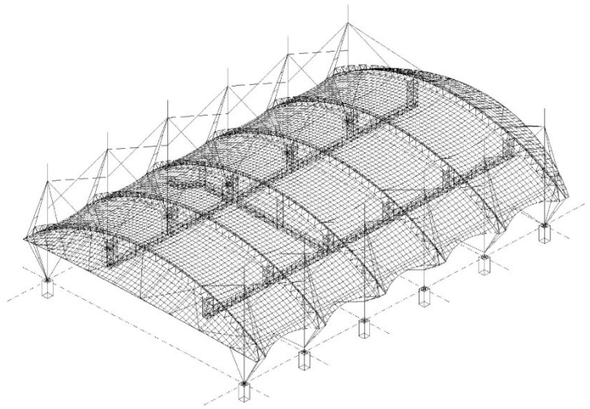
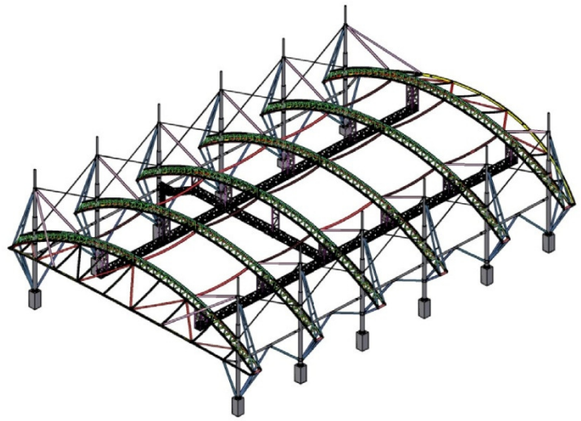
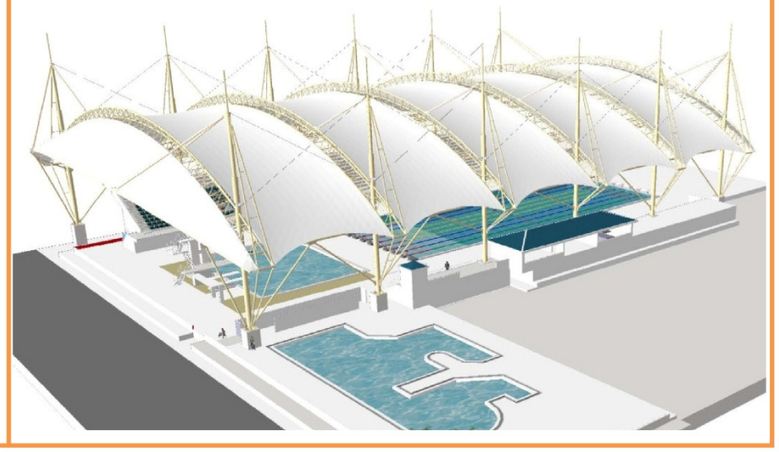






Tensile Structure for Indera Mahkota Aquatic Center, Kuantan, 15th MALAYSIA GAMES

Master-Thesis

A thesis submitted in partial fulfillment
of the requirements for the degree of

Master of Engineering in Membrane Structures (M.Eng.)

submitted to

Anhalt University of Applied Sciences

Faculty of Architecture,
Facility Management and Geo Information

by

Siew Moi, Tan
22nd January 1962, Batu Pahat, Malaysia

Matrikel number : 4048307

Submission date: 18 August 2012

First Tutor: Prof. Robert Off

Second Tutor:

Statement

I hereby declare that the work presented in this Master thesis, entitled "Tensile Structure for Indera Mahkota Aquatic Center, Kuantan, 15th MALAYSIA GAMES" , is entirely my own and that I did not use any sources or auxiliary means other than those referenced.

Singapore, 18 August 2012

Tan Siew Moi

CONTENTS

1. INTRODUCTION

1.1 THE REPORT

This report is about the design, analysis, detailing, fabrication and execution of tensile membrane roof over existing Wisma Belia swimming pool at Kuantan for aquatic events for the XV Malaysia Games from 7th July to 16July 2012.

1.2 MALAYSIA

Malaysia is located in Southeast Asia, just north of the Equator. It comprise of East Malaysia and Peninsula Malaysia. They comprise of 13 states and 3 federal territories. Malaysia is the only federal constitutional monarchy in Southeast Asia.

The population is estimated to be about 29 millions (July,2011 est.) and represented by the multiple ethnic groups of mainly of Malays 50.4%, Chinese 23.7%, indigenous 11%, Indian 7.1% and others 7.8% (2004 est.). And the official language is Bahasa Malaysia.

1.3 MALAYSIA GAMES - SUKMA

In 1986, Malaysian Games SUKMA which is an acronym for Sukan Malaysia in Malay language is introduced to unearth new talents for international competition and also to rapport harmony among the multiple ethnic populations.

It was a biyearly event which was first held in Kuala Lumpur, the capital of Malaysia. It was change to annual event in 2011 and this year 2012 the 15th Malaysia Games is hosted by state of Pahang from 7 July to 16 July. Pahang is on the east coast of Peninsula Malaysia.

At end of 2010, the Pahang state government announced to upgrade building facilities for 2012 Sukma Games. And the existing Wisma Belia swimming Pool at Indera Mahkota (Indera Mahkota Youth Complex), Kuantan is one of the chosen venue for aquatic events.

Published: Monday November 29, 2010 MYT 4:11:00 PM

Pahang upgrading, building facilities for 2012 Sukma Games

KUANTAN: The Pahang government is upgrading and building facilities in preparation for 2012 Sukma Games, said State Youth, Sports and Culture Committee Chairman Datuk Wan Adnan Wan Mamat.

Venues being upgraded include Wisma Belia swimming pool in Indera Mahkota, Indera Mahkota Hockey Stadium, petanque court in Balok, woodball park in Rompin and Pahang Indoor Sports Stadium.

"We are also repairing existing facilities like Indera Mahkota Gymnasium, weightlifting hall in Rompin, Indera Mahkota Indoor Stadium, lawn bowling field, squash court in Taman Gelora and Sultan Haji Ahmad Shah Silver Jubilee Hall in Pekan," he said in reply to a question by Datuk Pang Tsu Ming (BN-Semambu) in the state assembly Monday.

Wan Adnan said new facilities being build include Wisma Belia Hockey Stadium, Temerloh Hockey Mini Stadium, Bentong Hockey Stadium, Indera Mahkota shooting range and a silat court in Temerloh.

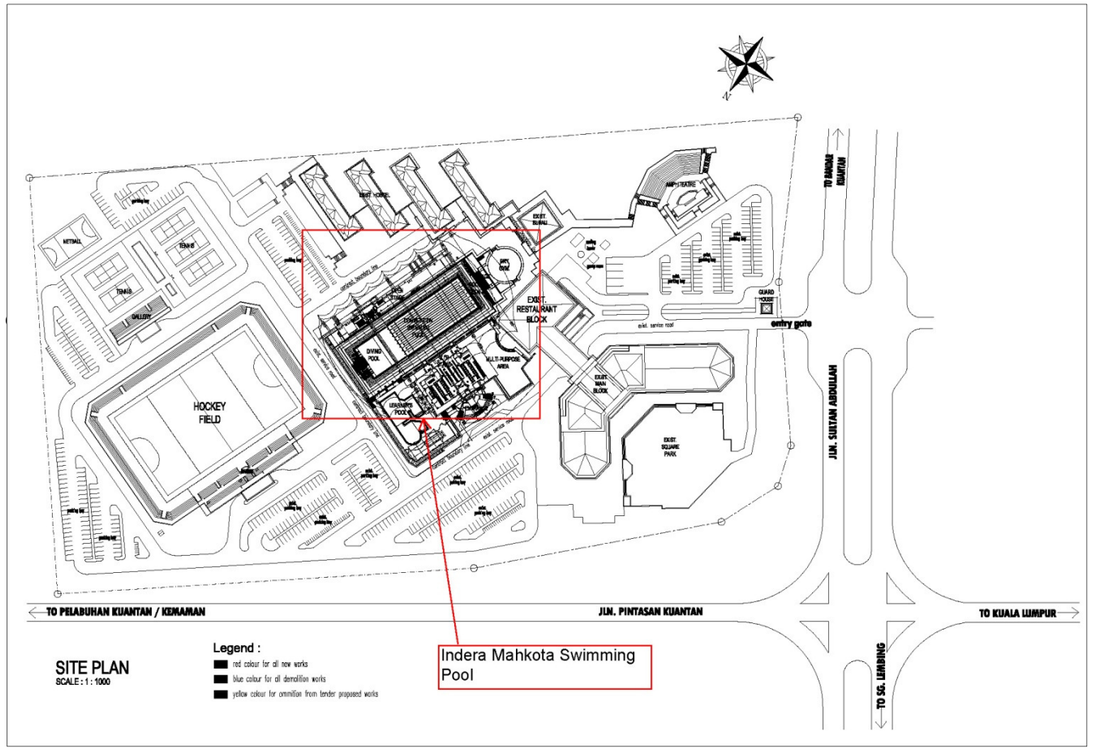
He said the State Executive Council had set up a Pahang Sukma 2012 main committee, organising sub-committee and a secretariat.

Meanwhile, State Rural Development and Orang Asli Affairs Committee chairman Datuk Wan Rosdy Wan Ismail said RM11.96mil was spent on housing the hardcore poor under the Ninth Malaysia Plan (9MP).

"Some 2,262 houses were built for the orang asli community in Pahang under 9MP," he said in reply to a question by Datuk Mohamed Jaafar (BN-Jenderak). - Bernama

BEAUTIFUL BEACHES OF KUANTAN

1.4 PROJECT AND SITE



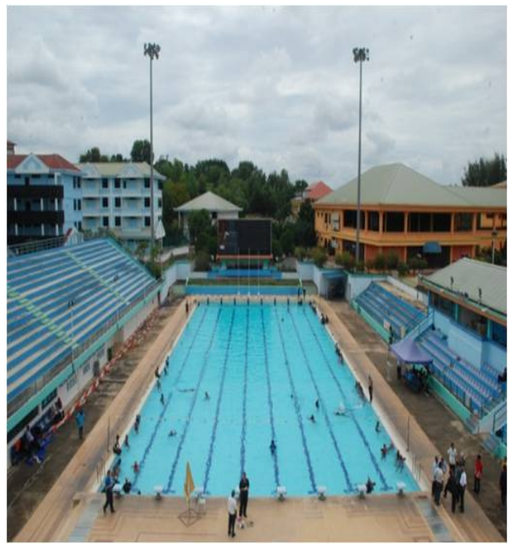
SITE PLAN

EVENT SIGNBOARD FOR SWIMMING EVENTS

BANNERS ALONG ROAD TO SITE

MORE BANNERS ALONG ROAD TO SITE

EXISTING POOL LOOKING TO HOCKEY STADIUM AT FAR END

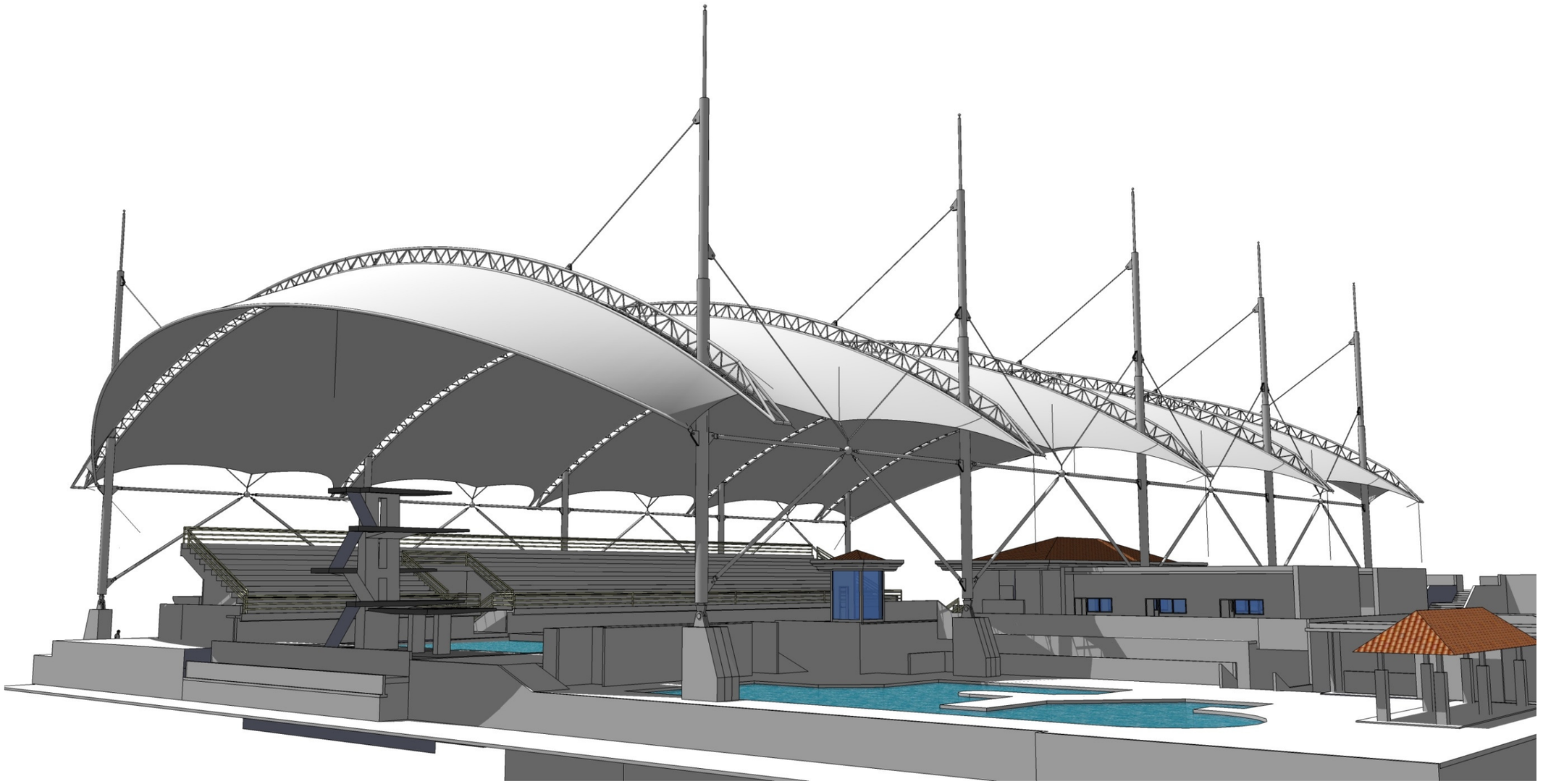


EXISTING POOL LOOKING TO EXISTING RESTAURANT

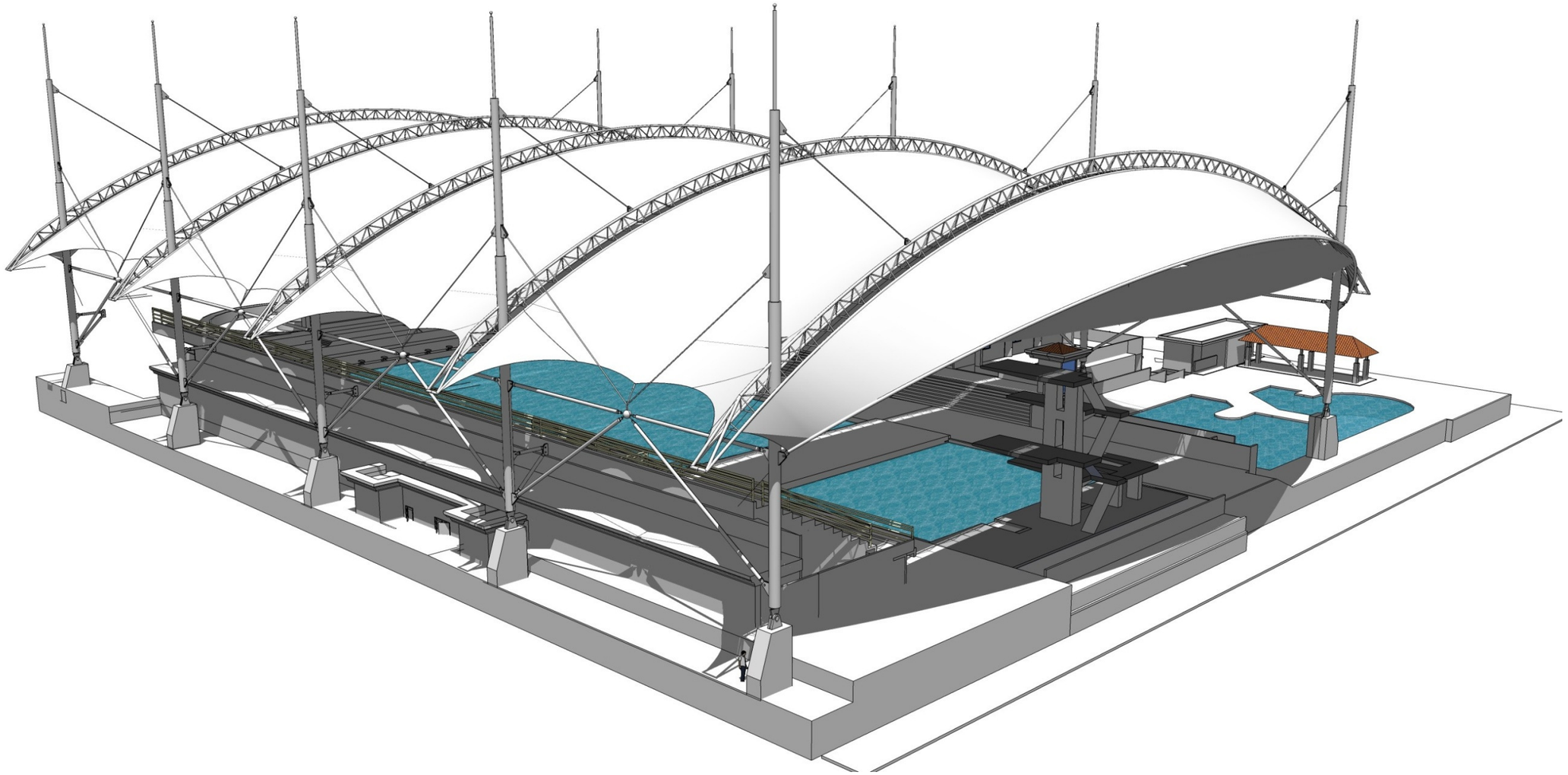
EVENT SIGNBOARD BESIDE ENTRY GATE

2. ARCHITECTURE CONCEPT & DESIGN DEVELOPMENT

2.1 ARCHITECT'S INTENT



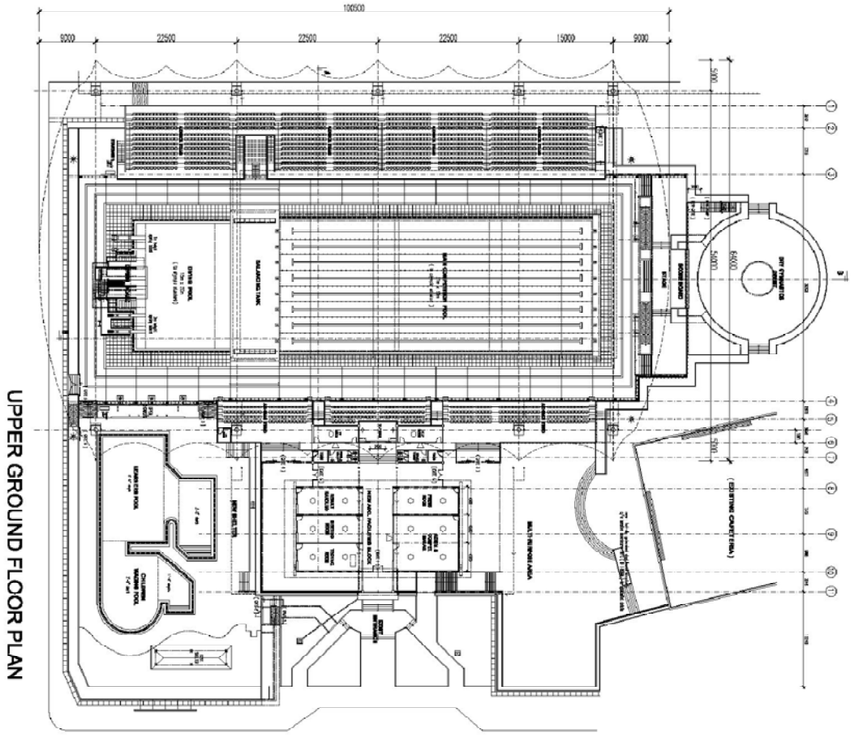
VIEW FROM FRONT

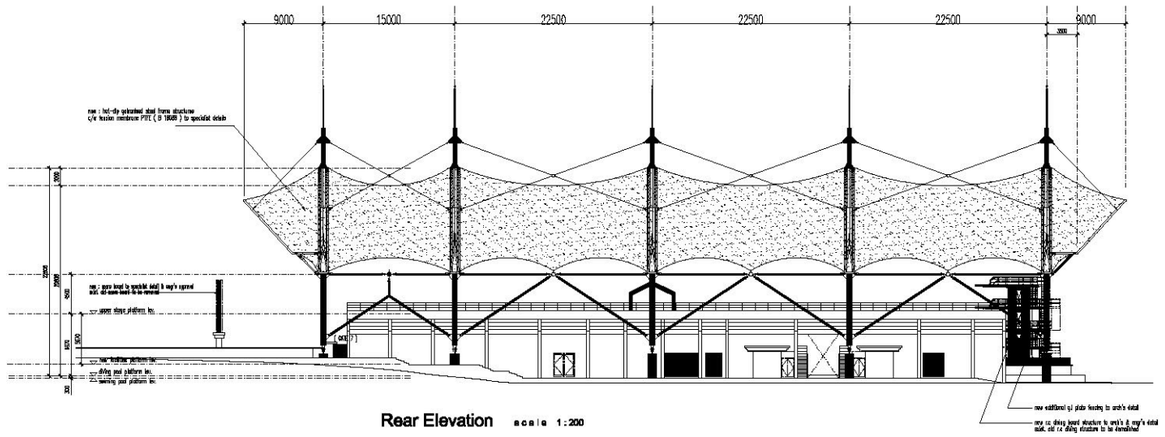


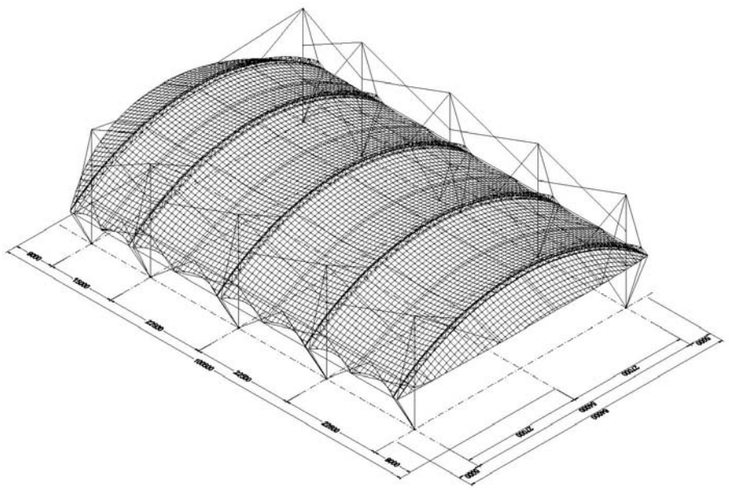
VIEW FROM REAR

2.2 DESIGN DEVELOPMENT

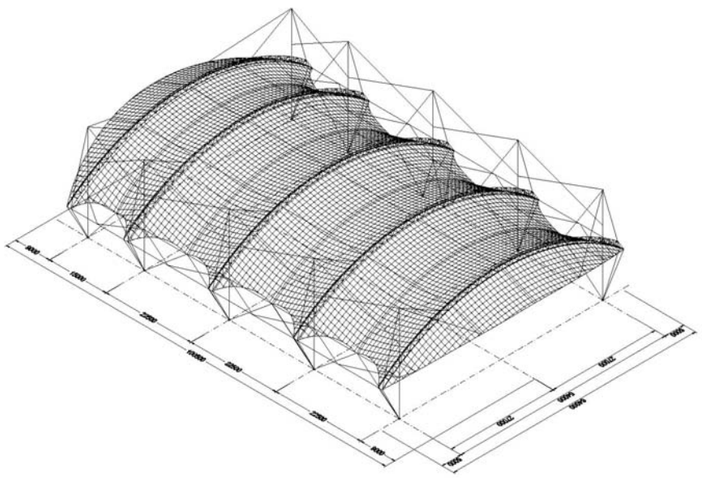
2.2.1 ORIGINAL UNEQUAL GRIDS



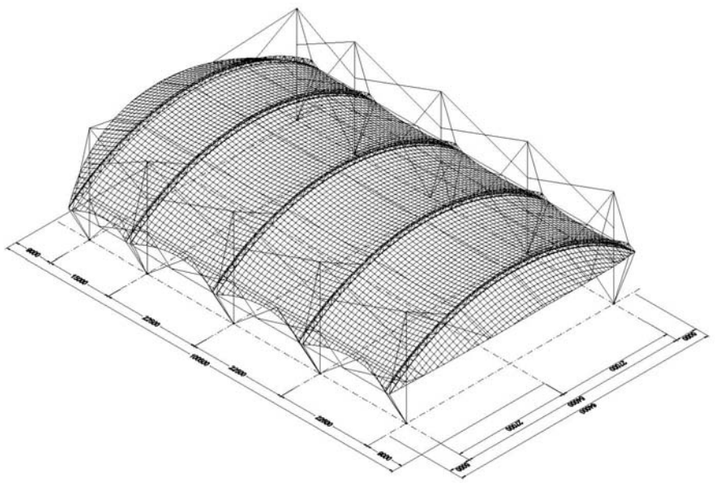




OPTION 1 - valley cable to end of truss

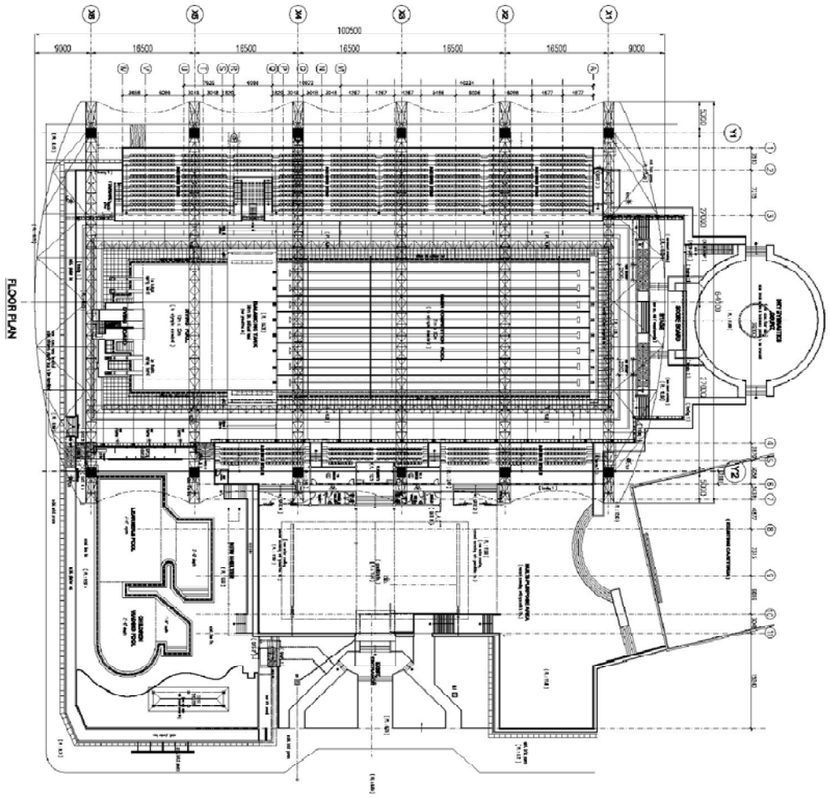


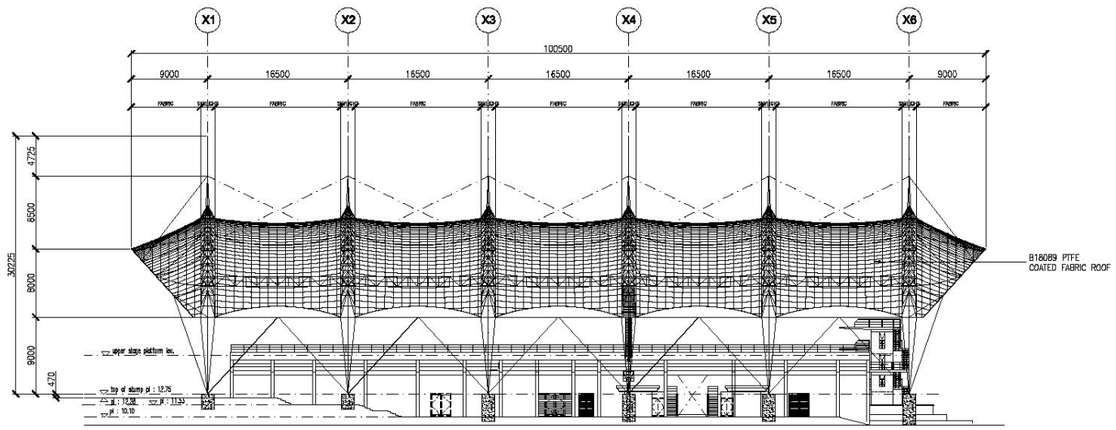
OPTION 2 - valley cable to column line



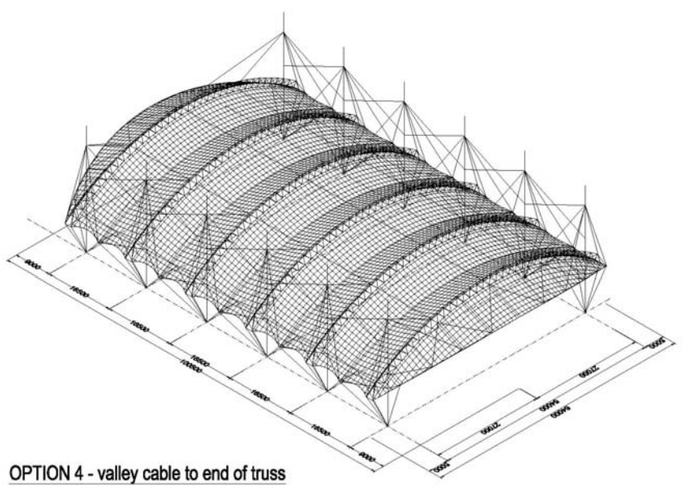
OPTION 3 - no valley cable

2.2.2 PROPOSED EQUAL GRIDS

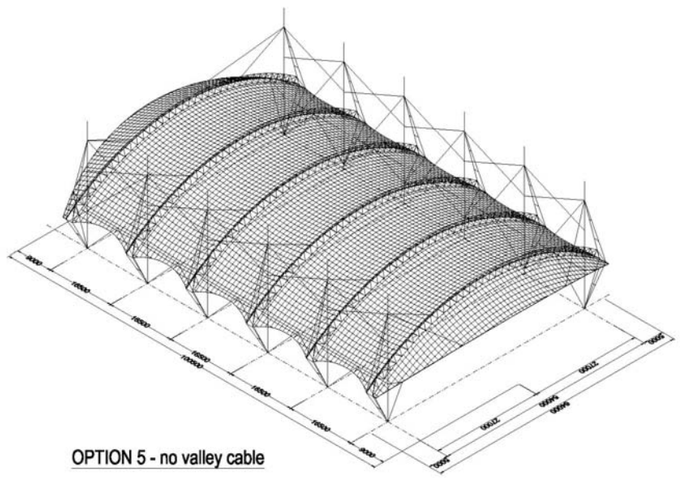




REAR ELEVATION



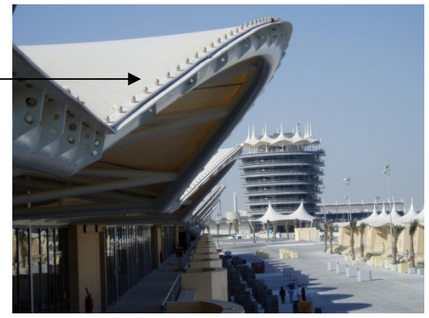
OPTION 4 - valley cable to end of truss



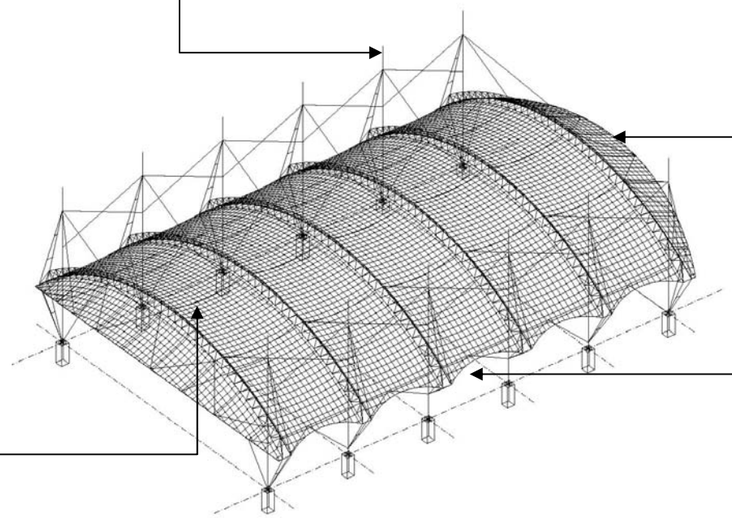
OPTION 5 - no valley cable

2.2.3 DETAILS AND DESIGN REFERENCE FROM JOB DONE

FRONT HANGER & BACKSTAY DETAIL TO LANGKAWI STADIUM GRANDSTAND CANOPY



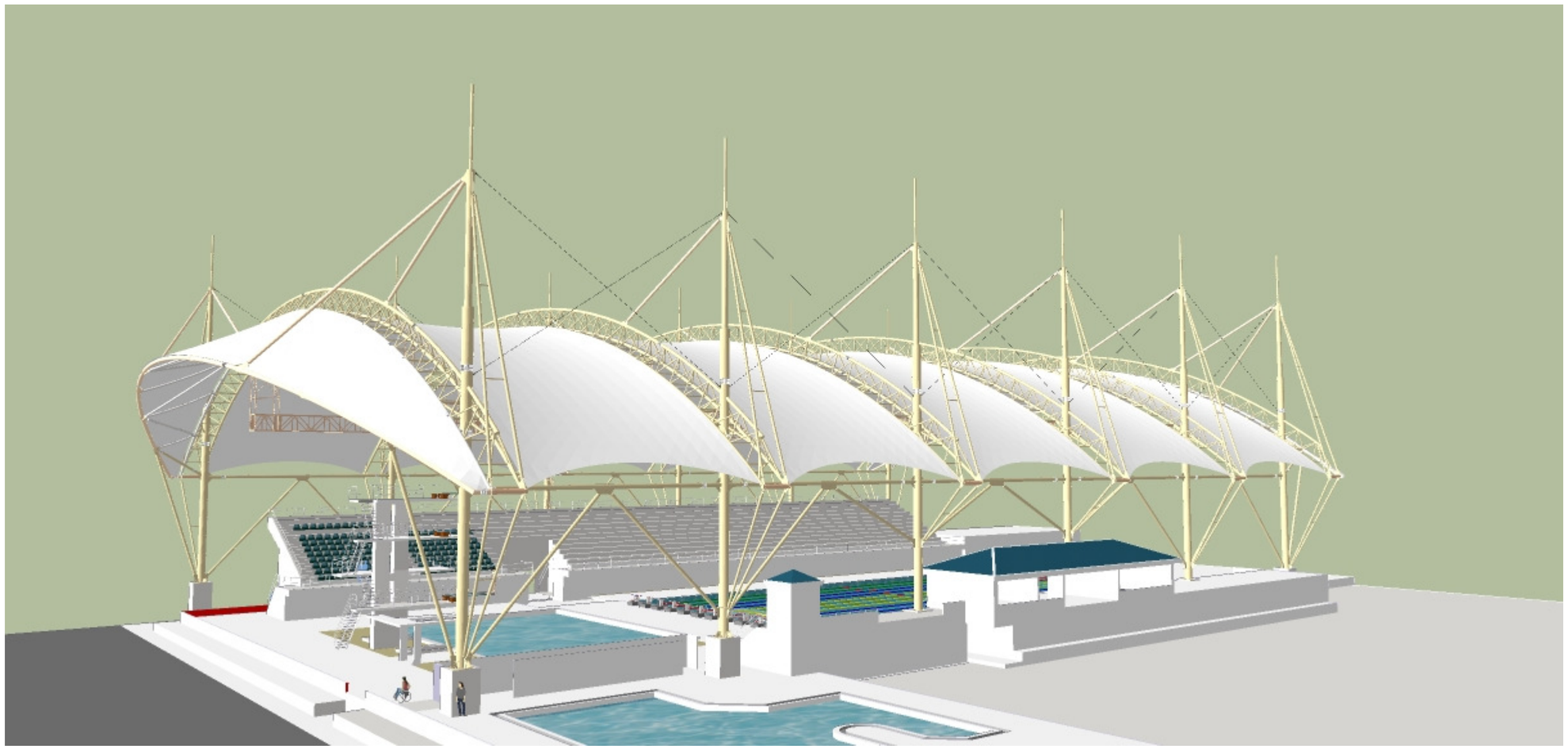
END CAP DETAIL TO BAHRAIN PIT BUILDING



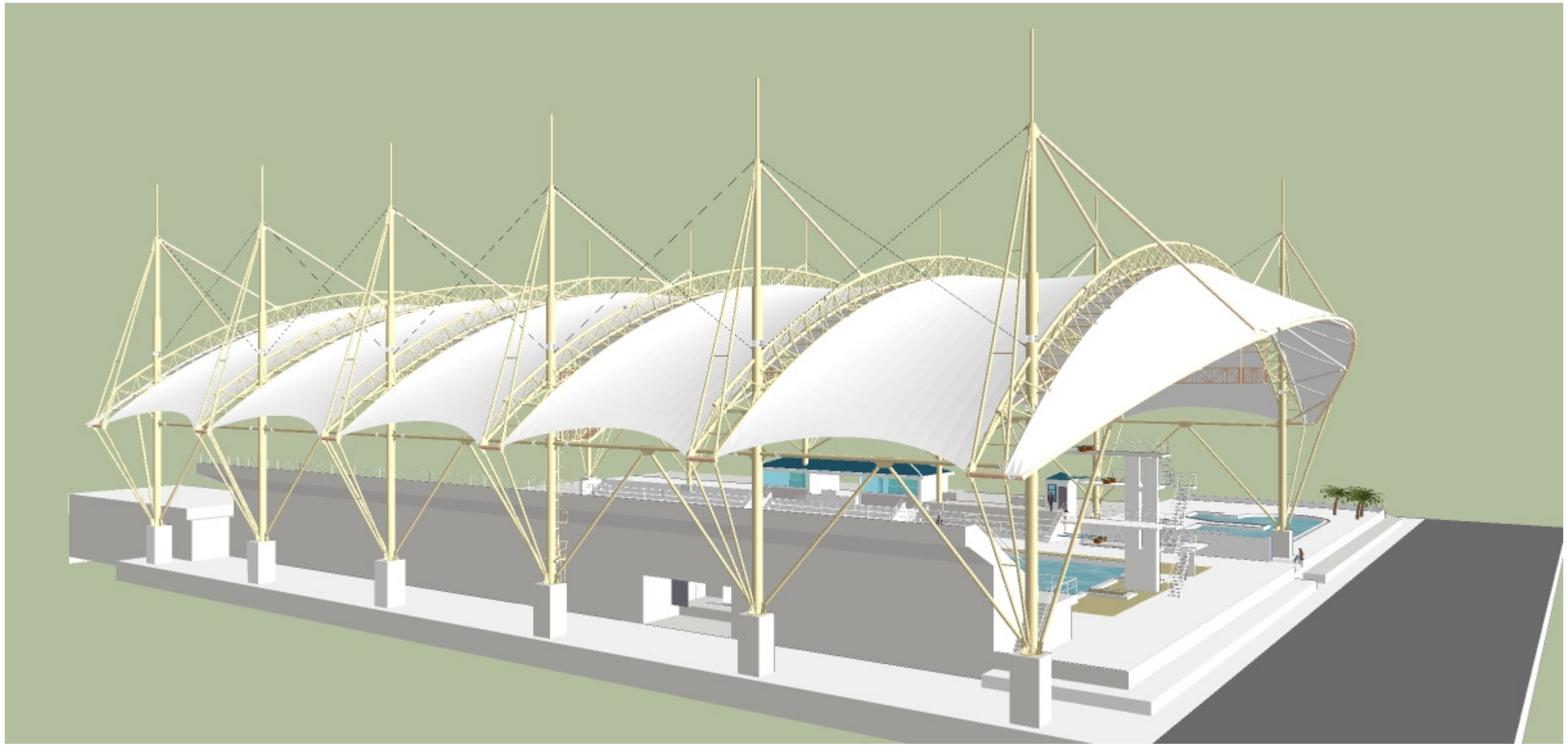
TRUSS TIE SYSTEM TO BUKIT KIARA X-TREME SPORT COMPLEX

BORDER CABLE AND CORNER PLATE DETAIL TO BAHRAIN MULTI-PURPOSE BUILDING

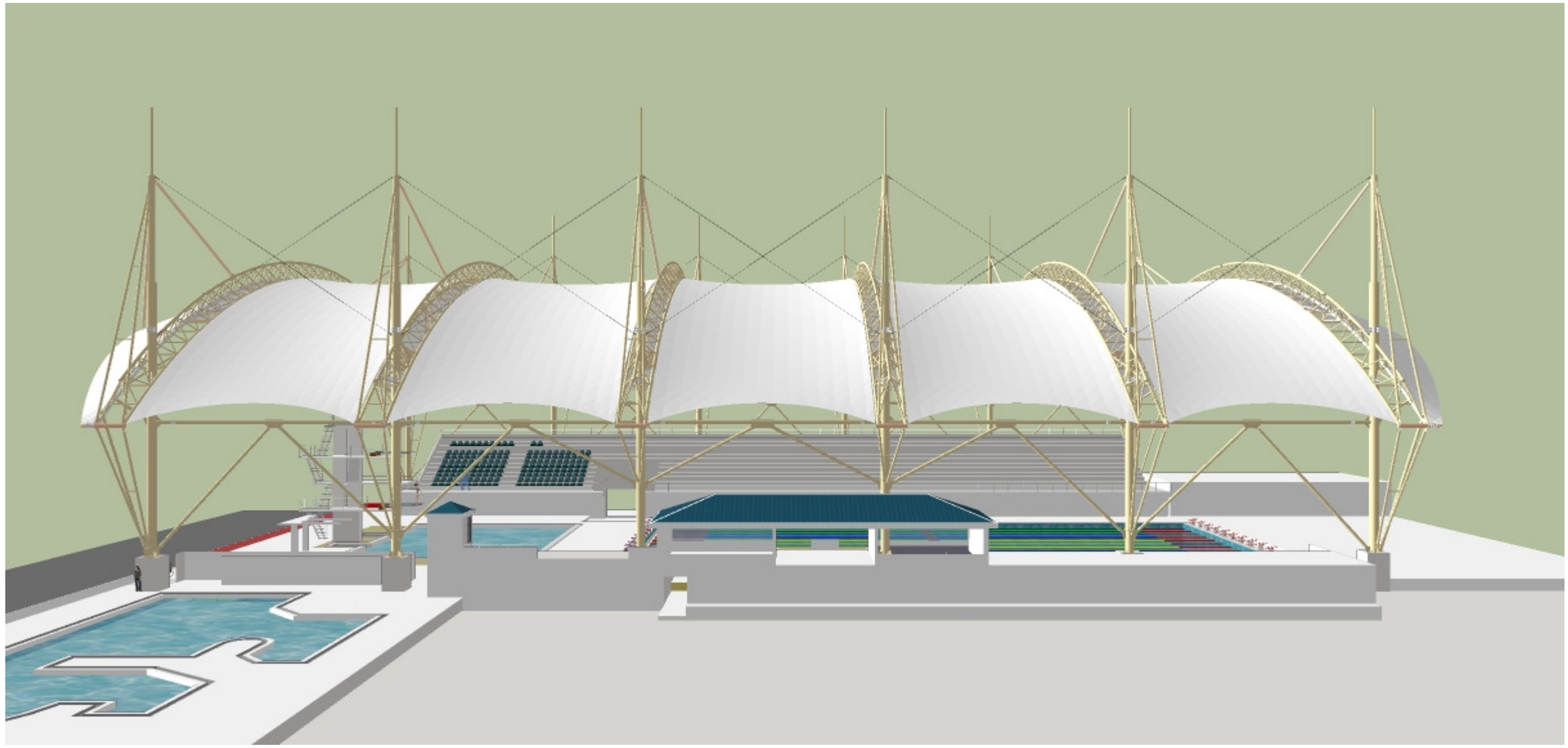
2.3 FINAL DESIGN CONCEPT



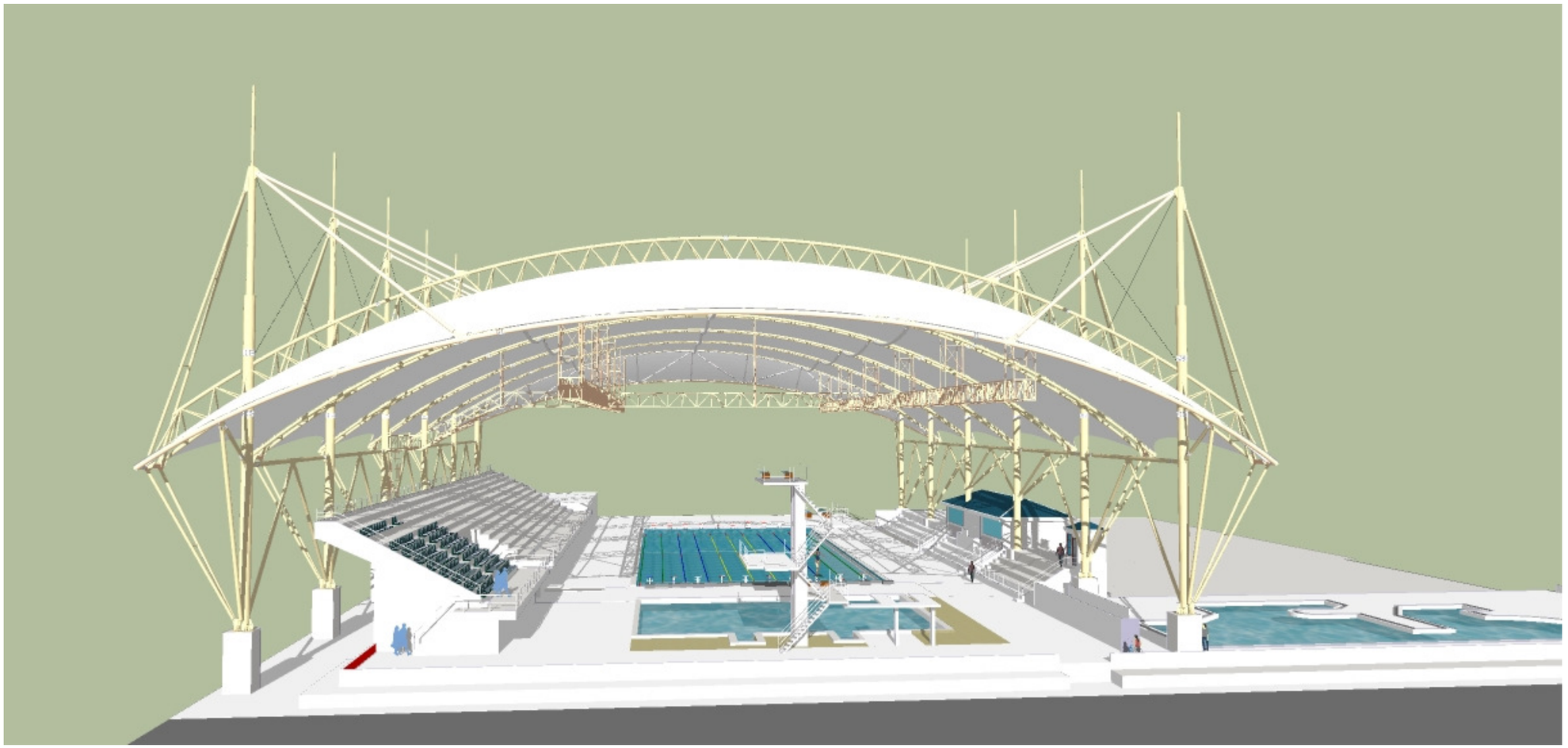
VIEW FROM FRONT



VIEW FROM REAR



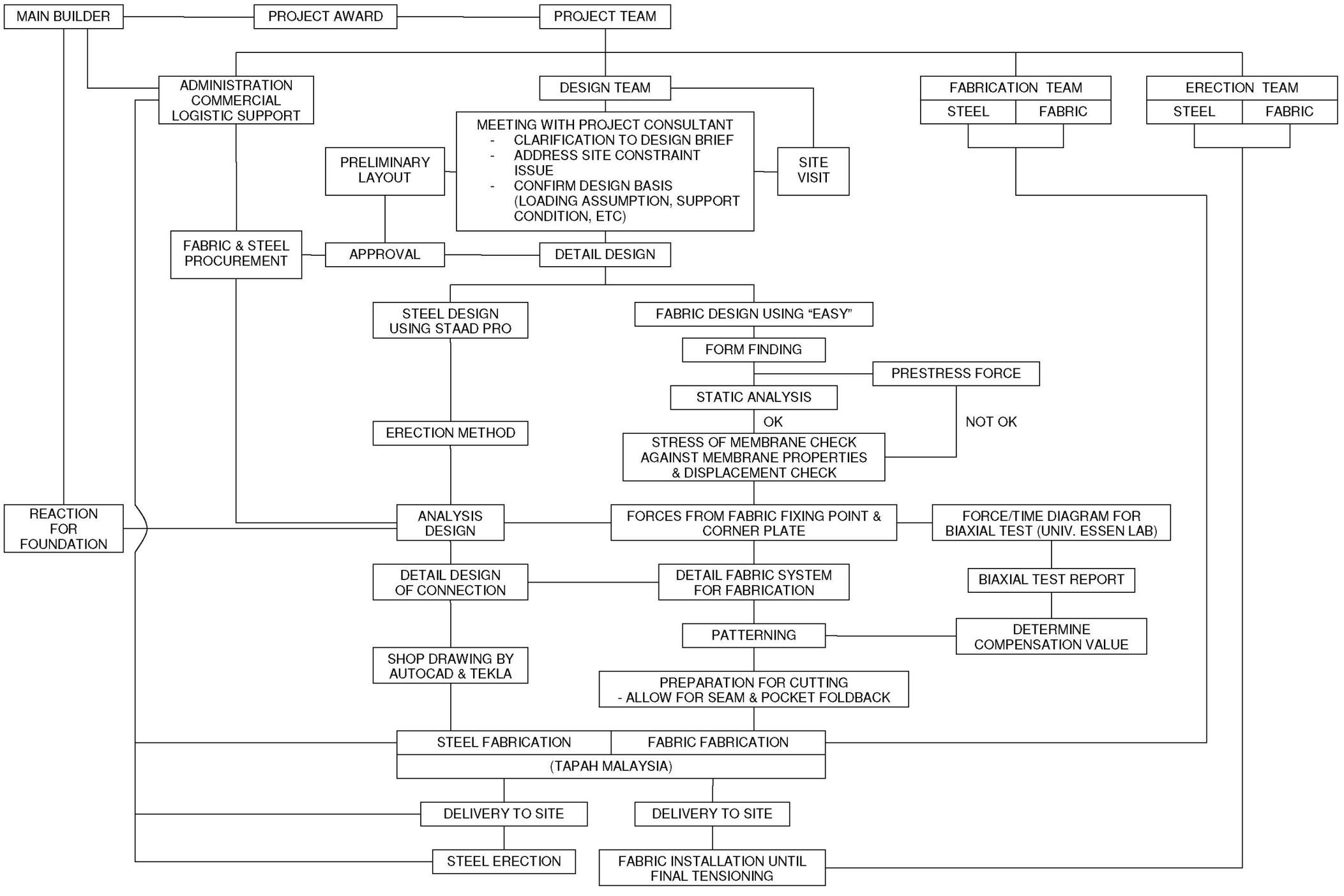
FRONT ELEVATION



LEFT ELEVATION

3. PROJECT ORGANISATION

3.1 FLOW CHART OF ENGINEERING DESIGN PROCESS IN RELATION TO PROJECT EXECUTION



3.2 GEOGRAPHICAL LOCATION OF PROJECT OFFICE

PRODUCTION FACTORY (TAPAH)

PROJECT MANAGEMENT OFFICE (SHAH ALAM)

SEDIABENA SDN. BHD.
building together Malaysia's Vision 2020

My home town (Batu Pahat)

SITE & CONSULTANT OFFICE (KUANTAN)

ENGINEERING OFFICE (SINGAPORE)

TRANSERVE TRANSERVE PTE LTD

4. GENERAL INFORMATION

4.1 PROJECT BRIEF

The proposed tensile PTFE (polytetrafluoroethylene) coated glass fiber roof is under the care of the Kuantan Town Council or Majlis Perbandaran Kuantan (MPK) in Malay language. The roof cover a main competition pool of 21m x 50m and a diving pool of 15m x 20m, both are of Olympic standard. The membrane used is B18089 of Verseidag, Germany. The foot print of the roof is approximately 100m x 64m on plan.

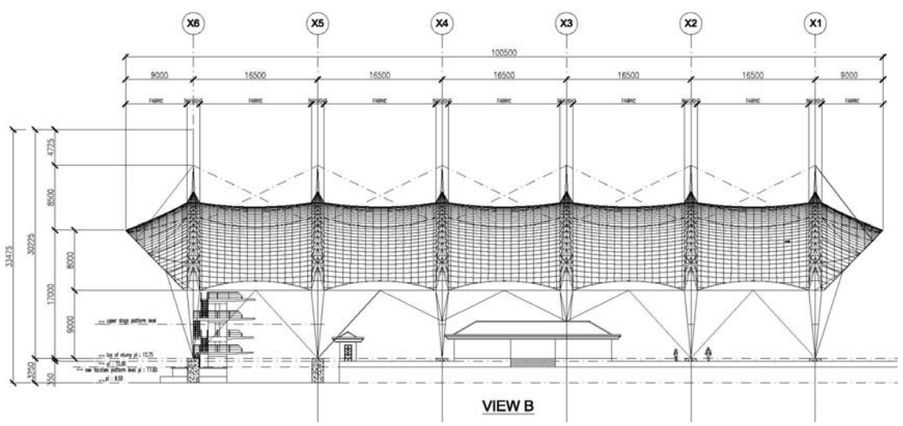
The swimming pool roof is a barrel vault like structure of 82.5m length with both end a eyelid canopy cantilevered 9m out and sloped 24 deg downward.

The steel roof structure comprise of 6 nos of 3D triangular truss of 1.7m width x 1.5m constant depth and spaced at 16.5m. Each truss is integrated with steel mast at 54m center to center at both end. The overall height of columns are 30m and top of truss is 22m above the general pool level. These columns are stabilized with front hanger and upper and lower backstay at rear. There are 1 column near the main entrance which 'punch' through the existing roof of the VIP room. The overall structure are braced longitudinally along the column gridline and also 3 single member curved tie beam at 3 location of bottom chord of the 3D truss. The base of column mast is then bolted to the precast holding down bolt to 1.5mx1.5m RC stump. And all steel frame are bolted connections.

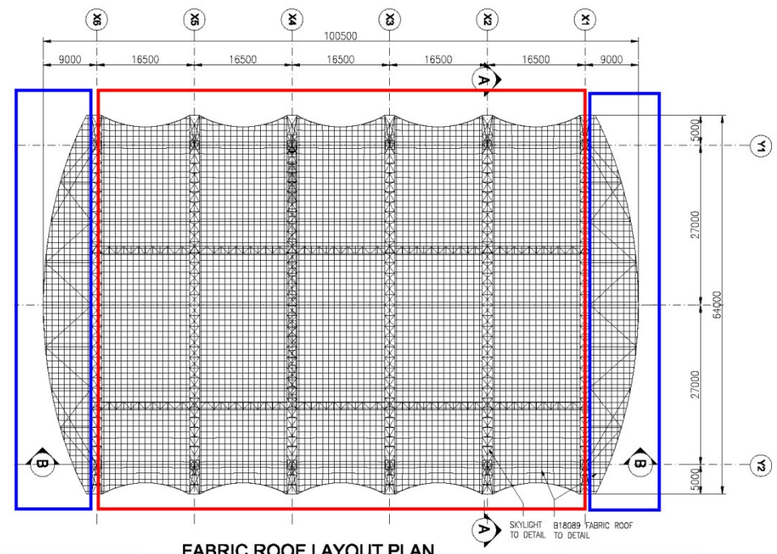
Approximately 220m run of 1.2m wide catwalk is hanged from these 3D truss at 15 location to provide access for maintenance of light fitting which is also fixed on the railing of catwalk.

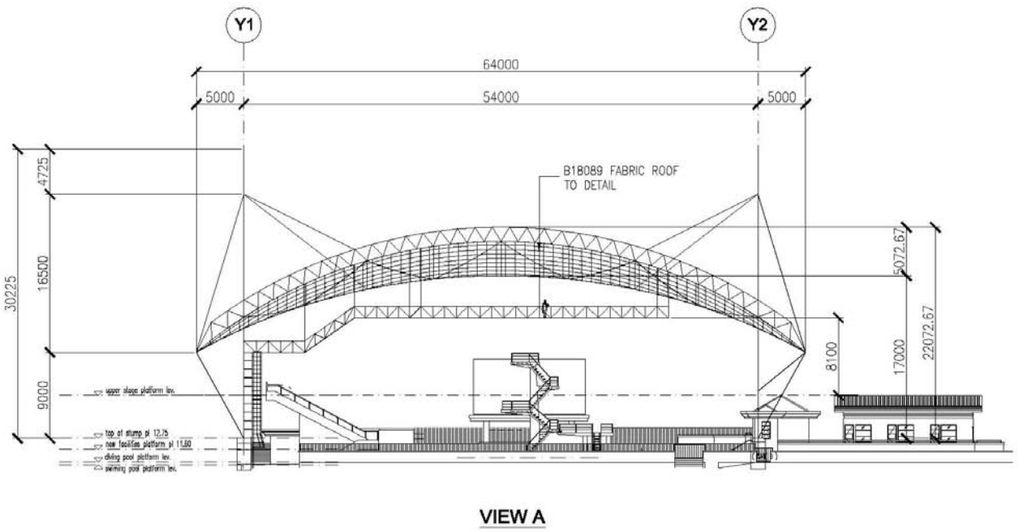
The fabric roof is make up of 5 internal panels and 2 end panels. The internal fabric panel is fixed across the bottom chord of 2 nos of 3D truss at 16.5m center to center and inside of the triangular truss is then fixed with 4mm thick solid polycarbonate sheet.

In summary, the project contract of approximately 6.2 million Malaysia Ringgit is to be completed in 5 months time for 6000m^2 of membrane, 250 tons of steel frame, and 25 tons of 220m long of catwalk.



In considering the short project time, it is agreed with the client MPK that there will be 2 phase of completion, before the games to finished installed all 5 internal panels from gridline X1 to X6 and after the games to continue to completed the 2 remaining end frame.





4.2 REFERENCE DOCUMENTS

Malaysia Standard MS 1553 : 2002 Code of Practice on Wind Loading For Building Structure

4.3 UNIT

The S.I system shall be used : ie mm, m, KN and etc

4.4 DESIGN CODE AND STANDARD

CP 3 : Chapter V-2 : 1993 Incorporating Amendment Nos. 1, 2, 3, 4 and 5 - Wind Loads

BS 6399 : Part 1 : 1996 – Code of practice for dead and imposed loads

BS 6399 : Part 3 : 1988 – Code of practice for imposed roof loads

BS 5950-1 : 2000 – Code of practice for design – Rolled and welded sections

4.5 COORDINATES SYSTEM

The design model structural axis system is as follow:

- +X from grid line X6 to X1
- +Y from grid line Y2 to Y1
- +Z vertically up

4.6 MATERIAL

4.6.1 STEEL

All circular hollow section to BS EN 10210 S275 or equal and general plates to BS EN 10025 S275 or equal. The corner plate is using S355 material. The choice of material used is subject to availability of material. For analysis and design of the structure steel roof, yield stress of 275 N/mm^2 is assumed.

4.6.2 CABLE

Border cable use PE coated galvanized steel wire rope, and safety cable is galvanized steel wire rope dry type.

4.6.3 MEMBRANE

PTFE fabric B18089 from Verseidag, Germany.

4.7 METHOD OF ANALYSIS

The analysis of the tensioned membrane structure is done in two parts. Firstly is to do the form finding of the membrane. Then by using the forces from the static analysis of the prestressed membrane and applied to the steel structure and do a design check of the steel structure.

4.7.1 FABRIC ROOF

The task of determining appropriate forms of the membrane based on the given outline is using the software EASY from Germany.

The EASY form finding method is based on the method of force density algorithm. After the equilibrium shape is formed, the form is then applied with external load, ie imposed load, wind load and etc. and static analysis of the fabric is then carried out.

External load which will be applied to the surface of the membrane will be represented by nodal forces.

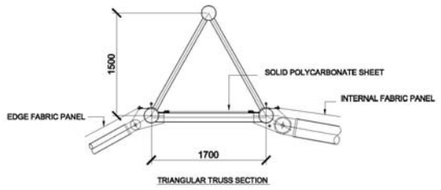
4.7.2 STRUCTURAL STEEL SYSTEM

The output forces from the membrane for all the load case from EASY is then extract for use as input forces to the structural steel and then for design purposes.

The finite element software used for the steel analysis is STAAD PRO2007, developed by Research Engineers International, USA.

5. STRUCTURAL SYSTEM

The steel roof structure comprise of 6 nos of 3D triangulated truss of 1 top chord 1.5m height and 2 bottom chord of 1.7m wide. These trusses are spaced at 16.5m and integrated with steel column at 54m center. The overall length of the truss is 64m with 11.6m rise at the center. Each of these integrated truss with column height of 30m is stabilized with 1 front stay and 2 upper and lower backstay.

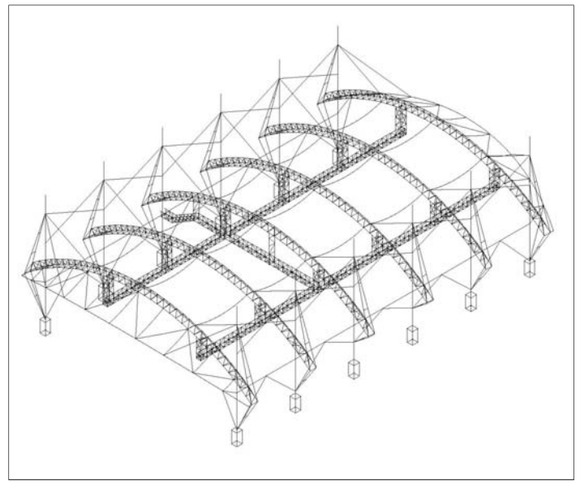


The stability of the structure is dependent on ties and bracing along the column longitudinally. They are also tied quarterly at 3 locations across the bottom chord of the trusses. At the upper part of the column, a pair of crossly brace safety cable is introduced.

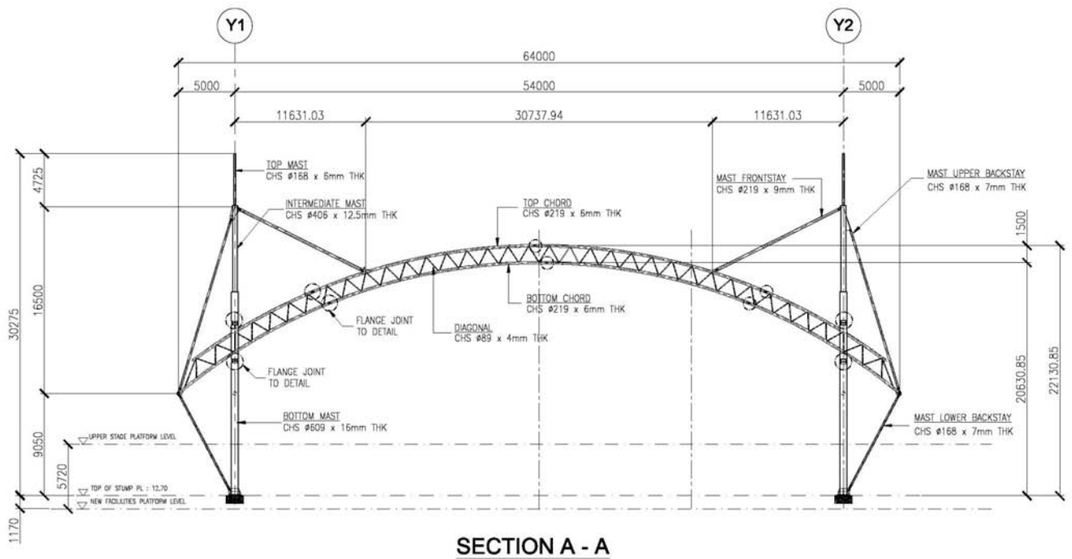
Due to limitation and constrain for site access, the steel structure is designed such that it will be able to be lifted by a small tonnage crane eg. 30 tons and so bolted connection is decided.

The 64m truss is then make up of 4 segment with flange joint connection. The 30m high column is divided into 3segment and connected at just before and after the 3D truss with flange joint. So is the bracing and ties along the columns, and the end canopies frame are also assembled in 3 parts by bolting system.

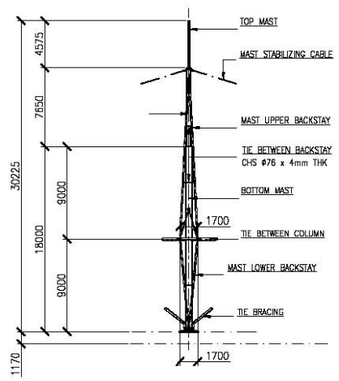
The 3D trusses is also providing supports to about 220m run of catwalk at 15 location of general 4 hanging point each. There are 2 row of 82.5m long catwalk parallel to and about 15m high from the swimming pool. Between these catwalk, there is interconnecting link along gridline X4. The catwalk is approximately 1.2m wide x 1.2m high.



3D VIEW OF CATWALK SUPPORT BY TRIANGULAR TRUSSES



SECTION A - A



SECTION A1 - A1

6. LOADING ASSUMPTION

The fabric roof and steel structure is subjected to the following loading:

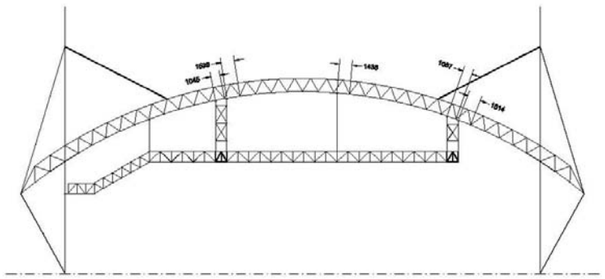
a) Self weight of steel truss, column, bracing etc.

b) Dead load of catwalk

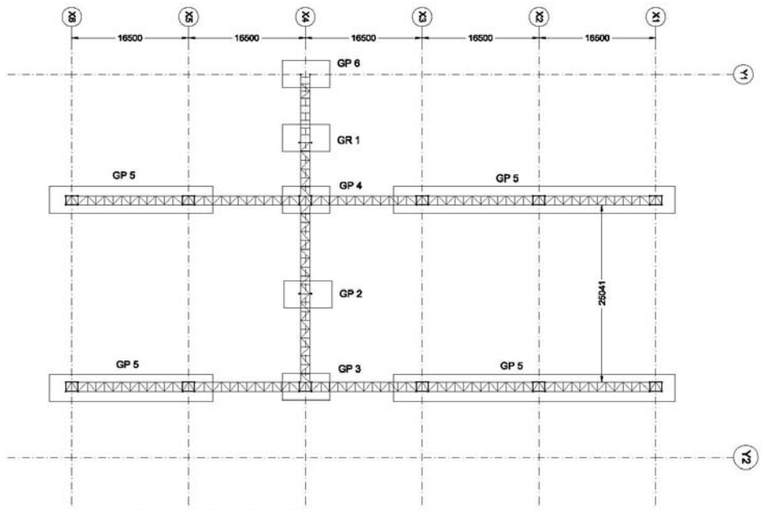
c) Prestress force in the membrane

d) Imposed live load on membrane roof and catwalk

e) Wind load



SECTION VIEW AT GRIDLINE X4



PLAN - GROUP OF APPLIED LOAD FROM CATWALK

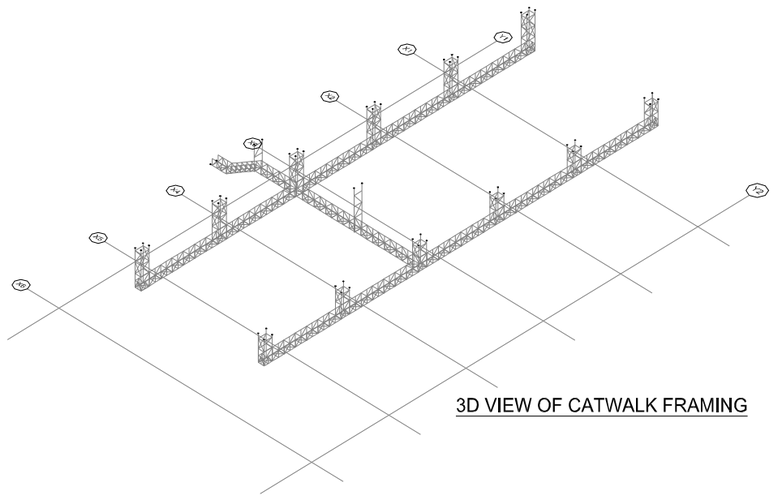
6.1 Self weight (SW)

Self weight of steel member = automatically calculated in the software

Self weight of fabric = 1.15 kg/ m^2
(Insignificant so it is ignored in the membrane load)

6.2 Dead Load of catwalk (DCW)

The catwalk is supported from the 3D truss at 15 Groups of generally 4 point from the bottom chord at 1.7m x 1.275m apart each except at gridline X4 where it is the main access.



3D VIEW OF CATWALK FRAMING

The weight of catwalk with expanded mesh + M&E load assumed to be 150 kg/m run

Group 1 load per point = [(7.544+7.2)/2 x 150] /2 = 553 kg (5.53 KN)

Group 2 load per point = [(25/2) x 150] /2 = 937 kg (9.4 KN)

Group 3 load per point = [(16.5 + 6.25) x 150] /4 = 853 kg (8.53 KN)

Group 4 load per point = [(6.25 +16.5 + 7.55/2) x 150] /4 = 995 kg (9.95 KN)

Group 5 load per point = (16.5x150) /4 = 618 kg (6.2 KN)

Group 6 load per point = [(7.544/2 + 3.3) x 150] /2 = 530 kg (5.3 KN)

6.3 Prestress Load (PRE)

Prestress is induced to increase membrane stiffness and obtain a stable form which is in equilibrium. In this case, a prestress force of 3KN/m is assumed for warp and weft direction.

6.4 Imposed Live Load

6.4.1) Membrane roof (VL)

Imposed live load on membrane roof = 0.25 KN/m^2

This load is applied vertically downward to the fabric roof.

6.4.2) Catwalk (LCW)

For localized catwalk design, assumed live load = 1.5 KN/m^2

For global analysis of the structure roof,
assumed live load applied simultaneously on all catwalk = 0.75 KN/m^2

Using the same loading group as in the dead load case,
Live load = 0.75 KN/m^2 x 1.2m internal clearance of catwalk = 0.9 KN/m

Group 1 load per point = [(7.544+7.2)/2 x 0.9] /2 = 3.32 KN
Group 2 load per point = [(25/2) x 0.9] /2 = 5.62 KN
Group 3 load per point = [(16.5 + 6.25) x 0.9] /4 = 5.12 KN
Group 4 load per point = [(6.25 +16.5 + 7.55/2) x 0.9] /4 = 5.96 KN
Group 5 load per point = (16.5x0.9) /4 = 3.71 KN
Group 6 load per point = [(7.544/2 + 3.3) x 0.9] /2 = 3.18 KN

6.5 Wind Load

Reference to Malaysian Standard MS 1553 :2002 : Code of Practice on wind loading for Building Structure

As Kuantan fall in Zone II as shown in Figure 3.1,
so basic wind speed of 32.5 m/s is adopted for the wind load calculation.

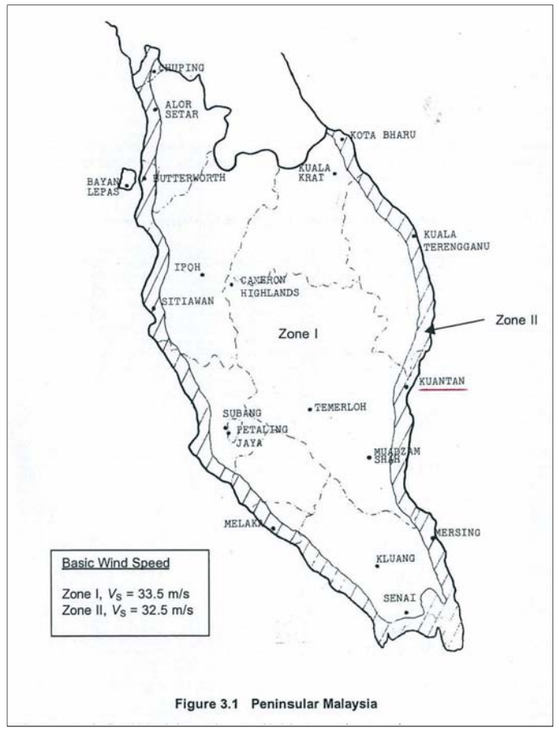


Figure 3.1 Peninsular Malaysia

WIND ZONE MAP OF PENINSULAR MALAYSIA

Reference to CP3 : Chapter V : Part 2 1993 for dynamic wind pressure

Dynamic pressure due to wind is given by :

$$q = k\, Vs^2 \ N/m^2$$

where k = 0.613

Vs = VxS1xS2xS3

Basic wind speed V = 32.5 m/s

S1 - topography factor = 1.0
S2 - ground roughness, structure size and height above ground factor

Ground roughness = 3
Maximum height = 20 m
Class = C
Therefore S2 = 0.85

S3 – statistical factor = 1.0

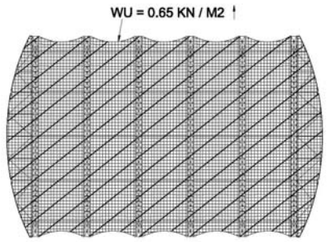
Vs = 32.5x1.0x0.85x1.0 = 27.6 m/s
q = 0.613 x 27.6 x 27.6 = 467 N/m^2 say 0.5 KN/m^2

Assumed the fabric roof is duopitch canopy of roof angle approx = 20 deg

Therefore from Table 13,
Assumed the entrance and audience stand is 100% obstruct,

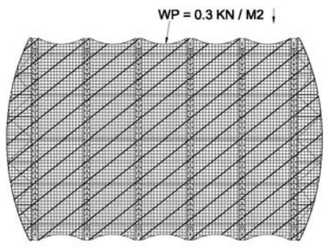
Solidity ratio Ø = 1 (obstruct)
Min Overall Cp = -1.3 and Max Overall Cp = +0.6

6.5.1) Wind Uplift (WU)
Wind uplift Wu = -1.3 x 0.5 = -0.65 KN/m^2



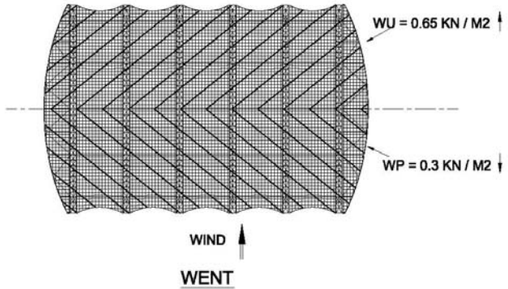
WU

6.5.2) Wind Pressure (WP)
Wind pressure Wp = +0.6 x 0.5 = 0.3 KN/m^2



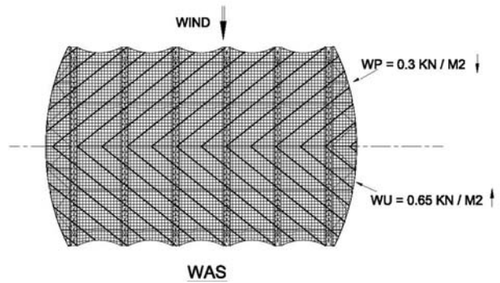
WP

6.5.3) Wind from Entrance (WENT)
Wind Perpendicular to Grid line Y2



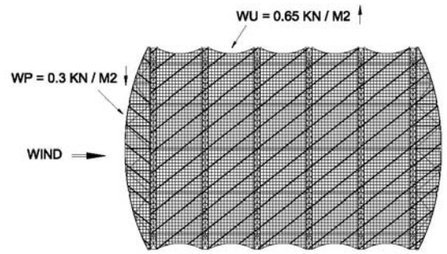
WENT

6.5.4) Audience stand (WAS)
Wind Perpendicular to Grid line Y1



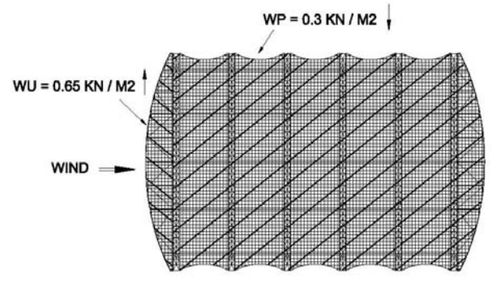
WAS

6.5.5) Wind from Driving Pool Side when End bay is Wind Pressure (WDP_P)
Wind Perpendicular to Grid line X6



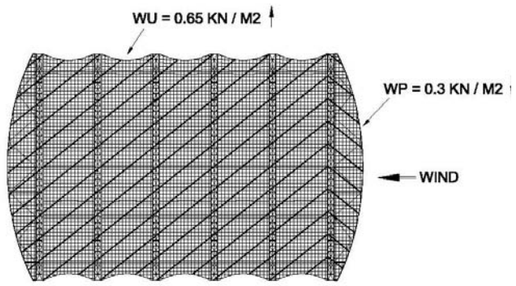
WDP_P

6.5.6) Wind from Driving Pool Side when End bay is Wind Uplift (WDP_U)
Wind Perpendicular to Grid line X6



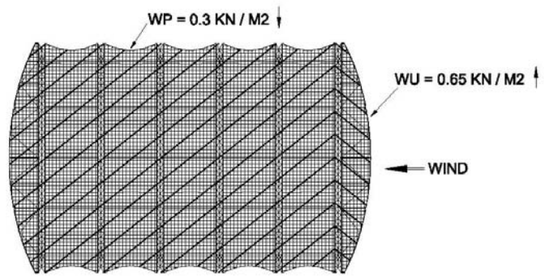
WDP_U

6.5.7) Wind from Score Board Side when End Bay is Wind Pressure (WSB_P)
Wind Perpendicular to Grid line X1



WSB_P

6.5.8) Wind from Score Board Side when End Bay is Wind Uplift (WSB_U)
Wind Perpendicular to Grid line X1



WSB_U

7. STEEL ANALYSIS AND DESIGN

7.1 DESIGN METHOD

For the in-placed analysis there will be 2 limit state analysis, service limit state and the ultimate limit state.

The service limit state relate to performance under normal service conditions, e.g deflections. And ultimate limit state are related to safety and load carrying capacity of the structure where the specified loads is multiplied by relevant partial factor.

The design facility available in STAADPRO software shall be used to code check the members for member forces and moment due to the various loading combinations for both limit states.

7.2 DESIGN MODEL

The steel structure has been modeled as a 3 dimensional frame model along the center line of the steel section. The ends of frame member are connected by nodes. All the steel member in this case uses all circular hollow section.

All the steel member are assumed to be frame type except the mast frontstay, backstay, ties between truss and bracings between column. These are assumed to be truss member which will have a bolted connection at both end.

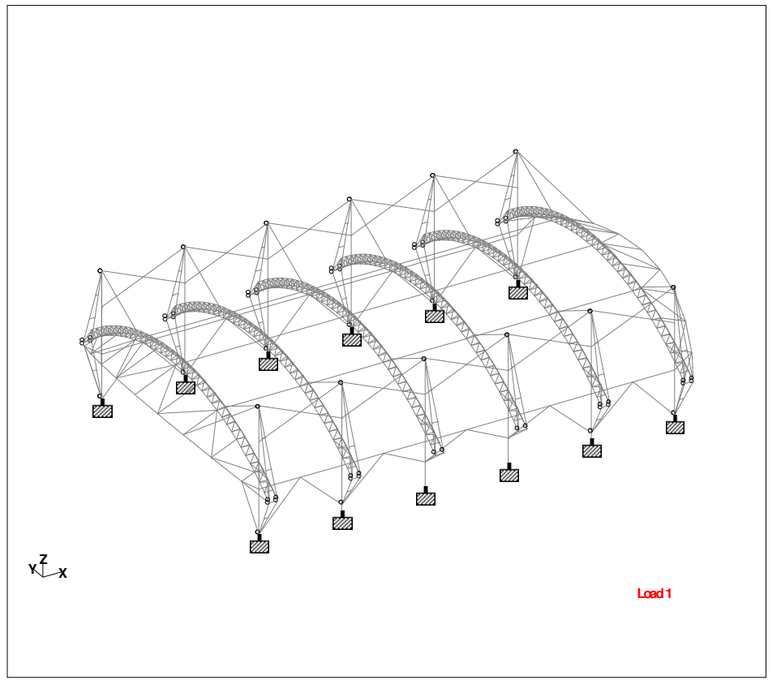
The stabilizing cable between top of mast are assumed to be tension only Member with small diameter solid round bar representing the cables.

The following properties is used for the analysis on the steel member: -

Young's Modulus = 2.10E08KN/m²
Shear Modulus = 8.0E07 KN/ m²
Poisson Ratio = 0.3
Mass density of steel = 7850 kg/m³
Gravitational acceleration = 9.81 m/s²
Coefficient of thermal expansion = 11.7E-06 /deg C

For ease of reference, the steel member of the design model has been group as follow;

a) member 1 to 456 = bottom curved chord of 3D truss
b) member 457 to 536 = edge member of eyelid canopy
c) member 537 to 782 = bottom horizontal chord of 3D truss
d) member 783 to 992 = top curved chord of 3D truss
e) member 993 to 1928 = diagonal chord of 3D truss
f) member 1929 to 1962 = bracing and prop member to eyelid canopy
g) member 1963 to 1977 = tie member between 3D truss
h) member 1978 to 2041 = lower, intermediate and upper mast
i) member 2042 to 2061 = tie member at between lower masts
j) member 2062 to 2077 = mast front stay
k) member 2078 to 2193 = mast backstay
l) member 2194 to 2227 = internal short tie of backstay
m) member 2228 to 2255 = longitudinal bracing between lower mast
n) member 2256 to 2275 = stabilizing cable at intermediate mast



STEEL DESIGN MODEL

7.3. BASIC LOAD CASES & LOAD COMBINATION

The membrane roof and steel structure system are analyzed based on the following load cases and load combinations.

7.3.1 BASIC LOAD CASES

LOAD 1 (SW) = Self weight of steel structure automatically calculated by the software

LOAD 2 (DCW) = Dead load of catwalk + ME load

LOAD 3 (LCW) = Imposed Live Load on catwalk

LOAD 4 (PRE) = Prestress load from membrane roof WITHOUT any external load

The following external load is applied on to a stable and prestressed membrane form. So the following load case actually consist of prestressing load.

LOAD 5 (VL) = Imposed Live Load on membrane roof

LOAD 6 (WU) = Wind Uplift on membrane roof

LOAD 7 (WP) = Wind Pressure on membrane roof

LOAD 8 (WENT) = Wind from Entrance side (Y2)

LOAD 9 (WAS) = Wind from Audience Stand (Y1)

LOAD 10 (WDP_P) = Wind from Driving Pool side (X6), End bay wind pressure

LOAD 11 (WDP_U) = Wind from Driving Pool side (X6), End bay wind uplift

LOAD 12 (WSB_P) = Wind from Score Board side (X1), End bay wind pressure

LOAD 13 (WSB_U) = Wind from Score Board side (X1), End bay wind uplift

And all the above load case are unfactored load.

7.3.2. SERVICE LOAD COMBINATION

LOAD 100 = SW + DCW + PRE
LOAD 101 = SW + DCW + LCW + VL
LOAD 102 = SW + DCW + WU
LOAD 103 = SW + DCW + WP
LOAD 104 = SW + DCW + WENT
LOAD 105 = SW + DCW + WAS
LOAD 106 = SW + DCW + WDP_P
LOAD 107 = SW + DCW + WDP_U
LOAD 108 = SW + DCW + WSB_P
LOAD 109 = SW + DCW + WSB_U

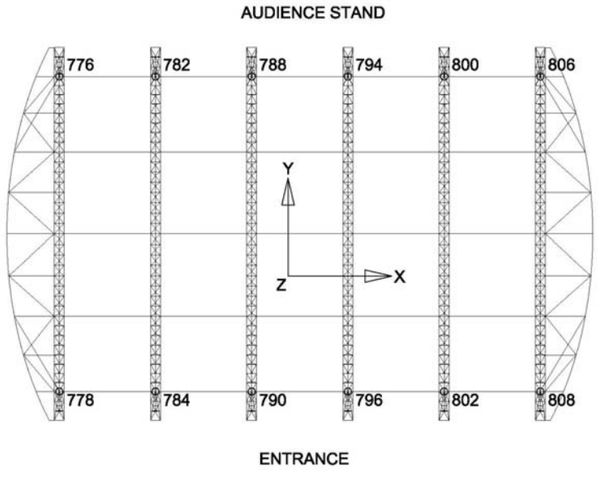
7.3.3 ULTIMATE LOAD COMBINATION

LOAD 200 = 1.4(SW + DCW+PRE)
LOAD 201 = 1.4(SW+DCW) + 1.6(LCW+VL)
LOAD 202 = 1.0(SW + DCW) + 1.4WU
LOAD 203 = 1.2(SW + DCW) +1.2WP
LOAD 204 = 1.2(SW + DCW) + 1.2(WENT)
LOAD 205 = 1.2(SW + DCW) + 1.2(WAS)
LOAD 206 = 1.2(SW + DCW) + 1.2(WDP_P)
LOAD 207 = 1.0(SW + DCW) + 1.4(WDP_U)
LOAD 208 = 1.2(SW + DCW) + 1.2(WSB_P)
LOAD 209 = 1.0(SW + DCW) + 1.4(WSB_U)

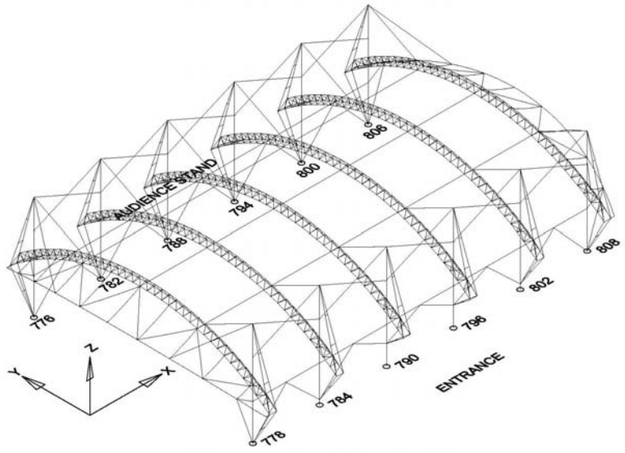
The design of the member sizes are based on the above load combination.

7.4. BOUNDARY CONDITION

The steel structure is supported on top of 12 nos of RC stump at spacing of 16.5m x 54m to each other. The mast base supports are assumed to be fixed condition which restrained in X, Y direction horizontally and Z direction vertically and also restrained in the X, Y and Z moment.



SUPPORT NODE NUMBER LAYOUT PLAN



SUPPORT NODE NUMBER 3D VIEW

7.5. DESIGN OF STEEL MEMBERS

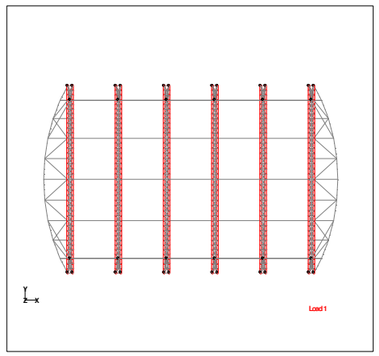
The design of the member size complied to BS5950 where the ultimate strength is used and the relevant load factor is applied to the imposed loading.

For deciding the correct pipe size for every member, compression will be the deciding factor and the compression capacity depends on the slenderness ratio (l/r) and the tension capacity only depends on the sectional area.

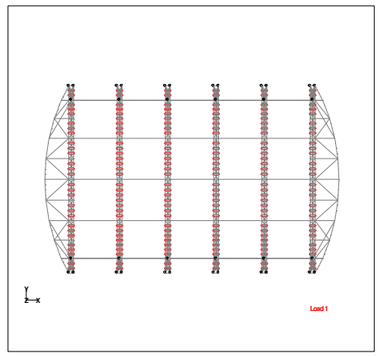
The final member size for individual member are determined from the worst force and moment from the ultimate load combination.

The software is able to check the sizes assigned based on the output from the worst load combination. The member sizes layout is attached for reference.

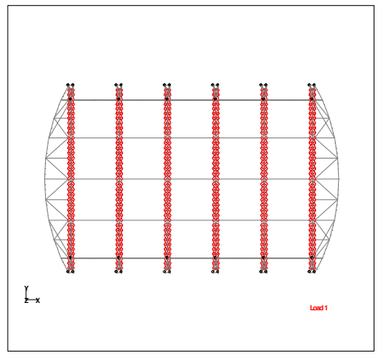
7.5.1 MEMBER SIZES LAYOUT



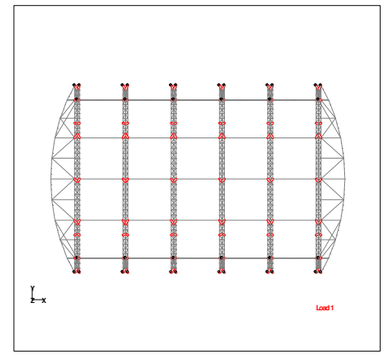
BOTTOM CURVED CHORD - 219Ø X 6



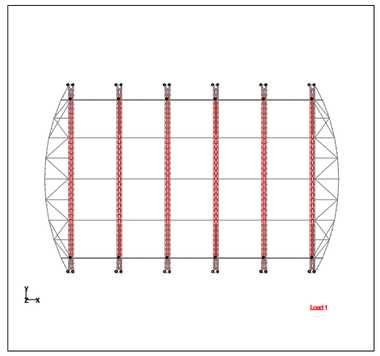
HORIZONTAL BOTTOM – 89Ø X 4



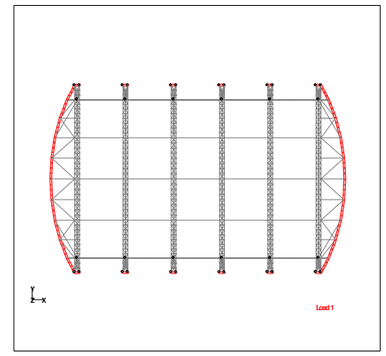
DIAGONAL – 89Ø X 4



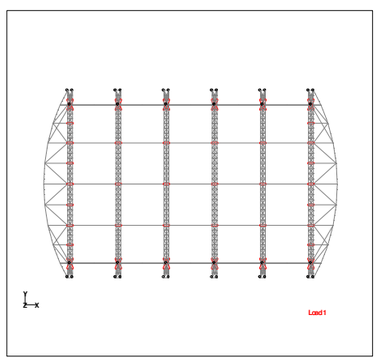
DIAGONAL – 114Ø X 4.5



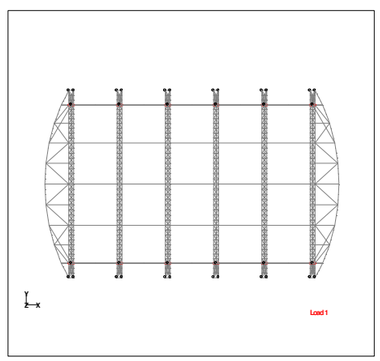
TOP CURVED CHORD - 219Ø X 6



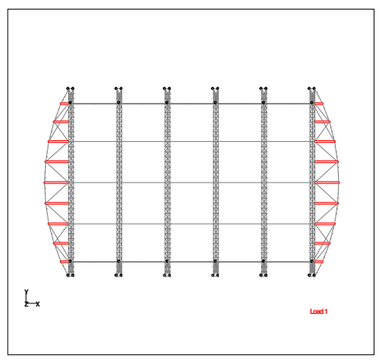
EDGE CHORD - 273Ø X 9.5



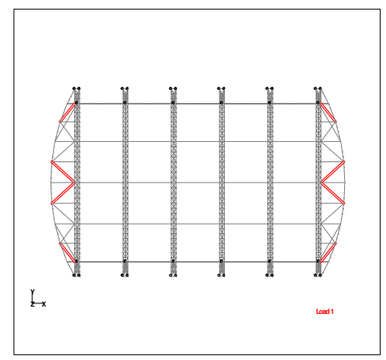
HORIZONTAL BOTTOM & DIAGONAL – 139Ø X 6



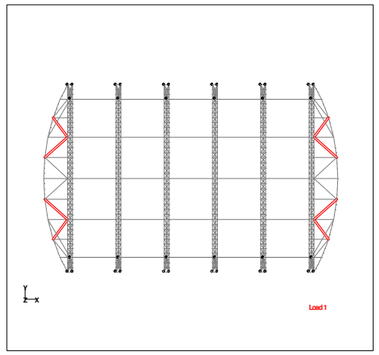
HORIZONTAL BOTTOM – 139Ø X 8



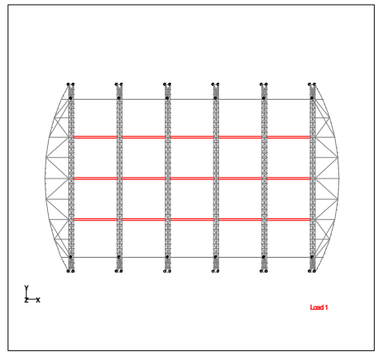
EDGE BRACE – 168.3Ø X 6



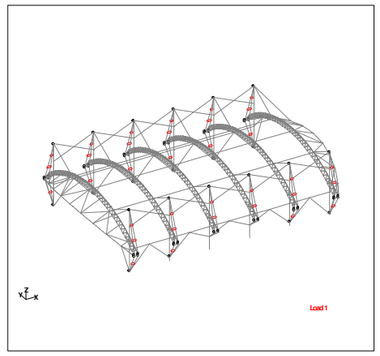
EDGE DIAGONAL BRACE – 168.3Ø X 10



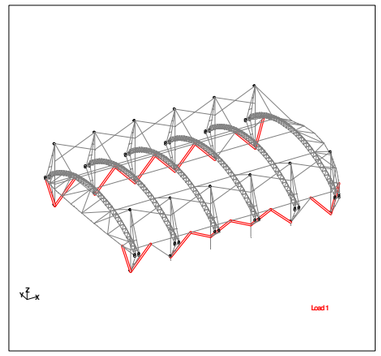
EDGE DIAGONAL BRACE – 168.3Ø X 8



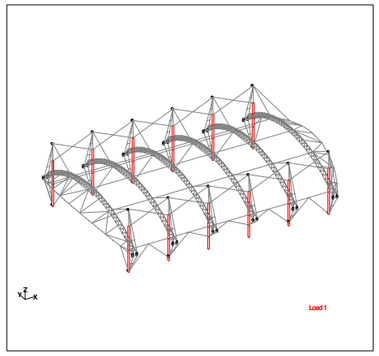
TIE BTW 3D TRUSS – 273Ø X 8



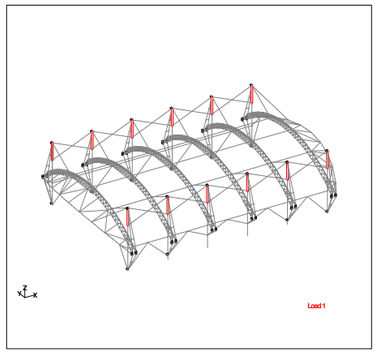
TIE BETWEEN MAST BACKSTAY – 73Ø X 5



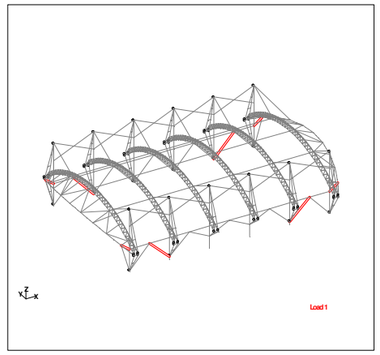
LONGITUDINAL BRACE – 219Ø X 6



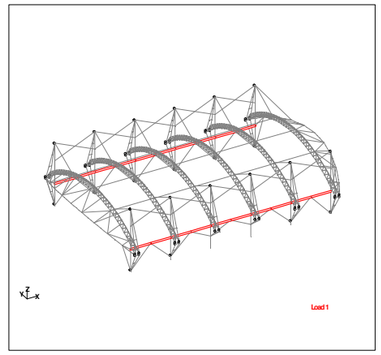
LOWER MAST – 609Ø X 16



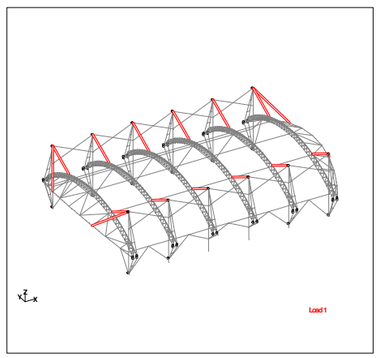
INTERMEDIATE MAST – 406.4Ø X 12.5



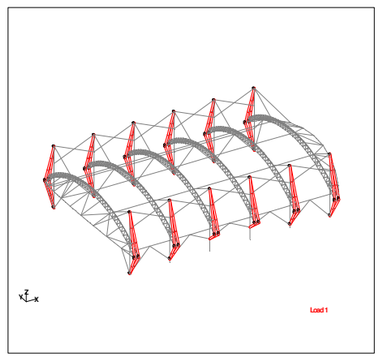
LONGITUDINAL BRACE – 219Ø X 9



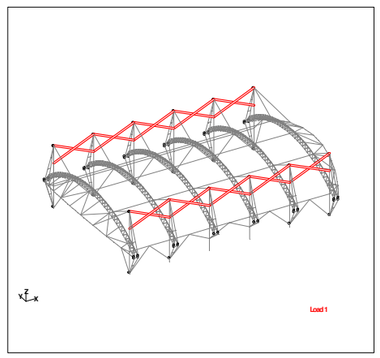
LONGITUDINAL TIE – 273Ø X 9



MAST FRONT STAY – 219Ø X 9



MAST BACKSTAY – 168Ø X 6



SAFETY CABLE BETWEEN MAST – 16Ø

7.6 LOCAL DESIGN CHECK

7.6.1 STABILIZING CABLE AT TOP OF MAST

From the steel structure analysis output,

maximum axial force = 30 KN

Proposed to use 16mm Ø 1x19 galvanized steel wire rope

Min breaking load = 211 KN >>30 KN

Therefore is ok to use 16mm Ø wire rope.

7.6.2. HOLDING DOWN BOLTS

Reaction summary extracted from analysis output as shown,

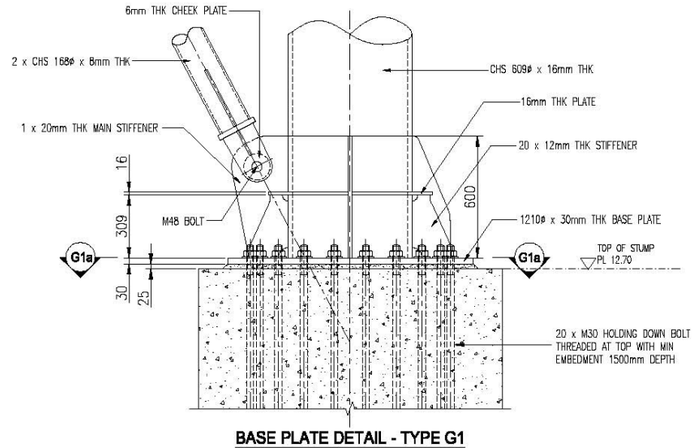
			Horizontal		Vertical	Moment		
	Node	L/C	FX (kN)	FY (kN)	FZ (kN)	MX (kNm)	MY (kNm)	MZ (kNm)
Max FX	800	208:1.2(SW+DCW)+1.2(WSB_P)	**232.063**	97.654	-23.855	-106.987	62.379	-22.129
Min FX	782	206:1.2(SW+DCW)+1.2(WDP_P)	**-232.586**	97.637	-23.505	-106.971	-60.596	20.386
Max FY	790	201:1.4(SW+DCW)+1.6(CDW+VL)	-13.887	**228.469**	507.055	-773.536	-39.192	3.081
Min FY	788	201:1.4(SW+DCW)+1.6(CDW+VL)	-26.716	**-228.757**	566.764	246.624	-4.373	-1.534
Max FZ	788	201:1.4(SW+DCW)+1.6(CDW+VL)	-26.716	-228.757	**566.764**	246.624	-4.373	-1.534
Min FZ	776	202:(SW+DCW)+1.4WU	-60.139	160.995	**-333.775**	-95.690	9.324	62.486
Max MX	788	204:1.2(SW+DCW)+1.2WEN	-42.971	-124.248	88.426	**529.380**	-7.790	-0.007
Min MX	790	201:1.4(SW+DCW)+1.6(CDW+VL)	-13.887	228.469	507.055	**-773.536**	-39.192	3.081
Max MY	802	208:1.2(SW+DCW)+1.2(WSB_P)	228.307	-97.765	13.935	171.829	**278.833**	22.013
Min MY	784	206:1.2(SW+DCW)+1.2(WDP_P)	-228.844	-97.713	14.756	171.682	**-278.306**	-19.787
Max MZ	808	208:1.2(SW+DCW)+1.2(WSB_P)	63.227	34.256	-60.780	-87.560	-27.936	**124.287**
Min MZ	806	208:1.2(SW+DCW)+1.2(WSB_P)	63.709	-34.308	-65.863	89.498	-29.237	**-124.972**

From the reaction forces summary output, max reaction forces are;

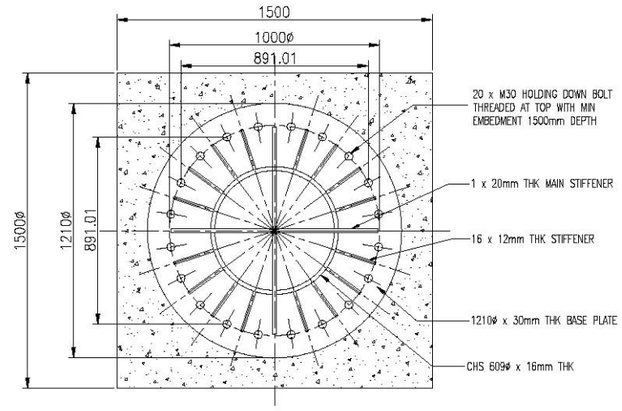
Fx = 233 / -233 KN Mx = 530 / -774 KNm
Fy = 229 / -229 KN My = 279 / -279 KNm
Fz = 567 / -334 KN Mz = 125 / -125 KNm

Note : +ve Fz is the compression and –ve Fz is the tensile force

Proposed 20 x M30 grade 8.8 in a circular arrangement at 1m diameter, and assumed only 4 bolts on each side at 0.89m apart are resisting;



BASE PLATE DETAIL - TYPE G1



SECTION G1a - G1a

Ft due to Mx per bolt = 774 / (4x0.89) = 217.4 KN
Direct Ft per bolt =334 /20 = 16.7 KN
Total tensile per bolt Ft = 217.4 + 16.7 = 234.1 KN

Fs due to Mz per bolt = 125 / (4x0.89) = 35.1 KN
Direct Fs per bolt = $(233^2 + 229^2)^{½}$ /20 = 16.3 KN
Total Fs per bolt = 35.1 + 16.3 = 51.4 KN

Tensile strength of Grade 8.8 bolt = 450 N/mm^2
Shear strength of Grade 8.8 bolt = 375 N/mm^2
ft = 234.1xe3 / 561 = 417 N/mm^2 < 450 N/mm^2 OK
fs = 51.4xe3 / 561 = 92 N/mm^2 < 375 N/mm^2 OK

Combined stress check,
417/450 + 92 /375 = 1.172 < 1.4 OK

7.6.2.1 Embedment length check,

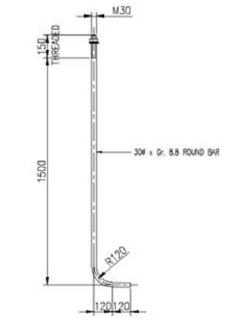
fbu = $\beta (fcu)^{½}$

Where fbu = design ultimate anchorage bond stress
β = 0.28 for plain bar
fcu = 35 N/mm^2 for concrete grade

fbu = $0.28 (35)^{½} = 1.656$

anchorage force / (Π x Ø x L) = fbu

embedment length L = anchorage force / (Π x Ø x fbu)
= 234.1x1e3 / (Π x 30 x 1.656)
= 1500 mm



TYPICAL HOLDING DOWN BOLT DETAIL

Therefore provide minimum 1500mm embedment length is OK.

7.6.2.2 Base plate thickness check

Assumed the plate is bend in double curvature over the width of 590mm for 4 bolts and ignored the 16mm and 20mm thk stiffener plate,

M = 234.1 x (1.0 - 0.609)/2 x ½ = 22.88 KNm

$Z_{provide}$ = 1/6 x 590 x 30^2 = 88500 mm^3

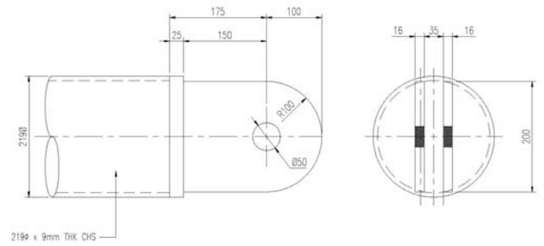
fb = 22.88x1e6 / 88500 = 258 N/mm^2 < 275 N/mm^2 OK

Therefore use 30mm thk base plate with stiffener plate is OK.

7.6.3 DESIGN OF PIN CONNECTIONS

7.6.3.1 MAST FRONT HANGER

Max axial force as extracted from analysis output = 217 KN



END DETAIL

Proposed to use 1 x M48 grade 8.8 bolt with 16mm thick tongue plate,

Tensile strength of Grade 8.8 bolt = 450 N/mm^2
Shear strength of Grade 8.8 bolt = 375 N/mm^2

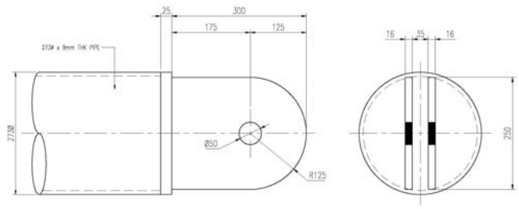
fs = [(217/2x1e3)] /1470 = 74 N/mm^2 < 375 N/mm^2 OK

bearing stress of tongue plate, fbs = [(217/2)x1e3] / (48x16)
= 141 N/mm^2 < 460 N/mm^2 OK

Where 460 N/mm^2 is the bearing strength for S275 plate.

7.6.3.2 TIE BETWEEN 3D TRUSS

Max axial force as extracted from analysis output = 323 KN



END PLATE FOR 273Ø PIPE

Proposed to use 1 x M48 grade 8.8 bolt with 16mm thick tongue plate,

Tensile strength of Grade 8.8 bolt = 450 N/mm^2
Shear strength of Grade 8.8 bolt = 375 N/mm^2

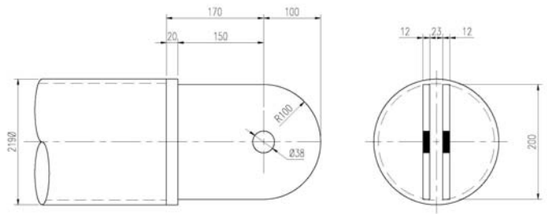
fs = [(323/2)x1e3] / 1470 = 110 N/mm^2 < 375 N/mm^2 OK

bearing stress of tongue plate, fbs = [(323/2)x1e3] / (48x16)
= 210 N/mm^2 < 460 N/mm^2 OK

Where 460 N/mm^2 is the bearing strength for S275 plate.

7.6.3.3 BRACE AT LOWER MAST

Max axial force as extracted from analysis output = 365 KN



END DETAIL

Proposed to use 1 x M36 grade 8.8 bolt with 12mm thick tongue plate,

Tensile strength of Grade 8.8 bolt = 450 N/mm^2
Shear strength of Grade 8.8 bolt = 375 N/mm^2

fs = [(365/2)x1e3] / 817 = 224 N/mm^2 < 375 N/mm^2 OK

bearing stress of tongue plate, fbs = [(365/2)x1e3] / (36x12)
= 422 N/mm^2 < 460 N/mm^2 OK

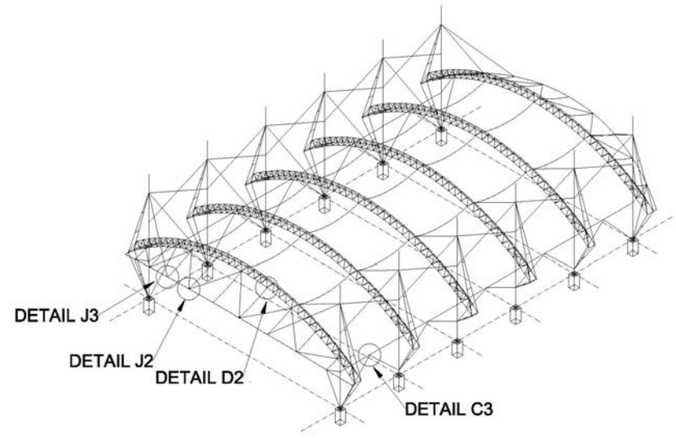
Where 460 N/mm^2 is the bearing strength for S275 plate.

7.6.4 PLATE CONNECTION TO CHS

For the tensile structure, there is a lot of connection with plate welded to circular hollow section for fixing of fabric, for bolting of bracing member and etc. To check the influences of forces to these plate and main member is quite complex, so a finite element model (FEM) is done for some typical connection to verify the von mises stresses or equivalent stress is not to exceed the yield stress of main member and plates.

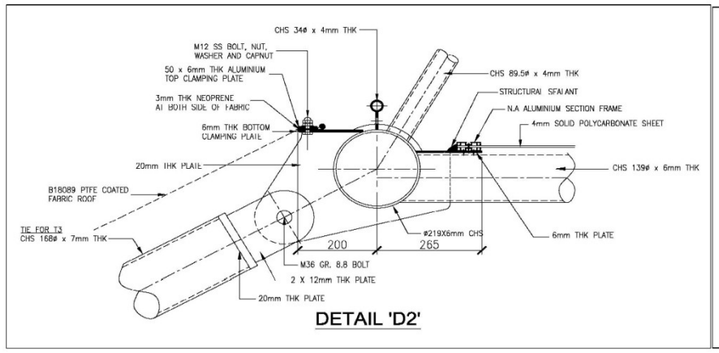
The von mises stress shall not exceed 90% of the material yield stress. Therefore the connection stresses shall not exceed 0.9x275 N/mm^2 = 247.5 N/mm^2

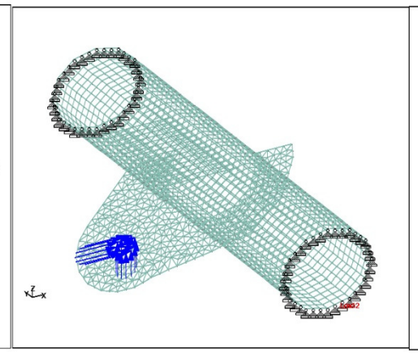
Extract 4 finite element model done at four connections as shown and attached for information. And max von mises stress is 237 N/mm^2 at Detail J2.

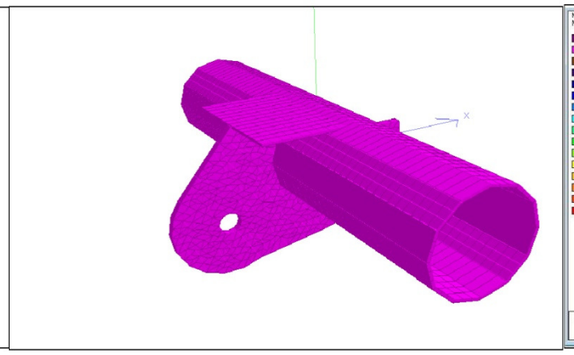


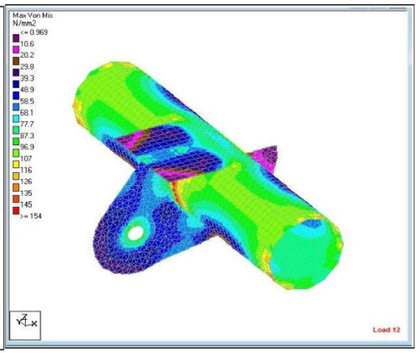
KEY PLAN FOR CONNECTION DESIGN

7.6.4.1 JOINT AT 3D TRUSS BOTTOM CHORD TO EDGE FRAME BRACE MEMBER



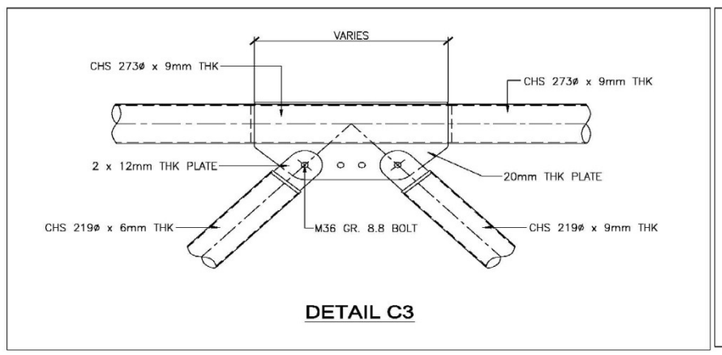


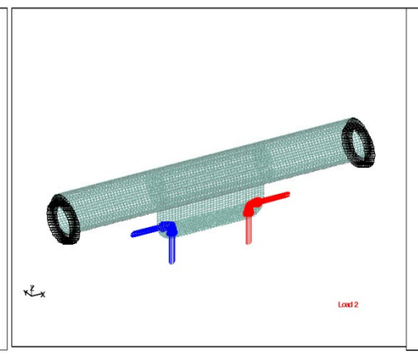


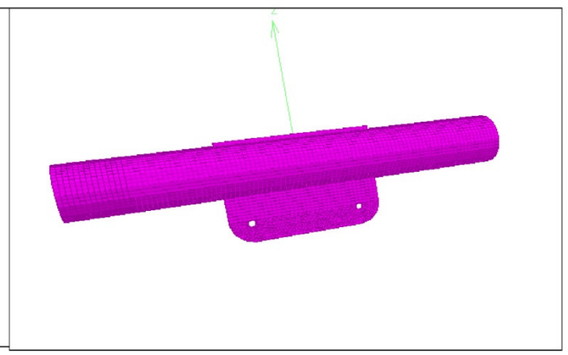


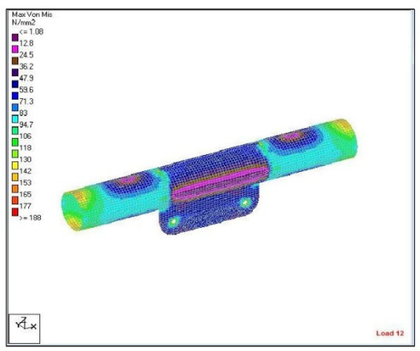
INFORMATION ON THE JOINT | FEM WITH FORCE @ BOLT HOLE | 3D RENDERED | MAX VON MISES OUTPUT

7.6.4.2 JOINT AT LOWER MAST HORIZONTAL TIE & BRACE MEMBER



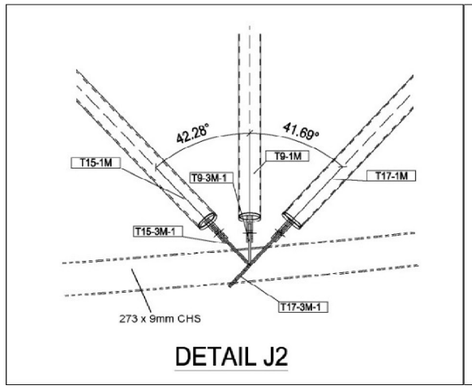




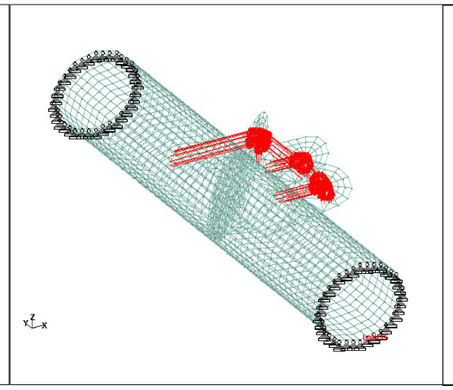


INFORMATION ON THE JOINT | FEM WITH FORCES @ BOLT HOLES | 3D RENDERED | MAX VON MISES OUTPUT

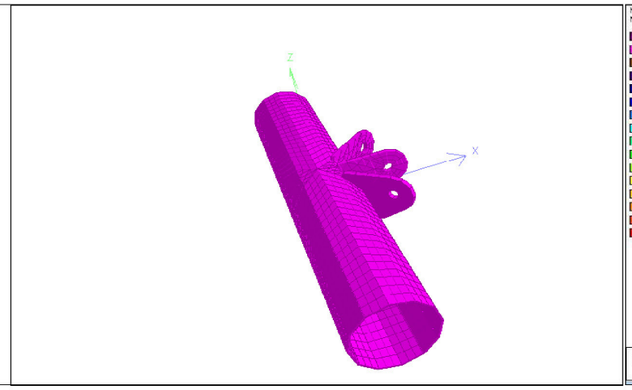
7.6.4.3 JOINT AT EDGE FRAME WITH 3 BRACE MEMBER



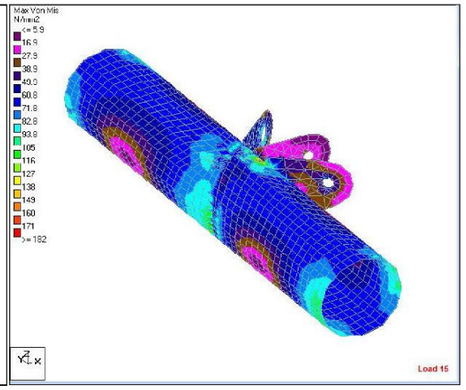
INFORMATION ON THE JOINT



FEM WITH FORCES

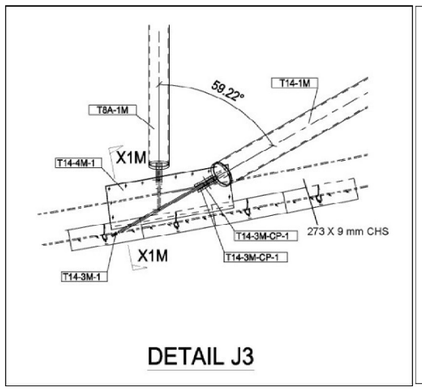


3D RENDERED

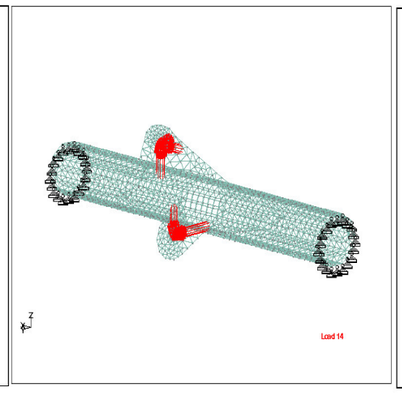


MAX VON MISES OUTPUT

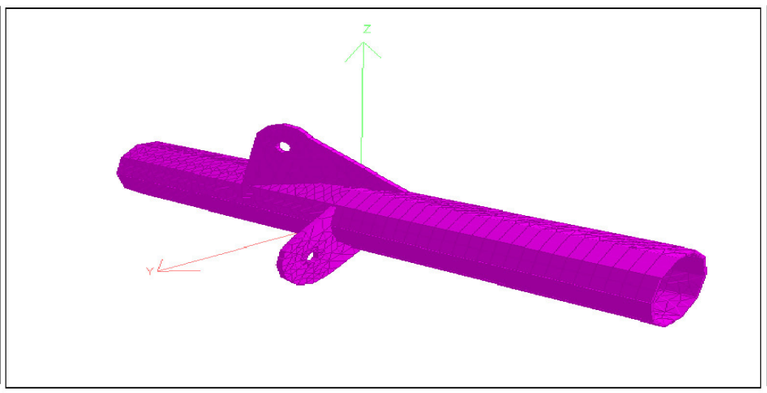
7.6.4.4 JOINT AT FRONT HANGAR TO EDGE FRAME WITH BRACE MEMBER



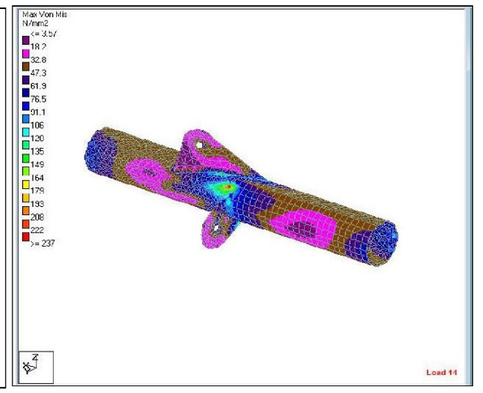
INFORMATION ON THE JOINT



FEM WITH FORCES

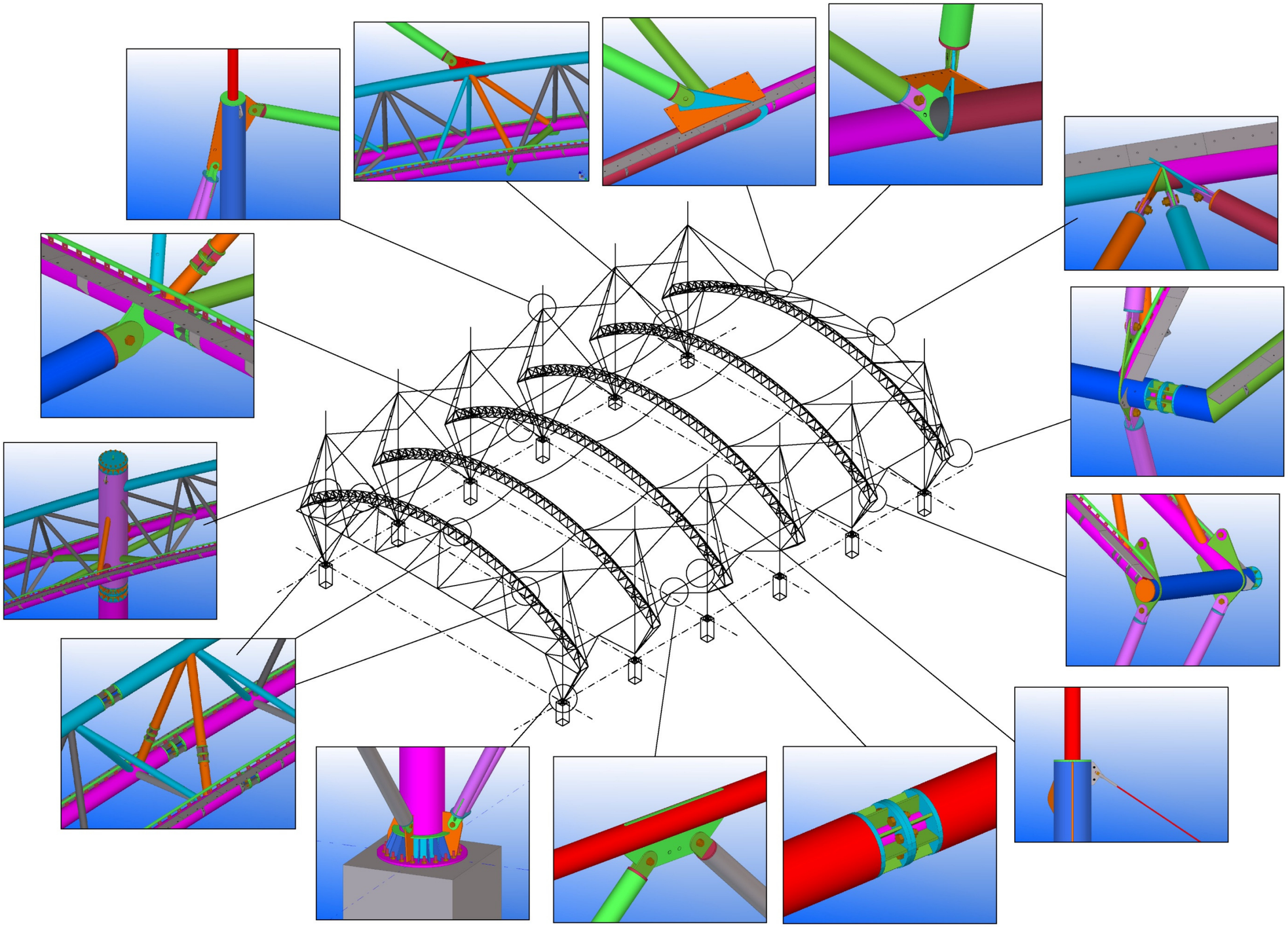


3D RENDERED



MAX VON MISES OUTPUT

7.7 SUMMARY OF CONNECTION DETAILS



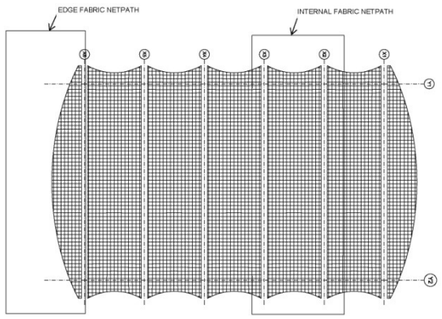
8. MEMBRANE ANALYSIS AND DESIGN

8.1 GENERAL INFORMATION

The fabric material is represented by a network of mesh formed by membrane link represented by segment of lines. For membrane design, firstly is to do a form finding to study the feasibility of the proposed shape with assumed material type and sizes. Secondly is to study the proposal when various loading is applied onto the stable form and check for the displacement and stresses in the membrane for all possible load combination and not forgetting to make sure the proposed form will not have any water pounding possibility. And lastly is to do a cutting pattern based on the available width of proposed fabric used with compensation value adopted from the result of the biaxial test and also typical production practice ie seam width and pocket allowance. And then finally the individual pattern can then be used for production.

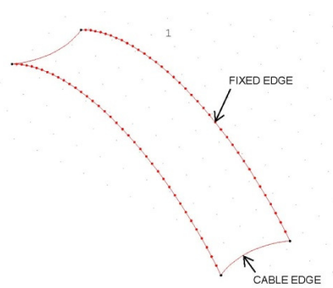
8.2 FORM FINDING

8.2.1) To identify the different netpath for the project and for the shape of this structure, there is only 2 type of netpath ie the internal panel and the edge panel as shown.

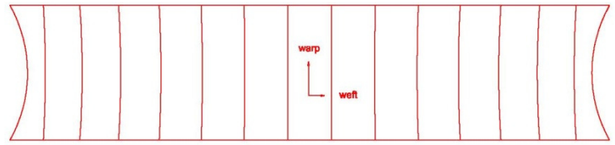


8.2.2) Prepare the boundary in cad program and then import into EASY and assign sag ratio to the cable edge and radius or sag ratio for the curved beam. Check the fixity of the boundary points for form find and also for static analysis.

In this case, the sag ratio used is 12.5% for the border cable edge and 18% or 50m radius for the curved fixing edge.



8.2.3) Then form find based on the assigned value. The warp and weft direction have to be decide based on the intended cutting pattern configuration as these will affect the static analysis result later.

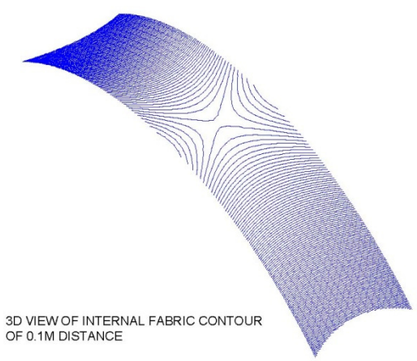


PROPOSED CUTTING PATTERN LAYOUT

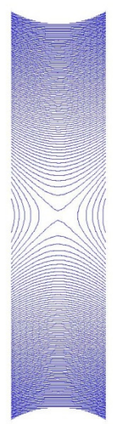
Result of form finding | Weft is along the curved edge | Ward is across curve edge

8.3 CONTOUR

A contour line of 0.1m is plotted and it show there will not be any water stagnate problem due to the shape of the structure.



3D VIEW OF INTERNAL FABRIC CONTOUR OF 0.1M DISTANCE

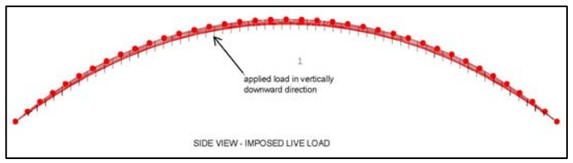


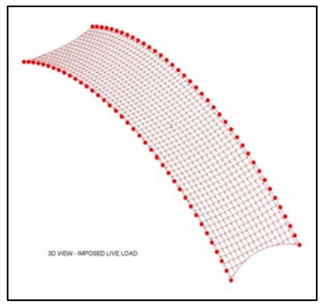
PLAN VIEW OF INTERNAL FABRIC CONTOUR OF 0.1M DISTANCE

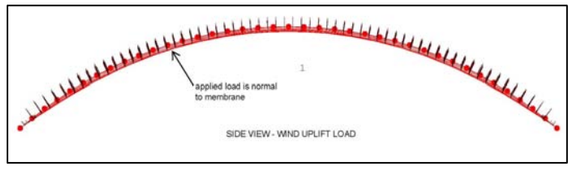
8.4 LOADING AND STATICAL ANALYSIS

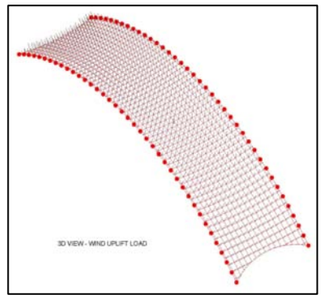
8.4.1) Assumed a prestress force for the final form and load the form with the calculated various loading ie. wind load or live load by creating load case. A prestress force of 3 KN/m for warp and weft is adopted for this project.

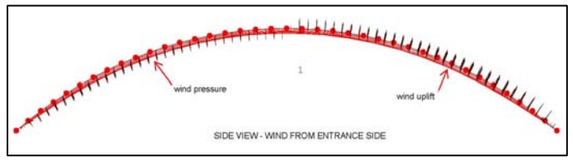
The surface load is applied as nodal load to the nodes in the mesh. And all wind load are applied normal to the membrane surface, except the imposed live load which is vertically to the surface of the membrane. Extract some applied load diagram for reference.

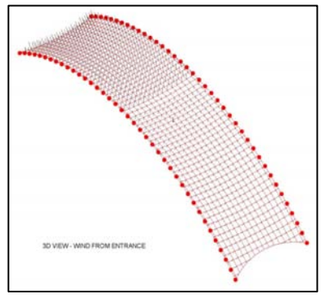




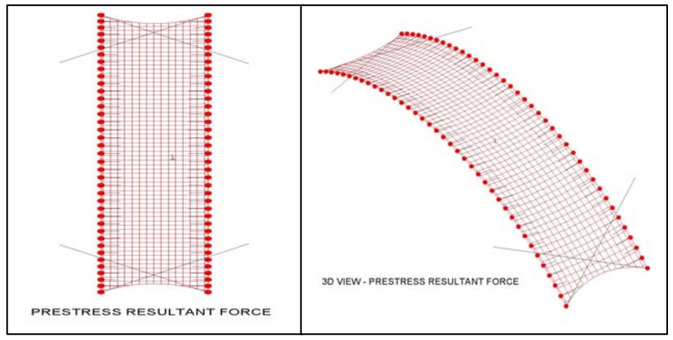


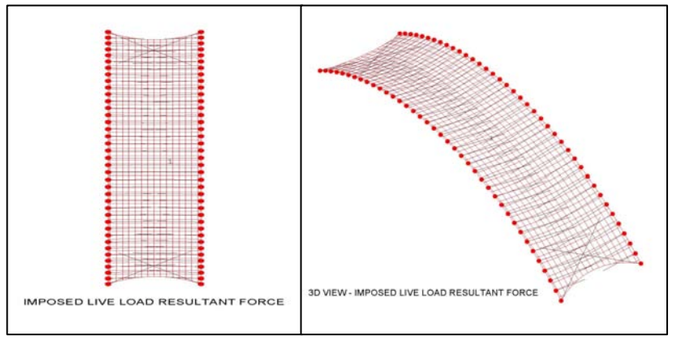


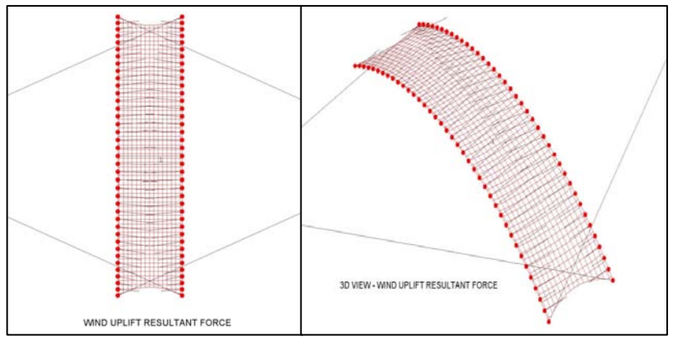


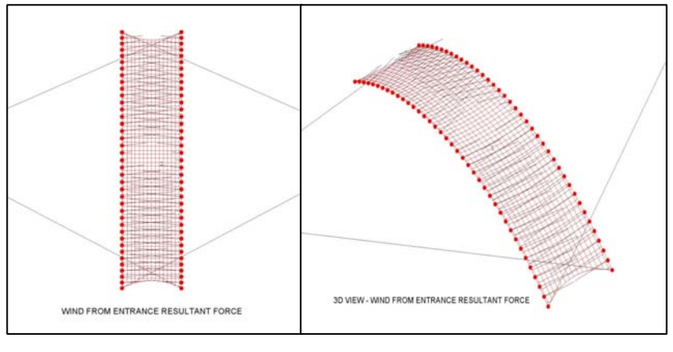


8.4.2) Then view the analysis results ie reactions at the fixing point. These are the forces that are then extract and apply to the steel structure.

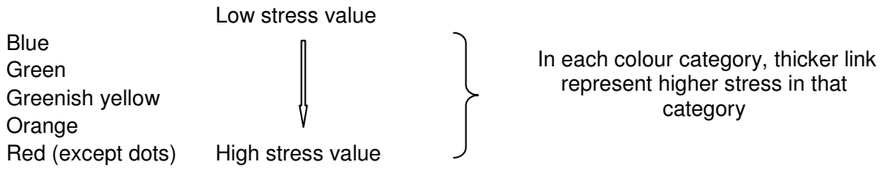




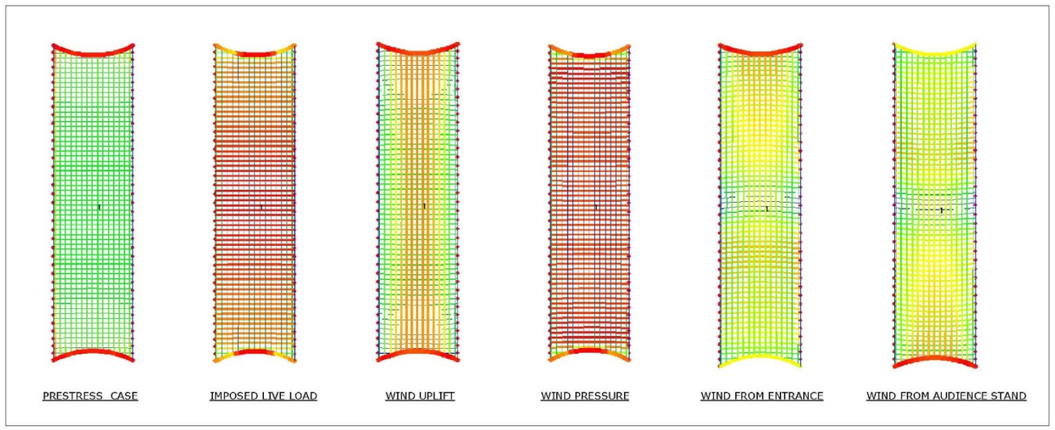


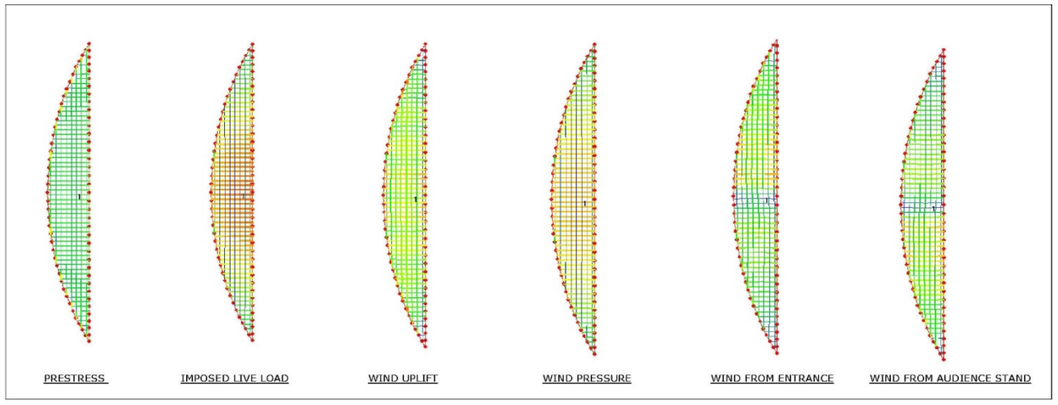


8.4.3) To perform statical structural analysis, correct stiffness value have to assumed for the membrane link. In this case, 2000 and 1000 is assumed for warp and weft membrane links and 5000 assumed for cable link. Upon completion of the analysis of a typical load cases, there will be a stressed pattern shown in these membrane link. The magnitude of stresses is expressed in colour as well as width of membrane link in the following order,



Red dots seen in any stress pattern represent fixed point of fabric for design analysis.
For each load case, there will be a overall stress pattern shown where the highest stressed area can be located. The following membrane stress value are not shown for clarity.





8.5 LOCAL DESIGN CHECK

8.5.1 MEMBRANE

Summary of Membrane Stress and Border Cable Force

	Membrane Link Stress KN/m	KN/m		Cable Link Force KN
Load Case	Critical Low	Critical High		Critical High
Internal Fabric				
Prestress	2.224	5.056		42
Imposed Live	1.005	9.045		18
Wind Uplift	3.056	24.144		231
Wind Pressure	0.896	10.464		32
Wind from Entrance	1.923	17.307		165
Wind from Grandstand	1.953	17.577		168
Edge Fabric				
Prestress	2.442	5.098		-
Imposed Live	1.67	8.47		-
Wind Uplift	4.176	15.424		-
Wind Pressure	1.433	11.137		-
Wind from Entrance	3.132	15.948		-
Wind from Grandstand	3.214	15.886		-

From the tabulated summary, the max membrane stress is 24 KN/m from wind uplift case.

From the technical data of B18089 from Verseidag, ,

Tensile strength (N/5cm) warp/ weft = 7000 / 6000

And the max stress is along the weft direction, = 120 KN/m

Safety factor = 120 / 24 = 5.0

Therefore the chosen membrane is ok to use for this span.

8.5.2 BORDER CABLE

From the tabulated summary, the max cable force is 231KN from wind uplift case.

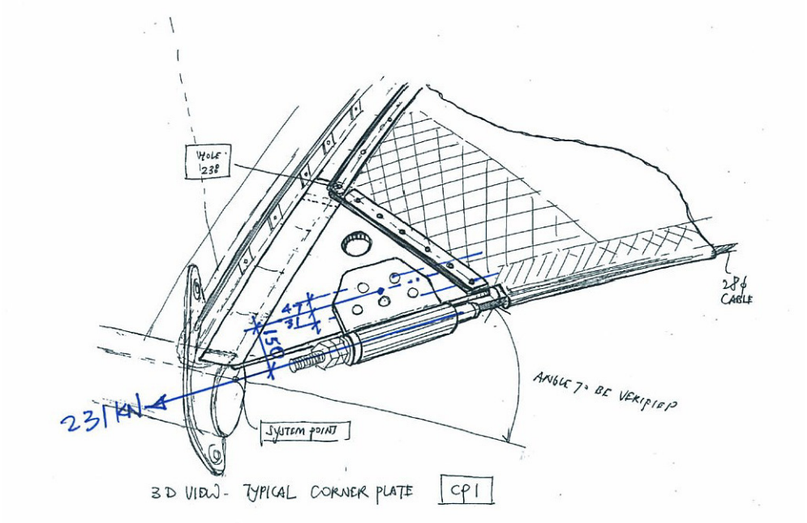
Proposed to use 28mm Ø 6 x 37 IWRC galvanized steel ire rope,

Min breaking load = 49600 kg = 506 KN

Safety factor = 506 / 231 = 2.2

Therefore is ok to use 28mm Ø wire rope.

8.5.3 CORNER PLATE



The 28mm diameter border cable is fix on to a double layer 16mm thk 'burger' welded to 89 ø x 11.3mm thk x 300mm long pipe section.

Max border cable force = 231 KN (unfactored load)
Assumed load factor of 1.4 due to wind uplift, F = 231 x 1.4 = 323.4 KN

Center of group of 5 x M36 G8.8 bolts to center of cable fitting = 155mm
Moment due to cable force, M = 323.4 x 0.155 = 50 KNm

This moment is to resist by the 5 bolts about the center of bolts in shear force Fs,

Therefore 2 Fs x 0.047 = 50 KNm
Fs due to moment = 50/(2x0.047) = 532 KN

Or 3 Fs x 0.031 = 50 KNm
Fs due to moment = 50/(3x0.031) = 538 KN

Direct shear force per bolt = 323.4/5 = 64.7 KN
Therefore maximum shear force per bolt = 538 + 64.7 = 602.7 KN

Proposed to use 5 x M36 grade 8.8 bolt with 16mm thick double plate,

Tensile strength of Grade 8.8 bolt = 450 N/mm^2
Shear strength of Grade 8.8 bolt = 375 N/mm^2

fs = [(602.7/2x1e3)] /817 = 369 N/mm^2 < 375 N/mm^2 OK

bearing stress of the double 'burger' plate, fbs = [(602.7/2)x1e3] / (36x16)
= 523 N/mm^2 < 550 N/mm^2 OK

Where 550 N/mm^2 is the bearing strength for S355 plate.

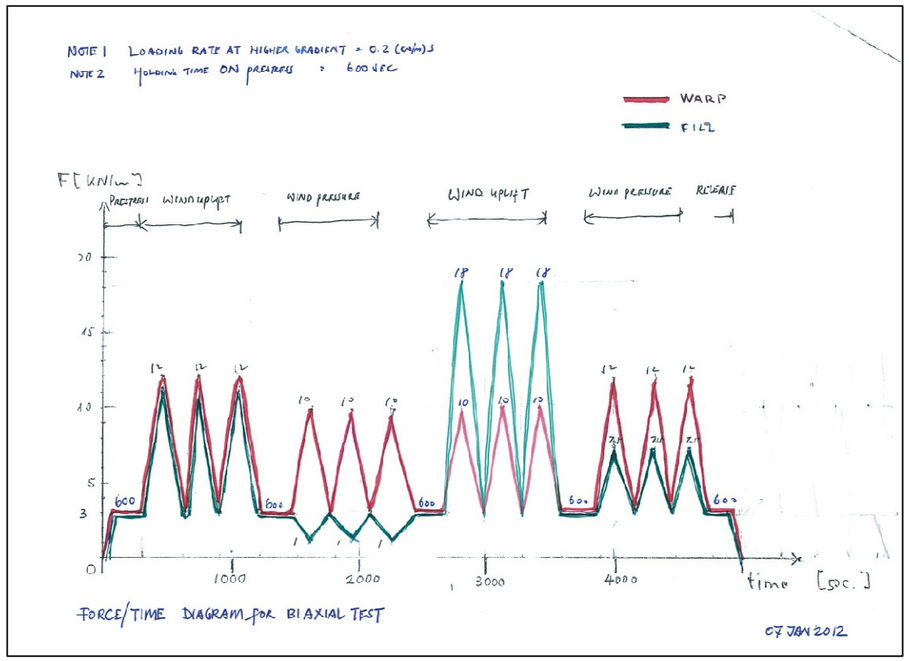
8.6 BIAXIAL TEST

From the membrane stress pattern, a suitable value is decided for carry out the biaxial test. In this case, a value of about 70% of the maximum stress is used for various load case is tabulated as follow. And the test is carried out by University of Essen, Germany.

These values are extracted from the membrane analysis based on wind speed of 38 m/s which is later revised to 32 m/s in the final design.

S/N	LOAD CASE	WARP DIRECTION (KN/m)	WEFT DIRECTION (KN/m)
1	PRESTRESS	3.0	3.0
2	VERTICAL LIVE LOAD	7.5	1.4
3	WIND PRESSURE	10.0	1.0
4	WIND UPLIFT	10.0	18.0
5	WIND UPRESSURE + UPLIFT		
	PRESSURE SIDE	12.0	7.5
	UPLIFTSIDE	12.0	12.0

The following sketch is the force-time diagram proposed to University of Essen for the load ratio and sequences and the numbers of loads.



In this particular project, there are FOUR batch of material from Verseidag, so FOUR biaxial test is done. Extract here some pages from one of the test for information.

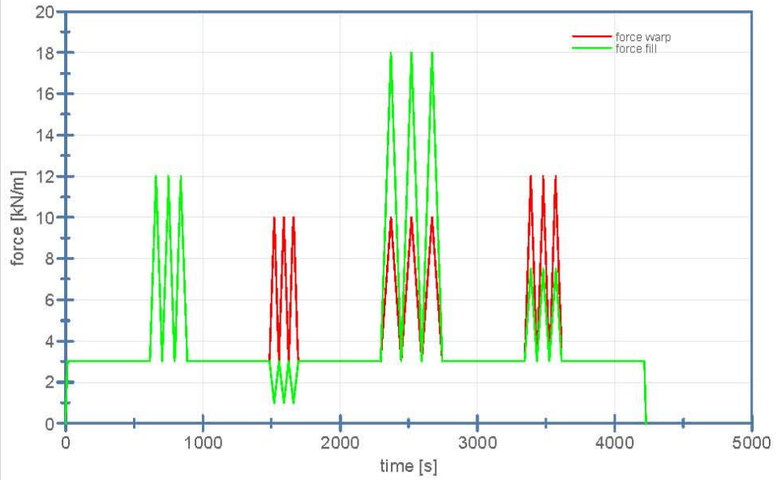
UNIVERSITÄT DUISBURG ESSEN

Fakultät für Ingenieurwissenschaften - Abteilung Bauwissenschaften
Essener Labor für Leichte Flächentragwerke ELLF
45141 Essen, Universitätsstr. 15, Tel.: 0201/183-4223, Fax: -4276

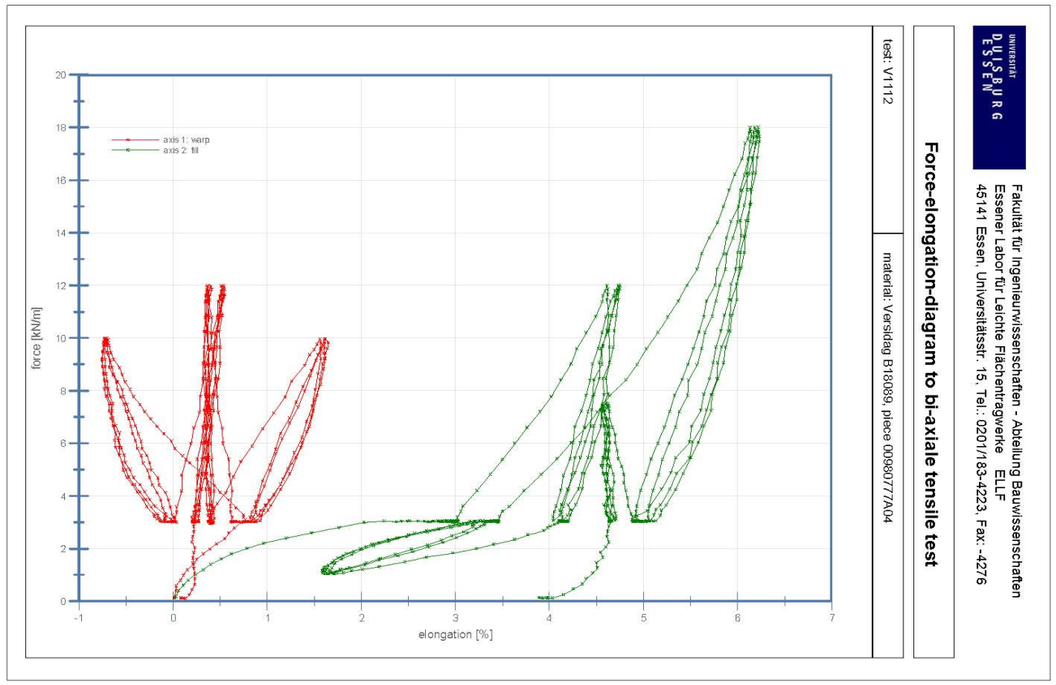
Test report on bi-axiale tensile test

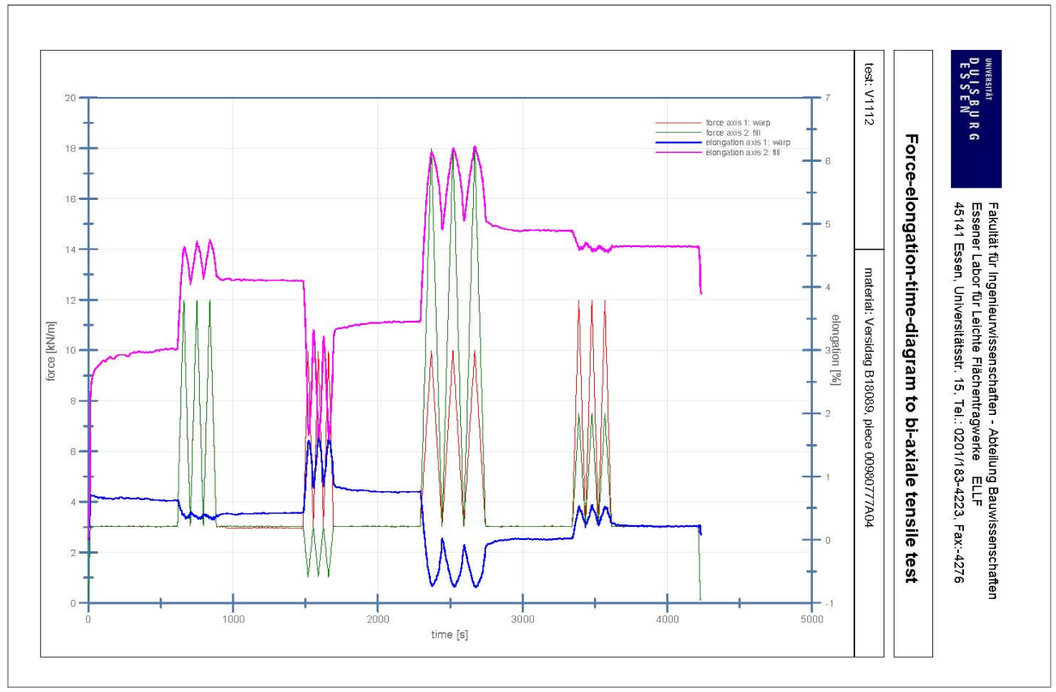
date: 09.01.2012 test: V1112	persons in charge: Dipl.-Ing. K. Saxe/G. Knop/Dipl.-Ing. T. Homm material: Versidag B18089, piece 00980777A04

load diagram (reference values)

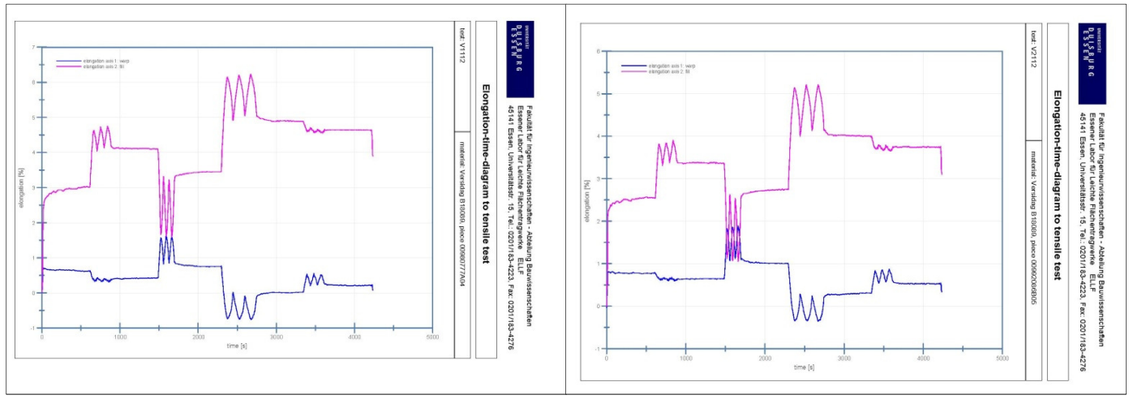


axis 1: warp direction	- Minimum: 0.10 kN/m - Maximum: 12.00 kN/m
axis 2: fill direction	- Minimum: 0.10 kN/m - Maximum: 18.00 kN/m
loading rate:	0.2 (kN/m)/s at the higher gradient
test temperature:	23.6°C
time interval:	1.0, 2.0, 3.0, 10.0 s
comments:	





The elongation result of the 4 batch of material is summarized as follow;



As the result was based on higher wind speed as opposed to the design wind speed of 32m/s, when deciding a suitable value for compensation for cutting pattern, some reduction is considered from the tested result.

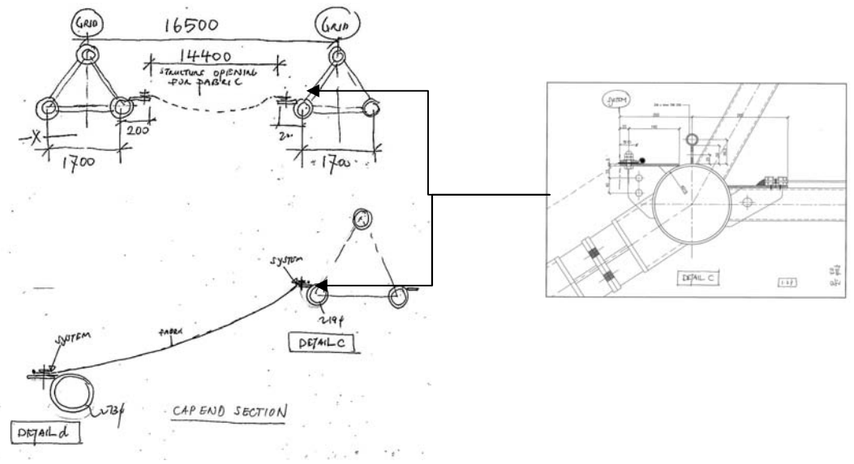
Based on past experience with Verseidag's PTFE material and the above result, we have used compensation value of 2.8% for the weft and 0.6% for the warp. Whereas the fixed side which is along the weft direction 1.2% is used instead of 2.8% as shrinkage is expected at welded seam for the keder pocket.

8.7 CUTTING PATTERN

8.7.1 FABRIC SYSTEM POINT

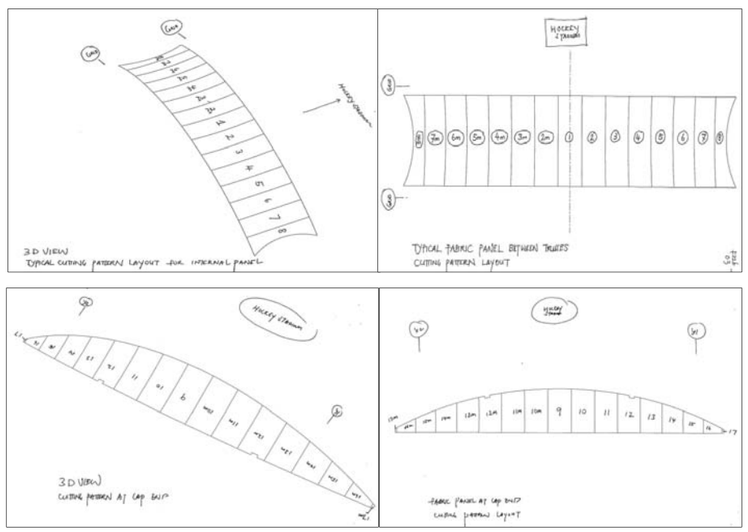
After the compensation value is established, some typical details ie. seam width, clamping detail, border cable pocket size are then finalized to prepared the cutting pattern. Also the roll width of the membrane is also known to decide how many strips of cutting pattern.

For fabric patterning, the system is different from the steel structure system, example the distance between 2 steel arch center is 16.5m, but fabric system is smaller than that and is 14.4m instead.



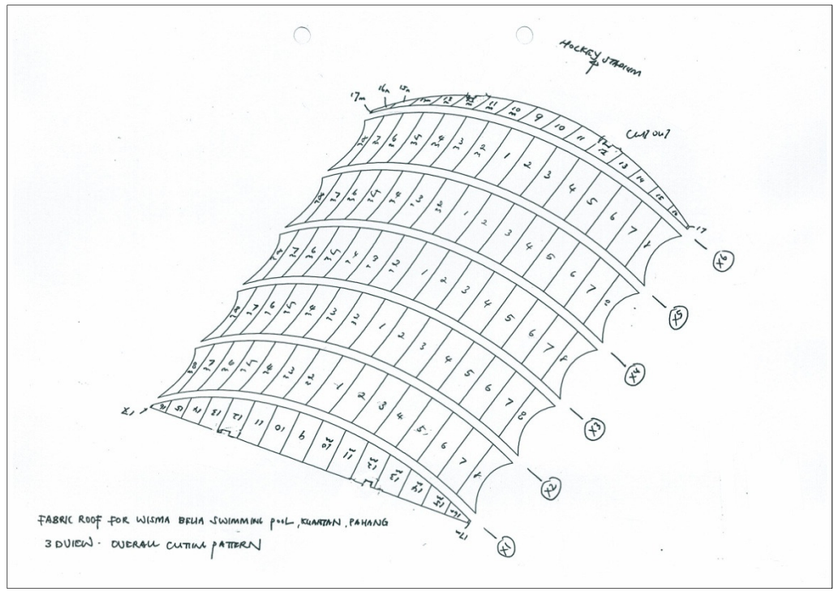
The width of B18089 is 4.7m, so maximum width of the patterning at system is 4.6m after deducting the overlapped seam of 80mm and trimming of 10mm on each side of the width of membrane.

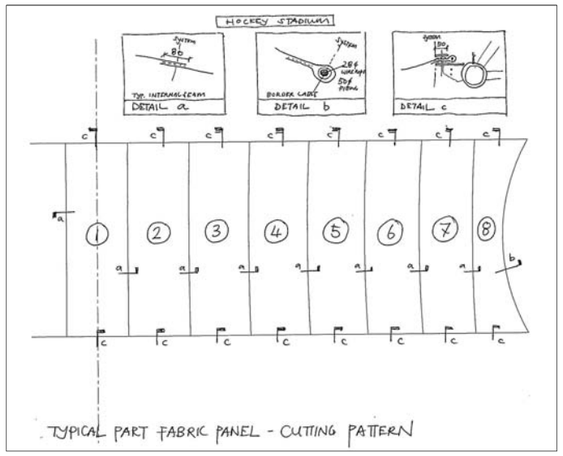
So total nos of strip for internal panel is about 68m/4.6 = 15 and end panel 17 strip, and they are symmetrical about the centerline, so only 17 cutting pattern need to be done.

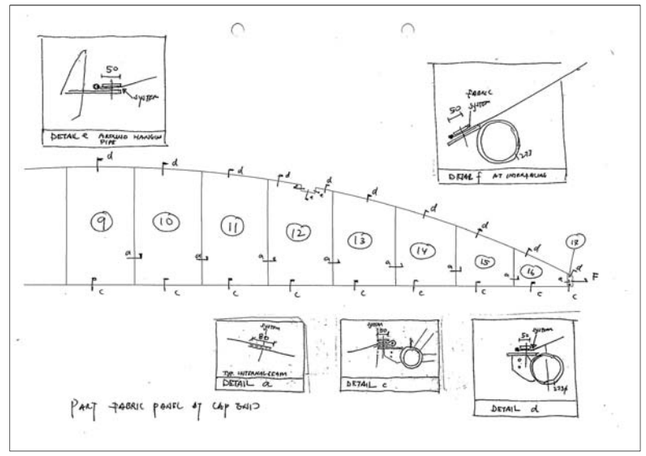


8.7.2 COMPENSATED CUTTING PATTERN

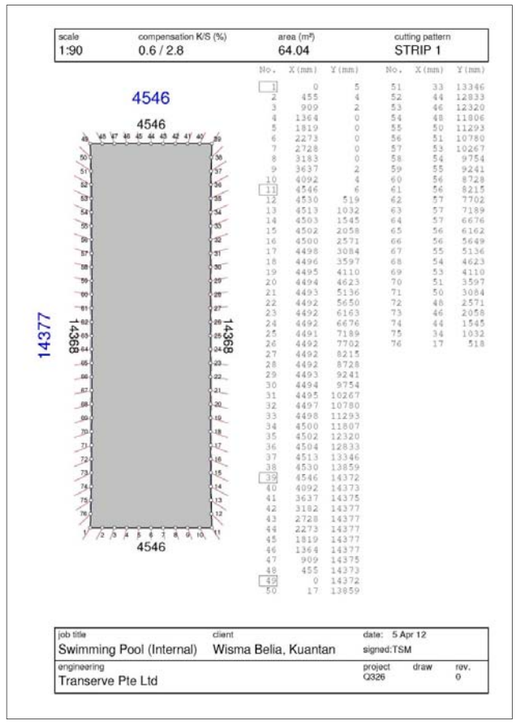
Therefore the overall cutting pattern for the swimming pool membrane roof are as follow;

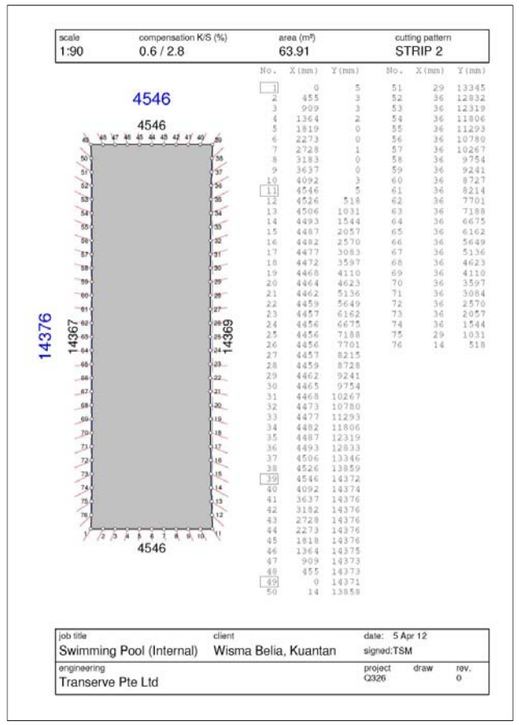


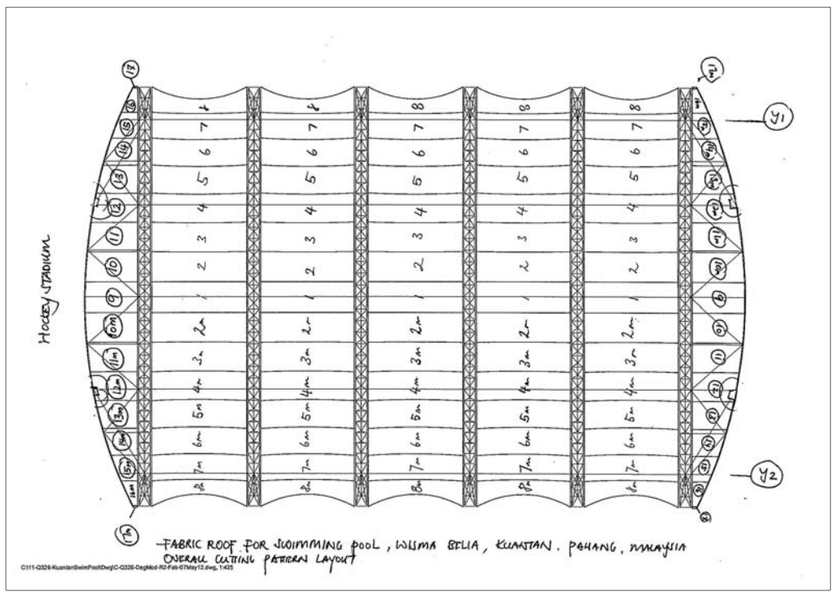




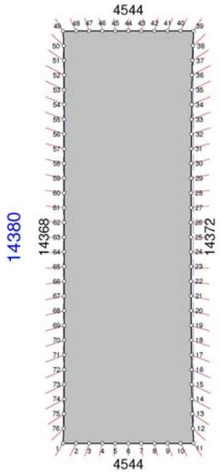
The compensated cutting pattern Strip 1 to 17 based on fabric system are attached for info.







scale	compensation K/S (%)	area (m²)	cutting pattern
1:90	0.6 / 2.8	63.88	STRIP 3



No.	X (mm)	Y (mm)	No.	X (mm)	Y (mm)
1	0	7	51	29	13348
2	454	5	52	36	12835
3	909	3	53	36	12321
4	1363	2	54	36	11808
5	1818	1	55	36	11295
6	2272	0	56	36	10782
7	2726	1	57	36	10269
8	3181	1	58	36	9756
9	3635	2	59	36	9243
10	4090	2	60	36	8730
11	4544	6	61	36	8216
12	4523	519	62	36	7703
13	4503	1032	63	36	7190
14	4489	1545	64	36	6677
15	4484	2058	65	36	6164
16	4478	2571	66	36	5651
17	4474	3085	67	36	5138
18	4469	3598	68	36	4625
19	4465	4111	69	36	4111
20	4461	4624	70	36	3598
21	4458	5138	71	36	3085
22	4456	5651	72	36	2572
23	4454	6164	73	36	2059
24	4453	6677	74	36	1546
25	4453	7190	75	29	1033
26	4453	7704	76	14	520
27	4454	8217			
28	4456	8730			
29	4458	9243			
30	4462	9756			
31	4465	10270			
32	4469	10783			
33	4474	11296			
34	4479	11809			
35	4484	12322			
36	4490	12836			
37	4503	13349			
38	4524	13862			
39	4544	14375			
40	4089	14378			
41	3635	14379			
42	3181	14379			
43	2726	14380			
44	2272	14380			
45	1817	14379			
46	1363	14378			
47	909	14378			
48	454	14376			
49	0	14374			
50	14	13861			

job title	client	date: 5 Apr 12
Swimming Pool (Internal)	Wisma Belia, Kuantan	signed:TSM
engineering	project / draw / rev.	
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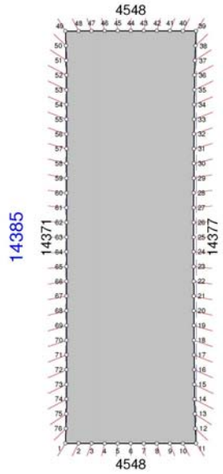
scale	compensation K/S (%)	area (m²)	cutting pattern
1:90	0.6 / 2.8	64.01	STRIP 4



No.	X (mm)	Y (mm)	No.	X (mm)	Y (mm)
1	0	7	51	29	13351
2	455	8	52	37	12838
3	910	4	53	37	12325
4	1365	2	54	37	11811
5	1819	2	55	37	11298
6	2274	1	56	37	10785
7	2729	0	57	37	10272
8	3184	1	58	37	9758
9	3639	2	59	37	9245
10	4094	4	60	37	8732
11	4548	5	61	37	8219
12	4529	518	62	37	7706
13	4509	1032	63	37	7192
14	4496	1545	64	37	6679
15	4491	2058	65	37	6166
16	4486	2572	66	37	5653
17	4482	3085	67	37	5139
18	4478	3599	68	37	4626
19	4475	4112	69	37	4113
20	4471	4625	70	37	3600
21	4469	5139	71	37	3087
22	4467	5652	72	37	2573
23	4465	6166	73	37	2060
24	4464	6679	74	37	1547
25	4464	7192	75	29	1034
26	4464	7706	76	14	520
27	4465	8219			
28	4467	8733			
29	4469	9246			
30	4472	9760			
31	4475	10273			
32	4478	10786			
33	4482	11300			
34	4487	11813			
35	4491	12326			
36	4496	12840			
37	4509	13353			
38	4529	13867			
39	4548	14380			
40	4094	14381			
41	3639	14382			
42	3184	14384			
43	2729	14385			
44	2274	14384			
45	1819	14383			
46	1364	14383			
47	910	14380			
48	455	14377			
49	0	14377			
50	14	13864			

job title	client	date: 5 Apr 12
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engineering	project / draw / rev.	
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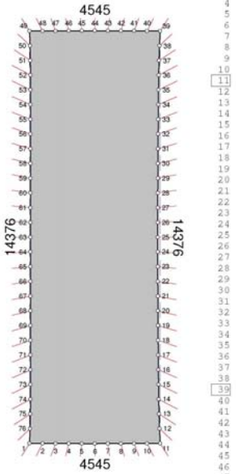
scale	compensation K/S (%)	area (m²)	cutting pattern
1:90	0.6 / 2.8	64.00	STRIP 5



No.	X (mm)	Y (mm)	No.	X (mm)	Y (mm)
1	0	6	51	29	13355
2	455	7	52	37	12841
3	909	4	53	37	12328
4	1364	4	54	37	11815
5	1818	0	55	37	11301
6	2273	0	56	37	10788
7	2727	2	57	37	10274
8	3182	1	58	37	9761
9	3636	2	59	37	9248
10	4091	5	60	37	8734
11	4545	7	61	37	8221
12	4526	520	62	37	7707
13	4506	1034	63	37	7194
14	4494	1547	64	37	6680
15	4489	2060	65	37	6167
16	4484	2574	66	37	5654
17	4480	3087	67	37	5140
18	4476	3600	68	37	4627
19	4473	4114	69	37	4113
20	4469	4627	70	37	3600
21	4467	5141	71	37	3087
22	4465	5654	72	37	2573
23	4463	6167	73	37	2060
24	4462	6681	74	37	1546
25	4462	7194	75	29	1033
26	4462	7707	76	14	520
27	4463	8221			
28	4465	8734			
29	4467	9248			
30	4470	9761			
31	4473	10274			
32	4476	10788			
33	4480	11301			
34	4485	11814			
35	4489	12328			
36	4494	12841			
37	4507	13355			
38	4526	13868			
39	4545	14381			
40	4091	14383			
41	3636	14386			
42	3182	14387			
43	2727	14386			
44	2273	14388			
45	1818	14388			
46	1364	14384			
47	909	14383			
48	454	14382			
49	0	14382			
50	14	13868			

job title	client	date: 5 Apr 12
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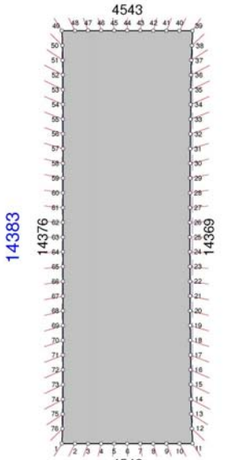
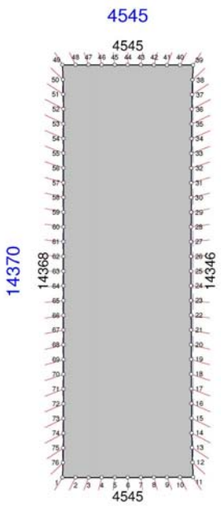
scale	compensation K/S (%)	area (m²)	cutting pattern
1:90	0.6 / 2.8	63.89	STRIP 6



No.	X (mm)	Y (mm)	No.	X (mm)	Y (mm)
1	0	4	51	29	13352
2	454	3	52	36	12839
3	909	2	53	36	12325
4	1363	2	54	36	11812
5	1817	0	55	36	11299
6	2272	0	56	36	10785
7	2726	2	57	36	10272
8	3180	3	58	36	9759
9	3635	3	59	36	9245
10	4089	5	60	36	8732
11	4543	9	61	36	8218
12	4523	522	62	36	7705
13	4503	1035	63	36	7192
14	4489	1548	64	36	6678
15	4484	2061	65	36	6165
16	4478	2574	66	36	5651
17	4474	3087	67	36	5138
18	4469	3600	68	36	4625
19	4465	4113	69	36	4111
20	4461	4626	70	36	3598
21	4459	5139	71	36	3085
22	4456	5652	72	36	2571
23	4455	6166	73	36	2058
24	4453	6679	74	36	1544
25	4453	7192	75	29	1031
26	4454	7705	76	14	518
27	4455	8218			
28	4456	8731			
29	4459	9244			
30	4462	9757			
31	4465	10270			
32	4469	10784			
33	4474	11297			
34	4479	11810			
35	4484	12323			
36	4489	12836			
37	4503	13349			
38	4523	13862			
39	4543	14375			
40	4089	14379			
41	3635	14380			
42	3180	14381			
43	2726	14382			
44	2272	14383			
45	1817	14383			
46	1363	14382			
47	909	14382			
48	454	14381			
49	0	14379			
50	14	13866			

job title	client	date: 5 Apr 12
Swimming Pool (Internal)	Wisma Belia, Kuantan	signed:TSM
engineering	project / draw / rev.	
Transerve Pte Ltd	Q326 / / 0	

scale	compensation K/S (%)	area (m²)	cutting pattern
1:90	0.6 / 2.8	64.01	STRIP 7



No.	X (mm)	Y (mm)	No.	X (mm)	Y (mm)
1	0	2	51	29	13343
2	454	1	52	37	12829
3	909	0	53	37	12316
4	1363	1	54	37	11803
5	1818	2	55	37	11290
6	2272	3	56	37	10777
7	2727	3	57	37	10264
8	3181	5	58	37	9751
9	3636	8	59	37	9238
10	4090	10	60	37	8725
11	4545	13	61	37	8211
12	4526	526	62	37	7698
13	4508	1038	63	37	7185
14	4496	1550	64	37	6672
15	4493	2062	65	37	6159
16	4489	2575	66	37	5646
17	4487	3087	67	37	5133
18	4484	3599	68	37	4620
19	4482	4112	69	37	4107
20	4480	4624	70	37	3593
21	4478	5136	71	37	3080
22	4477	5648	72	37	2567
23	4476	6161	73	37	2054
24	4475	6673	74	37	1541
25	4475	7185	75	29	1028
26	4475	7698	76	14	515
27	4476	8210			
28	4477	8722			
29	4478	9235			
30	4480	9747			
31	4482	10259			
32	4484	10772			
33	4487	11284			
34	4490	11796			
35	4493	12308			
36	4496	12821			
37	4508	13333			
38	4526	13845			
39	4545	14357			
40	4090	14361			
41	3636	14363			
42	3181	14366			
43	2727	14368			
44	2272	14368			
45	1818	14368			
46	1363	14369			
47	909	14370			
48	454	14369			
49	0	14369			
50	14	13856			

job title	client	date: 5 Apr 12
Swimming Pool (Internal)	Wisma Belia, Kuantan	signed:TSM
engineering	project / draw / rev.	
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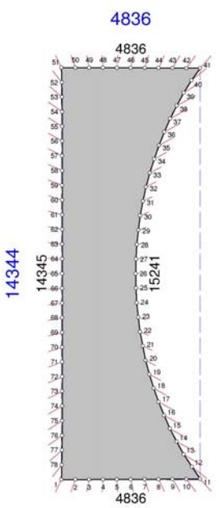
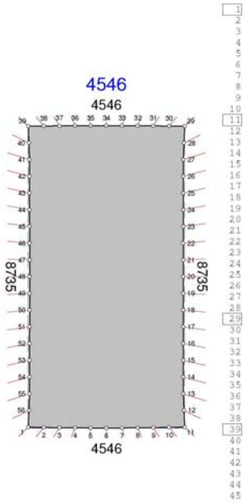
scale	compensation K/S (%)	area (m²)	cutting pattern
1:90	0.6 / 2.8	46.91	STRIP 8



No.	X (mm)	Y (mm)	No.	X (mm)	Y (mm)
1	0	0	51	0	14344
2	484	1	52	11	13832
3	967	2	53	22	13320
4	1451	4	54	28	12807
5	1935	7	55	28	12295
6	2418	9	56	28	11783
7	2902	11	57	28	11271
8	3385	13	58	28	10758
9	3869	17	59	28	10246
10	4353	20	60	28	9734
11	4836	23	61	28	9221
12	4548	450	62	28	8709
13	4262	878	63	28	8197
14	4015	1325	64	28	7684
15	3781	1772	65	28	7172
16	3582	2237	66	28	6660
17	3388	2704	67	28	6148
18	3218	3181	68	28	5635
19	3067	3665	69	28	5123
20	2933	4154	70	28	4611
21	2836	4652	71	28	4098
22	2739	5150	72	28	3586
23	2677	5653	73	28	3074
24	2622	6158	74	28	2561
25	2601	6665	75	28	2049
26	2585	7172	76	28	1537
27	2602	7679	77	22	1025
28	2627	8186	78	11	512
29	2681	8691			
30	2746	9193			
31	2840	9692			
32	2949	10186			
33	3083	10675			
34	3233	11159			
35	3402	11636			
36	3589	12106			
37	3789	12571			
38	4018	13021			
39	4263	13469			
40	4535	13904			
41	4836	14324			
42	4353	14326			
43	3869	14329			
44	3385	14332			
45	2902	14335			
46	2418	14336			
47	1934	14339			
48	1451	14341			
49	967	14342			
50	484	14343			

job title	client	date: 5 Apr 12
Swimming Pool (Internal)	Wisma Belia, Kuantan	signed:TSM
engineering	project / draw / rev.	
Transerve Pte Ltd	Q326 / / 0	

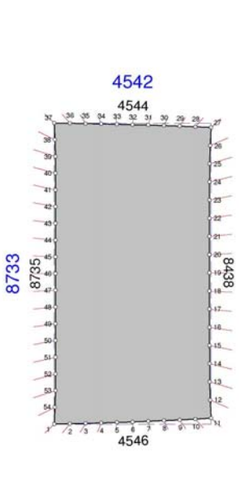
scale	compensation K/S (%)	area (m²)	cutting pattern
1:75	0.6 / 2.8	39.19	(R01) STRIP 9



No.	X (mm)	Y (mm)	No.	X (mm)	Y (mm)
1	0	23	51	41	2934
2	455	16	52	41	2449
3	909	9	53	40	1964
4	1364	4	54	39	1479
5	1819	2	55	39	994
6	2273	0	56	21	508
7	2728	2			
8	3182	5			
9	3637	8			
10	4092	16			
11	4546	23			
12	4525	509			
13	4508	994			
14	4507	1479			
15	4506	1964			
16	4505	2449			
17	4505	2935			
18	4504	3420			
19	4504	3905			
20	4504	4390			
21	4504	4875			
22	4504	5361			
23	4505	5846			
24	4505	6331			
25	4506	6816			
26	4507	7301			
27	4508	7787			
28	4525	8272			
29	4546	8757			
30	4092	8762			
31	3637	8769			
32	3182	8771			
33	2728	8773			
34	2273	8775			
35	1818	8773			
36	1364	8771			
37	909	8768			
38	455	8763			
39	0	8757			
40	21	8272			
41	39	7786			
42	39	7301			
43	40	6816			
44	41	6331			
45	41	5846			
46	42	5360			
47	42	4875			
48	42	4390			
49	42	3905			
50	42	3420			

job title	client	date: 7-Jun-12
Swimming Pool End @ X6	Wisma Belia, Kuantan	signed:TSM
engineering	project / draw / rev.	
Transerve Pte Ltd	Q326 / / 01	

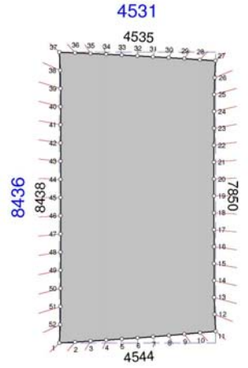
scale	compensation K/S (%)	area (m²)	cutting pattern
1:75	0.6 / 2.8	38.49	(R01) STRIP 10



No.	X (mm)	Y (mm)	No.	X (mm)	Y (mm)
1	0	0	51	36	1941
2	454	11	52	36	1455
3	909	20	53	36	970
4	1363	31	54	20	485
5	1818	48			
6	2272	63			
7	2726	82			
8	3181	100			
9	3635	122			
10	4089	146			
11	4542	171			
12	4517	698			
13	4502	1225			
14	4500	1753			
15	4498	2280			
16	4497	2807			
17	4496	3334			
18	4495	3862			
19	4495	4389			
20	4495	4916			
21	4495	5444			
22	4496	5971			
23	4498	6498			
24	4499	7025			
25	4501	7553			
26	4517	8080			
27	4542	8607			
28	4088	8628			
29	3634	8644			
30	3180	8660			
31	2726	8676			
32	2271	8688			
33	1817	8699			
34	1363	8711			
35	909	8718			
36	454	8727			
37	0	8733			
38	20	8248			
39	36	7763			
40	36	7278			
41	36	6793			
42	36	6307			
43	36	5822			
44	36	5337			
45	36	4852			
46	36	4367			
47	36	3881			
48	36	3396			
49	36	2911			
50	36	2426			

job title	client	date: 8-Jun-12
Swimming Pool End @ X6	Wisma Belia, Kuantan	signed:TSM
engineering	project / draw / rev.	
Transerve Pte Ltd	Q326 / / 01	

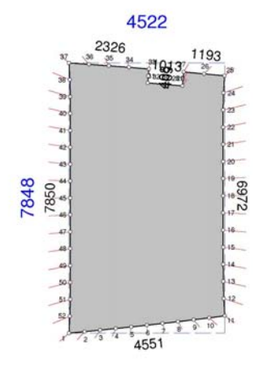
scale	compensation K/S (%)	area (m²)	cutting pattern
1:75	0.6 / 2.8	36.42	(R01) STRIP 11



No.	X (mm)	Y (mm)	No.	X (mm)	Y (mm)
1	0	0	51	36	1054
2	454	27	52	23	527
3	907	53			
4	1361	84			
5	1814	115			
6	2267	148			
7	2720	183			
8	3173	218			
9	3626	258			
10	4079	297			
11	4531	339			
12	4506	830			
13	4490	1320			
14	4488	1811			
15	4486	2302			
16	4485	2792			
17	4484	3283			
18	4483	3773			
19	4483	4264			
20	4483	4754			
21	4483	5245			
22	4484	5735			
23	4485	6226			
24	4486	6716			
25	4488	7207			
26	4504	7697			
27	4528	8188			
28	4076	8219			
29	3623	8248			
30	3171	8277			
31	2718	8303			
32	2265	8328			
33	1812	8354			
34	1359	8375			
35	906	8397			
36	453	8418			
37	0	8436			
38	23	7909			
39	36	7382			
40	36	6855			
41	36	6327			
42	36	5800			
43	36	5273			
44	36	4745			
45	36	4218			
46	36	3691			
47	36	3164			
48	36	2636			
49	36	2109			
50	36	1582			

job title	client	date: 8-Jun-12
Swimming Pool End @ X6	Wisma Belia, Kuantan	signed:TSM
engineering	project / draw / rev.	
Transerve Pte Ltd	Q326 / / 01	

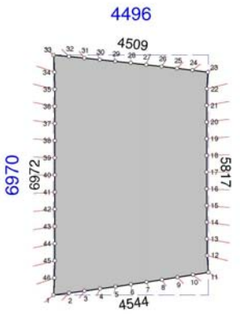
scale	compensation K/S (%)	area (m²)	cutting pattern
1:75	0.6 / 2.8	32.67	(R01) STRIP 12



No.	X (mm)	Y (mm)	No.	X (mm)	Y (mm)
1	0	0	51	36	981
2	453	43	52	22	490
3	906	86			
4	1359	134			
5	1811	181			
6	2264	231			
7	2716	282			
8	3168	334			
9	3619	390			
10	4071	445			
11	4522	504			
12	4493	1002			
13	4481	1500			
14	4479	1998			
15	4477	2495			
16	4476	2993			
17	4475	3491			
18	4474	3989			
19	4474	4487			
20	4474	4985			
21	4474	5483			
22	4475	5981			
23	4476	6478			
24	4488	6976			
25	4516	7474			
26	3922	7531			
27	3328	7587			
28	3311	7384			
29	3294	7180			
30	2789	7224			
31	2285	7267			
32	2302	7470			
33	2320	7674			
34	1740	7719			
35	1160	7765			
36	580	7807			
37	0	7848			
38	22	7358			
39	36	6867			
40	36	6377			
41	36	5886			
42	36	5396			
43	36	4905			
44	36	4415			
45	36	3924			
46	36	3434			
47	36	2943			
48	36	2452			
49	36	1962			
50	36	1471			

job title	client	date: 8-Jun-12
Swimming Pool End @ X6	Wisma Belia, Kuantan	signed:TSM
engineering	project / draw / rev.	
Transerve Pte Ltd	Q326 / / 01	

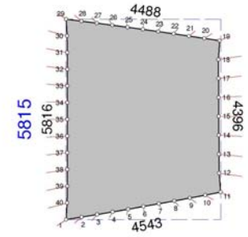
scale	compensation K/S (%)	area (m²)	cutting pattern
1:75	0.6 / 2.8	28.37	(R01) STRIP 13



No.	X (mm)	Y (mm)
1	0	0
2	451	58
3	901	118
4	1351	181
5	1801	243
6	2251	309
7	2700	376
8	3150	443
9	3598	514
10	4047	584
11	4496	658
12	4462	1143
13	4453	1628
14	4451	2112
15	4449	2597
16	4447	3081
17	4445	3566
18	4444	4050
19	4444	4535
20	4444	5019
21	4444	5504
22	4450	5989
23	4482	6473
24	4034	6528
25	3586	6583
26	3139	6635
27	2691	6687
28	2242	6737
29	1794	6786
30	1346	6834
31	897	6881
32	449	6926
33	0	6970
34	25	6472
35	35	5974
36	35	5476
37	35	4979
38	35	4481
39	35	3983
40	35	3485
41	35	2987
42	35	2489
43	35	1991
44	35	1494
45	35	996
46	25	498

job title	client	date: 8-Jun-12
Swimming Pool End @ X6	Wisma Belia, Kuantan	signed:TSM
engineering	project / draw / rev.	
Transerve Pte Ltd	Q326 / / 01	

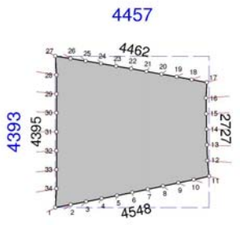
scale	compensation K/S (%)	area (m²)	cutting pattern
1:75	0.6 / 2.8	22.53	(R01) STRIP 14



No.	X (mm)	Y (mm)
1	0	0
2	448	73
3	897	147
4	1344	224
5	1792	300
6	2240	381
7	2687	460
8	3134	542
9	3580	626
10	4027	710
11	4473	798
12	4430	1347
13	4425	1896
14	4420	2445
15	4416	2994
16	4413	3544
17	4411	4093
18	4408	4642
19	4444	5191
20	4001	5260
21	3557	5325
22	3113	5391
23	2668	5455
24	2224	5518
25	1780	5580
26	1335	5640
27	890	5699
28	445	5757
29	0	5815
30	29	5330
31	34	4845
32	34	4361
33	34	3876
34	34	3392
35	34	2907
36	34	2423
37	34	1938
38	34	1454
39	34	969
40	29	484

job title	client	date: 8-Jun-12
Swimming Pool End @ X6	Wisma Belia, Kuantan	signed:TSM
engineering	project / draw / rev.	
Transerve Pte Ltd	Q326 / / 01	

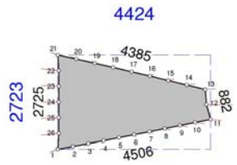
scale	compensation K/S (%)	area (m²)	cutting pattern
1:75	0.6 / 2.8	15.63	(R01) STRIP 15



No.	X (mm)	Y (mm)
1	0	0
2	447	84
3	894	170
4	1340	258
5	1786	346
6	2232	437
7	2677	527
8	3123	620
9	3568	715
10	4013	809
11	4457	906
12	4407	1360
13	4396	1813
14	4385	2267
15	4376	2721
16	4366	3175
17	4396	3628
18	3957	3710
19	3518	3791
20	3079	3870
21	2640	3949
22	2200	4026
23	1761	4101
24	1321	4177
25	881	4250
26	440	4323
27	0	4393
28	33	3844
29	33	3295
30	33	2746
31	33	2196
32	33	1647
33	33	1098
34	33	549

job title	client	date: 8-Jun-12
Swimming Pool End @ X6	Wisma Belia, Kuantan	signed:TSM
engineering	project / draw / rev.	
Transerve Pte Ltd	Q326 / / 01	

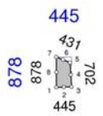
scale	compensation K/S (%)	area (m²)	cutting pattern
1:75	0.6 / 2.8	7.78	(R01) STRIP 16



No.	X (mm)	Y (mm)
1	0	0
2	443	81
3	886	164
4	1329	247
5	1772	333
6	2214	419
7	2656	505
8	3098	593
9	3540	681
10	3982	769
11	4424	857
12	4303	1288
13	4268	1721
14	3737	1853
15	3204	1982
16	2671	2112
17	2138	2238
18	1604	2362
19	1070	2485
20	535	2605
21	0	2723
22	29	2269
23	29	1815
24	29	1362
25	29	908
26	29	454

job title	client	date: 8-Jun-12
Swimming Pool End @ X6	Wisma Belia, Kuantan	signed:TSM
engineering	project / draw / rev.	
Transerve Pte Ltd	Q326 / / 01	

scale	compensation K/S (%)	area (m²)	cutting pattern
1:75	0.6 / 2.8	0.33	(R01) STRIP 17

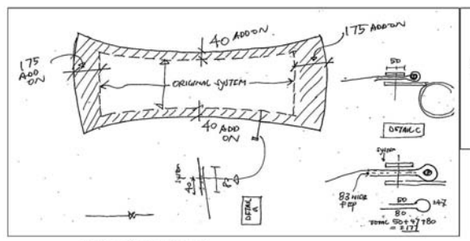


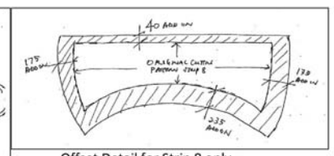
No.	X (mm)	Y (mm)
1	0	0
2	222	7
3	445	13
4	420	363
5	398	713
6	199	795
7	0	878
8	3	439

job title	client	date: 8-Jun-12
Swimming Pool End @ X6	Wisma Belia, Kuantan	signed:TSM
engineering	project / draw / rev.	
Transerve Pte Ltd	Q326 / / 01	

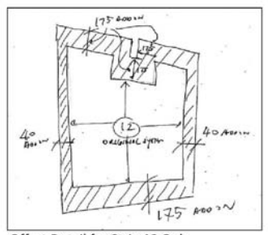
8.7.3 OFFSET CUTTING PATTERN

The cutting pattern based on fabric system are to be further process before actual cutting can be carried out. The tabulation of how much offset is is shown in the sketch below. The offsetting process is then done in autoucad.

