ABSCO SIGNATURE CARPORT
MODEL: ADCPSN3

3.11m W x 6.12m D x 2.60m H

AU: 1800 029 701
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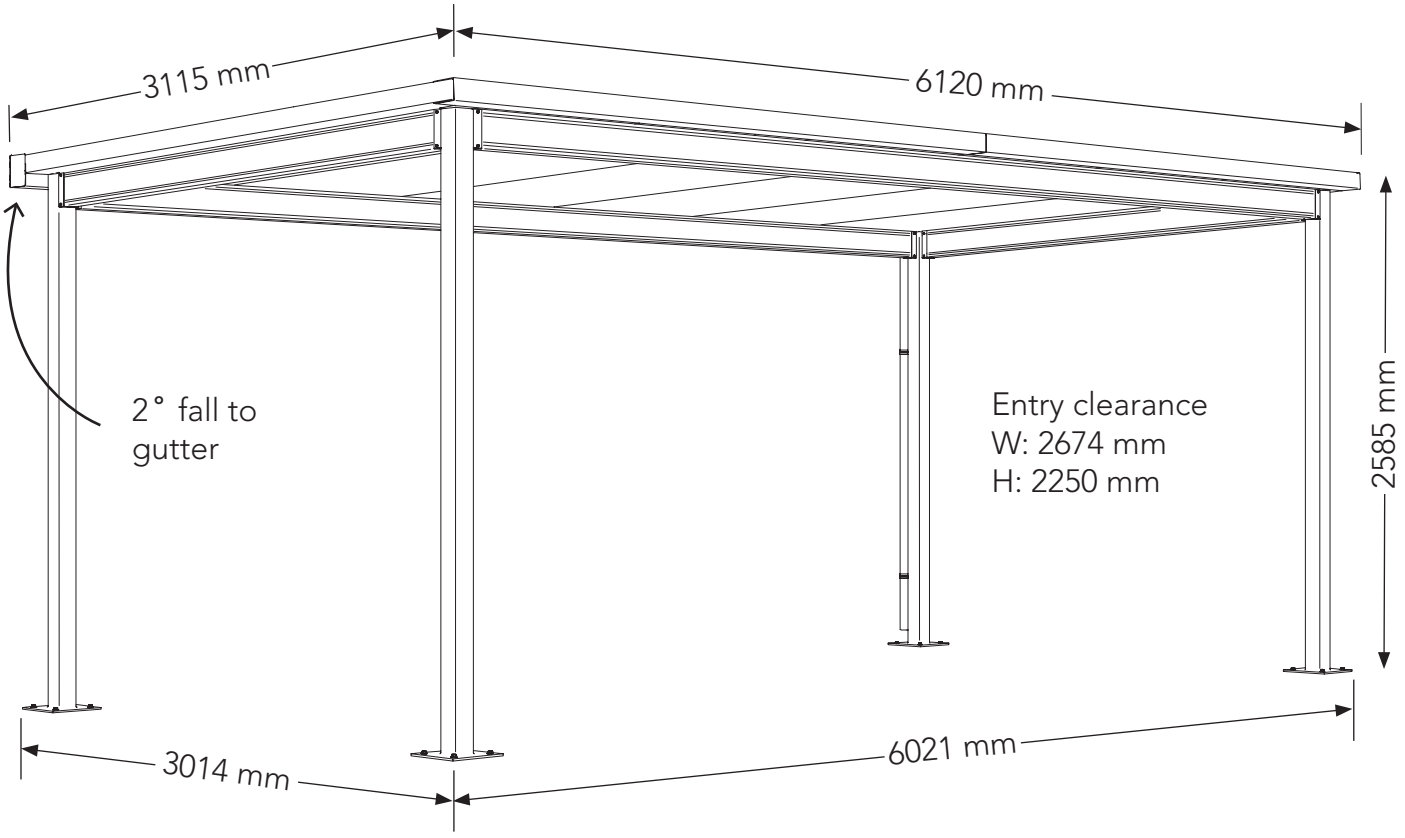

For construction in non-cyclonic areas

Wind rating: N3 as per AS4055-2021.

If you require a higher wind rating please contact us: admin@absco.com.au or 1800 029 701

NOTE - Concrete slab must be a minimum of 100mm thick, 20 MPa concrete reinforced with SL72 mesh and extend for the full area covered by the structure.

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IMPORTANT INFO - READ BEFORE CONSTRUCTION BEGINS

General

Read through these instructions in detail to gain a thorough understanding of assembly methods and associated details.

Unpack and carefully identify and check off all the parts against the parts described and illustrated on "Components List" page.

If you are missing anything do not begin, contact Absco.

Site Prep

The structure shall be erected on top of suitable foundations and anchored down appropriately.

The site for the structure must be level. An uneven surface may result in misalignment of parts.

Region specific: If required, you have approval for the structure. If unsure, seek advice from relevant local authorities.

Safety

Some parts may have sharp edges. It is recommended to wear gloves when handling items and safety glasses when drilling holes. Sensible shoes are highly recommended.

Minimum two people are required to easily lift and align assemblies.

Consider the weather and do not build in windy conditions.
If the structure must be left for a period of time uncompleted it must be made safe to prevent damage.

TOOLS REQUIRED

Use as a guide, other tools/equipment may be suitable. Safely work within your ability.

- Sheet metal locking pliers
- 4mm drill bit
- 5/16" & 3/8" nut setter
- 12mm masonry drill bit
- Chuck drill
- Impact drill driver
- Hammer drill
- 8m tape measure
- Caulking gun
- 16mm socket
- 1.8m ladder (2 required)
- Visegrips or clamps
- Pop riveter
- Stanley knife
- Masking tape
- Spirit level
- Marker
- Ruler
- Square
- String line
- 70mm hole saw
- Tin snips

Please wear recommended PPE for any tool used during construction

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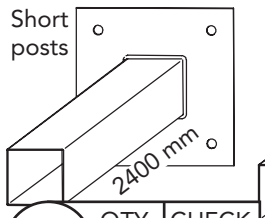
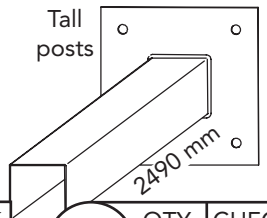
COMPONENT LIST

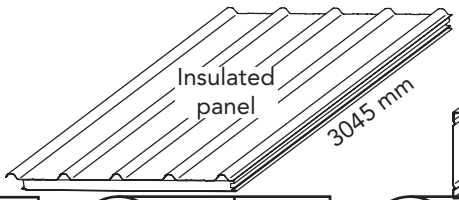
Check off all components, parts shown are not to scale.



