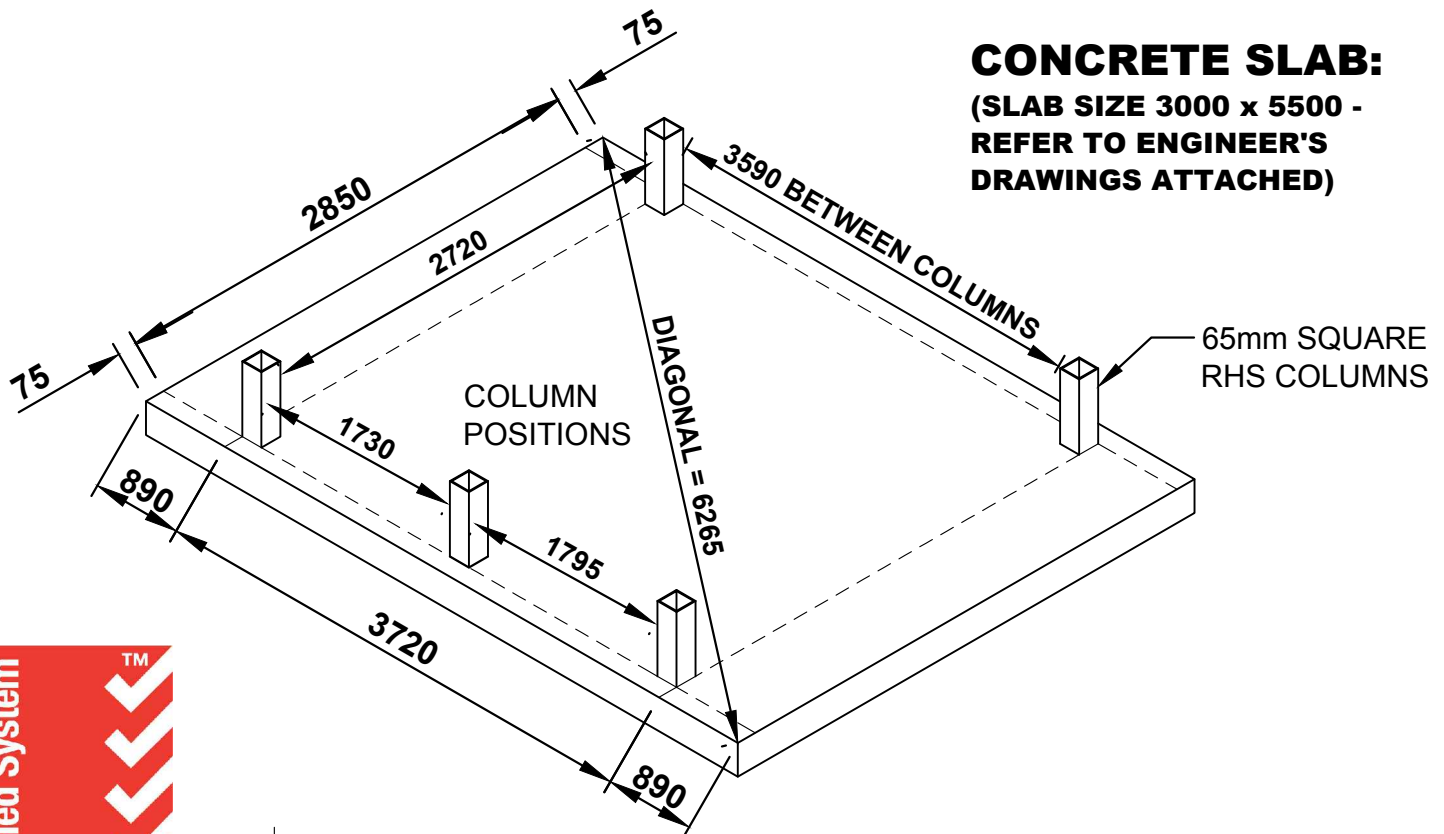
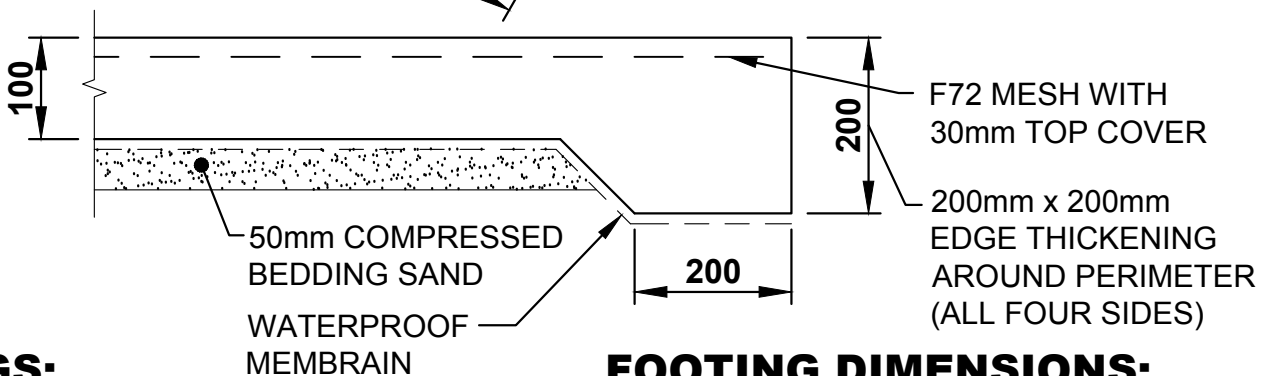


WIND LOADINGS
OF: W50C (C2)

CONCRETE SLAB:
(SLAB SIZE 3000 x 5500 -
REFER TO ENGINEER'S
DRAWINGS ATTACHED)



Quality
ISO 9001



FOOTINGS:

WHERE NO CONCRETE SLAB IS PROPOSED,
CONCRETE FOOTINGS WITH DIMENSIONS
SHOWN ON THIS PAGE MAY BE USED.

FOOTING DIMENSIONS:

700 SQUARE x 600 DEEP

SITE PREPARATION

- Local council approval must be obtained prior to construction of the carport. Once you have selected your site you will need to create and lodge a site plan to your local council or certifier. You will also have to attach a copy of the engineering drawings at the back of these instructions to your site plan.
- The site for the carport must be level, refer to concrete and foundation notes on engineers drawing 06205-003-CP03.

GENERAL INSTRUCTIONS

- Before commencing any assembly, read through these instructions and engineers drawings in detail to gain a thorough understanding of assembly methods and associated details.
- Some components have been pre-punched. Some 10mm holes will still have to be drilled. It may be easier to drill a small pilot hole first.
- Measure, and check off all components using the parts lists on the following pages prior to commencement. To prevent damage in transit, some components may be packed inside others, almost hidden. Carefully examine inside each component to ensure that you have located every item. If a discrepancy is found, contact Absco industries immediately.

- SPIRIT LEVEL
- SPANNERS
- 10mm MASONRY DRILL BIT
- TAPE MEASURE
- CLAMP OR VICE GRIPS
- HACKSAW

TOOLS REQUIRED



10mm DRILL BIT AND
MASONRY DRILL BIT

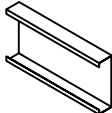
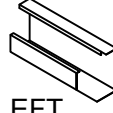
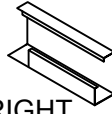

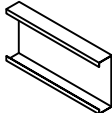
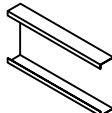
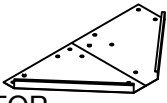
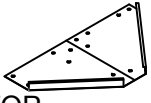
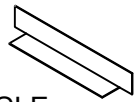
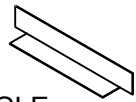





A NOTE ON SAFETY

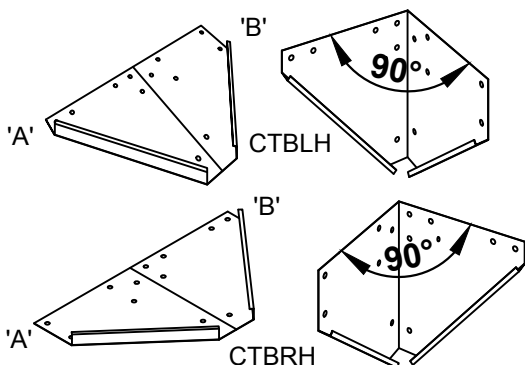
- Some parts may have sharp edges. It is advisable to wear gloves when handling these items and safety glasses if drilling holes. Sensible shoes are highly recommended.
- It is highly recommended to erect the carport with at least two or more people.



COMPONENTS PACKING LIST - CHECK OFF ALL COMPONENTS

CPSW50 SINGLE CARPORT FRAME COMPONENTS							
QTY	COMPONENT DESCRIPTION	PART No.	CHECK	QTY	COMPONENT DESCRIPTION	PART No.	CHECK
2	 EDGE BEAM L= 3000	EB		2	 EDGE BEAM LEFT HAND L= 2750	EBLH	
2	 EDGE BEAM RIGHT HAND L= 2750	EBRH		6	 EDGE BEAM SPLICE PLATE L= 608	EBSP	
3	 CROSS BEAM L= 2720	CB		2	 CROSS BEAM L= 2850	CB	
3	 COLUMN TOP BRACKET LEFT HAND	CTBLH		3	 COLUMN TOP BRACKET RIGHT HAND	CTBRH	
4	 30 x 30 ANGLE ROOF BRACE L=920	ARB 920		2	 30 x 30 ANGLE ROOF BRACE L=855	ARB 855	
4	 65 x 65 x 2.5 STEEL COLUMN L = 2250	RHS		2	 65 x 65 x 2.5 STEEL COLUMN L = 2200	RHS	
8	 STEEL SHEET L= 2820	SHEET					

BEND COLUMN TOP BRACKETS (CTBLH & CTBRH)



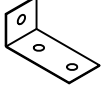
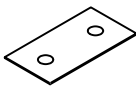


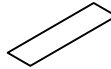







BEND EACH COLUMN TOP BRACKET ALONG THE SLOTTED CENTRE LINE, SIMPLY BY HOLDING THE BRACKETS AT POINTS A & B AS SHOWN.

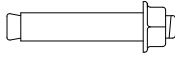

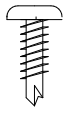


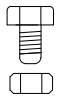
APPLY SUFFICIENT PRESSURE TO FORM A 90 DEGREE ANGLE ALONG THE BEND LINE.

ENSURE THAT THE EXISTING PRE-FOLDED EDGES ALWAYS FACE INWARDS. THE END RESULT WILL GIVE YOU TWO LEFT HAND AND TWO RIGHT HAND BRACKETS.

COMPONENTS PACKING LIST - CHECK OFF ALL COMPONENTS

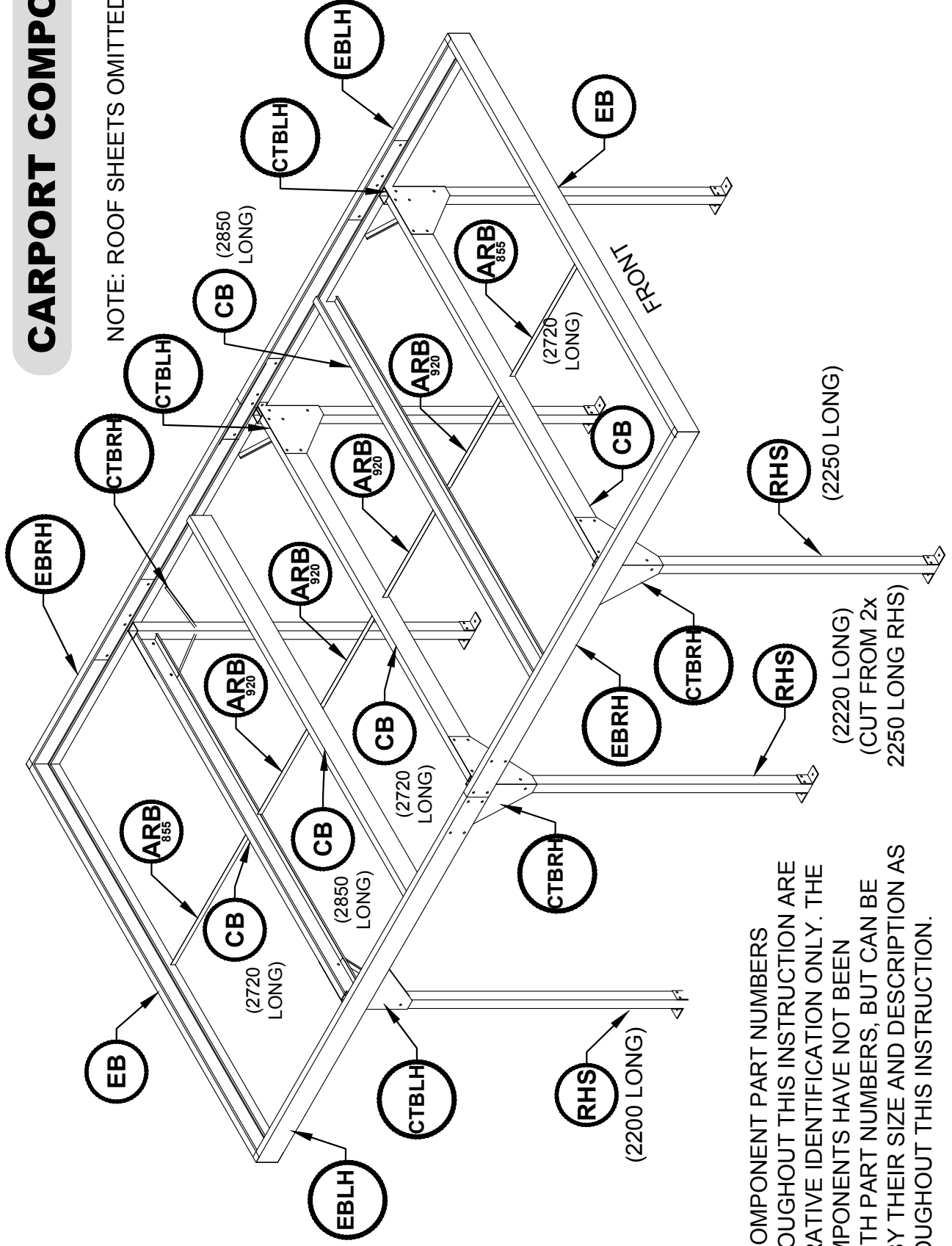
CPSW50 SINGLE CARPORT FRAME ACCESSORIES							
QTY	COMPONENT DESCRIPTION	PART No.	CHECK	QTY	COMPONENT DESCRIPTION	PART No.	CHECK
4	 JOINER ANGLE 50 x 50 L = 45mm (EDGE BEAM INNER CORNER CONNECTOR)	JA-1		4	 JOINER ANGLE 50 x 50 L = 100mm (EDGE BEAM OUTER CORNER CONNECTOR)	JA-2	
8	 JOINER ANGLE 100 x 50 L = 50mm (MID CROSS BEAM TO EDGE BEAM CONNECTOR)	JA-3		4	 50mm JOINER PLATE L = 100mm (BACKING SUPPORT PLATE FOR JA-3)	JP	
12	 75 x 75 ANGLE COLUMN BASE BRACKET L = 65mm (CONNECT COLUMNS TO CONCRETE)	CBB		12	 25mm WIDE FLAT STRIPS L = 270mm (FOLD FOR LATER USE AS ROOF BRACKETS)	RB	
2	 25mm WIDE FLAT STRIPS L = 270mm (FOLD FOR LATER USE AS DOWNPIPE STRAPS)	DS		1	 50mm PVC DOWNPIPE L = 1880mm	DP-1	
1	 50mm PVC DOWNPIPE L = 900mm	DP-2		2	 50mm PVC DOWNPIPE 90° bend	DP-3	
1	 50mm PVC DOWNPIPE 45° bend	DP-4		1	50mm ROUND GALV. GUTTER DROP FOR DOWNPIPE 	DP-5	