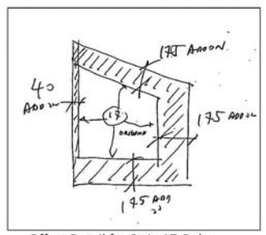




Offset Detail for Strip 8 only

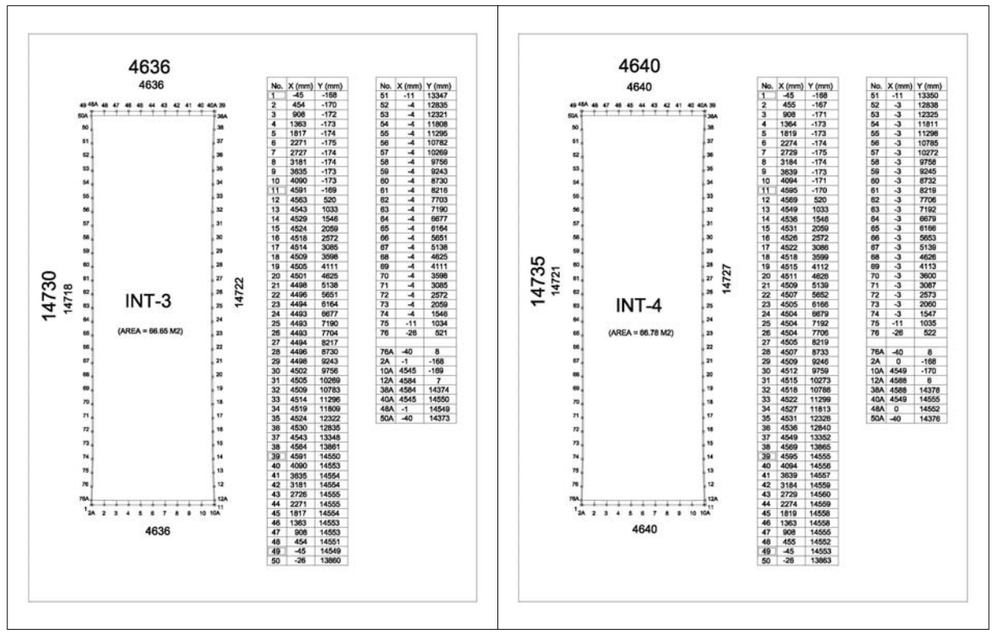


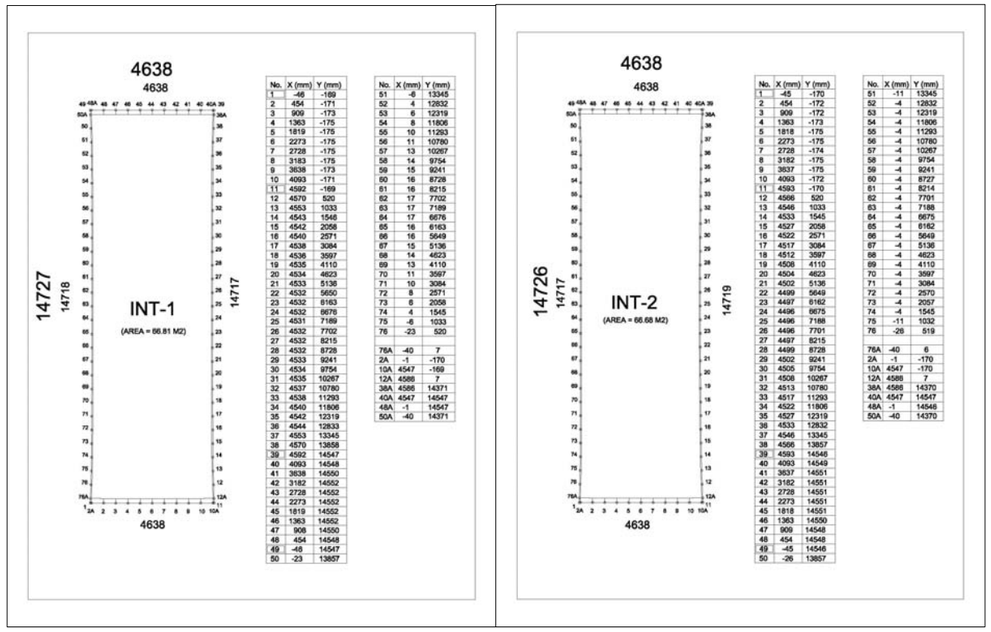
Offset Detail for Strip 12 Only

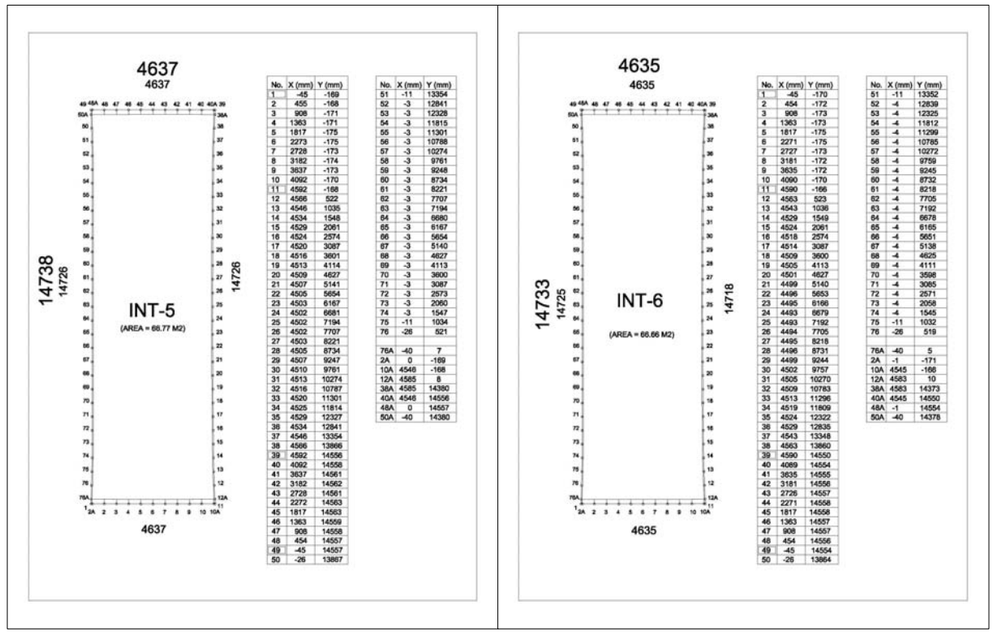


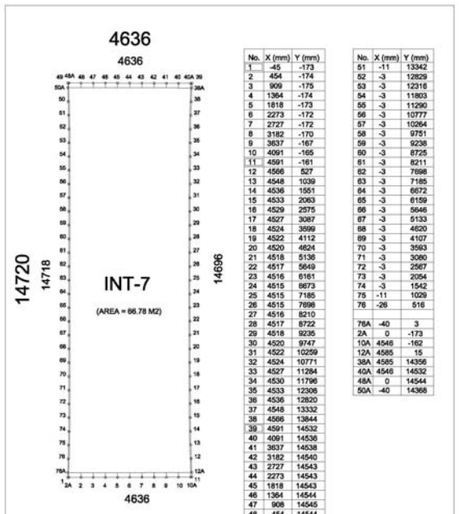
Offset Detail for Strip 17 Only

After that a different set of cutting pattern data is then passed to factory for actual fabrication.



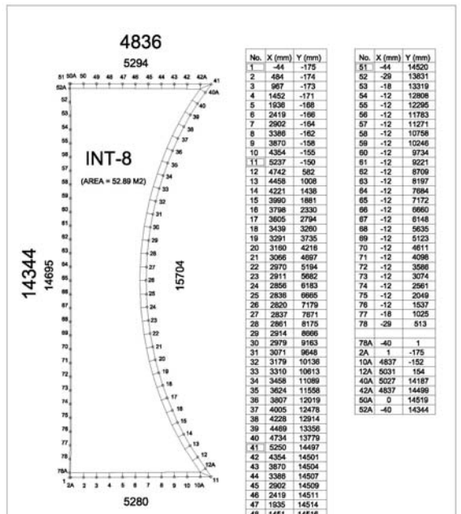






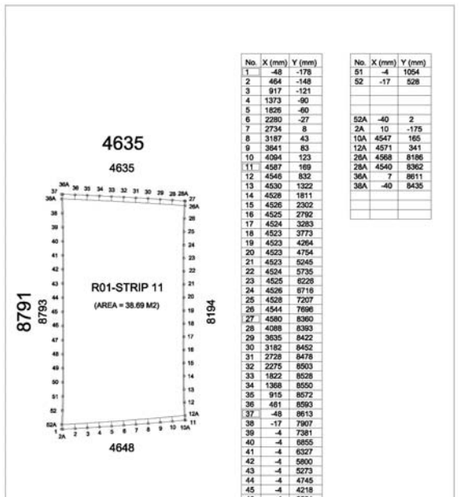
No.	X (mm)	Y (mm)
1	-45	-173
2	454	-174
3	909	-175
4	1364	-174
5	1818	-173
6	2273	-172
7	2727	-172
8	3182	-170
9	3637	-167
10	4091	-165
11	4591	-161
12	4566	527
13	4548	1039
14	4536	1551
15	4533	2063
16	4529	2575
17	4527	3087
18	4524	3599
19	4522	4112
20	4520	4624
21	4518	5136
22	4517	5649
23	4516	6161
24	4515	6673
25	4515	7185
26	4515	7696
27	4516	8210
28	4517	8722
29	4518	9235
30	4520	9747
31	4522	10259
32	4524	10771
33	4527	11284
34	4530	11796
35	4533	12308
36	4536	12820
37	4548	13332
38	4566	13844
39	4591	14532
40	4091	14536
41	3637	14538
42	3182	14540
43	2727	14543
44	2273	14543
45	1818	14543
46	1364	14544
47	908	14545
48	454	14544
49	-45	14544
50	-26	13854

No.	X (mm)	Y (mm)
51	-11	13342
52	-3	12829
53	-3	12316
54	-3	11803
55	-3	11290
56	-3	10777
57	-3	10264
58	-3	9751
59	-3	9238
60	-3	8725
61	-3	8211
62	-3	7698
63	-3	7185
64	-3	6672
65	-3	6159
66	-3	5646
67	-3	5133
68	-3	4620
69	-3	4107
70	-3	3593
71	-3	3080
72	-3	2567
73	-3	2054
74	-3	1542
75	-11	1029
76	-26	516
76A	-40	3
2A	0	-173
10A	4548	-182
12A	4585	15
38A	4585	14356
49A	4546	14532
48A	0	14544
50A	-40	14368



No.	X (mm)	Y (mm)
1	-44	-175
2	484	-174
3	967	-173
4	1452	-171
5	1938	-168
6	2419	-166
7	2902	-164
8	3386	-162
9	3870	-158
10	4354	-155
11	5237	-150
12	4742	582
13	4458	1008
14	4221	1438
15	3990	1881
16	3798	2330
17	3605	2794
18	3439	3260
19	3291	3735
20	3160	4218
21	3066	4697
22	2970	5194
23	2911	5692
24	2856	6183
25	2836	6665
26	2820	7179
27	2837	7671
28	2861	8175
29	2914	8666
30	2979	9163
31	3071	9648
32	3179	10136
33	3310	10613
34	3458	11089
35	3624	11558
36	3807	12019
37	4005	12478
38	4228	12914
39	4469	13356
40	4734	13779
41	5250	14497
42	4354	14501
43	3870	14504
44	3386	14507
45	2902	14509
46	2419	14511
47	1935	14514
48	1451	14516
49	968	14517
50	484	14518

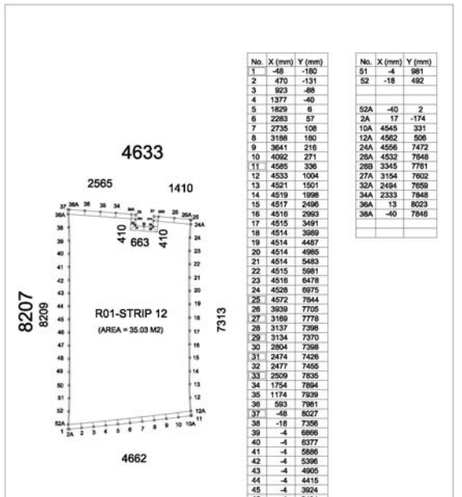
No.	X (mm)	Y (mm)
51	-44	14520
52	-29	13631
53	-18	13319
54	-12	12808
55	-12	12295
56	-12	11783
57	-12	11271
58	-12	10758
59	-12	10246
60	-12	9734
61	-12	9221
62	-12	8709
63	-12	8197
64	-12	7684
65	-12	7172
66	-12	6660
67	-12	6148
68	-12	5635
69	-12	5123
70	-12	4611
71	-12	4098
72	-12	3586
73	-12	3074
74	-12	2561
75	-12	2049
76	-12	1537
77	-18	1025
78	-29	513
78A	-40	1
2A	1	-175
10A	4837	-152
12A	5031	154
40A	5027	14187
42A	4837	14499
50A	0	14519
52A	-40	14344



No.	X (mm)	Y (mm)
1	-48	-178
2	464	-148
3	917	-121
4	1373	-90
5	1826	-60
6	2280	-27
7	2734	8
8	3187	43
9	3641	83
10	4094	123
11	4587	189
12	4546	832
13	4530	1322
14	4528	1811
15	4526	2302
16	4525	2792
17	4524	3283
18	4523	3773
19	4523	4264
20	4523	4754
21	4523	5245
22	4524	5735
23	4525	6226
24	4526	6716
25	4528	7207
26	4544	7696
27	4580	8360
28	4088	8393
29	3635	8422
30	3182	8452
31	2728	8478
32	2275	8503
33	1822	8528
34	1368	8550
35	915	8572
36	461	8593
37	-48	8613
38	-17	7907
39	-4	7381
40	-4	6855
41	-4	6327
42	-4	5800
43	-4	5273
44	-4	4745
45	-4	4218
46	-4	3691
47	-4	3164
48	-4	2636
49	-4	2109
50	-4	1582

No.	X (mm)	Y (mm)
51	-4	1054
52	-17	526
52A	-40	2
2A	10	-175
10A	4547	165
12A	4571	341
26A	4568	8186
28A	4540	8362
36A	7	8611
38A	-40	8435

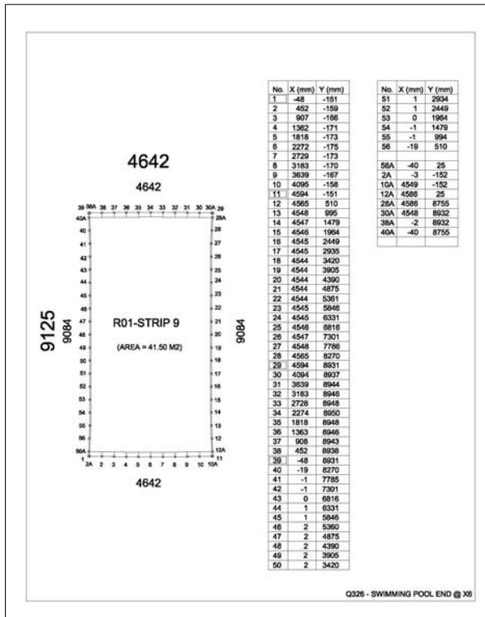
Q326 - SWIMMING POOL END @ X6



No.	X (mm)	Y (mm)
1	-48	-180
2	470	-131
3	923	-88
4	1377	-40
5	1829	6
6	2283	57
7	2735	108
8	3186	160
9	3641	215
10	4092	271
11	4585	336
12	4533	1004
13	4521	1501
14	4519	1998
15	4517	2496
16	4518	2993
17	4515	3491
18	4514	3989
19	4514	4487
20	4514	4985
21	4514	5483
22	4515	5981
23	4518	6478
24	4528	6975
25	4572	7644
26	3939	7705
27	3189	7778
28	3137	7396
29	3134	7370
30	2804	7398
31	2474	7426
32	2477	7455
33	2509	7835
34	1754	7894
35	1174	7939
36	593	7981
37	-48	8027
38	-18	7356
39	-4	6866
40	-4	6377
41	-4	5886
42	-4	5396
43	-4	4905
44	-4	4415
45	-4	3924
46	-4	3434
47	-4	2943
48	-4	2453
49	-4	1962
50	-4	1471

No.	X (mm)	Y (mm)
51	-4	981
52	-18	492
52A	-40	2
2A	17	-174
10A	4545	331
12A	4562	506
24A	4556	7472
28A	4532	7648
26B	3345	7761
27A	3154	7602
32A	2494	7659
34A	2333	7848
36A	13	8023
38A	-40	7846

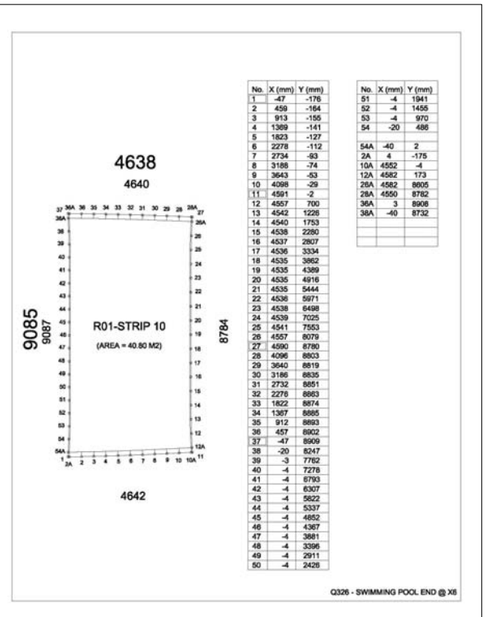
Q326 - SWIMMING POOL END @ X6



No.	X (mm)	Y (mm)
1	-48	-151
2	462	-159
3	907	-166
4	1362	-171
5	1818	-173
6	2272	-175
7	2729	-173
8	3183	-170
9	3639	-167
10	4095	-158
11	4594	-151
12	4565	510
13	4548	995
14	4547	1479
15	4546	1964
16	4545	2449
17	4545	2935
18	4544	3420
19	4544	3905
20	4544	4390
21	4544	4875
22	4544	5361
23	4545	5846
24	4545	6331
25	4546	6818
26	4547	7301
27	4548	7786
28	4565	8270
29	4594	8931
30	4094	8937
31	3639	8944
32	3183	8946
33	2728	8948
34	2274	8950
35	1818	8948
36	1363	8946
37	908	8943
38	452	8938
39	-48	8931
40	-19	8270
41	-1	7785
42	-1	7301
43	0	6816
44	1	6331
45	1	5846
46	2	5360
47	2	4875
48	2	4390
49	2	3905
50	2	3420

No.	X (mm)	Y (mm)
51	1	2934
52	1	2449
53	0	1964
54	-1	1479
55	-1	994
56	-19	510
58A	-40	25
2A	-3	-152
10A	4549	-152
12A	4586	25
28A	4586	8755
30A	4548	8932
38A	-2	8932
40A	-40	8755

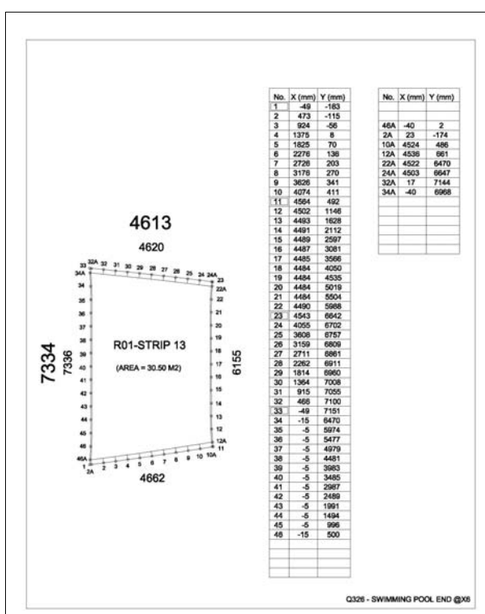
Q326 - SWIMMING POOL END @ X6



No.	X (mm)	Y (mm)
1	-47	-176
2	459	-164
3	913	-155
4	1369	-141
5	1823	-127
6	2278	-112
7	2734	-93
8	3188	-74
9	3643	-53
10	4098	-29
11	4591	-2
12	4557	700
13	4542	1226
14	4540	1753
15	4538	2280
16	4537	2807
17	4536	3334
18	4535	3862
19	4535	4389
20	4535	4916
21	4535	5444
22	4536	5971
23	4538	6498
24	4539	7025
25	4541	7553
26	4557	8079
27	4590	8780
28	4096	8803
29	3640	8819
30	3186	8835
31	2732	8851
32	2278	8863
33	1822	8874
34	1367	8885
35	912	8893
36	457	8902
37	-47	8909
38	-20	8247
39	-3	7782
40	-4	7278
41	-4	6793
42	-4	6307
43	-4	5822
44	-4	5337
45	-4	4852
46	-4	4367
47	-4	3881
48	-4	3396
49	-4	2911
50	-4	2426

No.	X (mm)	Y (mm)
51	-4	1941
52	-4	1455
53	-4	970
54	-20	486
54A	-40	2
2A	4	-175
10A	4552	-4
12A	4582	173
26A	4582	8805
28A	4550	8782
36A	3	8908
38A	-40	8732

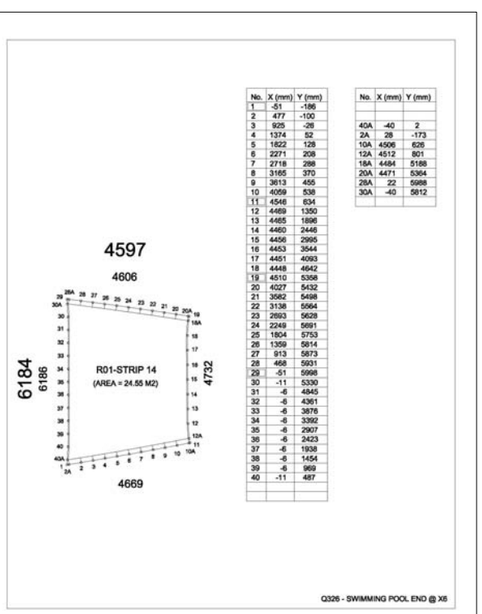
Q326 - SWIMMING POOL END @ X6



No.	X (mm)	Y (mm)
1	-49	-183
2	473	-155
3	924	-56
4	1375	8
5	1825	70
6	2276	136
7	2728	203
8	3176	270
9	3626	341
10	4074	411
11	4584	492
12	4502	1146
13	4493	1628
14	4491	2112
15	4489	2597
16	4487	3081
17	4485	3566
18	4484	4050
19	4484	4535
20	4484	5019
21	4484	5504
22	4490	5988
23	4543	6642
24	4055	6702
25	3608	6757
26	3159	6809
27	2711	6861
28	2262	6911
29	1814	6960
30	1364	7008
31	915	7056
32	466	7100
33	-49	7151
34	-15	6470
35	-5	5974
36	-5	5477
37	-5	4979
38	-5	4481
39	-5	3983
40	-5	3485
41	-5	2987
42	-5	2489
43	-5	1991
44	-5	1494
45	-5	996
46	-15	500

No.	X (mm)	Y (mm)
46A	-40	2
2A	23	-174
10A	4524	486
12A	4536	861
22A	4522	6470
24A	4503	6647
32A	17	7144
34A	-40	6968

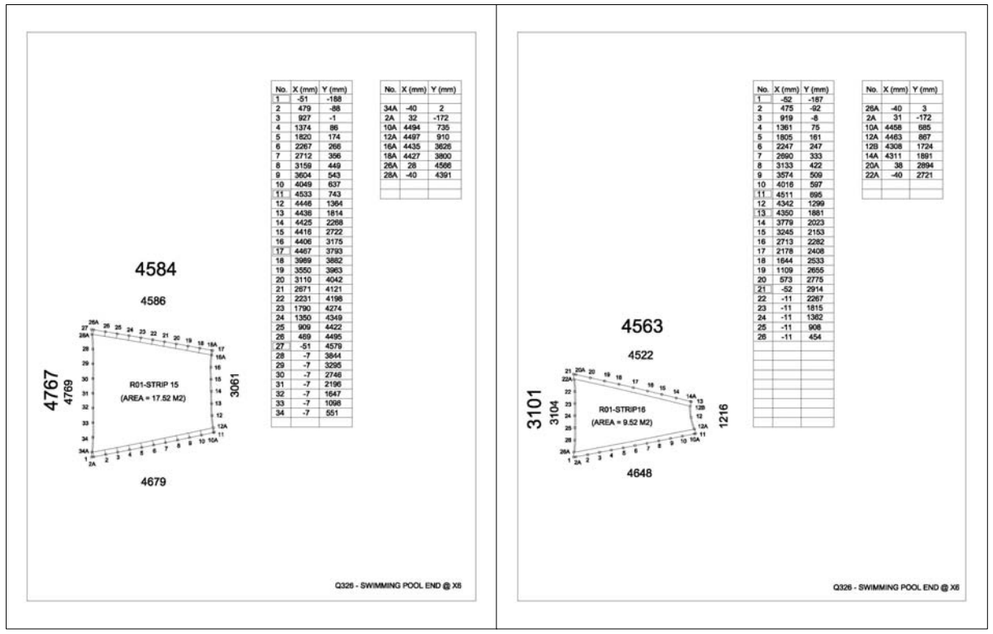
Q326 - SWIMMING POOL END @X6



No.	X (mm)	Y (mm)
1	-51	-186
2	477	-100
3	925	-26
4	1374	52
5	1822	128
6	2271	208
7	2718	288
8	3165	370
9	3613	455
10	4059	538
11	4546	634
12	4489	1350
13	4465	1896
14	4460	2446
15	4456	2995
16	4453	3544
17	4451	4093
18	4448	4642
19	4510	5398
20	4027	5432
21	3582	5498
22	3138	5564
23	2693	5628
24	2249	5691
25	1804	5753
26	1359	5814
27	913	5873
28	468	5931
29	-51	5998
30	-11	5330
31	-6	4845
32	-6	4361
33	-6	3876
34	-6	3392
35	-6	2907
36	-6	2423
37	-6	1938
38	-6	1454
39	-6	969
40	-11	487

No.	X (mm)	Y (mm)
40A	-40	2
2A	28	-173
10A	4506	626
12A	4512	801
18A	4494	5188
20A	4471	5364
28A	22	5988
30A	-40	5812

Q326 - SWIMMING POOL END @ X6

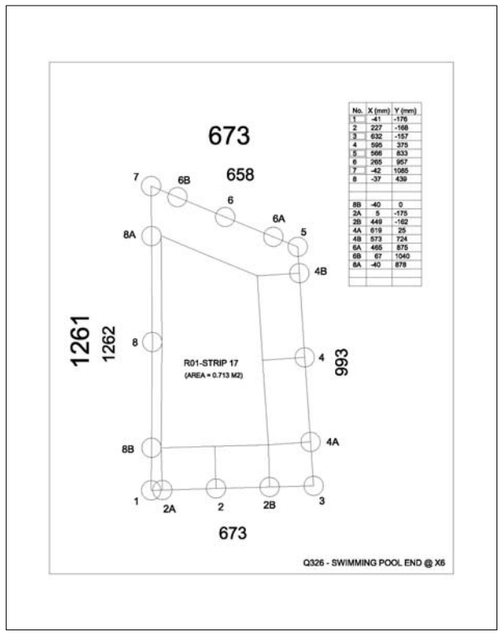


No.	X (mm)	Y (mm)
1	-51	-188
2	479	-88
3	927	-1
4	1374	86
5	1820	174
6	2267	268
7	2712	356
8	3159	449
9	3604	543
10	4049	637
11	4533	743
12	4446	1364
13	4438	1814
14	4425	2268
15	4416	2722
16	4406	3175
17	4467	3793
18	3989	3882
19	3550	3963
20	3110	4042
21	2671	4121
22	2231	4196
23	1790	4274
24	1350	4349
25	909	4422
26	469	4495
27	-51	4579
28	-7	3844
29	-7	3295
30	-7	2746
31	-7	2196
32	-7	1647
33	-7	1098
34	-7	551

No.	X (mm)	Y (mm)
34A	-40	2
2A	32	-172
10A	4494	735
12A	4497	910
16A	4435	3626
18A	4427	3800
26A	28	4566
28A	-40	4391

No.	X (mm)	Y (mm)
1	-52	-187
2	475	-92
3	919	-8
4	1361	75
5	1805	161
6	2247	247
7	2690	333
8	3133	422
9	3574	509
10	4016	597
11	4511	695
12	4342	1299
13	4350	1881
14	3779	2023
15	3245	2153
16	2713	2282
17	2178	2408
18	1644	2533
19	1109	2655
20	573	2775
21	-52	2914
22	-11	2267
23	-11	1815
24	-11	1362
25	-11	908
26	-11	454

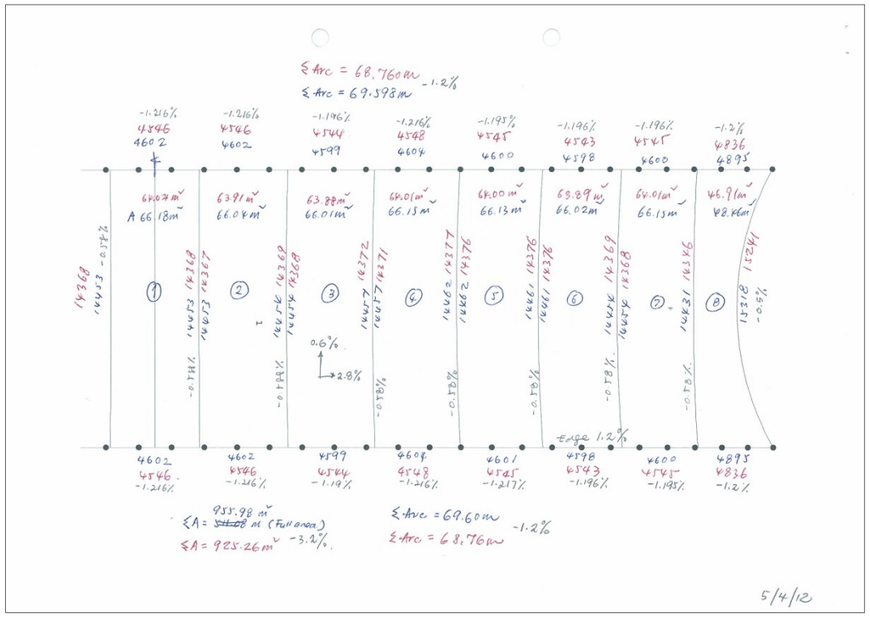
No.	X (mm)	Y (mm)
26A	-40	3
2A	31	-172
10A	4458	685
12A	4463	867
12B	4308	1724
14A	4311	1891
20A	38	2894
22A	-40	2721



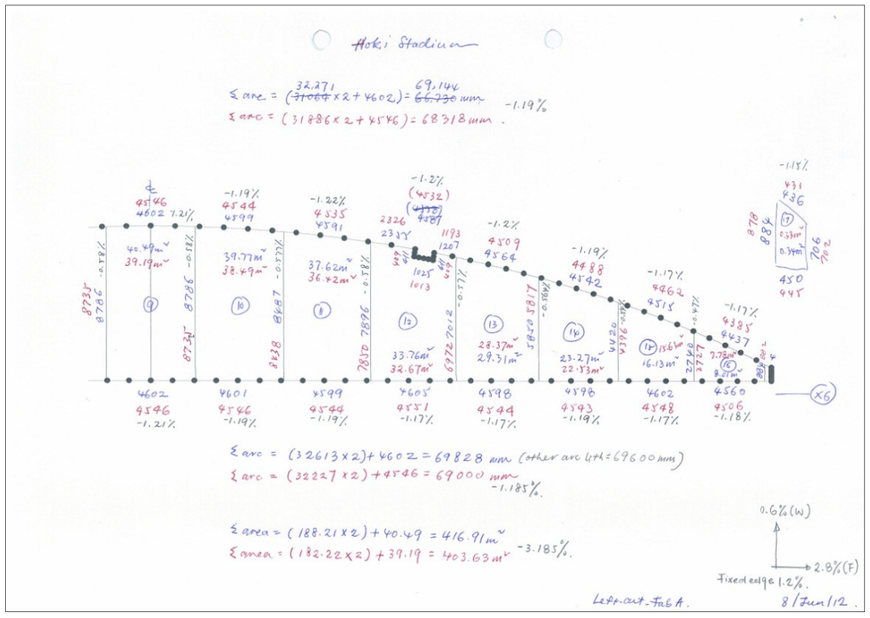
No.	X (mm)	Y (mm)
1	-41	-176
2	227	-168
3	632	-157
4	595	375
5	566	833
6	265	957
7	-42	1085
8	-37	439
8B	-40	0
2A	5	-175
2B	449	-162
4A	819	25
4B	573	724
6A	466	875
6B	67	1040
8A	-40	878

8.7.4 DIMENSION CHECK

As the cutting pattern is to be use 5 times for internal panel and 2 times for the end panel, extra measure is taken to make sure the compensated strips are done correctly, so dimension check of uncompensated length and area against the compensated length is done as shown.

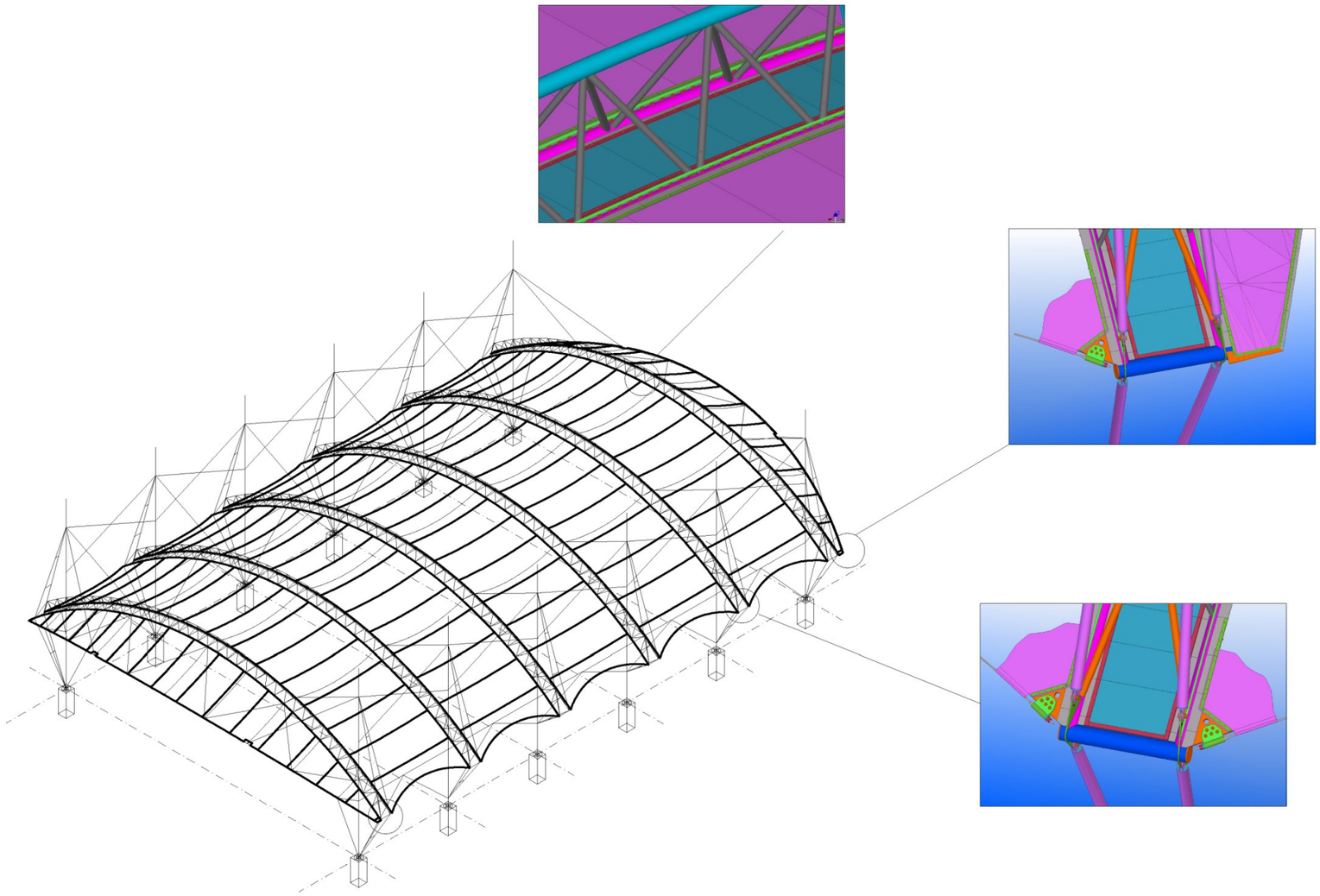


DIMENSION CHECK FOR INTERNAL STRIPS



DIMENSION CHECK FOR EDGE STRIPS

8.8 SUMMARY OF DETAILS



9. STEEL ERECTION

9.1 LIFTING CHECK

After site visit, noted that site access for crane only possible on the pavement beside the pool and also the access road leading to existing hostel beside the swimming pool. And the width of pool side pavement is 6.5m width of 250mm thick concrete slab, and so bigger tonnage crane are not possible to be used at site. And so not possible to erection the trusses in one single lift.

CRANE ACCESS BESIDE EXISTING HOSTEL BLOCK AT REAR OF SITE

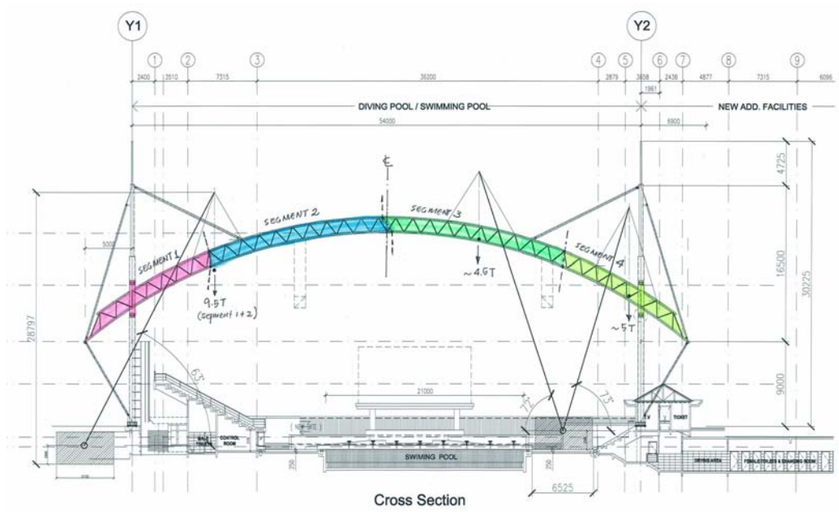
CRANE ACCESS BESIDE POOL

Due to these site access constrain, and preferably no welding work on site, proposed to use 35 ton hydraulic mobile crane. As such the 3D curved truss of approximately 68m span have to be fabricated in 4 segment to enable lifting by 35 tons crane and flange jointed to ensure the structural integrity and continuity of the trusses.

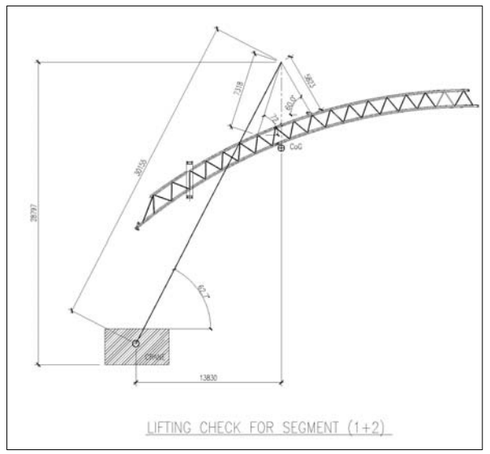
The truss is then subdivided further to 4t to 5t each so that they are possible to be lifted by the crane. And it is preferred that they are exactly oriented in final position when lifted and placed in position, so the center of gravity of these segment truss and correct length of lifting sling is important to the erector.

The Cog of these segmented truss is calculated with StaadPro software.

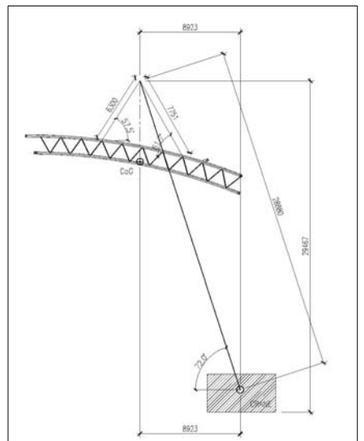
In the preliminary study of erection method, possibility of lifting truss segment 1 and segment 2 together from the rear access is also checked to minimize connection in the high air. But this option was not used at site later. It is attached for information.



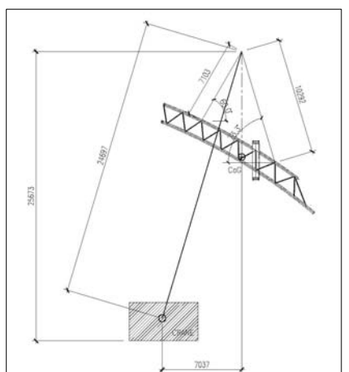
Cross Section



LIFTING CHECK FOR SEGMENT (1+2)



LIFTING CHECK FOR SEGMENT 3
(SIMILAR FOR SEGMENT 2)



LIFTING CHECK FOR SEGMENT 4
(SIMILAR FOR SEGMENT 1)

9.2 ERECTION SEQUENCE

The steel frame erection sequence is briefly describe below, a detail illustration of the erection process is refers to attachment in the appendix.

The erection will starts from gridline X1 near to Score Board and progressively to gridline X6.

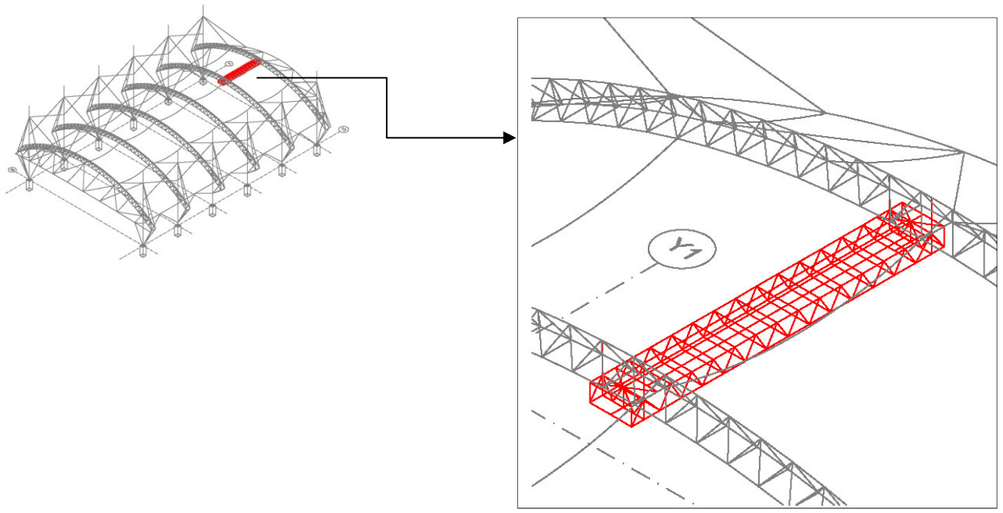
1) Firstly lift the lower column with base stump into correct position.
2) Then tie up at least 2 lower mast with the horizontal brace and cross bracing.
3) Then put in position Segment 1 truss on top and bolt up the flange joint.
4) With Segment 1 truss, the lower backstay can be fix up.
5) The step 1 to 4 can be repeated to the other side as well.
6) Then the upper mast with backstay and front hanger is connected placed on top
7) Then using 2 crane to lift the Segment 2 truss and also bolt the front hanger to stabilized the partly erected frame.
8) And a truss is completed when the opposite side Segment truss 3 is lifted and connected.
9) The same process will repeat for the second truss.
10) When the two truss are done, the 3 nos of curve tie beam can then be bolted on.
11) Same process repeat for the remaining truss until gridline X6.
12) Then the 2 end cap frame is erect with all its brace member until complete.
13) The 2 end front hanger is then bolted on.
14) Now the main structure is completed, the cross cable at the upper mast can then be install.
15) The catwalk hanging cage and walkway frame is then bolt on to the main roof structure.
16) So the roof is now ready to take on the fabric installation.

10. MEMBRANE INSTALLATION

10.1 MEMBRANE HANDLING

For lifting of fabric to the right level for installation, a temporary platform is proposed to be hung in-between 2 nos of 3D truss of 16.5m apart. This 3D platform is 18m in length, 2.4m width and 1.05m depth. It has to be lighted weight so not to impose too much load on to the steel structures. It is designed to be less than 2 tons and mainly welded from rectangular, square hollow section and angles.

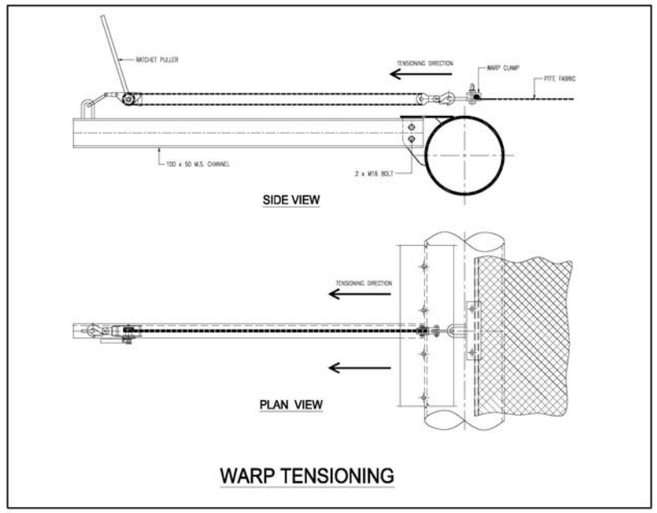
4 nos of lifting padeye is provided at 4 corner, and 12mm thick plywood is fixed on top the platform. The platform will be placed slightly off center of the truss to avoid the center tie member , and it will be opened up at the center with the help of a crane with a spreader beam of as long as the width of the membrane 14m to one side and then to other side.

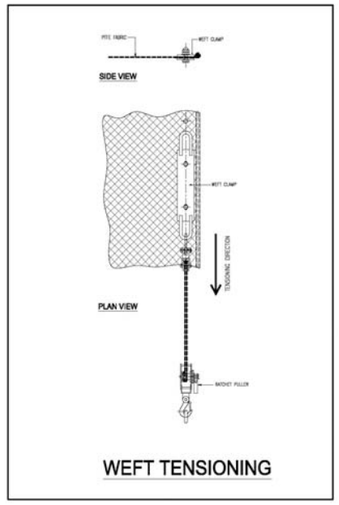


TEMPORARY PLATFORM

10.2 MEMBRANE TENSIONING

For installation of the membrane, some in-house tools are used. There are two type of tensioning tools used in this project; one for the warp and the other for the weft direction.

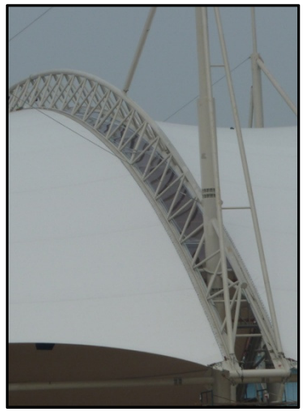




10.3 ERECTION SEQUENCE

The membrane installation is starting from grid X1 outward to grid X6. The sequence is briefly description as follow;

1) Firstly lift the temporary platform to just underneath the 3D truss and then secured at four corner to the bottom chord of truss.
2) Then lift the fabric with a spreader beam and place it on to top of the platform.
3) After that, fix the nylon ropes at a constant distance of about 1.5m across the truss. And do all necessary preparation for securing fabric.
4) Then secure 2 corners of the fabric to the spreader beam and lift up slowly by crane.
5) As the fabric is slowly lifted up and move outward, the edge of the fabric is temporary secure with the warp tensioning tools.
6) So this process will continue until the fabric reaches the end of truss.
7) After all necessary temporary securing is done, the crane can release the fabric.
8) The same process will repeat for the other side of the fabric.
9) The remaining work is then time consuming and it will progress slowly to tension the warp and weft of the fabric.
10) The same sequence is repeated for internal panel 2 and until panel 5.
11) After all internal fabric is installed, then proceed for preparation work for edge fabric.
12) The erection process of the edge panel is similar to the internal fabric.
13) After all the fabric are installed, the tensioning and fixing of clamping edge work is still in progress until they are all fully tension and clamped.
14) A fully illustration of the sequence can refers to photo images in the Appendix.



11. APPENDIX

11.1 WORK PROGRAMME

11.2 ENGINEERING DRAWINGS

11.3 ERECTION SEQUENCE

11.4 PHOTO IMAGES OF STEEL WORK

11.5 PHOTO IMAGES OF FABRIC WORK

11.6 PHOTO IMAGES OF COMPARISON BEFORE & AFTER ERECTION

11.7 AERIAL VIEW PHASE 1 COMPLETION

11.8 AERIAL VIEW PHASE 2 COMPLETION – IMPRESSION

11.9 NEWSPAPER ARTICLES BEFORE THE GAMES

11.10 PHOTO IMAGES DURING THE GAMES

11.11 BIAXIAL TEST REPORT

11.12 DESIGN CALCULATION

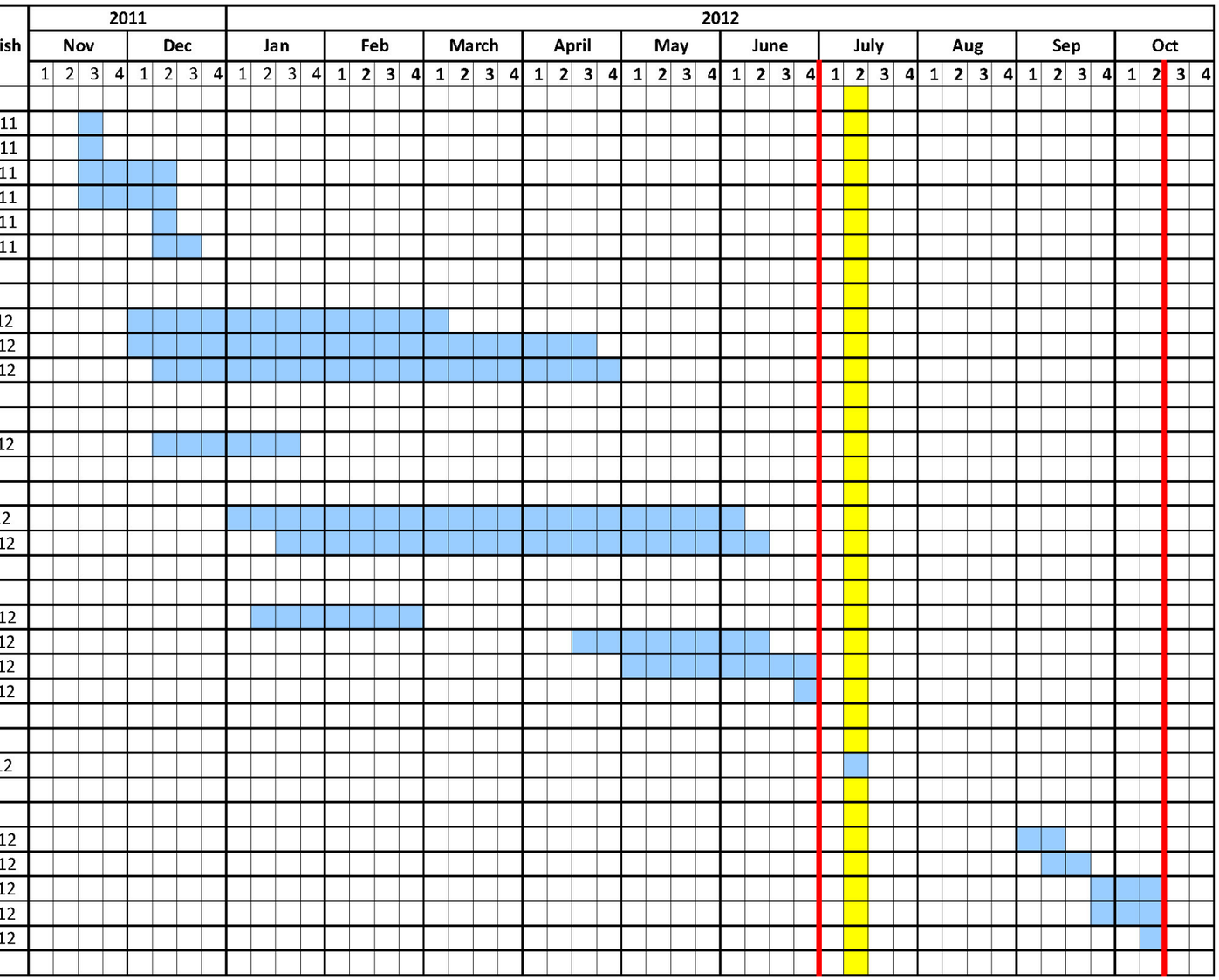
11.1 WORK PROGRAMME

PROJECT: PROPOSED TENSILE FABRIC ROOF SYSTEM AT KOMPLEKS KOLAM RENANG, WISMA BELIA INDERA MAHKOTA, KUANTAN, PAHANG DARUL MAKMUR, MALAYSIA

PROPOSED WORK PROGRAMME

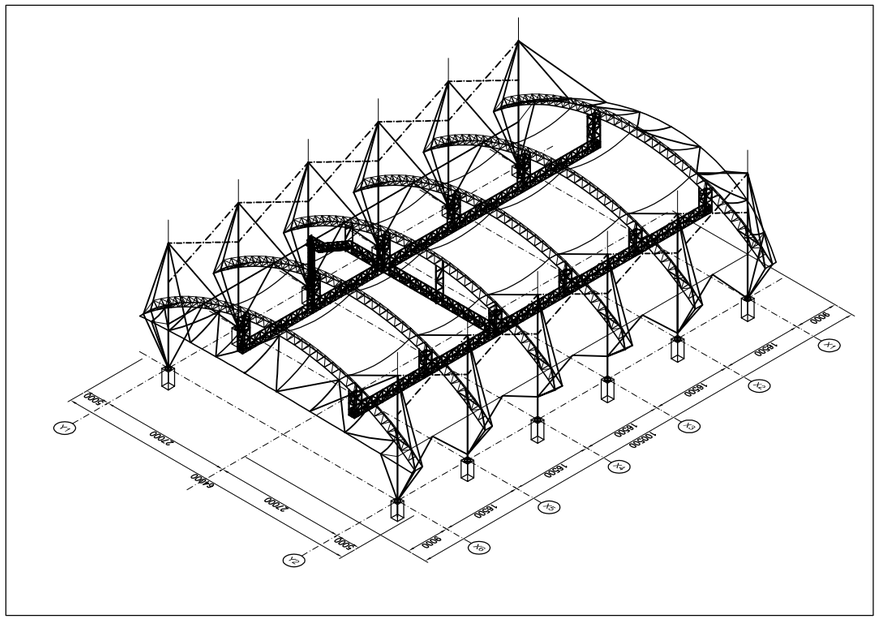
Rev. 01
Date: 16 Jan 2012

S/N	Schedule of Works	Date Start	Date Finish
A	**Pre-Design & Form Finding Activities**		
1	Contract Award by Tri Arch to Sediabena	23-Nov-11	26-Nov-11
2	Meeting with Client and Consultant at Site	21-Nov-11	21-Nov-11
3	Submission of Approval Final Roof Form Drawings	23-Nov-11	15-Dec-11
4	Submission of Reaction Forces of Columns	23-Nov-11	15-Dec-11
5	Technical Presentation	15-Dec-11	15-Dec-11
6	Submission of Revised Reaction Forces	15-Dec-11	23-Dec-11
B	**Procurement of Long Lead Time Materials**		
7	Purchase of Fabric (Using Airfreight)	7-Dec-11	7-Mar-12
8	Purchase of Steel Materials	7-Dec-11	15-Apr-12
9	Purchase of Galvanised Cables	15-Dec-11	28-Apr-12
C	**Engineering & Design**		
10	Submission of Final Roof Dwgs	15-Dec-11	21-Jan-12
D	**Fabrication Works**		
11	Fabrication Of Steelworks	7-Jan-12	7-Jun-12
12	Fabrication of Fabric Works	15-Jan-12	15-Jun-12
E	**Erection Works (Phase 1)**		
13	Holding Down Bolts Installation for Columns	7-Jan-12	28-Feb-12
14	Erection of Steelworks	15-Apr-12	15-Jun-12
15	Installation of Fabric	7-May-12	30-Jun-12
16	Handing Over (Contract Finish Date)	30-Jun-12	30-Jun-12
F	**SUKMA Games 2012**		
17	Aquatic Competitions	7-Jul-12	16-Jul-12
G	**Erection Works (Phase 2)**		
18	Erection of Steelwork	1-Sep-12	14-Sep-12
19	Installation of Fabric	7-Sep-12	21-Sep-12
20	Post Tensioning Works of Fabrics	22-Sep-12	15-Oct-12
21	Touching Up of Paints & Cables Tensioning	22-Sep-12	15-Oct-12
22	Final Handing Over	15-Oct-12	15-Oct-12

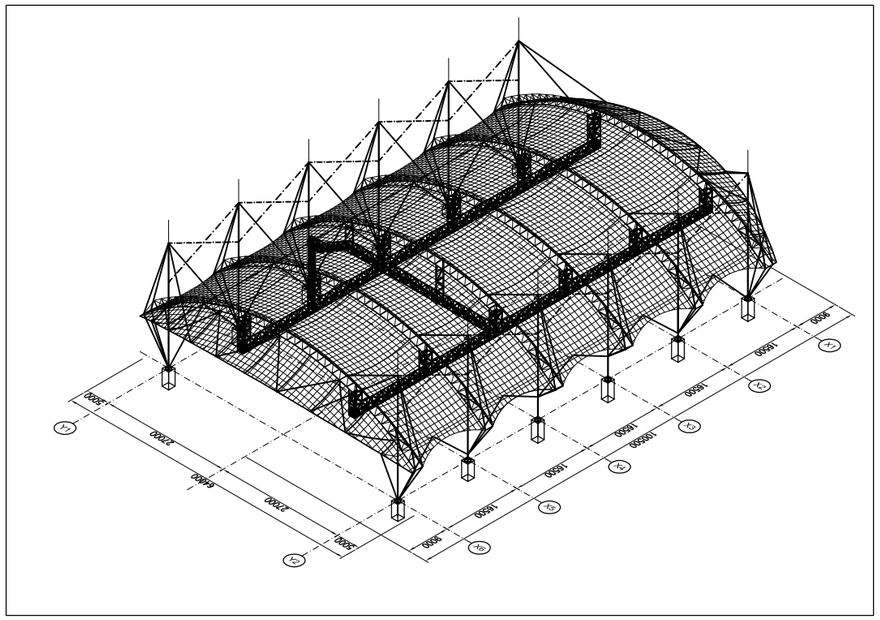


11.2 ENGINEERING DRAWINGS

PROPOSED TENSILE FABRIC ROOF SYSTEM AT KOMPLEKS KOLAM RENANG, WISMA BELIA INDERA MAHKOTA, KUANTAN, PAHANG DARUL MAKMUR. MALAYSIA.



3D-VIEW OF STRUCTURE FRAMING



3D-VIEW OF STRUCTURE FRAMING + FABRIC

Kompleks Kolam Renang

NOTE :

55

REF	DATE	DESCRIPTION
03	31.07.2012	AS-BUILT
02	20.04.2012	GENERAL
01	12.01.2012	GENERAL

OWNER :

MAJLIS PERBANDARAN KUANTAN
Jalan Tanah Putih, 25100 Kuantan,
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& ASSOCIATES ARCHITECTS SENDIRIAN BERHAD (78280-P)
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Company No.: 595754-T website: www.sediabena.com

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85 Jalan Loke Yew, 55200 Kuala Lumpur
Tel : 03-92008268 Fax : 03-92008276 (391855-V)
email: info@pendita.com.my website: pendita.com.my

PROJECT :

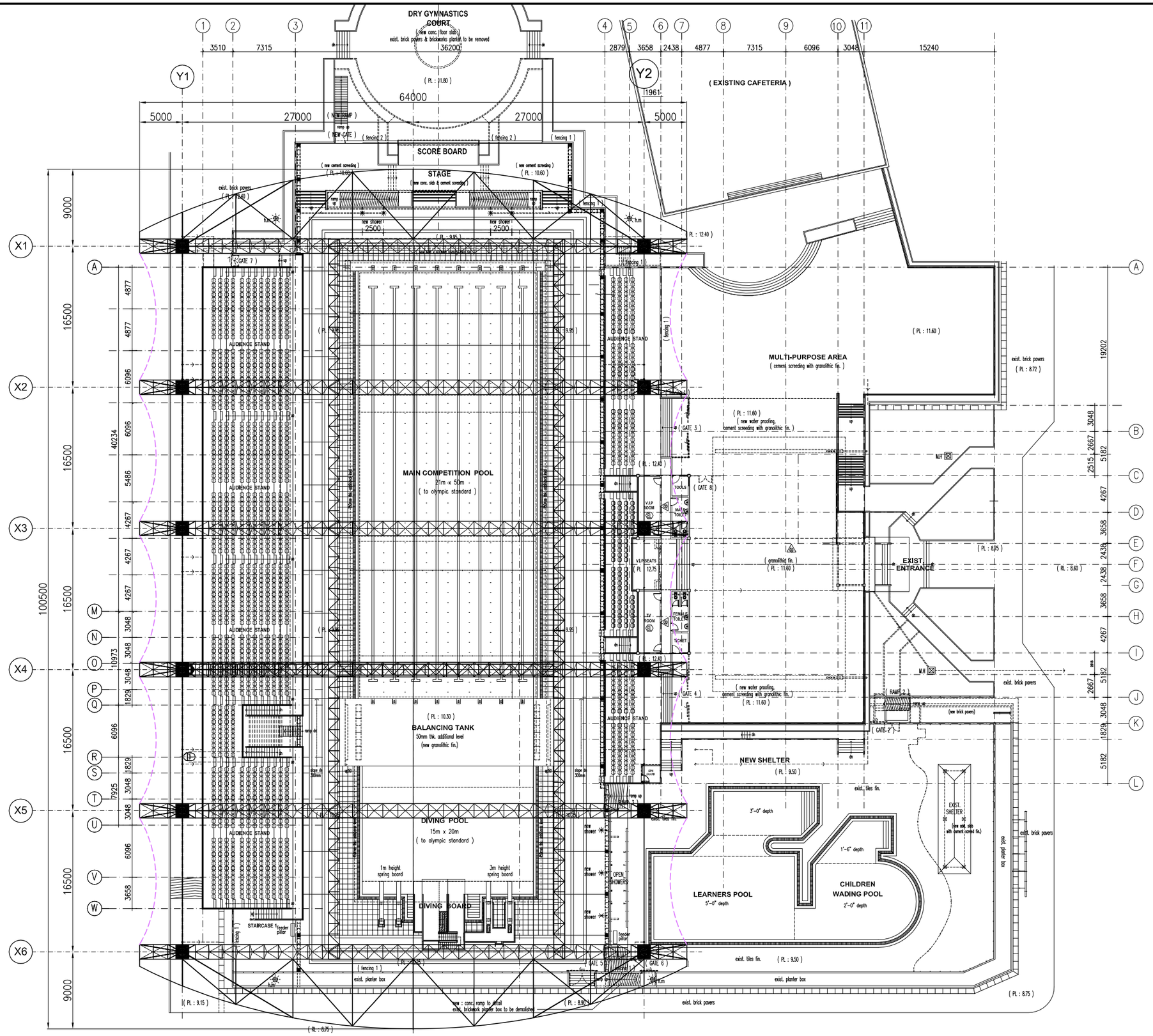
CADANGAN MENAIK TARAF KOLAM RENANG SERTA KERJA-KERJA BERKAITAN DI WISMA BELIA, INDERA MAHKOTA, KUANTAN. MALAYSIA.

TITTLE :

3D - VIEW

DATE : 29.12.2011	DRAWN :
SCALE : NTS	CHECKED :

DRAWING NO. :	REVISION
TA-Q326-01	03



SUPPORT COLUMN LAYOUT PLAN

Tensile Structure for Indera Mahkota Aquatic Center,Kuantan,15TH MALAYSIA GAMES TAN SIEW MOI Institute for Membrane and Shell Technologies Anhalt University of Applied Sciences, Dessau

Kompleks Kolam Renang

NOTE :

56

REF	DATE	DESCRIPTION
03	31.07.2012	AS-BUILT
02	20.04.2012	GENERAL
01	12.01.2012	GENERAL

OWNER :

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Tel : (603-7847 3322 Fax : (603-7847 2222
e-mail : enquiry@sediabena.com
website : www.sediabena.com
(Company No : 235367-M)

&

TRANSERVE PTE LTD
(Co. Reg. No.: 197202443K)
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email: info@pendita.com.my website: pendita.com.my

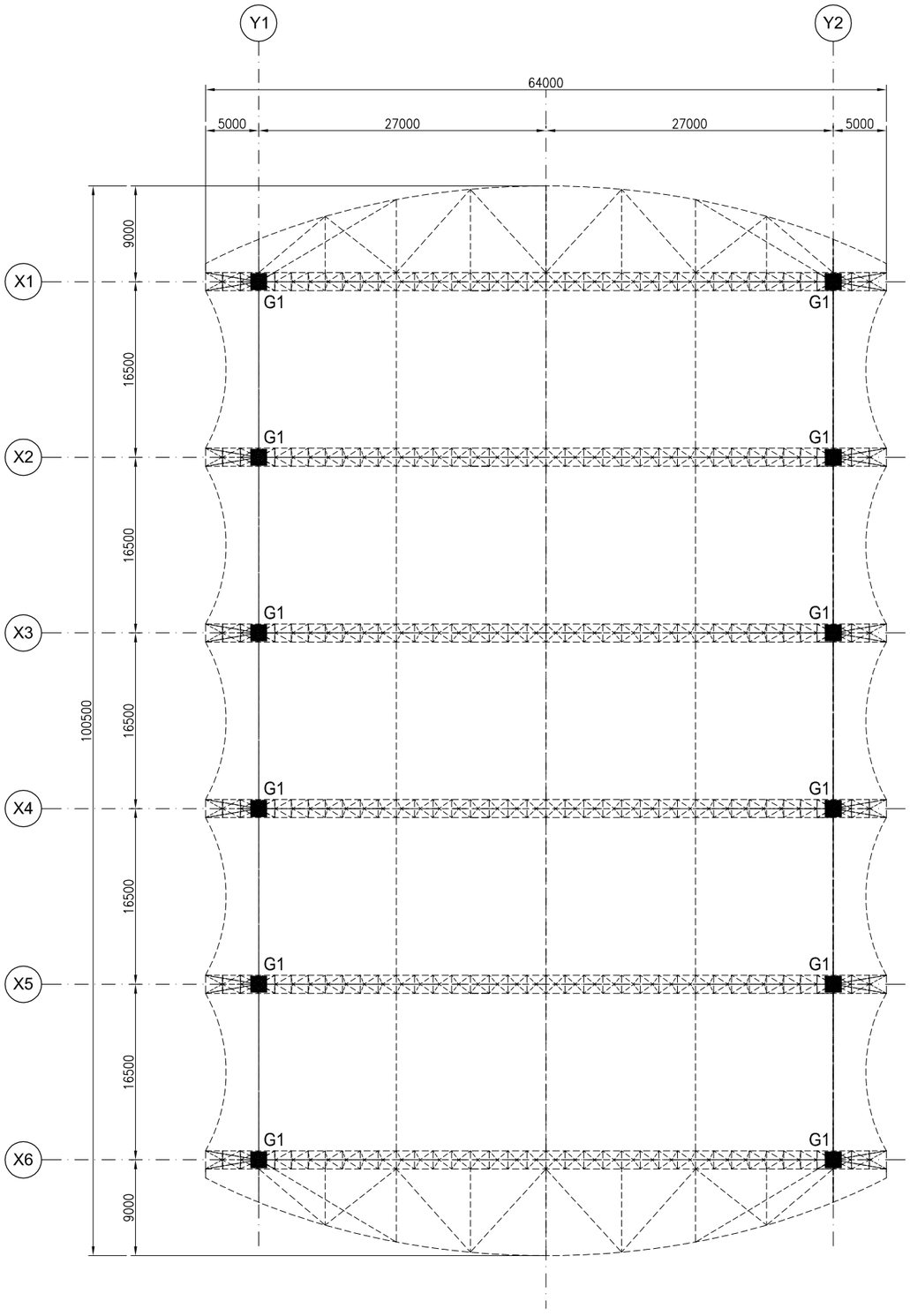
PROJECT :

CADANGAN MENAIK TARAF KOLAM RENANG SERTA KERJA-KERJA BERKAITAN DI WISMA BELIA, INDERA MAHKOTA, KUANTAN. MALAYSIA.

TITTLE :

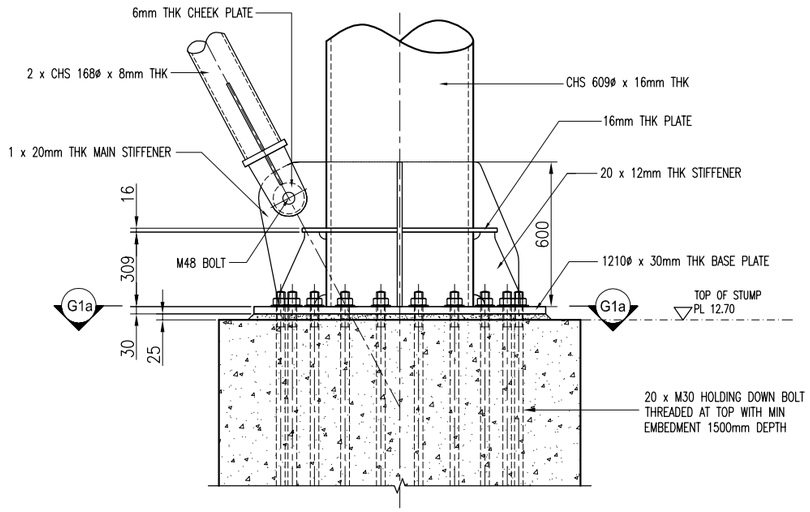
SUPPORT COLUMN LAYOUT PLAN

DATE : 29.12.2011	DRAWN :
SCALE : 1 : 500	CHECKED :
DRAWING NO. : TA-Q326-02	REVISION 03

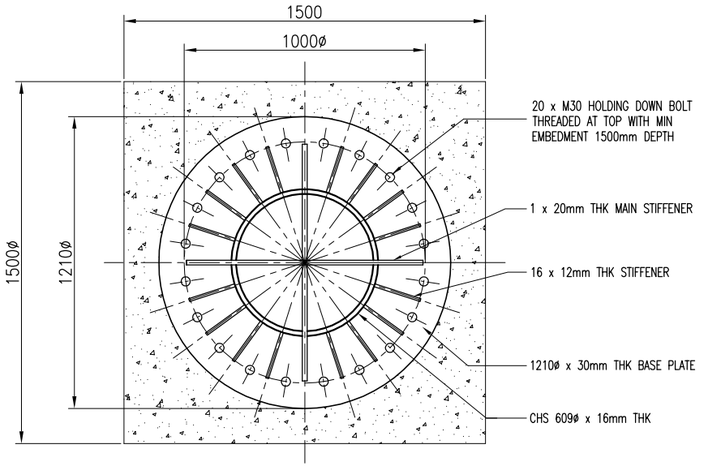


HOLDING DOWN BOLT LAYOUT PLAN

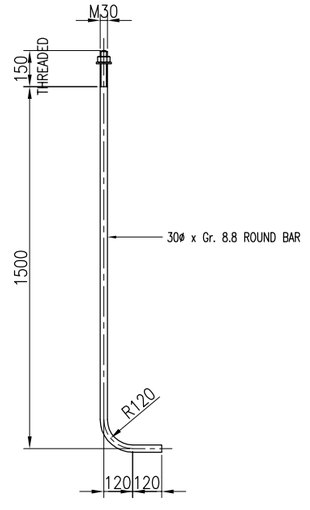
(NOTE: TOP OF STUMP LEVEL SUBJECT TO SITE ADJUSTMENT)



TYPICAL BASE PLATE DETAIL - TYPE G1



SECTION G1a - G1a



TYPICAL HOLDING DOWN BOLT DETAIL

Kompleks Kolam Renang

NOTE :

57

REF	DATE	DESCRIPTION
03	31.07.2012	AS-BUILT
02	20.04.2012	GENERAL
01	12.01.2012	GENERAL

OWNER :

Majlis Perbandaran KUANTAN

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117-A, 1st. FLOOR, MUIP BUILDING,
JALAN MAHKOTA, 25000 KUANTAN ,
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25200 Kuantan Pahang Darul Makmur.
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7-1 JALAN 2/115A, TAMAN PAGAR RUYONG
OFF JALAN KUCHAI LAMA,
58200 KUALA LUMPUR.
TEL : 79812870 FAX : 79818210
E-mail : triarch90@yahoo.com.my

IN CONJUNCTION WITH:

SEDIABENA SDN. BHD.
Building Supplier Malaysia Since 1970
No. 11, Jalan Anggerik SP6/K, Seksyen 6A, Bukit Jelutong, 40150 Shah Alam, Selangor Darul Ehsan, Malaysia.
Tel: 603-7847 2333 Fax: 603-7847 2222 (Company No.: 180370-P)
e-mail: enquiry@sediabena.com website: www.sediabena.com

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Co. Reg. No.: 197701474D
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85 Jalan Loke Yew, 55200 Kuala Lumpur
Tel : 03-92008268 Fax : 03-92008276 (391855-V)
email: info@pendita.com.my website: pendita.com.my

PROJECT :

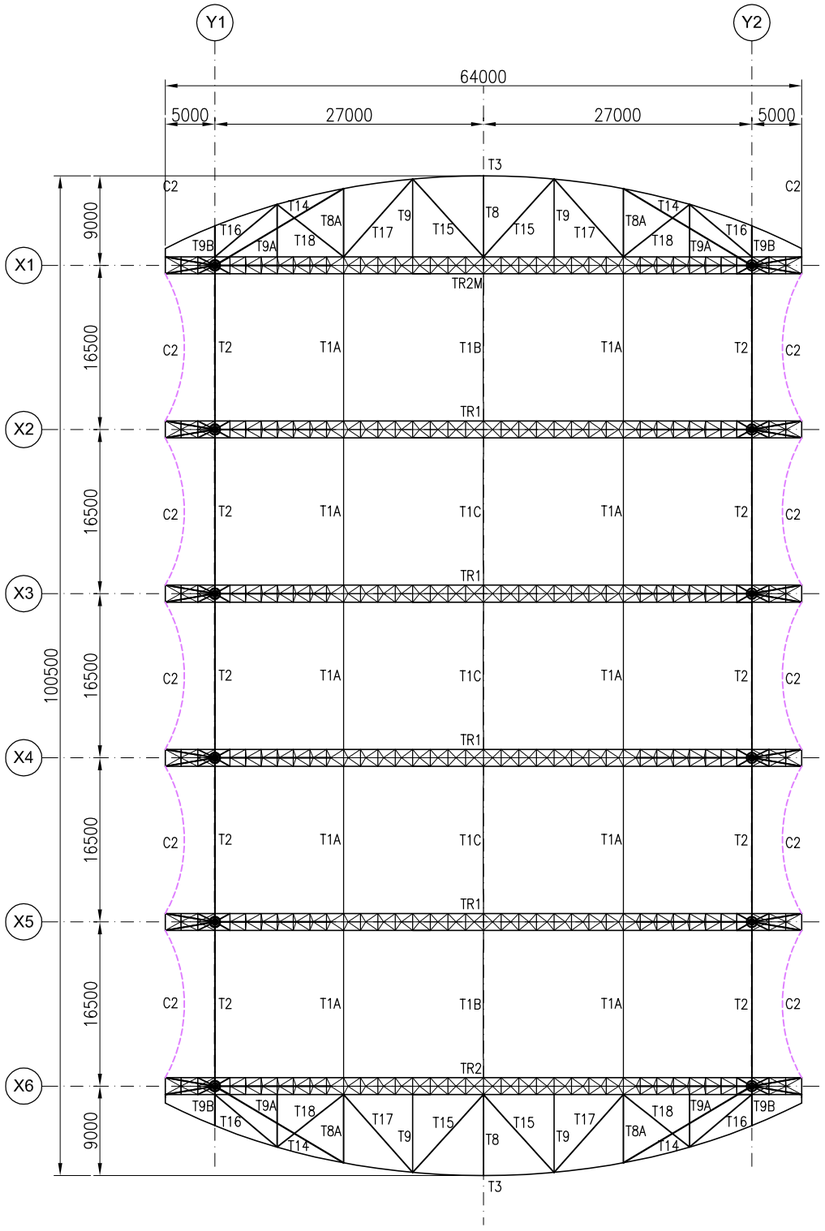
CADANGAN MENAIK TARAF KOLAM RENANG SERTA KERJA-KERJA BERKAITAN DI WISMA BELIA, INDERA MAHKOTA, KUANTAN. MALAYSIA.

TITTLE :

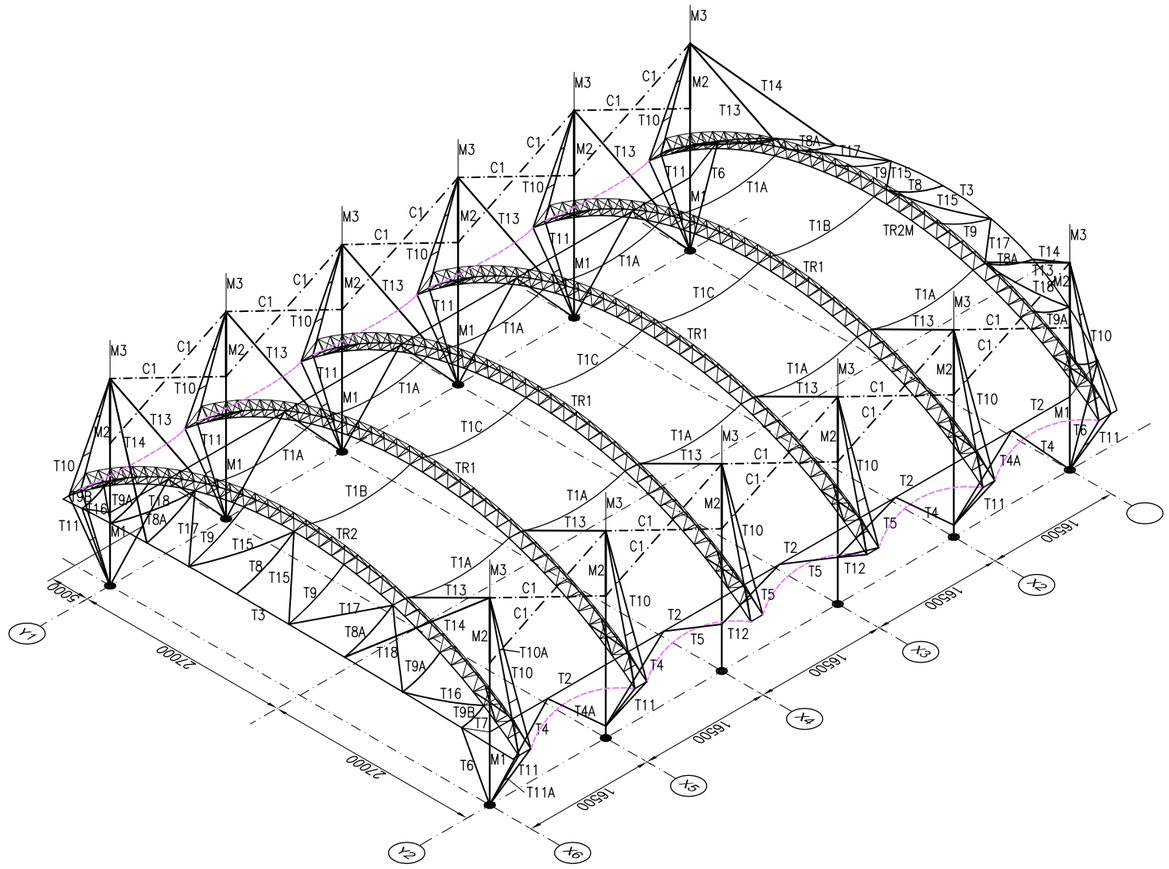
HOLDING DOWN BOLT LAYOUT PLAN & DETAILS

DATE : 29.12.2011	DRAWN :
SCALE : 1 : 500 / 1 : 20	CHECKED :

DRAWING NO. :	REVISION
TA-Q326-03	03



STEEL STRUCTURE FRAMING PLAN



3D-VIEW STEEL STRUCTURE FRAMING

MEMBER SIZING

MARKING	DESCRIPTION	GENERAL SIZE
M1	BOTTOM MAST	CHS 609ø x 16mm THK
M2	INTERMEDIATE MAST	CHS 406ø x 12.5mm THK
M3	TOP MAST	CHS 168ø x 6mm THK
TR1	TOP CHORD	CHS 219ø x 6mm THK
	BOTTOM CHORD	CHS 219ø x 6mm THK
	DIAGONAL & HORIZONTAL	CHS 89ø x 4mm THK
T1A	TIE BETWEEN TRUSS TR1/TR2	CHS 273ø x 9mm THK
T1B	TIE BETWEEN TRUSS TR1/TR2	CHS 273ø x 9mm THK
T1C	TIE BETWEEN TRUSS TR1	CHS 273ø x 8mm THK
T2	TIE BETWEEN COLUMN	CHS 273ø x 9mm THK
T3	CURVED EDGE BEAM	CHS 273ø x 9mm THK
T4	NORMAL BRACING FOR T2	CHS 219ø x 6mm THK
T4A	NORMAL BRACING FOR T2	CHS 219ø x 9mm THK
T5	SHORT BRACING FOR T2	CHS 219ø x 6mm THK
T6	LOWER PROP TO T3	CHS 219ø x 6mm THK
T7	UPPER PROP TO T3	CHS 219ø x 9mm THK
T8	TIE FOR T3	CHS 168ø x 7mm THK
T8A	TIE FOR T3	CHS 168ø x 7mm THK
T9	TIE FOR T3	CHS 168ø x 6mm THK
T9A	TIE FOR T3	CHS 168ø x 6mm THK
T9B	TIE FOR T3	CHS 168ø x 6mm THK
T10	MAST UPPER BACKSTAY	2 X CHS 168ø x 7mm THK
T10A	TIE BETWEEN T10	2 X CHS 73ø x 5.16mm THK

MEMBER SIZING

MARKING	DESCRIPTION	GENERAL SIZE
T11	MAST LOWER BACKSTAY	2 X CHS 168ø x 7mm THK
T11A	TIE BETWEEN T11	CHS 73ø x 5.16mm THK
T12	SHORTENED MAST LOWER BACKSTAY	CHS 168ø x 7mm THK
T13	MAST FRONTSTAY TO TR1	CHS 219ø x 9mm THK
T14	MAST FRONTSTAY TO T3	CHS 219ø x 9mm THK
T15	DIAGONAL BRACING FOR T3	CHS 168ø x 11mm THK
T16	DIAGONAL BRACING FOR T3	CHS 168ø x 11mm THK
T17	DIAGONAL BRACING FOR T3	CHS 177ø x 8mm THK
T18	DIAGONAL BRACING FOR T3	CHS 177ø x 8mm THK
C1	MAST STABILIZING CABLE	16ø GALVANIZED WIRE ROPE
C2	FABRIC BORDER CABLE	28ø GALVANIZED WIRE ROPE WITH PE COVER

Kompleks Kolam Renang

NOTE :

58

REF	DATE	DESCRIPTION
03	31.07.2012	AS-BUILT
02	20.04.2012	GENERAL
01	12.01.2012	GENERAL

OWNER :

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Jalan Tanah Putih, 25100 Kuantan,
Pahang Darul Makmur, Malaysia.
TEL : 09-5121555/666 FAKS : 5130644

MAIN CONTRACTOR :

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117-A, 1st. FLOOR, MUIP BUILDING,
JALAN MAHKOTA, 25000 KUANTAN ,
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TEL :609-515 2473, FAX : 603-516 2619

ARCHITECT'S :

& ASSOCIATES ARCHITECTS SENDIRIAN BERHAD (PR280-P)
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SPECIALIST ROOF & CLADDING CONTRACTOR:

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Tel: 607-667 2333 Fax: 607-667 2222 e-mail: engineering@sediabena.com
(Company No.: 260754-T) website: www.sediabena.com

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email: info@pendita.com.my website: pendita.com.my

PROJECT :

CADANGAN MENAIK TARAF KOLAM RENANG SERTA KERJA-KERJA BERKAITAN DI WISMA BELIA, INDERA MAHKOTA, KUANTAN. MALAYSIA.

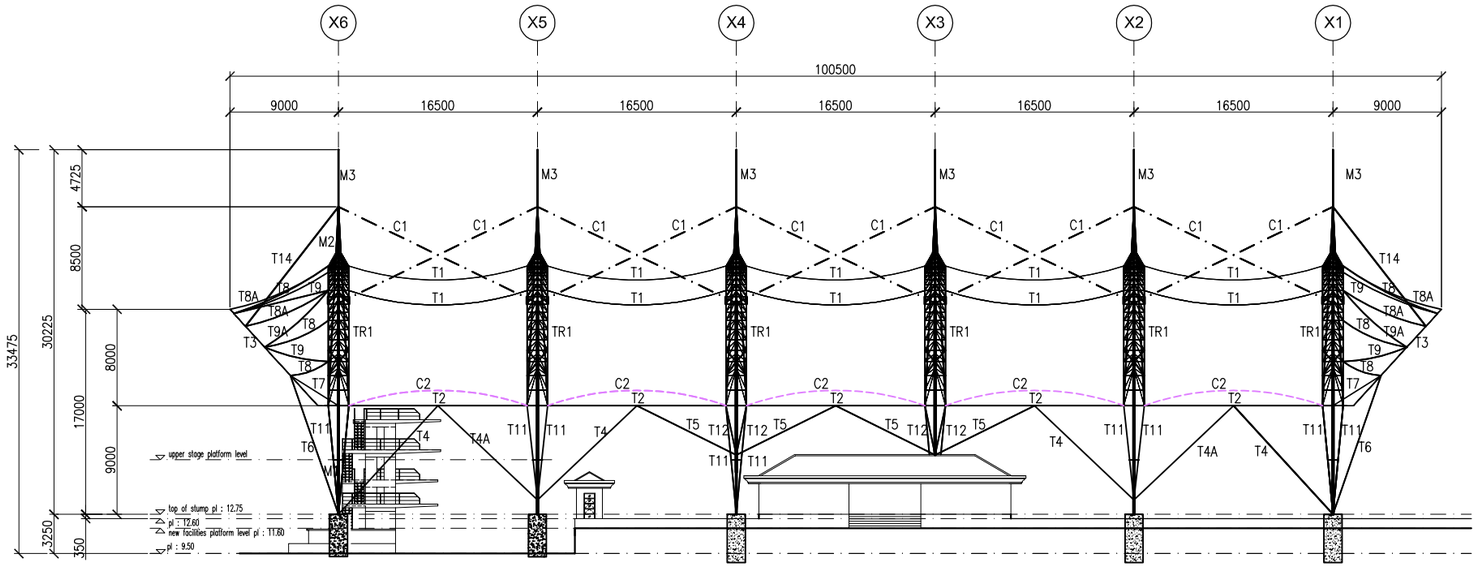
TITTLE :

STEEL STRUCTURE FRAMING PLAN

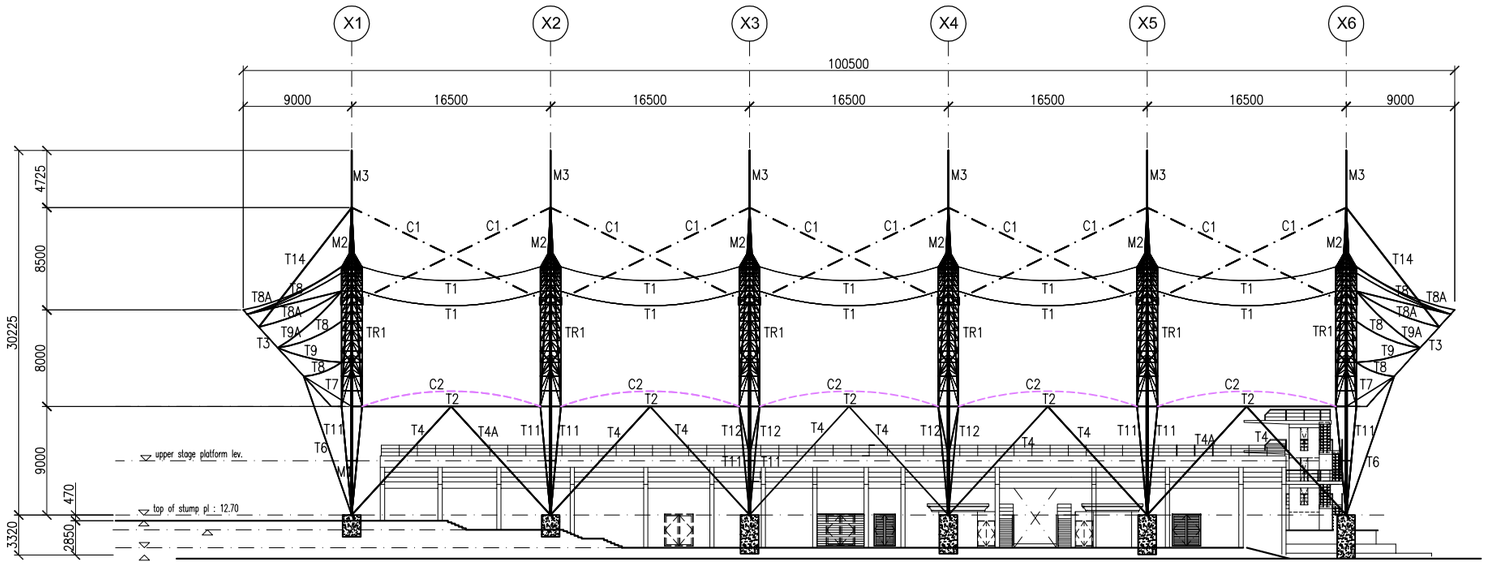
DATE : 29.12.2011	DRAWN :
SCALE : 1 : 600	CHECKED :

DRAWING NO. : TA-Q326-04

REVISION 03



FRONT ELEVATION OF STRUCTURE FRAMING



REAR ELEVATION OF STRUCTURE FRAMING

MEMBER SIZING

MARKING	DESCRIPTION	GENERAL SIZE
M1	BOTTOM MAST	CHS 609ø x 16mm THK
M2	INTERMEDIATE MAST	CHS 406ø x 12.5mm THK
M3	TOP MAST	CHS 168ø x 6mm THK
TR1	TOP CHORD	CHS 219ø x 6mm THK
	BOTTOM CHORD	CHS 219ø x 6mm THK
	DIAGONAL & HORIZONTAL	CHS 89ø x 4mm THK
T1A	TIE BETWEEN TRUSS TR1/TR2	CHS 273ø x 9mm THK
T1B	TIE BETWEEN TRUSS TR1/TR2	CHS 273ø x 9mm THK
T1C	TIE BETWEEN TRUSS TR1	CHS 273ø x 8mm THK
T2	TIE BETWEEN COLUMN	CHS 273ø x 9mm THK
T3	CURVED EDGE BEAM	CHS 273ø x 9mm THK
T4	NORMAL BRACING FOR T2	CHS 219ø x 6mm THK
T4A	NORMAL BRACING FOR T2	CHS 219ø x 9mm THK
T5	SHORT BRACING FOR T2	CHS 219ø x 6mm THK
T6	LOWER PROP TO T3	CHS 219ø x 6mm THK
T7	UPPER PROP TO T3	CHS 219ø x 9mm THK
T8	TIE FOR T3	CHS 168ø x 7mm THK
T8A	TIE FOR T3	CHS 168ø x 7mm THK
T9	TIE FOR T3	CHS 168ø x 6mm THK
T9A	TIE FOR T3	CHS 168ø x 6mm THK
T9B	TIE FOR T3	CHS 168ø x 6mm THK
T10	MAST UPPER BACKSTAY	2 X CHS 168ø x 7mm THK
T10A	TIE BETWEEN T10	2 X CHS 73ø x 5.16mm THK
T11	MAST LOWER BACKSTAY	2 X CHS 168ø x 7mm THK
T11A	TIE BETWEEN T11	CHS 73ø x 5.16mm THK
T12	SHORTENED MAST LOWER BACKSTAY	CHS 168ø x 8mm THK
T13	MAST FRONTSTAY TO TR1	CHS 219ø x 9mm THK
T14	MAST FRONTSTAY TO T3	CHS 219ø x 9mm THK
T15	DIAGONAL BRACING FOR T3	CHS 168ø x 11mm THK
T16	DIAGONAL BRACING FOR T3	CHS 168ø x 11mm THK
T17	DIAGONAL BRACING FOR T3	CHS 177ø x 8mm THK
T18	DIAGONAL BRACING FOR T3	CHS 177ø x 8mm THK
C1	MAST STABILIZING CABLE	16ø GALVANIZED WIRE ROPE
C2	FABRIC BORDER CABLE	28ø GALVANIZED WIRE ROPE WITH PE COVER

Kompleks Kolam Renang

NOTE :

REF	DATE	DESCRIPTION
03	31.07.2012	AS-BUILT
02	20.04.2012	GENERAL
01	12.01.2012	GENERAL

OWNER :

MAJLIS PERBANDARAN KUANTAN
Jalan Tanah Putih, 25100 Kuantan,
Pahang Darul Makmur, Malaysia.
TEL : 09-5121555/666 FAKS : 5130644

MAIN CONTRACTOR :

SUARA HATI SDN. BHD.
117-A, 1st. FLOOR, MUIP BUILDING,
JALAN MAHKOTA, 25000 KUANTAN ,
PAHANG DARUL MAKMUR
TEL :609-515 2473, FAX : 603-516 2619

ARCHITECT'S :

& ASSOCIATES ARCHITECTS
SENDIRIAN BERHAD (79280-P)
B-25, Tingkat Satu, Jalan IM3/10
Bandar Indera Mahkota
25200 Kuantan Pahang Darul Makmur.
Tel: 09-5736430 / 5736372 Fax: 09-5736443

SPECIALIST ROOF & CLADDING CONTRACTOR:

TRI-ARCH sdn. bhd.
7-1 JALAN 2/115A, TAMAN PAGAR RUYONG
OFF JALAN KUCHAI LAMA,
58200 KUALA LUMPUR.
TEL : 79812870 FAX : 79818210
Email : triarch98@yahoo.com.my

IN CONJUNCTION WITH:

SEDIABENA SDN. BHD.
&
TRANSERVE PTE LTD (Co. Reg. No. 197702443M)
39 PANDAN ROAD, JURONG, SINGAPORE 609281
Tel: (65) 6268 3069 Fax: (65) 6266 2324 Email: sales@transervet.com.sg

ENGINEER'S C&S and M&E:

JURUNDING HYH SDN. BHD.
A-7732, Tingkat Satu, Kedai LKNP,
Jalan Dato' Bahaman, 25200 Kuantan,
Pahang Darul Makmur.
Tel : 09-566 3031 Faks : 09-560 1182

QUANTITY SURVEYOR :

PENDITA
NO.C-9-9, Level 11, Menara Uncang Emas,
85 Jalan Loke Yew, 55200 Kuala Lumpur
Tel : 03-92008268 Fax : 03-92008276 (391855-V)
email: info@pendita.com.my website: pendita.com.my

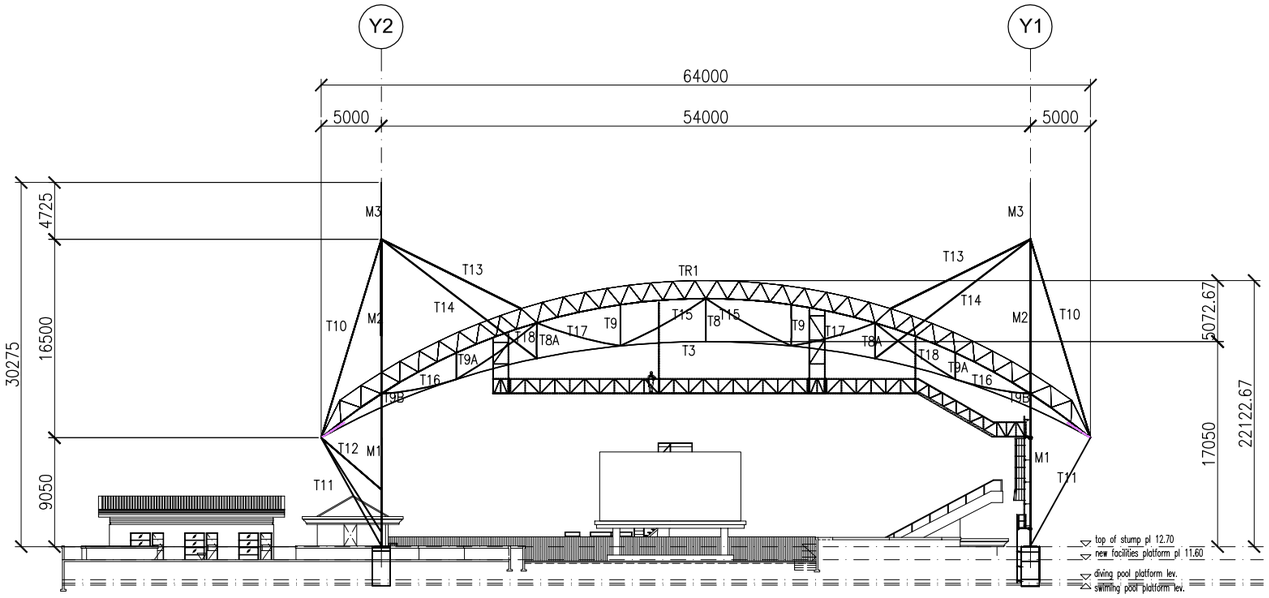
PROJECT :

CADANGAN MENAIK TARAF KOLAM RENANG SERTA KERJA-KERJA BERKAITAN DI WISMA BELIA, INDERA MAHKOTA, KUANTAN. MALAYSIA.

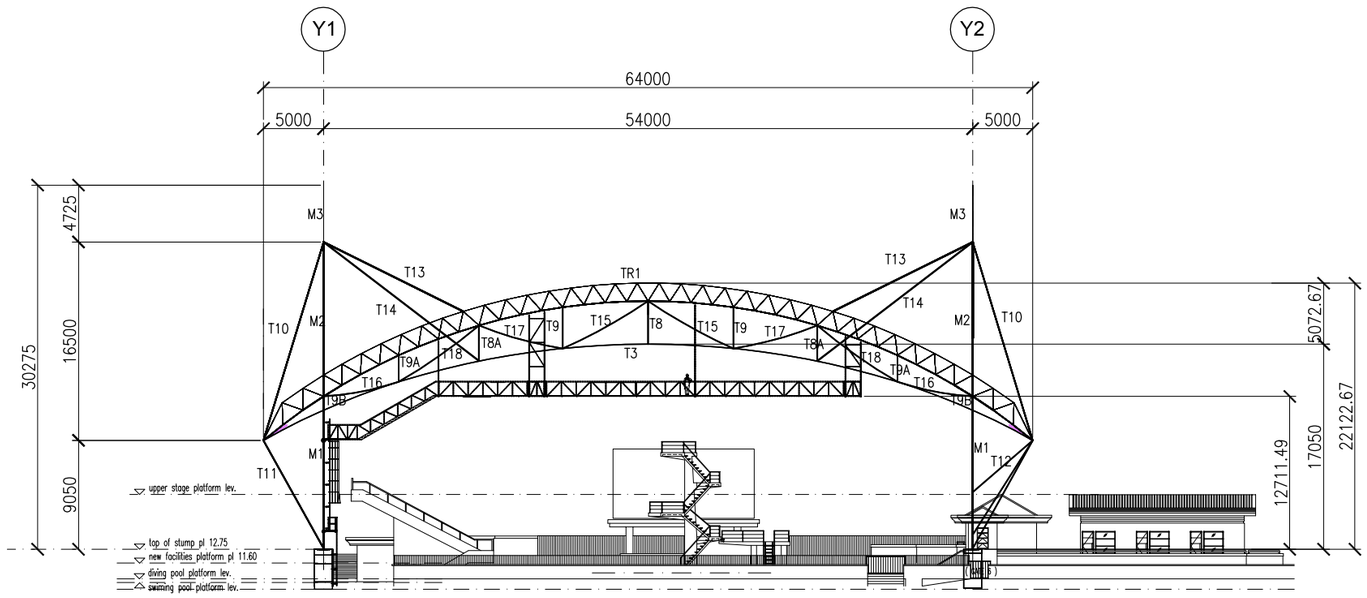
TITTLE :

FRONT ELEVATION
REAR ELEVATION

DATE : 14.12.2011	DRAWN :
SCALE : 1 : 500	CHECKED :
DRAWING NO. : TA-Q326-05	REVISION 03



RIGHT ELEVATION



LEFT ELEVATION

MEMBER SIZING

MARKING	DESCRIPTION	GENERAL SIZE
M1	BOTTOM MAST	CHS 609ø x 16mm THK
M2	INTERMEDIATE MAST	CHS 406ø x 12.5mm THK
M3	TOP MAST	CHS 168ø x 6mm THK
TR1	TOP CHORD	CHS 219ø x 6mm THK
	BOTTOM CHORD	CHS 219ø x 6mm THK
	DIAGONAL & HORIZONTAL	CHS 89ø x 4mm THK
T1A	TIE BETWEEN TRUSS TR1/TR2	CHS 273ø x 9mm THK
T1B	TIE BETWEEN TRUSS TR1/TR2	CHS 273ø x 9mm THK
T1C	TIE BETWEEN TRUSS TR1	CHS 273ø x 8mm THK
T2	TIE BETWEEN COLUMN	CHS 273ø x 9mm THK
T3	CURVED EDGE BEAM	CHS 273ø x 9mm THK
T4	NORMAL BRACING FOR T2	CHS 219ø x 6mm THK
T4A	NORMAL BRACING FOR T2	CHS 219ø x 9mm THK
T5	SHORT BRACING FOR T2	CHS 219ø x 6mm THK
T6	LOWER PROP TO T3	CHS 219ø x 6mm THK
T7	UPPER PROP TO T3	CHS 219ø x 9mm THK
T8	TIE FOR T3	CHS 168ø x 7mm THK
T8A	TIE FOR T3	CHS 168ø x 7mm THK
T9	TIE FOR T3	CHS 168ø x 6mm THK
T9A	TIE FOR T3	CHS 168ø x 6mm THK
T9B	TIE FOR T3	CHS 168ø x 6mm THK
T10	MAST UPPER BACKSTAY	2 X CHS 168ø x 7mm THK
T10A	TIE BETWEEN T10	2 X CHS 73ø x 5.16mm THK
T11	MAST LOWER BACKSTAY	2 X CHS 168ø x 7mm THK
T11A	TIE BETWEEN T11	CHS 73ø x 5.16mm THK
T12	SHORTENED MAST LOWER BACKSTAY	CHS 168ø x 8mm THK
T13	MAST FRONTSTAY TO TR1	CHS 219ø x 9mm THK
T14	MAST FRONTSTAY TO T3	CHS 219ø x 9mm THK
T15	DIAGONAL BRACING FOR T3	CHS 168ø x 11mm THK
T16	DIAGONAL BRACING FOR T3	CHS 168ø x 11mm THK
T17	DIAGONAL BRACING FOR T3	CHS 177ø x 8mm THK
T18	DIAGONAL BRACING FOR T3	CHS 177ø x 8mm THK
C1	MAST STABILIZING CABLE	16ø GALVANIZED WIRE ROPE
C2	FABRIC BORDER CABLE	28ø GALVANIZED WIRE ROPE WITH PE COVER

Kompleks Kolam Renang

NOTE :

60

REF	DATE	DESCRIPTION
03	31.07.2012	AS-BUILT
02	20.04.2012	GENERAL
01	12.01.2012	GENERAL

OWNER :

MAJLIS PERBANDARAN KUANTAN
Jalan Tanah Putih, 25100 Kuantan,
Pahang Darul Makmur, Malaysia.
TEL : 09-5121555/666 FAKS : 5130644

MAIN CONTRACTOR :

SUARA HATI SDN. BHD.
117-A, 1st. FLOOR, MUIP BUILDING,
JALAN MAHKOTA, 25000 KUANTAN ,
PAHANG DARUL MAKMUR
TEL :609-515 2473, FAX : 603-516 2619

ARCHITECT'S :

& ASSOCIATES ARCHITECTS SENDIRIAN BERHAD (78280-P)
B-26, Tingkat Satu, Jalan IM3/10
Bandar Indera Mahkota
25200 Kuantan Pahang Darul Makmur.
Tel: 09-5736430 / 5736372 Fax: 09-5736443

SPECIALIST ROOF & CLADDING CONTRACTOR:

TRI-ARCH sdn. bhd.
7-1, JALAN 2/115A, TAMAN PAGAR RUYONG
OFF JALAN KUCHAI LAMA,
58200 KUALA LUMPUR
TEL : 7981 2870 FAX : 7981 8210
E-mail : triarch90@yahoo.com.my

IN CONJUNCTION WITH:

SEDIABENA SDN. BHD.
No. 31, Jalan Anggrik USJ4, Selayan 1/1, Bandar Subang, 47610 Shah Alam, Selangor Darul Ehsan, Malaysia.
Tel: 603-5747 3333 Fax: 603-5747 2222 e-mail: email@sediabena.com
(Company No.: 385754-P) web site: www.sediabena.com

&

TRANSERVE PTE LTD Co. Reg. No.: 197204141K
39 PANDAN ROAD, JURONG, SINGAPORE 609281
Tel: (65) 6268 3069 Fax: (65) 6266 2324 Email: sales@transervet.com.sg

ENGINEER'S C&S and M&E:

JURUNDING HYH SDN. BHD.
A-7732, Tingkat Satu, Kedai LKNP,
Jalan Dato' Bahaman, 25200 Kuantan,
Pahang Darul Makmur.
Tel : 09-566 3031 Faks : 09-560 1182

QUANTITY SURVEYOR :

PENDITA
NO.C-9-9, Level 11, Menara Uncang Emas,
85 Jalan Loke Yew, 55200 Kuala Lumpur
Tel : 03-92008268 Fax : 03-92008276 (391855-V)
email: info@pendita.com.my website: pendita.com.my

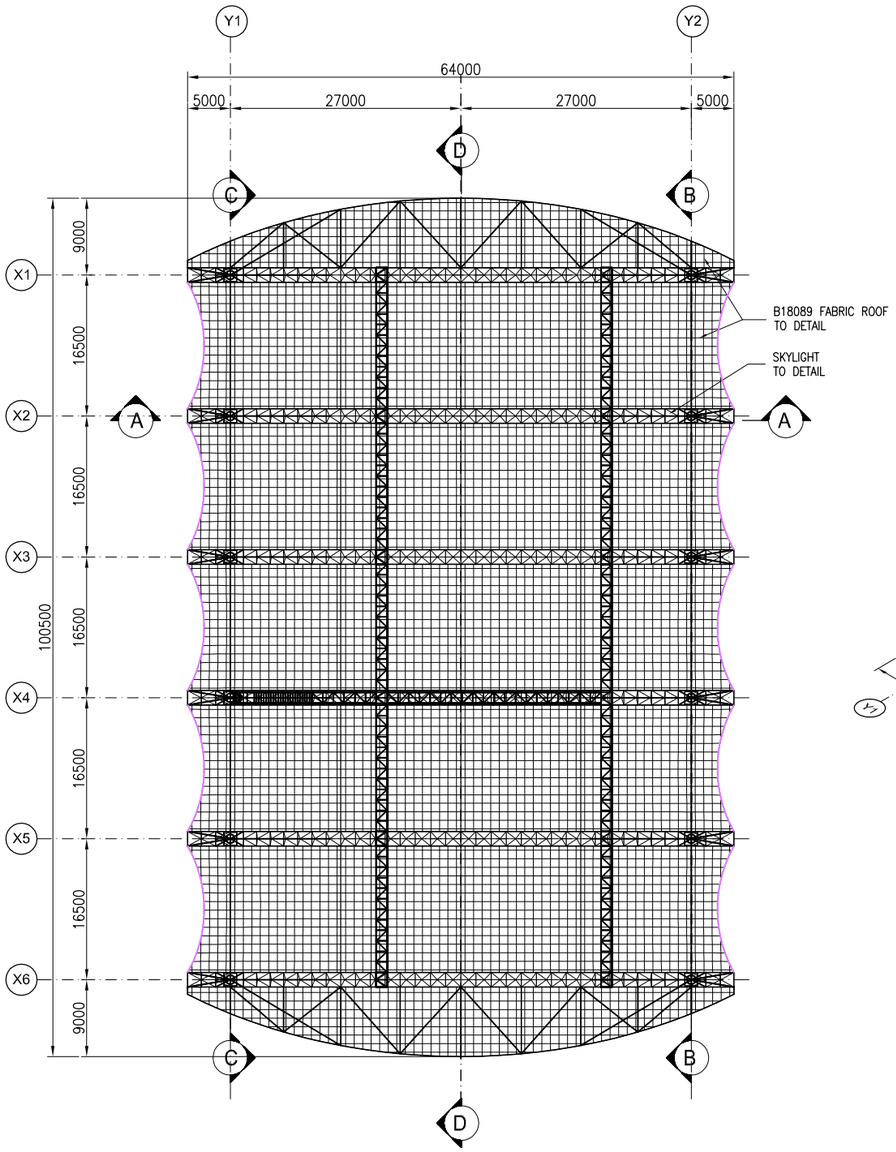
PROJECT :

CADANGAN MENAIK TARAF KOLAM RENANG SERTA KERJA-KERJA BERKAITAN DI WISMA BELIA, INDERA MAHKOTA, KUANTAN. MALAYSIA.

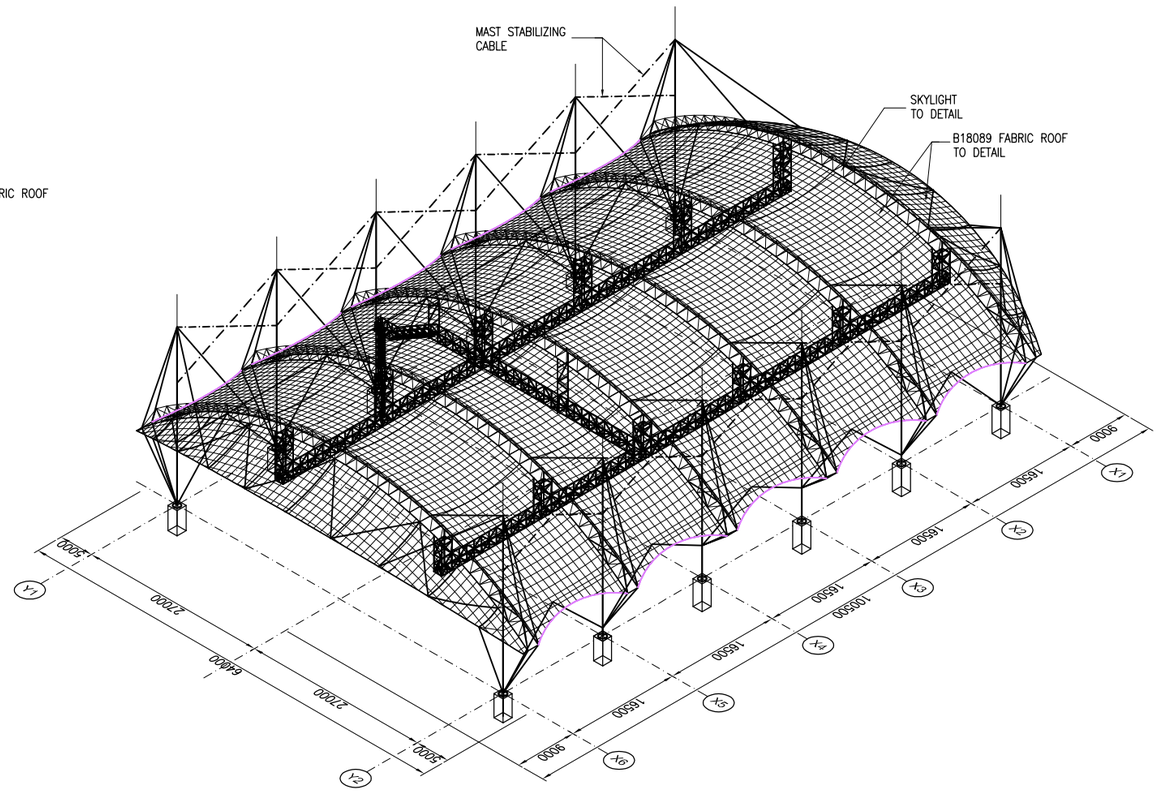
TITTLE :

RIGHT ELEVATION
LEFT ELEVATION

DATE : 29.12.2011	DRAWN :
SCALE : 1 : 500	CHECKED :
DRAWING NO. : TA-Q326-06	REVISION 03



FABRIC ROOF LAYOUT PLAN



3D-VIEW OF FABRIC ROOF LAYOUT

Kompleks Kolam Renang

NOTE :

61

REF	DATE	DESCRIPTION
03	31.07.2012	AS-BUILT
02	20.04.2012	GENERAL
01	12.01.2012	GENERAL

OWNER :

MAJLIS PERBANDARAN KUANTAN
Jalan Tanah Putih, 25100 Kuantan,
Pahang Darul Makmur, Malaysia.
TEL : 09-5121555/666 FAKS : 5130644

MAIN CONTRACTOR :

SUARA HATI SDN. BHD.
117-A, 1st. FLOOR, MUIP BUILDING,
JALAN MAHKOTA, 25000 KUANTAN ,
PAHANG DARUL MAKMUR
TEL :609-515 2473, FAX : 603-516 2619

ARCHITECT'S :

& ASSOCIATES ARCHITECTS SENDIRIAN BERHAD (78288-P)
B-26, Tingkat Satu, Jalan IM3/10
Bandar Indera Mahkota
25200 Kuantan Pahang Darul Makmur.
Tel: 09-5736430 / 5736372 Fax: 09-5736443

SPECIALIST ROOF & CLADDING CONTRACTOR:

TRI-ARCH sdn. bhd.
7-1 JALAN 2/115A, TAMAN PAGAR RUYONG
OFF JALAN KUCHAI LAMA,
58200 KUALA LUMPUR.
TEL : 79812870 FAX : 79818210
E-mail : triarch908@yahoo.com.my

IN CONJUNCTION WITH:

SEDIABENA SDN. BHD.
No. 11, Jalan Astaka U8/84, Seksyen 25, Bukit Jelutong, 40150 Shah Alam, Selangor Darul Ehsan, Malaysia.
Tel: 03-7491 2222 Fax: 03-7491 2222 e-mail: enquiry@sediabena.com
Company No: 128567-M website: www.sediabena.com

&

TRANSERVE PTE LTD (Co. Reg. No.: 197702443K)
39 PANDAN ROAD, JURONG, SINGAPORE 609281
Tel: (65) 6268 3069 Fax: (65) 6266 2324 Email: sales@transervet.com.sg

ENGINEER'S C&S and M&E:

JURUNDING HYH SDN. BHD.
A-7732, Tingkat Satu, Kedai LKNP,
Jalan Dato' Bahaman, 25200 Kuantan,
Pahang Darul Makmur.
Tel : 09-566 3031 Faks : 09-560 1182

QUANTITY SURVEYOR :

PENDITA
NO.C-9-9, Level 11, Menara Uncang Emas,
85 Jalan LokeYew, 55200 Kuala Lumpur
Tel : 03-92008268 Fax : 03-92008276 (391855-V)
email: info@pendita.com.my website: pendita.com.my

PROJECT :

CADANGAN MENAIK TARAF KOLAM RENANG SERTA KERJA-KERJA BERKAITAN DI WISMA BELIA, INDERA MAHKOTA, KUANTAN. MALAYSIA.

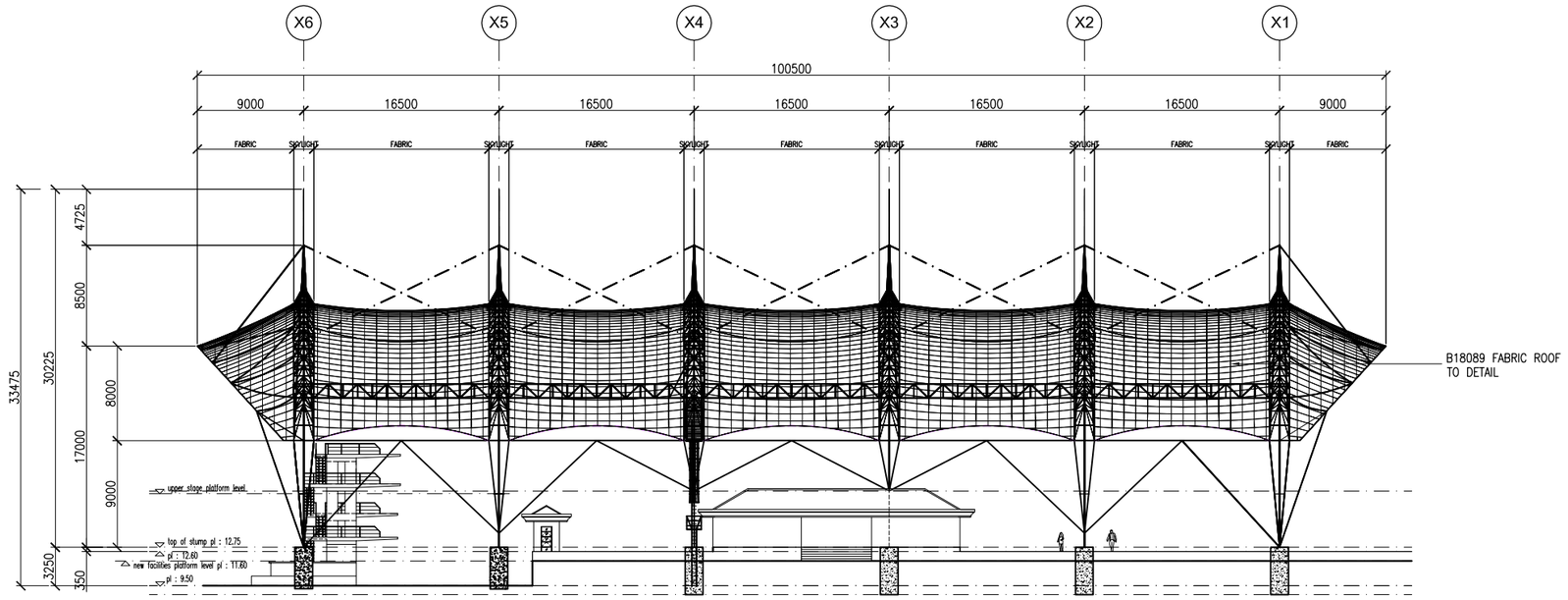
TITTLE :

FABRIC ROOF LAYOUT PLAN
3D-VIEW OF FABRIC ROOF LAYOUT

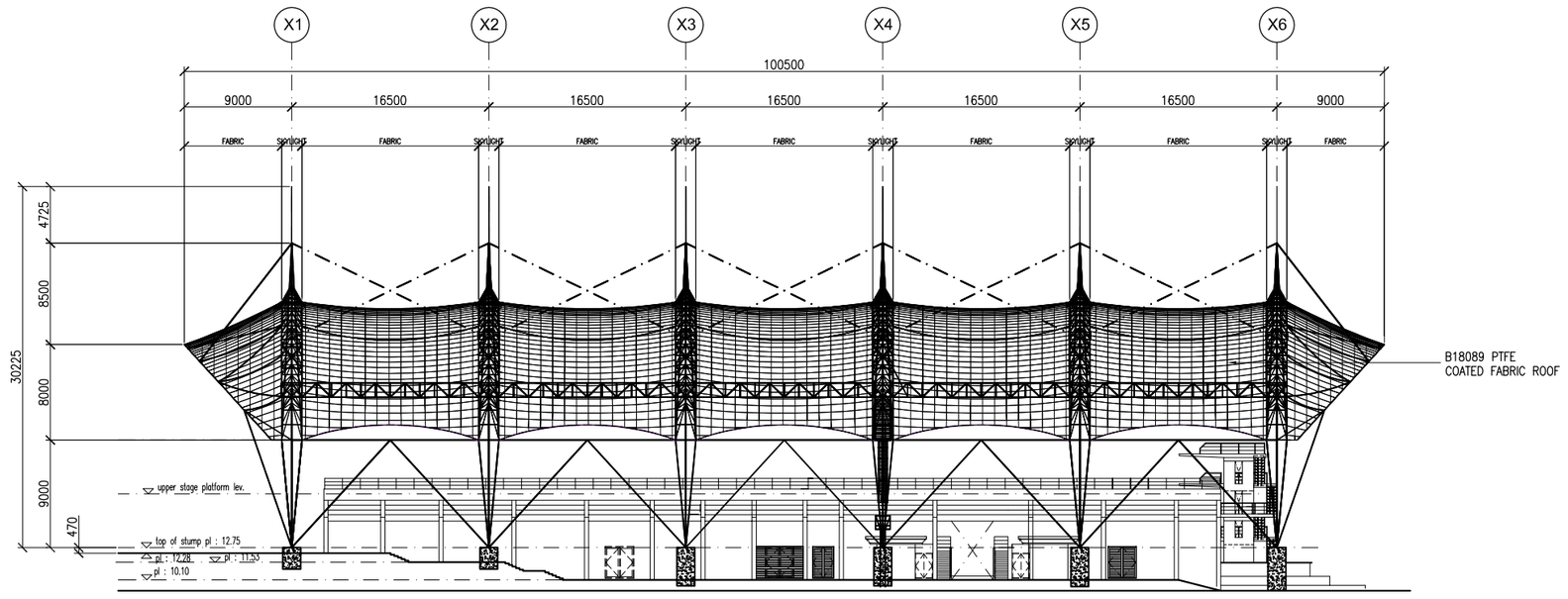
DATE : 28.12.2011	DRAWN :
SCALE : 1 : 700	CHECKED :

DRAWING NO. : TA-Q326-07

REVISION 03



FRONT ELEVATION OF
STRUCTURE FRAMING + FABRIC



REAR ELEVATION OF
STRUCTURE FRAMING + FABRIC

Kompleks Kolam Renang

NOTE :

62

REF	DATE	DESCRIPTION
03	31.07.2012	AS-BUILT
02	20.04.2012	GENERAL
01	12.01.2012	GENERAL

OWNER :

MAJLIS PERBANDARAN KUANTAN
Jalan Tanah Putih, 25100 Kuantan,
Pahang Darul Makmur, Malaysia.
TEL : 09-5121555/666 FAKS : 5130644

MAIN CONTRACTOR :

SUARA HATI SDN. BHD.
117-A, 1st. FLOOR, MUIP BUILDING,
JALAN MAHKOTA, 25000 KUANTAN ,
PAHANG DARUL MAKMUR
TEL :609-515 2473, FAX : 603-516 2619

ARCHITECT'S :

& ASSOCIATES ARCHITECTS SENDIRIAN BERHAD (78280-P)
B-26, Tingkat Satu, Jalan IM3/10
Bandar Indera Mahkota
25200 Kuantan Pahang Darul Makmur.
Tel: 09-5736430 / 5736372 Fax: 09-5736443

SPECIALIST ROOF & CLADDING CONTRACTOR:

TRI-ARCH sdn. bhd.
7-1 JALAN 2/115A, TAMAN PAGAR RUYONG
OFF JALAN KUCHAI LAMA,
58200 KUALA LUMPUR.
TEL : 79812870 FAX : 79818210
E-mail : triarch908@yahoo.com.my

IN CONJUNCTION WITH:

SEDIABENA SDN. BHD.
Building Smart Materials Since 1975
No. 11, Jalan Kenari U5/141, Seksyen U5, Bukit Jelutong, 40150 Shah Alam, Selangor Darul Ehsan, Malaysia.
Tel: 603-7847 3322 Fax: 603-7847 2222 e-mail: enquiry@sediabena.com
Company No.: 285874-M website: www.sediabena.com

&

TRANSERVE PTE LTD
39 PANDAN ROAD, JURONG, SINGAPORE 609281
Tel: (65) 6268 3069 Fax: (65) 6266 2324 Email: sales@transervet.com.sg

ENGINEER'S C&S and M&E:

JURUNDING HYH SDN. BHD.
A-7732, Tingkat Satu, Kedai LKNP,
Jalan Dato' Bahaman, 25200 Kuantan,
Pahang Darul Makmur.
Tel : 09-566 3031 Faks : 09-560 1182

QUANTITY SURVEYOR :

PENDITA
NO.C-9-9, Level 11, Menara Uncang Emas,
85 Jalan Loke Yew, 55200 Kuala Lumpur
Tel : 03-92008268 Fax : 03-92008276 (391855-V)
email: info@pendita.com.my website: pendita.com.my

PROJECT :

CADANGAN MENAIK TARAF KOLAM RENANG SERTA KERJA-KERJA BERKAITAN DI WISMA BELIA, INDERA MAHKOTA, KUANTAN. MALAYSIA.

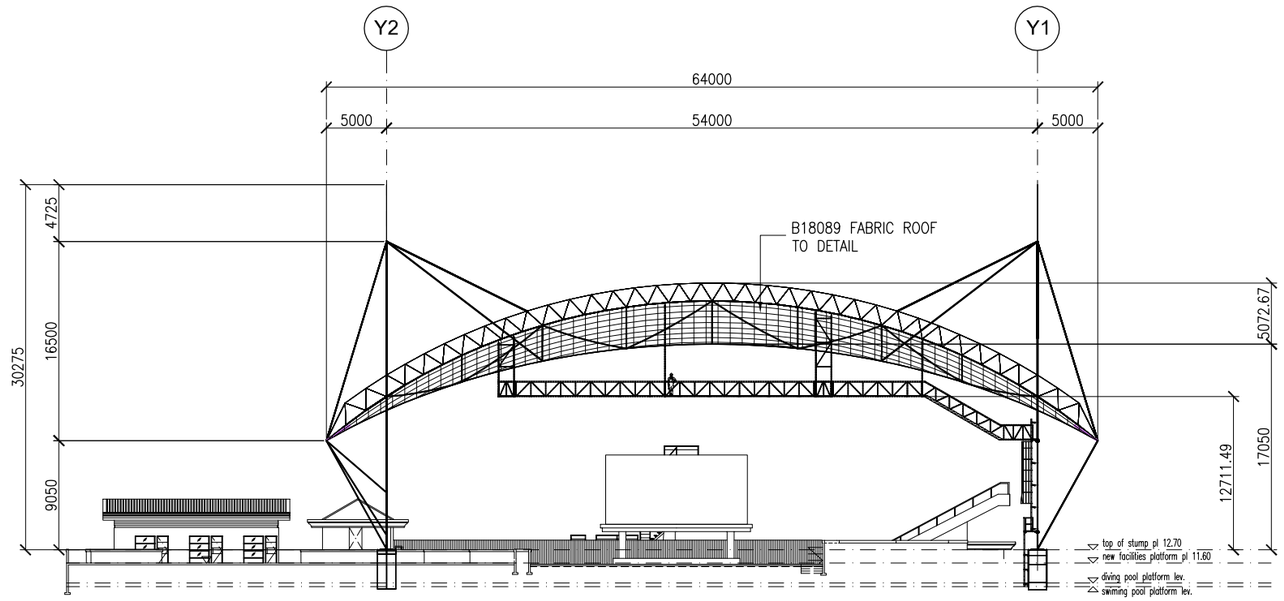
TITTLE :

FRONT ELEVATION OF STRUCTURE FRAMING + FABRIC
REAR ELEVATION OF STUCTURE FRAMING + FABRIC

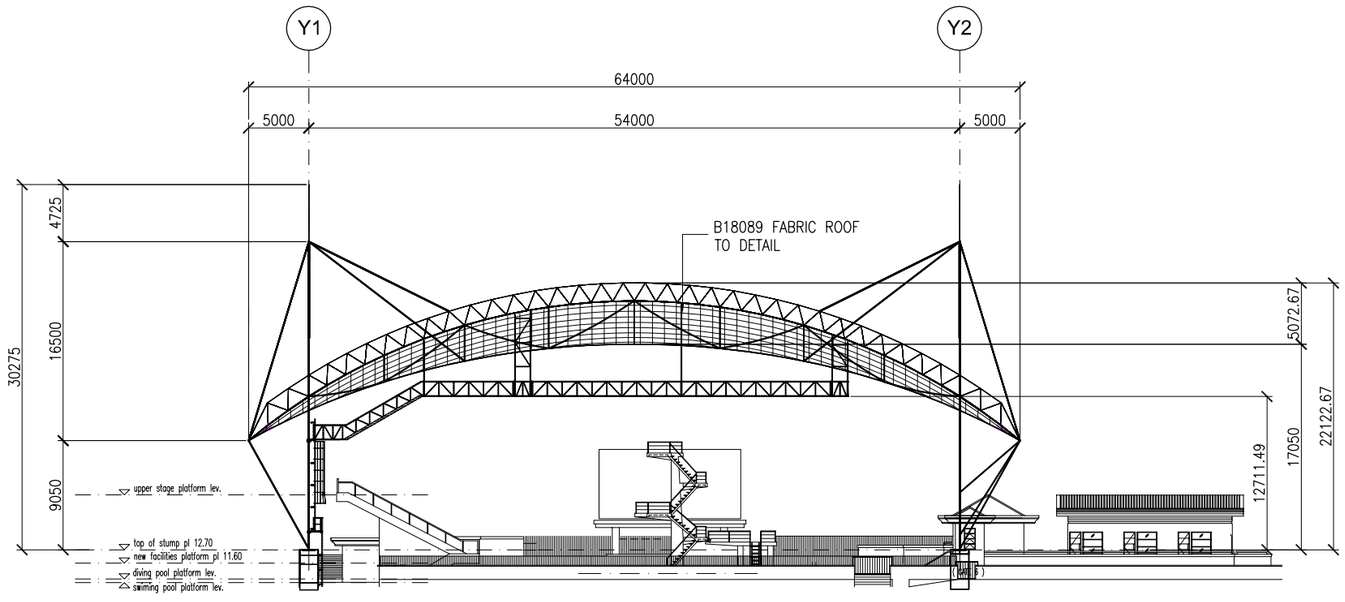
DATE : 29.12.2011	DRAWN :
SCALE : 1 : 500	CHECKED :

DRAWING NO. : TA-Q326-08

REVISION 03



RIGHT ELEVATION OF
STRUCTURE FRAMING + FABRIC



LEFT ELEVATION OF
STRUCTURE FRAMING + FABRIC

Kompleks Kolam Renang

NOTE :

63

REF	DATE	DESCRIPTION
03	31.07.2012	AS-BUILT
02	20.04.2012	GENERAL
01	12.01.2012	GENERAL

OWNER :

MAJLIS PERBANDARAN KUANTAN
Jalan Tanah Putih, 25100 Kuantan,
Pahang Darul Makmur, Malaysia.
TEL : 09-5121555/666 FAKS : 5130644

MAIN CONTRACTOR :

SUARA HATI SDN. BHD.
117-A, 1st. FLOOR, MUIP BUILDING,
JALAN MAHKOTA, 25000 KUANTAN ,
PAHANG DARUL MAKMUR
TEL :609-515 2473, FAX : 603-516 2619

ARCHITECT'S :

& ASSOCIATES ARCHITECTS SENDIRIAN BERHAD (79280-P)
B-26, Tingkat Satu, Jalan IM3/10
Bandar Indera Mahkota
25200 Kuantan Pahang Darul Makmur.
Tel: 09-5736430 / 5736372 Fax: 09-5736443

SPECIALIST ROOF & CLADDING CONTRACTOR:

TRI-ARCH sdn. bhd.
7-1 JALAN 2/115A, TAMAN PAGAR RUYONG
OFF JALAN KUCHAI LAMA,
58200 KUALA LUMPUR.
TEL : 79812870 FAX : 79818210
E-mail : triarch98@yahoo.com.my

IN CONJUNCTION WITH:

SEDIABENA SDN. BHD.
Building Steel or Materials Since 1970
Ibu 11, Jalan Kontena Utama Selayan Jln. Bukit Mahkota, 43700 Beranang, Selangor Darul Ehsan, Malaysia.
Tel: 603-8747 3322 Fax: 603-8747 2222 e-mail: sediab@sediabena.com
(Company No.: 285874-M) website: www.sediabena.com

&

TRANSERVE PTE LTD (Co. Reg. No.: 197702443K)
39 PANDAN ROAD, JURONG, SINGAPORE 609281
Tel: (65) 6268 3069 Fax: (65) 6266 2324 Email: sales@transervet.com.sg

ENGINEER'S C&S and M&E:

JURUNDING HYH SDN. BHD.
A-7732, Tingkat Satu, Kedai LKNP,
Jalan Dato' Bahaman, 25200 Kuantan,
Pahang Darul Makmur.
Tel : 09-566 3031 Faks : 09-560 1182

QUANTITY SURVEYOR :

PENDITA
NO.C-9-9, Level 11, Menara Uncang Emas,
85 Jalan Loke Yew, 55200 Kuala Lumpur
Tel : 03-92008268 Fax : 03-92008276 (391855-V)
email: info@pendita.com.my website: pendita.com.my

PROJECT :

CADANGAN MENAIK TARAF KOLAM RENANG SERTA KERJA-KERJA BERKAITAN DI WISMA BELIA, INDERA MAHKOTA, KUANTAN. MALAYSIA.

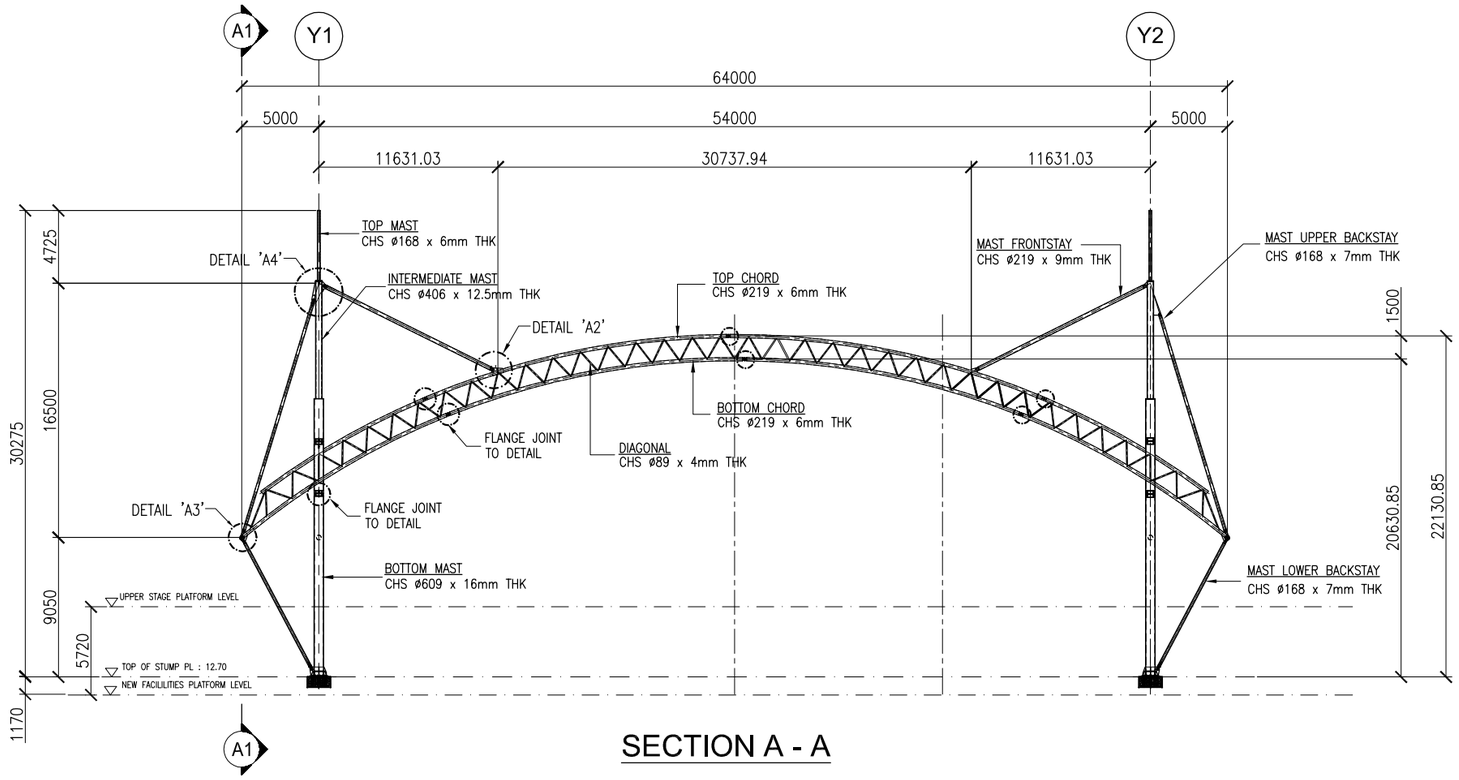
TITTLE :

RIGHT ELEVATION OF STRUCTURE FRAMING + FABRIC
LEFT ELEVATION OF STRUCTURE FRAMING + FABRIC

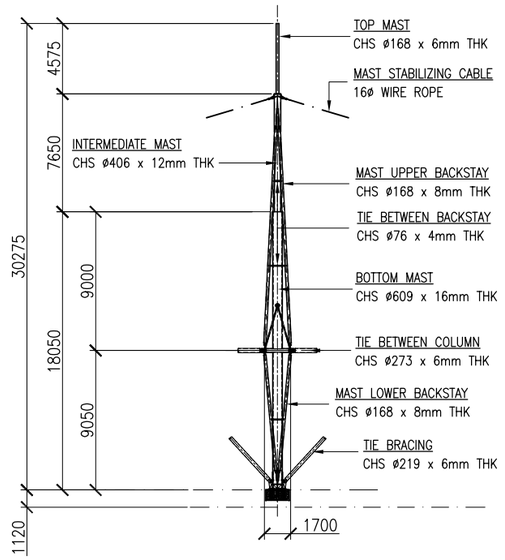
DATE : 29.12.2011	DRAWN :
SCALE : 1 : 500	CHECKED :

DRAWING NO. : TA-Q326-09

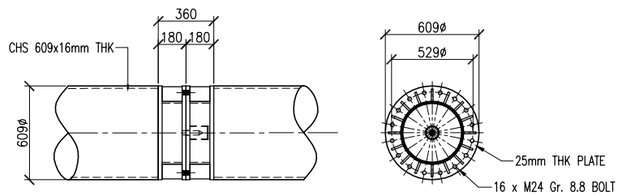
REVISION 03



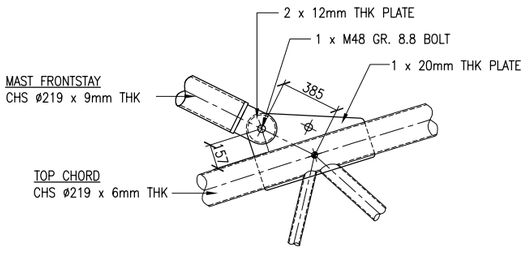
SECTION A - A



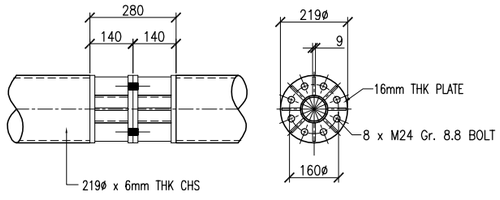
SECTION A1 - A1



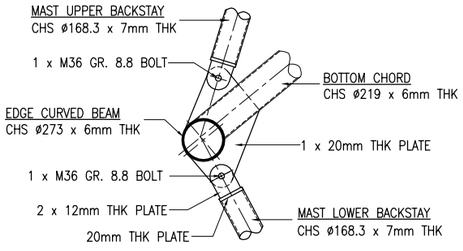
TYPICLA FLANGE JOINT FOR CHS 609Ø x 20mm THK



DETAIL 'A2'



TYPICLA FLANGE JOINT FOR CHS 219Ø x 6mm THK



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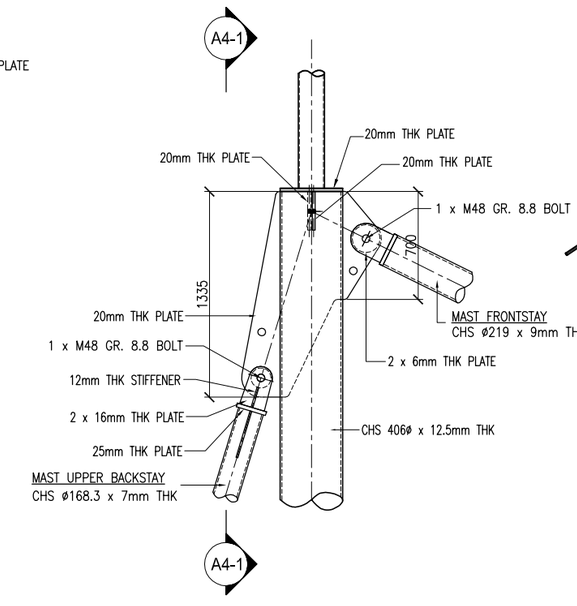

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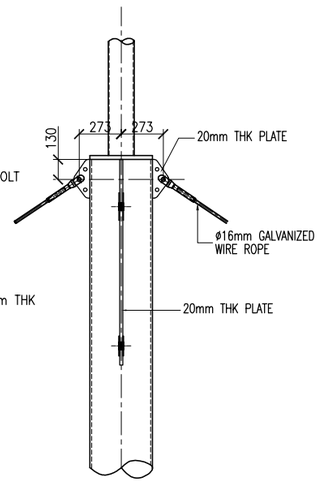


VIEW A4-1 - A4-1

Kompleks Kolam Renang

NOTE : 64

REF	DATE	DESCRIPTION
03	31.07.2012	AS-BUILT
02	20.04.2012	GENERAL
01	12.01.2012	GENERAL

OWNER :

MAJLIS PERBANDARAN KUANTAN
Jalan Tanah Putih, 25100 Kuantan,
Pahang Darul Makmur, Malaysia.
TEL : 09-5121555/666 FAKS : 5130644

MAIN CONTRACTOR :

SUARA HATI SDN. BHD.
117-A, 1st. FLOOR, MUIP BUILDING,
JALAN MAHKOTA, 25000 KUANTAN ,
PAHANG DARUL MAKMUR
TEL :609-515 2473, FAX : 603-516 2619

ARCHITECT'S :

& ASSOCIATES ARCHITECTS SENDIRIAN BERHAD (78280-P)
B-26, Tingkat Satu, Jalan IM3/10
Bandar Indera Mahkota
25200 Kuantan Pahang Darul Makmur.
Tel: 09-5736430 / 5736372 Fax: 09-5736443

SPECIALIST ROOF & CLADDING CONTRACTOR:

TRI-ARCH sdn. bhd.
7-1 JALAN 2/115A, TAMAN PAGAR RUYONG
OFF JALAN KUCHAI LAMA,
58200 KUALA LUMPUR.
TEL : 79812870 FAX : 79818210
Email : triarch98@yahoo.com.my

IN CONJUNCTION WITH:

SEDIABENA SDN. BHD.
Building Smart Materials Since 1970
No. 11, Jalan Kelabu Utara, Selayang Off, Batu Caves, 68100 Batu Caves, Selangor Darul Ehsan, Malaysia.
Tel: 603-6147 2222 Fax: 603-6147 2223
(Company No.: 0150754-M)
e-mail: enquiry@sediabena.com
website: www.sediabena.com

&

TRANSERVE PTE LTD
(Co. Reg. No.: 197702443K)
39 PANDAN ROAD, JURONG, SINGAPORE 609281
Tel: (65) 6268 3069 Fax: (65) 6266 2324 Email: sales@transervet.com.sg

ENGINEER'S C&S and M&E:

JURUNDING HYH SDN. BHD.
A-7732, Tingkat Satu, Kedai LKNP,
Jalan Dato' Bahaman, 25200 Kuantan,
Pahang Darul Makmur.
Tel : 09-566 3031 Faks : 09-560 1182

QUANTITY SURVEYOR :

PENDITA
NO.C-9-9, Level 11, Menara Uncang Emas,
85 Jalan Loke Yew, 55200 Kuala Lumpur
Tel : 03-92008268 Fax : 03-92008276 (391855-V)
email: info@pendita.com.my website: pendita.com.my

PROJECT :

CADANGAN MENAIK TARAF KOLAM RENANG SERTA KERJA-KERJA BERKAITAN DI WISMA BELIA, INDERA MAHKOTA, KUANTAN. MALAYSIA

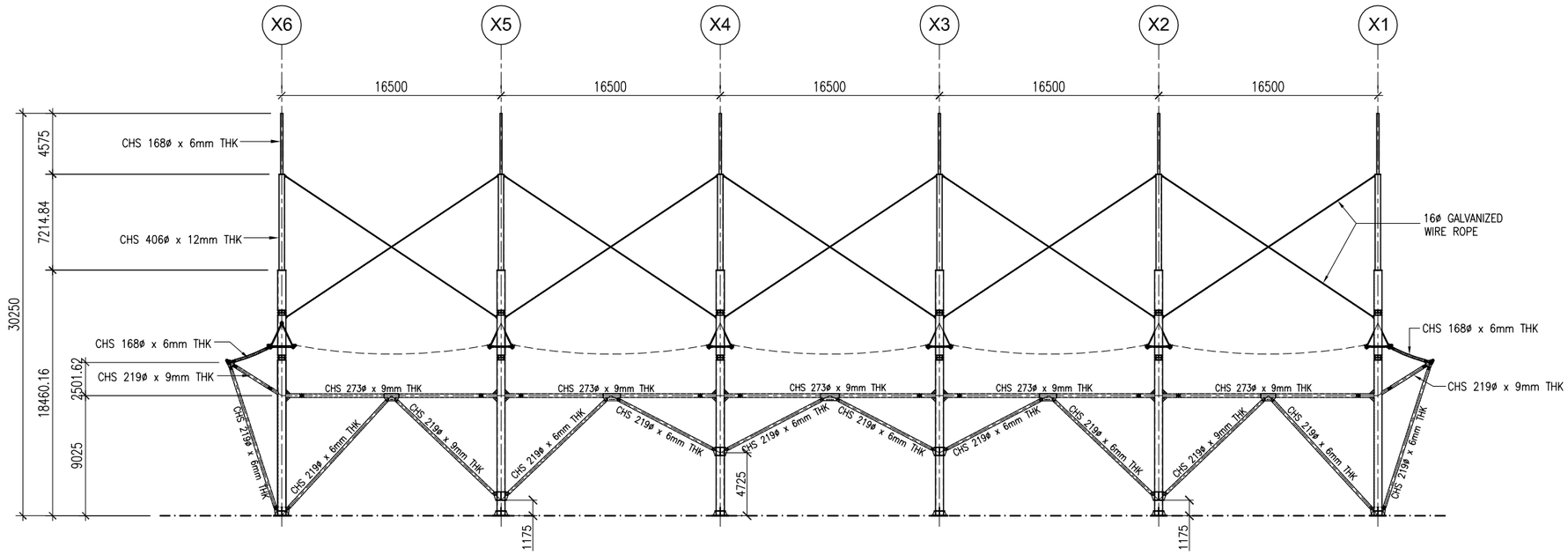
TITTLE :

SECTION A-A & DETAILS

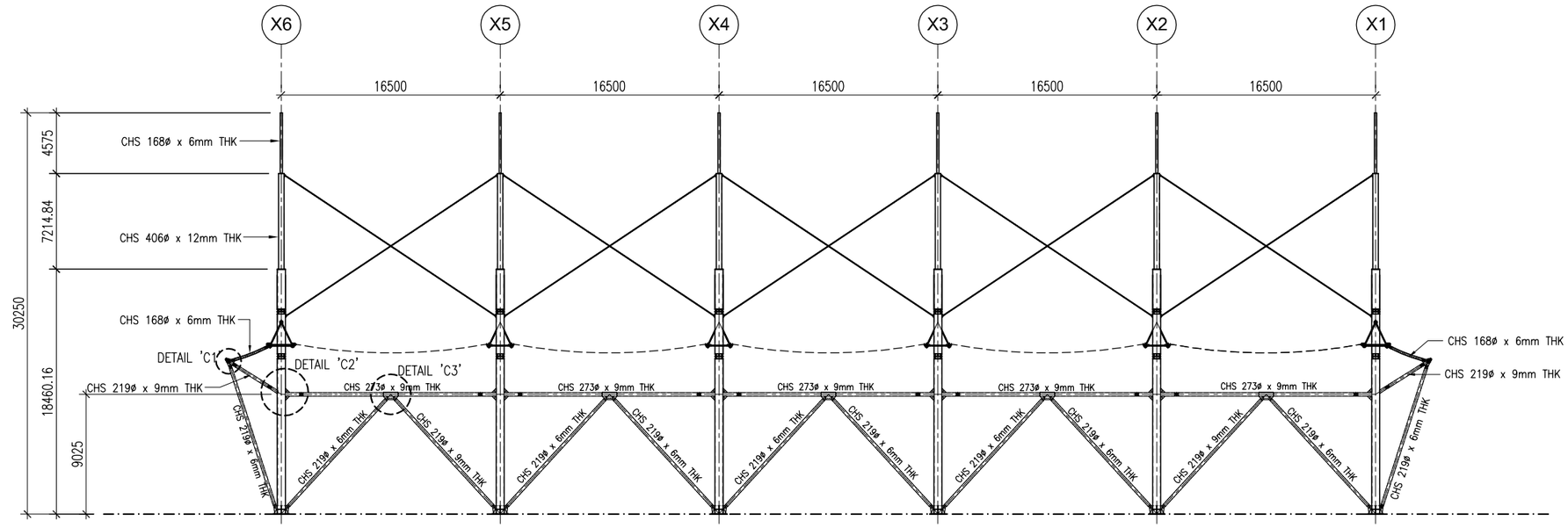
DATE : 29.12.2011	DRAWN :
SCALE : 1 : 600 1 : 10	CHECKED :

DRAWING NO. : TA-Q326-10

REVISION 03



SECTION B - B



SECTION C - C

Kompleks Kolam Renang

NOTE :

65

REF	DATE	DESCRIPTION
03	31.07.2012	AS-BUILT
02	20.04.2012	GENERAL
01	12.01.2012	GENERAL

OWNER :

Majlis Perbandaran KUANTAN

MAJLIS PERBANDARAN KUANTAN
Jalan Tanah Putih, 25100 Kuantan,
Pahang Darul Makmur, Malaysia.
TEL : 09-5121555/666 FAKS : 5130644

MAIN CONTRACTOR :

SUARA HATI SDN. BHD.
117-A, 1st. FLOOR, MUIP BUILDING,
JALAN MAHKOTA, 25000 KUANTAN ,
PAHANG DARUL MAKMUR
TEL :609-515 2473, FAX : 603-516 2619

ARCHITECT'S :

& ASSOCIATES ARCHITECTS SENDIRIAN BERHAD (78280-P)
B-26, Tingkat Satu, Jalan IM3/10
Bandar Indera Mahkota
25200 Kuantan Pahang Darul Makmur.
Tel: 09-5736430 / 5736372 Fax: 09-5736443

SPECIALIST ROOF & CLADDING CONTRACTOR:

TRI-ARCH sdn. bhd.
7-1 JALAN 2/115A, TAMAN PAGAR RUYONG
OFF JALAN KUCHAI LAMA,
58200 KUALA LUMPUR.
TEL : 79812870 FAX : 79818210
Email : triarch90@yahoo.com.my

IN CONJUNCTION WITH:

SEDIABENA SDN. BHD.
Building Steel Structures Since 1970
Br. 11, Jalan Kebun Lama, Selayang Lama, Batu Caves, 68100 Kuala Lumpur, Malaysia.
Tel: 03-6187 2222 Fax: 03-6187 2223
(Company No.: 3957-K)
e-mail: enquiry@sediabena.com
website: www.sediabena.com

&

TRANSERVE PTE LTD
(Co. Reg. No. 197702443K)
39 PANDAN ROAD, JURONG, SINGAPORE 609281
Tel: (65) 6268 3069 Fax: (65) 6266 2324 Email: sales@transervet.com.sg

ENGINEER'S C&S and M&E:

JURUNDING HYH SDN. BHD.
A-7732, Tingkat Satu, Kedai LKNP,
Jalan Dato' Bahaman, 25200 Kuantan,
Pahang Darul Makmur.
Tel : 09-566 3031 Faks : 09-560 1182

QUANTITY SURVEYOR :

PENDITA
NO.C-9-9, Level 11, Menara Uncang Emas,
85 Jalan Loke Yew, 55200 Kuala Lumpur
Tel : 03-92008268 Fax : 03-92008276 (391855-V)
email: info@pendita.com.my website: pendita.com.my

PROJECT :

CADANGAN MENAIK TARAF KOLAM RENANG SERTA KERJA-KERJA BERKAITAN DI WISMA BELIA, INDERA MAHKOTA, KUANTAN. MALAYSIA.

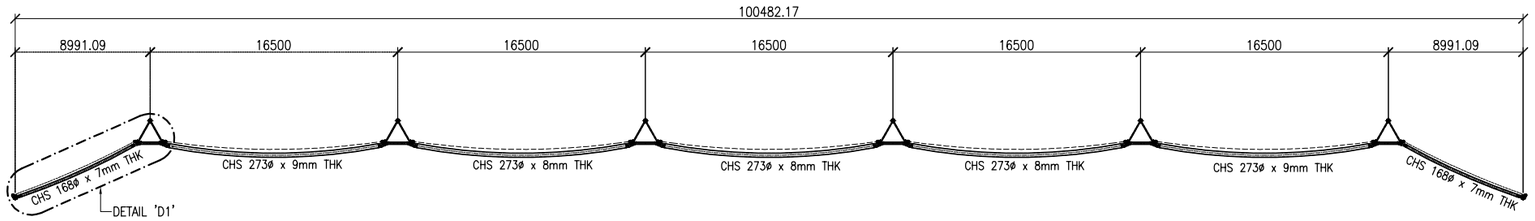
TITTLE :

SECTION B-B
SECTION C-C

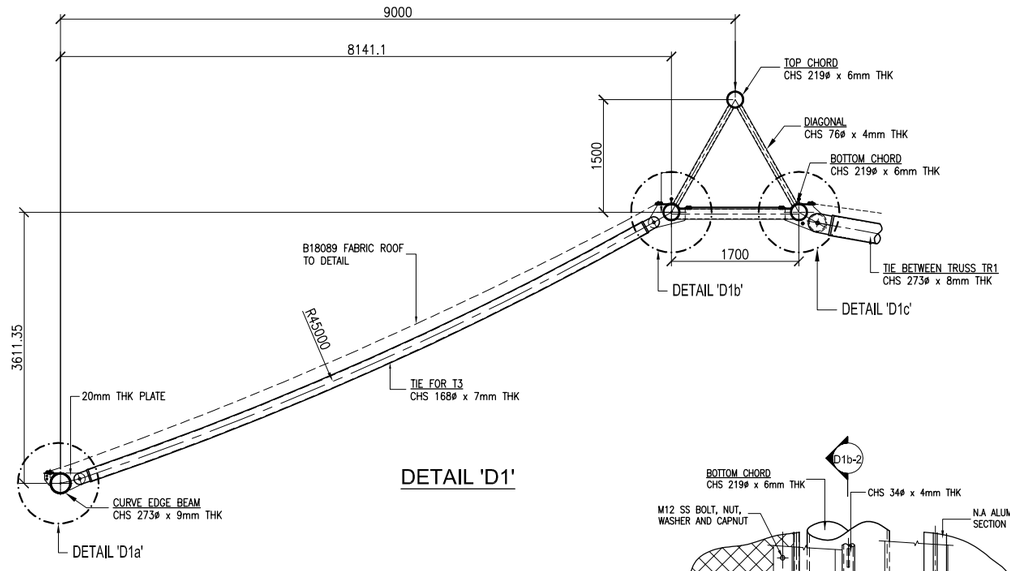
DATE : 29.12.2011	DRAWN :
SCALE : 1 : 400	CHECKED :

DRAWING NO. : TA-Q326-11

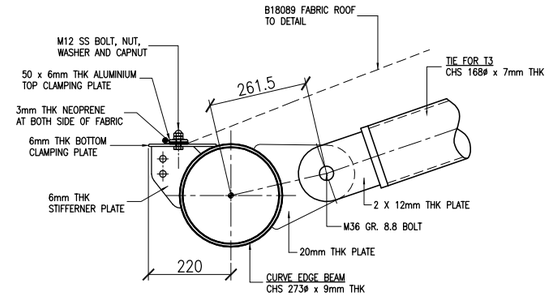
REVISION 03



SECTION D - D



DETAIL 'D1'



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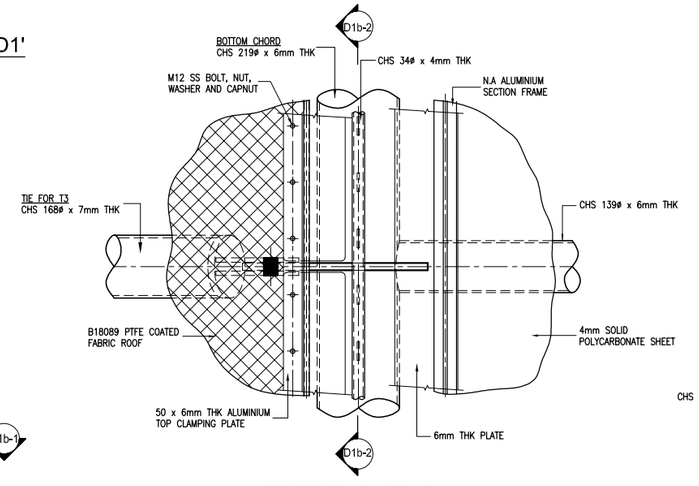
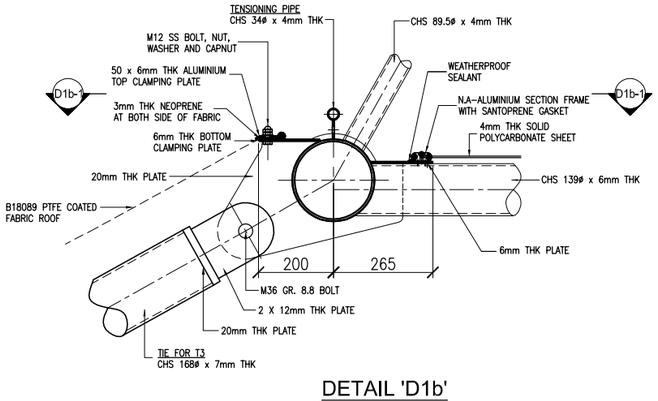


VIEW D1a-1 - D1a-1



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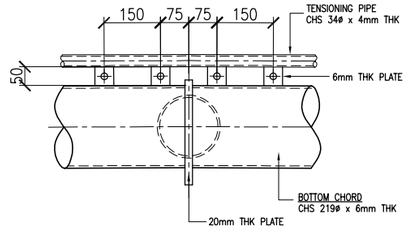
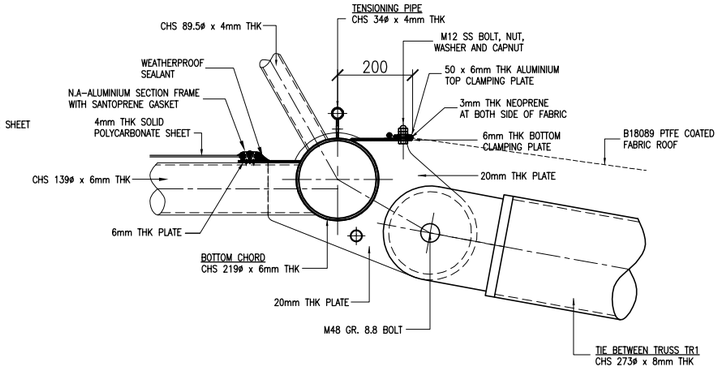


VIEW D1b-2 - D1b-2



DETAIL 'D1c'

Kompleks Kolam Renang

NOTE :

66

REF	DATE	DESCRIPTION
03	31.07.2012	AS-BUILT
02	20.04.2012	GENERAL
01	12.01.2012	GENERAL

OWNER :

MAJLIS PERBANDARAN KUANTAN
Jalan Tanah Putih, 25100 Kuantan,
Pahang Darul Makmur, Malaysia.
TEL : 09-5121555/666 FAKS : 5130644

MAIN CONTRACTOR :

SUARA HATI SDN. BHD.
117-A, 1st. FLOOR, MUIP BUILDING,
JALAN MAHKOTA, 25000 KUANTAN ,
PAHANG DARUL MAKMUR
TEL :609-515 2473, FAX : 603-516 2619

ARCHITECT'S :

& ASSOCIATES ARCHITECTS SENDIRIAN BERHAD (78280-P)
B-26, Tingkat Satu, Jalan IM3/10
Bandar Indera Mahkota
25200 Kuantan Pahang Darul Makmur.
Tel: 09-5736430 / 5736372 Fax: 09-5736443

SPECIALIST ROOF & CLADDING CONTRACTOR:

TRI-ARCH sdn. bhd.
7-1 JALAN 2/115A, TAMAN PAGAR RUYONG
OFF JALAN KUCHAI LAMA,
58200 KUALA LUMPUR.
TEL : 79812870 FAX : 79818210
E-mail : triarch08@yahoo.com.my

IN CONJUNCTION WITH:

SEDIABENA SDN. BHD.
Building Together Sustainable Value (0202)
No.11, Jalan Astaka U8/84, Seksyen 26, Bukit Jelutong, 40150 Shah Alam, Selangor Darul Ehsan, Malaysia.
Tel: 603-5567 3322 Fax: 603-5567 2222 e-mail: e-mail@sediabena.com website: www.sediabena.com
(Company No: 395079-H)

&

TRANSERVE PTE LTD
Co. Reg. No.: 197702443M
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Tel: (65) 6268 3069 Fax: (65) 6266 2324 Email: sales@transervet.com.sg

ENGINEER'S C&S and M&E:

JURUNDING HYH SDN. BHD.
A-7732, Tingkat Satu, Kedai LKNP,
Jalan Dato' Bahaman, 25200 Kuantan,
Pahang Darul Makmur.
Tel : 09-566 3031 Faks : 09-560 1182

QUANTITY SURVEYOR :

PENDITA
NO.C-9-9, Level 11, Menara Uncang Emas,
85 Jalan Loke Yew, 55200 Kuala Lumpur
Tel : 03-92008268 Fax : 03-92008276 (391855-V)
email: info@pendita.com.my website: pendita.com.my

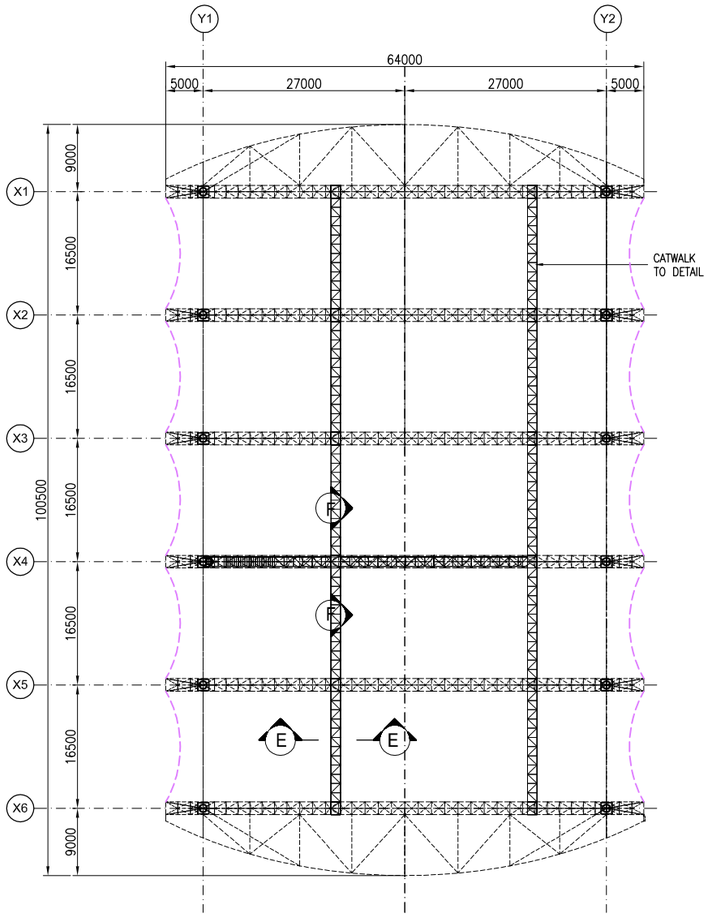
PROJECT :

CADANGAN MENAIK TARAF KOLAM RENANG SERTA KERJA-KERJA BERKAITAN DI WISMA BELIA, INDERA MAHKOTA, KUANTAN. MALAYSIA.

