

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.

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## TOOLS REQUIRED

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

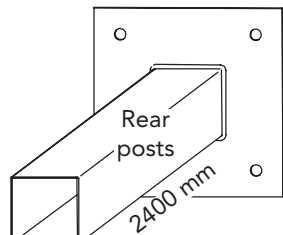
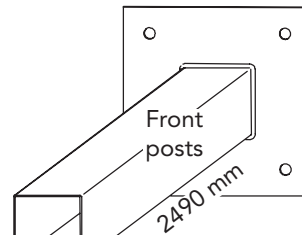
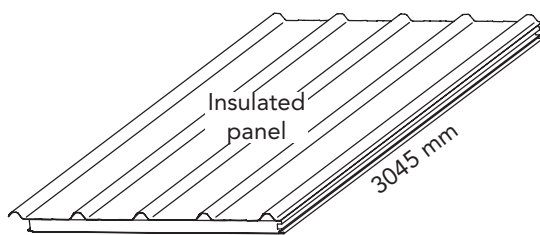
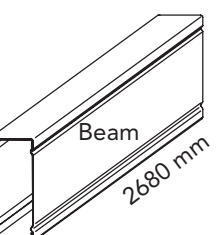
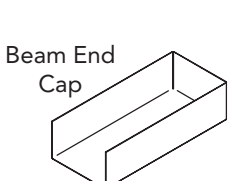
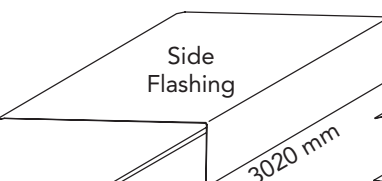
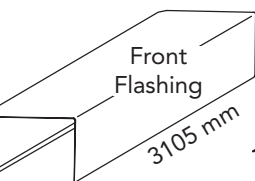
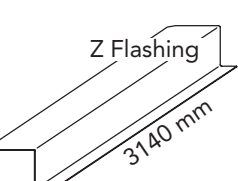
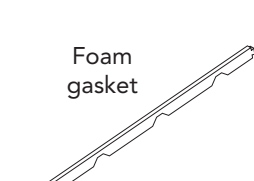
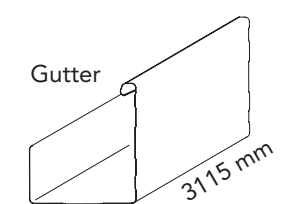
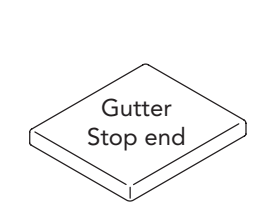
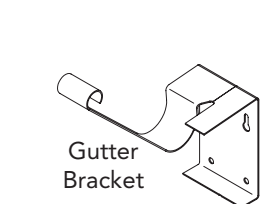
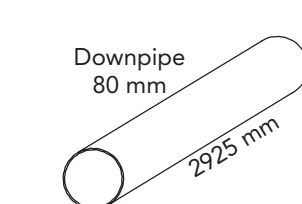
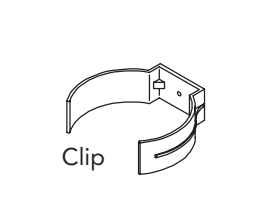

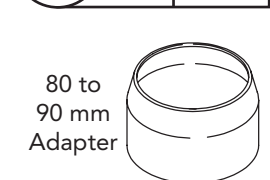

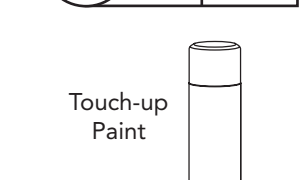
- Sheet metal locking pliers
- 4mm drill bit
- 5/16" & 3/8" nut setter
- 12mm masonry drill bit
- Chuck drill
- Impact drill driver
- Hammer drill
- 8m tape measure
- Caulking gun
- 16mm socket
- 1.8m ladder (2 required)
- Visegrips or clamps
- Pop riveter
- Stanley knife
- Masking tape
- Spirit level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








Please wear recommended PPE for any tool used during construction

## COMPONENT LIST

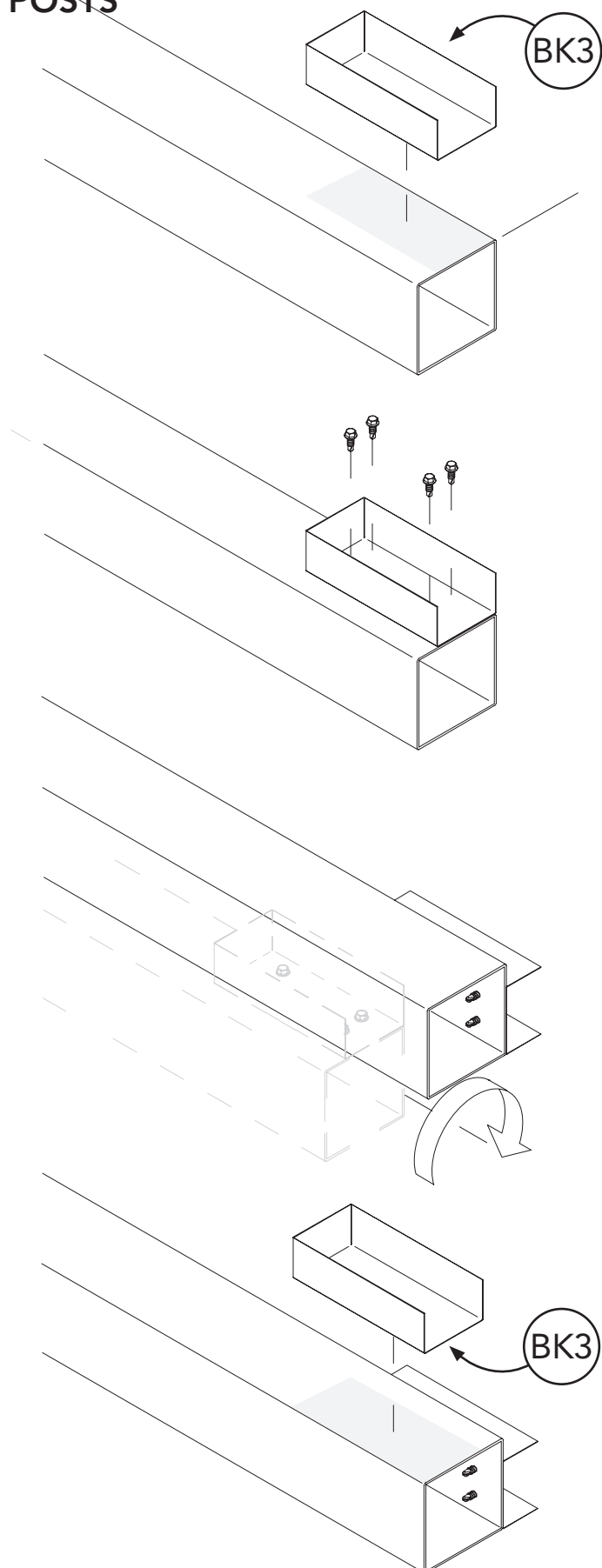
Check off all components, parts shown are not to scale.