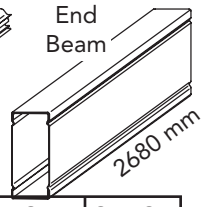
PT3	QTY 2	CHECK



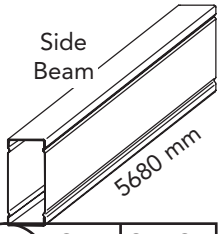
PT4	QTY 2	CHECK



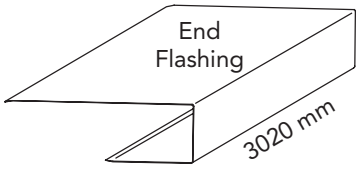
AD1	QTY 6	CHECK



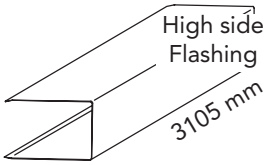
SB1	QTY 2	CHECK



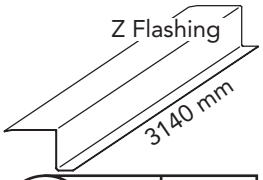
SB2	QTY 2	CHECK



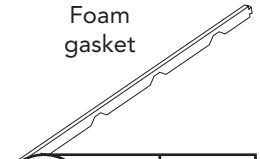
TR36	QTY 2	CHECK



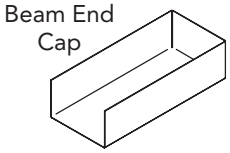
TR37	QTY 2	CHECK



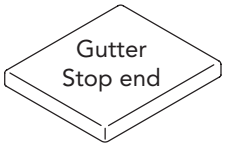
TR35	QTY 2	CHECK



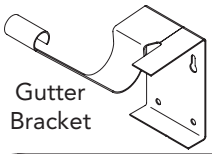
RWG 28	QTY 6	CHECK



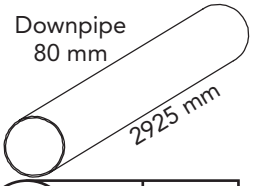
BK3	QTY 8	CHECK



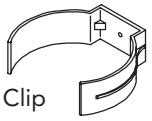
RWG 25	QTY 2	CHECK



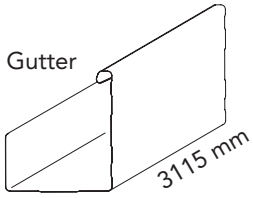
RWG 26	QTY 7	CHECK



RWG 21	QTY 1	CHECK



RWG 23	QTY 2	CHECK



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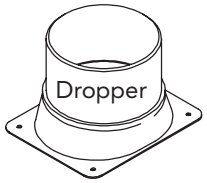
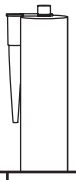


RWG 22	QTY 1	CHECK

RWG 29	QTY 1	CHECK

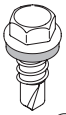


RWG 27	QTY 1	CHECK

TU	QTY 1	CHECK

FASTENER PACKS

FAST100	QTY 200	CHECK



FAST101	QTY 200	CHECK

FAST102	QTY 200	CHECK

FAST103	QTY 16	CHECK

FAST104	QTY 48	CHECK

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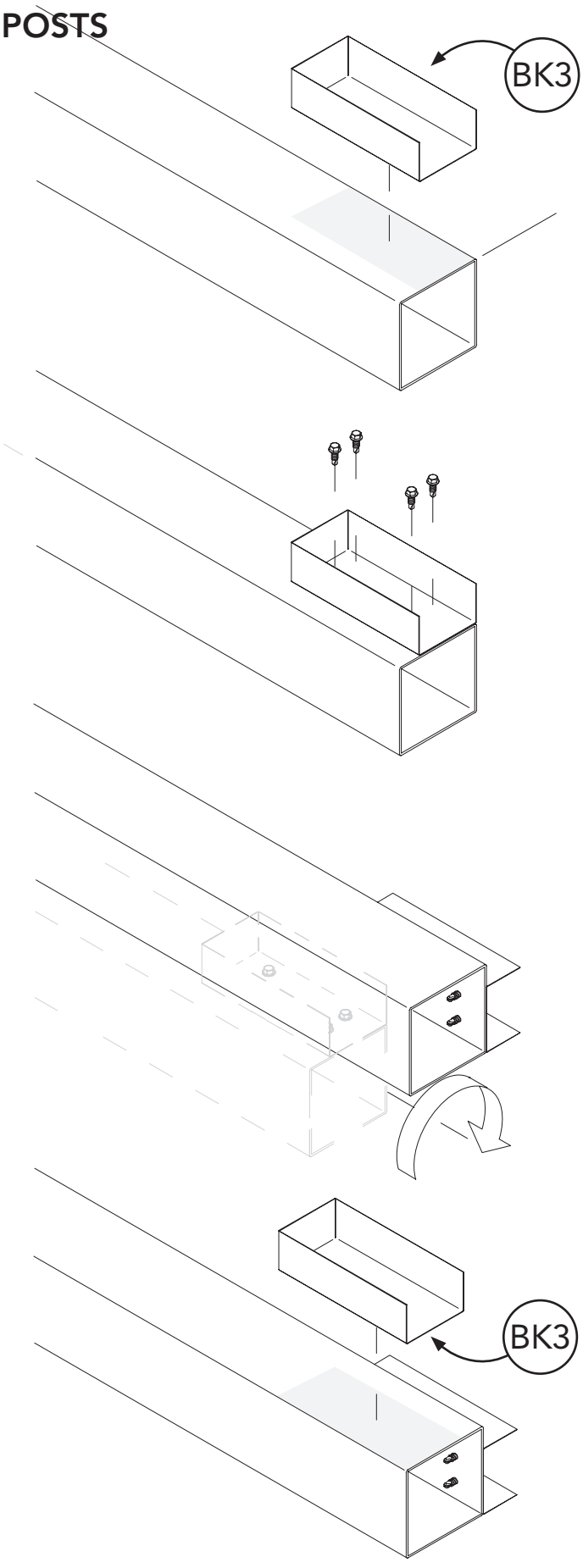
POSTS



1. Take any post and a **BK3** bracket.

Orientate the bracket as shown and align so it's flush with the end and side of the post.

2. Fasten using four **FAST100** tek screws and 5/16" nut setter.

Make sure screws are inset 20 mm from the edges of bracket for beam clearance.

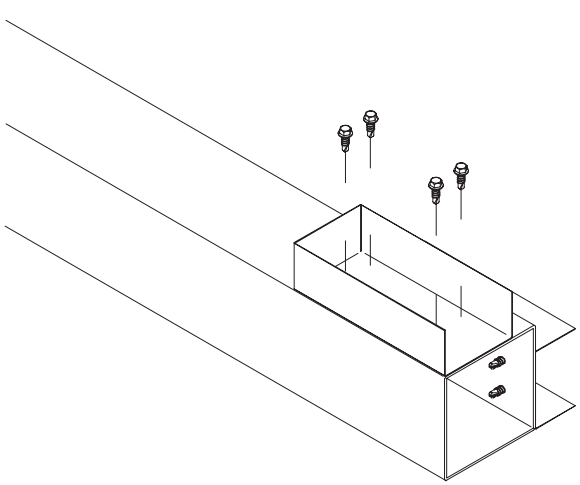
To keep the parts aligned while fastening use a clamp or visegrips.

3. Carefully roll the post to the side shown.

4. Take another **BK3** bracket and align so it's flush with the end and side of the post as shown.

5. As before, fasten using four **FAST100** tek screws.
Make sure they're inset 20 mm from the sides.

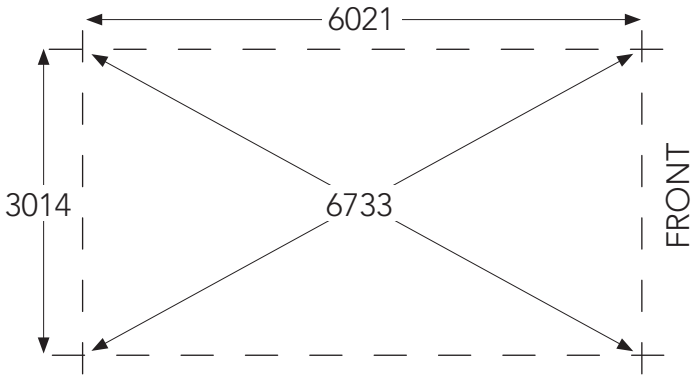
6. Repeat these steps for all posts.



