

FLAT VERANDAHS ATTACHED

STRATCO OUTBACK® ASSEMBLY INSTRUCTIONS.

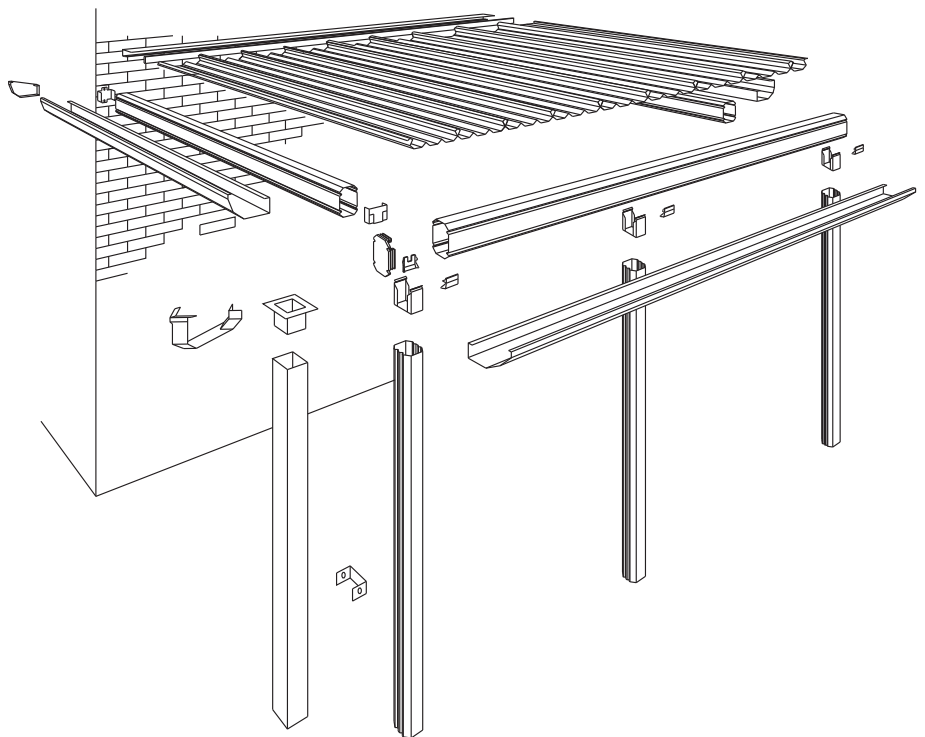
Your complete guide to building an ATTACHED Outback® VERANDAH, PATIO or CARPORT

BEFORE YOU START

Carefully read these instructions. If you do not have all the necessary tools or information, contact Stratco for advice. Before starting lay out all components and check them against the delivery docket. The parts description identifies each key part, and the component location diagram indicates their fastening position.

TOOLS REQUIRED

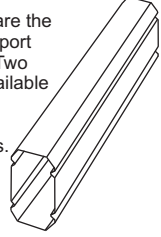
- Drill & Hex-Head Adaptor
- Rivet Gun
- Tape Measure
- Tin Snips
- Spirit Level
- Hack-Saw
- Post Hole Digger
- Silicone Gun
- Spanners or Ratchet
- Adjustable Construction Props
- Turn Up/Down Tool
- Concrete
- Ladder



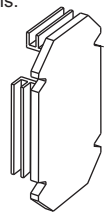
OUTBACK® ROOFING
 Roof sheets cover 500mm and clip together to form a ceiling-like cover.



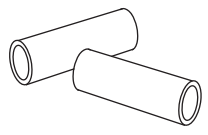
OUTBACK® BEAMS
 The beams are the frame to support the roofing. Two sizes are available for different spanning requirements.



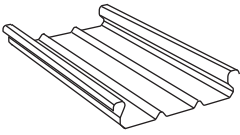
BEAM ENDCAP
 Endcaps enclose ends of beams.



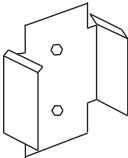
SPACERS
 Are used in conjunction with bolts to prevent beams from crushing.




FIBREGLASS ROOFLITE
 Translucent sheets which cover 250mm and allow extra light penetration under the unit.



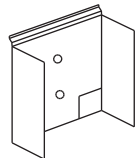
WALL BRACKET
 Fastens beams directly to a wall.



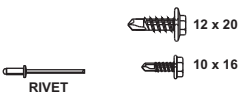
COLUMNS
 Support the beam framework.



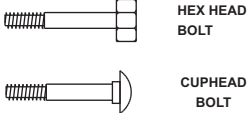
BEAM TO BEAM BRACKET
 Forms a concealed connection between beams.



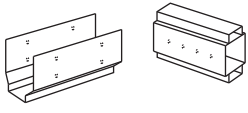
SCREWS AND RIVETS
 Fastener types vary depending upon the connection, ensure correct fixings are used.



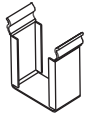
BOLTS
 Fastener types vary depending upon the connection, ensure correct fixings are used.




BEAM IN-LINE CONNECTORS
 Join beams flush to form a continuous beam. Different connectors are available for various angles and loadings.



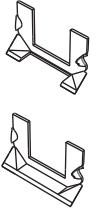
POST BRACKET
 Connects post to beam.



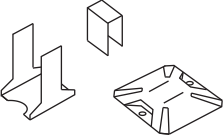
POST CAP
 Fills gap between post and beam.



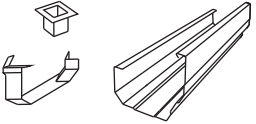
BEAM FILLERS
 Fills gap between intersecting beams. A notched version is available where a column also intersects.



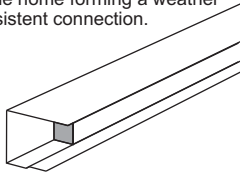
BOLTED FOOTING BRACKET
 The assembly of the footing plate, upstand and brace allows the column to be secured to an existing slab.



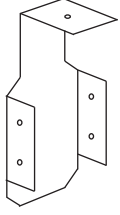
OUTBACK® GUTTER
 The gutter adjoins the roofing to catch water run off. Accessories of stop ends, 'pops', straps and mitre brackets are available.




BACK CHANNEL & B.I.P.
 These components contain the roof sheets as they attach to the home forming a weather-resistant connection.



SUSPENSION BRACKET
 Replaces the wall brackets when the beam is suspended from the fascia.



DOWNPIPE
 Funnels water from the gutter to the ground via a 'pop'. Accessories of mitres, shoes and brackets are available as optional extra.