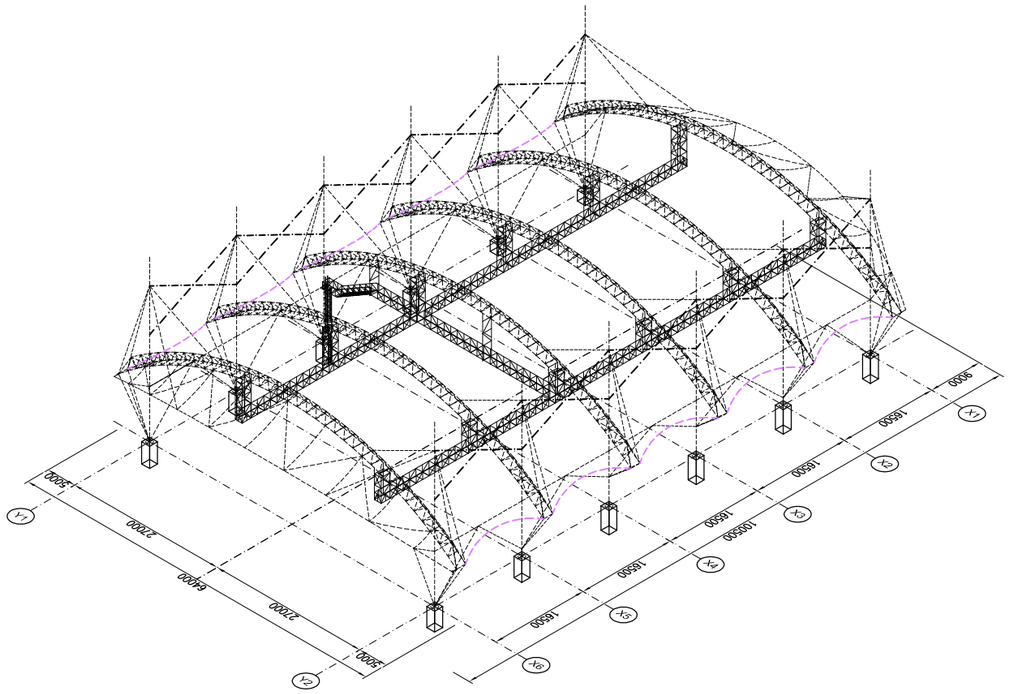
TITTLE :

SECTION D-D & DETAILS

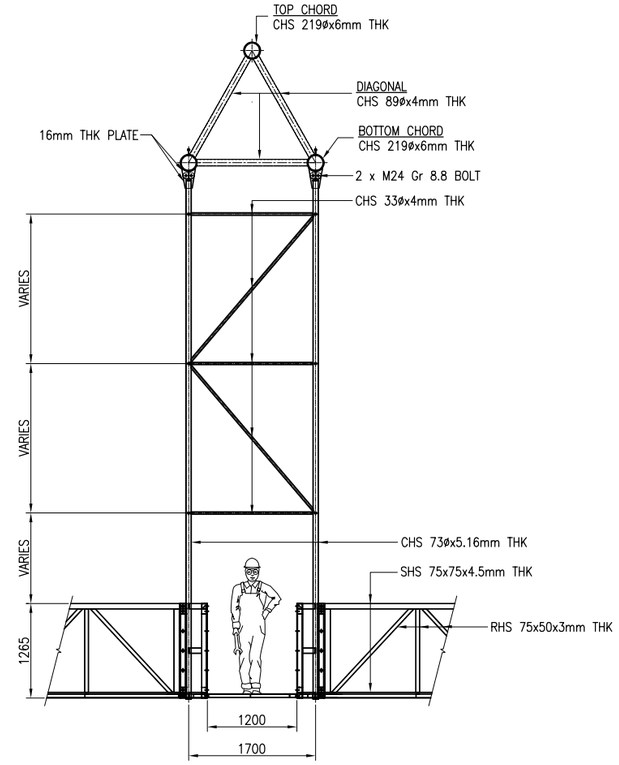
DATE : 29.12.2011	DRAWN :
SCALE : 1 : 400 / 1 : 40	CHECKED :
DRAWING NO. : TA-Q326-12	REVISION 03



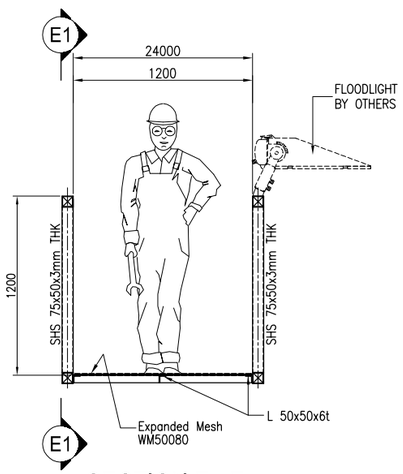
CATWALK LAYOUT PLAN



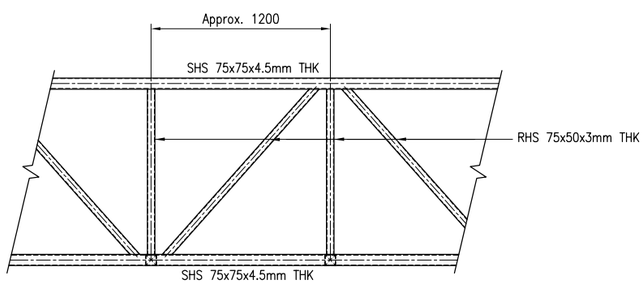
3D-VIEW OF CATWALK LAYOUT



SECTION F - F



SECTION E - E



SECTION E1 - E1

TYPICAL CATWALK DETAILS

Kompleks Kolam Renang

NOTE :

67

REF	DATE	DESCRIPTION
03	31.07.2012	AS-BUILT
02	20.04.2012	GENERAL
01	12.01.2012	GENERAL

OWNER :

MAJLIS PERBANDARAN KUANTAN
Jalan Tanah Putih, 25100 Kuantan,
Pahang Darul Makmur, Malaysia.
TEL : 09-5121555/666 FAKS : 5130644

MAIN CONTRACTOR :

SUARA HATI SDN. BHD.
117-A, 1st. FLOOR, MUIP BUILDING,
JALAN MAHKOTA, 25000 KUANTAN ,
PAHANG DARUL MAKMUR
TEL :609-515 2473, FAX : 603-516 2619

ARCHITECT'S :

& ASSOCIATES ARCHITECTS SENDIRIAN BERHAD (78280-P)
B-25, Tingkat Satu, Jalan IM3/10
Bandar Indera Mahkota
25200 Kuantan Pahang Darul Makmur.
Tel: 09-5736430 / 5736372 Fax: 09-5736443

SPECIALIST ROOF & CLADDING CONTRACTOR:

TRI-ARCH sdn. bhd.
7-1 JALAN 2/115A, TAMAN PAGAR RUYONG
OFF JALAN KUCHAI LAMA,
58200 KUALA LUMPUR.
TEL : 79812870 FAX : 79818210
E-mail : triarch908@yahoo.com.my

IN CONJUNCTION WITH:

SEDIABENA SDN. BHD.
No. 11, Jalan Astaka U8/84, Seksyen 25, Bukit Jelutong, 40150 Shah Alam, Selangor Darul Ehsan, Malaysia.
Tel: 603-7847 2222 Fax: 603-7847 2223 e-mail: enquiry@sediabena.com
(Company No. 139574-M) website: www.sediabena.com

&

TRANSERVE PTE LTD
39 PANDAN ROAD, JURONG, SINGAPORE 609281
Tel: (65) 6268 3069 Fax: (65) 6266 2324 Email: sales@transervet.com.sg

ENGINEER'S C&S and M&E:

JURUNDING HYH SDN. BHD.
A-7732, Tingkat Satu, Kedai LKNP,
Jalan Dato' Bahaman, 25200 Kuantan,
Pahang Darul Makmur.
Tel : 09-566 3031 Faks : 09-560 1182

QUANTITY SURVEYOR :

PENDITA
NO.C-9-9, Level 11, Menara Uncang Emas,
85 Jalan Loke Yew, 55200 Kuala Lumpur
Tel : 03-92008268 Fax : 03-92008276 (391855-V)
email: info@pendita.com.my website: pendita.com.my

PROJECT :

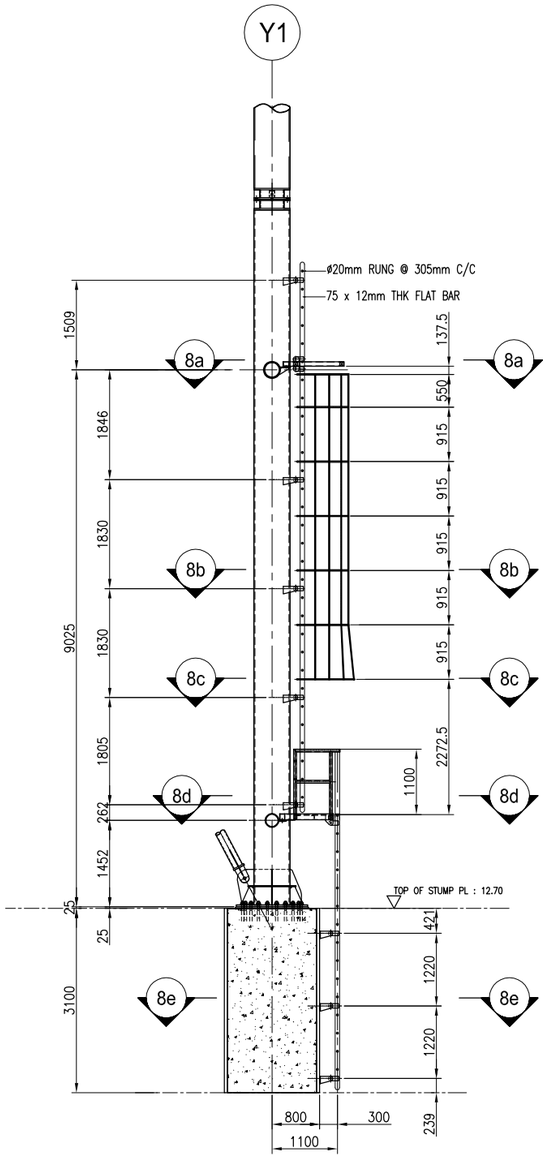
CADANGAN MENAIK TARAF KOLAM RENANG SERTA KERJA-KERJA BERKAITAN DI WISMA BELIA, INDERA MAHKOTA, KUANTAN. MALAYSIA.

TITTLE :

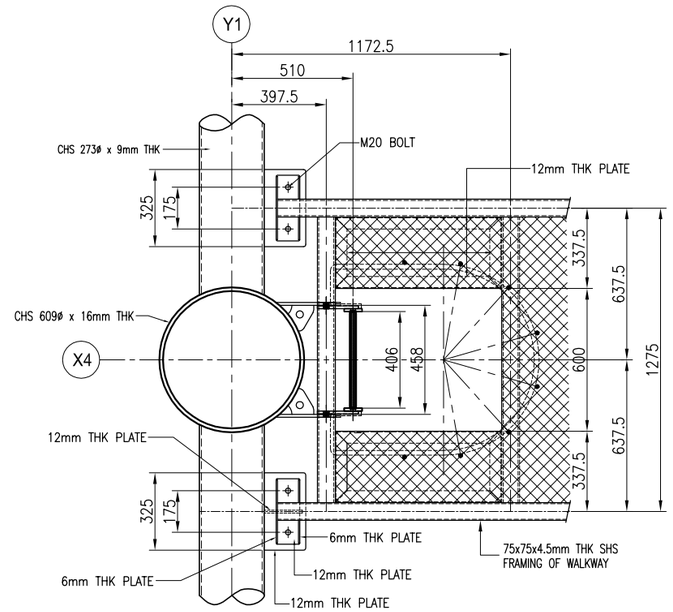
CATWALK LAYOUT & SECTION

DATE : 29.12.2011	DRAWN :
SCALE : 1 : 700 / 1 : 35	CHECKED :

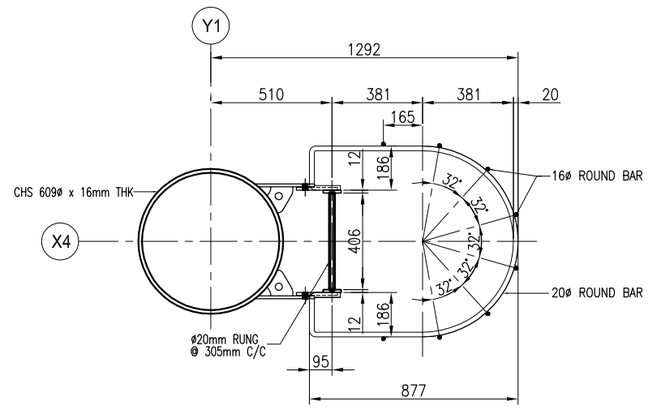
DRAWING NO. :	REVISION
TA-Q326-13	03



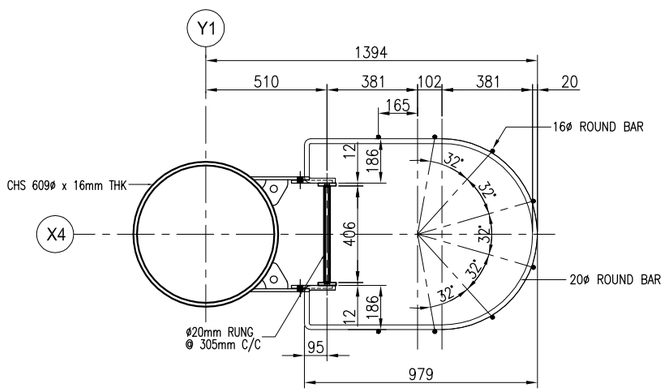
CATLADDER SETTING
ALONG GRIDLINE Y1/X4



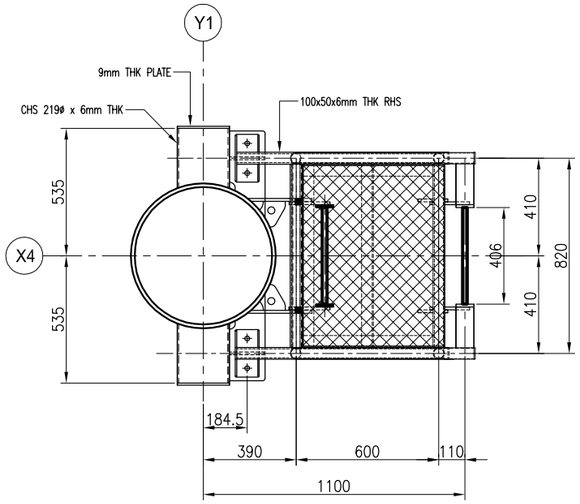
SECTION 8a - 8a



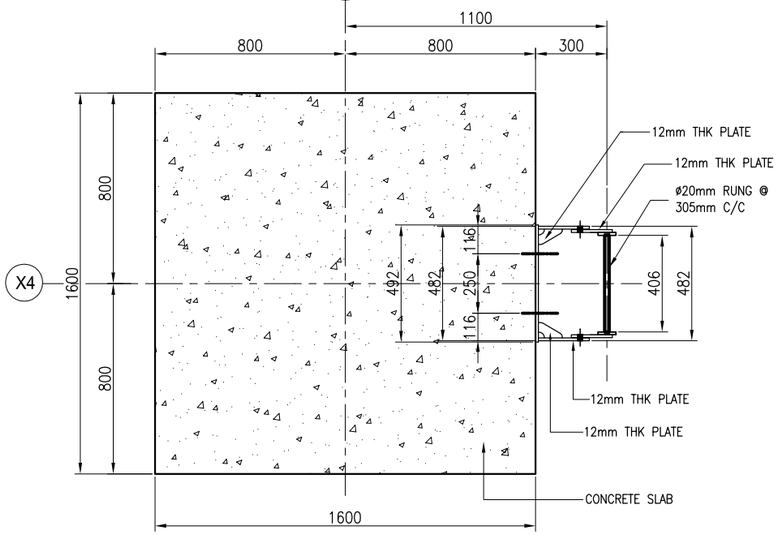
SECTION 8b - 8b



SECTION 8c - 8c



SECTION 8d - 8d



SECTION 8e - 8e

Kompleks Kolam Renang

NOTE :

68

REF	DATE	DESCRIPTION
00	31.07.12	AS-BUILT

OWNER :

MAJLIS PERBANDARAN KUANTAN
Jalan Tanah Putih, 25100 Kuantan,
Pahang Darul Makmur, Malaysia.
TEL : 09-5121555/666 FAKS : 5130644

MAIN CONTRACTOR :

SUARA HATI SDN. BHD.
117-A, 1st. FLOOR, MUIP BUILDING,
JALAN MAHKOTA, 25000 KUANTAN ,
PAHANG DARUL MAKMUR
TEL :609-515 2473, FAX : 603-516 2619

ARCHITECT'S :

& ASSOCIATES ARCHITECTS
SENDIRIAN BERHAD (78280-P)
B-25, Tingkat Satu, Jalan IM3/10
Bandar Indera Mahkota
25200 Kuantan Pahang Darul Makmur.
Tel: 09-5736430 / 5736372 Fax: 09-5736443

SPECIALIST ROOF & CLADDING CONTRACTOR:

TRI-ARCH sdn. bhd.
7-1 JALAN 2/115A, TAMAN PAGAR RUYONG
OFF JALAN KUCHAI LAMA,
58200 KUALA LUMPUR.
TEL : 79812870 FAX : 79818210
E-mail : triarch90@yahoo.com.my

IN CONJUNCTION WITH:

SEDIABENA SDN. BHD.
&
TRANSERVE PTE LTD
39 PANDAN ROAD, JURONG, SINGAPORE 609281
Tel: (65) 6268 3069 Fax: (65) 6266 2324 Email: sales@transervet.com.sg

ENGINEER'S C&S and M&E:

JURUNDING HYH SDN. BHD.
A-7732, Tingkat Satu, Kedai LKNP,
Jalan Dato' Bahaman, 25200 Kuantan,
Pahang Darul Makmur.
Tel : 09-566 3031 Faks : 09-560 1182

QUANTITY SURVEYOR :

PENDITA
NO.C-9-9, Level 11, Menara Uncang Emas,
85 Jalan Loke Yew, 55200 Kuala Lumpur
Tel : 03-92008268 Fax : 03-92008276 (391855-V)
email: info@pendita.com.my website: pendita.com.my

PROJECT :

CADANGAN MENAIK TARAF
KOLAM RENANG SERTA KERJA-KERJA
BERKAITAN DI WISMA BELIA,
INDERA MAHKOTA, KUANTAN. MALAYSIA.

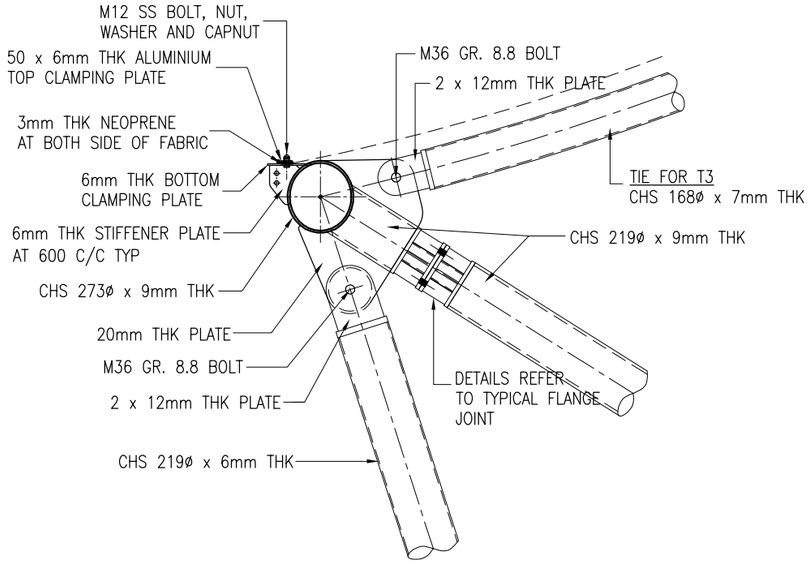
TITTLE :

CATLADDER DETAILS

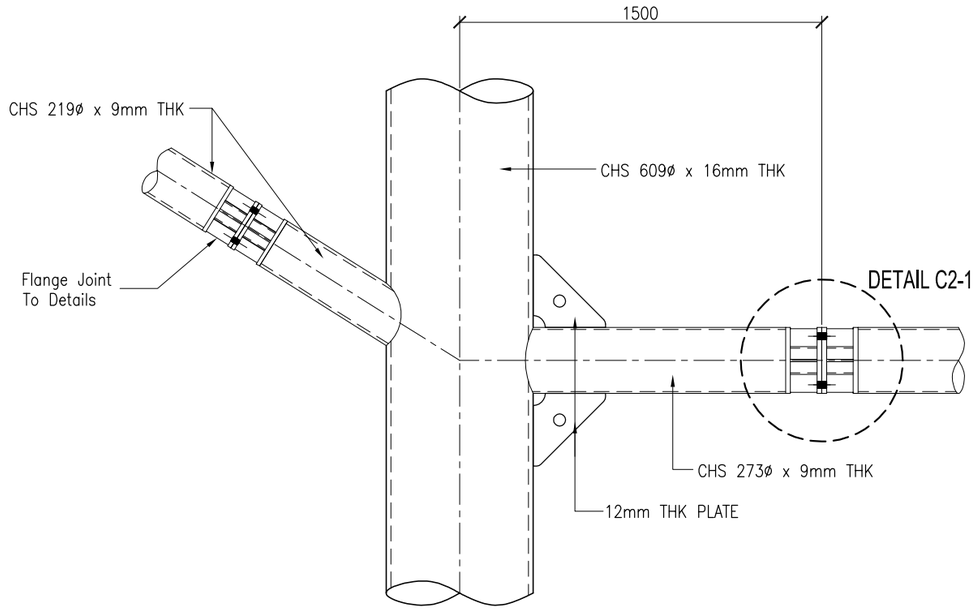
DATE : 31.07.2012	DRAWN :
SCALE : 1 : 100 / 1 : 25	CHECKED :

DRAWING NO. : TA-Q326-14

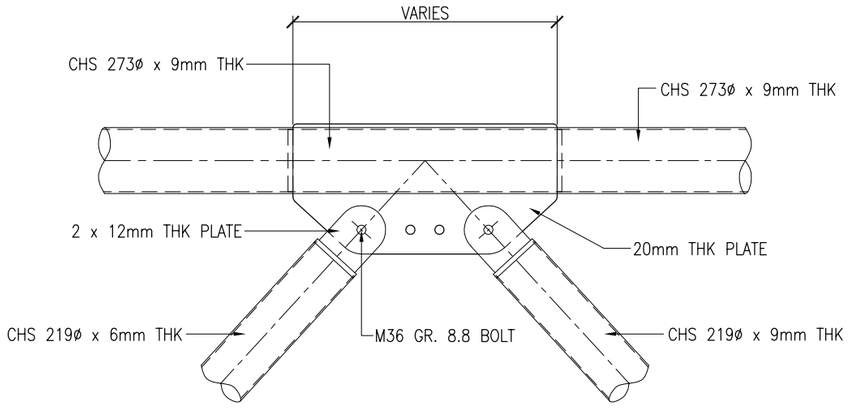
REVISION 00



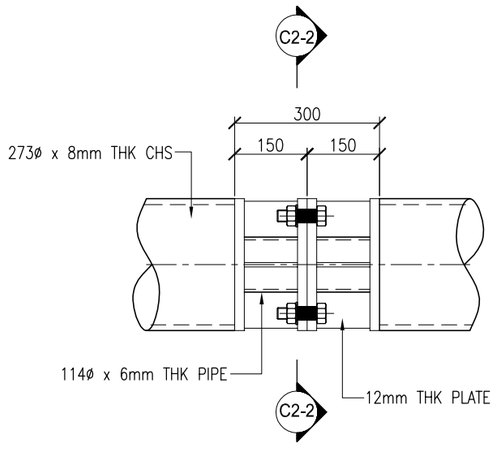
DETAIL C1



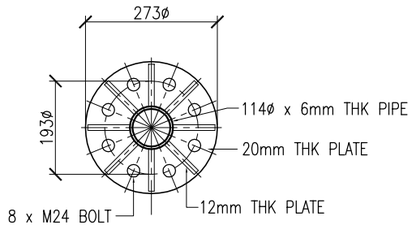
DETAIL C2



DETAIL C3



DETAIL C2-1



SECTION C2-2 - C2-2

Kompleks Kolam Renang

NOTE :

69

REF	DATE	DESCRIPTION
00	31.07.2012	AS-BUILT

OWNER :

MAJLIS PERBANDARAN KUANTAN
Jalan Tanah Putih, 25100 Kuantan,
Pahang Darul Makmur, Malaysia.
TEL : 09-5121555/666 FAKS : 5130644

MAIN CONTRACTOR :

SUARA HATI SDN. BHD.
117-A, 1st. FLOOR, MUIP BUILDING,
JALAN MAHKOTA, 25000 KUANTAN ,
PAHANG DARUL MAKMUR
TEL :609-515 2473, FAX : 603-516 2619

ARCHITECT'S :

& ASSOCIATES ARCHITECTS
SENDIRIAN BERHAD (78280-P)
B-26, Tingkat Satu, Jalan IM3/10
Bandar Indera Mahkota
25200 Kuantan Pahang Darul Makmur.
Tel: 09-5736430 / 5736372 Fax: 09-5736443

SPECIALIST ROOF & CLADDING CONTRACTOR:

TRI-ARCH sdn. bhd.
7-1 JALAN 2/115A, TAMAN PAGAR RUYONG
OFF JALAN KUCHAI LAMA,
58200 KUALA LUMPUR.
TEL : 79812870 FAX : 79818210
E-mail : triarch908@yahoo.com.my

IN CONJUNCTION WITH:

SEDIABENA SDN. BHD.
Building Steel Structures Since 1975
Tel: 03-7847 2333 Fax: 03-7847 2222
(Company No.: 3607-K)

&

TRANSERVE PTE LTD
39 PANDAN ROAD, JURONG, SINGAPORE 609281
Tel: (65) 6268 3069 Fax: (65) 6266 2324 Email: sales@transervet.com.sg

ENGINEER'S C&S and M&E:

JURUNDING HYH SDN. BHD.
A-7732, Tingkat Satu, Kedai LKNP,
Jalan Dato' Bahaman, 25200 Kuantan,
Pahang Darul Makmur.
Tel : 09-566 3031 Faks : 09-560 1182

QUANTITY SURVEYOR :

PENDITA
NO.C-9-9, Level 11, Menara Uncang Emas,
85 Jalan Loke Yew, 55200 Kuala Lumpur
Tel : 03-92008268 Fax : 03-92008276 (391855-V)
email: info@pendita.com.my website: pendita.com.my

PROJECT :

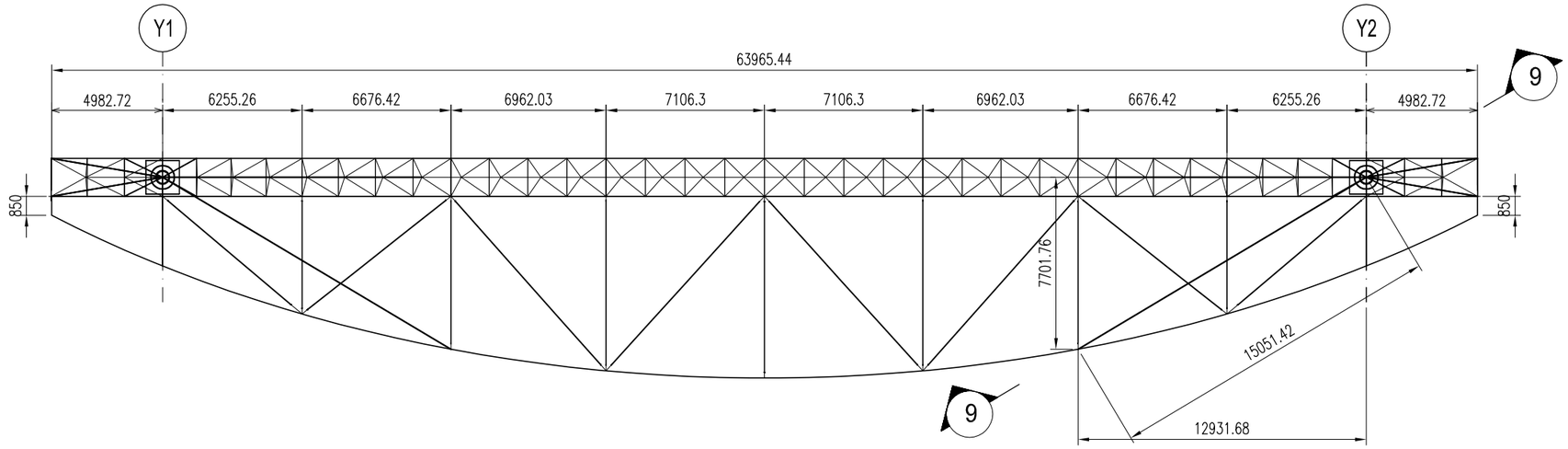
CADANGAN MENAIK TARAF KOLAM RENANG SERTA KERJA-KERJA BERKAITAN DI WISMA BELIA, INDERA MAHKOTA, KUANTAN. MALAYSIA.

TITTLE :

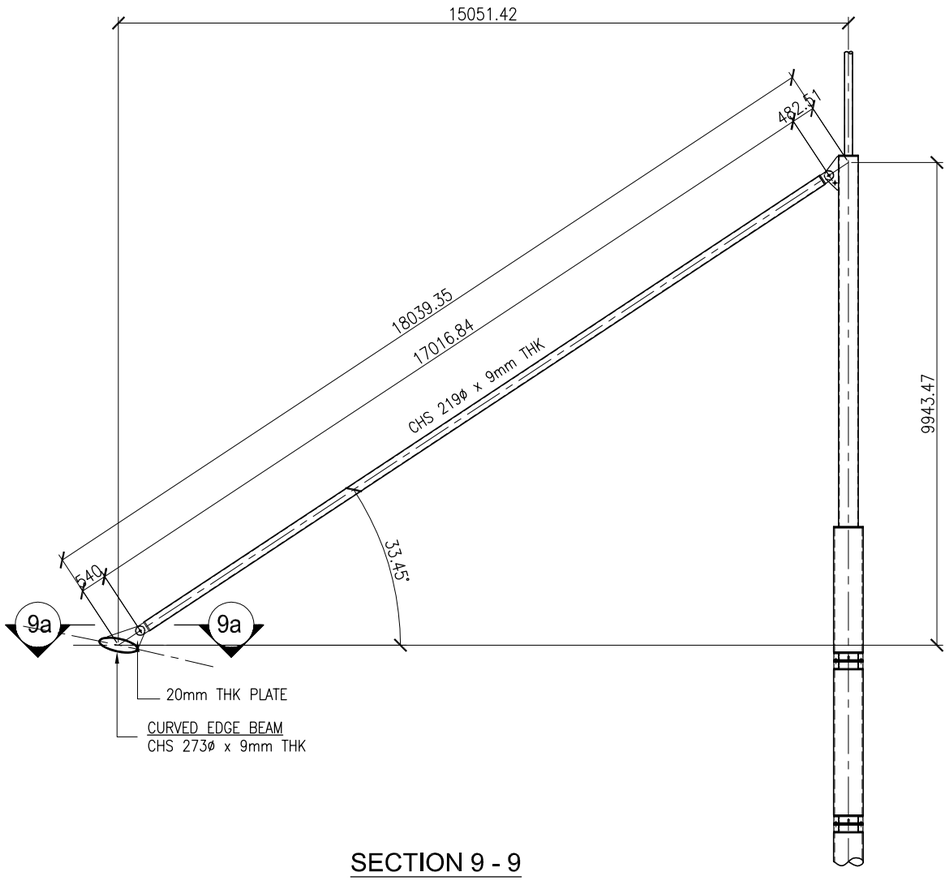
DETAILS

DATE : 31.07.2012	DRAWN :
SCALE : 1 : 25	CHECKED :

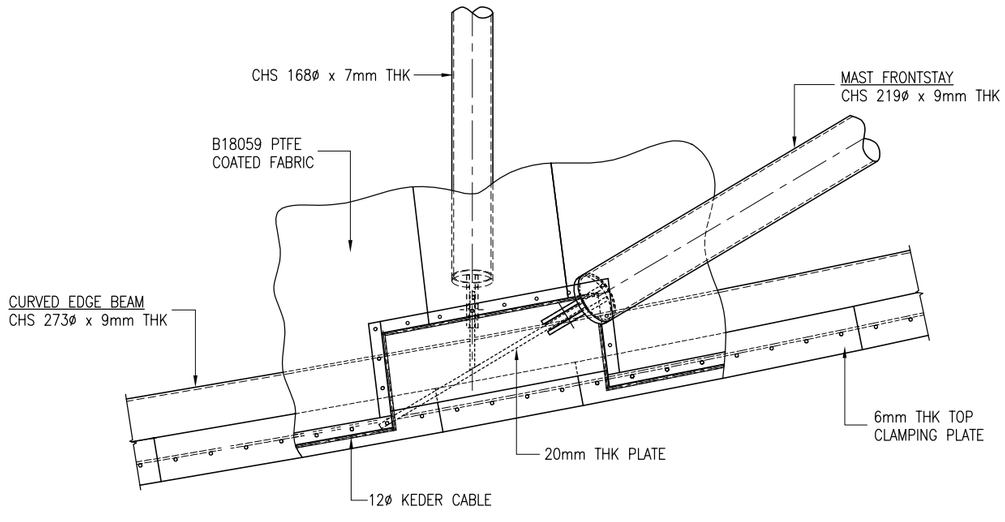
DRAWING NO. :	REVISION
TA-Q326-15	00



EDGE CANOPY FRAME SETTING - PLAN VIEW



SECTION 9 - 9



SECTION 9a - 9a

Kompleks Kolam Renang

NOTE : 70

REF	DATE	DESCRIPTION
00	31.07.2012	AS-BUILT

OWNER :

MAJLIS PERBANDARAN KUANTAN
Jalan Tanah Putih, 25100 Kuantan,
Pahang Darul Makmur, Malaysia.
TEL : 09-5121555/666 FAKS : 5130644

MAIN CONTRACTOR :

SUARA HATI SDN. BHD.
117-A, 1st. FLOOR, MUIP BUILDING,
JALAN MAHKOTA, 25000 KUANTAN ,
PAHANG DARUL MAKMUR
TEL :609-515 2473, FAX : 603-516 2619

ARCHITECT'S :

& ASSOCIATES ARCHITECTS
SENDIRIAN BERHAD (78280-P)
B-28, Tingkat Satu, Jalan IM3/10
Bandar Indera Mahkota
25200 Kuantan Pahang Darul Makmur.
Tel: 09-5736430 / 5736372 Fax: 09-5736443

SPECIALIST ROOF & CLADDING CONTRACTOR:

TRI-ARCH sdn. bhd.
7-1 JALAN 2/115A, TAMAN PAGAR RUYONG
OFF JALAN KUCHAI LAMA,
58200 KUALA LUMPUR.
TEL : 79812870 FAX : 79818210
E-mail : triarch90@yahoo.com.my

IN CONJUNCTION WITH:

SEDIABENA SDN. BHD.
& TRANSERVE PTE LTD
39 PANDAN ROAD, JURONG, SINGAPORE 609281
Tel: (65) 6268 3069 Fax: (65) 6266 2324 Email: sales@transervet.com.sg

ENGINEER'S C&S and M&E:

JURUNDING HYH SDN. BHD.
A-7732, Tingkat Satu, Kedai LKNP,
Jalan Dato' Bahaman, 25200 Kuantan,
Pahang Darul Makmur.
Tel : 09-566 3031 Faks : 09-560 1182

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85 Jalan Loke Yew, 55200 Kuala Lumpur
Tel : 03-92008268 Fax : 03-92008276 (391855-V)
email: info@pendita.com.my website: pendita.com.my

PROJECT :

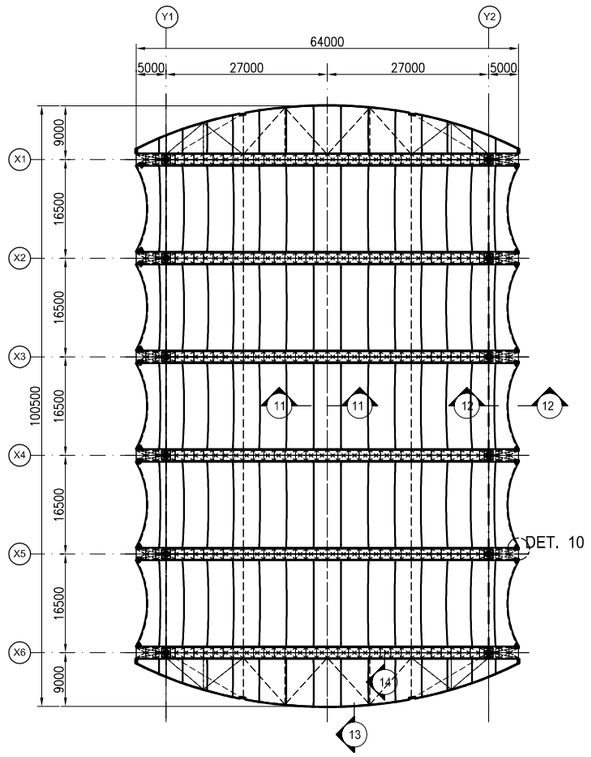
CADANGAN MENAIK TARAF KOLAM RENANG SERTA KERJA-KERJA BERKAITAN DI WISMA BELIA, INDERA MAHKOTA, KUANTAN. MALAYSIA.

TITTLE :

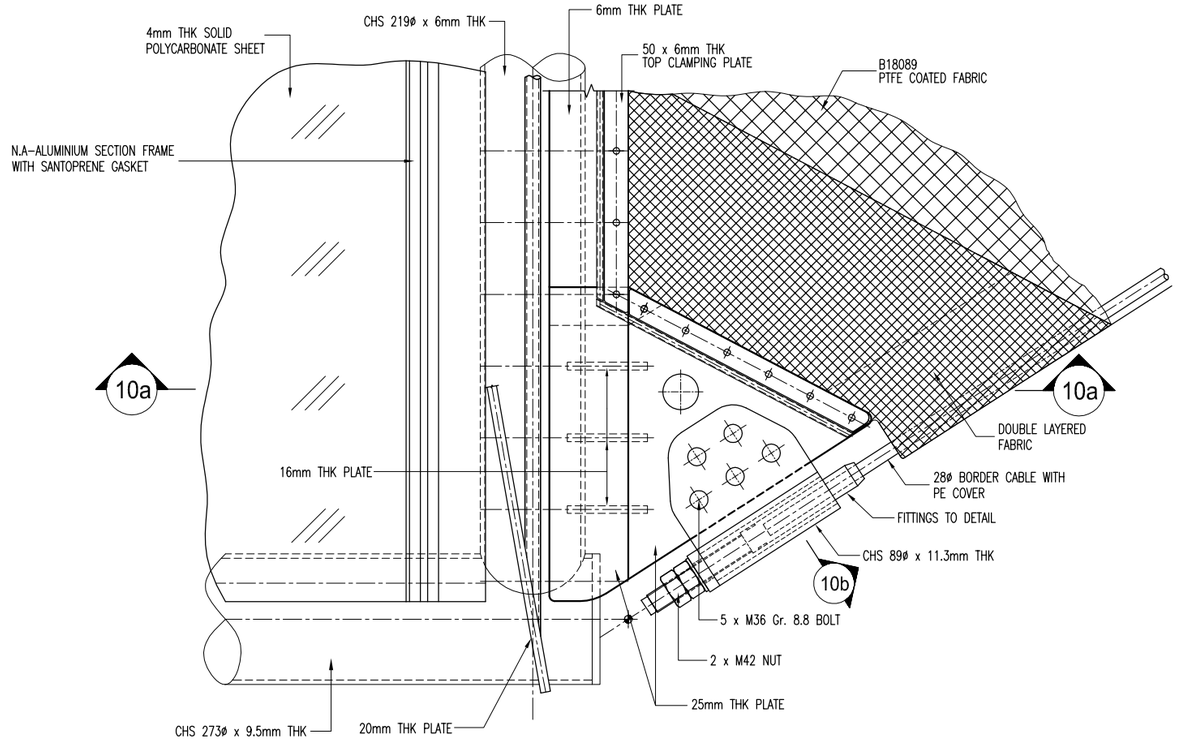
EDGE CANOPY FRAME SETTING & DETAILS

DATE : 31.07.2012	DRAWN :
SCALE : 1 : 250	CHECKED :

DRAWING NO. : TA-Q326-16 REVISION 00

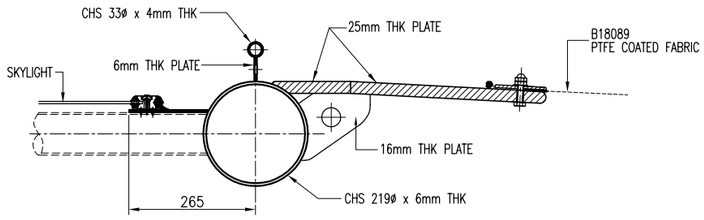


CUTTING PATTERN LAYOUT PLAN

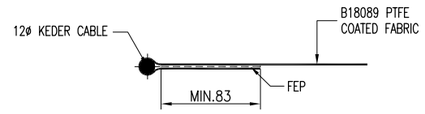


DETAIL 10

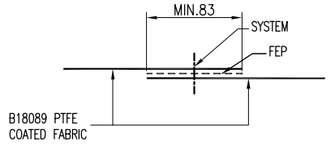
(20 LOCATIONS)



SECTION 10a - 10a

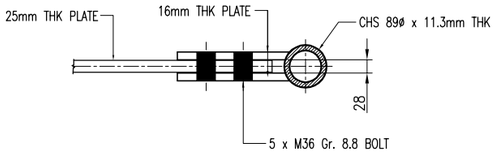


TYPICAL FABRIC FIXED EDGE DETAIL

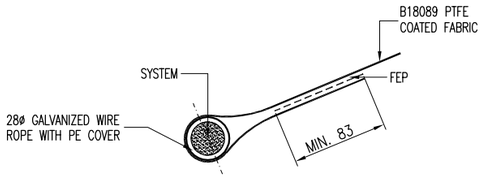


SECTION 11 - 11

(TYPICAL INTERNAL SEAM JOINT)

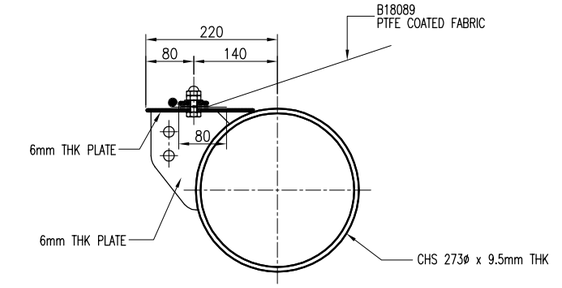


SECTION 10b - 10b



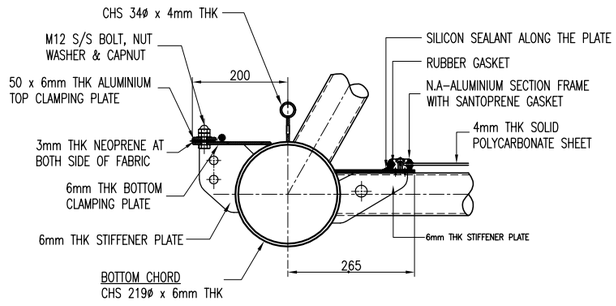
SECTION 12 - 12

(TYPICAL POCKET DETAIL)



SECTION 13 - 13

(TYPICAL EXTERNAL FIXED EDGE DETAIL)



SECTION 14 - 14

(TYPICAL INTERNAL FIXED EDGE DETAIL)

Kompleks Kolam Renang

NOTE :

71

REF	DATE	DESCRIPTION
00	12.01.2012	AS-BUILT

OWNER :

MAJLIS PERBANDARAN KUANTAN
Jalan Tanah Putih, 25100 Kuantan,
Pahang Darul Makmur, Malaysia.
TEL : 09-5121555/666 FAKS : 5130644

MAIN CONTRACTOR :

SUARA HATI SDN. BHD.
117-A, 1st. FLOOR, MUIP BUILDING,
JALAN MAHKOTA, 25000 KUANTAN ,
PAHANG DARUL MAKMUR
TEL :609-515 2473, FAX : 603-516 2619

ARCHITECT'S :

& ASSOCIATES ARCHITECTS SENDIRIAN BERHAD (78280-P)
B-25, Tingkat Satu, Jalan IM3/10
Bandar Indera Mahkota
25200 Kuantan Pahang Darul Makmur.
Tel: 09-5736430 / 5736372 Fax: 09-5736443

SPECIALIST ROOF & CLADDING CONTRACTOR:

TRI-ARCH sdn. bhd.
7-1 JALAN 2/115A, TAMAN PAGAR RUYONG
OFF JALAN KUCHAI LAMA,
58200 KUALA LUMPUR.
TEL : 79812870 FAX : 79818210
E-mail : triarch08@yahoo.com.my

IN CONJUNCTION WITH:

SEDIABENA SDN. BHD.
& TRANSERVE PTE LTD
39 PANDAN ROAD, JURONG, SINGAPORE 609281
Tel: (65) 6268 3069 Fax: (65) 6266 2324 Email: sales@transervet.com.sg

ENGINEER'S C&S and M&E:

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A-7732, Tingkat Satu, Kedai LKNP,
Jalan Dato' Bahaman, 25200 Kuantan,
Pahang Darul Makmur.
Tel : 09-566 3031 Faks : 09-560 1182

QUANTITY SURVEYOR :

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NO.C-9-9, Level 11, Menara Uncang Emas,
85 Jalan Loke Yew, 55200 Kuala Lumpur
Tel : 03-92008268 Fax : 03-92008276 (391855-V)
email: info@pendita.com.my website: pendita.com.my

PROJECT :

CADANGAN MENAIK TARAF KOLAM RENANG SERTA KERJA-KERJA BERKAITAN DI WISMA BELIA, INDERA MAHKOTA, KUANTAN. MALAYSIA.

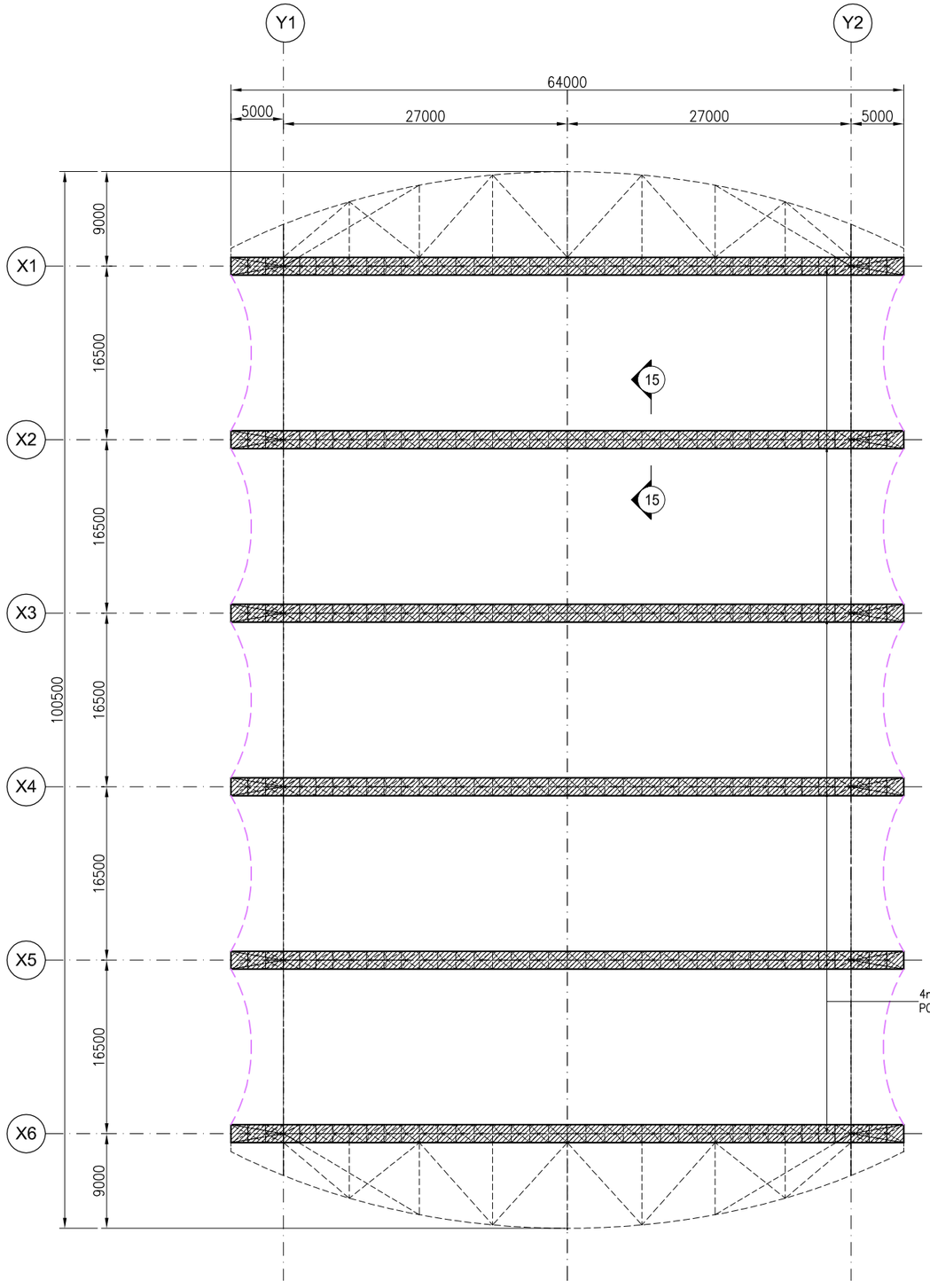
TITTLE :

CUTTING PATTERN LAYOUT & DETAILS

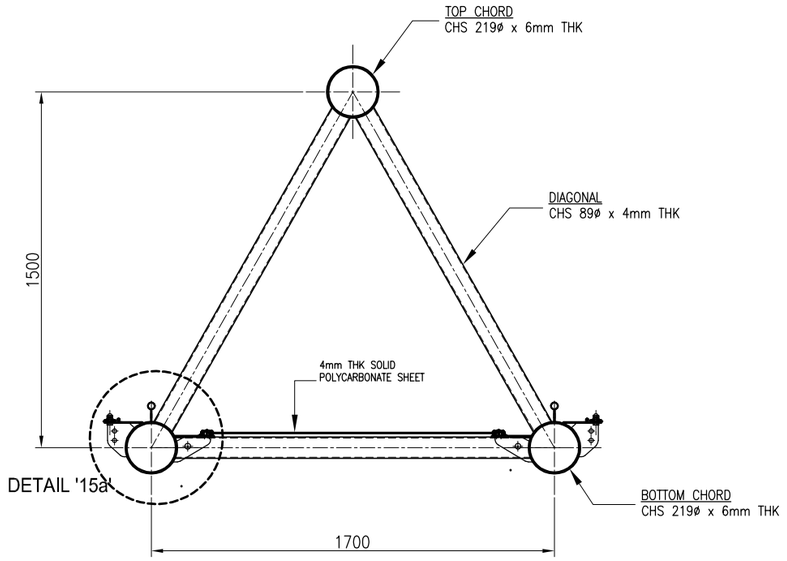
DATE : 31.07.2012	DRAWN :
SCALE : 1 : 500	CHECKED :

DRAWING NO. : TA-Q326-17

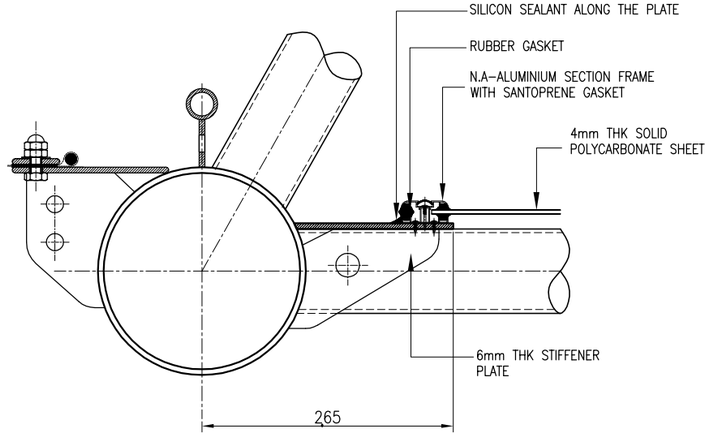
REVISION 00



SKYLIGHT LAYOUT PLAN



SECTION 15 - 15



DETAIL '15a'

Kompleks Kolam Renang

NOTE :

72

REF	DATE	DESCRIPTION
00	31.07.2012	AS-BUILT

OWNER :

MAJLIS PERBANDARAN KUANTAN
Jalan Tanah Putih, 25100 Kuantan,
Pahang Darul Makmur, Malaysia.
TEL : 09-5121555/666 FAKS : 5130644

MAIN CONTRACTOR :

SUARA HATI SDN. BHD.
117-A, 1st. FLOOR, MUIP BUILDING,
JALAN MAHKOTA, 25000 KUANTAN ,
PAHANG DARUL MAKMUR
TEL :609-515 2473, FAX : 603-516 2619

ARCHITECT'S :

& ASSOCIATES ARCHITECTS SENDIRIAN BERHAD (78020-P)
B-26, Tingkat Satu, Jalan IM3/10
Bandar Indera Mahkota
25200 Kuantan Pahang Darul Makmur.
Tel: 09-5736430 / 5736372 Fax: 09-5736443

SPECIALIST ROOF & CLADDING CONTRACTOR:

TRI-ARCH sdn. bhd.
7-1 JALAN 2/115A, TAMAN PAGAR RUYONG
OFF JALAN KUCHAI LAMA,
58200 KUALA LUMPUR.
TEL : 79812870 FAX : 79818210
E-mail : triarch908@yahoo.com.my

IN CONJUNCTION WITH:

SEDIABENA SDN. BHD.
Building Services Consultants Since 1970
No. 11, Jalan Kenari 5/5A4, Selayang Off, Bandar Baru Selayang, 68100 Batu Caves, Selangor Darul Ehsan, Malaysia.
Tel: 603-6101 3333 Fax: 603-6101 2222 e-mail: enquiry@sediabena.com
(Company No.: 185975-H) website: www.sediabena.com

&

TRANSERVE PTE LTD
39 PANDAN ROAD, JURONG, SINGAPORE 609281
Tel: (65) 6268 3069 Fax: (65) 6266 2324 Email: sales@transervet.com.sg

ENGINEER'S C&S and M&E:

JURUNDING HYH SDN. BHD.
A-7732, Tingkat Satu, Kedai LKNP,
Jalan Dato' Bahaman, 25200 Kuantan,
Pahang Darul Makmur.
Tel : 09-566 3031 Faks : 09-560 1182

QUANTITY SURVEYOR :

PENDITA
NO.C-9-9, Level 11, Menara Uncang Emas,
85 Jalan Loke Yew, 55200 Kuala Lumpur
Tel : 03-92008268 Fax : 03-92008276 (391855-V)
email: info@pendita.com.my website: pendita.com.my

PROJECT :

CADANGAN MENAIK TARAF KOLAM RENANG SERTA KERJA-KERJA BERKAITAN DI WISMA BELIA, INDERA MAHKOTA, KUANTAN. MALAYSIA.

TITTLE :

SKYLIGHT LAYOUT & DETAILS

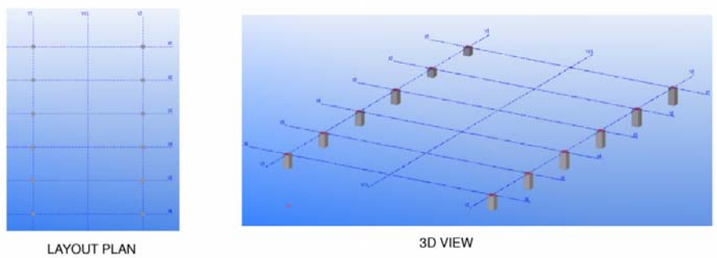
DATE : 31.07.2012	DRAWN :
SCALE : 1 : 500	CHECKED :

DRAWING NO. : TA-Q326-18

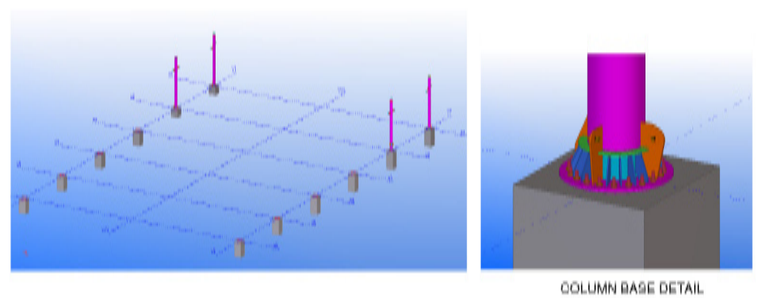
REVISION 00

11.3 ERECTION SEQUENCE

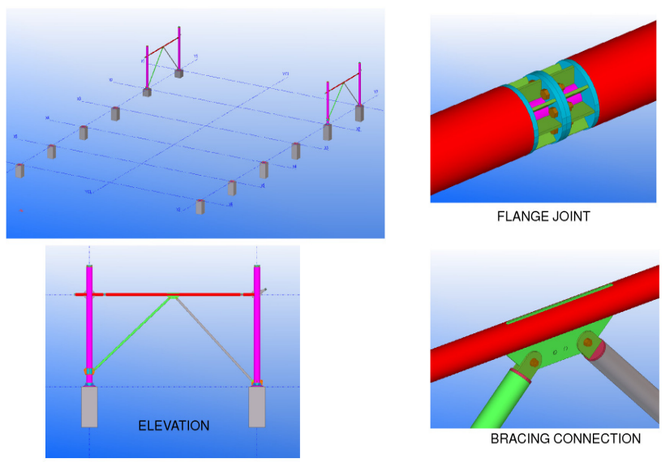
ERECTIONSEQUENCE



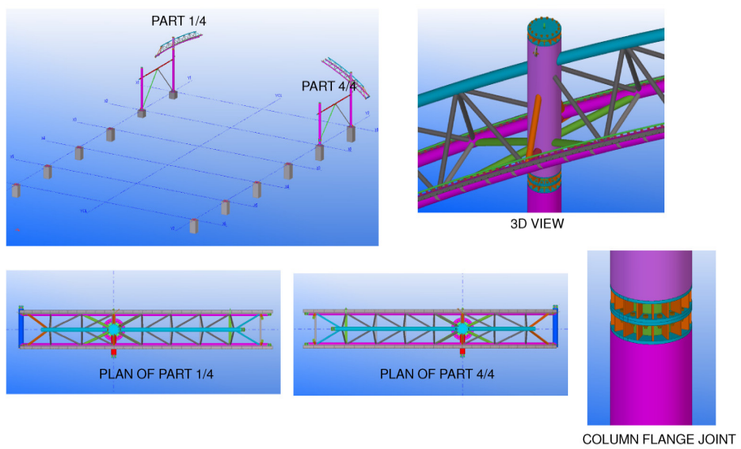
1) HOLDING DOWN BOLT PRECAST IN 12 Nos. OF RC STUMP



2) ERECT 4 Nos. OF LOWER COLUMN

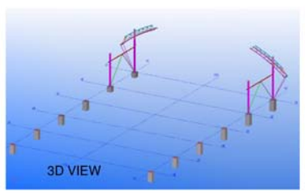


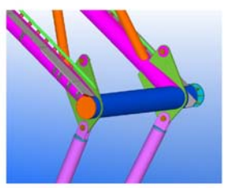
3) ERECT TIE & BRACING BETWEEN LOWER COLUMN



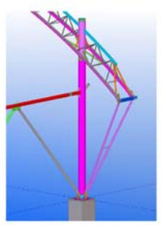
4) ERECT PART 1/4 & PART 4/4 TRUSS ALONG GRID X1

ERECTIONSEQUENCE

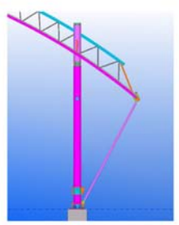




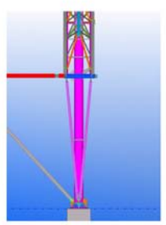
BACKSTAY CONNECTION
TO BOTTOM CHORD OF TRUSS



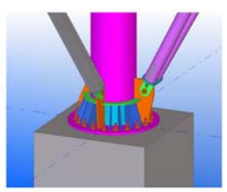
3D VIEW



SIDE VIEW

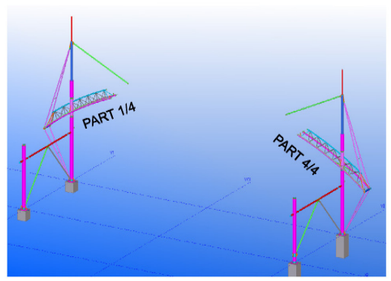


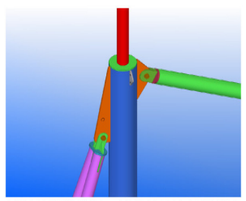
END VIEW



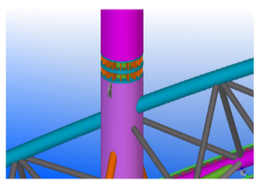
BACKSTAY CONNECTION
TO COLUMN BASE

5) ERECT LOWER BACKSTAY



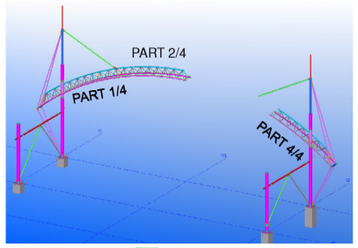


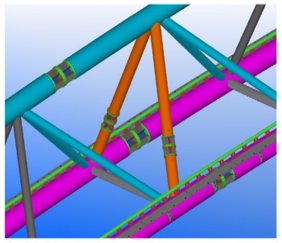
MAST HANGER & UPPER BACKSTAY
CONNECTION TO COLUMN TOP



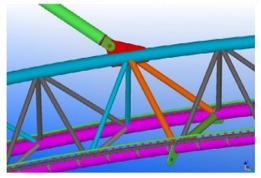
COLUMN FLANGE JOINT

6) ERECT UPPER COLUMN ASSEMBLY



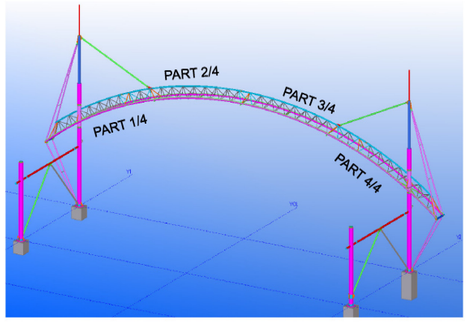


TRUSS FLANGE JOINT

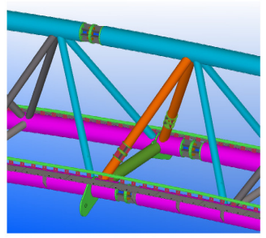


MAST HANGER CONNECTION TO TOP CHORD OF TRUSS

7) ERECT PART 2/4 TRUSS



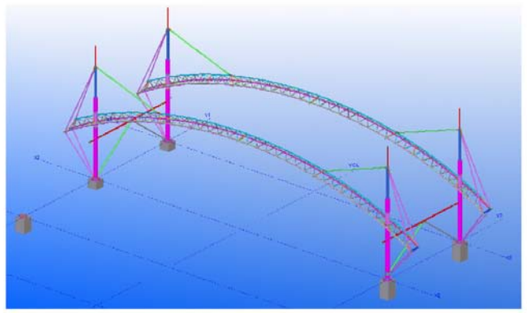
3D VIEW



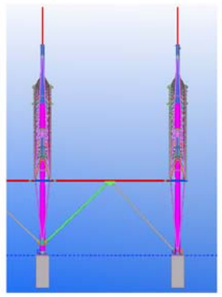
TRUSS FLANGE JOINT

8) ERECT PART 3/4 TRUSS

ERECTIONSEQUENCE

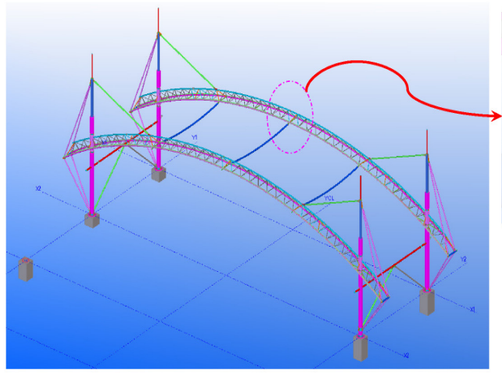


3D VIEW

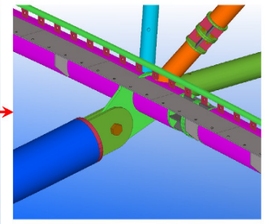


ELEVATION

9) ERECT TRUSS ALONG GRID X2

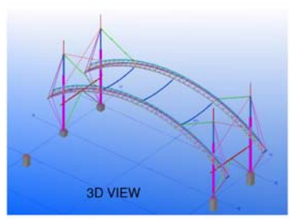


3D VIEW

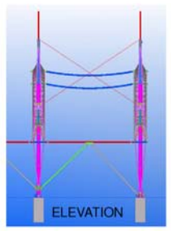


TIE BEAM CONNECTION TO BOTTOM CHORD OF TRUSS

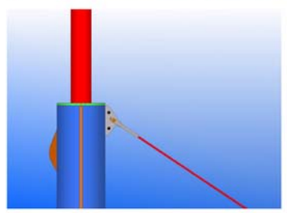
10) ERECT TIE BEAM BETWEEN TRUSS



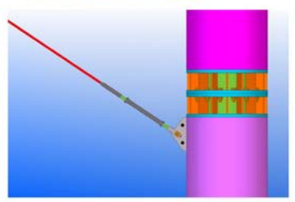
3D VIEW



ELEVATION

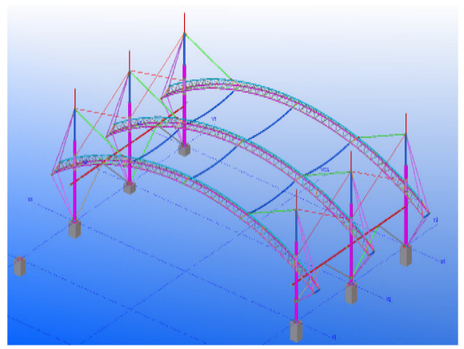


CABLE CONNECTION TO UPPER COLUMN

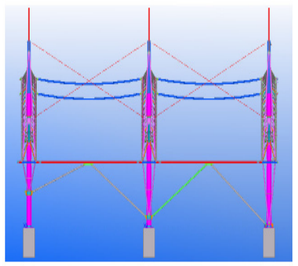


CABLE CONNECTION TO LOWER COLUMN

11) ERECT MAST STABILIZING CABLE



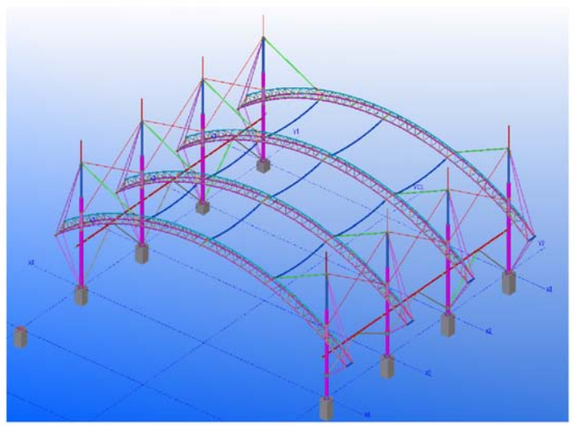
3D VIEW



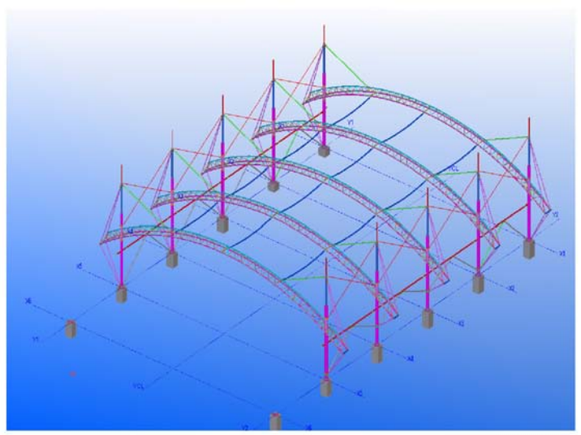
ELEVATION

12) ERECT TRUSS ALONG GRID X3

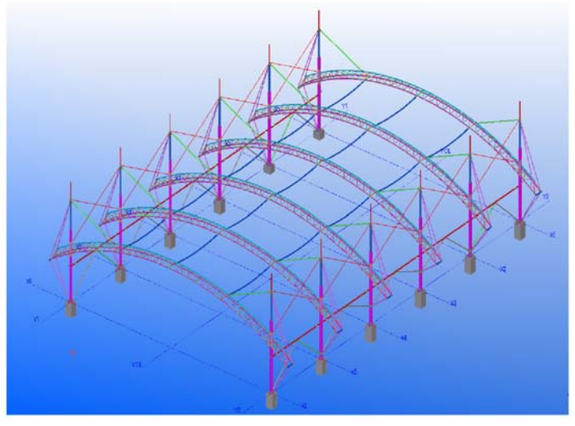
ERECTIONSEQUENCE



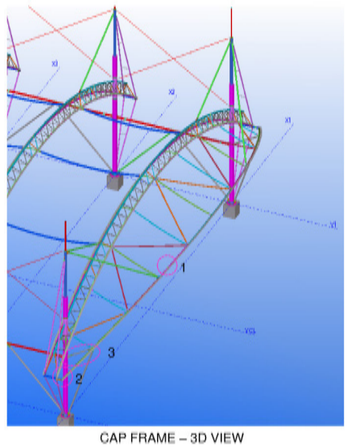
13) ERECT TRUSS ALONG GRID X4



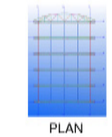
14) ERECT TRUSS ALONG GRID X5



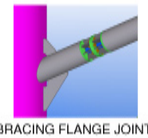
15) ERECT TRUSS ALONG GRID X6



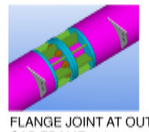
CAP FRAME – 3D VIEW



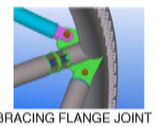
PLAN



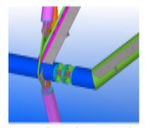
BRACING FLANGE JOINT TO COLUMN (3)



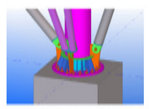
FLANGE JOINT AT OUTER CAP FRAME (1)



BRACING FLANGE JOINT TO CAP FRAME (3)



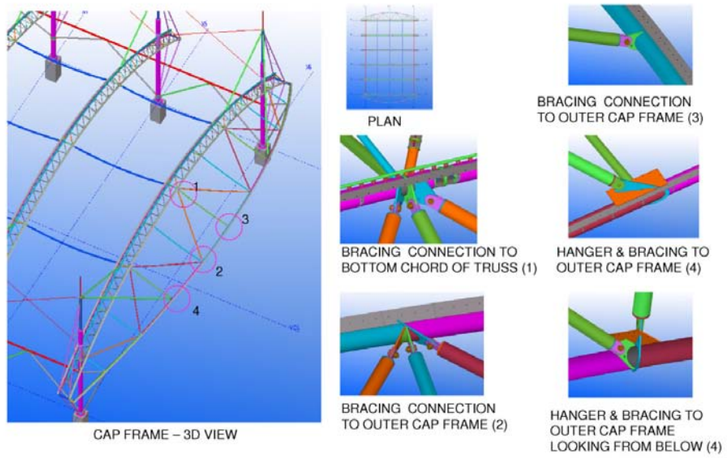
FLANGE JOINT AT CAP FRAME NEAR COLUMN (2)



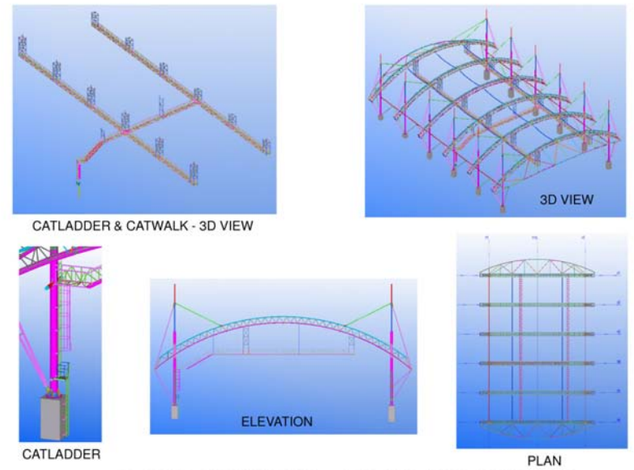
BRACING CONNECTION TO COLUMN BASE

16) ERECT THE ASSEMBLY OF CAP FRAME ALONG GRID X1

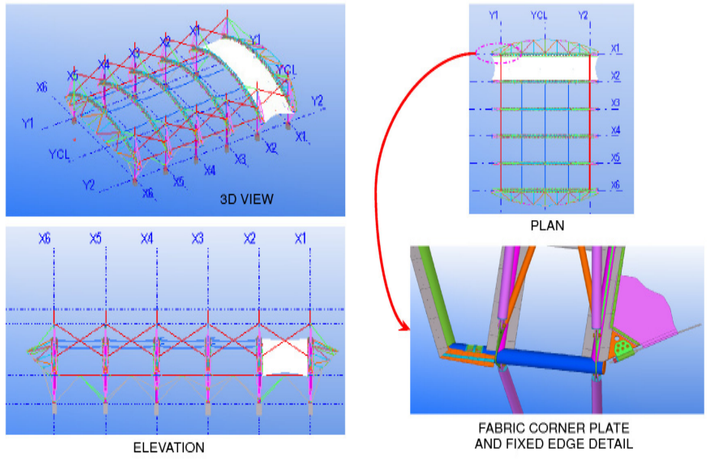
ERECTIONSEQUENCE



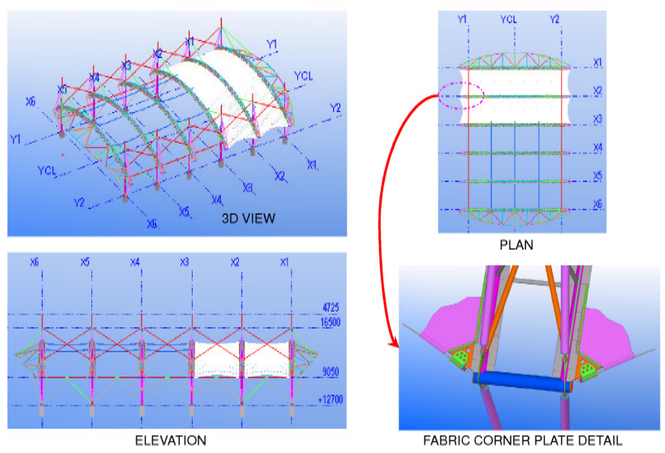
17) ERECT THE ASSEMBLY OF CAP FRAME ALONG GRID X6



18) ERECT CATLADDER & CATWALK TO TRUSSES

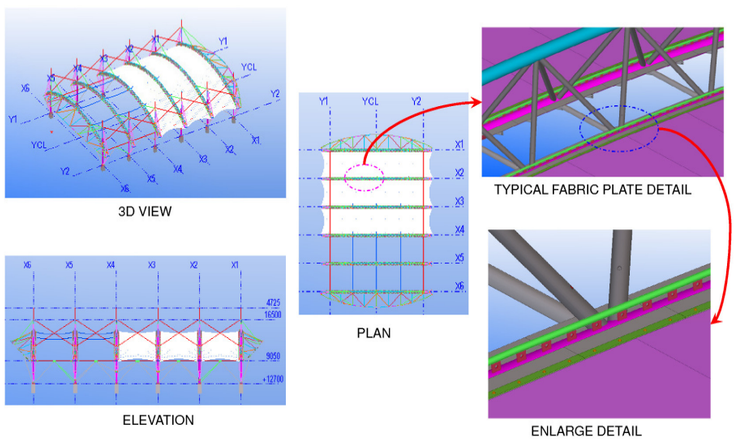


19) ERECT 1ST INTERNAL FABRIC PANEL BETWEEN X1 TO X2

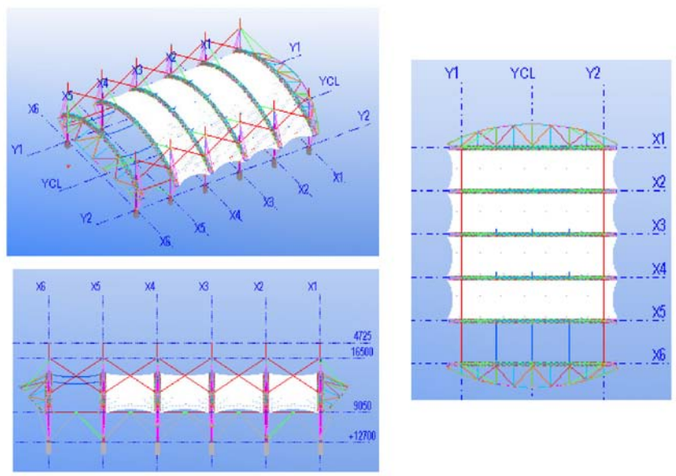


20) ERECT 2ND INTERNAL FABRIC PANEL BETWEEN X2 TO X3

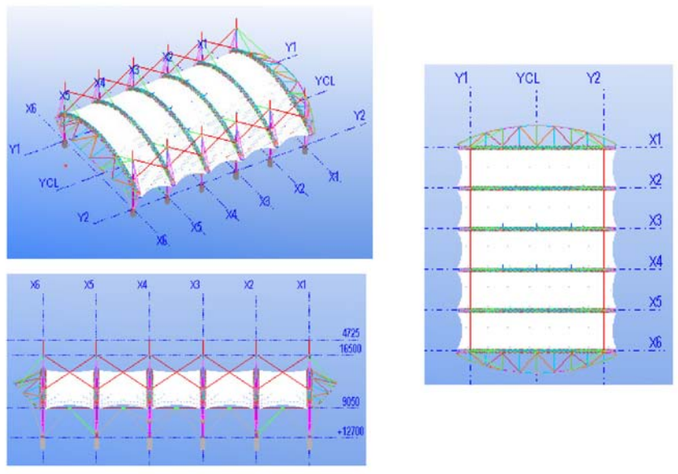
ERECTIONSEQUENCE



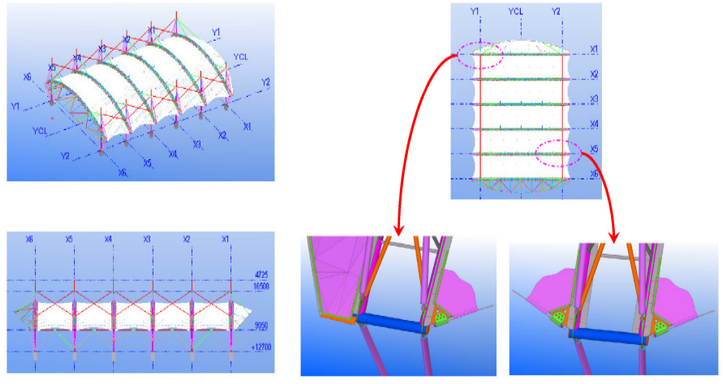
21) ERECT INTERNAL FABRIC PANEL BETWEEN X3 TO X4



22) ERECT INTERNAL FABRIC PANEL BETWEEN X4 TO X5

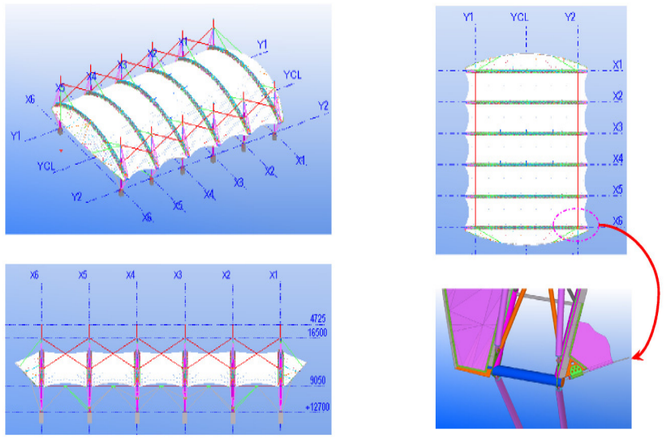


23) ERECT LAST INTERNAL FABRIC PANEL BETWEEN X5 TO X6

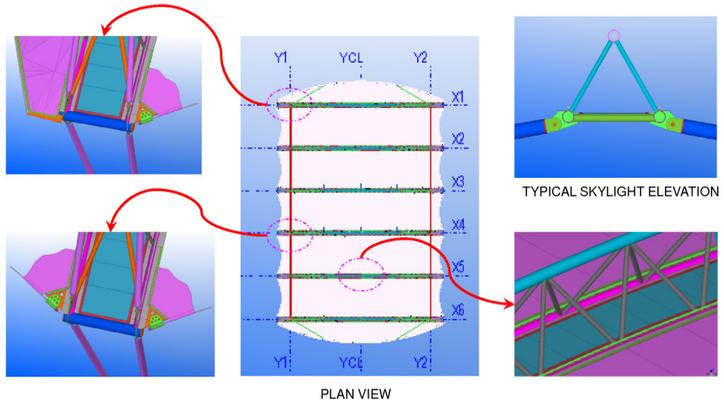


24) ERECT EDGE FABRIC PANEL AT X1 CAP

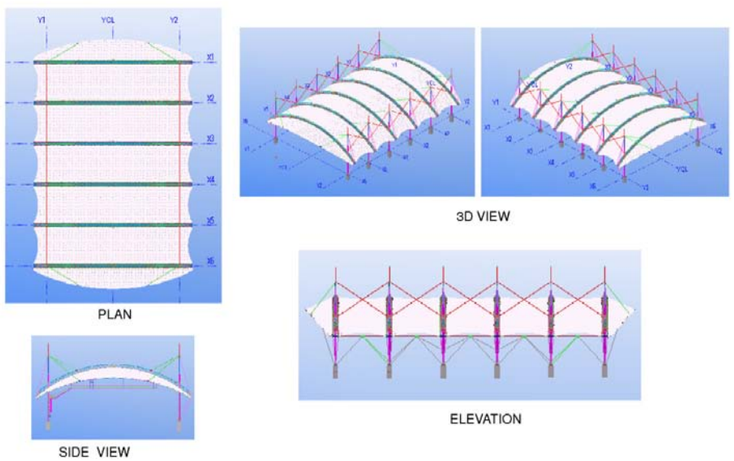
ERECTIONSEQUENCE



25) ERECT EDGE FABRIC PANEL AT X6 CAP



26) INSTALL SKYLIGHT PANEL ALONG GRID X1 TO X6



27) COMPLETED TENSILE FABRIC ROOF STRUCTURE

11.4 PHOTO IMAGES OF STEEL WORK

PHOTO IMAGES – STEEL WORKS (1 OF 6)


TAPAH FACTORY, MALAYSIA


TAPAH FACTORY, MALAYSIA


TRUSS FABRICATION


TRUSS FABRICATION


TRUSS & COLUMN FABRICATION


COLUMN FLANGE


COLUMN BASE


TRUSS WITH COLUMN


TRUSS FABRICATION


WELDING WORK


CLAMPING PLATE


CLAMPING PLATE

PHOTO IMAGES – STEEL WORKS (2 OF 6)


TRUSS FLANGE JOINT


TRUSS DIAGONALS


ROLLED & WELDED COLUMN


WELDING PREPARATION FOR COLUMN


BEFORE SANDBLASTING


AFTER SANDBLASTING


PAINTED TRUSS


PAINTED TIE


PAINTED COLUMN


COLUMN DELIVERY


UNLOADING OF COLUMN


COLUMN STORAGE

PHOTO IMAGES – STEEL WORKS (3 OF 6)

TRUSS DELIVERY

UNLOADING OF TRUSS

TRUSS STORAGE

TRUSS STORAGE AT SITE

INSTALL HD BOLT

COMPLETED STUMP

ERECT LOWER COLUMN

COLUMN BASE

ERECT LOWER COLUMN

ERECT COLUMN TIE

ERECT COLUMN TIE

ERECTED COLUMN TIE

PHOTO IMAGES – STEEL WORKS (4 OF 6)


ERECT 1/4 TRUSS @ X1


ERECT UPPER COLUMN


ERECT 2/4 TRUSS @ X1


ERECT 4/4 TRUSS @ X1


ERECT UPPER COLUMN


ERECT 3/4 TRUSS @ X1


ERECT 2/4 TRUSS @ X2


ERECT 3/4 TRUSS @ X2


ERECTED TRUSS @ X2


ERECTING TRUSS @ X3


ERECTED TRUSS @ X3

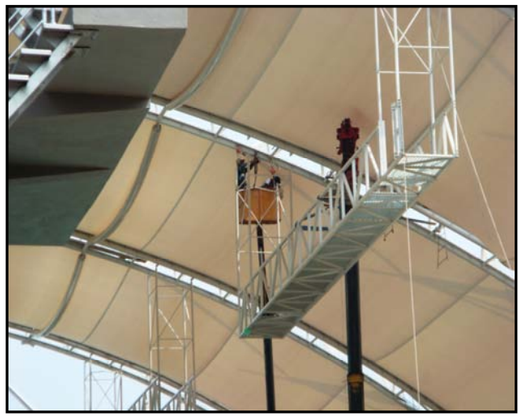

ERECTING TRUSS @ X4

PHOTO IMAGES – STEEL WORKS (5 OF 6)

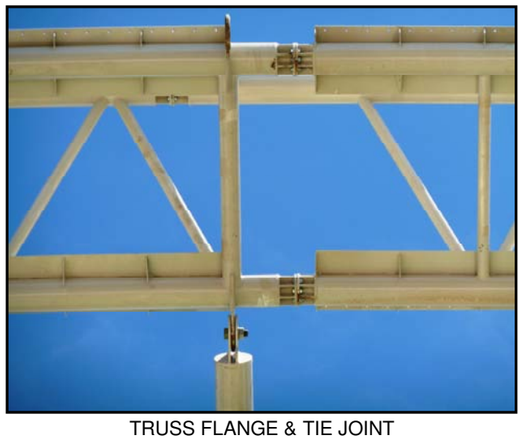

ERECTED TRUSS @ X4


ERECTING TRUSS @ X5


ERECTED TRUSS @ X6


ERECTING CATWALK


TRUSS FLANGE CONNECTION

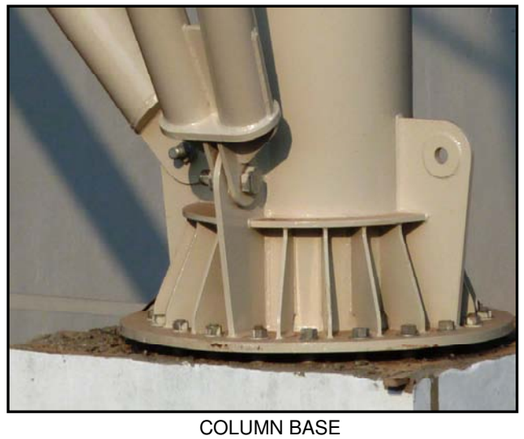

TRUSS FLANGE & TIE JOINT


FRONTSTAY CONNECTION


COLUMN TOP CONNECTION


COLUMN FLANGE JOINT


TRUSS END CONNECTION


COLUMN BASE


COLUMN BRACING CONNECTION

PHOTO IMAGES – STEEL WORKS (6 OF 6)

ERECTED TRUSS @ X1

ERECTED TRUSS @ X2

ERECTED TRUSS @ X3

ERECTED TRUSS @ X4

ERECTED TRUSS @ X5

ERECTED TRUSS @ X6

CATWALK IN PROGRESS

COMPLETED CATWALK

11.5 PHOTO IMAGES OF FABRIC WORK

PHOTO IMAGES – FABRIC WORKS (1 OF 6)


VERSEIDAG FABRIC IN SINGAPORE

FABRIC DELIVERY

TRANSPORT TO TAPAH


FABRIC PACKING


FABRIC INSPECTION

FEP DELIVERY


FEP MATERIAL


NEOPRENE


28Ø BORDER CABLE


STABILISING CABLE


FORK END

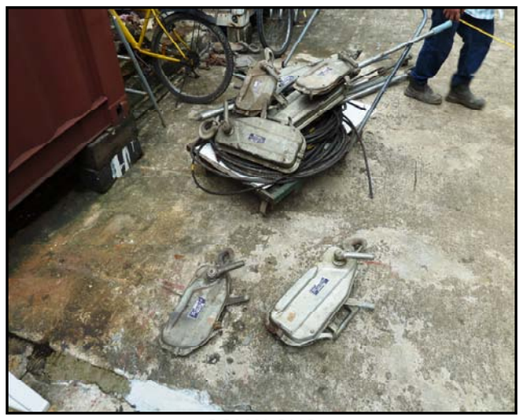
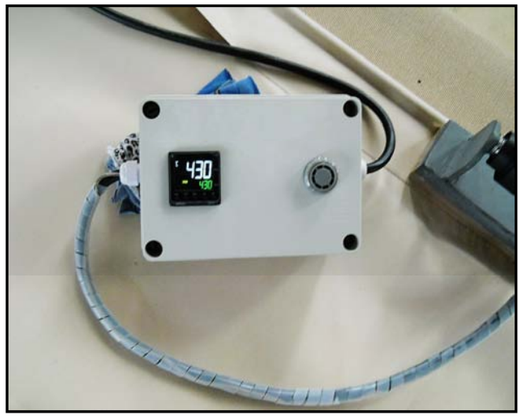

COMALONG

PHOTO IMAGES – FABRIC WORKS (2 OF 6)

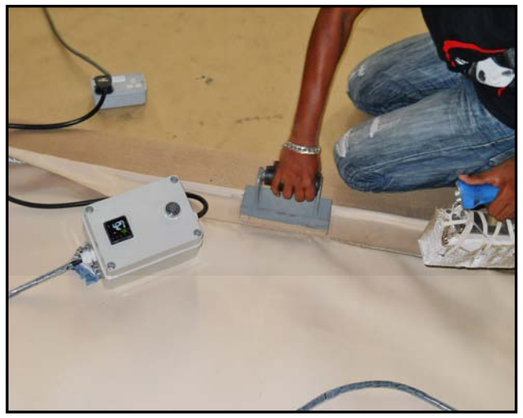

FIXED EDGE PREPARATION


TACKING


TACKING



TEMPERATURE CONTROL


COOLING


SEAMING

TEMPERATURE CONTROL


INTERNAL PANEL


EDGE PANEL WITH POCKET


TRIAL FIT EDGE CABLE


CORNER PREPARATION


CORNER PREPARATION

PHOTO IMAGES – FABRIC WORKS (3 OF 6)


PREPARE TENSIONING TOOL


CLAMPING TOOL (WARP)


CLAMPING TOOL (WEFT)


RATCHET PULLER


TENSIONING ANGLE


FABRIC PANEL AT SITE


FABRIC ERECTION PLATFORM


FIX PLATFORM


LIFTING 1ST FABRIC PANEL


1ST PANEL ON PLATFORM


FIXING HOLDING ROPES


OPENING FABRIC TO Y2

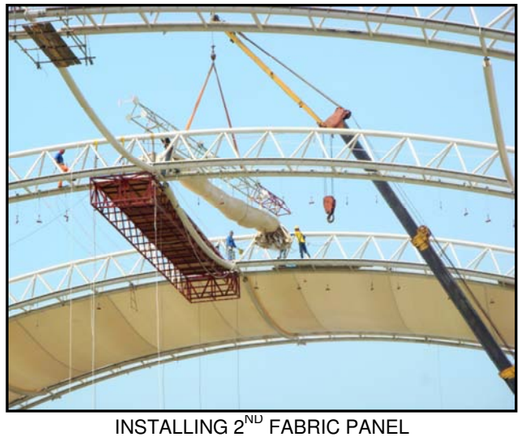
PHOTO IMAGES – FABRIC WORKS (4 OF 6)


OPENING FABRIC TO Y2


OPENING FABRIC TO Y1


OPENING FABRIC TO Y1


1ST FABRIC PANEL INSTALLED


INSTALLING 2ND FABRIC PANEL


OPENING FABRIC TO Y1


OPENING FABRIC TO Y1


OPENING FABRIC TO Y1


2ND FABRIC PANEL INSTALLED


3RD FABRIC PANEL INSTALLED


4TH FABRIC PANEL INSTALLED


5TH FABRIC PANEL INSTALLED

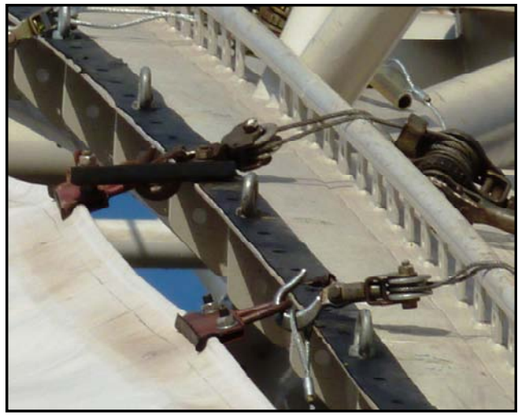
PHOTO IMAGES – FABRIC WORKS (5 OF 6)


FABRIC TENSIONING


FABRIC TENSIONING


FABRIC TENSIONING


WEFT TENSIONING


WARP TENSIONING


WARP TENSIONING


WARP TENSIONING


FABRIC TENSIONING


WARP TENSIONING


FABRIC TENSIONING


WARP TENSIONING


WARP TENSIONING

PHOTO IMAGES – FABRIC WORKS (6 OF 6)


FIXING FASTENER


FIXING FASTENER


TIE BEAM CLEARANCE


EDGE FIXED


CORNER PLATE


WEFT TENSIONING AT CORNER


FIXED EDGE


FIXED EDGE


CORNER PLATE

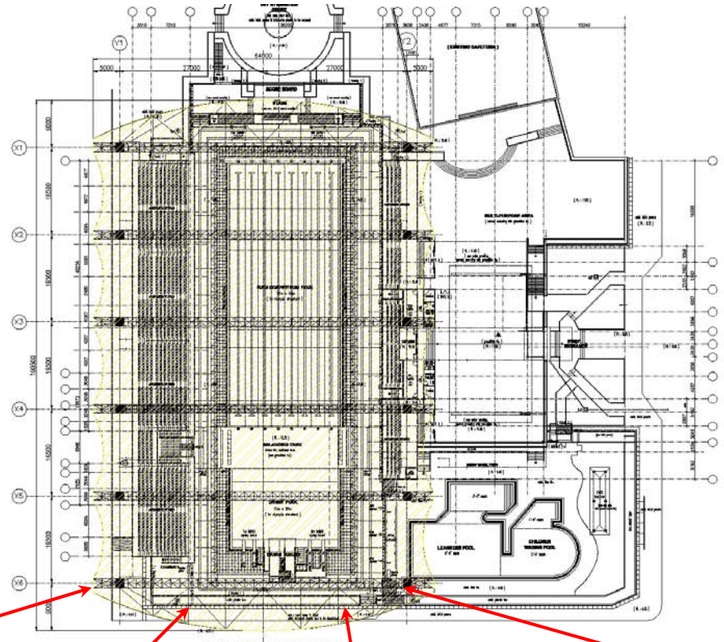

CORNER PLATE


CORNER PLATE


CABLE EDGE

11.6 PHOTO IMAGES OF COMPARISON BEFORE & AFTER ERECTION

PHOTO IMAGE COMPARISON BEFORE & AFTER ERECTION



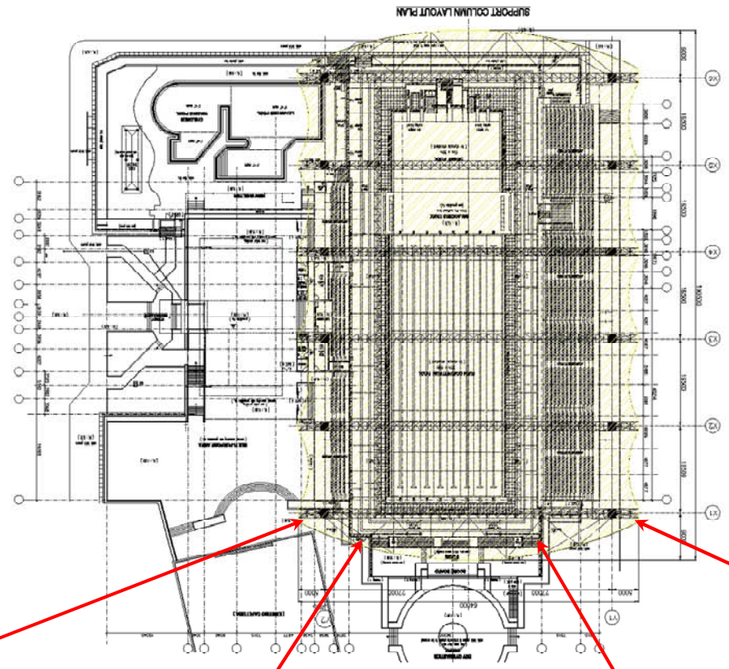
SUPPORT COLUMN LAYOUT PLAN

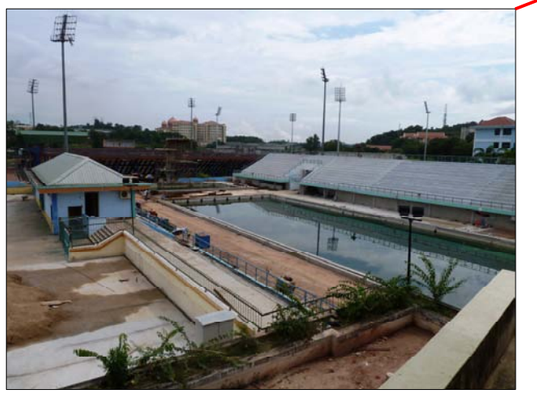


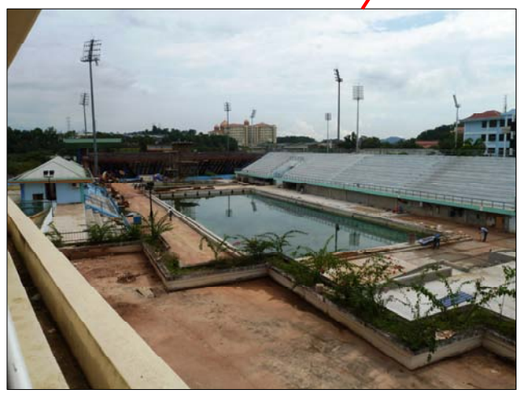


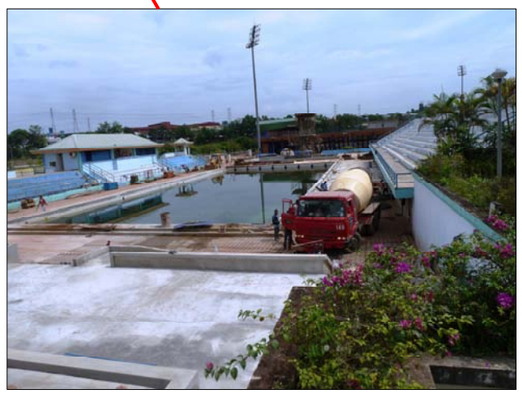



PHOTO IMAGE COMPARISON BEFORE & AFTER ERECTION



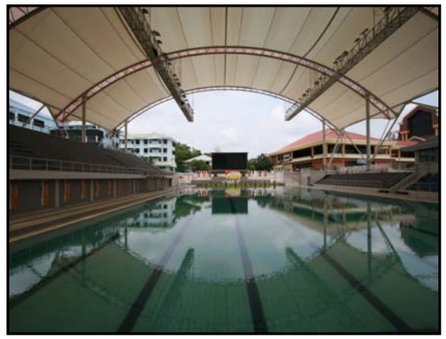






11.7 AERIAL VIEW PHASE1 COMPLETION

PROPOSED TENSILE FABRIC ROOF SYSTEM AT KOMPLEKS KOLAM RENANG, WISMA BELIA INDERA MAHKOTA, KUANTAN, PAHANG DARUL MAKMUR, MALAYSIA



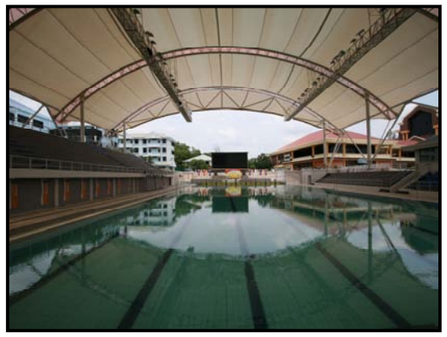
INTERNAL VIEW

HANDOVER CEREMONY

AERIAL VIEW – PHASE 1 COMPLETION

11.8 AERIAL VIEW PHASE2 COMPLETION - IMPRESSION

PROPOSED TENSILE FABRIC ROOF SYSTEM AT KOMPLEKS KOLAM RENANG, WISMA BELIA INDERA MAHKOTA, KUANTAN, PAHANG DARUL MAKMUR, MALAYSIA



INTERNAL VIEW

AERIAL VIEW – PHASE 2 COMPLETION - IMPRESSION

11.9 NEWSPAPER ARTICLES BEFORE THE GAMES

NEWSPAPER ARTICLES – BEFORE THE GAMES

All systems go

AFTER a month's delay, upgrading works for the 15th Malaysia Games swimming pool in Kuantan were finally completed and it was officially handed over to the organising committee yesterday.

Since it was the last venue to be completed, Games chief executive officer Ahmad Hairi Hussin made a 'splashing' gimmick when he jumped into the Olympic-size swimming pool from a springboard after making a final inspection on the facility which utilised the latest technology from Germany.

Hairi said he was relieved the pool was ready for the Games.

The RM21 million upgrading works were supposed to be completed on May 30.

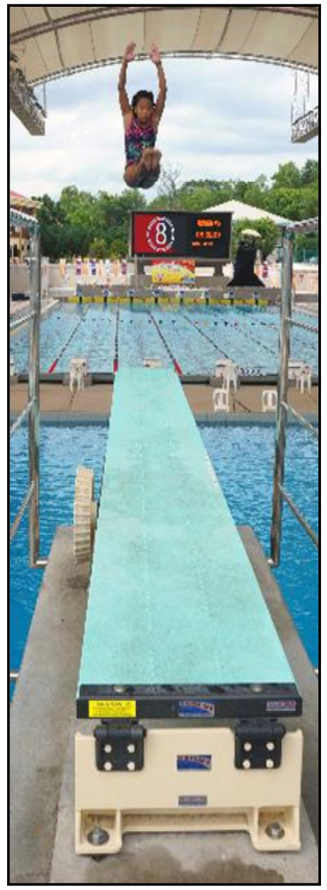
Malaysia Games chief executive officer ***Ahmad Hairi Hussin*** *looks satisfied with the* ***swimming pool, renovated at a cost of RM21 million,*** *which will be the venue for aquatic events.* **Pic by Halim Mat Ali**

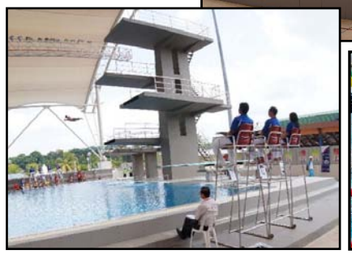
He said upgrading works and construction of new venues — costing about RM238 million — had already been completed, including the Darulmakmur stadium where the opening ceremony will be officiated by Sultan Ahmad Shah of Pahang on Saturday and closed by Prime Minister Datuk Seri Najib Razak on July 16.

Some 7,000 athletes and officials will participate in the Games which offer 377 gold, 377 silver and 453 bronze medals. **By M. Hamzah Jamaludin**

11.10 PHOTO IMAGES DURING THE GAMES

PHOTO IMAGES – DURING THE GAMES





11.11 BIAXIAL TEST REPORT

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Bi-axiale tensile test on technical membranes

persons in charge: Dipl.-Ing. K. Saxe/G. Knop/Dipl.-Ing. T. Homm location: V15R00H01	date: 09.01.2012

customer:	Verseidag Indutex GmbH Industriestr. 56 47803 Krefeld
subject of order:	biaxiale test on technical membranes for the project: Swimming Pool, Wisma Belia, Kuantan, Malaysia
test procedure:	according to specifications by: A.W. Lam
material:	Versidag B18089, piece 00980777A04
test:	V1112
comments:	

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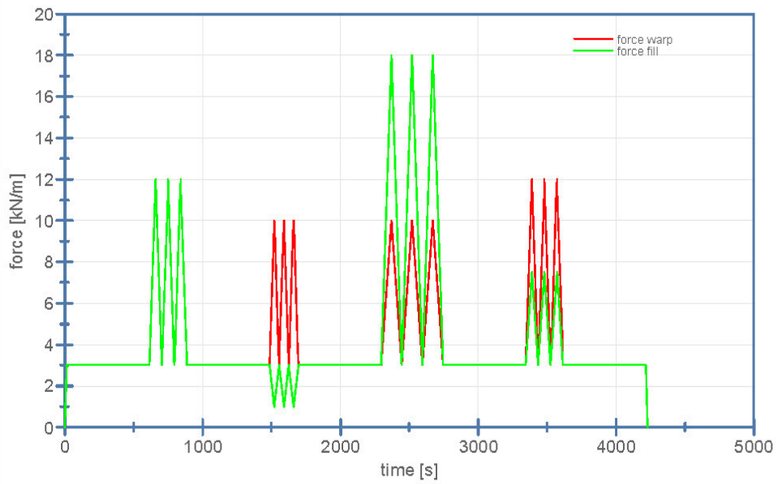
Test report on bi-axiale tensile test

date: 09.01.2012 test: V1112	persons in charge: Dipl.-Ing. K. Saxe/G. Knop/Dipl.-Ing. T. Homm material: Versidag B18089, piece 00980777A04

load diagram (reference values)



axis 1: warp direction	- Minimum: 0.10 kN/m - Maximum: 12.00 kN/m
axis 2: fill direction	- Minimum: 0.10 kN/m - Maximum: 18.00 kN/m
loading rate:	0.2 (kN/m)/s at the higher gradient
test temperature:	23.6°C
time interval:	1.0, 2.0, 3.0, 10.0 s
comments:	

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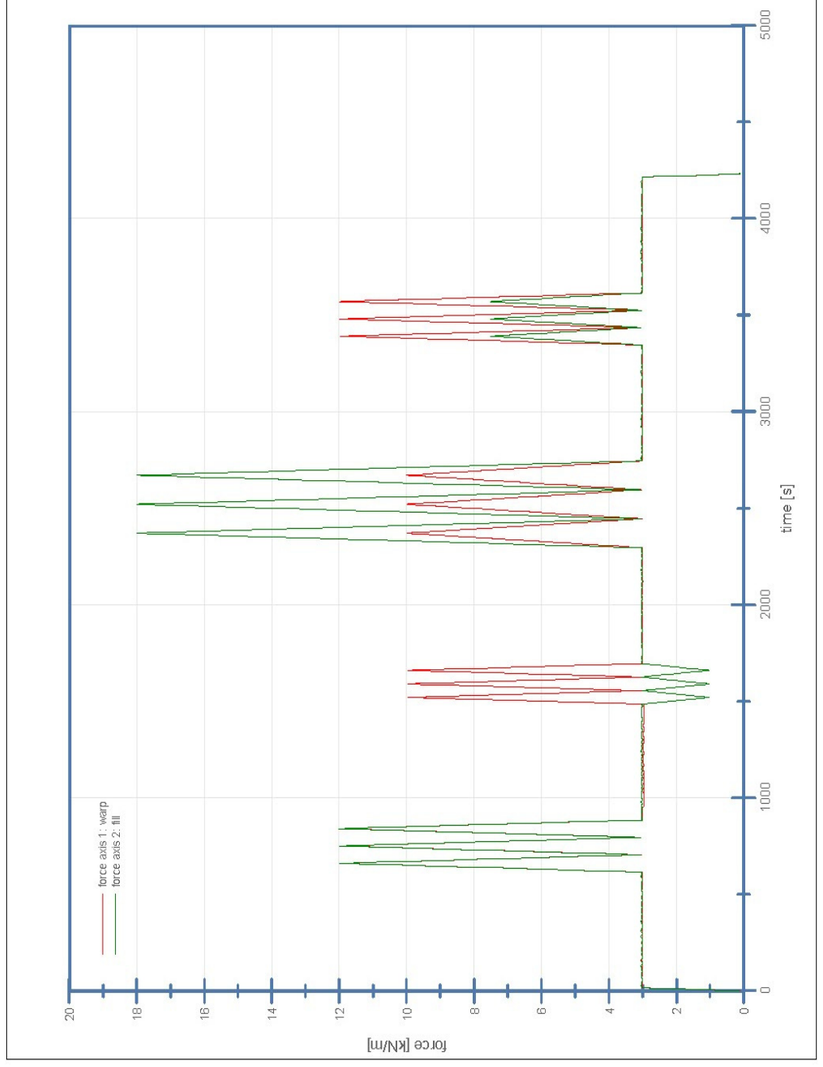
Control factor of load

test: V1112 | material: Versidag B18089, piece 00980777A04



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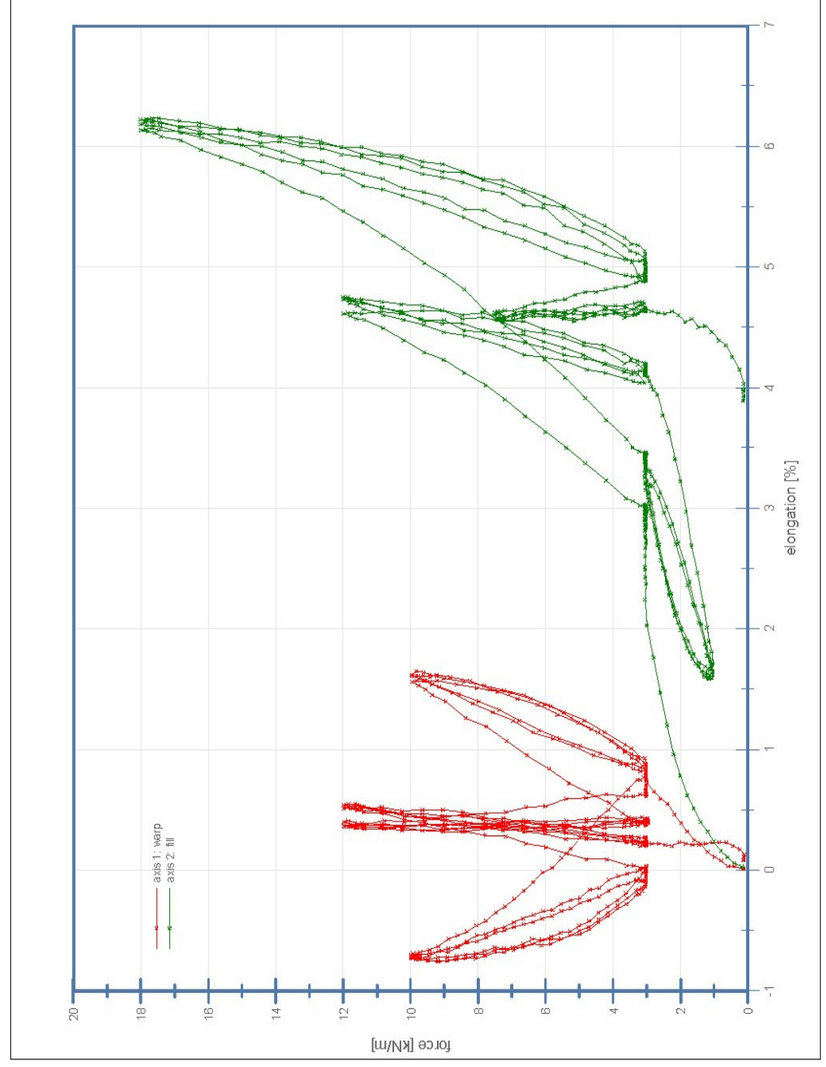
Force-elongation-diagram to bi-axiale tensile test

test: V1112 | material: Versidag B18089, piece 00980777A04



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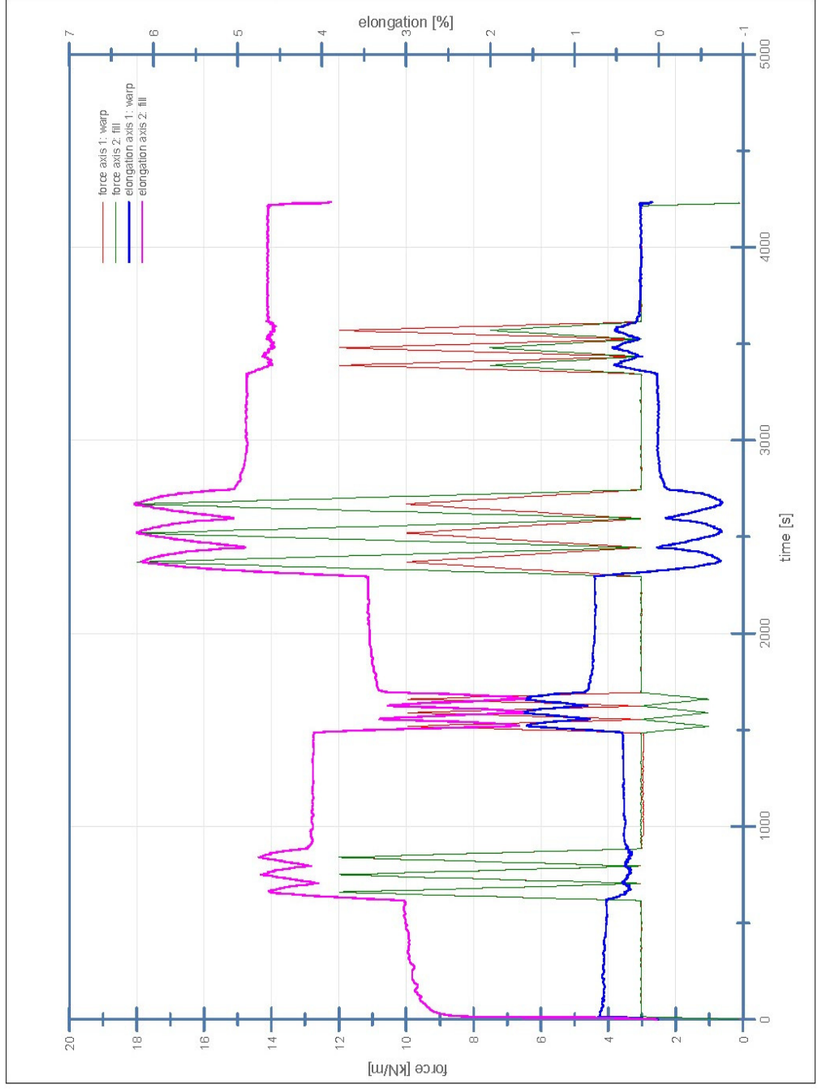
Force-elongation-time-diagram to bi-axiale tensile test

test: V1112	material: Versidag B18089, piece 00980777A04



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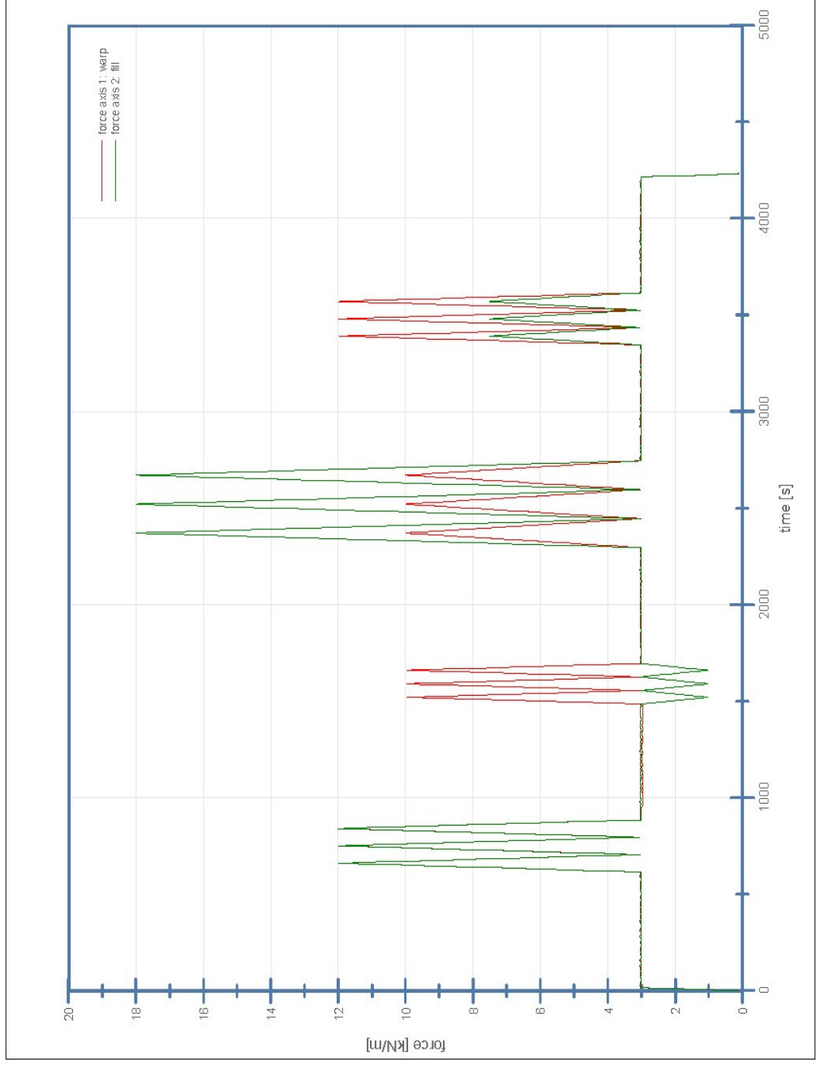
Force-time-diagram to bi-axiale tensile test

test: V1112	material: Versidag B18089, piece 00980777A04



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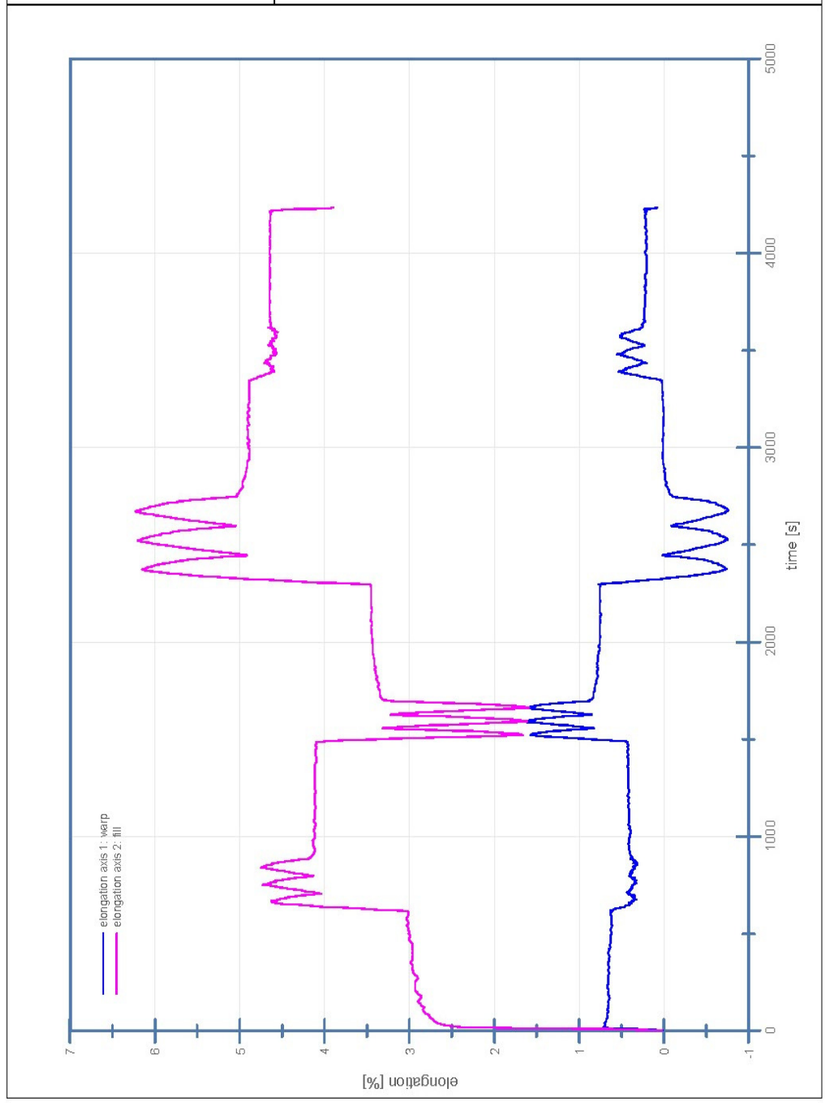
Elongation-time-diagram to tensile test

test: V1112	material: Versidag B18089, piece 00980777A04



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Measured data of bi-axiale tensile test

test: V1112	material: Versidag B18089, piece 00980777A04	page: 3

time [s]	force [kN/m] warp	force [kN/m] fill	elongation [%] warp	elongation [%] fill
1518.0	9.55	1.15	1.50	1.90
1519.0	9.76	1.07	1.53	1.81
1520.0	9.95	1.03	1.56	1.71
1521.0	9.81	1.07	1.57	1.67
1522.0	9.61	1.13	1.57	1.66
1523.0	9.42	1.18	1.56	1.67
1524.0	9.21	1.25	1.57	1.69
1527.0	8.62	1.44	1.54	1.72
1530.0	8.03	1.60	1.51	1.79
1533.0	7.43	1.76	1.48	1.90
1536.0	6.83	1.95	1.42	2.00
1539.0	6.23	2.11	1.37	2.13
1542.0	5.64	2.27	1.29	2.29
1545.0	5.04	2.46	1.22	2.48
1548.0	4.44	2.62	1.14	2.70
1551.0	3.84	2.79	1.02	2.95
1552.0	3.64	2.86	0.98	3.04
1553.0	3.44	2.91	0.93	3.12
1554.0	3.25	2.97	0.90	3.19
1555.0	3.04	3.02	0.83	3.29
1556.0	3.19	2.98	0.82	3.32
1557.0	3.39	2.92	0.84	3.31
1558.0	3.57	2.89	0.87	3.30
1559.0	3.77	2.84	0.88	3.26
1560.0	3.98	2.75	0.91	3.22
1563.0	4.57	2.58	0.95	3.13
1566.0	5.18	2.41	1.03	3.01
1569.0	5.77	2.23	1.09	2.87
1572.0	6.36	2.07	1.14	2.72
1575.0	6.96	1.88	1.24	2.55
1578.0	7.56	1.73	1.31	2.39
1581.0	8.16	1.56	1.38	2.19
1584.0	8.76	1.38	1.47	2.04
1587.0	9.35	1.22	1.54	1.85
1588.0	9.55	1.16	1.57	1.78
1589.0	9.76	1.10	1.61	1.73
1590.0	9.95	1.04	1.61	1.65
1591.0	9.82	1.07	1.61	1.61
1592.0	9.62	1.13	1.61	1.61
1593.0	9.42	1.19	1.60	1.63
1594.0	9.23	1.25	1.62	1.64
1596.0	8.82	1.37	1.60	1.65
1599.0	8.24	1.54	1.57	1.71
1602.0	7.63	1.72	1.50	1.81
1605.0	7.04	1.88	1.47	1.92
1608.0	6.43	2.07	1.42	2.05
1611.0	5.84	2.21	1.36	2.19
1614.0	5.23	2.39	1.26	2.38
1617.0	4.63	2.57	1.17	2.57
1620.0	4.03	2.74	1.07	2.82
1622.0	3.63	2.86	0.99	2.94
1623.0	3.44	2.91	0.96	3.06
1624.0	3.24	2.96	0.93	3.13
1625.0	3.04	3.03	0.88	3.20
1626.0	3.18	2.99	0.85	3.22
1627.0	3.38	2.93	0.88	3.20
1628.0	3.58	2.87	0.88	3.18
1629.0	3.78	2.82	0.90	3.19
1632.0	4.37	2.64	0.97	3.09
1635.0	4.97	2.48	1.03	2.96
1638.0	5.58	2.31	1.09	2.85
1641.0	6.18	2.12	1.16	2.70
1644.0	6.77	1.96	1.24	2.53
1647.0	7.37	1.78	1.33	2.36
1650.0	7.97	1.62	1.40	2.20
1653.0	8.56	1.44	1.46	2.05
1656.0	9.15	1.27	1.52	1.87
1657.0	9.36	1.20	1.54	1.78
1658.0	9.56	1.13	1.57	1.74
1659.0	9.75	1.09	1.59	1.69

time [s]	force [kN/m] warp	force [kN/m] fill	elongation [%] warp	elongation [%] fill
1660.0	9.95	1.03	1.62	1.62
1661.0	9.82	1.06	1.65	1.59
1662.0	9.62	1.14	1.64	1.59
1663.0	9.42	1.18	1.62	1.59
1664.0	9.22	1.25	1.61	1.60
1665.0	9.02	1.30	1.59	1.61
1668.0	8.43	1.45	1.56	1.69
1671.0	7.82	1.64	1.53	1.75
1674.0	7.23	1.80	1.49	1.84
1677.0	6.63	1.99	1.45	1.99
1680.0	6.03	2.16	1.37	2.11
1683.0	5.44	2.33	1.31	2.28
1686.0	4.84	2.51	1.24	2.50
1689.0	4.24	2.68	1.14	2.69
1692.0	3.64	2.86	1.04	2.94
1693.0	3.45	2.91	1.01	2.99
1694.0	3.25	2.97	0.94	3.09
1695.0	3.05	3.03	0.93	3.15
1696.0	3.02	3.03	0.88	3.21
1698.0	3.02	3.04	0.87	3.25
1700.0	3.03	3.03	0.88	3.27
1702.0	3.02	3.04	0.87	3.29
1704.0	3.02	3.03	0.86	3.31
1710.0	3.02	3.02	0.84	3.33
1720.0	3.01	3.03	0.83	3.34
1730.0	3.01	3.03	0.83	3.35
1740.0	3.01	3.02	0.83	3.35
1750.0	3.01	3.02	0.81	3.35
1760.0	3.02	3.02	0.82	3.36
1770.0	3.02	3.02	0.81	3.37
1780.0	3.02	3.03	0.81	3.36
1790.0	3.01	3.03	0.79	3.36
1800.0	3.01	3.02	0.80	3.38
1810.0	3.01	3.04	0.79	3.39
1820.0	3.02	3.04	0.78	3.38
1830.0	3.03	3.03	0.78	3.39
1840.0	3.01	3.03	0.79	3.40
1850.0	3.02	3.03	0.79	3.40
1860.0	3.02	3.02	0.77	3.41
1870.0	3.02	3.01	0.79	3.39
1880.0	3.01	3.03	0.78	3.41
1890.0	3.01	3.03	0.79	3.41
1900.0	3.02	3.04	0.78	3.41
1910.0	3.02	3.03	0.78	3.41
1920.0	3.01	3.04	0.78	3.42
1930.0	3.02	3.04	0.78	3.42
1940.0	3.02	3.03	0.77	3.43
1950.0	3.02	3.01	0.77	3.43
1960.0	3.01	3.04	0.76	3.43
1970.0	3.03	3.03	0.76	3.43
1980.0	3.02	3.04	0.77	3.43
1990.0	3.02	3.02	0.76	3.43
2000.0	3.01	3.03	0.76	3.44
2010.0	3.01	3.04	0.76	3.43
2020.0	3.03	3.03	0.76	3.44
2030.0	3.01	3.02	0.75	3.44
2040.0	3.01	3.03	0.76	3.44
2050.0	3.03	3.03	0.76	3.45
2060.0	3.02	3.04	0.76	3.44
2070.0	3.01	3.03	0.76	3.45
2080.0	3.02	3.03	0.76	3.45
2090.0	3.01	3.02	0.76	3.44
2100.0	3.00	3.04	0.75	3.44
2110.0	3.02	3.03	0.75	3.46
2120.0	3.02	2.99	0.76	3.45
2130.0	3.01	3.03	0.75	3.45
2140.0	3.01	3.03	0.74	3.45
2150.0	3.02	3.02	0.76	3.45
2160.0	3.02	3.04	0.76	3.44
2170.0	3.02	3.02	0.76	3.44

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Measured data of bi-axiale tensile test

test: V1112 | material: Versidag B18089, piece 00980777A04 | page: 2

time [s]	force [kN/m] warp	force [kN/m] fill	elongation [%] warp	elongation [%] fill
750.0	11.98	11.99	0.37	4.73
751.0	11.84	11.83	0.36	4.73
752.0	11.63	11.66	0.36	4.72
753.0	11.43	11.46	0.36	4.71
756.0	10.84	10.85	0.35	4.66
759.0	10.24	10.27	0.33	4.63
762.0	9.64	9.65	0.33	4.64
765.0	9.03	9.05	0.34	4.64
768.0	8.44	8.45	0.35	4.57
771.0	7.84	7.85	0.35	4.58
774.0	7.25	7.27	0.33	4.54
777.0	6.65	6.65	0.34	4.47
780.0	6.03	6.03	0.36	4.45
783.0	5.44	5.45	0.37	4.41
786.0	4.84	4.85	0.34	4.35
789.0	4.26	4.25	0.38	4.31
792.0	3.64	3.66	0.39	4.20
793.0	3.44	3.46	0.39	4.22
794.0	3.24	3.25	0.40	4.19
795.0	3.05	3.06	0.40	4.14
796.0	3.18	3.20	0.39	4.14
797.0	3.38	3.39	0.40	4.13
798.0	3.58	3.60	0.41	4.15
801.0	4.18	4.19	0.40	4.20
804.0	4.78	4.80	0.40	4.24
807.0	5.38	5.43	0.38	4.27
810.0	5.98	6.02	0.38	4.33
813.0	6.58	6.60	0.40	4.37
816.0	7.18	7.19	0.37	4.41
819.0	7.77	7.78	0.39	4.46
822.0	8.37	8.40	0.37	4.47
825.0	8.97	9.00	0.38	4.56
828.0	9.57	9.61	0.38	4.55
831.0	10.19	10.21	0.36	4.62
834.0	10.78	10.82	0.34	4.66
837.0	11.37	11.41	0.34	4.70
838.0	11.58	11.61	0.35	4.70
839.0	11.77	11.80	0.36	4.72
840.0	11.97	12.01	0.36	4.75
841.0	11.83	11.86	0.36	4.75
842.0	11.63	11.67	0.35	4.73
843.0	11.43	11.46	0.35	4.73
846.0	10.84	10.84	0.36	4.71
849.0	10.22	10.27	0.35	4.69
852.0	9.64	9.65	0.33	4.68
855.0	9.03	9.06	0.32	4.64
858.0	8.44	8.47	0.32	4.60
861.0	7.84	7.86	0.34	4.62
864.0	7.24	7.26	0.36	4.55
867.0	6.64	6.66	0.32	4.55
870.0	6.02	6.05	0.33	4.48
873.0	5.43	5.46	0.35	4.45
876.0	4.84	4.86	0.36	4.37
879.0	4.25	4.27	0.35	4.35
882.0	3.65	3.66	0.36	4.28
883.0	3.45	3.46	0.37	4.24
884.0	3.25	3.26	0.37	4.22
885.0	3.05	3.07	0.39	4.20
886.0	3.02	3.02	0.38	4.20
888.0	3.01	3.03	0.39	4.17
890.0	3.00	3.03	0.38	4.18
892.0	3.01	3.02	0.37	4.16
894.0	3.01	3.02	0.37	4.17
900.0	3.03	3.03	0.38	4.15
910.0	3.00	3.03	0.40	4.13
920.0	3.02	3.04	0.40	4.12
930.0	3.00	3.02	0.41	4.11
940.0	3.02	3.04	0.41	4.12
950.0	3.00	3.02	0.41	4.13
960.0	2.96	3.04	0.42	4.13

time [s]	force [kN/m] warp	force [kN/m] fill	elongation [%] warp	elongation [%] fill
970.0	2.95	3.02	0.41	4.13
980.0	2.96	3.05	0.41	4.14
990.0	2.96	3.02	0.41	4.11
1000.0	2.95	3.03	0.40	4.11
1010.0	2.96	3.04	0.40	4.11
1020.0	2.95	3.03	0.39	4.12
1030.0	2.97	3.04	0.39	4.13
1040.0	2.96	3.02	0.41	4.12
1050.0	2.98	3.03	0.40	4.12
1060.0	2.96	3.02	0.42	4.10
1070.0	2.97	3.03	0.41	4.12
1080.0	2.96	3.04	0.41	4.13
1090.0	2.96	3.02	0.41	4.11
1100.0	2.97	3.03	0.41	4.12
1110.0	2.96	3.02	0.41	4.11
1120.0	2.97	3.04	0.41	4.11
1130.0	2.96	3.03	0.41	4.12
1140.0	2.98	3.02	0.41	4.11
1150.0	2.98	3.03	0.42	4.10
1160.0	2.97	3.02	0.42	4.11
1170.0	2.96	3.04	0.41	4.11
1180.0	2.99	3.03	0.42	4.12
1190.0	2.97	3.02	0.42	4.11
1200.0	2.98	3.04	0.41	4.12
1210.0	2.97	3.02	0.43	4.11
1220.0	2.98	3.03	0.42	4.11
1230.0	2.96	3.02	0.41	4.10
1240.0	2.98	3.05	0.41	4.11
1250.0	2.97	3.03	0.42	4.11
1260.0	2.97	3.02	0.42	4.11
1270.0	2.98	3.03	0.42	4.11
1280.0	2.97	3.02	0.42	4.11
1290.0	2.96	3.03	0.42	4.11
1300.0	2.98	3.02	0.42	4.11
1310.0	2.96	3.03	0.42	4.11
1320.0	2.97	3.03	0.42	4.11
1330.0	2.97	3.04	0.42	4.11
1340.0	2.97	3.03	0.42	4.12
1350.0	2.96	3.02	0.42	4.11
1360.0	2.96	3.03	0.43	4.11
1370.0	2.97	3.03	0.42	4.11
1380.0	2.97	3.03	0.42	4.10
1390.0	2.96	3.03	0.42	4.10
1400.0	2.96	3.02	0.42	4.10
1410.0	2.96	3.02	0.43	4.10
1420.0	2.96	3.03	0.42	4.11
1430.0	2.96	3.03	0.43	4.10
1440.0	2.96	3.03	0.43	4.11
1450.0	2.96	3.03	0.42	4.10
1460.0	2.96	3.03	0.43	4.10
1470.0	2.96	3.03	0.42	4.11
1476.0	2.97	3.01	0.43	4.10
1478.0	2.96	3.02	0.43	4.10
1480.0	2.96	3.04	0.43	4.10
1482.0	2.96	3.03	0.43	4.10
1484.0	2.97	3.03	0.43	4.10
1486.0	3.14	2.97	0.44	4.09
1487.0	3.34	2.91	0.43	4.05
1488.0	3.53	2.85	0.44	4.01
1489.0	3.71	2.80	0.47	3.98
1491.0	4.11	2.68	0.56	3.94
1494.0	4.71	2.52	0.64	3.77
1497.0	5.30	2.34	0.72	3.63
1500.0	5.89	2.16	0.84	3.41
1503.0	6.54	2.00	0.95	3.22
1506.0	7.15	1.83	1.07	2.97
1509.0	7.75	1.67	1.19	2.69
1512.0	8.35	1.49	1.26	2.46
1515.0	8.95	1.31	1.40	2.19
1517.0	9.36	1.20	1.45	2.01

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Measured data of bi-axiale tensile test

test: V1112 | material: Versidag B18089, piece 00980777A04 | page: 3

time [s]	force [kN/m] warp	force [kN/m] fill	elongation [%] warp	elongation [%] fill
1518.0	9.55	1.15	1.50	1.90
1519.0	9.76	1.07	1.53	1.81
1520.0	9.95	1.03	1.56	1.71
1521.0	9.81	1.07	1.57	1.67
1522.0	9.61	1.13	1.57	1.66
1523.0	9.42	1.18	1.56	1.67
1524.0	9.21	1.25	1.57	1.69
1527.0	8.62	1.44	1.54	1.72
1530.0	8.03	1.60	1.51	1.79
1533.0	7.43	1.76	1.48	1.90
1536.0	6.83	1.95	1.42	2.00
1539.0	6.23	2.11	1.37	2.13
1542.0	5.64	2.27	1.29	2.29
1545.0	5.04	2.46	1.22	2.48
1548.0	4.44	2.62	1.14	2.70
1551.0	3.84	2.79	1.02	2.95
1552.0	3.64	2.86	0.98	3.04
1553.0	3.44	2.91	0.93	3.12
1554.0	3.25	2.97	0.90	3.19
1555.0	3.04	3.02	0.83	3.29
1556.0	3.19	2.98	0.82	3.32
1557.0	3.39	2.92	0.84	3.31
1558.0	3.57	2.89	0.87	3.30
1559.0	3.77	2.84	0.88	3.26
1560.0	3.98	2.75	0.91	3.22
1563.0	4.57	2.58	0.95	3.13
1566.0	5.18	2.41	1.03	3.01
1569.0	5.77	2.23	1.09	2.87
1572.0	6.36	2.07	1.14	2.72
1575.0	6.96	1.88	1.24	2.55
1578.0	7.56	1.73	1.31	2.39
1581.0	8.16	1.56	1.38	2.19
1584.0	8.76	1.38	1.47	2.04
1587.0	9.35	1.22	1.54	1.85
1588.0	9.55	1.16	1.57	1.78
1589.0	9.76	1.10	1.61	1.73
1590.0	9.95	1.04	1.61	1.65
1591.0	9.82	1.07	1.61	1.61
1592.0	9.62	1.13	1.61	1.61
1593.0	9.42	1.19	1.60	1.63
1594.0	9.23	1.25	1.62	1.64
1596.0	8.82	1.37	1.60	1.65
1599.0	8.24	1.54	1.57	1.71
1602.0	7.63	1.72	1.50	1.81
1605.0	7.04	1.88	1.47	1.92
1608.0	6.43	2.07	1.42	2.05
1611.0	5.84	2.21	1.36	2.19
1614.0	5.23	2.39	1.26	2.38
1617.0	4.63	2.57	1.17	2.57
1620.0	4.03	2.74	1.07	2.82
1622.0	3.63	2.86	0.99	2.94
1623.0	3.44	2.91	0.96	3.06
1624.0	3.24	2.96	0.93	3.13
1625.0	3.04	3.03	0.88	3.20
1626.0	3.18	2.99	0.85	3.22
1627.0	3.38	2.93	0.88	3.20
1628.0	3.58	2.87	0.88	3.18
1629.0	3.78	2.82	0.90	3.19
1632.0	4.37	2.64	0.97	3.09
1635.0	4.97	2.48	1.03	2.96
1638.0	5.58	2.31	1.09	2.85
1641.0	6.18	2.12	1.16	2.70
1644.0	6.77	1.96	1.24	2.53
1647.0	7.37	1.78	1.33	2.36
1650.0	7.97	1.62	1.40	2.20
1653.0	8.56	1.44	1.46	2.05
1656.0	9.15	1.27	1.52	1.87
1657.0	9.36	1.20	1.54	1.78
1658.0	9.56	1.13	1.57	1.74
1659.0	9.75	1.09	1.59	1.69

time [s]	force [kN/m] warp	force [kN/m] fill	elongation [%] warp	elongation [%] fill
1660.0	9.95	1.03	1.62	1.62
1661.0	9.82	1.06	1.65	1.59
1662.0	9.62	1.14	1.64	1.59
1663.0	9.42	1.18	1.62	1.59
1664.0	9.22	1.25	1.61	1.60
1665.0	9.02	1.30	1.59	1.61
1668.0	8.43	1.45	1.56	1.69
1671.0	7.82	1.64	1.53	1.75
1674.0	7.23	1.80	1.49	1.84
1677.0	6.63	1.99	1.45	1.99
1680.0	6.03	2.16	1.37	2.11
1683.0	5.44	2.33	1.31	2.28
1686.0	4.84	2.51	1.24	2.50
1689.0	4.24	2.68	1.14	2.69
1692.0	3.64	2.86	1.04	2.94
1693.0	3.45	2.91	1.01	2.99
1694.0	3.25	2.97	0.94	3.09
1695.0	3.05	3.03	0.93	3.15
1696.0	3.02	3.03	0.88	3.21
1698.0	3.02	3.04	0.87	3.25
1700.0	3.03	3.03	0.88	3.27
1702.0	3.02	3.04	0.87	3.29
1704.0	3.02	3.03	0.86	3.31
1710.0	3.02	3.02	0.84	3.33
1720.0	3.01	3.03	0.83	3.34
1730.0	3.01	3.03	0.83	3.35
1740.0	3.01	3.02	0.83	3.35
1750.0	3.01	3.02	0.81	3.35
1760.0	3.02	3.02	0.82	3.36
1770.0	3.02	3.02	0.81	3.37
1780.0	3.02	3.03	0.81	3.36
1790.0	3.01	3.03	0.79	3.36
1800.0	3.01	3.02	0.80	3.38
1810.0	3.01	3.04	0.79	3.39
1820.0	3.02	3.04	0.78	3.38
1830.0	3.03	3.03	0.78	3.39
1840.0	3.01	3.03	0.79	3.40
1850.0	3.02	3.03	0.79	3.40
1860.0	3.02	3.02	0.77	3.41
1870.0	3.02	3.01	0.79	3.39
1880.0	3.01	3.03	0.78	3.41
1890.0	3.01	3.03	0.79	3.41
1900.0	3.02	3.04	0.78	3.41
1910.0	3.02	3.03	0.78	3.41
1920.0	3.01	3.04	0.78	3.42
1930.0	3.02	3.04	0.78	3.42
1940.0	3.02	3.03	0.77	3.43
1950.0	3.02	3.01	0.77	3.43
1960.0	3.01	3.04	0.76	3.43
1970.0	3.03	3.03	0.76	3.43
1980.0	3.02	3.04	0.77	3.43
1990.0	3.02	3.02	0.76	3.43
2000.0	3.01	3.03	0.76	3.44
2010.0	3.01	3.04	0.76	3.43
2020.0	3.03	3.03	0.76	3.44
2030.0	3.01	3.02	0.75	3.44
2040.0	3.01	3.03	0.76	3.44
2050.0	3.03	3.03	0.76	3.45
2060.0	3.02	3.04	0.76	3.44
2070.0	3.01	3.03	0.76	3.45
2080.0	3.02	3.03	0.76	3.45
2090.0	3.01	3.02	0.76	3.44
2100.0	3.00	3.04	0.75	3.44
2110.0	3.02	3.03	0.75	3.46
2120.0	3.02	2.99	0.76	3.45
2130.0	3.01	3.03	0.75	3.45
2140.0	3.01	3.03	0.74	3.45
2150.0	3.02	3.02	0.76	3.45
2160.0	3.02	3.04	0.76	3.44
2170.0	3.02	3.02	0.76	3.44

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Measured data of bi-axiale tensile test

test: V1112 | material: Versidag B18089, piece 00980777A04 | page: 4

time [s]	force [kN/m] warp	force [kN/m] fill	elongation [%] warp	elongation [%] fill
2180.0	3.01	3.05	0.76	3.45
2190.0	3.01	3.02	0.76	3.45
2200.0	3.02	3.03	0.76	3.45
2210.0	3.00	3.04	0.75	3.45
2220.0	3.02	3.03	0.76	3.45
2230.0	3.02	3.03	0.76	3.45
2240.0	3.01	3.02	0.76	3.45
2250.0	3.02	3.03	0.76	3.45
2260.0	3.01	3.03	0.76	3.45
2270.0	3.01	3.02	0.76	3.45
2280.0	3.02	3.04	0.76	3.45
2286.0	3.01	3.02	0.75	3.45
2288.0	3.01	3.02	0.76	3.46
2290.0	3.03	3.03	0.76	3.45
2292.0	3.02	3.03	0.76	3.45
2294.0	3.02	3.03	0.76	3.46
2296.0	3.09	3.21	0.77	3.47
2297.0	3.19	3.41	0.75	3.50
2298.0	3.27	3.59	0.75	3.57
2301.0	3.55	4.20	0.67	3.73
2304.0	3.84	4.81	0.59	3.91
2307.0	4.13	5.41	0.50	4.08
2310.0	4.40	6.02	0.44	4.23
2313.0	4.67	6.59	0.34	4.38
2316.0	4.96	7.19	0.27	4.51
2319.0	5.25	7.81	0.18	4.64
2322.0	5.52	8.40	0.10	4.81
2325.0	5.80	8.99	0.02	4.93
2328.0	6.08	9.59	-0.02	5.03
2331.0	6.36	10.20	-0.10	5.15
2334.0	6.64	10.81	-0.17	5.26
2337.0	6.92	11.40	-0.24	5.37
2340.0	7.19	11.99	-0.30	5.46
2343.0	7.47	12.60	-0.35	5.57
2346.0	7.76	13.21	-0.42	5.62
2349.0	8.04	13.81	-0.46	5.70
2352.0	8.32	14.39	-0.51	5.79
2355.0	8.60	14.99	-0.54	5.85
2358.0	8.87	15.61	-0.57	5.91
2361.0	9.17	16.22	-0.63	5.97
2364.0	9.44	16.81	-0.66	6.05
2367.0	9.71	17.39	-0.68	6.08
2368.0	9.81	17.59	-0.69	6.11
2369.0	9.90	17.79	-0.70	6.12
2370.0	9.99	17.99	-0.70	6.13
2371.0	9.93	17.85	-0.69	6.14
2372.0	9.83	17.66	-0.72	6.15
2373.0	9.74	17.46	-0.72	6.13
2376.0	9.47	16.85	-0.74	6.12
2379.0	9.19	16.25	-0.72	6.10
2382.0	8.90	15.63	-0.72	6.10
2385.0	8.62	15.05	-0.71	6.07
2388.0	8.35	14.45	-0.70	6.03
2391.0	8.07	13.88	-0.69	6.04
2394.0	7.80	13.25	-0.67	6.00
2397.0	7.51	12.62	-0.64	5.98
2400.0	7.23	12.04	-0.65	5.93
2403.0	6.96	11.44	-0.64	5.91
2406.0	6.67	10.87	-0.61	5.86
2409.0	6.39	10.26	-0.57	5.82
2412.0	6.10	9.65	-0.58	5.77
2415.0	5.82	9.05	-0.55	5.74
2418.0	5.55	8.46	-0.52	5.70
2421.0	5.28	7.86	-0.51	5.64
2424.0	5.00	7.25	-0.46	5.61
2427.0	4.70	6.64	-0.42	5.51
2430.0	4.43	6.04	-0.35	5.49
2433.0	4.15	5.45	-0.30	5.34
2436.0	3.87	4.87	-0.25	5.29
2439.0	3.60	4.26	-0.19	5.19

time [s]	force [kN/m] warp	force [kN/m] fill	elongation [%] warp	elongation [%] fill
2442.0	3.31	3.64	-0.09	5.07
2443.0	3.22	3.44	-0.07	5.04
2444.0	3.12	3.25	-0.02	4.93
2445.0	3.02	3.05	-0.00	4.94
2446.0	3.09	3.21	0.02	4.91
2447.0	3.18	3.41	0.01	4.92
2448.0	3.27	3.61	-0.01	4.93
2451.0	3.56	4.21	-0.03	4.97
2454.0	3.84	4.80	-0.05	5.03
2457.0	4.12	5.40	-0.08	5.08
2460.0	4.40	5.99	-0.15	5.15
2463.0	4.68	6.60	-0.16	5.22
2466.0	4.97	7.20	-0.23	5.28
2469.0	5.25	7.80	-0.25	5.33
2472.0	5.53	8.40	-0.28	5.41
2475.0	5.79	8.98	-0.33	5.47
2478.0	6.07	9.59	-0.34	5.53
2481.0	6.35	10.22	-0.37	5.59
2484.0	6.65	10.81	-0.40	5.64
2487.0	6.93	11.40	-0.43	5.67
2490.0	7.20	12.00	-0.47	5.76
2493.0	7.47	12.59	-0.49	5.78
2496.0	7.76	13.19	-0.53	5.85
2499.0	8.03	13.80	-0.54	5.88
2502.0	8.33	14.42	-0.59	5.93
2505.0	8.60	15.01	-0.63	6.01
2508.0	8.88	15.62	-0.65	6.03
2511.0	9.15	16.19	-0.67	6.07
2514.0	9.43	16.79	-0.69	6.11
2517.0	9.71	17.40	-0.70	6.16
2518.0	9.80	17.61	-0.71	6.17
2519.0	9.90	17.81	-0.70	6.17
2520.0	9.99	18.00	-0.72	6.18
2521.0	9.94	17.87	-0.72	6.20
2522.0	9.84	17.67	-0.72	6.20
2523.0	9.76	17.45	-0.71	6.20
2526.0	9.47	16.85	-0.75	6.16
2529.0	9.19	16.26	-0.75	6.16
2532.0	8.91	15.64	-0.75	6.14
2535.0	8.62	15.07	-0.73	6.14
2538.0	8.35	14.45	-0.73	6.09
2541.0	8.07	13.86	-0.70	6.07
2544.0	7.79	13.26	-0.70	6.03
2547.0	7.50	12.65	-0.66	6.02
2550.0	7.23	12.04	-0.65	5.99
2553.0	6.94	11.45	-0.66	5.93
2556.0	6.67	10.86	-0.63	5.92
2559.0	6.39	10.26	-0.61	5.90
2562.0	6.11	9.66	-0.58	5.83
2565.0	5.82	9.05	-0.57	5.79
2568.0	5.55	8.44	-0.57	5.78
2571.0	5.27	7.85	-0.54	5.72
2574.0	5.00	7.27	-0.50	5.67
2577.0	4.71	6.66	-0.47	5.62
2580.0	4.43	6.05	-0.41	5.52
2583.0	4.14	5.45	-0.35	5.49
2586.0	3.87	4.85	-0.29	5.35
2589.0	3.58	4.26	-0.23	5.28
2592.0	3.32	3.66	-0.17	5.18
2593.0	3.23	3.48	-0.16	5.13
2594.0	3.13	3.26	-0.15	5.11
2595.0	3.04	3.05	-0.09	5.07
2596.0	3.11	3.19	-0.09	5.05
2597.0	3.19	3.41	-0.09	5.05
2598.0	3.29	3.60	-0.08	5.06
2601.0	3.55	4.20	-0.11	5.10
2604.0	3.84	4.79	-0.13	5.16
2607.0	4.12	5.38	-0.17	5.20
2610.0	4.40	6.00	-0.22	5.27
2613.0	4.69	6.61	-0.25	5.34

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Measured data of bi-axiale tensile test

test: V1112 | material: Versidag B18089, piece 00980777A04 | page: 5

time [s]	force [kN/m] warp	force [kN/m] fill	elongation [%] warp	elongation [%] fill
2616.0	4.96	7.20	-0.27	5.38
2619.0	5.24	7.80	-0.32	5.47
2622.0	5.52	8.39	-0.34	5.48
2625.0	5.80	8.98	-0.38	5.57
2628.0	6.08	9.60	-0.40	5.62
2631.0	6.36	10.20	-0.43	5.65
2634.0	6.64	10.82	-0.45	5.73
2637.0	6.93	11.41	-0.47	5.77
2640.0	7.21	12.00	-0.50	5.81
2643.0	7.48	12.60	-0.52	5.87
2646.0	7.75	13.19	-0.56	5.88
2649.0	8.03	13.79	-0.59	5.95
2652.0	8.32	14.40	-0.60	6.00
2655.0	8.59	15.01	-0.64	6.01
2658.0	8.88	15.60	-0.68	6.05
2661.0	9.16	16.22	-0.67	6.12
2664.0	9.44	16.81	-0.71	6.16
2667.0	9.72	17.42	-0.73	6.19
2668.0	9.81	17.62	-0.73	6.22
2669.0	9.90	17.81	-0.72	6.22
2670.0	10.00	18.01	-0.73	6.22
2671.0	9.94	17.85	-0.73	6.22
2672.0	9.84	17.66	-0.74	6.23
2673.0	9.74	17.46	-0.74	6.23
2676.0	9.46	16.85	-0.75	6.21
2679.0	9.18	16.26	-0.76	6.19
2682.0	8.90	15.66	-0.75	6.15
2685.0	8.62	15.06	-0.74	6.13
2688.0	8.35	14.44	-0.72	6.11
2691.0	8.06	13.85	-0.73	6.08
2694.0	7.79	13.25	-0.71	6.07
2697.0	7.50	12.67	-0.68	6.04
2700.0	7.23	12.06	-0.68	5.99
2703.0	6.96	11.46	-0.64	5.99
2706.0	6.67	10.86	-0.64	5.94
2709.0	6.39	10.26	-0.61	5.92
2712.0	6.12	9.65	-0.62	5.87
2715.0	5.84	9.06	-0.61	5.85
2718.0	5.54	8.46	-0.57	5.79
2721.0	5.27	7.85	-0.54	5.73
2724.0	4.99	7.24	-0.53	5.72
2727.0	4.70	6.64	-0.49	5.64
2730.0	4.43	6.03	-0.43	5.58
2733.0	4.15	5.44	-0.38	5.50
2736.0	3.87	4.85	-0.32	5.42
2739.0	3.59	4.24	-0.28	5.34
2742.0	3.30	3.64	-0.20	5.24
2743.0	3.21	3.45	-0.20	5.19
2744.0	3.12	3.25	-0.17	5.18
2745.0	3.03	3.05	-0.14	5.13
2746.0	3.01	3.03	-0.12	5.10
2748.0	3.01	3.03	-0.12	5.06
2750.0	3.02	3.03	-0.10	5.04
2752.0	3.02	3.02	-0.09	5.03
2754.0	3.01	3.04	-0.09	5.03
2760.0	3.02	3.05	-0.07	5.03
2770.0	3.02	3.03	-0.06	5.01
2780.0	3.01	3.02	-0.06	5.00
2790.0	3.01	3.03	-0.05	4.98
2800.0	3.01	3.02	-0.04	4.96
2810.0	3.01	3.03	-0.02	4.97
2820.0	3.01	3.02	-0.03	4.97
2830.0	3.01	3.03	-0.02	4.96
2840.0	3.01	3.03	-0.01	4.95
2850.0	3.00	3.03	-0.01	4.94
2860.0	3.01	3.04	-0.01	4.93
2870.0	3.02	3.03	-0.01	4.93
2880.0	3.01	3.02	0.00	4.92
2890.0	3.01	3.02	-0.01	4.92
2900.0	3.02	3.02	0.00	4.91

time [s]	force [kN/m] warp	force [kN/m] fill	elongation [%] warp	elongation [%] fill
2910.0	3.02	3.02	-0.00	4.91
2920.0	3.02	3.05	0.01	4.91
2930.0	3.02	3.03	0.01	4.91
2940.0	3.01	3.03	0.01	4.89
2950.0	3.02	3.03	0.02	4.89
2960.0	3.02	3.05	0.01	4.89
2970.0	3.02	3.04	0.02	4.89
2980.0	3.01	3.03	0.01	4.88
2990.0	3.01	3.02	0.01	4.88
3000.0	3.02	3.03	0.01	4.90
3010.0	3.02	3.03	0.01	4.89
3020.0	3.01	3.03	0.01	4.91
3030.0	3.01	3.02	0.01	4.89
3040.0	3.02	3.03	0.02	4.89
3050.0	3.01	3.03	0.01	4.91
3060.0	3.01	3.03	0.01	4.90
3070.0	3.03	3.02	0.00	4.90
3080.0	3.02	3.03	0.01	4.90
3090.0	3.02	3.03	0.01	4.90
3100.0	3.02	3.01	0.01	4.91
3110.0	3.01	3.02	0.01	4.91
3120.0	3.01	3.02	0.00	4.89
3130.0	3.02	3.03	0.01	4.90
3140.0	3.02	3.03	-0.00	4.90
3150.0	3.03	3.04	0.01	4.91
3160.0	3.01	3.03	0.00	4.89
3170.0	3.02	3.02	0.00	4.90
3180.0	3.01	3.01	-0.00	4.91
3190.0	3.02	3.03	0.01	4.89
3200.0	3.02	3.04	0.00	4.89
3210.0	3.02	3.06	0.01	4.90
3220.0	3.02	3.02	0.01	4.90
3230.0	3.01	3.03	0.01	4.89
3240.0	3.01	3.01	0.01	4.88
3250.0	3.02	3.03	0.02	4.89
3260.0	3.02	3.03	0.02	4.89
3270.0	3.02	3.04	0.01	4.89
3280.0	3.01	3.03	0.01	4.89
3290.0	3.01	3.03	0.02	4.89
3300.0	3.01	3.02	0.02	4.89
3310.0	3.01	3.01	0.02	4.89
3320.0	3.01	3.02	0.02	4.89
3330.0	3.01	3.03	0.02	4.89
3336.0	3.01	3.02	0.02	4.88
3338.0	3.00	3.03	0.03	4.88
3340.0	3.01	3.03	0.03	4.89
3342.0	3.02	3.02	0.02	4.88
3344.0	3.01	3.03	0.03	4.88
3346.0	3.19	3.11	0.02	4.88
3347.0	3.38	3.21	0.04	4.89
3348.0	3.58	3.31	0.04	4.87
3351.0	4.18	3.61	0.09	4.84
3354.0	4.78	3.92	0.09	4.83
3357.0	5.37	4.22	0.14	4.81
3360.0	5.98	4.50	0.19	4.79
3363.0	6.58	4.81	0.22	4.79
3366.0	7.18	5.11	0.28	4.77
3369.0	7.78	5.41	0.29	4.73
3372.0	8.38	5.72	0.32	4.72
3375.0	8.98	6.01	0.35	4.70
3378.0	9.58	6.31	0.39	4.70
3381.0	10.18	6.61	0.42	4.67
3384.0	10.78	6.91	0.47	4.64
3387.0	11.38	7.20	0.48	4.64
3388.0	11.58	7.31	0.50	4.63
3389.0	11.78	7.42	0.51	4.63
3390.0	11.97	7.51	0.52	4.62
3391.0	11.85	7.44	0.53	4.61
3392.0	11.64	7.34	0.53	4.61
3393.0	11.45	7.24	0.52	4.59

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Measured data of bi-axiale tensile test

test: V1112 | material: Versidag B18089, piece 00980777A04 | page: 6

time [s]	force [kN/m] warp	force [kN/m] fill	elongation [%] warp	elongation [%] fill
3396.0	10.84	6.94	0.48	4.59
3399.0	10.24	6.65	0.47	4.62
3402.0	9.64	6.34	0.44	4.63
3405.0	9.04	6.04	0.44	4.64
3408.0	8.45	5.74	0.46	4.63
3411.0	7.85	5.45	0.42	4.61
3414.0	7.25	5.15	0.39	4.61
3417.0	6.65	4.86	0.37	4.60
3420.0	6.05	4.55	0.34	4.62
3423.0	5.45	4.26	0.32	4.65
3426.0	4.85	3.95	0.30	4.64
3429.0	4.25	3.65	0.28	4.66
3432.0	3.66	3.37	0.27	4.65
3433.0	3.45	3.25	0.27	4.68
3434.0	3.26	3.15	0.23	4.69
3435.0	3.06	3.06	0.21	4.70
3436.0	3.19	3.12	0.20	4.71
3437.0	3.39	3.22	0.22	4.71
3438.0	3.59	3.34	0.24	4.70
3441.0	4.19	3.62	0.25	4.68
3444.0	4.78	3.93	0.26	4.68
3447.0	5.39	4.22	0.26	4.67
3450.0	5.99	4.52	0.30	4.69
3453.0	6.59	4.82	0.32	4.68
3456.0	7.18	5.12	0.34	4.65
3459.0	7.78	5.41	0.36	4.63
3462.0	8.38	5.71	0.37	4.63
3465.0	8.97	6.01	0.41	4.64
3468.0	9.57	6.31	0.43	4.64
3471.0	10.18	6.60	0.45	4.64
3474.0	10.78	6.91	0.49	4.62
3477.0	11.38	7.20	0.52	4.58
3478.0	11.58	7.30	0.54	4.58
3479.0	11.77	7.43	0.53	4.58
3480.0	11.98	7.52	0.54	4.60
3481.0	11.84	7.43	0.55	4.58
3482.0	11.64	7.35	0.55	4.57
3483.0	11.44	7.23	0.53	4.56
3486.0	10.84	6.96	0.50	4.56
3489.0	10.25	6.64	0.47	4.59
3492.0	9.65	6.35	0.47	4.61
3495.0	9.05	6.07	0.45	4.60
3498.0	8.45	5.76	0.45	4.60
3501.0	7.85	5.45	0.43	4.58
3504.0	7.24	5.14	0.43	4.57
3507.0	6.64	4.85	0.39	4.57
3510.0	6.05	4.53	0.37	4.61
3513.0	5.44	4.24	0.34	4.60
3516.0	4.84	3.93	0.31	4.62
3519.0	4.25	3.62	0.29	4.60
3522.0	3.64	3.33	0.25	4.61
3523.0	3.44	3.23	0.25	4.63
3524.0	3.24	3.14	0.24	4.64
3525.0	3.04	3.03	0.23	4.66
3526.0	3.18	3.10	0.23	4.66
3527.0	3.38	3.20	0.24	4.64
3528.0	3.58	3.31	0.23	4.66
3531.0	4.17	3.62	0.25	4.62
3534.0	4.79	3.90	0.27	4.62
3537.0	5.39	4.21	0.31	4.65
3540.0	5.99	4.54	0.32	4.62
3543.0	6.60	4.82	0.36	4.62
3546.0	7.19	5.12	0.37	4.64
3549.0	7.79	5.41	0.38	4.59
3552.0	8.39	5.71	0.40	4.60
3555.0	8.98	6.01	0.42	4.60
3558.0	9.58	6.31	0.44	4.62
3561.0	10.18	6.60	0.45	4.62
3564.0	10.77	6.91	0.50	4.60
3567.0	11.38	7.21	0.49	4.57
3568.0	11.58	7.31	0.51	4.58
3569.0	11.78	7.41	0.51	4.57
3570.0	11.98	7.51	0.51	4.57
3571.0	11.84	7.44	0.52	4.56
3572.0	11.64	7.35	0.51	4.57
3573.0	11.45	7.26	0.51	4.56
3576.0	10.84	6.95	0.52	4.56
3579.0	10.25	6.65	0.49	4.58
3582.0	9.65	6.35	0.50	4.59
3585.0	9.04	6.04	0.50	4.59
3588.0	8.43	5.75	0.48	4.59
3591.0	7.84	5.44	0.44	4.57
3594.0	7.24	5.14	0.40	4.55
3597.0	6.64	4.83	0.41	4.58
3600.0	6.05	4.55	0.37	4.59
3603.0	5.45	4.26	0.36	4.61
3606.0	4.86	3.95	0.34	4.62
3609.0	4.26	3.65	0.30	4.58
3612.0	3.65	3.35	0.28	4.60
3613.0	3.45	3.25	0.28	4.61
3614.0	3.24	3.16	0.27	4.63
3615.0	3.05	3.04	0.27	4.64
3616.0	3.02	3.03	0.27	4.64
3618.0	3.01	3.05	0.26	4.66
3620.0	3.02	3.03	0.26	4.63
3622.0	3.02	3.02	0.25	4.64
3624.0	3.03	3.02	0.25	4.64
3630.0	3.01	3.02	0.26	4.64
3640.0	3.01	3.03	0.25	4.63
3650.0	3.02	3.02	0.22	4.65
3660.0	3.02	3.03	0.24	4.64
3670.0	3.02	3.04	0.23	4.64
3680.0	3.02	3.04	0.23	4.65
3690.0	3.01	3.03	0.23	4.64
3700.0	3.00	3.02	0.23	4.65
3710.0	3.02	3.01	0.23	4.65
3720.0	3.01	3.02	0.23	4.65
3730.0	3.01	3.03	0.22	4.65
3740.0	3.02	3.03	0.22	4.65
3750.0	3.02	3.03	0.22	4.64
3760.0	3.02	3.03	0.22	4.65
3770.0	3.01	3.01	0.22	4.65
3780.0	3.01	3.02	0.22	4.65
3790.0	3.02	3.05	0.22	4.65
3800.0	3.02	3.04	0.21	4.65
3810.0	3.01	3.03	0.22	4.65
3820.0	3.01	3.05	0.22	4.64
3830.0	3.02	3.06	0.23	4.65
3840.0	3.02	3.03	0.21	4.64
3850.0	3.02	3.02	0.22	4.65
3860.0	3.01	3.01	0.21	4.65
3870.0	3.02	3.03	0.22	4.65
3880.0	3.03	3.05	0.22	4.64
3890.0	3.02	3.04	0.22	4.65
3900.0	3.01	3.02	0.21	4.64
3910.0	3.00	3.03	0.21	4.65
3920.0	3.00	3.03	0.21	4.64
3930.0	3.01	3.02	0.21	4.65
3940.0	3.02	3.04	0.21	4.65
3950.0	3.02	3.05	0.20	4.65
3960.0	3.02	3.04	0.21	4.64
3970.0	3.02	3.03	0.21	4.65
3980.0	3.01	3.03	0.21	4.64
3990.0	3.01	3.03	0.21	4.64
4000.0	3.00	3.03	0.22	4.65
4010.0	3.01	3.04	0.22	4.65
4020.0	3.02	3.02	0.21	4.65
4030.0	3.02	3.02	0.21	4.64
4040.0	3.01	3.03	0.21	4.64
4050.0	3.02	3.03	0.21	4.65

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Measured data of bi-axiale tensile test

test: V1112 | material: Versidag B18089, piece 00980777A04 | page: 7

time [s]	force [kN/m] warp	force [kN/m] fill	elongation [%] warp	elongation [%] fill
4060.0	3.01	3.02	0.22	4.64
4070.0	3.02	3.04	0.21	4.65
4080.0	3.02	3.03	0.21	4.65
4090.0	3.03	3.02	0.21	4.64
4100.0	3.01	3.04	0.22	4.64
4110.0	3.03	3.03	0.21	4.64
4120.0	3.02	3.03	0.21	4.65
4130.0	3.01	3.02	0.22	4.64
4140.0	3.01	3.02	0.22	4.64
4150.0	3.02	3.01	0.21	4.65
4160.0	3.02	3.02	0.22	4.65
4170.0	3.02	3.04	0.21	4.64
4180.0	3.03	3.02	0.22	4.64
4190.0	3.01	3.05	0.22	4.64
4200.0	3.02	3.02	0.22	4.64
4206.0	3.01	3.02	0.21	4.63
4208.0	3.01	3.01	0.22	4.64
4210.0	3.01	3.01	0.22	4.63
4212.0	3.01	3.01	0.22	4.64
4214.0	3.01	3.01	0.22	4.65
4216.0	2.84	2.85	0.22	4.63
4217.0	2.64	2.65	0.22	4.62
4218.0	2.44	2.45	0.21	4.61
4219.0	2.24	2.25	0.20	4.63
4220.0	2.03	2.06	0.23	4.60
4221.0	1.84	1.85	0.22	4.54
4222.0	1.64	1.66	0.21	4.57
4223.0	1.44	1.46	0.21	4.50
4224.0	1.24	1.25	0.22	4.51
4225.0	1.04	1.06	0.23	4.46
4226.0	0.84	0.85	0.23	4.39
4227.0	0.64	0.65	0.23	4.35
4228.0	0.44	0.46	0.20	4.25
4229.0	0.24	0.25	0.17	4.15
4230.0	0.10	0.12	0.13	4.03
4231.0	0.11	0.12	0.11	3.98
4232.0	0.11	0.12	0.09	3.97
4233.0	0.11	0.11	0.11	3.93
4234.0	0.12	0.12	0.08	3.91
4235.0	0.11	0.13	0.09	3.89

11.12 DESIGN CALCULATION

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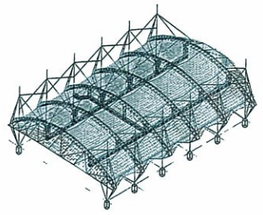
Title: Swimming Pool Tensile Membrane Roof - Structural Analysis & Design

CADANGAN MENAIK TARAF KOLAM RENANG SERTA KERJA-KERJA BERKAITAN DI WISMA BELIA INDERA MAHKOTA, KUANTAN PAHANG DARUL MAKMUR, MALAYSIA
UNTUK
MAJLIS PERBANDARAN KUANTAN

ANALYSIS & DESIGN CALCULATION FOR THE TENSILE MEMBRANE ROOF



Designed & Submitted by : SM Tan

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1. GENERAL

1.1 INTRODUCTION

The proposed tensile fabric roof structure is part of the upgrading work over the existing Wisma Belia Indera Mahkota swimming pool complex at Kuantan. It is the aquatic events venue for the 15th Malaysia Games held in Kuantan, Pahang Darul Makmur from 7th July to 16th July 2012.

The PTFE (polytetrafluoroethylene) coated glass fiber roof covered a main competition pool of 21m x 50m and a diving pool of 15m x 20m, both are of olympic standard. The membrane used is B18089 of Verseidag, Germany. The foot print of the roof is approximately 100m x 64m on plan.

The swimming pool roof is a barrel vault like structure of 82.5m length with both end a 9m cantilevered eyelid canopy which is about 24 deg tilted downward.

The steel roof structure comprise of 6 nos of 3D triangular truss spaced at 16.5m Each truss is integrated with steel mast at 54m center to center at both end. The overall height of columns are 30m and top of truss is 22m above the general pool level respectively. These columns are stabilized with frontstay and upper and lower backstay. There are 1 column near the main entrance which 'punch' through the roof of the VIP room. The overall structure are braced longitudinally along the column gridline and also 3 tie beam at 3 location of bottom chord of the 3D truss. The base of column mast is then fixed to RC stump of 2.8m above the general pool level.

Approximately 220m run of 1.2m wide catwalk is hanged from these 3D truss at 15 location to provide access for maintenance of light fitting which is also fixed on the railing of catwalk.

The fabric roof consist of 5 internal panel and 2 end panel of approximately 6000m² area in total. The internal fabric panel is secured across the bottom chord of 2 nos of 3D truss and inside of the triangular truss is then fixed with polycarbonate.

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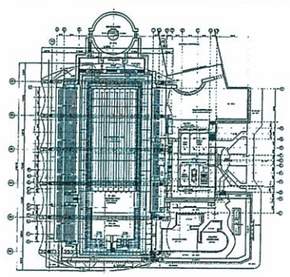
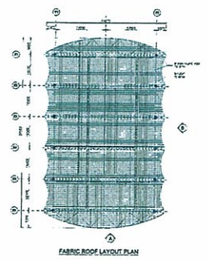


FLOOR PLAN



FABRIC ROOF LAYOUT PLAN

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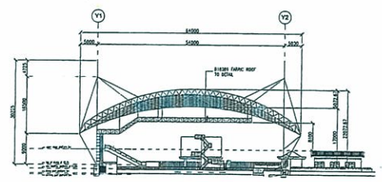
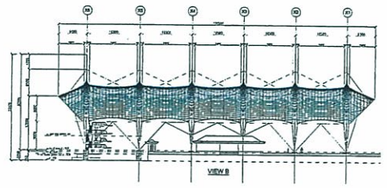


VIEW A



VIEW B

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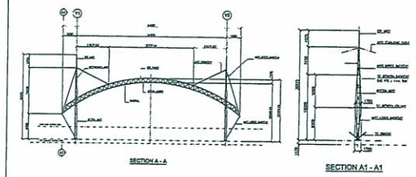
1.2 STRUCTURAL SYSTEM

The steel roof structure comprise of 6 nos of 3D triangulated truss of 1 top chord 15.m height and 2 bottom chord of 1.7m wide. These trusses are spaced at 16.5m and integrated with steel column at 54m center. The overall length of the truss is 64m with 11.6m rise at the center. Each of these integrated truss with column height of 30m is stabilized with 1 front stay and 2 upper and lower backstay.

The stability of the structure is dependent on ties and bracing along the column longitudinally. They are also tied quarterly at 3 locations across the bottom chord of the trusses. At the upper part of the column, a pair of crossiy brace safety cable is introduced.

Due to site access and constraint, the steel structure is designed such that it will be able to be lifted by a small tonnage crane eg. 30 tons and so bolted connection is decided.