COMPONENTS PACKING LIST - CHECK OFF ALL COMPONENTS

CPSW50 SINGLE CARPORT FRAME ACCESSORIES (CONT.)					
QTY	COMPONENT DESCRIPTION	CHECK	QTY	COMPONENT DESCRIPTION	CHECK
12	 12mm DYNABOLTS		120	 NEOPREHNE WASHERS	
200	 10mm x 16mm WAFER HEAD SELF DRILLING TEK SCREWS		280	 WASHERS	
24	 10mm x 80mm BOLTS & NUTS		1	ASSEMBLY INSTRUCTIONS	
120	 10mm x 20mm BOLTS & NUTS				

Absco Skillion Carport - Model: CPSW50

CARPOR COMPONENTS



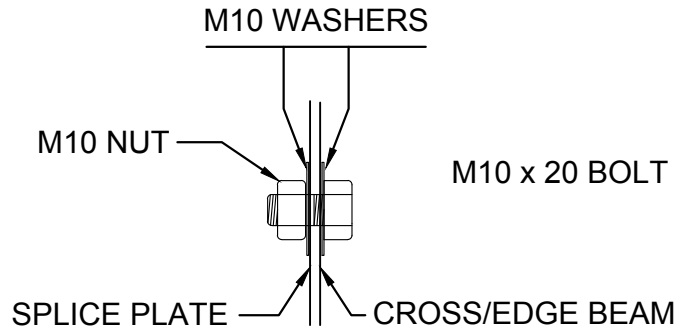
NOTE: ROOF SHEETS OMITTED FOR CLARITY

NOTE: THE COMPONENT PART NUMBERS SHOWN THROUGHOUT THIS INSTRUCTION ARE FOR ILLUSTRATIVE IDENTIFICATION ONLY. THE ACTUAL COMPONENTS HAVE NOT BEEN BRANDED WITH PART NUMBERS, BUT CAN BE IDENTIFIED BY THEIR SIZE AND DESCRIPTION AS NOTED THROUGHOUT THIS INSTRUCTION.

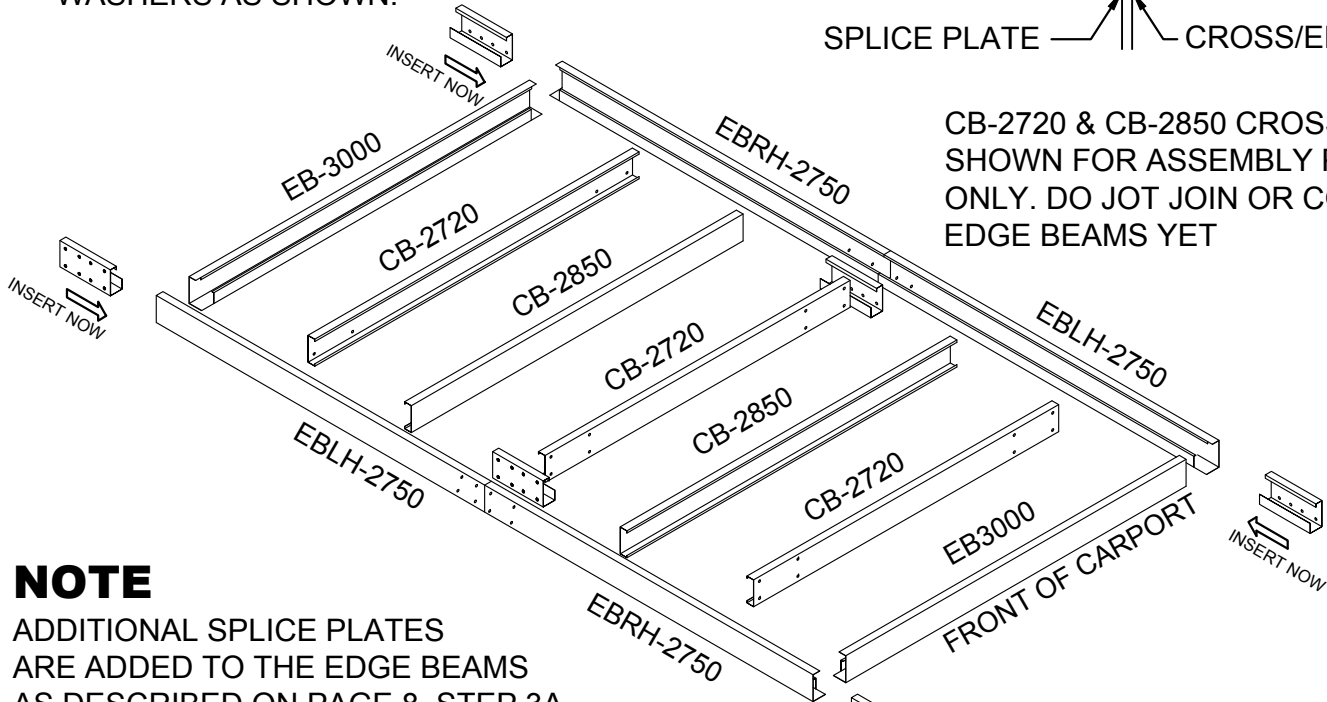
Absco Skillion Carport - Model: CPSW50

STEP 1.

JOIN THE EDGE BEAMS TOGETHER WITH THE SPLICE PLATES, USING M10 x 20 BOLTS, NUTS AND WASHERS AS SHOWN.

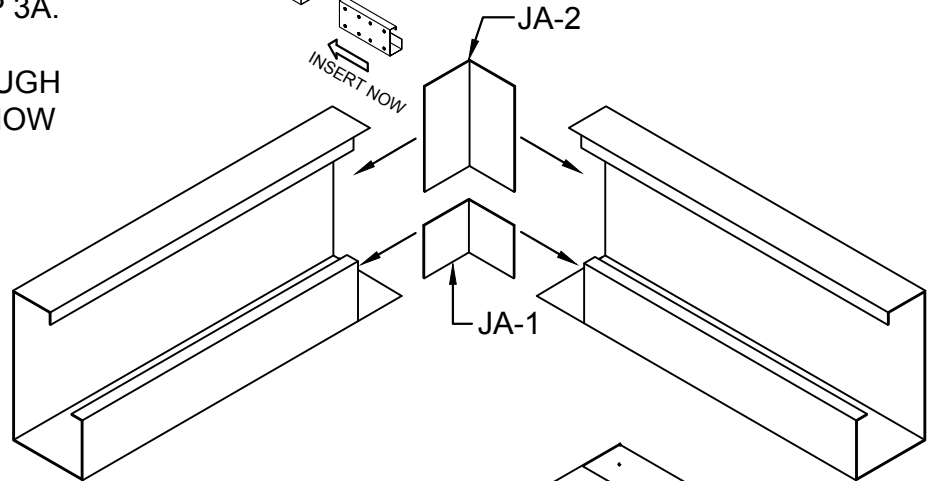


CB-2720 & CB-2850 CROSS BEAMS SHOWN FOR ASSEMBLY PURPOSES ONLY. DO NOT JOIN OR CONNECT TO EDGE BEAMS YET



NOTE

ADDITIONAL SPLICE PLATES ARE ADDED TO THE EDGE BEAMS AS DESCRIBED ON PAGE 8, STEP 3A. IT IS EASIER TO INSERT THESE PLATES BY SLIDING THEM THROUGH THE END OF THE EDGE BEAMS NOW PRIOR TO BOLTING THE FRAME TOGETHER.



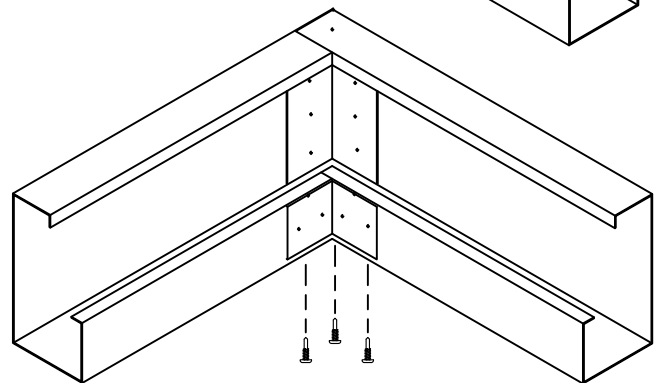
STEP 2.

SECURE THE EDGE BEAMS TOGETHER AT EACH CORNER USING THE JOINER ANGLES AS SHOWN.

THE JOINER ANGLES SHOULD BE POSITIONED ON THE INSIDE OF THE EDGE BEAMS, HELD WITH 'G' CLAMPS, AND FASTENED WITH TEK SCREWS FROM THE OUTSIDE OF THE EDGE BEAMS.

SEAL ALL JOINTS WITH SILICONE.

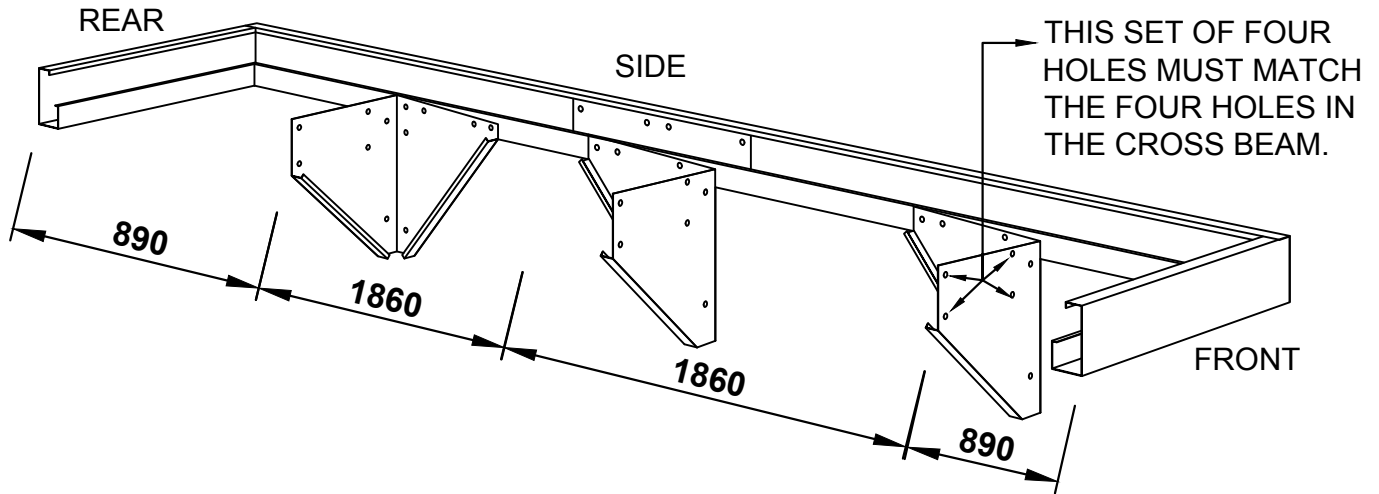
THE EXTERNAL DIMENSIONS OF THIS FRAME SHOULD MATCH THE CONCRETE SLAB SIZE OF 3000 x 5500 WITH A DIAGONAL MEASUREMENT OF 6265, AS SHOWN ON THE FRONT PAGE OF THIS INSTRUCTION.



ALSO FASTEN THE BOTTOM OVERLAP SECTIONS OF THE EDGE BEAMS WITH THREE TEK SCREWS.

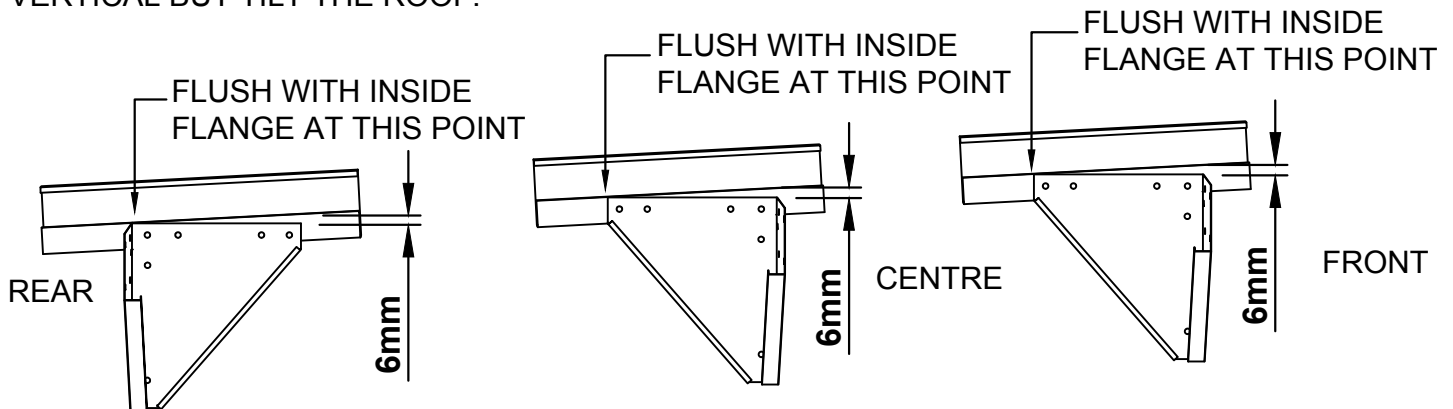
STEP 3.