ATTACHED FLAT VERANDA

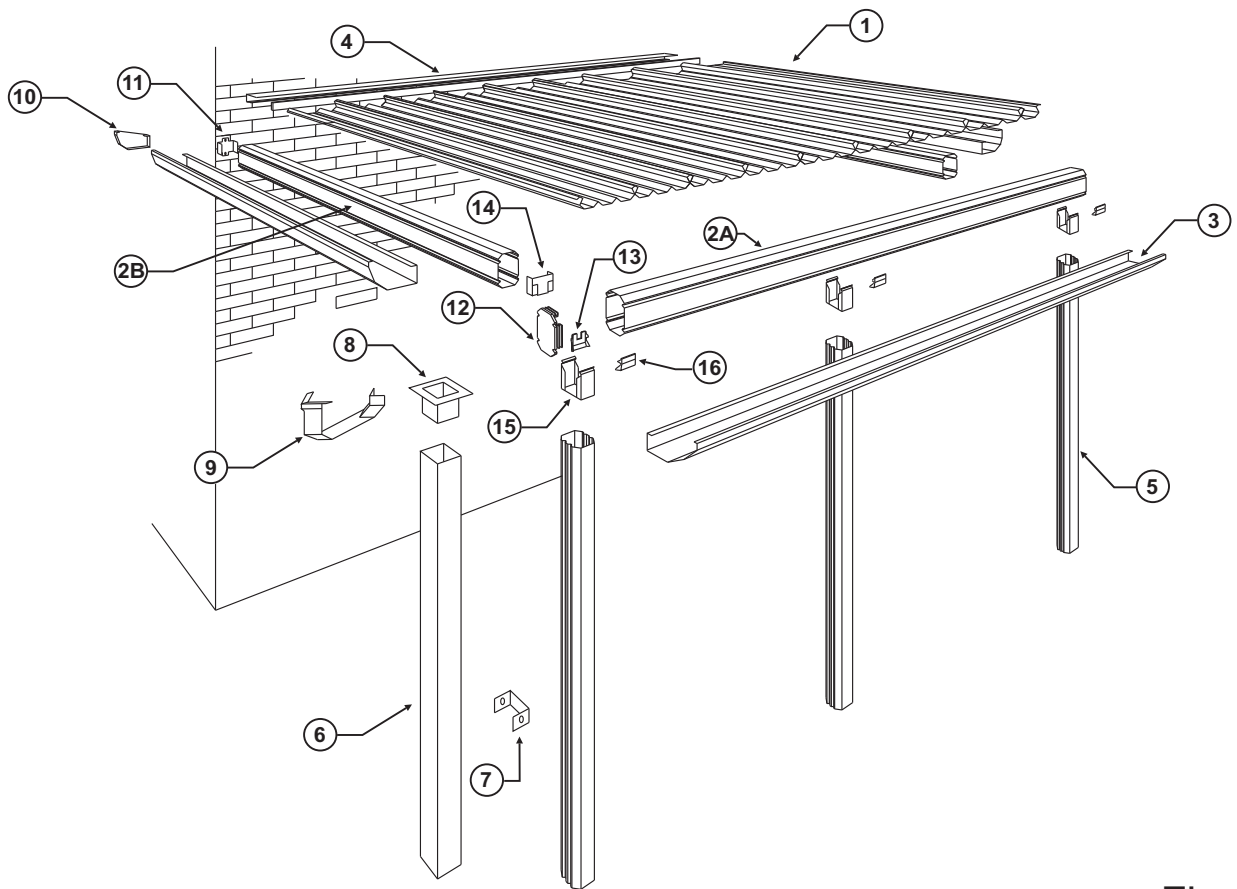


Figure 1

- | | | |
|-------------------------|-------------------------|----------------|
| ① Roofing | ⑥ Downpipe | ⑫ Beam End Cap |
| ②A Front Fascia Beam | ⑦ Downpipe Strap | ⑬ Beam Filler |
| ②B End Fascia Beam | ⑧ Downpipe Outlet (Pop) | ⑭ Beam Bracket |
| ③ Gutter | ⑨ Gutter Mitre | ⑮ Post Bracket |
| ④ Back Channel & B.I.P. | ⑩ Gutter Stop End | ⑯ Post Cap |
| ⑤ Columns | ⑪ Wall Bracket | |

ADDITIONAL MATERIALS

These materials are needed to complete the job, but are not included in the basic kit price (they must be purchased as extra items and their quantities specified):

Steel Fascia Brackets
 M10 bolts and nuts for fixing fascia brackets to rafters and back channel.
 Any extra tie down or stiffening requirements for the house fascia and rafters.
 Box gutter if necessary (measurements required).

OPTIONAL EXTRAS

These items are available at request:

Concrete
 Downpipe Mitres
 Downpipe Shoes

1.0 INTRODUCTION

It is important to check with your Local Government Authority prior to the installation of your new Stratco Outback® Verandah. It is the builder's responsibility to ensure any existing structure a Stratco Outback® is being attached to is sufficient or adequately reinforced to accommodate the additional loads imposed by the verandah, patio or carport.

Please read these assembly instructions thoroughly before commencing the construction and refer to them constantly during each stage of construction. Double check all dimensions, levels and bolting locations before cutting, screwing or bolting structural members. It is recommended that the persons erecting the structure have had some previous building experience because some modifications to the existing house structure are required.

2.0 MARKING OUT CARPORT POSITION

Mark out the overall area of your verandah, patio or carport and ensure it is free of obstructions. Beam to wall connections can cause difficulty if they coincide with door and window openings, so avoid these in your design. Ensure reasonable access for materials and working space and consider disposal of run-off water.

3.0 ASSEMBLING FRAMEWORK

3.1 BACK CHANNEL INSTALLATION

The stepped leg of the Outback® back channel must sit on the underside when fixed. The back channel should extend 50mm past the end of the beam to allow for overflow into the gutter. If more than one length of back channel is required, butt together and waterproof with silicone.

Pre-drill the back channel on the ground. Locate the first hole 100mm from the end of each length of back channel with other holes at 500mm centres for timber and brickwork and 250mm centres for steel fascia.