 <b>PT3</b> QTY <b>2</b> CHECK	 <b>PT4</b> QTY <b>2</b> CHECK	 <b>AD1</b> QTY <b>3</b> CHECK	 <b>SB1</b> QTY <b>4</b> CHECK
 <b>BK3</b> QTY <b>8</b> CHECK	 <b>TR36</b> QTY <b>2</b> CHECK	 <b>TR37</b> QTY <b>1</b> CHECK	 <b>TR35</b> QTY <b>1</b> CHECK
 <b>RWG 28</b> QTY <b>3</b> CHECK	 <b>RWG 24</b> QTY <b>1</b> CHECK	 <b>RWG 25</b> QTY <b>2</b> CHECK	 <b>RWG 26</b> QTY <b>4</b> CHECK
 <b>RWG 21</b> QTY <b>1</b> CHECK	 <b>RWG 23</b> QTY <b>2</b> CHECK	 <b>RWG 22</b> QTY <b>1</b> CHECK	 <b>RWG 29</b> QTY <b>1</b> CHECK
 <b>RWG 27</b> QTY <b>1</b> CHECK	 <b>TU</b> QTY <b>1</b> CHECK		

## FASTENER PACKS

 <b>FAST100</b> QTY <b>100</b> CHECK	 <b>FAST101</b> QTY <b>100</b> CHECK	 <b>FAST102</b> QTY <b>100</b> CHECK
 <b>FAST103</b> QTY <b>16</b> CHECK	 <b>FAST104</b> QTY <b>24</b> CHECK	

## 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.

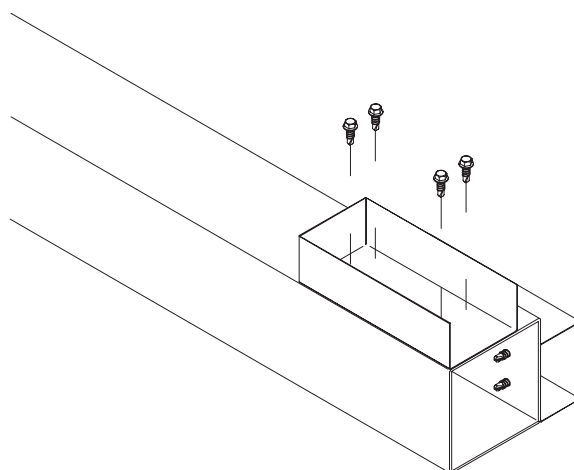
To keep the parts aligned while fastening use a clamp or visegrips.

3. Carefully roll the post to the side shown.

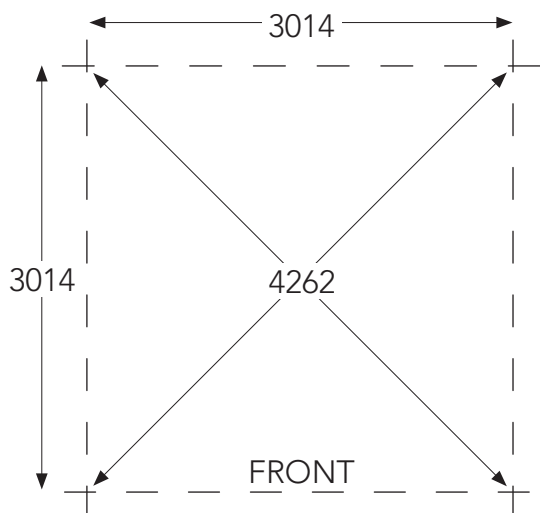
4. Take another **BK3** bracket and align so it's flush with the end and side of the post as shown.

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.

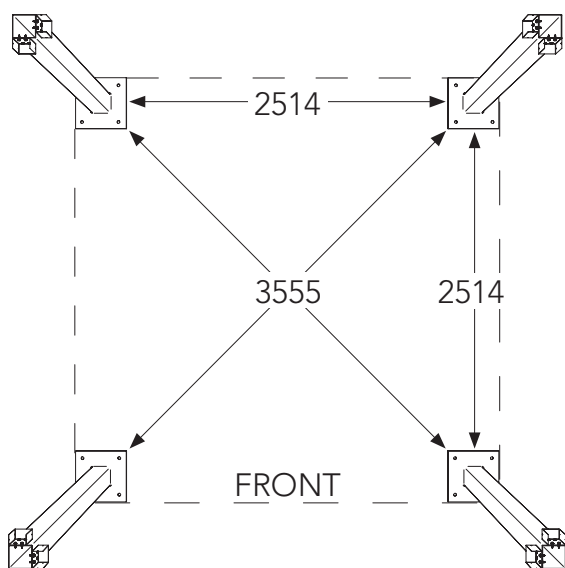


## POST LOCATIONS



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

The diagonal measurement will confirm squareness.