The 64m truss is then make into 4 segment with flange joint connection. The 30m high column is also flange jointed just before and after the 3D truss. So is the bracing and ties along the columns, at the end canopies are assembled in parts by bolting system.



SECTION A - A

SECTION A1 - A1

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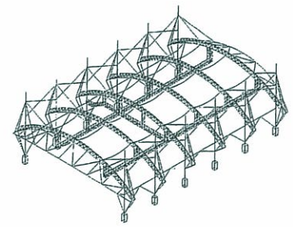
The 3D trusses is also providing supports to about 220m run of catwalk at 15 location of general 4 hanging point each. There are 2 row of 82.5m long catwalk parallel to and about 15m high from the swimming pool. Between these catwalk, there is interconnecting link along gridline X4. The catwalk is approximately 1.2m wide x 1.2m high.



3D VIEW OF CATWALK WITH STEEL TRUSS

1.3 SCOPE OF DOCUMENT

This document details the structural analysis and design of the steel roof structure with the fabric roof cover when in placed and subject to applied loading.

For ease of this analysis, secondary structure like catwalk etc are not modeled in the design model. A separate design check is done.

The design of the foundation and RC stump to resist the forces from the roof structures is exclude in this document as it is not included in the roof contract.

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1.4 REFERENCE DOCUMENTS

Malaysia Standard MS 1553 : 2002 Code of Practice on Wind Loading For Building Structure

1.5 UNIT

The S.I system shall be used : ie mm, m, KN and etc

1.6 DESIGN CODE AND STANDARD

CP 3 : Chapter V-2 : 1993 Incorporating Amendment Nos. 1, 2, 3, 4 and 5 - Wind Loads

BS 6399 : Part 1 : 1996 – Code of practice for dead and imposed loads

BS 6399 : Part 3 : 1988 – Code of practice for imposed roof loads

BS 5950-1 : 2000 – Code of practice for design – Rolled and welded sections

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2. ANALYSIS AND DESIGN CRITIRIA

2.1 COORDINATES SYSTEM

The design model structural axis system is as follow:

- +X from grid line X6 to X1
- +Y from grid line Y2 to Y1
- +Z vertically up

2.2 METHOD OF ANALYSIS

The analysis of the tensioned membrane structure is done in two parts. Firstly is to do the form finding of the membrane. Then by using the forces from the static analysis of the prestressed membrane and applied to the steel structure and do a design check of the steel structure.

2.2.1) Fabric Roof

The task of determining appropriate forms of the membrane based on the given outline is using the software EASY from Germany.

The EASY form finding method is based on the method of force density algorithm. After the equilibrium shape is formed, the form is then applied with external load, ie imposed load, wind load and etc. and static analysis of the fabric is then carried out.

External load which will be applied to the surface of the membrane will be represented by nodal forces.

2.2.2) Structural Steel System

The output forces from the membrane for all the load case from EASY is then extract for use as input forces to the structural steel and then for design purposes.

The finite element software used for the steel analysis is STAAD PRO2007, developed by Research Engineers International, USA.

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2.3 STRUCTURE STEEL DESIGN MODEL

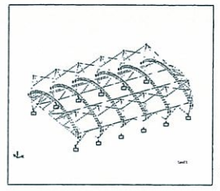
The steel structure has been modeled as a 3 dimensional frame model along the center line of the steel section. The ends of frame member are connected by nodes. All the steel member in this case uses all circular hollow section.

All the steel member are assumed to be frame type except the mast frontstay, backstay, ties between truss, bracings between column. These are assumed to be truss member which will have a bolted connection at both end.

The stabilizing cable between top of mast are assumed to be tension only Member with solid round bar representing the cables.

For ease of reference, the steel member of the design model has been group as follow;

a) member 1 to 456 = bottom curved chord of 3D truss
b) member 457 to 536 = edge member of eyelid canopy
c) member 537 to 782 = bottom horizontal chord of 3D truss
d) member 783 to 992 = top curved chord of 3D truss
e) member 993 to 1928 = diagonal chord of 3D truss
f) member 1929 to 1962 = bracing and prop member to eyelid canopy
g) member 1963 to 1977 = tie member between 3D truss
h) member 1978 to 2041 = lower, intermediate and upper mast
i) member 2042 to 2061 = tie member at between lower masts
j) member 2062 to 2077 = mast front stay
k) member 2078 to 2193 = mast backstay
l) member 2194 to 2227 = internal short tie of backstay
m) member 2228 to 2255 = longitudinal bracing between lower mast
n) member 2256 to 2275 = stabilizing cable at intermediate mast



3D VIEW

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The following properties is used for the analysis on the steel member: -

Young's Modulus = 2.10E08KN/m²
Shear Modulus = 8.0E07 KN/ m²
Poisson Ratio = 0.3
Mass density of steel = 7850 kg/m³
Gravitational acceleration = 9.81 m/s²
Coefficient of thermal expansion = 11.7E-06 /deg C

2.4 STEEL MATERIAL

Generally the following steel material or equivalents is proposed;

Circular hollow section to BS EN 10210 S275 or equal
Plates to BS EN 10025 S275 or equal

The choice of material used will be subject to availability of material.

Therefore for the analysis and design of the structure steel roof, assumed yield stress of 275 N/mm².

2.5 DESIGN METHOD

For the in-placed analysis there will be 2 limit state analysis, service limit state and the ultimate limit state.

The service limit state relate to performance under normal service conditions, e.g deflections. And ultimate limit state are related to safety and load carrying capacity of the structure where the specified loads is multiplied by relevant partial factor.

The design facility available in STAADPRO software shall be used to code check the members for member forces and moment due to the various loading combinations for both limit states.

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3. LOADING ASSUMPTION

The fabric roof and steel structure is subjected to the following loading:

a) Self weight of steel truss, column, bracing etc.
b) Dead load of catwalk
c) Prestress force in the membrane
d) Imposed live load on membrane roof and catwalk
e) Wind load

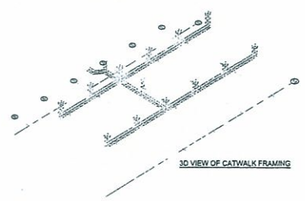
3.1 Self weight (SW)

Self weight of steel member = automatically calculated in the software

Self weight of fabric = 1.15 kg/ m²
(Insignificant so it is ignored in the membrane load)

3.2 Dead Load of catwalk (DCW)

The catwalk is supported from the 3D truss at 15 Groups of generally 4 point from the bottom chord at 1.7m x 1.275m apart each except at gridline X4 where it is the main access.



3D VIEW OF CATWALK FRAMING

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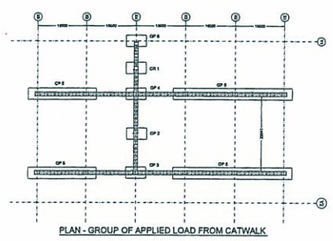
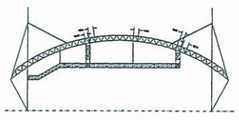


PLAN - GROUP OF APPLIED LOAD FROM CATWALK



SECTION VIEW AT GRIDLINE X4

The weight of catwalk with expanded mesh + M&E load assumed to be 150 kg/m run

Group 1 load per point = [(7.544+7.2)/2 x 150] /2 = 553 kg (5.53 KN)
Group 2 load per point = [(25/2) x 150] /2 = 937 kg (9.4 KN)
Group 3 load per point = [(16.5 + 6.25) x 150] /4 = 853 kg (8.53 KN)
Group 4 load per point = [(6.25 +16.5 + 7.55/2) x 150] /4 = 995 kg (9.95 KN)
Group 5 load per point = (16.5x150) /4 = 618 kg (6.2 KN)
Group 6 load per point = [(7.544/2 + 3.3) x 150] /2 = 530 kg (5.3 KN)

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3.3 Prestress Load (PRE)

Prestress is induced to increase membrane stiffness and obtain a stable form which is in equilibrium. In this case, a prestress force of 3KN/m is assumed.

3.4 Imposed Live Load

3.4.1) Membrane roof (VL)

Imposed live load on membrane roof = 0.25 KN/m²
This load is applied vertically downward to the fabric roof.

3.4.2) Catwalk (LCW)

For localized catwalk design, assumed live load = 1.5 KN/m²

For global analysis of the structure roof,
assumed live load applied simultaneously on all catwalk = 0.75 KN/m²

Using the same loading group as in the dead load case,
Live load = 0.75 KN/m² x 1.2m internal clearance of catwalk = 0.9 KN/m

Group 1 load per point = [(7.544+7.2)/2 x 0.9] /2 = 3.32 KN
Group 2 load per point = [(25/2) x 0.9] /2 = 5.62 KN
Group 3 load per point = [(16.5 + 6.25) x 0.9] /4 = 5.12 KN
Group 4 load per point = [(6.25 +16.5 + 7.55/2) x 0.9] /4 = 5.96 KN
Group 5 load per point = (16.5x0.9) /4 = 3.71 KN
Group 6 load per point = [(7.544/2 + 3.3) x 0.9] /2 = 3.18 KN

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3.5 Wind Load

Reference to Malaysian Standard MS 1553 :2002 : Code of Practice on wind loading for Building Structure

As Kuantan fall in Zone II as shown in Figure 3.1,
so basic wind speed of 32.5 m/s is adopted for the wind load calculation.

Figure 3.1 Peninsular Malaysia

Reference to CP3 : Chapter V : Part 2 1993 for dynamic wind pressure

Dynamic pressure due to wind is given by :

$q = k Vs^2$ N/m²

where k = 0.613

Vs = VxS1xS2xS3

Basic wind speed V = 32.5 m/s

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S1 - topography factor = 1.0
S2 - ground roughness, structure size and height above ground factor

Ground roughness = 3
Maximum height = 20 m
Class = C
Therefore S2 = 0.85

S3 – statistical factor = 1.0

Vs = 32.5x1.0x0.85x1.0 = 27.6 m/s
q = 0.613 x 27.6 x 27.6 = 467 N/m² say 0.5 KN/m²

Assumed the fabric roof is duopitch canopy of roof angle approx = 20 deg

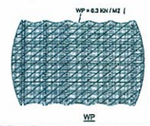
Therefore from Table 13,
Assumed the entrance and audience stand is 100% obstruct,

Solidity ratio Ø = 1 (obstruct)
Min Overall Cp = -1.3 and Max Overall Cp = +0.6

3.5.1) Wind Uplift (WU)
Wind uplift Wu = -1.3 x 0.5 = -0.65 KN/m²

WU

3.5.2) Wind Pressure (WP)
Wind pressure Wp = +0.6 x 0.5 = 0.3 KN/m²



WP

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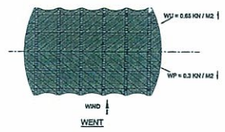
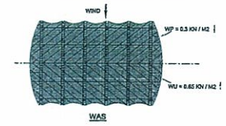
3.5.3) Wind from Entrance (WENT)
Wind Perpendicular to Grid line Y2



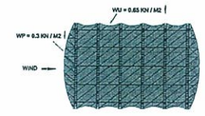
WENT

3.5.4) Audience stand (WAS)
Wind Perpendicular to Grid line Y1



WAS

3.5.5) Wind from Driving Pool Side when End bay is Wind Pressure (WDP_P)
Wind Perpendicular to Grid line X6



WDP_P

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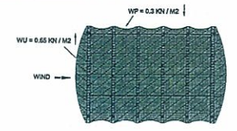
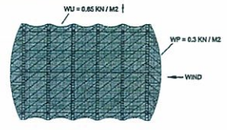
3.5.6) Wind from Driving Pool Side when End bay is Wind Uplift (WDP_U)
Wind Perpendicular to Grid line X6



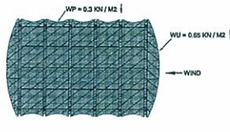
WDP_U

3.5.7) Wind from Score Board Side when End Bay is Wind Pressure (WSB_P)
Wind Perpendicular to Grid line X1



WSB_P

3.5.8) Wind from Score Board Side when End Bay is Wind Uplift (WSB_U)
Wind Perpendicular to Grid line X1



WSB_U

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4. BASIC LOAD CASES & LOAD COMBINATION

The membrane roof and steel structure system are analyzed based on the following load cases and load combinations.

4.1 BASIC LOAD CASES

LOAD 1 (SW) = Self weight of steel structure automatically calculated by the software

LOAD 2 (DCW) = Dead load of catwalk + ME load

LOAD 3 (LCW) = Imposed Live Load on catwalk

LOAD 4 (PRE) = Prestress load from membrane roof WITHOUT any external load

The following external load is applied on to a stable and prestressed membrane form. So the following load case actually consist of prestressing load.

LOAD 5 (VL) = Imposed Live Load on membrane roof

LOAD 6 (WU) = Wind Uplift on membrane roof

LOAD 7 (WP) = Wind Pressure on membrane roof

LOAD 8 (WENT) = Wind from Entrance side (Y2)

LOAD 9 (WAS) = Wind from Audience Stand (Y1)

LOAD 10 (WDP_P) = Wind from Driving Pool side (X6), End bay wind pressure

LOAD 11 (WDP_U) = Wind from Driving Pool side (X6), End bay wind uplift

LOAD 12 (WSB_P) = Wind from Score Board side (X1), End bay wind pressure

LOAD 13 (WSB_U) = Wind from Score Board side (X1), End bay wind uplift

And all the above load case are unfactored load.

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4.2 SERVICE LOAD COMBINATION

LOAD 100 = SW + DCW + PRE
LOAD 101 = SW + DCW + LCW + VL
LOAD 102 = SW + DCW + WU
LOAD 103 = SW + DCW + WP
LOAD 104 = SW + DCW + WENT
LOAD 105 = SW + DCW + WAS
LOAD 106 = SW + DCW + WDP_P
LOAD 107 = SW + DCW + WDP_U
LOAD 108 = SW + DCW + WSB_P
LOAD 109 = SW + DCW + WSB_U

4.3 ULTIMATE LOAD COMBINATION

LOAD 200 = 1.4(SW + DCW+PRE)
LOAD 201 = 1.4(SW+DCW) + 1.6(LCW+VL)
LOAD 202 = 1.0(SW + DCW) + 1.4WU
LOAD 203 = 1.2(SW + DCW) +1.2WP
LOAD 204 = 1.2(SW + DCW) + 1.2(WENT)
LOAD 205 = 1.2(SW + DCW) + 1.2(WAS)
LOAD 206 = 1.2(SW + DCW) + 1.2(WDP_P)
LOAD 207 = 1.0(SW + DCW) + 1.4(WDP_U)
LOAD 208 = 1.2(SW + DCW) + 1.2(WSB_P)
LOAD 209 = 1.0(SW + DCW) + 1.4(WSB_U)

The design of the member sizes are based on the above load combination.

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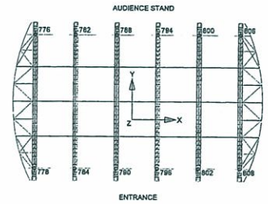
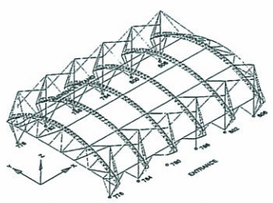
5. BOUNDARY CONDITION

The steel structure is supported on top of 12 nos of RC stump at spacing of 16.5m x 54m to each other. The mast base supports are assumed to be fixed condition which restrained in X, Y direction horizontally and Z direction vertically and also restrained in the X, Y and Z moment.



SUPPORT NODE NUMBER LAYOUT PLAN



SUPPORT NODE NUMBER 3D VIEW

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6. DESIGN OF STEEL MEMBERS

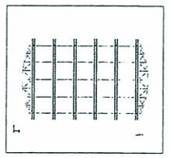
The design of the member size complied to BS5950 where the ultimate strength is used and the relevant load factor is applied to the imposed loading.

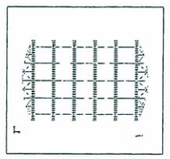
For deciding the correct pipe size for every member, compression will be the deciding factor and the compression capacity depends on the slenderness ratio (l/r) and the tension capacity only depends on the sectional area.

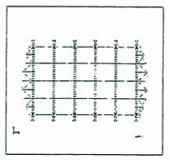
The final member size for individual member are determined from the worst force and moment from the ultimate load combination.

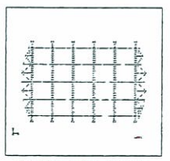
The software is able to check the sizes assigned based on the output from the worst load combination. The member sizes layout is attached for reference. The member design output refers to Appendix.

6.1 MEMBER SIZES LAYOUT


BOTTOM CURVED CHORD - 219Ø X 6


HORIZONTAL BOTTOM - 89Ø X 4


HORIZONTAL BOTTOM & DIAGONAL - 139Ø X 6


HORIZONTAL BOTTOM - 139Ø X 8

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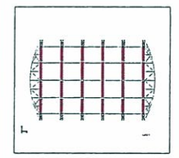
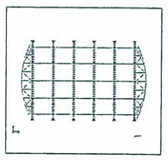
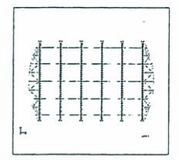
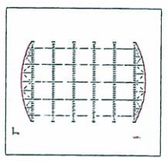
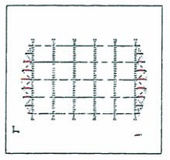
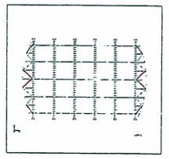

DIAGONAL - 89Ø X 4


DIAGONAL - 114Ø X 4.5


TOP CURVED CHORD - 219Ø X 6


EDGE CHORD - 273Ø X 9.5


EDGE BRACE - 168.3Ø X 6


EDGE DIAGONAL BRACE - 168.3Ø X 10

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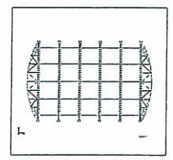
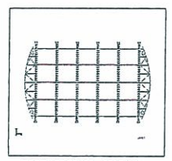
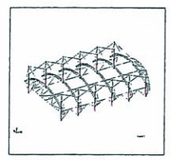


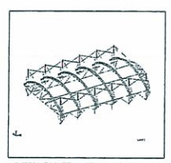
EDGE DIAGONAL BRACE - 168.3Ø X 8



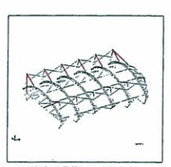
TIE BTW 3D TRUSS - 273Ø X 8



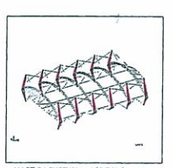
LOWER MAST - 609Ø X 16



INTERMEDIATE MAST - 406.4Ø X 12.5



MAST FRONT STAY - 219Ø X 9



MAST BACKSTAY - 168Ø X 6

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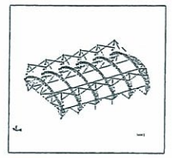
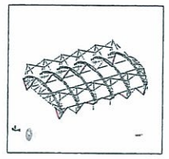
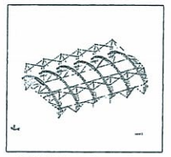


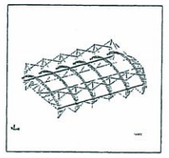
TIE BETWEEN MAST BACKSTAY - 73Ø X 5



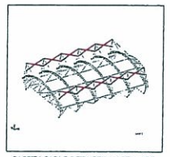
LONGITUDINAL BRACE - 219Ø X 6



LONGITUDINAL BRACE - 219Ø X 9



LONGITUDINAL TIE - 273Ø X 9



SAFETY CABLE BETWEEN MAST - 16Ø

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7. DESIGN OF CABLES

7.1 STABILIZING CABLE AT TOP OF MAST

From the steel structure analysis output,

maximum axial force = 30 KN

Proposed to use 16mm Ø 1x19 galvanized steel wire rope

Min breaking load = 211 KN >>30 KN

Therefore is ok to use 16mm Ø wire rope.

7.2 MEMBRANE BORDER CABLE

From the membrane static output for the internal panel,

Prestress load case , cable force = 47 KN
Imposed live load, cable force = 20 KN
Wind Uplift case, cable force = 250 KN
Wind pressure case, cable force = 35 KN
Wind from Entrance (one side uplift & one side pressure) = 184 KN
Wind from grandstand (one side pressure & one side uplift) = 184 KN

maximum unfactored tension force in the border cable = 250 KN from WU

Proposed to use 28mm Ø 6 x 37 IWRC galvanized steel wire rope,

Min breaking load = 49600 kg = 506 KN

Safety factor = 506 / 250 = 2.024

Therefore is ok to use 28mm Ø wire rope.

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8. DESIGN OF HOLDING DOWN BOLTS

Reaction summary extracted from analysis output as shown,

	Node	LC	Horizontal FX (kN)	Horizontal FY (kN)	Vertical FZ (kN)	Moment MX (kNm)	Moment MY (kNm)	Moment MZ (kNm)
Max FX	800	2008:1.2(DW+DOV)+1.2(WSB_P)	232.883	97.654	-23.855	-106.587	62.373	-22.129
Min FX	782	2006:1.2(DW+DOV)+1.2(WDP_P)	-232.596	97.637	-23.505	-106.571	-60.596	29.366
Max FY	790	2011:1.4(DW+DOV)+1.4(CDW+VL)	-13.887	228.489	507.655	-773.536	-35.192	3.051
Min FY	788	2015:1.4(DW+DOV)+1.4(CDW+VL)	-26.716	-228.737	566.764	248.624	-4.373	-1.534
Max FZ	788	2015:1.4(DW+DOV)+1.4(CDW+VL)	-26.716	-228.737	566.764	248.624	-4.373	-1.534
Min FZ	779	2002:(DW+DOV)+1.4WU	-62.109	160.895	-133.775	-95.890	9.324	62.486
Max MX	788	2041:1.2(DW+DOV)+1.2WEH	-42.871	-124.249	88.438	529.266	-7.799	-0.007
Min MX	790	2011:1.4(DW+DOV)+1.4(CDW+VL)	-13.887	228.489	507.655	-773.536	-35.192	3.051
Max MY	802	2008:1.2(DW+DOV)+1.2(WSB_P)	228.207	-97.765	13.835	171.829	278.833	22.013
Min MY	784	2006:1.2(DW+DOV)+1.2(WDP_P)	-229.844	-97.713	14.756	171.662	-278.384	-19.787
Max MZ	808	2041:1.2(DW+DOV)+1.2(WSB_P)	63.237	34.256	-63.760	-47.260	-27.035	124.287
Min MZ	806	2008:1.2(DW+DOV)+1.2(WSB_P)	63.708	-34.208	-65.863	89.498	-29.237	-124.972

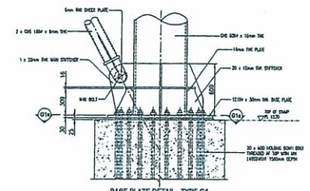
From the reaction forces summary output, max reaction forces are;

Fx = 233 / -233 KN
Fy = 229 / -229 KN
Fz = 567 / -334 KN

Mx = 530 / -774 KNm
My = 279 / -279 KNm
Mz = 125 / -125 KNm

Note : +ve Fz is the compression and -ve Fz is the tensile force

Proposed 20 x M30 grade 8.8 in a circular arrangement at 1m diameter, and assumed only 4 bolts on each side at 0.89m apart are resisting;



BASE PLATE DETAIL - TYPE G1

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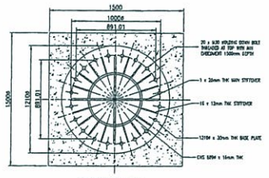

SECTION G1a - G1a

Ft due to Mx per bolt = 774 / (4x0.89) = 217.4 KN
Direct Ft per bolt =334 /20 = 16.7 KN
Total tensile per bolt Ft = 217.4 + 16.7 = 234.1 KN

Fs due to Mz per bolt = 125 / (4x0.89) = 35.1 KN
Direct Fs per bolt = $(233^2 + 229^2)^{½}$ /20 = 16.3 KN
Total Fs per bolt = 35.1 + 16.3 = 51.4 KN

Tensile strength of Grade 8.8 bolt = 450 N/mm²
Shear strength of Grade 8.8 bolt = 375 N/mm²

ft = 234.1x10e3 / 561 = 417 N/mm² < 450 N/mm² OK
fs = 51.4x10e3 / 561 = 92 N/mm² < 375 N/mm² OK

Combined stress check,
417/450 + 92 /375 = 1.172 < 1.4 OK

Embedment length check,

fbu = β $(fcu)^{½}$

Where fbu = design ultimate anchorage bond stress
β = 0.28 for plain bar
fcu = 35 N/mm² for concrete grade

fbu = 0.28 $(35)^{½}$ = 1.656

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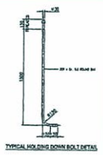
anchorage force / (Π x Ø x L) = fbu

embedment length L = anchorage force / (Π x Ø x fbu)
= 234.1x10e3 / (Π x 30 x 1.656)
= 1500 mm

Therefore provide minimum 1500mm embedment length is OK.



TYPICAL HOLDING DOWN BOLT DETAIL

Base plate thickness check

Assumed the plate is bend in double curvature over the width of 590mm for 4 bolts and ignored the 16mm and 20mm thk stiffener plate,

M = 234.1 x (1.0- 0.609)/2 x ½ = 22.88 KNm

$Z_{provide}$ = 1/6 x 590 x 30^2 = 88500 mm^3

fb = 22.88x10e6 / 88500 = 258 N/mm² < 275 N/mm² OK

Therefore use 30mm thk base plate with stiffener plate is OK.

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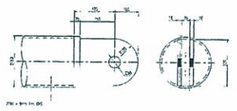
9. DESIGN OF PIN CONNECTIONS

9.1 MAST FRONT HANGER

Max axial force as extracted from analysis output = 217 KN



END DETAIL

Proposed to use 1 x M48 grade 8.8 bolt with 16mm thick tongue plate,

Tensile strength of Grade 8.8 bolt = 450 N/mm²
Shear strength of Grade 8.8 bolt = 375 N/mm²

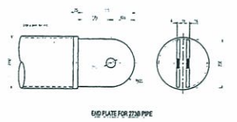
fs = [(217/2x1e3)] /1470 = 74 N/mm² < 375 N/mm² OK

bearing stress of tongue plate, fbs = [(217/2)x1e3] / (48x16)
= 141 N/mm² < 460 N/mm² OK

Where 460 N/mm² is the bearing strength for S275 plate.

9.2 TIE BETWEEN 3D TRUSS

Max axial force as extracted from analysis output = 323 KN



END PLATE FOR 273Ø PIPE

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Proposed to use 1 x M48 grade 8.8 bolt with 16mm thick tongue plate,

Tensile strength of Grade 8.8 bolt = 450 N/mm²
Shear strength of Grade 8.8 bolt = 375 N/mm²

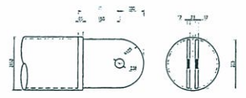
fs = [(323/2)x1e3] / 1470 = 110 N/mm² < 375 N/mm² OK

bearing stress of tongue plate, fbs = [(323/2)x1e3] / (48x16)
= 210 N/mm² < 460 N/mm² OK

Where 460 N/mm² is the bearing strength for S275 plate.

9.3 BRACE AT LOWER MAST

Max axial force as extracted from analysis output = 365 KN



END DETAIL

Proposed to use 1 x M36 grade 8.8 bolt with 12mm thick tongue plate,

Tensile strength of Grade 8.8 bolt = 450 N/mm²
Shear strength of Grade 8.8 bolt = 375 N/mm²

fs = [(365/2)x10e3] / 817 = 224 N/mm² < 375 N/mm² OK

bearing stress of tongue plate, fbs = [(365/2)x1e3] / (36x12)
= 422 N/mm² < 460 N/mm² OK

Where 460 N/mm² is the bearing strength for S275 plate.

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APPENDIX A

STAADPRO INPUT & OUTPUT DATAS

Q326-Kuantan

Q326-KSP-R4b-Deg.std a1

```
STAAD SPACE DXF IMPORT OF C-B.DXF
START JOB INFORMATION
ENGINEER DATE 17-Dec-11
JOB NAME Wisma Belia Swimming Pool
JOB NO TPL40581
JOB REV R4b-FAB2
JOB COMMENT 1. Basic wind Speed changed from 38.5 m/s to 32.5 m/s.
JOB COMMENT 2. R4b - full wind pressure & uplift for LC 10 to13 - 090312
*JOB COMMENT 3. R4b-size = column mast use API ys 240
JOB COMMENT 4. R4b-FAB = break mast intesect at top chord,update purchase size
JOB COMMENT 4. R4b-FAB = revised catwalk loading - 23Apr12
JOB COMMENT 5. R4b-FAB = Move backstay X2Y2, X5Y2 to 1.2m point - 030512
JOB COMMENT 6. R4b-FAB1 = ADJUST SIZES AT EDGE CANOPY FOR NO 13 & 14 - 070512
JOB COMMENT 7. R4b-FAB2 = Adjust col ht, catwalk hanging pt - 200612
ENGINEER NAME TSM
JOB CLIENT Majlis Perbandaran Kuantan
ENGINEER NAME TSM
JOB REF Fabric R5
JOB PART wind speed 32.5 m/s
CHECKER NAME TSM
CHECKER DATE 07-Mar-12
END JOB INFORMATION
SET Z UP
INPUT WIDTH 79
UNIT MMS KN
JOINT COORDINATES
1 -850 -5000 9000; 2 -850 -3384.33 10290; 3 -850 -1716.72 11512.2;
4 -850 0 12664.4; 5 -850 1517.22 13600; 6 -850 3066.82 14481;
7 -850 4646.83 15306.1; 8 -850 6255.26 16074.5; 9 -850 7890.05 16785;
10 -850 9549.13 17436.8; 11 -850 11230.4 18029; 12 -850 12931.7 18560.9;
13 -850 14650.9 19031.9; 14 -850 16385.7 19441.3; 15 -850 18134.1 19788.6;
16 -850 19893.7 20073.3; 17 -850 21662.4 20295.1; 18 -850 23437.8 20453.8;
19 -850 25217.8 20549.1; 20 -850 27000 20580.9; 21 -850 28782.2 20549.1;
22 -850 30562.2 20453.8; 23 -850 32337.6 20295.1; 24 -850 34106.3 20073.3;
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Q326-KSP-R4b-Deg.std a3

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1918 349 555; 1919 347 555; 1920 386 555; 1921 395 558; 1922 432 558;
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1934 24 531; 1935 28 535; 1936 32 539; 1937 36 543; 1938 410 488; 1939 406 484;
1940 402 480; 1941 398 476; 1942 394 472; 1943 414 492; 1944 418 496;
1945 422 500; 1946 426 504; 1947 20 523; 1948 523 12; 1949 12 515; 1950 515 4;
1951 20 531; 1952 531 28; 1953 28 539; 1954 539 36; 1955 410 484; 1956 484 402;
1957 402 476; 1958 476 394; 1959 410 492; 1960 492 418; 1961 418 500;
1962 500 426; 1963 59 137; 1964 67 145; 1965 51 129; 1966 98 215; 1967 106 223;
1968 90 207; 1969 176 293; 1970 184 301; 1971 168 285; 1972 254 371;
1973 262 379; 1974 246 363; 1975 332 449; 1976 340 457; 1977 324 441;
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2013 557 772; 2014 779 811; 2015 780 812; 2016 785 813; 2017 786 814;
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2033 664 792; 2034 669 797; 2035 700 798; 2036 705 803; 2037 736 804;
2038 741 809; 2039 772 810; 2040 913 783; 2041 914 801; 2042 777 823;
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2088 196 853; 2089 816 883; 2090 818 885; 2091 817 871; 2092 274 869;
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2133 876 313; 2134 877 878; 2135 878 156; 2136 879 880; 2137 880 117;
2138 881 882; 2139 882 234; 2140 883 884; 2141 884 195; 2142 885 886;
2143 886 312; 2144 887 888; 2145 888 273; 2146 889 890; 2147 890 390;
2148 891 892; 2149 892 351; 2150 778 893; 2151 40 894; 2152 39 901;
2153 776 902; 2154 913 896; 2155 118 895; 2156 117 904; 2157 782 903;
2158 843 157; 2159 196 843; 2160 195 906; 2161 788 905; 2162 844 235;
2163 274 844; 2164 273 908; 2165 794 907; 2166 914 898; 2167 352 897;
2168 351 910; 2169 800 909; 2170 808 900; 2171 430 899; 2172 429 912;
2173 806 911; 2174 893 1; 2175 894 778; 2176 895 913; 2177 896 79;
2178 897 914; 2179 898 313; 2180 899 808; 2181 900 391; 2182 901 776;
2183 902 78; 2184 903 156; 2185 904 782; 2186 905 234; 2187 906 788;
2188 907 312; 2189 908 794; 2190 909 390; 2191 910 800; 2192 911 468;
2193 912 806; 2194 845 848; 2195 846 847; 2196 849 852; 2197 850 851;
2198 853 856; 2199 854 855; 2200 857 860; 2201 858 859; 2202 862 864;
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2213 881 883; 2214 886 888; 2215 885 887; 2216 890 892; 2217 889 891;
2218 893 894; 2219 895 896; 2220 897 898; 2221 899 900; 2222 901 902;
2223 903 904; 2224 905 906; 2225 907 908; 2226 909 910; 2227 911 912;
2228 777 511; 2229 775 543; 2230 807 472; 2231 805 504; 2232 778 823;
2233 913 823; 2234 776 824; 2235 782 824; 2236 778 511; 2237 776 543;
2238 913 825; 2239 843 825; 2240 782 826; 2241 788 826; 2242 843 827;
2243 844 827; 2244 788 828; 2245 794 828; 2246 844 829; 2247 914 829;
2248 794 830; 2249 800 830; 2250 914 831; 2251 808 831; 2252 800 832;
2253 806 832; 2254 808 472; 2255 806 504; 2256 811 785; 2257 813 779;
2258 812 786; 2259 814 780; 2260 813 791; 2261 815 785; 2262 814 792;
2263 816 786; 2264 815 797; 2265 817 791; 2266 816 798; 2267 818 792;
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2273 821 803; 2274 820 810; 2275 822 804;
*********************************************************************
DEFINE MATERIAL START
ISOTROPIC STEEL
E 205
POISSON 0.3
DENSITY 7.68195e-008
ALPHA 1.2e-005
DAMP 0.03
END DEFINE MATERIAL
*********************************************************************
** MEMBER SIZES
*********************************************************************
START USER TABLE
TABLE 1
UNIT METER KN
PIPE
CHS114X10.0
0.114 0.094 0.00328 0.00328
CHS609X16
0.609 0.577 0.029807 0.029807
CHS114X8.0
0.114 0.098 0.00267 0.00267
CHS219X9.0
0.219 0.201 0.005937 0.005937
CHS88.9X5.5
0.0889 0.0779 0.001441 0.001441
CHS168.3X7
0.1683 0.1543 0.00354 0.00354
CHS168.3X11
0.1683 0.1463 0.005435 0.005435
CHS177.8X8
0.1778 0.1618 0.004267 0.004267
CHS273X9.5
0.273 0.254 0.007864 0.007864
CHS273X9.0
0.273 0.255 0.007464 0.007464
CHS73X5.16
0.073 0.06268 0.001099 0.001099
END
*********************************************************************
UNIT MMS KN
MEMBER PROPERTY BRITISH
1 TO 456 TABLE ST PIP2196.0
MEMBER PROPERTY JAPANESE
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538 TO 542 544 TO 546 548 TO 550 552 TO 554 556 TO 558 560 TO 562 564 TO 566 -
568 TO 572 575 TO 583 585 TO 591 593 TO 599 601 TO 603 605 TO 610 -
612 TO 620 622 TO 628 630 TO 636 638 TO 640 642 TO 647 649 TO 657 -
659 TO 665 667 TO 673 675 TO 677 679 TO 684 686 TO 694 696 TO 702 -
704 TO 710 712 TO 714 716 TO 721 723 TO 727 729 TO 731 733 TO 735 -
737 TO 739 741 TO 743 745 TO 747 749 TO 751 753 TO 756 -
757 TABLE ST PIP89.1X4.0
MEMBER PROPERTY BRITISH
543 547 551 555 559 563 573 584 592 600 621 629 637 658 666 674 695 703 711 -
728 732 736 740 744 748 758 TABLE ST PIP1395.0
MEMBER PROPERTY JAPANESE
994 TO 1008 1011 1012 1016 TO 1023 1025 TO 1028 1032 TO 1045 1048 1049 1053 -
1054 TO 1060 1062 TO 1065 1068 TO 1082 1085 1086 1090 TO 1097 1099 TO 1102 -
1106 TO 1119 1122 1123 1127 TO 1134 1136 TO 1139 1142 TO 1156 1159 1160 1164 -
1165 TO 1171 1173 TO 1176 1180 TO 1193 1196 1197 1201 TO 1208 1210 TO 1213 -
1216 TO 1230 1233 1234 1238 TO 1245 1247 TO 1250 1254 TO 1267 1270 1271 1275 -
1276 TO 1282 1284 TO 1287 1290 TO 1304 1307 1308 1312 TO 1319 1321 TO 1324 -
1328 TO 1341 1344 1345 1349 TO 1356 1358 TO 1361 1364 TO 1378 1381 1382 1386 -
1387 TO 1393 1395 TO 1398 1402 TO 1415 1418 1419 1423 TO 1430 1432 TO 1435 -
1438 TO 1452 1455 1456 1460 TO 1467 1469 TO 1472 1476 TO 1489 1492 1493 1497 -
1498 TO 1504 1506 TO 1509 1512 TO 1526 1529 1530 1534 TO 1541 1543 TO 1546 -
1550 TO 1563 1566 1567 1571 TO 1578 1580 TO 1583 1586 TO 1600 1603 1604 1608 -
1609 TO 1615 1617 TO 1620 1624 TO 1637 1640 1641 1645 TO 1652 1654 TO 1657 -
1660 TO 1674 1677 1678 1682 TO 1689 1691 TO 1694 1698 TO 1711 1714 1715 1719 -
1720 TO 1726 1728 TO 1731 1734 TO 1748 1751 1752 1756 TO 1763 1765 TO 1768 -
1772 TO 1785 1788 1789 1793 TO 1800 1802 TO 1805 1808 TO 1822 1825 1826 1830 -
1831 TO 1837 1839 TO 1842 1846 TO 1859 1862 1863 1867 TO 1874 1876 TO 1878 -
1879 TABLE ST PIP89.1X4.0
MEMBER PROPERTY JAPANESE
993 1010 1013 1015 1031 1047 1050 1052 1067 1084 1087 1089 1105 1121 1124 -
1126 1141 1158 1161 1163 1179 1195 1198 1200 1215 1232 1235 1237 1253 1269 -
1272 1274 1289 1306 1309 1311 1327 1343 1346 1348 1363 1380 1383 1385 1401 -
1417 1420 1422 1437 1454 1457 1459 1475 1491 1494 1496 1511 1528 1531 1533 -
1549 1565 1568 1570 1585 1602 1605 1607 1623 1639 1642 1644 1659 1676 1679 -
1681 1697 1713 1716 1718 1733 1750 1753 1755 1771 1787 1790 1792 1807 1824 -
1827 1829 1845 1861 1864 1866 TABLE ST PIP89.1X4.0
MEMBER PROPERTY JAPANESE
1009 1014 1024 1029 1030 1046 1051 1061 1066 1083 1088 1098 1103 1104 1120 -
1125 1135 1140 1157 1162 1172 1177 1178 1194 1199 1209 1214 1231 1236 1246 -
1251 1252 1268 1273 1283 1288 1305 1310 1320 1325 1326 1342 1347 1357 1362 -
1379 1384 1394 1399 1400 1416 1421 1431 1436 1453 1458 1468 1473 1474 1490 -
1495 1505 1510 1527 1532 1542 1547 1548 1564 1569 1579 1584 1601 1606 1616 -
1621 1622 1638 1643 1653 1658 1675 1680 1690 1695 1696 1712 1717 1727 1732 -
1749 1754 1764 1769 1770 1786 1791 1801 1806 1823 1828 1838 1843 1844 1860 -
1865 1875 1880 TABLE ST PIP114.3X4.5
MEMBER PROPERTY BRITISH
783 TO 992 TABLE ST PIP2196.0
MEMBER PROPERTY BRITISH
1881 TO 1928 TABLE ST PIP1395.0
759 TO 782 TABLE ST PIP1398.0
457 TO 537 567 574 604 611 641 648 678 685 715 722 752 TABLE ST PIP2736.0
1930 1932 TO 1934 1936 1937 1939 1941 TO 1943 1945 1946 TABLE ST PIP1686.0
MEMBER PROPERTY BRITISH
1929 1931 1935 1938 1940 1944 TABLE ST PIP1686.0
1947 1950 1951 1954 1955 1958 1959 1962 TABLE ST PIP16810.0
1948 1949 1952 1953 1956 1957 1960 1961 TABLE ST PIP1688.0
1963 TO 1977 TABLE ST PIP2738.0
1978 TO 2013 2026 TO 2041 UPTABLE 1 CHS609X16
2014 TO 2025 TABLE ST PIP40612.5
2062 TO 2077 UPTABLE 1 CHS219X9.0
2232 2234 2236 TO 2249 2251 2253 TO 2255 TABLE ST PIP2196.0
2228 TO 2231 2233 2235 2250 2252 TABLE ST PIP2198.0
2042 TO 2061 TABLE ST PIP2736.0
****
MEMBER PROPERTY BRITISH
2150 TO 2193 TABLE ST PIP1686.0
2078 TO 2149 TABLE ST PIP1686.0
MEMBER PROPERTY BRITISH
2194 TO 2227 UPTABLE 1 CHS73X5.16
MEMBER PROPERTY DUTCH
2256 TO 2275 TABLE ST RD16
****
CONSTANTS
MATERIAL STEEL ALL
****
```

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SUPPORTS
776 778 782 784 788 790 794 796 800 802 806 808 FIXED
*****
MEMBER TENSION
2256 TO 2275
MEMBER TRUSS
1929 TO 1977 2062 TO 2077 2158 2159 2162 2163 2232 TO 2255
*********************************************************************
START GROUP DEFINITION
MEMBER
_FJ-168X10 1929 1931 1935 1938 1940 1944
_FJ-168X8 1930 1932 1934 1936 1939 1941 1943 1945
_FJ-219CAN 1933 1937 1942 1946
_MLBS-UPPER 2150 TO 2193
_FJ-DIA114 1014 1030 1051 1088 1104 1125 1162 1178 1199 1236 1252 1273 1310 -
1326 1347 1384 1400 1421 1458 1474 1495 1532 1548 1569 1606 1622 1643 1680 -
1696 1717 1754 1770 1791 1828 1844 1865
_FJ-TOP219 789 800 811 824 835 846 859 870 881 894 905 916 929 940 951 964 -
975 986
_FJ-BOT219 9 19 30 47 57 68 85 95 106 123 133 144 161 171 182 199 209 220 -
237 247 258 275 285 296 313 323 334 351 361 372 389 399 410 427 437 448
_BRACE-219X6 2232 2234 2238 TO 2249 2251 2253
_CW-SUPP 9 10 24 25 47 48 62 63 85 86 100 101 123 124 138 139 161 162 169 -
176 177 181 199 200 207 214 215 219 237 238 252 253 275 276 290 291 313 314 -
328 329 351 352 366 367 389 390 404 405 427 428 442 443
JOINT
END GROUP DEFINITION
*********************************************************************
UNIT METER KN
MEMBER RELEASE
2103 END MX MY MZ
2080 START MX MY MZ
2105 END MX MY MZ
2079 START MX MY MZ
2109 END MX MY MZ
2084 START MX MY MZ
2083 START MX MY MZ
2107 END MX MY MZ
2088 START MX MY MZ
2113 END MX MY MZ
2087 START MX MY MZ
2111 END MX MY MZ
2119 END MX MY MZ
2121 END MX MY MZ
2123 END MX MY MZ
2125 END MX MY MZ
2100 START MX MY MZ
2117 END MX MY MZ
2081 START MX MY MZ
2078 START MX MY MZ
2098 START MX MY MZ
2101 START MX MY MZ
2115 END MX MY MZ
2099 START MX MY MZ
2092 START MX MY MZ
2129 END MX MY MZ
2096 START MX MY MZ
2133 END MX MY MZ
2127 END MX MY MZ
2091 START MX MY MZ
2131 END MX MY MZ
2095 START MX MY MZ
2135 END MX MY MZ
2082 START MX MY MZ
2137 END MX MY MZ
2085 START MX MY MZ
2139 END MX MY MZ
2141 END MX MY MZ
2086 START MX MY MZ
2089 START MX MY MZ
2143 END MX MY MZ
2145 END MX MY MZ
2090 START MX MY MZ
2093 START MX MY MZ
2147 END MX MY MZ
```

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```
2149 END MX MY MZ
2097 START MX MY MZ
2094 START MX MY MZ
2174 END MX MY MZ
2151 START MX MY MZ
2155 START MX MY MZ
2177 END MX MY MZ
2167 START MX MY MZ
2179 END MX MY MZ
2171 START MX MY MZ
2181 END MX MY MZ
2152 START MX MY MZ
2183 END MX MY MZ
2184 END MX MY MZ
2156 START MX MY MZ
2186 END MX MY MZ
2160 START MX MY MZ
2188 END MX MY MZ
2164 START MX MY MZ
2190 END MX MY MZ
2168 START MX MY MZ
2192 END MX MY MZ
2172 START MX MY MZ
2150 START MX MY MZ
2175 END MX MY MZ
2176 END MX MY MZ
2154 START MX MY MZ
2178 END MX MY MZ
2166 START MX MY MZ
2180 END MX MY MZ
2170 START MX MY MZ
2182 END MX MY MZ
2153 START MX MY MZ
2157 START MX MY MZ
2185 END MX MY MZ
2161 START MX MY MZ
2187 END MX MY MZ
2165 START MX MY MZ
2189 END MX MY MZ
2169 START MX MY MZ
2191 END MX MY MZ
2173 START MX MY MZ
2193 END MX MY MZ
*********************************************************************
LOAD 1 LOADTYPE Dead  TITLE LOAD CASE 1 - SW
SELFWEIGHT Z -1
*********************************************************************
LOAD 2 LOADTYPE Dead  TITLE LOAD CASE 2 - DCW
JOINT LOAD
186 225 FZ -5.53
MEMBER LOAD
169 207 CON GZ -9.4 1.44
162 200 CON GZ -8.53 1.08
161 199 CON GZ -8.53 1.51
177 215 CON GZ -9.95 1.04
176 214 CON GZ -9.95 1.53
63 101 139 253 291 329 367 443 CON GZ -6.2 1.05
62 100 138 252 290 328 366 442 CON GZ -6.2 1.53
48 86 124 238 276 314 352 428 CON GZ -6.2 1.08
47 85 123 237 275 313 351 427 CON GZ -6.2 1.51
2052 CON GZ -5.3 0.6375
2049 CON GZ -5.3 7.6125
*********************************************************************
LOAD 3 LOADTYPE Live  TITLE LOAD CASE 3 - LCW
JOINT LOAD
186 225 FZ -3.32
MEMBER LOAD
169 207 CON GZ -5.62 1.44
162 200 CON GZ -5.12 1.08
161 199 CON GZ -5.12 1.51
177 215 CON GZ -5.96 1.04
176 214 CON GZ -5.96 1.53
63 101 139 253 291 329 367 443 CON GZ -3.71 1.05
62 100 138 252 290 328 366 442 CON GZ -3.71 1.53
48 86 124 238 276 314 352 428 CON GZ -3.71 1.08
```

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47 85 123 237 275 313 351 427 CON GZ -3.71 1.51
2052 CON GZ -3.18 0.637
2049 CON GZ -3.18 7.612
*********************************************************************
LOAD 4 LOADTYPE None  TITLE LOAD CASE 4 - PRE
JOINT LOAD
***R3-EDGE-DPOOL
1 FX -0.15 FY 0.67 FZ 0.44
39 FX -0.15 FY -0.67 FZ 0.44
511 FX 3.96 FY 2.66 FZ 3.16
515 FX 4.87 FY 0.65 FZ 2.03
519 FX 4.96 FY 1.45 FZ 2.1
523 FX 5.18 FY 0.01 FZ 1.67
527 FX 5.24 FY 0 FZ 1.78
531 FX 5.18 FY -0.01 FZ 1.67
535 FX 4.96 FY -1.45 FZ 2.1
539 FX 4.87 FY -0.65 FZ 2.03
543 FX 3.96 FY -2.66 FZ 3.16
2 FX -4.71 FY -0.01 FZ -2.72
3 FX -4.14 FY 0 FZ -2.23
4 FX -4.87 FY 0 FZ -2.52
5 FX -4.31 FY 0 FZ -2.2
6 FX -5.2 FY -0.01 FZ -2.73
7 FX -4.64 FY 0.01 FZ -2.42
8 FX -4.87 FY 0 FZ -2.55
9 FX -5.31 FY 0 FZ -2.79
10 FX -4.96 FY 0 FZ -2.6
11 FX -5.07 FY 0 FZ -2.66
12 FX -5.42 FY 0 FZ -2.86
13 FX -5.35 FY -0.01 FZ -2.82
14 FX -5.27 FY -0.01 FZ -2.78
15 FX -5.33 FY 0 FZ -2.81
16 FX -5.37 FY 0 FZ -2.84
17 FX -5.65 FY 0.01 FZ -2.99
18 FX -5.46 FY -0.01 FZ -2.89
19 FX -5.43 FY 0.01 FZ -2.87
20 FX -5.43 FY 0 FZ -2.87
21 FX -5.43 FY -0.01 FZ -2.87
22 FX -5.46 FY 0.01 FZ -2.89
23 FX -5.65 FY -0.01 FZ -2.99
24 FX -5.37 FY 0 FZ -2.84
25 FX -5.33 FY 0 FZ -2.81
26 FX -5.27 FY 0.01 FZ -2.78
27 FX -5.35 FY 0.01 FZ -2.82
28 FX -5.42 FY 0 FZ -2.86
29 FX -5.07 FY 0 FZ -2.66
30 FX -4.96 FY 0 FZ -2.6
31 FX -5.31 FY 0 FZ -2.79
32 FX -4.87 FY 0 FZ -2.55
33 FX -4.64 FY -0.01 FZ -2.42
34 FX -5.2 FY 0.01 FZ -2.73
35 FX -4.31 FY 0 FZ -2.2
36 FX -4.87 FY 0 FZ -2.52
37 FX -4.14 FY 0 FZ -2.23
38 FX -4.71 FY 0.01 FZ -2.72
508 FX 3.59 FY 2.34 FZ 3.87
509 FX 4.2 FY 1.99 FZ 3.62
510 FX 3.6 FY 1.33 FZ 2.5
512 FX 5.03 FY 1.37 FZ 2.99
513 FX 4.44 FY 1.64 FZ 2.86
514 FX 4.8 FY 2.36 FZ 3.12
516 FX 4.81 FY 2.36 FZ 2.8
517 FX 5.23 FY 0.63 FZ 2.4
518 FX 4.98 FY 1.53 FZ 2.4
520 FX 5.26 FY 0 FZ 2.02
521 FX 5.4 FY 0.28 FZ 2.24
522 FX 5.11 FY 2.72 FZ 2.45
524 FX 5.34 FY 0 FZ 2
525 FX 5.54 FY -0.01 FZ 2.2
526 FX 5.24 FY 0.01 FZ 1.96
528 FX 5.24 FY -0.01 FZ 1.96
529 FX 5.54 FY 0.01 FZ 2.2
530 FX 5.34 FY 0 FZ 2
532 FX 5.11 FY -2.72 FZ 2.45
533 FX 5.4 FY -0.28 FZ 2.24
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Q326-KSP-R4b-Deg.std

```
534 FX 5.26 FY 0 FZ 2.02
536 FX 4.98 FY -1.53 FZ 2.4
537 FX 5.23 FY -0.63 FZ 2.4
538 FX 4.81 FY -2.36 FZ 2.8
540 FX 4.8 FY -2.36 FZ 3.12
541 FX 4.44 FY -1.64 FZ 2.86
542 FX 5.03 FY -1.37 FZ 2.99
544 FX 3.6 FY -1.33 FZ 2.5
545 FX 4.2 FY -1.99 FZ 3.62
546 FX 3.59 FY -2.34 FZ 3.87
***R4-INT-1
118 FX -40.85 FY 21.9 FZ 15.03
156 FX -40.85 FY -21.9 FZ 15.03
40 FX 40.85 FY 22.51 FZ 15.52
78 FX 40.85 FY -22.51 FZ 15.52
119 FX -4.65 FY 0.08 FZ -0.44
120 FX -4.12 FY 0.06 FZ -0.52
121 FX -4.85 FY 0.05 FZ -0.76
122 FX -4.3 FY 0.03 FZ -0.72
123 FX -5.2 FY 0.02 FZ -0.94
124 FX -4.63 FY 0.03 FZ -0.82
125 FX -4.88 FY 0.01 FZ -0.88
126 FX -5.31 FY 0.01 FZ -0.96
127 FX -4.96 FY 0 FZ -0.87
128 FX -5.07 FY 0.01 FZ -0.87
129 FX -5.42 FY 0.01 FZ -0.92
130 FX -5.35 FY 0 FZ -0.88
131 FX -5.27 FY 0 FZ -0.85
132 FX -5.33 FY 0 FZ -0.84
133 FX -5.37 FY 0 FZ -0.84
134 FX -5.65 FY 0.01 FZ -0.88
135 FX -5.46 FY -0.01 FZ -0.83
136 FX -5.43 FY 0.01 FZ -0.82
137 FX -5.43 FY 0 FZ -0.82
138 FX -5.43 FY -0.01 FZ -0.82
139 FX -5.46 FY 0.01 FZ -0.83
140 FX -5.65 FY -0.01 FZ -0.88
141 FX -5.37 FY 0 FZ -0.84
142 FX -5.33 FY 0 FZ -0.84
143 FX -5.27 FY 0 FZ -0.85
144 FX -5.35 FY 0 FZ -0.88
145 FX -5.42 FY -0.01 FZ -0.92
146 FX -5.07 FY -0.01 FZ -0.87
147 FX -4.96 FY 0 FZ -0.87
148 FX -5.31 FY -0.01 FZ -0.96
149 FX -4.88 FY -0.01 FZ -0.88
150 FX -4.63 FY -0.03 FZ -0.82
151 FX -5.2 FY -0.02 FZ -0.94
152 FX -4.3 FY -0.03 FZ -0.72
153 FX -4.85 FY -0.05 FZ -0.76
154 FX -4.12 FY -0.06 FZ -0.52
155 FX -4.65 FY -0.08 FZ -0.44
41 FX 4.66 FY 0.08 FZ -0.48
42 FX 4.11 FY 0.06 FZ -0.55
43 FX 4.85 FY 0.05 FZ -0.8
44 FX 4.3 FY 0.03 FZ -0.74
45 FX 5.2 FY 0.02 FZ -0.97
46 FX 4.63 FY 0.03 FZ -0.85
47 FX 4.88 FY 0.01 FZ -0.9
48 FX 5.32 FY 0.01 FZ -0.99
49 FX 4.96 FY 0 FZ -0.89
50 FX 5.07 FY 0.01 FZ -0.89
51 FX 5.42 FY 0.01 FZ -0.94
52 FX 5.35 FY 0 FZ -0.91
53 FX 5.27 FY 0 FZ -0.87
54 FX 5.32 FY 0 FZ -0.86
55 FX 5.37 FY 0 FZ -0.86
56 FX 5.65 FY 0.01 FZ -0.9
57 FX 5.46 FY -0.01 FZ -0.85
58 FX 5.43 FY 0.01 FZ -0.84
59 FX 5.43 FY 0 FZ -0.84
60 FX 5.43 FY -0.01 FZ -0.84
61 FX 5.46 FY 0.01 FZ -0.85
62 FX 5.65 FY -0.01 FZ -0.9
63 FX 5.37 FY 0 FZ -0.86
```

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Q326-KSP-R4b-Deg.std

```
64 FX 5.32 FY 0 FZ -0.86
65 FX 5.27 FY 0 FZ -0.87
66 FX 5.35 FY 0 FZ -0.91
67 FX 5.42 FY -0.01 FZ -0.94
68 FX 5.07 FY -0.01 FZ -0.89
69 FX 4.96 FY 0 FZ -0.89
70 FX 5.32 FY -0.01 FZ -0.99
71 FX 4.88 FY -0.01 FZ -0.9
72 FX 4.63 FY -0.03 FZ -0.85
73 FX 5.2 FY -0.02 FZ -0.97
74 FX 4.3 FY -0.03 FZ -0.74
75 FX 4.85 FY -0.05 FZ -0.8
76 FX 4.11 FY -0.06 FZ -0.55
77 FX 4.66 FY -0.08 FZ -0.48
***R4-INT-2
196 FX -40.85 FY 21.9 FZ 15.03
234 FX -40.85 FY -21.9 FZ 15.03
79 FX 40.85 FY 22.51 FZ 15.52
117 FX 40.85 FY -22.51 FZ 15.52
197 FX -4.65 FY 0.08 FZ -0.44
198 FX -4.12 FY 0.06 FZ -0.52
199 FX -4.85 FY 0.05 FZ -0.76
200 FX -4.3 FY 0.03 FZ -0.72
201 FX -5.2 FY 0.02 FZ -0.94
202 FX -4.63 FY 0.03 FZ -0.82
203 FX -4.88 FY 0.01 FZ -0.88
204 FX -5.31 FY 0.01 FZ -0.96
205 FX -4.96 FY 0 FZ -0.87
206 FX -5.07 FY 0.01 FZ -0.87
207 FX -5.42 FY 0.01 FZ -0.92
208 FX -5.35 FY 0 FZ -0.88
209 FX -5.27 FY 0 FZ -0.85
210 FX -5.33 FY 0 FZ -0.84
211 FX -5.37 FY 0 FZ -0.84
212 FX -5.65 FY 0.01 FZ -0.88
213 FX -5.46 FY -0.01 FZ -0.83
214 FX -5.43 FY 0.01 FZ -0.82
215 FX -5.43 FY 0 FZ -0.82
216 FX -5.43 FY -0.01 FZ -0.82
217 FX -5.46 FY 0.01 FZ -0.83
218 FX -5.65 FY -0.01 FZ -0.88
219 FX -5.37 FY 0 FZ -0.84
220 FX -5.33 FY 0 FZ -0.84
221 FX -5.27 FY 0 FZ -0.85
222 FX -5.35 FY 0 FZ -0.88
223 FX -5.42 FY -0.01 FZ -0.92
224 FX -5.07 FY -0.01 FZ -0.87
225 FX -4.96 FY 0 FZ -0.87
226 FX -5.31 FY -0.01 FZ -0.96
227 FX -4.88 FY -0.01 FZ -0.88
228 FX -4.63 FY -0.03 FZ -0.82
229 FX -5.2 FY -0.02 FZ -0.94
230 FX -4.3 FY -0.03 FZ -0.72
231 FX -4.85 FY -0.05 FZ -0.76
232 FX -4.12 FY -0.06 FZ -0.52
233 FX -4.65 FY -0.08 FZ -0.44
80 FX 4.66 FY 0.08 FZ -0.48
81 FX 4.11 FY 0.06 FZ -0.55
82 FX 4.85 FY 0.05 FZ -0.8
83 FX 4.3 FY 0.03 FZ -0.74
84 FX 5.2 FY 0.02 FZ -0.97
85 FX 4.63 FY 0.03 FZ -0.85
86 FX 4.88 FY 0.01 FZ -0.9
87 FX 5.32 FY 0.01 FZ -0.99
88 FX 4.96 FY 0 FZ -0.89
89 FX 5.07 FY 0.01 FZ -0.89
90 FX 5.42 FY 0.01 FZ -0.94
91 FX 5.35 FY 0 FZ -0.91
92 FX 5.27 FY 0 FZ -0.87
93 FX 5.32 FY 0 FZ -0.86
94 FX 5.37 FY 0 FZ -0.86
95 FX 5.65 FY 0.01 FZ -0.9
96 FX 5.46 FY -0.01 FZ -0.85
97 FX 5.43 FY 0.01 FZ -0.84
98 FX 5.43 FY 0 FZ -0.84
```

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Q326-KSP-R4b-Deg.std

```
99 FX 5.43 FY -0.01 FZ -0.84
100 FX 5.46 FY 0.01 FZ -0.85
101 FX 5.65 FY -0.01 FZ -0.9
102 FX 5.37 FY 0 FZ -0.86
103 FX 5.32 FY 0 FZ -0.86
104 FX 5.27 FY 0 FZ -0.87
105 FX 5.35 FY 0 FZ -0.91
106 FX 5.42 FY -0.01 FZ -0.94
107 FX 5.07 FY -0.01 FZ -0.89
108 FX 4.96 FY 0 FZ -0.89
109 FX 5.32 FY -0.01 FZ -0.99
110 FX 4.88 FY -0.01 FZ -0.9
111 FX 4.63 FY -0.03 FZ -0.85
112 FX 5.2 FY -0.02 FZ -0.97
113 FX 4.3 FY -0.03 FZ -0.74
114 FX 4.85 FY -0.05 FZ -0.8
115 FX 4.11 FY -0.06 FZ -0.55
116 FX 4.66 FY -0.08 FZ -0.48
***R4-INT-3
274 FX -40.85 FY 21.9 FZ 15.03
312 FX -40.85 FY -21.9 FZ 15.03
157 FX 40.85 FY 22.51 FZ 15.52
195 FX 40.85 FY -22.51 FZ 15.52
275 FX -4.65 FY 0.08 FZ -0.44
276 FX -4.12 FY 0.06 FZ -0.52
277 FX -4.85 FY 0.05 FZ -0.76
278 FX -4.3 FY 0.03 FZ -0.72
279 FX -5.2 FY 0.02 FZ -0.94
280 FX -4.63 FY 0.03 FZ -0.82
281 FX -4.88 FY 0.01 FZ -0.88
282 FX -5.31 FY 0.01 FZ -0.96
283 FX -4.96 FY 0 FZ -0.87
284 FX -5.07 FY 0.01 FZ -0.87
285 FX -5.42 FY 0.01 FZ -0.92
286 FX -5.35 FY 0 FZ -0.88
287 FX -5.27 FY 0 FZ -0.85
288 FX -5.33 FY 0 FZ -0.84
289 FX -5.37 FY 0 FZ -0.84
290 FX -5.65 FY 0.01 FZ -0.88
291 FX -5.46 FY -0.01 FZ -0.83
292 FX -5.43 FY 0.01 FZ -0.82
293 FX -5.43 FY 0 FZ -0.82
294 FX -5.43 FY -0.01 FZ -0.82
295 FX -5.46 FY 0.01 FZ -0.83
296 FX -5.65 FY -0.01 FZ -0.88
297 FX -5.37 FY 0 FZ -0.84
298 FX -5.33 FY 0 FZ -0.84
299 FX -5.27 FY 0 FZ -0.85
300 FX -5.35 FY 0 FZ -0.88
301 FX -5.42 FY -0.01 FZ -0.92
302 FX -5.07 FY -0.01 FZ -0.87
303 FX -4.96 FY 0 FZ -0.87
304 FX -5.31 FY -0.01 FZ -0.96
305 FX -4.88 FY -0.01 FZ -0.88
306 FX -4.63 FY -0.03 FZ -0.82
307 FX -5.2 FY -0.02 FZ -0.94
308 FX -4.3 FY -0.03 FZ -0.72
309 FX -4.85 FY -0.05 FZ -0.76
310 FX -4.12 FY -0.06 FZ -0.52
311 FX -4.65 FY -0.08 FZ -0.44
158 FX 4.66 FY 0.08 FZ -0.48
159 FX 4.11 FY 0.06 FZ -0.55
160 FX 4.85 FY 0.05 FZ -0.8
161 FX 4.3 FY 0.03 FZ -0.74
162 FX 5.2 FY 0.02 FZ -0.97
163 FX 4.63 FY 0.03 FZ -0.85
164 FX 4.88 FY 0.01 FZ -0.9
165 FX 5.32 FY 0.01 FZ -0.99
166 FX 4.96 FY 0 FZ -0.89
167 FX 5.07 FY 0.01 FZ -0.89
168 FX 5.42 FY 0.01 FZ -0.94
169 FX 5.35 FY 0 FZ -0.91
170 FX 5.27 FY 0 FZ -0.87
171 FX 5.32 FY 0 FZ -0.86
172 FX 5.37 FY 0 FZ -0.86
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Q326-KSP-R4b-Deg.std

```
173 FX 5.65 FY 0.01 FZ -0.9
174 FX 5.46 FY -0.01 FZ -0.85
175 FX 5.43 FY 0.01 FZ -0.84
176 FX 5.43 FY 0 FZ -0.84
177 FX 5.43 FY -0.01 FZ -0.84
178 FX 5.46 FY 0.01 FZ -0.85
179 FX 5.65 FY -0.01 FZ -0.9
180 FX 5.37 FY 0 FZ -0.86
181 FX 5.32 FY 0 FZ -0.86
182 FX 5.27 FY 0 FZ -0.87
183 FX 5.35 FY 0 FZ -0.91
184 FX 5.42 FY -0.01 FZ -0.94
185 FX 5.07 FY -0.01 FZ -0.89
186 FX 4.96 FY 0 FZ -0.89
187 FX 5.32 FY -0.01 FZ -0.99
188 FX 4.88 FY -0.01 FZ -0.9
189 FX 4.63 FY -0.03 FZ -0.85
190 FX 5.2 FY -0.02 FZ -0.97
191 FX 4.3 FY -0.03 FZ -0.74
192 FX 4.85 FY -0.05 FZ -0.8
193 FX 4.11 FY -0.06 FZ -0.55
194 FX 4.66 FY -0.08 FZ -0.48
***R4-INT-4
352 FX -40.85 FY 21.9 FZ 15.03
390 FX -40.85 FY -21.9 FZ 15.03
235 FX 40.85 FY 22.51 FZ 15.52
273 FX 40.85 FY -22.51 FZ 15.52
353 FX -4.65 FY 0.08 FZ -0.44
354 FX -4.12 FY 0.06 FZ -0.52
355 FX -4.85 FY 0.05 FZ -0.76
356 FX -4.3 FY 0.03 FZ -0.72
357 FX -5.2 FY 0.02 FZ -0.94
358 FX -4.63 FY 0.03 FZ -0.82
359 FX -4.88 FY 0.01 FZ -0.88
360 FX -5.31 FY 0.01 FZ -0.96
361 FX -4.96 FY 0 FZ -0.87
362 FX -5.07 FY 0.01 FZ -0.87
363 FX -5.42 FY 0.01 FZ -0.92
364 FX -5.35 FY 0 FZ -0.88
365 FX -5.27 FY 0 FZ -0.85
366 FX -5.33 FY 0 FZ -0.84
367 FX -5.37 FY 0 FZ -0.84
368 FX -5.65 FY 0.01 FZ -0.88
369 FX -5.46 FY -0.01 FZ -0.83
370 FX -5.43 FY 0.01 FZ -0.82
371 FX -5.43 FY 0 FZ -0.82
372 FX -5.43 FY -0.01 FZ -0.82
373 FX -5.46 FY 0.01 FZ -0.83
374 FX -5.65 FY -0.01 FZ -0.88
375 FX -5.37 FY 0 FZ -0.84
376 FX -5.33 FY 0 FZ -0.84
377 FX -5.27 FY 0 FZ -0.85
378 FX -5.35 FY 0 FZ -0.88
379 FX -5.42 FY -0.01 FZ -0.92
380 FX -5.07 FY -0.01 FZ -0.87
381 FX -4.96 FY 0 FZ -0.87
382 FX -5.31 FY -0.01 FZ -0.96
383 FX -4.88 FY -0.01 FZ -0.88
384 FX -4.63 FY -0.03 FZ -0.82
385 FX -5.2 FY -0.02 FZ -0.94
386 FX -4.3 FY -0.03 FZ -0.72
387 FX -4.85 FY -0.05 FZ -0.76
388 FX -4.12 FY -0.06 FZ -0.52
389 FX -4.65 FY -0.08 FZ -0.44
236 FX 4.66 FY 0.08 FZ -0.48
237 FX 4.11 FY 0.06 FZ -0.55
238 FX 4.85 FY 0.05 FZ -0.8
239 FX 4.3 FY 0.03 FZ -0.74
240 FX 5.2 FY 0.02 FZ -0.97
241 FX 4.63 FY 0.03 FZ -0.85
242 FX 4.88 FY 0.01 FZ -0.9
243 FX 5.32 FY 0.01 FZ -0.99
244 FX 4.96 FY 0 FZ -0.89
245 FX 5.07 FY 0.01 FZ -0.89
246 FX 5.42 FY 0.01 FZ -0.94
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Q326-KSP-R4b-Deg.std

```
247 FX 5.35 FY 0 FZ -0.91
248 FX 5.27 FY 0 FZ -0.87
249 FX 5.32 FY 0 FZ -0.86
250 FX 5.37 FY 0 FZ -0.86
251 FX 5.65 FY 0.01 FZ -0.9
252 FX 5.46 FY -0.01 FZ -0.85
253 FX 5.43 FY 0.01 FZ -0.84
254 FX 5.43 FY 0 FZ -0.84
255 FX 5.43 FY -0.01 FZ -0.84
256 FX 5.46 FY 0.01 FZ -0.85
257 FX 5.65 FY -0.01 FZ -0.9
258 FX 5.37 FY 0 FZ -0.86
259 FX 5.32 FY 0 FZ -0.86
260 FX 5.27 FY 0 FZ -0.87
261 FX 5.35 FY 0 FZ -0.91
262 FX 5.42 FY -0.01 FZ -0.94
263 FX 5.07 FY -0.01 FZ -0.89
264 FX 4.96 FY 0 FZ -0.89
265 FX 5.32 FY -0.01 FZ -0.99
266 FX 4.88 FY -0.01 FZ -0.9
267 FX 4.63 FY -0.03 FZ -0.85
268 FX 5.2 FY -0.02 FZ -0.97
269 FX 4.3 FY -0.03 FZ -0.74
270 FX 4.85 FY -0.05 FZ -0.8
271 FX 4.11 FY -0.06 FZ -0.55
272 FX 4.66 FY -0.08 FZ -0.48
***R4-INT-5
430 FX -40.85 FY 21.9 FZ 15.03
468 FX -40.85 FY -21.9 FZ 15.03
313 FX 40.85 FY 22.51 FZ 15.52
351 FX 40.85 FY -22.51 FZ 15.52
431 FX -4.65 FY 0.08 FZ -0.44
432 FX -4.12 FY 0.06 FZ -0.52
433 FX -4.85 FY 0.05 FZ -0.76
434 FX -4.3 FY 0.03 FZ -0.72
435 FX -5.2 FY 0.02 FZ -0.94
436 FX -4.63 FY 0.03 FZ -0.82
437 FX -4.88 FY 0.01 FZ -0.88
438 FX -5.31 FY 0.01 FZ -0.96
439 FX -4.96 FY 0 FZ -0.87
440 FX -5.07 FY 0.01 FZ -0.87
441 FX -5.42 FY 0.01 FZ -0.92
442 FX -5.35 FY 0 FZ -0.88
443 FX -5.27 FY 0 FZ -0.85
444 FX -5.33 FY 0 FZ -0.84
445 FX -5.37 FY 0 FZ -0.84
446 FX -5.65 FY 0.01 FZ -0.88
447 FX -5.46 FY -0.01 FZ -0.83
448 FX -5.43 FY 0.01 FZ -0.82
449 FX -5.43 FY 0 FZ -0.82
450 FX -5.43 FY -0.01 FZ -0.82
451 FX -5.46 FY 0.01 FZ -0.83
452 FX -5.65 FY -0.01 FZ -0.88
453 FX -5.37 FY 0 FZ -0.84
454 FX -5.33 FY 0 FZ -0.84
455 FX -5.27 FY 0 FZ -0.85
456 FX -5.35 FY 0 FZ -0.88
457 FX -5.42 FY -0.01 FZ -0.92
458 FX -5.07 FY -0.01 FZ -0.87
459 FX -4.96 FY 0 FZ -0.87
460 FX -5.31 FY -0.01 FZ -0.96
461 FX -4.88 FY -0.01 FZ -0.88
462 FX -4.63 FY -0.03 FZ -0.82
463 FX -5.2 FY -0.02 FZ -0.94
464 FX -4.3 FY -0.03 FZ -0.72
465 FX -4.85 FY -0.05 FZ -0.76
466 FX -4.12 FY -0.06 FZ -0.52
467 FX -4.65 FY -0.08 FZ -0.44
314 FX 4.66 FY 0.08 FZ -0.48
315 FX 4.11 FY 0.06 FZ -0.55
316 FX 4.85 FY 0.05 FZ -0.8
317 FX 4.3 FY 0.03 FZ -0.74
318 FX 5.2 FY 0.02 FZ -0.97
319 FX 4.63 FY 0.03 FZ -0.85
320 FX 4.88 FY 0.01 FZ -0.9
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Q326-KSP-R4b-Deg.std

```
321 FX 5.32 FY 0.01 FZ -0.99
322 FX 4.96 FY 0 FZ -0.89
323 FX 5.07 FY 0.01 FZ -0.89
324 FX 5.42 FY 0.01 FZ -0.94
325 FX 5.35 FY 0 FZ -0.91
326 FX 5.27 FY 0 FZ -0.87
327 FX 5.32 FY 0 FZ -0.86
328 FX 5.37 FY 0 FZ -0.86
329 FX 5.65 FY 0.01 FZ -0.9
330 FX 5.46 FY -0.01 FZ -0.85
331 FX 5.43 FY 0.01 FZ -0.84
332 FX 5.43 FY 0 FZ -0.84
333 FX 5.43 FY -0.01 FZ -0.84
334 FX 5.46 FY 0.01 FZ -0.85
335 FX 5.65 FY -0.01 FZ -0.9
336 FX 5.37 FY 0 FZ -0.86
337 FX 5.32 FY 0 FZ -0.86
338 FX 5.27 FY 0 FZ -0.87
339 FX 5.35 FY 0 FZ -0.91
340 FX 5.42 FY -0.01 FZ -0.94
341 FX 5.07 FY -0.01 FZ -0.89
342 FX 4.96 FY 0 FZ -0.89
343 FX 5.32 FY -0.01 FZ -0.99
344 FX 4.88 FY -0.01 FZ -0.9
345 FX 4.63 FY -0.03 FZ -0.85
346 FX 5.2 FY -0.02 FZ -0.97
347 FX 4.3 FY -0.03 FZ -0.74
348 FX 4.85 FY -0.05 FZ -0.8
349 FX 4.11 FY -0.06 FZ -0.55
350 FX 4.66 FY -0.08 FZ -0.48
***R3-EDGE-SBOARD
429 FX 0.15 FY 0 FZ -0.09
391 FX 0.15 FY 0 FZ -0.09
472 FX -3.96 FY 2.61 FZ 3.03
476 FX -4.88 FY 1.41 FZ 2.33
480 FX -4.97 FY 2.48 FZ 2.33
484 FX -5.18 FY 1.42 FZ 1.86
488 FX -5.25 FY 0 FZ 1.71
492 FX -5.18 FY -1.42 FZ 1.86
496 FX -4.97 FY -2.48 FZ 2.33
500 FX -4.88 FY -1.41 FZ 2.33
504 FX -3.96 FY -2.61 FZ 3.03
428 FX 4.71 FY 0.01 FZ -2.65
427 FX 4.14 FY 0 FZ -2.18
426 FX 4.88 FY 0.01 FZ -2.46
425 FX 4.31 FY 0 FZ -2.14
424 FX 3.19 FY 0 FZ -2.65
423 FX 4.65 FY 0 FZ -2.37
422 FX 4.86 FY 0 FZ -2.48
421 FX 5.34 FY -0.01 FZ -2.73
420 FX 4.96 FY 0.01 FZ -2.55
419 FX 5.07 FY 0 FZ -2.6
418 FX 5.4 FY 0 FZ -2.79
417 FX 5.36 FY 0 FZ -2.77
416 FX 5.26 FY 0 FZ -2.72
415 FX 5.32 FY 0 FZ -2.75
414 FX 5.34 FY 0 FZ -2.78
413 FX 5.64 FY 0 FZ -2.93
412 FX 5.46 FY -0.01 FZ -2.83
411 FX 5.42 FY 0.01 FZ -2.81
410 FX 5.43 FY 0 FZ -2.81
409 FX 5.42 FY -0.01 FZ -2.81
408 FX 5.46 FY 0.01 FZ -2.83
407 FX 5.64 FY 0 FZ -2.93
406 FX 5.36 FY 0 FZ -2.78
405 FX 5.32 FY 0 FZ -2.75
404 FX 5.26 FY 0 FZ -2.72
403 FX 5.36 FY 0 FZ -2.77
402 FX 5.4 FY 0 FZ -2.79
401 FX 5.07 FY 0 FZ -2.6
400 FX 4.96 FY -0.01 FZ -2.55
399 FX 5.34 FY 0.01 FZ -2.73
398 FX 4.86 FY 0 FZ -2.48
397 FX 4.65 FY 0 FZ -2.37
396 FX 5.19 FY 0 FZ -2.65
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Q326-KSP-R4b-Deg.std

```
395 FX 4.31 FY 0 FZ -2.14
394 FX 4.88 FY -0.01 FZ -2.46
393 FX 4.14 FY 0 FZ -2.18
392 FX 4.71 FY -0.01 FZ -2.65
468 FX -3.59 FY 3 FZ 4.33
470 FX -4.21 FY 1.33 FZ 3.07
471 FX -3.6 FY 1.7 FZ 2.77
473 FX -5.04 FY 1.01 FZ 2.76
474 FX -4.45 FY 2.38 FZ 3.22
475 FX -4.81 FY 1.62 FZ 2.68
477 FX -4.81 FY 1.34 FZ 2.39
478 FX -5.23 FY 1.65 FZ 2.73
479 FX -4.98 FY 0.51 FZ 2.01
481 FX -5.26 FY 0 FZ 1.99
482 FX -5.4 FY 0 FZ 2.14
483 FX -5.11 FY 1.59 FZ 2.17
485 FX -5.34 FY 0 FZ 1.96
486 FX -5.54 FY -0.01 FZ 2.16
487 FX -5.25 FY 0.01 FZ 1.92
489 FX -5.25 FY -0.01 FZ 1.92
490 FX -5.54 FY 0.01 FZ 2.16
491 FX -5.34 FY 0 FZ 1.96
493 FX -5.11 FY -1.59 FZ 2.17
494 FX -5.4 FY 0 FZ 2.14
495 FX -5.26 FY 0 FZ 1.99
497 FX -4.98 FY -0.51 FZ 2.01
498 FX -5.23 FY -1.65 FZ 2.73
499 FX -4.81 FY -1.34 FZ 2.39
501 FX -4.81 FY -1.62 FZ 2.68
502 FX -4.45 FY -2.38 FZ 3.22
503 FX -5.04 FY -1.01 FZ 2.76
505 FX -3.6 FY -1.7 FZ 2.77
506 FX -4.21 FY -1.33 FZ 3.07
507 FX -3.59 FY -3 FZ 4.33
*********************************************************************
LOAD 5 LOADTYPE Live  TITLE LOAD CASE 5 - VL
JOINT LOAD
***R3-EDGE-DPOOL
1 FX -0.15 FY 0.52 FZ 0.28
39 FX -0.15 FY -0.51 FZ 0.28
511 FX 5.49 FY 1.02 FZ 2.53
515 FX 8.76 FY 0.26 FZ 2.83
519 FX 10.48 FY 0.96 FZ 3.24
523 FX 11.96 FY 0.05 FZ 3.18
527 FX 12.49 FY 0 FZ 3.26
531 FX 11.98 FY -0.05 FZ 3.19
535 FX 10.52 FY -0.96 FZ 3.26
539 FX 8.8 FY -0.26 FZ 2.85
543 FX 5.56 FY -1.02 FZ 2.57
2 FX -4.91 FY 0 FZ -2.95
3 FX -4.84 FY 0.03 FZ -2.79
4 FX -6.41 FY 0.05 FZ -3.58
5 FX -6.2 FY 0.06 FZ -3.5
6 FX -8.08 FY 0.1 FZ -4.71
7 FX -7.74 FY 0.1 FZ -4.54
8 FX -8.56 FY 0.09 FZ -5.02
9 FX -9.88 FY 0.1 FZ -5.85
10 FX -9.62 FY 0.1 FZ -5.77
11 FX -10.21 FY 0.1 FZ -6.15
12 FX -11.31 FY 0.09 FZ -6.81
13 FX -11.47 FY 0.08 FZ -6.96
14 FX -11.53 FY 0.08 FZ -7.04
15 FX -11.9 FY 0.07 FZ -7.28
16 FX -12.32 FY 0.05 FZ -7.52
17 FX -13.03 FY 0.05 FZ -8
18 FX -12.63 FY 0.03 FZ -7.79
19 FX -12.68 FY 0.02 FZ -7.8
20 FX -12.88 FY 0 FZ -7.9
21 FX -12.68 FY -0.02 FZ -7.8
22 FX -12.63 FY -0.03 FZ -7.79
23 FX -13.02 FY -0.05 FZ -8
24 FX -12.34 FY -0.05 FZ -7.53
25 FX -11.93 FY -0.07 FZ -7.3
26 FX -11.54 FY -0.08 FZ -7.05
27 FX -11.49 FY -0.08 FZ -6.96
```

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```
28 FX -11.35 FY -0.09 FZ -6.84
29 FX -10.22 FY -0.1 FZ -6.15
30 FX -9.67 FY -0.1 FZ -5.8
31 FX -9.92 FY -0.1 FZ -5.87
32 FX -8.61 FY -0.09 FZ -5.05
33 FX -7.77 FY -0.1 FZ -4.56
34 FX -8.16 FY -0.1 FZ -4.77
35 FX -6.27 FY -0.07 FZ -3.54
36 FX -6.48 FY -0.05 FZ -3.62
37 FX -4.84 FY -0.04 FZ -2.8
38 FX -4.94 FY -0.01 FZ -2.95
508 FX 3.68 FY 1.8 FZ 3.38
509 FX 4.79 FY 1.02 FZ 3
510 FX 4.5 FY 0.64 FZ 2.21
512 FX 7.46 FY 0.51 FZ 3.07
513 FX 7.12 FY 0.6 FZ 2.95
514 FX 8.13 FY 0.92 FZ 3.23
516 FX 9.03 FY 1.11 FZ 3.33
517 FX 10.24 FY 0.39 FZ 3.54
518 FX 10.13 FY 1.07 FZ 3.48
520 FX 11.29 FY 0.08 FZ 3.45
521 FX 11.84 FY 0.33 FZ 3.76
522 FX 11.46 FY 2.41 FZ 3.81
524 FX 12.29 FY 0.04 FZ 3.59
525 FX 12.77 FY 0.03 FZ 3.86
526 FX 12.25 FY 0.02 FZ 3.54
528 FX 12.25 FY -0.02 FZ 3.54
529 FX 12.77 FY -0.03 FZ 3.86
530 FX 12.29 FY -0.04 FZ 3.59
532 FX 11.49 FY -2.42 FZ 3.84
533 FX 11.85 FY -0.33 FZ 3.76
534 FX 11.3 FY -0.08 FZ 3.45
536 FX 10.15 FY -1.07 FZ 3.49
537 FX 10.27 FY -0.39 FZ 3.55
538 FX 9.08 FY -1.11 FZ 3.36
540 FX 8.18 FY -0.92 FZ 3.26
541 FX 7.17 FY -0.59 FZ 2.98
542 FX 7.54 FY -0.51 FZ 3.12
544 FX 4.55 FY -0.64 FZ 2.25
545 FX 4.77 FY -1.02 FZ 2.59
546 FX 3.71 FY -1.79 FZ 3.38
***R4-INT-1
118 FX -13.78 FY 8.8 FZ 5.33
156 FX -13.74 FY -8.77 FZ 5.32
40 FX 13.68 FY 9.49 FZ 5.9
78 FX 13.69 FY -9.5 FZ 5.9
119 FX -8.43 FY 0.39 FZ -1.28
120 FX -12.23 FY 0.51 FZ -2.07
121 FX -15.49 FY 0.49 FZ -3
122 FX -13.69 FY 0.36 FZ -2.81
123 FX -16.27 FY 0.34 FZ -3.52
124 FX -14.33 FY 0.26 FZ -3.15
125 FX -15.04 FY 0.24 FZ -3.35
126 FX -14.43 FY 0.22 FZ -3.69
127 FX -15.42 FY 0.18 FZ -3.44
128 FX -15.86 FY 0.17 FZ -3.52
129 FX -17.11 FY 0.16 FZ -3.78
130 FX -17.03 FY 0.13 FZ -3.74
131 FX -16.9 FY 0.12 FZ -3.68
132 FX -17.18 FY 0.1 FZ -3.72
133 FX -17.42 FY 0.09 FZ -3.75
134 FX -18.43 FY 0.07 FZ -3.96
135 FX -17.86 FY 0.04 FZ -3.83
136 FX -17.79 FY 0.02 FZ -3.8
137 FX -17.82 FY 0 FZ -3.8
138 FX -17.79 FY -0.02 FZ -3.8
139 FX -17.86 FY -0.04 FZ -3.82
140 FX -18.42 FY -0.07 FZ -3.97
141 FX -17.42 FY -0.09 FZ -3.75
142 FX -17.18 FY -0.1 FZ -3.72
143 FX -16.9 FY -0.12 FZ -3.68
144 FX -17.03 FY -0.13 FZ -3.74
145 FX -17.11 FY -0.16 FZ -3.79
146 FX -15.86 FY -0.17 FZ -3.52
147 FX -15.42 FY -0.18 FZ -3.44
```

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```
148 FX -16.44 FY -0.22 FZ -3.69
149 FX -15.04 FY -0.23 FZ -3.36
150 FX -14.33 FY -0.27 FZ -3.15
151 FX -16.26 FY -0.33 FZ -3.53
152 FX -13.69 FY -0.36 FZ -2.81
153 FX -15.49 FY -0.5 FZ -3
154 FX -12.23 FY -0.51 FZ -2.08
155 FX -8.44 FY -0.41 FZ -1.29
41 FX 8.39 FY 0.4 FZ -1.34
42 FX 12.22 FY 0.5 FZ -2.12
43 FX 15.48 FY 0.47 FZ -3.06
44 FX 13.69 FY 0.35 FZ -2.84
45 FX 16.26 FY 0.32 FZ -3.58
46 FX 14.33 FY 0.26 FZ -3.18
47 FX 15.04 FY 0.23 FZ -3.38
48 FX 16.43 FY 0.21 FZ -3.73
49 FX 15.42 FY 0.18 FZ -3.47
50 FX 15.86 FY 0.17 FZ -3.55
51 FX 17.11 FY 0.16 FZ -3.82
52 FX 17.03 FY 0.13 FZ -3.77
53 FX 16.9 FY 0.12 FZ -3.7
54 FX 17.18 FY 0.1 FZ -3.74
55 FX 17.42 FY 0.08 FZ -3.78
56 FX 18.43 FY 0.07 FZ -3.99
57 FX 17.86 FY 0.04 FZ -3.85
58 FX 17.79 FY 0.02 FZ -3.82
59 FX 17.82 FY 0 FZ -3.83
60 FX 17.79 FY -0.02 FZ -3.82
61 FX 17.86 FY -0.04 FZ -3.85
62 FX 18.42 FY -0.07 FZ -3.99
63 FX 17.42 FY -0.08 FZ -3.78
64 FX 17.18 FY -0.1 FZ -3.74
65 FX 16.9 FY -0.12 FZ -3.7
66 FX 17.03 FY -0.13 FZ -3.77
67 FX 17.11 FY -0.16 FZ -3.82
68 FX 15.86 FY -0.17 FZ -3.55
69 FX 15.42 FY -0.18 FZ -3.47
70 FX 16.44 FY -0.21 FZ -3.73
71 FX 15.04 FY -0.23 FZ -3.39
72 FX 14.33 FY -0.26 FZ -3.18
73 FX 16.26 FY -0.32 FZ -3.58
74 FX 13.69 FY -0.35 FZ -2.84
75 FX 15.49 FY -0.48 FZ -3.06
76 FX 12.22 FY -0.49 FZ -2.12
77 FX 8.41 FY -0.39 FZ -1.32
***R4-INT-2
196 FX -13.78 FY 8.8 FZ 5.33
234 FX -13.74 FY -8.77 FZ 5.32
79 FX 13.68 FY 9.49 FZ 5.9
117 FX 13.69 FY -9.5 FZ 5.9
197 FX -8.43 FY 0.39 FZ -1.28
198 FX -12.23 FY 0.51 FZ -2.07
199 FX -15.49 FY 0.49 FZ -3
200 FX -13.69 FY 0.36 FZ -2.81
201 FX -16.27 FY 0.34 FZ -3.52
202 FX -14.33 FY 0.26 FZ -3.15
203 FX -15.04 FY 0.24 FZ -3.35
204 FX -16.43 FY 0.22 FZ -3.69
205 FX -15.42 FY 0.18 FZ -3.44
206 FX -15.86 FY 0.17 FZ -3.52
207 FX -17.11 FY 0.16 FZ -3.78
208 FX -17.03 FY 0.13 FZ -3.74
209 FX -16.9 FY 0.12 FZ -3.68
210 FX -17.18 FY 0.1 FZ -3.72
211 FX -17.42 FY 0.09 FZ -3.75
212 FX -18.43 FY 0.07 FZ -3.96
213 FX -17.86 FY 0.04 FZ -3.83
214 FX -17.79 FY 0.02 FZ -3.8
215 FX -17.82 FY 0 FZ -3.8
216 FX -17.79 FY -0.02 FZ -3.8
217 FX -17.86 FY -0.04 FZ -3.82
218 FX -18.42 FY -0.07 FZ -3.97
219 FX -17.42 FY -0.09 FZ -3.75
220 FX -17.18 FY -0.1 FZ -3.72
221 FX -16.9 FY -0.12 FZ -3.68
```

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Q326-KSP-R4b-Deg.std — a25

```
222 FX -17.03 FY -0.13 FZ -3.74
223 FX -17.11 FY -0.16 FZ -3.78
224 FX -15.86 FY -0.17 FZ -3.52
225 FX -15.42 FY -0.18 FZ -3.44
226 FX -16.44 FY -0.22 FZ -3.69
227 FX -15.04 FY -0.23 FZ -3.36
228 FX -14.33 FY -0.27 FZ -3.15
229 FX -16.26 FY -0.33 FZ -3.53
230 FX -13.69 FY -0.36 FZ -2.81
231 FX -15.49 FY -0.5 FZ -3
232 FX -12.23 FY -0.51 FZ -2.08
233 FX -8.44 FY -0.41 FZ -1.29
80 FX 8.39 FY 0.4 FZ -1.34
81 FX 12.22 FY 0.5 FZ -2.12
82 FX 15.48 FY 0.47 FZ -3.06
83 FX 13.69 FY 0.35 FZ -2.84
84 FX 16.26 FY 0.32 FZ -3.58
85 FX 14.33 FY 0.26 FZ -3.18
86 FX 15.04 FY 0.23 FZ -3.38
87 FX 16.43 FY 0.21 FZ -3.73
88 FX 15.42 FY 0.18 FZ -3.47
89 FX 15.86 FY 0.17 FZ -3.55
90 FX 17.11 FY 0.16 FZ -3.82
91 FX 17.03 FY 0.13 FZ -3.77
92 FX 16.9 FY 0.12 FZ -3.7
93 FX 17.18 FY 0.1 FZ -3.74
94 FX 17.42 FY 0.08 FZ -3.78
95 FX 18.43 FY 0.07 FZ -3.99
96 FX 17.86 FY 0.04 FZ -3.85
97 FX 17.79 FY 0.02 FZ -3.82
98 FX 17.82 FY 0 FZ -3.83
99 FX 17.79 FY -0.02 FZ -3.82
100 FX 17.86 FY -0.04 FZ -3.85
101 FX 18.42 FY -0.07 FZ -3.99
102 FX 17.42 FY -0.08 FZ -3.78
103 FX 17.18 FY -0.1 FZ -3.74
104 FX 16.9 FY -0.12 FZ -3.7
105 FX 17.03 FY -0.13 FZ -3.77
106 FX 17.11 FY -0.16 FZ -3.82
107 FX 15.86 FY -0.17 FZ -3.55
108 FX 15.42 FY -0.18 FZ -3.47
109 FX 16.44 FY -0.21 FZ -3.73
110 FX 15.04 FY -0.23 FZ -3.39
111 FX 14.33 FY -0.26 FZ -3.18
112 FX 16.26 FY -0.32 FZ -3.58
113 FX 13.69 FY -0.35 FZ -2.84
114 FX 15.49 FY -0.48 FZ -3.06
115 FX 12.22 FY -0.49 FZ -2.12
116 FX 8.41 FY -0.39 FZ -1.32
***R4-INT-3
274 FX -13.78 FY 8.8 FZ 5.33
312 FX -13.74 FY -8.77 FZ 5.32
157 FX 13.68 FY 9.49 FZ 5.9
195 FX 13.69 FY -9.5 FZ 5.9
275 FX -8.43 FY 0.39 FZ -1.28
276 FX -12.23 FY 0.51 FZ -2.07
277 FX -15.49 FY 0.49 FZ -3
278 FX -13.69 FY 0.36 FZ -2.81
279 FX -16.27 FY 0.34 FZ -3.52
280 FX -14.33 FY 0.26 FZ -3.15
281 FX -15.04 FY 0.24 FZ -3.35
282 FX -16.43 FY 0.22 FZ -3.69
283 FX -15.42 FY 0.18 FZ -3.44
284 FX -15.86 FY 0.17 FZ -3.52
285 FX -17.11 FY 0.16 FZ -3.78
286 FX -17.03 FY 0.13 FZ -3.74
287 FX -16.9 FY 0.12 FZ -3.68
288 FX -17.18 FY 0.1 FZ -3.72
289 FX -17.42 FY 0.09 FZ -3.75
290 FX -18.43 FY 0.07 FZ -3.96
291 FX -17.86 FY 0.04 FZ -3.83
292 FX -17.79 FY 0.02 FZ -3.8
293 FX -17.82 FY 0 FZ -3.8
294 FX -17.79 FY -0.02 FZ -3.8
295 FX -17.86 FY -0.04 FZ -3.82
```

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Q326-KSP-R4b-Deg.std — a26

```
296 FX -18.42 FY -0.07 FZ -3.97
297 FX -17.42 FY -0.09 FZ -3.75
298 FX -17.18 FY -0.1 FZ -3.72
299 FX -16.9 FY -0.12 FZ -3.68
300 FX -17.03 FY -0.13 FZ -3.74
301 FX -17.11 FY -0.16 FZ -3.79
302 FX -15.86 FY -0.17 FZ -3.52
303 FX -15.42 FY -0.18 FZ -3.44
304 FX -16.44 FY -0.22 FZ -3.69
305 FX -15.04 FY -0.23 FZ -3.36
306 FX -14.33 FY -0.27 FZ -3.15
307 FX -16.26 FY -0.33 FZ -3.53
308 FX -13.69 FY -0.36 FZ -2.81
309 FX -15.49 FY -0.5 FZ -3
310 FX -12.23 FY -0.51 FZ -2.08
311 FX -8.44 FY -0.41 FZ -1.29
158 FX 8.39 FY 0.4 FZ -1.34
159 FX 12.22 FY 0.5 FZ -2.12
160 FX 15.48 FY 0.47 FZ -3.06
161 FX 13.69 FY 0.35 FZ -2.84
162 FX 16.26 FY 0.32 FZ -3.58
163 FX 14.33 FY 0.26 FZ -3.18
164 FX 15.04 FY 0.23 FZ -3.38
165 FX 16.43 FY 0.21 FZ -3.73
166 FX 15.42 FY 0.18 FZ -3.47
167 FX 15.86 FY 0.17 FZ -3.55
168 FX 17.11 FY 0.16 FZ -3.82
169 FX 17.03 FY 0.13 FZ -3.77
170 FX 16.9 FY 0.12 FZ -3.7
171 FX 17.18 FY 0.1 FZ -3.74
172 FX 17.42 FY 0.08 FZ -3.78
173 FX 18.43 FY 0.07 FZ -3.99
174 FX 17.86 FY 0.04 FZ -3.85
175 FX 17.79 FY 0.02 FZ -3.82
176 FX 17.82 FY 0 FZ -3.83
177 FX 17.79 FY -0.02 FZ -3.82
178 FX 17.86 FY -0.04 FZ -3.85
179 FX 18.42 FY -0.07 FZ -3.99
180 FX 17.42 FY -0.08 FZ -3.78
181 FX 17.18 FY -0.1 FZ -3.74
182 FX 16.9 FY -0.12 FZ -3.7
183 FX 17.03 FY -0.13 FZ -3.77
184 FX 17.11 FY -0.16 FZ -3.82
185 FX 15.86 FY -0.17 FZ -3.55
186 FX 15.42 FY -0.18 FZ -3.47
187 FX 16.44 FY -0.21 FZ -3.73
188 FX 15.04 FY -0.23 FZ -3.39
189 FX 14.33 FY -0.26 FZ -3.18
190 FX 16.26 FY -0.32 FZ -3.58
191 FX 13.69 FY -0.35 FZ -2.84
192 FX 15.49 FY -0.48 FZ -3.06
193 FX 12.22 FY -0.49 FZ -2.12
194 FX 8.41 FY -0.39 FZ -1.32
***R4-INT-4
352 FX -13.78 FY 8.8 FZ 5.33
390 FX -13.74 FY -8.77 FZ 5.32
235 FX 13.68 FY 9.49 FZ 5.9
273 FX 13.69 FY -9.5 FZ 5.9
353 FX -8.43 FY 0.39 FZ -1.28
354 FX -12.23 FY 0.51 FZ -2.07
355 FX -15.49 FY 0.49 FZ -3
356 FX -13.69 FY 0.36 FZ -2.81
357 FX -16.27 FY 0.34 FZ -3.52
358 FX -14.33 FY 0.26 FZ -3.15
359 FX -15.04 FY 0.24 FZ -3.35
360 FX -16.43 FY 0.22 FZ -3.69
361 FX -15.42 FY 0.18 FZ -3.44
362 FX -15.86 FY 0.17 FZ -3.52
363 FX -17.11 FY 0.16 FZ -3.78
364 FX -17.03 FY 0.13 FZ -3.74
365 FX -16.9 FY 0.12 FZ -3.68
366 FX -17.18 FY 0.1 FZ -3.72
367 FX -17.42 FY 0.09 FZ -3.75
368 FX -18.43 FY 0.07 FZ -3.96
369 FX -17.86 FY 0.04 FZ -3.83
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```
370 FX -17.79 FY 0.02 FZ -3.8
371 FX -17.82 FY 0 FZ -3.8
372 FX -17.79 FY -0.02 FZ -3.8
373 FX -17.86 FY -0.04 FZ -3.82
374 FX -18.42 FY -0.07 FZ -3.97
375 FX -17.42 FY -0.09 FZ -3.75
376 FX -17.18 FY -0.1 FZ -3.72
377 FX -16.9 FY -0.12 FZ -3.68
378 FX -17.03 FY -0.13 FZ -3.74
379 FX -17.11 FY -0.16 FZ -3.79
380 FX -15.86 FY -0.17 FZ -3.52
381 FX -15.42 FY -0.18 FZ -3.44
382 FX -16.44 FY -0.22 FZ -3.69
383 FX -15.04 FY -0.23 FZ -3.36
384 FX -14.33 FY -0.27 FZ -3.15
385 FX -16.26 FY -0.33 FZ -3.53
386 FX -13.69 FY -0.36 FZ -2.81
387 FX -15.49 FY -0.5 FZ -3
388 FX -12.23 FY -0.51 FZ -2.08
389 FX -8.44 FY -0.41 FZ -1.29
236 FX 8.39 FY 0.4 FZ -1.34
237 FX 12.22 FY 0.5 FZ -2.12
238 FX 15.48 FY 0.47 FZ -3.06
239 FX 13.69 FY 0.35 FZ -2.84
240 FX 16.26 FY 0.32 FZ -3.58
241 FX 14.33 FY 0.26 FZ -3.18
242 FX 15.04 FY 0.23 FZ -3.38
243 FX 16.43 FY 0.21 FZ -3.73
244 FX 15.42 FY 0.18 FZ -3.47
245 FX 15.86 FY 0.17 FZ -3.55
246 FX 17.11 FY 0.16 FZ -3.82
247 FX 17.03 FY 0.13 FZ -3.77
248 FX 16.9 FY 0.12 FZ -3.7
249 FX 17.18 FY 0.1 FZ -3.74
250 FX 17.42 FY 0.08 FZ -3.78
251 FX 18.43 FY 0.07 FZ -3.99
252 FX 17.86 FY 0.04 FZ -3.85
253 FX 17.79 FY 0.02 FZ -3.82
254 FX 17.82 FY 0 FZ -3.83
255 FX 17.79 FY -0.02 FZ -3.82
256 FX 17.86 FY -0.04 FZ -3.85
257 FX 18.42 FY -0.07 FZ -3.99
258 FX 17.42 FY -0.08 FZ -3.78
259 FX 17.18 FY -0.1 FZ -3.74
260 FX 16.9 FY -0.12 FZ -3.7
261 FX 17.03 FY -0.13 FZ -3.77
262 FX 17.11 FY -0.16 FZ -3.82
263 FX 15.86 FY -0.17 FZ -3.55
264 FX 15.42 FY -0.18 FZ -3.47
265 FX 16.44 FY -0.21 FZ -3.73
266 FX 15.04 FY -0.23 FZ -3.39
267 FX 14.33 FY -0.26 FZ -3.18
268 FX 16.26 FY -0.32 FZ -3.58
269 FX 13.69 FY -0.35 FZ -2.84
270 FX 15.49 FY -0.48 FZ -3.06
271 FX 12.22 FY -0.49 FZ -2.12
272 FX 8.41 FY -0.39 FZ -1.32
***R4-INT-5
430 FX -13.78 FY 8.8 FZ 5.33
468 FX -13.74 FY -8.77 FZ 5.32
313 FX 13.68 FY 9.49 FZ 5.9
351 FX 13.69 FY -9.5 FZ 5.9
431 FX -8.43 FY 0.39 FZ -1.28
432 FX -12.23 FY 0.51 FZ -2.07
433 FX -15.49 FY 0.49 FZ -3
434 FX -13.69 FY 0.36 FZ -2.81
435 FX -16.27 FY 0.34 FZ -3.52
436 FX -14.33 FY 0.26 FZ -3.15
437 FX -15.04 FY 0.24 FZ -3.35
438 FX -16.43 FY 0.22 FZ -3.69
439 FX -15.42 FY 0.18 FZ -3.44
440 FX -15.86 FY 0.17 FZ -3.52
441 FX -17.11 FY 0.16 FZ -3.78
442 FX -17.03 FY 0.13 FZ -3.74
443 FX -16.9 FY 0.12 FZ -3.68
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```
444 FX -17.18 FY 0.1 FZ -3.72
445 FX -17.42 FY 0.09 FZ -3.75
446 FX -18.43 FY 0.07 FZ -3.96
447 FX -17.86 FY 0.04 FZ -3.83
448 FX -17.79 FY 0.02 FZ -3.8
449 FX -17.82 FY 0 FZ -3.8
450 FX -17.79 FY -0.02 FZ -3.8
451 FX -17.86 FY -0.04 FZ -3.82
452 FX -18.42 FY -0.07 FZ -3.97
453 FX -17.42 FY -0.09 FZ -3.75
454 FX -17.18 FY -0.1 FZ -3.72
455 FX -16.9 FY -0.12 FZ -3.68
456 FX -17.03 FY -0.13 FZ -3.74
457 FX -17.11 FY -0.16 FZ -3.79
458 FX -15.86 FY -0.17 FZ -3.52
459 FX -15.42 FY -0.18 FZ -3.44
460 FX -16.44 FY -0.22 FZ -3.69
461 FX -15.04 FY -0.23 FZ -3.36
462 FX -14.33 FY -0.27 FZ -3.15
463 FX -16.26 FY -0.33 FZ -3.53
464 FX -13.69 FY -0.36 FZ -2.81
465 FX -15.49 FY -0.5 FZ -3
466 FX -12.23 FY -0.51 FZ -2.08
467 FX -8.44 FY -0.41 FZ -1.29
314 FX 8.39 FY 0.4 FZ -1.34
315 FX 12.22 FY 0.5 FZ -2.12
316 FX 15.48 FY 0.47 FZ -3.06
317 FX 13.69 FY 0.35 FZ -2.84
318 FX 16.26 FY 0.32 FZ -3.58
319 FX 14.33 FY 0.26 FZ -3.18
320 FX 15.04 FY 0.23 FZ -3.38
321 FX 16.43 FY 0.21 FZ -3.73
322 FX 15.42 FY 0.18 FZ -3.47
323 FX 15.86 FY 0.17 FZ -3.55
324 FX 17.11 FY 0.16 FZ -3.82
325 FX 17.03 FY 0.13 FZ -3.77
326 FX 16.9 FY 0.12 FZ -3.7
327 FX 17.18 FY 0.1 FZ -3.74
328 FX 17.42 FY 0.08 FZ -3.78
329 FX 18.43 FY 0.07 FZ -3.99
330 FX 17.86 FY 0.04 FZ -3.85
331 FX 17.79 FY 0.02 FZ -3.82
332 FX 17.82 FY 0 FZ -3.83
333 FX 17.79 FY -0.02 FZ -3.82
334 FX 17.86 FY -0.04 FZ -3.85
335 FX 18.42 FY -0.07 FZ -3.99
336 FX 17.42 FY -0.08 FZ -3.78
337 FX 17.18 FY -0.1 FZ -3.74
338 FX 16.9 FY -0.12 FZ -3.7
339 FX 17.03 FY -0.13 FZ -3.77
340 FX 17.11 FY -0.16 FZ -3.82
341 FX 15.86 FY -0.17 FZ -3.55
342 FX 15.42 FY -0.18 FZ -3.47
343 FX 16.44 FY -0.21 FZ -3.73
344 FX 15.04 FY -0.23 FZ -3.39
345 FX 14.33 FY -0.26 FZ -3.18
346 FX 16.26 FY -0.32 FZ -3.58
347 FX 13.69 FY -0.35 FZ -2.84
348 FX 15.49 FY -0.48 FZ -3.06
349 FX 12.22 FY -0.49 FZ -2.12
350 FX 8.41 FY -0.39 FZ -1.32
***R3-EDGE-SBOARD
429 FX 0.15 FY 0 FZ -0.12
391 FX 0.15 FY 0 FZ -0.12
472 FX -5.53 FY 0.97 FZ 2.46
476 FX -8.84 FY 0.56 FZ 2.93
480 FX -10.59 FY 1.75 FZ 3.41
484 FX -12.03 FY 1.34 FZ 3.33
488 FX -12.53 FY 0 FZ 3.25
492 FX -12 FY -1.34 FZ 3.3
496 FX -10.55 FY -1.75 FZ 3.39
500 FX -8.79 FY -0.56 FZ 2.9
504 FX -5.46 FY -0.97 FZ 2.41
428 FX 4.85 FY 0 FZ -2.83
427 FX 4.75 FY -0.02 FZ -2.69
```

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Q326-KSP-R4b-Deg.std — a29

```
426 FX 6.44 FY -0.04 FZ -3.51
425 FX 6.19 FY -0.06 FZ -3.43
424 FX 8.08 FY -0.1 FZ -4.62
423 FX 7.78 FY -0.09 FZ -4.47
422 FX 8.55 FY -0.09 FZ -4.92
421 FX 9.97 FY -0.1 FZ -5.79
420 FX 9.65 FY -0.1 FZ -5.69
419 FX 10.22 FY -0.1 FZ -6.05
418 FX 11.34 FY -0.09 FZ -6.72
417 FX 11.55 FY -0.09 FZ -6.88
416 FX 11.57 FY -0.08 FZ -6.96
415 FX 11.95 FY -0.06 FZ -7.19
414 FX 12.35 FY -0.05 FZ -7.42
413 FX 13.04 FY -0.04 FZ -7.89
412 FX 12.68 FY -0.03 FZ -7.7
411 FX 12.72 FY -0.01 FZ -7.71
410 FX 12.91 FY 0 FZ -7.8
409 FX 12.72 FY 0.01 FZ -7.71
408 FX 12.68 FY 0.03 FZ -7.7
407 FX 13.06 FY 0.04 FZ -7.89
406 FX 12.38 FY 0.05 FZ -7.44
405 FX 11.96 FY 0.06 FZ -7.2
404 FX 11.57 FY 0.08 FZ -6.96
403 FX 11.57 FY 0.09 FZ -6.9
402 FX 11.38 FY 0.09 FZ -6.73
401 FX 10.24 FY 0.1 FZ -6.06
400 FX 9.7 FY 0.1 FZ -5.72
399 FX 9.96 FY 0.1 FZ -5.79
398 FX 8.64 FY 0.09 FZ -4.96
397 FX 7.83 FY 0.09 FZ -4.51
396 FX 8.14 FY 0.1 FZ -4.65
395 FX 6.28 FY 0.06 FZ -3.47
394 FX 6.48 FY 0.05 FZ -3.55
393 FX 4.85 FY 0.03 FZ -2.74
392 FX 4.85 FY 0 FZ -2.85
469 FX -3.63 FY 2.02 FZ 3.48
470 FX -4.75 FY 0.66 FZ 2.65
471 FX -4.57 FY 0.82 FZ 2.37
473 FX -7.52 FY 0.42 FZ 3.01
474 FX -7.19 FY 0.81 FZ 3.04
475 FX -8.2 FY 0.69 FZ 3.09
477 FX -9.09 FY 0.68 FZ 3.14
478 FX -10.31 FY 0.85 FZ 3.65
479 FX -10.16 FY 0.44 FZ 3.21
481 FX -11.35 FY 0.07 FZ 3.4
482 FX -11.89 FY 0.08 FZ 3.64
483 FX -11.52 FY 1.53 FZ 3.58
485 FX -12.34 FY 0.04 FZ 3.52
486 FX -12.81 FY 0.03 FZ 3.79
487 FX -12.29 FY 0.02 FZ 3.46
489 FX -12.3 FY -0.02 FZ 3.46
490 FX -12.82 FY -0.03 FZ 3.79
491 FX -12.33 FY -0.04 FZ 3.51
493 FX -11.51 FY -1.53 FZ 3.57
494 FX -11.89 FY -0.08 FZ 3.64
495 FX -11.34 FY -0.07 FZ 3.39
497 FX -10.15 FY -0.44 FZ 3.21
498 FX -10.26 FY -0.85 FZ 3.62
499 FX -9.08 FY -0.68 FZ 3.14
501 FX -8.15 FY -0.69 FZ 3.06
502 FX -7.12 FY -0.81 FZ 3
503 FX -7.48 FY -0.42 FZ 2.99
505 FX -4.52 FY -0.83 FZ 2.33
506 FX -4.66 FY -0.65 FZ 2.61
507 FX -3.65 FY -2.04 FZ 3.48
**********
LOAD 6 LOADTYPE Wind  TITLE LOAD CASE 6 - WU
JOINT LOAD
***RS-EDGE-DPOOL-WU
1 FX -0.22 FY 0.97 FZ 0.87
39 FX -0.22 FY -0.97 FZ 0.88
511 FX 6.13 FY 6.89 FZ 8.49
515 FX 10.36 FY 1.37 FZ 7.17
519 FX 12.67 FY 2.81 FZ 9.1
523 FX 14.66 FY -0.49 FZ 9.44
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Q326-KSP-R4b-Deg.std — a30

```
527 FX 15.39 FY 0 FZ 10.3
531 FX 14.69 FY 0.49 FZ 9.45
535 FX 12.74 FY -2.81 FZ 9.09
539 FX 10.46 FY -1.37 FZ 7.2
543 FX 6.36 FY -6.9 FZ 8.54
2 FX -5.44 FY -0.26 FZ -2.66
3 FX -6.73 FY -0.41 FZ -2.8
4 FX -8.19 FY -0.62 FZ -2.9
5 FX -9.95 FY -0.72 FZ -3.04
6 FX -14.62 FY -0.96 FZ -5.02
7 FX -13.67 FY -0.93 FZ -4.32
8 FX -12.72 FY -0.91 FZ -3.72
9 FX -16.23 FY -1.05 FZ -4.69
10 FX -18.01 FY -1.03 FZ -5.18
11 FX -18.34 FY -0.98 FZ -5.09
12 FX -17.23 FY -0.88 FZ -4.51
13 FX -19.64 FY -0.87 FZ -5.14
14 FX -21.49 FY -0.79 FZ -5.65
15 FX -21.14 FY -0.67 FZ -5.4
16 FX -19.07 FY -0.51 FZ -4.64
17 FX -22.52 FY -0.43 FZ -5.63
18 FX -23.49 FY -0.3 FZ -5.92
19 FX -22.21 FY -0.14 FZ -5.47
20 FX -20.17 FY 0 FZ -4.82
21 FX -22.21 FY 0.14 FZ -5.47
22 FX -23.5 FY 0.29 FZ -5.94
23 FX -22.53 FY 0.43 FZ -5.62
24 FX -19.11 FY 0.51 FZ -4.65
25 FX -21.2 FY 0.67 FZ -5.42
26 FX -21.51 FY 0.79 FZ -5.66
27 FX -19.68 FY 0.86 FZ -5.17
28 FX -17.3 FY 0.88 FZ -4.51
29 FX -18.39 FY 0.98 FZ -5.11
30 FX -18.11 FY 1.03 FZ -5.22
31 FX -16.36 FY 1.05 FZ -4.75
32 FX -12.83 FY 0.92 FZ -3.73
33 FX -13.79 FY 0.93 FZ -4.39
34 FX -14.85 FY 0.98 FZ -5.08
35 FX -10.15 FY 0.74 FZ -3.41
36 FX -8.53 FY 0.63 FZ -3.05
37 FX -6.82 FY 0.45 FZ -2.77
38 FX -5.52 FY 0.23 FZ -2.75
508 FX 3.52 FY 3.47 FZ 5.33
509 FX 5.75 FY 4.4 FZ 7.5
510 FX 5.25 FY 2.88 FZ 5.72
512 FX 11.3 FY 3.63 FZ 9.89
513 FX 11.17 FY 4.53 FZ 10.51
514 FX 11.56 FY 6.7 FZ 11.66
516 FX 13.08 FY 6.15 FZ 11.61
517 FX 16.15 FY 1.04 FZ 11.64
518 FX 14.44 FY 2.86 FZ 10.92
520 FX 16.27 FY -0.62 FZ 10.98
521 FX 18.3 FY -0.14 FZ 12.84
522 FX 16.21 FY 4.02 FZ 12.24
524 FX 17.5 FY -0.34 FZ 12.09
525 FX 19.48 FY -0.21 FZ 13.79
526 FX 17.38 FY -0.09 FZ 12.11
528 FX 17.38 FY 0.09 FZ 12.11
529 FX 19.49 FY 0.21 FZ 13.8
530 FX 17.5 FY 0.35 FZ 12.09
532 FX 16.29 FY -4.02 FZ 12.24
533 FX 18.32 FY 0.15 FZ 12.86
534 FX 16.3 FY 0.62 FZ 11.01
536 FX 14.49 FY -2.85 FZ 10.95
537 FX 16.23 FY -1.05 FZ 11.68
538 FX 13.21 FY -6.16 FZ 11.65
540 FX 11.7 FY -6.69 FZ 11.71
541 FX 11.32 FY -4.55 FZ 10.56
542 FX 11.55 FY -3.65 FZ 9.99
544 FX 5.57 FY -2.9 FZ 5.84
545 FX 5.7 FY -4.43 FZ 7.44
546 FX 3.63 FY -3.47 FZ 5.44
***RS-INT-1-WU
118 FX -222.02 FY 99.92 FZ 91.63
156 FX -221.81 FY -99.81 FZ 91.67
```

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Q326-KSP-R4b-Deg.std — a31

```
40 FX 221.74 FY 99.95 FZ 91.75
78 FX 221.54 FY -99.96 FZ 91.76
119 FX -9.49 FY -0.77 FZ 0.71
120 FX -6.36 FY -1.1 FZ 1.01
121 FX -7.75 FY -1.47 FZ 1.39
122 FX -8.16 FY -1.57 FZ 1.62
123 FX -10.39 FY -1.91 FZ 2.08
124 FX -10.97 FY -1.91 FZ 2.34
125 FX -12.4 FY -2 FZ 2.67
126 FX -14.15 FY -2.09 FZ 3.1
127 FX -14.28 FY -1.9 FZ 3.23
128 FX -15.06 FY -1.79 FZ 3.45
129 FX -16.25 FY -1.7 FZ 3.73
130 FX -16.47 FY -1.5 FZ 3.85
131 FX -16.58 FY -1.28 FZ 3.92
132 FX -16.91 FY -1.08 FZ 4.03
133 FX -17.08 FY -0.87 FZ 4.09
134 FX -17.81 FY -0.67 FZ 4.25
135 FX -17.44 FY -0.44 FZ 4.21
136 FX -17.46 FY -0.21 FZ 4.22
137 FX -17.5 FY 0 FZ 4.23
138 FX -17.46 FY 0.21 FZ 4.22
139 FX -17.45 FY 0.43 FZ 4.19
140 FX -17.8 FY 0.67 FZ 4.26
141 FX -17.08 FY 0.87 FZ 4.09
142 FX -16.91 FY 1.08 FZ 4.03
143 FX -16.58 FY 1.27 FZ 3.92
144 FX -16.48 FY 1.49 FZ 3.84
145 FX -16.23 FY 1.7 FZ 3.75
146 FX -15.05 FY 1.79 FZ 3.45
147 FX -14.28 FY 1.9 FZ 3.23
148 FX -14.18 FY 2.08 FZ 3.09
149 FX -12.41 FY 2.01 FZ 2.69
150 FX -11 FY 1.9 FZ 2.32
151 FX -10.37 FY 1.92 FZ 2.09
152 FX -8.16 FY 1.57 FZ 1.62
153 FX -7.78 FY 1.46 FZ 1.37
154 FX -6.34 FY 1.13 FZ 1.05
155 FX -9.76 FY 0.81 FZ 0.73
41 FX 9.77 FY -0.84 FZ 0.73
42 FX 6.36 FY -1.13 FZ 1.02
43 FX 7.76 FY -1.48 FZ 1.37
44 FX 8.16 FY -1.57 FZ 1.6
45 FX 10.39 FY -1.93 FZ 2.08
46 FX 10.97 FY -1.91 FZ 2.33
47 FX 12.42 FY -2.01 FZ 2.68
48 FX 14.27 FY -2.1 FZ 3.12
49 FX 14.31 FY -1.9 FZ 3.23
50 FX 15.06 FY -1.79 FZ 3.45
51 FX 16.25 FY -1.7 FZ 3.74
52 FX 16.47 FY -1.49 FZ 3.85
53 FX 16.58 FY -1.27 FZ 3.92
54 FX 16.91 FY -1.07 FZ 4.02
55 FX 17.08 FY -0.87 FZ 4.09
56 FX 17.81 FY -0.67 FZ 4.25
57 FX 17.44 FY -0.43 FZ 4.2
58 FX 17.46 FY -0.21 FZ 4.21
59 FX 17.5 FY 0 FZ 4.22
60 FX 17.46 FY 0.21 FZ 4.21
61 FX 17.45 FY 0.44 FZ 4.2
62 FX 17.81 FY 0.67 FZ 4.26
63 FX 17.08 FY 0.87 FZ 4.09
64 FX 16.91 FY 1.08 FZ 4.02
65 FX 16.58 FY 1.27 FZ 3.92
66 FX 16.48 FY 1.49 FZ 3.84
67 FX 16.24 FY 1.7 FZ 3.74
68 FX 15.05 FY 1.79 FZ 3.44
69 FX 14.31 FY 1.9 FZ 3.23
70 FX 14.31 FY 2.11 FZ 3.12
71 FX 12.41 FY 2.01 FZ 2.68
72 FX 10.98 FY 1.91 FZ 2.32
73 FX 10.37 FY 1.93 FZ 2.08
74 FX 8.16 FY 1.57 FZ 1.6
75 FX 7.78 FY 1.48 FZ 1.36
76 FX 6.34 FY 1.13 FZ 1.02
```

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Q326-KSP-R4b-Deg.std — a32

```
77 FX 9.63 FY 0.77 FZ 0.66
***RS-INT-2-WU
196 FX -222.02 FY 99.82 FZ 91.63
234 FX -221.81 FY -99.81 FZ 91.67
79 FX 221.74 FY 99.95 FZ 91.75
117 FX 221.94 FY -99.96 FZ 91.76
197 FX -9.49 FY -0.77 FZ 0.71
198 FX -6.36 FY -1.1 FZ 1.01
199 FX -7.75 FY -1.47 FZ 1.39
200 FX -8.16 FY -1.57 FZ 1.62
201 FX -10.39 FY -1.91 FZ 2.08
202 FX -10.97 FY -1.91 FZ 2.34
203 FX -12.4 FY -2 FZ 2.67
204 FX -14.15 FY -2.09 FZ 3.1
205 FX -14.28 FY -1.9 FZ 3.23
206 FX -15.06 FY -1.79 FZ 3.45
207 FX -16.25 FY -1.7 FZ 3.73
208 FX -16.47 FY -1.5 FZ 3.85
209 FX -16.58 FY -1.28 FZ 3.92
210 FX -16.91 FY -1.08 FZ 4.03
211 FX -17.08 FY -0.87 FZ 4.09
212 FX -17.81 FY -0.67 FZ 4.25
213 FX -17.44 FY -0.44 FZ 4.21
214 FX -17.46 FY -0.21 FZ 4.22
215 FX -17.5 FY 0 FZ 4.23
216 FX -17.46 FY 0.21 FZ 4.22
217 FX -17.45 FY 0.43 FZ 4.19
218 FX -17.8 FY 0.67 FZ 4.26
219 FX -17.08 FY 0.87 FZ 4.09
220 FX -16.91 FY 1.08 FZ 4.03
221 FX -16.58 FY 1.27 FZ 3.92
222 FX -16.48 FY 1.49 FZ 3.84
223 FX -16.23 FY 1.7 FZ 3.75
224 FX -15.05 FY 1.79 FZ 3.45
225 FX -14.28 FY 1.9 FZ 3.23
226 FX -14.18 FY 2.08 FZ 3.09
227 FX -12.41 FY 2.01 FZ 2.69
228 FX -11 FY 1.9 FZ 2.32
229 FX -10.37 FY 1.92 FZ 2.09
230 FX -8.16 FY 1.57 FZ 1.62
231 FX -7.78 FY 1.46 FZ 1.37
232 FX -6.34 FY 1.13 FZ 1.05
233 FX -9.76 FY 0.81 FZ 0.73
80 FX 9.77 FY -0.84 FZ 0.73
81 FX 6.36 FY -1.13 FZ 1.02
82 FX 7.76 FY -1.48 FZ 1.37
83 FX 8.16 FY -1.57 FZ 1.6
84 FX 10.39 FY -1.93 FZ 2.08
85 FX 10.97 FY -1.91 FZ 2.33
86 FX 12.42 FY -2.01 FZ 2.68
87 FX 14.27 FY -2.1 FZ 3.12
88 FX 14.31 FY -1.9 FZ 3.23
89 FX 15.06 FY -1.79 FZ 3.45
90 FX 16.25 FY -1.7 FZ 3.74
91 FX 16.47 FY -1.49 FZ 3.85
92 FX 16.58 FY -1.27 FZ 3.92
93 FX 16.91 FY -1.07 FZ 4.02
94 FX 17.08 FY -0.87 FZ 4.09
95 FX 17.81 FY -0.67 FZ 4.25
96 FX 17.44 FY -0.43 FZ 4.2
97 FX 17.46 FY -0.21 FZ 4.21
98 FX 17.5 FY 0 FZ 4.22
99 FX 17.46 FY 0.21 FZ 4.21
100 FX 17.45 FY 0.44 FZ 4.2
101 FX 17.81 FY 0.67 FZ 4.26
102 FX 17.08 FY 0.87 FZ 4.09
103 FX 16.91 FY 1.08 FZ 4.02
104 FX 16.58 FY 1.27 FZ 3.92
105 FX 16.48 FY 1.49 FZ 3.84
106 FX 16.24 FY 1.7 FZ 3.74
107 FX 15.05 FY 1.79 FZ 3.44
108 FX 14.31 FY 1.9 FZ 3.23
109 FX 14.31 FY 2.11 FZ 3.12
110 FX 12.41 FY 2.01 FZ 2.68
111 FX 10.98 FY 1.91 FZ 2.32
```

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Q326-KSP-R4b-Deg.std — a33

```
112 FX 10.37 FY 1.93 FZ 2.08
113 FX 8.16 FY 1.57 FZ 1.6
114 FX 7.78 FY 1.48 FZ 1.36
115 FX 6.34 FY 1.13 FZ 1.02
116 FX 9.63 FY 0.77 FZ 0.66
***RS-INT-3-WU
274 FX -222.02 FY 99.82 FZ 91.63
312 FX -221.81 FY -99.81 FZ 91.67
157 FX 221.74 FY 99.95 FZ 91.75
195 FX 221.94 FY -99.96 FZ 91.76
275 FX -9.49 FY -0.77 FZ 0.71
276 FX -6.36 FY -1.1 FZ 1.01
277 FX -7.75 FY -1.47 FZ 1.39
278 FX -8.16 FY -1.57 FZ 1.62
279 FX -10.39 FY -1.91 FZ 2.08
280 FX -10.97 FY -1.91 FZ 2.34
281 FX -12.4 FY -2 FZ 2.67
282 FX -14.15 FY -2.09 FZ 3.1
283 FX -14.28 FY -1.9 FZ 3.23
284 FX -15.06 FY -1.79 FZ 3.45
285 FX -16.25 FY -1.7 FZ 3.73
286 FX -16.47 FY -1.5 FZ 3.85
287 FX -16.58 FY -1.28 FZ 3.92
288 FX -16.91 FY -1.08 FZ 4.03
289 FX -17.08 FY -0.87 FZ 4.09
290 FX -17.81 FY -0.67 FZ 4.25
291 FX -17.44 FY -0.44 FZ 4.21
292 FX -17.46 FY -0.21 FZ 4.22
293 FX -17.5 FY 0 FZ 4.23
294 FX -17.46 FY 0.21 FZ 4.22
295 FX -17.45 FY 0.43 FZ 4.19
296 FX -17.8 FY 0.67 FZ 4.26
297 FX -17.08 FY 0.87 FZ 4.09
298 FX -16.91 FY 1.08 FZ 4.03
299 FX -16.58 FY 1.27 FZ 3.92
300 FX -16.48 FY 1.49 FZ 3.84
301 FX -16.23 FY 1.7 FZ 3.75
302 FX -15.05 FY 1.79 FZ 3.45
303 FX -14.28 FY 1.9 FZ 3.23
304 FX -14.18 FY 2.08 FZ 3.09
305 FX -12.41 FY 2.01 FZ 2.69
306 FX -11 FY 1.9 FZ 2.32
307 FX -10.37 FY 1.92 FZ 2.09
308 FX -8.16 FY 1.57 FZ 1.62
309 FX -7.78 FY 1.46 FZ 1.37
310 FX -6.34 FY 1.13 FZ 1.05
311 FX -9.76 FY 0.81 FZ 0.73
158 FX 9.77 FY -0.84 FZ 0.73
159 FX 6.36 FY -1.13 FZ 1.02
160 FX 7.76 FY -1.48 FZ 1.37
161 FX 8.16 FY -1.57 FZ 1.6
162 FX 10.39 FY -1.93 FZ 2.08
163 FX 10.97 FY -1.91 FZ 2.33
164 FX 12.42 FY -2.01 FZ 2.68
165 FX 14.27 FY -2.1 FZ 3.12
166 FX 14.31 FY -1.9 FZ 3.23
167 FX 15.06 FY -1.79 FZ 3.45
168 FX 16.25 FY -1.7 FZ 3.74
169 FX 16.47 FY -1.49 FZ 3.85
170 FX 16.58 FY -1.27 FZ 3.92
171 FX 16.91 FY -1.07 FZ 4.02
172 FX 17.08 FY -0.87 FZ 4.09
173 FX 17.81 FY -0.67 FZ 4.25
174 FX 17.44 FY -0.43 FZ 4.2
175 FX 17.46 FY -0.21 FZ 4.21
176 FX 17.5 FY 0 FZ 4.22
177 FX 17.46 FY 0.21 FZ 4.21
178 FX 17.45 FY 0.44 FZ 4.2
179 FX 17.81 FY 0.67 FZ 4.26
180 FX 17.08 FY 0.87 FZ 4.09
181 FX 16.91 FY 1.08 FZ 4.02
182 FX 16.58 FY 1.27 FZ 3.92
183 FX 16.48 FY 1.49 FZ 3.84
184 FX 16.24 FY 1.7 FZ 3.74
185 FX 15.05 FY 1.79 FZ 3.44
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Q326-KSP-R4b-Deg.std — a34

```
186 FX 14.31 FY 1.9 FZ 3.23
187 FX 14.31 FY 2.11 FZ 3.12
188 FX 12.41 FY 2.01 FZ 2.68
189 FX 10.98 FY 1.91 FZ 2.32
190 FX 10.37 FY 1.93 FZ 2.08
191 FX 8.16 FY 1.57 FZ 1.6
192 FX 7.78 FY 1.48 FZ 1.36
193 FX 6.34 FY 1.13 FZ 1.02
194 FX 9.63 FY 0.77 FZ 0.66
***RS-INT-4-WU
352 FX -222.02 FY 99.82 FZ 91.63
390 FX -221.81 FY -99.81 FZ 91.67
235 FX 221.74 FY 99.95 FZ 91.75
273 FX 221.94 FY -99.96 FZ 91.76
353 FX -9.49 FY -0.77 FZ 0.71
354 FX -6.36 FY -1.1 FZ 1.01
355 FX -7.75 FY -1.47 FZ 1.39
356 FX -8.16 FY -1.57 FZ 1.62
357 FX -10.39 FY -1.91 FZ 2.08
358 FX -10.97 FY -1.91 FZ 2.34
359 FX -12.4 FY -2 FZ 2.67
360 FX -14.15 FY -2.09 FZ 3.1
361 FX -14.28 FY -1.9 FZ 3.23
362 FX -15.06 FY -1.79 FZ 3.45
363 FX -16.25 FY -1.7 FZ 3.73
364 FX -16.47 FY -1.5 FZ 3.85
365 FX -16.58 FY -1.28 FZ 3.92
366 FX -16.91 FY -1.08 FZ 4.03
367 FX -17.08 FY -0.87 FZ 4.09
368 FX -17.81 FY -0.67 FZ 4.25
369 FX -17.44 FY -0.44 FZ 4.21
370 FX -17.46 FY -0.21 FZ 4.22
371 FX -17.5 FY 0 FZ 4.23
372 FX -17.46 FY 0.21 FZ 4.22
373 FX -17.45 FY 0.43 FZ 4.19
374 FX -17.8 FY 0.67 FZ 4.26
375 FX -17.08 FY 0.87 FZ 4.09
376 FX -16.91 FY 1.08 FZ 4.03
377 FX -16.58 FY 1.27 FZ 3.92
378 FX -16.48 FY 1.49 FZ 3.84
379 FX -16.23 FY 1.7 FZ 3.75
380 FX -15.05 FY 1.79 FZ 3.45
381 FX -14.28 FY 1.9 FZ 3.23
382 FX -14.18 FY 2.08 FZ 3.09
383 FX -12.41 FY 2.01 FZ 2.69
384 FX -11 FY 1.9 FZ 2.32
385 FX -10.37 FY 1.92 FZ 2.09
386 FX -8.16 FY 1.57 FZ 1.62
387 FX -7.78 FY 1.46 FZ 1.37
388 FX -6.34 FY 1.13 FZ 1.05
389 FX -9.76 FY 0.81 FZ 0.73
236 FX 9.77 FY -0.84 FZ 0.73
237 FX 6.36 FY -1.13 FZ 1.02
238 FX 7.76 FY -1.48 FZ 1.37
239 FX 8.16 FY -1.57 FZ 1.6
240 FX 10.39 FY -1.93 FZ 2.08
241 FX 10.97 FY -1.91 FZ 2.33
242 FX 12.42 FY -2.01 FZ 2.68
243 FX 14.27 FY -2.1 FZ 3.12
244 FX 14.31 FY -1.9 FZ 3.23
245 FX 15.06 FY -1.79 FZ 3.45
246 FX 16.25 FY -1.7 FZ 3.74
247 FX 16.47 FY -1.49 FZ 3.85
248 FX 16.58 FY -1.27 FZ 3.92
249 FX 16.91 FY -1.07 FZ 4.02
250 FX 17.08 FY -0.87 FZ 4.09
251 FX 17.81 FY -0.67 FZ 4.25
252 FX 17.44 FY -0.43 FZ 4.2
253 FX 17.46 FY -0.21 FZ 4.21
254 FX 17.5 FY 0 FZ 4.22
255 FX 17.46 FY 0.21 FZ 4.21
256 FX 17.45 FY 0.44 FZ 4.2
257 FX 17.81 FY 0.67 FZ 4.26
258 FX 17.08 FY 0.87 FZ 4.09
259 FX 16.91 FY 1.08 FZ 4.02
```

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Q326-KSP-R4b-Deg.std — a35

```
260 FX 16.58 FY 1.27 FZ 3.92
261 FX 16.48 FY 1.49 FZ 3.84
262 FX 16.24 FY 1.7 FZ 3.74
263 FX 15.05 FY 1.79 FZ 3.44
264 FX 14.31 FY 1.9 FZ 3.23
265 FX 14.31 FY 2.11 FZ 3.12
266 FX 12.41 FY 2.01 FZ 2.68
267 FX 10.98 FY 1.91 FZ 2.32
268 FX 10.37 FY 1.93 FZ 2.08
269 FX 8.16 FY 1.57 FZ 1.6
270 FX 7.78 FY 1.48 FZ 1.36
271 FX 6.34 FY 1.13 FZ 1.02
272 FX 9.63 FY 0.77 FZ 0.66
***RS-INT-5-WU
430 FX -222.02 FY 99.82 FZ 91.63
468 FX -221.81 FY -99.81 FZ 91.67
313 FX 221.74 FY 99.95 FZ 91.75
351 FX 221.94 FY -99.96 FZ 91.76
431 FX -9.49 FY -0.77 FZ 0.71
432 FX -6.36 FY -1.1 FZ 1.01
433 FX -7.75 FY -1.47 FZ 1.39
434 FX -8.16 FY -1.57 FZ 1.62
435 FX -10.39 FY -1.91 FZ 2.08
436 FX -10.97 FY -1.91 FZ 2.34
437 FX -12.4 FY -2 FZ 2.67
438 FX -14.15 FY -2.09 FZ 3.1
439 FX -14.28 FY -1.9 FZ 3.23
440 FX -15.06 FY -1.79 FZ 3.45
441 FX -16.25 FY -1.7 FZ 3.73
442 FX -16.47 FY -1.5 FZ 3.85
443 FX -16.58 FY -1.28 FZ 3.92
444 FX -16.91 FY -1.08 FZ 4.03
445 FX -17.08 FY -0.87 FZ 4.09
446 FX -17.81 FY -0.67 FZ 4.25
447 FX -17.44 FY -0.44 FZ 4.21
448 FX -17.46 FY -0.21 FZ 4.22
449 FX -17.5 FY 0 FZ 4.23
450 FX -17.46 FY 0.21 FZ 4.22
451 FX -17.45 FY 0.43 FZ 4.19
452 FX -17.8 FY 0.67 FZ 4.26
453 FX -17.08 FY 0.87 FZ 4.09
454 FX -16.91 FY 1.08 FZ 4.03
455 FX -16.58 FY 1.27 FZ 3.92
456 FX -16.48 FY 1.49 FZ 3.84
457 FX -16.23 FY 1.7 FZ 3.75
458 FX -15.05 FY 1.79 FZ 3.45
459 FX -14.28 FY 1.9 FZ 3.23
460 FX -14.18 FY 2.08 FZ 3.09
461 FX -12.41 FY 2.01 FZ 2.69
462 FX -11 FY 1.9 FZ 2.32
463 FX -10.37 FY 1.92 FZ 2.09
464 FX -8.16 FY 1.57 FZ 1.62
465 FX -7.78 FY 1.46 FZ 1.37
466 FX -6.34 FY 1.13 FZ 1.05
467 FX -9.76 FY 0.81 FZ 0.73
314 FX 9.77 FY -0.84 FZ 0.73
315 FX 6.36 FY -1.13 FZ 1.02
316 FX 7.76 FY -1.48 FZ 1.37
317 FX 8.16 FY -1.57 FZ 1.6
318 FX 10.39 FY -1.93 FZ 2.08
319 FX 10.97 FY -1.91 FZ 2.33
320 FX 12.42 FY -2.01 FZ 2.68
321 FX 14.27 FY -2.1 FZ 3.12
322 FX 14.31 FY -1.9 FZ 3.23
323 FX 15.06 FY -1.79 FZ 3.45
324 FX 16.25 FY -1.7 FZ 3.74
325 FX 16.47 FY -1.49 FZ 3.85
326 FX 16.58 FY -1.27 FZ 3.92
327 FX 16.91 FY -1.07 FZ 4.02
328 FX 17.08 FY -0.87 FZ 4.09
329 FX 17.81 FY -0.67 FZ 4.25
330 FX 17.44 FY -0.43 FZ 4.2
331 FX 17.46 FY -0.21 FZ 4.21
332 FX 17.5 FY 0 FZ 4.22
333 FX 17.46 FY 0.21 FZ 4.21
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Q326-KSP-R4b-Deg.std — a36

```
334 FX 17.45 FY 0.44 FZ 4.2
335 FX 17.81 FY 0.67 FZ 4.26
336 FX 17.08 FY 0.87 FZ 4.09
337 FX 16.91 FY 1.08 FZ 4.02
338 FX 16.58 FY 1.27 FZ 3.92
339 FX 16.48 FY 1.49 FZ 3.84
340 FX 16.24 FY 1.7 FZ 3.74
341 FX 15.05 FY 1.79 FZ 3.44
342 FX 14.31 FY 1.9 FZ 3.23
343 FX 14.31 FY 2.11 FZ 3.12
344 FX 12.41 FY 2.01 FZ 2.68
345 FX 10.98 FY 1.91 FZ 2.32
346 FX 10.37 FY 1.93 FZ 2.08
347 FX 8.16 FY 1.57 FZ 1.6
348 FX 7.78 FY 1.48 FZ 1.36
349 FX 6.34 FY 1.13 FZ 1.02
350 FX 9.63 FY 0.77 FZ 0.66
***RS-EDGE-SBOARD-WU
429 FX 0.21 FY 0.08 FZ 0.01
391 FX 0.21 FY -0.08 FZ 0.01
472 FX -6.22 FY 6.83 FZ 8.17
476 FX -10.47 FY 3.61 FZ 8.28
480 FX -12.84 FY 4.56 FZ 9.6
484 FX -14.8 FY 1.5 FZ 9.82
488 FX -15.45 FY 0 FZ 10.18
492 FX -14.71 FY -1.51 FZ 9.82
496 FX -12.75 FY -4.56 FZ 9.59
500 FX -10.35 FY -3.61 FZ 8.25
504 FX -6.05 FY -6.82 FZ 8.14
428 FX 5.31 FY 0.23 FZ -2.58
427 FX 6.39 FY 0.43 FZ -2.51
426 FX 8.21 FY 0.6 FZ -2.86
425 FX 9.93 FY 0.72 FZ -3.23
424 FX 14.63 FY 0.96 FZ -4.87
423 FX 13.68 FY 0.92 FZ -4.24
422 FX 12.67 FY 0.91 FZ -3.57
421 FX 16.36 FY 1.03 FZ -4.63
420 FX 18.02 FY 1.02 FZ -5.05
419 FX 18.27 FY 0.97 FZ -4.93
418 FX 17.23 FY 0.88 FZ -4.37
417 FX 19.74 FY 0.85 FZ -5.05
416 FX 21.49 FY 0.79 FZ -5.5
415 FX 21.15 FY 0.67 FZ -5.26
414 FX 19.09 FY 0.51 FZ -4.52
413 FX 22.49 FY 0.43 FZ -5.46
412 FX 23.5 FY 0.29 FZ -5.79
411 FX 22.19 FY 0.14 FZ -5.31
410 FX 20.14 FY 0 FZ -4.68
409 FX 22.19 FY -0.14 FZ -5.32
408 FX 23.5 FY -0.29 FZ -5.77
407 FX 22.52 FY -0.43 FZ -5.5
406 FX 19.15 FY -0.51 FZ -4.54
405 FX 21.18 FY -0.66 FZ -5.27
404 FX 21.52 FY -0.78 FZ -5.51
403 FX 19.79 FY -0.85 FZ -5.05
402 FX 17.31 FY -0.87 FZ -4.42
401 FX 18.34 FY -0.97 FZ -4.95
400 FX 18.11 FY -1.03 FZ -5.08
399 FX 16.4 FY -1.04 FZ -4.62
398 FX 12.83 FY -0.9 FZ -3.66
397 FX 13.82 FY -0.94 FZ -4.26
396 FX 14.83 FY -0.95 FZ -4.98
395 FX 10.16 FY -0.73 FZ -3.31
394 FX 8.38 FY -0.64 FZ -2.87
393 FX 6.87 FY -0.43 FZ -2.76
392 FX 5.35 FY -0.26 FZ -2.53
469 FX -3.46 FY 5.24 FZ 6.68
470 FX -5.66 FY 2.88 FZ 6.14
471 FX -5.61 FY 3.81 FZ 6.54
473 FX -11.58 FY 2.39 FZ 9.13
474 FX -11.3 FY 7.06 FZ 12.02
475 FX -11.81 FY 4.12 FZ 10.01
477 FX -13.32 FY 3.17 FZ 10.29
478 FX -16.19 FY 4.05 FZ 12.78
479 FX -14.56 FY 0.28 FZ 9.82
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Q326-KSP-R4b-Deg.std — a37

```
481 FX -16.4 FY -0.48 FZ 10.96
482 FX -18.4 FY -0.52 FZ 12.64
483 FX -16.35 FY 1.77 FZ 11.63
485 FX -17.58 FY -0.32 FZ 12.01
486 FX -19.55 FY -0.17 FZ 13.67
487 FX -17.45 FY -0.07 FZ 11.99
489 FX -17.45 FY 0.07 FZ 11.99
490 FX -19.56 FY 0.17 FZ 13.68
491 FX -17.56 FY 0.32 FZ 11.98
493 FX -16.35 FY -1.78 FZ 11.61
494 FX -18.38 FY 0.52 FZ 12.62
495 FX -16.36 FY 0.48 FZ 10.95
497 FX -14.52 FY -0.28 FZ 9.79
498 FX -16.08 FY -4.04 FZ 12.76
499 FX -13.27 FY -3.17 FZ 10.25
501 FX -11.67 FY -4.11 FZ 9.97
502 FX -11.09 FY -7.04 FZ 11.94
503 FX -11.42 FY -2.39 FZ 9.06
505 FX -5.34 FY -3.78 FZ 6.45
506 FX -5.24 FY -2.88 FZ 5.93
507 FX -3.51 FY -5.19 FZ 6.74
**********
LOAD 7 LOADTYPE Wind  TITLE LOAD CASE 7 - WP
JOINT LOAD
***RS-EDGE-SPOOL-WP
1 FX -0.12 FY 0.64 FZ 0.34
39 FX -0.12 FY -0.64 FZ 0.33
511 FX 7.31 FY 1.62 FZ 3.27
515 FX 11.8 FY 0.47 FZ 3.6
519 FX 13.59 FY 1.1 FZ 3.96
523 FX 15.09 FY 0.09 FZ 3.88
527 FX 15.61 FY 0 FZ 4.05
531 FX 15.1 FY -0.09 FZ 3.89
535 FX 13.63 FY -1.1 FZ 3.99
539 FX 11.85 FY -0.46 FZ 3.63
543 FX 7.42 FY -1.62 FZ 3.34
2 FX -5.19 FY 0.11 FZ -3.2
3 FX -5.71 FY 0.18 FZ -3.42
4 FX -7.93 FY 0.25 FZ -4.61
5 FX -7.7 FY 0.28 FZ -4.53
6 FX -10.06 FY 0.36 FZ -6.13
7 FX -9.62 FY 0.35 FZ -5.91
8 FX -10.54 FY 0.34 FZ -6.46
9 FX -11.96 FY 0.37 FZ -7.41
10 FX -11.54 FY 0.34 FZ -7.26
11 FX -12.11 FY 0.33 FZ -7.64
12 FX -13.12 FY 0.31 FZ -8.28
13 FX -13.22 FY 0.28 FZ -8.41
14 FX -13.27 FY 0.25 FZ -8.51
15 FX -13.53 FY 0.22 FZ -8.68
16 FX -13.73 FY 0.17 FZ -8.79
17 FX -14.58 FY 0.14 FZ -9.39
18 FX -14.19 FY 0.09 FZ -9.19
19 FX -14.12 FY 0.05 FZ -9.12
20 FX -14.17 FY 0 FZ -9.11
21 FX -14.12 FY -0.05 FZ -9.12
22 FX -14.2 FY -0.09 FZ -9.19
23 FX -14.57 FY -0.14 FZ -9.39
24 FX -13.75 FY -0.17 FZ -8.81
25 FX -13.56 FY -0.22 FZ -8.7
26 FX -13.27 FY -0.25 FZ -8.51
27 FX -13.24 FY -0.27 FZ -8.41
28 FX -13.17 FY -0.31 FZ -8.31
29 FX -12.12 FY -0.33 FZ -7.65
30 FX -11.59 FY -0.34 FZ -7.29
31 FX -12.02 FY -0.36 FZ -7.44
32 FX -10.61 FY -0.34 FZ -6.5
33 FX -9.67 FY -0.35 FZ -5.93
34 FX -10.18 FY -0.37 FZ -6.21
35 FX -7.8 FY -0.29 FZ -4.6
36 FX -8.07 FY -0.26 FZ -4.69
37 FX -5.69 FY -0.2 FZ -3.43
38 FX -5.26 FY -0.1 FZ -3.22
508 FX 5.91 FY 2.19 FZ 3.66
509 FX 5.83 FY 1.49 FZ 3.61
```

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Q326-KSP-R4b-Deg.std — a38

```
510 FX 5.83 FY 1.03 FZ 2.76
512 FX 10.01 FY 0.88 FZ 3.91
513 FX 9.66 FY 0.96 FZ 3.78
514 FX 11.06 FY 1.34 FZ 4.12
516 FX 12.09 FY 1.42 FZ 4.15
517 FX 13.66 FY 0.59 FZ 4.43
518 FX 13.37 FY 1.28 FZ 4.29
520 FX 14.67 FY 0.18 FZ 4.25
521 FX 15.4 FY 0.45 FZ 4.62
522 FX 14.72 FY 2.52 FZ 4.57
524 FX 15.65 FY 0.08 FZ 4.37
525 FX 16.36 FY 0.06 FZ 4.71
526 FX 15.53 FY 0.04 FZ 4.3
528 FX 15.53 FY -0.04 FZ 4.3
529 FX 16.37 FY -0.06 FZ 4.72
530 FX 15.64 FY -0.08 FZ 4.37
532 FX 14.76 FY -2.53 FZ 4.6
533 FX 15.41 FY -0.45 FZ 4.62
534 FX 14.68 FY -0.18 FZ 4.25
536 FX 13.4 FY -1.29 FZ 4.3
537 FX 13.7 FY -0.59 FZ 4.45
538 FX 12.16 FY -1.41 FZ 4.19
540 FX 11.13 FY -1.34 FZ 4.16
541 FX 9.74 FY -0.96 FZ 3.83
542 FX 10.14 FY -0.87 FZ 3.98
544 FX 5.93 FY -1.01 FZ 2.83
545 FX 5.77 FY -1.49 FZ 3.59
546 FX 4 FY -2.19 FZ 3.69
***RS-INT-1-WP
118 FX -26.18 FY 15.94 FZ 9.12
156 FX -26.17 FY -15.92 FZ 9.11
40 FX 26.23 FY 16.63 FZ 9.69
78 FX 26.23 FY -16.66 FZ 9.69
119 FX -11.39 FY 0.8 FZ -1.95
120 FX -16.36 FY 1.05 FZ -3.15
121 FX -21.23 FY 1.17 FZ -4.56
122 FX -18.7 FY 0.93 FZ -4.19
123 FX -21.75 FY 0.92 FZ -5.06
124 FX -18.59 FY 0.74 FZ -4.36
125 FX -19 FY 0.69 FZ -4.49
126 FX -20.12 FY 0.66 FZ -4.76
127 FX -18.36 FY 0.55 FZ -4.31
128 FX -18.45 FY 0.51 FZ -4.3
129 FX -19.44 FY 0.47 FZ -4.49
130 FX -18.96 FY 0.4 FZ -4.34
131 FX -18.51 FY 0.35 FZ -4.2
132 FX -18.58 FY 0.29 FZ -4.19
133 FX -18.63 FY 0.24 FZ -4.17
134 FX -19.52 FY 0.19 FZ -4.35
135 FX -18.82 FY 0.12 FZ -4.18
136 FX -18.7 FY 0.06 FZ -4.14
137 FX -18.71 FY 0 FZ -4.14
138 FX -18.7 FY -0.06 FZ -4.14
139 FX -18.82 FY -0.11 FZ -4.17
140 FX -19.51 FY -0.19 FZ -4.35
141 FX -18.63 FY -0.24 FZ -4.17
142 FX -18.58 FY -0.29 FZ -4.19
143 FX -18.51 FY -0.35 FZ -4.2
144 FX -18.96 FY -0.4 FZ -4.34
145 FX -19.44 FY -0.47 FZ -4.5
146 FX -18.45 FY -0.51 FZ -4.3
147 FX -18.36 FY -0.55 FZ -4.31
148 FX -20.12 FY -0.65 FZ -4.76
149 FX -18.99 FY -0.69 FZ -4.49
150 FX -18.59 FY -0.74 FZ -4.36
151 FX -21.74 FY -0.93 FZ -5.06
152 FX -18.7 FY -0.93 FZ -4.19
153 FX -21.24 FY -1.16 FZ -4.56
154 FX -16.36 FY -1.06 FZ -3.16
155 FX -11.42 FY -0.82 FZ -1.98
41 FX 11.34 FY 0.8 FZ -2.04
42 FX 16.36 FY 1.04 FZ -3.2
43 FX 21.23 FY 1.15 FZ -4.61
44 FX 18.7 FY 0.93 FZ -4.21
45 FX 21.74 FY 0.93 FZ -5.11
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Q326-KSP-R4b-Deg.std — a39

```
46 FX 18.59 FY 0.75 FZ -4.38
47 FX 19 FY 0.69 FZ -4.51
48 FX 20.12 FY 0.66 FZ -4.8
49 FX 18.36 FY 0.56 FZ -4.33
50 FX 18.45 FY 0.51 FZ -4.32
51 FX 19.44 FY 0.48 FZ -4.53
52 FX 18.96 FY 0.4 FZ -4.37
53 FX 18.51 FY 0.35 FZ -4.22
54 FX 18.58 FY 0.3 FZ -4.21
55 FX 18.63 FY 0.24 FZ -4.2
56 FX 19.52 FY 0.19 FZ -4.38
57 FX 18.82 FY 0.12 FZ -4.2
58 FX 18.7 FY 0.06 FZ -4.16
59 FX 18.71 FY 0 FZ -4.16
60 FX 18.7 FY -0.06 FZ -4.16
61 FX 18.82 FY -0.12 FZ -4.2
62 FX 19.51 FY -0.19 FZ -4.38
63 FX 18.63 FY -0.24 FZ -4.2
64 FX 18.58 FY -0.3 FZ -4.21
65 FX 18.51 FY -0.35 FZ -4.23
66 FX 18.96 FY -0.41 FZ -4.37
67 FX 19.44 FY -0.48 FZ -4.53
68 FX 18.45 FY -0.52 FZ -4.32
69 FX 18.36 FY -0.56 FZ -4.33
70 FX 20.12 FY -0.66 FZ -4.79
71 FX 18.99 FY -0.7 FZ -4.51
72 FX 18.59 FY -0.75 FZ -4.38
73 FX 21.74 FY -0.93 FZ -5.11
74 FX 18.7 FY -0.93 FZ -4.21
75 FX 21.24 FY -1.15 FZ -4.61
76 FX 16.35 FY -1.04 FZ -3.19
77 FX 11.37 FY -0.77 FZ -2
***RS-INT-2-WP
196 FX -26.18 FY 15.94 FZ 9.12
234 FX -26.17 FY -15.92 FZ 9.11
79 FX 26.23 FY 16.65 FZ 9.69
117 FX 26.23 FY -16.66 FZ 9.69
197 FX -11.39 FY 0.8 FZ -1.95
198 FX -16.36 FY 1.05 FZ -3.15
199 FX -21.23 FY 1.17 FZ -4.56
200 FX -18.7 FY 0.93 FZ -4.19
201 FX -21.75 FY 0.92 FZ -5.06
202 FX -18.59 FY 0.74 FZ -4.36
203 FX -19 FY 0.69 FZ -4.49
204 FX -20.12 FY 0.66 FZ -4.76
205 FX -18.36 FY 0.55 FZ -4.31
206 FX -18.45 FY 0.51 FZ -4.3
207 FX -19.44 FY 0.47 FZ -4.49
208 FX -18.96 FY 0.4 FZ -4.34
209 FX -18.51 FY 0.35 FZ -4.2
210 FX -18.58 FY 0.29 FZ -4.19
211 FX -18.63 FY 0.24 FZ -4.17
212 FX -19.52 FY 0.19 FZ -4.35
213 FX -18.82 FY 0.12 FZ -4.18
214 FX -18.7 FY 0.06 FZ -4.14
215 FX -18.71 FY 0 FZ -4.14
216 FX -18.7 FY -0.06 FZ -4.14
217 FX -18.82 FY -0.11 FZ -4.17
218 FX -19.51 FY -0.19 FZ -4.35
219 FX -18.63 FY -0.24 FZ -4.17
220 FX -18.58 FY -0.29 FZ -4.19
221 FX -18.51 FY -0.35 FZ -4.2
222 FX -18.96 FY -0.4 FZ -4.34
223 FX -19.44 FY -0.47 FZ -4.5
224 FX -18.45 FY -0.51 FZ -4.3
225 FX -18.36 FY -0.55 FZ -4.31
226 FX -20.12 FY -0.65 FZ -4.76
227 FX -18.99 FY -0.69 FZ -4.49
228 FX -18.59 FY -0.74 FZ -4.36
229 FX -21.74 FY -0.93 FZ -5.06
230 FX -18.7 FY -0.93 FZ -4.19
231 FX -21.24 FY -1.16 FZ -4.56
232 FX -16.36 FY -1.06 FZ -3.16
233 FX -11.42 FY -0.82 FZ -1.98
80 FX 11.34 FY 0.8 FZ -2.04
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Q326-KSP-R4b-Deg.std — a40

```
 81 FX 16.36 FY 1.04 FZ -3.2
 82 FX 21.23 FY 1.15 FZ -4.61
 83 FX 18.7 FY 0.93 FZ -4.21
 84 FX 21.74 FY 0.93 FZ -5.11
 85 FX 18.59 FY 0.75 FZ -4.38
 86 FX 19 FY 0.69 FZ -4.51
 87 FX 20.12 FY 0.66 FZ -4.8
 88 FX 18.36 FY 0.56 FZ -4.33
 89 FX 18.45 FY 0.51 FZ -4.32
 90 FX 19.44 FY 0.48 FZ -4.53
 91 FX 18.96 FY 0.4 FZ -4.37
 92 FX 18.51 FY 0.35 FZ -4.22
 93 FX 18.58 FY 0.3 FZ -4.21
 94 FX 18.63 FY 0.24 FZ -4.2
 95 FX 19.52 FY 0.19 FZ -4.38
 96 FX 18.82 FY 0.12 FZ -4.2
 97 FX 18.7 FY 0.06 FZ -4.16
 98 FX 18.71 FY 0 FZ -4.16
 99 FX 18.7 FY -0.06 FZ -4.16
100 FX 18.82 FY -0.12 FZ -4.2
101 FX 19.51 FY -0.19 FZ -4.38
102 FX 18.63 FY -0.24 FZ -4.2
103 FX 18.58 FY -0.3 FZ -4.21
104 FX 18.51 FY -0.35 FZ -4.23
105 FX 18.96 FY -0.41 FZ -4.37
106 FX 19.44 FY -0.48 FZ -4.53
107 FX 18.45 FY -0.52 FZ -4.32
108 FX 18.36 FY -0.56 FZ -4.33
109 FX 20.12 FY -0.66 FZ -4.79
110 FX 18.99 FY -0.7 FZ -4.51
111 FX 18.59 FY -0.75 FZ -4.38
112 FX 21.74 FY -0.93 FZ -5.11
113 FX 18.7 FY -0.93 FZ -4.21
114 FX 21.24 FY -1.15 FZ -4.61
115 FX 16.35 FY -1.04 FZ -3.19
116 FX 11.37 FY -0.77 FZ -2
***R5-INT-3-WP
274 FX -26.18 FY 15.94 FZ 9.12
312 FX -26.17 FY -15.92 FZ 9.11
157 FX 26.23 FY 16.65 FZ 9.69
195 FX 26.23 FY -16.66 FZ 9.69
275 FX -11.39 FY 0.8 FZ -1.95
276 FX -16.36 FY 1.05 FZ -3.15
277 FX -21.23 FY 1.17 FZ -4.56
278 FX -18.7 FY 0.93 FZ -4.19
279 FX -21.75 FY 0.92 FZ -5.06
280 FX -18.59 FY 0.74 FZ -4.36
281 FX -19 FY 0.69 FZ -4.49
282 FX -20.12 FY 0.66 FZ -4.76
283 FX -18.36 FY 0.55 FZ -4.31
284 FX -18.45 FY 0.51 FZ -4.3
285 FX -19.44 FY 0.47 FZ -4.49
286 FX -18.96 FY 0.4 FZ -4.34
287 FX -18.51 FY 0.35 FZ -4.2
288 FX -18.58 FY 0.29 FZ -4.19
289 FX -18.63 FY 0.24 FZ -4.17
290 FX -19.52 FY 0.19 FZ -4.35
291 FX -18.82 FY 0.12 FZ -4.18
292 FX -18.7 FY 0.06 FZ -4.14
293 FX -18.71 FY 0 FZ -4.14
294 FX -18.7 FY -0.06 FZ -4.14
295 FX -18.82 FY -0.11 FZ -4.17
296 FX -19.51 FY -0.19 FZ -4.35
297 FX -18.63 FY -0.24 FZ -4.17
298 FX -18.58 FY -0.29 FZ -4.19
299 FX -18.51 FY -0.35 FZ -4.2
300 FX -18.96 FY -0.4 FZ -4.34
301 FX -19.44 FY -0.47 FZ -4.5
302 FX -18.45 FY -0.51 FZ -4.3
303 FX -18.36 FY -0.55 FZ -4.31
304 FX -20.12 FY -0.65 FZ -4.76
305 FX -18.99 FY -0.69 FZ -4.49
306 FX -18.59 FY -0.74 FZ -4.36
307 FX -21.74 FY -0.93 FZ -5.06
308 FX -18.7 FY -0.93 FZ -4.19
```


Q326-KSP-R4b-Deg.std — a41

```
309 FX -21.24 FY -1.16 FZ -4.56
310 FX -16.36 FY -1.06 FZ -3.16
311 FX -11.42 FY -0.82 FZ -1.98
158 FX 11.34 FY 0.8 FZ -2.04
159 FX 16.36 FY 1.04 FZ -3.2
160 FX 21.23 FY 1.15 FZ -4.61
161 FX 18.7 FY 0.93 FZ -4.21
162 FX 21.74 FY 0.93 FZ -5.11
163 FX 18.59 FY 0.75 FZ -4.38
164 FX 19 FY 0.69 FZ -4.51
165 FX 20.12 FY 0.66 FZ -4.8
166 FX 18.36 FY 0.56 FZ -4.33
167 FX 18.45 FY 0.51 FZ -4.32
168 FX 19.44 FY 0.48 FZ -4.53
169 FX 18.96 FY 0.4 FZ -4.37
170 FX 18.51 FY 0.35 FZ -4.22
171 FX 18.58 FY 0.3 FZ -4.21
172 FX 18.63 FY 0.24 FZ -4.2
173 FX 19.52 FY 0.19 FZ -4.38
174 FX 18.82 FY 0.12 FZ -4.2
175 FX 18.7 FY 0.06 FZ -4.16
176 FX 18.71 FY 0 FZ -4.16
177 FX 18.7 FY -0.06 FZ -4.16
178 FX 18.82 FY -0.12 FZ -4.2
179 FX 19.51 FY -0.19 FZ -4.38
180 FX 18.63 FY -0.24 FZ -4.2
181 FX 18.58 FY -0.3 FZ -4.21
182 FX 18.51 FY -0.35 FZ -4.23
183 FX 18.96 FY -0.41 FZ -4.37
184 FX 19.44 FY -0.48 FZ -4.53
185 FX 18.45 FY -0.52 FZ -4.32
186 FX 18.36 FY -0.56 FZ -4.33
187 FX 20.12 FY -0.66 FZ -4.79
188 FX 18.99 FY -0.7 FZ -4.51
189 FX 18.59 FY -0.75 FZ -4.38
190 FX 21.74 FY -0.93 FZ -5.11
191 FX 18.7 FY -0.93 FZ -4.21
192 FX 21.24 FY -1.15 FZ -4.61
193 FX 16.35 FY -1.04 FZ -3.19
194 FX 11.37 FY -0.77 FZ -2
***R5-INT-4-WP
352 FX -26.18 FY 15.94 FZ 9.12
390 FX -26.17 FY -15.92 FZ 9.11
235 FX 26.23 FY 16.65 FZ 9.69
273 FX 26.23 FY -16.66 FZ 9.69
353 FX -11.39 FY 0.8 FZ -1.95
354 FX -16.36 FY 1.05 FZ -3.15
355 FX -21.23 FY 1.17 FZ -4.56
356 FX -18.7 FY 0.93 FZ -4.19
357 FX -21.75 FY 0.92 FZ -5.06
358 FX -18.59 FY 0.74 FZ -4.36
359 FX -19 FY 0.69 FZ -4.49
360 FX -20.12 FY 0.66 FZ -4.76
361 FX -18.36 FY 0.55 FZ -4.31
362 FX -18.45 FY 0.51 FZ -4.3
363 FX -19.44 FY 0.47 FZ -4.49
364 FX -18.96 FY 0.4 FZ -4.34
365 FX -18.51 FY 0.35 FZ -4.2
366 FX -18.58 FY 0.29 FZ -4.19
367 FX -18.63 FY 0.24 FZ -4.17
368 FX -19.52 FY 0.19 FZ -4.35
369 FX -18.82 FY 0.12 FZ -4.18
370 FX -18.7 FY 0.06 FZ -4.14
371 FX -18.71 FY 0 FZ -4.14
372 FX -18.7 FY -0.06 FZ -4.14
373 FX -18.82 FY -0.11 FZ -4.17
374 FX -19.51 FY -0.19 FZ -4.35
375 FX -18.63 FY -0.24 FZ -4.17
376 FX -18.58 FY -0.29 FZ -4.19
377 FX -18.51 FY -0.35 FZ -4.2
378 FX -18.96 FY -0.4 FZ -4.34
379 FX -19.44 FY -0.47 FZ -4.5
380 FX -18.45 FY -0.51 FZ -4.3
381 FX -18.36 FY -0.55 FZ -4.31
382 FX -20.12 FY -0.65 FZ -4.76
```


Q326-KSP-R4b-Deg.std — a42

```
383 FX -18.99 FY -0.69 FZ -4.49
384 FX -18.59 FY -0.74 FZ -4.36
385 FX -21.74 FY -0.93 FZ -5.06
386 FX -18.7 FY -0.93 FZ -4.19
387 FX -21.24 FY -1.16 FZ -4.56
388 FX -16.36 FY -1.06 FZ -3.16
389 FX -11.42 FY -0.82 FZ -1.98
236 FX 11.34 FY 0.8 FZ -2.04
237 FX 16.36 FY 1.04 FZ -3.2
238 FX 21.23 FY 1.15 FZ -4.61
239 FX 18.7 FY 0.93 FZ -4.21
240 FX 21.74 FY 0.93 FZ -5.11
241 FX 18.59 FY 0.75 FZ -4.38
242 FX 19 FY 0.69 FZ -4.51
243 FX 20.12 FY 0.66 FZ -4.8
244 FX 18.36 FY 0.56 FZ -4.33
245 FX 18.45 FY 0.51 FZ -4.32
246 FX 19.44 FY 0.48 FZ -4.53
247 FX 18.96 FY 0.4 FZ -4.37
248 FX 18.51 FY 0.35 FZ -4.22
249 FX 18.58 FY 0.3 FZ -4.21
250 FX 18.63 FY 0.24 FZ -4.2
251 FX 19.52 FY 0.19 FZ -4.38
252 FX 18.82 FY 0.12 FZ -4.2
253 FX 18.7 FY 0.06 FZ -4.16
254 FX 18.71 FY 0 FZ -4.16
255 FX 18.7 FY -0.06 FZ -4.16
256 FX 18.82 FY -0.12 FZ -4.2
257 FX 19.51 FY -0.19 FZ -4.38
258 FX 18.63 FY -0.24 FZ -4.2
259 FX 18.58 FY -0.3 FZ -4.21
260 FX 18.51 FY -0.35 FZ -4.23
261 FX 18.96 FY -0.41 FZ -4.37
262 FX 19.44 FY -0.48 FZ -4.53
263 FX 18.45 FY -0.52 FZ -4.32
264 FX 18.36 FY -0.56 FZ -4.33
265 FX 20.12 FY -0.66 FZ -4.79
266 FX 18.99 FY -0.7 FZ -4.51
267 FX 18.59 FY -0.75 FZ -4.38
268 FX 21.74 FY -0.93 FZ -5.11
269 FX 18.7 FY -0.93 FZ -4.21
270 FX 21.24 FY -1.15 FZ -4.61
271 FX 16.35 FY -1.04 FZ -3.19
272 FX 11.37 FY -0.77 FZ -2
***R5-INT-5-WP
430 FX -26.18 FY 15.94 FZ 9.12
468 FX -26.17 FY -15.92 FZ 9.11
313 FX 26.23 FY 16.65 FZ 9.69
351 FX 26.23 FY -16.66 FZ 9.69
431 FX -11.39 FY 0.8 FZ -1.95
432 FX -16.36 FY 1.05 FZ -3.15
433 FX -21.23 FY 1.17 FZ -4.56
434 FX -18.7 FY 0.93 FZ -4.19
435 FX -21.75 FY 0.92 FZ -5.06
436 FX -18.59 FY 0.74 FZ -4.36
437 FX -19 FY 0.69 FZ -4.49
438 FX -20.12 FY 0.66 FZ -4.76
439 FX -18.36 FY 0.55 FZ -4.31
440 FX -18.45 FY 0.51 FZ -4.3
441 FX -19.44 FY 0.47 FZ -4.49
442 FX -18.96 FY 0.4 FZ -4.34
443 FX -18.51 FY 0.35 FZ -4.2
444 FX -18.58 FY 0.29 FZ -4.19
445 FX -18.63 FY 0.24 FZ -4.17
446 FX -19.52 FY 0.19 FZ -4.35
447 FX -18.82 FY 0.12 FZ -4.18
448 FX -18.7 FY 0.06 FZ -4.14
449 FX -18.71 FY 0 FZ -4.14
450 FX -18.7 FY -0.06 FZ -4.14
451 FX -18.82 FY -0.11 FZ -4.17
452 FX -19.51 FY -0.19 FZ -4.35
453 FX -18.63 FY -0.24 FZ -4.17
454 FX -18.58 FY -0.29 FZ -4.19
455 FX -18.51 FY -0.35 FZ -4.2
456 FX -18.96 FY -0.4 FZ -4.34
```


Q326-KSP-R4b-Deg.std — a43

```
457 FX -19.44 FY -0.47 FZ -4.5
458 FX -18.45 FY -0.51 FZ -4.3
459 FX -18.36 FY -0.55 FZ -4.31
460 FX -20.12 FY -0.65 FZ -4.76
461 FX -18.99 FY -0.69 FZ -4.49
462 FX -18.59 FY -0.74 FZ -4.36
463 FX -21.74 FY -0.93 FZ -5.06
464 FX -18.7 FY -0.93 FZ -4.19
465 FX -21.24 FY -1.16 FZ -4.56
466 FX -16.36 FY -1.06 FZ -3.16
467 FX -11.42 FY -0.82 FZ -1.98
314 FX 11.34 FY 0.8 FZ -2.04
315 FX 16.36 FY 1.04 FZ -3.2
316 FX 21.23 FY 1.15 FZ -4.61
317 FX 18.7 FY 0.93 FZ -4.21
318 FX 21.74 FY 0.93 FZ -5.11
319 FX 18.59 FY 0.75 FZ -4.38
320 FX 19 FY 0.69 FZ -4.51
321 FX 20.12 FY 0.66 FZ -4.8
322 FX 18.36 FY 0.56 FZ -4.33
323 FX 18.45 FY 0.51 FZ -4.32
324 FX 19.44 FY 0.48 FZ -4.53
325 FX 18.96 FY 0.4 FZ -4.37
326 FX 18.51 FY 0.35 FZ -4.22
327 FX 18.58 FY 0.3 FZ -4.21
328 FX 18.63 FY 0.24 FZ -4.2
329 FX 19.52 FY 0.19 FZ -4.38
330 FX 18.82 FY 0.12 FZ -4.2
331 FX 18.7 FY 0.06 FZ -4.16
332 FX 18.71 FY 0 FZ -4.16
333 FX 18.7 FY -0.06 FZ -4.16
334 FX 18.82 FY -0.12 FZ -4.2
335 FX 19.51 FY -0.19 FZ -4.38
336 FX 18.63 FY -0.24 FZ -4.2
337 FX 18.58 FY -0.3 FZ -4.21
338 FX 18.51 FY -0.35 FZ -4.23
339 FX 18.96 FY -0.41 FZ -4.37
340 FX 19.44 FY -0.48 FZ -4.53
341 FX 18.45 FY -0.52 FZ -4.32
342 FX 18.36 FY -0.56 FZ -4.33
343 FX 20.12 FY -0.66 FZ -4.79
344 FX 18.99 FY -0.7 FZ -4.51
345 FX 18.59 FY -0.75 FZ -4.38
346 FX 21.74 FY -0.93 FZ -5.11
347 FX 18.7 FY -0.93 FZ -4.21
348 FX 21.24 FY -1.15 FZ -4.61
349 FX 16.35 FY -1.04 FZ -3.19
350 FX 11.37 FY -0.77 FZ -2
***R5-EDGE-SBOARD-WP
429 FX 0.12 FY -0.04 FZ -0.13
391 FX 0.12 FY 0.04 FZ -0.13
472 FX -7.4 FY 1.55 FZ 3.19
476 FX -11.87 FY 0.83 FZ 3.71
480 FX -13.68 FY 1.94 FZ 4.13
484 FX -15.12 FY 1.4 FZ 4
488 FX -15.6 FY 0 FZ 3.91
492 FX -15.08 FY -1.39 FZ 3.97
496 FX -13.62 FY -1.94 FZ 4.09
500 FX -11.8 FY -0.83 FZ 3.67
504 FX -7.28 FY -1.56 FZ 3.12
428 FX 5.06 FY -0.1 FZ -3.02
427 FX 5.52 FY -0.19 FZ -3.25
426 FX 8.03 FY -0.25 FZ -4.54
425 FX 7.67 FY -0.29 FZ -4.44
424 FX 10.04 FY -0.37 FZ -6.01
423 FX 9.65 FY -0.34 FZ -5.82
422 FX 10.51 FY -0.34 FZ -6.33
421 FX 12.05 FY -0.36 FZ -7.32
420 FX 11.55 FY -0.34 FZ -7.15
419 FX 12.09 FY -0.33 FZ -7.51
418 FX 13.14 FY -0.31 FZ -8.15
417 FX 13.29 FY -0.28 FZ -8.31
416 FX 13.29 FY -0.25 FZ -8.39
415 FX 13.56 FY -0.21 FZ -8.57
414 FX 13.74 FY -0.17 FZ -8.66
```


Q326-KSP-R4b-Deg.std — a44

```
413 FX 14.57 FY -0.14 FZ -9.25
412 FX 14.24 FY -0.09 FZ -9.08
411 FX 14.14 FY -0.04 FZ -9
410 FX 14.18 FY 0 FZ -8.99
409 FX 14.14 FY 0.04 FZ -8.99
408 FX 14.23 FY 0.09 FZ -9.08
407 FX 14.6 FY 0.14 FZ -9.25
406 FX 13.78 FY 0.17 FZ -8.69
405 FX 13.57 FY 0.21 FZ -8.57
404 FX 13.29 FY 0.25 FZ -8.39
403 FX 13.31 FY 0.29 FZ -8.33
402 FX 13.19 FY 0.31 FZ -8.17
401 FX 12.12 FY 0.33 FZ -7.52
400 FX 11.61 FY 0.34 FZ -7.18
399 FX 12.04 FY 0.37 FZ -7.32
398 FX 10.63 FY 0.34 FZ -6.38
397 FX 9.72 FY 0.35 FZ -5.87
396 FX 10.15 FY 0.37 FZ -6.06
395 FX 7.8 FY 0.29 FZ -4.51
394 FX 8.09 FY 0.27 FZ -4.6
393 FX 5.76 FY 0.19 FZ -3.37
392 FX 5.03 FY 0.12 FZ -3.03
469 FX -3.78 FY 2.53 FZ 3.8
470 FX -5.76 FY 1.03 FZ 3.16
471 FX -5.97 FY 1.24 FZ 3.01
473 FX -10.08 FY 0.76 FZ 3.83
474 FX -9.76 FY 1.25 FZ 3.89
475 FX -11.11 FY 1.05 FZ 3.93
477 FX -12.12 FY 0.93 FZ 3.91
478 FX -13.71 FY 1.09 FZ 4.53
479 FX -13.36 FY 0.62 FZ 3.97
481 FX -14.69 FY 0.16 FZ 4.17
482 FX -15.4 FY 0.19 FZ 4.47
483 FX -14.75 FY 1.65 FZ 4.31
485 FX -15.66 FY 0.08 FZ 4.26
486 FX -16.36 FY 0.06 FZ 4.61
487 FX -15.53 FY 0.04 FZ 4.19
489 FX -15.53 FY -0.04 FZ 4.19
490 FX -16.37 FY -0.06 FZ 4.61
491 FX -15.64 FY -0.08 FZ 4.26
493 FX -14.73 FY -1.64 FZ 4.3
494 FX -15.4 FY -0.19 FZ 4.47
495 FX -14.68 FY -0.16 FZ 4.16
497 FX -13.35 FY -0.61 FZ 3.97
498 FX -13.64 FY -1.1 FZ 4.49
499 FX -12.12 FY -0.93 FZ 3.91
501 FX -11.04 FY -1.05 FZ 3.89
502 FX -9.64 FY -1.25 FZ 3.83
503 FX -10.01 FY -0.74 FZ 3.8
505 FX -5.87 FY -1.25 FZ 2.93
506 FX -5.34 FY -1.03 FZ 3.05
507 FX -2.85 FY -2.55 FZ 3.82
**********
LOAD 8 LOADTYPE Wind  TITLE LOAD CASE 8 - WENT
JOINT LOAD
***R5-EDGE-DPOOL-WENT
1 FX -0.12 FY 0.74 FZ 0.42
39 FX -0.19 FY -0.95 FZ 0.78
511 FX 7.69 FY 4.21 FZ 4.76
515 FX 13.27 FY 1.76 FZ 4.25
519 FX 15.71 FY 3.42 FZ 4.76
523 FX 17.49 FY 0.5 FZ 4.27
527 FX 5.62 FY 0.11 FZ 3.33
531 FX 16.3 FY 0.8 FZ 10.64
535 FX 14.09 FY -1.44 FZ 9.72
539 FX 11.44 FY -0.59 FZ 7.57
543 FX 6.7 FY -5.4 FZ 7.81
2 FX -5.23 FY 0.12 FZ -3.22
3 FX -5.8 FY 0.2 FZ -3.46
4 FX -8.31 FY 0.31 FZ -4.82
5 FX -7.98 FY 0.35 FZ -4.69
6 FX -10.35 FY 0.48 FZ -6.29
7 FX -10.17 FY 0.5 FZ -6.22
8 FX -11.83 FY 0.56 FZ -7.2
9 FX -13.2 FY 0.65 FZ -8.13
```