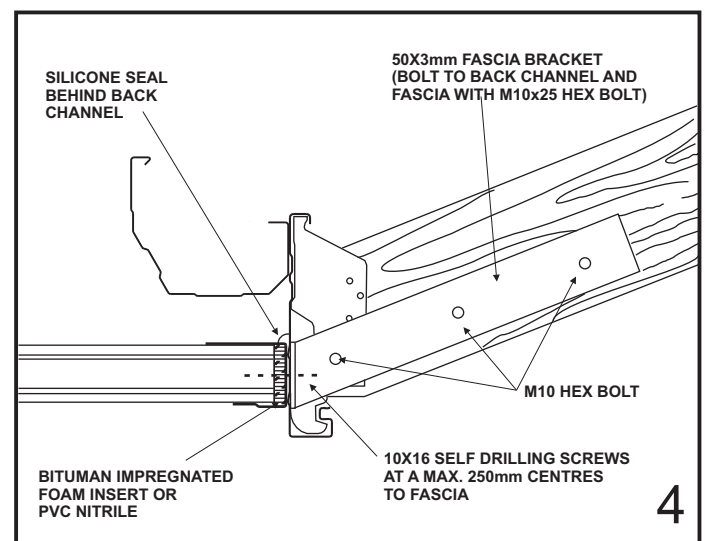
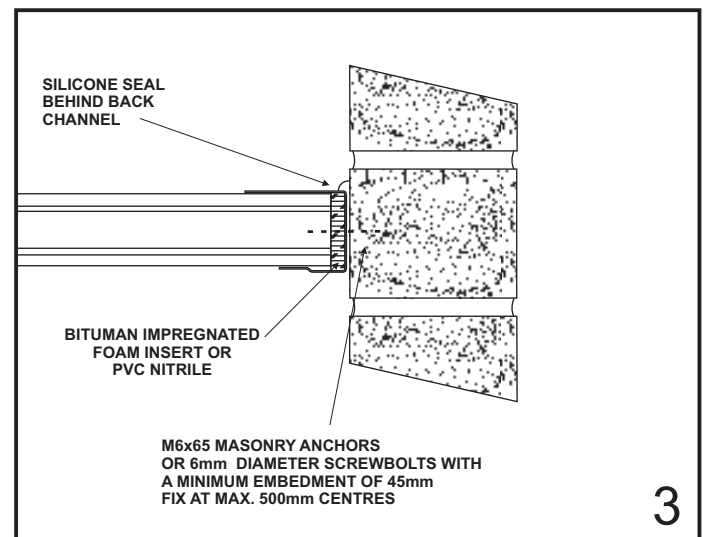
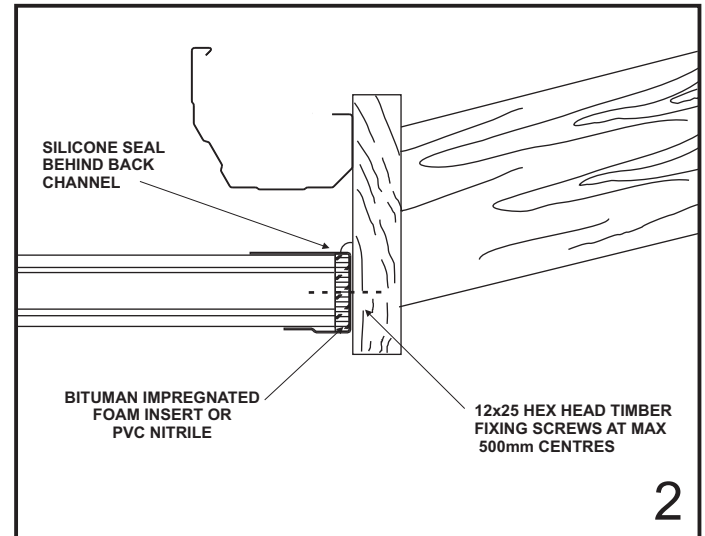
Deburr cut ends and remove swarf. Run a bead of silicone along the back of the back channel near the top and ensure that gaps between the back channel and the fascia or wall are sealed.

When fastening to a steel fascia, the roofing or eaves lining must be removed and steel fascia brackets fixed to the side of house rafters (Figure 4).

It is the builder's responsibility to determine the adequacy of the fascia and rafters and frequency of the brackets for each individual situation.

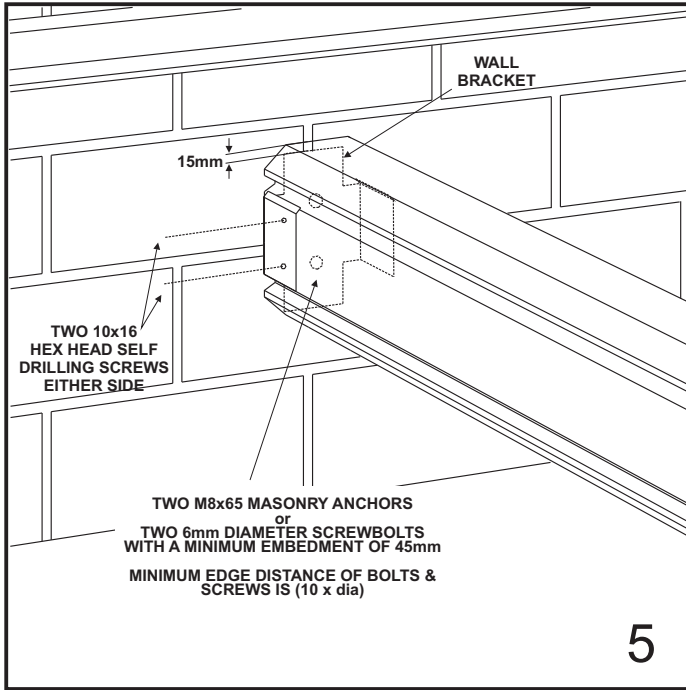
Fix to timber fascia using 12x25mm hex head timber fixing screws (Figure 2), for brickwork use M6x65 masonry anchors (Figure 3). Use 10x16 hex head screws for fixing to steel fascias at 250mm centres and M10x25 hex bolts to fasten the back channel to the steel fascia brackets (Figure 4). Remember to allow for a fall on the unit if required.

Insert the B.I.P. foam into the back channel. The B.I.P. foam will act as a weather seal when the roof sheets are pressed into it.



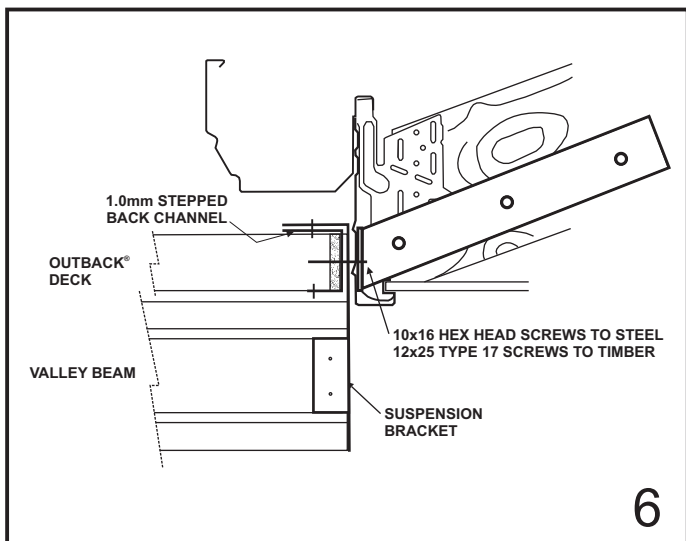
3.2 WALL BRACKETS

For units attached to a wall, wall brackets are positioned at the locations the beams meet the wall. The curved legs of the brackets are located at the top and the highest point of the wall bracket will be 15mm below the top of the beam (Figure 5). Brackets are fastened to the wall with two M8x65mm masonry anchors.



3.3 SUSPENSION BRACKETS

This bracket is used when a beam is suspended from the fascia. The top tab of the suspension bracket must be located between the fascia and the back channel. A minimum of two 10x16 hex head screws are fixed through back channel, suspension bracket and steel fascia while two 12x25 type 17 screws are used to fix through back channel, suspension bracket and timber (Figure 6).



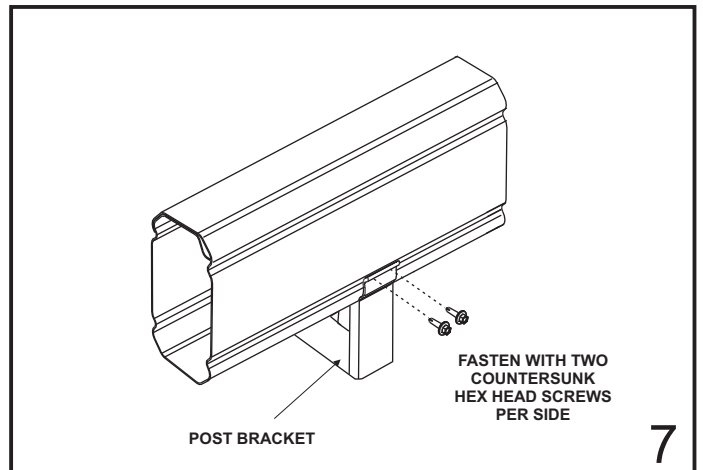
3.4 END FASCIA BEAM

Important: When installing all beams, ensure the double flange is on top.