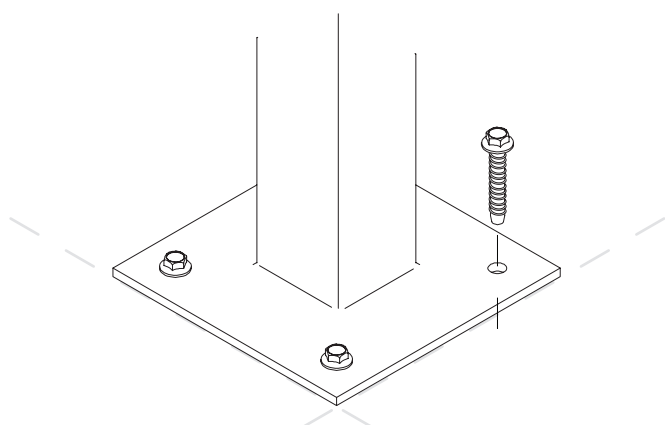


Position posts in the corners.

- Taller posts **PT4** to the front
- Shorter **PT3** posts to the rear.
- 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.

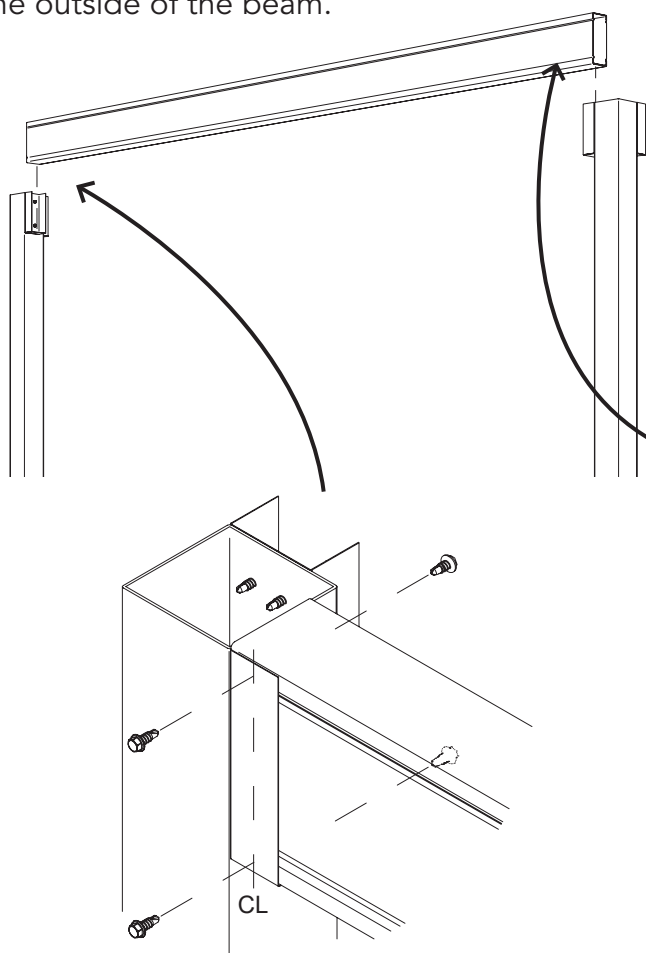
Use a hammer drill with a 12mm diameter masonry drill bit drill to a depth of 100mm

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.

## FITTING THE SHURELOCK BEAMS

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



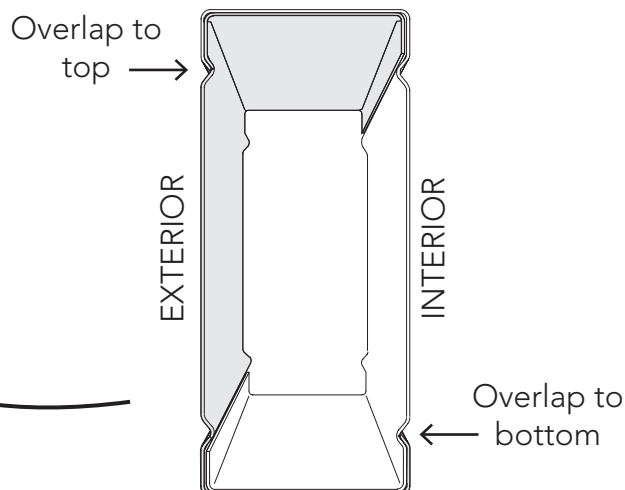
2. Make sure the ends of the beam are all the way into the brackets and fasten each end with four **FAST100** tek screws.

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.

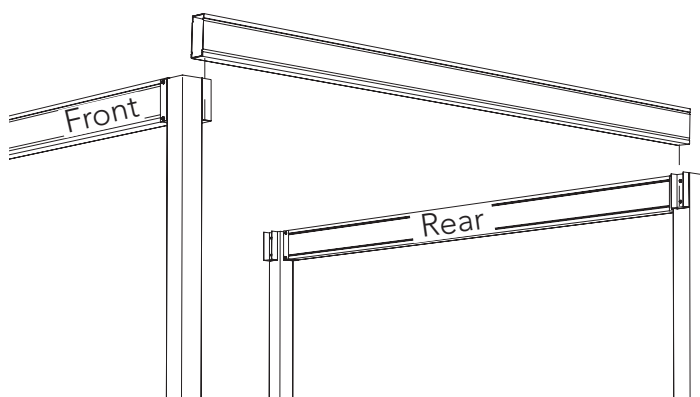
3. Repeat these steps for the rear beam before proceeding to step 4.

On the exterior side of the rear beam only put in the lower teks for now.