ABSCO SIGNATURE CARPORT MODEL: ADCPSN3

3.11m W x 6.12m D x 2.60m H

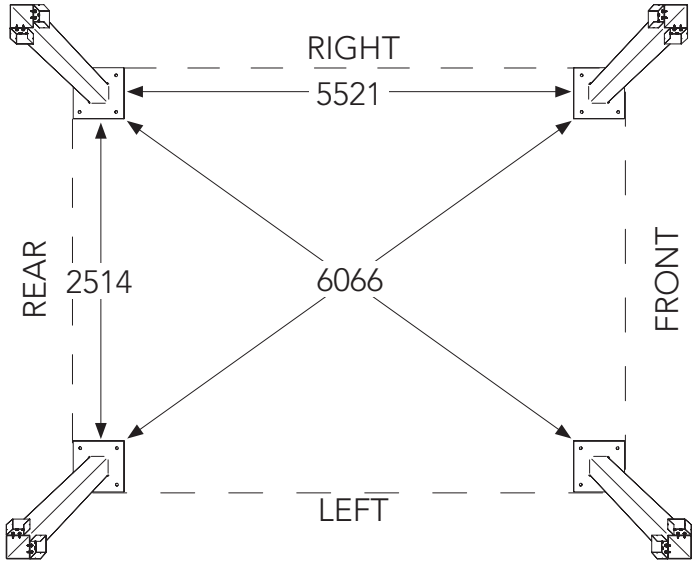
POST LOCATIONS



Use a chalk line, or equivalent, to mark nominal outside dimensions onto foundation.

The diagonal measurement will confirm squareness.

NOTE: Make the decision which side the gutter will go.
For illustrative purposes the gutter will on the right side for the rest of this manual.

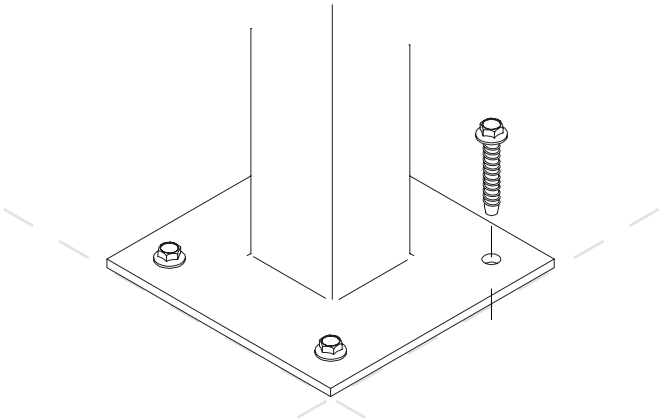


Position posts in the corners.

- Shorter **PT3** posts to the gutter side.
- Taller posts **PT4** to the other side.
- Make sure the faces with the brackets are all inward.

These internal dimensions can be used to confirm alignment.

ANCHORING



Drill the holes for the anchors using the post baseplate as a template.

Use a hammer drill with a 12mm diameter masonry drill bit drill to a depth of 100mm

Fasten to foundations with four concrete screws **FAST103** per post using a 16mm socket.

NOTE: Uneven foundations will cause posts to pull away from vertical.

ABSCO SIGNATURE CARPORT MODEL: ADCPSN3

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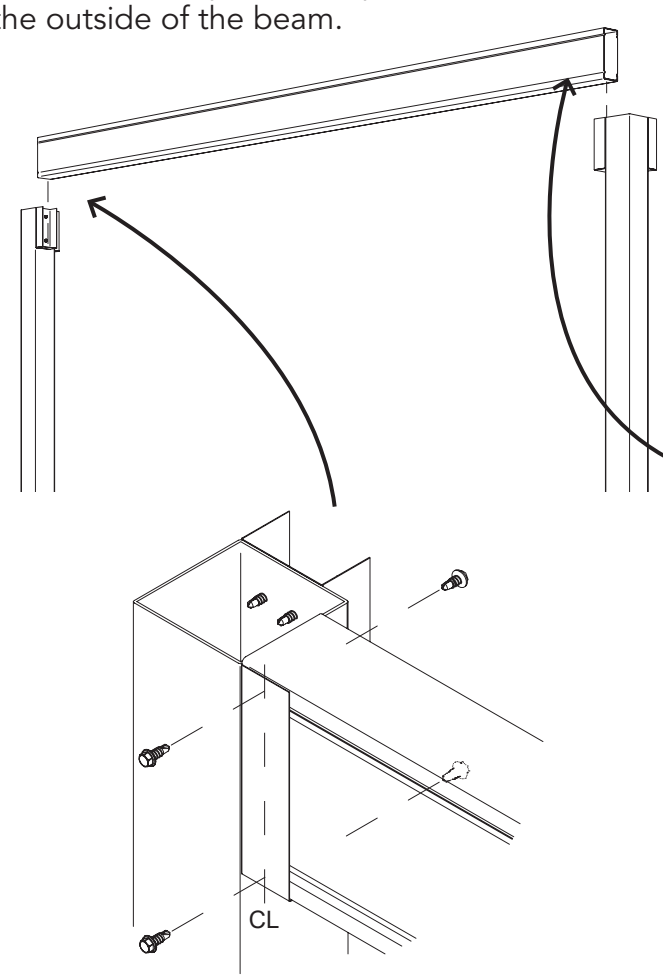
FITTING THE SHURELOCK BEAMS

0. Remove the protective plastic coating from the outside of the beam.



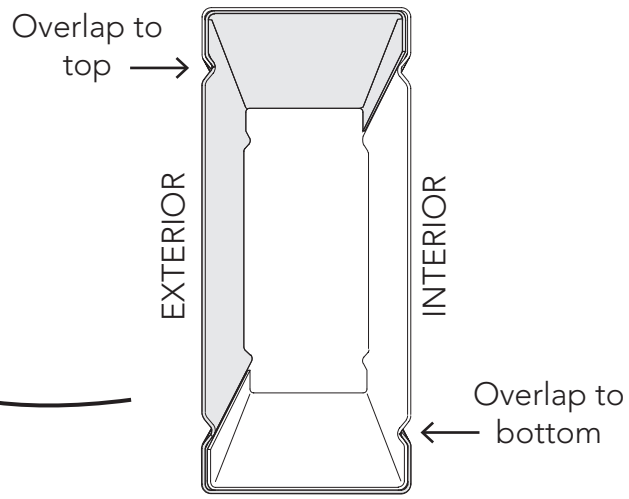
2. Make sure the ends of the beam are all the way into the brackets and fasten each end with four **FAST100** tek screws.

These are visible screws so take time to position them on the centreline of the BK3 bracket and inset equally from the top and bottom.

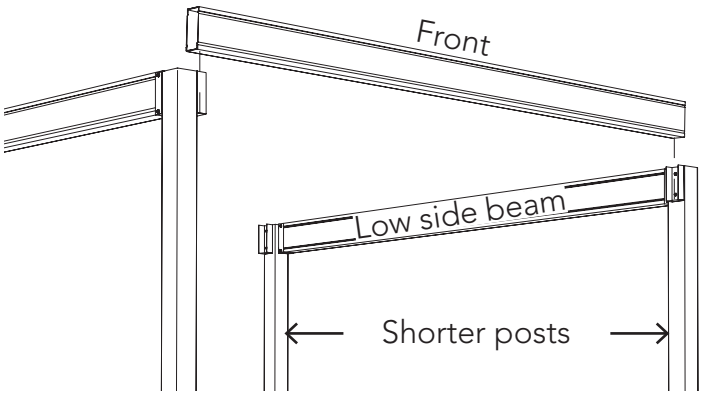
3. Repeat these steps for the other long beam **SB2** before proceeding to step 4.

On the exterior side of the beam that will get the gutter, only put in the lower teks for now.