Install the end fascia beam furthest from the downpipe/s first. Lift the backchannel end of the beam up into the wall or suspension bracket while supporting the other end on an adjustable construction prop. Adjust the construction prop to allow for the required roof pitch. Fasten the end fascia beam to the bracket using two 10x16 hex head screws either side in the holes provided.

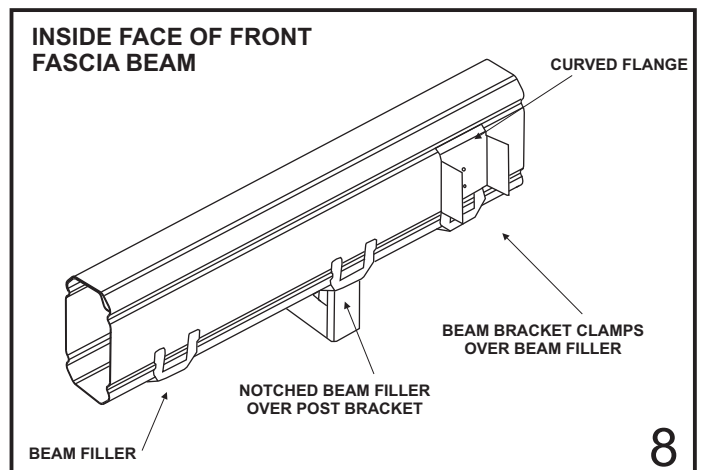
3.5 THE FRONT FASCIA BEAM

Measure the front fascia beam marking where the end fascias, intermediate beams (if required) and columns meet.



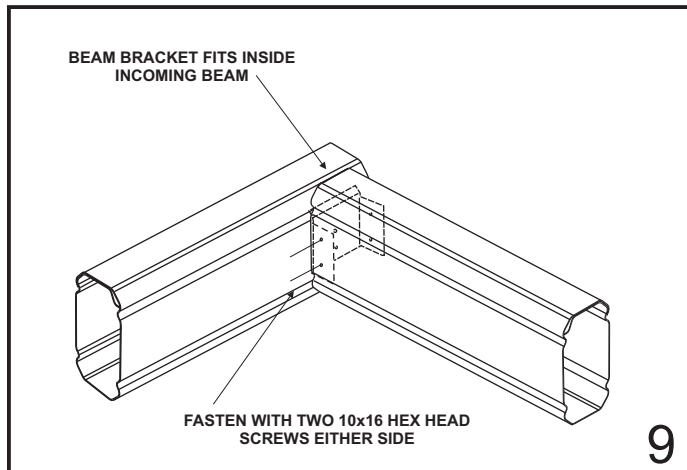
Clip post brackets to the bottom of the front fascia beam where columns are to be located. Fasten through the holes in the bracket using two 10x25 countersunk hex head screws each side into the flute of the beam (Figure 7).

Position beam fillers on the bottom flute of the front fascia beam where any beam intersects (Figure 8).



If a column also meets here, use the beam filler with the cut-out portion positioning it over the post bracket (Figure 8). Place the beam brackets on the inside face of the front fascia beam, aligning their curved flange with the top of the beam so that they clamp the beam fillers in place (Figure 8). Fasten through the bracket holes into the beam using two 10x16 hex head screws per bracket.

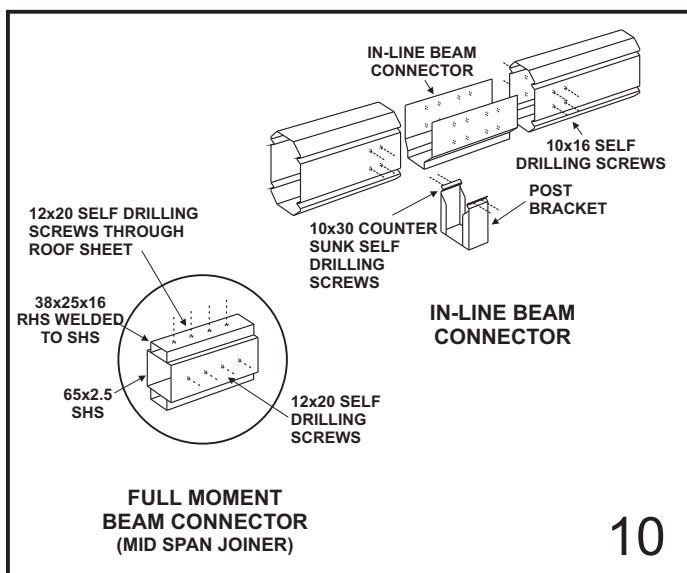
Lift the front fascia beam to slide the beam bracket into the end of the first end fascia beam. Support the front fascia beam on adjustable construction props allowing for fall toward the downpipe end of the structure. Fasten the end fascia beam to the beam bracket (Figure 9) using two 10x16 hex head screws either side.



3.6 IN-LINE BEAM CONNECTION

In-line beam connectors are used to butt join front fascia beams when more than one length is required. This connector must be positioned so that the butting joint of the front fascia beams are in-line with the edge of the column.

Slide the in-line connector halfway inside the yet to be installed front fascia beam while it is on the ground. Fix the connector in place using four 10x16 hex head screws either side. Push the exposed half of the in-line connector into the other front fascia beam until both beams meet flush. Complete the connection by fastening the beam to the in-line connector as previously described (Figure 10).



The post bracket at the in-line connection can now be fixed in place.

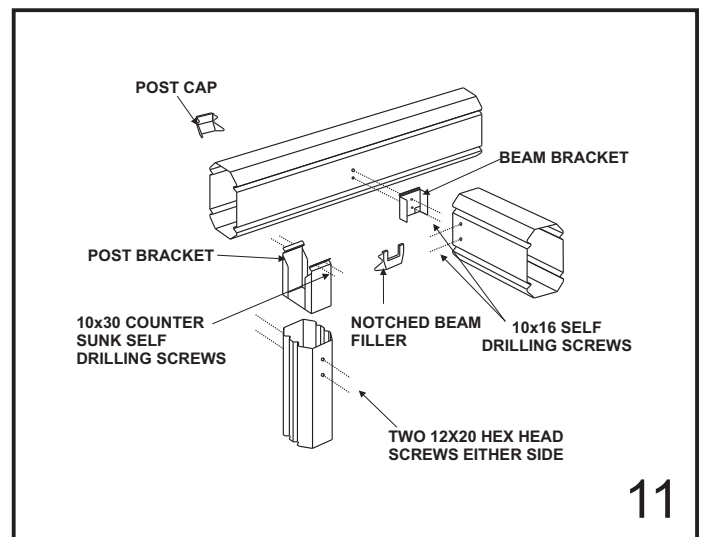
Note: If beams must be joined at a location other than over a post, a full moment beam connector is required (Figure 10).