Q326-KSP-R4b-Deg.std — a45

```
 10 FX -12.37 FY 0.64 FZ -7.74
 11 FX -13.3 FY 0.69 FZ -8.35
 12 FX -15.31 FY 0.78 FZ -9.59
 13 FX -15.05 FY 0.79 FZ -9.53
 14 FX -14.76 FY 0.8 FZ -9.43
 15 FX -15.42 FY 0.84 FZ -9.86
 16 FX -16.23 FY 0.89 FZ -10.36
 17 FX -16.1 FY 0.9 FZ -10.31
 18 FX -12.76 FY 0.72 FZ -8.1
 19 FX -7.27 FY 0.4 FZ -4.32
 20 FX -7.43 FY 0.31 FZ -2.22
 21 FX -17.8 FY 0.75 FZ -4.5
 22 FX -23.29 FY 1.04 FZ -5.91
 23 FX -23.8 FY 1.14 FZ -5.95
 24 FX -20.7 FY 1.08 FZ -5.07
 25 FX -22.48 FY 1.21 FZ -5.76
 26 FX -22.54 FY 1.28 FZ -5.97
 27 FX -20.93 FY 1.29 FZ -5.55
 28 FX -18.67 FY 1.24 FZ -4.94
 29 FX -19.31 FY 1.28 FZ -5.42
 30 FX -18.8 FY 1.29 FZ -5.47
 31 FX -17.3 FY 1.27 FZ -5.08
 32 FX -13.7 FY 1.08 FZ -4.04
 33 FX -14.29 FY 1.05 FZ -4.59
 34 FX -15.16 FY 1.08 FZ -5.22
 35 FX -10.43 FY 0.8 FZ -3.52
 36 FX -8.86 FY 0.68 FZ -3.18
 37 FX -6.91 FY 0.47 FZ -2.01
 38 FX -5.54 FY 0.23 FZ -2.77
508 FX 3.94 FY 2.56 FZ 3.95
509 FX 5.5 FY 2.56 FZ 4.38
510 FX 6.03 FY 1.92 FZ 3.37
512 FX 10.28 FY 2.7 FZ 4.9
513 FX 9.97 FY 3.17 FZ 4.96
514 FX 11.82 FY 5.01 FZ 5.92
516 FX 13.06 FY 5.27 FZ 5.63
517 FX 14.53 FY 1.88 FZ 5.04
518 FX 14.77 FY 3.59 FZ 5.17
520 FX 16.36 FY 0.65 FZ 4.65
521 FX 16.88 FY 1.09 FZ 5.09
522 FX 16.62 FY 4.79 FZ 5.34
524 FX 16.75 FY 0.5 FZ 4.66
525 FX 13.99 FY 0.42 FZ 4.25
526 FX 6.96 FY 0.2 FZ 2.29
528 FX 13.91 FY 0.32 FZ 9.48
529 FX 19.48 FY 0.56 FZ 13.66
530 FX 18.67 FY 0.69 FZ 12.9
532 FX 17.56 FY -2.66 FZ 12.89
533 FX 19.33 FY 0.61 FZ 13.5
534 FX 17.44 FY 0.98 FZ 11.8
536 FX 15.49 FY -1.48 FZ 11.25
537 FX 16.93 FY -0.23 FZ 11.9
538 FX 14.02 FY -3.94 FZ 11.31
540 FX 12.34 FY -4.58 FZ 11.06
541 FX 11.64 FY -3.27 FZ 10.04
542 FX 11.84 FY -2.6 FZ 9.55
544 FX 5.74 FY -2.38 FZ 5.58
545 FX 5.77 FY -3.81 FZ 7
546 FX 3.65 FY -3.26 FZ 5.27
***R5-INT-1-WENT
118 FX -107.25 FY 56.44 FZ 32.99
156 FX -158.66 FY -69.81 FZ 68.08
40 FX 107.29 FY 56.94 FZ 33.4
78 FX 158.79 FY -70.11 FZ 68.31
119 FX -14.55 FY 0.94 FZ -2.11
120 FX -14.73 FY 1.1 FZ -2.89
121 FX -21.26 FY 1.56 FZ -4.68
122 FX -20.65 FY 1.53 FZ -4.72
123 FX -25.77 FY 1.89 FZ -6.09
124 FX -22.95 FY 1.75 FZ -5.43
125 FX -24.03 FY 1.86 FZ -5.68
126 FX -26.02 FY 2.07 FZ -6.13
127 FX -24.15 FY 1.99 FZ -5.6
128 FX -24.65 FY 2.1 FZ -5.85
129 FX -26.45 FY 2.32 FZ -5.99
```


Q326-KSP-R4b-Deg.std — a46

```
130 FX -26.2 FY 2.37 FZ -5.85
131 FX -25.85 FY 2.42 FZ -5.69
132 FX -25.97 FY 2.5 FZ -5.65
133 FX -25.5 FY 2.53 FZ -5.48
134 FX -24.72 FY 2.53 FZ -5.21
135 FX -19.11 FY 2.01 FZ -3.87
136 FX -10.9 FY 1.17 FZ -2.05
137 FX -2.67 FY 0.29 FZ -0.29
138 FX -4.78 FY 0.52 FZ 1.16
139 FX -11.99 FY 1.38 FZ 2.7
140 FX -18.66 FY 2.23 FZ 4.1
141 FX -21.71 FY 2.71 FZ 4.72
142 FX -23.42 FY 3.06 FZ 5.03
143 FX -24 FY 3.28 FZ 5.1
144 FX -24.5 FY 3.53 FZ 5.11
145 FX -24.64 FY 3.73 FZ 5.05
146 FX -23.05 FY 3.67 FZ 4.67
147 FX -22.28 FY 3.72 FZ 4.43
148 FX -23.01 FY 4.01 FZ 4.39
149 FX -20.71 FY 3.77 FZ 3.88
150 FX -19.02 FY 3.56 FZ 3.45
151 FX -19.27 FY 3.7 FZ 3.27
152 FX -14.78 FY 2.85 FZ 2.47
153 FX -13.69 FY 2.57 FZ 2.08
154 FX -9.45 FY 1.67 FZ 1.41
155 FX -10.15 FY 1.11 FZ 0.96
41 FX 14.51 FY 0.94 FZ -2.19
42 FX 14.73 FY 1.1 FZ -2.93
43 FX 21.26 FY 1.55 FZ -4.73
44 FX 20.66 FY 1.54 FZ -4.72
45 FX 25.77 FY 1.89 FZ -6.13
46 FX 22.95 FY 1.76 FZ -5.44
47 FX 24.03 FY 1.87 FZ -5.7
48 FX 26.02 FY 2.07 FZ -6.16
49 FX 24.15 FY 2 FZ -5.61
50 FX 24.65 FY 2.1 FZ -5.66
51 FX 26.45 FY 2.32 FZ -6.02
52 FX 26.2 FY 2.37 FZ -5.87
53 FX 25.86 FY 2.42 FZ -5.71
54 FX 25.97 FY 2.5 FZ -5.67
55 FX 25.51 FY 2.53 FZ -5.49
56 FX 24.72 FY 2.53 FZ -5.23
57 FX 19.12 FY 2.01 FZ -3.88
58 FX 10.9 FY 1.17 FZ -2.04
59 FX 2.64 FY 0.29 FZ -0.27
60 FX 4.84 FY 0.53 FZ 1.19
61 FX 11.96 FY 1.36 FZ 2.71
62 FX 18.66 FY 2.21 FZ 4.09
63 FX 21.71 FY 2.69 FZ 4.71
64 FX 23.42 FY 3.04 FZ 5.02
65 FX 24 FY 3.27 FZ 5.09
66 FX 24.5 FY 3.51 FZ 5.1
67 FX 24.64 FY 3.71 FZ 5.04
68 FX 23.05 FY 3.65 FZ 4.66
69 FX 22.28 FY 3.7 FZ 4.42
70 FX 23.01 FY 4 FZ 4.39
71 FX 20.72 FY 3.76 FZ 3.87
72 FX 19.02 FY 3.55 FZ 3.45
73 FX 19.27 FY 3.7 FZ 3.26
74 FX 14.78 FY 2.85 FZ 2.45
75 FX 13.69 FY 2.58 FZ 2.06
76 FX 9.45 FY 1.67 FZ 1.37
77 FX 10.02 FY 1.08 FZ 0.88
***R5-INT-2-WENT
156 FX -107.25 FY 56.44 FZ 32.99
234 FX -158.66 FY -69.81 FZ 68.08
79 FX 107.29 FY 56.94 FZ 33.4
117 FX 158.79 FY -70.11 FZ 68.31
197 FX -14.55 FY 0.94 FZ -2.11
198 FX -14.73 FY 1.1 FZ -2.89
199 FX -21.26 FY 1.56 FZ -4.68
200 FX -20.65 FY 1.53 FZ -4.72
201 FX -25.77 FY 1.89 FZ -6.09
202 FX -22.95 FY 1.75 FZ -5.43
203 FX -24.03 FY 1.86 FZ -5.68
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Q326-KSP-R4b-Deg.std — a47

```
204 FX -26.02 FY 2.07 FZ -6.13
205 FX -24.15 FY 1.99 FZ -5.6
206 FX -24.65 FY 2.1 FZ -5.65
207 FX -26.45 FY 2.32 FZ -5.99
208 FX -26.2 FY 2.37 FZ -5.85
209 FX -25.85 FY 2.42 FZ -5.69
210 FX -25.97 FY 2.5 FZ -5.65
211 FX -25.5 FY 2.53 FZ -5.48
212 FX -24.72 FY 2.53 FZ -5.21
213 FX -19.11 FY 2.01 FZ -3.87
214 FX -10.9 FY 1.17 FZ -2.05
215 FX -2.67 FY 0.29 FZ -0.29
216 FX -4.78 FY 0.52 FZ 1.16
217 FX -11.99 FY 1.38 FZ 2.7
218 FX -18.66 FY 2.23 FZ 4.1
219 FX -21.71 FY 2.71 FZ 4.72
220 FX -23.42 FY 3.06 FZ 5.03
221 FX -24 FY 3.28 FZ 5.1
222 FX -24.5 FY 3.53 FZ 5.11
223 FX -24.64 FY 3.73 FZ 5.05
224 FX -23.05 FY 3.67 FZ 4.67
225 FX -22.28 FY 3.72 FZ 4.43
226 FX -23.01 FY 4.01 FZ 4.39
227 FX -20.71 FY 3.77 FZ 3.88
228 FX -19.02 FY 3.56 FZ 3.45
229 FX -19.27 FY 3.7 FZ 3.27
230 FX -14.78 FY 2.85 FZ 2.47
231 FX -13.69 FY 2.57 FZ 2.08
232 FX -9.45 FY 1.67 FZ 1.41
233 FX -10.15 FY 1.11 FZ 0.96
80 FX 14.51 FY 0.94 FZ -2.19
81 FX 14.73 FY 1.1 FZ -2.93
82 FX 21.26 FY 1.55 FZ -4.73
83 FX 20.66 FY 1.54 FZ -4.73
84 FX 25.77 FY 1.89 FZ -6.13
85 FX 22.95 FY 1.76 FZ -5.44
86 FX 24.03 FY 1.87 FZ -5.7
87 FX 26.02 FY 2.07 FZ -6.16
88 FX 24.15 FY 2 FZ -5.61
89 FX 24.65 FY 2.1 FZ -5.66
90 FX 26.45 FY 2.32 FZ -6.02
91 FX 26.2 FY 2.37 FZ -5.87
92 FX 25.86 FY 2.42 FZ -5.71
93 FX 25.97 FY 2.5 FZ -5.67
94 FX 25.51 FY 2.53 FZ -5.49
95 FX 24.72 FY 2.53 FZ -5.23
96 FX 19.12 FY 2.01 FZ -3.88
97 FX 10.9 FY 1.17 FZ -2.04
98 FX 2.64 FY 0.29 FZ -0.27
99 FX 4.84 FY 0.53 FZ 1.19
100 FX 11.96 FY 1.36 FZ 2.71
101 FX 18.66 FY 2.21 FZ 4.09
102 FX 21.71 FY 2.69 FZ 4.71
103 FX 23.42 FY 3.04 FZ 5.02
104 FX 24 FY 3.27 FZ 5.09
105 FX 24.5 FY 3.51 FZ 5.1
106 FX 24.64 FY 3.71 FZ 5.04
107 FX 23.05 FY 3.65 FZ 4.66
108 FX 22.28 FY 3.7 FZ 4.42
109 FX 23.01 FY 4 FZ 4.39
110 FX 20.72 FY 3.76 FZ 3.87
111 FX 19.02 FY 3.55 FZ 3.45
112 FX 19.27 FY 3.7 FZ 3.26
113 FX 14.78 FY 2.85 FZ 2.45
114 FX 13.69 FY 2.58 FZ 2.06
115 FX 9.45 FY 1.67 FZ 1.37
116 FX 10.02 FY 1.08 FZ 0.88
***R5-INT-3-WENT
274 FX -107.25 FY 56.44 FZ 32.99
312 FX -158.66 FY -69.81 FZ 68.08
157 FX 107.29 FY 56.94 FZ 33.4
195 FX 158.79 FY -70.11 FZ 68.31
275 FX -14.55 FY 0.94 FZ -2.11
276 FX -14.73 FY 1.1 FZ -2.89
277 FX -21.26 FY 1.56 FZ -4.68
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Q326-KSP-R4b-Deg.std

```
278 FX -20.65 FY 1.53 FZ -4.72
279 FX -25.77 FY 1.89 FZ -6.09
280 FX -22.95 FY 1.75 FZ -5.43
281 FX -24.03 FY 1.86 FZ -5.68
282 FX -26.02 FY 2.07 FZ -6.13
283 FX -24.15 FY 1.99 FZ -5.6
284 FX -24.65 FY 2.1 FZ -5.65
285 FX -26.45 FY 2.32 FZ -5.99
286 FX -26.2 FY 2.37 FZ -5.85
287 FX -25.85 FY 2.42 FZ -5.69
288 FX -25.97 FY 2.5 FZ -5.65
289 FX -25.5 FY 2.53 FZ -5.48
290 FX -24.72 FY 2.53 FZ -5.21
291 FX -19.11 FY 2.01 FZ -3.87
292 FX -10.9 FY 1.17 FZ -2.05
293 FX -2.67 FY 0.29 FZ -0.29
294 FX -4.78 FY 0.52 FZ 1.16
295 FX -11.99 FY 1.38 FZ 2.7
296 FX -18.66 FY 2.23 FZ 4.1
297 FX -21.71 FY 2.71 FZ 4.72
298 FX -23.42 FY 3.06 FZ 5.03
299 FX -24 FY 3.28 FZ 5.1
300 FX -24.5 FY 3.53 FZ 5.11
301 FX -24.64 FY 3.73 FZ 5.05
302 FX -23.05 FY 3.67 FZ 4.67
303 FX -22.28 FY 3.72 FZ 4.43
304 FX -23.01 FY 4.01 FZ 4.39
305 FX -20.71 FY 3.77 FZ 3.88
306 FX -19.02 FY 3.56 FZ 3.45
307 FX -19.27 FY 3.7 FZ 3.27
308 FX -14.78 FY 2.85 FZ 2.47
309 FX -13.69 FY 2.57 FZ 2.08
310 FX -9.45 FY 1.67 FZ 1.41
311 FX -10.15 FY 1.11 FZ 0.96
158 FX 14.51 FY 0.94 FZ -2.19
159 FX 14.73 FY 1.1 FZ -2.93
160 FX 21.26 FY 1.55 FZ -4.73
161 FX 20.66 FY 1.54 FZ -4.73
162 FX 25.77 FY 1.89 FZ -6.13
163 FX 22.95 FY 1.76 FZ -5.44
164 FX 24.03 FY 1.87 FZ -5.7
165 FX 26.02 FY 2.07 FZ -6.16
166 FX 24.15 FY 2 FZ -5.61
167 FX 24.65 FY 2.1 FZ -5.66
168 FX 26.45 FY 2.32 FZ -6.02
169 FX 26.2 FY 2.37 FZ -5.87
170 FX 25.86 FY 2.42 FZ -5.71
171 FX 25.97 FY 2.5 FZ -5.67
172 FX 25.51 FY 2.53 FZ -5.49
173 FX 24.72 FY 2.53 FZ -5.23
174 FX 19.12 FY 2.01 FZ -3.88
175 FX 10.9 FY 1.17 FZ -2.04
176 FX 2.64 FY 0.29 FZ -0.27
177 FX 4.84 FY 0.53 FZ 1.19
178 FX 11.96 FY 1.36 FZ 2.71
179 FX 18.66 FY 2.21 FZ 4.09
180 FX 21.71 FY 2.69 FZ 4.71
181 FX 23.42 FY 3.04 FZ 5.02
182 FX 24 FY 3.27 FZ 5.09
183 FX 24.5 FY 3.51 FZ 5.1
184 FX 24.64 FY 3.71 FZ 5.04
185 FX 23.05 FY 3.65 FZ 4.66
186 FX 22.28 FY 3.7 FZ 4.42
187 FX 23.01 FY 4 FZ 4.39
188 FX 20.72 FY 3.76 FZ 3.87
189 FX 19.02 FY 3.55 FZ 3.45
190 FX 19.27 FY 3.7 FZ 3.26
191 FX 14.78 FY 2.85 FZ 2.45
192 FX 13.69 FY 2.58 FZ 2.06
193 FX 9.45 FY 1.67 FZ 1.37
194 FX 10.02 FY 1.08 FZ 0.88
***RS-INT-4-WENT
352 FX -107.25 FY 56.44 FZ 32.99
390 FX -158.66 FY -69.81 FZ 68.08
235 FX 107.29 FY 56.94 FZ 33.4
```

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Q326-KSP-R4b-Deg.std

```
273 FX 158.79 FY -70.11 FZ 68.31
353 FX -14.55 FY 0.94 FZ -2.11
354 FX -14.73 FY 1.1 FZ -2.89
355 FX -21.26 FY 1.56 FZ -4.68
356 FX -20.65 FY 1.53 FZ -4.72
357 FX -25.77 FY 1.89 FZ -6.09
358 FX -22.95 FY 1.75 FZ -5.43
359 FX -24.03 FY 1.86 FZ -5.68
360 FX -26.02 FY 2.07 FZ -6.13
361 FX -24.15 FY 1.99 FZ -5.6
362 FX -24.65 FY 2.1 FZ -5.65
363 FX -26.45 FY 2.32 FZ -5.99
364 FX -26.2 FY 2.37 FZ -5.85
365 FX -25.85 FY 2.42 FZ -5.69
366 FX -25.97 FY 2.5 FZ -5.65
367 FX -25.5 FY 2.53 FZ -5.48
368 FX -24.72 FY 2.53 FZ -5.21
369 FX -19.11 FY 2.01 FZ -3.87
370 FX -10.9 FY 1.17 FZ -2.05
371 FX -2.67 FY 0.29 FZ -0.29
372 FX -4.78 FY 0.52 FZ 1.16
373 FX -11.99 FY 1.38 FZ 2.7
374 FX -18.66 FY 2.23 FZ 4.1
375 FX -21.71 FY 2.71 FZ 4.72
376 FX -23.42 FY 3.06 FZ 5.03
377 FX -24 FY 3.28 FZ 5.1
378 FX -24.5 FY 3.53 FZ 5.11
379 FX -24.64 FY 3.73 FZ 5.05
380 FX -23.05 FY 3.67 FZ 4.67
381 FX -22.28 FY 3.72 FZ 4.43
382 FX -23.01 FY 4.01 FZ 4.39
383 FX -20.71 FY 3.77 FZ 3.88
384 FX -19.02 FY 3.56 FZ 3.45
385 FX -19.27 FY 3.7 FZ 3.27
386 FX -14.78 FY 2.85 FZ 2.47
387 FX -13.69 FY 2.57 FZ 2.08
388 FX -9.45 FY 1.67 FZ 1.41
389 FX -10.15 FY 1.11 FZ 0.96
236 FX 14.51 FY 0.94 FZ -2.19
237 FX 14.73 FY 1.1 FZ -2.93
238 FX 21.26 FY 1.55 FZ -4.73
239 FX 20.66 FY 1.54 FZ -4.73
240 FX 25.77 FY 1.89 FZ -6.13
241 FX 22.95 FY 1.76 FZ -5.44
242 FX 24.03 FY 1.87 FZ -5.7
243 FX 26.02 FY 2.07 FZ -6.16
244 FX 24.15 FY 2 FZ -5.61
245 FX 24.65 FY 2.1 FZ -5.66
246 FX 26.45 FY 2.32 FZ -6.02
247 FX 26.2 FY 2.37 FZ -5.87
248 FX 25.86 FY 2.42 FZ -5.71
249 FX 25.97 FY 2.5 FZ -5.67
250 FX 25.51 FY 2.53 FZ -5.49
251 FX 24.72 FY 2.53 FZ -5.23
252 FX 19.12 FY 2.01 FZ -3.88
253 FX 10.9 FY 1.17 FZ -2.04
254 FX 2.64 FY 0.29 FZ -0.27
255 FX 4.84 FY 0.53 FZ 1.19
256 FX 11.96 FY 1.36 FZ 2.71
257 FX 18.66 FY 2.21 FZ 4.09
258 FX 21.71 FY 2.69 FZ 4.71
259 FX 23.42 FY 3.04 FZ 5.02
260 FX 24 FY 3.27 FZ 5.09
261 FX 24.5 FY 3.51 FZ 5.1
262 FX 24.64 FY 3.71 FZ 5.04
263 FX 23.05 FY 3.65 FZ 4.66
264 FX 22.28 FY 3.7 FZ 4.42
265 FX 23.01 FY 4 FZ 4.39
266 FX 20.72 FY 3.76 FZ 3.87
267 FX 19.02 FY 3.55 FZ 3.45
268 FX 19.27 FY 3.7 FZ 3.26
269 FX 14.78 FY 2.85 FZ 2.45
270 FX 13.69 FY 2.58 FZ 2.06
271 FX 9.45 FY 1.67 FZ 1.37
272 FX 10.02 FY 1.08 FZ 0.88
```

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Q326-KSP-R4b-Deg.std

```
***RS-INT-5-WENT
430 FX -107.25 FY 56.44 FZ 32.99
468 FX -158.66 FY -69.81 FZ 68.08
313 FX 107.29 FY 56.94 FZ 33.4
351 FX 158.79 FY -70.11 FZ 68.31
431 FX -14.55 FY 0.94 FZ -2.11
432 FX -14.73 FY 1.1 FZ -2.89
433 FX -21.26 FY 1.56 FZ -4.68
434 FX -20.65 FY 1.53 FZ -4.72
435 FX -25.77 FY 1.89 FZ -6.09
436 FX -22.95 FY 1.75 FZ -5.43
437 FX -24.03 FY 1.86 FZ -5.68
438 FX -26.02 FY 2.07 FZ -6.13
439 FX -24.15 FY 1.99 FZ -5.6
440 FX -24.65 FY 2.1 FZ -5.65
441 FX -26.45 FY 2.32 FZ -5.99
442 FX -26.2 FY 2.37 FZ -5.85
443 FX -25.85 FY 2.42 FZ -5.69
444 FX -25.97 FY 2.5 FZ -5.65
445 FX -25.5 FY 2.53 FZ -5.48
446 FX -24.72 FY 2.53 FZ -5.21
447 FX -19.11 FY 2.01 FZ -3.87
448 FX -10.9 FY 1.17 FZ -2.05
449 FX -2.67 FY 0.29 FZ -0.29
450 FX -4.78 FY 0.52 FZ 1.16
451 FX -11.99 FY 1.38 FZ 2.7
452 FX -18.66 FY 2.23 FZ 4.1
453 FX -21.71 FY 2.71 FZ 4.72
454 FX -23.42 FY 3.06 FZ 5.03
455 FX -24 FY 3.28 FZ 5.1
456 FX -24.5 FY 3.53 FZ 5.11
457 FX -24.64 FY 3.73 FZ 5.05
458 FX -23.05 FY 3.67 FZ 4.67
459 FX -22.28 FY 3.72 FZ 4.43
460 FX -23.01 FY 4.01 FZ 4.39
461 FX -20.71 FY 3.77 FZ 3.88
462 FX -19.02 FY 3.56 FZ 3.45
463 FX -19.27 FY 3.7 FZ 3.27
464 FX -14.78 FY 2.85 FZ 2.47
465 FX -13.69 FY 2.57 FZ 2.08
466 FX -9.45 FY 1.67 FZ 1.41
467 FX -10.15 FY 1.11 FZ 0.96
314 FX 14.51 FY 0.94 FZ -2.19
315 FX 14.73 FY 1.1 FZ -2.93
316 FX 21.26 FY 1.55 FZ -4.73
317 FX 20.66 FY 1.54 FZ -4.73
318 FX 25.77 FY 1.89 FZ -6.13
319 FX 22.95 FY 1.76 FZ -5.44
320 FX 24.03 FY 1.87 FZ -5.7
321 FX 26.02 FY 2.07 FZ -6.16
322 FX 24.15 FY 2 FZ -5.61
323 FX 24.65 FY 2.1 FZ -5.66
324 FX 26.45 FY 2.32 FZ -6.02
325 FX 26.2 FY 2.37 FZ -5.87
326 FX 25.86 FY 2.42 FZ -5.71
327 FX 25.97 FY 2.5 FZ -5.67
328 FX 25.51 FY 2.53 FZ -5.49
329 FX 24.72 FY 2.53 FZ -5.23
330 FX 19.12 FY 2.01 FZ -3.88
331 FX 10.9 FY 1.17 FZ -2.04
332 FX 2.64 FY 0.29 FZ -0.27
333 FX 4.84 FY 0.53 FZ 1.19
334 FX 11.96 FY 1.36 FZ 2.71
335 FX 18.66 FY 2.21 FZ 4.09
336 FX 21.71 FY 2.69 FZ 4.71
337 FX 23.42 FY 3.04 FZ 5.02
338 FX 24 FY 3.27 FZ 5.09
339 FX 24.5 FY 3.51 FZ 5.1
340 FX 24.64 FY 3.71 FZ 5.04
341 FX 23.05 FY 3.65 FZ 4.66
342 FX 22.28 FY 3.7 FZ 4.42
343 FX 23.01 FY 4 FZ 4.39
344 FX 20.72 FY 3.76 FZ 3.87
345 FX 19.02 FY 3.55 FZ 3.45
346 FX 19.27 FY 3.7 FZ 3.26
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Q326-KSP-R4b-Deg.std

```
347 FX 14.78 FY 2.85 FZ 2.45
348 FX 13.69 FY 2.58 FZ 2.06
349 FX 9.45 FY 1.67 FZ 1.37
350 FX 10.02 FY 1.08 FZ 0.88
***RS-EDGE-SBOARD-WENT
429 FX 0.21 FY 0.08 FZ 0.01
391 FX 0.12 FY 0.04 FZ -0.13
472 FX -7.8 FY 4.22 FZ 4.66
476 FX -13.34 FY 3.2 FZ 4.79
480 FX -15.77 FY 5.22 FZ 5.13
484 FX -17.5 FY 2.45 FZ 4.5
488 FX -5.75 FY 0.1 FZ 3.23
492 FX -16.31 FY -0.81 FZ 10.89
496 FX -14.11 FY -2.64 FZ 10.05
500 FX -11.34 FY -2.23 FZ 8.31
504 FX -6.42 FY -5.27 FZ 7.43
428 FX 5.34 FY 0.23 FZ -2.6
427 FX 6.5 FY 0.45 FZ -2.56
426 FX 8.58 FY 0.65 FZ -3
425 FX 10.21 FY 0.78 FZ -3.34
424 FX 14.93 FY 1.06 FZ -5
423 FX 14.18 FY 1.05 FZ -4.44
422 FX 13.54 FY 1.07 FZ -3.87
421 FX 17.3 FY 1.26 FZ -4.96
420 FX 18.7 FY 1.28 FZ -5.3
419 FX 19.19 FY 1.28 FZ -5.24
418 FX 18.61 FY 1.23 FZ -4.78
417 FX 20.98 FY 1.28 FZ -5.42
416 FX 22.51 FY 1.28 FZ -5.81
415 FX 22.42 FY 1.21 FZ -5.61
414 FX 20.67 FY 1.07 FZ -4.92
413 FX 23.76 FY 1.14 FZ -5.78
412 FX 23.31 FY 1.03 FZ -5.76
411 FX 17.81 FY 0.75 FZ -4.36
410 FX 7.54 FY 0.31 FZ -2.12
409 FX 7.29 FY 0.4 FZ -4.22
408 FX 12.79 FY 0.73 FZ -7.89
407 FX 16.11 FY 0.91 FZ -10.15
406 FX 16.26 FY 0.9 FZ -10.22
405 FX 15.45 FY 0.84 FZ -9.74
404 FX 14.78 FY 0.8 FZ -8.3
403 FX 15.12 FY 0.8 FZ -9.42
402 FX 15.35 FY 0.79 FZ -9.45
401 FX 13.32 FY 0.69 FZ -8.23
400 FX 12.43 FY 0.64 FZ -7.65
399 FX 13.29 FY 0.65 FZ -8.06
398 FX 11.89 FY 0.56 FZ -7.1
397 FX 10.28 FY 0.5 FZ -6.18
396 FX 10.44 FY 0.48 FZ -6.21
395 FX 8.1 FY 0.36 FZ -4.67
394 FX 8.51 FY 0.33 FZ -4.84
393 FX 5.87 FY 0.21 FZ -3.43
392 FX 5.08 FY 0.12 FZ -3.06
469 FX -3.81 FY 3.28 FZ 4.38
470 FX -5.85 FY 1.82 FZ 3.73
471 FX -6.19 FY 2.28 FZ 3.76
473 FX -10.35 FY 2.04 FZ 4.58
474 FX -10.07 FY 4.49 FZ 5.58
475 FX -11.86 FY 3.6 FZ 5.15
477 FX -13.08 FY 3.22 FZ 4.85
478 FX -14.57 FY 3.88 FZ 5.63
479 FX -14.76 FY 1.57 FZ 4.42
481 FX -16.37 FY 0.66 FZ 4.58
482 FX -16.88 FY 0.66 FZ 4.89
483 FX -16.63 FY 2.86 FZ 4.88
485 FX -16.76 FY 0.46 FZ 4.55
486 FX -14 FY 0.39 FZ 4.15
487 FX -7.02 FY 0.18 FZ 2.22
489 FX -13.99 FY 0.29 FZ 9.38
490 FX -19.56 FY 0.51 FZ 13.55
491 FX -18.73 FY 0.65 FZ 12.78
492 FX -17.6 FY -0.59 FZ 12.38
494 FX -19.38 FY 0.89 FZ 13.28
495 FX -17.49 FY 0.86 FZ 11.71
497 FX -15.51 FY 0.34 FZ 10.37
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Q326-KSP-R4b-Deg.std

```
498 FX -16.8 FY -2.39 FZ 12.63
499 FX -14.05 FY -1.82 FZ 10.27
501 FX -12.3 FY -2.62 FZ 9.69
502 FX -13.43 FY -5.18 FZ 11.07
503 FX -11.71 FY -1.63 FZ 8.79
505 FX -5.55 FY -3.17 FZ 6.13
506 FX -5.34 FY -2.43 FZ 5.64
507 FX -3.53 FY -4.74 FZ 6.4
*******************************************************************************
LOAD 9 LOADTYPE Wind  TITLE LOAD CASE 9 - WAS
JOINT LOAD
***RS-EDGE-DPOOL
1 FX -0.22 FY 0.9 FZ 0.82
39 FX -0.14 FY -0.7 FZ 0.46
511 FX 6.51 FY 5.26 FZ 7.69
515 FX 11.43 FY 0.52 FZ 7.57
519 FX 14.15 FY 1.25 FZ 9.78
523 FX 16.38 FY -0.87 FZ 10.73
527 FX 5.45 FY -0.12 FZ 1.98
531 FX 17.53 FY -0.44 FZ 4.3
535 FX 15.61 FY -3.21 FZ 4.72
539 FX 13.24 FY -1.67 FZ 4.23
543 FX 7.77 FY -4.04 FZ 4.73
2 FX -5.47 FY -0.26 FZ -2.67
3 FX -6.84 FY -0.43 FZ -2.85
4 FX -8.56 FY -0.66 FZ -3.05
5 FX -10.25 FY -0.78 FZ -3.46
6 FX -14.94 FY -1.07 FZ -5.16
7 FX -14.21 FY -1.06 FZ -4.54
8 FX -13.66 FY -1.09 FZ -4.05
9 FX -17.26 FY -1.29 FZ -5.05
10 FX -18.76 FY -1.3 FZ -5.46
11 FX -19.34 FY -1.31 FZ -5.43
12 FX -18.73 FY -1.26 FZ -4.97
13 FX -21.01 FY -1.33 FZ -5.56
14 FX -22.61 FY -1.32 FZ -6
15 FX -22.53 FY -1.26 FZ -5.8
16 FX -20.77 FY -1.12 FZ -5.09
17 FX -23.6 FY -1.18 FZ -5.93
18 FX -21.75 FY -1.03 FZ -5.56
19 FX -13.18 FY -0.59 FZ -3.48
20 FX -6.2 FY -0.31 FZ -2.97
21 FX -10.96 FY -0.6 FZ -6.81
22 FX -14.57 FY -0.79 FZ -9.34
23 FX -16.52 FY -0.89 FZ -10.62
24 FX -16.21 FY -0.85 FZ -10.35
25 FX -15.34 FY -0.8 FZ -9.81
26 FX -14.66 FY -0.76 FZ -9.37
27 FX -14.94 FY -0.75 FZ -9.46
28 FX -15.21 FY -0.76 FZ -9.54
29 FX -13.23 FY -0.67 FZ -8.31
30 FX -12.35 FY -0.62 FZ -7.73
31 FX -13.18 FY -0.63 FZ -8.11
32 FX -11.91 FY -0.55 FZ -7.19
33 FX -10.2 FY -0.48 FZ -6.23
34 FX -10.43 FY -0.48 FZ -6.35
35 FX -8.07 FY -0.35 FZ -4.74
36 FX -8.43 FY -0.31 FZ -4.88
37 FX -5.78 FY -0.22 FZ -3.48
38 FX -5.3 FY -0.1 FZ -3.23
508 FX 3.54 FY 3.23 FZ 5.15
509 FX 5.84 FY 3.73 FZ 7.03
510 FX 5.46 FY 2.32 FZ 5.45
512 FX 11.62 FY 2.49 FZ 9.42
513 FX 11.51 FY 3.14 FZ 9.84
514 FX 12.26 FY 4.39 FZ 10.95
516 FX 13.96 FY 3.69 FZ 11.23
517 FX 16.91 FY 0.14 FZ 11.87
518 FX 15.54 FY 1.31 FZ 11.24
520 FX 17.52 FY -1.03 FZ 11.84
521 FX 19.4 FY -0.68 FZ 13.53
522 FX 17.59 FY 2.33 FZ 12.9
524 FX 18.52 FY -0.77 FZ 12.78
525 FX 18.17 FY -0.62 FZ 12.65
526 FX 10.07 FY -0.29 FZ 6.67
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Q326-KSP-R4b-Deg.std

```
528 FX 11.25 FY -0.28 FZ 3.3
529 FX 16.26 FY -0.42 FZ 4.78
530 FX 17.31 FY -0.45 FZ 4.79
532 FX 16.55 FY -4.45 FZ 5.3
533 FX 16.78 FY -1.02 FZ 5.05
534 FX 16.26 FY -0.61 FZ 4.63
536 FX 14.7 FY -3.39 FZ 5.11
537 FX 14.5 FY -1.78 FZ 5.01
538 FX 13.05 FY -4.98 FZ 5.56
540 FX 11.84 FY -4.76 FZ 5.84
541 FX 10.02 FY -3.02 FZ 4.93
542 FX 10.38 FY -2.57 FZ 4.9
544 FX 6.11 FY -1.85 FZ 3.4
545 FX 5.83 FY -2.49 FZ 4.32
546 FX 4.01 FY -2.53 FZ 3.97
***RS-INT-1-WAS
118 FX -161.21 FY 70.91 FZ 68.97
156 FX -110.35 FY -58.02 FZ 33.91
40 FX 161.08 FY 71.21 FZ 69.21
78 FX 110.45 FY -58.54 FZ 34.32
119 FX -9.94 FY -1.06 FZ 0.92
120 FX -9.31 FY -1.62 FZ 1.35
121 FX -13.39 FY -2.51 FZ 2.06
122 FX -14.5 FY -2.79 FZ 2.43
123 FX -18.92 FY -3.61 FZ 3.21
124 FX -18.7 FY -3.5 FZ 3.42
125 FX -20.41 FY -3.69 FZ 3.83
126 FX -22.68 FY -3.93 FZ 4.36
127 FX -21.99 FY -3.63 FZ 4.39
128 FX -22.77 FY -3.59 FZ 4.64
129 FX -24.38 FY -3.64 FZ 5.01
130 FX -24.31 FY -3.44 FZ 5.11
131 FX -23.97 FY -3.22 FZ 5.12
132 FX -23.71 FY -3.02 FZ 5.12
133 FX -22.58 FY -2.74 FZ 4.94
134 FX -20.64 FY -2.38 FZ 4.54
135 FX -15.04 FY -1.66 FZ 3.41
136 FX -8.45 FY -0.89 FZ 2.01
137 FX -2.43 FY -0.25 FZ 0.52
138 FX -5.4 FY -0.59 FZ -0.94
139 FX -15.04 FY -1.63 FZ -2.92
140 FX -22.57 FY -2.39 FZ -4.68
141 FX -24.69 FY -2.54 FZ -5.25
142 FX -25.76 FY -2.57 FZ -5.57
143 FX -25.93 FY -2.51 FZ -5.69
144 FX -26.41 FY -2.47 FZ -5.88
145 FX -26.7 FY -2.4 FZ -6.04
146 FX -24.89 FY -2.17 FZ -5.69
147 FX -24.38 FY -2.07 FZ -5.64
148 FX -26.25 FY -2.13 FZ -6.18
149 FX -24.22 FY -1.92 FZ -5.73
150 FX -23.12 FY -1.79 FZ -5.46
151 FX -25.91 FY -1.94 FZ -6.13
152 FX -20.73 FY -1.56 FZ -4.73
153 FX -21.3 FY -1.58 FZ -4.69
154 FX -14.72 FY -1.12 FZ -2.91
155 FX -14.71 FY -0.97 FZ -2.14
41 FX 10.06 FY -1.12 FZ 0.95
42 FX 9.32 FY -1.65 FZ 1.36
43 FX 13.4 FY -2.53 FZ 2.04
44 FX 14.49 FY -2.79 FZ 2.41
45 FX 18.92 FY -3.62 FZ 3.21
46 FX 18.7 FY -3.48 FZ 3.41
47 FX 20.41 FY -3.68 FZ 3.82
48 FX 22.68 FY -3.92 FZ 4.35
49 FX 21.99 FY -3.61 FZ 4.38
50 FX 22.77 FY -3.57 FZ 4.63
51 FX 24.38 FY -3.63 FZ 5.01
52 FX 24.31 FY -3.42 FZ 5.1
53 FX 23.97 FY -3.2 FZ 5.11
54 FX 23.71 FY -3.01 FZ 5.11
55 FX 22.58 FY -2.73 FZ 4.92
56 FX 20.64 FY -2.38 FZ 4.53
57 FX 15.05 FY -1.66 FZ 3.4
58 FX 8.45 FY -0.9 FZ 1.98
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```
59 FX 2.39 FY -0.25 FZ 0.46
60 FX 5.45 FY -0.59 FZ -1
61 FX 15.02 FY -1.61 FZ -2.95
62 FX 22.57 FY -2.36 FZ -4.7
63 FX 24.69 FY -2.52 FZ -5.27
64 FX 25.76 FY -2.55 FZ -5.59
65 FX 25.93 FY -2.5 FZ -5.7
66 FX 26.41 FY -2.46 FZ -5.9
67 FX 26.7 FY -2.4 FZ -6.06
68 FX 24.89 FY -2.17 FZ -5.71
69 FX 24.38 FY -2.07 FZ -5.66
70 FX 26.25 FY -2.14 FZ -6.2
71 FX 24.22 FY -1.92 FZ -5.74
72 FX 23.12 FY -1.8 FZ -5.47
73 FX 25.91 FY -1.93 FZ -6.16
74 FX 20.73 FY -1.56 FZ -4.74
75 FX 21.3 FY -1.56 FZ -4.73
76 FX 14.72 FY -1.1 FZ -2.92
77 FX 14.62 FY -0.92 FZ -2.16
***RS-INT-2-WAS
196 FX -161.21 FY 70.91 FZ 68.97
234 FX -110.35 FY -58.02 FZ 33.91
79 FX 161.08 FY 71.21 FZ 69.21
117 FX 110.45 FY -58.54 FZ 34.32
197 FX -9.94 FY -1.06 FZ 0.92
198 FX -9.31 FY -1.62 FZ 1.35
199 FX -13.39 FY -2.51 FZ 2.06
200 FX -14.5 FY -2.79 FZ 2.43
201 FX -18.92 FY -3.61 FZ 3.21
202 FX -18.7 FY -3.5 FZ 3.42
203 FX -20.41 FY -3.69 FZ 3.83
204 FX -22.68 FY -3.93 FZ 4.36
205 FX -21.99 FY -3.63 FZ 4.39
206 FX -22.77 FY -3.59 FZ 4.64
207 FX -24.38 FY -3.64 FZ 5.01
208 FX -24.31 FY -3.44 FZ 5.11
209 FX -23.97 FY -3.22 FZ 5.12
210 FX -23.71 FY -3.02 FZ 5.12
211 FX -22.58 FY -2.74 FZ 4.94
212 FX -20.64 FY -2.38 FZ 4.54
213 FX -15.04 FY -1.66 FZ 3.41
214 FX -8.45 FY -0.89 FZ 2.01
215 FX -2.43 FY -0.25 FZ 0.52
216 FX -5.4 FY -0.59 FZ -0.94
217 FX -15.04 FY -1.63 FZ -2.92
218 FX -22.57 FY -2.39 FZ -4.68
219 FX -24.69 FY -2.54 FZ -5.25
220 FX -25.76 FY -2.57 FZ -5.57
221 FX -25.93 FY -2.51 FZ -5.69
222 FX -26.41 FY -2.47 FZ -5.88
223 FX -26.7 FY -2.4 FZ -6.04
224 FX -24.89 FY -2.17 FZ -5.69
225 FX -24.38 FY -2.07 FZ -5.64
226 FX -26.25 FY -2.13 FZ -6.18
227 FX -24.22 FY -1.92 FZ -5.73
228 FX -23.12 FY -1.79 FZ -5.46
229 FX -25.91 FY -1.94 FZ -6.13
230 FX -20.73 FY -1.56 FZ -4.73
231 FX -21.3 FY -1.58 FZ -4.69
232 FX -14.72 FY -1.12 FZ -2.91
233 FX -14.71 FY -0.97 FZ -2.14
80 FX 10.06 FY -1.12 FZ 0.95
81 FX 9.32 FY -1.65 FZ 1.36
82 FX 13.4 FY -2.53 FZ 2.04
83 FX 14.49 FY -2.79 FZ 2.41
84 FX 18.92 FY -3.62 FZ 3.21
85 FX 18.7 FY -3.48 FZ 3.41
86 FX 20.41 FY -3.68 FZ 3.82
87 FX 22.68 FY -3.92 FZ 4.35
88 FX 21.99 FY -3.61 FZ 4.38
89 FX 22.77 FY -3.57 FZ 4.63
90 FX 24.38 FY -3.63 FZ 5.01
91 FX 24.31 FY -3.42 FZ 5.1
92 FX 23.97 FY -3.2 FZ 5.11
93 FX 23.71 FY -3.01 FZ 5.11
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```
94 FX 22.58 FY -2.73 FZ 4.92
95 FX 20.64 FY -2.38 FZ 4.53
96 FX 15.05 FY -1.66 FZ 3.4
97 FX 8.45 FY -0.9 FZ 1.98
98 FX 2.39 FY -0.25 FZ 0.46
99 FX 5.45 FY -0.59 FZ -1
100 FX 15.02 FY -1.61 FZ -2.95
101 FX 22.57 FY -2.36 FZ -4.7
102 FX 24.69 FY -2.52 FZ -5.27
103 FX 25.76 FY -2.55 FZ -5.59
104 FX 25.93 FY -2.5 FZ -5.7
105 FX 26.41 FY -2.46 FZ -5.9
106 FX 26.7 FY -2.4 FZ -6.06
107 FX 24.89 FY -2.17 FZ -5.71
108 FX 24.38 FY -2.07 FZ -5.66
109 FX 26.25 FY -2.14 FZ -6.2
110 FX 24.22 FY -1.92 FZ -5.74
111 FX 23.12 FY -1.8 FZ -5.47
112 FX 25.91 FY -1.93 FZ -6.16
113 FX 20.73 FY -1.56 FZ -4.74
114 FX 21.3 FY -1.56 FZ -4.73
115 FX 14.72 FY -1.1 FZ -2.92
116 FX 14.62 FY -0.92 FZ -2.16
***RS-INT-3-WAS
274 FX -161.21 FY 70.91 FZ 68.97
312 FX -110.35 FY -58.02 FZ 33.91
157 FX 161.08 FY 71.21 FZ 69.21
195 FX 110.45 FY -58.54 FZ 34.32
275 FX -9.94 FY -1.06 FZ 0.92
276 FX -9.31 FY -1.62 FZ 1.35
277 FX -13.39 FY -2.51 FZ 2.06
278 FX -14.5 FY -2.79 FZ 2.43
279 FX -18.92 FY -3.61 FZ 3.21
280 FX -18.7 FY -3.5 FZ 3.42
281 FX -20.41 FY -3.69 FZ 3.83
282 FX -22.68 FY -3.93 FZ 4.36
283 FX -21.99 FY -3.63 FZ 4.39
284 FX -22.77 FY -3.59 FZ 4.64
285 FX -24.38 FY -3.64 FZ 5.01
286 FX -24.31 FY -3.44 FZ 5.11
287 FX -23.97 FY -3.22 FZ 5.12
288 FX -23.71 FY -3.02 FZ 5.12
289 FX -22.58 FY -2.74 FZ 4.94
290 FX -20.64 FY -2.38 FZ 4.54
291 FX -15.04 FY -1.66 FZ 3.41
292 FX -8.45 FY -0.89 FZ 2.01
293 FX -2.43 FY -0.25 FZ 0.52
294 FX -5.4 FY -0.59 FZ -0.94
295 FX -15.04 FY -1.63 FZ -2.92
296 FX -22.57 FY -2.39 FZ -4.68
297 FX -24.69 FY -2.54 FZ -5.25
298 FX -25.76 FY -2.57 FZ -5.57
299 FX -25.93 FY -2.51 FZ -5.69
300 FX -26.41 FY -2.47 FZ -5.88
301 FX -26.7 FY -2.4 FZ -6.04
302 FX -24.89 FY -2.17 FZ -5.69
303 FX -24.38 FY -2.07 FZ -5.64
304 FX -26.25 FY -2.13 FZ -6.18
305 FX -24.22 FY -1.92 FZ -5.73
306 FX -23.12 FY -1.79 FZ -5.46
307 FX -25.91 FY -1.94 FZ -6.13
308 FX -20.73 FY -1.56 FZ -4.73
309 FX -21.3 FY -1.58 FZ -4.69
310 FX -14.72 FY -1.12 FZ -2.91
311 FX -14.71 FY -0.97 FZ -2.14
158 FX 10.06 FY -1.12 FZ 0.95
159 FX 9.32 FY -1.65 FZ 1.36
160 FX 13.4 FY -2.53 FZ 2.04
161 FX 14.49 FY -2.79 FZ 2.41
162 FX 18.92 FY -3.62 FZ 3.21
163 FX 18.7 FY -3.48 FZ 3.41
164 FX 20.41 FY -3.68 FZ 3.82
165 FX 22.68 FY -3.92 FZ 4.35
166 FX 21.99 FY -3.61 FZ 4.38
167 FX 22.77 FY -3.57 FZ 4.63
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Q326-KSP-R4b-Deg.std

a56

```
168 FX 24.38 FY -3.63 FZ 5.01
169 FX 24.31 FY -3.42 FZ 5.1
170 FX 23.97 FY -3.2 FZ 5.11
171 FX 23.71 FY -3.01 FZ 5.11
172 FX 22.58 FY -2.73 FZ 4.92
173 FX 20.64 FY -2.38 FZ 4.53
174 FX 15.05 FY -1.66 FZ 3.4
175 FX 8.45 FY -0.9 FZ 1.98
176 FX 2.39 FY -0.25 FZ 0.46
177 FX 5.45 FY -0.59 FZ -1
178 FX 15.02 FY -1.61 FZ -2.95
179 FX 22.57 FY -2.36 FZ -4.7
180 FX 24.69 FY -2.52 FZ -5.27
181 FX 25.76 FY -2.55 FZ -5.59
182 FX 25.93 FY -2.5 FZ -5.7
183 FX 26.41 FY -2.46 FZ -5.9
184 FX 26.7 FY -2.4 FZ -6.06
185 FX 24.89 FY -2.17 FZ -5.71
186 FX 24.38 FY -2.07 FZ -5.66
187 FX 26.25 FY -2.14 FZ -6.2
188 FX 24.22 FY -1.92 FZ -5.74
189 FX 23.12 FY -1.8 FZ -5.47
190 FX 25.91 FY -1.93 FZ -6.16
191 FX 20.73 FY -1.56 FZ -4.74
192 FX 21.3 FY -1.56 FZ -4.73
193 FX 14.72 FY -1.1 FZ -2.92
194 FX 14.62 FY -0.92 FZ -2.16
***RS-INT-4-WAS
352 FX -161.21 FY 70.91 FZ 68.97
390 FX -110.35 FY -58.02 FZ 33.91
235 FX 161.08 FY 71.21 FZ 69.21
273 FX 110.45 FY -58.54 FZ 34.32
353 FX -9.94 FY -1.06 FZ 0.92
354 FX -9.31 FY -1.62 FZ 1.35
355 FX -13.39 FY -2.51 FZ 2.06
356 FX -14.5 FY -2.79 FZ 2.43
357 FX -18.92 FY -3.61 FZ 3.21
358 FX -18.7 FY -3.5 FZ 3.42
359 FX -20.41 FY -3.69 FZ 3.83
360 FX -22.68 FY -3.93 FZ 4.36
361 FX -21.99 FY -3.63 FZ 4.39
362 FX -22.77 FY -3.59 FZ 4.64
363 FX -24.38 FY -3.64 FZ 5.01
364 FX -24.31 FY -3.44 FZ 5.11
365 FX -23.97 FY -3.22 FZ 5.12
366 FX -23.71 FY -3.02 FZ 5.12
367 FX -22.58 FY -2.74 FZ 4.94
368 FX -20.64 FY -2.38 FZ 4.54
369 FX -15.04 FY -1.66 FZ 3.41
370 FX -8.45 FY -0.89 FZ 2.01
371 FX -2.43 FY -0.25 FZ 0.52
372 FX -5.4 FY -0.59 FZ -0.94
373 FX -15.04 FY -1.63 FZ -2.92
374 FX -22.57 FY -2.39 FZ -4.68
375 FX -24.69 FY -2.54 FZ -5.25
376 FX -25.76 FY -2.57 FZ -5.57
377 FX -25.93 FY -2.51 FZ -5.69
378 FX -26.41 FY -2.47 FZ -5.88
379 FX -26.7 FY -2.4 FZ -6.04
380 FX -24.89 FY -2.17 FZ -5.69
381 FX -24.38 FY -2.07 FZ -5.64
382 FX -26.25 FY -2.13 FZ -6.18
383 FX -24.22 FY -1.92 FZ -5.73
384 FX -23.12 FY -1.79 FZ -5.46
385 FX -25.91 FY -1.94 FZ -6.13
386 FX -20.73 FY -1.56 FZ -4.73
387 FX -21.3 FY -1.58 FZ -4.69
388 FX -14.72 FY -1.12 FZ -2.91
389 FX -14.71 FY -0.97 FZ -2.14
236 FX 10.06 FY -1.12 FZ 0.95
237 FX 9.32 FY -1.65 FZ 1.36
238 FX 13.4 FY -2.53 FZ 2.04
239 FX 14.49 FY -2.79 FZ 2.41
240 FX 18.92 FY -3.62 FZ 3.21
241 FX 18.7 FY -3.48 FZ 3.41
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Q326-KSP-R4b-Deg.std

a57

```
242 FX 20.41 FY -3.68 FZ 3.82
243 FX 22.68 FY -3.92 FZ 4.35
244 FX 21.99 FY -3.61 FZ 4.38
245 FX 22.77 FY -3.57 FZ 4.63
246 FX 24.38 FY -3.63 FZ 5.01
247 FX 24.31 FY -3.42 FZ 5.1
248 FX 23.97 FY -3.2 FZ 5.11
249 FX 23.71 FY -3.01 FZ 5.11
250 FX 22.58 FY -2.73 FZ 4.92
251 FX 20.64 FY -2.38 FZ 4.53
252 FX 15.05 FY -1.66 FZ 3.4
253 FX 8.45 FY -0.9 FZ 1.98
254 FX 2.39 FY -0.25 FZ 0.46
255 FX 5.45 FY -0.59 FZ -1
256 FX 15.02 FY -1.61 FZ -2.95
257 FX 22.57 FY -2.36 FZ -4.7
258 FX 24.69 FY -2.52 FZ -5.27
259 FX 25.76 FY -2.55 FZ -5.59
260 FX 25.93 FY -2.5 FZ -5.7
261 FX 26.41 FY -2.46 FZ -5.9
262 FX 26.7 FY -2.4 FZ -6.06
263 FX 24.89 FY -2.17 FZ -5.71
264 FX 24.38 FY -2.07 FZ -5.66
265 FX 26.25 FY -2.14 FZ -6.2
266 FX 24.22 FY -1.92 FZ -5.74
267 FX 23.12 FY -1.8 FZ -5.47
268 FX 25.91 FY -1.93 FZ -6.16
269 FX 20.73 FY -1.56 FZ -4.74
270 FX 21.3 FY -1.56 FZ -4.73
271 FX 14.72 FY -1.1 FZ -2.92
272 FX 14.62 FY -0.92 FZ -2.16
***RS-INT-5-WAS
430 FX -161.21 FY 70.91 FZ 68.97
468 FX -110.35 FY -58.02 FZ 33.91
313 FX 161.08 FY 71.21 FZ 69.21
351 FX 110.45 FY -58.54 FZ 34.32
431 FX -9.94 FY -1.06 FZ 0.92
432 FX -9.31 FY -1.62 FZ 1.35
433 FX -13.39 FY -2.51 FZ 2.06
434 FX -14.5 FY -2.79 FZ 2.43
435 FX -18.92 FY -3.61 FZ 3.21
436 FX -18.7 FY -3.5 FZ 3.42
437 FX -20.41 FY -3.69 FZ 3.83
438 FX -22.68 FY -3.93 FZ 4.36
439 FX -21.99 FY -3.63 FZ 4.39
440 FX -22.77 FY -3.59 FZ 4.64
441 FX -24.38 FY -3.64 FZ 5.01
442 FX -24.31 FY -3.44 FZ 5.11
443 FX -23.97 FY -3.22 FZ 5.12
444 FX -23.71 FY -3.02 FZ 5.12
445 FX -22.58 FY -2.74 FZ 4.94
446 FX -20.64 FY -2.38 FZ 4.54
447 FX -15.04 FY -1.66 FZ 3.41
448 FX -8.45 FY -0.89 FZ 2.01
449 FX -2.43 FY -0.25 FZ 0.52
450 FX -5.4 FY -0.59 FZ -0.94
451 FX -15.04 FY -1.63 FZ -2.92
452 FX -22.57 FY -2.39 FZ -4.68
453 FX -24.69 FY -2.54 FZ -5.25
454 FX -25.76 FY -2.57 FZ -5.57
455 FX -25.93 FY -2.51 FZ -5.69
456 FX -26.41 FY -2.47 FZ -5.88
457 FX -26.7 FY -2.4 FZ -6.04
458 FX -24.89 FY -2.17 FZ -5.69
459 FX -24.38 FY -2.07 FZ -5.64
460 FX -26.25 FY -2.13 FZ -6.18
461 FX -24.22 FY -1.92 FZ -5.73
462 FX -23.12 FY -1.79 FZ -5.46
463 FX -25.91 FY -1.94 FZ -6.13
464 FX -20.73 FY -1.56 FZ -4.73
465 FX -21.3 FY -1.58 FZ -4.69
466 FX -14.72 FY -1.12 FZ -2.91
467 FX -14.71 FY -0.97 FZ -2.14
314 FX 10.06 FY -1.12 FZ 0.95
315 FX 9.32 FY -1.65 FZ 1.36
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Q326-KSP-R4b-Deg.std

a58

```
316 FX 13.4 FY -2.53 FZ 2.04
317 FX 14.49 FY -2.79 FZ 2.41
318 FX 18.92 FY -3.62 FZ 3.21
319 FX 18.7 FY -3.48 FZ 3.41
320 FX 20.41 FY -3.68 FZ 3.82
321 FX 22.68 FY -3.92 FZ 4.35
322 FX 21.99 FY -3.61 FZ 4.38
323 FX 22.77 FY -3.57 FZ 4.63
324 FX 24.38 FY -3.63 FZ 5.01
325 FX 24.31 FY -3.42 FZ 5.1
326 FX 23.97 FY -3.2 FZ 5.11
327 FX 23.71 FY -3.01 FZ 5.11
328 FX 22.58 FY -2.73 FZ 4.92
329 FX 20.64 FY -2.38 FZ 4.53
330 FX 15.05 FY -1.66 FZ 3.4
331 FX 8.45 FY -0.9 FZ 1.98
332 FX 2.39 FY -0.25 FZ 0.46
333 FX 5.45 FY -0.59 FZ -1
334 FX 15.02 FY -1.61 FZ -2.95
335 FX 22.57 FY -2.36 FZ -4.7
336 FX 24.69 FY -2.52 FZ -5.27
337 FX 25.76 FY -2.55 FZ -5.59
338 FX 25.93 FY -2.5 FZ -5.7
339 FX 26.41 FY -2.46 FZ -5.9
340 FX 26.7 FY -2.4 FZ -6.06
341 FX 24.89 FY -2.17 FZ -5.71
342 FX 24.38 FY -2.07 FZ -5.66
343 FX 26.25 FY -2.14 FZ -6.2
344 FX 24.22 FY -1.92 FZ -5.74
345 FX 23.12 FY -1.8 FZ -5.47
346 FX 25.91 FY -1.93 FZ -6.16
347 FX 20.73 FY -1.56 FZ -4.74
348 FX 21.3 FY -1.56 FZ -4.73
349 FX 14.72 FY -1.1 FZ -2.92
350 FX 14.62 FY -0.92 FZ -2.16
***RS-EDGE-SBOARD-WAS
429 FX 0.12 FY -0.04 FZ -0.13
391 FX 0.21 FY -0.08 FZ 0.01
472 FX -6.63 FY 5.16 FZ 7.4
476 FX -11.56 FY 2.11 FZ 8.35
480 FX -14.34 FY 2.38 FZ 10.09
484 FX -16.56 FY 0.65 FZ 11
488 FX -5.28 FY -0.11 FZ 1.92
492 FX -17.5 FY -2.32 FZ 4.48
496 FX -15.6 FY -4.94 FZ 5.02
500 FX -13.19 FY -3.05 FZ 4.69
504 FX -7.67 FY -4.06 FZ 4.51
428 FX 5.1 FY -0.11 FZ -3.04
427 FX 5.63 FY -0.21 FZ -7.31
426 FX 8.43 FY -0.31 FZ -4.76
425 FX 7.85 FY -0.35 FZ -4.59
424 FX 10.32 FY -0.48 FZ -6.15
423 FX 10.18 FY -0.48 FZ -6.11
422 FX 11.71 FY -0.55 FZ -7.01
421 FX 13.21 FY -0.63 FZ -7.98
420 FX 12.32 FY -0.62 FZ -7.59
419 FX 13.2 FY -0.67 FZ -8.16
418 FX 15.16 FY -0.75 FZ -9.36
417 FX 14.98 FY -0.76 FZ -9.33
416 FX 14.66 FY -0.76 FZ -9.23
415 FX 15.33 FY -0.8 FZ -9.67
414 FX 16.19 FY -0.85 FZ -10.19
413 FX 16.51 FY -0.88 FZ -10.46
412 FX 14.6 FY -0.8 FZ -9.22
411 FX 10.94 FY -0.59 FZ -6.72
410 FX 6.02 FY -0.3 FZ -2.93
409 FX 13.11 FY -0.59 FZ -3.39
408 FX 21.77 FY -1.02 FZ -5.43
407 FX 23.58 FY -1.19 FZ -5.77
406 FX 20.84 FY -1.13 FZ -4.97
405 FX 22.56 FY -1.26 FZ -5.65
404 FX 22.62 FY -1.32 FZ -5.85
403 FX 21.15 FY -1.32 FZ -5.45
402 FX 18.82 FY -1.26 FZ -4.88
401 FX 19.33 FY -1.31 FZ -5.29
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a59

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400 FX 18.86 FY -1.31 FZ -5.35
399 FX 17.42 FY -1.29 FZ -4.97
398 FX 13.78 FY -1.09 FZ -3.99
397 FX 14.37 FY -1.08 FZ -4.47
396 FX 15.16 FY -1.06 FZ -5.12
395 FX 10.47 FY -0.8 FZ -3.44
394 FX 8.78 FY -0.69 FZ -3.02
393 FX 6.99 FY -0.45 FZ -2.81
392 FX 5.37 FY -0.27 FZ -2.54
469 FX -3.47 FY 4.76 FZ 6.3
470 FX -5.76 FY 2.39 FZ 5.83
471 FX -5.83 FY 3.15 FZ 6.19
473 FX -11.89 FY 1.57 FZ 8.84
474 FX -11.67 FY 5.04 FZ 11.09
475 FX -12.49 FY 2.49 FZ 9.7
477 FX -14.16 FY 1.67 FZ 10.29
478 FX -16.98 FY 2.23 FZ 12.63
479 FX -15.63 FY -0.42 FZ 10.44
481 FX -17.64 FY -0.91 FZ 11.79
482 FX -19.48 FY -0.94 FZ 13.34
483 FX -17.76 FY 0.83 FZ 12.45
485 FX -18.6 FY -0.72 FZ 12.67
486 FX -18.24 FY -0.56 FZ 12.55
487 FX -10.06 FY -0.25 FZ 6.62
489 FX -11.23 FY -0.26 FZ 3.24
490 FX -16.26 FY -0.4 FZ 4.68
491 FX -17.3 FY -0.42 FZ 4.67
493 FX -16.53 FY -2.71 FZ 4.83
494 FX -16.76 FY -0.61 FZ 4.86
495 FX -16.24 FY -0.62 FZ 4.54
497 FX -14.64 FY -1.49 FZ 4.38
498 FX -14.45 FY -3.68 FZ 5.51
499 FX -13 FY -3.06 FZ 4.78
501 FX -11.75 FY -3.43 FZ 5.03
502 FX -9.95 FY -4.29 FZ 5.41
503 FX -10.26 FY -1.97 FZ 4.49
505 FX -6.08 FY -2.23 FZ 3.64
506 FX -5.64 FY -1.77 FZ 3.59
507 FX -3.87 FY -3.25 FZ 4.35
**********
LOAD 10 LOADTYPE Wind  TITLE LOAD CASE 10 - WDP_F
JOINT LOAD
***RS-EDGE-DPOOL-WP
1 FX -0.12 FY 0.64 FZ 0.34
39 FX -0.12 FY -0.64 FZ 0.33
511 FX 7.31 FY 1.62 FZ 3.27
515 FX 11.8 FY 0.47 FZ 3.6
519 FX 13.59 FY 1.1 FZ 3.96
523 FX 15.09 FY 0.09 FZ 3.88
527 FX 15.61 FY 0 FZ 4.05
531 FX 15.1 FY -0.09 FZ 3.89
535 FX 13.63 FY -1.1 FZ 3.99
539 FX 11.85 FY -0.46 FZ 3.63
543 FX 7.42 FY -1.62 FZ 3.34
2 FX -5.18 FY 0.11 FZ -3.2
3 FX -5.71 FY 0.18 FZ -3.42
4 FX -7.93 FY 0.25 FZ -4.61
5 FX -7.7 FY 0.28 FZ -4.59
6 FX -10.06 FY 0.36 FZ -6.13
7 FX -9.62 FY 0.35 FZ -5.91
8 FX -10.54 FY 0.34 FZ -6.46
9 FX -11.96 FY 0.37 FZ -7.41
10 FX -11.54 FY 0.34 FZ -7.26
11 FX -12.11 FY 0.33 FZ -7.64
12 FX -13.12 FY 0.31 FZ -8.28
13 FX -13.22 FY 0.28 FZ -8.41
14 FX -13.27 FY 0.25 FZ -8.51
15 FX -13.53 FY 0.22 FZ -8.68
16 FX -13.73 FY 0.17 FZ -8.79
17 FX -14.58 FY 0.14 FZ -9.39
18 FX -14.19 FY 0.09 FZ -9.19
19 FX -14.12 FY 0.05 FZ -9.12
20 FX -14.17 FY 0 FZ -9.11
21 FX -14.12 FY -0.05 FZ -9.12
22 FX -14.2 FY -0.09 FZ -9.19
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a60

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23 FX -14.57 FY -0.14 FZ -9.39
24 FX -13.75 FY -0.17 FZ -8.81
25 FX -13.56 FY -0.22 FZ -8.7
26 FX -13.27 FY -0.25 FZ -8.51
27 FX -13.24 FY -0.27 FZ -8.41
28 FX -13.17 FY -0.31 FZ -8.31
29 FX -12.12 FY -0.33 FZ -7.65
30 FX -11.59 FY -0.34 FZ -7.29
31 FX -12.02 FY -0.36 FZ -7.44
32 FX -10.61 FY -0.34 FZ -6.5
33 FX -9.67 FY -0.35 FZ -5.93
34 FX -10.18 FY -0.37 FZ -6.21
35 FX -7.8 FY -0.29 FZ -4.6
36 FX -8.07 FY -0.26 FZ -4.69
37 FX -5.69 FY -0.2 FZ -3.43
38 FX -5.26 FY -0.1 FZ -3.22
508 FX 3.91 FY 2.19 FZ 3.66
509 FX 5.83 FY 1.49 FZ 3.61
510 FX 5.83 FY 1.03 FZ 2.76
512 FX 10.01 FY 0.88 FZ 3.91
513 FX 9.66 FY 0.96 FZ 3.78
514 FX 11.06 FY 1.34 FZ 4.12
516 FX 12.09 FY 1.42 FZ 4.15
517 FX 13.66 FY 0.59 FZ 4.43
518 FX 13.37 FY 1.28 FZ 4.29
520 FX 14.67 FY 0.18 FZ 4.25
521 FX 15.4 FY 0.45 FZ 4.62
522 FX 14.72 FY 2.52 FZ 4.57
524 FX 15.65 FY 0.08 FZ 4.37
525 FX 16.36 FY 0.06 FZ 4.71
526 FX 15.53 FY 0.04 FZ 4.3
528 FX 15.53 FY -0.04 FZ 4.3
529 FX 16.37 FY -0.06 FZ 4.72
530 FX 15.64 FY -0.08 FZ 4.37
532 FX 14.76 FY -2.53 FZ 4.6
533 FX 15.41 FY -0.45 FZ 4.62
534 FX 14.68 FY -0.18 FZ 4.25
536 FX 13.4 FY -1.29 FZ 4.3
537 FX 13.7 FY -0.59 FZ 4.45
538 FX 12.16 FY -1.41 FZ 4.19
540 FX 11.13 FY -1.34 FZ 4.16
541 FX 9.74 FY -0.96 FZ 3.83
542 FX 10.14 FY -0.87 FZ 3.98
544 FX 5.93 FY -1.01 FZ 2.83
545 FX 5.77 FY -1.49 FZ 3.59
546 FX 4 FY -2.19 FZ 3.69
***RS-INT-1-WU
118 FX -222.02 FY 99.82 FZ 91.63
156 FX -221.81 FY -99.81 FZ 91.67
40 FX 221.74 FY 99.95 FZ 91.75
78 FX 221.94 FY -99.96 FZ 91.76
119 FX -9.49 FY -0.77 FZ 0.71
120 FX -6.36 FY -1.1 FZ 1.01
121 FX -7.75 FY -1.47 FZ 1.39
122 FX -8.16 FY -1.57 FZ 1.62
123 FX -10.39 FY -1.91 FZ 2.08
124 FX -10.97 FY -1.91 FZ 2.34
125 FX -12.4 FY -2 FZ 2.67
126 FX -14.15 FY -2.09 FZ 3.1
127 FX -14.28 FY -1.9 FZ 3.23
128 FX -15.06 FY -1.79 FZ 3.45
129 FX -16.25 FY -1.7 FZ 3.73
130 FX -16.47 FY -1.5 FZ 3.85
131 FX -16.58 FY -1.28 FZ 3.92
132 FX -16.91 FY -1.08 FZ 4.03
133 FX -17.08 FY -0.87 FZ 4.09
134 FX -17.81 FY -0.67 FZ 4.25
135 FX -17.44 FY -0.44 FZ 4.21
136 FX -17.46 FY -0.21 FZ 4.22
137 FX -17.5 FY 0 FZ 4.23
138 FX -17.46 FY 0.21 FZ 4.22
139 FX -17.45 FY 0.43 FZ 4.19
140 FX -17.8 FY 0.67 FZ 4.26
141 FX -17.08 FY 0.87 FZ 4.09
142 FX -16.91 FY 1.08 FZ 4.03
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Q326-KSP-R4b-Deg.std

a61

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143 FX -16.58 FY 1.27 FZ 3.92
144 FX -16.48 FY 1.49 FZ 3.84
145 FX -16.23 FY 1.7 FZ 3.75
146 FX -15.05 FY 1.79 FZ 3.45
147 FX -14.28 FY 1.9 FZ 3.23
148 FX -14.18 FY 2.08 FZ 3.09
149 FX -12.41 FY 2.01 FZ 2.69
150 FX -11 FY 1.9 FZ 2.32
151 FX -10.37 FY 1.92 FZ 2.09
152 FX -8.16 FY 1.57 FZ 1.62
153 FX -7.78 FY 1.46 FZ 1.37
154 FX -6.34 FY 1.13 FZ 1.05
155 FX -9.76 FY 0.81 FZ 0.73
41 FX 9.77 FY -0.84 FZ 0.73
42 FX 6.36 FY -1.13 FZ 1.02
43 FX 7.76 FY -1.48 FZ 1.37
44 FX 8.16 FY -1.57 FZ 1.6
45 FX 10.39 FY -1.93 FZ 2.08
46 FX 10.97 FY -1.91 FZ 2.33
47 FX 12.42 FY -2.01 FZ 2.68
48 FX 14.27 FY -2.1 FZ 3.12
49 FX 14.31 FY -1.9 FZ 3.23
50 FX 15.06 FY -1.79 FZ 3.45
51 FX 16.25 FY -1.7 FZ 3.74
52 FX 16.47 FY -1.49 FZ 3.85
53 FX 16.58 FY -1.27 FZ 3.92
54 FX 16.91 FY -1.07 FZ 4.02
55 FX 17.08 FY -0.87 FZ 4.09
56 FX 17.81 FY -0.67 FZ 4.25
57 FX 17.44 FY -0.43 FZ 4.2
58 FX 17.46 FY -0.21 FZ 4.21
59 FX 17.5 FY 0 FZ 4.22
60 FX 17.46 FY 0.21 FZ 4.21
61 FX 17.45 FY 0.44 FZ 4.2
62 FX 17.81 FY 0.67 FZ 4.26
63 FX 17.08 FY 0.87 FZ 4.09
64 FX 16.91 FY 1.08 FZ 4.02
65 FX 16.58 FY 1.27 FZ 3.92
66 FX 16.48 FY 1.49 FZ 3.84
67 FX 16.24 FY 1.7 FZ 3.74
68 FX 15.05 FY 1.79 FZ 3.44
69 FX 14.31 FY 1.9 FZ 3.23
70 FX 14.31 FY 2.11 FZ 3.12
71 FX 12.41 FY 2.01 FZ 2.68
72 FX 10.98 FY 1.91 FZ 2.32
73 FX 10.37 FY 1.93 FZ 2.08
74 FX 8.16 FY 1.57 FZ 1.6
75 FX 7.78 FY 1.48 FZ 1.36
76 FX 6.34 FY 1.13 FZ 1.02
77 FX 9.63 FY 0.77 FZ 0.66
***RS-INT-2-WU
196 FX -222.02 FY 99.82 FZ 91.63
234 FX -221.81 FY -99.81 FZ 91.67
79 FX 221.74 FY 99.95 FZ 91.75
117 FX 221.94 FY -99.96 FZ 91.76
197 FX -9.49 FY -0.77 FZ 0.71
198 FX -6.36 FY -1.1 FZ 1.01
199 FX -7.75 FY -1.47 FZ 1.39
200 FX -8.16 FY -1.57 FZ 1.62
201 FX -10.39 FY -1.91 FZ 2.08
202 FX -10.97 FY -1.91 FZ 2.34
203 FX -12.4 FY -2 FZ 2.67
204 FX -14.15 FY -2.09 FZ 3.1
205 FX -14.28 FY -1.9 FZ 3.23
206 FX -15.06 FY -1.79 FZ 3.45
207 FX -16.25 FY -1.7 FZ 3.73
208 FX -16.47 FY -1.5 FZ 3.85
209 FX -16.58 FY -1.28 FZ 3.92
210 FX -16.91 FY -1.08 FZ 4.03
211 FX -17.08 FY -0.87 FZ 4.09
212 FX -17.81 FY -0.67 FZ 4.25
213 FX -17.44 FY -0.44 FZ 4.21
214 FX -17.46 FY -0.21 FZ 4.22
215 FX -17.5 FY 0 FZ 4.23
216 FX -17.46 FY 0.21 FZ 4.22
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Q326-KSP-R4b-Deg.std

a62

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217 FX -17.45 FY 0.43 FZ 4.19
218 FX -17.8 FY 0.67 FZ 4.26
219 FX -17.08 FY 0.87 FZ 4.09
220 FX -16.91 FY 1.08 FZ 4.03
221 FX -16.58 FY 1.27 FZ 3.92
222 FX -16.48 FY 1.49 FZ 3.84
223 FX -16.23 FY 1.7 FZ 3.75
224 FX -15.05 FY 1.79 FZ 3.45
225 FX -14.28 FY 1.9 FZ 3.23
226 FX -14.18 FY 2.08 FZ 3.09
227 FX -12.41 FY 2.01 FZ 2.69
228 FX -11 FY 1.9 FZ 2.32
229 FX -10.37 FY 1.92 FZ 2.09
230 FX -8.16 FY 1.57 FZ 1.62
231 FX -7.78 FY 1.46 FZ 1.37
232 FX -6.34 FY 1.13 FZ 1.05
233 FX -9.76 FY 0.81 FZ 0.73
80 FX 9.77 FY -0.84 FZ 0.73
81 FX 6.36 FY -1.13 FZ 1.02
82 FX 7.76 FY -1.48 FZ 1.37
83 FX 8.16 FY -1.57 FZ 1.6
84 FX 10.39 FY -1.93 FZ 2.08
85 FX 10.97 FY -1.91 FZ 2.33
86 FX 12.42 FY -2.01 FZ 2.68
87 FX 14.27 FY -2.1 FZ 3.12
88 FX 14.31 FY -1.9 FZ 3.23
89 FX 15.06 FY -1.79 FZ 3.45
90 FX 16.25 FY -1.7 FZ 3.74
91 FX 16.47 FY -1.49 FZ 3.85
92 FX 16.58 FY -1.27 FZ 3.92
93 FX 16.91 FY -1.07 FZ 4.02
94 FX 17.08 FY -0.87 FZ 4.09
95 FX 17.81 FY -0.67 FZ 4.25
96 FX 17.44 FY -0.43 FZ 4.2
97 FX 17.46 FY -0.21 FZ 4.21
98 FX 17.5 FY 0 FZ 4.22
99 FX 17.46 FY 0.21 FZ 4.21
100 FX 17.45 FY 0.44 FZ 4.2
101 FX 17.81 FY 0.67 FZ 4.26
102 FX 17.08 FY 0.87 FZ 4.09
103 FX 16.91 FY 1.08 FZ 4.02
104 FX 16.58 FY 1.27 FZ 3.92
105 FX 16.48 FY 1.49 FZ 3.84
106 FX 16.24 FY 1.7 FZ 3.74
107 FX 15.05 FY 1.79 FZ 3.44
108 FX 14.31 FY 1.9 FZ 3.23
109 FX 14.31 FY 2.11 FZ 3.12
110 FX 12.41 FY 2.01 FZ 2.68
111 FX 10.98 FY 1.91 FZ 2.32
112 FX 10.37 FY 1.93 FZ 2.08
113 FX 8.16 FY 1.57 FZ 1.6
114 FX 7.78 FY 1.48 FZ 1.36
115 FX 6.34 FY 1.13 FZ 1.02
116 FX 9.63 FY 0.77 FZ 0.66
***RS-INT-3-WU
274 FX -222.02 FY 99.82 FZ 91.63
312 FX -221.81 FY -99.81 FZ 91.67
157 FX 221.74 FY 99.95 FZ 91.75
195 FX 221.94 FY -99.96 FZ 91.76
275 FX -9.49 FY -0.77 FZ 0.71
276 FX -6.36 FY -1.1 FZ 1.01
277 FX -7.75 FY -1.47 FZ 1.39
278 FX -8.16 FY -1.57 FZ 1.62
279 FX -10.39 FY -1.91 FZ 2.08
280 FX -10.97 FY -1.91 FZ 2.34
281 FX -12.4 FY -2 FZ 2.67
282 FX -14.15 FY -2.09 FZ 3.1
283 FX -14.28 FY -1.9 FZ 3.23
284 FX -15.06 FY -1.79 FZ 3.45
285 FX -16.25 FY -1.7 FZ 3.73
286 FX -16.47 FY -1.5 FZ 3.85
287 FX -16.58 FY -1.28 FZ 3.92
288 FX -16.91 FY -1.08 FZ 4.03
289 FX -17.08 FY -0.87 FZ 4.09
290 FX -17.81 FY -0.67 FZ 4.25
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a63

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291 FX -17.44 FY -0.44 FZ 4.21
292 FX -17.46 FY -0.21 FZ 4.22
293 FX -17.5 FY 0 FZ 4.23
294 FX -17.46 FY 0.21 FZ 4.22
295 FX -17.45 FY 0.43 FZ 4.19
296 FX -17.8 FY 0.67 FZ 4.26
297 FX -17.08 FY 0.87 FZ 4.09
298 FX -16.91 FY 1.08 FZ 4.03
299 FX -16.58 FY 1.27 FZ 3.92
300 FX -16.48 FY 1.49 FZ 3.84
301 FX -16.23 FY 1.7 FZ 3.75
302 FX -15.05 FY 1.79 FZ 3.45
303 FX -14.28 FY 1.9 FZ 3.23
304 FX -14.18 FY 2.08 FZ 3.09
305 FX -12.41 FY 2.01 FZ 2.69
306 FX -11 FY 1.9 FZ 2.32
307 FX -10.37 FY 1.92 FZ 2.09
308 FX -8.16 FY 1.57 FZ 1.62
309 FX -7.78 FY 1.46 FZ 1.37
310 FX -6.34 FY 1.13 FZ 1.05
311 FX -9.76 FY 0.81 FZ 0.73
158 FX 9.77 FY -0.84 FZ 0.73
159 FX 6.36 FY -1.13 FZ 1.02
160 FX 7.76 FY -1.48 FZ 1.37
161 FX 8.16 FY -1.57 FZ 1.6
162 FX 10.39 FY -1.93 FZ 2.08
163 FX 10.97 FY -1.91 FZ 2.33
164 FX 12.42 FY -2.01 FZ 2.68
165 FX 14.27 FY -2.1 FZ 3.12
166 FX 14.31 FY -1.9 FZ 3.23
167 FX 15.06 FY -1.79 FZ 3.45
168 FX 16.25 FY -1.7 FZ 3.74
169 FX 16.47 FY -1.49 FZ 3.85
170 FX 16.58 FY -1.27 FZ 3.92
171 FX 16.91 FY -1.07 FZ 4.02
172 FX 17.08 FY -0.87 FZ 4.09
173 FX 17.81 FY -0.67 FZ 4.25
174 FX 17.44 FY -0.43 FZ 4.2
175 FX 17.46 FY -0.21 FZ 4.21
176 FX 17.5 FY 0 FZ 4.22
177 FX 17.46 FY 0.21 FZ 4.21
178 FX 17.45 FY 0.44 FZ 4.2
179 FX 17.81 FY 0.67 FZ 4.26
180 FX 17.08 FY 0.87 FZ 4.09
181 FX 16.91 FY 1.08 FZ 4.02
182 FX 16.58 FY 1.27 FZ 3.92
183 FX 16.48 FY 1.49 FZ 3.84
184 FX 16.24 FY 1.7 FZ 3.74
185 FX 15.05 FY 1.79 FZ 3.44
186 FX 14.31 FY 1.9 FZ 3.23
187 FX 14.31 FY 2.11 FZ 3.12
188 FX 12.41 FY 2.01 FZ 2.68
189 FX 10.98 FY 1.91 FZ 2.32
190 FX 10.37 FY 1.93 FZ 2.08
191 FX 8.16 FY 1.57 FZ 1.6
192 FX 7.78 FY 1.48 FZ 1.36
193 FX 6.34 FY 1.13 FZ 1.02
194 FX 9.63 FY 0.77 FZ 0.66
***RS-INT-4-WU
352 FX -222.02 FY 99.82 FZ 91.63
390 FX -221.81 FY -99.81 FZ 91.67
235 FX 221.74 FY 99.95 FZ 91.75
273 FX 221.94 FY -99.96 FZ 91.76
353 FX -9.49 FY -0.77 FZ 0.71
354 FX -6.36 FY -1.1 FZ 1.01
355 FX -7.75 FY -1.47 FZ 1.39
356 FX -8.16 FY -1.57 FZ 1.62
357 FX -10.39 FY -1.91 FZ 2.08
358 FX -10.97 FY -1.91 FZ 2.34
359 FX -12.4 FY -2 FZ 2.67
360 FX -14.15 FY -2.09 FZ 3.1
361 FX -14.28 FY -1.9 FZ 3.23
362 FX -15.06 FY -1.79 FZ 3.45
363 FX -16.25 FY -1.7 FZ 3.73
364 FX -16.47 FY -1.5 FZ 3.85
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a64

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365 FX -16.58 FY -1.28 FZ 3.92
366 FX -16.91 FY -1.08 FZ 4.03
367 FX -17.08 FY -0.87 FZ 4.09
368 FX -17.81 FY -0.67 FZ 4.25
369 FX -17.44 FY -0.44 FZ 4.21
370 FX -17.46 FY -0.21 FZ 4.22
371 FX -17.5 FY 0 FZ 4.23
372 FX -17.46 FY 0.21 FZ 4.22
373 FX -17.45 FY 0.43 FZ 4.19
374 FX -17.8 FY 0.67 FZ 4.26
375 FX -17.08 FY 0.87 FZ 4.09
376 FX -16.91 FY 1.08 FZ 4.03
377 FX -16.58 FY 1.27 FZ 3.92
378 FX -16.48 FY 1.49 FZ 3.84
379 FX -16.23 FY 1.7 FZ 3.75
380 FX -15.05 FY 1.79 FZ 3.45
381 FX -14.28 FY 1.9 FZ 3.23
382 FX -14.18 FY 2.08 FZ 3.09
383 FX -12.41 FY 2.01 FZ 2.69
384 FX -11 FY 1.9 FZ 2.32
385 FX -10.37 FY 1.92 FZ 2.09
386 FX -8.16 FY 1.57 FZ 1.62
387 FX -7.78 FY 1.46 FZ 1.37
388 FX -6.34 FY 1.13 FZ 1.05
389 FX -9.76 FY 0.81 FZ 0.73
236 FX 9.77 FY -0.84 FZ 0.73
237 FX 6.36 FY -1.13 FZ 1.02
238 FX 7.76 FY -1.48 FZ 1.37
239 FX 8.16 FY -1.57 FZ 1.6
240 FX 10.39 FY -1.93 FZ 2.08
241 FX 10.97 FY -1.91 FZ 2.33
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247 FX 16.47 FY -1.49 FZ 3.85
248 FX 16.58 FY -1.27 FZ 3.92
249 FX 16.91 FY -1.07 FZ 4.02
250 FX 17.08 FY -0.87 FZ 4.09
251 FX 17.81 FY -0.67 FZ 4.25
252 FX 17.44 FY -0.43 FZ 4.2
253 FX 17.46 FY -0.21 FZ 4.21
254 FX 17.5 FY 0 FZ 4.22
255 FX 17.46 FY 0.21 FZ 4.21
256 FX 17.45 FY 0.44 FZ 4.2
257 FX 17.81 FY 0.67 FZ 4.26
258 FX 17.08 FY 0.87 FZ 4.09
259 FX 16.91 FY 1.08 FZ 4.02
260 FX 16.58 FY 1.27 FZ 3.92
261 FX 16.48 FY 1.49 FZ 3.84
262 FX 16.24 FY 1.7 FZ 3.74
263 FX 15.05 FY 1.79 FZ 3.44
264 FX 14.31 FY 1.9 FZ 3.23
265 FX 14.31 FY 2.11 FZ 3.12
266 FX 12.41 FY 2.01 FZ 2.68
267 FX 10.98 FY 1.91 FZ 2.32
268 FX 10.37 FY 1.93 FZ 2.08
269 FX 8.16 FY 1.57 FZ 1.6
270 FX 7.78 FY 1.48 FZ 1.36
271 FX 6.34 FY 1.13 FZ 1.02
272 FX 9.63 FY 0.77 FZ 0.66
***RS-INT-S-WU
430 FX -222.02 FY 99.82 FZ 91.63
468 FX -221.91 FY -99.81 FZ 91.67
313 FX 221.74 FY 99.95 FZ 91.75
351 FX 221.94 FY -99.96 FZ 91.76
431 FX -9.49 FX -8.77 FZ 0.71
432 FX -6.36 FY -1.1 FZ 1.01
433 FX -7.75 FY -1.47 FZ 1.39
434 FX -8.16 FY -1.57 FZ 1.62
435 FX -10.39 FY -1.91 FZ 2.08
436 FX -10.97 FY -1.91 FZ 2.34
437 FX -12.4 FY -2 FZ 2.67
438 FX -14.15 FY -2.09 FZ 3.1
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a65

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439 FX -14.28 FY -1.9 FZ 3.23
440 FX -15.06 FY -1.79 FZ 3.45
441 FX -16.25 FY -1.7 FZ 3.73
442 FX -16.47 FY -1.5 FZ 3.85
443 FX -16.58 FY -1.28 FZ 3.92
444 FX -16.91 FY -1.08 FZ 4.03
445 FX -17.08 FY -0.87 FZ 4.09
446 FX -17.81 FY -0.67 FZ 4.25
447 FX -17.44 FY -0.44 FZ 4.21
448 FX -17.46 FY -0.21 FZ 4.22
449 FX -17.5 FY 0 FZ 4.23
450 FX -17.46 FY 0.21 FZ 4.22
451 FX -17.45 FY 0.43 FZ 4.19
452 FX -17.8 FY 0.67 FZ 4.26
453 FX -17.08 FY 0.87 FZ 4.09
454 FX -16.91 FY 1.08 FZ 4.03
455 FX -16.58 FY 1.27 FZ 3.92
456 FX -16.48 FY 1.49 FZ 3.84
457 FX -16.23 FY 1.7 FZ 3.75
458 FX -15.05 FY 1.79 FZ 3.45
459 FX -14.28 FY 1.9 FZ 3.23
460 FX -14.18 FY 2.08 FZ 3.09
461 FX -12.41 FY 2.01 FZ 2.69
462 FX -11 FY 1.9 FZ 2.32
463 FX -10.37 FY 1.92 FZ 2.09
464 FX -8.16 FY 1.57 FZ 1.62
465 FX -7.78 FY 1.46 FZ 1.37
466 FX -6.34 FY 1.13 FZ 1.05
467 FX -9.76 FY 0.81 FZ 0.73
314 FX 9.77 FY -0.84 FZ 0.73
315 FX 6.36 FY -1.13 FZ 1.02
316 FX 7.76 FY -1.48 FZ 1.37
317 FX 8.16 FY -1.57 FZ 1.6
318 FX 10.39 FY -1.93 FZ 2.08
319 FX 10.97 FY -1.91 FZ 2.33
320 FX 12.42 FY -2.01 FZ 2.68
321 FX 14.27 FY -2.1 FZ 3.12
322 FX 14.31 FY -1.9 FZ 3.23
323 FX 15.06 FY -1.79 FZ 3.45
324 FX 16.25 FY -1.7 FZ 3.74
325 FX 16.47 FY -1.49 FZ 3.85
326 FX 16.58 FY -1.27 FZ 3.92
327 FX 16.91 FY -1.07 FZ 4.02
328 FX 17.08 FY -0.87 FZ 4.09
329 FX 17.81 FY -0.67 FZ 4.25
330 FX 17.44 FY -0.43 FZ 4.2
331 FX 17.46 FY -0.21 FZ 4.21
332 FX 17.5 FY 0 FZ 4.22
333 FX 17.46 FY 0.21 FZ 4.21
334 FX 17.45 FY 0.44 FZ 4.2
335 FX 17.81 FY 0.67 FZ 4.26
336 FX 17.08 FY 0.87 FZ 4.09
337 FX 16.91 FY 1.08 FZ 4.02
338 FX 16.58 FY 1.27 FZ 3.92
339 FX 16.48 FY 1.49 FZ 3.84
340 FX 16.24 FY 1.7 FZ 3.74
341 FX 15.05 FY 1.79 FZ 3.44
342 FX 14.31 FY 1.9 FZ 3.23
343 FX 14.31 FY 2.11 FZ 3.12
344 FX 12.41 FY 2.01 FZ 2.68
345 FX 10.98 FY 1.91 FZ 2.32
346 FX 10.37 FY 1.93 FZ 2.08
347 FX 8.16 FY 1.57 FZ 1.6
348 FX 7.78 FY 1.48 FZ 1.36
349 FX 6.34 FY 1.13 FZ 1.02
350 FX 9.63 FY 0.77 FZ 0.66
***RS-EDGE-SBOARD-WU
429 FX 0.21 FY 0.08 FZ 0.01
391 FX 0.21 FY -0.08 FZ 0.01
472 FX -6.22 FY 6.83 FZ 8.17
476 FX -10.47 FY 3.61 FZ 8.28
480 FX -12.84 FY 4.56 FZ 9.6
484 FX -14.8 FY 1.5 FZ 9.82
488 FX -15.45 FY 0 FZ 10.18
492 FX -14.71 FY -1.51 FZ 9.82
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a66

```
496 FX -12.75 FY -1.56 FZ 9.59
500 FX -10.35 FY -1.61 FZ 8.25
504 FX -6.05 FY -6.82 FZ 8.14
428 FX 5.31 FY 0.23 FZ -2.58
427 FX 6.39 FY 0.43 FZ -2.51
426 FX 8.21 FY 0.6 FZ -2.86
425 FX 9.93 FY 0.72 FZ -3.23
424 FX 14.63 FY 0.96 FZ -4.87
423 FX 13.68 FY 0.92 FZ -4.24
422 FX 12.67 FY 0.81 FZ -3.57
421 FX 16.36 FY 1.03 FZ -4.63
420 FX 18.02 FY 1.02 FZ -5.05
419 FX 18.27 FY 0.97 FZ -4.93
418 FX 17.23 FY 0.88 FZ -4.37
417 FX 19.74 FY 0.85 FZ -5.05
416 FX 21.49 FY 0.79 FZ -5.5
415 FX 21.15 FY 0.67 FZ -5.26
414 FX 19.08 FY 0.51 FZ -4.52
413 FX 22.49 FY 0.43 FZ -5.46
412 FX 23.5 FY 0.29 FZ -5.79
411 FX 22.19 FY 0.14 FZ -5.31
410 FX 20.14 FY 0 FZ -4.68
409 FX 22.19 FY -0.14 FZ -5.32
408 FX 23.5 FY -0.29 FZ -5.77
407 FX 22.52 FY -0.43 FZ -5.5
406 FX 19.18 FY -0.51 FZ -4.56
405 FX 21.18 FY -0.66 FZ -5.27
404 FX 21.52 FY -0.78 FZ -5.51
403 FX 19.78 FY -0.85 FZ -5.05
402 FX 17.31 FY -0.87 FZ -4.42
401 FX 18.34 FY -0.97 FZ -4.95
400 FX 18.11 FY -1.03 FZ -5.08
399 FX 16.4 FY -1.04 FZ -4.62
398 FX 12.83 FY -0.9 FZ -3.66
397 FX 13.82 FY -0.94 FZ -4.26
396 FX 14.83 FY -0.95 FZ -4.98
395 FX 10.16 FY -0.73 FZ -3.31
394 FX 8.38 FY -0.64 FZ -2.87
393 FX 6.87 FY -0.43 FZ -2.76
392 FX 5.35 FY -0.26 FZ -2.53
469 FX -3.46 FY 5.24 FZ 6.68
470 FX -5.66 FY 2.88 FZ 6.14
471 FX -5.61 FY 3.81 FZ 6.54
473 FX -11.58 FY 2.39 FZ 9.13
474 FX -11.3 FY 7.06 FZ 12.02
475 FX -11.81 FY 4.12 FZ 10.01
477 FX -13.32 FY 3.17 FZ 10.29
478 FX -16.19 FY 4.05 FZ 12.78
479 FX -14.56 FY 0.28 FZ 9.82
481 FX -16.4 FY -0.48 FZ 10.96
482 FX -18.4 FY -0.52 FZ 12.64
483 FX -16.39 FY 1.77 FZ 11.63
485 FX -17.58 FY -0.32 FZ 12.01
486 FX -19.55 FY -0.17 FZ 13.67
487 FX -17.45 FY -0.07 FZ 11.99
489 FX -17.45 FY 0.07 FZ 11.99
490 FX -19.56 FY 0.17 FZ 13.68
491 FX -17.56 FY 0.32 FZ 11.98
493 FX -16.35 FY -1.78 FZ 11.61
494 FX -18.38 FY 0.52 FZ 12.62
495 FX -16.36 FY 0.48 FZ 10.95
497 FX -14.52 FY -0.28 FZ 9.79
498 FX -16.08 FY -4.04 FZ 12.76
499 FX -13.27 FY -3.17 FZ 10.25
501 FX -11.67 FY -4.11 FZ 9.97
502 FX -11.09 FY -7.04 FZ 11.94
503 FX -11.42 FY -2.39 FZ 9.06
505 FX -5.34 FY -3.78 FZ 6.45
506 FX -5.24 FY -2.88 FZ 5.93
507 FX -3.51 FY -5.19 FZ 6.74
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0

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LOAD 11 LOADTYPE Wind  TITLE LOAD CASE 11 - WDF_U
JOINT LOAD
***RS-EDGE-DPOOL-WU
1 FX -0.22 FY 0.97 FZ 0.87
```

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a67

```
39 FX -0.22 FY -0.97 FZ 0.88
511 FX 6.13 FY 6.89 FZ 8.49
515 FX 10.36 FY 1.37 FZ 7.17
519 FX 12.67 FY 2.81 FZ 9.1
523 FX 14.66 FY -0.49 FZ 9.44
527 FX 15.39 FY 0 FZ 10.3
531 FX 14.68 FY 0.49 FZ 9.45
535 FX 12.74 FY -2.81 FZ 9.09
539 FX 10.46 FY -1.37 FZ 7.2
543 FX 6.36 FY -6.9 FZ 8.54
2 FX -5.44 FY -0.26 FZ -2.66
3 FX -6.73 FY -0.41 FZ -2.8
4 FX -8.19 FY -0.62 FZ -2.9
5 FX -9.95 FY -0.72 FZ -3.34
6 FX -14.62 FY -0.96 FZ -5.02
7 FX -13.67 FY -0.93 FZ -4.32
8 FX -12.72 FY -0.91 FZ -3.72
9 FX -16.23 FY -1.05 FZ -4.69
10 FX -18.01 FY -1.03 FZ -5.18
11 FX -18.34 FY -0.98 FZ -5.09
12 FX -17.23 FY -0.88 FZ -4.51
13 FX -19.64 FY -0.87 FZ -5.14
14 FX -21.49 FY -0.79 FZ -5.65
15 FX -21.14 FY -0.67 FZ -5.4
16 FX -19.07 FY -0.51 FZ -4.64
17 FX -22.52 FY -0.43 FZ -5.63
18 FX -23.49 FY -0.3 FZ -5.92
19 FX -22.21 FY -0.14 FZ -5.47
20 FX -20.17 FY 0 FZ -4.82
21 FX -22.21 FY 0.14 FZ -5.47
22 FX -23.5 FY 0.29 FZ -5.94
23 FX -22.53 FY 0.43 FZ -5.62
24 FX -19.11 FY 0.51 FZ -4.65
25 FX -21.2 FY 0.67 FZ -5.42
26 FX -21.51 FY 0.79 FZ -5.66
27 FX -19.68 FY 0.86 FZ -5.17
28 FX -17.3 FY 0.88 FZ -4.51
29 FX -18.39 FY 0.98 FZ -5.11
30 FX -18.11 FY 1.03 FZ -5.22
31 FX -16.36 FY 1.05 FZ -4.75
32 FX -12.83 FY 0.92 FZ -3.73
33 FX -13.78 FY 0.93 FZ -4.39
34 FX -14.85 FY 0.98 FZ -5.08
35 FX -10.15 FY 0.74 FZ -3.41
36 FX -8.53 FY 0.63 FZ -3.05
37 FX -6.82 FY 0.45 FZ -2.77
38 FX -5.52 FY 0.23 FZ -2.75
508 FX 3.52 FY 3.47 FZ 5.33
509 FX 5.75 FY 4.4 FZ 7.5
510 FX 5.25 FY 2.88 FZ 5.72
512 FX 11.3 FY 3.63 FZ 9.89
513 FX 13.17 FY 4.53 FZ 10.51
514 FX 11.56 FY 6.7 FZ 11.66
516 FX 13.08 FY 6.15 FZ 11.61
517 FX 16.15 FY 1.04 FZ 11.64
518 FX 14.44 FY 2.86 FZ 10.92
520 FX 16.27 FY -0.62 FZ 10.98
521 FX 18.3 FY -0.14 FZ 12.84
522 FX 16.21 FY 4.02 FZ 12.24
524 FX 17.5 FY -0.34 FZ 12.09
525 FX 19.48 FY -0.21 FZ 13.79
526 FX 17.38 FY -0.09 FZ 12.11
528 FX 17.38 FY 0.09 FZ 12.11
529 FX 19.49 FY 0.21 FZ 13.8
530 FX 17.5 FY 0.35 FZ 12.09
532 FX 16.29 FY -4.02 FZ 12.24
533 FX 18.32 FY 0.15 FZ 12.86
534 FX 16.3 FY 0.02 FZ 11.01
536 FX 14.49 FY -2.85 FZ 10.95
537 FX 16.23 FY -1.05 FZ 11.68
538 FX 13.21 FY -6.16 FZ 11.65
540 FX 11.7 FY -6.69 FZ 11.71
541 FX 11.32 FY -6.55 FZ 10.56
542 FX 11.55 FY -3.65 FZ 9.99
544 FX 5.57 FY -2.9 FZ 5.84
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a68

```
545 FX 5.7 FY -4.43 FZ 7.44
546 FX 3.63 FY -3.47 FZ 5.44
***RS-INT-1-WP
118 FX -26.18 FY 15.94 FZ 9.12
156 FX -26.17 FY -15.92 FZ 9.11
40 FX 26.23 FY 16.65 FZ 9.69
78 FX 26.23 FY -16.66 FZ 9.69
119 FX -11.39 FY 0.8 FZ -1.95
120 FX -16.36 FY 1.05 FZ -3.15
121 FX -21.23 FY 1.17 FZ -4.56
122 FX -18.7 FY 0.93 FZ -4.19
123 FX -21.75 FY 0.92 FZ -5.06
124 FX -18.59 FY 0.74 FZ -4.36
125 FX -19 FY 0.69 FZ -4.49
126 FX -20.12 FY 0.66 FZ -4.76
127 FX -18.36 FY 0.55 FZ -4.31
128 FX -18.45 FY 0.51 FZ -4.3
129 FX -19.44 FY 0.47 FZ -4.49
130 FX -18.96 FY 0.4 FZ -4.34
131 FX -18.51 FY 0.35 FZ -4.2
132 FX -18.58 FY 0.29 FZ -4.19
133 FX -18.63 FY 0.24 FZ -4.17
134 FX -19.52 FY 0.19 FZ -4.35
135 FX -18.82 FY 0.12 FZ -4.18
136 FX -18.7 FY 0.06 FZ -4.14
137 FX -18.71 FY 0 FZ -4.14
138 FX -18.7 FY -0.06 FZ -4.14
139 FX -18.82 FY -0.11 FZ -4.17
140 FX -19.51 FY -0.19 FZ -4.35
141 FX -18.63 FY -0.24 FZ -4.17
142 FX -18.58 FY -0.29 FZ -4.19
143 FX -18.51 FY -0.35 FZ -4.2
144 FX -18.96 FY -0.4 FZ -4.34
145 FX -19.44 FY -0.47 FZ -4.5
146 FX -18.45 FY -0.51 FZ -4.3
147 FX -18.36 FY -0.55 FZ -4.31
148 FX -20.12 FY -0.65 FZ -4.76
149 FX -18.99 FY -0.69 FZ -4.49
150 FX -18.58 FY -0.74 FZ -4.36
151 FX -21.74 FY -0.93 FZ -5.06
152 FX -18.7 FY -0.93 FZ -4.19
153 FX -21.24 FY -1.16 FZ -4.56
154 FX -16.36 FY -1.06 FZ -3.16
155 FX -11.42 FY -0.82 FZ -1.98
41 FX 11.34 FY 0.8 FZ -2.04
42 FX 16.36 FY 1.04 FZ -3.2
43 FX 21.23 FY 1.15 FZ -4.61
44 FX 18.7 FY 0.93 FZ -4.21
45 FX 21.74 FY 0.93 FZ -5.11
46 FX 18.59 FY 0.75 FZ -4.38
47 FX 19 FY 0.69 FZ -4.51
48 FX 20.12 FY 0.66 FZ -4.8
49 FX 18.36 FY 0.56 FZ -4.33
50 FX 18.45 FY 0.51 FZ -4.32
51 FX 19.44 FY 0.48 FZ -4.53
52 FX 18.96 FY 0.4 FZ -4.37
53 FX 18.51 FY 0.35 FZ -4.22
54 FX 18.58 FY 0.3 FZ -4.21
55 FX 18.63 FY 0.24 FZ -4.2
56 FX 19.52 FY 0.19 FZ -4.38
57 FX 18.82 FY 0.12 FZ -4.2
58 FX 18.7 FY 0.06 FZ -4.16
59 FX 18.71 FY 0 FZ -4.16
60 FX 18.7 FY -0.06 FZ -4.16
61 FX 18.82 FY -0.12 FZ -4.2
62 FX 19.51 FY -0.19 FZ -4.38
63 FX 18.63 FY -0.24 FZ -4.2
64 FX 18.58 FY -0.3 FZ -4.21
65 FX 18.51 FY -0.35 FZ -4.23
66 FX 18.96 FY -0.41 FZ -4.37
67 FX 19.44 FY -0.48 FZ -4.53
68 FX 18.45 FY -0.52 FZ -4.32
69 FX 18.36 FY -0.56 FZ -4.33
70 FX 20.12 FY -0.66 FZ -4.79
71 FX 18.99 FY -0.7 FZ -4.51
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a69

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72 FX 18.59 FY -0.75 FZ -4.38
73 FX 21.74 FY -0.93 FZ -5.11
74 FX 18.7 FY -0.93 FZ -4.21
75 FX 21.24 FY -1.15 FZ -4.61
76 FX 16.35 FY -1.04 FZ -3.19
77 FX 11.37 FY -0.77 FZ -2
***RS-INT-2-WP
196 FX -26.18 FY 15.94 FZ 9.12
234 FX -26.17 FY -15.92 FZ 9.11
79 FX 26.23 FY 16.65 FZ 9.69
117 FX 26.23 FY -16.66 FZ 9.69
197 FX -11.39 FY 0.8 FZ -1.95
198 FX -16.36 FY 1.05 FZ -3.15
199 FX -21.23 FY 1.17 FZ -4.56
200 FX -18.7 FY 0.93 FZ -4.19
201 FX -21.75 FY 0.92 FZ -5.06
202 FX -18.59 FY 0.74 FZ -4.36
203 FX -19 FY 0.69 FZ -4.49
204 FX -20.12 FY 0.66 FZ -4.76
205 FX -18.36 FY 0.55 FZ -4.31
206 FX -18.45 FY 0.51 FZ -4.3
207 FX -19.44 FY 0.47 FZ -4.49
208 FX -18.96 FY 0.4 FZ -4.34
209 FX -18.51 FY 0.35 FZ -4.2
210 FX -18.58 FY 0.29 FZ -4.19
211 FX -18.63 FY 0.24 FZ -4.17
212 FX -19.52 FY 0.19 FZ -4.35
213 FX -18.82 FY 0.12 FZ -4.18
214 FX -18.7 FY 0.06 FZ -4.14
215 FX -18.71 FY 0 FZ -4.14
216 FX -18.7 FY -0.06 FZ -4.14
217 FX -18.82 FY -0.11 FZ -4.17
218 FX -19.51 FY -0.19 FZ -4.35
219 FX -18.63 FY -0.24 FZ -4.17
220 FX -18.58 FY -0.29 FZ -4.19
221 FX -18.51 FY -0.35 FZ -4.2
222 FX -18.96 FY -0.4 FZ -4.34
223 FX -19.44 FY -0.47 FZ -4.5
224 FX -18.45 FY -0.51 FZ -4.3
225 FX -18.36 FY -0.55 FZ -4.31
226 FX -20.12 FY -0.65 FZ -4.76
227 FX -18.99 FY -0.69 FZ -4.49
228 FX -18.59 FY -0.74 FZ -4.36
229 FX -21.74 FY -0.93 FZ -5.06
230 FX -18.7 FY -0.93 FZ -4.19
231 FX -21.24 FY -1.16 FZ -4.56
232 FX -16.36 FY -1.06 FZ -3.16
233 FX -11.42 FY -0.82 FZ -1.98
80 FX 11.34 FY 0.8 FZ -2.04
81 FX 16.36 FY 1.04 FZ -3.2
82 FX 21.23 FY 1.15 FZ -4.61
83 FX 18.7 FY 0.93 FZ -4.21
84 FX 21.74 FY 0.93 FZ -5.11
85 FX 18.59 FY 0.75 FZ -4.38
86 FX 19 FY 0.69 FZ -4.51
87 FX 20.12 FY 0.66 FZ -4.8
88 FX 18.36 FY 0.56 FZ -4.33
89 FX 18.45 FY 0.51 FZ -4.32
90 FX 19.44 FY 0.48 FZ -4.53
91 FX 18.96 FY 0.4 FZ -4.37
92 FX 18.51 FY 0.35 FZ -4.22
93 FX 18.58 FY 0.3 FZ -4.21
94 FX 18.63 FY 0.24 FZ -4.2
95 FX 19.52 FY 0.19 FZ -4.38
96 FX 18.82 FY 0.12 FZ -4.2
97 FX 18.7 FY 0.06 FZ -4.16
98 FX 18.71 FY 0 FZ -4.16
99 FX 18.7 FY -0.06 FZ -4.16
100 FX 18.82 FY -0.12 FZ -4.2
101 FX 19.51 FY -0.19 FZ -4.38
102 FX 18.63 FY -0.24 FZ -4.2
103 FX 18.58 FY -0.3 FZ -4.21
104 FX 18.51 FY -0.35 FZ -4.23
105 FX 18.96 FY -0.41 FZ -4.37
106 FX 19.44 FY -0.48 FZ -4.53
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a70

```
107 FX 18.45 FY -0.52 FZ -4.32
108 FX 18.36 FY -0.56 FZ -4.33
109 FX 20.12 FY -0.66 FZ -4.79
110 FX 18.99 FY -0.7 FZ -4.51
111 FX 18.59 FY -0.75 FZ -4.38
112 FX 21.74 FY -0.93 FZ -5.11
113 FX 18.7 FY -0.93 FZ -4.21
114 FX 21.24 FY -1.15 FZ -4.61
115 FX 16.35 FY -1.04 FZ -3.19
116 FX 11.37 FY -0.77 FZ -2
***RS-INT-3-WP
274 FX -26.18 FY 15.94 FZ 9.12
312 FX -26.17 FY -15.92 FZ 9.11
157 FX 26.23 FY 16.65 FZ 9.69
195 FX 26.23 FY -16.66 FZ 9.69
275 FX -11.39 FY 0.8 FZ -1.95
276 FX -16.36 FY 1.05 FZ -3.15
277 FX -21.23 FY 1.17 FZ -4.56
278 FX -18.7 FY 0.93 FZ -4.19
279 FX -21.75 FY 0.92 FZ -5.06
280 FX -18.59 FY 0.74 FZ -4.36
281 FX -19 FY 0.69 FZ -4.49
282 FX -20.12 FY 0.66 FZ -4.76
283 FX -18.36 FY 0.55 FZ -4.31
284 FX -18.45 FY 0.51 FZ -4.3
285 FX -19.44 FY 0.47 FZ -4.49
286 FX -18.96 FY 0.4 FZ -4.34
287 FX -18.51 FY 0.35 FZ -4.2
288 FX -18.58 FY 0.29 FZ -4.19
289 FX -18.63 FY 0.24 FZ -4.17
290 FX -19.52 FY 0.19 FZ -4.35
291 FX -18.82 FY 0.12 FZ -4.18
292 FX -18.7 FY 0.06 FZ -4.14
293 FX -18.71 FY 0 FZ -4.14
294 FX -18.7 FY -0.06 FZ -4.14
295 FX -18.82 FY -0.11 FZ -4.17
296 FX -19.51 FY -0.19 FZ -4.35
297 FX -18.63 FY -0.24 FZ -4.17
298 FX -18.58 FY -0.29 FZ -4.19
299 FX -18.51 FY -0.35 FZ -4.2
300 FX -18.96 FY -0.4 FZ -4.34
301 FX -19.44 FY -0.47 FZ -4.5
302 FX -18.45 FY -0.51 FZ -4.3
303 FX -18.36 FY -0.55 FZ -4.31
304 FX -20.12 FY -0.65 FZ -4.76
305 FX -18.99 FY -0.69 FZ -4.49
306 FX -18.59 FY -0.74 FZ -4.36
307 FX -21.74 FY -0.93 FZ -5.06
308 FX -18.7 FY -0.93 FZ -4.19
309 FX -21.24 FY -1.16 FZ -4.56
310 FX -16.36 FY -1.06 FZ -3.16
311 FX -11.42 FY -0.82 FZ -1.98
158 FX 11.34 FY 0.8 FZ -2.04
159 FX 16.36 FY 1.04 FZ -3.2
160 FX 21.23 FY 1.15 FZ -4.61
161 FX 18.7 FY 0.93 FZ -4.21
162 FX 21.74 FY 0.93 FZ -5.11
163 FX 18.59 FY 0.75 FZ -4.38
164 FX 19 FY 0.69 FZ -4.51
165 FX 20.12 FY 0.66 FZ -4.8
166 FX 18.36 FY 0.56 FZ -4.33
167 FX 18.45 FY 0.51 FZ -4.32
168 FX 19.44 FY 0.48 FZ -4.53
169 FX 18.96 FY 0.4 FZ -4.37
170 FX 18.51 FY 0.35 FZ -4.22
171 FX 18.58 FY 0.3 FZ -4.21
172 FX 18.63 FY 0.24 FZ -4.2
173 FX 19.52 FY 0.19 FZ -4.38
174 FX 18.82 FY 0.12 FZ -4.2
175 FX 18.7 FY 0.06 FZ -4.16
176 FX 18.71 FY 0 FZ -4.16
177 FX 18.7 FY -0.06 FZ -4.16
178 FX 18.82 FY -0.12 FZ -4.2
179 FX 19.51 FY -0.19 FZ -4.38
180 FX 18.63 FY -0.24 FZ -4.2
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a71

```
181 FX 18.58 FY -0.3 FZ -4.21
182 FX 18.51 FY -0.35 FZ -4.23
183 FX 18.96 FY -0.41 FZ -4.37
184 FX 19.44 FY -0.48 FZ -4.53
185 FX 18.45 FY -0.52 FZ -4.32
186 FX 18.36 FY -0.56 FZ -4.33
187 FX 20.12 FY -0.66 FZ -4.79
188 FX 18.99 FY -0.7 FZ -4.51
189 FX 18.59 FY -0.75 FZ -4.38
190 FX 21.74 FY -0.93 FZ -5.11
191 FX 18.7 FY -0.93 FZ -4.21
192 FX 21.24 FY -1.15 FZ -4.61
193 FX 16.35 FY -1.04 FZ -3.19
194 FX 11.37 FY -0.77 FZ -2
***RS-INT-4-WP
352 FX -26.18 FY 15.94 FZ 9.12
390 FX -26.17 FY -15.92 FZ 9.11
235 FX 26.23 FY 16.65 FZ 9.69
273 FX 26.23 FY -16.66 FZ 9.69
353 FX -11.39 FY 0.8 FZ -1.95
354 FX -16.36 FY 1.05 FZ -3.15
355 FX -21.23 FY 1.17 FZ -4.56
356 FX -18.7 FY 0.93 FZ -4.19
357 FX -21.75 FY 0.92 FZ -5.06
358 FX -18.59 FY 0.74 FZ -4.36
359 FX -19 FY 0.69 FZ -4.49
360 FX -20.12 FY 0.66 FZ -4.76
361 FX -18.36 FY 0.55 FZ -4.31
362 FX -18.45 FY 0.51 FZ -4.3
363 FX -19.44 FY 0.47 FZ -4.49
364 FX -18.96 FY 0.4 FZ -4.34
365 FX -18.51 FY 0.35 FZ -4.2
366 FX -18.58 FY 0.29 FZ -4.19
367 FX -18.63 FY 0.24 FZ -4.17
368 FX -19.52 FY 0.19 FZ -4.35
369 FX -18.82 FY 0.12 FZ -4.18
370 FX -18.7 FY 0.06 FZ -4.14
371 FX -18.71 FY 0 FZ -4.14
372 FX -18.7 FY -0.06 FZ -4.14
373 FX -18.82 FY -0.11 FZ -4.17
374 FX -19.51 FY -0.19 FZ -4.35
375 FX -18.63 FY -0.24 FZ -4.17
376 FX -18.58 FY -0.29 FZ -4.19
377 FX -18.51 FY -0.35 FZ -4.2
378 FX -18.96 FY -0.4 FZ -4.34
379 FX -19.44 FY -0.47 FZ -4.5
380 FX -18.45 FY -0.51 FZ -4.3
381 FX -18.36 FY -0.55 FZ -4.31
382 FX -20.12 FY -0.65 FZ -4.76
383 FX -18.99 FY -0.69 FZ -4.49
384 FX -18.59 FY -0.74 FZ -4.36
385 FX -21.74 FY -0.93 FZ -5.06
386 FX -18.7 FY -0.93 FZ -4.19
387 FX -21.24 FY -1.16 FZ -4.56
388 FX -16.36 FY -1.06 FZ -3.16
389 FX -11.42 FY -0.82 FZ -1.98
236 FX 11.34 FY 0.8 FZ -2.04
237 FX 16.36 FY 1.04 FZ -3.2
238 FX 21.23 FY 1.15 FZ -4.61
239 FX 18.7 FY 0.93 FZ -4.21
240 FX 21.74 FY 0.93 FZ -5.11
241 FX 18.59 FY 0.75 FZ -4.38
242 FX 19 FY 0.69 FZ -4.51
243 FX 20.12 FY 0.66 FZ -4.8
244 FX 18.36 FY 0.56 FZ -4.33
245 FX 18.45 FY 0.51 FZ -4.32
246 FX 19.44 FY 0.48 FZ -4.53
247 FX 18.96 FY 0.4 FZ -4.37
248 FX 18.51 FY 0.35 FZ -4.22
249 FX 18.58 FY 0.3 FZ -4.21
250 FX 18.63 FY 0.24 FZ -4.2
251 FX 19.52 FY 0.19 FZ -4.38
252 FX 18.82 FY 0.12 FZ -4.2
253 FX 18.7 FY 0.06 FZ -4.16
254 FX 18.71 FY 0 FZ -4.16
```

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Q326-KSP-R4b-Deg.std 0.72

```
255 FX 18.7 FY -0.06 FZ -4.16
256 FX 18.82 FY -0.12 FZ -4.2
257 FX 19.51 FY -0.19 FZ -4.38
258 FX 18.63 FY -0.24 FZ -4.2
259 FX 18.58 FY -0.3 FZ -4.21
260 FX 18.51 FY -0.35 FZ -4.23
261 FX 18.96 FY -0.41 FZ -4.37
262 FX 19.44 FY -0.48 FZ -4.53
263 FX 18.45 FY -0.52 FZ -4.32
264 FX 18.36 FY -0.56 FZ -4.33
265 FX 20.12 FY -0.66 FZ -4.79
266 FX 18.99 FY -0.7 FZ -4.51
267 FX 18.59 FY -0.75 FZ -4.38
268 FX 21.74 FY -0.93 FZ -5.11
269 FX 18.7 FY -0.93 FZ -4.21
270 FX 21.24 FY -1.15 FZ -4.61
271 FX 16.35 FY -1.04 FZ -3.19
272 FX 11.37 FY -0.77 FZ -2
***RS-INT-5-WP
430 FX -26.18 FY 15.94 FZ 9.12
468 FX -26.17 FY -15.92 FZ 9.11
313 FX 26.23 FY 16.65 FZ 9.69
351 FX 26.23 FY -16.66 FZ 9.69
431 FX -11.39 FY 0.8 FZ -1.95
432 FX -16.36 FY 1.05 FZ -3.15
433 FX -21.23 FY 1.17 FZ -4.56
434 FX -18.7 FY 0.93 FZ -4.19
435 FX -21.75 FY 0.92 FZ -5.06
436 FX -18.59 FY 0.74 FZ -4.36
437 FX -19 FY 0.69 FZ -4.49
438 FX -20.12 FY 0.66 FZ -4.76
439 FX -18.36 FY 0.55 FZ -4.31
440 FX -18.45 FY 0.51 FZ -4.3
441 FX -19.44 FY 0.47 FZ -4.49
442 FX -18.96 FY 0.4 FZ -4.34
443 FX -18.51 FY 0.35 FZ -4.2
444 FX -18.58 FY 0.29 FZ -4.19
445 FX -18.63 FY 0.24 FZ -4.17
446 FX -19.52 FY 0.19 FZ -4.35
447 FX -18.82 FY 0.12 FZ -4.18
448 FX -18.7 FY 0.06 FZ -4.14
449 FX -18.71 FY 0 FZ -4.14
450 FX -18.7 FY -0.06 FZ -4.14
451 FX -18.82 FY -0.11 FZ -4.17
452 FX -19.51 FY -0.19 FZ -4.35
453 FX -18.63 FY -0.24 FZ -4.17
454 FX -18.58 FY -0.29 FZ -4.19
455 FX -18.51 FY -0.35 FZ -4.2
456 FX -18.96 FY -0.4 FZ -4.34
457 FX -19.44 FY -0.47 FZ -4.5
458 FX -18.45 FY -0.51 FZ -4.3
459 FX -18.36 FY -0.55 FZ -4.31
460 FX -20.12 FY -0.65 FZ -4.76
461 FX -18.99 FY -0.69 FZ -4.49
462 FX -18.59 FY -0.74 FZ -4.36
463 FX -21.74 FY -0.93 FZ -5.06
464 FX -18.7 FY -0.93 FZ -4.19
465 FX -21.24 FY -1.16 FZ -4.56
466 FX -16.36 FY -1.06 FZ -3.16
467 FX -11.42 FY -0.82 FZ -1.98
314 FX 11.34 FY 0.8 FZ -2.04
315 FX 16.36 FY 1.04 FZ -3.2
316 FX 21.23 FY 1.15 FZ -4.61
317 FX 18.7 FY 0.93 FZ -4.21
318 FX 21.74 FY 0.93 FZ -5.11
319 FX 18.59 FY 0.75 FZ -4.38
320 FX 19 FY 0.69 FZ -4.51
321 FX 20.12 FY 0.66 FZ -4.8
322 FX 18.36 FY 0.56 FZ -4.33
323 FX 18.45 FY 0.51 FZ -4.32
324 FX 19.44 FY 0.48 FZ -4.53
325 FX 18.96 FY 0.4 FZ -4.37
326 FX 18.51 FY 0.35 FZ -4.22
327 FX 18.58 FY 0.3 FZ -4.21
328 FX 18.63 FY 0.24 FZ -4.2
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Q326-KSP-R4b-Deg.std 0.73

```
329 FX 19.52 FY 0.19 FZ -4.38
330 FX 18.82 FY 0.12 FZ -4.2
331 FX 18.7 FY 0.06 FZ -4.16
332 FX 18.71 FY 0 FZ -4.16
333 FX 18.7 FY -0.06 FZ -4.16
334 FX 18.82 FY -0.12 FZ -4.2
335 FX 19.51 FY -0.19 FZ -4.38
336 FX 18.63 FY -0.24 FZ -4.2
337 FX 18.58 FY -0.3 FZ -4.21
338 FX 18.51 FY -0.35 FZ -4.23
339 FX 18.96 FY -0.41 FZ -4.37
340 FX 19.44 FY -0.48 FZ -4.53
341 FX 18.45 FY -0.52 FZ -4.32
342 FX 18.36 FY -0.56 FZ -4.33
343 FX 20.12 FY -0.66 FZ -4.79
344 FX 18.99 FY -0.7 FZ -4.51
345 FX 18.59 FY -0.75 FZ -4.38
346 FX 21.74 FY -0.93 FZ -5.11
347 FX 18.7 FY -0.93 FZ -4.21
348 FX 21.24 FY -1.15 FZ -4.61
349 FX 16.35 FY -1.04 FZ -3.19
350 FX 11.37 FY -0.77 FZ -2
***RS-EDGE-SBOARD-WP
429 FX 0.12 FY -0.04 FZ -0.13
391 FX 0.12 FY 0.04 FZ -0.13
472 FX -7.4 FY 1.55 FZ 3.19
476 FX -11.87 FY 0.83 FZ 3.71
480 FX -13.68 FY 1.94 FZ 4.13
484 FX -15.12 FY 1.4 FZ 4
488 FX -15.6 FY 0 FZ 3.91
492 FX -15.08 FY -1.39 FZ 3.97
496 FX -13.62 FY -1.94 FZ 4.09
500 FX -11.8 FY -0.83 FZ 3.67
504 FX -7.28 FY -1.56 FZ 3.12
508 FX 5.06 FY -0.1 FZ -3.02
427 FX 5.52 FY -0.19 FZ -3.25
426 FX 8.03 FY -0.25 FZ -4.54
425 FX 7.67 FY -0.29 FZ -4.44
424 FX 10.04 FY -0.37 FZ -6.01
423 FX 9.65 FY -0.34 FZ -5.82
422 FX 10.51 FY -0.34 FZ -6.33
421 FX 12.05 FY -0.36 FZ -7.32
420 FX 11.55 FY -0.34 FZ -7.15
419 FX 12.09 FY -0.33 FZ -7.51
418 FX 13.14 FY -0.31 FZ -8.15
417 FX 13.29 FY -0.28 FZ -8.31
416 FX 13.29 FY -0.25 FZ -8.39
415 FX 13.56 FY -0.21 FZ -8.57
414 FX 13.74 FY -0.17 FZ -8.66
413 FX 14.57 FY -0.14 FZ -9.25
412 FX 14.24 FY -0.09 FZ -9.08
411 FX 14.14 FY -0.04 FZ -9
410 FX 14.18 FY 0 FZ -8.99
409 FX 14.14 FY 0.04 FZ -8.99
408 FX 14.23 FY 0.09 FZ -9.08
407 FX 14.6 FY 0.14 FZ -9.25
406 FX 13.78 FY 0.17 FZ -8.69
405 FX 13.57 FY 0.21 FZ -8.57
404 FX 13.29 FY 0.25 FZ -8.39
403 FX 13.31 FY 0.28 FZ -8.33
402 FX 13.19 FY 0.31 FZ -8.17
401 FX 12.12 FY 0.33 FZ -7.52
400 FX 11.61 FY 0.34 FZ -7.18
399 FX 12.04 FY 0.37 FZ -7.32
398 FX 10.63 FY 0.34 FZ -6.38
397 FX 9.72 FY 0.35 FZ -5.87
396 FX 10.15 FY 0.37 FZ -6.06
395 FX 7.8 FY 0.29 FZ -4.51
394 FX 8.09 FY 0.27 FZ -4.6
393 FX 5.76 FY 0.19 FZ -3.37
392 FX 5.03 FY 0.12 FZ -3.03
469 FX -3.78 FY 2.53 FZ 3.8
470 FX -5.76 FY 1.03 FZ 3.16
471 FX -5.97 FY 1.24 FZ 3.01
473 FX -10.08 FY 0.76 FZ 3.83
```


Q326-KSP-R4b-Deg.std 0.74

```
474 FX -9.76 FY 1.25 FZ 3.89
475 FX -11.11 FY 1.05 FZ 3.93
477 FX -12.12 FY 0.93 FZ 3.91
478 FX -13.71 FY 1.09 FZ 4.53
479 FX -13.36 FY 0.62 FZ 3.97
481 FX -14.69 FY 0.16 FZ 4.17
482 FX -15.4 FY 0.19 FZ 4.47
483 FX -14.75 FY 1.65 FZ 4.31
485 FX -15.66 FY 0.08 FZ 4.26
486 FX -16.36 FY 0.06 FZ 4.61
487 FX -15.53 FY 0.04 FZ 4.19
489 FX -15.53 FY -0.04 FZ 4.19
490 FX -16.37 FY -0.06 FZ 4.61
491 FX -15.64 FY -0.08 FZ 4.26
493 FX -14.73 FY -1.64 FZ 4.3
494 FX -15.4 FY -0.19 FZ 4.47
495 FX -14.68 FY -0.16 FZ 4.16
497 FX -13.35 FY -0.61 FZ 3.97
498 FX -13.64 FY -1.1 FZ 4.49
499 FX -12.12 FY -0.93 FZ 3.91
501 FX -11.04 FY -1.05 FZ 3.89
502 FX -9.64 FY -1.25 FZ 3.83
503 FX -10.01 FY -0.76 FZ 3.8
505 FX -5.87 FY -1.25 FZ 2.93
506 FX -5.54 FY -1.03 FZ 3.05
507 FX -3.85 FY -2.55 FZ 3.82
**********
LOAD 12 LOADTYPE Wind  TITLE LOAD CASE 12 - WSB_P
JOINT LOAD
***RS-EDGE-SBOARD-WP
429 FX 0.12 FY -0.04 FZ -0.13
391 FX 0.12 FY 0.04 FZ -0.13
472 FX -7.4 FY 1.55 FZ 3.19
476 FX -11.87 FY 0.83 FZ 3.71
480 FX -13.68 FY 1.94 FZ 4.13
484 FX -15.12 FY 1.4 FZ 4
488 FX -15.6 FY 0 FZ 3.91
492 FX -15.08 FY -1.39 FZ 3.97
496 FX -13.62 FY -1.94 FZ 4.09
500 FX -11.8 FY -0.83 FZ 3.67
504 FX -7.28 FY -1.56 FZ 3.12
428 FX 5.06 FY -0.1 FZ -3.02
427 FX 5.52 FY -0.19 FZ -3.25
426 FX 8.03 FY -0.25 FZ -4.54
425 FX 7.67 FY -0.29 FZ -4.44
424 FX 10.04 FY -0.37 FZ -6.01
423 FX 9.65 FY -0.34 FZ -5.82
422 FX 10.51 FY -0.34 FZ -6.33
421 FX 12.05 FY -0.36 FZ -7.32
420 FX 11.55 FY -0.34 FZ -7.15
419 FX 12.09 FY -0.33 FZ -7.51
418 FX 13.14 FY -0.31 FZ -8.15
417 FX 13.29 FY -0.28 FZ -8.31
416 FX 13.29 FY -0.25 FZ -8.39
415 FX 13.56 FY -0.21 FZ -8.57
414 FX 13.74 FY -0.17 FZ -8.66
413 FX 14.57 FY -0.14 FZ -9.25
412 FX 14.24 FY -0.09 FZ -9.08
411 FX 14.14 FY -0.04 FZ -9
410 FX 14.18 FY 0 FZ -8.99
409 FX 14.14 FY 0.04 FZ -8.99
408 FX 14.23 FY 0.09 FZ -9.08
407 FX 14.6 FY 0.14 FZ -9.25
406 FX 13.78 FY 0.17 FZ -8.69
405 FX 13.57 FY 0.21 FZ -8.57
404 FX 13.29 FY 0.25 FZ -8.39
403 FX 13.31 FY 0.28 FZ -8.33
402 FX 13.19 FY 0.31 FZ -8.17
401 FX 12.12 FY 0.33 FZ -7.52
400 FX 11.61 FY 0.34 FZ -7.18
399 FX 12.04 FY 0.37 FZ -7.32
398 FX 10.63 FY 0.34 FZ -6.38
397 FX 9.72 FY 0.35 FZ -5.87
396 FX 10.15 FY 0.37 FZ -6.06
395 FX 7.8 FY 0.29 FZ -4.51
```


Q326-KSP-R4b-Deg.std 0.75

```
394 FX 8.09 FY 0.27 FZ -4.6
393 FX 5.76 FY 0.19 FZ -3.37
392 FX 5.03 FY 0.12 FZ -3.03
469 FX -3.78 FY 2.53 FZ 3.8
470 FX -5.76 FY 1.03 FZ 3.16
471 FX -5.97 FY 1.24 FZ 3.01
473 FX -10.08 FY 0.76 FZ 3.83
474 FX -9.76 FY 1.25 FZ 3.89
475 FX -11.11 FY 1.05 FZ 3.93
477 FX -12.12 FY 0.93 FZ 3.91
478 FX -13.71 FY 1.09 FZ 4.53
479 FX -13.36 FY 0.62 FZ 3.97
481 FX -14.69 FY 0.16 FZ 4.17
482 FX -15.4 FY 0.19 FZ 4.47
483 FX -14.75 FY 1.65 FZ 4.31
485 FX -15.66 FY 0.08 FZ 4.26
486 FX -16.36 FY 0.06 FZ 4.61
487 FX -15.53 FY 0.04 FZ 4.19
489 FX -15.53 FY -0.04 FZ 4.19
490 FX -16.37 FY -0.06 FZ 4.61
491 FX -15.64 FY -0.08 FZ 4.26
493 FX -14.73 FY -1.64 FZ 4.3
494 FX -15.4 FY -0.19 FZ 4.47
495 FX -14.68 FY -0.16 FZ 4.16
497 FX -13.35 FY -0.61 FZ 3.97
498 FX -13.64 FY -1.1 FZ 4.49
499 FX -12.12 FY -0.93 FZ 3.91
501 FX -11.04 FY -1.05 FZ 3.89
502 FX -9.64 FY -1.25 FZ 3.83
503 FX -10.01 FY -0.76 FZ 3.8
505 FX -5.87 FY -1.25 FZ 2.93
506 FX -5.54 FY -1.03 FZ 3.05
507 FX -3.85 FY -2.55 FZ 3.82
***RS-EDGE-DPOOL-WP
1 FX -0.22 FY 0.97 FZ 0.87
39 FX -0.22 FY -0.97 FZ 0.88
511 FX 6.13 FY 6.89 FZ 8.49
515 FX 10.36 FY 1.37 FZ 7.17
519 FX 12.67 FY 2.81 FZ 9.1
523 FX 14.66 FY -0.49 FZ 9.44
527 FX 15.39 FY 0 FZ 10.3
531 FX 14.69 FY 0.49 FZ 9.45
535 FX 12.74 FY -2.81 FZ 9.09
539 FX 10.46 FY -1.37 FZ 7.2
543 FX 6.36 FY -6.9 FZ 8.54
2 FX -5.44 FY -0.26 FZ -2.66
3 FX -6.73 FY -0.41 FZ -2.8
4 FX -8.19 FY -0.62 FZ -2.9
5 FX -9.95 FY -0.72 FZ -3.34
6 FX -14.62 FY -0.96 FZ -5.02
7 FX -13.67 FY -0.93 FZ -4.32
8 FX -12.72 FY -0.91 FZ -3.72
9 FX -16.23 FY -1.05 FZ -4.69
10 FX -18.01 FY -1.03 FZ -5.18
11 FX -18.34 FY -0.98 FZ -5.09
12 FX -17.23 FY -0.88 FZ -4.51
13 FX -19.64 FY -0.87 FZ -5.14
14 FX -21.49 FY -0.79 FZ -5.65
15 FX -21.14 FY -0.67 FZ -5.4
16 FX -19.07 FY -0.51 FZ -4.64
17 FX -22.52 FY -0.43 FZ -5.63
18 FX -23.49 FY -0.3 FZ -5.92
19 FX -22.21 FY -0.14 FZ -5.47
20 FX -20.17 FY 0 FZ -4.82
21 FX -22.21 FY 0.14 FZ -5.47
22 FX -23.5 FY 0.29 FZ -5.94
23 FX -22.53 FY 0.43 FZ -5.62
24 FX -19.11 FY 0.51 FZ -4.65
25 FX -21.2 FY 0.67 FZ -5.42
26 FX -21.51 FY 0.79 FZ -5.66
27 FX -19.68 FY 0.86 FZ -5.17
28 FX -17.3 FY 0.88 FZ -4.53
29 FX -18.39 FY 0.98 FZ -5.11
30 FX -18.11 FY 1.03 FZ -5.22
31 FX -16.36 FY 1.05 FZ -4.75
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Q326-KSP-R4b-Deg.std 0.76

```
32 FX -12.83 FY 0.92 FZ -3.73
33 FX -13.79 FY 0.93 FZ -4.39
34 FX -14.85 FY 0.98 FZ -5.08
35 FX -10.15 FY 0.74 FZ -3.41
36 FX -8.53 FY 0.63 FZ -3.05
37 FX -6.82 FY 0.45 FZ -2.77
38 FX -5.52 FY 0.23 FZ -2.75
508 FX 3.52 FY 3.47 FZ 5.33
509 FX 5.75 FY 4.4 FZ 7.5
510 FX 5.25 FY 2.88 FZ 5.72
512 FX 11.3 FY 3.63 FZ 9.89
513 FX 11.17 FY 4.53 FZ 10.51
514 FX 11.56 FY 6.7 FZ 11.66
516 FX 13.08 FY 6.15 FZ 11.61
517 FX 16.15 FY 1.04 FZ 11.64
518 FX 14.44 FY 2.86 FZ 10.92
520 FX 16.27 FY -0.62 FZ 10.98
521 FX 18.3 FY -0.14 FZ 12.84
522 FX 16.21 FY 4.02 FZ 12.24
524 FX 17.5 FY -0.34 FZ 12.09
525 FX 19.48 FY -0.21 FZ 13.79
526 FX 17.38 FY -0.09 FZ 12.11
528 FX 17.38 FY 0.09 FZ 12.11
529 FX 19.49 FY 0.21 FZ 13.8
530 FX 17.5 FY 0.35 FZ 12.09
532 FX 16.29 FY -4.02 FZ 12.24
533 FX 18.32 FY 0.15 FZ 12.86
534 FX 16.3 FY 0.62 FZ 11.01
536 FX 14.49 FY -2.85 FZ 10.95
537 FX 16.23 FY -1.05 FZ 11.68
538 FX 13.21 FY -6.16 FZ 11.65
540 FX 11.7 FY -6.69 FZ 11.71
541 FX 11.32 FY -4.55 FZ 10.56
542 FX 11.55 FY -3.65 FZ 9.99
544 FX 5.57 FY -2.9 FZ 5.84
545 FX 5.7 FY -4.43 FZ 7.44
546 FX 3.63 FY -3.47 FZ 5.44
***RS-INT-1-WU
118 FX -222.02 FY 99.82 FZ 91.63
156 FX -221.81 FY -99.81 FZ 91.67
40 FX 221.74 FY 99.95 FZ 91.75
78 FX 221.94 FY -99.96 FZ 91.76
119 FX -9.49 FY -0.77 FZ 0.71
120 FX -6.36 FY -1.1 FZ 1.01
121 FX -7.75 FY -1.47 FZ 1.39
122 FX -8.16 FY -1.57 FZ 1.62
123 FX -10.39 FY -1.91 FZ 2.08
124 FX -10.97 FY -1.91 FZ 2.34
125 FX -12.4 FY -2 FZ 2.67
126 FX -14.15 FY -2.09 FZ 3.1
127 FX -14.28 FY -1.9 FZ 3.23
128 FX -15.06 FY -1.79 FZ 3.45
129 FX -16.25 FY -1.7 FZ 3.73
130 FX -16.47 FY -1.5 FZ 3.85
131 FX -16.58 FY -1.28 FZ 3.92
132 FX -16.91 FY -1.08 FZ 4.03
133 FX -17.08 FY -0.87 FZ 4.09
134 FX -17.81 FY -0.67 FZ 4.25
135 FX -17.44 FY -0.44 FZ 4.21
136 FX -17.46 FY -0.21 FZ 4.22
137 FX -17.5 FY 0 FZ 4.23
138 FX -17.46 FY 0.21 FZ 4.22
139 FX -17.45 FY 0.43 FZ 4.19
140 FX -17.8 FY 0.67 FZ 4.26
141 FX -17.08 FY 0.87 FZ 4.09
142 FX -16.91 FY 1.08 FZ 4.03
143 FX -16.58 FY 1.27 FZ 3.92
144 FX -16.48 FY 1.49 FZ 3.84
145 FX -16.23 FY 1.7 FZ 3.75
146 FX -15.05 FY 1.79 FZ 3.45
147 FX -14.28 FY 1.9 FZ 3.23
148 FX -14.18 FY 2.08 FZ 3.09
149 FX -12.41 FY 2.01 FZ 2.69
150 FX -11 FY 1.9 FZ 2.32
151 FX -10.37 FY 1.92 FZ 2.09
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Q326-KSP-R4b-Deg.std 0.77

```
152 FX -8.16 FY 1.57 FZ 1.62
153 FX -7.78 FY 1.46 FZ 1.37
154 FX -6.34 FY 1.13 FZ 1.05
155 FX -9.76 FY 0.81 FZ 0.73
41 FX 9.77 FY -0.84 FZ 0.73
42 FX 6.36 FY -1.13 FZ 1.02
43 FX 7.76 FY -1.48 FZ 1.37
44 FX 8.16 FY -1.57 FZ 1.6
45 FX 10.39 FY -1.93 FZ 2.08
46 FX 10.97 FY -1.91 FZ 2.33
47 FX 12.42 FY -2.01 FZ 2.68
48 FX 14.27 FY -2.1 FZ 3.12
49 FX 14.31 FY -1.9 FZ 3.23
50 FX 15.06 FY -1.79 FZ 3.45
51 FX 16.25 FY -1.7 FZ 3.74
52 FX 16.47 FY -1.49 FZ 3.85
53 FX 16.58 FY -1.27 FZ 3.92
54 FX 16.91 FY -1.07 FZ 4.02
55 FX 17.08 FY -0.87 FZ 4.09
56 FX 17.81 FY -0.67 FZ 4.25
57 FX 17.44 FY -0.43 FZ 4.2
58 FX 17.46 FY -0.21 FZ 4.21
59 FX 17.5 FY 0 FZ 4.22
60 FX 17.46 FY 0.21 FZ 4.21
61 FX 17.45 FY 0.44 FZ 4.2
62 FX 17.81 FY 0.67 FZ 4.26
63 FX 17.08 FY 0.87 FZ 4.09
64 FX 16.91 FY 1.08 FZ 4.02
65 FX 16.58 FY 1.27 FZ 3.92
66 FX 16.48 FY 1.49 FZ 3.84
67 FX 16.24 FY 1.7 FZ 3.74
68 FX 15.05 FY 1.79 FZ 3.44
69 FX 14.31 FY 1.9 FZ 3.23
70 FX 14.31 FY 2.11 FZ 3.12
71 FX 12.41 FY 2.01 FZ 2.68
72 FX 10.98 FY 1.91 FZ 2.32
73 FX 10.37 FY 1.93 FZ 2.08
74 FX 8.16 FY 1.57 FZ 1.6
75 FX 7.78 FY 1.48 FZ 1.36
76 FX 6.34 FY 1.13 FZ 1.02
77 FX 9.63 FY 0.77 FZ 0.66
***RS-INT-2-WU
196 FX -222.02 FY 99.82 FZ 91.63
234 FX -221.81 FY -99.81 FZ 91.67
79 FX 221.74 FY 99.95 FZ 91.75
117 FX 221.94 FY -99.96 FZ 91.76
197 FX -9.49 FY -0.77 FZ 0.71
198 FX -6.36 FY -1.1 FZ 1.01
199 FX -7.75 FY -1.47 FZ 1.39
200 FX -8.16 FY -1.57 FZ 1.62
201 FX -10.39 FY -1.91 FZ 2.08
202 FX -10.97 FY -1.91 FZ 2.34
203 FX -12.4 FY -2 FZ 2.67
204 FX -14.15 FY -2.09 FZ 3.1
205 FX -14.28 FY -1.9 FZ 3.23
206 FX -15.06 FY -1.79 FZ 3.45
207 FX -16.25 FY -1.7 FZ 3.73
208 FX -16.47 FY -1.5 FZ 3.85
209 FX -16.58 FY -1.28 FZ 3.92
210 FX -16.91 FY -1.08 FZ 4.03
211 FX -17.08 FY -0.87 FZ 4.09
212 FX -17.81 FY -0.67 FZ 4.25
213 FX -17.44 FY -0.44 FZ 4.21
214 FX -17.46 FY -0.21 FZ 4.22
215 FX -17.5 FY 0 FZ 4.23
216 FX -17.46 FY 0.21 FZ 4.22
217 FX -17.45 FY 0.43 FZ 4.19
218 FX -17.8 FY 0.67 FZ 4.26
219 FX -17.08 FY 0.87 FZ 4.09
220 FX -16.91 FY 1.08 FZ 4.03
221 FX -16.58 FY 1.27 FZ 3.92
222 FX -16.48 FY 1.49 FZ 3.84
223 FX -16.23 FY 1.7 FZ 3.75
224 FX -15.05 FY 1.79 FZ 3.45
225 FX -14.28 FY 1.9 FZ 3.23
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Q326-KSP-R4b-Deg.std 0.78

```
226 FX -14.18 FY 2.08 FZ 3.09
227 FX -12.41 FY 2.01 FZ 2.69
228 FX -11 FY 1.9 FZ 2.32
229 FX -10.37 FY 1.92 FZ 2.09
230 FX -8.16 FY 1.57 FZ 1.62
231 FX -7.78 FY 1.46 FZ 1.37
232 FX -6.34 FY 1.13 FZ 1.05
233 FX -9.76 FY 0.81 FZ 0.73
80 FX 9.77 FY -0.84 FZ 0.73
81 FX 6.36 FY -1.13 FZ 1.02
82 FX 7.76 FY -1.48 FZ 1.37
83 FX 8.16 FY -1.57 FZ 1.6
84 FX 10.39 FY -1.93 FZ 2.08
85 FX 10.97 FY -1.91 FZ 2.33
86 FX 12.42 FY -2.01 FZ 2.68
87 FX 14.27 FY -2.1 FZ 3.12
88 FX 14.31 FY -1.9 FZ 3.23
89 FX 15.06 FY -1.79 FZ 3.45
90 FX 16.25 FY -1.7 FZ 3.74
91 FX 16.47 FY -1.49 FZ 3.85
92 FX 16.58 FY -1.27 FZ 3.92
93 FX 16.91 FY -1.07 FZ 4.02
94 FX 17.08 FY -0.87 FZ 4.09
95 FX 17.81 FY -0.67 FZ 4.25
96 FX 17.44 FY -0.43 FZ 4.2
97 FX 17.46 FY -0.21 FZ 4.21
98 FX 17.5 FY 0 FZ 4.22
99 FX 17.46 FY 0.21 FZ 4.21
100 FX 17.45 FY 0.44 FZ 4.2
101 FX 17.81 FY 0.67 FZ 4.26
102 FX 17.08 FY 0.87 FZ 4.09
103 FX 16.91 FY 1.08 FZ 4.02
104 FX 16.58 FY 1.27 FZ 3.92
105 FX 16.48 FY 1.49 FZ 3.84
106 FX 16.24 FY 1.7 FZ 3.74
107 FX 15.05 FY 1.79 FZ 3.44
108 FX 14.31 FY 1.9 FZ 3.23
109 FX 14.31 FY 2.11 FZ 3.12
110 FX 12.41 FY 2.01 FZ 2.68
111 FX 10.98 FY 1.91 FZ 2.32
112 FX 10.37 FY 1.93 FZ 2.08
113 FX 8.16 FY 1.57 FZ 1.6
114 FX 7.78 FY 1.48 FZ 1.36
115 FX 6.34 FY 1.13 FZ 1.02
116 FX 9.63 FY 0.77 FZ 0.66
***RS-INT-3-WU
274 FX -222.02 FY 99.82 FZ 91.63
312 FX -221.81 FY -99.81 FZ 91.67
157 FX 221.74 FY 99.95 FZ 91.75
195 FX 221.94 FY -99.96 FZ 91.76
275 FX -9.49 FY -0.77 FZ 0.71
276 FX -6.36 FY -1.1 FZ 1.01
277 FX -7.75 FY -1.47 FZ 1.39
278 FX -8.16 FY -1.57 FZ 1.62
279 FX -10.39 FY -1.91 FZ 2.08
280 FX -10.97 FY -1.91 FZ 2.34
281 FX -12.4 FY -2 FZ 2.67
282 FX -14.15 FY -2.09 FZ 3.1
283 FX -14.28 FY -1.9 FZ 3.23
284 FX -15.06 FY -1.79 FZ 3.45
285 FX -16.25 FY -1.7 FZ 3.73
286 FX -16.47 FY -1.5 FZ 3.85
287 FX -16.58 FY -1.28 FZ 3.92
288 FX -16.91 FY -1.08 FZ 4.03
289 FX -17.08 FY -0.87 FZ 4.09
290 FX -17.81 FY -0.67 FZ 4.25
291 FX -17.44 FY -0.44 FZ 4.21
292 FX -17.46 FY -0.21 FZ 4.22
293 FX -17.5 FY 0 FZ 4.23
294 FX -17.46 FY 0.21 FZ 4.22
295 FX -17.45 FY 0.43 FZ 4.19
296 FX -17.8 FY 0.67 FZ 4.26
297 FX -17.08 FY 0.87 FZ 4.09
298 FX -16.91 FY 1.08 FZ 4.03
299 FX -16.58 FY 1.27 FZ 3.92
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Q326-KSP-R4b-Deg.std 0.79

```
300 FX -16.48 FY 1.49 FZ 3.84
301 FX -16.23 FY 1.7 FZ 3.75
302 FX -15.05 FY 1.79 FZ 3.45
303 FX -14.28 FY 1.9 FZ 3.23
304 FX -14.18 FY 2.08 FZ 3.09
305 FX -12.41 FY 2.01 FZ 2.69
306 FX -11 FY 1.9 FZ 2.32
307 FX -10.37 FY 1.92 FZ 2.09
308 FX -8.16 FY 1.57 FZ 1.62
309 FX -7.78 FY 1.46 FZ 1.37
310 FX -6.34 FY 1.13 FZ 1.05
311 FX -9.76 FY 0.81 FZ 0.73
158 FX 9.77 FY -0.84 FZ 0.73
159 FX 6.36 FY -1.13 FZ 1.02
160 FX 7.76 FY -1.48 FZ 1.37
161 FX 8.16 FY -1.57 FZ 1.6
162 FX 10.39 FY -1.93 FZ 2.08
163 FX 10.97 FY -1.91 FZ 2.33
164 FX 12.42 FY -2.01 FZ 2.68
165 FX 14.27 FY -2.1 FZ 3.12
166 FX 14.31 FY -1.9 FZ 3.23
167 FX 15.06 FY -1.79 FZ 3.45
168 FX 16.25 FY -1.7 FZ 3.74
169 FX 16.47 FY -1.49 FZ 3.85
170 FX 16.58 FY -1.27 FZ 3.92
171 FX 16.91 FY -1.07 FZ 4.02
172 FX 17.08 FY -0.87 FZ 4.09
173 FX 17.81 FY -0.67 FZ 4.25
174 FX 17.44 FY -0.43 FZ 4.2
175 FX 17.46 FY -0.21 FZ 4.21
176 FX 17.5 FY 0 FZ 4.22
177 FX 17.46 FY 0.21 FZ 4.21
178 FX 17.45 FY 0.44 FZ 4.2
179 FX 17.81 FY 0.67 FZ 4.26
180 FX 17.08 FY 0.87 FZ 4.09
181 FX 16.91 FY 1.08 FZ 4.02
182 FX 16.58 FY 1.27 FZ 3.92
183 FX 16.48 FY 1.49 FZ 3.84
184 FX 16.24 FY 1.7 FZ 3.74
185 FX 15.05 FY 1.79 FZ 3.44
186 FX 14.31 FY 1.9 FZ 3.23
187 FX 14.31 FY 2.11 FZ 3.12
188 FX 12.41 FY 2.01 FZ 2.68
189 FX 10.98 FY 1.91 FZ 2.32
190 FX 10.37 FY 1.93 FZ 2.08
191 FX 8.16 FY 1.57 FZ 1.6
192 FX 7.78 FY 1.48 FZ 1.36
193 FX 6.34 FY 1.13 FZ 1.02
194 FX 9.63 FY 0.77 FZ 0.66
***RS-INT-4-WU
352 FX -222.02 FY 99.82 FZ 91.63
390 FX -221.81 FY -99.81 FZ 91.67
235 FX 221.74 FY 99.95 FZ 91.75
273 FX 221.94 FY -99.96 FZ 91.76
353 FX -9.49 FY -0.77 FZ 0.71
354 FX -6.36 FY -1.1 FZ 1.01
355 FX -7.75 FY -1.47 FZ 1.39
356 FX -8.16 FY -1.57 FZ 1.62
357 FX -10.39 FY -1.91 FZ 2.08
358 FX -10.97 FY -1.91 FZ 2.34
359 FX -12.4 FY -2 FZ 2.67
360 FX -14.15 FY -2.09 FZ 3.1
361 FX -14.28 FY -1.9 FZ 3.23
362 FX -15.06 FY -1.79 FZ 3.45
363 FX -16.25 FY -1.7 FZ 3.73
364 FX -16.47 FY -1.5 FZ 3.85
365 FX -16.58 FY -1.28 FZ 3.92
366 FX -16.91 FY -1.08 FZ 4.03
367 FX -17.08 FY -0.87 FZ 4.09
368 FX -17.81 FY -0.67 FZ 4.25
369 FX -17.44 FY -0.44 FZ 4.21
370 FX -17.46 FY -0.21 FZ 4.22
371 FX -17.5 FY 0 FZ 4.23
372 FX -17.46 FY 0.21 FZ 4.22
373 FX -17.45 FY 0.43 FZ 4.19
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Q326-KSP-R4b-Deg.std

a80

```
374 FX -17.8 FY 0.67 FZ 4.26
375 FX -17.08 FY 0.87 FZ 4.09
376 FX -16.91 FY 1.08 FZ 4.03
377 FX -16.58 FY 1.27 FZ 3.92
378 FX -16.48 FY 1.49 FZ 3.84
379 FX -16.23 FY 1.7 FZ 3.75
380 FX -15.05 FY 1.79 FZ 3.45
381 FX -14.28 FY 1.9 FZ 3.23
382 FX -14.16 FY 2.08 FZ 3.09
383 FX -12.41 FY 2.01 FZ 2.69
384 FX -11 FY 1.9 FZ 2.32
385 FX -10.37 FY 1.92 FZ 2.09
386 FX -8.16 FY 1.57 FZ 1.62
387 FX -7.78 FY 1.46 FZ 1.37
388 FX -6.34 FY 1.13 FZ 1.05
389 FX -9.76 FY 0.81 FZ 0.73
236 FX 9.77 FY -0.84 FZ 0.73
237 FX 6.36 FY -1.13 FZ 1.02
238 FX 7.76 FY -1.48 FZ 1.37
239 FX 8.16 FY -1.57 FZ 1.6
240 FX 10.39 FY -1.93 FZ 2.08
241 FX 10.97 FY -1.91 FZ 2.33
242 FX 12.42 FY -2.01 FZ 2.68
243 FX 14.27 FY -2.1 FZ 3.12
244 FX 14.31 FY -1.9 FZ 3.23
245 FX 15.06 FY -1.79 FZ 3.45
246 FX 16.25 FY -1.7 FZ 3.74
247 FX 16.47 FY -1.49 FZ 3.85
248 FX 16.58 FY -1.27 FZ 3.92
249 FX 16.91 FY -1.07 FZ 4.02
250 FX 17.08 FY -0.87 FZ 4.09
251 FX 17.81 FY -0.67 FZ 4.25
252 FX 17.44 FY -0.43 FZ 4.2
253 FX 17.46 FY -0.21 FZ 4.21
254 FX 17.5 FY 0 FZ 4.22
255 FX 17.46 FY 0.21 FZ 4.21
256 FX 17.45 FY 0.44 FZ 4.2
257 FX 17.81 FY 0.67 FZ 4.26
258 FX 17.08 FY 0.87 FZ 4.09
259 FX 16.91 FY 1.08 FZ 4.02
260 FX 16.58 FY 1.27 FZ 3.92
261 FX 16.48 FY 1.49 FZ 3.84
262 FX 16.24 FY 1.7 FZ 3.74
263 FX 15.05 FY 1.79 FZ 3.44
264 FX 14.31 FY 1.9 FZ 3.23
265 FX 14.31 FY 2.11 FZ 3.12
266 FX 12.41 FY 2.01 FZ 2.68
267 FX 10.98 FY 1.91 FZ 2.32
268 FX 10.37 FY 1.93 FZ 2.08
269 FX 8.16 FY 1.57 FZ 1.6
270 FX 7.78 FY 1.48 FZ 1.36
271 FX 6.34 FY 1.13 FZ 1.02
272 FX 9.63 FY 0.77 FZ 0.66
***RS-INT-S-WU
430 FX -222.02 FY 99.82 FZ 91.63
460 FX -221.81 FY -99.81 FZ 91.67
313 FX 221.74 FY 99.95 FZ 91.75
351 FX 221.94 FY -99.96 FZ 91.76
431 FX -9.49 FY -0.77 FZ 0.71
432 FX -6.36 FY -1.1 FZ 1.01
433 FX -7.75 FY -1.47 FZ 1.39
434 FX -8.16 FY -1.57 FZ 1.62
435 FX -10.39 FY -1.91 FZ 2.08
436 FX -10.97 FY -1.91 FZ 2.34
437 FX -12.4 FY -2 FZ 2.67
438 FX -14.15 FY -2.09 FZ 3.1
439 FX -14.28 FY -1.9 FZ 3.23
440 FX -15.06 FY -1.79 FZ 3.45
441 FX -16.25 FY -1.7 FZ 3.73
442 FX -16.47 FY -1.5 FZ 3.85
443 FX -16.58 FY -1.28 FZ 3.92
444 FX -16.91 FY -1.08 FZ 4.03
445 FX -17.08 FY -0.87 FZ 4.09
446 FX -17.81 FY -0.67 FZ 4.25
447 FX -17.44 FY -0.44 FZ 4.21
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Q326-KSP-R4b-Deg.std

a81

```
448 FX -17.46 FY -0.21 FZ 4.22
449 FX -17.5 FY 0 FZ 4.23
450 FX -17.46 FY 0.21 FZ 4.22
451 FX -17.45 FY 0.43 FZ 4.19
452 FX -17.8 FY 0.67 FZ 4.26
453 FX -17.08 FY 0.87 FZ 4.09
454 FX -16.91 FY 1.08 FZ 4.03
455 FX -16.58 FY 1.27 FZ 3.92
456 FX -16.48 FY 1.49 FZ 3.84
457 FX -16.23 FY 1.7 FZ 3.75
458 FX -15.05 FY 1.79 FZ 3.45
459 FX -14.28 FY 1.9 FZ 3.23
460 FX -14.16 FY 2.08 FZ 3.09
461 FX -12.41 FY 2.01 FZ 2.69
462 FX -11 FY 1.9 FZ 2.32
463 FX -10.37 FY 1.92 FZ 2.09
464 FX -8.16 FY 1.57 FZ 1.62
465 FX -7.78 FY 1.46 FZ 1.37
466 FX -6.34 FY 1.13 FZ 1.05
467 FX -9.76 FY 0.81 FZ 0.73
314 FX 9.77 FY -0.84 FZ 0.73
315 FX 6.36 FY -1.13 FZ 1.02
316 FX 7.76 FY -1.48 FZ 1.37
317 FX 8.16 FY -1.57 FZ 1.6
318 FX 10.39 FY -1.93 FZ 2.08
319 FX 10.97 FY -1.91 FZ 2.33
320 FX 12.42 FY -2.01 FZ 2.68
321 FX 14.27 FY -2.1 FZ 3.12
322 FX 14.31 FY -1.9 FZ 3.23
323 FX 15.06 FY -1.79 FZ 3.45
324 FX 16.25 FY -1.7 FZ 3.74
325 FX 16.47 FY -1.49 FZ 3.85
326 FX 16.58 FY -1.27 FZ 3.92
327 FX 16.91 FY -1.07 FZ 4.02
328 FX 17.08 FY -0.87 FZ 4.09
329 FX 17.81 FY -0.67 FZ 4.25
330 FX 17.44 FY -0.43 FZ 4.2
331 FX 17.46 FY -0.21 FZ 4.21
332 FX 17.5 FY 0 FZ 4.22
333 FX 17.46 FY 0.21 FZ 4.21
334 FX 17.45 FY 0.44 FZ 4.2
335 FX 17.81 FY 0.67 FZ 4.26
336 FX 17.08 FY 0.87 FZ 4.09
337 FX 16.91 FY 1.08 FZ 4.02
338 FX 16.58 FY 1.27 FZ 3.92
339 FX 16.48 FY 1.49 FZ 3.84
340 FX 16.24 FY 1.7 FZ 3.74
341 FX 15.05 FY 1.79 FZ 3.44
342 FX 14.31 FY 1.9 FZ 3.23
343 FX 14.31 FY 2.11 FZ 3.12
344 FX 12.41 FY 2.01 FZ 2.68
345 FX 10.98 FY 1.91 FZ 2.32
346 FX 10.37 FY 1.93 FZ 2.08
347 FX 8.16 FY 1.57 FZ 1.6
348 FX 7.78 FY 1.48 FZ 1.36
349 FX 6.34 FY 1.13 FZ 1.02
350 FX 9.63 FY 0.77 FZ 0.66
********************************************************************************
LOAD 13 LOADTYPE Wind  TITLE LOAD CASE 13 - WSB_U
JOINT LOAD
***RS-EDGE-SBOARD-WU
429 FX 0.21 FY 0.08 FZ 0.01
391 FX 0.21 FY -0.08 FZ 0.01
472 FX -6.22 FY -6.83 FZ 8.17
476 FX -10.47 FY 3.61 FZ 8.28
480 FX -12.84 FY 4.56 FZ 9.6
484 FX -14.8 FY 1.5 FZ 9.82
488 FX -15.45 FY 0 FZ 10.18
492 FX -14.71 FY -1.51 FZ 9.82
496 FX -12.75 FY -4.56 FZ 9.59
500 FX -10.35 FY -3.61 FZ 8.25
504 FX -6.05 FY -6.82 FZ 8.14
428 FX 5.31 FY 0.23 FZ -2.58
427 FX 6.39 FY 0.43 FZ -2.51
426 FX 8.21 FY 0.6 FZ -2.86
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Q326-KSP-R4b-Deg.std

a82

```
425 FX 9.93 FY 0.72 FZ -3.23
424 FX 14.63 FY 0.96 FZ -4.87
423 FX 13.68 FY 0.92 FZ -4.24
422 FX 12.67 FY 0.91 FZ -3.57
421 FX 16.36 FY 1.03 FZ -4.63
420 FX 18.02 FY 1.02 FZ -5.05
419 FX 18.27 FY 0.97 FZ -4.93
418 FX 17.23 FY 0.88 FZ -4.37
417 FX 19.74 FY 0.85 FZ -5.05
416 FX 21.49 FY 0.79 FZ -5.5
415 FX 21.15 FY 0.67 FZ -5.26
414 FX 19.09 FY 0.51 FZ -4.52
413 FX 22.49 FY 0.43 FZ -5.46
412 FX 23.5 FY 0.29 FZ -5.79
411 FX 22.18 FY 0.14 FZ -5.31
410 FX 20.14 FY 0 FZ -4.68
409 FX 22.19 FY -0.14 FZ -5.32
408 FX 23.5 FY -0.29 FZ -5.77
407 FX 22.52 FY -0.43 FZ -5.5
406 FX 19.15 FY -0.51 FZ -4.54
405 FX 21.18 FY -0.66 FZ -5.27
404 FX 21.52 FY -0.78 FZ -5.51
403 FX 19.79 FY -0.85 FZ -5.05
402 FX 17.31 FY -0.87 FZ -4.42
401 FX 18.34 FY -0.97 FZ -4.85
400 FX 18.11 FY -1.03 FZ -5.08
399 FX 16.4 FY -1.04 FZ -4.62
398 FX 12.83 FY -0.9 FZ -3.66
397 FX 13.82 FY -0.94 FZ -4.26
396 FX 14.83 FY -0.95 FZ -4.58
395 FX 10.16 FY -0.73 FZ -3.31
394 FX 8.38 FY -0.64 FZ -2.87
393 FX 6.87 FY -0.43 FZ -2.76
392 FX 9.35 FY -0.26 FZ -2.53
469 FX -3.46 FY 5.24 FZ 6.68
470 FX -5.66 FY 2.88 FZ 6.14
471 FX -5.61 FY 3.81 FZ 6.54
473 FX -11.59 FY 2.39 FZ 9.13
474 FX -11.3 FY 7.06 FZ 12.02
475 FX -11.81 FY 4.12 FZ 10.01
477 FX -13.32 FY 3.17 FZ 10.29
478 FX -16.19 FY 4.05 FZ 12.78
479 FX -14.56 FY 0.28 FZ 9.82
481 FX -16.4 FY -0.48 FZ 10.96
482 FX -18.4 FY -0.52 FZ 12.64
483 FX -16.39 FY -1.77 FZ 11.63
485 FX -17.58 FY -0.32 FZ 12.01
486 FX -19.55 FY -0.17 FZ 13.67
487 FX -17.45 FY -0.07 FZ 11.99
489 FX -17.45 FY 0.07 FZ 11.99
490 FX -19.56 FY 0.17 FZ 13.68
491 FX -17.56 FY 0.32 FZ 11.98
493 FX -16.35 FY -1.78 FZ 11.61
494 FX -18.38 FY 0.52 FZ 12.62
495 FX -16.36 FY 0.48 FZ 10.95
497 FX -14.52 FY -0.28 FZ 9.79
498 FX -16.08 FY -4.04 FZ 12.76
499 FX -13.27 FY -3.17 FZ 10.25
501 FX -11.67 FY -4.11 FZ 9.97
502 FX -11.09 FY -7.04 FZ 13.94
503 FX -11.42 FY -2.39 FZ 9.06
505 FX -5.34 FY -3.78 FZ 6.45
506 FX -5.24 FY -2.88 FZ 5.93
507 FX -3.51 FY -5.19 FZ 6.74
***RS-EDGE-DPOOL-WP
1 FX -0.12 FY 0.64 FZ 0.34
39 FX -0.12 FY -0.64 FZ 0.33
511 FX 7.31 FY 1.62 FZ 3.27
515 FX 11.8 FY 0.47 FZ 3.6
519 FX 13.59 FY 1.1 FZ 3.96
523 FX 15.09 FY 0.09 FZ 3.88
527 FX 15.61 FY 0 FZ 4.05
531 FX 15.1 FY -0.09 FZ 3.89
535 FX 13.63 FY -1.1 FZ 3.99
539 FX 11.85 FY -0.46 FZ 3.63
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Q326-KSP-R4b-Deg.std

a83

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543 FX 7.42 FY -1.62 FZ 3.34
2 FX -9.19 FY 0.11 FZ -3.2
3 FX -5.71 FY 0.18 FZ -3.42
4 FX -7.93 FY 0.25 FZ -4.61
5 FX -7.7 FY 0.28 FZ -4.53
6 FX -10.06 FY 0.36 FZ -6.13
7 FX -9.62 FY 0.35 FZ -5.91
8 FX -10.54 FY 0.34 FZ -6.46
9 FX -11.96 FY 0.37 FZ -7.41
10 FX -11.54 FY 0.34 FZ -7.26
11 FX -12.11 FY 0.33 FZ -7.64
12 FX -13.12 FY 0.31 FZ -8.29
13 FX -13.22 FY 0.28 FZ -8.41
14 FX -13.27 FY 0.25 FZ -8.51
15 FX -13.53 FY 0.22 FZ -8.68
16 FX -13.73 FY 0.17 FZ -8.79
17 FX -14.58 FY 0.14 FZ -9.39
18 FX -14.19 FY 0.09 FZ -9.19
19 FX -14.12 FY 0.05 FZ -9.12
20 FX -14.17 FY 0 FZ -9.21
21 FX -14.12 FY -0.05 FZ -9.12
22 FX -14.2 FY -0.09 FZ -9.19
23 FX -14.57 FY -0.14 FZ -9.39
24 FX -13.75 FY -0.17 FZ -8.81
25 FX -13.56 FY -0.22 FZ -8.7
26 FX -13.27 FY -0.25 FZ -8.51
27 FX -13.24 FY -0.27 FZ -8.41
28 FX -13.17 FY -0.31 FZ -8.31
29 FX -12.12 FY -0.33 FZ -7.65
30 FX -11.59 FY -0.34 FZ -7.29
31 FX -12.02 FY -0.36 FZ -7.44
32 FX -10.61 FY -0.34 FZ -6.5
33 FX -9.67 FY -0.35 FZ -5.93
34 FX -10.18 FY -0.37 FZ -6.21
35 FX -7.8 FY -0.29 FZ -4.6
36 FX -8.07 FY -0.26 FZ -4.69
37 FX -5.69 FY -0.2 FZ -3.43
38 FX -5.26 FY -0.1 FZ -3.22
508 FX 3.91 FY 2.19 FZ 3.66
509 FX 5.83 FY 1.49 FZ 3.61
510 FX 5.83 FY 1.03 FZ 2.76
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513 FX 9.66 FY 0.96 FZ 3.78
514 FX 11.06 FY 1.34 FZ 4.12
516 FX 12.09 FY 1.42 FZ 4.15
517 FX 13.66 FY 0.59 FZ 4.43
518 FX 13.37 FY 1.28 FZ 4.29
520 FX 14.67 FY 0.18 FZ 4.25
521 FX 15.4 FY 0.45 FZ 4.62
522 FX 14.72 FY 2.52 FZ 4.57
524 FX 15.65 FY 0.08 FZ 4.37
525 FX 16.36 FY 0.06 FZ 4.71
526 FX 15.53 FY 0.04 FZ 4.3
528 FX 15.53 FY -0.04 FZ 4.3
529 FX 16.37 FY -0.06 FZ 4.72
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533 FX 15.41 FY -0.45 FZ 4.62
534 FX 14.68 FY -0.16 FZ 4.25
536 FX 13.4 FY -1.29 FZ 4.3
537 FX 13.7 FY -0.59 FZ 4.45
538 FX 12.16 FY -1.41 FZ 4.19
540 FX 11.13 FY -1.34 FZ 4.16
541 FX 9.74 FY -0.96 FZ 3.83
542 FX 10.14 FY -0.87 FZ 3.98
544 FX 5.93 FY -1.01 FZ 2.83
545 FX 5.77 FY -1.49 FZ 3.59
546 FX 4 FY -2.19 FZ 3.69
***RS-INT-1-WP
118 FX -26.18 FY 15.94 FZ 9.12
156 FX -26.17 FY -15.92 FZ 9.11
40 FX 26.23 FY 16.65 FZ 9.69
78 FX 26.23 FY -16.66 FZ 9.69
119 FX -11.39 FY 0.8 FZ -1.95
120 FX -16.36 FY 1.05 FZ -3.15
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Q326-KSP-R4b-Deg.std

a84

```
121 FX -21.23 FY 1.17 FZ -4.56
122 FX -18.7 FY 0.93 FZ -4.19
123 FX -21.75 FY 0.92 FZ -5.06
124 FX -18.59 FY 0.74 FZ -4.36
125 FX -19 FY 0.69 FZ -4.49
126 FX -20.12 FY 0.66 FZ -4.76
127 FX -18.36 FY 0.55 FZ -4.31
128 FX -18.45 FY 0.51 FZ -4.3
129 FX -19.44 FY 0.47 FZ -4.49
130 FX -18.96 FY 0.4 FZ -4.34
131 FX -18.51 FY 0.35 FZ -4.2
132 FX -18.58 FY 0.29 FZ -4.19
133 FX -18.63 FY 0.24 FZ -4.17
134 FX -19.52 FY 0.19 FZ -4.35
135 FX -18.82 FY 0.12 FZ -4.18
136 FX -18.7 FY 0.06 FZ -4.14
137 FX -18.71 FY 0 FZ -4.14
138 FX -18.7 FY -0.06 FZ -4.14
139 FX -18.82 FY -0.11 FZ -4.17
140 FX -19.51 FY -0.19 FZ -4.35
141 FX -18.63 FY -0.24 FZ -4.17
142 FX -18.58 FY -0.29 FZ -4.19
143 FX -18.51 FY -0.35 FZ -4.2
144 FX -18.96 FY -0.4 FZ -4.34
145 FX -19.44 FY -0.47 FZ -4.5
146 FX -18.45 FY -0.51 FZ -4.3
147 FX -18.36 FY -0.55 FZ -4.31
148 FX -20.12 FY -0.65 FZ -4.76
149 FX -18.99 FY -0.69 FZ -4.49
150 FX -18.59 FY -0.74 FZ -4.36
151 FX -21.74 FY -0.93 FZ -5.06
152 FX -18.7 FY -0.93 FZ -4.19
153 FX -21.24 FY -1.16 FZ -4.56
154 FX -16.36 FY -1.06 FZ -3.16
155 FX -11.42 FY -0.82 FZ -1.98
41 FX 11.34 FY 0.8 FZ -2.04
42 FX 16.36 FY 1.04 FZ -3.2
43 FX 21.23 FY 1.15 FZ -4.61
44 FX 18.7 FY 0.93 FZ -4.21
45 FX 21.74 FY 0.93 FZ -5.11
46 FX 18.59 FY 0.75 FZ -4.38
47 FX 19 FY 0.69 FZ -4.51
48 FX 20.12 FY 0.66 FZ -4.8
49 FX 18.36 FY 0.56 FZ -4.33
50 FX 18.45 FY 0.51 FZ -4.32
51 FX 19.44 FY 0.48 FZ -4.53
52 FX 18.96 FY 0.4 FZ -4.37
53 FX 18.51 FY 0.35 FZ -4.22
54 FX 18.58 FY 0.3 FZ -4.21
55 FX 18.63 FY 0.24 FZ -4.2
56 FX 19.52 FY 0.19 FZ -4.38
57 FX 18.82 FY 0.12 FZ -4.2
58 FX 18.7 FY 0.06 FZ -4.16
59 FX 18.71 FY 0 FZ -4.16
60 FX 18.7 FY -0.06 FZ -4.16
61 FX 18.82 FY -0.12 FZ -4.2
62 FX 19.51 FY -0.19 FZ -4.38
63 FX 18.63 FY -0.24 FZ -4.2
64 FX 18.58 FY -0.3 FZ -4.21
65 FX 18.51 FY -0.35 FZ -4.23
66 FX 18.96 FY -0.41 FZ -4.37
67 FX 19.44 FY -0.48 FZ -4.53
68 FX 18.45 FY -0.52 FZ -4.32
69 FX 18.36 FY -0.56 FZ -4.33
70 FX 20.12 FY -0.66 FZ -4.79
71 FX 18.99 FY -0.7 FZ -4.51
72 FX 18.59 FY -0.75 FZ -4.38
73 FX 21.74 FY -0.93 FZ -5.11
74 FX 18.7 FY -0.93 FZ -4.21
75 FX 21.24 FY -1.15 FZ -4.61
76 FX 16.35 FY -1.04 FZ -3.19
77 FX 11.37 FY -0.77 FZ -2
***RS-INT-2-WP
196 FX -26.18 FY 15.94 FZ 9.12
234 FX -26.17 FY -15.92 FZ 9.11
```

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Q326-KSP-R4b-Deg.std

a85