1. Safely lift and place a **SB1** beam inside the front 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.



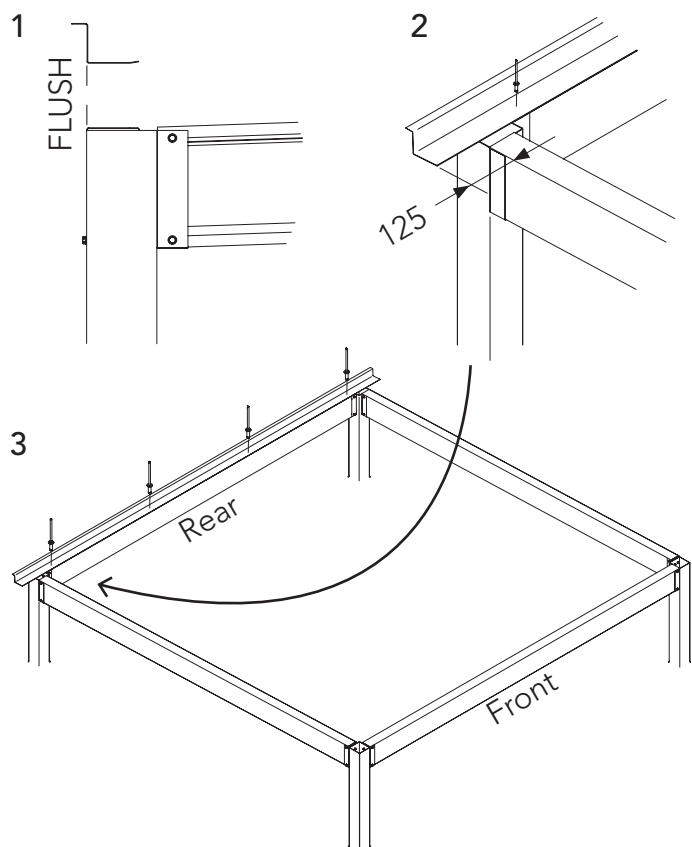
4. Safely lift and place the side beam **SB1** inside the post brackets **BK3** as shown.

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 top for the front due to angle.

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

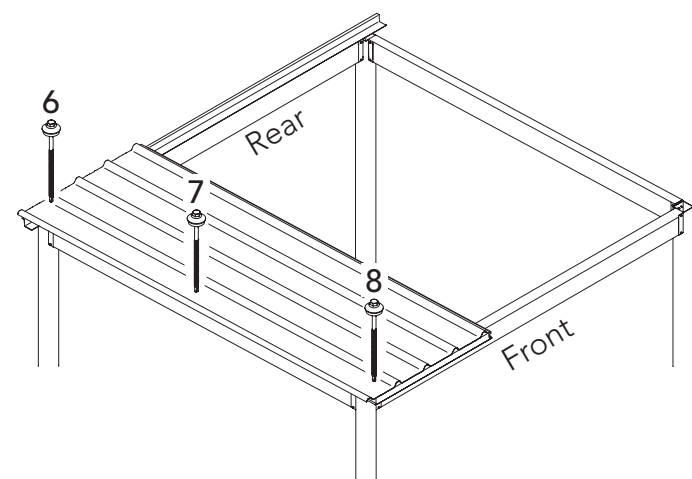
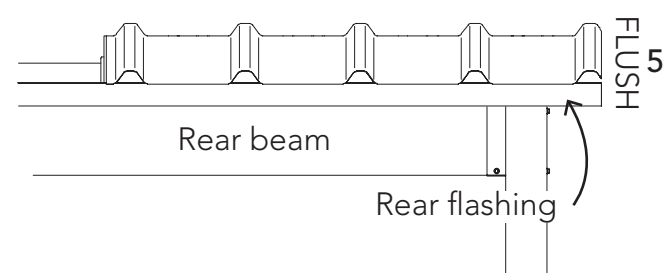
6. Repeat these steps for the other side beam

## ATTACH REAR FLASHING



## ROOF PANELS

REAR VIEW - Aligning the first panel



1. Place the rear flashing TR35 along the rear beam as pictured.

Align side shown to be flush with the exterior of the beam.

2. Overhang the left side of by 130 mm.

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

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 rear.

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.

4. Safely position the first panel on top of the frame - all the way to the left.

The steel 'top skin' will sit over the rear flashing.

5. 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.

6. In the pan, fasten panel to rear 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.

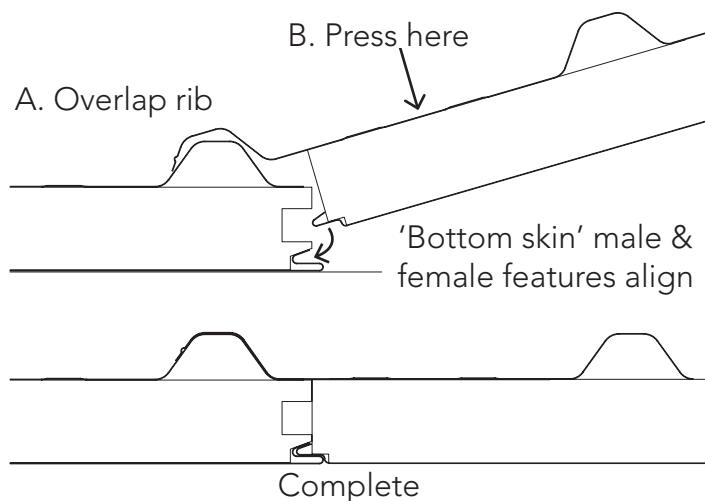
7. Check for consistent overhang along side beam - adjust if required.

Fasten with a tek 14 x 125 mm **FAST104** at the midpoint of side beam.

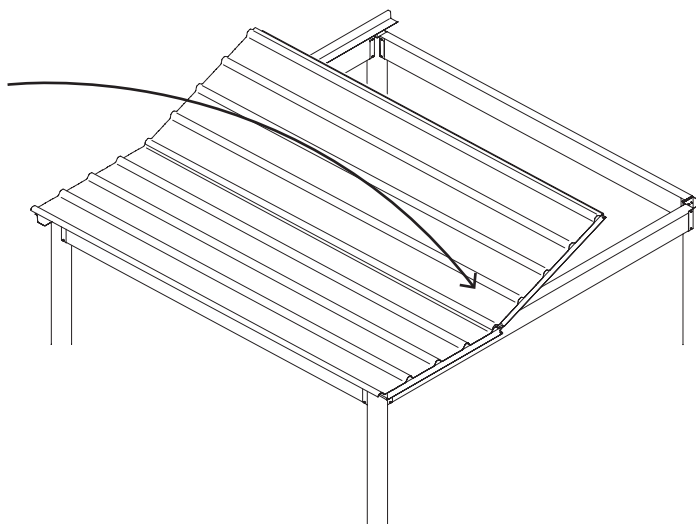
8. In the pan, fasten to front beam with another a tek 14 x 125 mm **FAST104**.