1. Safely lift and place a longer **SB2** beam inside the taller post brackets **BK3** as shown.



NOTE: Beam orientation is important to prevent water entry.
Orientate the beam so the exterior face has the overlap to the top.



4. Safely lift and place the first shorter beam **SB1** inside the post brackets **BK3** as shown.

5. Make sure the ends of the beam are as far as they can go into the brackets, there will be a small gap at the high-side due to angle.

Fasten each end with four **FAST100** tek screws as before.

6. Repeat these steps for the last **SB1** beam

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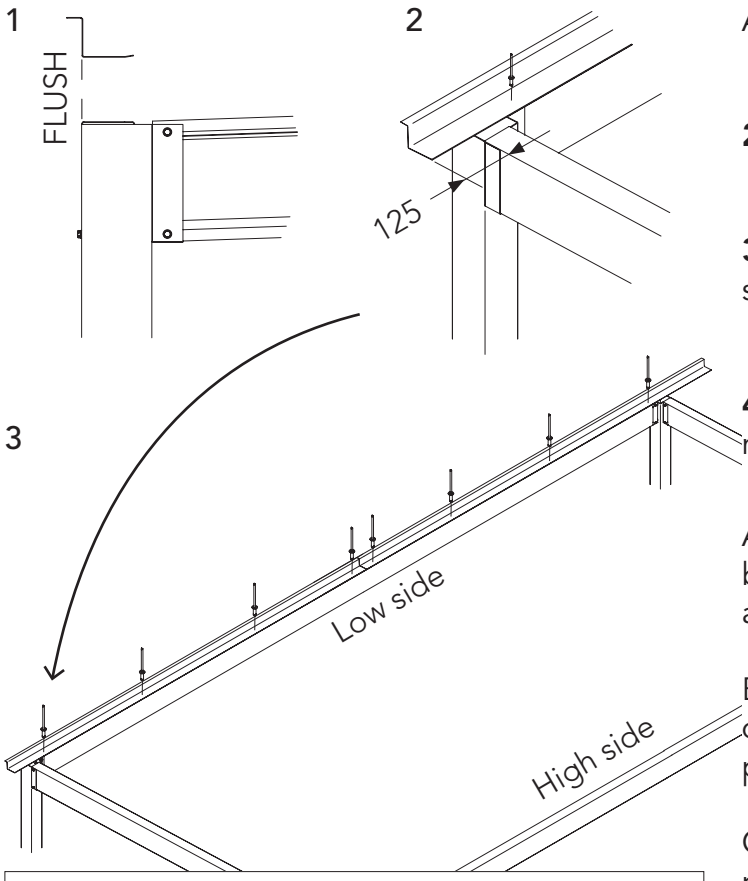
ATTACH Z FLASHING



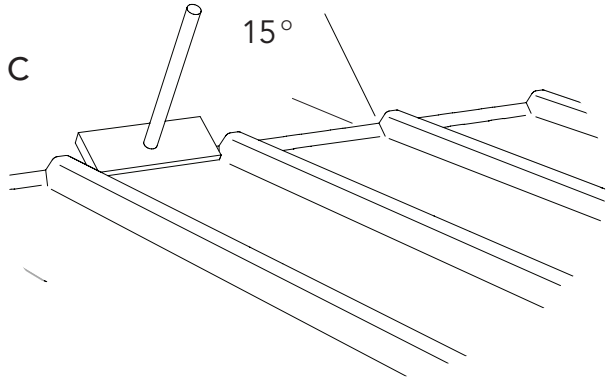
1. Place one Z flashing **TR35** along the lower side beam as pictured.
Align to be flush with the exterior of the beam.

2. Overhang the end of the beam by 125 mm.

3. Fasten flashing to top of beam with 4 evenly spaced pop rivets **FAST102.**

4. Fasten the second Z flashing in the same manner.

ROOF PANELS



A. Check the foam core is flush with the top and bottom skins. If it bulges out, safely trim flush with a Stanley knife.

B. Check if the steel bottom skin corner is bent down below the bottom face. Bend it up with pliers.

C. To increase weather protection turn up the pans 15 degrees with a turn up/down tool or equivalent as shown. (Non gutter end only)

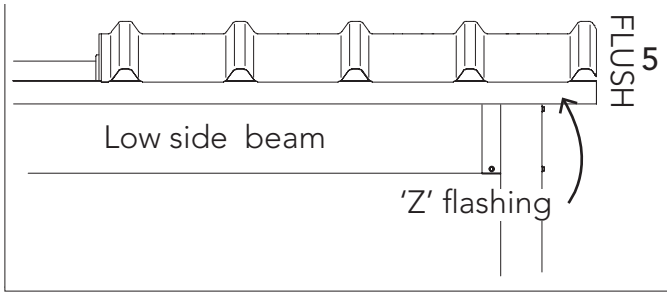
Familiarize yourself with the weight and orientation of the **AD1** panel before lifting.

The panel end with 'top skin' overhang & sticker must go to the low side beam.

The 'bottom skin' has a protective plastic coating, this can be peeled off just before lifting.

Remember to lift and place **do not slide**, this can scratch the panel.

SIDE VIEW - Aligning the first panel



1. Safely position the first panel on top of the frame - all the way to the end shown.
The steel 'top skin' will sit over the rear flashing.

2. Adjust so it's butted up against the rear trim *and* the side of the 'top skin' is flush with the end of the flashing.

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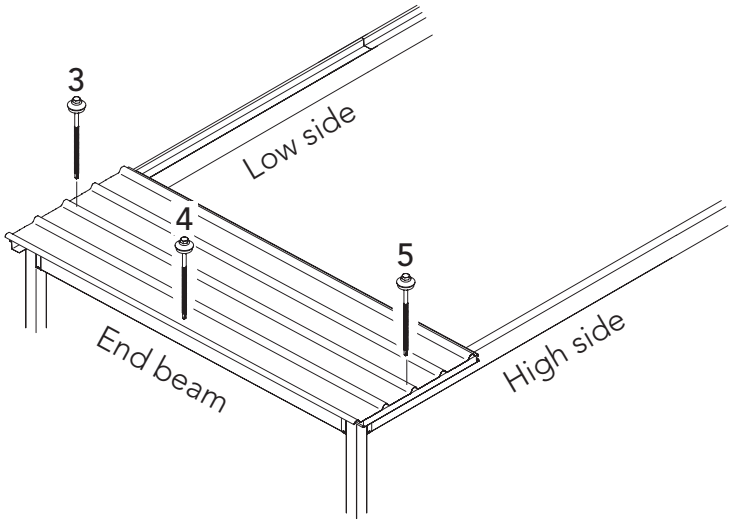
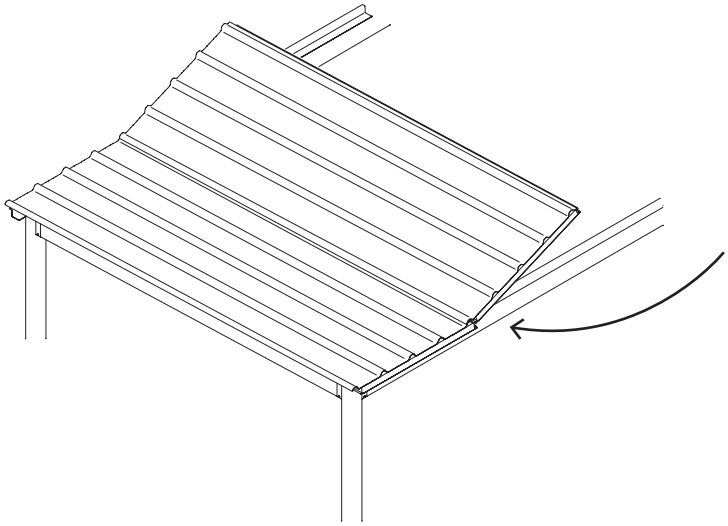
ROOF PANELS