3.7 COLUMNS AND FOOTINGS

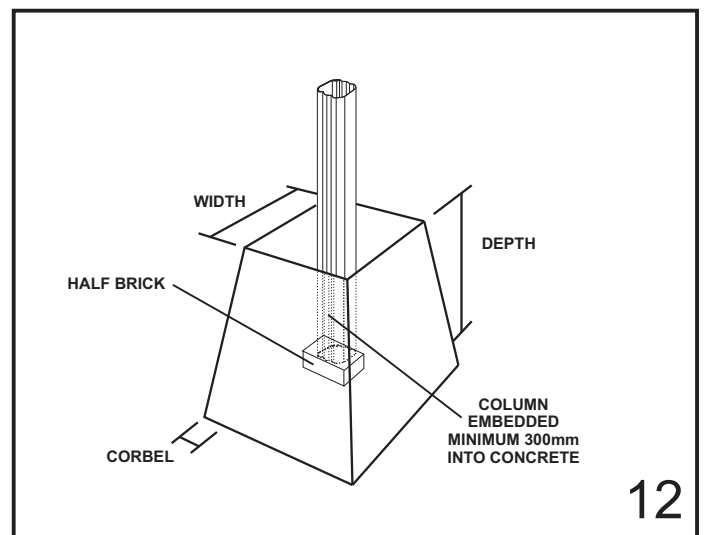
If fixing the columns into the ground, dig the holes to the specified size. Place a half brick in the bottom of the hole (Figure 12). Measure from the underside of the beam to the top of the half brick and cut posts to this length at each post location.

Slide the top of the column over the post bracket until it is flush with the underside of the fascia beam.

The unfluted faces of the column should be aligned with each face of the post to beam bracket. Fasten using two 12x20 hex head screws either side (Figure 11).



Use construction props or bracing to hold columns in position, but do not concrete in place at this stage.



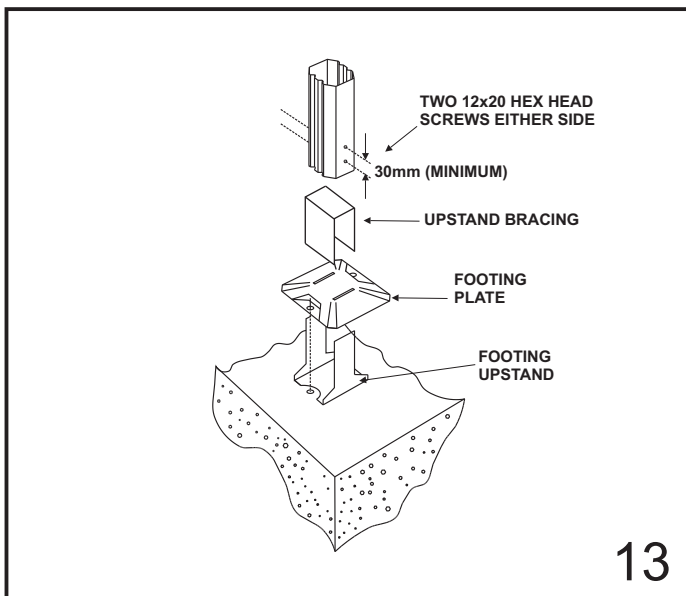
3.8 ATTACHED VERANDAH FOOTING PLATE

A bolted footing bracket is available if fixing posts to an existing concrete slab. Establish the column lengths by measuring the distance from the underside of the fascia beam to the concrete slab less 20mm to allow for the depth of the footing bracket.

Cut the columns to length, and assemble the footing bracket by sliding the legs of the footing upstand through the slots in the footing plate (Figure 13). The upstand bracing must be located between the legs of the upstand. Slide the assembled footing bracket and bracing into the bottom of the column, and fasten with two 12x20 hex head screws either side ensuring the top screws are located at least 15mm from the top of the upstand with screws being a minimum 30mm apart (Figure 13).

Slide the top of the column over the post bracket and align the column and footing bracket. (Note: it may be necessary to lift the fascia beam slightly to slide the column over the post bracket). The unfluted faces of the column should be aligned with each face of the post to beam bracket. Fasten using two 12x20 hex head screws either side (Figure 11).

Use construction props or bracing to hold columns in position but do not bolt to the concrete slab at this stage.



3.9 FINAL END FASCIA BEAM

Slide the front of the end fascia beam over the aligned beam bracket. Lift the back channel end of the beam up into the wall or suspension bracket detailed in section 3.2 and 3.3 respectively. Fasten the beam to the brackets using two 10x16 hex head screws either side per bracket.

3.10 CAPPING

To prevent moisture from entering the beams and for aesthetics, any beams with exposed ends require end caps be fitted. Align the endcap and push into the exposed beam end.

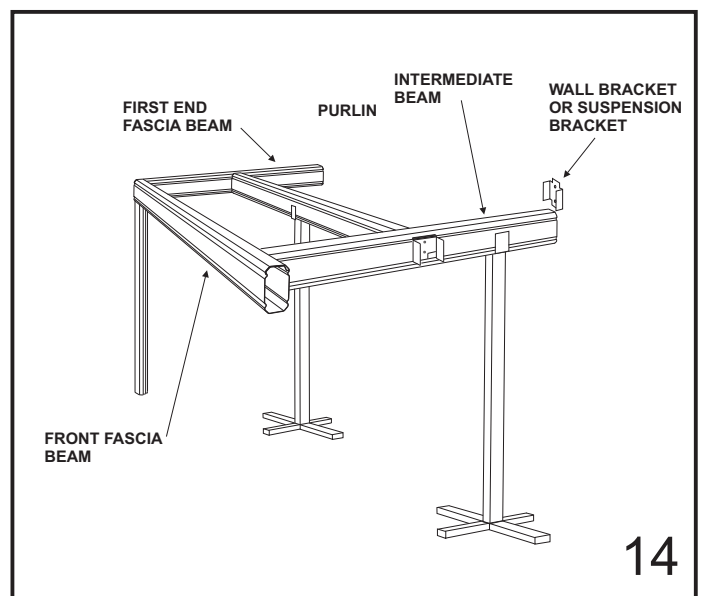
The postcaps can be fitted over the post-beam connection. Align the two lugs with the two exposed holes of the post bracket and push firmly.

If a downpipe runs flush with a column on the side where the post bracket clips (Figure 23), place a notched beam filler over the exposed post bracket and use silicone to hold it in place.

3.11 INTERMEDIATE BEAMS & PURLINS

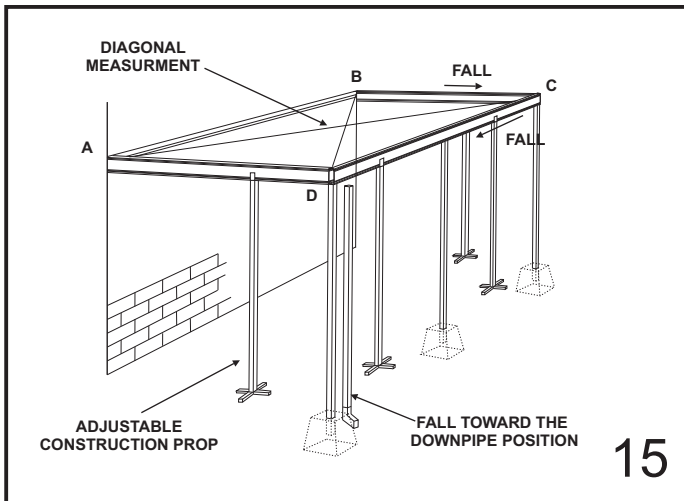
If intermediate beams and/or purlins are required, they are fitted at this stage. Work progressively from the first end of the unit. It is recommended the final end fascia is not secured in position until all intermediate beams and purlins are installed.