```
79 FX 26.23 FY 16.65 FZ 9.69
117 FX 26.23 FY -16.66 FZ 9.69
197 FX -11.39 FY 0.8 FZ -1.95
198 FX -16.36 FY 1.05 FZ -3.15
199 FX -21.23 FY 1.17 FZ -4.56
200 FX -18.7 FY 0.93 FZ -4.19
201 FX -21.75 FY 0.92 FZ -5.06
202 FX -18.59 FY 0.74 FZ -4.36
203 FX -19 FY 0.69 FZ -4.49
204 FX -20.12 FY 0.66 FZ -4.76
205 FX -18.36 FY 0.55 FZ -4.31
206 FX -18.45 FY 0.51 FZ -4.3
207 FX -19.44 FY 0.47 FZ -4.49
208 FX -18.96 FY 0.4 FZ -4.34
209 FX -18.51 FY 0.35 FZ -4.2
210 FX -18.58 FY 0.29 FZ -4.19
211 FX -18.63 FY 0.24 FZ -4.17
212 FX -19.52 FY 0.19 FZ -4.35
213 FX -18.82 FY 0.12 FZ -4.18
214 FX -18.7 FY 0.06 FZ -4.14
215 FX -18.71 FY 0 FZ -4.14
216 FX -18.7 FY -0.06 FZ -4.14
217 FX -18.82 FY -0.11 FZ -4.17
218 FX -19.51 FY -0.19 FZ -4.35
219 FX -18.63 FY -0.24 FZ -4.17
220 FX -18.58 FY -0.29 FZ -4.19
221 FX -18.51 FY -0.35 FZ -4.2
222 FX -18.96 FY -0.4 FZ -4.34
223 FX -19.44 FY -0.47 FZ -4.5
224 FX -18.45 FY -0.51 FZ -4.3
225 FX -18.36 FY -0.55 FZ -4.31
226 FX -20.12 FY -0.65 FZ -4.76
227 FX -18.99 FY -0.69 FZ -4.49
228 FX -18.59 FY -0.74 FZ -4.36
229 FX -21.74 FY -0.93 FZ -5.06
230 FX -18.7 FY -0.93 FZ -4.19
231 FX -21.24 FY -1.16 FZ -4.56
232 FX -16.36 FY -1.06 FZ -3.16
233 FX -11.42 FY -0.82 FZ -1.98
80 FX 11.34 FY 0.8 FZ -2.04
81 FX 16.36 FY 1.04 FZ -3.2
82 FX 21.23 FY 1.15 FZ -4.61
83 FX 18.7 FY 0.93 FZ -4.21
84 FX 21.74 FY 0.93 FZ -5.11
85 FX 18.59 FY 0.75 FZ -4.38
86 FX 19 FY 0.69 FZ -4.51
87 FX 20.12 FY 0.66 FZ -4.8
88 FX 18.36 FY 0.56 FZ -4.33
89 FX 18.45 FY 0.51 FZ -4.32
90 FX 19.44 FY 0.48 FZ -4.53
91 FX 18.96 FY 0.4 FZ -4.37
92 FX 18.51 FY 0.35 FZ -4.22
93 FX 18.58 FY 0.3 FZ -4.21
94 FX 18.63 FY 0.24 FZ -4.2
95 FX 19.52 FY 0.19 FZ -4.38
96 FX 18.82 FY 0.12 FZ -4.2
97 FX 18.7 FY 0.06 FZ -4.16
98 FX 18.71 FY 0 FZ -4.16
99 FX 18.7 FY -0.06 FZ -4.16
100 FX 18.82 FY -0.12 FZ -4.2
101 FX 19.51 FY -0.19 FZ -4.38
102 FX 18.63 FY -0.24 FZ -4.2
103 FX 18.58 FY -0.3 FZ -4.21
104 FX 18.51 FY -0.35 FZ -4.23
105 FX 18.96 FY -0.41 FZ -4.37
106 FX 19.44 FY -0.48 FZ -4.53
107 FX 18.45 FY -0.52 FZ -4.32
108 FX 18.36 FY -0.56 FZ -4.33
109 FX 20.12 FY -0.66 FZ -4.79
110 FX 18.99 FY -0.7 FZ -4.51
111 FX 18.59 FY -0.75 FZ -4.38
112 FX 21.74 FY -0.93 FZ -5.11
113 FX 18.7 FY -0.93 FZ -4.21
114 FX 21.24 FY -1.15 FZ -4.61
115 FX 16.35 FY -1.04 FZ -3.19
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Q326-KSP-R4b-Deg.std

a86

```
116 FX 11.37 FY -0.77 FZ -2
***RS-INT-3-WP
274 FX -26.18 FY 15.94 FZ 9.12
312 FX -26.17 FY -15.92 FZ 9.11
157 FX 26.23 FY 16.65 FZ 9.69
195 FX 26.23 FY -16.66 FZ 9.69
275 FX -11.39 FY 0.8 FZ -1.95
276 FX -16.36 FY 1.05 FZ -3.15
277 FX -21.23 FY 1.17 FZ -4.56
278 FX -18.7 FY 0.93 FZ -4.19
279 FX -21.75 FY 0.92 FZ -5.06
280 FX -18.59 FY 0.74 FZ -4.36
281 FX -19 FY 0.69 FZ -4.49
282 FX -20.12 FY 0.66 FZ -4.76
283 FX -18.36 FY 0.55 FZ -4.31
284 FX -18.45 FY 0.51 FZ -4.3
285 FX -19.44 FY 0.47 FZ -4.49
286 FX -18.96 FY 0.4 FZ -4.34
287 FX -18.51 FY 0.35 FZ -4.2
288 FX -18.58 FY 0.29 FZ -4.19
289 FX -18.63 FY 0.24 FZ -4.17
290 FX -19.52 FY 0.19 FZ -4.35
291 FX -18.82 FY 0.12 FZ -4.18
292 FX -18.7 FY 0.06 FZ -4.14
293 FX -18.71 FY 0 FZ -4.14
294 FX -18.7 FY -0.06 FZ -4.14
295 FX -18.82 FY -0.11 FZ -4.17
296 FX -19.51 FY -0.19 FZ -4.35
297 FX -18.63 FY -0.24 FZ -4.17
298 FX -18.58 FY -0.29 FZ -4.19
299 FX -18.51 FY -0.35 FZ -4.2
300 FX -18.96 FY -0.4 FZ -4.34
301 FX -19.44 FY -0.47 FZ -4.5
302 FX -18.45 FY -0.51 FZ -4.3
303 FX -18.36 FY -0.55 FZ -4.31
304 FX -20.12 FY -0.65 FZ -4.76
305 FX -18.99 FY -0.69 FZ -4.49
306 FX -18.59 FY -0.74 FZ -4.36
307 FX -21.74 FY -0.93 FZ -5.06
308 FX -18.7 FY -0.93 FZ -4.19
309 FX -21.24 FY -1.16 FZ -4.56
310 FX -16.36 FY -1.06 FZ -3.16
311 FX -11.42 FY -0.82 FZ -1.98
158 FX 11.34 FY 0.8 FZ -2.04
159 FX 16.36 FY 1.04 FZ -3.2
160 FX 21.23 FY 1.15 FZ -4.61
161 FX 18.7 FY 0.93 FZ -4.21
162 FX 21.74 FY 0.93 FZ -5.11
163 FX 18.59 FY 0.75 FZ -4.38
164 FX 19 FY 0.69 FZ -4.51
165 FX 20.12 FY 0.66 FZ -4.8
166 FX 18.36 FY 0.56 FZ -4.33
167 FX 18.45 FY 0.51 FZ -4.32
168 FX 19.44 FY 0.48 FZ -4.53
169 FX 18.96 FY 0.4 FZ -4.37
170 FX 18.51 FY 0.35 FZ -4.22
171 FX 18.58 FY 0.3 FZ -4.21
172 FX 18.63 FY 0.24 FZ -4.2
173 FX 19.52 FY 0.19 FZ -4.38
174 FX 18.82 FY 0.12 FZ -4.2
175 FX 18.7 FY 0.06 FZ -4.16
176 FX 18.71 FY 0 FZ -4.16
177 FX 18.7 FY -0.06 FZ -4.16
178 FX 18.82 FY -0.12 FZ -4.2
179 FX 19.51 FY -0.19 FZ -4.38
180 FX 18.63 FY -0.24 FZ -4.2
181 FX 18.58 FY -0.3 FZ -4.21

182 FX 18.51 FY -0.35 FZ -4.23
183 FX 18.96 FY -0.41 FZ -4.37
184 FX 19.44 FY -0.48 FZ -4.53
185 FX 18.45 FY -0.52 FZ -4.32
186 FX 18.36 FY -0.56 FZ -4.33
187 FX 20.12 FY -0.66 FZ -4.79
188 FX 18.99 FY -0.7 FZ -4.51
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Q326-KSP-R4b-Deg.std

a87

```
189 FX 18.59 FY -0.75 FZ -4.38
190 FX 21.74 FY -0.93 FZ -5.11
191 FX 18.7 FY -0.93 FZ -4.21
192 FX 21.24 FY -1.15 FZ -4.61
193 FX 16.35 FY -1.04 FZ -3.19
194 FX 11.37 FY -0.77 FZ -2
***RS-INT-4-WP
352 FX -26.18 FY 15.94 FZ 9.12
390 FX -26.17 FY -15.92 FZ 9.11
235 FX 26.23 FY 16.65 FZ 9.69
273 FX 26.23 FY -16.66 FZ 9.69
353 FX -11.39 FY 0.8 FZ -1.95
354 FX -16.36 FY 1.05 FZ -3.15
355 FX -21.23 FY 1.17 FZ -4.56
356 FX -18.7 FY 0.93 FZ -4.19
357 FX -21.75 FY 0.92 FZ -5.06
358 FX -18.59 FY 0.74 FZ -4.36
359 FX -19 FY 0.69 FZ -4.49
360 FX -20.12 FY 0.66 FZ -4.76
361 FX -18.36 FY 0.55 FZ -4.31
362 FX -18.45 FY 0.51 FZ -4.3
363 FX -19.44 FY 0.47 FZ -4.49
364 FX -18.96 FY 0.4 FZ -4.34
365 FX -18.51 FY 0.35 FZ -4.2
366 FX -18.58 FY 0.29 FZ -4.19
367 FX -18.63 FY 0.24 FZ -4.17
368 FX -19.52 FY 0.19 FZ -4.35
369 FX -18.82 FY 0.12 FZ -4.18
370 FX -18.7 FY 0.06 FZ -4.14
371 FX -18.71 FY 0 FZ -4.14
372 FX -18.7 FY -0.06 FZ -4.14
373 FX -18.82 FY -0.11 FZ -4.17
374 FX -19.51 FY -0.19 FZ -4.35
375 FX -18.63 FY -0.24 FZ -4.17
376 FX -18.58 FY -0.29 FZ -4.19
377 FX -18.51 FY -0.35 FZ -4.2
378 FX -18.96 FY -0.4 FZ -4.34
379 FX -19.44 FY -0.47 FZ -4.5
380 FX -18.45 FY -0.51 FZ -4.3
381 FX -18.36 FY -0.55 FZ -4.31
382 FX -20.12 FY -0.65 FZ -4.76
383 FX -18.99 FY -0.69 FZ -4.49
384 FX -18.59 FY -0.74 FZ -4.36
385 FX -21.74 FY -0.93 FZ -5.06
386 FX -18.7 FY -0.93 FZ -4.19
387 FX -21.24 FY -1.16 FZ -4.56
388 FX -16.36 FY -1.06 FZ -3.16
389 FX -11.42 FY -0.82 FZ -1.98
236 FX 11.34 FY 0.8 FZ -2.04
237 FX 16.36 FY 1.04 FZ -3.2
238 FX 21.23 FY 1.15 FZ -4.61
239 FX 18.7 FY 0.93 FZ -4.21
240 FX 21.74 FY 0.93 FZ -5.11
241 FX 18.59 FY 0.75 FZ -4.38
242 FX 19 FY 0.69 FZ -4.51
243 FX 20.12 FY 0.66 FZ -4.8
244 FX 18.36 FY 0.56 FZ -4.33
245 FX 18.45 FY 0.51 FZ -4.32
246 FX 19.44 FY 0.48 FZ -4.53
247 FX 18.96 FY 0.4 FZ -4.37
248 FX 18.51 FY 0.35 FZ -4.22
249 FX 18.58 FY 0.3 FZ -4.21
250 FX 18.63 FY 0.24 FZ -4.2
251 FX 19.52 FY 0.19 FZ -4.38
252 FX 18.82 FY 0.12 FZ -4.2
253 FX 18.7 FY 0.06 FZ -4.16
254 FX 18.71 FY 0 FZ -4.16
255 FX 18.7 FY -0.06 FZ -4.16
256 FX 18.82 FY -0.12 FZ -4.2
257 FX 19.51 FY -0.19 FZ -4.38
258 FX 18.63 FY -0.24 FZ -4.2
259 FX 18.58 FY -0.3 FZ -4.21
260 FX 18.51 FY -0.35 FZ -4.23
261 FX 18.96 FY -0.41 FZ -4.37
262 FX 19.44 FY -0.48 FZ -4.53
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Q326-KSP-R4b-Deg.std

a88

```
263 FX 18.45 FY -0.52 FZ -4.32
264 FX 18.36 FY -0.56 FZ -4.33
265 FX 20.12 FY -0.66 FZ -4.79
266 FX 18.99 FY -0.7 FZ -4.51
267 FX 18.59 FY -0.75 FZ -4.38
268 FX 21.74 FY -0.93 FZ -5.11
269 FX 18.7 FY -0.93 FZ -4.21
270 FX 21.24 FY -1.15 FZ -4.61
271 FX 16.35 FY -1.04 FZ -3.19
272 FX 11.37 FY -0.77 FZ -2
***R5-INT-5-WP
430 FX -26.18 FY 15.94 FZ 9.12
468 FX -26.17 FY -15.92 FZ 9.11
313 FX 26.23 FY 16.65 FZ 9.69
351 FX 26.23 FY -16.66 FZ 9.69
431 FX -11.39 FY 0.8 FZ -1.95
432 FX -16.36 FY 1.05 FZ -3.15
433 FX -21.23 FY 1.17 FZ -4.56
434 FX -18.7 FY 0.93 FZ -4.19
435 FX -21.75 FY 0.92 FZ -5.06
436 FX -18.59 FY 0.74 FZ -4.36
437 FX -19 FY 0.69 FZ -4.49
438 FX -20.12 FY 0.66 FZ -4.76
439 FX -18.36 FY 0.55 FZ -4.31
440 FX -18.45 FY 0.51 FZ -4.3
441 FX -19.44 FY 0.47 FZ -4.49
442 FX -18.96 FY 0.4 FZ -4.34
443 FX -18.51 FY 0.35 FZ -4.2
444 FX -18.58 FY 0.29 FZ -4.19
445 FX -18.63 FY 0.24 FZ -4.17
446 FX -19.52 FY 0.19 FZ -4.35
447 FX -18.82 FY 0.12 FZ -4.18
448 FX -18.7 FY 0.06 FZ -4.14
449 FX -18.71 FY 0 FZ -4.14
450 FX -18.7 FY -0.06 FZ -4.14
451 FX -18.82 FY -0.11 FZ -4.17
452 FX -19.51 FY -0.19 FZ -4.35
453 FX -18.63 FY -0.24 FZ -4.17
454 FX -18.58 FY -0.29 FZ -4.19
455 FX -18.51 FY -0.35 FZ -4.2
456 FX -18.96 FY -0.4 FZ -4.34
457 FX -19.44 FY -0.47 FZ -4.5
458 FX -18.45 FY -0.51 FZ -4.3
459 FX -18.36 FY -0.55 FZ -4.31
460 FX -20.12 FY -0.65 FZ -4.76
461 FX -18.99 FY -0.69 FZ -4.49
462 FX -18.59 FY -0.74 FZ -4.36
463 FX -21.74 FY -0.93 FZ -5.06
464 FX -18.7 FY -0.93 FZ -4.19
465 FX -21.24 FY -1.16 FZ -4.56
466 FX -16.36 FY -1.06 FZ -3.16
467 FX -11.42 FY -0.82 FZ -1.98
314 FX 11.34 FY 0.8 FZ -2.04
315 FX 16.36 FY 1.04 FZ -3.2
316 FX 21.23 FY 1.15 FZ -4.61
317 FX 18.7 FY 0.93 FZ -4.21
318 FX 21.74 FY 0.93 FZ -5.11
319 FX 18.59 FY 0.75 FZ -4.38
320 FX 19 FY 0.69 FZ -4.51
321 FX 20.12 FY 0.66 FZ -4.8
322 FX 18.36 FY 0.56 FZ -4.33
323 FX 18.45 FY 0.51 FZ -4.32
324 FX 19.44 FY 0.48 FZ -4.53
325 FX 18.96 FY 0.4 FZ -4.37
326 FX 18.51 FY 0.35 FZ -4.22
327 FX 18.58 FY 0.3 FZ -4.21
328 FX 18.63 FY 0.24 FZ -4.2
329 FX 19.52 FY 0.19 FZ -4.38
330 FX 18.82 FY 0.12 FZ -4.2
331 FX 18.7 FY 0.06 FZ -4.16
332 FX 18.71 FY 0 FZ -4.16
333 FX 18.7 FY -0.06 FZ -4.16
334 FX 18.82 FY -0.12 FZ -4.2
335 FX 19.51 FY -0.19 FZ -4.38
336 FX 18.63 FY -0.24 FZ -4.2
```

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a89

```
337 FX 18.58 FY -0.3 FZ -4.21
338 FX 18.51 FY -0.35 FZ -4.23
339 FX 18.96 FY -0.41 FZ -4.37
340 FX 19.44 FY -0.48 FZ -4.53
341 FX 18.45 FY -0.52 FZ -4.32
342 FX 18.36 FY -0.56 FZ -4.33
343 FX 20.12 FY -0.66 FZ -4.79
344 FX 18.99 FY -0.7 FZ -4.51
345 FX 18.59 FY -0.75 FZ -4.38
346 FX 21.74 FY -0.93 FZ -5.11
347 FX 18.7 FY -0.93 FZ -4.21
348 FX 21.24 FY -1.15 FZ -4.61
349 FX 16.35 FY -1.04 FZ -3.19
350 FX 11.37 FY -0.77 FZ -2
***********************************************************************
* SERVICE LOAD COMBINATION
***********************************************************************
LOAD COMB 100 (SW+DCW+PRE)
1 1.0 2 1.0 4 1.0
****
LOAD COMB 101 (SW+DCW+LCW+VL)
1 1.0 2 1.0 3 1.0 5 1.0
****
LOAD COMB 102 (SW+DCW+WU)
1 1.0 2 1.0 6 1.0
****
LOAD COMB 103 (SW+DCW+WP)
1 1.0 2 1.0 7 1.0
****
LOAD COMB 104 (SW+DCW+WENT)
1 1.0 2 1.0 8 1.0
****
LOAD COMB 105 (SW+DCW+WAS)
1 1.0 2 1.0 9 1.0
****
LOAD COMB 106 (SW+DCW+WDP_P)
1 1.0 2 1.0 10 1.0
****
LOAD COMB 107 (SW+DCW+WDP_U)
1 1.0 2 1.0 11 1.0
****
LOAD COMB 108 (SW+DCW+WSB_P)
1 1.0 2 1.0 12 1.0
****
LOAD COMB 109 (SW+DCW+WSB_U)
1 1.0 2 1.0 13 1.0
***********************************************************************
* ULTIMATE LOAD COMBINATION
***********************************************************************
LOAD COMB 200 1.4(SW+DCW+PRE)
1 1.4 2 1.4 4 1.0
****
LOAD COMB 201 1.4(SW+DCW)+1.6(CDW+VL)
1 1.4 2 1.4 3 1.6 5 1.6
****
LOAD COMB 202 (SW+DCW)+1.4WU
1 1.0 2 1.0 6 1.4
****
LOAD COMB 203 1.2(SW+DCW)+1.2WP
1 1.2 2 1.2 7 1.2
****
LOAD COMB 204 1.2(SW+DCW)+1.2WEN
1 1.2 2 1.2 8 1.2
****
LOAD COMB 205 1.2(SW+DCW)+1.2WAS
1 1.2 2 1.2 9 1.2
****
LOAD COMB 206 1.2(SW+DCW)+1.2(WDP_P)
1 1.2 2 1.2 10 1.2
****
LOAD COMB 207 1.0(SW+DCW)+1.4(WDP_U)
1 1.0 2 1.0 11 1.4
****
LOAD COMB 208 1.2(SW+DCW)+1.2(WSB_P)
1 1.2 2 1.2 12 1.2
```