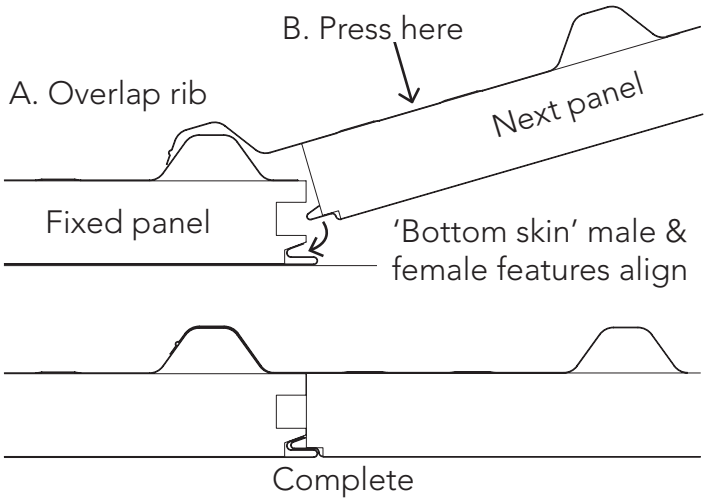
3. On the middle rib, fasten panel to low side beam with a tek 14 x 125 mm **FAST104.**
Don't over-tighten and crush the panel.

For further screw position detail see next page.

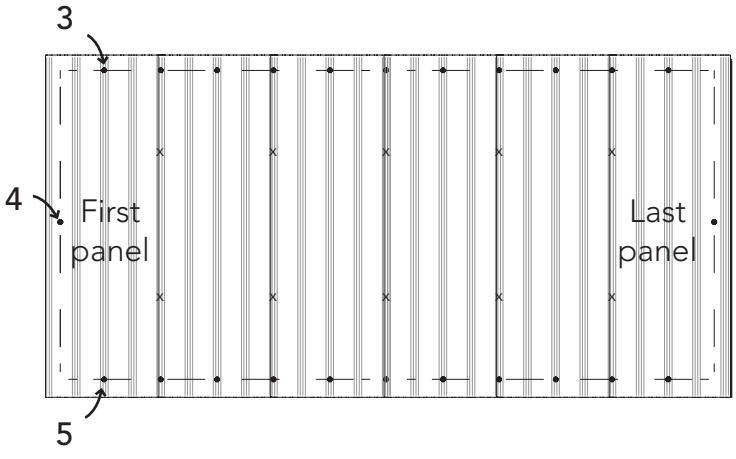
4. Check for consistent overhang along end beam - adjust if required.
Fasten with a tek 14 x 125 mm **FAST104** at the midpoint of end beam - in the sheet pan.

5. On the middle rib**,** fasten to high side beam with another a tek 14 x 125 mm **FAST104**.

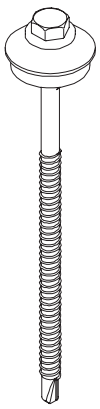
FRONT VIEW - Laying the roof panels



TOP VIEW - Fastening layout



6. Fasten roof panels to beams with a tek 14 x 125 mm **FAST104** at the remaining positions.
NOTE: rib fixed to centreline of beam unless noted otherwise.



NOTE: **3**, **4** & **5** are the screws done earlier.

Don't over tighten and crush the panel.

7. Use shorter tek screws with neoprene washers **FAST101** at the locations marked with 'x' where the 'top skins' overlap.

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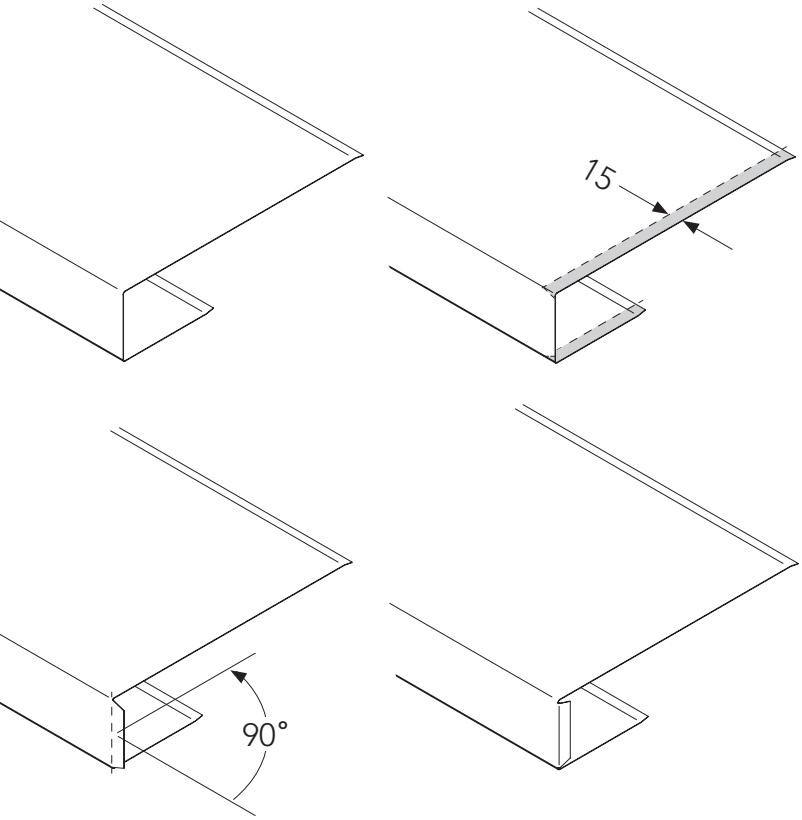
FRONT & REAR FLASHING - HIGH SIDE TRIM



NOTE:
Leave the protective plastic on **TR36** flashing until fastening, It's good to mark on.

Do one TR36 as pictured - the other TR36 is the same but 'mirrored'.

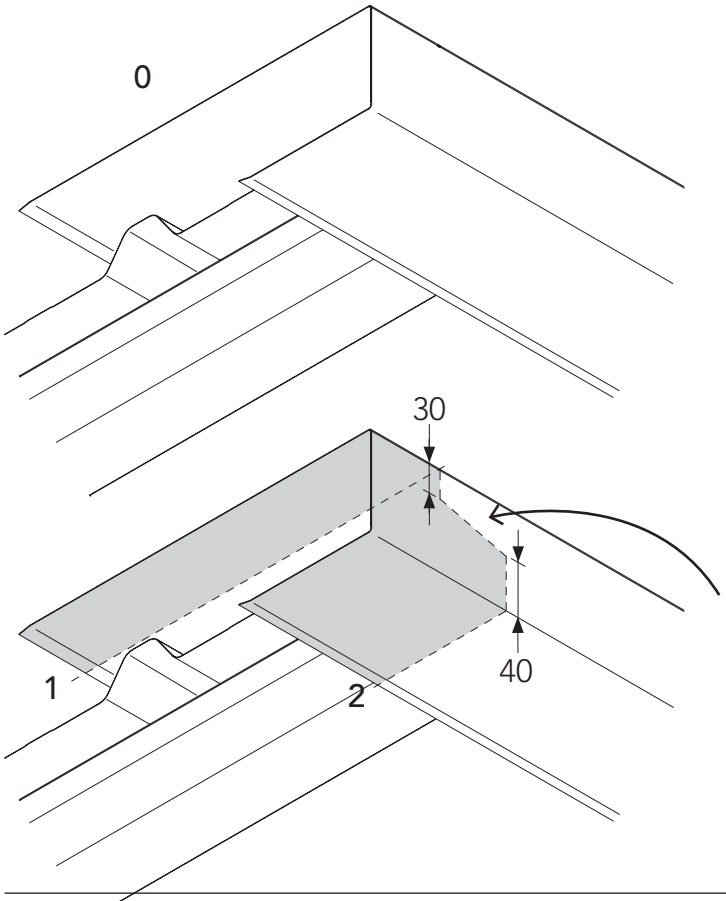
1. Mark out and cut away 15mm from the top and bottom sides using tinsnips (offcuts shown in grey).