Locate beam brackets and wall or suspension brackets in the correct positions and fasten as previously described. Lift the first intermediate beam into place and support on adjustable construction props, if purlins are required (i.e., type 4A Outback® unit) do not secure the intermediate beam until the first purlin is lifted into position (Figure 14). Secure all connections using two 10x16 hex head screws either side of each bracket. Continue this process along the Outback® unit until the final end fascia beam is fixed in place.



4.0 FRAMEWORK CHECK

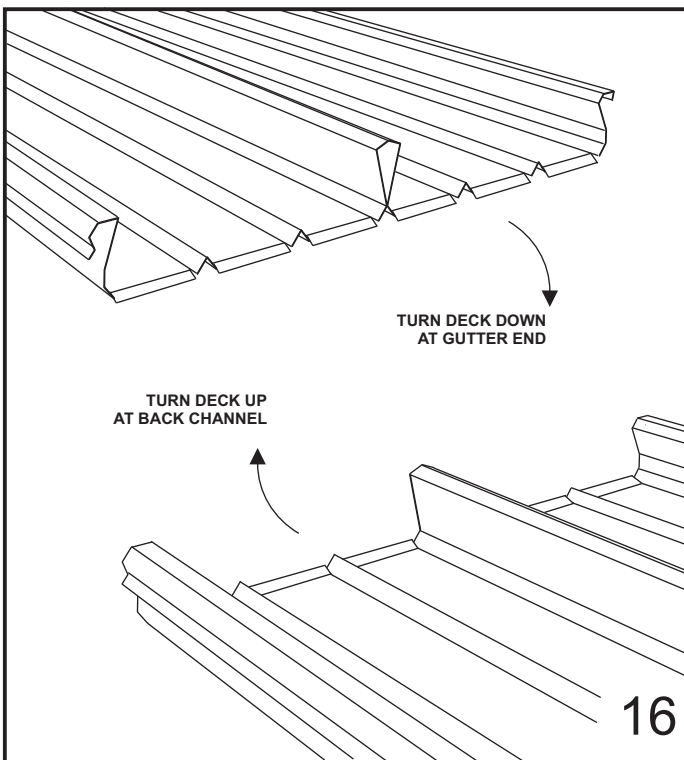
Check the basic framework for squareness by ensuring the diagonal measurements (A to C and B to D, Figure 15) are the same. Recheck that the falls are correct for the roof and gutter.



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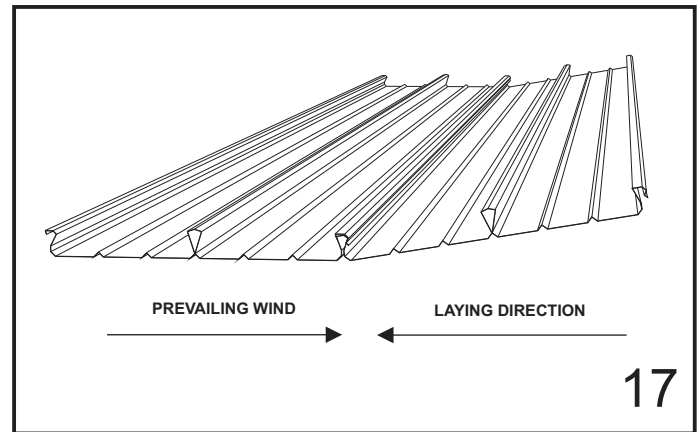
5.0 DECKING

While still at ground level, the ends of the decking need to be turned up or down approximately 30 degrees using a turn up/down tool. Turn the ends of the decking up at the back channel end and down at the gutter end (Figure 16).



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Decking should be positioned to allow a 50mm overhang into all of the gutters and should be laid with the overlapping rib away from the prevailing wind (Figure 17). Ensure that all of the sheets have locking ribs on the same side. Mark the back channel and front fascia beam every 1000mm to check that the decking is laid square.



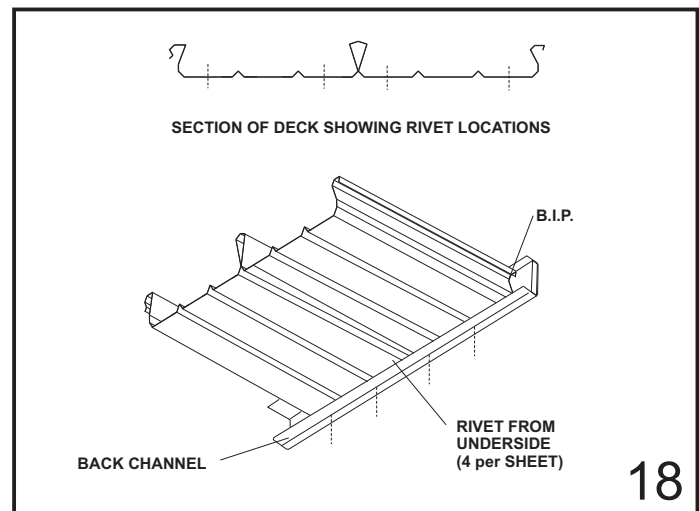
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Begin installing the first sheet of decking. Lift the first sheet into place and slide it firmly into the B.I.P. foam in the back channel to guarantee the correct weather proofing. Check the sheet is square against the back channel and side fascia beam. At the back channel end, rivet the decking from underneath through the raised edge of the bottom of the back channel with two 3.2mm rivets per pan (Figure 18). Seal rivets with silicone. At each supporting beam fasten down the sheet with two 12x20mm hex head self-drilling screws per pan (Figure 19). Remove any swarf.

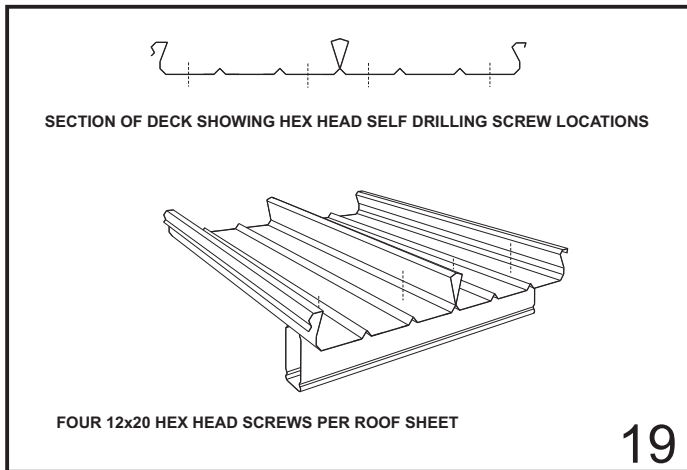
Lay the next sheet of decking over the previous sheet's side lap (Figure 17). At the back channel end press down on the lap until the sheets clip together and slide the roof sheet firmly into the B.I.P. foam. Clip the rest of the sheet lap together working along the length using a timber block (to avoid damaging sheeting) and hammer. For larger spans it may be necessary to temporarily support the underside of roof sheeting while clipping laps together. Continue this process along the unit until all roof decking is installed.

If decking runs parallel to the back channel, the first roof sheet is slid sideways into the B.I.P. foam in the back channel for a weather-proof seal. Sheeting is secured with rivets at 250mm centres (150mm centres for cyclonic application) to the back channel and hex head screws at 500mm centres to beams running parallel with the decking. Roof sheets are fixed as standard to supporting beams (Figure 19).