MARK OFF THE SIDE BEAMS TO THE DIMENSIONS SHOWN BELOW. THESE ARE THE POSITIONS FOR LOCATING THE COLUMN TOP BRACKETS, TO WHICH THE COLUMNS AND CROSS BEAMS WILL BE LATER CONNECTED.

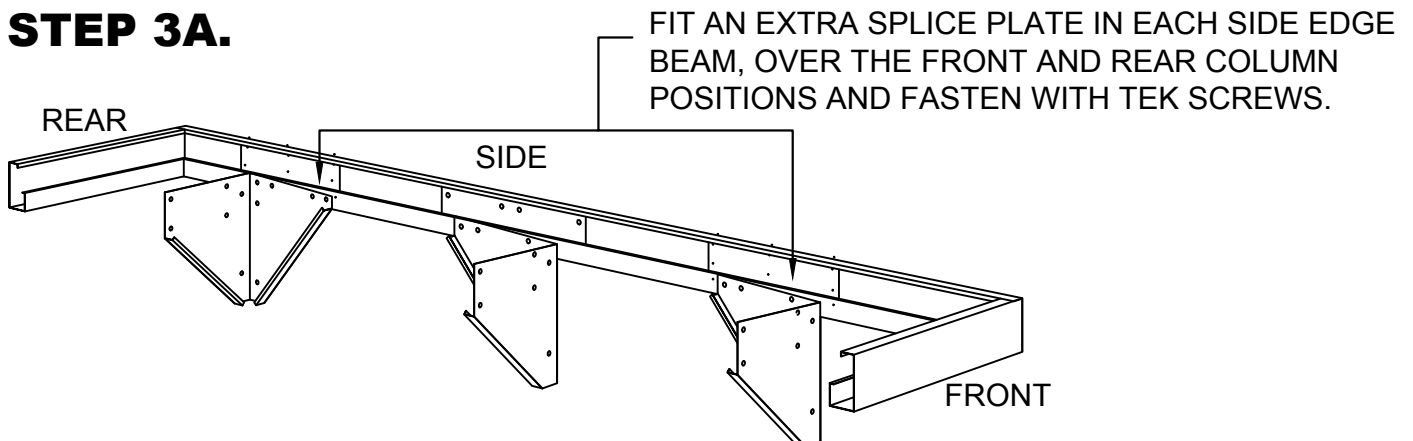


THE REAR RHS COLUMNS ARE 50mm SHORTER THAN THE FRONT RHS COLUMNS. THIS PRODUCES ABOUT A ONE DEGREE FALL IN THE ROOF, TO ALLOW RAINWATER TO FLOW TO THE REAR DOWNPIPE.

THEREFORE, TO ENSURE THAT THE COLUMNS WILL REMAIN VERTICAL WHEN THE STRUCTURE IS RAISED, EACH COLUMN TOP BRACKET MUST BE OFFSET BY 6mm AS SHOWN BELOW. YOU CAN SEE BELOW HOW THE END RESULT WILL KEEP THE COLUMNS VERTICAL BUT TILT THE ROOF.

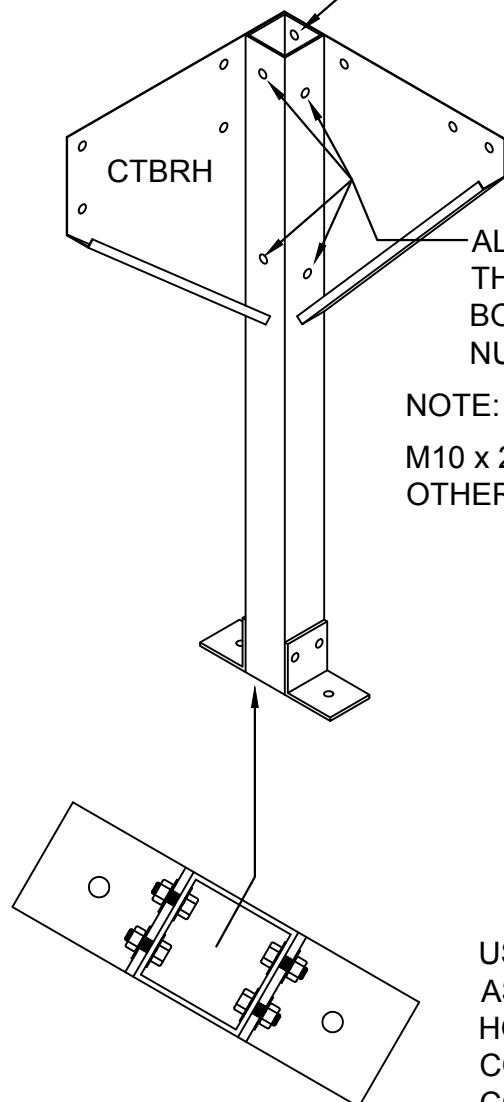


STEP 3A.



MARK THE HOLE POSITIONS FOR THE FOUR HOLES TO BE DRILLED IN THE BEAMS AT EACH LOCATION, AND DRILL 10mm HOLES. DO NOT FASTEN THE COLUMN TOP BRACKETS TO THE EDGE BEAMS AT THIS STAGE.

STEP 4. CONSTRUCTION PIVOT HOLE

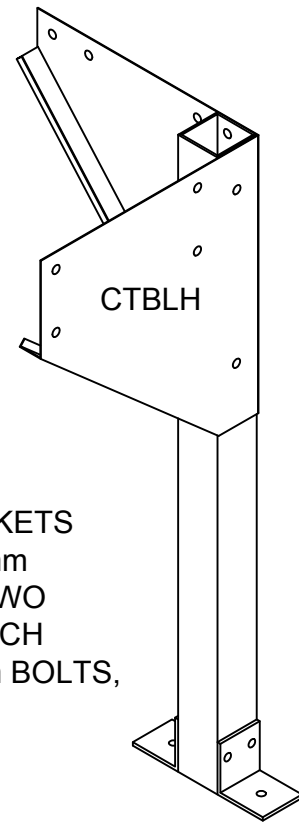


USING THE COLUMN TOP BRACKET AS A TEMPLATE, DRILL THIS HOLE IN EACH COLUMN. IT WILL LATER BE USED AS THE PIVOT POINT TO LIFT UP THE STRUCTURE.

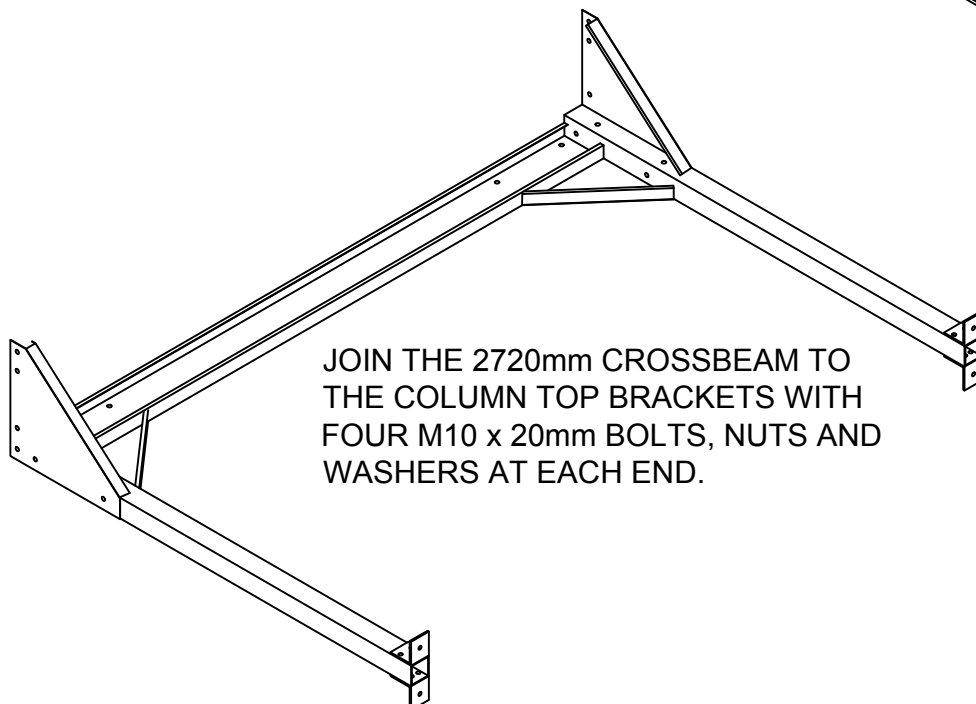
ALSO USING THE COLUMN TOP BRACKET AS A TEMPLATE, DRILL THESE FOUR HOLES THROUGH 'BOTH' SIDES OF THE COLUMN. JOIN BOTH SECTIONS TOGETHER WITH FOUR M10 X 80mm LONG BOLTS, NUTS AND WASHERS.

NOTE: (16 x 80mm LONG BOLTS SUPPLIED = 4 PER COLUMN)

M10 x 20mm BOLTS ARE USED AT ALL OTHER LOCATIONS.

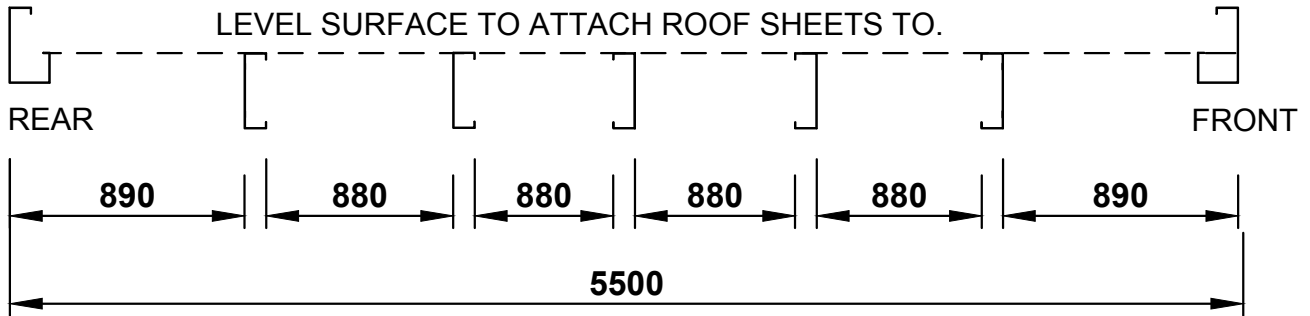


USING THE COLUMN BASE BRACKETS AS TEMPLATES, DRILL FOUR 10mm HOLES IN EACH COLUMN. JOIN TWO COLUMN BASE BRACKETS TO EACH COLUMN WITH FOUR M10 x 20mm BOLTS, NUTS AND WASHERS.

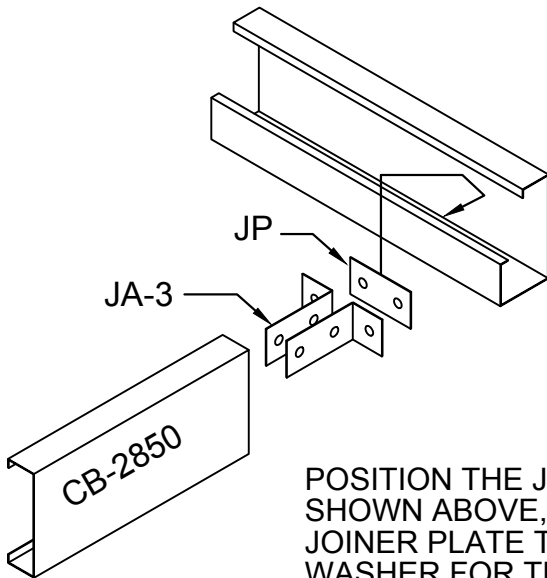


JOIN THE 2720mm CROSSBEAM TO THE COLUMN TOP BRACKETS WITH FOUR M10 x 20mm BOLTS, NUTS AND WASHERS AT EACH END.

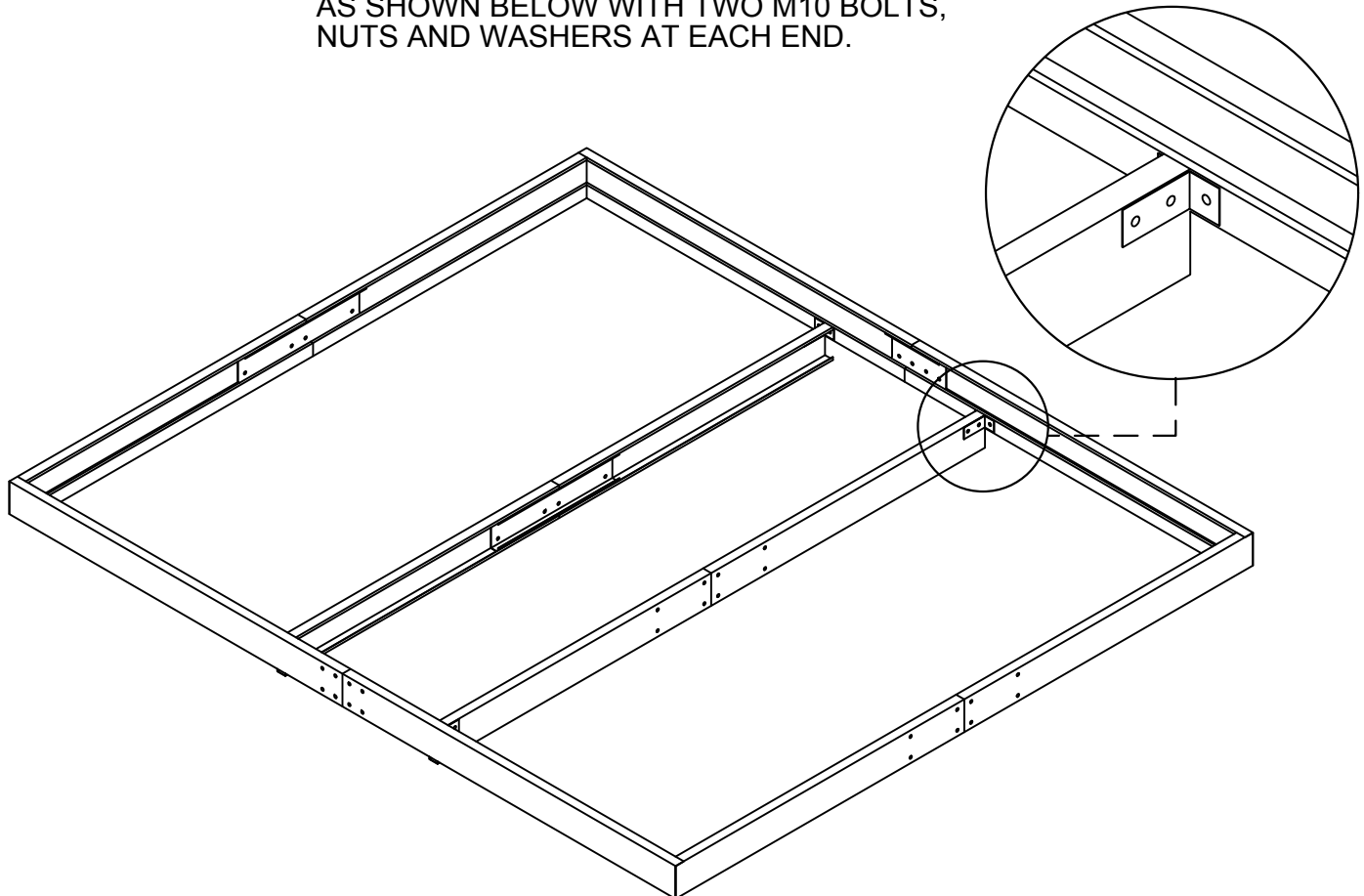
STEP 5. MARK THE POSITIONS FOR THE REMAINING CROSS BEAM ON THE EDGE BEAMS.