2. You'll be left with a tab as shown. Use "Sheet Metal Locking Pliers" to easily fold it 90 degrees.

3. Check fit by placing flashing along the edge of roof panel.

- Bent tab hard up against end.
- Top face sits on two sheet ribs.
- Bottom face covers the Z flashing.

- LOW SIDE TRIM



UNDERSIDE VIEW - Beams not shown.

0. TR36 flashing will overhang roof panel at the rear and we'll need to trim to make the gutter fit later.
NOTE: If the flashing is the same length as the roof panel you don't need to trim the top.

1. Mark off where 'top skin' end is against the top side of the TR36 flashing.

Then continue 30mm down the side.

2. Mark off where the rear 'Z' flashing is against the bottom side of the flashing.

Then continue 40mm up the side.

3. On the side mark a line to join these points as shown.

4. Take the flashing down off the roof and trim using tinsnips (offcuts shown in grey).

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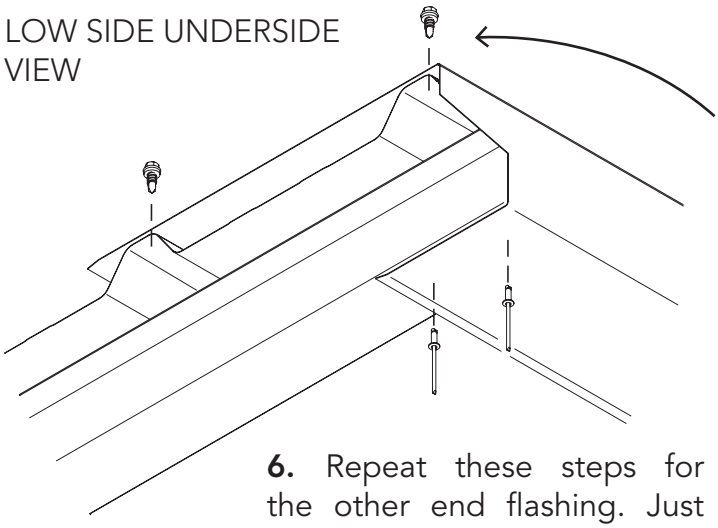
FRONT & REAR FLASHING

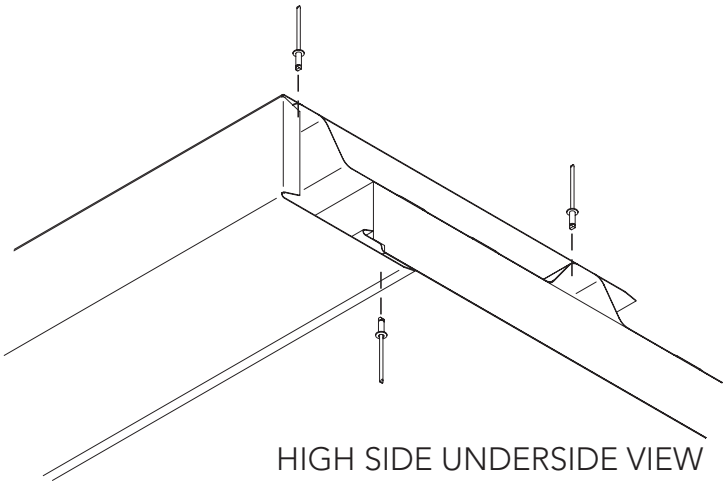
LOW SIDE UNDERSIDE VIEW



6. Repeat these steps for the other end flashing. Just remember to make the mirrored version.

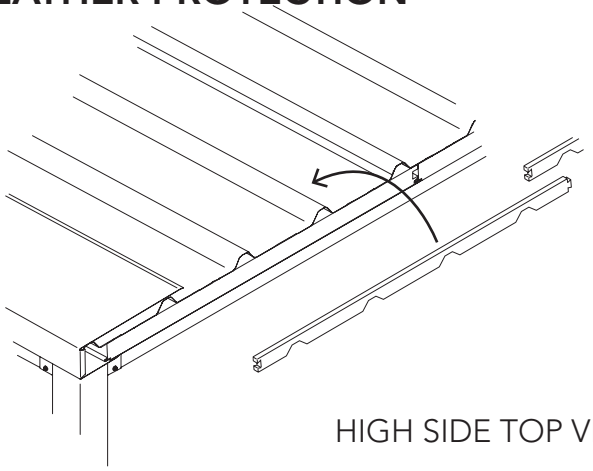
5. Refit the flashing, and fasten using pop rivets **FAST102** at the locations shown.

Only at the low side, on top, use teks with neoprene washers **FAST101.**



HIGH SIDE UNDERSIDE VIEW

WEATHER PROTECTION



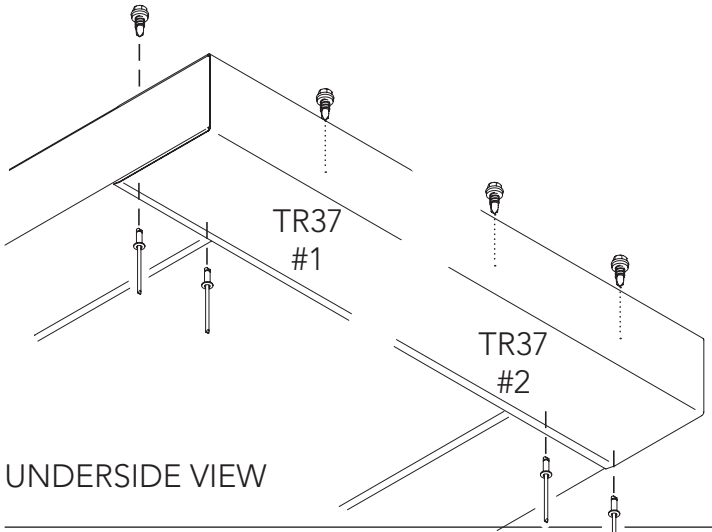
HIGH SIDE TOP VIEW

To increase weather protection do the following.

A. Turn up pans of sheet 15 degrees using "Sheet Metal Locking Pliers"

B. Installing foam gaskets **RWG28** within 90mm of the edge.
Some trimming may be required to fit at ends.
Apply silicone to the face that sits in the pan.

HIGH SIDE FLASHING



UNDERSIDE VIEW

1. Starting at the front end of the structure, take one **TR37** flashing and place over the front flashing and roof panels as shown.