## ROOF PANELS

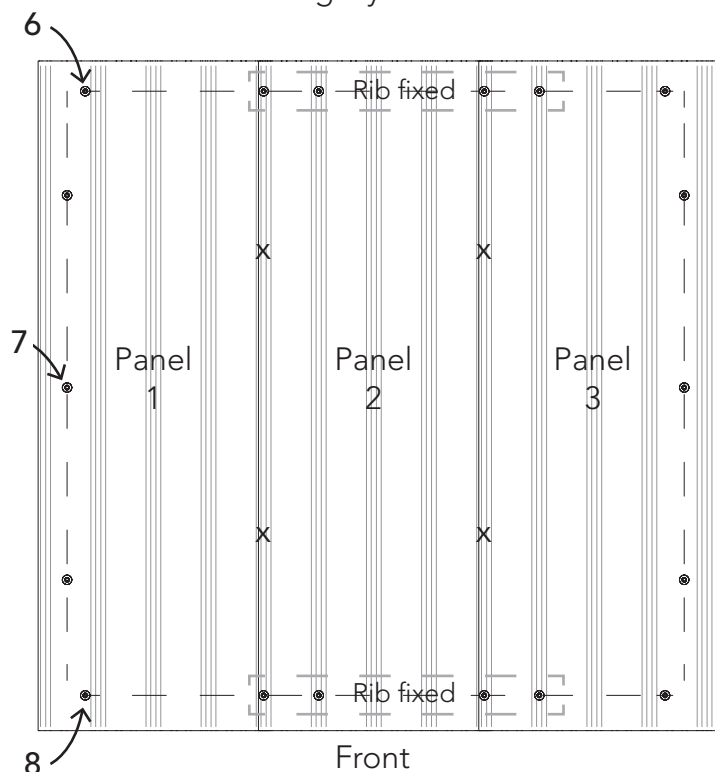
FRONT VIEW - Laying the roof panels



**9.** Safely place and mate the 2nd RP3 panel. Then the 3rd panel.



TOP VIEW - Fastening layout



**7.** Fasten roof panels to beams with a tek 14 x 125 mm **FAST104** at the remaining positions.

NOTE: pan fixed to centreline of beam unless noted otherwise.

NOTE: 6, 7 & 8 are the screws done earlier.

Don't over tighten and crush the panel.

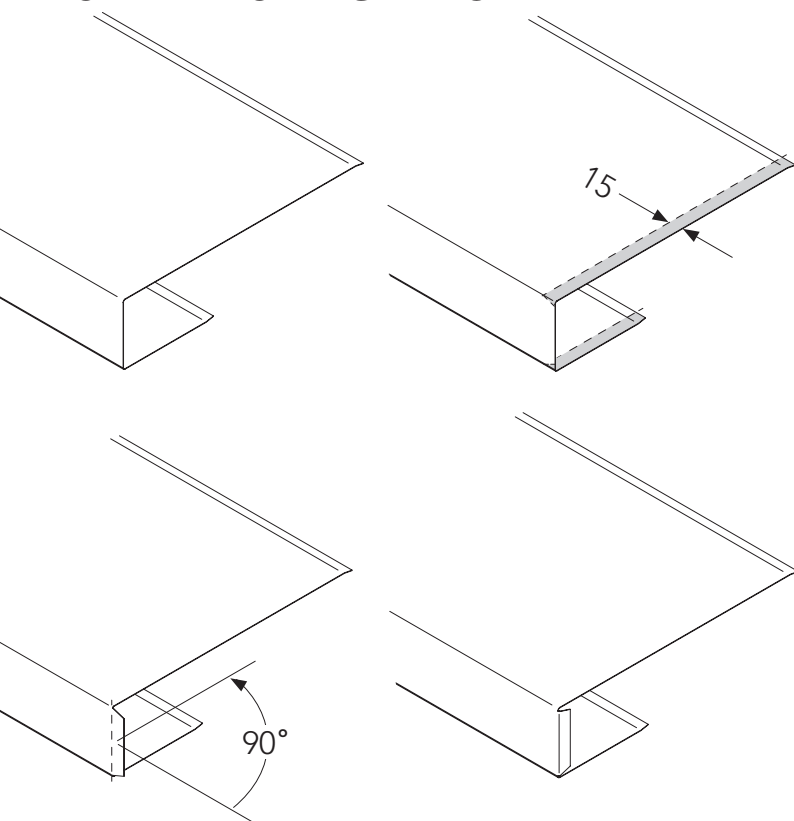
**8.** Use shorter tek screws with neoprene washers **FAST101** at the locations marked with 'x' where the 'top skins' overlap.

These can all be done without climbing onto the structure.





## SIDE FLASHING - FRONT DETAIL



### NOTE:

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

Trimming shown is for the Left flashing. Right is the same but 'mirrored'.

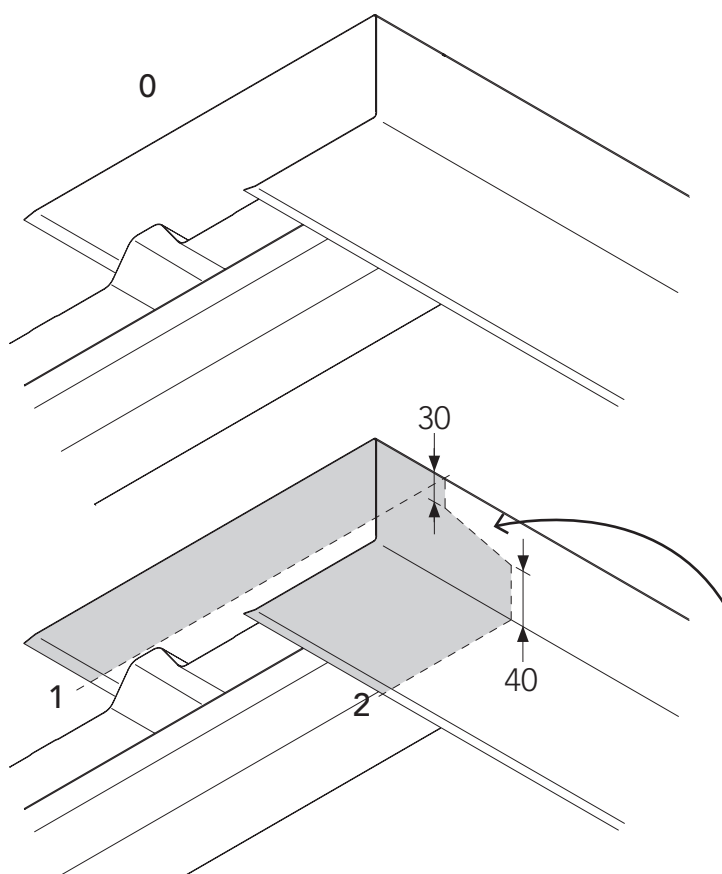
1. Mark out and cut away 15mm from the top and bottom sides using tinsnips (offcuts shown in grey).