USING THE JA-3 JOINER ANGLE AS A TEMPLATE, DRILL TWO 10mm HOLES IN EACH END OF THE CROSS BEAM. SECURE TWO JA-3 JOINER ANGLES TO EACH END OF THE CROSS BEAM WITH TWO M10 x 20mm BOLTS, NUTS AND WASHERS. THE JOINER ANGLES SHOULD BE FLUSH WITH THE TOP OF THE CROSS BEAM TO ACHIEVE A LEVEL SURFACE TO ATTACH THE ROOF SHEETS TO.



POSITION THE JOINER PLATE (JP) ON THE EDGE BEAM TO THE DIMENSIONS SHOWN ABOVE, AND DRILL TWO 10mm HOLES IN THE EDGE BEAM. MOVE THE JOINER PLATE TO THE INSIDE OF THE EDGE BEAM, TO ACT AS A LARGE WASHER FOR THE BOLTS. SECURE THE CROSS BEAMS TO THE EDGE BEAMS AS SHOWN BELOW WITH TWO M10 BOLTS, NUTS AND WASHERS AT EACH END.

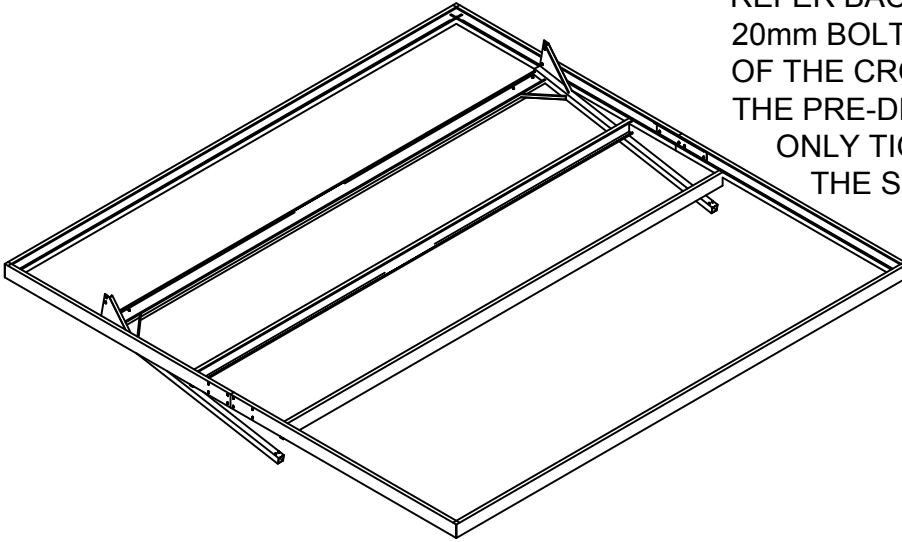


STEP 6.

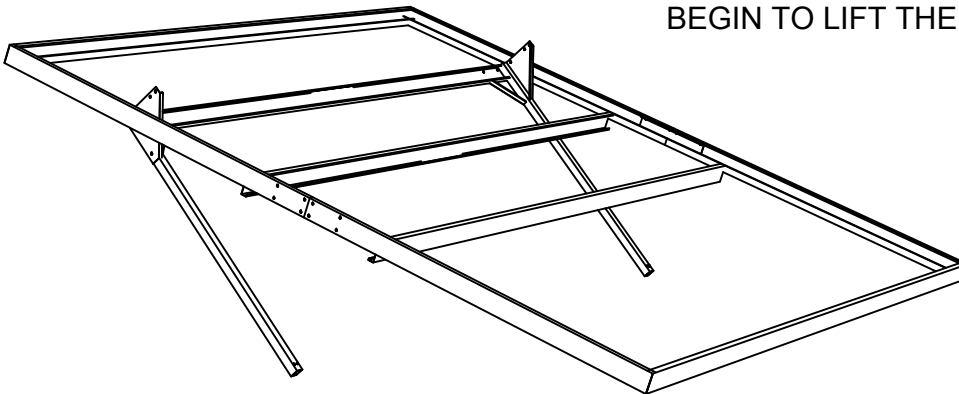
YOU WILL REQUIRE ASSISTANCE FROM ANOTHER PERSON TO LIFT THE ROOF STRUCTURE UP.

PIVOT HOLE CONNECTION.

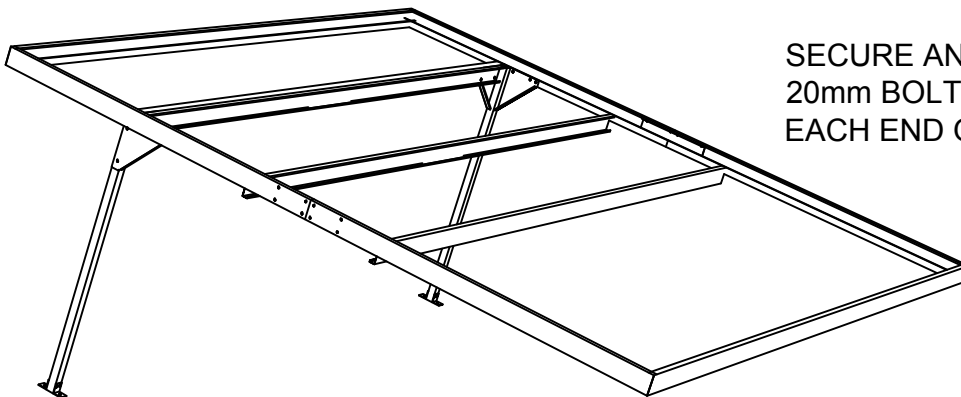
REFER BACK TO STEP 4. LOCATE ONE M10 x 20mm BOLT, NUT AND WASHER AT EACH END OF THE CROSS BEAM/COLUMN ASSEMBLY TO THE PRE-DRILLED HOLE IN THE EDGE BEAM. ONLY TIGHTEN FINGER TIGHT TO ALLOW THE SECTIONS TO MOVE DURING LIFTING.



WITH ONE PERSON HOLDING EACH COLUMN, BEGIN TO LIFT THE ROOF STRUCTURE.

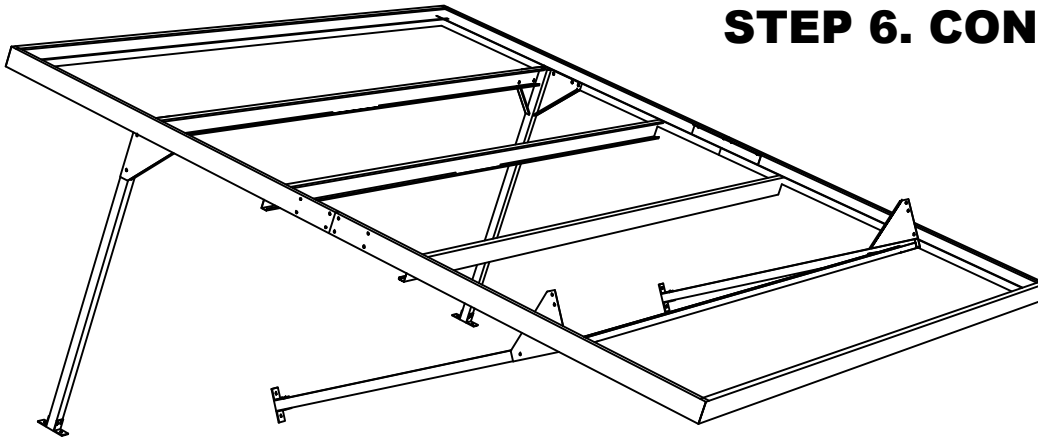


CONTINUE LIFTING THE ROOF STRUCTURE UNTIL A SECOND BOLT CAN BE FASTENED TO THE COLUMN TOP BRACKET AND EDGE BEAM.



SECURE AND TIGHTEN ALL FOUR M10 x 20mm BOLTS NUTS AND WASHERS AT EACH END OF THE CROSS BEAM.

STEP 6. CONTINUED



REPEAT THE LIFTING PROCEDURE FOR THE FRONT CROSS BEAM ASSEMBLY. WITH THE STRUCTURE NOW STANDING, POSITION AND SECURE THE CENTRE CROSS BEAM ASSEMBLY.

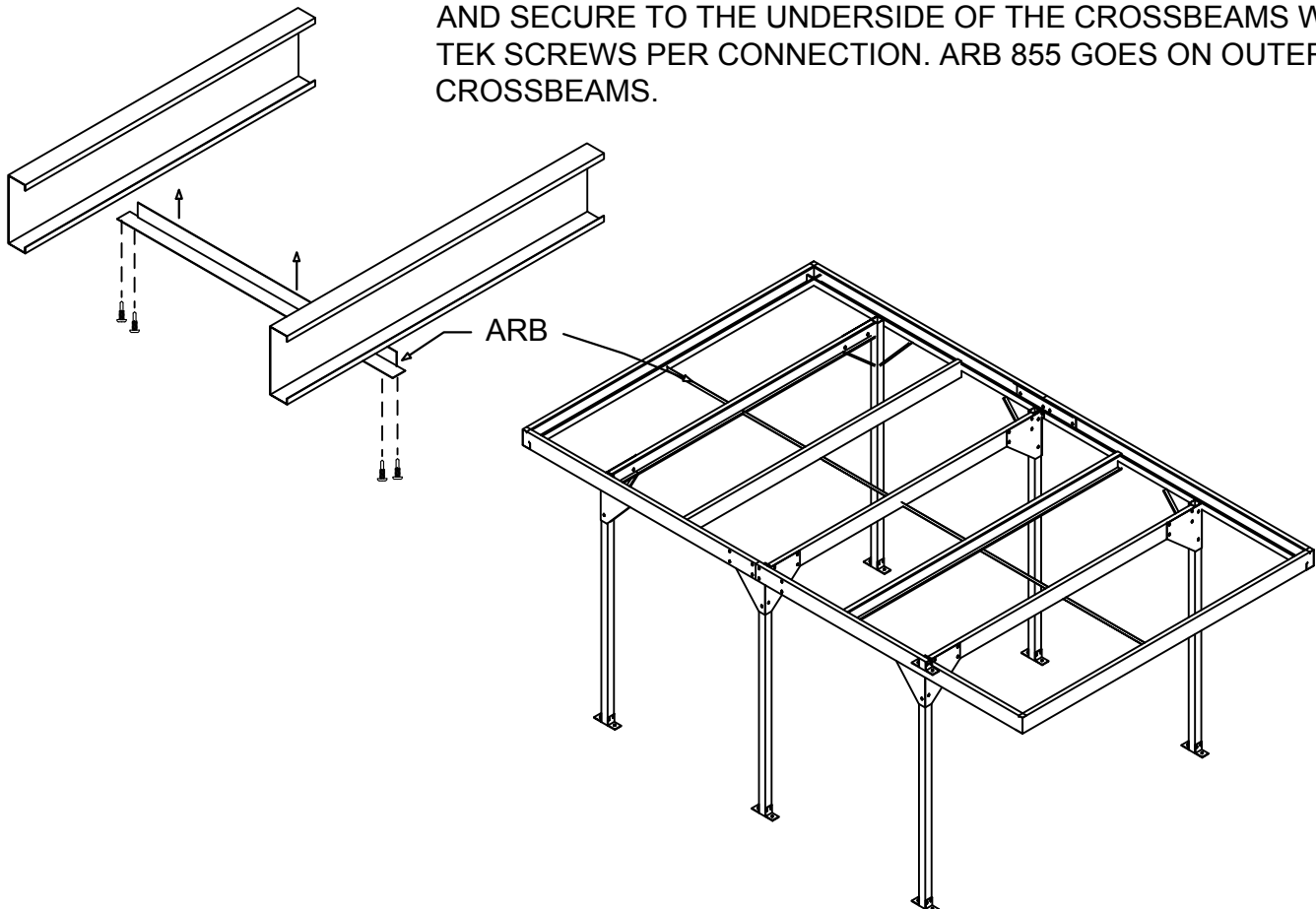
DOUBLE CHECK TO ENSURE THAT ALL BOLTS AND NUTS (INCLUDING SPLICE PLATE CONNECTIONS) ARE STILL FULLY TIGHTENED. IT IS ALSO VERY IMPORTANT (ALTHOUGH AWKWARD) TO ENSURE THAT THE BOLTS SECURING THE BASE BRACKETS TO THE COLUMNS ARE VERY TIGHT, TO REDUCE THE AMOUNT OF SWAY IN THE STRUCTURE.

STEP 7.

TO THE DIMENSIONS SHOWN ON THE FRONT PAGE OF THIS INSTRUCTION, SECURE THE FRAME TO THE CONCRETE SLAB WITH THE M12 DYNABOLTS PROVIDED. YOU WILL REQUIRE AN M12 MASONRY DRILL BIT TO DRILL INTO THE CONCRETE.

STEP 8.

EQUALLY SPACE THE SIX ANGLE ROOF BRACES (ARB) AS SHOWN, AND SECURE TO THE UNDERSIDE OF THE CROSSBEAMS WITH TWO TEK SCREWS PER CONNECTION. ARB 855 GOES ON OUTERMOST CROSSBEAMS.

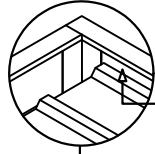
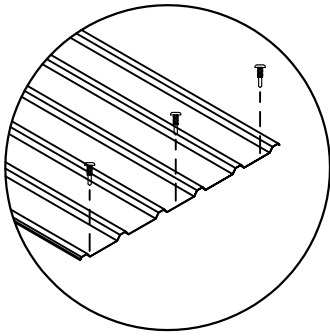


STEP 9.