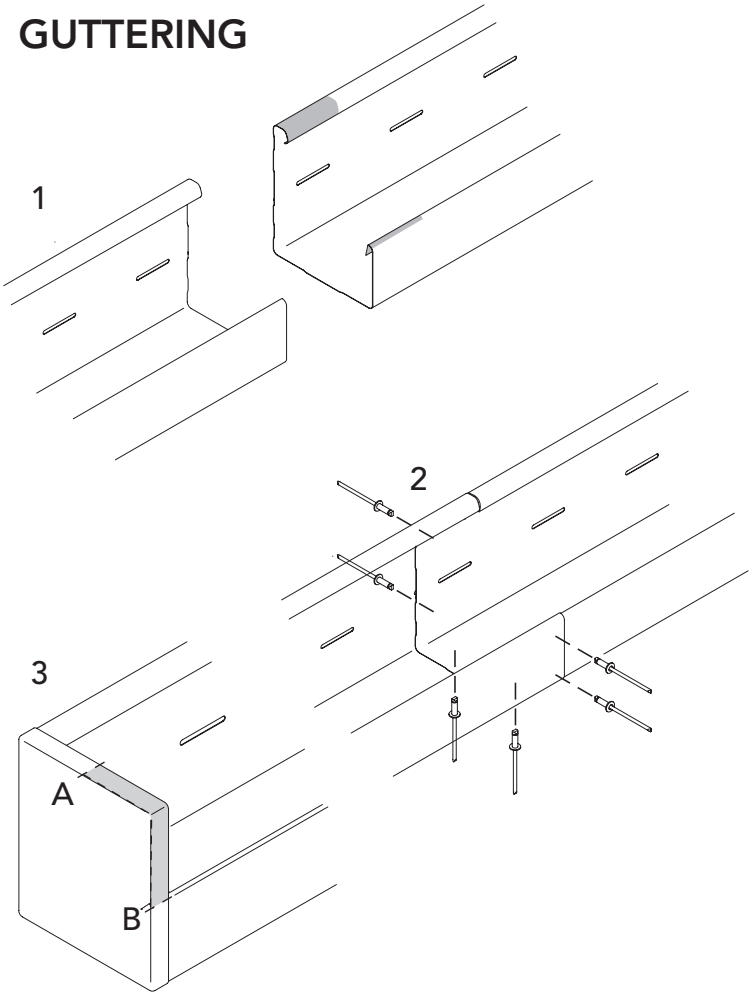
2. Take the second TR37 flashing and place alongside, butted against the first & trim so it finishes at the rear flashing.

3. Fasten with pop rivets **FAST102** along the underside are shown.
Fasten with tek screws with neoprene washers **FAST101** along the top.

ABSCO SIGNATURE CARPORT MODEL: ADCPSN3

3.11m W x 6.12m D x 2.60m H

GUTTERING



0. Remove protective plastic coating from guttering components.

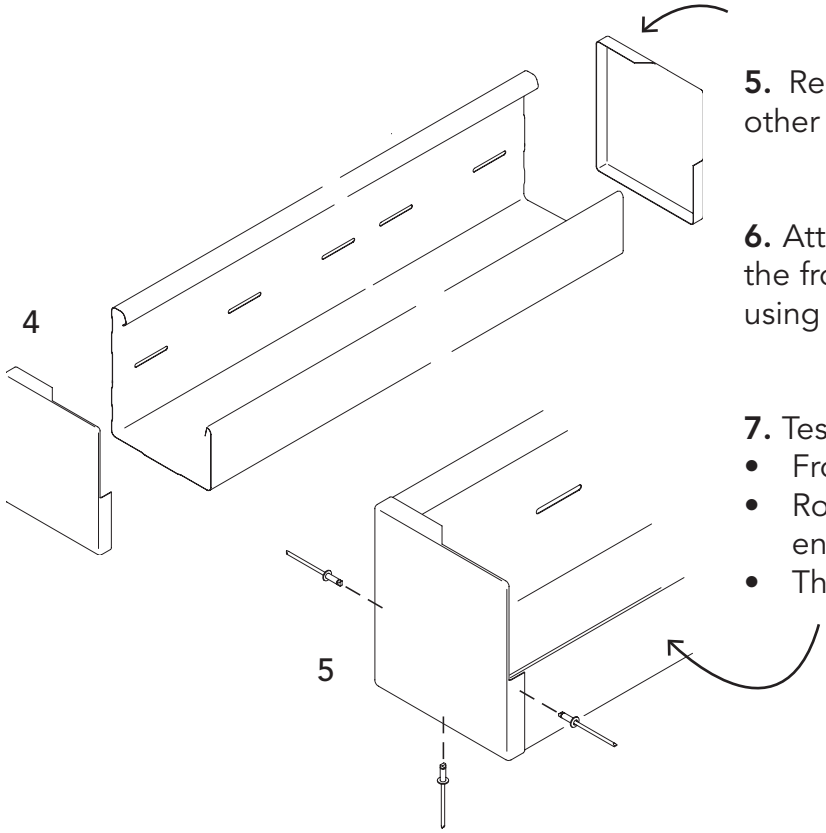
1. Next join both lengths of gutter RWG24, to match the overall finished length of the structure.

Notch out the rolled edges (shown in grey) to allow one to slide inside the other.

Consider which way you want the water to fall before notching. Make sure the 'uphill' gutter is notched and inside the other.

2. Put silicone in the joint and then use two rivets FAST102 per side.

3. Take a gutter end stop RWG25 and test fit it over an end of the gutter. Mark off the following.
A. Midpoint along the top
B. Face of gutter shown



4. Trim away area shown in grey with tinsnips

5. Repeat steps at the other end to make the other end stop.

6. Attach end caps with a rivet FAST102 through the front back and bottom. Joints may be sealed using silicone.

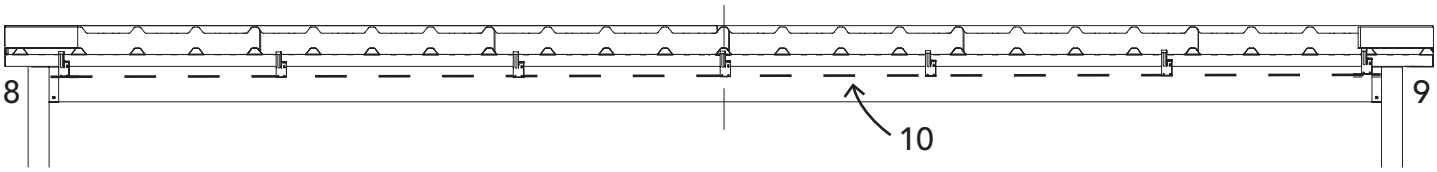
7. Test fit the assembly
- Front and rear flashings go inside end caps.
- Roof panel 'top skin' sits under top face of end caps.
- This face will be against the low side beam.

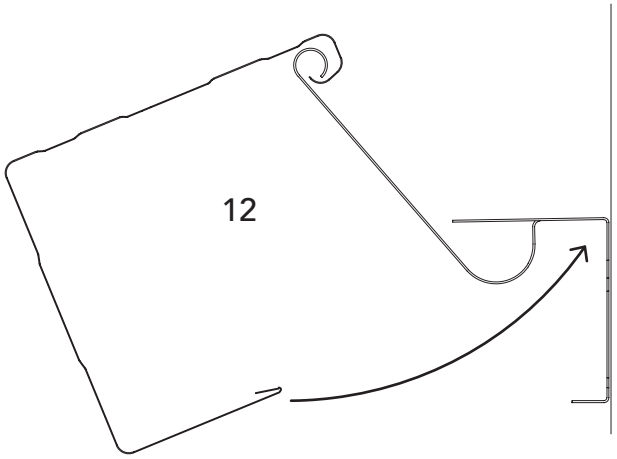
ABSCO SIGNATURE CARPORT MODEL: ADCPSN3

3.11m W x 6.12m D x 2.60m H

GUTTERING

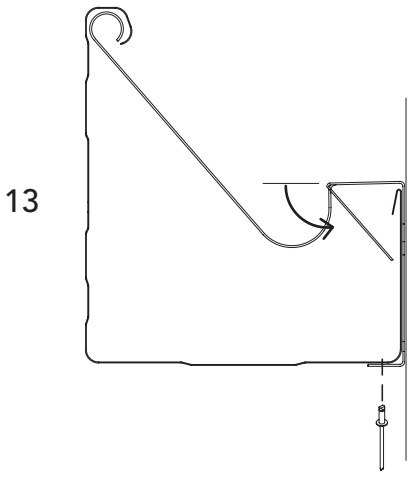
FRONT VIEW - NOTE: Gutter falls to left for illustrative purposes only.