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```
****
LOAD COMB 209 1.0(SW+DCW)+1.4(WSB_U)
1 1.0 2 1.0 13 1.4
***********************************************************************
PERFORM ANALYSIS PRINT STATICS CHECK
LOAD LIST ALL
PARAMETER 1
CODE BS5950
PY 275000 MEMB 1 TO 2255
CHECK CODE ALL
***********************************************************************
PRINT CG
STEEL TAKE OFF LIST 1 TO 2275
FINISH
```

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Software licensed to Transerve Pte Ltd

	Job No TPL40581	Sheet No a 91	Rev R4b-FAB
	Part wind speed 32.5 m/s		
Job Title Wisma Bella Swimming Pool	Ref Fabric R5		
	By TSM	Date 17-Dec-11	Chd TSM
Client Majlis Perbandaran Kuantan	File Q326-KSP-R4b-Deg.std	Date/Time 10-Jul-2012 16:43	

Job Information

	Engineer	Checked	Approved
Name:	TSM	TSM	
Date:	17-Dec-11	07-Mar-12	

Comments

1. Basic wind Speed changed from 38.5 m/s to 32.5 m/s.
2. R4b - full wind pressure & uplift for LC 10 to13 - 080312
4. R4b-FAB = break mast inlesect at top chord,update purchase size
4. R4b-FAB = revised catwalk loading - 23Apr12
5. R4b-FAB = Move backstay X2Y2, X5Y2 to 1.2m point - 030512
6. R4b-FAB1 = ADJUST SIZES AT EDGE CANOPY FOR NO 13 & 14 - 070512
7. R4b-FAB2 = Adjust col ht, catwalk hanging pl - 200612

Structure Type	SPACE FRAME

Number of Nodes	904	Highest Node	914
Number of Elements	2275	Highest Beam	2275

Number of Basic Load Cases	13
Number of Combination Load Cases	20

Included in this printout are data for:

All	The Whole Structure

Included in this printout are results for load cases:

Type	L/C	Name
Primary	1	LOAD CASE 1 - SW
Primary	2	LOAD CASE 2 - DCW
Primary	3	LOAD CASE 3 - LCW
Primary	4	LOAD CASE 4 - PRE
Primary	5	LOAD CASE 5 - VL
Primary	6	LOAD CASE 6 - WU
Primary	7	LOAD CASE 7 - WP
Primary	8	LOAD CASE 8 - WENT
Primary	9	LOAD CASE 9 - WAS
Primary	10	LOAD CASE 10 - WDP_P
Primary	11	LOAD CASE 11 - WDP_U
Primary	12	LOAD CASE 12 - WSB_P
Primary	13	LOAD CASE 13 - WSB_U
Combination	100	(SW+DCW+PRE)
Combination	101	(SW+DCW+LCW+VL)
Combination	102	(SW+DCW+WU)
Combination	103	(SW+DCW+WP)
Combination	104	(SW+DCW+WENT)
Combination	105	(SW+DCW+WAS)
Combination	106	(SW+DCW+WDP_P)
Combination	107	(SW+DCW+WDP_U)
Combination	108	(SW+DCW+WSB_P)
Combination	109	(SW+DCW+WSB_U)
Combination	200	1.4(SW+DCW+PRE)
Combination	201	1.4(SW+DCW)+1.6(CDW+VL)
Combination	202	(SW+DCW)+1.4WU
Combination	203	1.2(SW+DCW)+1.2WP
Combination	204	1.2(SW+DCW)+1.2WEN
Combination	205	1.2(SW+DCW)+1.2WAS
Combination	206	1.2(SW+DCW)+1.2(WDP_P)
Combination	207	1.0(SW+DCW)+1.4(WDP_U)
Combination	208	1.2(SW+DCW)+1.2(WSB_P)
Combination	209	1.0(SW+DCW)+1.4(WSB_U)

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	Job No TPL40581	Sheet No a 92	Rev R4b-FAB2
	Part wind speed 32.5 m/s		
Job Title Wisma Bella Swimming Pool	Ref Fabric R5		
	By TSM	Date 17-Dec-11	Chd TSM
Client Majlis Perbandaran Kuantan	File Q326-KSP-R4b-Deg.std	Date/Time 10-Jul-2012 16:43	

Reactions

		Horizontal		Vertical	Moment		
Node	L/C	FX (kN)	FY (kN)	FZ (kN)	MX (kNm)	MY (kNm)	MZ (kNm)
776	1:LOAD CASE	-0.026	-62.407	172.667	51.773	6.073	9.629
	2:LOAD CASE	0.158	-7.893	18.824	7.429	0.486	-0.617
	3:LOAD CASE	0.118	-4.763	6.477	4.445	0.292	-0.369
	4:LOAD CASE	-9.489	2.350	-34.024	7.676	4.972	11.704
	5:LOAD CASE	-6.076	-63.521	45.623	68.079	15.141	11.753
	6:LOAD CASE	-43.080	158.139	-358.475	-110.637	1.974	38.106
	7:LOAD CASE	-10.727	-70.183	41.258	79.308	21.385	18.450
	8:LOAD CASE	-15.879	-9.886	-273.182	354.321	17.498	63.404
	9:LOAD CASE	-29.540	105.231	-83.947	-383.287	15.738	1.750
	10:LOAD CASI	-53.302	31.944	-239.284	15.285	17.786	93.455
	11:LOAD CASI	3.640	56.839	-87.813	-47.115	6.654	-37.577
	12:LOAD CASI	-39.075	155.898	-378.413	-108.569	3.723	20.702
	13:LOAD CASI	-15.159	-67.485	52.305	77.058	19.407	37.067
	100:(SW+DCW	-9.316	-58.010	149.457	56.878	11.534	20.776
	101:(SW+DCW	-5.785	-128.704	235.590	131.726	22.894	20.396
	102:(SW+DCW	-42.807	97.739	-185.984	-51.435	8.535	47.208
	103:(SW+DCW	-10.555	-130.583	224.749	138.509	27.656	27.452
	104:(SW+DCW	-15.707	-70.086	-49.691	413.522	24.060	72.416
	105:(SW+DCW	-29.368	44.831	99.543	-324.065	22.289	10.762
	106:(SW+DCW	-53.130	-28.456	-55.773	74.467	24.347	102.468
	107:(SW+DCW	4.013	-3.561	95.678	12.087	13.116	-28.564
	108:(SW+DCW	-38.903	85.298	-195.922	-49.368	10.284	29.714
	109:(SW+DCW	-14.997	-127.885	236.795	136.280	25.958	46.079
	200:1.4(SW+D	-9.247	-82.170	222.863	80.559	14.158	24.381
	201:1.4(SW+D	-9.291	-183.846	340.248	198.521	35.479	30.631
	202:(SW+DCW	-60.139	160.995	-333.775	-95.690	9.324	62.486
	203:1.2(SW+D	-12.666	-156.700	289.899	166.211	33.547	32.955
	204:1.2(SW+D	-18.848	-84.104	-107.629	496.227	28.871	86.899
	205:1.2(SW+D	-35.241	53.757	119.452	-388.878	26.759	12.914
	206:1.2(SW+D	-63.756	-34.148	-66.928	89.361	29.216	122.961
	207:1.0(SW+D	5.549	19.174	60.553	-6.759	15.737	-43.595
	208:1.2(SW+D	-46.684	114.357	-235.107	-59.241	12.341	35.657
	209:1.0(SW+D	-21.084	-154.878	256.718	167.083	33.731	60.905
778	1:LOAD CASE	8.446	52.388	173.214	-51.697	5.862	-9.711
	2:LOAD CASE	0.381	7.973	14.409	-5.851	0.563	1.035
	3:LOAD CASE	0.228	4.771	8.622	-3.561	0.337	0.619
	4:LOAD CASE	-9.012	-2.390	-33.478	-7.712	4.900	-11.767
	5:LOAD CASE	-5.217	63.495	46.658	-68.125	15.931	-11.914
	6:LOAD CASE	-41.531	-157.991	-367.921	110.252	2.126	-37.846
	7:LOAD CASE	-9.624	70.146	42.681	-79.324	21.078	-18.620
	8:LOAD CASE	-27.654	-107.405	-77.393	366.500	14.195	1.358
	9:LOAD CASE	-13.213	11.876	-274.599	-357.170	18.404	-65.785
	10:LOAD CASI	-53.690	-31.832	-239.420	-15.097	16.742	-93.196
	11:LOAD CASI	6.722	-56.836	-84.695	46.785	7.304	37.498
	12:LOAD CASI	-35.056	-155.552	-375.208	108.119	4.763	-20.282
	13:LOAD CASI	-16.287	67.450	51.355	-77.006	18.268	-37.302
	100:(SW+DCW	-8.185	57.972	154.145	-65.360	11.424	-20.443
	101:(SW+DCW	-4.162	128.527	242.894	-129.335	22.792	-19.970
	102:(SW+DCW	-40.704	-97.530	-180.297	52.604	8.651	-46.522
	103:(SW+DCW	-8.798	130.508	230.305	-136.972	27.603	-27.285
	104:(SW+DCW	-26.828	-47.043	110.231	328.952	20.720	-7.318
	105:(SW+DCW	-12.385	72.237	-86.975	-414.819	24.929	-74.482
	106:(SW+DCW	-52.864	28.530	-51.786	-72.745	23.267	-101.871
	107:(SW+DCW	7.549	3.525	102.928	-10.864	13.829	28.822
	108:(SW+DCW	-34.229	-95.181	-187.584	50.470	11.288	-28.958
	109:(SW+DCW	-15.460	127.811	238.979	-134.654	24.793	-45.978
	200:1.4(SW+D	-7.855	82.116	228.195	-86.419	14.034	-23.913
	201:1.4(SW+D	-6.825	193.732	351.121	-185.497	35.183	-30.217
	202:(SW+DCW	-57.317	-160.826	-327.486	95.704	9.501	-61.660
	203:1.2(SW+D	-10.557	156.609	276.366	-164.387	33.124	-32.754
	204:1.2(SW+D	-32.193	-56.452	132.277	394.742	24.864	-8.782
	205:1.2(SW+D	-14.863	86.685	-184.370	-497.782	29.914	-89.354
	206:1.2(SW+D	-63.436	34.236	-62.156	-87.294	27.921	-122.246
	207:1.0(SW+D	10.238	-19.209	69.850	7.850	16.751	43.821
	208:1.2(SW+D	-41.075	-114.229	-225.101	60.564	13.545	-34.749
	209:1.0(SW+D	-21.975	154.791	259.521	-165.457	32.100	-60.899
782	1:LOAD CASE	-11.212	-29.565	152.398	32.509	-3.848	-0.373

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	Job No TPL40581	Sheet No a 93	Rev R4b-FAB2
	Part wind speed 32.5 m/s		
Job Title Wisma Bella Swimming Pool	Ref Fabric R5		
	By TSM	Date 17-Dec-11	Chd TSM
Client Majlis Perbandaran Kuantan	File Q326-KSP-R4b-Deg.std	Date/Time 10-Jul-2012 16:43	

Reactions Cont...

		Horizontal		Vertical	Moment		
Node	L/C	FX (kN)	FY (kN)	FZ (kN)	MX (kNm)	MY (kNm)	MZ (kNm)
	2:LOAD CASE	0.336	-16.245	21.209	17.859	0.006	-0.257
	3:LOAD CASE	0.201	-9.721	12.691	10.667	0.004	-0.150
	4:LOAD CASE	-40.842	1.916	24.058	-0.361	-6.101	0.073
	5:LOAD CASE	-66.188	-58.071	153.172	61.889	-9.195	-1.079
	6:LOAD CASE	-129.085	127.493	-220.960	-139.397	-19.313	0.362
	7:LOAD CASE	-95.741	-59.520	193.366	64.711	-13.374	-0.805
	8:LOAD CASE	-150.327	-37.744	-83.934	387.789	-24.919	-1.241
	9:LOAD CASE	-124.830	111.614	75.975	-463.095	-36.026	-4.986
	10:LOAD CASI	-182.945	127.575	-183.185	-135.711	-46.555	17.628
	11:LOAD CASI	-45.249	-59.595	165.008	64.867	6.437	-21.724
	12:LOAD CASI	-137.529	127.438	-214.907	-139.413	-10.157	-17.806
	13:LOAD CASI	-86.240	-59.527	185.491	64.728	-23.045	18.825
	100:(SW+DCW	-51.819	-44.295	197.675	50.208	-9.943	-0.567
	101:(SW+DCW	-76.883	-114.002	329.470	123.604	-13.033	-1.879
	102:(SW+DCW	-139.872	81.282	-47.353	-88.828	-23.155	-0.278
	103:(SW+DCW	-106.617	-105.731	366.973	115.279	-17.216	-1.445
	104:(SW+DCW	-161.203	-83.955	89.673	438.338	-28.761	-1.881
	105:(SW+DCW	-135.706	65.403	249.582	-412.527	-39.867	-5.636
	106:(SW+DCW	-193.822	81.264	-19.587	-89.143	-50.497	16.988
	107:(SW+DCW	-56.125	-105.806	338.615	115.535	2.595	-22.364
	108:(SW+DCW	-148.405	81.287	-41.360	-88.845	-13.999	-18.546
	109:(SW+DCW	-97.116	-105.738	360.098	115.296	-26.887	18.185
	200:1.4(SW+D	-56.169	-62.779	267.118	70.435	-11.480	-0.823
	201:1.4(SW+D	-120.805	-173.162	508.430	186.693	-20.065	-2.878
	202:(SW+DCW	-191.610	132.279	-135.736	-144.587	-30.881	-0.133
	203:1.2(SW+D	-127.941	-126.877	440.367	138.335	-20.659	-1.734
	204:1.2(SW+D	-193.444	-100.745	107.608	526.005	-34.513	-2.258
	205:1.2(SW+D	-162.847	78.484	299.499	-495.032	-47.841	-6.763
	206:1.2(SW+D	-232.586	97.637	-23.505	-106.971	-60.596	20.386
	207:1.0(SW+D	-74.225	-129.645	404.618	141.522	5.170	-31.054
	208:1.2(SW+D	-178.086	97.544	-49.560	-106.613	-16.799	-22.255
	209:1.0(SW+D	-131.612	-129.549	434.694	141.187	-36.105	25.715
784	1:LOAD CASE	-9.700	30.007	152.078	-51.163	-12.597	0.395
	2:LOAD CASE	0.393	16.310	28.280	-25.146	0.356	0.403
	3:LOAD CASE	0.235	9.759	16.923	-15.047	0.213	0.241
	4:LOAD CASE	-39.792	-1.520	29.010	1.734	-45.517	0.086
	5:LOAD CASE	-63.518	58.138	159.866	-98.838	-72.860	1.452
	6:LOAD CASE	-125.216	-127.663	-203.162	219.090	-144.059	0.166
	7:LOAD CASE	-92.658	59.598	203.724	-102.388	-105.574	1.224
	8:LOAD CASE	-116.674	-106.667	92.711	487.215	-143.812	5.962
	9:LOAD CASE	-150.924	32.706	-69.476	-363.598	-174.144	1.332
	10:LOAD CASI	-181.256	-127.744	-168.061	219.377	-219.681	-17.287
	11:LOAD CASI	-40.982	59.678	187.520	-102.653	-37.747	22.045
	12:LOAD CASI	-131.757	-127.667	-198.111	219.101	-143.145	18.640
	13:LOAD CASI	-86.406	59.610	196.972	-102.423	-106.295	-18.503
	100:(SW+DCW	-49.099	44.396	209.367	-74.576	-57.758	0.884
	101:(SW+DCW	-72.990	114.213	357.149	-190.194	-84.887	2.491
	102:(SW+DCW	-135.525	-81.347	-22.804	142.781	-156.309	0.564
	103:(SW+DCW	-101.965	105.914	384.082	-178.687	-117.815	2.023
	104:(SW+DCW	-125.381	-60.371	273.069	410.606	-156.052	6.760
	105:(SW+DCW	-160.231	79.023	110.882	-439.906	-186.385	2.131
	106:(SW+DCW	-190.703	-81.428	12.297	143.068	-231.922	-16.489
	107:(SW+DCW	-50.289	105.894	347.878	-178.552	-49.587	22.843
	108:(SW+DCW	-141.084	-81.351	-17.753	142.792	-155.386	19.438
	109:(SW+DCW	-95.713	105.926	377.329	-178.732	-118.445	-17.705
	200:1.4(SW+D	-52.822	62.822	281.511	-105.099	-82.654	1.203
	201:1.4(SW+D	-114.323	173.478	535.367	-289.049	-133.371	3.827
	202:(SW+DCW	-186.012	-132.412	-104.069	230.417	-213.937	1.030
	203:1.2(SW+D	-122.358	127.097	450.898	-214.436	-141.378	2.427
	204:1.2(SW+D	-150.458	-72.445	327.563	493.087	-187.262	8.112
	205:1.2(SW+D	-192.278	94.827	133.058	-527.887	-223.662	2.557
	206:1.2(SW+D	-228.844	-97.713	14.756	171.682	-278.306	-19.787
	207:1.0(SW+D	-66.682	129.865	414.896	-220.033	-65.086	31.661
	208:1.2(SW+D	-169.277	-97.621	-21.304	171.350	-186.463	23.326
	209:1.0(SW+D	-130.276	129.770	456.118	-219.701	-160.928	-25.106
788	1:LOAD CASE	-2.160	-31.380	148.982	36.764	-0.703	-0.013
	2:LOAD CASE	0.065	-37.240	62.276	36.432	-0.002	-0.022

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	Job No TPL40581	Sheet No a 94	Rev R4b-FAB2
	Part wind speed 32.5 m/s		
Job Title Wisma Bella Swimming Pool	Ref Fabric R5		
	By TSM	Date 17-Dec-11	Chd TSM
Client Majlis Perbandaran Kuantan	File Q326-KSP-R4b-Deg.std	Date/Time 10-Jul-2012 16:43	

Reactions Cont...

		Horizontal		Vertical	Moment		
Node	L/C	FX (kN)	FY (kN)	FZ (kN)	MX (kNm)	MY (kNm)	MZ (kNm)
	3:LOAD CASE	0.039	-22.312	37.324	21.840	-0.002	-0.013
	4:LOAD CASE	-8.240	1.980	9.811	-0.615	-1.432	-0.089
	5:LOAD CASE	-14.903	-60.819	132.052	68.253	-2.114	-0.914
	6:LOAD CASE	-29.183	132.768	-269.682	-153.421	-4.454	-0.246
	7:LOAD CASE	-21.688	-62.137	162.075	71.182	-3.003	-0.888
	8:LOAD CASE	-33.714	-34.920	-137.569	367.954	-6.788	0.030
	9:LOAD CASE	-26.630	111.642	39.097	-451.141	-5.667	-1.396
	10:LOAD CASI	-43.919	132.764	-260.945	-153.428	-18.472	18.271
	11:LOAD CASI	-6.975	-62.145	152.835	71.212	10.157	-21.079
	12:LOAD CASI	-27.691	132.771	-265.245	-153.426	6.359	-18.808
	13:LOAD CASI	-22.780	-62.144	167.261	71.200	-13.554	19.411
	100:(SW+DCW	-11.335	-66.659	221.069	72.681	-2.138	-0.125
	101:(SW+DCW	-16.956	-151.651	380.634	163.289	-2.821	-0.963
	102:(SW+DCW	-31.278	64.148	-58.424	-80.225	-5.159	-0.281
	103:(SW+DCW	-23.783	-130.757	373.333	144.378	-3.708	-0.923
	104:(SW+DCW	-35.809	-103.540	73.889	441.150	-6.492	-0.006
	105:(SW+DCW	-28.625	43.022	250.355	-377.944	-6.373	-1.431
	106:(SW+DCW	-46.014	64.144	-49.687	-80.231	-19.177	18.235
	107:(SW+DCW	-9.071	-130.765	364.093	144.409	9.452	-21.114
	108:(SW+DCW	-29.786	64.152	-53.988	-80.230	5.654	-18.843
	109:(SW+DCW	-24.875	-130.764	368.519	144.397	-14.260	19.376
	200:1.4(SW+D	-12.173	-94.107	305.572	101.860	-2.420	-0.139
	201:1.4(SW+D	-26.716	-228.757	556.764	248.624	-4.373	-1.534
	202:(SW+DCW	-42.851	117.255	-166.296	-141.593	-6.941	-0.380
	203:1.2(SW+D	-28.540	-156.908	447.999	173.254	-4.450	-1.108
	204:1.2(SW+D	-42.971	-124.248	88.426	529.380	-7.780	-0.007
	205:1.2(SW+D	-34.350	51.626	300.426	-453.633	-7.647	-1.718
	206:1.2(SW+D	-65.216	76.973	-59.625	-96.278	-23.013	21.882
	207:1.0(SW+D	-11.861	-155.623	425.227	172.893	13.515	-29.545
	208:1.2(SW+D	-35.743	76.982	-64.785	-96.276	6.785	-22.611
	209:1.0(SW+D	-33.987	-155.621	431.423	172.877	-19.682	27.141
790	1:LOAD CASE	-0.292	31.358	140.461	-105.452	-1.076	0.117
	2:LOAD CASE	0.121	37.186	51.652	-126.557	0.302	0.093
	3:LOAD CASE	0.073	22.288	30.964	-75.816	0.181	0.055
	4:LOAD CASE	-5.481	-1.556	4.554	5.301	-15.236	0.349
	5:LOAD CASE	-8.603	60.587	117.845	-204.636	-23.998	1.687
	6:LOAD CASE	-17.908	-132.648	-275.196	447.549	-49.503	0.675
	7:LOAD CASE	-12.625	62.095	143.890	-210.402	-35.204	1.811
	8:LOAD CASE	-14.462	-110.379	33.602	587.708	-40.295	1.775
	9:LOAD CASE	-20.869	33.719	-160.325	-332.322	-57.886	0.638
	10:LOAD CASI	-25.356	-132.645	-268.957	447.528	-72.876	-18.235
	11:LOAD CASI	-4.747	62.098	137.942	-210.406	-10.536	21.694
	12:LOAD CASI	-17.724	-132.653	-275.450	447.576	-46.207	19.202
	13:LOAD CASI	-12.138	62.099	144.122	-210.423	-38.289	-19.122
	100:(SW+DCW	-5.652	66.568	196.667	-226.708	-16.010	0.558
	101:(SW+DCW	-8.701	151.359	340.923	-512.461	-24.591	1.952
	102:(SW+DCW	-18.079	-64.124	-83.082	215.540	-50.277	0.885
	103:(SW+DCW	-12.796	130.519	336.004	-442.411	-35.978	2.021
	104:(SW+DCW	-14.633	-41.855	225.716	355.699	-41.069	1.984
	105:(SW+DCW	-21.031	102.243	31.788	-564.331	-58.670	0.847
	106:(SW+DCW	-25.527	-64.121	-76.844	215.519	-73.650	-18.026
	107:(SW+DCW	-4.918	130.622	330.055	-442.415	-11.311	21.903
	108:(SW+DCW	-17.895	-64.129	-83.336	215.567	-46.981	19.411
	109:(SW+DCW	-12.309	130.623	336.236	-442.432	-37.063	-18.913
	200:1.4(SW+D	-5.721	93.977	273.513	-319.512	-16.320	0.842
	201:1.4(SW+D	-13.887	228.469	507.055	-773.536	-39.192	3.081
	202:(SW+DCW	-25.242	-117.183	-193.161	394.560	-70.078	1.155
	203:1.2(SW+D	-15.355	156.743	403.204	-530.893	-43.174	2.425
	204:1.2(SW+D	-17.560	-50.226	270.859	426.838	-49.283	2.381
	205:1.2(SW+D	-25.238	122.691	38.146	-677.197	-70.494	1.017
	206:1.2(SW+D	-30.632	-76.945	-92.213	258.623	-88.380	-21.631
	207:1.0(SW+D	-6.817	155.481	395.232	-526.578	-15.525	30.581
	208:1.2(SW+D	-21.473	-76.955	-100.003	258.681	-56.377	23.294
	209:1.0(SW+D	-17.164	155.463	393.884	-526.601	-51.578	-26.562
794	1:LOAD CASE	2.160	-31.380	148.982	36.764	0.703	0.013
	2:LOAD CASE	-0.118	-16.958	21.838	19.322	0.006	0.163
	3:LOAD CASE	-0.071	-10.148	13.068	11.562	0.003	0.098

Print Time/Date: 11/07/2012 17:28 STAAD.Pro for Windows 20.07.02.15 Print Run 3 of 7

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	Job No TPL40581	Sheet No a 95	Rev R4b-FAB2
	Part wind speed 32.5 m/s		
Job Title Wisma Bella Swimming Pool	Ref Fabric R5		
	By TSM	Date 17-Dec-11	Chd TSM
Client Majlis Perbandaran Kuantan	File Q326-KSP-R4b-Deg.std	Date/Time 10-Jul-2012 16:43	

Reactions Cont...

		Horizontal		Vertical	Moment		
Node	L/C	FX (kN)	FY (kN)	FZ (kN)	MX (kNm)	MY (kNm)	MZ (kNm)
	4:LOAD CASE	9.207	1.950	9.819	-0.616	1.669	-0.197
	5:LOAD CASE	14.923	-60.619	132.041	68.253	2.537	-0.398
	6:LOAD CASE	28.931	132.766	-269.686	-153.419	5.314	-0.976
	7:LOAD CASE	21.361	-62.137	162.051	71.181	3.838	-0.482
	8:LOAD CASE	33.640	-34.920	-137.540	367.953	6.586	-1.036
	9:LOAD CASE	26.390	111.642	39.143	-451.138	6.304	0.676
	10:LOAD CASI	27.305	132.771	-265.188	-153.426	-5.314	17.365
	11:LOAD CASI	22.575	-62.145	157.207	71.204	14.089	-20.489
	12:LOAD CASI	43.452	132.763	-261.052	-153.426	19.661	-19.705
	13:LOAD CASI	6.910	-62.145	152.904	71.213	-9.551	20.040
	100:(SW+DCW	11.249	-46.378	180.639	55.471	2.379	-0.021
	101:(SW+DCW	16.893	-119.105	315.929	135.901	3.250	-0.124
	102:(SW+DCW	30.973	84.428	-98.865	-97.332	6.023	-0.800
	103:(SW+DCW	23.402	-110.475	332.872	127.287	4.547	-0.306
	104:(SW+DCW	35.681	-83.258	33.280	424.040	7.295	-0.860
	105:(SW+DCW	28.431	63.304	209.963	-395.052	7.013	0.852
	106:(SW+DCW	29.346	84.433	-94.367	-97.339	-4.605	17.540
	107:(SW+DCW	24.616	-110.483	328.027	127.291	14.799	-20.294
	108:(SW+DCW	45.494	84.425	-90.232	-97.339	20.270	-19.529
	109:(SW+DCW	8.952	-110.483	323.725	127.299	-6.842	20.215
	200:1.4(SW+D	12.065	-65.713	248.987	77.908	2.662	0.049
	201:1.4(SW+D	26.621	-180.800	471.322	206.225	5.057	-0.234
	202:(SW+DCW	42.545	137.535	-206.740	-158.700	8.149	-1.190
	203:1.2(SW+D	28.083	-132.570	399.446	152.721	5.457	-0.368
	204:1.2(SW+D	42.817	-99.909	39.936	508.848	8.754	-1.032
	205:1.2(SW+D	34.117	75.864	251.956	-474.062	8.415	1.022
	206:1.2(SW+D	35.215	101.319	-113.241	-116.807	-5.526	21.048
	207:1.0(SW+D	33.648	-135.341	390.910	155.772	20.434	-28.482
	208:1.2(SW+D	54.593	101.310	-108.278	-116.807	24.324	-23.435
	209:1.0(SW+D	11.716	-135.342	384.887	155.784	-12.682	28.231
795	1:LOAD CASE	0.292	31.358	140.481	-105.452	1.076	-0.117
	2:LOAD CASE	-0.164	18.873	27.761	-55.450	-0.410	-0.380
	3:LOAD CASE	-0.098	10.156	16.612	-33.181	-0.246	-0.227
	4:LOAD CASE	5.445	-1.956	4.563	5.300	15.159	-0.050
	5:LOAD CASE	8.692	60.567	117.895	-204.637	24.306	-0.252
	6:LOAD CASE	17.687	-132.647	-275.205	447.544	48.962	0.864
	7:LOAD CASE	12.405	62.096	143.876	-210.405	34.558	-0.405
	8:LOAD CASE	14.306	-110.379	33.616	587.706	39.874	-0.743
	9:LOAD CASE	20.802	33.719	-160.299	-332.323	57.785	0.345
	10:LOAD CASI	17.473	-132.653	-275.489	447.576	45.636	-17.553
	11:LOAD CASI	12.028	62.099	144.084	-210.423	36.066	20.162
	12:LOAD CASI	25.008	-132.645	-269.103	447.527	72.028	19.925
	13:LOAD CASI	4.684	62.098	137.965	-210.407	10.445	-20.660
	100:(SW+DCW	5.573	46.374	172.785	-155.602	15.825	-0.547
	101:(SW+DCW	8.723	119.054	302.729	-398.720	24.727	-0.976
	102:(SW+DCW	17.815	-84.317	-106.983	286.641	49.629	0.367
	103:(SW+DCW	12.534	110.426	312.098	-371.308	35.324	-0.902
	104:(SW+DCW	14.435	-62.048	201.838	426.804	40.640	-1.239
	105:(SW+DCW	20.931	82.049	7.923	-493.225	58.451	-0.151
	106:(SW+DCW	17.601	-84.322	-107.247	286.674	46.303	-18.050
	107:(SW+DCW	12.156	110.430	312.306	-371.325	36.733	19.665
	108:(SW+DCW	25.137	-84.314	-100.881	286.625	72.695	19.429
	109:(SW+DCW	4.813	110.428	305.187	-371.310	11.111	-21.156
	200:1.4(SW+D	5.625	65.707	240.074	-219.563	16.092	-0.745
	201:1.4(SW+D	13.931	180.829	450.721	-605.772	39.431	-1.452
	202:(SW+DCW	24.890	-137.375	-217.065	465.659	69.214	0.713
	203:1.2(SW+D	15.041	132.511	374.518	-445.569	42.389	-1.082
	204:1.2(SW+D	17.322	-74.458	242.205	512.164	48.769	-1.487
	205:1.2(SW+D	25.117	98.459	9.507	-591.870	70.141	-0.181
	206:1.2(SW+D	21.122	-101.187	-128.696	344.009	55.563	-21.660
	207:1.0(SW+D	15.968	135.269	369.939	-455.494	51.159	27.730
	208:1.2(SW+D	30.164	-101.177	-121.057	343.949	87.234	23.315
	209:1.0(SW+D	6.686	135.268	361.373	-455.473	15.289	-29.420
800	1:LOAD CASE	11.212	-29.966	152.398	32.909	3.848	0.373
	2:LOAD CASE	-0.281	-16.233	21.174	17.652	-0.004	0.123
	3:LOAD CASE	-0.168	-9.713	12.671	10.563	-0.002	0.074
	4:LOAD CASE	40.944	1.917	24.096	-0.361	6.346	-0.358

Print Time/Date: 11/07/2012 17:28 STAAD.Pro for Windows 20.07.02.15 Print Run 4 of 7

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Job No	Sheet No	Rev
TPL40581	a 96	R4b-FAB2

Job Title Wisma Belia Swimming Pool
Client Majlis Perbandaran Kuantan
Part wind speed 32.5 m/s
Ref Fabric R5
By TSM Date 17-Dec-11 Chd TSM
File Q326-KSP-R4b-Deg.std Date/Time 10-Jul-2012 16:43

Reactions Cont...

Node	L/C	Horizontal FX (kN)	Horizontal FY (kN)	Vertical FZ (kN)	Moment MX (kNm)	Moment MY (kNm)	Moment MZ (kNm)
	5:LOAD CASE	66.135	-58.071	153.106	61.868	9.605	-0.235
	6:LOAD CASE	129.301	127.494	-220.963	-139.404	21.028	-1.333
	7:LOAD CASE	95.250	-59.519	193.210	64.710	14.191	-0.559
	8:LOAD CASE	150.388	-37.741	-83.824	387.781	25.745	0.246
	9:LOAD CASE	124.839	111.614	75.982	-463.097	35.831	4.313
	10:LOAD CASI	137.289	127.499	-214.858	-139.414	11.405	16.520
	11:LOAD CASI	86.288	-58.527	186.377	64.723	24.319	-19.858
	12:LOAD CASI	182.455	127.577	-193.452	-139.717	48.138	-18.937
	13:LOAD CASI	45.485	-55.595	165.211	64.967	-5.659	20.723
	100:(SW+DCW	51.875	-44.282	197.669	50.200	10.190	0.136
	101:(SW+DCW	76.897	-113.983	339.349	122.992	13.447	0.335
	102:(SW+DCW	140.232	81.295	-47.390	-88.843	24.872	-0.837
	103:(SW+DCW	106.180	-105.718	366.783	115.271	18.035	-0.062
	104:(SW+DCW	161.319	-63.835	89.749	438.322	29.591	0.742
	105:(SW+DCW	135.770	65.416	249.535	-412.535	40.675	4.809
	106:(SW+DCW	148.220	81.300	-41.285	-88.853	15.251	17.016
	107:(SW+DCW	97.219	-105.725	359.949	115.285	28.183	-19.172
	108:(SW+DCW	193.385	81.378	-15.879	-89.156	51.983	-18.440
	109:(SW+DCW	56.416	-105.794	338.783	115.529	-1.815	21.219
	200:1.4(SW+D	56.247	-62.761	267.098	70.424	11.728	0.337
	201:1.4(SW+D	120.850	-173.132	508.244	186.575	20.746	0.436
	202:(SW+DCW	191.952	132.293	-135.775	-144.604	33.283	-1.370
	203:1.2(SW+D	127.416	-126.851	440.139	138.325	21.642	-0.075
	204:1.2(SW+D	193.582	-100.727	107.898	525.987	35.509	0.851
	205:1.2(SW+D	162.924	78.499	298.442	-495.042	48.810	5.771
	206:1.2(SW+D	177.864	97.560	-49.542	-106.623	18.301	20.419
	207:1.0(SW+D	131.735	-129.536	434.500	141.174	37.891	-27.039
	208:1.2(SW+D	232.063	97.654	-23.855	-106.987	62.379	-22.129
	209:1.0(SW+D	74.610	-128.632	404.867	141.516	-4.078	29.508
802	1:LOAD CASE	9.700	30.007	152.078	-51.163	12.597	-0.395
	2:LOAD CASE	-0.299	15.266	28.867	-25.022	-0.294	-0.109
	3:LOAD CASE	-0.179	8.733	16.795	-14.973	-0.176	-0.065
	4:LOAD CASE	39.799	-1.921	29.022	1.734	45.683	0.199
	5:LOAD CASE	64.096	58.139	159.912	-98.841	73.233	-0.021
	6:LOAD CASE	128.185	-127.663	-203.318	219.091	144.920	1.160
	7:LOAD CASE	92.239	59.597	203.463	-102.386	105.652	0.118
	8:LOAD CASE	116.078	-106.886	92.706	487.212	144.491	-4.962
	9:LOAD CASE	150.958	32.705	-69.453	-363.593	174.490	-0.385
	10:LOAD CASI	131.363	-127.667	-198.205	215.103	143.379	-15.942
	11:LOAD CASI	86.336	59.809	196.895	-102.420	106.645	19.476
	12:LOAD CASI	180.855	-127.743	-168.533	219.376	220.058	18.849
	13:LOAD CASI	41.238	58.676	167.721	-102.648	38.552	-21.065
	100:(SW+DCW	49.200	44.352	209.167	-74.451	57.986	-0.306
	101:(SW+DCW	73.318	114.145	356.851	-189.999	85.359	-0.591
	102:(SW+DCW	135.567	-81.390	-23.173	142.906	157.222	0.655
	103:(SW+DCW	101.640	105.870	383.608	-176.571	117.955	-0.387
	104:(SW+DCW	125.480	-60.414	272.851	411.027	156.794	-5.467
	105:(SW+DCW	180.358	78.978	110.692	-439.778	186.792	-0.890
	106:(SW+DCW	140.765	-81.395	-18.060	142.918	155.681	-17.446
	107:(SW+DCW	95.740	105.881	377.039	-176.605	118.947	18.972
	108:(SW+DCW	180.256	-81.471	11.812	143.191	232.361	18.344
	109:(SW+DCW	50.639	105.948	347.866	-176.833	50.655	-21.570
	200:1.4(SW+D	52.981	62.861	281.225	-104.925	82.907	-0.507
	201:1.4(SW+D	115.429	173.377	534.933	-288.762	134.115	-0.844
	202:(SW+DCW	186.061	-132.455	-104.500	230.542	215.190	1.119
	203:1.2(SW+D	121.968	127.044	460.330	-214.298	141.546	-0.484
	204:1.2(SW+D	150.576	-72.496	327.421	493.232	188.153	-6.580
	205:1.2(SW+D	192.429	94.773	132.830	-527.734	224.151	-1.059
	206:1.2(SW+D	169.918	-97.674	-21.673	171.501	186.818	-20.936
	207:1.0(SW+D	130.276	129.725	455.797	-219.573	161.605	26.763
	208:1.2(SW+D	228.307	-97.765	13.935	171.829	278.833	22.013
	209:1.0(SW+D	67.134	129.819	414.954	-219.892	66.276	-29.996
806	1:LOAD CASE	0.026	-52.407	172.667	51.773	-6.073	-9.629
	2:LOAD CASE	-0.199	-7.994	10.825	7.430	-0.489	0.620
	3:LOAD CASE	-0.119	-4.783	6.478	4.446	-0.292	0.371
	4:LOAD CASE	9.825	2.275	-33.968	7.799	-4.958	-12.131
	5:LOAD CASE	6.534	-63.695	45.774	68.291	-16.083	-13.037

Print Time/Date: 11/07/2012 17:28 STAAD.Pro for Windows 20.07.02.15 Print Run 5 of 7

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Job No	Sheet No	Rev
TPL40581	a 97	R4b-FAB2

Job Title Wisma Belia Swimming Pool
Client Majlis Perbandaran Kuantan
Part wind speed 32.5 m/s
Ref Fabric R5
By TSM Date 17-Dec-11 Chd TSM
File Q326-KSP-R4b-Deg.std Date/Time 10-Jul-2012 16:43

Reactions Cont...

Node	L/C	Horizontal FX (kN)	Horizontal FY (kN)	Vertical FZ (kN)	Moment MX (kNm)	Moment MY (kNm)	Moment MZ (kNm)
	6:LOAD CASE	43.103	157.795	-369.159	-110.055	-2.112	-39.705
	7:LOAD CASE	11.104	-70.449	41.955	79.684	-21.344	-19.961
	8:LOAD CASE	16.246	-10.008	-273.165	353.989	-17.568	-64.656
	9:LOAD CASE	29.619	105.095	-63.596	-382.544	-15.757	-2.700
	10:LOAD CASI	39.392	155.334	-379.022	-108.022	-3.788	-22.408
	11:LOAD CASI	15.224	-67.746	52.846	77.465	-19.445	-38.289
	12:LOAD CASI	53.264	31.811	-238.378	15.379	-17.802	-95.134
	13:LOAD CASI	-3.543	56.414	-87.733	-46.393	-6.653	36.313
	100:(SW+DCW	9.452	-58.125	149.524	67.002	-11.519	-21.140
	101:(SW+DCW	6.242	-128.880	235.744	131.940	-22.937	-21.576
	102:(SW+DCW	42.929	97.394	-185.666	-50.852	-8.674	-48.714
	103:(SW+DCW	10.930	-130.850	226.447	138.887	-27.905	-28.971
	104:(SW+DCW	16.072	-70.408	-89.673	413.172	-24.129	-73.666
	105:(SW+DCW	29.446	44.695	98.887	-323.341	-22.318	-11.710
	106:(SW+DCW	39.219	94.933	-195.530	-49.819	-10.349	-31.417
	107:(SW+DCW	15.050	-128.147	236.339	138.668	-26.007	-47.289
	108:(SW+DCW	53.090	-28.590	-54.886	74.582	-24.264	-104.143
	109:(SW+DCW	-3.716	-3.987	95.759	12.810	-13.215	27.303
	200:1.4(SW+D	9.382	-82.286	222.921	90.683	-14.144	-24.744
	201:1.4(SW+D	10.022	-194.127	340.493	199.263	-35.386	-32.879
	202:(SW+DCW	60.170	160.512	-333.329	-94.875	-9.518	-64.696
	203:1.2(SW+D	13.117	-157.020	270.537	166.665	-33.486	-34.765
	204:1.2(SW+D	19.287	-84.490	-107.607	495.806	-28.955	-88.399
	205:1.2(SW+D	35.335	53.634	119.876	-388.010	-26.782	-14.052
	206:1.2(SW+D	47.062	113.520	-234.636	-59.683	-12.419	-37.701
	207:1.0(SW+D	21.140	-155.246	257.477	167.653	-33.785	-62.615
	208:1.2(SW+D	63.709	-34.308	-65.863	89.498	-29.237	-124.972
	209:1.0(SW+D	-5.133	18.579	60.666	-5.747	-15.876	41.828
808	1:LOAD CASE	-0.446	52.388	173.214	-51.688	-5.962	8.711
	2:LOAD CASE	-0.433	7.975	14.464	-5.955	-0.578	-1.042
	3:LOAD CASE	-0.259	4.772	8.655	-3.563	-0.346	-0.624
	4:LOAD CASE	9.146	-2.275	-33.423	-7.830	-4.882	12.134
	5:LOAD CASE	5.814	63.661	46.535	-68.389	-15.821	13.218
	6:LOAD CASE	41.838	-157.802	-367.396	110.076	-2.070	39.416
	7:LOAD CASE	9.946	70.363	43.160	-79.521	-21.026	20.123
	8:LOAD CASE	27.653	-106.897	-77.037	385.337	-14.245	-0.023
	9:LOAD CASE	13.830	11.897	-274.522	-356.771	-18.270	66.782
	10:LOAD CASI	35.536	-155.344	-374.646	107.881	-4.671	22.055
	11:LOAD CASI	16.459	67.663	51.615	-77.170	-18.255	38.512
	12:LOAD CASI	53.568	-31.817	-238.329	-15.315	-16.740	94.904
	13:LOAD CASI	-6.254	-56.500	-84.803	46.586	-7.256	-36.206
	100:(SW+DCW	8.268	58.088	154.256	-65.483	-11.423	20.803
	101:(SW+DCW	4.677	128.798	242.888	-129.605	-22.708	21.263
	102:(SW+DCW	40.959	-97.439	-179.718	52.424	-8.610	48.085
	103:(SW+DCW	9.067	130.726	230.839	-137.173	-27.567	28.791
	104:(SW+DCW	26.775	-46.534	110.641	327.685	-20.786	8.646
	105:(SW+DCW	12.852	72.261	-86.843	-414.423	-24.810	75.451
	106:(SW+DCW	34.658	-94.981	-186.968	50.229	-11.212	30.724
	107:(SW+DCW	15.580	128.026	239.294	-134.822	-24.796	47.181
	108:(SW+DCW	52.689	28.547	-50.650	-72.967	-23.280	103.573
	109:(SW+DCW	-7.133	3.863	102.875	-11.067	-13.796	-27.537
	200:1.4(SW+D	7.916	82.233	229.327	-88.544	-14.039	24.270
	201:1.4(SW+D	7.659	194.001	351.054	-195.837	-35.024	32.287
	202:(SW+DCW	57.695	-160.560	-326.676	95.454	-9.438	63.852
	203:1.2(SW+D	10.880	156.871	277.007	-164.608	-33.080	34.550
	204:1.2(SW+D	32.130	-65.840	132.769	393.222	-24.943	10.375
	205:1.2(SW+D	15.542	86.713	-104.212	-497.308	-29.772	90.541
	206:1.2(SW+D	41.589	-113.977	-224.362	60.275	-13.454	36.869
	207:1.0(SW+D	22.163	155.092	259.940	-165.690	-32.098	62.566
	208:1.2(SW+D	63.227	34.256	-60.780	-87.580	-27.936	124.287
	209:1.0(SW+D	-9.834	-18.737	68.854	7.568	-16.698	-42.019

Print Time/Date: 11/07/2012 17:28 STAAD.Pro for Windows 20.07.02.15 Print Run 6 of 7

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Job No	Sheet No	Rev
TPL40581	a 98	R4b-FAB2

Job Title Wisma Belia Swimming Pool
Client Majlis Perbandaran Kuantan
Part wind speed 32.5 m/s
Ref Fabric R5
By TSM Date 17-Dec-11 Chd TSM
File Q326-KSP-R4b-Deg.std Date/Time 10-Jul-2012 16:43

Reaction Summary

	Node	L/C	Horizontal FX (kN)	Horizontal FY (kN)	Vertical FZ (kN)	Moment MX (kNm)	Moment MY (kNm)	Moment MZ (kNm)
Max FX	800	208:1.2(SW+D	232.063	97.654	-23.855	-106.987	62.379	-22.129
Min FX	782	206:1.2(SW+D	-232.586	97.637	-23.505	-106.971	-60.596	29.386
Max FY	790	201:1.4(SW+D	-13.887	228.469	507.055	-773.536	-39.192	3.081
Min FY	788	201:1.4(SW+D	-26.716	-228.757	566.764	246.624	-4.373	-1.534
Max FZ	788	201:1.4(SW+D	-26.716	-228.757	566.764	246.624	-4.373	-1.534
Min FZ	776	12:LOAD CASI	-39.075	155.698	-379.413	-108.569	3.723	20.702
Max MX	790	8:LOAD CASE	-14.462	-110.379	33.602	587.708	-40.295	1.775
Min MX	790	201:1.4(SW+D	-13.887	228.469	507.055	-773.536	-39.192	3.081
Max MY	802	208:1.2(SW+D	228.307	-97.765	13.935	171.829	278.833	22.013
Min MY	784	206:1.2(SW+D	-228.844	-97.713	14.756	171.682	-278.306	-19.787
Max MZ	808	208:1.2(SW+D	63.227	34.256	-60.780	-87.580	-27.936	124.287
Min MZ	806	208:1.2(SW+D	63.709	-34.308	-65.863	89.498	-29.237	-124.972

Reaction Envelope

Node	Env	Horizontal FX (kN)	Horizontal FY (kN)	Vertical FZ (kN)	Moment MX (kNm)	Moment MY (kNm)	MZ (kNm)
776	+ve	5.549	160.995	340.246	496.227	35.479	122.961
776	+ve	Load: 207	Load: 202	Load: 201	Load: 204	Load: 201	Load: 206
776	-ve	-63.756	-193.846	-379.413	-388.878	0.000	-43.585
776	-ve	Load: 206	Load: 201	Load: 12	Load: 205	-	Load: 207
778	+ve	10.238	193.732	351.121	394.742	35.163	43.821
778	+ve	Load: 207	Load: 201	Load: 201	Load: 204	Load: 201	Load: 207
778	-ve	-63.436	-160.826	-375.208	-497.782	0.000	-122.245
778	-ve	Load: 206	Load: 202	Load: 12	Load: 205	-	Load: 206
782	+ve	0.336	132.279	508.430	526.005	6.437	25.715
782	+ve	Load: 2	Load: 202	Load: 201	Load: 204	Load: 11	Load: 209
782	-ve	-232.586	-173.162	-220.960	-495.032	-60.596	-31.054
782	-ve	Load: 206	Load: 201	Load: 6	Load: 205	Load: 206	Load: 207
784	+ve	0.393	173.478	535.367	493.087	0.356	31.661
784	+ve	Load: 2	Load: 201	Load: 201	Load: 204	Load: 2	Load: 207
784	-ve	-228.844	-132.412	-203.162	-527.887	-278.306	-25.106
784	-ve	Load: 206	Load: 202	Load: 6	Load: 205	Load: 206	Load: 209
788	+ve	0.065	132.771	566.764	529.380	13.515	27.141
788	+ve	Load: 2	Load: 12	Load: 201	Load: 204	Load: 207	Load: 209
788	-ve	-55.216	-228.757	-269.882	-453.533	-23.013	-29.545
788	-ve	Load: 206	Load: 201	Load: 6	Load: 205	Load: 206	Load: 207
790	+ve	0.121	228.469	507.055	587.708	0.302	30.581
790	+ve	Load: 2	Load: 201	Load: 201	Load: 8	Load: 2	Load: 207
790	-ve	-30.832	-132.653	-275.450	-773.536	-88.380	-26.562
790	-ve	Load: 206	Load: 12	Load: 12	Load: 201	Load: 208	Load: 209
794	+ve	54.593	137.535	471.322	506.848	24.324	28.231
794	+ve	Load: 208	Load: 202	Load: 201	Load: 204	Load: 208	Load: 209
794	-ve	-0.118	-180.900	-289.686	-474.062	-12.662	-28.482
794	-ve	Load: 2	Load: 201	Load: 6	Load: 205	Load: 209	Load: 207
796	+ve	30.164	180.820	450.721	587.706	87.234	27.730
796	+ve	Load: 208	Load: 201	Load: 201	Load: 8	Load: 208	Load: 207
796	-ve	-0.164	-137.375	-275.469	-605.772	-0.410	-29.420
796	-ve	Load: 2	Load: 202	Load: 10	Load: 201	Load: 2	Load: 209
800	+ve	232.063	132.293	508.244	525.987	62.379	29.508
800	+ve	Load: 208	Load: 202	Load: 201	Load: 204	Load: 208	Load: 209
800	-ve	-0.281	-173.132	-220.963	-495.042	-5.659	-27.039
800	-ve	Load: 2	Load: 201	Load: 6	Load: 205	Load: 13	Load: 207
802	+ve	228.307	173.377	534.933	493.232	278.833	26.763
802	+ve	Load: 208	Load: 201	Load: 201	Load: 204	Load: 208	Load: 207
802	-ve	-0.299	-132.455	-203.318	-527.734	-0.294	-29.996
802	-ve	Load: 2	Load: 202	Load: 6	Load: 205	Load: 2	Load: 209
806	+ve	63.709	160.512	340.493	495.806	0.000	41.828
806	+ve	Load: 208	Load: 202	Load: 201	Load: 204	-	Load: 209
806	-ve	-5.133	-194.127	-379.022	-388.010	-35.386	-124.972
806	-ve	Load: 209	Load: 201	Load: 10	Load: 205	Load: 201	Load: 208
808	+ve	63.227	194.001	351.054	393.222	0.000	124.287
808	+ve	Load: 208	Load: 201	Load: 201	Load: 204	-	Load: 208
808	-ve	-9.634	-160.560	-374.646	-497.308	-35.024	-42.019
808	-ve	Load: 209	Load: 202	Load: 10	Load: 205	Load: 201	Load: 209

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Job No	Sheet No	Rev
TPL40581	a 99	R4b-FAB2

Job Title Wisma Belia Swimming Pool
Client Majlis Perbandaran Kuantan
Part wind speed 32.5 m/s
Ref Fabric R5
By TSM Date 17-Dec-11 Chd TSM
File Q326-KSP-R4b-Deg.std Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
1	ST PIP2196.0	PASS 415.64 C	BS-4.7 (C) -7.43	0.388 0.00	206 0.00
2	ST PIP2196.0	PASS 403.14 C	BS-4.7 (C) -3.38	0.373 0.00	206 0.00
3	ST PIP2196.0	PASS 250.08 C	BS-4.7 (C) -9.18	0.231 0.00	206 0.00
4	ST PIP2196.0	PASS 104.68 T	BS-4.8.2.2 -12.65	0.263 0.00	206 1.78
5	ST PIP2196.0	PASS 71.77 C	ANNEX I.1 -8.33	0.388 20.36	206 -
6	ST PIP2196.0	PASS 168.10 T	BS-4.8.2.2 -5.80	0.229 0.00	8 0.00
7	ST PIP2196.0	PASS 187.75 T	BS-4.8.2.2 -5.87	0.248 0.00	8 0.00
8	ST PIP2196.0	PASS 201.74 T	BS-4.8.2.2 -5.59	0.257 0.00	8 1.78
9	ST PIP2196.0	PASS 326.64 C	BS-4.7 (C) -2.37	0.300 0.00	205 0.00
10	ST PIP2196.0	PASS 372.83 C	BS-4.7 (C) -2.40	0.342 0.00	205 0.00
11	ST PIP2196.0	PASS 414.78 C	BS-4.7 (C) -3.48	0.380 0.00	205 0.00
12	ST PIP2196.0	PASS 142.49 T	BS-4.8.2.2 -18.20	0.371 0.00	204 0.00
13	ST PIP2196.0	PASS 176.00 T	BS-4.8.2.2 -9.95	0.292 0.00	204 1.78
14	ST PIP2196.0	PASS 204.48 T	BS-4.8.2.2 -7.43	0.284 0.00	204 0.00
15	ST PIP2196.0	PASS 225.21 T	BS-4.8.2.2 -4.65	0.292 0.00	204 1.78
16	ST PIP2196.0	PASS 210.11 T	BS-4.8.2.2 -12.54	0.357 0.00	204 0.00
17	ST PIP2196.0	PASS 215.50 T	BS-4.8.2.2 -6.86	0.286 0.00	209 1.78
18	ST PIP2196.0	PASS 220.73 T	BS-4.8.2.2 -7.77	0.303 0.00	209 0.00
19	ST PIP2196.0	PASS 214.89 T	BS-4.8.2.2 -13.96	0.380 0.00	209 1.78
20	ST PIP2196.0	PASS 212.31 T	BS-4.8.2.2 -13.94	0.378 0.00	209 0.00
21	ST PIP2196.0	PASS 217.71 T	BS-4.8.2.2 -7.72	0.300 0.00	209 1.78
22	ST PIP2196.0	PASS 211.74 T	BS-4.8.2.2 -6.94	0.284 0.00	209 0.00

Print Time/Date: 11/07/2012 17:29 STAAD.Pro for Windows 20.07.02.15 Print Run 1 of 10

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Job No	Sheet No	Rev
TPL40581	a 100	R4b-FAB2

Job Title Wisma Belia Swimming Pool
Client Majlis Perbandaran Kuantan
Part wind speed 32.5 m/s
Ref Fabric R5
By TSM Date 17-Dec-11 Chd TSM
File Q326-KSP-R4b-Deg.std Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
23	ST PIP2196.0	PASS 200.33 T	BS-4.8.2.2 -9.65	0.310 0.00	205 1.78
24	ST PIP2196.0	PASS 212.29 T	BS-4.8.2.2 -4.90	0.257 0.00	205 1.78
25	ST PIP2196.0	PASS 193.06 T	BS-4.8.2.2 -6.36	0.259 0.00	205 1.34
26	ST PIP2196.0	PASS 293.65 C	BS-4.7 (C) -2.72	0.269 0.00	204 1.78
27	ST PIP2196.0	PASS 130.55 T	BS-4.8.2.2 -17.73	0.354 0.00	205 1.78
28	ST PIP2196.0	PASS 156.91 T	BS-4.8.2.2 -16.96	0.368 0.00	207 0.00
29	ST PIP2196.0	PASS 350.68 C	BS-4.7 (C) -4.36	0.322 0.00	204 1.78
30	ST PIP2196.0	PASS 308.01 C	BS-4.7 (C) -2.42	0.283 0.00	204 1.78
31	ST PIP2196.0	PASS 188.53 T	BS-4.8.2.2 -5.57	0.245 0.00	9 0.00
32	ST PIP2196.0	PASS 177.16 T	BS-4.8.2.2 -5.84	0.238 0.00	9 1.78
33	ST PIP2196.0	PASS 160.24 T	BS-4.8.2.2 -5.57	0.219 0.00	9 1.78
34	ST PIP2196.0	PASS 71.47 C	ANNEX I.1 -8.49	0.394 20.67	206 -
35	ST PIP2196.0	PASS 104.65 T	BS-4.8.2.2 -12.87	0.266 0.00	206 0.00
36	ST PIP2196.0	PASS 254.83 C	BS-4.7 (C) -9.09	0.236 0.00	206 2.07
37	ST PIP2196.0	PASS 407.11 C	BS-4.7 (C) -3.40	0.377 0.00	206 2.07
38	ST PIP2196.0	PASS 423.53 C	BS-4.7 (C) -7.29	0.392 0.00	206 2.07
39	ST PIP2196.0	PASS 360.99 C	BS-4.7 (C) -9.65	0.334 0.00	206 0.00
40	ST PIP2196.0	PASS 356.94 C	BS-4.7 (C) -7.83	0.330 0.00	206 0.00
41	ST PIP2196.0	PASS 331.07 C	BS-4.7 (C) -6.50	0.306 0.00	206 0.00
42	ST PIP2196.0	PASS 319.88 C	BS-4.7 (C) -3.86	0.293 0.00	201 0.00
43	ST PIP2196.0	PASS 238.26 C	ANNEX I.1 -8.50	0.393 18.50	206 -
44	ST PIP2196.0	PASS 302.05 C	BS-4.7 (C) -3.69	0.277 0.00	201 0.00

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Job No	Sheet No	Rev
TPL40581	a 101	R4b-FAB2

Job Title Wisma Belia Swimming Pool
Client Majlis Perbandaran Kuantan
Part wind speed 32.5 m/s
Ref Fabric R5
By TSM Date 17-Dec-11 Chd TSM
File Q326-KSP-R4b-Deg.std Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
45	ST PIP2196.0	PASS 326.94 C	BS-4.7 (C) -5.08	0.300 0.00	205 0.00
46	ST PIP2196.0	PASS 349.99 C	BS-4.7 (C) -5.71	0.321 0.00	205 0.00
47	ST PIP2196.0	PASS 370.84 C	BS-4.7 (C) -4.85	0.340 0.00	205 0.00
48	ST PIP2196.0	PASS 387.72 C	BS-4.7 (C) -5.87	0.356 0.00	205 0.00
49	ST PIP2196.0	PASS 298.17 T	BS-4.8.2.2 -24.60	0.590 0.00	204 1.78
50	ST PIP2196.0	PASS 280.19 T	BS-4.8.2.2 -25.71	0.596 0.00	204 0.00
51	ST PIP2196.0	PASS 274.29 T	BS-4.8.2.2 -6.59	0.336 0.00	204 1.78
52	ST PIP2196.0	PASS 253.26 T	BS-4.8.2.2 -4.46	0.288 0.00	204 1.78
53	ST PIP2196.0	PASS 217.02 T	BS-4.8.2.2 -9.27	0.320 0.00	204 1.78
54	ST PIP2196.0	PASS 180.18 T	BS-4.8.2.2 -14.79	0.360 0.00	204 0.00
55	ST PIP2196.0	PASS 251.60 T	BS-4.8.2.2 -3.97	0.281 0.00	206 1.78
56	ST PIP2196.0	PASS 267.41 T	BS-4.8.2.2 -3.39	0.287 0.00	206 1.78
57	ST PIP2196.0	PASS 115.80 T	BS-4.8.2.2 -17.81	0.331 0.00	201 1.78
58	ST PIP2196.0	PASS 120.50 T	BS-4.8.2.2 -16.81	0.333 0.00	201 0.00
59	ST PIP2196.0	PASS 276.21 T	BS-4.8.2.2 -3.52	0.295 0.00	206 0.00
60	ST PIP2196.0	PASS 262.93 T	BS-4.8.2.2 -4.07	0.292 0.00	206 0.00
61	ST PIP2196.0	PASS 286.26 T	BS-4.8.2.2 -11.67	0.342 0.00	205 1.78
62	ST PIP2196.0	PASS 248.89 T	BS-4.8.2.2 -6.22	0.308 0.00	205 0.00
63	ST PIP2196.0	PASS 281.48 T	BS-4.8.2.2 -5.24	0.324 0.00	205 1.04
64	ST PIP2196.0	PASS 293.32 T	BS-4.8.2.2 -5.45	0.338 0.00	205 0.00
65	ST PIP2196.0	PASS 288.85 T	BS-4.8.2.2 -24.96	0.594 0.00	205 1.78
66	ST PIP2196.0	PASS 288.92 T	BS-4.8.2.2 -25.26	0.598 0.00	205 0.00

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Job No	Sheet No	Rev
TPL40581	a 102	R4b-FAB2

Job Title Wisma Belia Swimming Pool
Client Majlis Perbandaran Kuantan
Part wind speed 32.5 m/s
Ref Fabric R5
By TSM Date 17-Dec-11 Chd TSM
File Q326-KSP-R4b-Deg.std Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
67	ST PIP2196.0	PASS 412.12 C	BS-4.7 (C) -7.14	0.378 0.00	204 1.78
68	ST PIP2196.0	PASS 390.39 C	BS-4.7 (C) -5.09	0.358 0.00	204 1.78
69	ST PIP2196.0	PASS 363.37 C	BS-4.7 (C) -6.49	0.333 0.00	204 1.78
70	ST PIP2196.0	PASS 334.24 C	BS-4.7 (C) -5.02	0.307 0.00	204 1.78
71	ST PIP2196.0	PASS 305.64 C	BS-4.7 (C) -3.32	0.280 0.00	201 1.78
72	ST PIP2196.0	PASS 235.99 C	ANNEX I.1 -8.85	0.400 18.80	206 -
73	ST PIP2196.0	PASS 309.67 C	BS-4.7 (C) -3.59	0.284 0.00	201 1.78
74	ST PIP2196.0	PASS 327.17 C	BS-4.7 (C) -6.29	0.303 0.00	206 2.07
75	ST PIP2196.0	PASS 355.00 C	BS-4.7 (C) -7.67	0.328 0.00	206 2.07
76	ST PIP2196.0	PASS 359.10 C	BS-4.7 (C) -9.59	0.332 0.00	206 2.07
77	ST PIP2196.0	PASS 223.70 C	BS-4.7 (C) -0.37	0.207 0.00	201 0.00
78	ST PIP2196.0	PASS 220.61 C	BS-4.7 (C) -3.99	0.204 0.00	201 0.00
79	ST PIP2196.0	PASS 190.23 C	BS-4.7 (C) -0.89	0.176 0.00	201 0.00
80	ST PIP2196.0	PASS 203.57 C	BS-4.7 (C) -1.89	0.187 0.00	201 0.00
81	ST PIP2196.0	PASS 264.81 C	BS-4.7 (C) -3.19	0.243 0.00	201 0.00
82	ST PIP2196.0	PASS 241.76 C	BS-4.7 (C) -1.75	0.222 0.00	205 0.00
83	ST PIP2196.0	PASS 298.39 C	BS-4.7 (C) -2.32	0.274 0.00	205 0.00
84	ST PIP2196.0	PASS 343.32 C	BS-4.7 (C) -2.89	0.315 0.00	205 0.00
85	ST PIP2196.0	PASS 377.14 C	BS-4.7 (C) -3.91	0.346 0.00	205 0.00
86	ST PIP2196.0	PASS 330.21 T	BS-4.8.2.2 -6.06	0.379 0.00	204 1.04
87	ST PIP2196.0	PASS 355.36 T	BS-4.8.2.2 -5.96	0.401 0.00	204 1.78
88	ST PIP2196.0	PASS 346.94 T	BS-4.8.2.2 -6.02	0.394 0.00	204 0.00

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Job No	Sheet No	Rev
TPL40581	a 103	R4b-FAB2

Job Title Wisma Belia Swimming Pool
Client Majlis Perbandaran Kuantan
Part wind speed 32.5 m/s
Ref Fabric R5
By TSM Date 17-Dec-11 Chd TSM
File Q326-KSP-R4b-Deg.std Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
89	ST PIP2196.0	PASS 395.47 C	BS-4.7 (C) -5.24	0.363 0.00	205 0.00
90	ST PIP2196.0	PASS 367.54 C	BS-4.7 (C) -4.32	0.337 0.00	205 0.00
91	ST PIP2196.0	PASS 329.07 C	BS-4.7 (C) -4.09	0.302 0.00	205 0.00
92	ST PIP2196.0	PASS 280.85 C	BS-4.7 (C) -3.64	0.258 0.00	205 0.00
93	ST PIP2196.0	PASS 223.69 C	BS-4.7 (C) -3.08	0.205 0.00	205 0.00
94	ST PIP2196.0	PASS 169.26 C	BS-4.7 (C) -1.81	0.154 0.00	206 0.00
95	ST PIP2196.0	PASS 173.86 C	BS-4.7 (C) -1.56	0.159 0.00	206 0.00
96	ST PIP2196.0	PASS 170.68 C	BS-4.7 (C) -1.42	0.157 0.00	206 1.78
97	ST PIP2196.0	PASS 158.70 C	BS-4.7 (C) -1.67	0.146 0.00	206 1.78
98	ST PIP2196.0	PASS 192.97 C	BS-4.7 (C) -2.66	0.177 0.00	204 1.78
99	ST PIP2196.0	PASS 248.64 C	BS-4.7 (C) -3.42	0.228 0.00	204 1.78
100	ST PIP2196.0	PASS 251.32 T	BS-4.8.2.2 -4.74	0.290 0.00	205 1.49
101	ST PIP2196.0	PASS 296.13 T	BS-4.8.2.2 -6.59	0.356 0.00	205 1.04
102	ST PIP2196.0	PASS 386.44 C	BS-4.7 (C) -5.05	0.354 0.00	204 1.78
103	ST PIP2196.0	PASS 421.03 C	BS-4.7 (C) -4.94	0.386 0.00	204 1.78
104	ST PIP2196.0	PASS 446.86 C	BS-4.7 (C) -5.86	0.410 0.00	204 1.78
105	ST PIP2196.0	PASS 434.11 C	BS-4.7 (C) -3.91	0.398 0.00	204 1.78
106	ST PIP2196.0	PASS 408.77 C	BS-4.7 (C) -4.82	0.375 0.00	204 1.78
107	ST PIP2196.0	PASS 370.52 C	BS-4.7 (C) -3.18	0.340 0.00	204 1.78
108	ST PIP2196.0	PASS 320.54 C	BS-4.7 (C) -2.52	0.294 0.00	204 1.78
109	ST PIP2196.0	PASS 262.61 C	BS-4.7 (C) -1.53	0.241 0.00	201 1.78
110	ST PIP2196.0	PASS 274.25 C	BS-4.7 (C) -2.87	0.252 0.00	201 1.78

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Job No TPL40581 | Sheet No a 104 | Rev R4b-FAB2
Job Title Wisma Bella Swimming Pool | Ref Fabric R5 | Wind speed 32.5 m/s
By TSM | Date 17-Dec-11 | Chd TSM
Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
111 ST PIP2194.0	PASS 197.69 C	BS+4.7 (C) -1.29	0.181 0.00	201 1.78	
112 ST PIP2194.0	PASS 187.58 C	BS+4.7 (C) -0.96	0.173 0.00	201 2.07	
113 ST PIP2194.0	PASS 215.22 C	BS+4.7 (C) -3.48	0.195 0.00	201 2.07	
114 ST PIP2194.0	PASS 218.46 C	BS+4.7 (C) -4.29	0.202 0.00	201 2.07	
115 ST PIP2194.0	PASS 223.14 C	BS+4.7 (C) -5.29	0.206 0.00	201 0.00	
116 ST PIP2194.0	PASS 220.15 C	BS+4.7 (C) -4.63	0.204 0.00	201 0.00	
117 ST PIP2194.0	PASS 190.77 C	BS+4.7 (C) -0.48	0.177 0.00	201 0.00	
118 ST PIP2194.0	PASS 202.45 C	BS+4.7 (C) -1.91	0.186 0.00	201 0.00	
119 ST PIP2194.0	PASS 263.47 C	BS+4.7 (C) -2.93	0.240 0.00	201 0.00	
120 ST PIP2194.0	PASS 240.44 C	BS+4.7 (C) -1.38	0.221 0.00	201 0.00	
121 ST PIP2194.0	PASS 253.83 C	BS+4.7 (C) -2.30	0.230 0.00	205 0.00	
122 ST PIP2194.0	PASS 326.46 C	BS+4.7 (C) -2.85	0.299 0.00	205 0.00	
123 ST PIP2194.0	PASS 267.94 C	BS+4.7 (C) -2.62	0.329 0.00	205 0.00	
124 ST PIP2194.0	PASS 290.23 C	BS+4.7 (C) -4.35	0.358 0.00	205 0.00	
125 ST PIP2194.0	PASS 288.93 T	BS+4.8.2.2 -9.99	0.483 0.00	204 1.78	
126 ST PIP2194.0	PASS 288.88 T	BS+4.8.2.2 -10.46	0.486 0.00	204 0.00	
127 ST PIP2194.0	PASS 279.34 C	BS+4.7 (C) -5.88	0.348 0.00	205 0.00	
128 ST PIP2194.0	PASS 326.46 C	BS+4.7 (C) -4.13	0.322 0.00	205 0.00	
129 ST PIP2194.0	PASS 311.39 C	BS+4.7 (C) -3.97	0.296 0.00	205 0.00	
130 ST PIP2194.0	PASS 242.43 C	BS+4.7 (C) -3.46	0.241 0.00	205 0.00	
131 ST PIP2194.0	PASS 264.69 C	BS+4.7 (C) -2.82	0.198 0.00	205 0.00	
132 ST PIP2194.0	PASS 161.15 C	BS+4.7 (C) -1.71	0.148 0.00	208 0.00	

Job No TPL40581 | Sheet No a 105 | Rev R4b-FAB2
Job Title Wisma Bella Swimming Pool | Ref Fabric R5 | Wind speed 32.5 m/s
By TSM | Date 17-Dec-11 | Chd TSM
Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
133 ST PIP2194.0	PASS 164.83 C	BS+4.7 (C) -1.88	0.151 0.00	208 0.00	
134 ST PIP2194.0	PASS 161.42 C	BS+4.7 (C) -1.97	0.149 0.00	208 1.78	
135 ST PIP2194.0	PASS 150.83 C	BS+4.7 (C) -1.54	0.138 0.00	208 1.78	
136 ST PIP2194.0	PASS 173.86 C	BS+4.7 (C) -2.29	0.159 0.00	204 1.78	
137 ST PIP2194.0	PASS 229.29 C	BS+4.7 (C) -3.16	0.210 0.00	204 1.78	
138 ST PIP2194.0	PASS 225.72 T	BS+4.8.2.2 -4.45	0.263 0.00	205 1.49	
139 ST PIP2194.0	PASS 240.47 T	BS+4.8.2.2 -6.26	0.319 0.00	205 1.04	
140 ST PIP2194.0	PASS 246.96 C	BS+4.7 (C) -4.95	0.337 0.00	204 1.78	
141 ST PIP2194.0	PASS 267.83 T	BS+4.8.2.2 -10.25	0.597 0.00	205 1.78	
142 ST PIP2194.0	PASS 429.41 C	BS+4.7 (C) -5.84	0.394 0.00	204 1.78	
143 ST PIP2194.0	PASS 419.67 C	BS+4.7 (C) -5.62	0.384 0.00	204 1.78	
144 ST PIP2194.0	PASS 394.27 C	BS+4.7 (C) -3.98	0.364 0.00	204 1.78	
145 ST PIP2194.0	PASS 361.34 C	BS+4.7 (C) -3.10	0.331 0.00	204 1.78	
146 ST PIP2194.0	PASS 314.23 C	BS+4.7 (C) -2.48	0.288 0.00	204 1.78	
147 ST PIP2194.0	PASS 272.63 C	BS+4.7 (C) -1.52	0.240 0.00	201 1.78	
148 ST PIP2194.0	PASS 135.49 C	BS+4.7 (C) -1.40	0.128 0.00	201 1.78	
149 ST PIP2194.0	PASS 187.37 C	BS+4.7 (C) -0.78	0.173 0.00	201 2.07	
150 ST PIP2194.0	PASS 214.67 C	BS+4.7 (C) -2.66	0.199 0.00	201 2.07	
151 ST PIP2194.0	PASS 218.30 T	BS+4.8.2.2 -8.78	0.405 0.00	204 0.00	
152 ST PIP2194.0	PASS 349.47 C	BS+4.7 (C) -5.16	0.357 0.00	205 0.00	
153 ST PIP2194.0	PASS 314.94 C	BS+4.7 (C) -4.31	0.293 0.00	201 0.00	
154 ST PIP2194.0	PASS 202.28 C	BS+4.7 (C) -5.48	0.269 0.00	201 0.00	

Job No TPL40581 | Sheet No a 106 | Rev R4b-FAB2
Job Title Wisma Bella Swimming Pool | Ref Fabric R5 | Wind speed 32.5 m/s
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Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
153 ST PIP2194.0	PASS 241.23 C	BS+4.7 (C) -3.13	0.223 0.00	201 0.00	
156 ST PIP2194.0	PASS 150.75 C	BS+4.7 (C) -2.35	0.150 0.00	201 0.00	
157 ST PIP2194.0	PASS 199.99 C	BS+4.7 (C) -3.28	0.175 0.00	201 0.00	
158 ST PIP2194.0	PASS 274.78 C	BS+4.7 (C) -1.56	0.252 0.00	201 0.00	
159 ST PIP2194.0	PASS 319.83 C	BS+4.7 (C) -2.49	0.283 0.00	205 0.00	
160 ST PIP2194.0	PASS 163.43 C	BS+4.7 (C) -3.99	0.333 0.00	205 0.00	
161 ST PIP2194.0	PASS 395.78 C	BS+4.7 (C) -4.66	0.362 0.00	205 0.00	
162 ST PIP2194.0	PASS 419.18 C	BS+4.7 (C) -4.80	0.385 0.00	205 0.00	
163 ST PIP2194.0	PASS 461.01 C	BS+4.7 (C) -4.77	0.405 0.00	205 0.00	
164 ST PIP2194.0	PASS 425.83 C	BS+4.7 (C) -4.71	0.391 0.00	205 0.00	
165 ST PIP2194.0	PASS 401.84 C	BS+4.7 (C) -5.53	0.369 0.00	205 0.00	
166 ST PIP2194.0	PASS 367.39 C	BS+4.7 (C) -4.31	0.337 0.00	205 0.00	
167 ST PIP2194.0	PASS 321.71 C	BS+4.7 (C) -4.00	0.295 0.00	205 0.00	
168 ST PIP2194.0	PASS 265.45 C	BS+4.7 (C) -3.33	0.244 0.00	205 0.00	
169 ST PIP2194.0	PASS 158.43 C	BS+4.8.2.2 -4.70	0.206 0.00	204 1.24	
170 ST PIP2194.0	PASS 127.98 T	BS+4.8.2.2 -2.62	0.151 0.00	201 1.78	
171 ST PIP2194.0	PASS 118.39 T	BS+4.8.2.2 -4.68	0.177 0.00	201 1.78	
172 ST PIP2194.0	PASS 124.26 T	BS+4.8.2.2 -4.70	0.175 0.00	201 0.00	
173 ST PIP2194.0	PASS 151.35 C	BS+4.7 (C) -1.70	0.129 0.00	20 0.00	
174 ST PIP2194.0	PASS 171.65 C	BS+4.7 (C) -1.30	0.157 0.00	6 0.00	
175 ST PIP2194.0	PASS 189.43 T	BS+4.8.2.2 -3.23	0.315 0.00	205 1.78	
176 ST PIP2194.0	PASS 243.13 T	BS+4.8.2.2 -5.18	0.389 0.00	205 1.49	

Job No TPL40581 | Sheet No a 107 | Rev R4b-FAB
Job Title Wisma Bella Swimming Pool | Ref Fabric R5 | Wind speed 32.5 m/s
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Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
177 ST PIP2194.0	PASS 279.34 T	BS+4.8.2.2 -7.96	0.358 0.00	205 1.04	
178 ST PIP2194.0	PASS 376.73 C	BS+4.7 (C) -4.94	0.347 0.00	204 1.78	
179 ST PIP2194.0	PASS 423.46 C	BS+4.7 (C) -5.34	0.389 0.00	204 1.78	
180 ST PIP2194.0	PASS 458.19 C	BS+4.7 (C) -6.15	0.421 0.00	204 1.78	
181 ST PIP2194.0	PASS 447.32 C	BS+4.7 (C) -5.55	0.418 0.00	204 1.78	
182 ST PIP2194.0	PASS 427.24 C	BS+4.7 (C) -4.20	0.392 0.00	204 1.78	
183 ST PIP2194.0	PASS 384.86 C	BS+4.7 (C) -3.35	0.362 0.00	204 1.78	
184 ST PIP2194.0	PASS 349.74 C	BS+4.7 (C) -3.15	0.321 0.00	204 1.78	
185 ST PIP2194.0	PASS 345.97 C	BS+4.7 (C) -2.11	0.317 0.00	201 1.78	
186 ST PIP2194.0	PASS 356.64 C	BS+4.7 (C) -3.53	0.327 0.00	201 1.78	
187 ST PIP2194.0	PASS 256.88 C	BS+4.7 (C) -1.58	0.230 0.00	201 1.78	
188 ST PIP2194.0	PASS 240.68 C	BS+4.7 (C) -1.66	0.223 0.00	201 2.07	
189 ST PIP2194.0	PASS 277.68 C	BS+4.7 (C) -4.89	0.257 0.00	201 2.07	
190 ST PIP2194.0	PASS 282.91 C	BS+4.7 (C) -5.28	0.261 0.00	201 2.07	
191 ST PIP2194.0	PASS 314.04 C	BS+4.7 (C) -6.17	0.293 0.00	201 0.00	
192 ST PIP2194.0	PASS 311.78 C	BS+4.7 (C) -5.72	0.288 0.00	201 0.00	
193 ST PIP2194.0	PASS 241.68 C	BS+4.7 (C) -1.68	0.223 0.00	201 0.00	
194 ST PIP2194.0	PASS 248.96 C	BS+4.7 (C) -2.43	0.226 0.00	201 0.00	
195 ST PIP2194.0	PASS 297.61 C	BS+4.7 (C) -2.98	0.273 0.00	201 0.00	
196 ST PIP2194.0	PASS 273.45 C	BS+4.7 (C) -1.53	0.251 0.00	201 0.00	
197 ST PIP2194.0	PASS 318.21 C	BS+4.7 (C) -2.40	0.292 0.00	201 0.00	
198 ST PIP2194.0	PASS 363.18 C	BS+4.7 (C) -2.87	0.333 0.00	205 0.00	

Job No TPL40581 | Sheet No a 108 | Rev R4b-FAB2
Job Title Wisma Bella Swimming Pool | Ref Fabric R5 | Wind speed 32.5 m/s
By TSM | Date 17-Dec-11 | Chd TSM
Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
199 ST PIP2194.0	PASS 285.97 C	BS+4.7 (C) -4.67	0.263 0.00	205 0.00	
200 ST PIP2194.0	PASS 459.91 C	BS+4.7 (C) -4.88	0.395 0.00	205 0.00	
201 ST PIP2194.0	PASS 441.95 C	BS+4.7 (C) -4.72	0.405 0.00	205 0.00	
202 ST PIP2194.0	PASS 426.41 C	BS+4.7 (C) -4.76	0.391 0.00	205 0.00	
203 ST PIP2194.0	PASS 401.84 C	BS+4.7 (C) -5.19	0.369 0.00	205 0.00	
204 ST PIP2194.0	PASS 366.26 C	BS+4.7 (C) -4.28	0.336 0.00	205 0.00	
205 ST PIP2194.0	PASS 319.68 C	BS+4.7 (C) -3.57	0.293 0.00	205 0.00	
206 ST PIP2194.0	PASS 232.46 C	BS+4.7 (C) -3.36	0.241 0.00	205 0.00	
207 ST PIP2194.0	PASS 156.19 T	BS+4.8.2.2 -4.66	0.203 0.00	204 1.24	
208 ST PIP2194.0	PASS 126.78 T	BS+4.8.2.2 -2.63	0.159 0.00	201 1.78	
209 ST PIP2194.0	PASS 128.64 T	BS+4.8.2.2 -4.35	0.174 0.00	201 1.78	
210 ST PIP2194.0	PASS 122.77 T	BS+4.8.2.2 -4.57	0.172 0.00	201 0.00	
211 ST PIP2194.0	PASS 158.35 C	BS+4.7 (C) -1.75	0.138 0.00	12 0.00	
212 ST PIP2194.0	PASS 127.34 T	BS+4.8.2.2 -2.99	0.154 0.00	205 1.78	
213 ST PIP2194.0	PASS 187.87 T	BS+4.8.2.2 -3.21	0.212 0.00	205 1.78	
214 ST PIP2194.0	PASS 238.23 T	BS+4.8.2.2 -5.12	0.294 0.00	205 1.49	
215 ST PIP2194.0	PASS 271.82 T	BS+4.8.2.2 -7.39	0.351 0.00	205 1.04	
216 ST PIP2194.0	PASS 374.34 C	BS+4.7 (C) -4.88	0.343 0.00	204 1.78	
217 ST PIP2194.0	PASS 419.21 C	BS+4.7 (C) -5.35	0.385 0.00	204 1.78	
218 ST PIP2194.0	PASS 453.28 C	BS+4.7 (C) -6.13	0.418 0.00	204 1.78	
219 ST PIP2194.0	PASS 443.32 C	BS+4.7 (C) -5.52	0.417 0.00	204 1.78	
220 ST PIP2194.0	PASS 424.81 C	BS+4.7 (C) -4.17	0.389 0.00	204 1.78	

Job No TPL40581 | Sheet No a 109 | Rev R4b-FAB2
Job Title Wisma Bella Swimming Pool | Ref Fabric R5 | Wind speed 32.5 m/s
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Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
221 ST PIP2194.0	PASS 191.89 C	BS+4.7 (C) -3.23	0.168 0.00	204 1.78	
222 ST PIP2194.0	PASS 347.27 C	BS+4.7 (C) -2.73	0.319 0.00	204 1.78	
223 ST PIP2194.0	PASS 242.96 C	BS+4.7 (C) -2.69	0.315 0.00	201 1.78	
224 ST PIP2194.0	PASS 254.81 C	BS+4.7 (C) -3.34	0.325 0.00	201 1.78	
225 ST PIP2194.0	PASS 248.98 C	BS+4.7 (C) -1.62	0.224 0.00	201 1.78	
226 ST PIP2194.0	PASS 239.86 C	BS+4.7 (C) -1.03	0.222 0.00	201 2.07	
227 ST PIP2194.0	PASS 274.49 C	BS+4.7 (C) -4.51	0.256 0.00	201 2.07	
228 ST PIP2194.0	PASS 264.72 C	BS+4.7 (C) -4.22	0.249 0.00	201 2.07	
229 ST PIP2194.0	PASS 254.47 C	BS+4.7 (C) -4.27	0.237 0.00	201 0.00	
230 ST PIP2194.0	PASS 252.52 C	BS+4.7 (C) -4.48	0.234 0.00	201 0.00	
231 ST PIP2194.0	PASS 207.33 C	BS+4.7 (C) -2.14	0.193 0.00	201 0.00	
232 ST PIP2194.0	PASS 242.14 C	BS+4.7 (C) -2.79	0.222 0.00	201 0.00	
234 ST PIP2194.0	PASS 233.29 C	BS+4.7 (C) -1.76	0.212 0.00	205 0.00	
235 ST PIP2194.0	PASS 255.67 C	BS+4.7 (C) -2.19	0.245 0.00	205 0.00	
236 ST PIP2194.0	PASS 235.06 C	BS+4.7 (C) -2.76	0.307 0.00	205 0.00	
237 ST PIP2194.0	PASS 263.69 C	BS+4.7 (C) -3.82	0.339 0.00	205 0.00	
238 ST PIP2194.0	PASS 255.39 C	BS+4.7 (C) -4.33	0.343 0.00	205 0.00	
239 ST PIP2194.0	PASS 324.82 T	BS+4.8.2.2 -9.48	0.488 0.00	204 1.78	
240 ST PIP2194.0	PASS 218.30 T	BS+4.8.2.2 -8.78	0.405 0.00	204 0.00	
241 ST PIP2194.0	PASS 349.47 C	BS+4.7 (C) -5.16	0.357 0.00	205 0.00	
242 ST PIP2194.0	PASS 202.28 C	BS+4.7 (C) -5.48	0.269 0.00	201 0.00	

Job No TPL40581 | Sheet No a 110 | Rev R4b-FAB2
Job Title Wisma Bella Swimming Pool | Ref Fabric R5 | Wind speed 32.5 m/s
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Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
243 ST PIP2194.0	PASS 323.43 C	BS+4.7 (C) -3.23	0.296 0.00	205 0.00	
244 ST PIP2194.0	PASS 273.92 C	BS+4.7 (C) -3.53	0.251 0.00	205 0.00	
245 ST PIP2194.0	PASS 214.38 C	BS+4.7 (C) -3.94	0.198 0.00	205 0.00	
246 ST PIP2194.0	PASS 165.86 C	BS+4.7 (C) -1.79	0.151 0.00	208 0.00	
247 ST PIP2194.0	PASS 167.91 C	BS+4.7 (C) -1.77	0.153 0.00	208 0.00	
248 ST PIP2194.0	PASS 161.73 C	BS+4.7 (C) -1.59	0.148 0.00	208 1.78	
249 ST PIP2194.0	PASS 149.27 C	BS+4.7 (C) -1.53	0.137 0.00	208 1.78	
250 ST PIP2194.0	PASS 172.92 C	BS+4.7 (C) -2.45	0.159 0.00	204 1.78	
251 ST PIP2194.0	PASS 229.69 C	BS+4.7 (C) -3.17	0.210 0.00	204 1.78	
252 ST PIP2194.0	PASS 228.91 T	BS+4.8.2.2 -4.49	0.267 0.00	205 1.49	
253 ST PIP2194.0	PASS 267.13 T	BS+4.8.2.2 -4.24	0.326 0.00	205 1.04	
254 ST PIP2194.0	PASS 369.63 C	BS+4.7 (C) -4.93	0.339 0.00	204 1.78	
255 ST PIP2194.0	PASS 260.18 T	BS+4.8.2.2 -8.19	0.381 0.00	205 1.78	
256 ST PIP2194.0	PASS 438.18 C	BS+4.7 (C) -5.79	0.396 0.00	204 1.78	
257 ST PIP2194.0	PASS 421.45 C	BS+4.7 (C) -3.83	0.337 0.00	204 1.78	
258 ST PIP2194.0	PASS 398.39 C	BS+4.7 (C) -3.92	0.365 0.00	204 1.78	
259 ST PIP2194.0	PASS 262.54 C	BS+4.7 (C) -3.12	0.233 0.00	204 1.78	
260 ST PIP2194.0	PASS 315.80 C	BS+4.7 (C) -2.45	0.289 0.00	204 1.78	
261 ST PIP2194.0	PASS 276.36 C	BS+4.7 (C) -1.62	0.233 0.00	201 1.78	
262 ST PIP2194.0	PASS 285.18 C	BS+4.7 (C) -2.65	0.262 0.00	201 1.78	
263 ST PIP2194.0	PASS 189.43 T	BS+4.7 (C) -1.28	0.185 0.00	201 1.78	
264 ST PIP2194.0	PASS 193.22 C	BS+4.7 (C) -0.87	0.179 0.00	201 2.07	

Job No TPL40581 | Sheet No a 111 | Rev R4b-FAB
Job Title Wisma Bella Swimming Pool | Ref Fabric R5 | Wind speed 32.5 m/s
By TSM | Date 17-Dec-11 | Chd TSM
Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
265 ST PIP2194.0	PASS 222.20 C	BS+4.7 (C) -3.55	0.256 0.00	201 2.07	
266 ST PIP2194.0	PASS 225.41 C	BS+4.7 (C) -4.23	0.259 0.00	201 2.07	
267 ST PIP2194.0	PASS 253.54 C	BS+4.7 (C) -4.32	0.324 0.00	201 0.00	
268 ST PIP2194.0	PASS 252.06 C	BS+4.7 (C) -4.44	0.323 0.00	201 0.00	
269 ST PIP2194.0	PASS 197.27 C	BS+4.7 (C) -0.85	0.193 0.00	201 0.00	
270 ST PIP2194.0	PASS 204.24 C	BS+4.7 (C) -2.21	0.169 0.00	201 0.00	
271 ST PIP2194.0	PASS 239.83 C	BS+4.7 (C) -2.18	0.220 0.00	201 0.00	
272 ST PIP2194.0	PASS 230.86 C	BS+4.7 (C) -1.66	0.213 0.00	205 0.00	
273 ST PIP2194.0	PASS 249.47 C	BS+4.7 (C) -2.18	0.265 0.00	205 0.00	
274 ST PIP2194.0	PASS 334.28 C	BS+4.7 (C) -2.79	0.307 0.00	205 0.00	
275 ST PIP2194.0	PASS 348.32 C	BS+4.7 (C) -3.39	0.338 0.00	205 0.00	
276 ST PIP2194.0	PASS 317.48 T	BS+4.8.2.2 -4.69	0.368 0.00	204 1.04	
277 ST PIP2194.0	PASS 341.93 T	BS+4.8.2.2 -7.25	0.466 0.00	204 1.78	
278 ST PIP2194.0	PASS 333.34 T	BS+4.8.2.2 -7.49	0.481 0.00	204 0.00	
279 ST PIP2194.0	PASS 289.99 C	BS+4.7 (C) -5.24	0.258 0.00	205 0.00	
280 ST PIP2194.0	PASS 263.97 C	BS+4.7 (C) -4.24	0.333 0.00	205 0.00	
281 ST PIP2194.0	PASS 223.43 C	BS+4.7 (C) -4.62	0.289 0.00	205 0.00	
282 ST PIP2194.0	PASS 274.18 C	BS+4.7 (C) -3.37	0.255 0.00	205 0.00	
283 ST PIP2194.0	PASS 221.83 C	BS+4.7 (C) -3.02	0.293 0.00	205 0.00	
284 ST PIP2194.0	PASS 170.51 C	BS+4.7 (C) -1.86	0.156 0.00	208 0.00	
285 ST PIP2194.0	PASS 172.73 C	BS+4.7 (C) -1.47	0.159 0.00	208 0.00	
286 ST PIP2194.0	PASS 148.81 C	BS+4.7 (C) -1.49	0.135 0.00	208 1.78	

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Job No TPL40581 | Sheet No a 112 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Ref Fabric R5 | Par wind speed 32.5 m/s

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
287 ST PIP2196.0	PASS	BS-4.7 (C)	0.133	201	
	155.84 C	-1.61	0.00	1.78	
288 ST PIP2196.0	PASS	BS-4.7 (C)	0.146	206	
	181.27 C	-2.51	0.00	1.78	
289 ST PIP2196.0	PASS	BS-4.7 (C)	0.217	204	
	236.76 C	-3.27	0.00	1.78	
290 ST PIP2196.0	PASS	BS-4.8.2.2	0.272	205	
	233.75 T	-4.55	0.00	1.49	
291 ST PIP2196.0	PASS	BS-4.8.2.2	0.324	205	
	274.82 T	-6.46	0.00	1.04	
292 ST PIP2196.0	PASS	BS-4.7 (C)	0.343	206	
	374.44 C	-4.99	0.00	1.78	
293 ST PIP2196.0	PASS	BS-4.8.2.2	0.377	205	
	312.93 T	-7.06	0.00	1.78	
294 ST PIP2196.0	PASS	BS-4.7 (C)	0.400	204	
	425.36 C	-5.93	0.00	1.78	
295 ST PIP2196.0	PASS	BS-4.7 (C)	0.2000	204	
	424.39 C	-2.86	0.00	1.78	
296 ST PIP2196.0	PASS	BS-4.7 (C)	0.367	204	
	488.44 C	-3.93	0.00	1.78	
297 ST PIP2196.0	PASS	BS-4.7 (C)	0.334	204	
	363.65 C	-3.21	0.00	1.78	
298 ST PIP2196.0	PASS	BS-4.7 (C)	0.289	204	
	313.28 C	-2.47	0.00	1.78	
299 ST PIP2196.0	PASS	BS-4.7 (C)	0.256	201	
	274.37 C	-1.60	0.00	1.78	
300 ST PIP2196.0	PASS	BS-4.7 (C)	0.259	201	
	282.48 C	-2.72	0.00	1.78	
301 ST PIP2196.0	PASS	BS-4.7 (C)	0.184	201	
	199.22 C	-1.34	0.00	1.78	
302 ST PIP2196.0	PASS	BS-4.7 (C)	0.172	201	
	192.67 C	-0.85	0.00	2.07	
303 ST PIP2196.0	PASS	BS-4.7 (C)	0.205	201	
	221.32 C	-3.75	0.00	2.07	
304 ST PIP2196.0	PASS	BS-4.7 (C)	0.209	201	
	226.46 C	-3.27	0.00	2.07	
305 ST PIP2196.0	PASS	BS-4.7 (C)	0.197	201	
	223.78 C	-4.16	0.00	0.00	
306 ST PIP2196.0	PASS	BS-4.7 (C)	0.206	201	
	220.74 C	-3.99	0.00	0.00	
307 ST PIP2196.0	PASS	BS-4.7 (C)	0.177	201	
	190.83 C	-4.72	0.00	0.00	
308 ST PIP2196.0	PASS	BS-4.7 (C)	0.187	201	
	202.46 C	-1.87	0.00	0.00	

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Job No TPL40581 | Sheet No a 113 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Ref Fabric R5 | Par wind speed 32.5 m/s

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
309 ST PIP2196.0	PASS	BS-4.7 (C)	0.243	201	
	265.33 C	-3.14	0.00	0.00	
310 ST PIP2196.0	PASS	BS-4.7 (C)	0.221	201	
	241.96 C	-1.39	0.00	0.00	
311 ST PIP2196.0	PASS	BS-4.7 (C)	0.270	205	
	294.37 C	-2.21	0.00	0.00	
312 ST PIP2196.0	PASS	BS-4.7 (C)	0.269	205	
	334.69 C	-2.84	0.00	0.00	
313 ST PIP2196.0	PASS	BS-4.7 (C)	0.320	205	
	368.26 C	-3.63	0.00	0.00	
314 ST PIP2196.0	PASS	BS-4.7 (C)	0.334	205	
	360.38 C	-4.28	0.00	0.00	
315 ST PIP2196.0	PASS	BS-4.8.2.2	0.404	204	
	298.53 T	-10.68	0.00	1.78	
316 ST PIP2196.0	PASS	BS-4.8.2.2	0.486	204	
	350.71 T	-15.71	0.00	0.00	
317 ST PIP2196.0	PASS	BS-4.7 (C)	0.268	205	
	379.35 C	-5.66	0.00	0.00	
318 ST PIP2196.0	PASS	BS-4.7 (C)	0.321	205	
	350.34 C	-4.18	0.00	0.00	
319 ST PIP2196.0	PASS	BS-4.7 (C)	0.295	205	
	311.56 C	-3.84	0.00	0.00	
320 ST PIP2196.0	PASS	BS-4.7 (C)	0.240	205	
	251.32 C	-3.29	0.00	0.00	
321 ST PIP2196.0	PASS	BS-4.7 (C)	0.197	205	
	204.63 C	-2.81	0.00	0.00	
322 ST PIP2196.0	PASS	BS-4.7 (C)	0.146	206	
	159.43 C	-1.68	0.00	0.00	
323 ST PIP2196.0	PASS	BS-4.7 (C)	0.149	206	
	162.68 C	-1.63	0.00	1.78	
324 ST PIP2196.0	PASS	BS-4.7 (C)	0.146	206	
	159.56 C	-1.52	0.00	1.78	
325 ST PIP2196.0	PASS	BS-4.7 (C)	0.136	206	
	148.26 C	-1.52	0.00	1.78	
326 ST PIP2196.0	PASS	BS-4.7 (C)	0.130	204	
	152.13 C	-2.34	0.00	1.78	
327 ST PIP2196.0	PASS	BS-4.7 (C)	0.209	204	
	237.52 C	-3.14	0.00	1.78	
328 ST PIP2196.0	PASS	BS-4.8.2.2	0.262	205	
	225.58 T	-4.45	0.00	1.49	
329 ST PIP2196.0	PASS	BS-4.8.2.2	0.319	205	
	268.07 T	-6.38	0.00	1.04	
330 ST PIP2196.0	PASS	BS-4.7 (C)	0.234	204	
	266.21 C	-4.85	0.00	1.78	

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Job No TPL40581 | Sheet No a 114 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Ref Fabric R5 | Par wind speed 32.5 m/s

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
331 ST PIP2196.0	PASS	BS-4.8.2.2	0.286	205	
	184.93 T	-10.67	0.00	1.78	
332 ST PIP2196.0	PASS	BS-4.7 (C)	0.291	204	
	428.30 C	-3.85	0.00	1.78	
333 ST PIP2196.0	PASS	BS-4.7 (C)	0.285	204	
	419.41 C	-3.82	0.00	1.78	
334 ST PIP2196.0	PASS	BS-4.7 (C)	0.264	204	
	387.14 C	-3.81	0.00	1.78	
335 ST PIP2196.0	PASS	BS-4.7 (C)	0.232	204	
	282.13 C	-3.12	0.00	1.78	
336 ST PIP2196.0	PASS	BS-4.7 (C)	0.289	204	
	315.28 C	-2.48	0.00	1.78	
337 ST PIP2196.0	PASS	BS-4.7 (C)	0.242	201	
	263.76 C	-1.94	0.00	1.78	
338 ST PIP2196.0	PASS	BS-4.7 (C)	0.252	201	
	274.98 C	-2.84	0.00	1.78	
339 ST PIP2196.0	PASS	BS-4.7 (C)	0.191	201	
	197.58 C	-1.37	0.00	1.78	
340 ST PIP2196.0	PASS	BS-4.7 (C)	0.174	201	
	188.04 C	-0.79	0.00	2.07	
341 ST PIP2196.0	PASS	BS-4.7 (C)	0.200	201	
	215.75 C	-3.43	0.00	2.07	
342 ST PIP2196.0	PASS	BS-4.7 (C)	0.203	201	
	219.80 C	-0.17	0.00	2.07	
343 ST PIP2196.0	PASS	BS-4.7 (C)	0.206	201	
	222.98 C	-0.43	0.00	0.00	
344 ST PIP2196.0	PASS	BS-4.7 (C)	0.203	201	
	219.88 C	-4.83	0.00	0.00	
345 ST PIP2196.0	PASS	BS-4.7 (C)	0.174	201	
	188.03 C	-1.88	0.00	0.00	
346 ST PIP2196.0	PASS	BS-4.7 (C)	0.186	201	
	202.49 C	-1.93	0.00	0.00	
347 ST PIP2196.0	PASS	BS-4.7 (C)	0.241	201	
	262.95 C	-2.99	0.00	0.00	
348 ST PIP2196.0	PASS	BS-4.7 (C)	0.221	205	
	241.11 C	-1.73	0.00	0.00	
349 ST PIP2196.0	PASS	BS-4.7 (C)	0.273	205	
	297.85 C	-2.32	0.00	0.00	
350 ST PIP2196.0	PASS	BS-4.7 (C)	0.315	205	
	342.98 C	-2.89	0.00	0.00	
351 ST PIP2196.0	PASS	BS-4.7 (C)	0.346	205	
	376.82 C	-3.98	0.00	0.00	
352 ST PIP2196.0	PASS	BS-4.8.2.2	0.389	204	
	338.88 T	-4.85	0.00	1.04	

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Job No TPL40581 | Sheet No a 115 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Ref Fabric R5 | Par wind speed 32.5 m/s

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
353 ST PIP2196.0	PASS	BS-4.8.2.2	0.450	204	
	350.81 T	-5.98	0.00	1.78	
354 ST PIP2196.0	PASS	BS-4.8.2.2	0.384	204	
	347.18 T	-6.88	0.00	0.00	
355 ST PIP2196.0	PASS	BS-4.7 (C)	0.363	205	
	380.58 C	-5.24	0.00	0.00	
356 ST PIP2196.0	PASS	BS-4.7 (C)	0.337	205	
	367.78 C	-4.32	0.00	0.00	
357 ST PIP2196.0	PASS	BS-4.7 (C)	0.302	205	
	329.46 C	-4.10	0.00	0.00	
358 ST PIP2196.0	PASS	BS-4.7 (C)	0.256	205	
	281.39 C	-3.65	0.00	0.00	
359 ST PIP2196.0	PASS	BS-4.7 (C)	0.206	205	
	224.39 C	-3.08	0.00	0.00	
360 ST PIP2196.0	PASS	BS-4.7 (C)	0.157	208	
	170.81 C	-1.94	0.00	0.00	
361 ST PIP2196.0	PASS	BS-4.7 (C)	0.143	208	
	176.49 C	-1.55	0.00	0.00	
362 ST PIP2196.0	PASS	BS-4.7 (C)	0.159	208	
	173.51 C	-1.42	0.00	1.78	
363 ST PIP2196.0	PASS	BS-4.7 (C)	0.148	208	
	161.24 C	-1.68	0.00	1.78	
364 ST PIP2196.0	PASS	BS-4.7 (C)	0.178	204	
	194.69 C	-2.69	0.00	1.78	
365 ST PIP2196.0	PASS	BS-4.7 (C)	0.229	208	
	250.06 C	-3.44	0.00	1.78	
366 ST PIP2196.0	PASS	BS-4.8.2.2	0.291	205	
	251.41 T	-4.74	0.00	1.49	
367 ST PIP2196.0	PASS	BS-4.8.2.2	0.356	205	
	306.92 T	-5.86	0.00	1.04	
368 ST PIP2196.0	PASS	BS-4.7 (C)	0.201	204	
	421.28 C	-4.94	0.00	1.78	
369 ST PIP2196.0	PASS	BS-4.7 (C)	0.166	204	
	444.88 C	-5.87	0.00	1.78	
370 ST PIP2196.0	PASS	BS-4.7 (C)	0.298	204	
	423.78 C	-5.38	0.00	1.78	
371 ST PIP2196.0	PASS	BS-4.7 (C)	0.274	204	
	408.23 C	-4.01	0.00	1.78	
372 ST PIP2196.0	PASS	BS-4.7 (C)	0.339	204	
	349.74 C	-3.18	0.00	1.78	
373 ST PIP2196.0	PASS	BS-4.7 (C)	0.292	204	
	319.53 C	-2.50	0.00	1.78	

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Job No TPL40581 | Sheet No a 116 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Ref Fabric R5 | Par wind speed 32.5 m/s

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
375 ST PIP2196.0	PASS	BS-4.7 (C)	0.229	201	
	269.73 C	-1.82	0.00	1.78	
376 ST PIP2196.0	PASS	BS-4.7 (C)	0.2000	201	
	272.62 C	-2.71	0.00	1.78	
377 ST PIP2196.0	PASS	BS-4.7 (C)	0.179	201	
	193.45 C	-1.43	0.00	1.78	
378 ST PIP2196.0	PASS	BS-4.7 (C)	0.173	201	
	186.80 C	-0.85	0.00	2.07	
379 ST PIP2196.0	PASS	BS-4.7 (C)	0.198	201	
	214.27 C	-3.48	0.00	2.07	
380 ST PIP2196.0	PASS	BS-4.7 (C)	0.201	201	
	217.44 C	-0.34	0.00	2.07	
381 ST PIP2196.0	PASS	BS-4.7 (C)	0.367	208	
	418.52 C	-3.23	0.00	0.00	
382 ST PIP2196.0	PASS	BS-4.7 (C)	0.372	208	
	492.16 C	-3.36	0.00	0.00	
383 ST PIP2196.0	PASS	BS-4.7 (C)	0.331	208	
	349.43 C	-9.17	0.00	0.00	
384 ST PIP2196.0	PASS	BS-4.8.2.2	0.282	208	
	184.19 T	-10.58	0.00	1.78	
385 ST PIP2196.0	PASS	ANNEX J.1	0.397	208	
	72.55 C	-4.31	20.24	-	
386 ST PIP2196.0	PASS	BS-4.8.2.2	0.228	0	
	167.70 T	-5.79	0.00	0.00	
387 ST PIP2196.0	PASS	BS-4.8.2.2	0.247	0	
	186.99 T	-5.93	0.00	0.00	
388 ST PIP2196.0	PASS	BS-4.8.2.2	0.251	0	
	200.67 T	-5.55	0.00	1.78	
389 ST PIP2196.0	PASS	BS-4.7 (C)	0.299	205	
	325.56 C	-2.34	0.00	0.00	
390 ST PIP2196.0	PASS	BS-4.7 (C)	0.341	205	
	371.64 C	-2.35	0.00	0.00	
391 ST PIP2196.0	PASS	BS-4.7 (C)	0.376	205	
	413.46 C	-3.48	0.00	0.00	
392 ST PIP2196.0	PASS	BS-4.8.2.2	0.372	204	
	143.93 T	-18.15	0.00	0.00	
393 ST PIP2196.0	PASS	BS-4.8.2.2	0.293	204	
	178.21 T	-9.93	0.00	1.78	
394 ST PIP2196.0	PASS	BS-4.8.2.2	0.246	204	
	207.52 T	-7.40	0.00	0.00	
395 ST PIP2196.0	PASS	BS-4.8.2.2	0.296	204	
	229.58 T	-6.67	0.00	1.78	
396 ST PIP2196.0	PASS	BS-4.8.2.2	0.262	204	
	214.77 T	-12.56	0.00	0.00	

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Job No TPL40581 | Sheet No a 117 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Ref Fabric R5 | Par wind speed 32.5 m/s

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
397 ST PIP2196.0	PASS	BS-4.8.2.2	0.292	207	
	221.57 T	-6.88	0.00	1.78	
398 ST PIP2196.0	PASS	BS-4.8.2.2	0.288	207	
	227.42 T	-7.77	0.00	0.00	
399 ST PIP2196.0	PASS	BS-4.8.2.2	0.388	207	
	222.39 T	-14.00	0.00	1.78	
400 ST PIP2196.0	PASS	BS-4.8.2.2	0.395	207	
	229.93 T	-13.98	0.00	0.00	
401 ST PIP2196.0	PASS	BS-4.8.2.2	0.306	207	
	224.82 T	-7.73	0.00	1.78	
402 ST PIP2196.0	PASS	BS-4.8.2.2	0.290	207	
	217.74 T	-6.96	0.00	0.00	
403 ST PIP2196.0	PASS	BS-4.8.2.2	0.313	205	
	282.39 T	-5.71	0.00	1.78	
404 ST PIP2196.0	PASS	BS-4.8.2.2	0.230	205	
	214.95 T	-4.88	0.00	1.78	
405 ST PIP2196.0	PASS	BS-4.8.2.2	0.2021	205	
	195.22 T	-6.34	0.00	1.04	
406 ST PIP2196.0	PASS	BS-4.7 (C)	0.266	204	
	299.84 C	-2.72	0.00	1.78	
407 ST PIP2196.0	PASS	BS-4.8.2.2	0.355	205	
	131.59 T	-17.72	0.00	1.78	
408 ST PIP2196.0	PASS	BS-4.8.2.2	0.347	205	
	156.44 T	-16.90	0.00	0.00	
409 ST PIP2196.0	PASS	BS-4.7 (C)	0.322	204	
	358.77 C	-4.35	0.00	1.78	
410 ST PIP2196.0	PASS	BS-4.7 (C)	0.283	204	
	306.32 C	-2.41	0.00	1.78	
411 ST PIP2196.0	PASS	BS-4.8.2.2	0.244	9	
	188.47 T	-5.33	0.00	0.00	
412 ST PIP2196.0	PASS	BS-4.8.2.2	0.2000	9	
	177.27 T	-5.83	0.00	1.78	
413 ST PIP2196.0	PASS	BS-4.8.2.2	0.220	9	
	160.56 T	-5.58	0.00	1.78	
414 ST PIP2196.0	PASS	ANNEX J.1	0.394	208	
	72.42 C	-8.48	20.48	-	
415 ST PIP2196.0	PASS	BS-4.8.2.2	0.263	208	
	164.58 T	-12.83	0.00	0.00	
416 ST PIP2196.0	PASS	BS-4.7 (C)	0.2000	208	
	253.97 C	-9.10	0.00	2.07	
417 ST PIP2196.0	PASS	BS-4.7 (C)	0.376	208	
	406.16 C	-2.48	0.00	2.07	
418 ST PIP2196.0	PASS	BS-4.7 (C)	0.391	208	
	422.66 C	-7.65	0.00	2.07	

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Job No TPL40581 | Sheet No a 118 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Ref Fabric R5 | Par wind speed 32.5 m/s

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
419 ST PIP2196.0	PASS	BS-4.7 (C)	0.334	208	
	283.29 C	-8.64	0.00	0.00	
420 ST PIP2196.0	PASS	BS-4.7 (C)	0.331	208	
	357.38 C	-7.78	0.00	0.00	
421 ST PIP2196.0	PASS	BS-4.7 (C)	0.306	208	
	330.98 C	-6.48	0.00	0.00	
422 ST PIP2196.0	PASS	BS-4.7 (C)	0.292	201	
	318.83 C	-3.31	0.00	0.00	
423 ST PIP2196.0	PASS	ANNEX J.1	0.399	208	
	72.55 C	-4.31	18.48	-	
424 ST PIP2196.0	PASS	BS-4.7 (C)	0.375	201	
	299.99 C	-3.62	0.00	0.00	
425 ST PIP2196.0	PASS	BS-4.7 (C)	0.299	205	
	324.25 C	-5.64	0.00	0.00	
426 ST PIP2194.5	PASS	BS-4.7 (C)	0.320	205	
	349.24 C	-5.64	0.00	0.00	
427 ST PIP2196.0	PASS	BS-4.7 (C)	0.339	205	
	370.69 C	-4.81	0.00	0.00	
428 ST PIP2196.0	PASS	BS-4.7 (C)	0.335	205	
	366.69 C	-5.81	0.00	0.00	
429 ST PIP2196.0	PASS	BS-4.8.2.2	0.588	204	
	288.48 T	-24.47	0.00	1.78	
430 ST PIP2196.0	PASS	BS-4.8.2.2	0.594	204	
	279.38 T	-25.64	0.00	0.00	
431 ST PIP2196.0	PASS	BS-4.8.2.2	0.334	204	
	272.48 T	-6.57	0.00	1.78	
432 ST PIP2196.0	PASS	BS-4.8.2.2	0.286	204	
	251.22 T	-4.44	0.00	1.78	
433 ST PIP2196.0	PASS	BS-4.8.2.2	0.318	204	
	314.89 T	-9.24	0.00	1.78	
434 ST PIP2196.0	PASS	BS-4.8.2.2	0.2000	204	
	177.51 T	-16.84	0.00	0.00	
435 ST PIP2196.0	PASS	BS-4.8.2.2	0.277	208	
	247.01 T	-3.99	0.00	1.78	
436 ST PIP2196.0	PASS	BS-4.8.2.2	0.282	208	
	252.47 T	-3.37	0.00	1.78	
437 ST PIP2196.0	PASS	BS-4.8.2.2	0.329	201	
	112.34 T	-17.99	0.00	1.78	
438 ST PIP2196.0	PASS	BS-4.8.2.2	0.331	201	
	117.02 T	-16.97	0.00	0.00	
439 ST PIP2196.0	PASS	BS-4.8.2.2	0.299	208	
	269.37 T	-3.58	0.00	0.00	
440 ST PIP2196.0	PASS	BS-4.8.2.2	0.299	208	
	256.52 T	-4.88	0.00	0.00	

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Job No TPL40581 | Sheet No a 119 | Rev R4b-FAB

Job Title Wisma Bella Swimming Pool | Ref Fabric R5 | Par wind speed 32.5 m/s

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
441 ST PIP2196.0	PASS	BS-4.8.2.2	0.341	205	
	284.21 T	-11.79	0.00	1.78	
442 ST PIP2196.0	PASS	BS-4.8.2.2	0.356	205	
	247.93 T	-15.22	0.00	0.00	
443 ST PIP2196.0	PASS	BS-4.8.2.2	0.223	205	
	280.87 T	-5.23	0.00	1.04	
444 ST PIP2196.0	PASS	BS-4.8.2.2	0.337	205	
	292.30 T	-5.43	0.00	0.00	
445 ST PIP2196.0	PASS	BS-4.8.2.2	0.383	205	
	288.20 T	-14.91	0.00	1.78	
446 ST PIP2196.0	PASS	BS-4.8.2.2	0.587	205	
	288.81 T	-25.29	0.00	0.00	
447 ST PIP2196.0	PASS	BS-4.7 (C)	0.371	204	
	410.95 C	-7.13	0.00	1.78	
448 ST PIP2196.0	PASS	BS-4.7 (C)	0.337	204	
	369.58 C	-5.95	0.00	1.78	
449 ST PIP2196.0	PASS	BS-4.7 (C)	0.332	204	
	341.96 C	-4.51	0.00	1.78	
450 ST PIP2196.0	PASS	BS-4.7 (C)	0.305	204	
	332.77 C	-3.63	0.00	1.78	
451 ST PIP2196.0	PASS	BS-4.7 (C)	0.276	201	
	283.48 C	-1.25	0.00	1.78	
452 ST PIP2196.0	PASS	ANNEX J.1	0.400	208	
	72.55 C	-4.31	18.81	-	
453 ST PIP2196.0	PASS	BS-4.7 (C)	0.243	201	
	268.83 C	-3.65	0.00	1.78	
454 ST PIP2196.0	PASS	BS-4.7 (C)	0.303	208	
	227.22 C	-6.41	0.00	2.07	
455 ST PIP2196.0	PASS	BS-4.7 (C)	0.329	208	
	265.22 C	-7.72	0.00	2.07	
456 ST PIP2196.0	PASS	BS-4.7 (C)	0.232	208	
	253.24 C	-5.42	0.00	2.07	
457 ST PIP2734.0	PASS	BS-4.8.2.2	0.331	202	
	264.69 T	-12.81	0.00	1.54	
458 ST PIP2734.0	PASS	BS-4.8.2.2	0.326	202	
	574.83 T	-12.81	0.00	0.00	
459 ST PIP2734.0	PASS	BS-4.8.2.2	0.358	202	
	253.93 T	-16.82	0.00	1.54	
460 ST PIP2734.0	PASS	BS-4.8.2.2	0.646	202	
	549.38 T	-31.27	0.00	1.54	
461 ST PIP2734.0	PASS	BS-4.8.2.2	0.906	202	
	683.45 T	-43.43	0.00	0.00	
462 ST PIP2734.0	PASS	BS-4.8.2.2	0.617	202	
	573.99 T	-31.61	0.00	1.78	

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Job No TPL40581 | Sheet No a 120 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Par wind speed 32.5 m/s | Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - NM METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COMB/ MY	RATIO/ MZ	LOADING/ LOCATION
483 ST PIP2734.0	PASS 475.43 T	BS-4.8.2.2 -31.41	0.611 0.00	202 0.00	
484 ST PIP2734.0	PASS 489.76 T	BS-4.8.2.2 -45.13	0.893 0.00	202 1.78	
485 ST PIP2734.0	PASS 208.48 T	BS-4.8.2.2 -47.87	0.722 0.00	202 0.00	
486 ST PIP2734.0	PASS 197.68 T	BS-4.8.2.2 -42.95	0.508 0.00	202 1.78	
487 ST PIP2734.0	PASS 192.82 T	BS-4.8.2.2 -42.95	0.565 0.00	202 0.00	
488 ST PIP2734.0	PASS 7.75 C	ANNEX I.1 -42.91	0.870 58.47	288 -	
489 ST PIP2734.0	PASS 31.68 C	ANNEX I.1 -26.88	0.478 56.76	287 -	
490 ST PIP2734.0	PASS 211.17 T	BS-4.8.2.2 -50.16	0.582 0.00	202 1.78	
491 ST PIP2734.0	PASS 213.14 T	BS-4.8.2.2 -50.16	0.593 0.00	202 0.00	
492 ST PIP2734.0	PASS 135.49 T	BS-4.8.2.2 -33.57	0.638 0.00	204 1.78	
493 ST PIP2734.0	PASS 4.03 C	ANNEX I.1 -40.28	0.660 58.96	285 -	
494 ST PIP2734.0	PASS 130.45 T	BS-4.8.2.2 -42.14	0.622 0.00	209 1.78	
495 ST PIP2734.0	PASS 133.12 T	BS-4.8.2.2 -42.14	0.623 0.00	209 0.00	
496 ST PIP2734.0	PASS 88.96 C	ANNEX I.1 -45.94	0.665 31.98	287 -	
497 ST PIP2734.0	PASS 131.12 T	BS-4.8.2.2 -42.14	0.621 0.00	209 1.78	
498 ST PIP2734.0	PASS 361.92 T	BS-4.8.2.2 -52.22	0.848 0.00	202 0.00	
499 ST PIP2734.0	PASS 0.03 C	ANNEX I.1 -45.91	0.654 34.61	285 -	
500 ST PIP2734.0	PASS 124.42 T	BS-4.8.2.2 -42.47	0.656 0.00	205 0.00	
501 ST PIP2734.0	PASS 212.28 T	BS-4.8.2.2 -50.33	0.581 0.00	202 1.78	
502 ST PIP2734.0	PASS 210.22 T	BS-4.8.2.2 -50.33	0.586 0.00	202 0.00	
503 ST PIP2734.0	PASS 12.69 C	ANNEX I.1 -24.83	0.477 54.77	287 -	

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Job No TPL40581 | Sheet No a 121 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Par wind speed 32.5 m/s | Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - NM METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COMB/ MY	RATIO/ MZ	LOADING/ LOCATION
485 ST PIP2734.0	PASS 9.01 C	ANNEX I.1 -44.17	0.873 58.51	288 -	
486 ST PIP2734.0	PASS 192.76 T	BS-4.8.2.2 -42.89	0.563 0.00	202 1.78	
487 ST PIP2734.0	PASS 196.88 T	BS-4.8.2.2 -42.89	0.586 0.00	202 0.00	
488 ST PIP2734.0	PASS 189.58 T	BS-4.8.2.2 -37.12	0.715 0.00	202 1.78	
489 ST PIP2734.0	PASS 471.73 T	BS-4.8.2.2 -54.28	0.867 0.00	202 0.00	
490 ST PIP2734.0	PASS 473.47 T	BS-4.8.2.2 -31.25	0.689 0.00	202 1.78	
491 ST PIP2734.0	PASS 484.45 T	BS-4.8.2.2 -31.25	0.664 0.00	202 0.00	
492 ST PIP2734.0	PASS 485.78 T	BS-4.8.2.2 -54.48	0.899 0.00	202 1.78	
493 ST PIP2734.0	PASS 471.07 T	BS-4.8.2.2 -50.58	0.843 0.00	202 0.00	
494 ST PIP2734.0	PASS 370.70 T	BS-4.8.2.2 -14.78	0.559 0.00	202 0.00	
495 ST PIP2734.0	PASS 378.83 T	BS-4.8.2.2 -12.78	0.527 0.00	202 1.54	
496 ST PIP2734.0	PASS 388.53 T	BS-4.8.2.2 -12.78	0.533 0.00	202 0.00	
497 ST PIP2734.0	PASS 382.95 T	BS-4.8.2.2 -12.43	0.529 0.00	202 0.00	
498 ST PIP2734.0	PASS 378.58 T	BS-4.8.2.2 -13.17	0.538 0.00	202 1.54	
499 ST PIP2734.0	PASS 372.81 T	BS-4.8.2.2 -17.00	0.559 0.00	202 1.54	
500 ST PIP2734.0	PASS 368.27 T	BS-4.8.2.2 -56.85	0.844 0.00	202 1.54	
501 ST PIP2734.0	PASS 494.42 T	BS-4.8.2.2 -54.54	0.899 0.00	202 0.00	
502 ST PIP2734.0	PASS 481.15 T	BS-4.8.2.2 -30.48	0.667 0.00	202 1.78	
503 ST PIP2734.0	PASS 473.37 T	BS-4.8.2.2 -30.48	0.653 0.00	202 0.00	
504 ST PIP2734.0	PASS 488.21 T	BS-4.8.2.2 -45.25	0.692 0.00	202 1.78	
505 ST PIP2734.0	PASS 265.51 T	BS-4.8.2.2 -48.06	0.727 0.00	202 0.00	
506 ST PIP2734.0	PASS 198.35 T	BS-4.8.2.2 -42.46	0.584 0.00	202 1.78	

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Job No TPL40581 | Sheet No a 122 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Par wind speed 32.5 m/s | Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - NM METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COMB/ MY	RATIO/ MZ	LOADING/ LOCATION
507 ST PIP2734.0	PASS 139.41 T	BS-4.8.2.2 -42.46	0.594 0.00	202 0.00	
508 ST PIP2734.0	PASS 7.78 C	ANNEX I.1 -41.96	0.847 57.73	286 -	
509 ST PIP2734.0	PASS 135.35 T	BS-4.8.2.2 -47.54	0.572 0.00	204 0.00	
510 ST PIP2734.0	PASS 213.75 T	BS-4.8.2.2 -50.67	0.595 0.00	202 1.78	
511 ST PIP2734.0	PASS 215.14 T	BS-4.8.2.2 -50.67	0.566 0.00	202 0.00	
512 ST PIP2734.0	PASS 134.44 T	BS-4.8.2.2 -33.48	0.637 0.00	204 1.78	
513 ST PIP2734.0	PASS 1.26 C	ANNEX I.1 -40.95	0.683 62.67	285 -	
514 ST PIP2734.0	PASS 135.28 T	BS-4.8.2.2 -42.70	0.631 0.00	207 1.78	
515 ST PIP2734.0	PASS 134.88 T	BS-4.8.2.2 -42.70	0.631 0.00	207 0.00	
516 ST PIP2734.0	PASS 0.00 C	ANNEX I.1 -45.19	0.660 32.01	288 -	
517 ST PIP2734.0	PASS 85.14 C	ANNEX I.1 -45.19	0.660 32.02	288 -	
518 ST PIP2734.0	PASS 136.00 T	BS-4.8.2.2 -42.46	0.629 0.00	207 1.78	
519 ST PIP2734.0	PASS 135.29 T	BS-4.8.2.2 -42.46	0.628 0.00	207 0.00	
520 ST PIP2734.0	PASS 123.41 T	BS-4.8.2.2 -57.24	0.593 0.00	202 1.78	
521 ST PIP2734.0	PASS 125.54 T	BS-4.8.2.2 -46.37	0.615 0.00	205 0.00	
522 ST PIP2734.0	PASS 214.65 T	BS-4.8.2.2 -50.68	0.595 0.00	202 1.78	
523 ST PIP2734.0	PASS 213.63 T	BS-4.8.2.2 -50.68	0.564 0.00	202 0.00	
524 ST PIP2734.0	PASS 31.23 C	ANNEX I.1 -26.83	0.477 54.37	288 -	
525 ST PIP2734.0	PASS 8.45 C	ANNEX I.1 -42.16	0.850 57.87	286 -	
526 ST PIP2734.0	PASS 197.98 T	BS-4.8.2.2 -42.42	0.585 0.00	202 1.78	
527 ST PIP2734.0	PASS 197.24 T	BS-4.8.2.2 -42.42	0.586 0.00	202 0.00	
528 ST PIP2734.0	PASS 284.38 T	BS-4.8.2.2 -47.91	0.725 0.00	202 1.78	

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Job No TPL40581 | Sheet No a 123 | Rev R4b-FAB

Job Title Wisma Bella Swimming Pool | Par wind speed 32.5 m/s | Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - NM METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COMB/ MY	RATIO/ MZ	LOADING/ LOCATION
529 ST PIP2734.0	PASS 450.48 T	BS-4.8.2.2 -45.04	0.893 0.00	202 0.00	
530 ST PIP2734.0	PASS 455.29 T	BS-4.8.2.2 -30.67	0.668 0.00	202 1.54	
531 ST PIP2734.0	PASS 462.45 T	BS-4.8.2.2 -30.67	0.612 0.00	202 0.00	
532 ST PIP2734.0	PASS 484.67 T	BS-4.8.2.2 -44.81	0.902 0.00	202 1.78	
533 ST PIP2734.0	PASS 472.33 T	BS-4.8.2.2 -31.26	0.810 0.00	202 0.00	
534 ST PIP2734.0	PASS 470.24 T	BS-4.8.2.2 -14.62	0.559 0.00	202 0.00	
535 ST PIP2734.0	PASS 380.58 T	BS-4.8.2.2 -13.10	0.531 0.00	202 0.00	
536 ST PIP2734.0	PASS 385.43 T	BS-4.8.2.2 -12.47	0.529 0.00	202 1.54	
537 ST PIP2734.0	PASS 381.32 T	BS-4.8.2.2 -13.46	0.549 0.00	202 0.00	
538 ST PIP99.184.0	PASS 18.74 T	BS-4.8.2.2 -1.49	0.280 0.00	202 0.00	
539 ST PIP99.184.0	PASS 40.95 T	BS-4.8.2.2 -2.98	0.351 0.00	206 1.70	
540 ST PIP99.184.0	PASS 58.72 T	BS-4.8.2.2 -1.74	0.411 0.00	205 1.70	
541 ST PIP99.184.0	PASS 14.98 T	BS-4.8.2.2 -3.93	0.544 0.00	206 1.70	
542 ST PIP99.184.0	PASS 13.68 T	BS-4.8.2.2 -2.69	0.588 0.00	206 0.00	
543 ST PIP1395.0	PASS 19.37 T	BS-4.8.2.2 -12.00	0.514 0.00	206 1.70	
544 ST PIP99.184.0	PASS 20.23 T	BS-4.8.2.2 -2.68	0.401 0.00	207 0.00	
545 ST PIP99.184.0	PASS 26.03 T	BS-4.8.2.2 -3.20	0.496 0.00	207 0.00	
546 ST PIP99.184.0	PASS 18.02 T	BS-4.8.2.2 -3.26	0.478 0.00	207 1.70	
547 ST PIP1395.0	PASS 250.14 C	ANNEX I.1 -4.87	0.541 2.27	204 -	
548 ST PIP99.184.0	PASS 14.81 T	BS-4.8.2.2 -2.66	0.395 0.00	206 1.70	
549 ST PIP99.184.0	PASS 17.10 T	BS-4.8.2.2 -2.33	0.339 0.00	206 1.70	
550 ST PIP99.184.0	PASS 15.42 T	BS-4.8.2.2 -1.73	0.270 0.00	206 0.00	

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Job No TPL40581 | Sheet No a 124 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Par wind speed 32.5 m/s | Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - NM METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COMB/ MY	RATIO/ MZ	LOADING/ LOCATION
551 ST PIP1395.0	PASS 48.94 T	BS-4.8.2.2 -5.54	0.282 0.00	204 0.00	
552 ST PIP99.184.0	PASS 27.75 T	BS-4.8.2.2 -2.16	0.345 0.00	205 0.00	
553 ST PIP99.184.0	PASS 23.82 T	BS-4.8.2.2 -2.34	0.370 0.00	205 0.00	
554 ST PIP99.184.0	PASS 12.08 T	BS-4.8.2.2 -2.69	0.383 0.00	205 0.00	
555 ST PIP1395.0	PASS 61.64 C	BS-4.8.3.3.1 -1.14	0.424 3.21	201 -	
556 ST PIP99.184.0	PASS 11.48 T	BS-4.8.2.2 -1.61	0.241 0.00	206 0.00	
557 ST PIP99.184.0	PASS 22.18 T	BS-4.8.2.2 -2.45	0.293 0.00	204 0.00	
558 ST PIP99.184.0	PASS 24.66 T	BS-4.8.2.2 -2.57	0.413 0.00	204 1.70	
559 ST PIP1395.0	PASS 23.47 T	BS-4.8.2.2 -4.77	0.312 0.00	204 1.70	
560 ST PIP99.184.0	PASS 62.55 T	BS-4.8.2.2 -11.79	0.1307 0.00	201 0.00	
561 ST PIP99.184.0	PASS 10.66 T	BS-4.8.2.2 -2.08	0.214 0.00	206 1.70	
562 ST PIP99.184.0	PASS 14.58 T	BS-4.8.2.2 -2.29	0.329 0.00	206 0.00	
563 ST PIP1395.0	PASS 139.12 C	ANNEX I.1 -4.74	0.415 6.67	207 -	
564 ST PIP99.184.0	PASS 19.38 T	BS-4.8.2.2 -2.54	0.369 0.00	207 0.00	
565 ST PIP99.184.0	PASS 22.91 T	BS-4.8.2.2 -3.37	0.500 0.00	207 1.70	
566 ST PIP99.184.0	PASS 17.01 T	BS-4.8.2.2 -2.88	0.419 0.00	206 0.00	
567 ST PIP2734.0	PASS 361.92 T	BS-4.8.2.2 -52.22	0.848 0.00	202 0.00	
568 ST PIP99.184.0	PASS 18.67 T	BS-4.8.2.2 -1.96	0.286 0.00	202 0.00	
569 ST PIP99.184.0	PASS 40.84 T	BS-4.8.2.2 -4.69	0.556 0.00	206 1.70	
570 ST PIP99.184.0	PASS 33.97 T	BS-4.8.2.2 -3.79	0.415 0.00	206 1.70	
571 ST PIP99.184.0	PASS 14.58 T	BS-4.8.2.2 -4.52	0.335 0.00	206 1.70	
572 ST PIP99.184.0	PASS 12.77 T	BS-4.8.2.2 -2.88	0.323 0.00	206 0.00	

Software licensed to Transcave Pte Ltd

Job No TPL40581 | Sheet No a 125 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Par wind speed 32.5 m/s | Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - NM METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COMB/ MY	RATIO/ MZ	LOADING/ LOCATION
573 ST PIP1395.0	PASS 20.37 T	BS-4.8.2.2 -12.72	0.545 0.00	206 0.00	
574 ST PIP2734.0	PASS 239.62 T	BS-4.8.2.2 -0.69	0.253 0.00	202 1.78	
575 ST PIP99.184.0	PASS 16.90 T	BS-4.8.2.2 -0.24	0.087 0.00	207 1.70	
576 ST PIP99.184.0	PASS 38.78 T	BS-4.8.2.2 -0.16	0.132 0.00	207 1.70	
577 ST PIP99.184.0	PASS 49.82 T	BS-4.8.2.2 -0.05	0.212 0.00	201 0.00	
578 ST PIP99.184.0	PASS 31.70 T	BS-4.8.2.2 -0.38	0.154 0.00	207 0.00	
579 ST PIP99.184.0	PASS 25.55 T	BS-4.8.2.2 -0.46	0.147 0.00	207 0.00	
580 ST PIP99.184.0	PASS 26.29 T	BS-4.8.2.2 -0.55	0.156 0.00	207 1.70	
581 ST PIP99.184.0	PASS 26.26 T	BS-4.8.2.2 -0.58	0.163 0.00	289 0.00	
582 ST PIP99.184.0	PASS 23.17 T	BS-4.8.2.2 -0.62	0.155 0.00	289 0.00	
583 ST PIP99.184.0	PASS 18.82 T	BS-4.8.2.2 -0.62	0.128 0.00	289 1.70	
584 ST PIP1395.0	PASS 249.20 C	BS-4.7 (C) -1.02	0.518 0.00	204 0.00	
585 ST PIP99.184.0	PASS 37.19 T	BS-4.8.2.2 -0.59	0.138 0.00	205 1.70	
586 ST PIP99.184.0	PASS 40.77 T	BS-4.8.2.2 -0.16	0.231 0.00	205 0.00	
587 ST PIP99.184.0	PASS 28.38 T	BS-4.8.2.2 -0.14	0.148 0.00	205 0.00	
588 ST PIP99.184.0	PASS 26.16 T	BS-4.8.2.2 -0.17	0.145 0.00	205 0.00	
589 ST PIP99.184.0	PASS 25.35 T	BS-4.8.2.2 -0.39	0.137 0.00	206 1.70	
590 ST PIP99.184.0	PASS 26.08 T	BS-4.8.2.2 -0.49	0.150 0.00	206 0.00	
591 ST PIP99.184.0	PASS 24.79 T	BS-4.8.2.2 -0.31	0.148 0.00	206 1.70	
592 ST PIP1395.0	PASS 196.75 C	BS-4.7 (C) -0.45	0.352 0.00	207 0.00	
593 ST PIP99.184.0	PASS 24.46 T	BS-4.8.2.2 -0.51	0.148 0.00	206 1.70	
594 ST PIP99.184.0	PASS 25.81 T	BS-4.8.2.2 -0.50	0.155 0.00	206 0.00	

Software licensed to Transcave Pte Ltd

Job No TPL40581 | Sheet No a 126 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Par wind speed 32.5 m/s | Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - NM METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COMB/ MY	RATIO/ MZ	LOADING/ LOCATION
595 ST PIP99.184.0	PASS 25.67 T	BS-4.8.2.2 -0.39	0.136 0.00	206 0.00	
596 ST PIP99.184.0	PASS 23.75 T	BS-4.8.2.2 -0.35	0.134 0.00	206 0.00	
597 ST PIP99.184.0	PASS 31.80 T	BS-4.8.2.2 -0.12	0.123 0.00	206 0.00	
598 ST PIP99.184.0	PASS 37.70 T	BS-4.8.2.2 -0.07	0.137 0.00	206 0.00	
599 ST PIP99.184.0	PASS 37.78 T	BS-4.8.2.2 -0.06	0.136 0.00	206 0.00	
600 ST PIP1395.0	PASS 293.45 C	BS-4.7 (C) -0.66	0.506 0.00	205 0.00	
601 ST PIP99.184.0	PASS 20.89 T	BS-4.8.2.2 -0.60	0.147 0.00	288 0.00	
602 ST PIP99.184.0	PASS 27.03 T	BS-4.8.2.2 -0.62	0.170 0.00	289 1.70	
603 ST PIP99.184.0	PASS 27.30 T	BS-4.8.2.2 -0.58	0.166 0.00	207 0.00	
604 ST PIP2734.0	PASS 238.81 T	BS-4.8.2.2 -0.74	0.251 0.00	202 0.71	
605 ST PIP99.184.0	PASS 17.01 T	BS-4.8.2.2 -0.25	0.098 0.00	207 1.70	
606 ST PIP99.184.0	PASS 37.20 T	BS-4.8.2.2 -0.17	0.148 0.00	205 0.00	
607 ST PIP99.184.0	PASS 31.93 T	BS-4.8.2.2 -0.26	0.219 0.00	201 0.00	
608 ST PIP99.184.0	PASS 25.69 T	BS-4.8.2.2 -0.48	0.149 0.00	207 0.00	
609 ST PIP99.184.0	PASS 25.54 T	BS-4.8.2.2 -0.55	0.159 0.00	207 0.00	
610 ST PIP2734.0	PASS 329.36 T	BS-4.8.2.2 -0.74	0.350 0.00	202 0.85	
611 ST PIP99.184.0	PASS 17.76 T	BS-4.8.2.2 -0.21	0.087 0.00	207 1.70	
612 ST PIP99.184.0	PASS 31.21 T	BS-4.8.2.2 -0.03	0.218 0.00	201 1.70	
613 ST PIP99.184.0	PASS 41.54 T	BS-4.8.2.2 -0.26	0.194 0.00	201 0.00	
614 ST PIP99.184.0	PASS 21.67 T	BS-4.8.2.2 -0.48	0.156 0.00	207 0.00	
615 ST PIP99.184.0	PASS 25.71 T	BS-4.8.2.2 -0.48	0.148 0.00	207 0.00	
616 ST PIP99.184.0	PASS 25.71 T	BS-4.8.2.2 -0.48	0.148 0.00	207 0.00	

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Job No TPL40581 | Sheet No a 127 | Rev R4b-FAB

Job Title Wisma Bella Swimming Pool | Par wind speed 32.5 m/s | Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - NM METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COMB/ MY	RATIO/ MZ	LOADING/ LOCATION
617 ST PIP99.184.0	PASS 26.24 T	BS-4.8.2.2 -0.35	0.158 0.00	207 1.70	
618 ST PIP99.184.0	PASS 26.37 T	BS-4.8.2.2 -0.45	0.162 0.00	207 1.70	
619 ST PIP99.184.0	PASS 26.66 T	BS-4.8.2.2 -0.41	0.167 0.00	207 1.70	
620 ST PIP99.184.0	PASS 17.25 T	BS-4.8.2.2 -0.59	0.133 0.00	207 0.00	
621 ST PIP1395.0	PASS 282.93 C	BS-4.7 (C) -0.41	0.507 0.00	206 0.00	
622 ST PIP99.184.0	PASS 37.82 T	BS-4.8.2.2 -0.19	0.141 0.00	205 1.70	
623 ST PIP99.184.0	PASS 40.99 T	BS-4.8.2.2 -0.07	0.149 0.00	205 1.70	
624 ST PIP99.184.0	PASS 38.35 T	BS-4.8.2.2 -0.08	0.141 0.00	205 0.00	
625 ST PIP99.184.0	PASS 34.24 T	BS-4.8.2.2 -0.08	0.134 0.00	205 0.00	
626 ST PIP99.184.0	PASS 34.23 T	BS-4.8.2.2 -0.09	0.126 0.00	206 1.70	
627 ST PIP99.184.0	PASS 28.66 T	BS-4.8.2.2 -0.49	0.121 0.00	206 0.00	
628 ST PIP99.184.0	PASS 24.25 T	BS-4.8.2.2 -0.42	0.134 0.00	206 1.70	
629 ST PIP1395.0	PASS 184.55 C	BS-4.7 (C) -0.66	0.331 0.00	207 0.00	
630 ST PIP99.184.0	PASS 24.86 T	BS-4.8.2.2 -0.43	0.126 0.00	206 1.70	
631 ST PIP99.184.0	PASS 25.53 T	BS-4.8.2.2 -0.41	0.128 0.00	206 0.00	
632 ST PIP99.184.0	PASS 25.39 T	BS-4.8.2.2 -0.35	0.125 0.00	206 0.00	
633 ST PIP99.184.0	PASS 33.59 T	BS-4.8.2.2 -0.64	0.126 0.00	206 0.00	
634 ST PIP99.184.0	PASS 31.58 T	BS-4.8.2.2 -0.05	0.114 0.00	0.00	
635 ST PIP99.184.0	PASS 36.66 T	BS-4.8.2.2 -0.03	0.129 0.00	206 0.85	
636 ST PIP99.184.0	PASS 39.24 T	BS-4.8.2.2 -0.01	0.137 0.00	204 0.00	
637 ST PIP1395.0	PASS 273.60 C	BS-4.7 (C) -0.13	0.497 0.00	205 0.00	
638 ST PIP99.184.0	PASS 21.51 T	BS-4.8.2.2 -0.68	0.149 0.00	207 1.70	

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Job No TPL40581 | Sheet No a 128 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Fab wind speed 32.5 m/s | Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
639 ST	PIP89.1X4.0	PASS 20.17 T	BS-4.8.2.2 -6.62	0.144 0.00	207 0.00
640 ST	PIP89.1X4.0	PASS 27.83 T	BS-4.8.2.2 -9.59	0.198 0.00	207 0.00
641 ST	PIP2734.0	PASS 335.48 T	BS-4.8.2.2 -9.75	0.249 0.00	202 0.57
642 ST	PIP89.1X4.0	PASS 17.49 T	BS-4.8.2.2 -5.22	0.098 0.00	207 1.70
643 ST	PIP89.1X4.0	PASS 43.38 T	BS-4.8.2.2 -9.93	0.152 0.00	201 0.85
644 ST	PIP89.1X4.0	PASS 76.18 T	BS-4.8.2.2 -9.06	0.264 0.00	201 0.00
645 ST	PIP89.1X4.0	PASS 32.90 T	BS-4.8.2.2 -9.38	0.160 0.00	207 0.00
646 ST	PIP89.1X4.0	PASS 24.28 T	BS-4.8.2.2 -6.49	0.191 0.00	207 0.00
647 ST	PIP89.1X4.0	PASS 47.29 T	BS-4.8.2.2 -9.53	0.162 0.00	207 0.00
648 ST	PIP2734.0	PASS 343.53 T	BS-4.8.2.2 -9.83	0.255 0.00	202 1.70
649 ST	PIP89.1X4.0	PASS 17.34 T	BS-4.8.2.2 -5.20	0.094 0.00	209 0.00
650 ST	PIP89.1X4.0	PASS 12.18 T	BS-4.8.2.2 -6.85	0.187 0.00	201 1.70
651 ST	PIP89.1X4.0	PASS 46.42 T	BS-4.8.2.2 -9.16	0.178 0.00	207 0.00
652 ST	PIP89.1X4.0	PASS 31.09 T	BS-4.8.2.2 -9.38	0.153 0.00	207 0.00
653 ST	PIP89.1X4.0	PASS 25.24 T	BS-4.8.2.2 -9.48	0.146 0.00	207 0.00
654 ST	PIP89.1X4.0	PASS 21.76 T	BS-4.8.2.2 -9.54	0.157 0.00	207 1.70
655 ST	PIP89.1X4.0	PASS 25.96 T	BS-4.8.2.2 -9.68	0.183 0.00	207 1.70
656 ST	PIP89.1X4.0	PASS 31.61 T	BS-4.8.2.2 -9.84	0.153 0.00	207 1.70
657 ST	PIP89.1X4.0	PASS 17.69 T	BS-4.8.2.2 -9.61	0.137 0.00	207 0.00
658 ST	PIP1395.0	PASS 283.41 C	BS-4.7 (C) -9.67	0.588 0.00	204 0.00
659 ST	PIP89.1X4.0	PASS 37.23 T	BS-4.8.2.2 -9.69	0.134 0.00	205 0.00
660 ST	PIP89.1X4.0	PASS 48.82 T	BS-4.8.2.2 -9.66	0.147 0.00	205 1.70

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Job No TPL40581 | Sheet No a 129 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Fab wind speed 32.5 m/s | Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
661 ST	PIP89.1X4.0	PASS 26.25 T	BS-4.8.2.2 -6.67	0.160 0.00	205 1.70
662 ST	PIP89.1X4.0	PASS 34.24 T	BS-4.8.2.2 -9.88	0.133 0.00	205 1.70
663 ST	PIP89.1X4.0	PASS 26.65 T	BS-4.8.2.2 -9.35	0.129 0.00	208 0.00
664 ST	PIP89.1X4.0	PASS 24.23 T	BS-4.8.2.2 -6.43	0.143 0.00	208 1.70
665 ST	PIP89.1X4.0	PASS 24.62 T	BS-4.8.2.2 -6.45	0.146 0.00	208 0.00
666 ST	PIP1395.0	PASS 184.25 C	BS-4.7 (C) -9.63	0.330 0.00	209 0.00
667 ST	PIP89.1X4.0	PASS 24.41 T	BS-4.8.2.2 -6.45	0.129 0.00	208 0.00
668 ST	PIP89.1X4.0	PASS 23.82 T	BS-4.8.2.2 -6.42	0.141 0.00	208 1.70
669 ST	PIP89.1X4.0	PASS 25.56 T	BS-4.8.2.2 -9.32	0.127 0.00	208 1.70
670 ST	PIP89.1X4.0	PASS 23.83 T	BS-4.8.2.2 -6.07	0.123 0.00	204 1.70
671 ST	PIP89.1X4.0	PASS 21.81 T	BS-4.8.2.2 -6.06	0.115 0.00	204 1.42
672 ST	PIP89.1X4.0	PASS 23.82 T	BS-4.8.2.2 -6.63	0.135 0.00	204 0.89
673 ST	PIP89.1X4.0	PASS 27.67 T	BS-4.8.2.2 -6.66	0.135 0.00	204 1.13
674 ST	PIP1395.0	PASS 277.69 C	BS-4.7 (C) -9.29	0.497 0.00	205 0.00
675 ST	PIP89.1X4.0	PASS 21.27 T	BS-4.8.2.2 -6.62	0.150 0.00	207 1.70
676 ST	PIP89.1X4.0	PASS 27.32 T	BS-4.8.2.2 -6.64	0.173 0.00	207 0.00
677 ST	PIP89.1X4.0	PASS 27.55 T	BS-4.8.2.2 -6.65	0.169 0.00	207 0.00
678 ST	PIP2734.0	PASS 339.48 T	BS-4.8.2.2 -9.75	0.252 0.00	202 0.42
679 ST	PIP89.1X4.0	PASS 17.12 T	BS-4.8.2.2 -5.22	0.095 0.00	207 1.70
680 ST	PIP89.1X4.0	PASS 24.54 T	BS-4.8.2.2 -6.14	0.142 0.00	207 1.70
681 ST	PIP89.1X4.0	PASS 44.83 T	BS-4.8.2.2 -9.64	0.224 0.00	201 0.85
682 ST	PIP89.1X4.0	PASS 22.12 T	BS-4.8.2.2 -6.39	0.157 0.00	207 0.00

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Job No TPL40581 | Sheet No a 130 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Fab wind speed 32.5 m/s | Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
683 ST	PIP89.1X4.0	PASS 26.58 T	BS-4.8.2.2 -6.69	0.150 0.00	207 0.00
684 ST	PIP89.1X4.0	PASS 26.91 T	BS-4.8.2.2 -6.54	0.161 0.00	207 0.00
685 ST	PIP2734.0	PASS 339.83 T	BS-4.8.2.2 -9.74	0.252 0.00	202 0.28
686 ST	PIP89.1X4.0	PASS 16.84 T	BS-4.8.2.2 -5.21	0.089 0.00	207 1.70
687 ST	PIP89.1X4.0	PASS 28.77 T	BS-4.8.2.2 -9.17	0.153 0.00	207 1.70
688 ST	PIP89.1X4.0	PASS 68.43 T	BS-4.8.2.2 -9.84	0.212 0.00	201 0.00
689 ST	PIP89.1X4.0	PASS 31.71 T	BS-4.8.2.2 -9.39	0.156 0.00	207 0.00
690 ST	PIP89.1X4.0	PASS 25.55 T	BS-4.8.2.2 -6.49	0.189 0.00	207 0.00
691 ST	PIP89.1X4.0	PASS 24.20 T	BS-4.8.2.2 -9.37	0.161 0.00	207 1.70
692 ST	PIP89.1X4.0	PASS 26.26 T	BS-4.8.2.2 -6.62	0.147 0.00	207 1.70
693 ST	PIP89.1X4.0	PASS 23.17 T	BS-4.8.2.2 -6.46	0.159 0.00	207 1.70
694 ST	PIP89.1X4.0	PASS 18.62 T	BS-4.8.2.2 -6.64	0.142 0.00	207 0.00
695 ST	PIP1395.0	PASS 288.54 C	BS-4.7 (C) -9.68	0.519 0.00	204 0.00
696 ST	PIP89.1X4.0	PASS 27.18 T	BS-4.8.2.2 -6.69	0.137 0.00	205 0.00
697 ST	PIP89.1X4.0	PASS 49.77 T	BS-4.8.2.2 -9.69	0.139 0.00	205 1.70
698 ST	PIP89.1X4.0	PASS 30.39 T	BS-4.8.2.2 -9.14	0.147 0.00	205 1.70
699 ST	PIP89.1X4.0	PASS 26.16 T	BS-4.8.2.2 -9.17	0.144 0.00	205 1.70
700 ST	PIP89.1X4.0	PASS 26.47 T	BS-4.8.2.2 -9.42	0.129 0.00	208 0.00
701 ST	PIP89.1X4.0	PASS 26.47 T	BS-4.8.2.2 -9.52	0.154 0.00	208 1.70
702 ST	PIP89.1X4.0	PASS 24.82 T	BS-4.8.2.2 -9.34	0.152 0.00	208 0.00
703 ST	PIP1395.0	PASS 198.89 C	BS-4.7 (C) -9.74	0.351 0.00	209 0.00
704 ST	PIP89.1X4.0	PASS 24.69 T	BS-4.8.2.2 -9.53	0.131 0.00	208 0.00

Software licensed to Transoeve Pte Ltd

Job No TPL40581 | Sheet No a 131 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Fab wind speed 32.5 m/s | Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
705 ST	PIP89.1X4.0	PASS 25.92 T	BS-4.8.2.2 -9.51	0.152 0.00	208 1.70
706 ST	PIP89.1X4.0	PASS 25.67 T	BS-4.8.2.2 -6.48	0.136 0.00	208 1.70
707 ST	PIP89.1X4.0	PASS 23.75 T	BS-4.8.2.2 -9.14	0.135 0.00	204 1.70
708 ST	PIP89.1X4.0	PASS 21.92 T	BS-4.8.2.2 -6.12	0.124 0.00	204 1.70
709 ST	PIP89.1X4.0	PASS 23.75 T	BS-4.8.2.2 -9.08	0.136 0.00	204 1.70
710 ST	PIP89.1X4.0	PASS 27.74 T	BS-4.8.2.2 -6.64	0.136 0.00	204 1.23
711 ST	PIP1395.0	PASS 283.41 C	BS-4.7 (C) -9.67	0.588 0.00	205 0.00
712 ST	PIP89.1X4.0	PASS 20.89 T	BS-4.8.2.2 -6.64	0.151 0.00	207 1.70
713 ST	PIP89.1X4.0	PASS 27.63 T	BS-4.8.2.2 -6.66	0.175 0.00	207 0.00
714 ST	PIP89.1X4.0	PASS 27.23 T	BS-4.8.2.2 -6.62	0.170 0.00	207 0.00
715 ST	PIP2734.0	PASS 338.92 T	BS-4.8.2.2 -9.85	0.252 0.00	202 0.00
716 ST	PIP89.1X4.0	PASS 17.01 T	BS-4.8.2.2 -5.25	0.099 0.00	207 1.70
717 ST	PIP89.1X4.0	PASS 27.18 T	BS-4.8.2.2 -6.69	0.149 0.00	205 1.70
718 ST	PIP89.1X4.0	PASS 31.93 T	BS-4.8.2.2 -9.89	0.159 0.00	205 0.00
719 ST	PIP89.1X4.0	PASS 31.93 T	BS-4.8.2.2 -9.39	0.157 0.00	207 0.00
720 ST	PIP89.1X4.0	PASS 23.86 T	BS-4.8.2.2 -6.58	0.156 0.00	207 0.00
721 ST	PIP89.1X4.0	PASS 26.56 T	BS-4.8.2.2 -9.57	0.162 0.00	207 0.00
722 ST	PIP2734.0	PASS 341.34 T	BS-4.8.2.2 -10.16	0.347 0.00	202 0.00
723 ST	PIP89.1X4.0	PASS 18.58 T	BS-4.8.2.2 -5.87	0.097 0.00	202 0.00
724 ST	PIP89.1X4.0	PASS 49.37 T	BS-4.8.2.2 -9.84	0.251 0.00	208 1.70
725 ST	PIP89.1X4.0	PASS 34.69 T	BS-4.8.2.2 -6.69	0.418 0.00	205 1.70
726 ST	PIP89.1X4.0	PASS 15.05 T	BS-4.8.2.2 -3.83	0.344 0.00	208 1.70

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Job No TPL40581 | Sheet No a 132 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Fab wind speed 32.5 m/s | Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
727 ST	PIP89.1X4.0	PASS 13.77 T	BS-4.8.2.2 -5.76	0.510 0.00	208 0.00
728 ST	PIP1395.0	PASS 283.41 C	BS-4.7 (C) -10.02	0.514 0.00	209 1.70
729 ST	PIP89.1X4.0	PASS 20.35 T	BS-4.8.2.2 -2.47	0.495 0.00	209 0.00
730 ST	PIP89.1X4.0	PASS 29.48 T	BS-4.8.2.2 -3.58	0.693 0.00	209 0.00
731 ST	PIP89.1X4.0	PASS 18.58 T	BS-4.8.2.2 -3.23	0.486 0.00	209 1.70
732 ST	PIP1395.0	PASS 259.61 C	ANNEX I.1 -6.84	0.549 2.32	204 -
733 ST	PIP89.1X4.0	PASS 14.98 T	BS-4.8.2.2 -2.68	0.387 0.00	208 1.70
734 ST	PIP89.1X4.0	PASS 17.16 T	BS-4.8.2.2 -3.20	0.352 0.00	208 1.70
735 ST	PIP89.1X4.0	PASS 19.47 T	BS-4.8.2.2 -3.75	0.272 0.00	208 0.00
736 ST	PIP1395.0	PASS 41.81 T	BS-4.8.2.2 -5.36	0.293 0.00	204 0.00
737 ST	PIP89.1X4.0	PASS 27.77 T	BS-4.8.2.2 -2.15	0.364 0.00	205 0.00
738 ST	PIP89.1X4.0	PASS 23.04 T	BS-4.8.2.2 -2.24	0.371 0.00	205 0.00
739 ST	PIP89.1X4.0	PASS 12.06 T	BS-4.8.2.2 -2.09	0.393 0.00	205 0.00
740 ST	PIP1395.0	PASS 60.92 C	BS-4.8.3.3.1 -1.13	0.423 0.24	201 -
741 ST	PIP89.1X4.0	PASS 11.44 T	BS-4.8.2.2 -1.42	0.345 0.00	204 0.00
742 ST	PIP89.1X4.0	PASS 23.04 T	BS-4.8.2.2 -2.24	0.384 0.00	204 0.00
743 ST	PIP89.1X4.0	PASS 24.44 T	BS-4.8.2.2 -2.37	0.413 0.00	204 1.70
744 ST	PIP1395.0	PASS 23.65 T	BS-4.8.2.2 -4.77	0.313 0.00	204 1.70
745 ST	PIP89.1X4.0	PASS 12.22 T	BS-4.8.2.2 -1.91	0.269 0.00	208 0.00
746 ST	PIP89.1X4.0	PASS 15.71 T	BS-4.8.2.2 -2.10	0.356 0.00	208 1.70
747 ST	PIP89.1X4.0	PASS 15.82 T	BS-4.8.2.2 -2.30	0.345 0.00	208 0.00
748 ST	PIP1395.0	PASS 158.56 C	ANNEX I.1 -4.72	0.413 0.83	209 -

Software licensed to Transoeve Pte Ltd

Job No TPL40581 | Sheet No a 133 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Fab wind speed 32.5 m/s | Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
749 ST	PIP89.1X4.0	PASS 19.28 T	BS-4.8.2.2 -3.02	0.507 0.00	209 0.00
750 ST	PIP89.1X4.0	PASS 22.82 T	BS-4.8.2.2 -3.35	0.497 0.00	209 1.70
751 ST	PIP89.1X4.0	PASS 16.99 T	BS-4.8.2.2 -2.69	0.420 0.00	208 0.00
752 ST	PIP2734.0	PASS 301.82 T	BS-4.8.2.2 -10.19	0.347 0.00	202 0.00
753 ST	PIP89.1X4.0	PASS 18.72 T	BS-4.8.2.2 -2.88	0.256 0.00	202 0.00
754 ST	PIP89.1X4.0	PASS 20.80 T	BS-4.8.2.2 -3.00	0.249 0.00	208 1.70
755 ST	PIP89.1X4.0	PASS 23.78 T	BS-4.8.2.2 -3.68	0.415 0.00	204 1.70
756 ST	PIP89.1X4.0	PASS 14.94 T	BS-4.8.2.2 -4.02	0.555 0.00	208 1.70
757 ST	PIP89.1X4.0	PASS 13.81 T	BS-4.8.2.2 -3.80	0.523 0.00	208 0.00
758 ST	PIP1395.0	PASS 28.27 T	BS-4.8.2.2 -12.72	0.545 0.00	209 0.00
759 ST	PIP1398.0	PASS 23.28 T	ANNEX I.1 -1.55	0.776 28.93	204 -
760 ST	PIP1398.0	PASS 14.94 T	BS-4.8.2.2 -20.74	0.559 0.00	206 0.00
761 ST	PIP1398.0	PASS 30.34 C	ANNEX I.1 -1.46	0.775 27.91	204 -
762 ST	PIP1398.0	PASS 15.33 T	BS-4.8.2.2 -20.72	0.559 0.00	206 0.00
763 ST	PIP1398.0	PASS 29.28 T	BS-4.8.2.2 -9.15	0.245 0.00	207 0.85
764 ST	PIP1398.0	PASS 29.47 T	BS-4.8.2.2 -7.74	0.223 0.00	209 0.00
765 ST	PIP1398.0	PASS 29.41 T	BS-4.8.2.2 -7.86	0.238 0.00	207 0.85
766 ST	PIP1398.0	PASS 23.87 T	BS-4.8.2.2 -7.27	0.227 0.00	207 0.00
767 ST	PIP1398.0	PASS 21.08 T	BS-4.8.2.2 -14.42	0.253 0.00	207 0.85
768 ST	PIP1398.0	PASS 20.22 T	BS-4.8.2.2 -7.95	0.241 0.00	209 0.00
769 ST	PIP1398.0	PASS 24.82 T	BS-4.8.2.2 -9.14	0.242 0.00	207 0.85
770 ST	PIP1398.0	PASS 24.84 T	BS-4.8.2.2 -9.82	0.264 0.00	207 0.00

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Job No TPL40581 | Sheet No a 134 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Fab wind speed 32.5 m/s | Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
771 ST	PIP1398.0	PASS 29.49 T	BS-4.8.2.2 -9.19	0.247 0.00	207 0.85
772 ST	PIP1398.0	PASS 28.53 T	BS-4.8.2.2 -7.91	0.239 0.00	209 0.00
773 ST	PIP1398.0	PASS 34.24 T	BS-4.8.2.2 -9.13	0.250 0.00	209 0.85
774 ST	PIP1398.0	PASS 26.26 T	BS-4.8.2.2 -9.42	0.258 0.00	207 0.00
775 ST	PIP1398.0	PASS 29.42 T	BS-4.8.2.2 -8.85	0.242 0.00	207 0.85
776 ST	PIP1398.0	PASS 29.56 T	BS-4.8.2.2 -7.93	0.237 0.00	209 0.00
777 ST	PIP1398.0	PASS 29.51 T	BS-4.8.2.2 -7.93	0.232 0.00	207 0.85
778 ST	PIP1398.0	PASS 26.26 T	BS-4.8.2.2 -7.93	0.220 0.00	209 0.00
779 ST	PIP1398.0	PASS 33.54 C	ANNEX I.1 -1.61	0.788 28.43	208 -
780 ST	PIP1398.0	PASS 15.57 T	BS-4.8.2.2 -21.12	0.568 0.00	208 0.00
781 ST	PIP1398.0	PASS 31.29 C	ANNEX I.1 -1.71	0.747 28.36	208 -
782 ST	PIP1398.0	PASS 15.25 T	BS-4.8.2.2 -21.12	0.568 0.00	208 0.00
783 ST	PIP1398.0	PASS 111.46 T	BS-4.8.2.2 -3.97	0.126 0.00	201 2.13
784 ST	PIP1398.0	PASS 40.86 C	ANNEX I.1 -4.88	0.233 39.62	206 -
785 ST	PIP1398.0	PASS 22.62 T	BS-4.8.2.2 -20.55	0.562 0.00	205 0.00
786 ST	PIP1398.0	PASS 193.24 C	BS-4.7 (C) -2.04	0.178 0.00	0 0.00
787 ST	PIP1398.0	PASS 291.33 C	BS-4.7 (C) -9.85	0.268 0.00	204 0.00
788 ST	PIP1398.0	PASS 392.95 C	BS-4.7 (C) -2.41	0.361 0.00	204 0.00
789 ST	PIP1398.0	PASS 454.84 C	BS-4.7 (C) -2.66	0.418 0.00	204 0.00
790 ST	PIP1398.0	PASS 496.25 C	BS-4.7 (C) -2.75	0.456 0.00	204 0.00
791 ST	PIP1398.0	PASS 519.34 T	BS-4.8.2.2 -7.13	0.564 0.00	205 1.84
792 ST	PIP1398.0	PASS 498.08 T	BS-4.8.2.2 -6.92	0.453 0.00	205 0.00

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Job No TPL40581 | Sheet No a 135 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Fab wind speed 32.5 m/s | Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
793 ST	PIP2196.0	PASS 326.93 T	BS-4.8.2.2 -6.48	0.546 0.00	205 0.00
794 ST	PIP2196.0	PASS 573.68 C	BS-4.7 (C) -2.72	0.529 0.00	204 0.00
795 ST	PIP2196.0	PASS 571.95 C	BS-4.7 (C) -3.25	0.525 0.00	204 0.00
796 ST	PIP2196.0	PASS 545.42 C	BS-4.7 (C) -2.93	0.581 0.00	204 0.00
797 ST	PIP2196.0	PASS 462.48 C	BS-4.7 (C) -3.80	0.426 0.00	204 0.00
798 ST	PIP2196.0	PASS 482.84 C	BS-4.7 (C) -2.16	0.369 0.00	205 0.00
799 ST	PIP2196.0	PASS 465.19 C	BS-4.7 (C) -2.72	0.370 0.00	201 0.00
800 ST	PIP2196.0	PASS 387.68 C	BS-4.7 (C) -1.59	0.356 0.00	201 0.00
801 ST	PIP2196.0	PASS 432.28 C	BS-4.7 (C) -2.69	0.379 0.00	201 1.84
802 ST	PIP2196.0	PASS 416.57 C	BS-4.7 (C) -2.29	0.393 0.00	201 1.84
803 ST	PIP2196.0	PASS 477.53 C	BS-4.7 (C) -3.76	0.438 0.00	201 1.84
804 ST	PIP2196.0	PASS 557.48 C	BS-4.7 (C) -3.97	0.512 0.00	205 1.84
805 ST	PIP2196.0	PASS 589.42 C	BS-4.7 (C) -3.73	0.542 0.00	205 1.84
806 ST	PIP2196.0	PASS 587.29 C	BS-4.7 (C) -3.75	0.540 0.00	205 1.84
807 ST	PIP2196.0	PASS 525.65 T	BS-4.8.2.2 -4.45	0.355 0.00	204 1.84
808 ST	PIP2196.0	PASS 412.99 T	BS-4.8.2.2 -6.72	0.444 0.00	204 1.84
809 ST	PIP2196.0	PASS 324.22 T	BS-4.8.2.2 -6.89	0.546 0.00	204 0.00
810 ST	PIP2196.0	PASS 442.10 T	BS-4.8.2.2 -3.42	0.464 0.00	204 0.00
811 ST	PIP2196.0	PASS 433.75 C	BS-4.7 (C) -2.56	0.399 0.00	205 1.84
812 ST	PIP2196.0	PASS 377.43 C	BS-4.7 (C) -2.22	0.347 0.00	205 1.84
813 ST	PIP2196.0	PASS 286.56 C	BS-4.7 (C) -1.63	0.258 0.00	205 1.84
814 ST	PIP2196.0	PASS 198.30 C	BS-4.7 (C) -1.28	0.175 0.00	0 0.00

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Job No TPL40581 | Sheet No a 136 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Ref Fabric R5 | Pwf wind speed 32.5 m/s

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
915 ST PIP2196.0	PASS 29.38 T	RS-4.8.2.2 -21.15	0.359 0.00	201 1.84
916 ST PIP2196.0	PASS 49.94 C	ANNEX I.1 -4.18	0.326 20.45	206 -
917 ST PIP2196.0	PASS 164.83 T	RS-4.8.2.2 -1.99	0.122 0.00	201 0.00
918 ST PIP2196.0	PASS 125.09 C	RS-4.7 (C) -0.41	0.116 0.00	9 0.00
919 ST PIP2196.0	PASS 203.18 C	RS-4.7 (C) -0.19	0.184 0.00	9 0.00
920 ST PIP2196.0	PASS 90.73 T	RS-4.8.2.2 -9.24	0.205 0.00	207 0.00
921 ST PIP2196.0	PASS 201.47 C	RS-4.7 (C) -2.69	0.195 0.00	204 0.00
922 ST PIP2196.0	PASS 344.38 C	RS-4.7 (C) -3.47	0.316 0.00	204 0.00
923 ST PIP2196.0	PASS 472.93 C	RS-4.7 (C) -1.74	0.434 0.00	204 0.00
924 ST PIP2196.0	PASS 583.71 C	RS-4.7 (C) -2.85	0.536 0.00	204 0.00
925 ST PIP2196.0	PASS 675.86 C	RS-4.7 (C) -2.83	0.623 0.00	204 0.00
926 ST PIP2196.0	PASS 733.23 C	RS-4.7 (C) -4.18	0.674 0.00	204 0.00
927 ST PIP2196.0	PASS 744.43 C	RS-4.7 (C) -5.48	0.782 0.00	204 0.00
928 ST PIP2196.0	PASS 737.81 C	RS-4.7 (C) -4.22	0.678 0.00	204 0.00
929 ST PIP2196.0	PASS 687.39 C	RS-4.7 (C) -4.34	0.632 0.00	204 0.00
930 ST PIP2196.0	PASS 623.00 C	RS-4.7 (C) -3.94	0.572 0.00	204 0.00
931 ST PIP2196.0	PASS 542.77 C	RS-4.7 (C) -3.43	0.498 0.00	204 0.00
932 ST PIP2196.0	PASS 447.32 C	RS-4.7 (C) -3.19	0.412 0.00	204 0.00
933 ST PIP2196.0	PASS 359.83 C	RS-4.7 (C) -1.61	0.331 0.00	201 0.00
934 ST PIP2196.0	PASS 287.63 C	RS-4.7 (C) -1.47	0.264 0.00	201 1.84
935 ST PIP2196.0	PASS 223.86 C	RS-4.7 (C) -0.88	0.207 0.00	204 2.02
936 ST PIP2196.0	PASS 134.34 C	RS-4.7 (C) -0.93	0.126 0.00	204 2.13
937 ST PIP2196.0	PASS 123.32 T	RS-4.8.2.2 -2.01	0.134 0.00	201 2.13
938 ST PIP2196.0	PASS 110.11 T	RS-4.8.2.2 -7.05	0.193 0.00	207 2.02
939 ST PIP2196.0	PASS 71.24 T	RS-4.8.2.2 -9.09	0.189 0.00	207 0.00
940 ST PIP2196.0	PASS 167.04 C	RS-4.7 (C) -1.62	0.153 0.00	204 0.00
941 ST PIP2196.0	PASS 315.24 C	RS-4.7 (C) -0.16	0.290 0.00	204 0.00
942 ST PIP2196.0	PASS 445.87 C	RS-4.7 (C) -1.47	0.413 0.00	204 0.00

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Job No TPL40581 | Sheet No a 137 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Ref Fabric R5 | Pwf wind speed 32.5 m/s

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
835 ST PIP2196.0	PASS 390.84 C	RS-4.7 (C) -1.69	0.359 0.00	201 1.84
836 ST PIP2196.0	PASS 439.16 C	RS-4.7 (C) -3.20	0.403 0.00	204 1.84
838 ST PIP2196.0	PASS 553.48 C	RS-4.7 (C) -4.84	0.507 0.00	204 1.84
840 ST PIP2196.0	PASS 647.81 C	RS-4.7 (C) -4.43	0.595 0.00	204 1.84
841 ST PIP2196.0	PASS 765.18 C	RS-4.7 (C) -4.39	0.698 0.00	204 1.84
842 ST PIP2196.0	PASS 728.33 C	RS-4.7 (C) -4.61	0.678 0.00	204 1.84
843 ST PIP2196.0	PASS 748.88 C	RS-4.7 (C) -5.29	0.688 0.00	204 1.84
844 ST PIP2196.0	PASS 697.24 C	RS-4.7 (C) -5.47	0.641 0.00	204 1.84
845 ST PIP2196.0	PASS 620.41 C	RS-4.7 (C) -2.53	0.568 0.00	204 1.84
846 ST PIP2196.0	PASS 499.81 T	RS-4.8.2.2 -4.31	0.509 0.00	204 0.00
847 ST PIP2196.0	PASS 419.28 T	RS-4.8.2.2 -4.23	0.428 0.00	204 0.00
848 ST PIP2196.0	PASS 337.87 T	RS-4.8.2.2 -3.65	0.318 0.00	204 0.00
849 ST PIP2196.0	PASS 212.07 C	RS-4.7 (C) -1.85	0.195 0.00	9 0.00
850 ST PIP2196.0	PASS 89.24 T	RS-4.8.2.2 -4.95	0.269 0.00	207 1.88
851 ST PIP2196.0	PASS 223.86 C	RS-4.7 (C) -0.88	0.207 0.00	204 2.02
852 ST PIP2196.0	PASS 454.46 C	RS-4.7 (C) -1.89	0.372 0.00	201 1.84
853 ST PIP2196.0	PASS 359.35 C	RS-4.7 (C) -2.29	0.302 0.00	204 0.00
854 ST PIP2196.0	PASS 485.89 C	RS-4.7 (C) -2.66	0.415 0.00	204 0.00
855 ST PIP2196.0	PASS 493.25 C	RS-4.7 (C) -2.73	0.453 0.00	204 0.00
856 ST PIP2196.0	PASS 519.95 T	RS-4.8.2.2 -7.11	0.566 0.00	205 1.84
857 ST PIP2196.0	PASS 619.82 T	RS-4.8.2.2 -4.50	0.653 0.00	205 0.00
858 ST PIP2196.0	PASS 484.71 C	RS-4.7 (C) -3.35	0.631 0.00	205 1.84
860 ST PIP2196.0	PASS 626.27 C	RS-4.7 (C) -2.39	0.575 0.00	205 1.84

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Job No TPL40581 | Sheet No a 138 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Ref Fabric R5 | Pwf wind speed 32.5 m/s

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
859 ST PIP2196.0	PASS 325.67 C	RS-4.7 (C) -2.62	0.323 0.00	204 0.00
860 ST PIP2196.0	PASS 676.65 C	RS-4.7 (C) -2.65	0.624 0.00	204 0.00
861 ST PIP2196.0	PASS 720.76 C	RS-4.7 (C) -4.25	0.673 0.00	204 0.00
862 ST PIP2196.0	PASS 760.31 C	RS-4.7 (C) -5.68	0.699 0.00	204 0.00
863 ST PIP2196.0	PASS 746.22 C	RS-4.7 (C) -6.69	0.686 0.00	204 0.00
864 ST PIP2196.0	PASS 718.44 C	RS-4.7 (C) -4.31	0.653 0.00	204 0.00
865 ST PIP2196.0	PASS 681.56 C	RS-4.7 (C) -3.98	0.608 0.00	204 0.00
866 ST PIP2196.0	PASS 587.48 C	RS-4.7 (C) -3.73	0.549 0.00	204 0.00
867 ST PIP2196.0	PASS 526.69 C	RS-4.7 (C) -3.38	0.479 0.00	204 0.00
868 ST PIP2196.0	PASS 527.87 C	RS-4.7 (C) -2.79	0.485 0.00	201 0.00
869 ST PIP2196.0	PASS 534.47 C	RS-4.7 (C) -2.83	0.491 0.00	201 0.00
870 ST PIP2196.0	PASS 532.21 C	RS-4.7 (C) -3.72	0.489 0.00	201 0.00
871 ST PIP2196.0	PASS 515.46 C	RS-4.7 (C) -2.23	0.474 0.00	201 1.84
872 ST PIP2196.0	PASS 497.89 C	RS-4.7 (C) -2.60	0.449 0.00	201 1.84
873 ST PIP2196.0	PASS 470.78 C	RS-4.7 (C) -3.30	0.437 0.00	265 1.84
874 ST PIP2196.0	PASS 385.99 C	RS-4.7 (C) -4.30	0.539 0.00	265 1.84
875 ST PIP2196.0	PASS 488.29 C	RS-4.7 (C) -4.68	0.625 0.00	265 1.84
876 ST PIP2196.0	PASS 723.18 C	RS-4.7 (C) -4.28	0.664 0.00	265 1.84
877 ST PIP2196.0	PASS 725.83 C	RS-4.7 (C) -3.79	0.676 0.00	265 1.84
878 ST PIP2196.0	PASS 649.85 T	RS-4.8.2.2 -6.46	0.674 0.00	204 1.84
879 ST PIP2196.0	PASS 484.71 C	RS-4.7 (C) -3.35	0.631 0.00	265 1.84
880 ST PIP2196.0	PASS 626.27 C	RS-4.7 (C) -2.39	0.575 0.00	265 1.84

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Job No TPL40581 | Sheet No a 139 | Rev R4b-FAB

Job Title Wisma Bella Swimming Pool | Ref Fabric R5 | Pwf wind speed 32.5 m/s

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
881 ST PIP2196.0	PASS 599.59 T	RS-4.8.2.2 -4.27	0.510 0.00	204 0.00
882 ST PIP2196.0	PASS 419.97 T	RS-4.8.2.2 -4.33	0.430 0.00	204 0.00
883 ST PIP2196.0	PASS 213.44 T	RS-4.8.2.2 -3.83	0.335 0.00	204 0.00
884 ST PIP2196.0	PASS 181.33 T	RS-4.8.2.2 -2.11	0.205 0.00	204 1.84
885 ST PIP2196.0	PASS 231.73 C	RS-4.8.2.2 -3.94	0.220 0.00	207 1.88
886 ST PIP2196.0	PASS 206.29 C	RS-4.7 (C) -0.74	0.191 0.00	204 2.02
887 ST PIP2196.0	PASS 127.32 C	RS-4.7 (C) -0.34	0.118 0.00	9 0.00
888 ST PIP2196.0	PASS 157.16 C	RS-4.8.2.2.1 -0.67	0.121 0.00	202 -
889 ST PIP2196.0	PASS 179.37 C	RS-4.8.2.2.1 -0.39	0.121 0.02	9 -
890 ST PIP2196.0	PASS 81.06 T	RS-4.8.2.2 -9.18	0.178 0.00	207 0.00
891 ST PIP2196.0	PASS 183.53 C	RS-4.7 (C) -1.87	0.147 0.00	204 0.00
892 ST PIP2196.0	PASS 320.16 C	RS-4.7 (C) -0.24	0.303 0.00	204 0.00
893 ST PIP2196.0	PASS 462.18 C	RS-4.7 (C) -1.68	0.425 0.00	204 0.00
894 ST PIP2196.0	PASS 579.43 C	RS-4.7 (C) -2.83	0.533 0.00	204 0.00
895 ST PIP2196.0	PASS 678.28 C	RS-4.7 (C) -2.79	0.624 0.00	204 0.00
896 ST PIP2196.0	PASS 729.23 C	RS-4.7 (C) -4.16	0.673 0.00	204 0.00
897 ST PIP2196.0	PASS 776.41 C	RS-4.7 (C) -5.41	0.714 0.00	204 0.00
898 ST PIP2196.0	PASS 726.27 C	RS-4.7 (C) -4.26	0.669 0.00	204 0.00
899 ST PIP2196.0	PASS 706.83 C	RS-4.7 (C) -4.44	0.649 0.00	204 0.00
900 ST PIP2196.0	PASS 636.73 C	RS-4.7 (C) -4.02	0.586 0.00	204 0.00
901 ST PIP2196.0	PASS 555.53 C	RS-4.7 (C) -3.79	0.510 0.00	204 0.00
902 ST PIP2196.0	PASS 465.62 C	RS-4.7 (C) -3.26	0.423 0.00	204 0.00

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Software licensed to Transcene Pte Ltd

Job No TPL40581 | Sheet No a 140 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Ref Fabric R5 | Pwf wind speed 32.5 m/s

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
903 ST PIP2196.0	PASS 343.68 C	RS-4.7 (C) -1.57	0.353 0.00	201 0.00
904 ST PIP2196.0	PASS 455.58 C	RS-4.7 (C) -1.78	0.373 0.00	201 0.00
905 ST PIP2196.0	PASS 614.84 C	RS-4.7 (C) -2.22	0.391 0.00	201 0.00
906 ST PIP2196.0	PASS 657.91 C	RS-4.7 (C) -1.84	0.375 0.00	201 1.84
907 ST PIP2196.0	PASS 388.07 C	RS-4.7 (C) -1.81	0.357 0.00	201 1.84
908 ST PIP2196.0	PASS 427.89 C	RS-4.7 (C) -3.13	0.353 0.00	205 1.84
909 ST PIP2196.0	PASS 339.84 C	RS-4.7 (C) -3.97	0.496 0.00	205 1.84
910 ST PIP2196.0	PASS 433.33 C	RS-4.7 (C) -4.34	0.384 0.00	205 1.84
911 ST PIP2196.0	PASS 693.54 C	RS-4.7 (C) -4.31	0.637 0.00	204 1.84
912 ST PIP2196.0	PASS 726.27 C	RS-4.7 (C) -3.94	0.667 0.00	201 1.84
913 ST PIP2196.0	PASS 737.82 C	RS-4.7 (C) -3.18	0.677 0.00	205 1.84
914 ST PIP2196.0	PASS 686.45 C	RS-4.7 (C) -3.41	0.631 0.00	205 1.84
915 ST PIP2196.0	PASS 625.92 C	RS-4.7 (C) -2.49	0.573 0.00	205 1.84
916 ST PIP2196.0	PASS 494.28 T	RS-4.8.2.2 -4.27	0.506 0.00	204 0.00
917 ST PIP2196.0	PASS 494.54 T	RS-4.8.2.2 -4.19	0.424 0.00	204 0.00
918 ST PIP2196.0	PASS 295.01 T	RS-4.8.2.2 -3.42	0.315 0.00	204 0.00
919 ST PIP2196.0	PASS 211.87 C	RS-4.7 (C) -1.85	0.195 0.00	9 0.00
920 ST PIP2196.0	PASS 163.34 T	RS-4.8.2.2 -6.79	0.211 0.00	207 1.88
921 ST PIP2196.0	PASS 219.55 C	RS-4.7 (C) -0.58	0.203 0.00	204 2.02
922 ST PIP2196.0	PASS 133.23 C	RS-4.7 (C) -0.93	0.124 0.00	204 2.13
923 ST PIP2196.0	PASS 123.09 C	RS-4.7 (C) -0.41	0.116 0.00	9 0.00
924 ST PIP2196.0	PASS 203.18 C	RS-4.7 (C) -0.20	0.186 0.00	9 0.00

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Software licensed to Transcene Pte Ltd

Job No TPL40581 | Sheet No a 141 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Ref Fabric R5 | Pwf wind speed 32.5 m/s

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
925 ST PIP2196.0	PASS 90.73 T	RS-4.8.2.2 -9.24	0.205 0.00	207 0.00
926 ST PIP2196.0	PASS 201.48 C	RS-4.7 (C) -2.02	0.195 0.00	204 0.00
927 ST PIP2196.0	PASS 344.48 C	RS-4.7 (C) -3.47	0.316 0.00	204 0.00
928 ST PIP2196.0	PASS 473.84 C	RS-4.7 (C) -1.76	0.434 0.00	204 0.00
929 ST PIP2196.0	PASS 583.33 C	RS-4.7 (C) -2.84	0.536 0.00	204 0.00
930 ST PIP2196.0	PASS 677.88 C	RS-4.7 (C) -2.93	0.623 0.00	204 0.00
931 ST PIP2196.0	PASS 733.26 C	RS-4.7 (C) -4.18	0.674 0.00	204 0.00
932 ST PIP2196.0	PASS 744.44 C	RS-4.7 (C) -5.47	0.782 0.00	204 0.00
933 ST PIP2196.0	PASS 737.84 C	RS-4.7 (C) -4.22	0.678 0.00	204 0.00
934 ST PIP2196.0	PASS 687.43 C	RS-4.7 (C) -4.34	0.632 0.00	204 0.00
935 ST PIP2196.0	PASS 624.01 C	RS-4.7 (C) -3.94	0.572 0.00	204 0.00
936 ST PIP2196.0	PASS 542.77 C	RS-4.7 (C) -3.43	0.498 0.00	204 0.00
937 ST PIP2196.0	PASS 447.32 C	RS-4.7 (C) -3.19	0.412 0.00	204 0.00
938 ST PIP2196.0	PASS 359.83 C	RS-4.7 (C) -1.61	0.331 0.00	201 0.00
939 ST PIP2196.0	PASS 288.78 C	RS-4.7 (C) -1.64	0.357 0.00	201 0.00
940 ST PIP2196.0	PASS 465.86 C	RS-4.7 (C) -2.15	0.372 0.00	201 1.84
941 ST PIP2196.0	PASS 454.46 C	RS-4.7 (C) -1.89	0.372 0.00	201 1.84
942 ST PIP2196.0	PASS 359.80 C	RS-4.7 (C) -1.69	0.359 0.00	201 1.84
943 ST PIP2196.0	PASS 439.14 C	RS-4.7 (C) -3.20	0.403 0.00	204 1.84
944 ST PIP2196.0	PASS 151.46 C	RS-4.7 (C) -4.04	0.307 0.00	202 1.84
945 ST PIP2196.0	PASS 447.78 C	RS-4.7 (C) -4.43	0.595 0.00	205 1.84
946 ST PIP2196.0	PASS 703.83 C	RS-4.7 (C) -4.29	0.648 0.00	205 1.84

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Software licensed to Transcene Pte Ltd

Job No TPL40581 | Sheet No a 142 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool | Ref Fabric R5 | Pwf wind speed 32.5 m/s

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
947 ST PIP2196.0	PASS 536.32 C	RS-4.7 (C) -4.81	0.478 0.00	265 1.84
948 ST PIP2196.0	PASS 748.88 C	RS-4.7 (C) -5.29	0.688 0.00	265 1.84
949 ST PIP2196.0	PASS 697.33 C	RS-4.7 (C) -5.47	0.641 0.00	265 1.84
950 ST PIP2196.0	PASS 620.48 C	RS-4.7 (C) -2.53	0.582 0.00	265 1.84
951 ST PIP2196.0	PASS 499.81 T	RS-4.8.2.2 -4.31	0.509 0.00	204 0.00
952 ST PIP2196.0	PASS 418.28 T	RS-4.8.2.2 -4.23	0.428 0.00	204 0.00
953 ST PIP2196.0	PASS 287.87 T	RS-4.8.2.2 -3.65	0.318 0.00	204 0.00
954 ST PIP2196.0	PASS 212.07 C	RS-4.7 (C) -1.85	0.195 0.00	9 0.00
955 ST PIP2196.0	PASS 89.29 T	RS-4.8.2.2 -4.95	0.269 0.00	207 1.88
956 ST PIP2196.0	PASS 222.99 C	RS-4.7 (C) -0.89	0.207 0.00	204 2.02
957 ST PIP2196.0	PASS 134.27 C	RS-4.7 (C) -0.93	0.126 0.00	204 2.13
958 ST PIP2196.0	PASS 111.77 T	RS-4.8.2.2 -1.98	0.126 0.00	201 2.13
959 ST PIP2196.0	PASS 46.44 C	ANNEX I.1 -4.88	0.233 20.84	208 -
960 ST PIP2196.0	PASS 20.77 T	RS-4.8.2.2 -20.69	0.365 0.00	205 0.00
961 ST PIP2196.0	PASS 192.18 C	RS-4.7 (C) -2.05	0.174 0.00	8 0.00
962 ST PIP2196.0	PASS 269.33 C	RS-4.7 (C) -0.79	0.266 0.00	204 0.00
963 ST PIP2196.0	PASS 359.35 C	RS-4.7 (C) -2.29	0.359 0.00	204 0.00
964 ST PIP2196.0	PASS 485.89 C	RS-4.7 (C) -2.66	0.415 0.00	204 0.00
965 ST PIP2196.0	PASS 493.25 C	RS-4.7 (C) -2.73	0.453 0.00	204 0.00
966 ST PIP2196.0	PASS 518.95 T	RS-4.8.2.2 -7.11	0.566 0.00	205 1.84
967 ST PIP2196.0	PASS 619.82 T	RS-4.8.2.2 -4.50	0.653 0.00	205 0.00
968 ST PIP2196.0	PASS 536.32 T	RS-4.8.2.2 -4.69	0.546 0.00	205 0.00

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Job No TPL40581 | Sheet No a 143 | Rev R4b-FAB

Job Title Wisma Bella Swimming Pool | Ref Fabric R5 | Pwf wind speed 32.5 m/s

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
969 ST PIP2196.0	PASS 473.19 C	RS-4.7 (C) -3.71	0.327 0.00	204 0.00
970 ST PIP2196.0	PASS 570.23 C	RS-4.7 (C) -3.34	0.526 0.00	204 0.00
971 ST PIP2196.0	PASS 544.21 C	RS-4.7 (C) -3.93	0.500 0.00	204 0.00
972 ST PIP2196.0	PASS 462.84 C	RS-4.7 (C) -3.66	0.425 0.00	204 0.00
973 ST PIP2196.0	PASS 402.84 C	RS-4.7 (C) -2.17	0.369 0.00	201 0.00
974 ST PIP2196.0	PASS 405.45 C	RS-4.7 (C) -2.73	0.373 0.00	201 0.00
975 ST PIP2196.0	PASS 288.18 C	RS-4.7 (C) -1.62	0.267 0.00	201 0.00
976 ST PIP2196.0	PASS 432.79 C	RS-4.7 (C) -2.70	0.379 0.00	201 1.84
977 ST PIP2196.0	PASS 416.65 C	RS-4.7 (C) -2.28	0.383 0.00	201 1.84
978 ST PIP2196.0	PASS 476.22 C	RS-4.7 (C) -3.69	0.438 0.00	205 1.84
979 ST PIP2196.0	PASS 473.28 C	RS-4.7 (C) -2.97	0.511 0.00	205 1.84
980 ST PIP2196.0	PASS 547.83 C	RS-4.7 (C) -3.72	0.540 0.00	205 1.84
981 ST PIP2196.0	PASS 365.43 C	RS-4.7 (C) -2.74	0.529 0.00	205 1.84
982 ST PIP2196.0	PASS 520.92 T	RS-4.8.2.2 -4.45	0.535 0.00	204 1.84
983 ST PIP2196.0	PASS 513.23 T	RS-4.8.2.2 -4.73	0.444 0.00	204 1.84
984 ST PIP2196.0	PASS 324.28 T	RS-4.8.2.2 -4.28	0.567 0.00	204 0.00
985 ST PIP2196.0	PASS 482.48 T	RS-4.8.2.2 -3.48	0.465 0.00	204 0.00
986 ST PIP2196.0	PASS 431.69 C	RS-4.7 (C) -2.55	0.397 0.00	205 1.84
987 ST PIP2196.0	PASS 376.63 C	RS-4.7 (C) -2.32	0.345 0.00	205 1.84
988 ST PIP2196.0	PASS 279.07 C	RS-4.7 (C) -0.68	0.258 0.00	205 1.84
989 ST PIP2196.0	PASS 189.42 C	RS-4.7 (C) -1.38	0.174 0.00	9 0.00
990 ST PIP2196.0	PASS 38.84 T	RS-4.8.2.2 -21.35	0.212 0.00	204 1.88

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Job No TPL40581 | Sheet No a 144 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool

Ref wind speed 32.5 m/s

Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan

File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
991 ST	PIP20194.0	PASS 58.34 C	ANNEX I.1 -4.19	0.338 20.97	208 -
992 ST	PIP2194.0	PASS 167.13 T	BS-4.8.2.2 -1.89	0.132 0.00	201 0.00
993 ST	PIP89.1X4.0	PASS 69.83 C	BS-4.7 (C) -0.36	0.278 0.00	205 0.00
994 ST	PIP89.1X4.0	PASS 71.22 T	BS-4.8.2.2 -0.42	0.295 0.00	205 1.95
995 ST	PIP89.1X4.0	PASS 58.17 C	BS-4.7 (C) -0.46	0.234 0.00	205 0.00
996 ST	PIP89.1X4.0	PASS 64.22 T	BS-4.8.2.2 -0.50	0.297 0.00	205 1.95
997 ST	PIP89.1X4.0	PASS 67.22 T	BS-4.8.2.2 -0.44	0.325 0.00	204 1.95
998 ST	PIP89.1X4.0	PASS 54.82 T	BS-4.8.2.2 -0.43	0.261 0.00	205 1.95
999 ST	PIP89.1X4.0	PASS 54.78 T	BS-4.8.2.2 -0.39	0.299 0.00	204 0.00
1000 ST	PIP89.1X4.0	PASS 57.72 C	BS-4.7 (C) -0.46	0.232 0.00	204 1.95
1001 ST	PIP89.1X4.0	PASS 71.79 T	BS-4.8.2.2 -0.38	0.292 0.00	205 1.95
1002 ST	PIP89.1X4.0	PASS 64.53 C	BS-4.7 (C) -0.41	0.262 0.00	205 1.95
1003 ST	PIP89.1X4.0	PASS 64.39 T	BS-4.8.2.2 -0.40	0.342 0.00	205 1.95
1004 ST	PIP89.1X4.0	PASS 73.89 C	BS-4.7 (C) -0.73	0.222 0.00	205 1.95
1005 ST	PIP89.1X4.0	PASS 94.89 T	BS-4.8.2.2 -0.56	0.393 0.00	205 1.95
1006 ST	PIP89.1X4.0	PASS 92.28 C	BS-4.7 (C) -0.58	0.371 0.00	205 1.95
1007 ST	PIP89.1X4.0	PASS 98.16 T	BS-4.8.2.2 -0.91	0.447 0.00	205 0.00
1008 ST	PIP89.1X4.0	PASS 104.58 C	BS-4.8.3.3-3 -0.73	0.416 0.34	205 -
1009 ST	PIP114.2X4.5	PASS 82.17 C	ANNEX I.1 -1.74	0.342 2.55	205 -
1010 ST	PIP89.1X4.0	PASS 25.55 T	BS-4.8.2.2 -1.22	0.274 0.00	205 1.95
1011 ST	PIP89.1X4.0	PASS 49.16 C	BS-4.7 (C) -0.29	0.199 0.00	204 0.00
1012 ST	PIP89.1X4.0	PASS 50.13 T	BS-4.8.2.2 -0.41	0.247 0.00	204 1.95

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Job No TPL40581 | Sheet No a 145 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool

Ref wind speed 32.5 m/s

Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan

File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
1013 ST	PIP89.1X4.0	PASS 54.66 C	BS-4.7 (C) -0.23	0.220 0.00	206 0.00
1014 ST	PIP114.3X4.5	PASS 48.59 T	BS-4.8.2.2 -2.14	0.258 0.00	204 1.95
1015 ST	PIP89.1X4.0	PASS 55.57 C	BS-4.7 (C) -0.25	0.224 0.00	204 0.00
1016 ST	PIP89.1X4.0	PASS 48.93 T	BS-4.8.2.2 -0.66	0.269 0.00	204 1.95
1017 ST	PIP89.1X4.0	PASS 45.92 C	BS-4.7 (C) -0.17	0.185 0.00	206 0.00
1018 ST	PIP89.1X4.0	PASS 46.85 T	BS-4.8.2.2 -0.61	0.252 0.00	204 1.95
1019 ST	PIP89.1X4.0	PASS 53.22 C	BS-4.8.2.2 -0.47	0.222 0.00	207 0.00
1020 ST	PIP89.1X4.0	PASS 43.16 T	BS-4.8.2.2 -0.85	0.254 0.00	204 0.00
1021 ST	PIP89.1X4.0	PASS 37.45 C	ANNEX I.1 -0.66	0.243 1.19	206 -
1022 ST	PIP89.1X4.0	PASS 47.86 T	BS-4.8.2.2 -1.61	0.362 0.00	205 0.00
1023 ST	PIP89.1X4.0	PASS 25.68 C	ANNEX I.1 -0.43	0.273 1.53	206 -
1024 ST	PIP114.2X4.5	PASS 77.32 C	BS-4.7 (C) - -0.28	0.199 0.00	202 1.94
1025 ST	PIP89.1X4.0	PASS 44.46 T	BS-4.8.2.2 -0.33	0.242 0.00	202 2.02
1026 ST	PIP89.1X4.0	PASS 53.27 T	BS-4.8.2.2 -0.91	0.266 0.00	202 2.02
1027 ST	PIP89.1X4.0	PASS 84.39 T	BS-4.8.2.2 -0.48	0.348 0.00	202 2.02
1028 ST	PIP89.1X4.0	PASS 25.19 C	ANNEX I.1 -0.39	0.335 0.59	202 -
1029 ST	PIP114.2X4.5	PASS 101.70 C	BS-4.7 (C) -0.55	0.370 0.00	202 3.59
1030 ST	PIP114.2X4.5	PASS 69.41 C	BS-4.7 (C) -0.67	0.178 0.00	206 0.00
1031 ST	PIP89.1X4.0	PASS 69.91 T	BS-4.8.2.2 -0.43	0.292 0.00	204 1.95
1032 ST	PIP89.1X4.0	PASS 61.44 C	BS-4.7 (C) -0.45	0.247 0.00	204 0.00
1033 ST	PIP89.1X4.0	PASS 70.79 T	BS-4.8.2.2 -0.74	0.296 0.00	204 1.95
1034 ST	PIP89.1X4.0	PASS 69.62 T	BS-4.8.2.2 -0.68	0.249 0.00	205 0.00

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Job No TPL40581 | Sheet No a 146 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool

Ref wind speed 32.5 m/s

Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan

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Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
1035 ST	PIP89.1X4.0	PASS 44.55 T	BS-4.8.2.2 -0.62	0.299 0.00	204 1.95
1036 ST	PIP89.1X4.0	PASS 53.59 T	BS-4.8.2.2 -0.86	0.302 0.00	205 0.00
1037 ST	PIP89.1X4.0	PASS 31.86 T	BS-4.8.2.2 -0.53	0.243 0.00	204 0.00
1038 ST	PIP89.1X4.0	PASS 74.75 T	BS-4.8.2.2 -0.41	0.304 0.00	209 1.95
1039 ST	PIP89.1X4.0	PASS 67.25 C	BS-4.7 (C) -0.72	0.271 0.00	209 1.95
1040 ST	PIP89.1X4.0	PASS 85.91 T	BS-4.8.2.2 -0.75	0.284 0.00	209 1.95
1041 ST	PIP89.1X4.0	PASS 81.91 C	BS-4.7 (C) -0.91	0.256 0.00	209 1.95
1042 ST	PIP89.1X4.0	PASS 94.96 T	BS-4.8.2.2 -0.69	0.410 0.00	209 1.95
1043 ST	PIP89.1X4.0	PASS 91.96 C	BS-4.7 (C) -0.63	0.370 0.00	209 1.95
1044 ST	PIP89.1X4.0	PASS 83.93 T	BS-4.8.2.2 -0.92	0.447 0.00	209 0.00
1045 ST	PIP89.1X4.0	PASS 67.44 C	BS-4.8.3.3.3 -0.62	0.428 0.28	13 -
1046 ST	PIP114.3X4.5	PASS 67.28 C	ANNEX I.1 -1.73	0.348 2.55	204 -
1047 ST	PIP89.1X4.0	PASS 53.88 T	BS-4.8.2.2 -1.30	0.284 0.00	204 1.95
1048 ST	PIP89.1X4.0	PASS 53.84 C	BS-4.7 (C) -0.37	0.227 0.00	205 0.00
1049 ST	PIP89.1X4.0	PASS 45.36 T	BS-4.8.2.2 -0.62	0.232 0.00	205 1.95
1050 ST	PIP89.1X4.0	PASS 47.37 C	BS-4.7 (C) -0.29	0.231 0.00	205 0.00
1051 ST	PIP114.3X4.5	PASS 56.09 T	BS-4.8.2.3 -1.10	0.225 0.00	205 1.95
1052 ST	PIP89.1X4.0	PASS 57.68 C	BS-4.7 (C) -0.18	0.232 0.00	205 0.00
1053 ST	PIP89.1X4.0	PASS 58.60 T	BS-4.8.2.2 -0.80	0.296 0.00	205 1.95
1054 ST	PIP89.1X4.0	PASS 58.60 C	BS-4.7 (C) -0.37	0.185 0.00	206 0.00
1055 ST	PIP89.1X4.0	PASS 47.25 T	BS-4.8.2.2 -0.81	0.242 0.00	206 1.95
1056 ST	PIP89.1X4.0	PASS 32.98 T	BS-4.8.2.2 -0.51	0.226 0.00	207 0.00

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Job No TPL40581 | Sheet No a 147 | Rev R4b-FAB

Job Title Wisma Bella Swimming Pool

Ref wind speed 32.5 m/s

Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan

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Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
1057 ST	PIP89.1X4.0	PASS 43.84 T	BS-4.8.2.2 -0.91	0.351 0.00	206 0.00
1058 ST	PIP89.1X4.0	PASS 39.61 C	ANNEX I.1 -0.43	0.234 1.14	206 -
1059 ST	PIP89.1X4.0	PASS 43.73 T	BS-4.8.2.2 -1.57	0.359 0.00	206 0.00
1060 ST	PIP89.1X4.0	PASS 26.74 C	ANNEX I.1 -0.45	0.269 1.51	206 -
1061 ST	PIP114.3X4.5	PASS 75.27 C	BS-4.7 (C) -0.28	0.194 0.00	202 1.94
1062 ST	PIP89.1X4.0	PASS 44.73 T	BS-4.8.2.2 -0.53	0.262 0.00	202 2.02
1063 ST	PIP89.1X4.0	PASS 73.15 C	BS-4.7 (C) -0.62	0.307 0.00	202 2.02
1064 ST	PIP89.1X4.0	PASS 84.77 T	BS-4.8.2.2 -0.49	0.349 0.00	202 2.02
1065 ST	PIP89.1X4.0	PASS 25.43 C	ANNEX I.1 -0.28	0.225 0.51	202 -
1066 ST	PIP114.3X4.5	PASS 102.89 C	BS-4.7 (C) -0.56	0.374 0.00	202 3.59
1067 ST	PIP89.1X4.0	PASS 48.94 T	BS-4.8.2.2 -0.68	0.317 0.00	204 1.95
1068 ST	PIP89.1X4.0	PASS 56.33 T	BS-4.8.2.2 -0.39	0.381 0.00	205 0.00
1069 ST	PIP89.1X4.0	PASS 58.33 T	BS-4.8.2.2 -0.79	0.301 0.00	204 1.95
1070 ST	PIP89.1X4.0	PASS 68.19 T	BS-4.8.2.2 -0.50	0.295 0.00	205 1.95
1071 ST	PIP89.1X4.0	PASS 53.15 C	BS-4.7 (C) -0.43	0.322 0.00	205 0.00
1072 ST	PIP89.1X4.0	PASS 44.16 T	BS-4.8.2.2 -0.41	0.270 0.00	205 1.95
1073 ST	PIP89.1X4.0	PASS 48.05 T	BS-4.8.2.2 -0.93	0.253 0.00	204 0.00
1074 ST	PIP89.1X4.0	PASS 56.58 T	BS-4.8.2.2 -0.59	0.266 0.00	205 0.00
1075 ST	PIP89.1X4.0	PASS 48.91 T	BS-4.8.2.2 -0.91	0.253 0.00	204 0.00
1076 ST	PIP89.1X4.0	PASS 54.92 T	BS-4.8.2.2 -0.91	0.231 0.00	9 1.95
1077 ST	PIP89.1X4.0	PASS 46.31 T	BS-4.8.2.2 -0.83	0.262 0.00	204 0.00
1078 ST	PIP89.1X4.0	PASS 59.45 C	BS-4.7 (C) -0.51	0.239 0.00	201 1.95

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Job No TPL40581 | Sheet No a 148 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool

Ref wind speed 32.5 m/s

Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan

File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
1079 ST	PIP89.1X4.0	PASS 81.28 T	BS-4.8.2.2 -0.42	0.329 0.00	201 0.00
1080 ST	PIP89.1X4.0	PASS 88.48 C	BS-4.7 (C) -0.44	0.324 0.00	201 1.95
1081 ST	PIP89.1X4.0	PASS 83.43 T	BS-4.8.2.2 -0.73	0.384 0.00	201 0.00
1082 ST	PIP89.1X4.0	PASS 83.76 C	BS-4.8.3.3.1 -0.94	0.491 0.10	209 -
1083 ST	PIP114.3X4.5	PASS 77.24 T	BS-4.8.2.2 -2.20	0.328 0.00	201 1.95
1084 ST	PIP89.1X4.0	PASS 22.14 T	BS-4.8.2.2 -1.13	0.214 0.00	207 1.95
1085 ST	PIP89.1X4.0	PASS 30.24 T	BS-4.8.2.2 -0.79	0.270 0.00	205 1.95
1086 ST	PIP89.1X4.0	PASS 50.42 C	BS-4.7 (C) -0.65	0.264 0.00	206 1.95
1087 ST	PIP89.1X4.0	PASS 47.22 T	BS-4.8.2.2 -0.83	0.333 0.00	205 0.00
1088 ST	PIP114.3X4.5	PASS 23.33 T	BS-4.8.2.2 -2.25	0.281 0.00	204 1.95
1089 ST	PIP89.1X4.0	PASS 44.14 T	BS-4.8.2.2 -0.72	0.277 0.00	205 0.00
1090 ST	PIP89.1X4.0	PASS 56.68 C	BS-4.7 (C) -0.52	0.368 0.00	205 1.95
1091 ST	PIP89.1X4.0	PASS 89.12 T	BS-4.8.2.2 -0.53	0.366 0.00	205 0.00
1092 ST	PIP89.1X4.0	PASS 83.42 C	BS-4.7 (C) -0.65	0.326 0.00	205 1.95
1093 ST	PIP89.1X4.0	PASS 93.61 T	BS-4.8.2.2 -0.89	0.449 0.00	205 0.00
1094 ST	PIP89.1X4.0	PASS 99.71 C	BS-4.7 (C) -0.89	0.397 0.00	205 1.95
1095 ST	PIP89.1X4.0	PASS 109.74 T	BS-4.8.2.2 -0.74	0.446 0.00	205 0.00
1096 ST	PIP89.1X4.0	PASS 99.55 C	BS-4.7 (C) -0.53	0.409 0.00	205 1.95
1097 ST	PIP89.1X4.0	PASS 94.25 T	BS-4.8.2.2 -0.28	0.352 0.00	205 1.93
1098 ST	PIP114.3X4.5	PASS 64.52 C	ANNEX I.1 -0.95	0.172 1.49	206 -
1099 ST	PIP89.1X4.0	PASS 26.16 C	BS-4.8.3.3.3 -0.22	0.193 0.06	205 -
1100 ST	PIP89.1X4.0	PASS 2.58 C	BS-4.8.3.3.3 -0.77	0.176 0.27	206 -

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Job No TPL40581 | Sheet No a 149 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool

Ref wind speed 32.5 m/s

Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan

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Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
1101 ST	PIP89.1X4.0	PASS 53.75 C	BS-4.7 (C) -0.10	0.220 0.00	205 0.00
1102 ST	PIP89.1X4.0	PASS 3.23 C	ANNEX I.1 -0.44	0.076 0.00	208 -
1103 ST	PIP114.3X4.5	PASS 93.93 T	BS-4.8.2.2 -2.03	0.235 0.00	201 2.58
1104 ST	PIP114.3X4.5	PASS 69.91 T	BS-4.8.2.2 -1.27	0.249 0.00	205 1.95
1105 ST	PIP89.1X4.0	PASS 70.68 T	BS-4.8.2.2 -0.27	0.297 0.00	204 1.95
1106 ST	PIP89.1X4.0	PASS 59.86 T	BS-4.8.2.2 -0.69	0.265 0.00	201 1.95
1107 ST	PIP89.1X4.0	PASS 64.46 T	BS-4.8.2.2 -0.75	0.323 0.00	204 1.95
1108 ST	PIP89.1X4.0	PASS 52.97 T	BS-4.8.2.2 -0.71	0.269 0.00	205 0.00
1109 ST	PIP89.1X4.0	PASS 53.85 T	BS-4.8.2.2 -0.58	0.266 0.00	204 1.95
1110 ST	PIP89.1X4.0	PASS 47.62 T	BS-4.8.2.2 -0.80	0.255 0.00	205 0.00
1111 ST	PIP89.1X4.0	PASS 48.85 T	BS-4.8.2.2 -0.59	0.238 0.00	204 0.00
1112 ST	PIP89.1X4.0	PASS 45.27 T	BS-4.8.2.2 -0.91	0.268 0.00	205 0.00
1113 ST	PIP89.1X4.0	PASS 54.57 C	BS-4.7 (C) -0.68	0.228 0.00	205 1.95
1114 ST	PIP89.1X4.0	PASS 40.76 T	BS-4.8.2.2 -0.95	0.258 0.00	205 0.00
1115 ST	PIP89.1X4.0	PASS 34.43 C	BS-4.7 (C) -0.98	0.219 0.00	205 1.93
1116 ST	PIP89.1X4.0	PASS 38.48 T	BS-4.8.2.2 -0.58	0.272 0.00	201 1.95
1117 ST	PIP89.1X4.0	PASS 25.57 C	BS-4.7 (C) -0.51	0.239 0.00	201 1.95
1118 ST	PIP89.1X4.0	PASS 63.70 T	BS-4.8.2.2 -0.70	0.312 0.00	201 0.00
1119 ST	PIP89.1X4.0	PASS 44.69 C	BS-4.8.3.3.1 -1.05	0.382 0.02	205 -
1120 ST	PIP114.3X4.5	PASS 12.28 C	ANNEX I.1 -0.16	0.254 0.00	204 -
1121 ST	PIP89.1X4.0	PASS 20.70 T	BS-4.8.2.2 -1.16	0.256 0.00	207 1.95
1122 ST	PIP89.1X4.0	PASS 45.29 T	BS-4.8.2.2 -0.92	0.270 0.00	204 1.95

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Job No TPL40581 | Sheet No a 150 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool

Ref wind speed 32.5 m/s

Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan

File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
1123 ST	PIP89.1X4.0	PASS 44.70 C	BS-4.7 (C) -0.44	0.160 0.00	206 1.95
1124 ST	PIP89.1X4.0	PASS 59.63 T	BS-4.8.2.2 -0.84	0.320 0.00	204 0.00
1125 ST	PIP114.3X4.5	PASS 27.94 T	BS-4.8.2.2 -1.73	0.281 0.00	9 1.95
1126 ST	PIP89.1X4.0	PASS 66.90 T	BS-4.8.2.2 -0.72	0.285 0.00	204 0.00
1127 ST	PIP89.1X4.0	PASS 79.58 C	BS-4.7 (C) -0.54	0.318 0.00	204 1.95
1128 ST	PIP89.1X4.0	PASS 90.78 T	BS-4.8.2.2 -0.58	0.281 0.00	204 0.00
1129 ST	PIP89.1X4.0	PASS 83.72 C	BS-4.7 (C) -0.66	0.245 0.00	204 1.95
1130 ST	PIP89.1X4.0	PASS 101.84 T	BS-4.8.2.2 -0.86	0.467 0.00	204 0.00
1131 ST	PIP89.1X4.0	PASS 101.15 C	BS-4.7 (C) -0.80	0.487 0.00	204 1.95
1132 ST	PIP89.1X4.0	PASS 112.14 T	BS-4.8.2.2 -0.83	0.485 0.00	204 0.00
1133 ST	PIP89.1X4.0	PASS 101.30 C	BS-4.7 (C) -0.57	0.488 0.00	204 1.95
1134 ST	PIP89.1X4.0	PASS 88.86 T	BS-4.8.2.2 -0.57	0.356 0.00	204 1.93
1135 ST	PIP114.3X4.5	PASS 39.28 C	ANNEX I.1 -0.22	0.171 0.65	206 -
1136 ST	PIP89.1X4.0	PASS 5.33 T	BS-4.8.3.3.3 -0.77	0.174 0.24	206 -
1138 ST	PIP89.1X4.0	PASS 34.24 C	BS-4.7 (C) -0.10	0.226 0.00	204 0.00
1139 ST	PIP89.1X4.0	PASS 2.13 C	ANNEX I.1 -0.44	0.077 0.17	208 -
1140 ST	PIP114.3X4.5	PASS 84.94 T	BS-4.8.2.2 -0.62	0.248 0.00	204 3.59
1141 ST	PIP89.1X4.0	PASS 63.67 C	BS-4.8.3.3.3 -0.26	0.314 0.12	9 -
1142 ST	PIP89.1X4.0	PASS 55.66 T	BS-4.8.2.2 -0.57	0.304 0.00	205 1.95
1143 ST	PIP89.1X4.0	PASS 72.36 C	BS-4.7 (C) -0.43	0.291 0.00	205 0.00
1144 ST	PIP89.1X4.0	PASS 77.93 T	BS-4.8.2.2 -0.33	0.307 0.00	205 0.00

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Job No TPL40581 | Sheet No a 151 | Rev R4b-FAB

Job Title Wisma Bella Swimming Pool

Ref wind speed 32.5 m/s

Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan

File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
1145 ST	PIP89.1X4.0	PASS 48.01 C	BS-4.7 (C) -0.49	0.374 0.00	205 0.00
1146 ST	PIP89.1X4.0	PASS 74.16 T	BS-4.8.2.2 -0.35	0.288 0.00	205 0.00
1147 ST	PIP89.1X4.0	PASS 48.39 C	BS-4.7 (C) -0.43	0.243 0.00	205 0.00
1148 ST	PIP89.1X4.0	PASS 71.28 T	BS-4.8.2.2 -0.28	0.278 0.00	205 0.00
1149 ST	PIP89.1X4.0	PASS 58.34 C	BS-4.7 (C) -0.42	0.293 0.00	205 0.00
1150 ST	PIP89.1X4.0	PASS 69.78 T	BS-4.8.2.2 -0.22	0.242 0.00	202 0.00
1151 ST	PIP89.1X4.0	PASS 55.85 T	BS-4.8.2.2 -0.15	0.207 0.00	201 1.95
1152 ST	PIP89.1X4.0	PASS 42.75 C	BS-4.8.3.3.3 -0.84	0.212 0.21	104 -
1153 ST	PIP89.1X4.0	PASS 66.95 T	BS-4.8.2.2 -0.35	0.279 0.00	201 0.00
1154 ST	PIP89.1X4.0	PASS 66.96 C	BS-4.7 (C) -0.38	0.268 0.00	201 1.95
1155 ST	PIP89.1X4.0	PASS 70.15 T	BS-4.8.2.2 -0.26	0.263 0.00	201 0.00
1156 ST	PIP89.1X4.0	PASS 70.21 C	BS-4.7 (C) -0.28	0.282 0.00	201 1.95
1157 ST	PIP114.3X4.5	PASS 48.37 T	BS-4.8.2.2 -0.89	0.228 0.00	201 0.60
1158 ST	PIP89.1X4.0	PASS 18.48 C	BS-4.7 (C) -0.28	0.074 0.00	205 1.95
1159 ST	PIP89.1X4.0	PASS 45.94 T	BS-4.8.2.2 -0.18	0.178 0.00	205 1.95
1160 ST	PIP89.1X4.0	PASS 31.76 C	BS-4.7 (C) -0.16	0.128 0.00	205 1.95
1161 ST	PIP89.1X4.0	PASS 58.34 T	BS-4.8.2.2 -0.15	0.207 0.00	205 1.95
1162 ST	PIP114.3X4.5	PASS 20.52 T	BS-4.8.2.2 -0.70	0.118 0.00	204 1.95
1163 ST	PIP89.1X4.0	PASS 54.99 C	BS-4.8.3.3.3 -0.29	0.271 0.16	204 -
1164 ST	PIP89.1X4.0	PASS 52.32 C	BS-4.8.3.3.1 -0.65	0.299 0.42	205 -
1165 ST	PIP89.1X4.0	PASS 57.63 C	BS-4.8.3.3.2 -0.22	0.284 0.17	9 -
1166 ST	PIP89.1X4.0	PASS 63.08 C	BS-4.7 (C) -0.44	0.254 0.00	205 1.95

Software licensed to Transerve Pte Ltd | Job No TPL40581 | Sheet No a 152 | Rev R4b-FAB2
Job Title Wisma Belia Swimming Pool | Part wind speed 32.5 m/s | Ref Fabric R5 | By TSM | Date 17-Dec-11 | Chd TSM
Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT	FX	CRITICAL COND	MY	RATIO	MZ	LOADING	LOCATION
1167 ST	PIP89.1X4.0	PASS	77.28 C	BS-4.7 (C)	-0.27	0.311	0.00	204	0.00
1168 ST	PIP89.1X4.0	PASS	72.29 T	BS-4.8.2.2	-0.43	0.309	0.00	204	1.95
1169 ST	PIP89.1X4.0	PASS	86.76 C	BS-4.7 (C)	-0.44	0.349	0.00	204	0.00
1170 ST	PIP89.1X4.0	PASS	78.14 T	BS-4.8.2.2	-0.43	0.320	0.00	204	0.00
1171 ST	PIP89.1X4.0	PASS	89.98 C	BS-4.7 (C)	-0.12	0.361	0.00	204	0.00
1172 ST	PIP114.3X4.5	PASS	48.01 C	BS-4.7 (C)	-0.45	0.124	0.00	204	1.96
1173 ST	PIP89.1X4.0	PASS	43.99 T	BS-4.8.2.2	-0.32	0.189	0.00	204	0.00
1174 ST	PIP89.1X4.0	PASS	41.23 C	BS-4.7 (C)	-0.34	0.169	0.00	204	2.02
1175 ST	PIP89.1X4.0	PASS	39.90 T	BS-4.8.2.2	-0.22	0.163	0.00	204	0.00
1176 ST	PIP89.1X4.0	PASS	10.53 C	BS-4.7 (C)	-0.16	0.043	0.00	204	2.02
1177 ST	PIP114.3X4.5	PASS	48.75 C	BS-4.7 (C)	-0.10	0.180	0.00	204	3.59
1178 ST	PIP114.3X4.5	PASS	63.81 C	BS-4.8.3.3.3	-0.63	0.244	0.31	8	-
1179 ST	PIP89.1X4.0	PASS	75.88 C	BS-4.7 (C)	-0.32	0.305	0.00	205	1.95
1180 ST	PIP89.1X4.0	PASS	67.66 T	BS-4.8.2.2	-0.37	0.277	0.00	205	0.00
1181 ST	PIP89.1X4.0	PASS	72.40 C	BS-4.7 (C)	-0.31	0.291	0.00	205	1.95
1182 ST	PIP89.1X4.0	PASS	59.59 T	BS-4.8.2.2	-0.40	0.253	0.00	205	0.00
1183 ST	PIP89.1X4.0	PASS	66.66 C	BS-4.7 (C)	-0.23	0.268	0.00	205	1.95
1184 ST	PIP89.1X4.0	PASS	48.88 T	BS-4.8.2.2	-0.38	0.214	0.00	205	0.00
1185 ST	PIP89.1X4.0	PASS	61.99 T	BS-4.8.2.2	-0.23	0.240	0.00	204	0.00
1186 ST	PIP89.1X4.0	PASS	37.64 T	BS-4.8.2.2	-0.36	0.173	0.00	205	0.00
1187 ST	PIP89.1X4.0	PASS	49.30 C	BS-4.8.3.3.1	-0.03	0.243	0.23	205	-
1188 ST	PIP89.1X4.0	PASS	38.59 C	BS-4.8.3.3.3	-0.18	0.198	0.20	206	-

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Software licensed to Transerve Pte Ltd | Job No TPL40581 | Sheet No a 153 | Rev R4b-FAB2
Job Title Wisma Belia Swimming Pool | Part wind speed 32.5 m/s | Ref Fabric R5 | By TSM | Date 17-Dec-11 | Chd TSM
Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT	FX	CRITICAL COND	MY	RATIO	MZ	LOADING	LOCATION
1189 ST	PIP89.1X4.0	PASS	46.74 T	BS-4.8.2.2	-0.16	0.179	0.00	204	0.00
1190 ST	PIP89.1X4.0	PASS	46.64 C	BS-4.8.3.3.3	-0.17	0.232	0.16	202	-
1191 ST	PIP89.1X4.0	PASS	46.14 T	BS-4.8.2.2	-0.26	0.190	0.00	202	1.95
1192 ST	PIP89.1X4.0	PASS	40.77 C	BS-4.8.3.3.3	-0.18	0.208	0.14	6	-
1193 ST	PIP89.1X4.0	PASS	50.06 T	BS-4.8.2.2	-0.23	0.199	0.00	202	0.00
1194 ST	PIP114.3X4.5	PASS	49.57 T	BS-4.8.2.2	-0.74	0.165	0.00	207	1.95
1195 ST	PIP89.1X4.0	PASS	18.21 T	BS-4.8.2.2	-0.23	0.091	0.00	205	1.95
1196 ST	PIP89.1X4.0	PASS	42.28 T	BS-4.8.2.2	-0.14	0.161	0.00	204	1.95
1197 ST	PIP89.1X4.0	PASS	23.74 T	BS-4.8.2.2	-0.26	0.113	0.00	205	1.95
1198 ST	PIP89.1X4.0	PASS	62.91 T	BS-4.8.2.2	-0.16	0.235	0.00	204	1.95
1199 ST	PIP114.3X4.5	PASS	49.71 C	BS-4.7 (C)	-0.59	0.128	0.00	204	1.95
1200 ST	PIP89.1X4.0	PASS	72.02 T	BS-4.8.2.2	-0.24	0.275	0.00	204	1.95
1201 ST	PIP89.1X4.0	PASS	49.85 C	BS-4.8.3.3.1	-0.04	0.273	0.38	104	-
1202 ST	PIP89.1X4.0	PASS	79.36 T	BS-4.8.2.2	-0.32	0.310	0.00	204	1.95
1203 ST	PIP89.1X4.0	PASS	70.34 C	BS-4.7 (C)	-0.48	0.283	0.00	204	1.95
1204 ST	PIP89.1X4.0	PASS	85.48 T	BS-4.8.2.2	-0.33	0.332	0.00	204	0.00
1205 ST	PIP89.1X4.0	PASS	81.28 C	BS-4.7 (C)	-0.49	0.327	0.00	204	1.95
1206 ST	PIP89.1X4.0	PASS	91.50 T	BS-4.8.2.2	-0.49	0.373	0.00	204	1.95
1207 ST	PIP89.1X4.0	PASS	81.27 C	BS-4.7 (C)	-0.45	0.327	0.00	204	1.95
1208 ST	PIP89.1X4.0	PASS	84.17 C	BS-4.7 (C)	-0.12	0.337	0.00	205	0.00
1209 ST	PIP114.3X4.5	PASS	39.70 C	BS-4.8.3.3.3	-0.33	0.143	0.23	9	-
1210 ST	PIP89.1X4.0	PASS	40.38 T	BS-4.8.2.2	-0.28	0.172	0.00	205	0.00

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Software licensed to Transerve Pte Ltd | Job No TPL40581 | Sheet No a 154 | Rev R4b-FAB2
Job Title Wisma Belia Swimming Pool | Part wind speed 32.5 m/s | Ref Fabric R5 | By TSM | Date 17-Dec-11 | Chd TSM
Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT	FX	CRITICAL COND	MY	RATIO	MZ	LOADING	LOCATION
1211 ST	PIP89.1X4.0	PASS	38.23 C	BS-4.7 (C)	-0.30	0.156	0.00	205	2.02
1212 ST	PIP89.1X4.0	PASS	35.82 T	BS-4.8.2.2	-0.19	0.146	0.00	205	0.00
1213 ST	PIP89.1X4.0	PASS	7.73 C	BS-4.8.3.3.3	-0.02	0.060	0.16	9	-
1214 ST	PIP114.3X4.5	PASS	46.16 C	BS-4.8.3.3.3	-0.11	0.185	0.09	9	-
1215 ST	PIP89.1X4.0	PASS	56.93 C	BS-4.8.3.3.3	-0.11	0.278	0.23	9	-
1216 ST	PIP89.1X4.0	PASS	67.32 C	BS-4.7 (C)	-0.34	0.271	0.00	204	1.95
1217 ST	PIP89.1X4.0	PASS	64.65 T	BS-4.8.2.2	-0.37	0.266	0.00	204	0.00
1218 ST	PIP89.1X4.0	PASS	67.97 C	BS-4.7 (C)	-0.30	0.273	0.00	204	1.95
1219 ST	PIP89.1X4.0	PASS	57.60 T	BS-4.8.2.2	-0.36	0.241	0.00	204	0.00
1220 ST	PIP89.1X4.0	PASS	66.05 T	BS-4.8.2.2	-0.25	0.256	0.00	205	0.00
1221 ST	PIP89.1X4.0	PASS	48.06 T	BS-4.8.2.2	-0.35	0.207	0.00	204	0.00
1222 ST	PIP89.1X4.0	PASS	55.98 C	BS-4.8.3.3.3	-0.17	0.273	0.20	204	-
1223 ST	PIP89.1X4.0	PASS	38.41 T	BS-4.8.2.2	-0.32	0.171	0.00	204	0.00
1224 ST	PIP89.1X4.0	PASS	53.68 T	BS-4.8.2.2	-0.16	0.203	0.00	205	0.00
1225 ST	PIP89.1X4.0	PASS	55.66 T	BS-4.8.2.2	-0.15	0.209	0.00	201	1.95
1226 ST	PIP89.1X4.0	PASS	42.40 C	BS-4.8.3.3.3	-0.11	0.209	0.17	104	-
1227 ST	PIP89.1X4.0	PASS	69.45 T	BS-4.8.2.2	-0.35	0.280	0.00	201	0.00
1228 ST	PIP89.1X4.0	PASS	67.44 C	BS-4.7 (C)	-0.39	0.271	0.00	201	1.95
1229 ST	PIP89.1X4.0	PASS	70.47 T	BS-4.8.2.2	-0.36	0.285	0.00	201	0.00
1230 ST	PIP89.1X4.0	PASS	70.42 C	BS-4.7 (C)	-0.29	0.283	0.00	201	1.95
1231 ST	PIP114.3X4.5	PASS	79.06 T	BS-4.8.2.2	-0.64	0.228	0.00	201	0.00
1232 ST	PIP89.1X4.0	PASS	12.64 C	ANNEX I.1	-0.22	0.056	0.20	205	-

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Software licensed to Transerve Pte Ltd | Job No TPL40581 | Sheet No a 155 | Rev R4b-FAB
Job Title Wisma Belia Swimming Pool | Part wind speed 32.5 m/s | Ref Fabric R5 | By TSM | Date 17-Dec-11 | Chd TSM
Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT	FX	CRITICAL COND	MY	RATIO	MZ	LOADING	LOCATION
1233 ST	PIP89.1X4.0	PASS	38.20 T	BS-4.8.2.2	-0.10	0.143	0.00	205	1.95
1234 ST	PIP89.1X4.0	PASS	23.58 C	BS-4.7 (C)	-0.32	0.095	0.00	205	1.95
1235 ST	PIP89.1X4.0	PASS	45.62 T	BS-4.8.2.2	-0.10	0.168	0.00	205	1.95
1236 ST	PIP114.3X4.5	PASS	27.61 T	BS-4.8.2.2	-0.66	0.109	0.00	204	1.95
1237 ST	PIP89.1X4.0	PASS	51.81 C	BS-4.8.3.3.3	-0.20	0.256	0.13	204	-
1238 ST	PIP89.1X4.0	PASS	40.55 T	BS-4.8.2.2	-0.34	0.180	0.00	204	1.95
1239 ST	PIP89.1X4.0	PASS	54.96 C	BS-4.8.3.3.3	-0.22	0.273	0.14	8	-
1240 ST	PIP89.1X4.0	PASS	54.51 T	BS-4.8.2.2	-0.37	0.232	0.00	204	1.95
1241 ST	PIP89.1X4.0	PASS	74.11 C	BS-4.7 (C)	-0.25	0.298	0.00	204	0.00
1242 ST	PIP89.1X4.0	PASS	68.99 T	BS-4.8.2.2	-0.42	0.287	0.00	204	1.95
1243 ST	PIP89.1X4.0	PASS	83.45 C	BS-4.7 (C)	-0.42	0.336	0.00	204	0.00
1244 ST	PIP89.1X4.0	PASS	75.92 T	BS-4.8.2.2	-0.41	0.309	0.00	204	0.00
1245 ST	PIP89.1X4.0	PASS	87.65 C	BS-4.7 (C)	-0.13	0.351	0.00	204	0.00
1246 ST	PIP114.3X4.5	PASS	47.78 C	BS-4.7 (C)	-0.44	0.123	0.00	204	1.96
1247 ST	PIP89.1X4.0	PASS	44.19 T	BS-4.8.2.2	-0.32	0.191	0.00	204	0.00
1248 ST	PIP89.1X4.0	PASS	41.97 C	BS-4.7 (C)	-0.35	0.172	0.00	204	2.02
1249 ST	PIP89.1X4.0	PASS	40.33 T	BS-4.8.2.2	-0.22	0.165	0.00	204	0.00
1250 ST	PIP89.1X4.0	PASS	10.56 C	BS-4.7 (C)	-0.17	0.043	0.00	204	2.02
1251 ST	PIP114.3X4.5	PASS	49.48 C	BS-4.7 (C)	-0.11	0.182	0.00	204	3.59
1252 ST	PIP114.3X4.5	PASS	73.08 T	BS-4.8.2.2	-0.77	0.223	0.00	205	0.00
1253 ST	PIP89.1X4.0	PASS	61.59 C	BS-4.8.3.3.3	-0.13	0.303	0.25	105	-
1254 ST	PIP89.1X4.0	PASS	66.69 T	BS-4.8.2.2	-0.37	0.273	0.00	205	0.00

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Software licensed to Transerve Pte Ltd | Job No TPL40581 | Sheet No a 156 | Rev R4b-FAB2
Job Title Wisma Belia Swimming Pool | Part wind speed 32.5 m/s | Ref Fabric R5 | By TSM | Date 17-Dec-11 | Chd TSM
Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT	FX	CRITICAL COND	MY	RATIO	MZ	LOADING	LOCATION
1255 ST	PIP89.1X4.0	PASS	71.70 C	BS-4.7 (C)	-0.31	0.288	0.00	205	1.95
1256 ST	PIP89.1X4.0	PASS	59.55 T	BS-4.8.2.2	-0.39	0.252	0.00	205	0.00
1257 ST	PIP89.1X4.0	PASS	66.48 C	BS-4.7 (C)	-0.23	0.267	0.00	205	1.95
1258 ST	PIP89.1X4.0	PASS	49.29 T	BS-4.8.2.2	-0.37	0.215	0.00	205	0.00
1259 ST	PIP89.1X4.0	PASS	48.91 C	BS-4.8.3.3.3	-0.15	0.238	0.18	105	-
1260 ST	PIP89.1X4.0	PASS	38.25 T	BS-4.8.2.2	-0.35	0.174	0.00	205	0.00
1261 ST	PIP89.1X4.0	PASS	49.66 C	BS-4.8.3.3.3	-0.13	0.241	0.18	205	-
1262 ST	PIP89.1X4.0	PASS	38.26 T	BS-4.8.2.2	-0.18	0.152	0.00	209	1.95
1263 ST	PIP89.1X4.0	PASS	39.90 C	BS-4.7 (C)	-0.03	0.161	0.00	205	1.95
1264 ST	PIP89.1X4.0	PASS	37.29 C	BS-4.8.3.3.3	-0.11	0.181	0.13	6	-
1265 ST	PIP89.1X4.0	PASS	44.32 T	BS-4.8.2.2	-0.25	0.182	0.00	202	1.95
1266 ST	PIP89.1X4.0	PASS	47.96 C	BS-4.7 (C)	-0.26	0.193	0.00	202	0.00
1267 ST	PIP89.1X4.0	PASS	48.65 T	BS-4.8.2.2	-0.24	0.196	0.00	202	0.00
1268 ST	PIP114.3X4.5	PASS	48.78 T	BS-4.8.2.2	-0.82	0.169	0.00	209	1.95
1269 ST	PIP89.1X4.0	PASS	16.49 T	BS-4.8.2.2	-0.22	0.086	0.00	205	1.95
1270 ST	PIP89.1X4.0	PASS	33.95 C	BS-4.7 (C)	-0.07	0.137	0.00	205	0.00
1271 ST	PIP89.1X4.0	PASS	21.71 T	BS-4.8.2.2	-0.25	0.105	0.00	205	1.95
1272 ST	PIP89.1X4.0	PASS	52.44 T	BS-4.8.2.2	-0.11	0.193	0.00	204	1.95
1273 ST	PIP114.3X4.5	PASS	29.69 T	BS-4.8.2.2	-0.61	0.110	0.00	9	1.95
1274 ST	PIP89.1X4.0	PASS	60.81 T	BS-4.8.2.2	-0.18	0.230	0.00	204	1.95
1275 ST	PIP89.1X4.0	PASS	49.54 C	BS-4.7 (C)	-0.41	0.199	0.00	204	1.95
1276 ST	PIP89.1X4.0	PASS	56.22 C	BS-4.8.3.3.3	-0.22	0.279	0.15	9	-

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Software licensed to Transerve Pte Ltd | Job No TPL40581 | Sheet No a 157 | Rev R4b-FAB2
Job Title Wisma Belia Swimming Pool | Part wind speed 32.5 m/s | Ref Fabric R5 | By TSM | Date 17-Dec-11 | Chd TSM
Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT	FX	CRITICAL COND	MY	RATIO	MZ	LOADING	LOCATION
1277 ST	PIP89.1X4.0	PASS	59.44 C	BS-4.7 (C)	-0.43	0.239	0.00	204	1.95
1278 ST	PIP89.1X4.0	PASS	74.28 T	BS-4.8.2.2	-0.28	0.288	0.00	204	0.00
1279 ST	PIP89.1X4.0	PASS	69.45 C	BS-4.7 (C)	-0.45	0.279	0.00	204	1.95
1280 ST	PIP89.1X4.0	PASS	79.80 T	BS-4.8.2.2	-0.41	0.323	0.00	204	1.95
1281 ST	PIP89.1X4.0	PASS	74.67 C	BS-4.7 (C)	-0.40	0.300	0.00	204	1.95
1282 ST	PIP89.1X4.0	PASS	82.31 C	BS-4.7 (C)	-0.12	0.330	0.00	205	0.00
1283 ST	PIP114.3X4.5	PASS	44.71 C	BS-4.7 (C)	-0.40	0.115	0.00	205	1.96
1284 ST	PIP89.1X4.0	PASS	40.54 T	BS-4.8.2.2	-0.29	0.174	0.00	205	0.00
1285 ST	PIP89.1X4.0	PASS	38.65 C	BS-4.7 (C)	-0.32	0.158	0.00	205	2.02
1286 ST	PIP89.1X4.0	PASS	35.85 T	BS-4.8.2.2	-0.20	0.147	0.00	205	0.00
1287 ST	PIP89.1X4.0	PASS	10.26 C	BS-4.7 (C)	-0.15	0.042	0.00	205	2.02
1288 ST	PIP114.3X4.5	PASS	45.92 C	BS-4.7 (C)	-0.12	0.169	0.00	9	0.00
1289 ST	PIP89.1X4.0	PASS	61.43 C	BS-4.8.3.3.3	-0.22	0.302	0.16	9	-
1290 ST	PIP89.1X4.0	PASS	70.99 C	BS-4.7 (C)	-0.37	0.286	0.00	204	1.95
1291 ST	PIP89.1X4.0	PASS	68.87 T	BS-4.8.2.2	-0.37	0.281	0.00	204	0.00
1292 ST	PIP89.1X4.0	PASS	70.57 C	BS-4.7 (C)	-0.32	0.284	0.00	204	1.95
1293 ST	PIP89.1X4.0	PASS	60.65 T	BS-4.8.2.2	-0.36	0.251	0.00	204	0.00
1294 ST	PIP89.1X4.0	PASS	70.90 T	BS-4.8.2.2	-0.27	0.275	0.00	205	0.00
1295 ST	PIP89.1X4.0	PASS	55.06 C	BS-4.8.3.3.3	-0.30	0.302	0.29	205	-
1296 ST	PIP89.1X4.0	PASS	66.54 T	BS-4.8.2.2	-0.25	0.258	0.00	205	0.00
1297 ST	PIP89.1X4.0	PASS	43.76 C	BS-4.8.3.3.3	-0.25	0.241	0.23	9	-
1298 ST	PIP89.1X4.0	PASS	59.27 T	BS-4.8.2.2	-0.18	0.224	0.00	205	0.00

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Software licensed to Transerve Pte Ltd | Job No TPL40581 | Sheet No a 158 | Rev R4b-FAB2
Job Title Wisma Belia Swimming Pool | Part wind speed 32.5 m/s | Ref Fabric R5 | By TSM | Date 17-Dec-11 | Chd TSM
Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT	FX	CRITICAL COND	MY	RATIO	MZ	LOADING	LOCATION
1299 ST	PIP89.1X4.0	PASS	74.36 T	BS-4.8.2.2	-0.21	0.279	0.00	201	1.95
1300 ST	PIP89.1X4.0	PASS	67.75 C	BS-4.7 (C)	-0.59	0.273	0.00	201	1.95
1301 ST	PIP89.1X4.0	PASS	93.12 T	BS-4.8.2.2	-0.50	0.379	0.00	201	0.00
1302 ST	PIP89.1X4.0	PASS	90.99 C	BS-4.7 (C)	-0.50	0.366	0.00	201	1.95
1303 ST	PIP89.1X4.0	PASS	90.94 T	BS-4.8.2.2	-0.47	0.368	0.00	201	0.00
1304 ST	PIP89.1X4.0	PASS	91.31 C	BS-4.7 (C)	-0.35	0.367	0.00	201	1.95
1305 ST	PIP114.3X4.5	PASS	98.74 T	BS-4.8.2.2	-0.76	0.283	0.00	201	0.00
1306 ST	PIP89.1X4.0	PASS	15.23 C	BS-4.8.3.3.3	-0.08	0.074	0.25	208	-
1307 ST	PIP89.1X4.0	PASS	41.13 T	BS-4.8.2.2	-0.12	0.155	0.00	205	1.95
1308 ST	PIP89.1X4.0	PASS	26.62 C	BS-4.7 (C)	-0.35	0.107	0.00	205	1.95
1309 ST	PIP89.1X4.0	PASS	55.45 T	BS-4.8.2.2	-0.13	0.205	0.00	205	1.95
1310 ST	PIP114.3X4.5	PASS	43.43 C	BS-4.7 (C)	-0.88	0.112	0.00	205	1.95
1311 ST	PIP89.1X4.0	PASS	62.89 T	BS-4.8.2.2	-0.19	0.238	0.00	205	1.95
1312 ST	PIP89.1X4.0	PASS	52.13 C	BS-4.7 (C)	-0.41	0.210	0.00	205	1.95
1313 ST	PIP89.1X4.0	PASS	62.25 C	BS-4.8.3.3.3	-0.28	0.317	0.18	204	-
1314 ST	PIP89.1X4.0	PASS	61.34 C	BS-4.7 (C)	-0.43	0.247	0.00	205	1.95
1315 ST	PIP89.1X4.0	PASS	73.98 C	BS-4.7 (C)	-0.25	0.298	0.00	204	0.00
1316 ST	PIP89.1X4.0	PASS	68.51 T	BS-4.8.2.2	-0.42	0.285	0.00	204	1.95
1317 ST	PIP89.1X4.0	PASS	84.66 C	BS-4.7 (C)	-0.42	0.341	0.00	204	0.00
1318 ST	PIP89.1X4.0	PASS	76.10 T	BS-4.8.2.2	-0.41	0.310	0.00	204	0.00
1319 ST	PIP89.1X4.0	PASS	89.44 C	BS-4.7 (C)	-0.12	0.358	0.00	204	0.00
1320 ST	PIP114.3X4.5	PASS	39.57 C	BS-4.8.3.3.3	-0.34	0.144	0.23	8	-

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Software licensed to Transerve Pte Ltd | Job No TPL40581 | Sheet No a 159 | Rev R4b-FAB
Job Title Wisma Belia Swimming Pool | Part wind speed 32.5 m/s | Ref Fabric R5 | By TSM | Date 17-Dec-11 | Chd TSM
Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT	FX	CRITICAL COND	MY	RATIO	MZ	LOADING	LOCATION
1321 ST	PIP89.1X4.0	PASS	42.29 T	BS-4.8.2.2	-0.32	0.184	0.00	204	0.00
1322 ST	PIP89.1X4.0	PASS	40.33 C	BS-4.7 (C)	-0.34	0.165	0.00	204	2.02
1323 ST	PIP89.1X4.0	PASS	36.72 T	BS-4.8.2.2	-0.21	0.152	0.00	204	0.00
1324 ST	PIP89.1X4.0	PASS	11.43 C	BS-4.7 (C)	-0.14	0.047	0.00	204	2.02
1325 ST	PIP114.3X4.5	PASS	46.99 C	BS-4.7 (C)	-0.12	0.173	0.00	8	0.00
1326 ST	PIP114.3X4.5	PASS	60.47 C	BS-4.8.3.3.3	-0.57	0.227	0.37	8	-
1327 ST	PIP89.1X4.0	PASS	70.68 C	BS-4.7 (C)	-0.30	0.284	0.00	205	1.95
1328 ST	PIP89.1X4.0	PASS	64.15 C	BS-4.7 (C)	-0.38	0.258	0.00	204	0.00
1329 ST	PIP89.1X4.0	PASS	72.54 T	BS-4.8.2.2	-0.30	0.285	0.00	204	0.00
1330 ST	PIP89.1X4.0	PASS	66.65 T	BS-4.8.2.2	-0.33	0.268	0.00	205	0.00
1331 ST	PIP89.1X4.0	PASS	72.14 C	BS-4.7 (C)	-0.30	0.290	0.00	205	1.95
1332 ST	PIP89.1X4.0	PASS	58.36 T	BS-4.8.2.2	-0.43	0.253	0.00	205	0.00
1333 ST	PIP89.1X4.0	PASS	67.06 C	BS-4.7 (C)	-0.21	0.270	0.00	205	1.95
1334 ST	PIP89.1X4.0	PASS	37.72 C	BS-4.8.3.3.3	-0.24	0.212	0.21	8	-
1335 ST	PIP89.1X4.0	PASS	56.90 C	BS-4.7 (C)	-0.14	0.229	0.00	205	1.95
1336 ST	PIP89.1X4.0	PASS	49.21 T	BS-4.8.2.2	-0.16	0.188	0.00	201	1.95
1337 ST	PIP89.1X4.0	PASS	46.54 C	BS-4.8.3.3.3	-0.05	0.227	0.20	205	-
1338 ST	PIP89.1X4.0	PASS	50.60 T	BS-4.8.2.2	-0.19	0.196	0.00	201	0.00
1339 ST	PIP89.1X4.0	PASS	47.42 C	BS-4.7 (C)	-0.32	0.191	0.00	201	1.95
1340 ST	PIP89.1X4.0	PASS	52.88 T	BS-4.8.2.2	-0.25	0.211	0.00	201	0.00
1341 ST	PIP89.1X4.0	PASS	50.71 C	BS-4.7 (C)	-0.24	0.204	0.00	201	1.95
1342 ST	PIP114.3X4.5	PASS	51.48 T	BS-4.8.2.2	-0.75	0.171	0.00	207	1.95

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Job No TPL40581 | Sheet No a 160 | Rev R4b-FAB2
Software licensed to Transerve Pte Ltd
Job Title Wisma Bella Swimming Pool | Part wind speed 32.5 m/s | Ref Fabric R5 | By TSM | Date 17-Dec-11 | Chd TSM
Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
1343 ST	PIP89.1X4.0	PASS 20.90 T	BS-4.8.2.2 -0.24	0.101 0.00	205 1.95
1344 ST	PIP89.1X4.0	PASS 41.05 T	BS-4.8.2.2 -0.11	0.153 0.00	204 1.14
1345 ST	PIP89.1X4.0	PASS 25.35 T	BS-4.8.2.2 -0.25	0.118 0.00	205 1.95
1346 ST	PIP89.1X4.0	PASS 64.27 T	BS-4.8.2.2 -0.16	0.238 0.00	204 1.95
1347 ST	PIP114.3X4.5	PASS 51.40 C	BS-4.7 (C) -1.01	0.132 0.00	204 1.95
1348 ST	PIP89.1X4.0	PASS 72.42 T	BS-4.8.2.2 -0.23	0.276 0.00	204 1.95
1349 ST	PIP89.1X4.0	PASS 61.08 C	BS-4.7 (C) -0.46	0.246 0.00	204 1.95
1350 ST	PIP89.1X4.0	PASS 78.65 T	BS-4.8.2.2 -0.31	0.307 0.00	204 1.95
1351 ST	PIP89.1X4.0	PASS 70.44 C	BS-4.7 (C) -0.47	0.283 0.00	204 1.95
1352 ST	PIP89.1X4.0	PASS 83.92 T	BS-4.8.2.2 -0.33	0.327 0.00	204 0.00
1353 ST	PIP89.1X4.0	PASS 80.20 C	BS-4.7 (C) -0.48	0.323 0.00	204 1.95
1354 ST	PIP89.1X4.0	PASS 88.50 T	BS-4.8.2.2 -0.48	0.361 0.00	204 0.00
1355 ST	PIP89.1X4.0	PASS 81.26 C	BS-4.7 (C) -0.43	0.327 0.00	204 1.95
1356 ST	PIP89.1X4.0	PASS 87.54 C	BS-4.7 (C) -0.14	0.351 0.00	205 0.00
1357 ST	PIP114.3X4.5	PASS 43.16 C	BS-4.7 (C) -0.28	0.111 0.00	205 1.96
1358 ST	PIP89.1X4.0	PASS 35.43 T	BS-4.8.2.2 -0.20	0.145 0.00	205 0.00
1359 ST	PIP89.1X4.0	PASS 34.72 C	BS-4.7 (C) -0.25	0.142 0.00	205 2.02
1360 ST	PIP89.1X4.0	PASS 31.27 T	BS-4.8.2.2 -0.14	0.124 0.00	202 0.00
1361 ST	PIP89.1X4.0	PASS 11.77 C	BS-4.7 (C) -0.06	0.048 0.00	205 2.02
1362 ST	PIP114.3X4.5	PASS 44.67 C	BS-4.7 (C) -0.13	0.145 0.00	202 3.59
1363 ST	PIP89.1X4.0	PASS 60.12 C	BS-4.8.3.3.3 -0.17	0.289 0.20	9 -
1364 ST	PIP89.1X4.0	PASS 70.36 C	BS-4.7 (C) -0.37	0.283 0.00	204 1.95

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Job No TPL40581 | Sheet No a 161 | Rev R4b-FAB2
Software licensed to Transerve Pte Ltd
Job Title Wisma Bella Swimming Pool | Part wind speed 32.5 m/s | Ref Fabric R5 | By TSM | Date 17-Dec-11 | Chd TSM
Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
1365 ST	PIP89.1X4.0	PASS 68.46 T	BS-4.8.2.2 -0.37	0.279 0.00	204 0.00
1366 ST	PIP89.1X4.0	PASS 70.16 C	BS-4.8.3.3.3 -0.21	0.351 0.29	204 -
1367 ST	PIP89.1X4.0	PASS 60.52 T	BS-4.8.2.2 -0.36	0.251 0.00	204 0.00
1368 ST	PIP89.1X4.0	PASS 68.45 T	BS-4.8.2.2 -0.26	0.266 0.00	205 0.00
1369 ST	PIP89.1X4.0	PASS 50.13 T	BS-4.8.2.2 -0.35	0.214 0.00	204 0.00
1370 ST	PIP89.1X4.0	PASS 56.94 C	BS-4.8.3.3.3 -0.13	0.281 0.23	204 -
1371 ST	PIP89.1X4.0	PASS 40.50 T	BS-4.8.2.2 -0.31	0.177 0.00	204 0.00
1372 ST	PIP89.1X4.0	PASS 49.04 C	BS-4.8.3.3.3 -0.13	0.247 0.22	204 -
1373 ST	PIP89.1X4.0	PASS 74.20 T	BS-4.8.2.2 -0.21	0.278 0.00	201 1.95
1374 ST	PIP89.1X4.0	PASS 67.60 C	BS-4.7 (C) -0.59	0.272 0.00	201 1.95
1375 ST	PIP89.1X4.0	PASS 92.94 T	BS-4.8.2.2 -0.49	0.378 0.00	201 0.00
1376 ST	PIP89.1X4.0	PASS 90.60 C	BS-4.7 (C) -0.50	0.365 0.00	201 1.95
1377 ST	PIP89.1X4.0	PASS 90.69 T	BS-4.8.2.2 -0.47	0.367 0.00	201 0.00
1378 ST	PIP89.1X4.0	PASS 91.04 C	BS-4.7 (C) -0.35	0.366 0.00	201 1.95
1379 ST	PIP114.3X4.5	PASS 98.36 T	BS-4.8.2.2 -0.77	0.282 0.00	201 0.00
1380 ST	PIP89.1X4.0	PASS 13.89 C	BS-4.8.3.3.3 -0.13	0.074 0.23	206 -
1381 ST	PIP89.1X4.0	PASS 39.33 T	BS-4.8.2.2 -0.10	0.146 0.00	205 1.62
1382 ST	PIP89.1X4.0	PASS 24.75 C	BS-4.7 (C) -0.34	0.100 0.00	205 1.95
1383 ST	PIP89.1X4.0	PASS 53.21 T	BS-4.8.2.2 -0.12	0.196 0.00	205 1.95
1384 ST	PIP114.3X4.5	PASS 28.32 T	BS-4.8.2.2 -0.59	0.106 0.00	8 1.95
1385 ST	PIP89.1X4.0	PASS 48.89 C	BS-4.8.3.3.3 -0.19	0.242 0.13	204 -
1386 ST	PIP89.1X4.0	PASS 49.88 C	BS-4.7 (C) -0.40	0.201 0.00	205 1.95

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Job No TPL40581 | Sheet No a 162 | Rev R4b-FAB2
Software licensed to Transerve Pte Ltd
Job Title Wisma Bella Swimming Pool | Part wind speed 32.5 m/s | Ref Fabric R5 | By TSM | Date 17-Dec-11 | Chd TSM
Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
1387 ST	PIP89.1X4.0	PASS 54.99 C	BS-4.8.3.3.3 -0.21	0.273 0.15	8 -
1388 ST	PIP89.1X4.0	PASS 59.00 C	BS-4.7 (C) -0.41	0.237 0.00	205 1.95
1389 ST	PIP89.1X4.0	PASS 73.54 C	BS-4.7 (C) -0.24	0.296 0.00	204 0.00
1390 ST	PIP89.1X4.0	PASS 68.11 T	BS-4.8.2.2 -0.41	0.284 0.00	204 1.95
1391 ST	PIP89.1X4.0	PASS 84.21 C	BS-4.7 (C) -0.42	0.339 0.00	204 0.00
1392 ST	PIP89.1X4.0	PASS 75.51 T	BS-4.8.2.2 -0.41	0.308 0.00	204 0.00
1393 ST	PIP89.1X4.0	PASS 88.77 C	BS-4.7 (C) -0.11	0.356 0.00	204 0.00
1394 ST	PIP114.3X4.5	PASS 39.90 C	BS-4.8.3.3.3 -0.34	0.145 0.24	8 -
1395 ST	PIP89.1X4.0	PASS 42.52 T	BS-4.8.2.2 -0.31	0.184 0.00	204 0.00
1396 ST	PIP89.1X4.0	PASS 40.39 C	BS-4.7 (C) -0.34	0.165 0.00	204 2.02
1397 ST	PIP89.1X4.0	PASS 29.75 C	BS-4.8.3.3.3 -0.06	0.156 0.17	205 -
1398 ST	PIP89.1X4.0	PASS 11.43 C	BS-4.7 (C) -0.14	0.047 0.00	204 2.02
1399 ST	PIP114.3X4.5	PASS 47.16 C	BS-4.7 (C) -0.12	0.174 0.00	8 0.00
1400 ST	PIP114.3X4.5	PASS 71.41 T	BS-4.8.2.2 -0.71	0.215 0.00	205 0.00
1401 ST	PIP89.1X4.0	PASS 70.86 C	BS-4.7 (C) -0.30	0.285 0.00	205 1.95
1402 ST	PIP89.1X4.0	PASS 53.34 C	BS-4.8.3.3.3 -0.17	0.272 0.25	8 -
1403 ST	PIP89.1X4.0	PASS 69.80 T	BS-4.8.2.2 -0.29	0.274 0.00	204 0.00
1404 ST	PIP89.1X4.0	PASS 67.37 T	BS-4.8.2.2 -0.33	0.270 0.00	205 0.00
1405 ST	PIP89.1X4.0	PASS 72.86 C	BS-4.7 (C) -0.31	0.293 0.00	205 1.95
1406 ST	PIP89.1X4.0	PASS 59.19 T	BS-4.8.2.2 -0.43	0.255 0.00	205 0.00
1407 ST	PIP89.1X4.0	PASS 67.78 C	BS-4.8.3.3.3 -0.16	0.335 0.27	205 -
1408 ST	PIP89.1X4.0	PASS 46.72 T	BS-4.8.2.2 -0.38	0.205 0.00	205 0.00

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Job No TPL40581 | Sheet No a 163 | Rev R4b-FAB
Software licensed to Transerve Pte Ltd
Job Title Wisma Bella Swimming Pool | Part wind speed 32.5 m/s | Ref Fabric R5 | By TSM | Date 17-Dec-11 | Chd TSM
Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
1409 ST	PIP89.1X4.0	PASS 57.71 C	BS-4.7 (C) -0.15	0.232 0.00	205 1.95
1410 ST	PIP89.1X4.0	PASS 49.39 T	BS-4.8.2.2 -0.17	0.189 0.00	201 0.00
1411 ST	PIP89.1X4.0	PASS 47.35 C	BS-4.7 (C) -0.08	0.190 0.00	205 1.95
1412 ST	PIP89.1X4.0	PASS 50.84 T	BS-4.8.2.2 -0.19	0.197 0.00	201 0.00
1413 ST	PIP89.1X4.0	PASS 47.64 C	BS-4.7 (C) -0.32	0.192 0.00	201 1.95
1414 ST	PIP89.1X4.0	PASS 52.88 T	BS-4.8.2.2 -0.25	0.212 0.00	201 0.00
1415 ST	PIP89.1X4.0	PASS 50.63 C	BS-4.7 (C) -0.24	0.204 0.00	201 1.95
1416 ST	PIP114.3X4.5	PASS 50.85 T	BS-4.8.2.2 -0.78	0.171 0.00	209 1.95
1417 ST	PIP89.1X4.0	PASS 21.22 T	BS-4.8.2.2 -0.24	0.103 0.00	205 1.95
1418 ST	PIP89.1X4.0	PASS 37.75 C	BS-4.7 (C) -0.09	0.152 0.00	205 0.00
1419 ST	PIP89.1X4.0	PASS 25.78 T	BS-4.8.2.2 -0.25	0.120 0.00	205 1.95
1420 ST	PIP89.1X4.0	PASS 61.39 T	BS-4.8.2.2 -0.14	0.227 0.00	204 1.95
1421 ST	PIP114.3X4.5	PASS 48.56 C	BS-4.7 (C) -0.98	0.125 0.00	204 1.95
1422 ST	PIP89.1X4.0	PASS 69.33 T	BS-4.8.2.2 -0.22	0.263 0.00	204 1.95
1423 ST	PIP89.1X4.0	PASS 58.20 C	BS-4.7 (C) -0.45	0.234 0.00	204 1.95
1424 ST	PIP89.1X4.0	PASS 60.04 C	BS-4.8.3.3.3 -0.23	0.299 0.16	9 -
1425 ST	PIP89.1X4.0	PASS 67.42 C	BS-4.7 (C) -0.46	0.271 0.00	204 1.95
1426 ST	PIP89.1X4.0	PASS 80.83 T	BS-4.8.2.2 -0.32	0.315 0.00	204 0.00
1427 ST	PIP89.1X4.0	PASS 76.97 C	BS-4.7 (C) -0.47	0.310 0.00	204 1.95
1428 ST	PIP89.1X4.0	PASS 85.26 T	BS-4.8.2.2 -0.46	0.347 0.00	204 0.00
1429 ST	PIP89.1X4.0	PASS 79.18 C	BS-4.7 (C) -0.42	0.319 0.00	204 1.95
1430 ST	PIP89.1X4.0	PASS 87.49 C	BS-4.7 (C) -0.13	0.351 0.00	205 0.00

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Job No TPL40581 | Sheet No a 164 | Rev R4b-FAB2
Software licensed to Transerve Pte Ltd
Job Title Wisma Bella Swimming Pool | Part wind speed 32.5 m/s | Ref Fabric R5 | By TSM | Date 17-Dec-11 | Chd TSM
Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
1431 ST	PIP114.3X4.5	PASS 37.87 C	BS-4.8.3.3.3 -0.28	0.132 0.19	9 -
1432 ST	PIP89.1X4.0	PASS 36.05 T	BS-4.8.2.2 -0.19	0.146 0.00	205 0.00
1433 ST	PIP89.1X4.0	PASS 34.92 C	BS-4.7 (C) -0.25	0.143 0.00	205 2.02
1434 ST	PIP89.1X4.0	PASS 31.52 T	BS-4.8.2.2 -0.14	0.125 0.00	202 0.00
1435 ST	PIP89.1X4.0	PASS 11.87 C	BS-4.7 (C) -0.06	0.049 0.00	205 2.02
1436 ST	PIP114.3X4.5	PASS 44.00 C	BS-4.8.3.3.3 -0.14	0.180 0.10	12 -
1437 ST	PIP89.1X4.0	PASS 60.02 C	BS-4.8.3.3.3 -0.17	0.289 0.20	9 -
1438 ST	PIP89.1X4.0	PASS 70.01 T	BS-4.8.2.2 -0.32	0.278 0.00	205 1.95
1439 ST	PIP89.1X4.0	PASS 66.00 T	BS-4.8.2.2 -0.37	0.271 0.00	204 0.00
1440 ST	PIP89.1X4.0	PASS 68.90 C	BS-4.8.3.3.3 -0.21	0.344 0.28	204 -
1441 ST	PIP89.1X4.0	PASS 61.60 C	BS-4.7 (C) -0.40	0.248 0.00	205 0.00
1442 ST	PIP89.1X4.0	PASS 69.26 T	BS-4.8.2.2 -0.27	0.270 0.00	205 0.00
1443 ST	PIP89.1X4.0	PASS 53.91 C	BS-4.7 (C) -0.40	0.217 0.00	205 0.00
1444 ST	PIP89.1X4.0	PASS 56.03 C	BS-4.8.3.3.3 -0.14	0.279 0.22	204 -
1445 ST	PIP89.1X4.0	PASS 44.05 C	BS-4.7 (C) -0.39	0.177 0.00	205 0.00
1446 ST	PIP89.1X4.0	PASS 56.98 T	BS-4.8.2.2 -0.18	0.216 0.00	205 0.00
1447 ST	PIP89.1X4.0	PASS 59.04 T	BS-4.8.2.2 -0.17	0.218 0.00	201 1.95
1448 ST	PIP89.1X4.0	PASS 53.30 C	BS-4.7 (C) -0.44	0.214 0.00	201 1.95
1449 ST	PIP89.1X4.0	PASS 71.62 T	BS-4.8.2.2 -0.37	0.290 0.00	201 0.00
1450 ST	PIP89.1X4.0	PASS 70.22 C	BS-4.7 (C) -0.39	0.282 0.00	201 1.95
1451 ST	PIP89.1X4.0	PASS 72.40 T	BS-4.8.2.2 -0.38	0.293 0.00	201 0.00
1452 ST	PIP89.1X4.0	PASS 73.02 C	BS-4.7 (C) -0.29	0.294 0.00	201 1.95

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Job No TPL40581 | Sheet No a 165 | Rev R4b-FAB2
Software licensed to Transerve Pte Ltd
Job Title Wisma Bella Swimming Pool | Part wind speed 32.5 m/s | Ref Fabric R5 | By TSM | Date 17-Dec-11 | Chd TSM
Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
1453 ST	PIP114.3X4.5	PASS 81.04 T	BS-4.8.2.2 -0.66	0.234 0.00	201 0.00
1454 ST	PIP89.1X4.0	PASS 14.73 C	BS-4.7 (C) -0.27	0.059 0.00	205 1.95
1455 ST	PIP89.1X4.0	PASS 40.64 T	BS-4.8.2.2 -0.11	0.152 0.00	205 1.78
1456 ST	PIP89.1X4.0	PASS 26.39 C	BS-4.7 (C) -0.33	0.106 0.00	205 1.95
1457 ST	PIP89.1X4.0	PASS 48.73 T	BS-4.8.2.2 -0.12	0.181 0.00	205 1.95
1458 ST	PIP114.3X4.5	PASS 28.15 T	BS-4.8.2.2 -0.66	0.110 0.00	204 1.95
1459 ST	PIP89.1X4.0	PASS 52.34 C	BS-4.8.3.3.3 -0.20	0.258 0.14	204 -
1460 ST	PIP89.1X4.0	PASS 46.02 C	BS-4.7 (C) -0.39	0.185 0.00	205 1.95
1461 ST	PIP89.1X4.0	PASS 64.03 C	BS-4.8.3.3.3 -0.28	0.325 0.17	204 -
1462 ST	PIP89.1X4.0	PASS 55.03 T	BS-4.8.2.2 -0.38	0.234 0.00	204 1.95
1463 ST	PIP89.1X4.0	PASS 74.60 C	BS-4.7 (C) -0.25	0.300 0.00	204 0.00
1464 ST	PIP89.1X4.0	PASS 69.52 T	BS-4.8.2.2 -0.42	0.289 0.00	204 1.95
1465 ST	PIP89.1X4.0	PASS 83.94 C	BS-4.7 (C) -0.42	0.338 0.00	204 0.00
1466 ST	PIP89.1X4.0	PASS 76.16 T	BS-4.8.2.2 -0.41	0.311 0.00	204 0.00
1467 ST	PIP89.1X4.0	PASS 87.82 C	BS-4.7 (C) -0.13	0.352 0.00	204 0.00
1468 ST	PIP114.3X4.5	PASS 39.49 C	BS-4.8.3.3.3 -0.34	0.143 0.23	8 -
1469 ST	PIP89.1X4.0	PASS 43.25 T	BS-4.8.2.2 -0.31	0.187 0.00	204 0.00
1470 ST	PIP89.1X4.0	PASS 40.57 C	BS-4.7 (C) -0.34	0.168 0.00	204 2.02
1471 ST	PIP89.1X4.0	PASS 39.20 T	BS-4.8.2.2 -0.22	0.161 0.00	204 0.00
1472 ST	PIP89.1X4.0	PASS 10.50 C	BS-4.7 (C) -0.16	0.043 0.00	204 2.02
1473 ST	PIP114.3X4.5	PASS 47.67 C	BS-4.7 (C) -0.10	0.176 0.00	204 3.59
1474 ST	PIP114.3X4.5	PASS 74.02 T	BS-4.8.2.2 -0.78	0.226 0.00	205 0.00

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Job No TPL40581 | Sheet No a 166 | Rev R4b-FAB2
Software licensed to Transerve Pte Ltd
Job Title Wisma Bella Swimming Pool | Part wind speed 32.5 m/s | Ref Fabric R5 | By TSM | Date 17-Dec-11 | Chd TSM
Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
1475 ST	PIP89.1X4.0	PASS 74.64 C	BS-4.8.3.3.3 -0.19	0.363 0.26	205 -
1476 ST	PIP89.1X4.0	PASS 66.93 T	BS-4.8.2.2 -0.37	0.274 0.00	205 0.00
1477 ST	PIP89.1X4.0	PASS 72.05 C	BS-4.7 (C) -0.30	0.290 0.00	205 1.95
1478 ST	PIP89.1X4.0	PASS 59.44 T	BS-4.8.2.2 -0.39	0.252 0.00	205 0.00
1479 ST	PIP89.1X4.0	PASS 66.59 C	BS-4.7 (C) -0.23	0.268 0.00	205 1.95
1480 ST	PIP89.1X4.0	PASS 48.99 T	BS-4.8.2.2 -0.37	0.213 0.00	205 0.00
1481 ST	PIP89.1X4.0	PASS 58.64 C	BS-4.8.3.3.3 -0.14	0.288 0.23	205 -
1482 ST	PIP89.1X4.0	PASS 37.83 T	BS-4.8.2.2 -0.35	0.172 0.00	205 0.00
1483 ST	PIP89.1X4.0	PASS 49.49 C	BS-4.8.3.3.3 -0.10	0.241 0.19	205 -
1484 ST	PIP89.1X4.0	PASS 34.71 C	BS-4.8.3.3.3 -0.05	0.176 0.18	10 -
1485 ST	PIP89.1X4.0	PASS 39.56 C	BS-4.7 (C) -0.05	0.159 0.00	205 1.95
1486 ST	PIP89.1X4.0	PASS 42.08 C	BS-4.7 (C) -0.16	0.169 0.00	202 0.00
1487 ST	PIP89.1X4.0	PASS 40.66 T	BS-4.8.2.2 -0.24	0.168 0.00	202 1.95
1488 ST	PIP89.1X4.0	PASS 45.36 C	BS-4.7 (C) -0.24	0.182 0.00	202 0.00
1489 ST	PIP89.1X4.0	PASS 37.70 C	BS-4.8.3.3.3 -0.20	0.201 0.16	201 -
1490 ST	PIP114.3X4.5	PASS 46.37 T	BS-4.8.2.2 -0.79	0.161 0.00	207 1.95
1491 ST	PIP89.1X4.0	PASS 19.25 T	BS-4.8.2.2 -0.23	0.095 0.00	205 1.95
1492 ST	PIP89.1X4.0	PASS 36.91 C	BS-4.7 (C) -0.08	0.149 0.00	205 0.00
1493 ST	PIP89.1X4.0	PASS 24.83 T	BS-4.8.2.2 -0.26	0.117 0.00	205 1.95
1494 ST	PIP89.1X4.0	PASS 59.24 T	BS-4.8.2.2 -0.14	0.220 0.00	204 1.95
1495 ST	PIP114.3X4.5	PASS 33.07 T	BS-4.8.2.2 -0.65	0.121 0.00	9 1.95
1496 ST	PIP89.1X4.0	PASS 67.88 T	BS-4.8.2.2 -0.22	0.258 0.00	204 1.95

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Job No TPL40581 | Sheet No a 167 | Rev R4b-FAB
Software licensed to Transerve Pte Ltd
Job Title Wisma Bella Swimming Pool | Part wind speed 32.5 m/s | Ref Fabric R5 | By TSM | Date 17-Dec-11 | Chd TSM
Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
1497 ST	PIP89.1X4.0	PASS 56.48 C	BS-4.7 (C) -0.44	0.227 0.00	204 1.95
1498 ST	PIP89.1X4.0	PASS 59.88 C	BS-4.8.3.3.3 -0.23	0.298 0.16	9 -
1499 ST	PIP89.1X4.0	PASS 66.74 C	BS-4.7 (C) -0.46	0.269 0.00	204 1.95
1500 ST	PIP89.1X4.0	PASS 81.48 T	BS-4.8.2.2 -0.32	0.317 0.00	204 0.00
1501 ST	PIP89.1X4.0	PASS 77.40 C	BS-4.7 (C) -0.47	0.311 0.00	204 1.95
1502 ST	PIP89.1X4.0	PASS 87.14 T	BS-4.8.2.2 -0.46	0.355 0.00	204 1.95
1503 ST	PIP89.1X4.0	PASS 80.16 C	BS-4.7 (C) -0.43	0.322 0.00	204 1.95
1504 ST	PIP89.1X4.0	PASS 85.24 C	BS-4.7 (C) -0.13	0.342 0.00	205 0.00
1505 ST	PIP114.3X4.5	PASS 37.69 C	BS-4.8.3.3.3 -0.28	0.132 0.18	9 -
1506 ST	PIP89.1X4.0	PASS 36.49 T	BS-4.8.2.2 -0.20	0.149 0.00	205 0.00
1507 ST	PIP89.1X4.0	PASS 35.29 C	BS-4.7 (C) -0.26	0.144 0.00	205 2.02
1508 ST	PIP89.1X4.0	PASS 33.68 T	BS-4.8.2.2 -0.14	0.133 0.00	202 0.00
1509 ST	PIP89.1X4.0	PASS 10.88 C	BS-4.7 (C) -0.09	0.045 0.00	205 2.02
1510 ST	PIP114.3X4.5	PASS 49.86 C	BS-4.7 (C) -0.15	0.184 0.00	202 3.59
1511 ST	PIP89.1X4.0	PASS 61.52 C	BS-4.8.3.3.3 -0.22	0.303 0.16	9 -
1512 ST	PIP89.1X4.0	PASS 72.13 T	BS-4.8.2.2 -0.33	0.287 0.00	205 1.95
1513 ST	PIP89.1X4.0	PASS 68.91 C	BS-4.7 (C) -0.41	0.277 0.00	205 0.00
1514 ST	PIP89.1X4.0	PASS 74.03 T	BS-4.8.2.2 -0.31	0.291 0.00	205 0.00
1515 ST	PIP89.1X4.0	PASS 64.45 C	BS-4.7 (C) -0.41	0.259 0.00	205 0.00
1516 ST	PIP89.1X4.0	PASS 72.17 T	BS-4.8.2.2 -0.29	0.281 0.00	205 0.00
1517 ST	PIP89.1X4.0	PASS 56.85 C	BS-4.7 (C) -0.41	0.229 0.00	205 0.00
1518 ST	PIP89.1X4.0	PASS 56.28 C	BS-4.8.3.3.3 -0.10	0.278 0.24	204 -

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Job No TPL40581 | Sheet No a 168 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool

Ref wind speed 32.5 m/s

Ref Fabric R5

By TSM Date 17-Dec-11 Chd TSM

Client Majlis Perbandaran Kuantan

File Q326-KSP-R4b-Deg.std Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COMB/ MY	RATIO/ MZ	LOADING/ LOCATION
1519 ST	PIP89.1X4.0	PASS 43.98 C	RS-4.0,3.3.3 -0.23	0.242 0.23	9 -
1520 ST	PIP89.1X4.0	PASS 23.94 T	RS-4.0,2.2 -0.10	0.226 0.00	205 0.00
1521 ST	PIP89.1X4.0	PASS 57.34 T	RS-4.0,2.2 -0.16	0.216 0.00	205 1.95
1522 ST	PIP89.1X4.0	PASS 52.47 C	RS-4.7 (C) -0.42	0.212 0.00	201 1.95
1523 ST	PIP89.1X4.0	PASS 70.96 T	RS-4.0,2.2 -0.37	0.267 0.00	201 0.00
1524 ST	PIP89.1X4.0	PASS 69.62 C	RS-4.7 (C) -0.39	0.280 0.00	201 1.95
1525 ST	PIP89.1X4.0	PASS 71.89 T	RS-4.0,2.2 -0.37	0.291 0.00	201 0.00
1526 ST	PIP89.1X4.0	PASS 72.47 C	RS-4.7 (C) -0.28	0.292 0.00	201 1.95
1527 ST	PIP114.3X4.5	PASS 69.47 T	RS-4.0,2.2 -0.44	0.232 0.00	201 0.00
1528 ST	PIP89.1X4.0	PASS 61.84 C	RS-4.7 (C) -0.26	0.261 0.00	201 1.95
1529 ST	PIP89.1X4.0	PASS 42.69 T	RS-4.0,2.2 -0.13	0.159 0.00	205 1.95
1530 ST	PIP89.1X4.0	PASS 37.93 C	RS-4.7 (C) -0.24	0.132 0.00	205 1.95
1531 ST	PIP89.1X4.0	PASS 50.67 T	RS-4.0,2.2 -0.13	0.189 0.00	205 1.95
1532 ST	PIP114.3X4.5	PASS 29.16 T	RS-4.0,2.2 -0.69	0.114 0.00	205 1.95
1533 ST	PIP89.1X4.0	PASS 53.38 C	RS-4.0,3.3.3 -0.19	0.263 0.15	204 -
1534 ST	PIP89.1X4.0	PASS 47.94 C	RS-4.7 (C) -0.39	0.193 0.00	205 1.95
1535 ST	PIP89.1X4.0	PASS 63.56 C	RS-4.0,3.3.3 -0.21	0.276 0.16	9 -
1536 ST	PIP89.1X4.0	PASS 56.69 T	RS-4.0,2.2 -0.39	0.229 0.00	204 1.95
1537 ST	PIP89.1X4.0	PASS 73.64 C	RS-4.7 (C) -0.28	0.304 0.00	204 0.00
1538 ST	PIP89.1X4.0	PASS 70.76 T	RS-4.0,2.2 -0.42	0.293 0.00	204 1.95
1539 ST	PIP89.1X4.0	PASS 65.65 C	RS-4.7 (C) -0.42	0.262 0.00	204 0.00
1540 ST	PIP89.1X4.0	PASS 74.94 T	RS-4.0,2.2 -0.42	0.214 0.00	204 0.00

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Job No TPL40581 | Sheet No a 169 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool

Ref wind speed 32.5 m/s

Ref Fabric R5

By TSM Date 17-Dec-11 Chd TSM

Client Majlis Perbandaran Kuantan

File Q326-KSP-R4b-Deg.std Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COMB/ MY	RATIO/ MZ	LOADING/ LOCATION
1541 ST	PIP89.1X4.0	PASS 48.83 C	RS-4.7 (C) -0.12	0.205 0.00	204 0.00
1542 ST	PIP114.3X4.5	PASS 39.38 C	RS-4.0,3.3.3 -0.24	0.146 0.24	8 -
1543 ST	PIP89.1X4.0	PASS 43.45 T	RS-4.0,2.2 -0.31	0.188 0.00	204 0.00
1544 ST	PIP89.1X4.0	PASS 41.11 C	RS-4.7 (C) -0.34	0.168 0.00	204 2.02
1545 ST	PIP89.1X4.0	PASS 29.49 T	RS-4.0,2.2 -0.22	0.161 0.00	204 0.00
1546 ST	PIP89.1X4.0	PASS 10.25 C	RS-4.7 (C) -0.14	0.043 0.00	204 2.02
1547 ST	PIP114.3X4.5	PASS 47.58 C	RS-4.7 (C) -0.18	0.173 0.00	204 3.59
1548 ST	PIP114.3X4.5	PASS 66.36 C	RS-4.0,3.3.3 -0.35	0.229 0.26	9 -
1549 ST	PIP89.1X4.0	PASS 74.42 C	RS-4.7 (C) -0.29	0.299 0.00	205 1.95
1550 ST	PIP89.1X4.0	PASS 66.26 T	RS-4.0,2.2 -0.37	0.272 0.00	205 0.00
1551 ST	PIP89.1X4.0	PASS 71.25 C	RS-4.7 (C) -0.30	0.297 0.00	205 1.95
1552 ST	PIP89.1X4.0	PASS 58.48 T	RS-4.0,2.2 -0.29	0.240 0.00	205 0.00
1553 ST	PIP89.1X4.0	PASS 45.58 C	RS-4.7 (C) -0.22	0.266 0.00	205 1.95
1554 ST	PIP89.1X4.0	PASS 45.22 C	RS-4.0,3.3.3 -0.24	0.219 0.24	164 -
1555 ST	PIP89.1X4.0	PASS 57.58 C	RS-4.7 (C) -0.14	0.232 0.00	205 1.95
1556 ST	PIP89.1X4.0	PASS 36.84 T	RS-4.0,3.3.3 -0.24	0.214 0.22	8 -
1557 ST	PIP89.1X4.0	PASS 49.33 C	RS-4.7 (C) -0.06	0.226 0.23	205 -
1558 ST	PIP89.1X4.0	PASS 30.38 C	RS-4.0,3.3.3 -0.23	0.179 0.20	9 -
1559 ST	PIP89.1X4.0	PASS 43.73 T	RS-4.0,2.2 -0.14	0.166 0.00	204 0.00
1560 ST	PIP89.1X4.0	PASS 43.58 C	RS-4.0,3.3.3 -0.15	0.216 0.15	202 -
1561 ST	PIP89.1X4.0	PASS 42.83 T	RS-4.0,2.2 -0.25	0.175 0.00	202 1.95
1562 ST	PIP89.1X4.0	PASS 37.84 C	RS-4.0,3.3.3 -0.15	0.191 0.14	6 -

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Job No TPL40581 | Sheet No a 170 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool

Ref wind speed 32.5 m/s

Ref Fabric R5

By TSM Date 17-Dec-11 Chd TSM

Client Majlis Perbandaran Kuantan

File Q326-KSP-R4b-Deg.std Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COMB/ MY	RATIO/ MZ	LOADING/ LOCATION
1563 ST	PIP89.1X4.0	PASS 37.56 C	RS-4.0,3.3.3 -0.17	0.192 0.17	201 -
1564 ST	PIP114.3X4.5	PASS 54.39 T	RS-4.0,2.2 -0.53	0.193 0.00	205 1.95
1565 ST	PIP89.1X4.0	PASS 19.37 T	RS-4.0,2.2 -0.24	0.095 0.00	205 1.95
1566 ST	PIP89.1X4.0	PASS 41.41 T	RS-4.0,2.2 -0.11	0.155 0.00	204 1.46
1567 ST	PIP89.1X4.0	PASS 24.78 T	RS-4.0,2.2 -0.08	0.117 0.00	205 1.95
1568 ST	PIP89.1X4.0	PASS 61.54 T	RS-4.0,2.2 -0.35	0.225 0.00	204 1.95
1569 ST	PIP114.3X4.5	PASS 48.43 C	RS-4.7 (C) -0.97	0.124 0.00	204 1.95
1570 ST	PIP89.1X4.0	PASS 70.49 T	RS-4.0,2.2 -0.23	0.268 0.00	204 1.95
1571 ST	PIP89.1X4.0	PASS 54.76 C	RS-4.7 (C) -0.45	0.231 0.00	204 1.95
1572 ST	PIP89.1X4.0	PASS 77.78 T	RS-4.0,2.2 -0.31	0.304 0.00	204 1.95
1573 ST	PIP89.1X4.0	PASS 62.16 C	RS-4.7 (C) -0.47	0.278 0.00	204 1.95
1574 ST	PIP89.1X4.0	PASS 64.86 T	RS-4.0,2.2 -0.26	0.327 0.00	204 0.00
1575 ST	PIP89.1X4.0	PASS 78.92 C	RS-4.7 (C) -0.48	0.322 0.00	204 1.95
1576 ST	PIP89.1X4.0	PASS 85.49 T	RS-4.0,2.2 -0.48	0.365 0.00	204 1.95
1577 ST	PIP89.1X4.0	PASS 82.19 C	RS-4.7 (C) -0.43	0.331 0.00	204 1.95
1578 ST	PIP89.1X4.0	PASS 71.37 C	RS-4.7 (C) -0.42	0.343 0.00	205 0.00
1579 ST	PIP114.3X4.5	PASS 42.41 C	RS-4.7 (C) -0.25	0.169 0.00	205 1.96
1580 ST	PIP89.1X4.0	PASS 35.89 T	RS-4.0,2.2 -0.20	0.147 0.00	205 0.00
1581 ST	PIP89.1X4.0	PASS 34.61 C	RS-4.7 (C) -0.25	0.142 0.00	205 2.02
1582 ST	PIP89.1X4.0	PASS 32.74 T	RS-4.0,2.2 -0.15	0.120 0.00	202 0.00
1583 ST	PIP89.1X4.0	PASS 10.74 C	RS-4.7 (C) -0.09	0.044 0.00	205 2.02
1584 ST	PIP114.3X4.5	PASS 46.36 C	RS-4.7 (C) -0.24	0.178 0.00	202 3.59

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Job No TPL40581 | Sheet No a 171 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool

Ref wind speed 32.5 m/s

Ref Fabric R5

By TSM Date 17-Dec-11 Chd TSM

Client Majlis Perbandaran Kuantan

File Q326-KSP-R4b-Deg.std Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COMB/ MY	RATIO/ MZ	LOADING/ LOCATION
1585 ST	PIP89.1X4.0	PASS 56.83 C	RS-4.0,3.3.3 -0.11	0.274 0.23	9 -
1586 ST	PIP89.1X4.0	PASS 67.56 C	RS-4.7 (C) -0.35	0.272 0.00	204 1.95
1587 ST	PIP89.1X4.0	PASS 44.98 T	RS-4.0,2.2 -0.27	0.267 0.00	204 0.00
1588 ST	PIP89.1X4.0	PASS 68.24 C	RS-4.7 (C) -0.30	0.275 0.00	204 1.95
1589 ST	PIP89.1X4.0	PASS 57.99 T	RS-4.0,2.2 -0.23	0.242 0.00	204 0.00
1590 ST	PIP89.1X4.0	PASS 46.80 T	RS-4.0,2.2 -0.25	0.255 0.00	205 0.00
1591 ST	PIP89.1X4.0	PASS 48.65 T	RS-4.0,2.2 -0.25	0.259 0.00	204 0.00
1592 ST	PIP89.1X4.0	PASS 56.29 C	RS-4.0,3.3.3 -0.17	0.274 0.20	204 -
1593 ST	PIP89.1X4.0	PASS 38.77 T	RS-4.0,2.2 -0.32	0.173 0.00	204 0.00
1594 ST	PIP89.1X4.0	PASS 53.42 T	RS-4.0,2.2 -0.16	0.202 0.00	205 0.00
1595 ST	PIP89.1X4.0	PASS 56.86 T	RS-4.0,2.2 -0.16	0.210 0.00	202 1.95
1596 ST	PIP89.1X4.0	PASS 51.29 C	RS-4.7 (C) -0.15	0.206 0.00	204 1.95
1597 ST	PIP89.1X4.0	PASS 49.84 T	RS-4.0,2.2 -0.35	0.282 0.00	201 0.00
1598 ST	PIP89.1X4.0	PASS 67.81 C	RS-4.7 (C) -0.39	0.273 0.00	201 1.95
1599 ST	PIP89.1X4.0	PASS 70.86 T	RS-4.0,2.2 -0.36	0.284 0.00	201 0.00
1600 ST	PIP89.1X4.0	PASS 70.79 C	RS-4.7 (C) -0.39	0.285 0.00	201 1.95
1601 ST	PIP114.3X4.5	PASS 79.38 T	RS-4.0,2.2 -0.45	0.229 0.00	201 0.00
1602 ST	PIP89.1X4.0	PASS 18.56 C	RS-4.0,3.3.3 -0.19	0.093 0.17	165 -
1603 ST	PIP89.1X4.0	PASS 44.39 T	RS-4.0,2.2 -0.31	0.144 0.00	205 1.95
1604 ST	PIP89.1X4.0	PASS 23.78 C	RS-4.7 (C) -0.32	0.095 0.00	205 1.95
1605 ST	PIP89.1X4.0	PASS 43.73 T	RS-4.0,2.2 -0.11	0.159 0.00	205 1.95
1606 ST	PIP114.3X4.5	PASS 25.28 T	RS-4.0,2.2 -0.86	0.108 0.00	204 1.95

Print Time/Date: 11/07/2012 17:29 STAAD.Pro for Windows 20.07.02.15 Print Run 73 of 10

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Job No TPL40581 | Sheet No a 172 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool

Ref wind speed 32.5 m/s

Ref Fabric R5

By TSM Date 17-Dec-11 Chd TSM

Client Majlis Perbandaran Kuantan

File Q326-KSP-R4b-Deg.std Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COMB/ MY	RATIO/ MZ	LOADING/ LOCATION
1607 ST	PIP89.1X4.0	PASS 51.52 C	RS-4.0,3.3.3 -0.20	0.254 0.13	204 -
1608 ST	PIP89.1X4.0	PASS 49.24 T	RS-4.0,2.2 -0.24	0.179 0.00	204 1.95
1609 ST	PIP89.1X4.0	PASS 54.76 C	RS-4.0,3.3.3 -0.21	0.272 0.14	8 -
1610 ST	PIP89.1X4.0	PASS 54.19 T	RS-4.0,2.2 -0.37	0.231 0.00	204 1.95
1611 ST	PIP89.1X4.0	PASS 73.94 C	RS-4.7 (C) -0.25	0.297 0.00	204 0.00
1612 ST	PIP89.1X4.0	PASS 68.64 T	RS-4.0,2.2 -0.41	0.285 0.00	204 1.95
1613 ST	PIP89.1X4.0	PASS 63.13 C	RS-4.7 (C) -0.41	0.254 0.00	204 0.00
1614 ST	PIP89.1X4.0	PASS 70.86 T	RS-4.0,2.2 -0.40	0.289 0.00	204 0.00
1615 ST	PIP89.1X4.0	PASS 67.55 C	RS-4.7 (C) -0.13	0.261 0.00	204 0.00
1616 ST	PIP114.3X4.5	PASS 39.28 C	RS-4.0,3.3.3 -0.20	0.158 0.21	164 -
1617 ST	PIP89.1X4.0	PASS 43.89 T	RS-4.0,2.2 -0.33	0.190 0.00	204 0.00
1618 ST	PIP89.1X4.0	PASS 41.84 C	RS-4.7 (C) -0.26	0.171 0.00	204 2.02
1619 ST	PIP89.1X4.0	PASS 45.28 T	RS-4.0,2.2 -0.22	0.165 0.00	204 0.00
1620 ST	PIP89.1X4.0	PASS 10.54 C	RS-4.7 (C) -0.17	0.043 0.00	204 2.02
1621 ST	PIP114.3X4.5	PASS 49.28 C	RS-4.7 (C) -0.11	0.182 0.00	204 3.59
1622 ST	PIP114.3X4.5	PASS 72.13 T	RS-4.0,2.2 -0.77	0.223 0.00	205 0.00
1623 ST	PIP89.1X4.0	PASS 61.63 C	RS-4.0,3.3.3 -0.19	0.256 0.23	165 -
1624 ST	PIP89.1X4.0	PASS 68.88 T	RS-4.0,2.2 -0.37	0.274 0.00	205 0.00
1625 ST	PIP89.1X4.0	PASS 71.81 C	RS-4.7 (C) -0.31	0.289 0.00	205 1.95
1626 ST	PIP89.1X4.0	PASS 59.79 T	RS-4.0,2.2 -0.29	0.252 0.00	205 0.00
1627 ST	PIP89.1X4.0	PASS 66.61 C	RS-4.7 (C) -0.29	0.268 0.00	205 1.95
1628 ST	PIP89.1X4.0	PASS 69.65 T	RS-4.0,2.2 -0.25	0.215 0.00	205 0.00

Print Time/Date: 11/07/2012 17:29 STAAD.Pro for Windows 20.07.02.15 Print Run 74 of 104

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Job No TPL40581 | Sheet No a 173 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool

Ref wind speed 32.5 m/s

Ref Fabric R5

By TSM Date 17-Dec-11 Chd TSM

Client Majlis Perbandaran Kuantan

File Q326-KSP-R4b-Deg.std Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COMB/ MY	RATIO/ MZ	LOADING/ LOCATION
1629 ST	PIP89.1X4.0	PASS 54.83 C	RS-4.0,3.3.3 -0.18	0.298 0.21	205 -
1630 ST	PIP89.1X4.0	PASS 39.43 T	RS-4.0,2.2 -0.32	0.174 0.00	205 0.00
1631 ST	PIP89.1X4.0	PASS 49.82 C	RS-4.0,3.3.3 -0.14	0.241 0.18	205 -
1632 ST	PIP89.1X4.0	PASS 38.84 T	RS-4.0,2.2 -0.18	0.155 0.00	207 1.95
1633 ST	PIP89.1X4.0	PASS 45.84 C	RS-4.0,3.3.3 -0.09	0.192 0.14	205 -
1634 ST	PIP89.1X4.0	PASS 37.66 C	RS-4.0,3.3.3 -0.12	0.186 0.12	6 -
1635 ST	PIP89.1X4.0	PASS 43.98 T	RS-4.0,2.2 -0.24	0.169 0.00	202 1.95
1636 ST	PIP89.1X4.0	PASS 47.09 C	RS-4.7 (C) -0.24	0.191 0.00	202 0.00
1637 ST	PIP89.1X4.0	PASS 49.33 T	RS-4.0,2.2 -0.23	0.196 0.00	202 0.00
1638 ST	PIP114.3X4.5	PASS 49.14 T	RS-4.0,2.2 -0.84	0.171 0.00	207 1.95
1639 ST	PIP89.1X4.0	PASS 14.34 T	RS-4.0,2.2 -0.22	0.063 0.00	205 1.95
1640 ST	PIP89.1X4.0	PASS 33.78 C	RS-4.7 (C) -0.07	0.124 0.00	205 0.00
1641 ST	PIP89.1X4.0	PASS 21.56 T	RS-4.0,2.2 -0.24	0.094 0.00	205 1.95
1642 ST	PIP89.1X4.0	PASS 32.67 T	RS-4.0,2.2 -0.12	0.144 0.00	204 1.95
1643 ST	PIP114.3X4.5	PASS 29.53 T	RS-4.0,2.2 -0.62	0.130 0.00	8 1.95
1644 ST	PIP89.1X4.0	PASS 61.53 T	RS-4.0,2.2 -0.18	0.231 0.00	204 1.95
1645 ST	PIP89.1X4.0	PASS 49.78 C	RS-4.7 (C) -0.41	0.220 0.00	204 1.95
1646 ST	PIP89.1X4.0	PASS 39.18 C	RS-4.0,3.3.3 -0.07	0.296 0.23	205 -
1647 ST	PIP89.1X4.0	PASS 28.48 C	RS-4.7 (C) -0.43	0.240 0.00	204 1.95
1648 ST	PIP89.1X4.0	PASS 47.58 T	RS-4.0,2.2 -0.28	0.208 0.00	204 0.00
1649 ST	PIP89.1X4.0	PASS 49.74 C	RS-4.7 (C) -0.45	0.281 0.00	204 1.95
1650 ST	PIP89.1X4.0	PASS 46.58 T	RS-4.0,2.2 -0.42	0.225 0.00	204 1.95

Print Time/Date: 11/07/2012 17:29 STAAD.Pro for Windows 20.07.02.15 Print Run 75 of 104

Software licensed to Transeare Pte Ltd

Job No TPL40581 | Sheet No a 174 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool

Ref wind speed 32.5 m/s

Ref Fabric R5

By TSM Date 17-Dec-11 Chd TSM

Client Majlis Perbandaran Kuantan

File Q326-KSP-R4b-Deg.std Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COMB/ MY	RATIO/ MZ	LOADING/ LOCATION
1651 ST	PIP89.1X4.0	PASS 74.72 C	RS-4.7 (C) -0.49	0.301 0.00	204 1.95
1652 ST	PIP89.1X4.0	PASS 82.32 C	RS-4.7 (C) -0.13	0.330 0.00	205 0.00
1653 ST	PIP114.3X4.5	PASS 38.91 C	RS-4.0,3.3.3 -0.33	0.129 0.22	165 -
1654 ST	PIP89.1X4.0	PASS 69.57 T	RS-4.0,2.2 -0.23	0.274 0.00	205 0.00
1655 ST	PIP89.1X4.0	PASS 29.86 C	RS-4.7 (C) -0.32	0.159 0.00	205 2.02
1656 ST	PIP89.1X4.0	PASS 30.99 T	RS-4.0,2.2 -0.20	0.148 0.00	205 0.00
1657 ST	PIP89.1X4.0	PASS 10.37 C	RS-4.7 (C) -0.15	0.042 0.00	205 2.02
1658 ST	PIP114.3X4.5	PASS 46.10 C	RS-4.7 (C) -0.22	0.170 0.00	9 0.00
1659 ST	PIP89.1X4.0	PASS 63.17 C	RS-4.0,3.3.3 -0.25	0.227 0.22	9 -
1660 ST	PIP89.1X4.0	PASS 75.77 T	RS-4.0,2.2 -0.27	0.304 0.00	205 1.95
1661 ST	PIP89.1X4.0	PASS 72.54 C	RS-4.7 (C) -0.43	0.292 0.00	205 0.00
1662 ST	PIP89.1X4.0	PASS 78.16 T	RS-4.0,2.2 -0.33	0.308 0.00	205 0.00
1663 ST	PIP89.1X4.0	PASS 68.28 C	RS-4.7 (C) -0.43	0.275 0.00	205 0.00
1664 ST	PIP89.1X4.0	PASS 76.48 T	RS-4.0,2.2 -0.31	0.298 0.00	205 0.00
1665 ST	PIP89.1X4.0	PASS 68.66 C	RS-4.7 (C) -0.44	0.264 0.00	205 0.00
1666 ST	PIP89.1X4.0	PASS 71.44 T	RS-4.0,2.2 -0.28	0.279 0.00	205 0.00
1667 ST	PIP89.1X4.0	PASS 50.41 C	RS-4.7 (C) -0.42	0.204 0.00	205 0.00
1668 ST	PIP89.1X4.0	PASS 44.84 T	RS-4.0,2.2 -0.25	0.245 0.00	205 0.00
1669 ST	PIP89.1X4.0	PASS 41.25 C	RS-4.0,3.3.3 -0.06	0.209 0.21	12 -
1670 ST	PIP89.1X4.0	PASS 42.42 C	RS-4.0,3.3.3 -0.04	0.231 0.21	164 -
1671 ST	PIP89.1X4.0	PASS 69.51 T	RS-4.0,2.2 -0.35	0.277 0.00	201 0.00
1672 ST	PIP89.1X4.0	PASS 66.36 C	RS-4.7 (C) -0.39	0.268 0.00	201 1.95

Print Time/Date: 11/07/2012 17:29 STAAD.Pro for Windows 20.07.02.15 Print Run 76 of 104

Software licensed to Transeare Pte Ltd

Job No TPL40581 | Sheet No a 175 | Rev R4b-FAB2

Job Title Wisma Bella Swimming Pool

Ref wind speed 32.5 m/s

Ref Fabric R5

By TSM Date 17-Dec-11 Chd TSM

Client Majlis Perbandaran Kuantan

File Q326-KSP-R4b-Deg.std Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COMB/ MY	RATIO/ MZ	LOADING/ LOCATION
1673 ST	PIP89.1X4.0	PASS 69.75 T	RS-4.0,2.2 -0.35	0.282 0.00	201 0.00
1674 ST	PIP89.1X4.0	PASS 69.83 C	RS-4.7 (C) -0.28	0.281 0.00	201 1.95
1675 ST	PIP114.3X4.5	PASS 79.08 T	RS-4.0,2.2 -0.41	0.226 0.00	201 0.00
1676 ST	PIP89.1X4.0	PASS 15.13 C	RS-4.0,3.3.3 -0.03	0.092 0.23	201 -
1677 ST	PIP89.1X4.0	PASS 43.44 T	RS-4.0,2.2 -0.16	0.178 0.00	205 1.95
1678 ST	PIP89.1X4.0	PASS 21.58 C	RS-4.7 (C) -0.36	0.127 0.00	205 1.95
1679 ST	PIP89.1X4.0	PASS 55.24 T	RS-4.0,2.2 -0.33	0.207 0.00	205 1.95
1680 ST	PIP114.3X4.5	PASS 39.83 T	RS-4.0,2.2 -0.79	0.119 0.00	204 1.95
1681 ST	PIP89.1X4.0	PASS 55.28 C	RS-4.0,3.3.3 -0.09	0.273 0.16	204 -
1682 ST	PIP89.1X4.0	PASS 32.23 C	RS-4.0,3.3.1 -0.06	0.299 0.42	205 -
1683 ST	PIP89.1X4.0	PASS 57.89 C	RS-4.0,3.3.3 -0.22	0.287 0.17	8 -
1684 ST	PIP89.1X4.0	PASS 57.56 C	RS-4.7 (C) -0.37	0.253 0.00	205 1.95
1685 ST	PIP89.1X4.0	PASS 77.56 C	RS-4.7 (C) -0.37	0.312 0.00	204 0.00
1686 ST	PIP89.1X4.0	PASS 72.63 T	RS-4.0,2.2 -0.43	0.301 0.00	204 1.95
1687 ST	PIP89.1X4.0	PASS 69.69 C	RS-4.7 (C) -0.44	0.330 0.00	204 0.00
1688 ST	PIP89.1X4.0	PASS 78.20 T	RS-4.0,2.2 -0.43	0.329 0.00	204 0.00
1689 ST	PIP89.1X4.0	PASS 30.69 C	RS-4.7 (C) -0.11	0.261 0.00	204 0.00
1690 ST	PIP114.3X4.5	PASS 48.68 C	RS-4.7 (C) -0.48	0.325 0.00	204 1.96
1691 ST	PIP89.1X4.0	PASS 44.39 T	RS-4.0,2.2 -0.31	0.190 0.00	204 0.00
1692 ST	PIP89.1X4.0	PASS 41.24 C	RS-4.7 (C) -0.24	0.168 0.00	204 2.02
1693 ST	PIP89.1X4.0	PASS 48.04 T	RS-4.0,2.2 -0.22	0.164 0.00	204 0.00
1694 ST	PIP89.1X4.0	PASS 19.56 C	RS-4.7 (C) -0.16	0.043 0.00	204 2.02

Print Time/Date: 11/07/2012 17:29 STAAD.Pro for Windows 20.07.02.15 Print Run 77 of 10

Job No TPL40581 | Sheet No a 176 | Rev R4b-FAB2

Software licensed to Transerve Pte Ltd

Part wind speed 32.5 m/s | Ref Fabric R5 | By TSM | Date 17-Dec-11 | Chd TSM

Job Title Wisma Bella Swimming Pool

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT	FX	CRITICAL COND	MY	RATIO	MZ	LOADING	LOCATION
1695 ST	PIP114.3X4.5	PASS	48.59 C	BS-4.7 (C)	-0.10	0.181	0.00	204	3.59
1696 ST	PIP114.3X4.5	PASS	63.91 C	BS-4.8.3.3.3	-0.71	0.245	0.30	6	-
1697 ST	PIP89.1X4.0	PASS	75.83 C	BS-4.7 (C)	-0.32	0.305	0.00	205	1.95
1698 ST	PIP89.1X4.0	PASS	67.54 T	BS-4.8.2.2	-0.37	0.276	0.00	205	0.00
1699 ST	PIP89.1X4.0	PASS	72.28 C	BS-4.7 (C)	-0.31	0.291	0.00	205	1.95
1700 ST	PIP89.1X4.0	PASS	59.44 T	BS-4.8.2.2	-0.40	0.252	0.00	205	0.00
1701 ST	PIP89.1X4.0	PASS	66.52 C	BS-4.7 (C)	-0.23	0.268	0.00	205	1.95
1702 ST	PIP89.1X4.0	PASS	48.71 T	BS-4.8.2.2	-0.38	0.214	0.00	205	0.00
1703 ST	PIP89.1X4.0	PASS	62.33 T	BS-4.8.2.2	-0.23	0.241	0.00	204	0.00
1704 ST	PIP89.1X4.0	PASS	37.45 T	BS-4.8.2.2	-0.36	0.172	0.00	205	0.00
1705 ST	PIP89.1X4.0	PASS	49.13 C	BS-4.8.3.3.1	-0.03	0.242	0.23	205	-
1706 ST	PIP89.1X4.0	PASS	39.06 C	BS-4.8.3.3.3	-0.10	0.201	0.21	208	-
1707 ST	PIP89.1X4.0	PASS	47.12 T	BS-4.8.2.2	-0.16	0.181	0.00	204	0.00
1708 ST	PIP89.1X4.0	PASS	47.05 C	BS-4.8.3.3.3	-0.16	0.233	0.17	202	-
1709 ST	PIP89.1X4.0	PASS	46.50 T	BS-4.8.2.2	-0.27	0.192	0.00	202	1.95
1710 ST	PIP89.1X4.0	PASS	41.04 C	BS-4.8.3.3.3	-0.17	0.210	0.15	6	-
1711 ST	PIP89.1X4.0	PASS	50.36 T	BS-4.8.2.2	-0.22	0.199	0.00	202	0.00
1712 ST	PIP114.3X4.5	PASS	49.20 T	BS-4.8.2.2	-0.72	0.163	0.00	209	1.95
1713 ST	PIP89.1X4.0	PASS	18.36 T	BS-4.8.2.2	-0.23	0.092	0.00	205	1.95
1714 ST	PIP89.1X4.0	PASS	42.03 T	BS-4.8.2.2	-0.14	0.161	0.00	204	1.95
1715 ST	PIP89.1X4.0	PASS	23.88 T	BS-4.8.2.2	-0.26	0.114	0.00	205	1.95
1716 ST	PIP89.1X4.0	PASS	62.48 T	BS-4.8.2.2	-0.16	0.234	0.00	204	1.95

Print Time/Date: 11/07/2012 17:29 STAAD.Pro for Windows 20.07.02.15 Print Run 78 of 104

Job No TPL40581 | Sheet No a 177 | Rev R4b-FAB2

Software licensed to Transerve Pte Ltd

Part wind speed 32.5 m/s | Ref Fabric R5 | By TSM | Date 17-Dec-11 | Chd TSM

Job Title Wisma Bella Swimming Pool

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT	FX	CRITICAL COND	MY	RATIO	MZ	LOADING	LOCATION
1717 ST	PIP114.3X4.5	PASS	49.48 C	BS-4.7 (C)	-0.99	0.127	0.00	204	1.95
1718 ST	PIP89.1X4.0	PASS	71.80 T	BS-4.8.2.2	-0.24	0.274	0.00	204	1.95
1719 ST	PIP89.1X4.0	PASS	59.59 C	BS-4.8.3.3.1	-0.06	0.327	0.46	204	-
1720 ST	PIP89.1X4.0	PASS	79.14 T	BS-4.8.2.2	-0.32	0.309	0.00	204	1.95
1721 ST	PIP89.1X4.0	PASS	70.11 C	BS-4.7 (C)	-0.48	0.282	0.00	204	1.95
1722 ST	PIP89.1X4.0	PASS	85.27 T	BS-4.8.2.2	-0.33	0.331	0.00	204	0.00
1723 ST	PIP89.1X4.0	PASS	81.00 C	BS-4.7 (C)	-0.49	0.326	0.00	204	1.95
1724 ST	PIP89.1X4.0	PASS	91.22 T	BS-4.8.2.2	-0.43	0.372	0.00	204	1.95
1725 ST	PIP89.1X4.0	PASS	81.21 C	BS-4.7 (C)	-0.44	0.327	0.00	204	1.95
1726 ST	PIP89.1X4.0	PASS	84.25 C	BS-4.7 (C)	-0.11	0.338	0.00	205	0.00
1727 ST	PIP114.3X4.5	PASS	45.00 C	BS-4.7 (C)	-0.40	0.116	0.00	205	1.96
1728 ST	PIP89.1X4.0	PASS	40.36 T	BS-4.8.2.2	-0.27	0.172	0.00	205	0.00
1729 ST	PIP89.1X4.0	PASS	38.04 C	BS-4.7 (C)	-0.30	0.156	0.00	205	2.02
1730 ST	PIP89.1X4.0	PASS	35.70 T	BS-4.8.2.2	-0.19	0.146	0.00	205	0.00
1731 ST	PIP89.1X4.0	PASS	7.72 C	BS-4.8.3.3.3	-0.02	0.061	0.17	9	-
1732 ST	PIP114.3X4.5	PASS	45.96 C	BS-4.8.3.3.3	-0.11	0.184	0.09	9	-
1733 ST	PIP89.1X4.0	PASS	68.44 C	BS-4.7 (C)	-0.36	0.275	0.00	205	0.00
1734 ST	PIP89.1X4.0	PASS	70.64 T	BS-4.8.2.2	-0.42	0.294	0.00	205	1.95
1735 ST	PIP89.1X4.0	PASS	57.52 C	BS-4.7 (C)	-0.45	0.231	0.00	205	0.00
1736 ST	PIP89.1X4.0	PASS	65.57 T	BS-4.8.2.2	-0.50	0.286	0.00	205	1.95
1737 ST	PIP89.1X4.0	PASS	49.94 T	BS-4.8.2.2	-0.46	0.228	0.00	204	1.95
1738 ST	PIP89.1X4.0	PASS	54.19 T	BS-4.8.2.2	-0.43	0.239	0.00	205	1.95

Print Time/Date: 11/07/2012 17:29 STAAD.Pro for Windows 20.07.02.15 Print Run 79 of 104

Job No TPL40581 | Sheet No a 178 | Rev R4b-FAB2

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Part wind speed 32.5 m/s | Ref Fabric R5 | By TSM | Date 17-Dec-11 | Chd TSM

Job Title Wisma Bella Swimming Pool

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT	FX	CRITICAL COND	MY	RATIO	MZ	LOADING	LOCATION
1739 ST	PIP89.1X4.0	PASS	55.47 T	BS-4.8.2.2	-0.90	0.302	0.00	204	0.00
1740 ST	PIP89.1X4.0	PASS	58.39 C	BS-4.7 (C)	-0.47	0.235	0.00	204	1.95
1741 ST	PIP89.1X4.0	PASS	72.80 T	BS-4.8.2.2	-0.38	0.296	0.00	207	1.95
1742 ST	PIP89.1X4.0	PASS	65.55 C	BS-4.7 (C)	-0.62	0.264	0.00	207	1.95
1743 ST	PIP89.1X4.0	PASS	85.36 T	BS-4.8.2.2	-0.61	0.366	0.00	207	1.95
1744 ST	PIP89.1X4.0	PASS	80.99 C	BS-4.7 (C)	-0.74	0.326	0.00	207	1.95
1745 ST	PIP89.1X4.0	PASS	95.82 T	BS-4.8.2.2	-0.56	0.397	0.00	207	1.95
1746 ST	PIP89.1X4.0	PASS	93.15 C	BS-4.7 (C)	-0.58	0.375	0.00	207	1.95
1747 ST	PIP89.1X4.0	PASS	99.01 T	BS-4.8.2.2	-0.91	0.451	0.00	207	0.00
1748 ST	PIP89.1X4.0	PASS	105.50 C	BS-4.8.3.3.3	-0.73	0.620	0.56	207	-
1749 ST	PIP114.3X4.5	PASS	82.33 C	ANNEX I.1	-1.73	0.342	2.55	205	-
1750 ST	PIP89.1X4.0	PASS	35.26 T	BS-4.8.2.2	-1.22	0.273	0.00	205	1.95
1751 ST	PIP89.1X4.0	PASS	49.18 C	BS-4.7 (C)	-0.29	0.198	0.00	208	0.00
1752 ST	PIP89.1X4.0	PASS	49.74 T	BS-4.8.2.2	-0.61	0.245	0.00	208	1.95
1753 ST	PIP89.1X4.0	PASS	45.18 C	BS-4.8.3.3.3	-0.54	0.318	0.45	204	-
1754 ST	PIP114.3X4.5	PASS	48.31 T	BS-4.8.2.2	-2.16	0.258	0.00	204	1.95
1755 ST	PIP89.1X4.0	PASS	55.44 C	BS-4.7 (C)	-0.24	0.223	0.00	204	0.00
1756 ST	PIP89.1X4.0	PASS	48.69 T	BS-4.8.2.2	-0.66	0.248	0.00	204	1.95
1757 ST	PIP89.1X4.0	PASS	46.17 C	BS-4.7 (C)	-0.17	0.186	0.00	208	0.00
1758 ST	PIP89.1X4.0	PASS	47.14 T	BS-4.8.2.2	-0.81	0.262	0.00	209	1.95
1759 ST	PIP89.1X4.0	PASS	32.88 T	BS-4.8.2.2	-0.87	0.220	0.00	209	0.00
1760 ST	PIP89.1X4.0	PASS	43.50 T	BS-4.8.2.2	-0.86	0.256	0.00	208	0.00

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Job No TPL40581 | Sheet No a 179 | Rev R4b-FAB

Software licensed to Transerve Pte Ltd

Part wind speed 32.5 m/s | Ref Fabric R5 | By TSM | Date 17-Dec-11 | Chd TSM

Job Title Wisma Bella Swimming Pool

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT	FX	CRITICAL COND	MY	RATIO	MZ	LOADING	LOCATION
1761 ST	PIP89.1X4.0	PASS	38.12 C	ANNEX I.1	-0.46	0.244	1.19	208	-
1762 ST	PIP89.1X4.0	PASS	47.89 T	BS-4.8.2.2	-1.62	0.366	0.00	208	0.00
1763 ST	PIP89.1X4.0	PASS	26.71 C	ANNEX I.1	-0.42	0.277	1.55	208	-
1764 ST	PIP114.3X4.5	PASS	77.09 C	BS-4.7 (C)	-0.27	0.198	0.00	202	1.96
1765 ST	PIP89.1X4.0	PASS	64.47 T	BS-4.8.2.2	-0.34	0.261	0.00	202	2.02
1766 ST	PIP89.1X4.0	PASS	75.24 C	BS-4.7 (C)	-0.62	0.308	0.00	202	2.02
1767 ST	PIP89.1X4.0	PASS	84.06 T	BS-4.8.2.2	-0.48	0.346	0.00	202	2.02
1768 ST	PIP89.1X4.0	PASS	25.34 C	ANNEX I.1	-0.37	0.123	0.50	202	-
1769 ST	PIP114.3X4.5	PASS	100.83 C	BS-4.7 (C)	-0.54	0.372	0.00	202	3.59
1770 ST	PIP114.3X4.5	PASS	68.65 C	BS-4.7 (C)	-0.67	0.176	0.00	204	0.00
1771 ST	PIP89.1X4.0	PASS	69.23 T	BS-4.8.2.2	-0.43	0.290	0.00	204	1.95
1772 ST	PIP89.1X4.0	PASS	60.63 C	BS-4.7 (C)	-0.45	0.244	0.00	204	0.00
1773 ST	PIP89.1X4.0	PASS	69.96 T	BS-4.8.2.2	-0.76	0.333	0.00	204	1.95
1774 ST	PIP89.1X4.0	PASS	50.12 T	BS-4.8.2.2	-0.65	0.252	0.00	205	0.00
1775 ST	PIP89.1X4.0	PASS	63.67 T	BS-4.8.2.2	-0.63	0.295	0.00	204	1.95
1776 ST	PIP89.1X4.0	PASS	54.02 T	BS-4.8.2.2	-0.96	0.304	0.00	205	0.00
1777 ST	PIP89.1X4.0	PASS	50.98 T	BS-4.8.2.2	-0.53	0.248	0.00	204	0.00
1778 ST	PIP89.1X4.0	PASS	75.72 T	BS-4.8.2.2	-0.42	0.310	0.00	207	1.95
1779 ST	PIP89.1X4.0	PASS	68.24 C	BS-4.7 (C)	-0.73	0.275	0.00	207	1.95
1780 ST	PIP89.1X4.0	PASS	86.86 T	BS-4.8.2.2	-0.76	0.398	0.00	207	1.95
1781 ST	PIP89.1X4.0	PASS	81.99 C	BS-4.7 (C)	-0.92	0.330	0.00	207	1.95
1782 ST	PIP89.1X4.0	PASS	95.89 T	BS-4.8.2.2	-0.70	0.414	0.00	207	1.95

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Job No TPL40581 | Sheet No a 180 | Rev R4b-FAB2

Software licensed to Transerve Pte Ltd

Part wind speed 32.5 m/s | Ref Fabric R5 | By TSM | Date 17-Dec-11 | Chd TSM

Job Title Wisma Bella Swimming Pool

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT	FX	CRITICAL COND	MY	RATIO	MZ	LOADING	LOCATION
1783 ST	PIP89.1X4.0	PASS	92.88 C	BS-4.7 (C)	-0.63	0.374	0.00	207	1.95
1784 ST	PIP89.1X4.0	PASS	98.80 T	BS-4.8.2.2	-0.91	0.450	0.00	207	0.00
1785 ST	PIP89.1X4.0	PASS	105.25 C	BS-4.7 (C)	-0.61	0.423	0.00	207	1.95
1786 ST	PIP114.3X4.5	PASS	87.15 C	ANNEX I.1	-1.72	0.344	2.53	204	-
1787 ST	PIP89.1X4.0	PASS	37.56 T	BS-4.8.2.2	-1.31	0.292	0.00	204	1.95
1788 ST	PIP89.1X4.0	PASS	53.69 C	BS-4.7 (C)	-0.17	0.216	0.00	205	0.00
1789 ST	PIP89.1X4.0	PASS	45.18 T	BS-4.8.2.2	-0.62	0.231	0.00	205	1.95
1790 ST	PIP89.1X4.0	PASS	57.23 C	BS-4.7 (C)	-0.28	0.230	0.00	205	0.00
1791 ST	PIP114.3X4.5	PASS	50.21 T	BS-4.8.2.2	-1.74	0.224	0.00	205	1.95
1792 ST	PIP89.1X4.0	PASS	57.52 C	BS-4.7 (C)	-0.18	0.231	0.00	205	0.00
1793 ST	PIP89.1X4.0	PASS	50.40 T	BS-4.8.2.2	-0.60	0.247	0.00	205	1.95
1794 ST	PIP89.1X4.0	PASS	46.47 C	BS-4.7 (C)	-0.17	0.187	0.00	208	0.00
1795 ST	PIP89.1X4.0	PASS	47.66 T	BS-4.8.2.2	-0.80	0.263	0.00	208	1.95
1796 ST	PIP89.1X4.0	PASS	32.52 T	BS-4.8.2.2	-0.90	0.223	0.00	209	0.00
1797 ST	PIP89.1X4.0	PASS	44.27 T	BS-4.8.2.2	-0.82	0.253	0.00	208	0.00
1798 ST	PIP89.1X4.0	PASS	38.89 C	ANNEX I.1	-0.43	0.235	1.15	208	-
1799 ST	PIP89.1X4.0	PASS	48.46 T	BS-4.8.2.2	-1.58	0.362	0.00	208	0.00
1800 ST	PIP89.1X4.0	PASS	27.51 C	ANNEX I.1	-0.40	0.273	1.53	208	-
1801 ST	PIP114.3X4.5	PASS	76.07 C	BS-4.7 (C)	-0.27	0.196	0.00	202	1.96
1802 ST	PIP89.1X4.0	PASS	64.23 T	BS-4.8.2.2	-0.34	0.261	0.00	202	2.02
1803 ST	PIP89.1X4.0	PASS	74.97 C	BS-4.7 (C)	-0.42	0.307	0.00	202	2.02
1804 ST	PIP89.1X4.0	PASS	84.43 T	BS-4.8.2.2	-0.49	0.348	0.00	202	2.02

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Job No TPL40581 | Sheet No a 181 | Rev R4b-FAB2

Software licensed to Transerve Pte Ltd

Part wind speed 32.5 m/s | Ref Fabric R5 | By TSM | Date 17-Dec-11 | Chd TSM

Job Title Wisma Bella Swimming Pool

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT	FX	CRITICAL COND	MY	RATIO	MZ	LOADING	LOCATION
1805 ST	PIP89.1X4.0	PASS	25.48 C	ANNEX I.1	-0.38	0.125	0.50	202	-
1806 ST	PIP114.3X4.5	PASS	101.36 C	BS-4.7 (C)	-0.57	0.374	0.00	202	3.59
1807 ST	PIP89.1X4.0	PASS	68.77 T	BS-4.8.2.2	-0.65	0.316	0.00	204	1.95
1808 ST	PIP89.1X4.0	PASS	68.17 T	BS-4.8.2.2	-0.38	0.280	0.00	205	0.00
1809 ST	PIP89.1X4.0	PASS	58.86 T	BS-4.8.2.2	-0.79	0.299	0.00	204	1.95
1810 ST	PIP89.1X4.0	PASS	68.25 T	BS-4.8.2.2	-0.51	0.296	0.00	205	1.95
1811 ST	PIP89.1X4.0	PASS	55.34 C	BS-4.7 (C)	-0.43	0.223	0.00	205	0.00
1812 ST	PIP89.1X4.0	PASS	64.32 T	BS-4.8.2.2	-0.42	0.271	0.00	205	1.95
1813 ST	PIP89.1X4.0	PASS	39.61 T	BS-4.8.2.2	-0.93	0.251	0.00	204	0.00
1814 ST	PIP89.1X4.0	PASS	56.75 T	BS-4.8.2.2	-0.60	0.268	0.00	205	0.00
1815 ST	PIP89.1X4.0	PASS	40.32 T	BS-4.8.2.2	-0.91	0.251	0.00	204	0.00
1816 ST	PIP89.1X4.0	PASS	54.30 T	BS-4.8.2.2	-0.38	0.232	0.00	9	1.95
1817 ST	PIP89.1X4.0	PASS	45.68 T	BS-4.8.2.2	-0.83	0.260	0.00	204	0.00
1818 ST	PIP89.1X4.0	PASS	58.70 C	BS-4.7 (C)	-0.51	0.236	0.00	201	1.95
1819 ST	PIP89.1X4.0	PASS	80.44 T	BS-4.8.2.2	-0.42	0.326	0.00	201	0.00
1820 ST	PIP89.1X4.0	PASS	79.81 C	BS-4.7 (C)	-0.43	0.321	0.00	201	1.95
1821 ST	PIP89.1X4.0	PASS	84.59 T	BS-4.8.2.2	-0.75	0.381	0.00	201	0.00
1822 ST	PIP89.1X4.0	PASS	82.94 C	BS-4.8.3.3.1	-0.96	0.399	0.10	207	-
1823 ST	PIP114.3X4.5	PASS	0.17 C	ANNEX I.1	-2.07	0.344	3.06	205	-
1824 ST	PIP89.1X4.0	PASS	22.46 T	BS-4.8.2.2	-1.30	0.215	0.00	209	1.95
1825 ST	PIP89.1X4.0	PASS	50.25 T	BS-4.8.2.2	-0.75	0.269	0.00	205	1.95
1826 ST	PIP89.1X4.0	PASS	50.37 C	BS-4.7 (C)	-0.64	0.203	0.00	208	1.95

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Job No TPL40581 | Sheet No a 182 | Rev R4b-FAB2

Software licensed to Transerve Pte Ltd

Part wind speed 32.5 m/s | Ref Fabric R5 | By TSM | Date 17-Dec-11 | Chd TSM

Job Title Wisma Bella Swimming Pool

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT	FX	CRITICAL COND	MY	RATIO	MZ	LOADING	LOCATION
1827 ST	PIP89.1X4.0	PASS	67.21 T	BS-4.8.2.2	-0.82	0.332	0.00	205	0.00
1828 ST	PIP114.3X4.5	PASS	23.49 T	BS-4.8.2.2	-2.25	0.206	0.00	204	1.95
1829 ST	PIP89.1X4.0	PASS	84.00 T	BS-4.8.2.2	-0.72	0.376	0.00	205	0.00
1830 ST	PIP89.1X4.0	PASS	76.53 C	BS-4.7 (C)	-0.51	0.308	0.00	205	1.95
1831 ST	PIP89.1X4.0	PASS	87.94 T	BS-4.8.2.2	-0.53	0.365	0.00	205	0.00
1832 ST	PIP89.1X4.0	PASS	83.25 C	BS-4.7 (C)	-0.65	0.335	0.00	205	1.95
1833 ST	PIP89.1X4.0	PASS	99.22 T	BS-4.8.2.2	-0.89	0.449	0.00	205	0.00
1834 ST	PIP89.1X4.0	PASS	98.52 C	BS-4.7 (C)	-0.89	0.396	0.00	205	1.95
1835 ST	PIP89.1X4.0	PASS	109.56 T	BS-4.8.2.2	-0.74	0.465	0.00	205	0.00
1836 ST	PIP89.1X4.0	PASS	99.52 C	BS-4.7 (C)	-0.53	0.400	0.00	205	1.95
1837 ST	PIP89.1X4.0	PASS	96.25 T	BS-4.8.2.2	-0.20	0.352	0.00	205	1.93
1838 ST	PIP114.3X4.5	PASS	45.24 C	ANNEX I.1	-0.95	0.175	1.43	208	-
1839 ST	PIP89.1X4.0	PASS	35.59 C	BS-4.8.3.3.3	-0.24	0.195	0.06	205	-
1840 ST	PIP89.1X4.0	PASS	33.45 T	BS-4.8.2.2	-0.29	0.151	0.00	205	2.02
1841 ST	PIP89.1X4.0	PASS	53.71 C	BS-4.7 (C)	-0.10	0.220	0.00	205	0.00
1842 ST	PIP89.1X4.0	PASS	3.36 C	ANNEX I.1	-0.43	0.075	0.15	206	-
1843 ST	PIP114.3X4.5	PASS	62.66 T	BS-4.8.2.2	-0.60	0.234	0.00	205	3.59
1844 ST	PIP114.3X4.5	PASS	69.68 T	BS-4.8.2.2	-1.26	0.248	0.00	205	1.95
1845 ST	PIP89.1X4.0	PASS	70.59 T	BS-4.8.2.2	-0.37	0.287	0.00	204	1.95
1846 ST	PIP89.1X4.0	PASS	59.58 T	BS-4.8.2.2	-0.49	0.264	0.00	205	1.95
1847 ST	PIP89.1X4.0	PASS	64.48 T	BS-4.8.2.2	-0.76	0.314	0.00	204	1.95
1848 ST	PIP89.1X4.0	PASS	52.64 T	BS-4.8.2.2	-0.71	0.268	0.00	205	0.00

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Job No TPL40581 | Sheet No a 183 | Rev R4b-FAB.

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Part wind speed 32.5 m/s | Ref Fabric R5 | By TSM | Date 17-Dec-11 | Chd TSM

Job Title Wisma Bella Swimming Pool

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT	FX	CRITICAL COND	MY	RATIO	MZ	LOADING	LOCATION
1849 ST	PIP89.1X4.0	PASS	57.16 T	BS-4.8.2.2	-0.58	0.268	0.00	204	1.95
1850 ST	PIP89.1X4.0	PASS	46.63 T	BS-4.8.2.2	-1.00	0.284	0.00	205	0.00
1851 ST	PIP89.1X4.0	PASS	48.27 T	BS-4.8.2.2	-0.68	0.239	0.00	204	0.00
1852 ST	PIP89.1X4.0	PASS	44.98 T	BS-4.8.2.2	-0.91	0.266	0.00	205	0.00
1853 ST	PIP89.1X4.0	PASS	56.11 C	BS-4.7 (C)	-0.88	0.226	0.00	205	1.95
1854 ST	PIP89.1X4.0	PASS	48.23 T	BS-4.8.2.2	-0.94	0.255	0.00	205	0.00
1855 ST	PIP89.1X4.0	PASS	53.92 C	BS-4.7 (C)	-0.98	0.217	0.00	205	1.95
1856 ST	PIP89.1X4.0	PASS	57.65 T	BS-4.8.2.2	-0.58	0.269	0.00	201	1.95
1857 ST	PIP89.1X4.0	PASS	58.55 C	BS-4.7 (C)	-0.51	0.236	0.00	201	1.95
1858 ST	PIP89.1X4.0	PASS	64.83 T	BS-4.8.2.2	-0.70	0.309	0.00	201	0.00
1859 ST	PIP89.1X4.0	PASS	63.29 C	BS-4.8.3.3.1	-1.05	0.379	0.02	203	-
1860 ST	PIP114.3X4.5	PASS	12.77 C	ANNEX I.1	-2.16	0.353	2.99	204	-
1861 ST	PIP89.1X4.0	PASS	30.81 T	BS-4.8.2.2	-1.15	0.250	0.00	209	1.95
1862 ST	PIP89.1X4.0	PASS	44.94 T	BS-4.8.2.2	-0.93	0.269	0.00	204	1.95
1863 ST	PIP89.1X4.0	PASS	44.47 C	BS-4.7 (C)	-0.43	0.179	0.00	208	1.95
1864 ST	PIP89.1X4.0	PASS	70.36 T	BS-4.8.2.2	-0.63	0.318	0.00	204	0.00
1865 ST	PIP114.3X4.5	PASS	27.93 T	BS-4.8.2.2	-1.72	0.181	0.00	9	1.95
1866 ST	PIP89.1X4.0	PASS	86.55 T	BS-4.8.2.2	-0.71	0.384	0.00	204	0.00
1867 ST	PIP89.1X4.0	PASS	78.70 C	BS-4.7 (C)	-0.54	0.317	0.00	204	1.95
1868 ST	PIP89.1X4.0	PASS	90.44 T	BS-4.8.2.2	-0.58	0.380	0.00	204	0.00
1869 ST	PIP89.1X4.0	PASS	85.58 C	BS-4.7 (C)	-0.65	0.344	0.00	204	1.95
1870 ST	PIP89.1X4.0	PASS	101.38 T	BS-4.8.2.2	-0.96	0.465	0.00	204	0.00

Print Time/Date: 11/07/2012 17:29 STAAD.Pro for Windows 20.07.02.15 Print Run 85 of 10

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Job No TPL40581 | Sheet No a 184 | Rev R4b-FAB2

Job Title Wisma Bela Swimming Pool | Ref wind speed 32.5 m/s | Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
1959 ST PIP1691	0.0	PASS 105.86 C	BS-4.7 (C) 0.00	0.458 0.00	209 11.24
1960 ST PIP1689	0.0	PASS 168.73 C	BS-4.7 (C) 0.00	0.883 0.00	205 0.00
1961 ST PIP1688	0.0	PASS 102.24 C	BS-4.7 (C) 0.00	0.422 0.00	209 1.55
1962 ST PIP1691	0.0	PASS 417.15 C	BS-4.7 (C) 0.00	0.974 0.00	208 9.09
1963 ST PIP2728	0.0	PASS 228.95 C	BS-4.7 (C) 0.00	0.472 0.00	207 0.00
1964 ST PIP2728	0.0	PASS 315.85 C	BS-4.7 (C) 0.00	0.650 0.00	202 0.00
1965 ST PIP2728	0.0	PASS 321.99 C	BS-4.7 (C) 0.00	0.663 0.00	204 0.00
1966 ST PIP2728	0.0	PASS 216.48 C	BS-4.7 (C) 0.00	0.446 0.00	207 0.00
1967 ST PIP2728	0.0	PASS 206.44 C	BS-4.7 (C) 0.00	0.431 0.00	205 0.00
1968 ST PIP2728	0.0	PASS 312.14 C	BS-4.7 (C) 0.00	0.643 0.00	206 0.00
1969 ST PIP2728	0.0	PASS 202.71 C	BS-4.7 (C) 0.00	0.419 0.00	209 0.00
1970 ST PIP2728	0.0	PASS 304.29 C	BS-4.7 (C) 0.00	0.626 0.00	205 0.00
1971 ST PIP2728	0.0	PASS 309.47 C	BS-4.7 (C) 0.00	0.637 0.00	206 0.00
1972 ST PIP2728	0.0	PASS 216.13 C	BS-4.7 (C) 0.00	0.445 0.00	209 0.00
1973 ST PIP2728	0.0	PASS 248.52 C	BS-4.7 (C) 0.00	0.631 0.00	205 0.00
1974 ST PIP2728	0.0	PASS 312.29 C	BS-4.7 (C) 0.00	0.643 0.00	206 0.00
1975 ST PIP2728	0.0	PASS 227.96 C	BS-4.7 (C) 0.00	0.469 0.00	209 0.00
1976 ST PIP2728	0.0	PASS 216.11 C	BS-4.7 (C) 0.00	0.631 0.00	205 0.00
1977 ST PIP2728	0.0	PASS 322.34 C	BS-4.7 (C) 0.00	0.664 0.00	204 0.00
1978 ST CHS609X16	PASS 130.59 C	AMNX 1.1 -233.40	0.264 194.96	204 -
1979 ST CHS609X16	PASS 422.27 C	AMNX 1.1 -215.33	0.475 498.23	204 -
1980 ST CHS609X16	PASS 143.29 C	AMNX 1.1 -229.79	0.371 197.58	205 -

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Job No TPL40581 | Sheet No a 185 | Rev R4b-FAB2

Job Title Wisma Bela Swimming Pool | Ref wind speed 32.5 m/s | Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
1893 ST PIP1395	0.0	PASS 45.15 C	BS-4.8,3,3.3 +1.89	0.223 3.12	205 -
1894 ST PIP1395	0.0	PASS 13.70 T	BS-4.8,2.2 -2.24	0.113 0.00	8 2.24
1895 ST PIP1395	0.0	PASS 36.28 C	BS-4.7 (C) -1.17	0.175 0.00	201 1.97
1896 ST PIP1395	0.0	PASS 92.54 C	BS-4.7 (C) -1.15	0.174 0.00	201 1.97
1897 ST PIP1395	0.0	PASS 64.83 C	AMNX 2.1 -0.55	0.142 2.76	207 -
1898 ST PIP1395	0.0	PASS 98.37 C	BS-4.7 (C) -0.54	0.183 0.00	202 0.00
1899 ST PIP1395	0.0	PASS 98.48 C	BS-4.7 (C) -0.44	0.183 0.00	201 0.00
1900 ST PIP1395	0.0	PASS 76.23 C	BS-4.7 (C) -0.49	0.139 0.00	201 1.97
1901 ST PIP1395	0.0	PASS 44.18 C	BS-4.8,3,3.3 +1.54	0.130 0.69	201 -
1902 ST PIP1395	0.0	PASS 4.58 C	AMNX 1.1 -2.56	0.139 0.66	204 -
1903 ST PIP1395	0.0	PASS 124.64 C	BS-4.7 (C) -1.45	0.227 0.00	201 1.97
1904 ST PIP1395	0.0	PASS 122.91 C	BS-4.7 (C) -1.39	0.226 0.00	201 1.97
1905 ST PIP1395	0.0	PASS 38.22 C	AMNX 2.1 -0.01	0.137 2.69	207 -
1906 ST PIP1395	0.0	PASS 76.66 C	BS-4.7 (C) -0.45	0.146 0.00	201 0.00
1907 ST PIP1395	0.0	PASS 76.89 C	BS-4.7 (C) -0.39	0.146 0.00	201 0.00
1908 ST PIP1395	0.0	PASS 58.80 C	AMNX 1.1 -0.54	0.134 2.68	209 -
1909 ST PIP1395	0.0	PASS 36.01 C	AMNX 1.1 -0.68	0.110 2.13	207 -
1910 ST PIP1395	0.0	PASS 48.70 C	AMNX 2.1 -1.88	0.113 0.74	205 -
1911 ST PIP1395	0.0	PASS 99.68 C	BS-4.7 (C) -1.22	0.182 0.00	201 1.97
1912 ST PIP1395	0.0	PASS 99.07 C	BS-4.7 (C) -1.15	0.181 0.00	201 1.97
1913 ST PIP1395	0.0	PASS 91.38 C	BS-4.7 (C) -1.12	0.166 0.00	201 1.97
1914 ST PIP1395	0.0	PASS 43.57 C	AMNX 1.1 -0.49	0.111 2.21	207 -

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Job No TPL40581 | Sheet No a 186 | Rev R4b-FAB2

Job Title Wisma Bela Swimming Pool | Ref wind speed 32.5 m/s | Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
1915 ST PIP1395	0.0	PASS 28.28 C	AMNX 2.1 -1.77	0.117 0.81	204 -
1916 ST PIP1395	0.0	PASS 90.54 C	BS-4.7 (C) -1.06	0.168 0.00	201 1.97
1917 ST PIP1395	0.0	PASS 13.72 T	BS-4.8,2.2 -2.24	0.113 0.00	8 2.24
1918 ST PIP1395	0.0	PASS 37.31 C	BS-4.8,3,3.3 -1.66	0.184 0.00	185 -
1919 ST PIP1395	0.0	PASS 91.24 C	BS-4.7 (C) -1.08	0.170 0.00	201 1.97
1920 ST PIP1395	0.0	PASS 95.41 C	BS-4.7 (C) -1.12	0.176 0.00	201 1.97
1921 ST PIP1395	0.0	PASS 152.75 C	AMNX 1.1 -1.58	0.474 0.11	208 -
1922 ST PIP1395	0.0	PASS 42.56 C	AMNX 2.1 -1.29	0.329 0.67	208 -
1923 ST PIP1395	0.0	PASS 169.23 C	AMNX 2.1 -2.05	0.488 6.50	208 -
1924 ST PIP1395	0.0	PASS 9.98 T	BS-4.8,2.2 -7.34	0.311 0.00	208 1.97
1925 ST PIP1395	0.0	PASS 43.97 C	AMNX 2.1 -1.34	0.336 6.46	208 -
1926 ST PIP1395	0.0	PASS 109.80 C	AMNX 2.1 -1.39	0.481 0.31	208 -
1927 ST PIP1395	0.0	PASS 154.64 C	AMNX 2.1 -1.67	0.483 8.15	208 -
1928 ST PIP1395	0.0	PASS 12.93 T	BS-4.8,2.2 -7.39	0.314 0.00	208 1.97
1929 ST PIP1686	0.0	PASS 121.97 C	BS-4.7 (C) 0.00	0.523 0.00	207 0.00
1930 ST PIP1686	0.0	PASS 75.64 T	BS-4.6 (T) 0.00	0.000 0.00	204 0.00
1931 ST PIP1686	0.0	PASS 145.31 C	BS-4.7 (C) 0.00	0.447 0.00	204 7.35
1932 ST PIP1686	0.0	PASS 54.72 T	BS-4.6 (T) 0.00	0.065 0.00	204 0.00
1933 ST PIP1686	0.0	PASS 208.28 T	BS-4.6 (T) 0.00	0.249 0.00	205 0.00
1934 ST PIP1686	0.0	PASS 29.28 C	BS-4.7 (C) 0.00	0.157 0.00	208 8.51
1935 ST PIP1686	0.0	PASS 141.89 C	BS-4.7 (C) 0.00	0.436 0.00	205 7.35
1936 ST PIP1686	0.0	PASS 56.85 T	BS-4.6 (T) 0.00	0.067 0.00	205 0.00

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Job No TPL40581 | Sheet No a 187 | Rev R4b-FAB

Job Title Wisma Bela Swimming Pool | Ref wind speed 32.5 m/s | Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
1937 ST PIP1686	0.0	PASS 104.12 T	BS-4.7 (T) 0.00	0.246 0.00	206 0.00
1938 ST PIP1686	0.0	PASS 102.91 C	BS-4.7 (C) 0.00	0.333 0.00	209 8.98
1939 ST PIP1686	0.0	PASS 75.71 T	BS-4.6 (T) 0.00	0.000 0.00	204 0.00
1940 ST PIP1686	0.0	PASS 143.79 C	BS-4.7 (C) 0.00	0.448 0.00	204 7.35
1941 ST PIP1686	0.0	PASS 54.10 T	BS-4.6 (T) 0.00	0.064 0.00	204 0.00
1942 ST PIP1686	0.0	PASS 206.43 T	BS-4.6 (T) 0.00	0.246 0.00	205 0.00
1943 ST PIP1686	0.0	PASS 28.86 C	BS-4.7 (C) 0.00	0.155 0.00	208 8.51
1944 ST PIP1686	0.0	PASS 142.17 C	BS-4.7 (C) 0.00	0.437 0.00	205 7.35
1945 ST PIP1686	0.0	PASS 54.77 T	BS-4.6 (T) 0.00	0.067 0.00	205 0.00
1946 ST PIP1686	0.0	PASS 204.71 T	BS-4.6 (T) 0.00	0.243 0.00	208 0.00
1947 ST PIP1687	0.0	PASS 110.30 C	BS-4.7 (C) 0.00	0.477 0.00	207 15.26
1948 ST PIP1688	0.0	PASS 191.79 C	BS-4.7 (C) 0.00	0.898 0.00	204 0.00
1949 ST PIP1688	0.0	PASS 142.39 C	BS-4.7 (C) 0.00	0.626 0.00	207 9.55
1950 ST PIP1691	0.0	PASS 411.85 C	BS-4.7 (C) 0.00	0.902 0.00	206 0.00
1951 ST PIP1691	0.0	PASS 187.33 C	BS-4.7 (C) 0.00	0.444 0.00	207 15.26
1952 ST PIP1694	0.0	PASS 187.33 C	BS-4.7 (C) 0.00	0.879 0.00	205 0.00
1953 ST PIP1688	0.0	PASS 144.39 C	BS-4.7 (C) 0.00	0.630 0.00	207 9.55
1954 ST PIP1691	0.0	PASS 417.21 C	BS-4.7 (C) 0.00	0.974 0.00	206 0.00
1955 ST PIP1691	0.0	PASS 188.91 C	BS-4.7 (C) 0.00	0.451 0.00	209 15.26
1956 ST PIP1688	0.0	PASS 193.63 C	BS-4.7 (C) 0.00	0.906 0.00	204 0.00
1957 ST PIP1688	0.0	PASS 193.25 C	BS-4.7 (C) 0.00	0.618 0.00	209 9.55
1958 ST PIP1691	0.0	PASS 411.91 C	BS-4.7 (C) 0.00	0.902 0.00	208 0.00

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Job No TPL40581 | Sheet No a 188 | Rev R4b-FAB2

Job Title Wisma Bela Swimming Pool | Ref wind speed 32.5 m/s | Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
1959 ST PIP1691	0.0	PASS 105.86 C	BS-4.7 (C) 0.00	0.458 0.00	209 11.24
1960 ST PIP1689	0.0	PASS 168.73 C	BS-4.7 (C) 0.00	0.883 0.00	205 0.00
1961 ST PIP1688	0.0	PASS 102.24 C	BS-4.7 (C) 0.00	0.422 0.00	209 1.55
1962 ST PIP1691	0.0	PASS 417.15 C	BS-4.7 (C) 0.00	0.974 0.00	208 9.09
1963 ST PIP2728	0.0	PASS 228.95 C	BS-4.7 (C) 0.00	0.472 0.00	207 0.00
1964 ST PIP2728	0.0	PASS 315.85 C	BS-4.7 (C) 0.00	0.650 0.00	202 0.00
1965 ST PIP2728	0.0	PASS 321.99 C	BS-4.7 (C) 0.00	0.663 0.00	204 0.00
1966 ST PIP2728	0.0	PASS 216.48 C	BS-4.7 (C) 0.00	0.446 0.00	207 0.00
1967 ST PIP2728	0.0	PASS 206.44 C	BS-4.7 (C) 0.00	0.431 0.00	205 0.00
1968 ST PIP2728	0.0	PASS 312.14 C	BS-4.7 (C) 0.00	0.643 0.00	206 0.00
1969 ST PIP2728	0.0	PASS 202.71 C	BS-4.7 (C) 0.00	0.419 0.00	209 0.00
1970 ST PIP2728	0.0	PASS 304.29 C	BS-4.7 (C) 0.00	0.626 0.00	205 0.00
1971 ST PIP2728	0.0	PASS 309.47 C	BS-4.7 (C) 0.00	0.637 0.00	206 0.00
1972 ST PIP2728	0.0	PASS 216.13 C	BS-4.7 (C) 0.00	0.445 0.00	209 0.00
1973 ST PIP2728	0.0	PASS 248.52 C	BS-4.7 (C) 0.00	0.631 0.00	205 0.00
1974 ST PIP2728	0.0	PASS 312.29 C	BS-4.7 (C) 0.00	0.643 0.00	206 0.00
1975 ST PIP2728	0.0	PASS 227.96 C	BS-4.7 (C) 0.00	0.469 0.00	209 0.00
1976 ST PIP2728	0.0	PASS 216.11 C	BS-4.7 (C) 0.00	0.631 0.00	205 0.00
1977 ST PIP2728	0.0	PASS 322.34 C	BS-4.7 (C) 0.00	0.664 0.00	204 0.00
1978 ST CHS609X16	PASS 130.59 C	AMNX 1.1 -233.40	0.264 194.96	204 -
1979 ST CHS609X16	PASS 422.27 C	AMNX 1.1 -215.33	0.475 498.23	204 -
1980 ST CHS609X16	PASS 143.29 C	AMNX 1.1 -229.79	0.371 197.58	205 -

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Job No TPL40581 | Sheet No a 189 | Rev R4b-FAB2

Job Title Wisma Bela Swimming Pool | Ref wind speed 32.5 m/s | Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
1981 ST CHS609X16	PASS 440.90 C	AMNX 1.1 -222.28	0.482 497.78	205 -	
1982 ST CHS609X16	PASS 550.13 C	AMNX 2.1 -159.90	0.284 184.49	209 -	
1983 ST CHS609X16	PASS 547.07 C	AMNX 1.1 -163.02	0.206 153.78	209 -	
1984 ST CHS609X16	PASS 430.94 T	BS-4.8,2.2 -131.87	0.145 0.00	202 3.44	
1985 ST CHS609X16	PASS 57.84 C	AMNX 2.1 -34.51	0.364 526.91	204 -	
1986 ST CHS609X16	PASS 472.31 T	BS-4.8,2.2 -99.85	0.123 0.00	10 3.44	
1987 ST CHS609X16	PASS 133.84 C	AMNX 2.1 -225.46	0.496 327.89	205 -	
1988 ST CHS609X16	PASS 424.16 T	BS-4.8,2.2 -101.83	0.117 0.00	202 0.00	
1989 ST CHS609X16	PASS 430.94 T	BS-4.8,2.2 -131.87	0.138 0.00	202 3.44	
1990 ST CHS609X16	PASS 580.12 T	BS-4.8,2.2 -133.32	0.147 0.00	10 3.44	
1991 ST CHS609X16	PASS 147.84 C	AMNX 1.1 -5.79	0.351 329.28	204 -	
1992 ST CHS609X16	PASS 447.85 C	AMNX 2.1 -4.09	0.128 192.53	201 -	
1993 ST CHS609X16	PASS 587.65 C	AMNX 2.1 -39.39	0.532 772.54	201 -	
1994 ST CHS609X16	PASS 676.49 C	BS-4.7 (C) -48.08	0.883 0.00	201 0.00	
1995 ST CHS609X16	PASS 445.32 T	BS-4.8,2.2 -132.16	0.148 0.00	10 0.00	
1996 ST CHS609X16	PASS 503.93 T	BS-4.8,2.2 -134.35	0.151 0.00	202 3.44	
1997 ST CHS609X16	PASS 61.34 C	AMNX 1.1 -8.75	0.336 508.85	204 -	
1998 ST CHS609X16	PASS 418.07 T	BS-4.8,2.2 -117.64	0.127 0.00	10 0.00	
1999 ST CHS609X16	PASS 9.31 C	AMNX 1.1 -70.14	0.428 581.89	205 -	
2000 ST CHS609X16	PASS 421.25 T	BS-4.8,2.2 -32.19	0.073 0.00	10 0.00	
2001 ST CHS609X16	PASS 444.18 T	BS-4.8,2.2 -137.98	0.143 0.00	202 0.00	
2002 ST CHS609X16	PASS 494.16 T	BS-4.8,2.2 -131.16	0.145 0.00	202 3.44	

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Job No TPL40581 | Sheet No a 190 | Rev R4b-FAB2

Job Title Wisma Bela Swimming Pool | Ref wind speed 32.5 m/s | Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
2003 ST CHS609X16	PASS 57.93 C	AMNX 2.1 -34.51	0.364 526.89	204 -	
2004 ST CHS609X16	PASS 472.63 T	BS-4.8,2.2 -100.22	0.122 0.00	10 3.44	
2005 ST CHS609X16	PASS 122.93 C	AMNX 2.1 -224.15	0.494 327.73	205 -	
2006 ST CHS609X16	PASS 424.74 T	BS-4.8,2.2 -101.83	0.117 0.00	202 0.00	
2007 ST CHS609X16	PASS 430.97 T	BS-4.8,2.2 -139.97	0.139 0.00	202 3.44	
2008 ST CHS609X16	PASS 130.49 C	AMNX 2.1 -213.94	0.264 194.66	204 -	
2009 ST CHS609X16	PASS 421.30 C	AMNX 2.1 -215.10	0.472 498.81	204 -	
2010 ST CHS609X16	PASS 142.33 C	AMNX 2.1 -228.55	0.370 197.47	205 -	
2011 ST CHS609X16	PASS 443.13 C	AMNX 2.1 -221.96	0.482 497.21	205 -	
2012 ST CHS609X16	PASS 580.32 T	AMNX 1.1 -142.76	0.206 153.89	207 -	
2013 ST CHS609X16	PASS 547.45 C	AMNX 2.1 -163.82	0.207 153.73	207 -	
2014 ST PIP4812.5	PASS 242.76 C	AMNX 2.1 -131.28	0.290 20.05	208 -	
2015 ST PIP4812.5	PASS 242.76 C	AMNX 2.1 -131.28	0.299 20.05	206 -	
2016 ST PIP4812.5	PASS 533.58 C	BS-4.7 (C) -31.71	0.139 0.00	201 0.00	
2017 ST PIP4812.5	PASS 547.75 C	BS-4.7 (C) -39.28	0.147 0.00	201 0.00	
2018 ST PIP4812.5	PASS 405.13 C	BS-4.7 (C) -31.11	0.107 0.00	201 0.00	
2019 ST PIP4812.5	PASS 734.39 C	BS-4.7 (C) -32.48	0.190 0.00	201 0.00	
2020 ST PIP4812.5	PASS 486.53 C	BS-4.7 (C) -32.94	0.126 0.00	201 0.00	
2021 ST PIP4812.5	PASS 580.98 C	BS-4.7 (C) -41.65	0.153 0.00	201 0.00	
2022 ST PIP4812.5	PASS 533.43 C	BS-4.7 (C) -31.72	0.139 0.00	201 0.00	
2023 ST PIP4812.5	PASS 547.47 C	BS-4.7 (C) -39.29	0.147 0.00	201 0.00	
2024 ST PIP4812.5	PASS 281.89 C	AMNX 2.1 -133.69	0.302 19.29	208 -	

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Job No TPL40581 | Sheet No a 191 | Rev R4b-FAB

Job Title Wisma Bela Swimming Pool | Ref wind speed 32.5 m/s | Ref Fabric R5

By TSM | Date 17-Dec-11 | Chd TSM

Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
2025 ST PIP4812.5	PASS 242.83 C	AMNX 2.1 -132.31	0.302 20.17	208 -	
2026 ST CHS609X16	PASS 484.97 C	AMNX 1.1 -28.48	0.252 204.24	201 -	
2027 ST CHS609X16	PASS 582.29 C	AMNX 1.1 -29.46	0.207 299.28	201 -	
2028 ST CHS609X16	PASS 271.74 C	AMNX 2.1 -206.23	0.153 29.84	206 -	
2029 ST CHS609X16	PASS 272.91 C	AMNX 1.1 -206.06	0.152 31.16	206 -	
2030 ST CHS609X16	PASS 389.67 T	BS-4.8,2.2 -33.45	0.048 0.00	10 0.00	
2031 ST CHS609X16	PASS 389.73 T	BS-4.8,2.2 -27.47	0.073 0.00	10 0.00	
2032 ST CHS609X16	PASS 417.52 C	BS-4.7 (C) -49.41	0.492 0.00	201 0.00	
2033 ST CHS609X16	PASS 747.13 C	BS-4.7 (C) -81.57	0.892 0.00	201 0.00	
2034 ST CHS609X16	PASS 499.26 C	BS-4.7 (C) -35.65	0.641 0.00	201 0.00	
2035 ST CHS609X16	PASS 386.81 T	BS-4.8,2.2 -27.42	0.077 0.00	12 0.00	
2036 ST CHS609X16	PASS 389.86 T	BS-4.8,2.2 -27.84	0.073 0.00	12 0.00	
2037 ST CHS609X16	PASS 272.45 C	AMNX 2.1 -207.78	0.154 30.13	208 -	
2038 ST CHS609X16	PASS 158.19 C	AMNX 2.1 -45.69	0.254 404.34	204 -	
2039 ST CHS609X16	PASS 158.05 C	AMNX 2.1 -52.18	0.298 404.42	204 -	
2040 ST CHS609X16	PASS 532.83 C	AMNX 2.1 -32.18	0.593 16.94	206 -	
2041 ST PIP2736.0	PASS 184.43 C	AMNX 2.1 -27.10	0.203 417.21	206 -	
2042 ST PIP2736.0	PASS 323.40 C	BS-4.7 (C) -15.46	0.098 0.00	206 0.00	
2043 ST PIP2736.0	PASS 215.19 C	BS-4.7 (C) -7.47	0.239 0.00	206 0.00	
2044 ST PIP2736.0	PASS 176.81 C	BS-4.7 (C) -4.92	0.186 0.00	206 0.00	

Job No TPL40581 | Sheet No a 192 | Rev R4b-FAB2
Job Title Wisma Bela Swimming Pool | Ref wind speed 32.5 m/s | Fabric R5
By TSM | Date 17-Dec-11 | Chd TSM
Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
2047 ST PIP2734.0	PASS 101.29 C	BS-4.7 (C) -1.89	0.108 0.00	206 0.00	
2048 ST PIP2734.0	PASS 193.90 C	BS-4.7 (C) -4.23	0.207 0.00	206 0.00	
2049 ST PIP2734.0	PASS 59.87 C	BS-4.7 (C) -2.48	0.165 0.00	206 0.00	
2050 ST PIP2734.0	PASS 118.46 C	BS-4.7 (C) -4.11	0.127 0.00	206 0.00	
2051 ST PIP2734.0	PASS 118.44 C	BS-4.7 (C) -4.16	0.126 0.00	206 0.00	
2052 ST PIP2734.0	PASS 89.62 C	ANNEX I.1 -4.35	0.096 1.23	206 -	
2053 ST PIP2734.0	PASS 89.58 C	BS-4.7 (C) -2.52	0.095 0.00	206 0.00	
2054 ST PIP2734.0	PASS 101.73 C	BS-4.7 (C) -3.28	0.108 0.00	206 0.00	
2055 ST PIP2734.0	PASS 174.28 C	BS-4.7 (C) -1.66	0.186 0.00	206 0.00	
2056 ST PIP2734.0	PASS 89.31 C	BS-4.7 (C) -4.80	0.196 0.00	206 0.00	
2057 ST PIP2734.0	PASS 193.11 C	BS-4.7 (C) -2.31	0.206 0.00	206 0.00	
2058 ST PIP2734.0	PASS 169.28 C	BS-4.7 (C) -5.37	0.202 0.00	206 0.00	
2059 ST PIP2734.0	PASS 151.94 C	ANNEX I.1 -12.08	0.599 19.24	206 -	
2060 ST PIP2734.0	PASS 215.74 C	BS-4.7 (C) -4.89	0.230 0.00	206 0.00	
2061 ST PIP2734.0	PASS 152.14 C	BS-4.7 (C) -7.50	0.569 0.00	206 0.00	
2062 ST CHS21909.0	PASS 141.49 C	BS-4.7 (C) 0.00	0.298 0.00	202 13.85	
2063 ST CHS21909.0	PASS 149.31 C	BS-4.7 (C) 0.00	0.297 0.00	202 13.85	
2064 ST CHS21909.0	PASS 118.06 C	BS-4.7 (C) 0.00	0.232 0.00	202 13.85	
2065 ST CHS21909.0	PASS 122.46 C	BS-4.7 (C) 0.00	0.245 0.00	202 13.85	
2066 ST CHS21909.0	PASS 23.48 C	BS-4.7 (C) 0.00	0.133 0.00	3 0.00	
2067 ST CHS21909.0	PASS 23.97 C	BS-4.7 (C) 0.00	0.133 0.00	6 0.00	
2068 ST CHS21909.0	PASS 183.26 C	BS-4.7 (C) 0.00	0.291 0.00	10 0.00	

Job No TPL40581 | Sheet No a 193 | Rev R4b-FAB2
Job Title Wisma Bela Swimming Pool | Ref wind speed 32.5 m/s | Fabric R5
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Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
2069 ST CHS21909.0	PASS 124.67 C	BS-4.7 (C) 0.00	0.349 0.00	12 0.00	
2070 ST CHS21909.0	PASS 157.58 C	BS-4.7 (C) 0.00	0.303 0.00	202 13.85	
2071 ST CHS21909.0	PASS 157.23 C	BS-4.7 (C) 0.00	0.258 0.00	202 13.85	
2072 ST CHS21909.0	PASS 118.58 C	BS-4.7 (C) 0.00	0.232 0.00	202 13.85	
2073 ST CHS21909.0	PASS 122.47 C	BS-4.7 (C) 0.00	0.245 0.00	202 13.85	
2074 ST CHS21909.0	PASS 142.50 C	BS-4.7 (C) 0.00	0.442 0.00	202 13.85	
2075 ST CHS21909.0	PASS 142.62 C	BS-4.7 (C) 0.00	0.440 0.00	202 13.85	
2076 ST CHS21909.0	PASS 24.23 C	BS-4.7 (C) 0.00	0.126 0.00	9 0.00	
2077 ST CHS21909.0	PASS 123.68 C	BS-4.7 (C) 0.00	0.119 0.00	8 0.00	
2078 ST PIP1686.0	PASS 201.80 T	BS-4.8.2.2 -4.41	0.434 0.00	201 5.90	
2079 ST PIP1686.0	PASS 208.06 C	BS-4.7 (C) -4.72	0.449 0.00	202 5.90	
2080 ST PIP1686.0	PASS 208.35 T	BS-4.8.2.2 -1.55	0.334 0.00	209 5.75	
2081 ST PIP1686.0	PASS 207.47 C	BS-4.7 (C) -4.72	0.448 0.00	202 5.90	
2082 ST PIP1686.0	PASS 183.98 C	BS-4.7 (C) 0.00	0.397 0.00	10 0.00	
2083 ST PIP1686.0	PASS 174.83 C	BS-4.7 (C) -7.29	0.377 0.00	202 5.90	
2084 ST PIP1686.0	PASS 177.82 C	BS-4.7 (C) 0.00	0.370 0.00	202 0.00	
2085 ST PIP1686.0	PASS 180.31 C	ANNEX I.1 -7.44	0.391 1.25	202 -	
2086 ST PIP1686.0	PASS 201.48 T	BS-4.8.2.2 -4.54	0.520 0.00	201 5.90	
2087 ST PIP1686.0	PASS 202.74 T	BS-4.8.2.2 -4.38	0.412 0.00	201 5.90	
2088 ST PIP1686.0	PASS 202.18 T	BS-4.8.2.2 -4.52	0.226 0.00	201 5.75	
2089 ST PIP1686.0	PASS 201.92 T	BS-4.8.2.2 -4.54	0.520 0.00	201 5.90	
2090 ST PIP1686.0	PASS 201.98 C	ANNEX I.1 -7.44	0.417 1.25	202 -	

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Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

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MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
2091 ST PIP1686.0	PASS 158.78 C	BS-4.7 (C) -4.20	0.342 0.00	202 5.90	
2092 ST PIP1686.0	PASS 144.43 C	BS-4.7 (C) 0.00	0.342 0.00	202 0.00	
2093 ST PIP1686.0	PASS 187.58 C	ANNEX I.1 -7.66	0.418 1.29	202 -	
2094 ST PIP1686.0	PASS 179.87 C	ANNEX I.1 -7.46	0.384 1.27	202 -	
2095 ST PIP1686.0	PASS 175.88 C	BS-4.7 (C) -7.39	0.379 0.00	202 5.90	
2096 ST PIP1686.0	PASS 174.84 C	BS-4.7 (C) 0.00	0.368 0.00	202 0.00	
2097 ST PIP1686.0	PASS 183.85 C	BS-4.7 (C) 0.00	0.397 0.00	10 0.00	
2098 ST PIP1686.0	PASS 204.72 T	BS-4.8.2.2 -4.42	0.448 0.00	201 5.90	
2099 ST PIP1686.0	PASS 210.11 C	BS-4.7 (C) -6.74	0.453 0.00	202 5.90	
2100 ST PIP1686.0	PASS 270.21 T	BS-4.8.2.2 -1.57	0.207 0.00	207 5.75	
2101 ST PIP1686.0	PASS 208.53 C	BS-4.7 (C) -6.71	0.452 0.00	202 5.90	
2102 ST PIP1686.0	PASS 212.34 C	BS-4.7 (C) -5.28	0.442 0.00	202 5.75	
2103 ST PIP1686.0	PASS 214.17 C	BS-4.7 (C) 0.00	0.446 0.00	202 5.75	
2104 ST PIP1686.0	PASS 209.48 T	BS-4.8.2.2 -4.33	0.453 0.00	201 5.75	
2105 ST PIP1686.0	PASS 209.77 T	BS-4.8.2.2 -4.36	0.453 0.00	201 0.00	
2106 ST PIP1686.0	PASS 176.48 C	BS-4.7 (C) -6.66	0.367 0.00	202 0.00	
2107 ST PIP1686.0	PASS 172.42 C	BS-4.7 (C) -4.82	0.370 0.00	10 0.00	
2108 ST PIP1686.0	PASS 176.25 C	BS-4.7 (C) -6.65	0.367 0.00	202 5.75	
2109 ST PIP1686.0	PASS 177.59 C	BS-4.7 (C) 0.00	0.370 0.00	202 5.75	
2110 ST PIP1686.0	PASS 164.04 T	BS-4.8.2.2 -4.30	0.413 0.00	201 5.75	
2111 ST PIP1686.0	PASS 164.67 T	BS-4.8.2.2 -4.30	0.413 0.00	201 0.00	
2112 ST PIP1686.0	PASS 203.71 T	BS-4.8.2.2 -4.30	0.412 0.00	201 0.00	

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Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

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MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
2113 ST PIP1686.0	PASS 168.57 C	BS-4.7 (C) -2.31	0.334 0.00	12 0.00	
2114 ST PIP1686.0	PASS 203.44 T	BS-4.8.2.2 -4.34	0.437 0.00	201 5.75	
2115 ST PIP1686.0	PASS 202.80 T	BS-4.8.2.2 -4.37	0.436 0.00	201 0.00	
2116 ST PIP1686.0	PASS 214.30 C	BS-4.7 (C) -5.31	0.447 0.00	202 5.75	
2117 ST PIP1686.0	PASS 214.34 C	BS-4.7 (C) 0.00	0.450 0.00	202 5.75	
2118 ST PIP1686.0	PASS 211.97 C	BS-4.7 (C) -5.29	0.441 0.00	202 5.75	
2119 ST PIP1686.0	PASS 213.80 C	BS-4.7 (C) 0.00	0.445 0.00	202 5.75	
2120 ST PIP1686.0	PASS 202.30 T	BS-4.8.2.2 -4.39	0.437 0.00	201 5.00	
2121 ST PIP1686.0	PASS 209.16 T	BS-4.8.2.2 -1.56	0.354 0.00	208 5.00	
2122 ST PIP1686.0	PASS 205.57 T	BS-4.8.2.2 -4.39	0.440 0.00	201 0.00	
2123 ST PIP1686.0	PASS 270.78 T	BS-4.8.2.2 -1.59	0.206 0.00	207 5.00	
2124 ST PIP1686.0	PASS 212.90 C	BS-4.7 (C) -5.30	0.443 0.00	202 5.75	
2125 ST PIP1686.0	PASS 214.76 C	BS-4.7 (C) 0.00	0.447 0.00	202 5.75	
2126 ST PIP1686.0	PASS 142.59 C	BS-4.7 (C) -4.42	0.330 0.00	202 0.00	
2127 ST PIP1686.0	PASS 141.67 C	BS-4.7 (C) -6.85	0.349 0.00	202 0.00	
2128 ST PIP1686.0	PASS 168.86 C	BS-4.7 (C) -4.62	0.233 0.00	202 5.75	
2129 ST PIP1686.0	PASS 161.37 C	BS-4.7 (C) 0.00	0.334 0.00	202 5.75	
2130 ST PIP1686.0	PASS 175.53 C	BS-4.7 (C) -4.85	0.365 0.00	202 0.00	
2131 ST PIP1686.0	PASS 174.24 C	BS-4.7 (C) -7.38	0.374 0.00	202 0.00	
2132 ST PIP1686.0	PASS 157.26 C	BS-4.7 (C) -4.67	0.369 0.00	202 5.75	
2133 ST PIP1686.0	PASS 178.41 C	BS-4.7 (C) 0.00	0.372 0.00	202 5.75	
2134 ST PIP1686.0	PASS 161.83 C	ANNEX I.1 -7.46	0.385 1.24	202 -	

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Job Title Wisma Bela Swimming Pool | Ref wind speed 32.5 m/s | Fabric R5
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Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

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MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
2135 ST PIP1686.0	PASS 184.28 C	BS-4.7 (C) -2.64	0.206 0.00	10 0.00	
2136 ST PIP1686.0	PASS 182.25 C	ANNEX I.1 -7.44	0.396 1.25	202 -	
2137 ST PIP1686.0	PASS 184.84 C	BS-4.7 (C) 0.00	0.395 0.00	202 5.75	
2138 ST PIP1686.0	PASS 321.79 T	BS-4.8.2.2 -5.96	0.520 0.00	201 0.00	
2139 ST PIP1686.0	PASS 319.91 T	BS-4.8.2.2 -1.36	0.411 0.00	201 0.00	
2140 ST PIP1686.0	PASS 321.91 T	BS-4.8.2.2 -5.94	0.520 0.00	201 0.00	
2141 ST PIP1686.0	PASS 320.83 T	BS-4.8.2.2 -1.36	0.412 0.00	201 0.00	
2142 ST PIP1686.0	PASS 189.24 C	ANNEX I.1 -7.45	0.407 1.29	202 -	
2143 ST PIP1686.0	PASS 190.47 C	BS-4.7 (C) 0.00	0.397 0.00	202 5.75	
2144 ST PIP1686.0	PASS 188.86 C	ANNEX I.1 -7.45	0.408 1.29	202 -	
2145 ST PIP1686.0	PASS 191.50 C	BS-4.7 (C) 0.00	0.399 0.00	202 5.75	
2146 ST PIP1686.0	PASS 181.21 C	ANNEX I.1 -7.44	0.395 1.28	202 -	
2147 ST PIP1686.0	PASS 183.86 C	BS-4.7 (C) 0.00	0.393 0.00	202 5.75	
2148 ST PIP1686.0	PASS 182.04 C	ANNEX I.1 -7.46	0.394 1.25	202 -	
2149 ST PIP1686.0	PASS 184.68 C	BS-4.7 (C) 0.00	0.396 0.00	202 5.75	
2150 ST PIP1686.0	PASS 268.82 C	BS-4.7 (C) 0.00	0.491 0.00	202 0.00	
2151 ST PIP1686.0	PASS 191.97 T	BS-4.8.2.2 -3.24	0.296 0.00	201 5.19	
2152 ST PIP1686.0	PASS 271.53 C	BS-4.7 (C) -6.21	0.492 0.00	202 5.19	
2153 ST PIP1686.0	PASS 190.62 T	BS-4.8.2.2 -3.24	0.363 0.00	201 5.19	
2154 ST PIP1686.0	PASS 144.21 T	BS-4.8.2.2 -1.89	0.217 0.00	201 4.65	
2155 ST PIP1686.0	PASS 144.49 T	BS-4.8.2.2 -1.89	0.217 0.00	201 4.65	
2156 ST PIP1686.0	PASS 150.16 T	BS-4.8.2.2 -3.11	0.350 0.00	201 5.19	

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Steel Design (Track 0) Checks Cont...

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MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
2157 ST PIP1686.0	PASS 150.87 T	BS-4.8.2.2 -3.11	0.351 0.00	201 5.19	
2158 ST PIP1686.0	PASS 154.70 C	BS-4.7 (C) 0.00	0.343 0.00	12 0.00	
2159 ST PIP1686.0	PASS 101.61 C	BS-4.7 (C) 0.00	0.254 0.00	10 0.00	
2160 ST PIP1686.0	PASS 158.98 T	BS-4.8.2.2 -3.41	0.315 0.00	201 5.17	
2161 ST PIP1686.0	PASS 159.88 T	BS-4.8.2.2 -3.41	0.315 0.00	201 5.19	
2162 ST PIP1686.0	PASS 165.23 C	BS-4.7 (C) 0.00	0.264 0.00	202 0.00	
2163 ST PIP1686.0	PASS 166.54 C	BS-4.7 (C) 0.00	0.267 0.00	202 6.31	
2164 ST PIP1686.0	PASS 155.93 T	BS-4.8.2.2 -3.14	0.258 0.00	201 5.17	
2165 ST PIP1686.0	PASS 164.63 T	BS-4.8.2.2 -3.11	0.250 0.00	201 5.19	
2166 ST PIP1686.0	PASS 163.89 T	BS-4.8.2.2 -1.99	0.217 0.00	201 4.65	
2167 ST PIP1686.0	PASS 164.71 T	BS-4.8.2.2 -1.99	0.218 0.00	201 4.65	
2168 ST PIP1686.0	PASS 158.46 T	BS-4.8.2.2 -3.11	0.250 0.00	201 5.17	
2169 ST PIP1686.0	PASS 156.33 T	BS-4.8.2.2 -3.11	0.251 0.00	201 5.19	
2170 ST PIP1686.0	PASS 271.85 C	BS-4.7 (C) 0.00	0.493 0.00	202 0.00	
2171 ST PIP1686.0	PASS 193.30 T	BS-4.8.2.2 -3.27	0.306 0.00	201 5.17	
2172 ST PIP1686.0	PASS 272.60 C	BS-4.7 (C) -5.22	0.492 0.00	202 5.17	
2173 ST PIP1686.0	PASS 192.14 T	BS-4.8.2.2 -3.25	0.305 0.00	201 5.19	
2174 ST PIP1686.0	PASS 271.44 C	BS-4.7 (C) -5.21	0.491 0.00	202 5.19	
2175 ST PIP1686.0	PASS 191.40 T	BS-4.8.2.2 -3.24	0.304 0.00	201 5.19	
2176 ST PIP1686.0	PASS 144.42 T	BS-4.8.2.2 -1.99	0.217 0.00	201 0.00	
2177 ST PIP1686.0	PASS 144.24 T	BS-4.8.2.2 -1.99	0.217 0.00	201 0.00	
2178 ST PIP1686.0	PASS 144.84 T	BS-4.8.2.2 -1.99	0.218 0.00	201 0.00	

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Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

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MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
2179 ST PIP1686.0	PASS 163.94 T	BS-4.8.2.2 -3.09	0.217 0.00	201 0.00	
2180 ST PIP1686.0	PASS 192.90 T	BS-4.8.2.2 -3.35	0.306 0.00	201 0.00	
2181 ST PIP1686.0	PASS 272.68 C	BS-4.7 (C) -5.22	0.494 0.00	202 0.00	
2182 ST PIP1686.0	PASS 276.82 C	BS-4.7 (C) 0.00	0.491 0.00	202 5.19	
2183 ST PIP1686.0	PASS 191.16 T	BS-4.8.2.2 -3.36	0.304 0.00	201 0.00	
2184 ST PIP1686.0	PASS 150.94 T	BS-4.8.2.2 -3.11	0.251 0.00	201 0.00	
2185 ST PIP1686.0	PASS 150.18 T	BS-4.8.2.2 -3.13	0.250 0.00	201 0.00	
2186 ST PIP1686.0	PASS 195.15 T	BS-4.8.2.2 -3.41	0.315 0.00	201 0.00	
2187 ST PIP1686.0	PASS 198.93 T	BS-4.8.2.2 -3.41	0.315 0.00	201 0.00	
2188 ST PIP1686.0	PASS 154.49 T	BS-4.8.2.2 -3.13	0.258 0.00	201 0.00	
2189 ST PIP1686.0	PASS 155.97 T	BS-4.8.2.2 -3.13	0.258 0.00	201 0.00	
2190 ST PIP1686.0	PASS 156.58 T	BS-4.8.2.2 -3.11	0.251 0.00	201 0.00	
2191 ST PIP1686.0	PASS 158.48 T	BS-4.8.2.2 -3.11	0.250 0.00	201 0.00	
2192 ST PIP1686.0	PASS 192.72 T	BS-4.8.2.2 -3.37	0.307 0.00	201 0.00	
2193 ST PIP1686.0	PASS 270.20 C	BS-4.7 (C) 0.00	0.492 0.00	202 5.19	
2194 ST CHS7X85.16	PASS 0.01 C	BS-4.8.3.3.3 -0.88	0.291 0.47	10 -	
2195 ST CHS7X85.16	PASS 0.00 C	ANNEX I.1 -0.49	0.095 0.14	206 -	
2196 ST CHS7X85.16	PASS 0.00 C	ANNEX I.1 -0.65	0.020 0.08	206 -	
2197 ST CHS7X85.16	PASS 0.23 C	ANNEX I.1 -0.98	0.029 0.18	206 -	
2198 ST CHS7X85.16	PASS 0.00 C	ANNEX I.1 -0.64	0.017 0.07	208 -	
2199 ST CHS7X85.16	PASS 0.00 C	ANNEX I.1 -0.67	0.025 0.09	208 -	
2200 ST CHS7X85.16	PASS 0.00 C	ANNEX I.1 -0.49	0.096 0.14	208 -	

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Client Majlis Perbandaran Kuantan | File Q326-KSP-R4b-Deg.std | Date/Time 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

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MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
2201 ST CHS7X85.16	PASS 0.01 C	BS-4.8.3.3.3 -0.89	0.295 0.47	12 -	
2202 ST CHS7X85.16	PASS 0.00 C	ANNEX I.1 -0.48	0.094 0.14	206 -	
2203 ST CHS7X85.16	PASS 0.00 C	BS-4.8.3.3.3 -0.88	0.279 0.24	10 -	
2204 ST CHS7X85.16	PASS 0.00 C	ANNEX I.1 -0.48	0.093 0.24	206 -	
2205 ST CHS7X85.16	PASS 0.01 C	BS-4.8.3.3.3 -0.89	0.293 0.47	12 -	
2206 ST CHS7X85.16	PASS 0.00 C	ANNEX I.1 -0.64	0.018 0.08	206 -	
2207 ST CHS7X85.16	PASS 0.24 C	ANNEX I.1 -0.97	0.025 0.09	206 -	
2208 ST CHS7X85.16	PASS 0.00 C	ANNEX I.1 -0.65	0.020 0.08	208 -	
2209 ST CHS7X85.16	PASS 0.25 C	ANNEX I.1 -0.98	0.029 0.18	208 -	
2210 ST CHS7X85.16	PASS 0.00 C	ANNEX I.1 -0.65	0.021 0.08	206 -	
2211 ST CHS7X85.16	PASS 0.25 C	ANNEX I.1 -0.99	0.031 0.11	206 -	
2212 ST CHS7X85.16	PASS 0.00 C	ANNEX I.1 -0.64	0.018 0.08	206 -	
2213 ST CHS7X85.16	PASS 0.22 C	ANNEX I.1 -0.97	0.025 0.09	206 -	
2214 ST CHS7X85.16	PASS 0.07 C	ANNEX I.1 -0.64	0.020 0.09	208 -	
2215 ST CHS7X85.16	PASS 0.24 C	ANNEX I.1 -0.97	0.026 0.10	208 -	
2216 ST CHS7X85.16	PASS 0.07 C	ANNEX I.1 -0.65	0.021 0.08	208 -	
2217 ST CHS7X85.16	PASS 0.23 C	ANNEX I.1 -0.99	0.031 0.11	208 -	
2218 ST CHS7X85.16	PASS 0.00 C	BS-4.8.3.3.3 -0.78	0.258 0.44	10 -	
2219 ST CHS7X85.16	PASS 0.14 T	BS-4.8.2.2 -0.96	0.069 0.00	206 0.85	
2220 ST CHS7X85.16	PASS 0.14 T	BS-4.8.2.2 -0.96	0.069 0.00	209 0.00	
2221 ST CHS7X85.16	PASS 0.00 C	BS-4.8.3.3.3 -0.79	0.257 0.44	12 -	
2222 ST CHS7X85.16	PASS 0.00 C	BS-4.8.3.3.3 -0.78	0.255 0.44	10 -	

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Job Title: Wisma Bella Swimming Pool | Job No: TPL40581 | Sheet No: a 200 | Rev: R4b-FAB2

Part: wind speed 32.5 m/s | Ref: Fabric R5 | By: TSM | Date: 17-Dec-11 | Chd: TSM

Client: Majlis Perbandaran Kuantan | File: Q326-KSP-R4b-Deg.std | Date/Time: 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
2223 ST CHS73X5.16	PASS	BS-4.8,3,3.3	0.013	10
	0.03 C	-0.04	0.02	-
2224 ST CHS73X5.16	PASS	BS-4.8,3,3.3	0.010	12
	0.03 C	-0.03	0.02	-
2225 ST CHS73X5.16	PASS	BS-4.8,3,3.3	0.010	12
	0.03 C	-0.03	0.02	-
2226 ST CHS73X5.16	PASS	BS-4.8,3,3.3	0.013	12
	0.03 C	-0.04	0.02	-
2227 ST CHS73X5.16	PASS	BS-4.8,3,3.3	0.256	12
	0.00 C	-0.79	0.44	-
2228 ST PIP2198.0	PASS	ANNEX I.1	0.757	202
	436.67 C	-28.15	24.08	-
2229 ST PIP2198.0	PASS	ANNEX I.1	0.755	202
	435.69 C	-28.14	24.00	-
2230 ST PIP2198.0	PASS	ANNEX I.1	0.741	202
	430.38 C	-28.10	24.50	-
2231 ST PIP2198.0	PASS	ANNEX I.1	0.755	208
	476.28 C	-19.36	30.49	-
2232 ST PIP2196.0	PASS	BS-4.6 (T)	0.220	206
	243.26 T	0.00	0.00	12.23
2233 ST PIP2198.0	PASS	BS-4.7 (C)	0.673	208
	279.66 C	0.00	0.00	0.00
2234 ST PIP2196.0	PASS	BS-4.6 (T)	0.221	206
	244.05 T	0.00	0.00	12.23
2235 ST PIP2198.0	PASS	BS-4.7 (C)	0.722	206
	241.11 C	0.00	0.00	0.00
2236 ST PIP2196.0	PASS	BS-4.6 (T)	0.320	205
	344.67 T	0.00	0.00	12.05
2237 ST PIP2196.0	PASS	BS-4.6 (T)	0.317	204
	350.65 T	0.00	0.00	12.05
2238 ST PIP2196.0	PASS	BS-4.6 (T)	0.026	206
	29.18 T	0.00	0.00	11.35
2239 ST PIP2196.0	PASS	BS-4.7 (C)	0.130	206
	68.28 C	0.00	0.00	0.00
2240 ST PIP2196.0	PASS	BS-4.6 (T)	0.060	206
	66.36 T	0.00	0.00	12.23
2241 ST PIP2196.0	PASS	BS-4.7 (C)	0.279	206
	77.69 C	0.00	0.00	0.00
2242 ST PIP2196.0	PASS	BS-4.7 (C)	0.030	206
	14.62 C	0.00	0.00	0.00
2243 ST PIP2196.0	PASS	BS-4.7 (C)	0.023	208
	15.33 C	0.00	0.00	0.00
2244 ST PIP2196.0	PASS	BS-4.7 (C)	0.032	201
	8.93 C	0.00	0.00	0.00

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Job Title: Wisma Bella Swimming Pool | Job No: TPL40581 | Sheet No: a 201 | Rev: R4b-FAB2

Part: wind speed 32.5 m/s | Ref: Fabric R5 | By: TSM | Date: 17-Dec-11 | Chd: TSM

Client: Majlis Perbandaran Kuantan | File: Q326-KSP-R4b-Deg.std | Date/Time: 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
2245 ST PIP2196.0	PASS	BS-4.7 (C)	0.033	201
	9.12 C	0.00	0.00	0.00
2246 ST PIP2196.0	PASS	BS-4.7 (C)	0.129	208
	59.64 C	0.00	0.00	0.00
2247 ST PIP2196.0	PASS	BS-4.6 (T)	0.026	208
	28.79 T	0.00	0.00	11.35
2248 ST PIP2196.0	PASS	BS-4.7 (C)	0.276	208
	78.76 C	0.00	0.00	0.00
2249 ST PIP2196.0	PASS	BS-4.6 (T)	0.059	208
	65.42 T	0.00	0.00	12.23
2250 ST PIP2198.0	PASS	BS-4.7 (C)	0.669	208
	277.72 C	0.00	0.00	0.00
2251 ST PIP2196.0	PASS	BS-4.6 (T)	0.219	208
	241.89 T	0.00	0.00	12.23
2252 ST PIP2198.0	PASS	BS-4.7 (C)	0.719	208
	260.07 C	0.00	0.00	0.00
2253 ST PIP2196.0	PASS	BS-4.6 (T)	0.220	208
	242.98 T	0.00	0.00	12.23
2254 ST PIP2196.0	PASS	BS-4.6 (T)	0.328	205
	362.71 T	0.00	0.00	12.05
2255 ST PIP2196.0	PASS	BS-4.6 (T)	0.315	204
	348.58 T	0.00	0.00	12.05
2256 ST RD16	PASS	BS-4.6 (T)	0.436	204
	25.21 T	0.00	0.00	0.00
2257 ST RD16	PASS	BS-4.6 (T)	0.000	204
	0.00	0.00	0.00	0.00
2258 ST RD16	PASS	BS-4.6 (T)	0.430	205
	23.77 T	0.00	0.00	0.00
2259 ST RD16	PASS	BS-4.6 (T)	0.000	205
	0.00	0.00	0.00	0.00
2260 ST RD16	PASS	BS-4.6 (T)	0.087	204
	4.83 T	0.00	0.00	0.00
2261 ST RD16	PASS	BS-4.6 (T)	0.119	204
	6.58 T	0.00	0.00	0.00
2262 ST RD16	PASS	BS-4.6 (T)	0.081	205
	4.44 T	0.00	0.00	0.00
2263 ST RD16	PASS	BS-4.6 (T)	0.101	205
	5.54 T	0.00	0.00	0.00
2264 ST RD16	PASS	BS-4.6 (T)	0.105	204
	5.78 T	0.00	0.00	0.00
2265 ST RD16	PASS	BS-4.6 (T)	0.107	204
	5.91 T	0.00	0.00	0.00
2266 ST RD16	PASS	BS-4.6 (T)	0.082	205
	4.51 T	0.00	0.00	0.00

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Job Title: Wisma Bella Swimming Pool | Job No: TPL40581 | Sheet No: a 202 | Rev: R4b-FAB2

Part: wind speed 32.5 m/s | Ref: Fabric R5 | By: TSM | Date: 17-Dec-11 | Chd: TSM

Client: Majlis Perbandaran Kuantan | File: Q326-KSP-R4b-Deg.std | Date/Time: 10-Jul-2012 16:43

Steel Design (Track 0) Checks Cont...

ALL UNITS ARE - KN METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
2267 ST RD16	PASS	BS-4.6 (T)	0.084	205
	4.64 T	0.00	0.00	0.00
2268 ST RD16	PASS	BS-4.6 (T)	0.119	204
	6.58 T	0.00	0.00	0.00
2269 ST RD16	PASS	BS-4.6 (T)	0.090	204
	4.89 T	0.00	0.00	0.00
2270 ST RD16	PASS	BS-4.6 (T)	0.101	205
	5.58 T	0.00	0.00	0.00
2271 ST RD16	PASS	BS-4.6 (T)	0.083	205
	4.57 T	0.00	0.00	0.00
2272 ST RD16	PASS	BS-4.6 (T)	0.000	205
	0.00	0.00	0.00	0.00
2273 ST RD16	PASS	BS-4.6 (T)	0.463	204
	25.58 T	0.00	0.00	0.00
2274 ST RD16	PASS	BS-4.6 (T)	0.000	204
	0.00	0.00	0.00	0.00
2275 ST RD16	PASS	BS-4.6 (T)	0.437	205
	24.14 T	0.00	0.00	0.00

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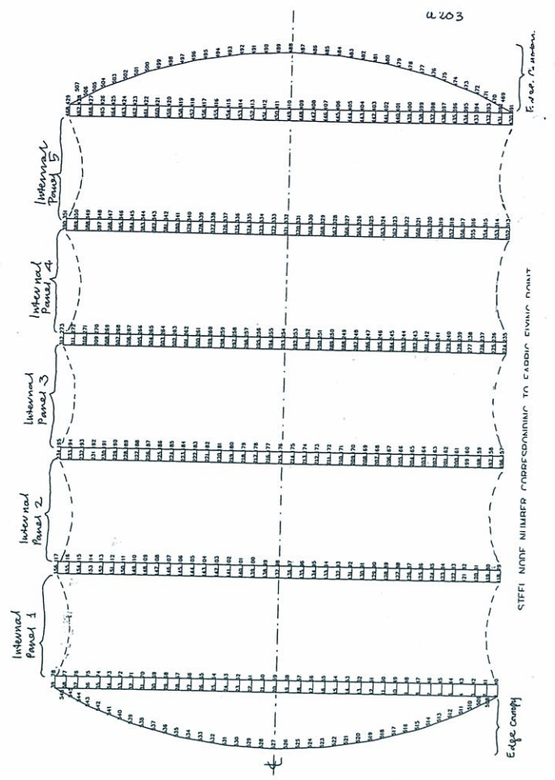

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Job Title: Wisma Bella Swimming Pool | Job No: TPL40581 | Sheet No: a 204 | Rev: R4b-FAB2

Part: wind speed 32.5 m/s | Ref: Fabric R5 | By: TSM | Date: 17-Dec-11 | Chd: TSM

Client: Majlis Perbandaran Kuantan | File: Q326-KSP-R4b-Deg.std | Date/Time: 10-Jul-2012 16:43

Beam Maximum Forces by Section Property

Section		Axial Max Fx (kN)	Shear Max Fy (kN)	Shear Max Fz (kN)	Torsion Max Mx (kNm)	Bending Max My (kNm)	Bending Max Mz (kNm)
PIP2196.0	Max +ve	459.163	13.679	9.445	10.458	14.728	31.075
	Max -ve	-355.806	-13.640	-21.883	-10.382	-13.368	-31.019
PIP89.1X4.0	Max +ve	14.322	4.450	2.331	0.539	1.918	3.800
	Max -ve	-76.184	-4.453	-1.920	-0.540	-1.904	-3.797
PIP1395.0	Max +ve	289.945	12.906	8.099	1.852	8.851	11.018
	Max -ve	-41.006	-12.930	-8.370	-1.655	-7.066	-11.037
PIP89.1X4.0	Max +ve	195.553	1.320	1.814	0.394	1.088	1.550
	Max -ve	-112.248	-1.547	-1.256	-0.395	-1.605	-1.535
PIP89.1X4.0	Max +ve	76.851	0.586	1.089	0.329	1.363	0.823
	Max -ve	-66.999	-0.667	-1.045	-0.322	-1.301	-0.822
PIP114.3X4.5	Max +ve	120.540	2.802	1.721	0.722	2.939	3.664
	Max -ve	-89.940	-2.811	-2.269	-0.722	-2.228	-3.971
PIP2196.0	Max +ve	776.610	14.471	8.909	10.273	19.228	20.654
	Max -ve	-650.042	-14.595	-8.236	-10.158	-17.227	-20.973
PIP1395.0	Max +ve	171.797	7.819	3.055	0.507	3.403	8.154
	Max -ve	-58.836	-7.881	-3.213	-0.510	-3.008	-8.112
PIP1398.0	Max +ve	33.539	47.379	5.869	1.567	5.838	26.427
	Max -ve	-62.451	-47.103	-7.539	-1.569	-4.671	-26.397
PIP2736.0	Max +ve	104.814	38.801	31.139	26.641	65.907	63.576
	Max -ve	-585.530	-28.538	-31.149	-26.669	-50.540	-64.031
PIP1686.0	Max +ve	29.378	0.000	1.282	0.000	0.000	0.000
	Max -ve	-358.288	0.000	-1.282	0.000	0.000	0.000
PIP1686.0	Max +ve	140.790	0.000	1.341	0.000	0.000	0.000
	Max -ve	-3.950	0.000	-1.341	0.000	0.000	0.000
PIP16110.0	Max +ve	417.212	0.000	2.818	0.000	0.000	0.000
	Max -ve	-49.650	0.000	-2.818	0.000	0.000	0.000
PIP1686.0	Max +ve	183.628	0.000	2.384	0.000	0.000	0.000
	Max -ve	-101.300	0.000	-2.384	0.000	0.000	0.000
PIP2736.0	Max +ve	327.343	0.000	5.300	0.000	0.000	0.000
	Max -ve	-15.560	0.000	-5.300	0.000	0.000	0.000
CHS609X16	Max +ve	919.626	228.469	229.844	124.287	378.833	773.836
	Max -ve	-505.324	-137.375	-228.307	-124.973	-279.306	-587.758
PIP40612.5	Max +ve	734.290	7.388	18.529	0.000	132.703	53.399
	Max -ve	-412.432	-5.841	-18.393	-0.000	-133.690	-43.185
CHS219X9.0	Max +ve	142.799	0.000	4.785	0.000	0.000	0.000
	Max -ve	-216.930	0.000	-4.785	0.000	0.000	0.000
PIP2196.0	Max +ve	77.669	0.000	1.783	0.000	0.000	0.000
	Max -ve	-364.673	0.000	-1.783	0.000	0.000	0.000
PIP2198.0	Max +ve	478.320	13.258	2.356	7.771	13.554	30.679
	Max -ve	-1.317	-13.161	-15.503	-7.846	-28.183	-30.490
PIP2736.0	Max +ve	553.401	9.315	14.328	6.844	12.106	10.338
	Max -ve	-0.585	-9.951	-14.377	-6.843	-9.297	-9.996
PIP1686.0	Max +ve	272.097	0.293	1.267	0.000	3.358	1.217
	Max -ve	-206.833	-0.292	-1.267	-0.000	-1.416	-1.822
PIP1686.0	Max +ve	216.264	0.413	1.457	0.294	7.836	2.433
	Max -ve	-323.782	-0.409	-1.453	-0.293	-6.830	-2.361
CHS73X5.16	Max +ve	0.309	2.154	4.090	0.183	1.187	0.621
	Max -ve	-0.290	-2.175	-4.135	-0.184	-1.183	-0.625
RD16	Max +ve	0.000	0.000	0.178	0.000	0.000	0.000
	Max -ve	-23.582	0.000	-0.178	0.000	0.000	0.000

Print Time/Date: 12/07/2012 17:16 | STAAD.Pro for Windows 20.07.02.15 | Print Run 1 of 1

Sediabena Sdn. Bhd.
No. 11 Jalan Astaka U8/84, Seksyen U8
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Tel: (603)7847 3333 Fax: (603)7847 2222

Project No: TPL 40581 | Page:
Date: 26 June 2011
Doc No: Q326-KSP-CAL-001 Rev 0

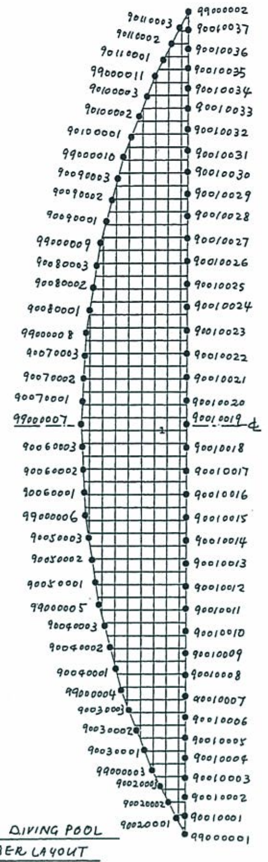
Project : Upgrading of Aquatic Center Wisma Belia Indera Mahkota, Kuantan
Title: Swimming Pool Tensile Membrane Roof - Structural Analysis & Design

APPENDIX B

FABRIC OUTPUT DATAS

Q326-Kuantan

b1



EDGE PANEL NEAR DIVING POOL
FABRIC NODE NUMBER LAYOUT

b2

EDGE PANEL NEAR DIVING POOL – PRESTRESS

b3

EDGE PANEL NEAR DIVING POOL – PRESTRESS

b4

EDGE PANEL NEAR DIVING POOL – PRESTRESS

b5