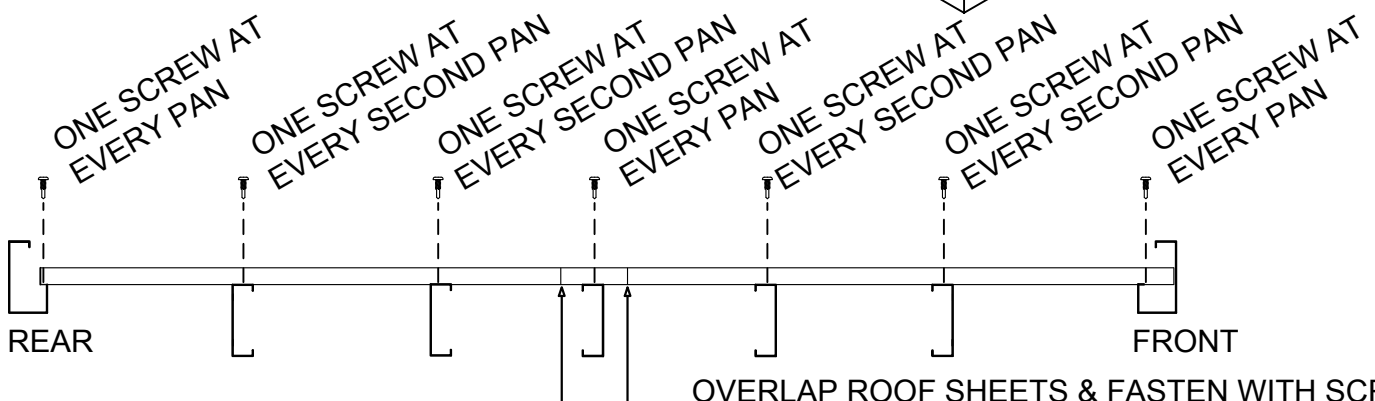
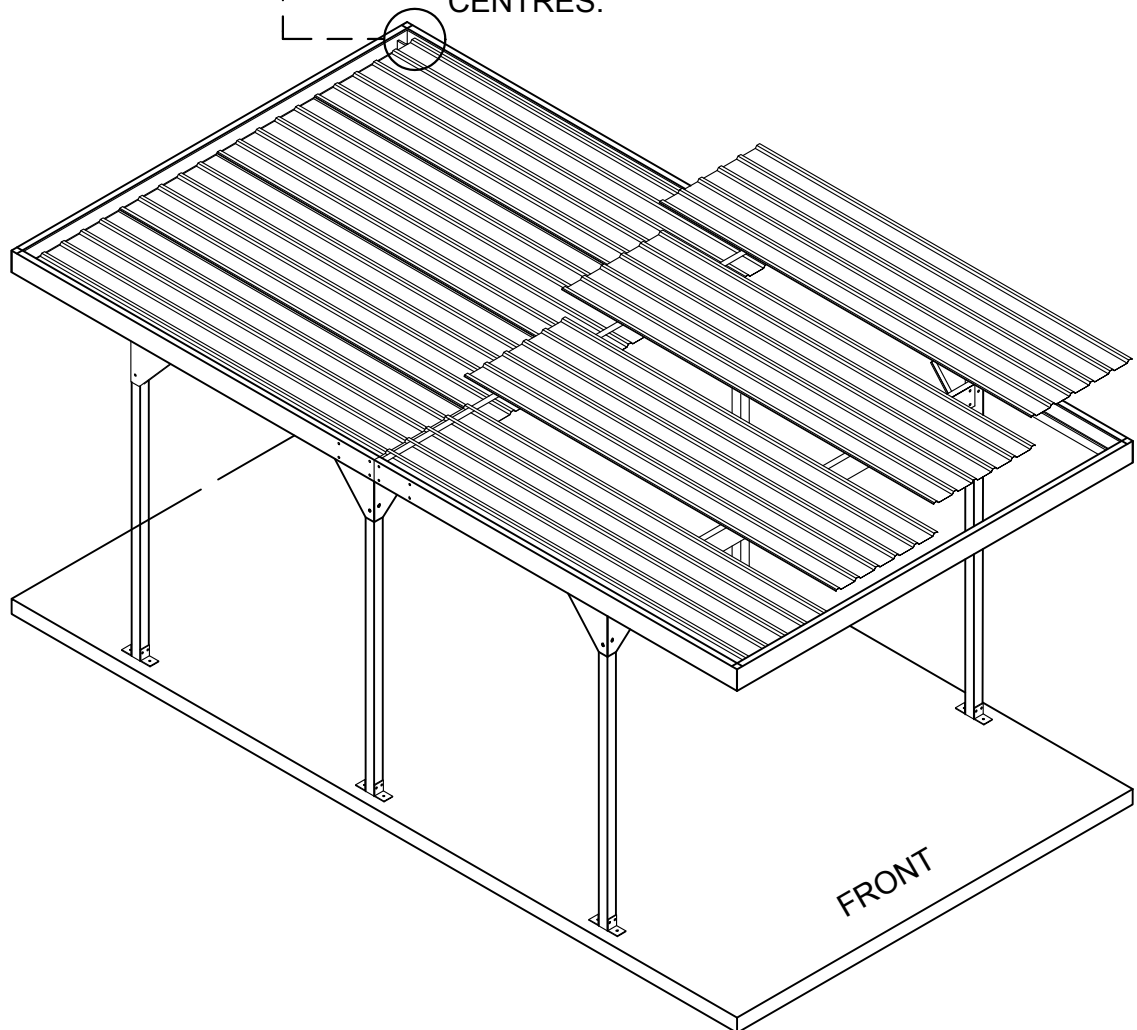
SECURE 8 x 2820mm ROOF SHEETS TO FRAME.

ALL ROOF SHEETS ARE PAN-FIXED. ie SCREW THROUGH THE FLAT PAN OF THE SHEET INTO THE FRAMEWORK.

SLIP THE NEOPRENE WASHERS ON TO THE SELF DRILLING SCREWS FOR A WATER TIGHT CONNECTION.



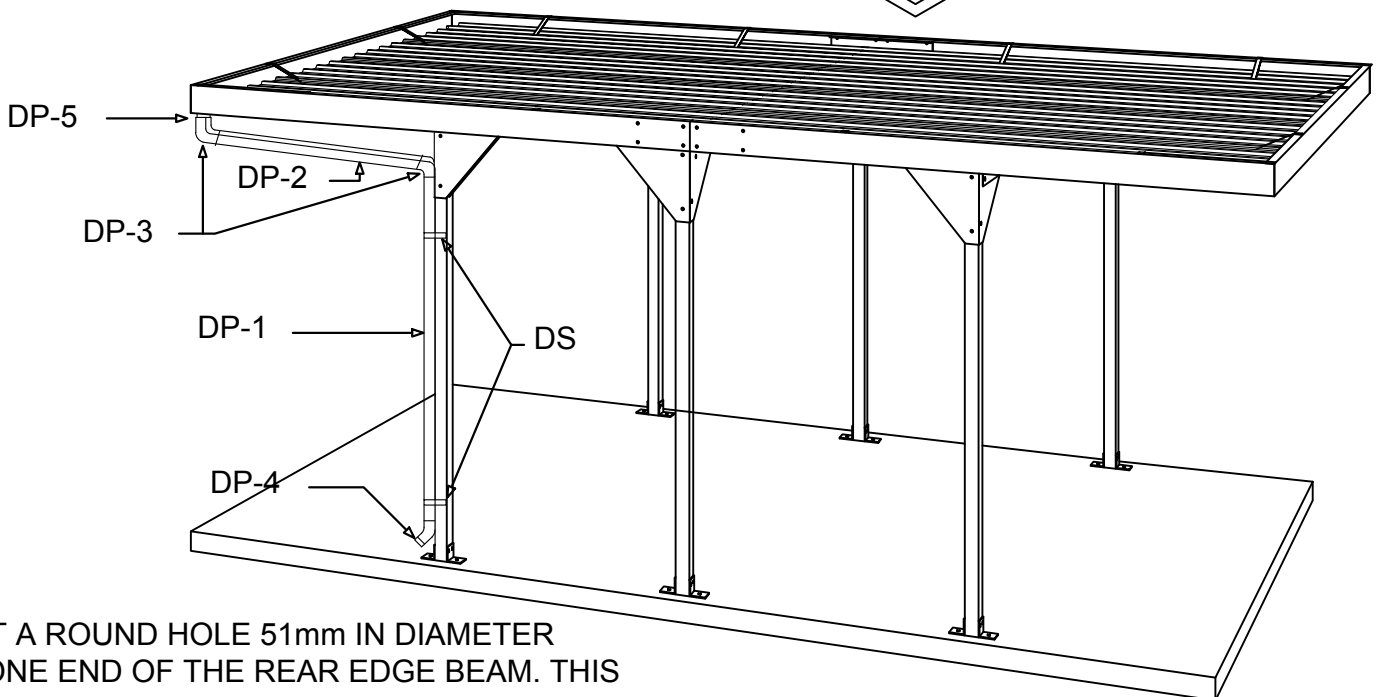
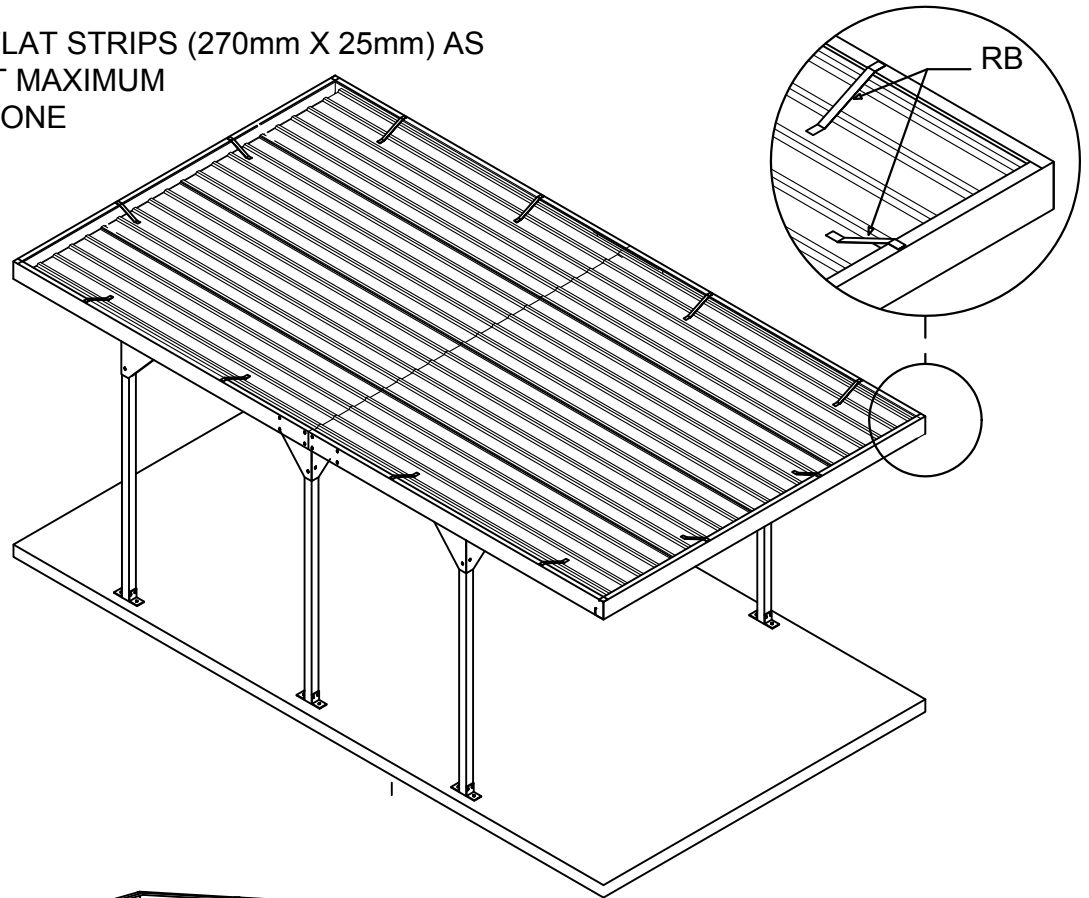
THE EDGE ALONG THE LENGTH OF THE SHEET SHOULD BE HARD UP AGAINST THE INSIDE OF THE EDGE BEAM ON BOTH SIDES OF THE STRUCTURE. SECURE WITH SCREWS ALONG THIS EDGE AT 150mm CENTRES.



OVERLAP ROOF SHEETS & FASTEN WITH SCREWS

STEP 10

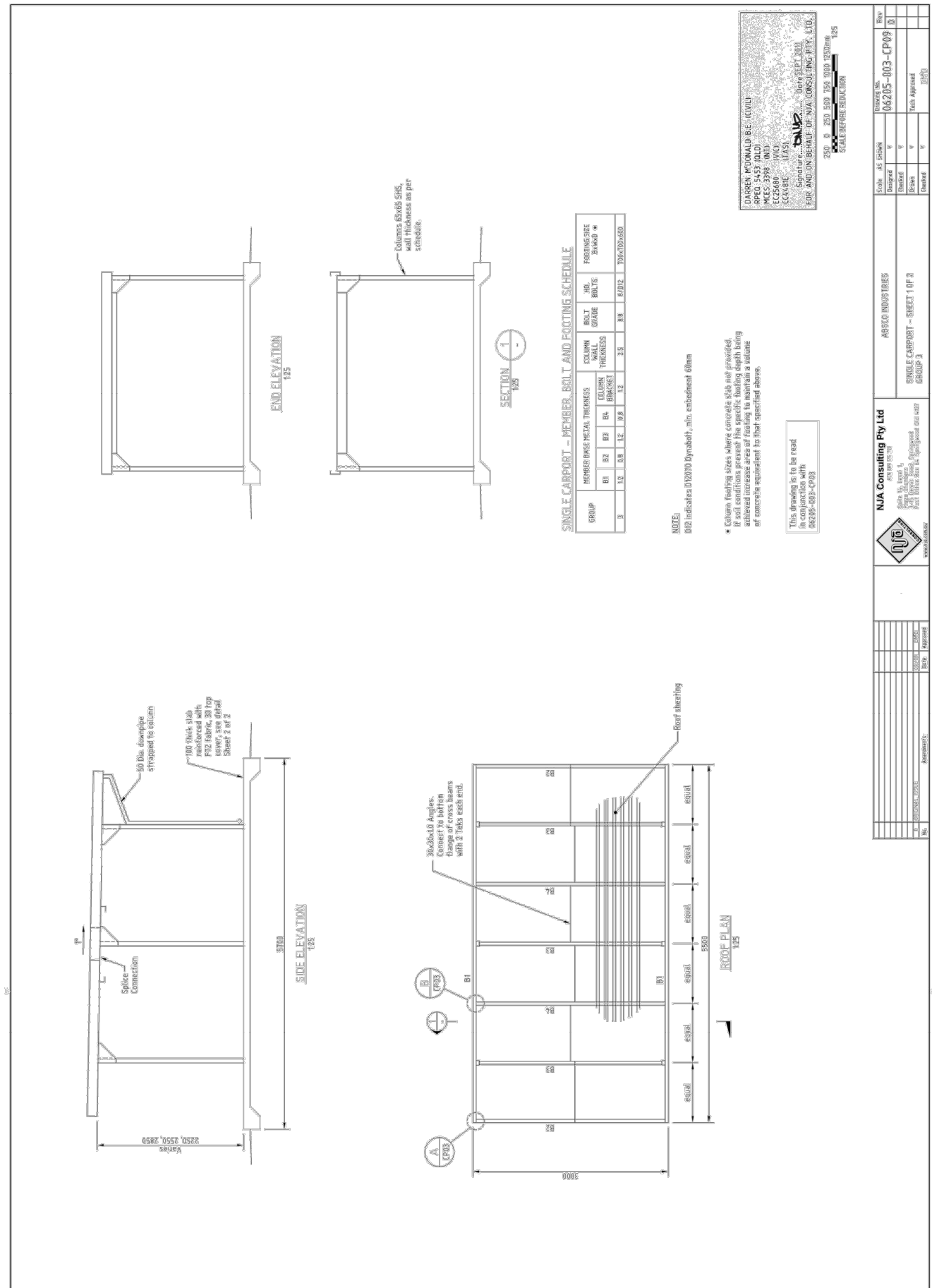
BEND THE ENDS OF 16 FLAT STRIPS (270mm X 25mm) AS SHOWN AND SECURE AT MAXIMUM 1500mm CENTRES WITH ONE SCREW AT EACH END.