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 side of roof panel.

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

## SIDE FLASHING - REAR DETAIL



REAR LEFT UNDERSIDE VIEW - Rear & side 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 flashing.

Then continue 30mm down the side.

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

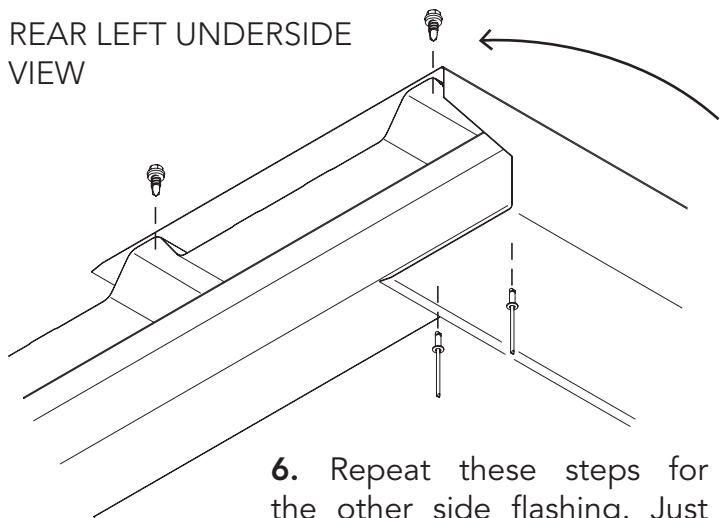
Then continue 40mm up the side.

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).

## SIDE FLASHING - FASTENING

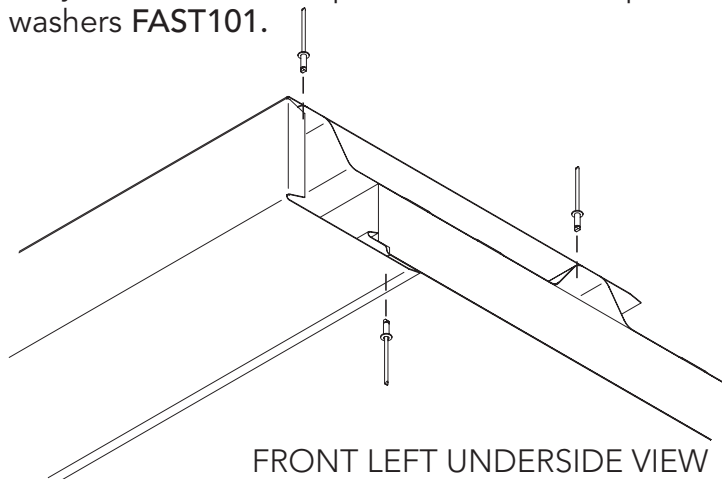
REAR LEFT UNDERSIDE  
VIEW



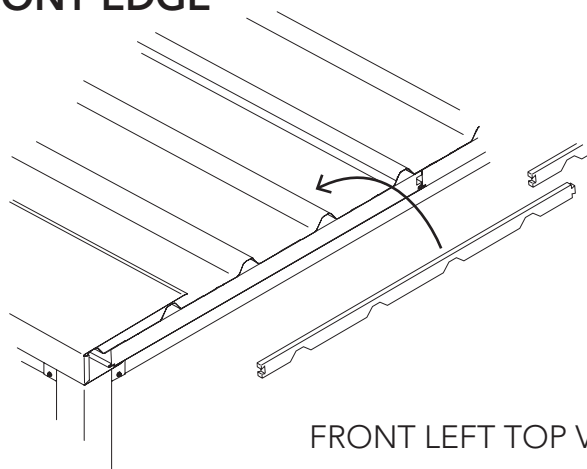
6. Repeat these steps for the other side flashing. Just remember to make the mirrored version.

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

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



## FRONT EDGE



FRONT LEFT TOP VIEW

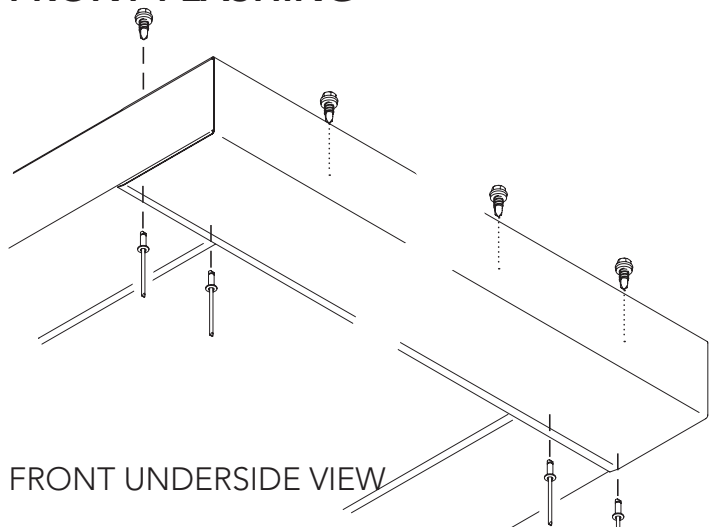
To increase weather protection at the front do the following.