8. The gutter needs fall to drive water to a specific end. At the end you'd like the downpipe, mark the underside of the gutter onto the beam.
This will be used as a reference when mounting the gutter brackets RWG24.
Take the gutter down for now.

9. At the other end measure up another 10mm from this reference line and make another mark onto the beam at the point shown.

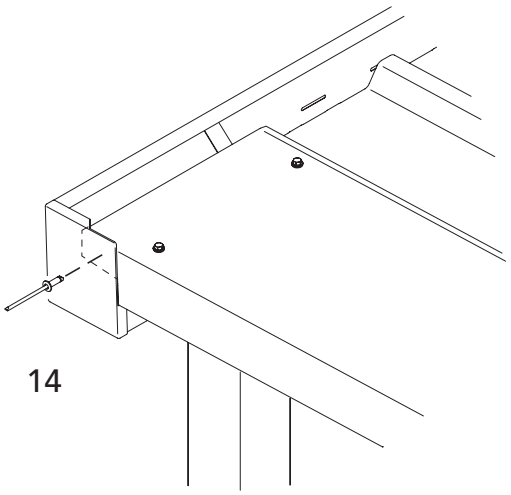


10. Take a string line and make a line from the high to low point.

11. Align the bottom of the gutter bracket with the marks and fasten to rear beam using rivets FAST102.

- Place middle bracket at centre panel join.
- From there align with every 4th pan as shown.

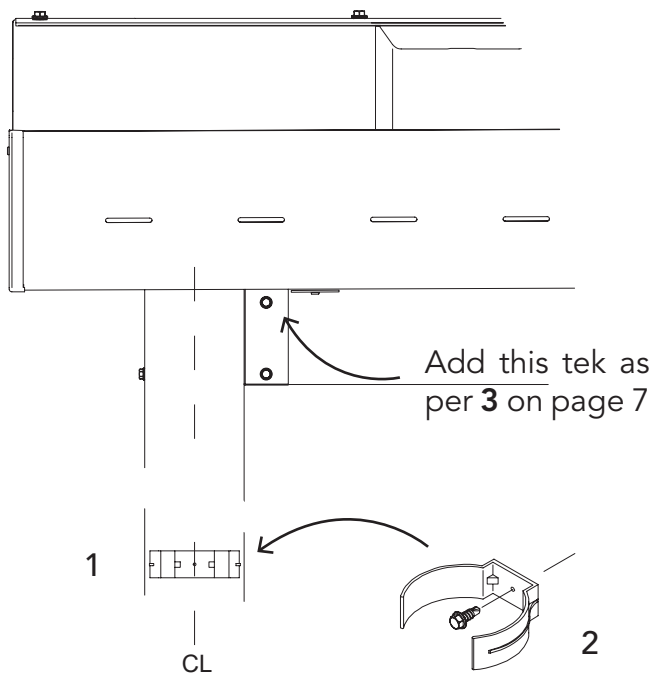
12. Lift the gutter assembly and placed the rolled top edge over the gutter bracket in the orientation shown.
Roll the gutter around, make sure the front and rear flashings go inside.

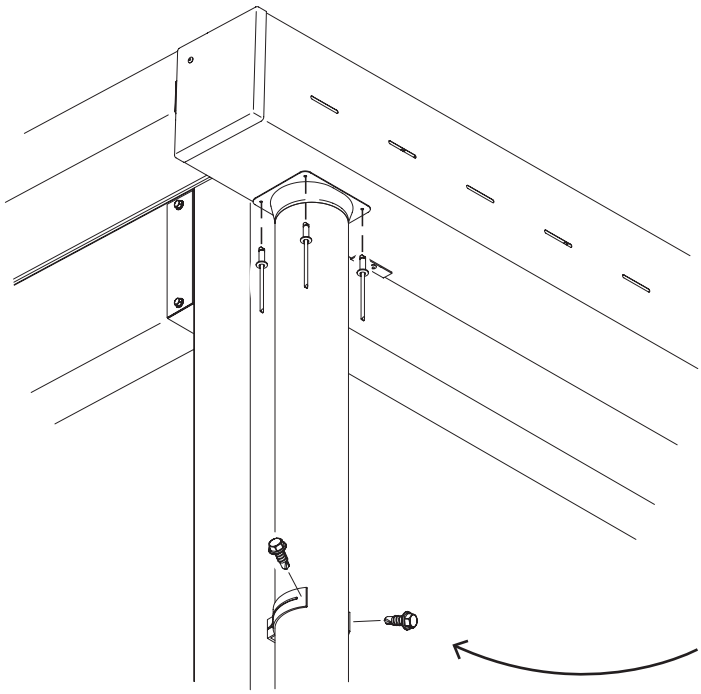


13. Lift so the bottom sits on the lower part of the bracket.
Fold the tabs down by hand then rivet from below as shown.

14. Rivet the gutter end stop to the front and rear flashing.

DOWNPIPE





NOTE: The method shown is to mount a simple full height straight downpipe RWG21. An 80 to 90 mm adapter RWG29 is supplied if you wish to join into existing system instead.

1. Fit both downpipe clips RWG23 to the centreline of the post at the positions shown.

2. Fasten the clips to the posts using tek screws FAST100 (no neoprene washer).
Be careful not to over-tighten and damage.
Predrilling may be helpful.

3. Cut the downpipe to length.

4. Place the dropper RWG22 into the top of the downpipe and fasten and seal, press into clips and slide up until it touches the underside of the gutter.

5. Straighten and then mark the four fastening holes and the centre.

6. Cut out the centre hole with a 70 mm hole saw.

7. Seal the dropper to the underside of the gutter and rivet at all corners.

8. Secure downpipe to clips using two tek screws FAST100 (no neoprene washer). Be careful not to over-tighten and damage.

Immediate maintenance required!
Check and clean swarf from surfaces. Swarf will rust and if not cleaned away can permanently discolour the structure.

Referenced Standards

Information in this manual has been designed in accordance with the following Australian and New Zealand Standards.

– National Construction Code of Australia 2022

– Specification S4C2—Design of Building in Cyclonic Areas NCC2022 VOL 1

– Part H1D7 Sheet Roofing of NCC 2022 Vol 2

– AS 1163:1991 Structural Steel Hollow Sections

– AS/NZS 1170.0:2002 Structural Design Actions Part 0— General Principles

– AS/NZS 1170.1:2002 Structural Design Actions Part 1— Permanent, Imposed & Other Actions

– AS/NZS 1170.2:2021 Structural Design Actions Part 2— Wind Actions

– AS/NZS 1170.3:2003 Design Actions Part 3— Snow and Ice Actions

– AS/NZS 1554.1:2004 Structural Steel Welding— Welding of Steel Structures

– AS1562.1: 2018 Design and installation of sheet roof and wall cladding Part 1: Metal

– AS/NZS 1664.1:1997 Aluminium structures— Limit state design

– AS 1684.2:2021 Residential Timber Framed Construction

– AS 3566.1:2002 Self Drilling Screws

– AS 3600:2018 Concrete Structures

– AS 4055:2021 Wind Loads for Housing

– AS 4100:2020 Steel Structures Code

– AS/NZS 4600:2018 Cold Formed Steel Structures