CUT A ROUND HOLE 51mm IN DIAMETER IN ONE END OF THE REAR EDGE BEAM. THIS CAN BE DONE BY DRILLING A SERIES OF 3mm HOLES AND THEN PUNCHING OUT THAT SECTION. FIT THE GALVANISED GUTTER DROP AND SEAL WITH SILICONE. FASTEN THE DOWNPIPES AND BENDS AS SHOWN. BEND THE 270 x 25 FLAT STRIPS (DS) TO SHAPE AND FASTEN THE DOWNPIPE TO THE COLUMNS.

IMMEDIATE MAINTENANCE:

CLEAN DOWN ALL ROOF AND EDGE/CROSS BEAM INTERNAL AREAS. METAL FILINGS FROM DRILLING HOLES AND USING SELF DRILLING SCREWS CAN CAUSE DISCOLORATION AND CORROSION TO ROOF SHEETS AND GALVANIZED FRAMING SECTIONS.



SINGLE CARPORT - MEMBER, BOLT AND FOOTING SCHEDULE

GROUP	MEMBER BASE METAL THICKNESS				COLUMN WALL THICKNESS	BOLT GRADE	NO. BOLTS	FOOTING SIZE BxWxD
	B1	B2	B3	B4				
B	1.2	0.8	1.2	0.8	1.2	3.5	88	700x700x600

NOTES:
 D12 indicates D12070 Dynabolt, min. embedment 60mm

* Column footing sizes where concrete slab not provided. If soil conditions prevent the specific footing depth being achieved, then a larger volume of concrete equivalent to that specified above.

This drawing is to be read in conjunction with the following documents:
 06205-003-CP03

DEREK DONALDSON (CIVIL)
 PPO 5433 (OLD)
 MES 3398 (N3)
 EC25680 (VIC)
 CC4486 (TAS)
 Signature: [Signature]
 Date: 11/17/2011
 FOR AND ON BEHALF OF NJA CONSULTING PTY. LTD.

200 0 250 500 1000 1250mm
 SCALE BEFORE REDUCTION

Scale AS SHOWN		Drawing No.	Rev
Designed	W	06205-003-CP09	0
Checked	W		
Drawn	W		
Checked	W		

NJA Consulting Pty Ltd AN 18 17 120		ABSCO INDUSTRIES	
Date: 10/17/2011 File: Skillion Carport_Signed.dwg Plot: Skillion Carport_Signed.dwg		SINGLE CARPORT - SHEET 1 OF 2	
www.nja.com.au		GROUP 3	

Form 15—Compliance Certificate for building Design or Specification

<p>NOTE</p>	<p>This is to be used for the purposes of section 10 of the <i>Building Act 1975</i> and/or section 46 of the <i>Building Regulation 2006</i>.</p> <p>RESTRICTION: A building certifier (class B) can only give a compliance certificate about whether building work complies with the BCA or a provision of the QDC. A building certifier (Class B) can not give a certificate regarding QDC boundary clearance and site cover provisions.</p>
<p>1. Property description This section need only be completed if details of street address and property description are applicable. EG. In the case of (standard/generic) pool design/shell manufacture and/or patio and carport systems this section may not be applicable.</p> <p>The description must identify all land the subject of the application.</p> <p>The lot & plan details (eg. SP / RP) are shown on title documents or a rates notice.</p> <p>If the plan is not registered by title, provide previous lot and plan details.</p> <p>2. Description of component/s certified Clearly describe the extent of work covered by this certificate, e.g. all structural aspects of the steel roof beams.</p>	<p>Street address (include no., street, suburb / locality & postcode)</p> <p>Postcode</p> <p>Lot & plan details (attach list if necessary)</p> <p>In which local government area is the land situated?</p> <p>ABSCO standard range of kit-form garages, carports, awnings.</p>
<p>3. Basis of certification Detail the basis for giving the certificate and the extent to which tests, specifications, rules, standards, codes of practice and other publications, were relied upon.</p>	<p>The structural design for the range of ABSCO kit-form buildings has been undertaken in accordance with the following design conditions.</p> <ul style="list-style-type: none"> ➤ NCC - Building Code of Australia (2016) – Volume 2 – Class 1 and Class 10 Buildings ➤ AS1170.0-2002 - Structural design actions Part 0 General Principles ➤ AS1170.1-2002 - Structural design actions Part 1 Permanent, imposed and other actions ➤ AS1170.2-2011 - Structural design actions Part 2 Wind Actions ➤ AS1170.3-2003 - Snow Loads ➤ AS3600 - 2009 - Concrete Structures ➤ AS4100 - 1998 - Steel Structures ➤ AS4055 - 2012 - Wind loads for Housing ➤ AS4600 - 2005 - Cold-formed Steel Structures ➤ AS2870 - 2011 - Residential Slabs and Footings – Construction. ➤ Ramset - Specifiers Resource Book ➤ Buildex Fasteners - Technical Specification ➤ Low-High-Low testing of cyclonic area roof sheeting by University of Adelaide. Test results available on request.

The *Building Act 1975* is administered by the
 Department of Housing and Public Works



**Queensland
 Government**

4. Reference documentation

Clearly identify any relevant documentation, e.g. numbered structural engineering plans.

NJA Consulting Pty Ltd Drawings:

Carports: Drawings: 06205-003-CP01, CP02A, CP03 to CP06, CP07A, CP08, CP09
Awnings: Drawings: 06205-003-AW01A, AW02A, AW05
Garages: Drawings: 06205-003-GR01A, 02A, 03B to 11B, 12A, 13B, 14A, 15B
Connections Drawings: 06205-003-CN01

Scope or Limitations

- This certificate relates to the structural aspects of the building only.
- The slab and footings nominated on the drawings are suitable for class A, S, M & H site classifications (awnings, garden sheds and carports), class A, S & M site classifications (garages) in accordance with AS2870. The applicant shall seek advice from a local building practitioner should the site classification fall outside of this range ie class H, E and P sites.
- The building shall be constructed in accordance with the design drawings and ABSCO assembly manuals. NJA accept no responsibility whatsoever for the performance of structures not constructed in accordance with these documents.
- The structures are designed to sustain the wind loads nominated on the drawing for Group 1, Group 2 and Group 3 wind loadings. The site wind classification shall be derived in accordance with AS4055. Structural wind loads have been derived using AS1170.2-2011.

The following criteria are applicable to structure wind loads:

Structure Importance Level: 2
Annual probability of exceedance: 1:500
Topographic Classification: T1

Internal Pressure Coefficients
N2, N3 garages: +0.2, -0.3 (non-cyclonic)
C1 garages: +0.7, -0.65 (cyclonic)

The structures are rated to meet the wind classifications nominated on the plans. The onus is on the building certifier or local authority to ensure that the wind classification relevant to the intended siting of the ABSCO product does not exceed the product's individual wind rating. The site wind classification shall be determined in accordance with AS4055 Table 1 for topographic classification T1, for the relevant wind region.

NJA Consulting will not be providing site specific wind data as part of this certification. Should the certifier require site specific wind data, then they shall refer the applicant to a suitably qualified local building practitioner.

- This certificate shall not be construed as relieving any party of their contractual responsibilities, and is valid until 28 April 2017. Beyond this date the certification will be carried by another engineering consultant.

5. Building certifier reference number

Building certifier reference number

The *Building Act 1975* is administered by the
Department of Housing and Public Works



Queensland
Government

6. Competent person details

A competent person for building work, means a person who is assessed by the building certifier for the work as competent to practice in an aspect of the building and specification design, of the building work because of the individual's skill, experience and qualifications in the aspect. The competent person must also be registered or licensed under a law applying in the State to practice the aspect.

If no relevant law requires the individual to be licensed or registered to be able to give the help, the certifier must assess the individual as having appropriate experience, qualifications or skills to be able to give the help.

If the chief executive issues any guidelines for assessing a competent person, the building certifier must use the guidelines when assessing the person.

Name (in full)

Darren McDonald

Company name (if applicable)

NJA Consulting Pty Ltd

Contact person

Phone no. business hours

(07) 3208 4755

Mobile no.

Fax no.

(07) 3208 1822

Email address

d.mcdonald@nja.com.au

Postal address

PO Box 64 Springwood QLD.

Postcode 4127

Licence or registration number (if applicable)

RPEQ 5453

7. Signature of competent person

This certificate must be signed by the individual assessed by the building certifier as competent.

Signature



Date

15 Feb 2017

LOCAL GOVERNMENT USE ONLY

Date received

Reference Number/s

The *Building Act 1975* is administered by the
Department of Housing and Public Works



Queensland
Government

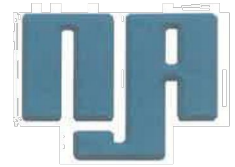
12206-003-DMCD

24 June 2016

ABSCO

PO Box 119

ACACIA RIDGE QLD 4110



NJA Consulting Pty Ltd
ACN 089 515 720

Suite 14, Level 1
Plaza Chambers
3-15 Dennis Road
PO Box 64
Springwood QLD 4127

Ph (07) 3208 4755
Fax (07) 3208 1822
Email admin@nja.com.au
Web www.nja.com.au

STRUCTURAL CERTIFICATION OF ABSCO PRODUCT RANGE

We refer to above matter. We hereby certify that the range of ABSCO products indicated on the drawings listed below are structurally satisfactory in accordance with the Australian Standards outlined in the Design Certificate Criteria section of this certificate.

DOCUMENTS ATTACHED (as built drawings or latest amendments)	
Drawing Nos:	This certificate covers the full range of ABSCO products as outlined on the following drawings:
NJA Consulting Pty Ltd Drawings:	
Garden Sheds:	Drawings: 06205-003-GS01C, GS02C, GS03B, GS04B, GS05A, GS06A, GS07A, GS08B, GS09 to GS11, GS12A, GS13A, GS14B, GS15, GS16B, GS17.
Carports:	Drawings: 06205-003-CP01, CP02A, CP3 to CP06, CP07A, CP08, CP09
Awnings	Drawings: 06205-003-AW01A, AW02A, AW05
Garages	Drawings: 06205-003-GR01A, GR02A, GR03B to GR11B, GR12A, GR13B, GR14A, GR15B
Connections	Drawings: 06205-003-CN01
Other Related Documents:	
1.	PI INSURANCE CERTIFICATE (attached)

DESIGN CERTIFICATE CRITERIA
The structural design for the range of ABSCO kit-form buildings has been undertaken in accordance with the following design conditions:
<ul style="list-style-type: none">➤ Building Code of Australia – Volume 2 (2016) – Class 1 and Class 10 Buildings➤ AS1170.0-2002 - Structural design actions Part 0 General Principles➤ AS1170.1-2002 - Structural design actions Part 1 Permanent, imposed and other actions➤ AS1170.1-2011 - Structural design actions Part 2 Wind Actions➤ AS1170.3-2003 - Snow Loads➤ AS3600 - 2009 - Concrete Structures➤ AS4100 - 1998 - Steel Structures➤ AS4055 - 2012- Wind loads for Housing➤ AS4600 - 2005 - Cold-formed Steel Structures➤ AS2870 - 2011 - Residential Slabs and Footings – Construction.➤ Ramset - Specifiers Resource Book➤ Buildex Fasteners - Technical Specification➤ Low-High-Low testing of cyclonic area roof sheeting by University of Adelaide.
Class of Building (BCA) : 10a
Building Importance Level: (BCA Table B1.2a): 2
Annual Probability of Exceedance for wind: 1 in 500



COMMENTS / EXCLUSIONS (Exclusions to this Certificate must be clearly identified).

- This certificate relates to the structural aspects of the building only.
- The slab and footings nominated on the drawings are suitable for class A, S, M & H site classifications (awnings, garden sheds and carports), class A, S & M site classifications (garages) in accordance with AS2870. The applicant shall seek advice from a local building practitioner should the site classification fall outside of this range ie class H, E and P sites. The founding material shall have a minimum safe bearing capacity of 75kPa.
- The building shall be constructed in accordance with the design drawings and ABSCO assembly manuals. NJA accept no responsibility whatsoever for the performance of structures not constructed strictly in accordance with these documents.
- The structures are designed to sustain the wind loads nominated on the drawing for Group 1, Group 2 and Group 3 wind loadings. The site wind classification shall be derived in accordance with AS4055. Structural wind loads have been derived using AS1170.2-2011.

The following criteria are applicable to structure wind loads:

Structure Importance Level: **2**

Annual probability of exceedance: **1:500**

Topographic Classification: **T0 and T1 (ref AS4055) generally flat site with ground slope up to 1 in 10**

Internal Pressure Coefficients

N2, N3 garages: **+0.2, -0.3 (non-cyclonic)**

C1 garages: **+0.7, -0.3 (cyclonic)**

Garden Sheds: **0.0, -0.2 (all regions)**

Garden sheds are considered to be effectively sealed during major wind events. Roller doors are excluded from certification, and are assumed to have blown in during cyclonic wind events.