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

**B.** Installing foam gaskets **RWG28** within 90mm of the front edge.

Some trimming may be required to fit at ends. Apply silicone to the face that sits in the pan.

## FRONT FLASHING



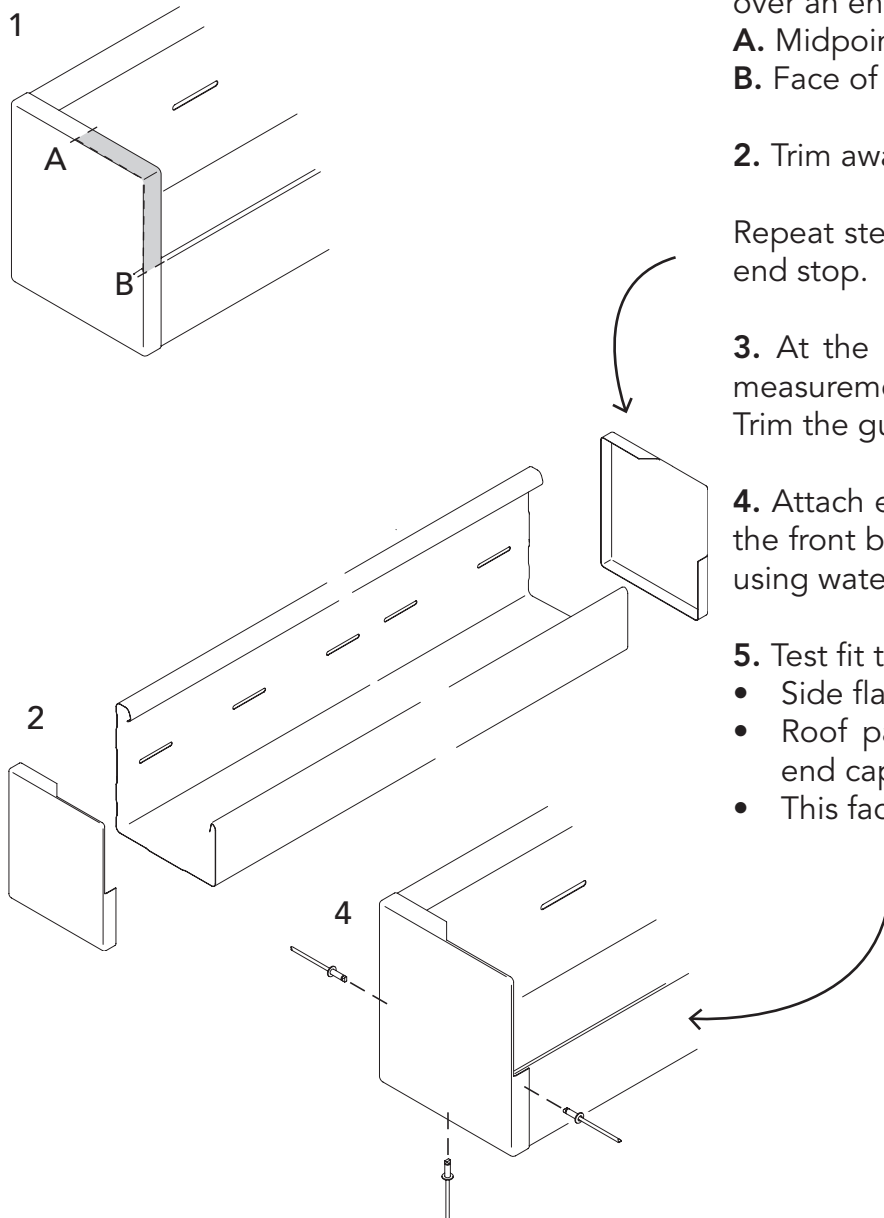
FRONT UNDERSIDE VIEW

1. At the front, take an outside measurement from the left to the right flashing. Trim the front flashing **TR37** to this length.

2. Cover the front edge of the roof and flashings. Carefully lift over gaskets.

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

## GUTTERING



1. 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

2. Trim away area shown in grey with tinsnips

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

3. At the rear of the structure, take an outside measurement from the left to the right flashing. Trim the gutter to match this length.

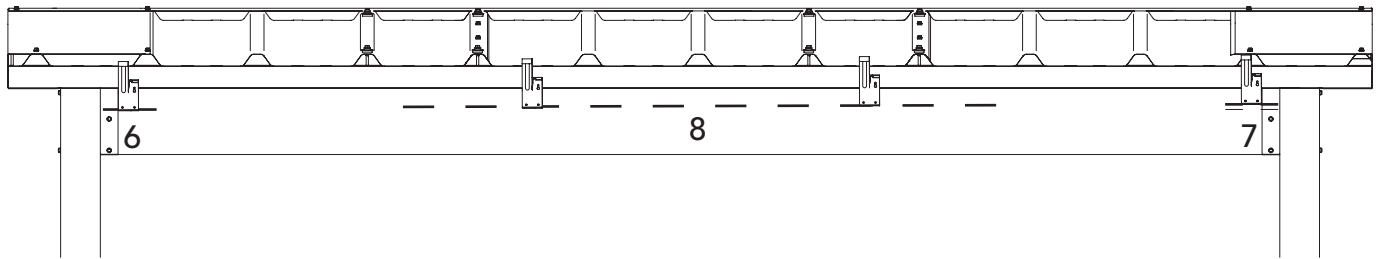
4. Attach end caps with a rivet **FAST102** through the front back and bottom. Joints may be sealed using water proof sealant

5. Test fit the gutter assembly

- Side flashings go inside end caps.
- Roof panel 'top skin' sits under top face of end caps.
- This face will be against the rear beam.

## GUTTERING

REAR VIEW - NOTE: Fall to left for illustrative purposes only.



**6.** 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 rear beam. This will be used as a reference when mounting the gutter brackets **RWG24**. Take the gutter down for now.