```
Warning! (051) Using default value: NROB=          0
Statik
Result from EASY Statical analysis
Date = 12/21/2011       Time = 16:17:27
Values from INI-file
Zero for the computer (small number)    0.1000000000E-07
Limit for conjugate gradient            0.1000000000E+00
Minimum stiffness of a point            0.1000000000E-06
Maximum numbers of outer iterations                   20
Maximum numbers of inner iterations                  200
Kind of calculation                                    0

Line from EIN-file:
Statik: Statical analysis...

Dimensions:
Number of points.....................(MAX)   576   20000
Number of free points....................     498
Number of fully fixed points.............      78
Number of all links..................(MAX)   860   40000
Number of cable links....................       0
Number of links controlled by Hookes law.     860
Number of links controlled by force density.    0
Number of t-elements.................(MAX)   142    4000

Limit for convergence:
Maximal number of iterations..............     20
Conjugate gradient.................0.1000E+00

Statical calculation with loads

Informations to solve equations with the method of conjugate gradient
```

Number of inner iterations		residual	right side
0	201	0.0000E+00	0.4309E+01
1 201	201	0.7548E-06	0.5904E+02
2 114	201	0.1014E-05	0.8495E+01
3 110	400	0.2682E-07	0.1083E+00

EDGE PANEL DIVING POOL – LIVE LOAD

b6

EDGE PANEL DIVING POOL – LIVE LOAD

b7

EDGE PANEL DIVING POOL – LIVE LOAD

```
Warning! (051) Using default value: NROB=              0
Statik
Result from EASY Statical analysis
Date = 03/08/2012       Time = 11:29:31
Values from INI-file
Zero for the computer (small number)      0.1000000000E-07
Limit for conjugate gradient              0.1000000000E+00
Minimum stiffness of a point              0.1000000000E-06
Maximum numbers of outer iterations                     20
Maximum numbers of inner iterations                    200
Kind of calculation                                      0

Line from EIN-file:
Statik: Statical analysis...

Dimensions:
Number of points.........................(MAX)    576    20000
Number of free points.........................    498
Number of fully fixed points..................     78
Number of all links......................(MAX)    860    40000
Number of cable links.........................      0
Number of links controlled by Hookes law......    860
Number of links controlled by force density...      0
Number of t-elements.....................(MAX)    142     4000

Limit for convergence:
Maximal number of iterations..................     20
Conjugate gradient...........................0.1000E+00

Statical calculation with loads

Informations to solve equations with the method of conjugate gradient

Number of inner iterations                residual     right side
------------------------------------------------------------------
      0           0     201    0.0000E+00    0.1275E+02
      1         201     201    0.6512E-05    0.5959E+03
      2         162     201    0.1341E-03    0.7855E+03
      3         104     201    0.1296E-03    0.4253E+03
      4          95     201    0.3550E-04    0.7630E+02
      5          84     201    0.1040E-05    0.1110E+02
      6          70     400    0.2165E-07    0.1037E+00
      7          96     400    0.5738E-11    0.4584E-03
Results from calculation of equilibrium

Statik: Statical analysis...              Statik    03/08/201211:29:32
```

EDGE PANEL NEAR DIVING POOL – WIND UPLIFT

Nodes	Coordinates			Coordinate changes			Applied nodes			Residual forces		
PointNo.	X-coor	Y-coor	Z-coor	DX	DY	DZ	ResX	ResY	ResZ	U	V	W
99000001	-0.8500	-5.0000	9.0000	0.0000	0.0000	0.0000	-0.0495	-0.0686	0.0857	-0.22	0.97	0.87
99000002	-0.8500	59.0000	9.0000	0.0000	0.0000	0.0000	-0.0495	0.0686	0.0857	-0.22	-0.97	0.88
99000003	-3.4221	0.0000	11.5248	0.0000	0.0000	0.0000	-0.1405	-0.2162	0.3484	6.13	6.89	8.49
99000004	-5.8218	6.2553	13.8803	0.0000	0.0000	0.0000	-0.0994	-0.1161	0.2817	10.36	1.37	7.17
99000005	-7.5746	12.9317	15.6008	0.0000	0.0000	0.0000	-0.0839	-0.0694	0.2459	12.67	2.81	9.10
99000006	-8.6417	19.8937	16.6483	0.0000	0.0000	0.0000	-0.0505	-0.0191	0.1650	14.66	-0.49	9.44
99000007	-9.0000	27.0000	17.0000	0.0000	0.0000	0.0000	-0.1072	0.0000	0.3298	15.39	0.00	10.30
99000008	-8.6417	34.1063	16.6483	0.0000	0.0000	0.0000	-0.0505	0.0191	0.1650	14.69	0.49	9.45
99000009	-7.5746	41.0683	15.6008	0.0000	0.0000	0.0000	-0.0839	0.0694	0.2459	12.74	-2.81	9.09
99000010	-5.8218	47.7447	13.8803	0.0000	0.0000	0.0000	-0.0994	0.1161	0.2817	10.46	-1.37	7.20
99000011	-3.4221	54.0000	11.5248	0.0000	0.0000	0.0000	-0.1405	0.2162	0.3484	6.36	-6.90	8.54
90010001	-0.8500	-3.5745	10.1434	0.0000	0.0000	0.0000	-0.1327	-0.1788	0.2319	-5.44	-0.26	-2.66
90010002	-0.8500	-2.1081	11.2340	0.0000	0.0000	0.0000	-0.1188	-0.1565	0.2179	-6.73	-0.41	-2.80
90010003	-0.8500	-0.6029	12.2703	0.0000	0.0000	0.0000	-0.1399	-0.1788	0.2698	-8.19	-0.62	-2.90
90010004	-0.8500	0.9391	13.2509	0.0000	0.0000	0.0000	-0.1354	-0.1584	0.2616	-9.95	-0.72	-3.34
90010005	-0.8500	2.5160	14.1745	0.0000	0.0000	0.0000	-0.1289	-0.1374	0.2460	-14.62	-0.96	-5.02
90010006	-0.8500	4.1255	15.0399	0.0000	0.0000	0.0000	-0.1433	-0.1391	0.2720	-13.67	-0.93	-4.32
90010007	-0.8500	5.7656	15.8459	0.0000	0.0000	0.0000	-0.1292	-0.1151	0.2458	-12.72	-0.91	-3.72
90010008	-0.8500	7.4341	16.5914	0.0000	0.0000	0.0000	-0.1512	-0.1224	0.2884	-16.23	-1.05	-4.69
90010009	-0.8500	9.1286	17.2755	0.0000	0.0000	0.0000	-0.1497	-0.1078	0.2836	-18.01	-1.03	-5.18
90010010	-0.8500	10.8471	17.8972	0.0000	0.0000	0.0000	-0.1520	-0.0971	0.2870	-18.34	-0.98	-5.09
90010011	-0.8500	12.5870	18.4558	0.0000	0.0000	0.0000	-0.1396	-0.0792	0.2640	-17.23	-0.88	-4.51
90010012	-0.8500	14.3463	18.9503	0.0000	0.0000	0.0000	-0.1559	-0.0769	0.2951	-19.64	-0.87	-5.14
90010013	-0.8500	16.1224	19.3803	0.0000	0.0000	0.0000	-0.1564	-0.0651	0.2948	-21.49	-0.79	-5.65
90010014	-0.8500	17.9131	19.7451	0.0000	0.0000	0.0000	-0.1577	-0.0542	0.2968	-21.14	-0.67	-5.40
90010015	-0.8500	19.7158	20.0443	0.0000	0.0000	0.0000	-0.1584	-0.0431	0.2984	-19.07	-0.51	-4.64
90010016	-0.8500	21.5284	20.2774	0.0000	0.0000	0.0000	-0.1454	-0.0299	0.2744	-22.52	-0.43	-5.63
90010017	-0.8500	23.3482	20.4441	0.0000	0.0000	0.0000	-0.1596	-0.0218	0.3012	-23.49	-0.30	-5.92
90010018	-0.8500	25.1729	20.5442	0.0000	0.0000	0.0000	-0.1599	-0.0106	0.3009	-22.21	-0.14	-5.47
90010019	-0.8500	27.0000	20.5776	0.0000	0.0000	0.0000	-0.1602	0.0006	0.3011	-20.17	0.00	-4.82
90010020	-0.8500	28.8271	20.5442	0.0000	0.0000	0.0000	-0.1601	0.0117	0.3010	-22.21	0.14	-5.47
90010021	-0.8500	30.6518	20.4441	0.0000	0.0000	0.0000	-0.1441	0.0200	0.2716	-23.50	0.29	-5.94
90010022	-0.8500	32.4716	20.2774	0.0000	0.0000	0.0000	-0.1608	0.0335	0.3042	-22.53	0.43	-5.62
90010023	-0.8500	34.2842	20.0443	0.0000	0.0000	0.0000	-0.1582	0.0443	0.2985	-19.11	0.51	-4.65
90010024	-0.8500	36.0869	19.7451	0.0000	0.0000	0.0000	-0.1577	0.0554	0.2970	-21.20	0.67	-5.42
90010025	-0.8500	37.8776	19.3803	0.0000	0.0000	0.0000	-0.1566	0.0665	0.2950	-21.51	0.79	-5.66
90010026	-0.8500	39.6537	18.9503	0.0000	0.0000	0.0000	-0.1400	0.0694	0.2646	-19.68	0.86	-5.17
90010027	-0.8500	41.4130	18.4558	0.0000	0.0000	0.0000	-0.1557	0.0890	0.2952	-17.30	0.88	-4.51
90010028	-0.8500	43.1529	17.8972	0.0000	0.0000	0.0000	-0.1520	0.0987	0.2874	-18.39	0.98	-5.11
90010029	-0.8500	44.8714	17.2755	0.0000	0.0000	0.0000	-0.1500	0.1095	0.2840	-18.11	1.03	-5.22
90010030	-0.8500	46.5659	16.5914	0.0000	0.0000	0.0000	-0.1347	0.1094	0.2564	-16.36	1.05	-4.75
90010031	-0.8500	48.2344	15.8459	0.0000	0.0000	0.0000	-0.1465	0.1313	0.2788	-12.83	0.92	-3.73
90010032	-0.8500	49.8745	15.0399	0.0000	0.0000	0.0000	-0.1260	0.1229	0.2390	-13.79	0.93	-4.39
90010033	-0.8500	51.4840	14.1745	0.0000	0.0000	0.0000	-0.1462	0.1573	0.2804	-14.85	0.98	-5.08
90010034	-0.8500	53.0609	13.2509	0.0000	0.0000	0.0000	-0.1354	0.1611	0.2624	-10.15	0.74	-3.41
90010035	-0.8500	54.6029	12.2703	0.0000	0.0000	0.0000	-0.1223	0.1563	0.2346	-8.53	0.63	-3.05
90010036	-0.8500	56.1081	11.2340	0.0000	0.0000	0.0000	-0.1404	0.1845	0.2548	-6.82	0.45	-2.77

EDGE PANEL NEAR DIVING POOL – WIND UPLIFT

PointNo.	X-coor	Y-coor	Z-coor	DX	DY	DZ	ResX	ResY	ResZ	U	V	W
99000001	-0.8500	-5.0000	9.0000	0.0000	0.0000	0.0000	0.0228	0.0317	-0.0395	-0.12	0.64	0.34
99000002	-0.8500	59.0000	9.0000	0.0000	0.0000	0.0000	0.0228	-0.0317	-0.0395	-0.12	-0.64	0.33
99000003	-3.4221	0.0000	11.5248	0.0000	0.0000	0.0000	0.0649	0.0998	-0.1608	7.31	1.62	3.27
99000004	-5.8218	6.2553	13.8803	0.0000	0.0000	0.0000	0.0459	0.0536	-0.1300	11.80	0.47	3.60
99000005	-7.5746	12.9317	15.6008	0.0000	0.0000	0.0000	0.0387	0.0320	-0.1135	13.59	1.10	3.96
99000006	-8.6417	19.8937	16.6483	0.0000	0.0000	0.0000	0.0233	0.0088	-0.0762	15.09	0.09	3.88
99000007	-9.0000	27.0000	17.0000	0.0000	0.0000	0.0000	0.0495	0.0000	-0.1522	15.61	0.00	4.05
99000008	-8.6417	34.1063	16.6483	0.0000	0.0000	0.0000	0.0233	-0.0088	-0.0762	15.10	-0.09	3.89
99000009	-7.5746	41.0683	15.6008	0.0000	0.0000	0.0000	0.0387	-0.0320	-0.1135	13.63	-1.10	3.99
99000010	-5.8218	47.7447	13.8803	0.0000	0.0000	0.0000	0.0459	-0.0536	-0.1300	11.85	-0.46	3.63
99000011	-3.4221	54.0000	11.5248	0.0000	0.0000	0.0000	0.0649	-0.0998	-0.1608	7.42	-1.62	3.34
90010001	-0.8500	-3.5745	10.1434	0.0000	0.0000	0.0000	0.0612	0.0825	-0.1070	-5.19	0.11	-3.20
90010002	-0.8500	-2.1081	11.2340	0.0000	0.0000	0.0000	0.0548	0.0722	-0.1006	-5.71	0.18	-3.42
90010003	-0.8500	-0.6029	12.2703	0.0000	0.0000	0.0000	0.0646	0.0825	-0.1245	-7.93	0.25	-4.61
90010004	-0.8500	0.9391	13.2509	0.0000	0.0000	0.0000	0.0625	0.0731	-0.1207	-7.70	0.28	-4.53
90010005	-0.8500	2.5160	14.1745	0.0000	0.0000	0.0000	0.0595	0.0634	-0.1136	-10.06	0.36	-6.13
90010006	-0.8500	4.1255	15.0399	0.0000	0.0000	0.0000	0.0661	0.0642	-0.1255	-9.62	0.35	-5.91
90010007	-0.8500	5.7656	15.8459	0.0000	0.0000	0.0000	0.0596	0.0531	-0.1134	-10.54	0.34	-6.46
90010008	-0.8500	7.4341	16.5914	0.0000	0.0000	0.0000	0.0698	0.0565	-0.1331	-11.96	0.37	-7.41
90010009	-0.8500	9.1286	17.2755	0.0000	0.0000	0.0000	0.0691	0.0498	-0.1309	-11.54	0.34	-7.26
90010010	-0.8500	10.8471	17.8972	0.0000	0.0000	0.0000	0.0701	0.0448	-0.1325	-12.11	0.33	-7.64
90010011	-0.8500	12.5870	18.4558	0.0000	0.0000	0.0000	0.0644	0.0365	-0.1219	-13.12	0.31	-8.28
90010012	-0.8500	14.3463	18.9503	0.0000	0.0000	0.0000	0.0720	0.0355	-0.1362	-13.22	0.28	-8.41
90010013	-0.8500	16.1224	19.3803	0.0000	0.0000	0.0000	0.0722	0.0301	-0.1361	-13.27	0.25	-8.51
90010014	-0.8500	17.9131	19.7451	0.0000	0.0000	0.0000	0.0728	0.0250	-0.1370	-13.53	0.22	-8.68
90010015	-0.8500	19.7158	20.0443	0.0000	0.0000	0.0000	0.0731	0.0199	-0.1377	-13.73	0.17	-8.79
90010016	-0.8500	21.5284	20.2774	0.0000	0.0000	0.0000	0.0671	0.0138	-0.1266	-14.58	0.14	-9.39
90010017	-0.8500	23.3482	20.4441	0.0000	0.0000	0.0000	0.0737	0.0100	-0.1390	-14.19	0.09	-9.19
90010018	-0.8500	25.1729	20.5442	0.0000	0.0000	0.0000	0.0738	0.0049	-0.1389	-14.12	0.05	-9.12
90010019	-0.8500	27.0000	20.5776	0.0000	0.0000	0.0000	0.0739	-0.0003	-0.1390	-14.17	0.00	-9.11
90010020	-0.8500	28.8271	20.5442	0.0000	0.0000	0.0000	0.0739	-0.0054	-0.1389	-14.12	-0.05	-9.12
90010021	-0.8500	30.6518	20.4441	0.0000	0.0000	0.0000	0.0665	-0.0093	-0.1253	-14.20	-0.09	-9.19
90010022	-0.8500	32.4716	20.2774	0.0000	0.0000	0.0000	0.0742	-0.0155	-0.1404	-14.57	-0.14	-9.39
90010023	-0.8500	34.2842	20.0443	0.0000	0.0000	0.0000	0.0730	-0.0205	-0.1378	-13.75	-0.17	-8.81
90010024	-0.8500	36.0869	19.7451	0.0000	0.0000	0.0000	0.0728	-0.0256	-0.1371	-13.56	-0.22	-8.70
90010025	-0.8500	37.8776	19.3803	0.0000	0.0000	0.0000	0.0723	-0.0307	-0.1362	-13.27	-0.25	-8.51
90010026	-0.8500	39.6537	18.9503	0.0000	0.0000	0.0000	0.0646	-0.0320	-0.1221	-13.24	-0.27	-8.41
90010027	-0.8500	41.4130	18.4558	0.0000	0.0000	0.0000	0.0718	-0.0411	-0.1362	-13.17	-0.31	-8.31
90010028	-0.8500	43.1529	17.8972	0.0000	0.0000	0.0000	0.0701	-0.0455	-0.1327	-12.12	-0.33	-7.65
90010029	-0.8500	44.8714	17.2755	0.0000	0.0000	0.0000	0.0693	-0.0505	-0.1311	-11.59	-0.34	-7.29
90010030	-0.8500	46.5659	16.5914	0.0000	0.0000	0.0000	0.0622	-0.0505	-0.1183	-12.02	-0.36	-7.44
90010031	-0.8500	48.2344	15.8459	0.0000	0.0000	0.0000	0.0676	-0.0606	-0.1287	-10.61	-0.34	-6.50
90010032	-0.8500	49.8745	15.0399	0.0000	0.0000	0.0000	0.0581	-0.0567	-0.1103	-9.67	-0.35	-5.93
90010033	-0.8500	51.4840	14.1745	0.0000	0.0000	0.0000	0.0675	-0.0726	-0.1294	-10.18	-0.37	-6.21
90010034	-0.8500	53.0609	13.2509	0.0000	0.0000	0.0000	0.0625	-0.0743	-0.1211	-7.80	-0.29	-4.60
90010035	-0.8500	54.6029	12.2703	0.0000	0.0000	0.0000	0.0564	-0.0722	-0.1083	-8.07	-0.26	-4.69
90010036	-0.8500	56.1081	11.2340	0.0000	0.0000	0.0000	0.0648	-0.0852	-0.1176	-5.69	-0.20	-3.43
90010037	-0.8500	57.5745	10.1434	0.0000	0.0000	0.0000	0.0520	-0.0696	-0.0900	-5.26	-0.10	-3.22
90020001	-1.4930	-3.7500	9.6312	0.0000	0.0000	0.0000	0.0499	0.0709	-0.0906	3.91	2.19	3.66
90020002	-2.1361	-2.5000	10.2624	0.0000	0.0000	0.0000	0.0700	0.1046	-0.1390	5.83	1.49	3.61

EDGE PANEL NEAR DIVING POOL – WIND PRESSURE

90020003	-2.7791	-1.2500	10.8936	0.0000	0.0000	0.0000	0.0569	0.0926	-0.1297	5.83	1.03	2.76
90030001	-4.0220	1.5638	12.1137	0.0000	0.0000	0.0000	0.0685	0.0837	-0.1518	10.01	0.88	3.91
90030002	-4.6220	3.1276	12.7025	0.0000	0.0000	0.0000	0.0467	0.0580	-0.1073	9.66	0.96	3.78
90030003	-5.2219	4.6914	13.2914	0.0000	0.0000	0.0000	0.0695	0.0897	-0.1720	11.06	1.34	4.12
90040001	-6.2600	7.9244	14.3104	0.0000	0.0000	0.0000	0.0701	0.0638	-0.1721	12.09	1.42	4.15
90040002	-6.6982	9.5935	14.7406	0.0000	0.0000	0.0000	0.0402	0.0356	-0.0977	13.66	0.59	4.43
90040003	-7.1364	11.2626	15.1707	0.0000	0.0000	0.0000	0.0694	0.0630	-0.1794	13.37	1.28	4.29
90050001	-7.8414	14.6722	15.8627	0.0000	0.0000	0.0000	0.0562	0.0304	-0.1424	14.67	0.18	4.25
90050002	-8.1081	16.4127	16.1246	0.0000	0.0000	0.0000	0.0807	0.0423	-0.2010	15.40	0.45	4.62
90050003	-8.3749	18.1532	16.3864	0.0000	0.0000	0.0000	0.0597	0.0317	-0.1562	14.72	2.52	4.57
90060001	-8.7313	21.6703	16.7362	0.0000	0.0000	0.0000	0.0362	0.0067	-0.0947	15.65	0.08	4.37
90060002	-8.8209	23.4469	16.8241	0.0000	0.0000	0.0000	0.0516	0.0090	-0.1304	16.36	0.06	4.71
90060003	-8.9104	25.2234	16.9121	0.0000	0.0000	0.0000	0.0569	0.0096	-0.1537	15.53	0.04	4.30
90070001	-8.9104	28.7766	16.9121	0.0000	0.0000	0.0000	0.0569	-0.0096	-0.1537	15.53	-0.04	4.30
90070002	-8.8209	30.5531	16.8241	0.0000	0.0000	0.0000	0.0516	-0.0090	-0.1304	16.37	-0.06	4.72
90070003	-8.7313	32.3297	16.7362	0.0000	0.0000	0.0000	0.0362	-0.0067	-0.0947	15.64	-0.08	4.37
90080001	-8.3749	35.8468	16.3864	0.0000	0.0000	0.0000	0.0597	-0.0317	-0.1562	14.76	-2.53	4.60
90080002	-8.1081	37.5873	16.1246	0.0000	0.0000	0.0000	0.0807	-0.0423	-0.2010	15.41	-0.45	4.62
90080003	-7.8414	39.3278	15.8627	0.0000	0.0000	0.0000	0.0562	-0.0304	-0.1424	14.68	-0.18	4.25
90090001	-7.1364	42.7374	15.1707	0.0000	0.0000	0.0000	0.0694	-0.0630	-0.1794	13.40	-1.29	4.30
90090002	-6.6982	44.4065	14.7406	0.0000	0.0000	0.0000	0.0402	-0.0356	-0.0977	13.70	-0.59	4.45
90090003	-6.2600	46.0756	14.3104	0.0000	0.0000	0.0000	0.0701	-0.0638	-0.1721	12.16	-1.41	4.19
90100001	-5.2219	49.3086	13.2914	0.0000	0.0000	0.0000	0.0695	-0.0897	-0.1720	11.13	-1.34	4.16
90100002	-4.6220	50.8724	12.7025	0.0000	0.0000	0.0000	0.0467	-0.0580	-0.1073	9.74	-0.96	3.83
90100003	-4.0220	52.4362	12.1137	0.0000	0.0000	0.0000	0.0685	-0.0837	-0.1518	10.14	-0.87	3.98
90110001	-2.7791	55.2500	10.8936	0.0000	0.0000	0.0000	0.0569	-0.0926	-0.1297	5.93	-1.01	2.83
90110002	-2.1361	56.5000	10.2624	0.0000	0.0000	0.0000	0.0700	-0.1046	-0.1390	5.77	-1.49	3.59
90110003	-1.4930	57.7500	9.6312	0.0000	0.0000	0.0000	0.0499	-0.0709	-0.0906	4.00	-2.19	3.69

```
Statik: Time of calculation:      1.04s
Statik: Version 8.01 done.
```

EDGE PANEL NEAR DIVING POOL – WIND PRESSURE

```
Warning! (051) Using default value: NROB=              0
Statik
Result from EASY Statical analysis
Date = 03/08/2012       Time = 11:30:31
Values from INI-file
Zero for the computer (small number)      0.1000000000E-07
Limit for conjugate gradient              0.1000000000E+00
Minimum stiffness of a point              0.1000000000E-06
Maximum numbers of outer iterations                     20
Maximum numbers of inner iterations                    200
Kind of calculation                                      0

Line from EIN-file:
Statik: Statical analysis...

Dimensions:
Number of points.........................(MAX)    576    20000
Number of free points.........................    498
Number of fully fixed points..................     78
Number of all links......................(MAX)    860    40000
Number of cable links.........................      0
Number of links controlled by Hookes law......    860
Number of links controlled by force density...      0
Number of t-elements.....................(MAX)    142     4000

Limit for convergence:
Maximal number of iterations..................     20
Conjugate gradient...........................0.1000E+00

Statical calculation with loads

Informations to solve equations with the method of conjugate gradient

Number of inner iterations                residual     right side
------------------------------------------------------------------
      0           0     201    0.0000E+00    0.9920E+01
      1         201     201    0.8613E-05    0.5510E+03
      2         200     201    0.1138E-03    0.1055E+04
      3         110     201    0.2034E-03    0.5602E+03
      4         100     201    0.5624E-04    0.1529E+03
      5          92     201    0.3715E-05    0.1555E+02
      6          90     400    0.3495E-07    0.9931E+00
      7          91     400    0.1570E-09    0.9383E-03
Results from calculation of equilibrium

Statik: Statical analysis...              Statik    03/08/201211:30:33
```

EDGE PANEL NEAR DIVING POOL – WIND FROM ENTRANCE

Nodes	Coordinates			Coordinate changes			Applied nodes			Residual forces		
PointNo.	X-coor	Y-coor	Z-coor	DX	DY	DZ	ResX	ResY	ResZ	U	V	W
99000001	-0.8500	-5.0000	9.0000	0.0000	0.0000	0.0000	0.0228	0.0317	-0.0395	-0.12	0.74	0.42
99000002	-0.8500	59.0000	9.0000	0.0000	0.0000	0.0000	-0.0304	0.0421	0.0526	-0.19	-0.95	0.78
99000003	-3.4221	0.0000	11.5248	0.0000	0.0000	0.0000	0.0649	0.0998	-0.1608	7.69	4.21	4.76
99000004	-5.8218	6.2553	13.8803	0.0000	0.0000	0.0000	0.0459	0.0536	-0.1300	13.27	1.76	4.25
99000005	-7.5746	12.9317	15.6008	0.0000	0.0000	0.0000	0.0387	0.0320	-0.1135	15.71	3.42	4.76
99000006	-8.6417	19.8937	16.6483	0.0000	0.0000	0.0000	0.0233	0.0088	-0.0762	17.49	0.50	4.27
99000007	-9.0000	27.0000	17.0000	0.0000	0.0000	0.0000	-0.0716	0.0066	0.2253	5.62	0.11	3.33
99000008	-8.6417	34.1063	16.6483	0.0000	0.0000	0.0000	-0.0505	0.0191	0.1650	16.30	0.80	10.64
99000009	-7.5746	41.0683	15.6008	0.0000	0.0000	0.0000	-0.0839	0.0694	0.2459	14.09	-1.44	9.72
99000010	-5.8218	47.7447	13.8803	0.0000	0.0000	0.0000	-0.0994	0.1161	0.2817	11.44	-0.59	7.57
99000011	-3.4221	54.0000	11.5248	0.0000	0.0000	0.0000	-0.1405	0.2162	0.3484	6.70	-5.40	7.81
90010001	-0.8500	-3.5745	10.1434	0.0000	0.0000	0.0000	0.0612	0.0825	-0.1070	-5.23	0.12	-3.22
90010002	-0.8500	-2.1081	11.2340	0.0000	0.0000	0.0000	0.0548	0.0722	-0.1006	-5.80	0.20	-3.46
90010003	-0.8500	-0.6029	12.2703	0.0000	0.0000	0.0000	0.0646	0.0825	-0.1245	-8.31	0.31	-4.82
90010004	-0.8500	0.9391	13.2509	0.0000	0.0000	0.0000	0.0625	0.0731	-0.1207	-7.98	0.35	-4.69
90010005	-0.8500	2.5160	14.1745	0.0000	0.0000	0.0000	0.0595	0.0634	-0.1136	-10.35	0.48	-6.29
90010006	-0.8500	4.1255	15.0399	0.0000	0.0000	0.0000	0.0661	0.0642	-0.1255	-10.17	0.50	-6.22
90010007	-0.8500	5.7656	15.8459	0.0000	0.0000	0.0000	0.0596	0.0531	-0.1134	-11.83	0.56	-7.20
90010008	-0.8500	7.4341	16.5914	0.0000	0.0000	0.0000	0.0698	0.0565	-0.1331	-13.20	0.65	-8.13
90010009	-0.8500	9.1286	17.2755	0.0000	0.0000	0.0000	0.0691	0.0498	-0.1309	-12.37	0.64	-7.74
90010010	-0.8500	10.8471	17.8972	0.0000	0.0000	0.0000	0.0701	0.0448	-0.1325	-13.30	0.69	-8.35
90010011	-0.8500	12.5870	18.4558	0.0000	0.0000	0.0000	0.0644	0.0365	-0.1219	-15.31	0.78	-9.59
90010012	-0.8500	14.3463	18.9503	0.0000	0.0000	0.0000	0.0720	0.0355	-0.1362	-15.05	0.79	-9.53
90010013	-0.8500	16.1224	19.3803	0.0000	0.0000	0.0000	0.0722	0.0301	-0.1361	-14.76	0.80	-9.43
90010014	-0.8500	17.9131	19.7451	0.0000	0.0000	0.0000	0.0728	0.0250	-0.1370	-15.42	0.84	-9.86
90010015	-0.8500	19.7158	20.0443	0.0000	0.0000	0.0000	0.0731	0.0199	-0.1377	-16.23	0.89	-10.36
90010016	-0.8500	21.5284	20.2774	0.0000	0.0000	0.0000	0.0671	0.0138	-0.1266	-16.10	0.90	-10.31
90010017	-0.8500	23.3482	20.4441	0.0000	0.0000	0.0000	0.0737	0.0100	-0.1390	-12.76	0.72	-8.10
90010018	-0.8500	25.1729	20.5442	0.0000	0.0000	0.0000	0.0681	0.0047	-0.1281	-7.27	0.40	-4.32
90010019	-0.8500	27.0000	20.5776	0.0000	0.0000	0.0000	-0.1124	0.0022	0.2107	-7.43	0.31	-2.22
90010020	-0.8500	28.8271	20.5442	0.0000	0.0000	0.0000	-0.1601	0.0117	0.3010	-17.80	0.75	-4.50
90010021	-0.8500	30.6518	20.4441	0.0000	0.0000	0.0000	-0.1441	0.0200	0.2716	-23.29	1.04	-5.91
90010022	-0.8500	32.4716	20.2774	0.0000	0.0000	0.0000	-0.1608	0.0335	0.3042	-23.80	1.14	-5.95
90010023	-0.8500	34.2842	20.0443	0.0000	0.0000	0.0000	-0.1582	0.0443	0.2985	-20.70	1.08	-5.07
90010024	-0.8500	36.0869	19.7451	0.0000	0.0000	0.0000	-0.1577	0.0554	0.2970	-22.48	1.21	-5.78
90010025	-0.8500	37.8776	19.3803	0.0000	0.0000	0.0000	-0.1566	0.0665	0.2950	-22.54	1.28	-5.97
90010026	-0.8500	39.6537	18.9503	0.0000	0.0000	0.0000	-0.1400	0.0694	0.2646	-20.93	1.29	-5.55
90010027	-0.8500	41.4130	18.4558	0.0000	0.0000	0.0000	-0.1557	0.0890	0.2952	-18.67	1.24	-4.94
90010028	-0.8500	43.1529	17.8972	0.0000	0.0000	0.0000	-0.1520	0.0987	0.2874	-19.31	1.28	-5.42
90010029	-0.8500	44.8714	17.2755	0.0000	0.0000	0.0000	-0.1500	0.1095	0.2840	-18.80	1.29	-5.47
90010030	-0.8500	46.5659	16.5914	0.0000	0.0000	0.0000	-0.1347	0.1094	0.2564	-17.30	1.27	-5.08
90010031	-0.8500	48.2344	15.8459	0.0000	0.0000	0.0000	-0.1465	0.1313	0.2788	-13.70	1.08	-4.04
90010032	-0.8500	49.8745	15.0399	0.0000	0.0000	0.0000	-0.1260	0.1229	0.2390	-14.29	1.05	-4.59
90010033	-0.8500	51.4840	14.1745	0.0000	0.0000	0.0000	-0.1462	0.1573	0.2804	-15.16	1.08	-5.22
90010034	-0.8500	53.0609	13.2509	0.0000	0.0000	0.0000	-0.1354	0.1611	0.2624	-10.43	0.80	-3.52
90010035	-0.8500	54.6029	12.2703	0.0000	0.0000	0.0000	-0.1223	0.1563	0.2346	-8.86	0.68	-3.18
90010036	-0.8500	56.1081	11.2340	0.0000	0.0000	0.0000	-0.1404	0.1845	0.2548	-6.91	0.47	-2.81

EDGE PANEL NEAR DIVING POOL – WIND FROM ENTRANCE

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90010037	-0.8500	57.5745	10.1434	0.0000	0.0000	0.0000	-0.1107	0.1479	0.1914	-5.54	0.23	-2.77
90020001	-1.4930	-3.7500	9.6312	0.0000	0.0000	0.0000	0.0499	0.0709	-0.0906	3.94	2.56	3.95
90020002	-2.1361	-2.5000	10.2624	0.0000	0.0000	0.0000	0.0700	0.1046	-0.1390	5.90	2.56	4.38
90020003	-2.7791	-1.2500	10.8936	0.0000	0.0000	0.0000	0.0569	0.0926	-0.1297	6.03	1.92	3.37
90030001	-4.0220	1.5638	12.1137	0.0000	0.0000	0.0000	0.0685	0.0837	-0.1518	10.28	2.70	4.90
90030002	-4.6220	3.1276	12.7025	0.0000	0.0000	0.0000	0.0467	0.0580	-0.1073	9.97	3.17	4.96
90030003	-5.2219	4.6914	13.2914	0.0000	0.0000	0.0000	0.0695	0.0897	-0.1720	11.82	5.01	5.92
90040001	-6.2600	7.9244	14.3104	0.0000	0.0000	0.0000	0.0701	0.0638	-0.1721	13.06	5.27	5.63
90040002	-6.6982	9.5935	14.7406	0.0000	0.0000	0.0000	0.0402	0.0356	-0.0977	14.53	1.88	5.04
90040003	-7.1364	11.2626	15.1707	0.0000	0.0000	0.0000	0.0694	0.0630	-0.1794	14.77	3.59	5.17
90050001	-7.8414	14.6722	15.8627	0.0000	0.0000	0.0000	0.0562	0.0304	-0.1424	16.36	0.65	4.65
90050002	-8.1081	16.4127	16.1246	0.0000	0.0000	0.0000	0.0807	0.0423	-0.2010	16.88	1.09	5.09
90050003	-8.3749	18.1532	16.3864	0.0000	0.0000	0.0000	0.0597	0.0317	-0.1562	16.62	4.79	5.34
90060001	-8.7313	21.6703	16.7362	0.0000	0.0000	0.0000	0.0362	0.0067	-0.0947	16.75	0.50	4.66
90060002	-8.8209	23.4469	16.8241	0.0000	0.0000	0.0000	0.0516	0.0090	-0.1304	13.99	0.42	4.25
90060003	-8.9104	25.2234	16.9121	0.0000	0.0000	0.0000	0.0522	0.0086	-0.1398	6.96	0.20	2.29
90070001	-8.9104	28.7766	16.9121	0.0000	0.0000	0.0000	-0.1232	0.0207	0.3331	13.91	0.32	9.48
90070002	-8.8209	30.5531	16.8241	0.0000	0.0000	0.0000	-0.1118	0.0195	0.2825	19.48	0.56	13.66
90070003	-8.7313	32.3297	16.7362	0.0000	0.0000	0.0000	-0.0784	0.0146	0.2053	18.67	0.69	12.90
90080001	-8.3749	35.8468	16.3864	0.0000	0.0000	0.0000	-0.1294	0.0688	0.3383	17.56	-2.66	12.89
90080002	-8.1081	37.5873	16.1246	0.0000	0.0000	0.0000	-0.1748	0.0916	0.4356	19.33	0.61	13.50
90080003	-7.8414	39.3278	15.8627	0.0000	0.0000	0.0000	-0.1217	0.0658	0.3085	17.44	0.98	11.80
90090001	-7.1364	42.7374	15.1707	0.0000	0.0000	0.0000	-0.1505	0.1365	0.3887	15.49	-1.48	11.25
90090002	-6.6982	44.4065	14.7406	0.0000	0.0000	0.0000	-0.0871	0.0772	0.2117	16.93	-0.23	11.90
90090003	-6.2600	46.0756	14.3104	0.0000	0.0000	0.0000	-0.1519	0.1382	0.3729	14.02	-3.94	11.31
90100001	-5.2219	49.3086	13.2914	0.0000	0.0000	0.0000	-0.1507	0.1942	0.3727	12.34	-4.58	11.06
90100002	-4.6220	50.8724	12.7025	0.0000	0.0000	0.0000	-0.1011	0.1258	0.2324	11.64	-3.27	10.04
90100003	-4.0220	52.4362	12.1137	0.0000	0.0000	0.0000	-0.1485	0.1814	0.3289	11.84	-2.60	9.55
90110001	-2.7791	55.2500	10.8936	0.0000	0.0000	0.0000	-0.1232	0.2006	0.2810	5.74	-2.38	5.58
90110002	-2.1361	56.5000	10.2624	0.0000	0.0000	0.0000	-0.1517	0.2266	0.3012	5.77	-3.81	7.00
90110003	-1.4930	57.7500	9.6312	0.0000	0.0000	0.0000	-0.1057	0.1504	0.1922	3.65	-3.26	5.27

Statik: Time of calculation: 1.37s
Statik: Version 8.01 done.

EDGE PANEL NEAR DIVING POOL – WIND FROM ENTRANCE

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Warning! (051) Using default value: NROB= 0
Statik
Result from EASY Statical analysis
Date = 03/08/2012 Time = 11:31:46
Values from INI-file
Zero for the computer (small number) 0.1000000000E-07
Limit for conjugate gradient 0.1000000000E+00
Minimum stiffness of a point 0.1000000000E-06
Maximum numbers of outer iterations 20
Maximum numbers of inner iterations 200
Kind of calculation 0

Line from EIN-file:
Statik: Statical analysis...

Dimensions:
Number of points..........(MAX) 576 20000
Number of free points.......... 498
Number of fully fixed points.......... 78
Number of all links..........(MAX) 860 40000
Number of cable links.......... 0
Number of links controlled by Hookes law.......... 860
Number of links controlled by force density.......... 0
Number of t-elements..........(MAX) 142 4000

Limit for convergence:
Maximal number of iterations.......... 20
Conjugate gradient..........0.1000E+00

Statical calculation with loads

Informations to solve equations with the method of conjugate gradient

Number of inner iterations			residual	right side
0	0	201	0.0000E+00	0.9740E+01
1	201	201	0.6665E-05	0.5370E+03
2	196	201	0.1108E-03	0.1105E+04
3	110	201	0.2302E-03	0.5815E+03
4	101	201	0.6837E-04	0.1683E+03
5	91	201	0.4075E-05	0.3058E+02
6	80	201	0.1766E-06	0.2416E+01
7	86	400	0.1124E-08	0.5858E-02

Results from calculation of equilibrium

Statik: Statical analysis... Statik 03/08/201211:31:47

EDGE PANEL NEAR DIVING POOL – WIND FROM AUDIENCE STAND

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Nodes	Coordinates			Coordinate changes			Applied nodes			Residual forces		
PointNo.	X-coor	Y-coor	Z-coor	DX	DY	DZ	ResX	ResY	ResZ	U	V	W
99000001	-0.8500	-5.0000	9.0000	0.0000	0.0000	0.0000	-0.0495	-0.0686	0.0857	-0.22	0.90	0.82
99000002	-0.8500	59.0000	9.0000	0.0000	0.0000	0.0000	0.0037	-0.0051	-0.0065	-0.14	-0.70	0.46
99000003	-3.4221	0.0000	11.5248	0.0000	0.0000	0.0000	-0.1405	-0.2162	0.3484	6.51	5.26	7.69
99000004	-5.8218	6.2553	13.8803	0.0000	0.0000	0.0000	-0.0994	-0.1161	0.2817	11.43	0.52	7.57
99000005	-7.5746	12.9317	15.6008	0.0000	0.0000	0.0000	-0.0839	-0.0694	0.2459	14.15	1.25	9.78
99000006	-8.6417	19.8937	16.6483	0.0000	0.0000	0.0000	-0.0505	-0.0191	0.1650	16.38	-0.87	10.73
99000007	-9.0000	27.0000	17.0000	0.0000	0.0000	0.0000	0.0139	-0.0066	-0.0477	5.45	-0.12	1.98
99000008	-8.6417	34.1063	16.6483	0.0000	0.0000	0.0000	0.0233	-0.0088	-0.0762	17.53	-0.44	4.30
99000009	-7.5746	41.0683	15.6008	0.0000	0.0000	0.0000	0.0387	-0.0320	-0.1135	15.61	-3.21	4.72
99000010	-5.8218	47.7447	13.8803	0.0000	0.0000	0.0000	0.0459	-0.0536	-0.1300	13.24	-1.67	4.23
99000011	-3.4221	54.0000	11.5248	0.0000	0.0000	0.0000	0.0649	-0.0998	-0.1608	7.77	-4.04	4.73
90010001	-0.8500	-3.5745	10.1434	0.0000	0.0000	0.0000	-0.1327	-0.1788	0.2319	-5.47	-0.26	-2.67
90010002	-0.8500	-2.1081	11.2340	0.0000	0.0000	0.0000	-0.1188	-0.1565	0.2179	-6.84	-0.43	-2.85
90010003	-0.8500	-0.6029	12.2703	0.0000	0.0000	0.0000	-0.1399	-0.1788	0.2698	-8.56	-0.66	-3.05
90010004	-0.8500	0.9391	13.2509	0.0000	0.0000	0.0000	-0.1354	-0.1584	0.2616	-10.25	-0.78	-3.46
90010005	-0.8500	2.5160	14.1745	0.0000	0.0000	0.0000	-0.1289	-0.1374	0.2460	-14.94	-1.07	-5.16
90010006	-0.8500	4.1255	15.0399	0.0000	0.0000	0.0000	-0.1433	-0.1391	0.2720	-14.21	-1.06	-4.54
90010007	-0.8500	5.7656	15.8459	0.0000	0.0000	0.0000	-0.1292	-0.1151	0.2458	-13.66	-1.09	-4.05
90010008	-0.8500	7.4341	16.5914	0.0000	0.0000	0.0000	-0.1512	-0.1224	0.2884	-17.26	-1.29	-5.05
90010009	-0.8500	9.1286	17.2755	0.0000	0.0000	0.0000	-0.1497	-0.1078	0.2836	-18.76	-1.30	-5.46
90010010	-0.8500	10.8471	17.8972	0.0000	0.0000	0.0000	-0.1520	-0.0971	0.2870	-19.34	-1.31	-5.43
90010011	-0.8500	12.5870	18.4558	0.0000	0.0000	0.0000	-0.1396	-0.0792	0.2640	-18.73	-1.26	-4.97
90010012	-0.8500	14.3463	18.9503	0.0000	0.0000	0.0000	-0.1559	-0.0769	0.2951	-21.01	-1.33	-5.56
90010013	-0.8500	16.1224	19.3803	0.0000	0.0000	0.0000	-0.1564	-0.0651	0.2948	-22.61	-1.32	-6.00
90010014	-0.8500	17.9131	19.7451	0.0000	0.0000	0.0000	-0.1577	-0.0542	0.2968	-22.53	-1.26	-5.80
90010015	-0.8500	19.7158	20.0443	0.0000	0.0000	0.0000	-0.1584	-0.0431	0.2984	-20.77	-1.12	-5.09
90010016	-0.8500	21.5284	20.2774	0.0000	0.0000	0.0000	-0.1454	-0.0299	0.2744	-23.60	-1.18	-5.93
90010017	-0.8500	23.3482	20.4441	0.0000	0.0000	0.0000	-0.1596	-0.0218	0.3012	-21.75	-1.03	-5.56
90010018	-0.8500	25.1729	20.5442	0.0000	0.0000	0.0000	-0.1542	-0.0104	0.2901	-13.18	-0.59	-3.48
90010019	-0.8500	27.0000	20.5776	0.0000	0.0000	0.0000	0.0261	-0.0019	-0.0485	-6.20	-0.31	-2.97
90010020	-0.8500	28.8271	20.5442	0.0000	0.0000	0.0000	0.0739	-0.0054	-0.1389	-10.96	-0.60	-6.81
90010021	-0.8500	30.6518	20.4441	0.0000	0.0000	0.0000	0.0665	-0.0093	-0.1253	-14.57	-0.79	-9.34
90010022	-0.8500	32.4716	20.2774	0.0000	0.0000	0.0000	0.0742	-0.0155	-0.1404	-16.52	-0.89	-10.62
90010023	-0.8500	34.2842	20.0443	0.0000	0.0000	0.0000	0.0730	-0.0205	-0.1378	-16.21	-0.85	-10.35
90010024	-0.8500	36.0869	19.7451	0.0000	0.0000	0.0000	0.0728	-0.0256	-0.1371	-15.34	-0.80	-9.81
90010025	-0.8500	37.8776	19.3803	0.0000	0.0000	0.0000	0.0723	-0.0307	-0.1362	-14.66	-0.76	-9.37
90010026	-0.8500	39.6537	18.9503	0.0000	0.0000	0.0000	0.0646	-0.0320	-0.1221	-14.94	-0.75	-9.46
90010027	-0.8500	41.4130	18.4558	0.0000	0.0000	0.0000	0.0718	-0.0411	-0.1362	-15.21	-0.76	-9.54
90010028	-0.8500	43.1529	17.8972	0.0000	0.0000	0.0000	0.0701	-0.0455	-0.1327	-13.23	-0.67	-8.31
90010029	-0.8500	44.8714	17.2755	0.0000	0.0000	0.0000	0.0693	-0.0505	-0.1311	-12.35	-0.62	-7.73
90010030	-0.8500	46.5659	16.5914	0.0000	0.0000	0.0000	0.0622	-0.0505	-0.1183	-13.18	-0.63	-8.11
90010031	-0.8500	48.2344	15.8459	0.0000	0.0000	0.0000	0.0676	-0.0606	-0.1287	-11.81	-0.55	-7.19
90010032	-0.8500	49.8745	15.0399	0.0000	0.0000	0.0000	0.0581	-0.0567	-0.1103	-10.20	-0.49	-6.23
90010033	-0.8500	51.4840	14.1745	0.0000	0.0000	0.0000	0.0675	-0.0726	-0.1294	-10.43	-0.48	-6.35
90010034	-0.8500	53.0609	13.2509	0.0000	0.0000	0.0000	0.0625	-0.0743	-0.1211	-8.07	-0.35	-4.74
90010035	-0.8500	54.6029	12.2703	0.0000	0.0000	0.0000	0.0564	-0.0722	-0.1083	-8.43	-0.31	-4.88
90010036	-0.8500	56.1081	11.2340	0.0000	0.0000	0.0000	0.0648	-0.0852	-0.1176	-5.78	-0.22	-3.48

EDGE PANEL NEAR DIVING POOL – WIND FROM AUDIENCE STAND

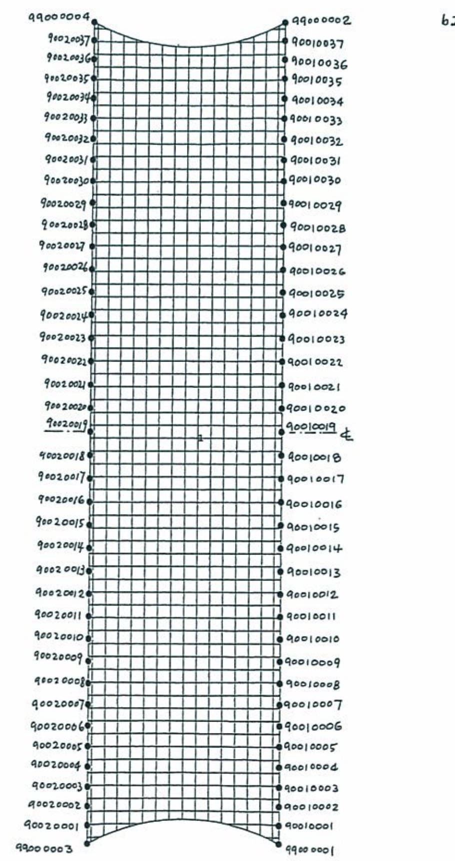
619

90010037	-0.8500	57.5745	10.1434	0.0000	0.0000	0.0000	0.0500	-0.0667	-0.0864	-5.30	-0.10	-3.23
90020001	-1.4930	-3.7500	9.6312	0.0000	0.0000	0.0000	-0.1081	-0.1536	0.1963	3.54	3.23	5.15
90020002	-2.1361	-2.5000	10.2624	0.0000	0.0000	0.0000	-0.1517	-0.2266	0.3012	5.84	3.73	7.03
90020003	-2.7791	-1.2500	10.8936	0.0000	0.0000	0.0000	-0.1232	-0.2006	0.2810	5.46	2.32	5.45
90030001	-4.0220	1.5638	12.1137	0.0000	0.0000	0.0000	-0.1485	-0.1814	0.3289	11.62	2.49	9.42
90030002	-4.6220	3.1276	12.7025	0.0000	0.0000	0.0000	-0.1011	-0.1258	0.2324	11.51	3.14	9.94
90030003	-5.2219	4.6914	13.2914	0.0000	0.0000	0.0000	-0.1507	-0.1942	0.3727	12.26	4.39	10.95
90040001	-6.2600	7.9244	14.3104	0.0000	0.0000	0.0000	-0.1519	-0.1382	0.3729	13.96	3.69	11.23
90040002	-6.6982	9.5935	14.7406	0.0000	0.0000	0.0000	-0.0871	-0.0772	0.2117	16.91	0.14	11.07
90040003	-7.1364	11.2626	15.1707	0.0000	0.0000	0.0000	-0.1505	-0.1365	0.3085	15.54	1.31	11.24
90050001	-7.8414	14.6722	15.8627	0.0000	0.0000	0.0000	-0.1217	-0.0658	0.3887	17.52	-1.03	11.84
90050002	-8.1081	16.4127	16.1246	0.0000	0.0000	0.0000	-0.1748	-0.0916	0.4356	19.40	-0.68	13.53
90050003	-8.3749	18.1532	16.3864	0.0000	0.0000	0.0000	-0.1294	-0.0688	0.3383	17.59	2.33	12.90
90060001	-8.7313	21.6703	16.7362	0.0000	0.0000	0.0000	-0.0784	-0.0146	0.2053	18.52	-0.77	12.78
90060002	-8.8209	23.4469	16.8241	0.0000	0.0000	0.0000	-0.1118	-0.0195	0.2825	18.17	-0.62	12.65
90060003	-8.9104	25.2234	16.9121	0.0000	0.0000	0.0000	-0.1185	-0.0198	0.3192	10.07	-0.29	6.67
90070001	-8.9104	28.7766	16.9121	0.0000	0.0000	0.0000	0.0569	-0.0096	-0.1537	11.25	-0.28	3.30
90070002	-8.8209	30.5531	16.8241	0.0000	0.0000	0.0000	0.0516	-0.0090	-0.1304	16.26	-0.42	4.78
90070003	-8.7313	32.3297	16.7362	0.0000	0.0000	0.0000	0.0362	-0.0067	-0.0947	17.31	-0.45	4.79
90080001	-8.3749	35.8468	16.3864	0.0000	0.0000	0.0000	0.0597	-0.0317	-0.1562	16.55	-4.45	5.30
90080002	-8.1081	37.5873	16.1246	0.0000	0.0000	0.0000	0.0807	-0.0423	-0.2010	16.78	-1.02	5.05
90080003	-7.8414	39.3278	15.8627	0.0000	0.0000	0.0000	0.0562	-0.0304	-0.1424	16.26	-0.61	4.63
90090001	-7.1364	42.7374	15.1707	0.0000	0.0000	0.0000	0.0694	-0.0630	-0.1794	14.70	-3.39	5.11
90090002	-6.6982	44.4065	14.7406	0.0000	0.0000	0.0000	0.0402	-0.0356	-0.0977	14.50	-1.78	5.01
90090003	-6.2600	46.0756	14.3104	0.0000	0.0000	0.0000	0.0701	-0.0638	-0.1721	13.05	-4.98	5.56
90100001	-5.2219	49.3086	13.2914	0.0000	0.0000	0.0000	0.0695	-0.0897	-0.1720	11.84	-4.76	5.84
90100002	-4.6220	50.8724	12.7025	0.0000	0.0000	0.0000	0.0467	-0.0580	-0.1073	10.02	-3.02	4.93
90100003	-4.0220	52.4362	12.1137	0.0000	0.0000	0.0000	0.0685	-0.0837	-0.1518	10.38	-2.57	4.90
90110001	-2.7791	55.2500	10.8936	0.0000	0.0000	0.0000	0.0569	-0.0926	-0.1297	6.11	-1.85	3.40
90110002	-2.1361	56.5000	10.2624	0.0000	0.0000	0.0000	0.0700	-0.1046	-0.1390	5.83	-2.49	4.32
90110003	-1.4930	57.7500	9.6312	0.0000	0.0000	0.0000	0.0475	-0.0676	-0.0865	4.01	-2.53	3.97

Statik: Time of calculation: 1.32s
Statik: Version 8.01 done.

EDGE PANEL NEAR DIVING POOL – WIND FROM AUDIENCE STAND

620



INTERNAL PANEL - FABRIC NODE NUMBER LAYOUT

621

Warning! (051) Using default value: NROB= 0
Statik
Result from EASY Statical analysis
Date = 12/22/2011 Time = 12:18:35
Values from INI-file
Zero for the computer (small number) 0.1000000000E-07
Limit for conjugate gradient 0.1000000000E+01
Minimum stiffness of a point 0.1000000000E-06
Maximum numbers of outer iterations 50
Maximum numbers of inner iterations 200
Kind of calculation 0

Line from EIN-file:
Statik: Statical analysis...

Dimensions:
Number of points..........(MAX) 1192 20000
Number of free points.......... 1114
Number of fully fixed points.......... 78
Number of all links..........(MAX) 2029 40000
Number of cable links.......... 0
Number of links controlled by Hookes law.......... 2029
Number of links controlled by force density.......... 0
Number of t-elements..........(MAX) 166 4000

Limit for convergence:
Maximal number of iterations.......... 50
Conjugate gradient..........0.1000E+01

Statical calculation without loads

Informations to solve equations with the method of conjugate gradient

Number of inner iterations			residual	right side
0	0	400	0.0000E+00	0.6100E-01

Results from calculation of equilibrium

Statik: Statical analysis... Statik 12/22/201112:18:35

Nodes	Coordinates			Coordinate changes			Applied nodes			Residual forces		
PointNo.	X-coor	Y-coor	Z-coor	DX	DY	DZ	ResX	ResY	ResZ	U	V	W
99000001	81.5500	-5.0000	9.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-40.85	21.90	15.03
99000002	81.5500	59.0000	9.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-40.85	-21.90	15.03
99000003	66.7500	-5.0000	9.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	40.85	22.51	15.52
99000004	66.7500	59.0000	9.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	40.85	-22.51	15.52

INTERNAL PANEL - PRESTRESS

622

90010001	81.5500	-3.5745	10.1434	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-4.65	0.08	-0.44
90010002	81.5500	-2.1081	11.2340	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-4.12	0.06	-0.52
90010003	81.5500	-0.6029	12.2703	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-4.85	0.05	-0.76
90010004	81.5500	0.9391	13.2509	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-4.30	0.03	-0.72
90010005	81.5500	2.5160	14.1745	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5.20	0.02	-0.94
90010006	81.5500	4.1255	15.0399	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-4.63	0.03	-0.82
90010007	81.5500	5.7656	15.8459	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-4.88	0.01	-0.88
90010008	81.5500	7.4341	16.5914	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5.31	0.01	-0.96
90010009	81.5500	9.1286	17.2755	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-4.96	0.00	-0.87
90010010	81.5500	10.8471	17.8972	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5.07	0.01	-0.87
90010011	81.5500	12.5870	18.4558	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5.42	0.01	-0.92
90010012	81.5500	14.3463	18.9503	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5.35	0.00	-0.88
90010013	81.5500	16.1224	19.3803	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5.27	0.00	-0.85
90010014	81.5500	17.9131	19.7451	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5.33	0.00	-0.84
90010015	81.5500	19.7158	20.0443	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5.37	0.00	-0.84
90010016	81.5500	21.5284	20.2774	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5.65	0.01	-0.88
90010017	81.5500	23.3482	20.4441	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5.46	-0.01	-0.83
90010018	81.5500	25.1729	20.5442	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5.43	0.01	-0.82
90010019	81.5500	27.0000	20.5776	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5.43	0.00	-0.82
90010020	81.5500	28.8271	20.5442	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5.43	-0.01	-0.82
90010021	81.5500	30.6518	20.4441	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5.46	0.01	-0.83
90010022	81.5500	32.4716	20.2774	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5.65	-0.01	-0.88
90010023	81.5500	34.2842	20.0443	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5.37	0.00	-0.84
90010024	81.5500	36.0869	19.7451	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5.33	0.00	-0.84
90010025	81.5500	37.8776	19.3803	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5.27	0.00	-0.85
90010026	81.5500	39.6537	18.9503	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5.35	0.00	-0.88
90010027	81.5500	41.4130	18.4558	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5.42	-0.01	-0.92
90010028	81.5500	43.1529	17.8972	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5.07	-0.01	-0.87
90010029	81.5500	44.8714	17.2755	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-4.96	0.00	-0.87
90010030	81.5500	46.5659	16.5914	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5.31	-0.01	-0.96
90010031	81.5500	48.2344	15.8459	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-4.88	-0.01	-0.88
90010032	81.5500	49.8745	15.0399	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-4.63	-0.03	-0.82
90010033	81.5500	51.4840	14.1745	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5.20	-0.02	-0.94
90010034	81.5500	53.0609	13.2509	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-4.30	-0.03	-0.72
90010035	81.5500	54.6029	12.2703	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-4.85	-0.05	-0.76
90010036	81.5500	56.1081	11.2340	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-4.12	-0.06	-0.52
90010037	81.5500	57.5745	10.1434	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-4.65	-0.08	-0.44
90020001	66.7500	-3.5745	10.1434	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.66	0.08	-0.48
90020002	66.7500	-2.1081	11.2340	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.11	0.06	-0.55
90020003	66.7500	-0.6029	12.2703	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.85	0.05	-0.80
90020004	66.7500	0.9391	13.2509	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.30	0.03	-0.74
90020005	66.7500	2.5160	14.1745	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.20	0.02	-0.97
90020006	66.7500	4.1255	15.0399	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.63	0.03	-0.85
90020007	66.7500	5.7656	15.8459	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.88	0.01	-0.90
90020008	66.7500	7.4341	16.5914	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.32	0.01	-0.99
90020009	66.7500	9.1286	17.2755	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.96	0.00	-0.89
90020010	66.7500	10.8471	17.8972	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.07	0.01	-0.89
90020011	66.7500	12.5870	18.4558	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.42	0.01	-0.94
90020012	66.7500	14.3463	18.9503	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.35	0.00	-0.91
90020013	66.7500	16.1224	19.3803	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.27	0.00	-0.87
90020014	66.7500	17.9131	19.7451	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.32	0.00	-0.86
90020015	66.7500	19.7158	20.0443	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.37	0.00	-0.86

INTERNAL PANEL - PRESTRESS

623

90020016	66.7500	21.5284	20.2774	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.65	0.01	-0.90
90020017	66.7500	23.3482	20.4441	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.46	-0.01	-0.85
90020018	66.7500	25.1729	20.5442	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.43	0.01	-0.84
90020019	66.7500	27.0000	20.5776	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.43	0.00	-0.84
90020020	66.7500	28.8271	20.5442	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.43	-0.01	-0.84
90020021	66.7500	30.6518	20.4441	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.46	0.01	-0.85
90020022	66.7500	32.4716	20.2774	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.65	-0.01	-0.90
90020023	66.7500	34.2842	20.0443	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.37	0.00	-0.86
90020024	66.7500	36.0869	19.7451	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.32	0.00	-0.86
90020025	66.7500	37.8776	19.3803	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.27	0.00	-0.87
90020026	66.7500	39.6537	18.9503	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.35	0.00	-0.91
90020027	66.7500	41.4130	18.4558	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.42	-0.01	-0.94
90020028	66.7500	43.1529	17.8972	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.07	-0.01	-0.89
90020029	66.7500	44.8714	17.2755	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.96	0.00	-0.89
90020030	66.7500	46.5659	16.5914	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.32	-0.01	-0.99
90020031	66.7500	48.2344	15.8459	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.88	-0.01	-0.90
90020032	66.7500	49.8745	15.0399	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.63	-0.03	-0.85
90020033	66.7500	51.4840	14.1745	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.20	-0.02	-0.97
90020034	66.7500	53.0609	13.2509	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.30	-0.03	-0.74
90020035	66.7500	54.6029	12.2703	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.85	-0.05	-0.80
90020036	66.7500	56.1081	11.2340	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.11	-0.06	-0.55
90020037	66.7500	57.5745	10.1434	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.66	-0.08	-0.48

Statik: Time of calculation: 0.29s
Statik: Version 8.01 done.

INTERNAL PANEL - PRESTRESS

624

```
Warning! (051) Using default value: NROB=              0
Statik
Result from EASY Statical analysis
Date = 12/22/2011       Time = 12:19:02
Values from INI-file
Zero for the computer (small number)      0.1000000000E-07
Limit for conjugate gradient              0.1000000000E+01
Minimum stiffness of a point              0.1000000000E-06
Maximum numbers of outer iterations                     50
Maximum numbers of inner iterations                    200
Kind of calculation                                      0

Line from EIN-file:
Statik: Statical analysis...

Dimensions:
Number of points.........................(MAX)     1192     20000
Number of free points........................     1114
Number of fully fixed points.................       78
Number of all links......................(MAX)     2029     40000
Number of cable links........................        0
Number of links controlled by Hookes law......     2029
Number of links controlled by force density...        0
Number of t-elements.....................(MAX)      166      4000

Limit for convergence:
Maximal number of iterations..................       50
Conjugate gradient...........................0.1000E+01

Statical calculation with loads

Informations to solve equations with the method of conjugate gradient
```

Number of inner iterations			residual	right side
0	0	201	0.0000E+00	0.7271E+01
1	201	201	0.5694E-05	0.3238E+02
2	201	201	0.6081E-05	0.9708E+01
3	184	201	0.4503E-07	0.3760E+01
4	166	201	0.4772E-08	0.1292E+01
5	201	400	0.1552E-08	0.5476E+00

Results from calculation of equilibrium

Statik: Statical analysis...   Statik   12/22/201112:19:05

Nodes	Coordinates			Coordinate changes			Applied nodes			Residual forces		
PointNo.	X-coor	Y-coor	Z-coor	DX	DY	DZ	ResX	ResY	ResZ	U	V	W

INTERNAL PANEL – LIVE LOAD

625

PointNo.	X-coor	Y-coor	Z-coor	DX	DY	DZ	ResX	ResY	ResZ	U	V	W
99000001	81.5500	-5.0000	9.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0414	-13.78	8.80	5.33
99000002	81.5500	59.0000	9.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0414	-13.74	-8.77	5.32
99000003	66.7500	-5.0000	9.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0333	13.68	9.49	5.90
99000004	66.7500	59.0000	9.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0333	13.69	-9.50	5.90
90010001	81.5500	-3.5745	10.1434	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1014	-8.43	0.39	-1.28
90010002	81.5500	-2.1081	11.2340	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0833	-12.23	0.51	-2.07
90010003	81.5500	-0.6029	12.2703	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1034	-15.49	0.49	-3.00
90010004	81.5500	0.9391	13.2509	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1004	-13.69	0.36	-2.81
90010005	81.5500	2.5160	14.1745	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0945	-16.27	0.34	-3.52
90010006	81.5500	4.1255	15.0399	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1045	-14.33	0.26	-3.15
90010007	81.5500	5.7656	15.8459	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0945	-15.04	0.24	-3.35
90010008	81.5500	7.4341	16.5914	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1109	-16.43	0.22	-3.69
90010009	81.5500	9.1286	17.2755	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1091	-15.42	0.18	-3.44
90010010	81.5500	10.8471	17.8972	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1104	-15.86	0.17	-3.52
90010011	81.5500	12.5870	18.4558	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1015	-17.11	0.16	-3.78
90010012	81.5500	14.3463	18.9503	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1135	-17.03	0.13	-3.74
90010013	81.5500	16.1224	19.3803	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1134	-16.90	0.12	-3.68
90010014	81.5500	17.9131	19.7451	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1141	-17.18	0.10	-3.72
90010015	81.5500	19.7158	20.0443	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1148	-17.42	0.09	-3.75
90010016	81.5500	21.5284	20.2774	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1055	-18.43	0.07	-3.96
90010017	81.5500	23.3482	20.4441	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1159	-17.86	0.04	-3.83
90010018	81.5500	25.1729	20.5442	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1157	-17.79	0.02	-3.80
90010019	81.5500	27.0000	20.5776	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1158	-17.82	0.00	-3.80
90010020	81.5500	28.8271	20.5442	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1158	-17.79	-0.02	-3.80
90010021	81.5500	30.6518	20.4441	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1044	-17.86	-0.04	-3.82
90010022	81.5500	32.4716	20.2774	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1170	-18.42	-0.07	-3.97
90010023	81.5500	34.2842	20.0443	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1148	-17.42	-0.09	-3.75
90010024	81.5500	36.0869	19.7451	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1142	-17.18	-0.10	-3.72
90010025	81.5500	37.8776	19.3803	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1135	-16.90	-0.12	-3.68
90010026	81.5500	39.6537	18.9503	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1018	-17.03	-0.13	-3.74
90010027	81.5500	41.4130	18.4558	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1135	-17.11	-0.16	-3.79
90010028	81.5500	43.1529	17.8972	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1105	-15.86	-0.17	-3.52
90010029	81.5500	44.8714	17.2755	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1092	-15.42	-0.18	-3.44
90010030	81.5500	46.5659	16.5914	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0986	-16.44	-0.22	-3.69
90010031	81.5500	48.2344	15.8459	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1072	-15.04	-0.23	-3.36
90010032	81.5500	49.8745	15.0399	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0919	-14.33	-0.27	-3.15
90010033	81.5500	51.4840	14.1745	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1077	-16.26	-0.33	-3.53
90010034	81.5500	53.0609	13.2509	0.0000	0.0000	0.0000	0.0000	0.0000	-0.1007	-13.69	-0.36	-2.81
90010035	81.5500	54.6029	12.2703	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0899	-15.49	-0.50	-3.00
90010036	81.5500	56.1081	11.2340	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0974	-12.23	-0.51	-2.08
90010037	81.5500	57.5745	10.1434	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0873	-8.44	-0.41	-1.29
90020001	66.7500	-3.5745	10.1434	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0613	8.39	0.40	-1.34
90020002	66.7500	-2.1081	11.2340	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0500	12.22	0.50	-2.12
90020003	66.7500	-0.6029	12.2703	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0621	15.48	0.47	-3.06
90020004	66.7500	0.9391	13.2509	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0603	13.69	0.35	-2.84
90020005	66.7500	2.5160	14.1745	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0567	16.26	0.32	-3.58
90020006	66.7500	4.1255	15.0399	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0627	14.33	0.26	-3.18
90020007	66.7500	5.7656	15.8459	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0567	15.04	0.23	-3.38
90020008	66.7500	7.4341	16.5914	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0665	16.43	0.21	-3.73
90020009	66.7500	9.1286	17.2755	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0654	15.42	0.18	-3.47
90020010	66.7500	10.8471	17.8972	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0662	15.86	0.17	-3.55
90020011	66.7500	12.5870	18.4558	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0609	17.11	0.16	-3.82

INTERNAL PANEL – LIVE LOAD

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PointNo.	X-coor	Y-coor	Z-coor	DX	DY	DZ	ResX	ResY	ResZ	U	V	W
90020012	66.7500	14.3463	18.9503	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0681	17.03	0.13	-3.77
90020013	66.7500	16.1224	19.3803	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0680	16.90	0.12	-3.70
90020014	66.7500	17.9131	19.7451	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0685	17.18	0.10	-3.74
90020015	66.7500	19.7158	20.0443	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0689	17.42	0.08	-3.78
90020016	66.7500	21.5284	20.2774	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0633	18.43	0.07	-3.99
90020017	66.7500	23.3482	20.4441	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0695	17.86	0.04	-3.85
90020018	66.7500	25.1729	20.5442	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0694	17.79	0.02	-3.82
90020019	66.7500	27.0000	20.5776	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0695	17.82	0.00	-3.83
90020020	66.7500	28.8271	20.5442	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0695	17.79	-0.02	-3.82
90020021	66.7500	30.6518	20.4441	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0627	17.86	-0.04	-3.85
90020022	66.7500	32.4716	20.2774	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0702	18.42	-0.07	-3.99
90020023	66.7500	34.2842	20.0443	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0689	17.42	-0.08	-3.78
90020024	66.7500	36.0869	19.7451	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0685	17.18	-0.10	-3.74
90020025	66.7500	37.8776	19.3803	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0681	16.90	-0.12	-3.70
90020026	66.7500	39.6537	18.9503	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0611	17.03	-0.13	-3.77
90020027	66.7500	41.4130	18.4558	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0681	17.11	-0.16	-3.82
90020028	66.7500	43.1529	17.8972	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0663	15.86	-0.17	-3.55
90020029	66.7500	44.8714	17.2755	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0655	15.42	-0.18	-3.47
90020030	66.7500	46.5659	16.5914	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0592	16.44	-0.21	-3.73
90020031	66.7500	48.2344	15.8459	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0643	15.04	-0.23	-3.39
90020032	66.7500	49.8745	15.0399	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0551	14.33	-0.26	-3.18
90020033	66.7500	51.4840	14.1745	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0646	16.26	-0.32	-3.58
90020034	66.7500	53.0609	13.2509	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0604	13.69	-0.35	-2.84
90020035	66.7500	54.6029	12.2703	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0540	15.49	-0.48	-3.06
90020036	66.7500	56.1081	11.2340	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0584	12.22	-0.49	-2.12
90020037	66.7500	57.5745	10.1434	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0528	8.41	-0.39	-1.32

Statik: Time of calculation: 3.04s
Statik: Version 8.01 done.

INTERNAL PANEL – LIVE LOAD

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```
Warning! (051) Using default value: NROB=              0
Statik
Result from EASY Statical analysis
Date = 03/08/2012       Time = 11:35:34
Values from INI-file
Zero for the computer (small number)      0.1000000000E-07
Limit for conjugate gradient              0.1000000000E+01
Minimum stiffness of a point              0.1000000000E-06
Maximum numbers of outer iterations                     50
Maximum numbers of inner iterations                    200
Kind of calculation                                      0

Line from EIN-file:
Statik: Statical analysis...

Dimensions:
Number of points.........................(MAX)     1192     20000
Number of free points........................     1114
Number of fully fixed points.................       78
Number of all links......................(MAX)     2029     40000
Number of cable links........................        0
Number of links controlled by Hookes law......     2029
Number of links controlled by force density...        0
Number of t-elements.....................(MAX)      166      4000

Limit for convergence:
Maximal number of iterations..................       50
Conjugate gradient...........................0.1000E+01

Statical calculation with loads

Informations to solve equations with the method of conjugate gradient
```

Number of inner iterations			residual	right side
0	0	201	0.0000E+00	0.2033E+02
1	201	201	0.7648E-04	0.3465E+03
2	201	201	0.2419E-02	0.7706E+04
3	105	201	0.2455E-01	0.2891E+04
4	176	201	0.2420E-02	0.2196E+04
5	110	201	0.1221E-02	0.9031E+03
6	135	201	0.2242E-03	0.6744E+03
7	123	201	0.7894E-04	0.1877E+03
8	127	201	0.7402E-05	0.9124E+02
9	126	201	0.1502E-05	0.6086E+01
10	177	400	0.7173E-08	0.2697E+00

Results from calculation of equilibrium

Statik: Statical analysis...   Statik   03/08/201211:35:40

INTERNAL PANEL –WIND UPLIFT

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Nodes	Coordinates			Coordinate changes			Applied nodes			Residual forces		
PointNo.	X-coor	Y-coor	Z-coor	DX	DY	DZ	ResX	ResY	ResZ	U	V	W
99000001	81.5500	-5.0000	9.0000	0.0000	0.0000	0.0000	-0.0069	-0.0861	0.1077	-222.02	99.82	91.63
99000002	81.5500	59.0000	9.0000	0.0000	0.0000	0.0000	-0.0069	0.0861	0.1077	-221.81	-99.81	91.67
99000003	66.7500	-5.0000	9.0000	0.0000	0.0000	0.0000	0.0055	-0.0692	0.0865	221.74	99.95	91.75
99000004	66.7500	59.0000	9.0000	0.0000	0.0000	0.0000	0.0055	0.0692	0.0865	221.94	-99.96	91.76
90010001	81.5500	-3.5745	10.1434	0.0000	0.0000	0.0000	-0.0279	-0.2020	0.2637	-9.49	-0.77	0.71
90010002	81.5500	-2.1081	11.2340	0.0000	0.0000	0.0000	-0.0314	-0.1544	0.2167	-6.36	-1.10	1.01
90010003	81.5500	-0.6029	12.2703	0.0000	0.0000	0.0000	-0.0439	-0.1772	0.2689	-7.75	-1.47	1.39
90010004	81.5500	0.9391	13.2509	0.0000	0.0000	0.0000	-0.0466	-0.1581	0.2611	-8.16	-1.57	1.62
90010005	81.5500	2.5160	14.1745	0.0000	0.0000	0.0000	-0.0449	-0.1373	0.2458	-10.39	-1.91	2.08
90010006	81.5500	4.1255	15.0399	0.0000	0.0000	0.0000	-0.0504	-0.1390	0.2718	-10.97	-1.91	2.34
90010007	81.5500	5.7656	15.8459	0.0000	0.0000	0.0000	-0.0454	-0.1151	0.2457	-12.40	-2.00	2.67
90010008	81.5500	7.4341	16.5914	0.0000	0.0000	0.0000	-0.0520	-0.1225	0.2883	-14.15	-2.09	3.10
90010009	81.5500	9.1286	17.2755	0.0000	0.0000	0.0000	-0.0507	-0.1080	0.2836	-14.28	-1.90	3.23
90010010	81.5500	10.8471	17.8972	0.0000	0.0000	0.0000	-0.0503	-0.0973	0.2870	-15.06	-1.79	3.45
90010011	81.5500	12.5870	18.4558	0.0000	0.0000	0.0000	-0.0449	-0.0792	0.2640	-16.25	-1.70	3.73
90010012	81.5500	14.3463	18.9503	0.0000	0.0000	0.0000	-0.0489	-0.0770	0.2951	-16.47	-1.50	3.85
90010013	81.5500	16.1224	19.3803	0.0000	0.0000	0.0000	-0.0482	-0.0653	0.2948	-16.58	-1.28	3.92
90010014	81.5500	17.9131	19.7451	0.0000	0.0000	0.0000	-0.0478	-0.0542	0.2968	-16.91	-1.08	4.03
90010015	81.5500	19.7158	20.0443	0.0000	0.0000	0.0000	-0.0471	-0.0432	0.2984	-17.08	-0.87	4.09
90010016	81.5500	21.5284	20.2774	0.0000	0.0000	0.0000	-0.0425	-0.0299	0.2744	-17.81	-0.67	4.25
90010017	81.5500	23.3482	20.4441	0.0000	0.0000	0.0000	-0.0461	-0.0218	0.3012	-17.44	-0.44	4.21
90010018	81.5500	25.1729	20.5442	0.0000	0.0000	0.0000	-0.0462	-0.0106	0.3009	-17.46	-0.21	4.22
90010019	81.5500	27.0000	20.5776	0.0000	0.0000	0.0000	-0.0464	0.0006	0.3011	-17.50	0.00	4.23
90010020	81.5500	28.8271	20.5442	0.0000	0.0000	0.0000	-0.0465	0.0117	0.3010	-17.46	0.21	4.22
90010021	81.5500	30.6518	20.4441	0.0000	0.0000	0.0000	-0.0418	0.0201	0.2716	-17.45	0.43	4.19
90010022	81.5500	32.4716	20.2774	0.0000	0.0000	0.0000	-0.0467	0.0336	0.3042	-17.80	0.67	4.26
90010023	81.5500	34.2842	20.0443	0.0000	0.0000	0.0000	-0.0469	0.0444	0.2985	-17.08	0.87	4.09
90010024	81.5500	36.0869	19.7451	0.0000	0.0000	0.0000	-0.0479	0.0555	0.2970	-16.91	1.08	4.03
90010025	81.5500	37.8776	19.3803	0.0000	0.0000	0.0000	-0.0486	0.0666	0.2950	-16.58	1.27	3.92
90010026	81.5500	39.6537	18.9503	0.0000	0.0000	0.0000	-0.0442	0.0695	0.2646	-16.48	1.49	3.84
90010027	81.5500	41.4130	18.4558	0.0000	0.0000	0.0000	-0.0500	0.0891	0.2952	-16.23	1.70	3.75
90010028	81.5500	43.1529	17.8972	0.0000	0.0000	0.0000	-0.0504	0.0988	0.2874	-15.05	1.79	3.45
90010029	81.5500	44.8714	17.2755	0.0000	0.0000	0.0000	-0.0511	0.1096	0.2840	-14.28	1.90	3.23
90010030	81.5500	46.5659	16.5914	0.0000	0.0000	0.0000	-0.0467	0.1095	0.2564	-14.18	2.08	3.09
90010031	81.5500	48.2344	15.8459	0.0000	0.0000	0.0000	-0.0514	0.1313	0.2787	-12.41	2.01	2.69
90010032	81.5500	49.8745	15.0399	0.0000	0.0000	0.0000	-0.0443	0.1228	0.2388	-11.00	1.90	2.32
90010033	81.5500	51.4840	14.1745	0.0000	0.0000	0.0000	-0.0506	0.1572	0.2801	-10.37	1.92	2.09
90010034	81.5500	53.0609	13.2509	0.0000	0.0000	0.0000	-0.0460	0.1605	0.2618	-8.16	1.57	1.62
90010035	81.5500	54.6029	12.2703	0.0000	0.0000	0.0000	-0.0379	0.1549	0.2338	-7.78	1.46	1.37
90010036	81.5500	56.1081	11.2340	0.0000	0.0000	0.0000	-0.0355	0.1813	0.2532	-6.34	1.13	1.05
90010037	81.5500	57.5745	10.1434	0.0000	0.0000	0.0000	-0.0229	0.1750	0.2270	-9.76	0.81	0.73
90020001	66.7500	-3.5745	10.1434	0.0000	0.0000	0.0000	0.0181	-0.1225	0.1594	9.77	-0.84	0.73
90020002	66.7500	-2.1081	11.2340	0.0000	0.0000	0.0000	0.0203	-0.0928	0.1300	6.36	-1.13	1.02
90020003	66.7500	-0.6029	12.2703	0.0000	0.0000	0.0000	0.0277	-0.1065	0.1613	7.76	-1.48	1.37
90020004	66.7500	0.9391	13.2509	0.0000	0.0000	0.0000	0.0294	-0.0950	0.1567	8.16	-1.57	1.60

INTERNAL PANEL –WIND UPLIFT

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PointNo.	X-coor	Y-coor	Z-coor	DX	DY	DZ	ResX	ResY	ResZ	U	V	W
90020005	66.7500	2.5160	14.1745	0.0000	0.0000	0.0000	0.0280	-0.0824	0.1475	10.39	-1.93	2.08
90020006	66.7500	4.1255	15.0399	0.0000	0.0000	0.0000	0.0316	-0.0834	0.1631	10.97	-1.91	2.33
90020007	66.7500	5.7656	15.8459	0.0000	0.0000	0.0000	0.0284	-0.0690	0.1474	12.42	-2.01	2.68
90020008	66.7500	7.4341	16.5914	0.0000	0.0000	0.0000	0.0322	-0.0735	0.1730	14.27	-2.10	3.12
90020009	66.7500	9.1286	17.2755	0.0000	0.0000	0.0000	0.0316	-0.0648	0.1702	14.31	-1.90	3.23
90020010	66.7500	10.8471	17.8972	0.0000	0.0000	0.0000	0.0314	-0.0583	0.1722	15.06	-1.79	3.45
90020011	66.7500	12.5870	18.4558	0.0000	0.0000	0.0000	0.0278	-0.0475	0.1584	16.25	-1.70	3.74
90020012	66.7500	14.3463	18.9503	0.0000	0.0000	0.0000	0.0303	-0.0462	0.1771	16.47	-1.49	3.85
90020013	66.7500	16.1224	19.3803	0.0000	0.0000	0.0000	0.0301	-0.0391	0.1769	16.58	-1.27	3.92
90020014	66.7500	17.9131	19.7451	0.0000	0.0000	0.0000	0.0298	-0.0325	0.1781	16.91	-1.07	4.02
90020015	66.7500	19.7158	20.0443	0.0000	0.0000	0.0000	0.0293	-0.0259	0.1790	17.08	-0.87	4.09
90020016	66.7500	21.5284	20.2774	0.0000	0.0000	0.0000	0.0262	-0.0179	0.1646	17.81	-0.67	4.25
90020017	66.7500	23.3482	20.4441	0.0000	0.0000	0.0000	0.0285	-0.0131	0.1807	17.44	-0.43	4.20
90020018	66.7500	25.1729	20.5442	0.0000	0.0000	0.0000	0.0288	-0.0063	0.1806	17.46	-0.21	4.21
90020019	66.7500	27.0000	20.5776	0.0000	0.0000	0.0000	0.0290	0.0003	0.1807	17.50	0.00	4.22
90020020	66.7500	28.8271	20.5442	0.0000	0.0000	0.0000	0.0290	0.0070	0.1806	17.46	0.21	4.21
90020021	66.7500	30.6518	20.4441	0.0000	0.0000	0.0000	0.0259	0.0121	0.1629	17.45	0.44	4.20
90020022	66.7500	32.4716	20.2774	0.0000	0.0000	0.0000	0.0288	0.0201	0.1825	17.81	0.67	4.26
90020023	66.7500	34.2842	20.0443	0.0000	0.0000	0.0000	0.0291	0.0266	0.1791	17.08	0.87	4.09
90020024	66.7500	36.0869	19.7451	0.0000	0.0000	0.0000	0.0299	0.0333	0.1782	16.91	1.08	4.02
90020025	66.7500	37.8776	19.3803	0.0000	0.0000	0.0000	0.0303	0.0399	0.1770	16.58	1.27	3.92
90020026	66.7500	39.6537	18.9503	0.0000	0.0000	0.0000	0.0275	0.0417	0.1588	16.48	1.49	3.84
90020027	66.7500	41.4130	18.4558	0.0000	0.0000	0.0000	0.0309	0.0535	0.1771	16.24	1.70	3.74
90020028	66.7500	43.1529	17.8972	0.0000	0.0000	0.0000	0.0314	0.0592	0.1725	15.05	1.79	3.44
90020029	66.7500	44.8714	17.2755	0.0000	0.0000	0.0000	0.0319	0.0657	0.1704	14.31	1.90	3.23
90020030	66.7500	46.5659	16.5914	0.0000	0.0000	0.0000	0.0290	0.0657	0.1538	14.31	2.11	3.12
90020031	66.7500	48.2344	15.8459	0.0000	0.0000	0.0000	0.0321	0.0788	0.1672	12.41	2.01	2.68
90020032	66.7500	49.8745	15.0399	0.0000	0.0000	0.0000	0.0278	0.0737	0.1433	10.98	1.91	2.32
90020033	66.7500	51.4840	14.1745	0.0000	0.0000	0.0000	0.0314	0.0943	0.1681	10.37	1.93	2.08
90020034	66.7500	53.0609	13.2509	0.0000	0.0000	0.0000	0.0291	0.0964	0.1571	8.16	1.57	1.60
90020035	66.7500	54.6029	12.2703	0.0000	0.0000	0.0000	0.0240	0.0931	0.1403	7.78	1.48	1.36
90020036	66.7500	56.1081	11.2340	0.0000	0.0000	0.0000	0.0230	0.1090	0.1520	6.34	1.13	1.02
90020037	66.7500	57.5745	10.1434	0.0000	0.0000	0.0000	0.0149	0.1062	0.1373	9.63	0.77	0.66

Statik: Time of calculation: 5.63s
Statik: Version 8.01 done.

INTERNAL PANEL –WIND UPLIFT

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```
Warning! (051) Using default value: NROB=              0
Statik
Result from EASY Statical analysis
Date = 03/08/2012       Time = 11:36:09
Values from INI-file
Zero for the computer (small number)      0.1000000000E-07
Limit for conjugate gradient              0.1000000000E+01
Minimum stiffness of a point              0.1000000000E-06
Maximum numbers of outer iterations                     50
Maximum numbers of inner iterations                    200
Kind of calculation                                      0

Line from EIN-file:
Statik: Statical analysis...

Dimensions:
Number of points.........................(MAX)     1192     20000
Number of free points........................     1114
Number of fully fixed points.................       78
Number of all links......................(MAX)     2029     40000
Number of cable links........................        0
Number of links controlled by Hookes law......     2029
Number of links controlled by force density...        0
Number of t-elements.....................(MAX)      166      4000

Limit for convergence:
Maximal number of iterations..................       50
Conjugate gradient...........................0.1000E+01

Statical calculation with loads

Informations to solve equations with the method of conjugate gradient
```

Number of inner iterations			residual	right side
0	0	201	0.0000E+00	0.9385E+01
1	201	201	0.1624E-04	0.7602E+02
2	188	201	0.2420E-05	0.1270E+02
3	162	201	0.6404E-07	0.1278E+01
4	161	201	0.1546E-07	0.1649E+03
5	56	201	0.2875E-04	0.1996E+03
6	72	201	0.3499E-04	0.3885E+02
7	84	201	0.1715E-05	0.1381E+03
8	65	201	0.1393E-04	0.6524E+02
9	53	201	0.5088E-05	0.6674E+02
10	84	201	0.4342E-05	0.5055E+02
11	57	201	0.2343E-05	0.2433E+02
12	45	201	0.4982E-06	0.6288E+02
13	41	201	0.3399E-05	0.6176E+01
14	78	201	0.2720E-07	0.3136E+02

INTERNAL PANEL – WIND PRESSURE

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Number of inner iterations			residual	right side
15	40	201	0.9231E-06	0.1453E+01
16	95	201	0.1450E-08	0.7096E+01
17	43	400	0.3753E-07	0.7947E+00

Results from calculation of equilibrium

Statik: Statical analysis...   Statik   03/08/201211:36:14

Nodes	Coordinates			Coordinate changes			Applied nodes			Residual forces		
PointNo.	X-coor	Y-coor	Z-coor	DX	DY	DZ	ResX	ResY	ResZ	U	V	W
99000001	81.5500	-5.0000	9.0000	0.0000	0.0000	0.0000	0.0032	0.0398	-0.0497	-26.18	15.94	9.12
99000002	81.5500	59.0000	9.0000	0.0000	0.0000	0.0000	0.0032	-0.0398	-0.0497	-26.17	-15.92	9.11
99000003	66.7500	-5.0000	9.0000	0.0000	0.0000	0.0000	-0.0026	0.0319	-0.0399	26.23	16.65	9.69
99000004	66.7500	59.0000	9.0000	0.0000	0.0000	0.0000	-0.0026	-0.0319	-0.0399	26.23	-16.66	9.69
90010001	81.5500	-3.5745	10.1434	0.0000	0.0000	0.0000	0.0129	0.0932	-0.1217	-11.39	0.80	-1.95
90010002	81.5500	-2.1081	11.2340	0.0000	0.0000	0.0000	0.0145	0.0713	-0.1000	-16.36	1.05	-3.15
90010003	81.5500	-0.6029	12.2703	0.0000	0.0000	0.0000	0.0202	0.0818	-0.1241	-21.23	1.17	-4.56
90010004	81.5500	0.9391	13.2509	0.0000	0.0000	0.0000	0.0215	0.0730	-0.1205	-18.70	0.93	-4.19
90010005	81.5500	2.5160	14.1745	0.0000	0.0000	0.0000	0.0207	0.0634	-0.1134	-21.75	0.92	-5.06
90010006	81.5500	4.1255	15.0399	0.0000	0.0000	0.0000	0.0232	0.0642	-0.1255	-18.59	0.74	-4.36
90010007	81.5500	5.7656	15.8459	0.0000	0.0000	0.0000	0.0209	0.0531	-0.1134	-19.00	0.69	-4.49
90010008	81.5500	7.4341	16.5914	0.0000	0.0000	0.0000	0.0240	0.0566	-0.1331	-20.12	0.66	-4.76
90010009	81.5500	9.1286	17.2755	0.0000	0.0000	0.0000	0.0234	0.0498	-0.1309	-18.36	0.55	-4.31
90010010	81.5500	10.8471	17.8972	0.0000	0.0000	0.0000	0.0232	0.0449	-0.1325	-18.45	0.51	-4.30
90010011	81.5500	12.5870	18.4558	0.0000	0.0000	0.0000	0.0207	0.0366	-0.1219	-19.44	0.47	-4.49
90010012	81.5500	14.3463	18.9503	0.0000	0.0000	0.0000	0.0226	0.0355	-0.1362	-18.96	0.40	-4.34
90010013	81.5500	16.1224	19.3803	0.0000	0.0000	0.0000	0.0223	0.0301	-0.1361	-18.51	0.35	-4.20
90010014	81.5500	17.9131	19.7451	0.0000	0.0000	0.0000	0.0221	0.0250	-0.1370	-18.58	0.29	-4.19
90010015	81.5500	19.7158	20.0443	0.0000	0.0000	0.0000	0.0218	0.0199	-0.1377	-18.63	0.24	-4.17
90010016	81.5500	21.5284	20.2774	0.0000	0.0000	0.0000	0.0196	0.0138	-0.1266	-19.52	0.19	-4.35
90010017	81.5500	23.3482	20.4441	0.0000	0.0000	0.0000	0.0213	0.0101	-0.1390	-18.82	0.12	-4.18
90010018	81.5500	25.1729	20.5442	0.0000	0.0000	0.0000	0.0213	0.0049	-0.1389	-18.70	0.06	-4.14
90010019	81.5500	27.0000	20.5776	0.0000	0.0000	0.0000	0.0214	-0.0003	-0.1390	-18.71	0.00	-4.14
90010020	81.5500	28.8271	20.5442	0.0000	0.0000	0.0000	0.0214	-0.0054	-0.1389	-18.70	-0.06	-4.14
90010021	81.5500	30.6518	20.4441	0.0000	0.0000	0.0000	0.0193	-0.0093	-0.1253	-18.82	-0.11	-4.17
90010022	81.5500	32.4716	20.2774	0.0000	0.0000	0.0000	0.0216	-0.0155	-0.1404	-19.51	-0.19	-4.35
90010023	81.5500	34.2842	20.0443	0.0000	0.0000	0.0000	0.0217	-0.0205	-0.1378	-18.63	-0.24	-4.17
90010024	81.5500	36.0869	19.7451	0.0000	0.0000	0.0000	0.0221	-0.0256	-0.1371	-18.58	-0.29	-4.19
90010025	81.5500	37.8776	19.3803	0.0000	0.0000	0.0000	0.0224	-0.0307	-0.1362	-18.51	-0.35	-4.20
90010026	81.5500	39.6537	18.9503	0.0000	0.0000	0.0000	0.0204	-0.0321	-0.1221	-18.96	-0.40	-4.34
90010027	81.5500	41.4130	18.4558	0.0000	0.0000	0.0000	0.0231	-0.0411	-0.1362	-19.44	-0.47	-4.50
90010028	81.5500	43.1529	17.8972	0.0000	0.0000	0.0000	0.0233	-0.0456	-0.1327	-18.45	-0.51	-4.30
90010029	81.5500	44.8714	17.2755	0.0000	0.0000	0.0000	0.0236	-0.0506	-0.1311	-18.36	-0.55	-4.31
90010030	81.5500	46.5659	16.5914	0.0000	0.0000	0.0000	0.0215	-0.0505	-0.1183	-20.12	-0.65	-4.76
90010031	81.5500	48.2344	15.8459	0.0000	0.0000	0.0000	0.0237	-0.0606	-0.1286	-18.99	-0.69	-4.49
90010032	81.5500	49.8745	15.0399	0.0000	0.0000	0.0000	0.0204	-0.0567	-0.1102	-18.59	-0.74	-4.36
90010033	81.5500	51.4840	14.1745	0.0000	0.0000	0.0000	0.0233	-0.0725	-0.1293	-21.74	-0.93	-5.06
90010034	81.5500	53.0609	13.2509	0.0000	0.0000	0.0000	0.0212	-0.0741	-0.1208	-18.70	-0.93	-4.19

INTERNAL PANEL – WIND PRESSURE

b32

INTERNAL PANEL – WIND PRESSURE

b33

INTERNAL PANEL – WIND FROM ENTRANCE

b34

INTERNAL PANEL – WIND FROM ENTRANCE

b35

INTERNAL PANEL – WIND FROM ENTRANCE

b36

INTERNAL PANEL – WIND FROM AUDIENCE STAND

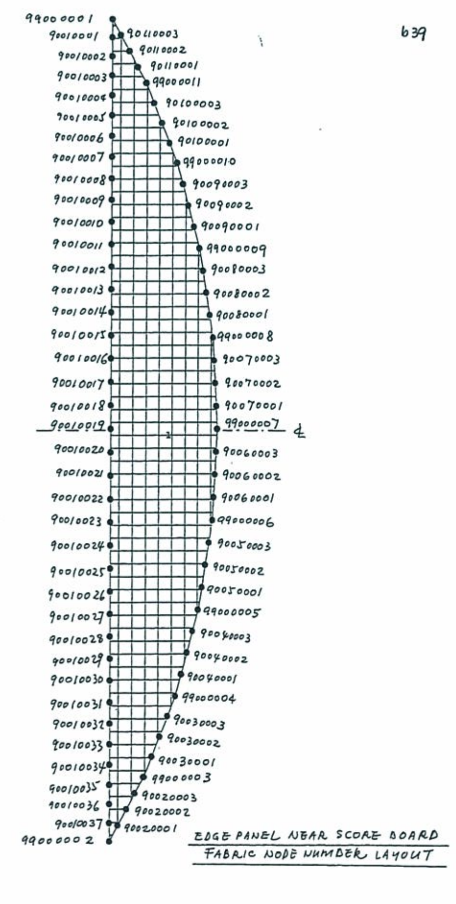
b37

INTERNAL PANEL – WIND FROM AUDIENCE STAND

b38

INTERNAL PANEL – WIND FROM AUDIENCE STAND

b39



640

EDGE PANEL NEAR SCORE BOARD - PRESTRESS

641

EDGE PANEL NEAR SCORE BOARD - PRESTRESS

642

EDGE PANEL NEAR SCORE BOARD - PRESTRESS

643

EDGE PANEL NEAR SCORE BOARD - LIVE LOAD

644

EDGE PANEL NEAR SCORE BOARD - LIVE LOAD

645

EDGE PANEL NEAR SCORE BOARD - LIVE LOAD

646

EDGE PANEL NEAR SCORE BOARD - WIND UPLIFT

647

EDGE PANEL NEAR SCORE BOARD - WIND UPLIFT

EDGE PANEL NEAR SCORE BOARD - WIND FROM ENTRANCE

```
Warning! (0511) Using default value: RHOW=                0
Static
Result from EASY Statical analysis
Date = 03/08/2012                    Time = 11:36:08
Zero for the computer (small) number)          0.10000000000E-07
Limit for computed gradient                    0.10000000000E+00
Minimum stiffness of a point                   0.10000000000E-06
Maximum numbers of inner iterations                          200
Maximum numbers of outer iterations                           20
Kind of calculation                                            0

Line from EIN-file:

Statik: Statical analysis...

Dimensions:
Number of points.....(MAX)        569      20000
Number of free points.....                  490
Number of fully fixed points.....             78
Number of all fixed points.....              664      40000
Number of cable links.....                     0
Number of links controlled by hooken law.....
Number of links controlled by force density...  0
Number of t-elements.....(MAX)               142      4000
Limit for convergence:.....                  20
Maximal number of iterations.....
Conjugate gradient.....                  0.10000E+00

Statical calculation with loads

Incrementations to solve equations with the method of conjugate gradient

Number of inner iterations      residual      right side
------------------------------------------------------------
     0          0          201          0.00000E+00    0.97190+01
     1         193         201          0.95315-05     0.54580+03
     2         193         201          0.11256-03     0.11650+04
     3         109         201          0.18036-03     0.67840+03
     4          96         201          0.57000-04     0.15657E+03
     5          89         201          0.65456-05     0.93336+02
     6          63         201          0.81832-04     0.54503E+01
     7          03         100          0.27588-08     0.93488-01
Results from calculation of equilibrium
------------------------------------------------------------

Statik: Statical analysis...          Statik   03/08/2012 11:36:47
```

EDGE PANEL NEAR SCORE BOARD - WIND FROM AUDIENCE STAND

```
Nodes      Coordinates      Coordinate changes      Applied nodes      Residual forces
------------------------------------------------------------
Point-No.  X-coor   Y-coor   Z-coor   DX       DY       RHAX     RHAY     RHAZ     U        V        W
------------------------------------------------------------
900000001  03.3500  -5.0000  9.0000   0.0000   0.0000   0.0424   0.0355   0.0796   0.21     0.08     0.01
900000002  03.3500  -2.5000  9.0000   0.0000   0.0000   -0.0424  -0.0355  -0.0796  -0.21    -0.08    -0.01
900000003  03.9221  -5.0000  11.3249  0.0000   0.0000   -0.0573  -0.1462  -0.2988  -1.98    -0.44    -0.13
900000004  04.9221  -2.5353  13.3803  0.0000   0.0000   -0.0330  -0.1020  -0.2134  -2.70    -0.20    -0.79
900000005  03.3500  -1.7.80  0.0000   0.0000   0.0000   -0.0290  -0.0892  -0.1750  -13.50   -2.45    -0.50
900000006  03.3500  -0.0000  0.0000   0.0000   0.0000   -0.0290  -0.0892  -0.1750  -13.50   -2.45    -0.50
900000007  91.1421  -5.0000  27.0000  0.0000   0.0000   0.0513   0.0856   0.1737   -5.75    0.10     3.23
900000008  91.1421  -2.5000  27.0000  0.0000   0.0000   0.0513   0.0856   0.1737   -5.75    0.10     3.23
900000009  90.0746  -5.0000  14.4063  0.0000   0.0000   -0.0544  -0.1600  -0.2296  -15.70   -9.32    -5.13
900000010  90.0746  -2.5353  14.4063  0.0000   0.0000   -0.0544  -0.1600  -0.2296  -15.70   -9.32    -5.13
900000011  89.9221  -5.0000  11.3249  0.0000   0.0000   0.0573   0.1462   0.2988   2.70     0.20     0.79
900000012  89.9221  -2.5353  11.3803  0.0000   0.0000   0.0330   0.0420   0.1020   13.34    1.80     0.55
900000013  89.3500  -5.0000  9.0000   0.0000   0.0000   0.0424   0.0355   0.0796   0.21     0.08     0.01
900000014  89.3500  -2.5000  9.0000   0.0000   0.0000   0.0424   0.0355   0.0796   0.21     0.08     0.01
------------------------------------------------------------

Statik: Statical analysis...          Statik   03/08/2012 11:36:02
```

EDGE PANEL NEAR SCORE BOARD - WIND FROM ENTRANCE

```
Warning! (0511) Using default value: RHOW=                0
Static
Result from EASY Statical analysis
Date = 03/08/2012                    Time = 11:32:55
Zero for the computer (small number)           0.10000000000E-07
Limit for computed gradient                    0.10000000000E+00
Minimum stiffness of a point                   0.10000000000E-06
Maximum numbers of inner iterations                          200
Maximum numbers of outer iterations                           20
Kind of calculation                                            0

Line from EIN-file:

Statik: Statical analysis...

Dimensions:
Number of points.....(MAX)        569      20000
Number of free points.....                  490
Number of fully fixed points.....             78
Number of all fixed points.....              664      40000
Number of cable links.....                     0
Number of links controlled by hooken law.....
Number of links controlled by force density...  0
Number of t-elements.....(MAX)               142      4000
Limit for convergence:.....                  20
Maximal number of iterations.....
Conjugate gradient.....                  0.10000E+00

Statical calculation with loads

Incrementations to solve equations with the method of conjugate gradient

Number of inner iterations      residual      right side
------------------------------------------------------------
     0          0          201          0.00000E+00    0.97190+01
     1         193         201          0.95315-05     0.54580+03
     2         193         201          0.11256-03     0.11650+04
     3         109         201          0.18036-03     0.67840+03
     4          96         201          0.57000-04     0.15657E+03
     5          89         201          0.65456-05     0.93336+02
     6          63         201          0.81832-04     0.54503E+01
     7          03         100          0.27588-08     0.93488-01
Results from calculation of equilibrium
------------------------------------------------------------

Statik: Statical analysis...          Statik   03/08/2012 11:32:56
```

EDGE PANEL NEAR SCORE BOARD - WIND PRESSURE

```
Nodes      Coordinates      Coordinate changes      Applied nodes      Residual forces
------------------------------------------------------------
Point-No.  X-coor   Y-coor   Z-coor   DX       DY       RHAX     RHAY     RHAZ     U        V        W
------------------------------------------------------------
900000001  03.3500  -5.0000  9.0000   0.0000   0.0000   -0.0424  -0.0355  -0.0796  -0.21    -0.08    -0.01
900000002  03.3500  -2.5000  9.0000   0.0000   0.0000   0.0424   0.0355   0.0796   0.21     0.08     0.01
900000003  03.9221  -5.0000  11.3249  0.0000   0.0000   0.0573   0.1462   0.2988   2.70     0.20     0.79
900000004  04.9221  -2.5353  13.3803  0.0000   0.0000   0.0330   0.0420   0.1020   13.34    1.80     0.55
900000005  03.3500  -1.7.80  0.0000   0.0000   0.0000   0.0290   0.0892   0.1750   13.50    2.45     0.50
900000006  03.3500  -0.0000  0.0000   0.0000   0.0000   0.0290   0.0892   0.1750   13.50    2.45     0.50
900000007  91.1421  -5.0000  27.0000  0.0000   0.0000   -0.0513  -0.1462  -0.2988  -2.70    -0.20    -0.79
900000008  91.1421  -2.5000  27.0000  0.0000   0.0000   -0.0513  -0.1462  -0.2988  -2.70    -0.20    -0.79
900000009  90.0746  -5.0000  14.4063  0.0000   0.0000   0.0544   0.1600   0.2296   15.70    9.32     5.13
900000010  90.0746  -2.5353  14.4063  0.0000   0.0000   0.0544   0.1600   0.2296   15.70    9.32     5.13
900000011  89.9221  -5.0000  11.3249  0.0000   0.0000   -0.0573  -0.1462  -0.2988  -2.70    -0.20    -0.79
900000012  89.9221  -2.5353  11.3803  0.0000   0.0000   -0.0330  -0.1020  -0.2134  -2.70    -0.20    -0.79
900000013  89.3500  -5.0000  9.0000   0.0000   0.0000   -0.0424  -0.0355  -0.0796  -0.21    -0.08    -0.01
900000014  89.3500  -2.5000  9.0000   0.0000   0.0000   -0.0424  -0.0355  -0.0796  -0.21    -0.08    -0.01
------------------------------------------------------------

Statik: Statical analysis...          Statik   03/08/2012 11:36:08
```

EDGE PANEL NEAR SCORE BOARD - WIND FROM ENTRANCE

```
Warning! (0511) Using default value: RHOW=                0
Static
Result from EASY Statical analysis
Date = 03/08/2012                    Time = 11:36:08
Zero for the computer (small number)           0.10000000000E-07
Limit for computed gradient                    0.10000000000E+00
Minimum stiffness of a point                   0.10000000000E-06
Maximum numbers of inner iterations                          200
Maximum numbers of outer iterations                           20
Kind of calculation                                            0

Line from EIN-file:

Statik: Statical analysis...

Dimensions:
Number of points.....(MAX)        569      20000
Number of free points.....                  490
Number of fully fixed points.....             78
Number of all fixed points.....              664      40000
Number of cable links.....                     0
Number of links controlled by hooken law.....
Number of links controlled by force density...  0
Number of t-elements.....(MAX)               142      4000
Limit for convergence:.....                  20
Maximal number of iterations.....
Conjugate gradient.....                  0.10000E+00

Statical calculation with loads

Incrementations to solve equations with the method of conjugate gradient

Number of inner iterations      residual      right side
------------------------------------------------------------
     0          0          201          0.00000E+00    0.97190+01
     1         193         201          0.95315-05     0.54580+03
     2         193         201          0.11256-03     0.11650+04
     3         109         201          0.18036-03     0.67840+03
     4          96         201          0.57000-04     0.15657E+03
     5          89         201          0.65456-05     0.93336+02
     6          63         201          0.81832-04     0.54503E+01
     7          03         100          0.27588-08     0.93488-01
Results from calculation of equilibrium
------------------------------------------------------------

Statik: Statical analysis...          Statik   03/08/2012 11:36:47
```

EDGE PANEL NEAR SCORE BOARD - WIND FROM ENTRANCE

```
Nodes      Coordinates      Coordinate changes      Applied nodes      Residual forces
------------------------------------------------------------
Point-No.  X-coor   Y-coor   Z-coor   DX       DY       RHAX     RHAY     RHAZ     U        V        W
------------------------------------------------------------
900000001  03.3500  -5.0000  9.0000   0.0000   0.0000   -0.0424  -0.0355  -0.0796  -0.21    -0.08    -0.01
900000002  03.3500  -2.5000  9.0000   0.0000   0.0000   0.0424   0.0355   0.0796   0.21     0.08     0.01
900000003  03.9221  -5.0000  11.3249  0.0000   0.0000   0.0573   0.1462   0.2988   2.70     0.20     0.79
900000004  04.9221  -2.5353  13.3803  0.0000   0.0000   0.0330   0.0420   0.1020   13.34    1.80     0.55
900000005  03.3500  -1.7.80  0.0000   0.0000   0.0000   0.0290   0.0892   0.1750   13.50    2.45     0.50
900000006  03.3500  -0.0000  0.0000   0.0000   0.0000   0.0290   0.0892   0.1750   13.50    2.45     0.50
900000007  91.1421  -5.0000  27.0000  0.0000   0.0000   -0.0513  -0.1462  -0.2988  -2.70    -0.20    -0.79
900000008  91.1421  -2.5000  27.0000  0.0000   0.0000   -0.0513  -0.1462  -0.2988  -2.70    -0.20    -0.79
900000009  90.0746  -5.0000  14.4063  0.0000   0.0000   0.0544   0.1600   0.2296   15.70    9.32     5.13
900000010  90.0746  -2.5353  14.4063  0.0000   0.0000   0.0544   0.1600   0.2296   15.70    9.32     5.13
900000011  89.9221  -5.0000  11.3249  0.0000   0.0000   -0.0573  -0.1462  -0.2988  -2.70    -0.20    -0.79
900000012  89.9221  -2.5353  11.3803  0.0000   0.0000   -0.0330  -0.1020  -0.2134  -2.70    -0.20    -0.79
900000013  89.3500  -5.0000  9.0000   0.0000   0.0000   -0.0424  -0.0355  -0.0796  -0.21    -0.08    -0.01
900000014  89.3500  -2.5000  9.0000   0.0000   0.0000   -0.0424  -0.0355  -0.0796  -0.21    -0.08    -0.01
------------------------------------------------------------

Statik: Statical analysis...          Statik   03/08/2012 11:36:02
```

EDGE PANEL NEAR SCORE BOARD - WIND UPLIFT

```
Warning! (0511) Using default value: RHOW=                0
Static
Result from EASY Statical analysis
Date = 03/08/2012                    Time = 11:32:55
Zero for the computer (small number)           0.10000000000E-07
Limit for computed gradient                    0.10000000000E+00
Minimum stiffness of a point                   0.10000000000E-06
Maximum numbers of inner iterations                          200
Maximum numbers of outer iterations                           20
Kind of calculation                                            0

Line from EIN-file:

Statik: Statical analysis...

Dimensions:
Number of points.....(MAX)        569      20000
Number of free points.....                  490
Number of fully fixed points.....             78
Number of all fixed points.....              664      40000
Number of cable links.....                     0
Number of links controlled by hooken law.....
Number of links controlled by force density...  0
Number of t-elements.....(MAX)               142      4000
Limit for convergence:.....                  20
Maximal number of iterations.....
Conjugate gradient.....                  0.10000E+00

Statical calculation with loads

Incrementations to solve equations with the method of conjugate gradient

Number of inner iterations      residual      right side
------------------------------------------------------------
     0          0          201          0.00000E+00    0.97190+01
     1         193         201          0.95315-05     0.54580+03
     2         193         201          0.11256-03     0.11650+04
     3         109         201          0.18036-03     0.67840+03
     4          96         201          0.57000-04     0.15657E+03
     5          89         201          0.65456-05     0.93336+02
     6          63         201          0.81832-04     0.54503E+01
     7          03         100          0.27588-08     0.93488-01
Results from calculation of equilibrium
------------------------------------------------------------

Statik: Statical analysis...          Statik   03/08/2012 11:32:56
```

EDGE PANEL NEAR SCORE BOARD - WIND PRESSURE

```
Nodes      Coordinates      Coordinate changes      Applied nodes      Residual forces
------------------------------------------------------------
Point-No.  X-coor   Y-coor   Z-coor   DX       DY       RHAX     RHAY     RHAZ     U        V        W
------------------------------------------------------------
900000001  03.3500  -5.0000  9.0000   0.0000   0.0000   -0.0424  -0.0355  -0.0796  -0.21    -0.08    -0.01
900000002  03.3500  -2.5000  9.0000   0.0000   0.0000   0.0424   0.0355   0.0796   0.21     0.08     0.01
900000003  03.9221  -5.0000  11.3249  0.0000   0.0000   0.0573   0.1462   0.2988   2.70     0.20     0.79
900000004  04.9221  -2.5353  13.3803  0.0000   0.0000   0.0330   0.0420   0.1020   13.34    1.80     0.55
900000005  03.3500  -1.7.80  0.0000   0.0000   0.0000   0.0290   0.0892   0.1750   13.50    2.45     0.50
900000006  03.3500  -0.0000  0.0000   0.0000   0.0000   0.0290   0.0892   0.1750   13.50    2.45     0.50
900000007  91.1421  -5.0000  27.0000  0.0000   0.0000   -0.0513  -0.1462  -0.2988  -2.70    -0.20    -0.79
900000008  91.1421  -2.5000  27.0000  0.0000   0.0000   -0.0513  -0.1462  -0.2988  -2.70    -0.20    -0.79
900000009  90.0746  -5.0000  14.4063  0.0000   0.0000   0.0544   0.1600   0.2296   15.70    9.32     5.13
900000010  90.0746  -2.5353  14.4063  0.0000   0.0000   0.0544   0.1600   0.2296   15.70    9.32     5.13
900000011  89.9221  -5.0000  11.3249  0.0000   0.0000   -0.0573  -0.1462  -0.2988  -2.70    -0.20    -0.79
900000012  89.9221  -2.5353  11.3803  0.0000   0.0000   -0.0330  -0.1020  -0.2134  -2.70    -0.20    -0.79
900000013  89.3500  -5.0000  9.0000   0.0000   0.0000   -0.0424  -0.0355  -0.0796  -0.21    -0.08    -0.01
900000014  89.3500  -2.5000  9.0000   0.0000   0.0000   -0.0424  -0.0355  -0.0796  -0.21    -0.08    -0.01
------------------------------------------------------------

Statik: Statical analysis...          Statik   03/08/2012 11:36:08
```

EDGE PANEL NEAR SCORE BOARD – WIND FROM AUDIENCE STAND

Nodes	Coordinates			Coordinate changes			Applied nodes			Residual forces		
Point No.	X-coor	Y-coor	Z-coor	DX	DY	DZ	RotX	RotY	RotZ	U	V	W
90000001	83.3500	35.0000	9.8000	0.0000	0.0000	0.0000	-0.0155	+0.0271	+0.0146	0.12	-0.04	+0.13
90000002	83.3500	-3.0000	9.8000	0.0000	0.0000	0.0000	0.0424	+0.0595	+0.0746	0.21	-0.08	0.01
90000003	83.3500	0.0000	12.7500	0.0000	0.0000	0.0000	0.0000	+0.0000	+0.0000	0.00	0.00	0.00
90000004	88.2213	0.2353	12.4803	0.0000	0.0000	0.0000	0.0258	+0.0011	+0.2210	-11.54	2.11	0.35
90000005	88.2213	0.2353	12.4803	0.0000	0.0000	0.0000	0.0258	+0.0011	+0.2210	-11.54	2.11	0.35
90000006	91.1417	10.9937	12.4493	0.0000	0.0000	0.0000	0.0222	+0.0224	+0.1990	-14.34	2.36	10.09
90000007	91.1417	10.9937	12.4493	0.0000	0.0000	0.0000	0.0222	+0.0224	+0.1990	-14.34	2.36	10.09
90000008	91.3400	27.0000	12.0000	0.0000	0.0000	0.0000	+0.0039	+0.0056	+0.0307	-15.10	-0.11	1.02
90000009	91.3400	27.0000	12.0000	0.0000	0.0000	0.0000	+0.0039	+0.0056	+0.0307	-15.10	-0.11	1.02
90000010	89.8744	41.4843	11.4688	0.0000	0.0000	0.0000	+0.0144	+0.0479	+0.1686	-15.60	-14.44	1.60
90000011	89.8744	41.4843	11.4688	0.0000	0.0000	0.0000	+0.0144	+0.0479	+0.1686	-15.60	-14.44	1.60
90010001	83.3500	54.9921	14.0060	0.0000	0.0000	0.0000	+0.0033	+0.0983	+0.1445	-21.07	-2.06	4.65
90010002	83.3500	54.9921	14.0060	0.0000	0.0000	0.0000	+0.0033	+0.0983	+0.1445	-21.07	-2.06	4.65
90010003	83.3500	54.5957	13.2354	0.0000	0.0000	0.0000	+0.0714	+0.0935	+0.1975	3.10	-0.11	-3.04
90010004	83.3500	54.5957	13.2354	0.0000	0.0000	0.0000	+0.0714	+0.0935	+0.1975	3.10	-0.11	-3.04
90010005	83.3500	51.4754	14.1498	0.0000	0.0000	0.0000	+0.0855	+0.0937	+0.1661	18.32	-0.48	+0.53
90010006	83.3500	51.4754	14.1498	0.0000	0.0000	0.0000	+0.0855	+0.0937	+0.1661	18.32	-0.48	+0.53
90010007	83.3500	48.2201	15.8129	0.0000	0.0000	0.0000	+0.0854	+0.0793	+0.1525	11.36	-0.58	+2.11
90010008	83.3500	48.2201	15.8129	0.0000	0.0000	0.0000	+0.0854	+0.0793	+0.1525	11.36	-0.58	+2.11
90010009	83.3500	44.3253	17.3516	0.0000	0.0000	0.0000	+0.0759	+0.0654	+0.1340	13.23	-0.63	+7.08
90010010	83.3500	44.3253	17.3516	0.0000	0.0000	0.0000	+0.0759	+0.0654	+0.1340	13.23	-0.63	+7.08
90010011	83.3500	39.4454	18.9914	0.0000	0.0000	0.0000	+0.0891	+0.0589	+0.1701	13.10	-0.67	+4.16
90010012	83.3500	39.4454	18.9914	0.0000	0.0000	0.0000	+0.0891	+0.0589	+0.1701	13.10	-0.67	+4.16
90010013	83.3500	34.2759	19.8895	0.0000	0.0000	0.0000	+0.0933	+0.0337	+0.1389	14.56	-0.76	+5.35
90010014	83.3500	34.2759	19.8895	0.0000	0.0000	0.0000	+0.0933	+0.0337	+0.1389	14.56	-0.76	+5.35
90010015	83.3500	30.4451	20.3972	0.0000	0.0000	0.0000	+0.0847	+0.0210	+0.1429	14.60	-0.85	-10.10
90010016	83.3500	30.4451	20.3972	0.0000	0.0000	0.0000	+0.0847	+0.0210	+0.1429	14.60	-0.85	-10.10
90010017	83.3500	27.0000	20.3500	0.0000	0.0000	0.0000	+0.0832	+0.0025	+0.0855	8.04	-0.58	-4.72
90010018	83.3500	27.0000	20.3500	0.0000	0.0000	0.0000	+0.0832	+0.0025	+0.0855	8.04	-0.58	-4.72
90010019	83.3500	23.1353	20.1488	0.0000	0.0000	0.0000	0.1061	+0.0034	+0.0793	13.11	-0.59	-3.39
90010020	83.3500	23.1353	20.1488	0.0000	0.0000	0.0000	0.1061	+0.0034	+0.0793	13.11	-0.59	-3.39
90010021	83.3500	19.4908	19.6920	0.0000	0.0000	0.0000	0.1356	+0.0196	+0.0846	22.54	-1.26	-1.65
90010022	83.3500	19.4908	19.6920	0.0000	0.0000	0.0000	0.1356	+0.0196	+0.0846	22.54	-1.26	-1.65
90010023	83.3500	15.8031	18.7821	0.0000	0.0000	0.0000	0.1397	+0.0442	+0.0931	32.62	-1.32	+1.45
90010024	83.3500	15.8031	18.7821	0.0000	0.0000	0.0000	0.1397	+0.0442	+0.0931	32.62	-1.32	+1.45
90010025	83.3500	12.3541	18.4054	0.0000	0.0000	0.0000	0.1772	+0.1023	+0.1428	18.82	-1.26	+4.68
90010026	83.3500	12.3541	18.4054	0.0000	0.0000	0.0000	0.1772	+0.1023	+0.1428	18.82	-1.26	+4.68
90010027	83.3500	9.1165	17.2352	0.0000	0.0000	0.0000	0.1300	+0.1334	+0.1661	18.46	-1.31	+5.35
90010028	83.3500	9.1165	17.2352	0.0000	0.0000	0.0000	0.1300	+0.1334	+0.1661	18.46	-1.31	+5.35
90010029	83.3500	5.7751	15.4119	0.0000	0.0000	0.0000	0.1732	+0.1485	+0.1753	17.74	-1.28	+4.97
90010030	83.3500	5.7751	15.4119	0.0000	0.0000	0.0000	0.1732	+0.1485	+0.1753	17.74	-1.28	+4.97
90010031	83.3500	4.1349	14.4169	0.0000	0.0000	0.0000	0.1810	+0.1302	+0.1541	14.37	-1.08	+1.67
90010032	83.3500	4.1349	14.4169	0.0000	0.0000	0.0000	0.1810	+0.1302	+0.1541	14.37	-1.08	+1.67
90010033	83.3500	0.9447	13.2288	0.0000	0.0000	0.0000	0.1733	+0.2646	+0.1463	10.47	-0.48	-1.44
90010034	83.3500	0.9447	13.2288	0.0000	0.0000	0.0000	0.1733	+0.2646	+0.1463	10.47	-0.48	-1.44
90010035	83.3500	-2.1914	11.2254	0.0000	0.0000	0.0000	0.1501	+0.2026	+0.2014	6.79	-0.45	-2.92
90010036	83.3500	-2.1914	11.2254	0.0000	0.0000	0.0000	0.1501	+0.2026	+0.2014	6.79	-0.45	-2.92
90010037	83.3500	-3.1720	10.1391	0.0000	0.0000	0.0000	0.1365	+0.2197	+0.2804	5.37	-0.27	-2.54

EDGE PANEL NEAR SCORE BOARD – WIND FROM AUDIENCE STAND

Nodes	Coordinates			Coordinate changes			Applied nodes			Residual forces		
Point No.	X-coor	Y-coor	Z-coor	DX	DY	DZ	RotX	RotY	RotZ	U	V	W
90020001	83.3535	-3.7500	9.4332	0.0000	0.0000	0.0000	0.0846	+0.1414	0.1887	-3.47	4.76	6.30
90020002	83.3535	-3.7500	9.4332	0.0000	0.0000	0.0000	0.0846	+0.1414	0.1887	-3.47	4.76	6.30
90020003	84.2761	-2.2500	10.2624	0.0000	0.0000	0.0000	0.1451	+0.2256	0.2983	-5.76	2.39	5.83
90020004	84.2761	-2.2500	10.2624	0.0000	0.0000	0.0000	0.1451	+0.2256	0.2983	-5.76	2.39	5.83
90020005	86.3229	1.1454	12.1137	0.0000	0.0000	0.0000	0.1455	+0.1396	0.2274	-11.49	1.57	8.84
90020006	86.3229	1.1454	12.1137	0.0000	0.0000	0.0000	0.1455	+0.1396	0.2274	-11.49	1.57	8.84
90020007	87.7213	4.6914	13.1914	0.0000	0.0000	0.0000	0.1268	+0.1477	0.2322	-12.49	2.49	9.70
90020008	87.7213	4.6914	13.1914	0.0000	0.0000	0.0000	0.1268	+0.1477	0.2322	-12.49	2.49	9.70
90040001	89.1982	9.3551	14.7404	0.0000	0.0000	0.0000	0.1330	+0.2346	0.2721	-14.14	1.97	10.33
90040002	89.1982	9.3551	14.7404	0.0000	0.0000	0.0000	0.1330	+0.2346	0.2721	-14.14	1.97	10.33
90040003	89.4354	11.2452	13.1707	0.0000	0.0000	0.0000	0.1449	+0.2377	0.2643	-15.63	-0.42	10.44
90040004	89.4354	11.2452	13.1707	0.0000	0.0000	0.0000	0.1449	+0.2377	0.2643	-15.63	-0.42	10.44
90050001	90.6951	14.4127	12.1244	0.0000	0.0000	0.0000	0.1356	+0.2173	0.2428	-13.46	-0.34	13.34
90050002	90.6951	14.4127	12.1244	0.0000	0.0000	0.0000	0.1356	+0.2173	0.2428	-13.46	-0.34	13.34
90060001	91.2313	21.4703	10.7362	0.0000	0.0000	0.0000	0.0473	+0.0844	0.1257	-10.76	-0.93	12.45
90060002	91.2313	21.4703	10.7362	0.0000	0.0000	0.0000	0.0473	+0.0844	0.1257	-10.76	-0.93	12.45
90070001	91.2039	33.4459	10.8241	0.0000	0.0000	0.0000	0.0350	+0.0335	0.1027	-10.24	+0.56	12.55
90070002	91.2039	33.4459	10.8241	0.0000	0.0000	0.0000	0.0350	+0.0335	0.1027	-10.24	+0.56	12.55
90080001	91.4154	39.7756	14.3321	0.0000	0.0000	0.0000	0.0466	+0.0071	0.1138	-11.23	+0.24	3.24
90080002	91.4154	39.7756	14.3321	0.0000	0.0000	0.0000	0.0466	+0.0071	0.1138	-11.23	+0.24	3.24
90090001	91.2313	32.2297	16.7342	0.0000	0.0000	0.0000	0.0218	+0.0441	0.0566	-17.38	+0.45	4.49
90090002	91.2313	32.2297	16.7342	0.0000	0.0000	0.0000	0.0218	+0.0441	0.0566	-17.38	+0.45	4.49
90100001	90.4691	37.1975	18.1744	0.0000	0.0000	0.0000	0.0239	+0.0327	0.0333	-16.53	-0.71	4.83
90100002	90.4691	37.1975	18.1744	0.0000	0.0000	0.0000	0.0239	+0.0327	0.0333	-16.53	-0.71	4.83
90080003	89.7414	33.3273	13.1427	0.0000	0.0000	0.0000	0.0460	+0.0217	0.1024	-16.24	-0.42	4.54
90080004	89.7414	33.3273	13.1427	0.0000	0.0000	0.0000	0.0460	+0.0217	0.1024	-16.24	-0.42	4.54
90090002	89.1982	44.4045	14.7486	0.0000	0.0000	0.0000	0.0455	+0.0459	0.1246	-14.45	-1.48	1.31
90090003	89.1982	44.4045	14.7486	0.0000	0.0000	0.0000	0.0455	+0.0459	0.1246	-14.45	-1.48	1.31
90100001	87.7213	49.3984	13.1914	0.0000	0.0000	0.0000	0.0585	+0.0774	0.1497	-11.78	-3.16	1.79
90100002	87.7213	49.3984	13.1914	0.0000	0.0000	0.0000	0.0585	+0.0774	0.1497	-11.78	-3.16	1.79
90110001	87.1239	52.4724	12.7053	0.0000	0.0000	0.0000	0.0724	+0.0898	0.1464	-9.55	-4.39	3.41
90110002	87.1239	52.4724	12.7053	0.0000	0.0000	0.0000	0.0724	+0.0898	0.1464	-9.55	-4.39	3.41
90110003	85.2791	55.1268	10.9532	0.0000	0.0000	0.0000	0.0595	+0.0470	0.0922	-4.04	-4.23	3.64
90110004	85.2791	55.1268	10.9532	0.0000	0.0000	0.0000	0.0595	+0.0470	0.0922	-4.04	-4.23	3.64
90110005	83.9936	57.7506	9.4332	0.0000	0.0000	0.0000	0.0455	+0.0653	0.0824	-3.97	-3.25	4.35

Statik, Version 13.00.

Statik: Version 13 Demo.

1.22s

Sediabena Sdn. Bhd. No. 11 Jalan Astaka U8/84, Sekyen U8 Bukit Jelutong 40150 Shah Alam Tel: (603)7847 3333 Fax: (603)7847 2222	Project No: TPL 40581 Date: 26 June 2011 Doc No: Q326-KSP-CAL-001 Rev 0	Page:
Project : Upgrading of Aquatic Center Wisma Belia Indera Mahkota, Kuantan Title: Swimming Pool Tensile Membrane Roof - Structural Analysis & Design		

APPENDIX C

TECHNICAL DATA

C1

NANTONG WIRE ROPE (GROUP) CO., LTD.

MILL TEST CERTIFICATE

DATE: Oct. 27 2005

1. Manufactory	NANTONG WIRE ROPE (GROUP) CO., LTD.	
2. Ordering company.	KENG WAH HARDWARE CO PTE LTD	
3. S/C No.	KWXT-0504	
4. Length of rope	300	M
5. Rope diameter.	16	MM
6. Construction.	1X19	
7. Kind of core.		
8. Surface of wire rope.	GALV	
9. Nominal tensile strength.	1570	N/MM2
10. Nominal breaking force.	211.0	KN
11. Actual breaking force	215.5	KN
12. Lay	RHRL	
13. Total weight.	1.532	KGS
14. Amount of coil	1	
15. Lube.	DRY	
16. Delivery date.	Oct. 28, 2005	

The manufactured and delivered wire ropes of above indicated order correspond with the technical term of delivery according to BS 302.

CHEMICAL ANALYSIS OF WIRE ROD

Chemical composition (%)

C	Mn	S	P	Si
0.73	0.71	0.013	0.011	0.19

I-CMIC No. 223821 UNITED OVERSEAS BANK LTD

南通鋼絲繩(集團)有限公司 NANTONG WIRE ROPE (GROUP) CO., LTD

C3

VERSEIDAG COATING AND COMPOSITE

duraskin®

B 18089

C2

Manho Rope & Wire Ltd.

Registered by
AMERICAN BUREAU OF SHIPPING
LLOYD'S REGISTER OF SHIPPING

Manufactures & Exporters
100-1, HWA MYOUNG-DONG BUK-KU, BUSAN, KOREA
P.O.BOX NO.377 BUSAN
TELEX NO.K23941,
HEAD OFFICE TEL:(82-51)- (9)NINE LINES)

Sheet No. 2007A-292-01-R1
Date SEP.30.2007

MILL TEST CERTIFICATE

Customer : Messrs KENG WAH HARDWARE CO PTE LTD
Supplier : Messrs MANHO ROPE & WIRE LTD.
L/C No.
Order No MK2007-065
Commodity PE COATED GALVANIZED STEEL WIRE ROPE
Construction 6X37 IWRC
Grade
'ification BS 302
Lubrication
Order Quantity 300 feet/m
Reel No 1
~~Gross Weight~~ ~~Lbs/Kgs~~
Net Weight 1032.50 Lbs/Kgs

TEST RESULT

Rope Dia 28X32 (Actual) 28X32 Inch/mm Preforming GOOD
Kind of Lay RHRL Length of Lay Inch/mm
Actual Breaking Strength of Wire Rope 51.300 Lbs/Kgs
Nominal Dia. of Wire Inch/mm
Tensile Strength of Wires Min Max PSI/Kg/mm²
Number of Torsion of Wires Min Max Times
Weight of Zinc Coating g/m² OZ/ft²

CHEMICAL ANALYSIS OF WIRE ROD %

Heat No.	C	Si	Mn	P	S
66740	0.69	0.23	0.58	0.014	0.007

REMARKS

Quality Control Dept.

MHS-B102-30 Manho Rope & Wire Ltd. (203×280)

C4

duraskin®

DE	Typ III		B 18089
Trägergewebe			Glasfaser EC 3/4
Beschichtung			PTFE – Polytetrafluorethylen
Flächengewicht (g/m²)	DIN EN ISO 2286-2		1150
Breite (cm)	DIN EN ISO 2286-1		470
Höchstzugkraft (N/5 cm)	DIN 53354	Kette/Schuss	7000/6000
Weiterreißkraft (N)	DIN 53363	Kette/Schuss	500/500
Haftung (N/5 cm)	DIN 53357		80
Transluzenz bei 550 nm (%)	DIN 5036		14
Brandverhalten	DIN 4102		B1*

Hinweis: Produkt ist nicht zu vernähen, sondern mit Hochfallen zu verschweißen. *Weitere Zertifikate erhältlich auf Anfrage. Änderungen, die dem technischen Fortschritt dienen, behalten wir uns vor. Werte ohne Toleranzangaben sind Nennwerte mit einer Toleranz von ± 5%. Die Angaben entsprechen unserem heutigen Kenntnisstand und sollen ohne Rechtsverbindlichkeit informieren. Transluzenz bezieht sich auf ausgerüstete Ware.

UK	Type III		B 18089
Base fabric			Glass fibre EC 3/4
Coating			PTFE – polytetrafluoroethylene
Total weight (g/m²)	DIN EN ISO 2286-2		1150
Width (cm)	DIN EN ISO 2286-1		470
Tensile strength (N/5 cm)	DIN 53354	warp/weft	7000/6000
Tear resistance (N)	DIN 53363	warp/weft	500/500
Adhesion (N/5 cm)	DIN 53357		80
Translucency at 550 nm (%)	DIN 5036		14
Flame retardancy	DIN 4102		B1*

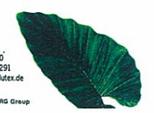
Note: Product must not be sewn, but heatbar welded. *Additional certificates available on request. Subject to change regarding technical upgrades. Values indicated without tolerance levels are nominal values with a tolerance range ± 5%. All data presented here is given in the best of our current knowledge for guidance purposes and is not legally binding. Translucency refers to bleached version.

F	Type III		B 18089
Tissu support			Fibre de verre EC 3/4
Enduction de base			PTFE – Polytétrafluoréthylène
Poids total (g/m²)	DIN EN ISO 2286-2		1150
Longueur (cm)	DIN EN ISO 2286-1		470
Résistance à la rupture (N/5 cm)	DIN 53354	chaîne/trame	7000/6000
Résistance à la déchirure (N)	DIN 53363	chaîne/trame	500/500
Adhésion (N/5 cm)	DIN 53357		80
Translucidité à 550 nm (%)	DIN 5036		14
Réaction au feu	DIN 4102		B1*

Remarques : le produit ne doit pas être cousu mais soudé à l'aide d'une électrode chaude. *D'autres certificats sont disponibles sur demande. Sous réserve de toutes modifications dans le cadre d'améliorations techniques. Les valeurs mentionnés sans tolérance sont des valeurs nominales avec une tolérance de ± 5%. Les indications correspondent à notre savoir actuel et sont données à titre informatif sans obligation juridique. La translucidité se rapporte à la version blanche.

ESP	Tipo III		B 18089
Tejido base			Fibra de vidrio EC 3/4
Revestimiento			PTFE – Politetrafluoretileno
Peso total (g/m²)	DIN EN ISO 2286-2		1150
Ancho (cm)	DIN EN ISO 2286-1		470
Resistencia a la rotura (N/5 cm)	DIN 53354	urdimbre/trama	7000/6000
Resistencia al desgarro (N)	DIN 53363	urdimbre/trama	500/500
Adherencia (N/5 cm)	DIN 53357		80
Translucidez en 550 nm (%)	DIN 5036		14
Ignifugación	DIN 4102		B1*

Notas: El producto no debe ser cosido, sino soldado con barra caliente. *Otros certificados obtenibles previa petición. Reservado el derecho a realizar modificaciones destinadas al avance técnico. Los valores sin datos de tolerancias obedecen a valores nominales con una tolerancia de ± 5%. Los datos se corresponden con nuestro estado actual de conocimiento y su finalidad es informar sin vinculación legal. La translucidez hace referencia a la versión blanqueada.



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The reliable protection