The structures are rated to meet the wind classifications nominated on the plans. The onus is on the building certifier or local authority to ensure that the wind classification relevant to the intended siting of the ABSCO product does not exceed the product's individual wind rating. The site wind classification shall be determined in accordance with AS4055 Table 1 for topographic classification T0 or T1, for the relevant wind region. **NJA Consulting will not be providing site specific wind data as part of this certification. Should the certifier require site specific wind data, then they shall refer the applicant to a suitably qualified local building practitioner.**

- All glazed windows and doors to be designed and certified by window manufacturer. The glazing shall be designed to the Wind Classification System specified above, as defined in AS4055-1992. The glazing manufacturer shall satisfy the requirements of AS2047 for the specified Wind Classification System. The wind classification system has been determined on the basis of the following additional assumptions:-

- Flat site. Where the site is not generally flat (i.e. average slope steeper than 1:10), advise the certifying engineer for a possible reclassification of the glazing requirements.

This certificate shall not be construed as relieving any party of their contractual responsibilities.

- NJA have prepared a range of engineering drawings for ABSCO garden sheds, GS01 to GS16 inclusive. These drawings nominate the maximum size garden shed structure, in length, width, and height permissible for each shed design. NJA acknowledge that for each garden shed design, as detailed on engineering plans GS01 to GS16 inclusive, that garden shed structures smaller in size are acceptable, providing that all structural elements are fully adhered to, including internal steel framework, which can be proportionately reduced in size and spacing, in accordance with the reduced garden shed size.

Yours faithfully



Darren McDonald B.E. (Civil) RPEQ
Senior Structural Engineer - Director
For an on behalf of NJA Consulting Pty Ltd

Building Act 1993
Building Regulations 2006

REGULATION 1507: CERTIFICATE OF COMPLIANCE—DESIGN

Building Certifier or Local Authority (applicant to complete)

Relevant building surveyor:

Postal address:

Postcode:

From

Building practitioner:

Darren McDonald

Category and class: **Engineer - Civil**

Registration No: EC 25680

Postal address:

PO Box 64 Springwood QLD

Postcode:

4127

Property details (applicant to complete)

Number: Street/road:

City/suburb/town:

Lot/s:

LP/PS:

Volume:

Folio:

Crown allotment:

Section:

Parish:

County:

Municipal District:

COMPLIANCE

I did prepare the design and I certify that the part of the design described as ABSCO garages, carports and awnings comply with the following provisions of the Regulations.

- NCC - Building Code of Australia (2016) – Volume 2 – Class 1 and Class 10 Buildings
- AS1170.0-2002 - Structural design actions Part 0 General Principles
- AS1170.1-2002 - Structural design actions Part 1 Permanent, imposed and other actions
- AS1170.1-2011 - Structural design actions Part 2 Wind Actions
- AS1170.3-2003 - Snow Loads
- AS3600 - 2009 - Concrete Structures
- AS4100 - 1998 - Steel Structures
- AS4055 - 2012 - Wind loads for Housing
- AS4600 - 2005 - Cold-formed Steel Structures
- AS2870 - 2011 - Residential Slabs and Footings – Construction.
- Ramset - Specifiers Resource Book
- Buildex Fasteners - Technical Specification
- Low-High-Low testing of cyclonic area roof sheeting by University of Adelaide.



NJA Consulting Pty Ltd
ACN 089 515 720

Suite 14, Level 1
Plaza Chambers
3-15 Dennis Road
PO Box 64
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Ph (07) 3208 4755
Fax (07) 3208 1822
Email admin@nja.com.au
Web www.nja.com.au

NJA CONSULTING
STRUCTURAL CIVIL FORENSIC
ENGINEERS

DESIGN DOCUMENTS

NJA Consulting Pty Ltd Drawings

Dated: OCTOBER 2006 REV: 0 UNO

Carports: Drawings: **06205-003-CP01, CP02A, CP03 to CP06, CP07A, CP08, CP09**
Awnings: Drawings: **06205-003-AW01A, AW02A, AW05**
Garages: Drawings: **06205-003-GR01A, 02A, 03B to 11B, 12A, 13B, 14A, 15B**
Connections: Drawings: **06205-003-CN01**

Specifications: N/A

Prepared by:

Date:

Computations: N/A

Prepared by:

Date:

Test reports: N/A

Prepared by:

Date:

SCOPE OR LIMITATIONS

- This certificate relates to the structural aspects of the building only.
- The slab and footings nominated on the drawings are suitable for class A, S, M & H site classifications (awnings, garden sheds and carports), class A, S & M site classifications (garages) in accordance with AS2870. The applicant shall seek advice from a local building practitioner should the site classification fall outside of this range ie class H, E and P sites. The founding material shall have a minimum safe bearing capacity of 75kPa.
- The building shall be constructed in accordance with the design drawings and ABSCO assembly manuals. NJA accept no responsibility whatsoever for the performance of structures not constructed strictly in accordance with these documents.
- The structures are designed to sustain the wind loads nominated on the drawing for Group 1, Group 2 and Group 3 wind loadings. The site wind classification shall be derived in accordance with AS4055. Structural wind loads have been derived using AS1170.2-2002.

The following criteria are applicable to structure wind loads:

Structure Importance Level: **2**

Annual probability of exceedance: **1:500**

Topographic Classification: **T1**

Internal Pressure Coefficients:

N2, N3 garages: **+0.2, -0.3 (non-cyclonic)**

C1 garages: **+0.7, -0.65 (cyclonic)**

The structures are rated to meet the wind classifications nominated on the plans. The onus is on the building certifier or local authority to ensure that the wind classification relevant to the intended siting of the ABSCO product does not exceed the product's individual wind rating. The site wind classification shall be determined in accordance with AS4055 Table 1 for topographic classification T1, for the relevant wind region. **NJA Consulting will not be providing site specific wind data as part of this certification. Should the certifier require site specific wind data, then they shall refer the applicant to a suitably qualified local building practitioner.**

- This certificate shall not be construed as relieving any party of their contractual or duty of care responsibilities, and is valid until **28 April 2017**. Beyond this date the certification is to be carried by another consultant.

Signature



Signed: Darren McDonald EC25680

Date: 15 Feb 2017

for and on behalf of NJA Consulting Pty Ltd

Our Ref: 12206-003: DMCD



4 February 2016

ABSCO
PO Box 119
ACACIA RIDGE QLD 4110

Attn: Ms Lisa Holtby

Dear Lisa

NJA Consulting Pty Ltd
ACN 089 515 720

Suite 14, Level 1
Plaza Chambers
3-15 Dennis Road
PO Box 64
Springwood QLD 4127

Ph (07) 3208 4755
Fax (07) 3208 1822
Email admin@nja.com.au
Web www.nja.com.au

ABSCO KIT-FORM BUILDING PRODUCTS – REGULATION 88 - CERTIFICATE OF INDEPENDENT TECHNICAL EXPERT

We refer to the above matter.

We advise that NJA Consulting have been providing structural engineering certification services to ABSCO since 2006.

The current structural designs were originally prepared and certified by Cardno prior to NJA being engaged as the structural engineering certifier for ABSCO. The structural design verification process was undertaken by NJA Consulting based on the Cardno designs prior to providing certification services.

The structural design verification process has been undertaken, which complies with the following Australian standards and design conditions:

- NCC - Building Code of Australia (2015) – Volume 2 – Class 1 and Class 10 Buildings
- AS1170.0-2002 - Structural design actions Part 0 General Principles
- AS1170.1-2002 - Structural design actions Part 1 Permanent, imposed and other actions
- AS1170.1-2011 - Structural design actions Part 2 Wind Actions
- AS3600 - 2009 - Concrete Structures
- AS4100 - 1998 - Steel Structures
- AS4055 - 2012 - Wind loads for Housing
- AS4600 - 2005 - Cold-formed Steel Structures
- AS2870 - 2011 - Residential Slabs and Footings – Construction.
- Ramset - Specifiers Resource Book
- Buildex Fasteners - Technical Specification
- Low-High-Low testing of cyclonic area roof sheeting by University of Adelaide.

The current product range was originally indicated on Cardno drawings as follows:

Sheds/Garages: 1685/11/01-045, 049 to 050, 200 to 211, 224 to 227
Garden Sheds: 1685/11/01-017 to 019, 028, 031, 038, 039, 040, 055, 056, 059, 062
Awnings: 1685/11/01-060, 063, 231, 232
Carpports: 1685/11/01-041 to 044, 051, 052, 100, 101



The ABSCO product range is currently indicated on NJA drawings as follows:

Garden Sheds: **06205-003-GS01C, GS02C, GS03B, GS04B, GS05B, GS06A, GS07A, GS08B, GS09 to GS11, GS12B, GS13B, GS14C, GS15, GS16C, GS17**
Carports: **06205-003-CP01, CP02A, CP03 to CP06, CP07A, CP08, CP09**
Awnings: **06205-003-AW01A, AW02A, AW05**
Garages: **06205-003-GR01A, 02A, 03B to 11B, 12A, 13B, 14A, 15B**
Connections: **06205-003-CN01**

If constructed in accordance with the above plans the range of structures indicated will comply with the relevant parts of the Building Code of Australia, and should be structurally sound.

We advise as independent technical experts;

1. We are not direct employees of the product manufacturer or building owner;
2. We were not involved in any aspect whatsoever of the product development or original design process by the previous consultant;
3. We have no pecuniary interest whatsoever in any aspect of proposed developments involving ABSCO products;
4. We have qualifications (Bachelor Degree suitable for corporate membership of the Institution of Engineers Australia) that qualify NJA Consulting Pty Ltd to act as an independent technical expert under regulation 85 of the South Australian Development Regulations.

Specifically in relation to the range of ABSCO Products the following limitations apply;

SCOPE OR LIMITATIONS

- *This certificate relates to the structural aspects of the building only.*
- *The slab and footings nominated on the drawings are suitable for class A, S, M & H site classifications (awnings, garden sheds and carports), class A, S & M site classifications (garages) in accordance with AS2870. The applicant shall seek advice from a local building practitioner should the site classification fall outside of this range ie class H, E and P sites. The founding material shall have a minimum safe bearing capacity of 75kPa.*
- *The building shall be constructed in accordance with the design drawings and ABSCO assembly manuals. NJA accept no responsibility whatsoever for the performance of structures not constructed strictly in accordance with these documents.*
- *The structures are designed to sustain the wind loads nominated on the drawing for Group 1, Group 2 and Group 3 wind loadings. The site wind classification shall be derived in accordance with AS4055. Structural wind loads have been derived using AS1170.2-2002.*

The following criteria are applicable to structure wind loads:

*Structure Importance Level: 2
Annual probability of exceedance: 1:500
Topographic Classification: T1*

Internal Pressure Coefficients:

*N2, N3 garages: +0.2, -0.3 (non-cyclonic)
C1 garages: +0.7, -0.3 (cyclonic)
Garden Sheds: 0.0, -0.2 (all regions)*

Garden sheds are considered to be effectively sealed during major wind events.

*The structures are rated to meet the wind classifications nominated on the plans. The onus is on the building certifier or local authority to ensure that the wind classification relevant to the intended siting of the ABSCO product does not exceed the product's individual wind rating. The site wind classification shall be determined in accordance with AS4055 Table 1 for topographic classification T1, for the relevant wind region. **NJA Consulting will not be providing site specific wind data as part of this certification. Should the certifier require site specific wind data, then they shall refer the applicant to a suitably qualified local building practitioner.***

- *This certificate shall not be construed as relieving any party of their contractual or duty of care responsibilities.*

- *The range of engineering drawings for ABSCO garden sheds is indicated as GS01 to GS16 inclusive. These drawings nominate the maximum size garden shed structure, in length, width, and height permissible for each shed design. NJA acknowledge that for each garden shed design, as detailed on engineering plans GS01 to GS16 inclusive, that garden shed structures smaller in size are acceptable, providing that all structural elements are fully adhered to, including internal steel framework, which can be proportionately reduced in size and spacing, in accordance with the reduced garden shed size.*

Please contact us if you have any further queries in relation to this matter.

Yours faithfully



Darren McDonald – Senior Structural Engineer (Director)

B.E. (Civil)
RPEQ 5453 QLD
24619ES NT
EC25680 VIC
CC 4481E TAS

***for and on behalf of
NJA Consulting Pty Ltd***

☺

□

**CERTIFICATE OF THE RESPONSIBLE DESIGNER
(BUILDING WORK)**

**Sections 62(2)
& 66(b)**

To:

Building Surveyor

Address

Suburb/postcode

Form

35A

Accredited Designer details:

Name:

Darren McDonald

Category:

CIVIL

Business name:

NJA Consulting Pty Ltd

Phone No:

07 3208 4755

Business address:

PO Box 64 (3-15 Dennis Road)
Springwood

QLD

4127

Fax No:

07 3208 1822

Accreditation No:

CC-4481E

Email address:

d.mcdonald@nja.com.au

Details of proposed work: (to be completed by others)

Owner:

Designer's project
reference No.

Address:

Lot No:

Type of work:

(e.g. new building/ alteration/ addition/ repair/ re-erection/ other)

New kit-form steel structure (Carport, Awning or Garage)

Design documents provided:

The following documents are relevant to this Certificate*

Document description:

NJA Consulting Pty Ltd Drawings:

- Carports: Drawings: **06205-003-CP01, CP02A, CP03 to CP06, CP07A, CP08, CP09**
- Awnings: Drawings: **06205-003-AW01A, AW02A, AW05**
- Garages: Drawings: **06205-003-GR01A, 02A, 03B to 11B, 12A, 13B, 14A, 15B**
- Connections: Drawings: **06205-003-CN01**

* Applicable drawings for each individual ABSCO product shall be supplied with the application. Only some drawings are required for each individual product

This is a generic certificate for kit-form steel building products. The above items left blank on this certificate shall be completed by the applicant in conjunction with the Building Surveyor.

Standards, codes or guidelines relied on in design process:

Substance of Certificate:

The structural design for the range of ABSCO kit-form buildings has been undertaken in accordance with the following design conditions.