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

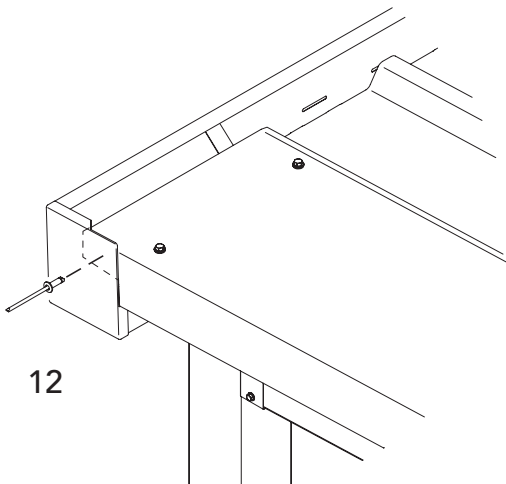
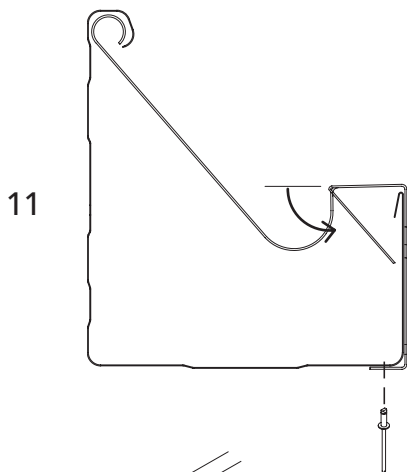
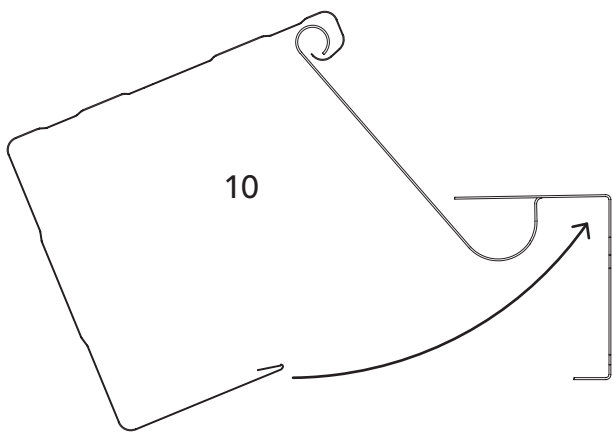
**8.** Take a string line and make a line from the high to low point, this is for the two middle brackets.

**9.** Align the bottom of the gutter bracket with the marks and fasten to rear beam using rivets **FAST102**. Make sure they're spaced evenly.

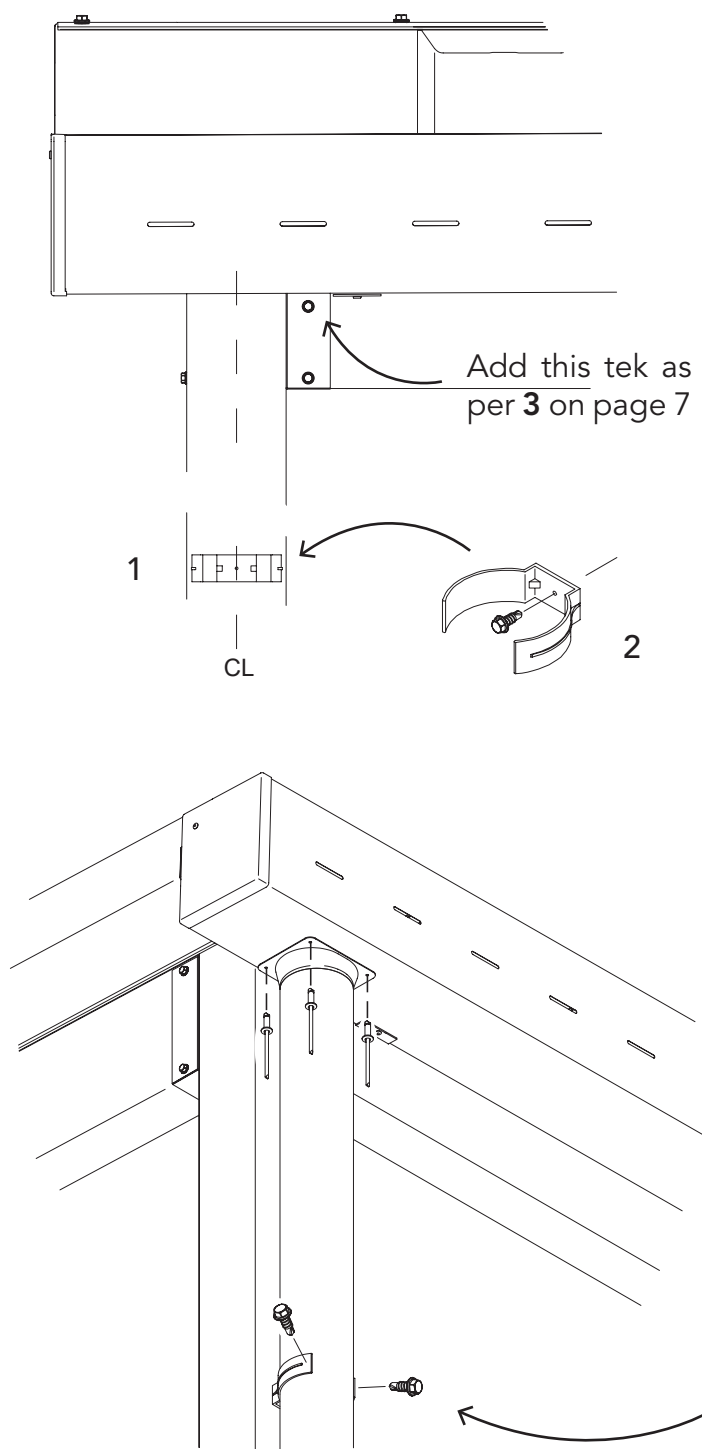
**10.** Lift the gutter assembly and placed the rolled top edge over the gutter bracket in the orientation shown. Roll the gutter around, make sure the side flashings go inside.

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

**12.** Rivet the gutter end stop to the side 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