Note: In cyclonic conditions three 12x20mm hex head self-drilling screws are required per pan to supporting beams and three rivets per pan at the back channel.

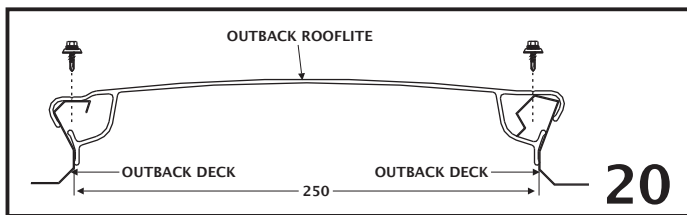


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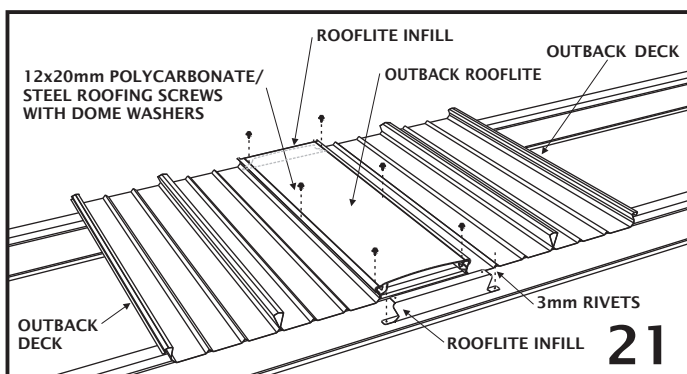


5.1 OUTBACK ROOFLITE

An Outback Rooflite® can be used for extra natural light. The polycarbonate Rooflite overlaps the outback deck by snapping or sliding over already installed sheets spaced 250mm apart. Ensure the lower tab of the Rooflite touches the Outback deck at the points shown (Figure 20).



9mm holes must be predrilled through the Rooflite at all fastener locations prior to fixing to allow for thermal expansion. The Rooflite is fastened using 12x20mm hex head self drilling screws with domed washers at maximum 2000mm centres, fixing through the groove located along the top of the Rooflite connectors (Figure 21).



To finish the exposed ends of the Rooflite infill is required. Fasten the infill over the Rooflite with 12x20mm screws and domed washers on both sides through pre-drilled holes. Connect the infill to the underside of the decking with 3mm rivets and seal with

6.0 GUTTER PREPERATION

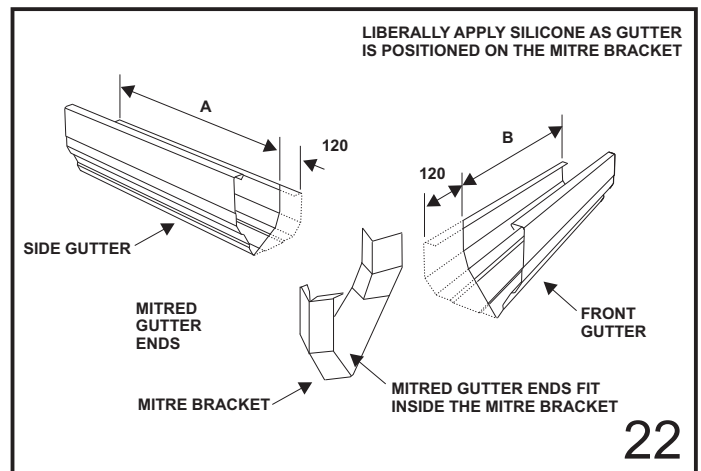
To establish inside gutter length 'A' (Figure 22), measure from the back of the back channel to the outside of the front fascia and subtract 5 mm for the mitre bracket.

To establish gutter length 'A' for units with deck overhang, subtract 55mm from the total roof sheet length.

To establish gutter length 'B' (Figure 22) for the front gutter, measure the length of the front fascia beam and subtract 5 mm for each mitre bracket.

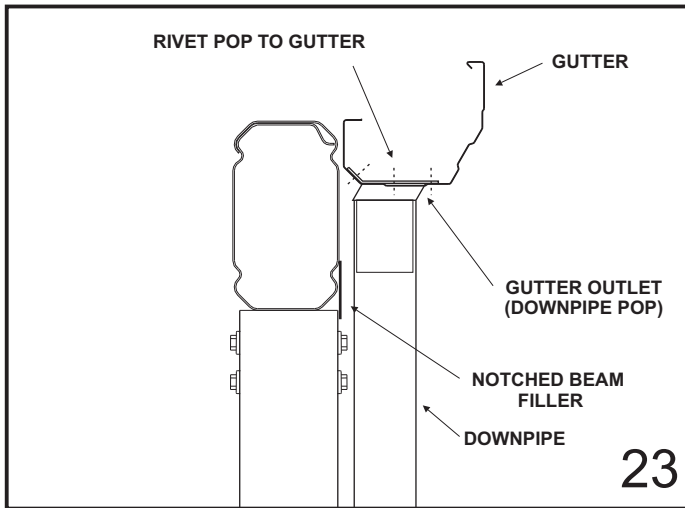
Attach the stop ends to the side gutters with four rivets per stop end, remove any swarf and waterproof with silicone.

Cut a 45 degree mitre on the ends of the gutters to fit the mitre brackets.



6.1 GUTTER OUTLET

Position downpipe in line with column/s. Cut a hole in the base of the gutter near the back chamfer. Insert the gutter outlet pop from the inside of the gutter and rivet in place using 3mm rivets (Figure 23), remove any swarf and waterproof with silicone.



6.2 GUTTER MITRES

Installing gutters progressively, drill rivet holes for the gutter mitre brackets, remove swarf, and notch bracket if necessary to accommodate the pop. Fasten with rivets and silicone for a waterproof connection (Figure 22).

6.3 FIRST SIDE GUTTER

After fixing a gutter mitre bracket to the corner of the first side gutter, lift the gutter into place so that the stop end slides up behind the back channel. Use rivets to fasten the gutter's back lip to the roofing at maximum 1000mm spacings and gutter straps at 1000mm maximum centres (Figure 24).

When fixing gutters always ensure that the front face of the gutter remains vertical and even.

Apply silicone to waterproof all rivets.