- NCC - Building Code of Australia (2016) – Volume 2 – Class 1 and Class 10 Buildings
- AS1170.0-2002 - Structural design actions Part 0 General Principles
- AS1170.1-2002 - Structural design actions Part 1 Permanent, imposed and other actions
- AS1170.2-2011 - Structural design actions Part 2 Wind Actions
- AS1170.3-2003 - Snow Loads
- AS3600 - 2009 - Concrete Structures
- AS4100 - 1998 - Steel Structures
- AS4055 - 2012 - Wind loads for Housing
- AS4600 - 2005 - Cold-formed Steel Structures
- AS2870 - 2011 - Residential Slabs and Footings – Construction.
- Ramset - Specifiers Resource Book
- Buildex Fasteners - Technical Specification
- Low-High-Low testing of cyclonic area roof sheeting by University of Adelaide. Test results available on request.

Scope or Limitations

- This certificate relates to the structural aspects of the building only.
- The slab and footings nominated on the drawings are suitable for class A, S, M, and H site classifications (awnings, garden sheds and carports), class A, S & M site classifications (garages) in accordance with AS2870. The applicant shall seek advice from a local building practitioner should the site classification fall outside of this range i.e. class E and P sites. The foundation material shall have a minimum safe bearing capacity of 75 kPa.
- The building shall be constructed in accordance with the design drawings and ABSCO assembly manuals. NJA accept no responsibility whatsoever for the performance of structures not constructed in accordance with these documents.
- The structures are designed to sustain the wind loads nominated on the drawing for Group 1, Group 2 and Group 3 wind loadings. The site wind classification shall be derived in accordance with AS4055. Structural wind loads have been derived using AS1170.2-2002.

The following criteria are applicable to structure wind loads:

Structure Importance Level: **2**

Annual probability of exceedance: **1:500**

Topographic Classification: **T1**

Internal Pressure Coefficients

N2, N3 garages: **+0.2, -0.3 (non-cyclonic)**

C1 garages: **+0.7, -0.65 (cyclonic)**

The structures are rated to meet the wind classifications nominated on the plans. The onus is on the building certifier or local authority to ensure that the wind classification relevant to the intended siting of the ABSCO product does not exceed the product's individual wind rating. The site wind classification shall be determined in accordance with AS4055 Table 1 for topographic classification T1, for the relevant wind region.

NJA Consulting will not be providing site specific wind data as part of this certification. Should the certifier require site specific wind data, then they shall refer the applicant to a suitably qualified local building practitioner.

- This certificate shall not be construed as relieving any party of their contractual responsibilities, and is valid until 28 April 2017. Beyond this date the certification shall be carried by another consultant.

Any other relevant documentation: NIL

Attribution as designer:

I was responsible for the design of this building or building work.

Signed:

Date:

Designer:

T.M. O'D.

15 Feb 2017

**NORTHERN TERRITORY OF AUSTRALIA
BUILDING ACT
SECTION 40 – CERTIFICATE OF COMPLIANCE – STRUCTURAL DESIGN**

PROPERTY / PROJECT DETAILS	
Owner (if known): _____	
Lot/Portion Number: _____	Address: _____
Location: _____	Town / Hundred : _____
Description of works : PROPOSED KIT-FORM SHED, AWNING or CARPORT	

DOCUMENTS ATTACHED (as built drawings or latest amendments)
Drawing Nos: This certificate covers the full range of ABSCO products as outlined on the following drawings:
NJA Consulting Pty Ltd Drawings:
Carports: Drawings: 06205-003-CP01, CP02A, CP3 to CP06, CP07A, CP08, CP09
Awnings Drawings: 06205-003-AW01A, AW02A, AW05
Garages Drawings: 06205-003-GR01A, GR02A, GR03B to GR11B, GR12A, GR13B, GR14A, GR15B
Connections Drawings: 06205-003-CN01
Other Related Documents:
<ol style="list-style-type: none"> 1. Schedule of inspections : see over 2. PI INSURANCE CERTIFICATE (attached)

DESIGN CERTIFICATE CRITERIA
The structural design for the range of ABSCO kit-form buildings has been undertaken in accordance with the following design conditions:
<ul style="list-style-type: none"> ✔ NCC - Building Code of Australia (2016) – Volume 2 – Class 1 and Class 10 Buildings ✔ AS1170.0-2002 - Structural design actions Part 0 General Principles ✔ AS1170.1-2002 - Structural design actions Part 1 Permanent, imposed and other actions ✔ AS1170.1-2011 - Structural design actions Part 2 Wind Actions ✔ AS1170.3-2003 - Snow Loads ✔ AS3600 - 2009 - Concrete Structures ✔ AS4100 - 1998 - Steel Structures ✔ AS4055 - 2012 - Wind loads for Housing ✔ AS4600 - 2005 - Cold-formed Steel Structures ✔ AS2870 - 2011 - Residential Slabs and Footings – Construction. ✔ Ramset - Specifiers Resource Book ✔ Buildex Fasteners - Technical Specification ✔ Low-High-Low testing of cyclonic area roof sheeting by University of Adelaide.
Class of Building (BCA) : 10a
Building Importance Level: (BCA Table B1.2a): 2
Annual Probability of Exceedance for wind: 1 in 500

COMMENTS / EXCLUSIONS (Exclusions to this Certificate must be clearly identified).

- This certificate relates to the structural aspects of the building only.
- The slab and footings nominated on the drawings are suitable for class A, S, M & H site classifications (awnings, garden sheds and carports), class A, S & M site classifications (garages) in accordance with AS2870. The applicant shall seek advice from a local building practitioner should the site classification fall outside of this range ie class H, E and P sites. The founding material shall have a minimum safe bearing capacity of 75kPa.
- The building shall be constructed in accordance with the design drawings and ABSCO assembly manuals. NJA accept no responsibility whatsoever for the performance of structures not constructed strictly in accordance with these documents.
- The structures are designed to sustain the wind loads nominated on the drawing for Group 1, Group 2 and Group 3 wind loadings. The site wind classification shall be derived in accordance with AS4055. Structural wind loads have been derived using AS1170.2-2002.

The following criteria are applicable to structure wind loads:

Structure Importance Level: **2**

Annual probability of exceedance: **1:500**

Topographic Classification: **T1**

Internal Pressure Coefficients

N2, N3 garages: **+0.2, -0.3 (non-cyclonic)**

C1 garages: **+0.7, -0.3 (cyclonic)**

The structures are rated to meet the wind classifications nominated on the plans. The onus is on the building certifier or local authority to ensure that the wind classification relevant to the intended siting of the ABSCO product does not exceed the product's individual wind rating. The site wind classification shall be determined in accordance with AS4055 Table 1 for topographic classification T1, for the relevant wind region. **NJA Consulting will not be providing site specific wind data as part of this certification. Should the certifier require site specific wind data, then they shall refer the applicant to a suitably qualified local building practitioner.**

- All glazed windows and doors to be designed and certified by window manufacturer. The glazing shall be designed to the Wind Classification System specified above, as defined in AS4055-1992. The glazing manufacturer shall satisfy the requirements of AS2047 for the specified Wind Classification System. The wind classification system has been determined on the basis of the following additional assumptions:-
 - Flat site. Where the site is not generally flat (i.e. average slope steeper than 1:10), advise the certifying engineer for a possible reclassification of the glazing requirements.
- This certificate shall not be construed as relieving any party of their contractual responsibilities and is valid until **28 April 2017. Beyond the date the certification will be carried by another engineering consultant.**

CERTIFICATION BY STRUCTURAL ENGINEER

Company Name if certification issued on behalf of a corporation:

NJA CONSULTING PTY LTD

Company NT Registration Number: **53639ES**

I certify that reasonable care has been taken to ensure that the structural engineering aspects of the works as described above have been designed in accordance with the requirements of the Building Code of Australia and the Northern Territory Building Regulations.

Name (see *below)

Darren John McDonald

Nominee/Individual
NT Registration Number

24619ES

Signature



Date

15 Feb 2017

* Name and registration number of nominee signing on behalf of the company or if no company, name of individual issuing certification.

SCHEDULE OF STRUCTURAL INSPECTIONS (CERTIFIER TO DETERMINE REQUIREMENTS)

- 1. Completion of site preparation/site filling/excavations for footings prior to placement of any reinforcement or concrete.
 - 2. Completion of preparations for placing of concrete strip footings including placement of reinforcement.
 - 3. **Completion of preparations for placing concrete slabs including compaction of fill and sand blinding, placement of formwork, reinforcement, starter bars and cast in items.**
 - 4. Completion of preparations for placing of concrete pier footings including reinforcement (if any).
 - 5. Starter bars and cast in items after placing of concrete and prior to any covering up work.
 - 6. Reinforcement to walls completed prior to core filling (inspection holes and cleanout cores to be completed).
 - 7. **Structural steelwork and cold formed steelwork completed and prior to any covering up work. Floor framing system completed before floors are laid or underside is lined.**
 - 8. Suspended concrete floor slabs with formwork, reinforcement and cast in items completed, prior to placing of concrete.
 - 9. Wall framing or blockwork wall core filling completed (with windows fixed in place) and roof framing with connections completed and prior to sheeting or lining.
- Note: Prior lodgement of truss manufacturer's drawings, details and certification required.
 Prior lodgement of windows manufacturer's drawings including fixings and certification required.
- 10. Structural wall linings completed and prior to any covering up work.
 - 11. Final inspection upon completion of all structural work including fixings of external roof and wall claddings, flashings, barges & vents.
 - 12. Other Inspections

Important Information:

- 1) The above inspections are required to be carried out by either the certifying engineer or the building certifier who issued the Building Permit for the work. (If no inspections are indicated refer to the certifying engineer for advice).
- 2) Where works are prescribed building works under the *NT Building Act*, the building certifier must be provided with a copy of the inspection record and no further works must be carried out by the builder until the building certifier issues a release to proceed with further works.
- 3) Additional non-structural inspections may be required during the course of construction before the issue of an Occupancy Permit (refer to building certifier for requirements).
- 4) Failure to obtain inspections may prevent the issue of an Occupancy Permit upon completion of the building works.



ABN 42 127 786 823
AFSL 324767

CERTIFICATE OF CURRENCY

Insured: *NJA Consulting Pty Ltd*

Policy Type: *Professional Indemnity Insurance.*

Policy Number: *191182*

Sum Insured: *\$3,000,000 Costs Exclusive any one Claim, and \$6,000,000 Costs Exclusive for all Claims for the Policy Period.*

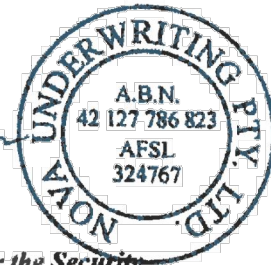
Business: *Consulting Engineers, Drafting, Expert Witness.*

Wording: *Nova Underwriting Pty Limited - Professional Indemnity [Nova PI Miscellaneous 12/14 Civil form].*

Policy Period: *From: *4:00pm on 8th October 2016
To: *4:00pm on 8th October 2017
[*Sydney time]*

Date: 06/10/2016

Signature: *J. McKeown*



Signed for and on behalf of Nova Underwriting Pty Limited as agent for the Security.

SECURITY: *Novae Syndicate [NVA 2007], Pembroke Syndicate [PEM 4000] & Aegis [AES 1225] at Lloyd's.*

Coverholder at

S:\Certificates of Currency\i\Completes\P1

AUSTRALIA PRODUCT WARRANTY AGAINST DEFECTS

Congratulations on your purchase of an ABSCO SHED

ABSCO SHEDS, including garden sheds, garden beds, aviaries, storage units, garages, awnings and carports are made using high quality Australian made steel.

We are pleased to advise we warrant that the steel coating will not rust, crack, flake peel or blister for 30 years from date of purchase, when installed within Australia.

This warranty does not apply to surface deterioration of panels caused by 'Swarf' (Tiny particles of steel debris left from cutting, grinding or drilling operations) that has not been removed after building construction, or as a result of contact with damp soil, chemicals, fertilisers or other corrosive substances.

This warranty covers any Absco product used for normal domestic use and installed in accordance with the installation instructions. The warranty does NOT cover Damage caused by storms, wind, rain snow or poor foundations.

This warranty does NOT cover ABSCO products installed in severe coastal, industrial or other highly corrosive environments. The warranty does not cover fasteners (screws, nuts, bolts, rivets, hasps or sliding padbolts).

The warranty is limited to replacement and delivery of components and does not include any labour or installation costs. The benefits given by the warranty are in addition to your other rights and remedies under a law in relation to the goods or services to which the warranty relates.

The warranty applies to the exclusion of all other representations, guarantees or warranties express or implied, our goods come with guarantees that cannot be excluded under the Australian consumer law and is not transferable. You are entitled to a replacement or refund for a major failure and for compensation for any other foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of an acceptable quality and the failure does not amount to a major failure. For further information go to <http://www.consumerlaw.gov.au>.

Please retain a proof of purchase (sales docket or invoice) or register your warranty within 30 days of purchase here: www.absco.com.au/register_warranty.php

In the unlikely event a warranty claim is made, it must be supported by photographic evidence and details of the defect, including component part numbers, together with proof of purchase documentation (or on-line registration of purchase) and forwarded to the address below. Upon receipt of the warranty claim, the Customer Service Manager will contact you within three business days to advise you of the assessment outcome of the claim, which may include your expenses incurred in making the claim.

THE CUSTOMER SERVICE MANAGER, ABSCO INDUSTRIES, PO BOX 119 ACACIA RIDGE QLD AUSTRALIA 4110

PHONE: 1800 029701 FAX: 07-33441191 EMAIL: warranty@absco.com.au

Issued 01 January 2013

ABSCO SHEDS - STORAGE GUIDELINES

ABSCO SHEDS include garden sheds, garden beds, storage units, aviaries, garages, awnings and carports.

ABSCO SHEDS are designed to be weatherproof for normal weather conditions. In the event of extreme weather conditions such as heavy rain, combined with high wind gusts, the ridge capping, sheeting joints, screw fixings etc., may exhibit minor deformations which may allow some water entry. These areas should be checked regularly to ensure that maximum strength and protection is maintained.

Other weather conditions such as extreme heat and extreme cold, moist or dry air can influence the effects of concrete floor moisture and/or condensation on the underside of the roof sheets.

ABSCO SHEDS and storage units are primarily used for storage of garden equipment such as lawnmowers, wheelbarrows, garden tools etc. Storage items that might be adversely affected by any of the above conditions may require additional protection such as being sealed or covered by plastic sheets and/or stacked above the concrete floor on timber slats.

Waterproof sealants may be used to offer further protection where required around joins and screw fixings, as can rubber door seals and other products which are available from most hardware outlets.

Placement of waterproof sealants (silicone) between the base of the shed and concrete slab is not recommended, as this process can have a reverse effect, preventing excess water from escaping, resulting with water accumulating and being trapped inside the shed.

Absco accepts no responsibility for water entry, floor moisture, condensation or the condition of the Contents inside your Absco steel building arising from any of the pre-mentioned weather conditions.