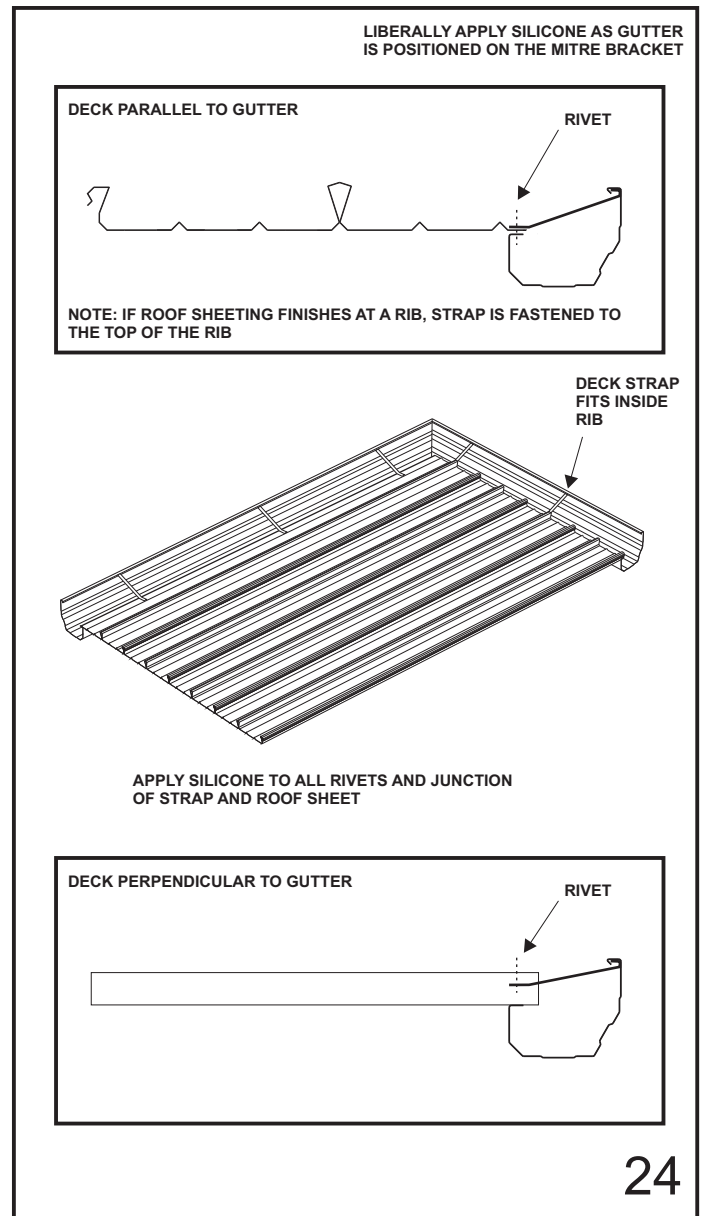
6.4 FRONT GUTTER

Attach a gutter mitre bracket to the front gutter at the opposite end of the mitre bracket on the side gutter. Slide the flat end of the gutter straps inside the ribs of the roof sheets at maximum 1000mm centres. Hang the front gutter on the gutter straps and using a rolling action, lift the back of the gutter into the corner mitre bracket attached to the side gutter.

Check that the roof sheets overflow into the gutters by 50mm and that the gutters are square in relation to the framework. Fasten the front gutter with rivets at 1000mm maximum spacings, down through the ends of the roof sheets into the gutter's back lip.

For units with a deck overhang, fasten the gutter to the roof sheets using two rivets per pan (four per sheet)

Rivet and seal the front gutter to the gutter mitre brackets and the gutter straps to the roof sheets (Figure 24).



6.5 FINAL SIDE GUTTER

Lift the final side gutter so that its front end slides into the gutter mitre and the stop end slides up behind the back channel. Fix gutter in position as previously described and waterproof with silicone.

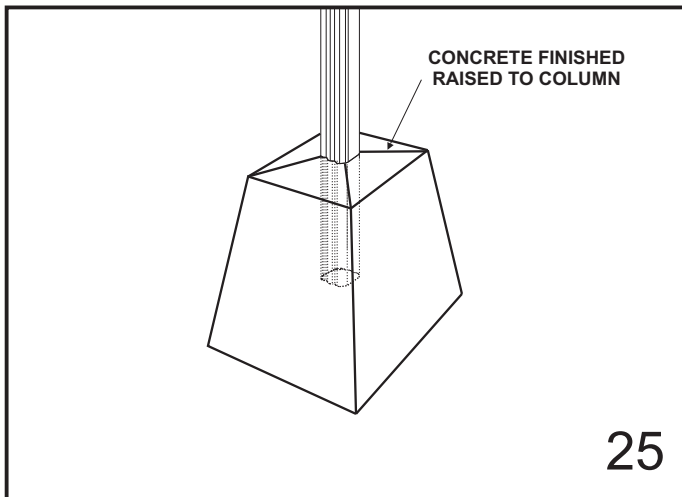
The downpipe is not attached at this stage as the columns are not yet fixed in their vertical position.

7.0 FINAL FIXING

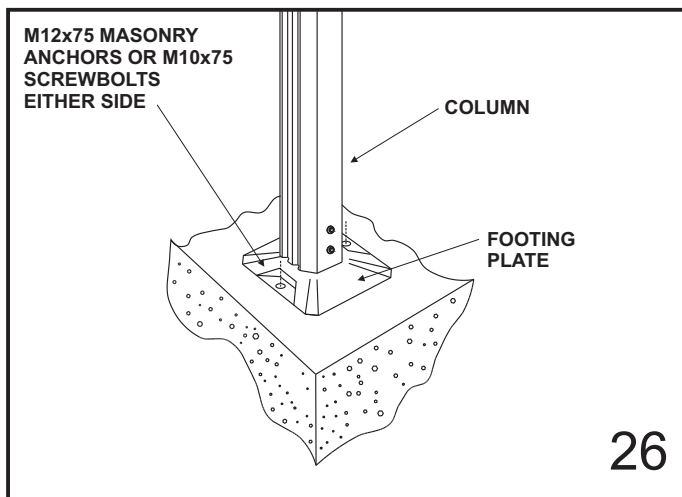
7.1 COLUMNS

Thoroughly check the plumb of the posts with a spirit level. Fill the post hole with approximately 150mm of concrete and use a shovel or pole to agitate the concrete to remove any air pockets. Repeat this process until the hole is full, continually checking the plumb of the posts. Once the concrete is set remove any temporary bracing or props.

Note: The concrete must be finished slightly raised towards the column, ensuring water runs away from the column (Figure 25).



If fixing the columns to existing concrete with an Attached Verandah Footing Plate, each plate must be fixed to concrete with two M12x75mm masonry anchors or two M10x75mm screwbolts (Figure 26).



Note: The minimum distances from an anchor hole to the concrete edge is 60mm for M10 anchors and 75mm for M12 anchors.

7.2 DOWNPIPES

Before attaching the downpipe/s, rivet the downpipe bracket to the column and bend its flanges along the 'break-line' to accept the downpipe.

Slide the downpipe over the gutter outlet (pop) and rivet into position. Fix the downpipe to the downpipe bracket. Weatherproof all fasteners with silicone.

8.0 HELPFUL TIPS

Double check all measurements and drilling locations before proceeding.

Regularly check framework for squareness and vertical alignment to make sure it has not moved during construction.

Leave plastic coating on members until they are about to be fastened to the structure. This will help prevent scratching of the coloured finish.

Sweep the roof and clean gutters after the completion of work. Ensure any swarf and rivet stubs are removed as they can cause unsightly rust stains.

Do not allow soil to remain in permanent contact with the columns, as corrosion will result in the base of the column. Refer to the "Selection, Use and Maintenance of Stratco Steel Products" brochure for complete details of the maintenance requirements.

8.0 MAINTENANCE

Your Attached Stratco Outback® Verandah, Patio or Carport will give you many years of service by simply following the important recommendations set out in the Stratco 'Selection, Use and Maintenance' brochure.

Wash and wipe down your Stratco Outback® unit with a soft broom, mop or sponge as frequently as you would wash your car to maintain its duco. More frequent cleaning and rinsing will be required in severe environments.