

INSTALLATION GUIDE

Stratco Sanctuary™

VERANDAHS, PATIOS AND CARPORTS



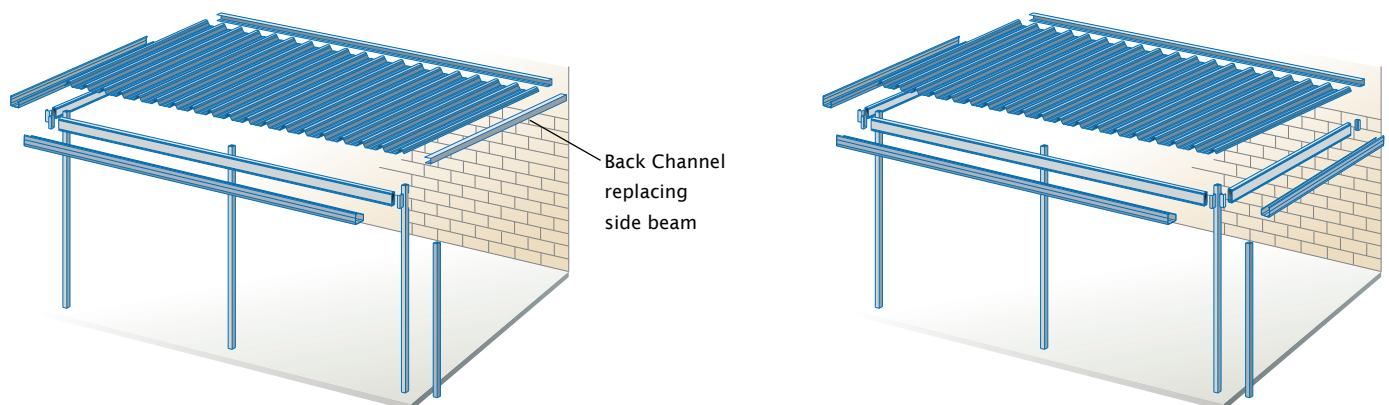
BEFORE YOU START

It is important to check with your Local Government Authority prior to the installation of your new Stratco Sanctuary™ verandah. It is the builder's responsibility to ensure that any existing structure that a Stratco Sanctuary™ is being attached to is sufficient or adequately reinforced to accommodate the additional loads imposed by the verandah, patio or carport. Read these instructions thoroughly before starting your project and refer to them constantly during each stage of construction. Contact Stratco for advice if you do not have the necessary tools or information.

Before starting, lay out the main components in order of assembly on the ground and check them against the delivery note. The 'Components' section identifies each part of your Stratco Sanctuary™ verandah or carport and shows the relative location of components.

Mark out the overall area of your verandah, patio or carport and ensure it is free from obstructions. Beam to wall connections can cause difficulty if they coincide with door and window openings, so avoid these in your design. Ensure there is reasonable access for materials and working space and consider the disposal of run off water. Check the post and beam positions on the ground, roughly check they are square and mark the hole locations.

Side Beam and Gutter on Type 1A and Type 2A units can be replaced with back channels as shown in the diagram below.

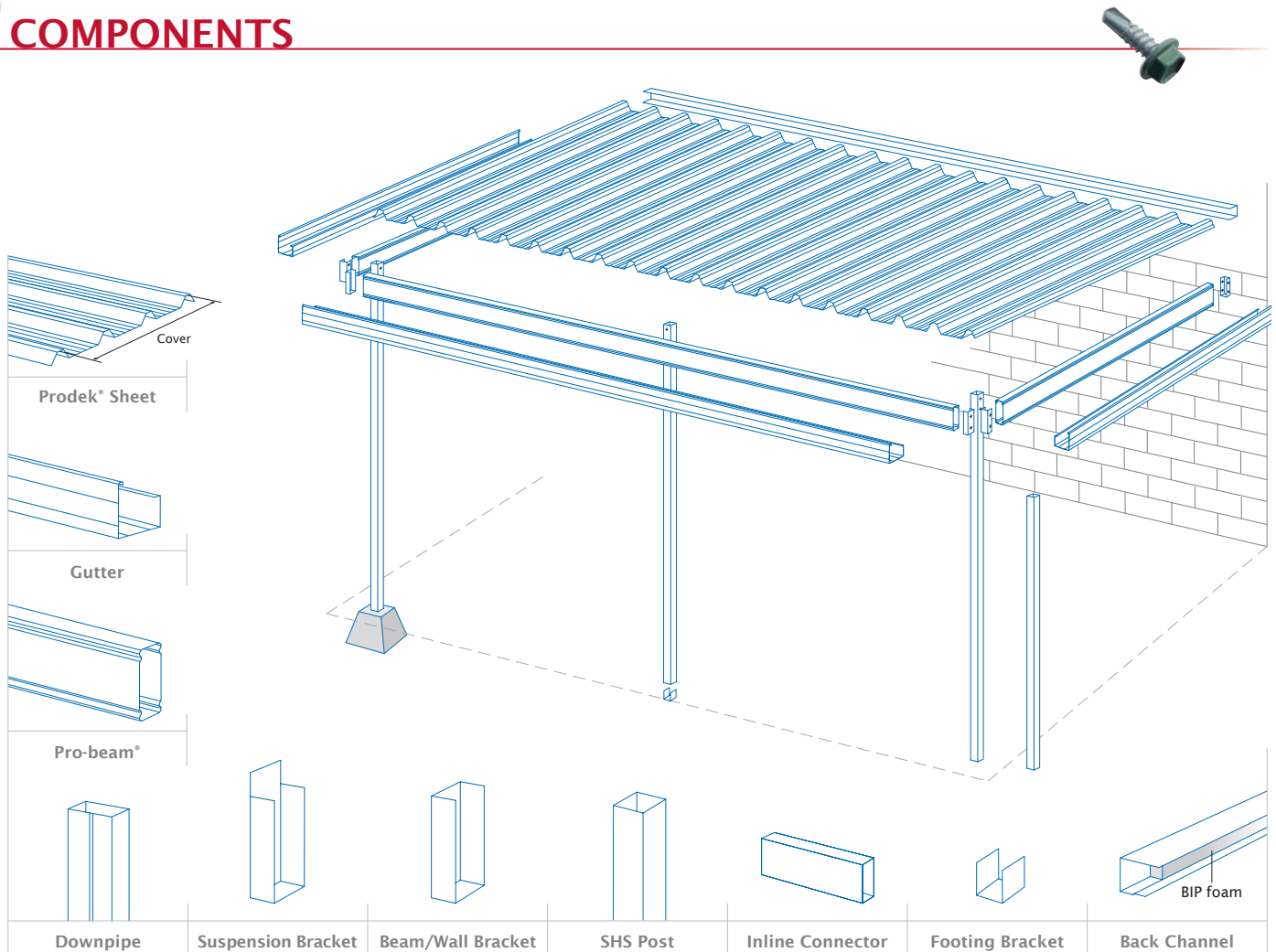


TOOLS REQUIRED

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



COMPONENTS



BACK CHANNEL INSTALLATION

The stepped edge of the back channel should 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 the two lengths together and waterproof with silicone.

Pre-drill the back channel on the ground. Locate the first hole 100mm from the edge on the back face of each length of channel. Drill the other holes at 250mm centres. When fixing to a steel fascia, the roofing or eave lining must be removed and steel fascia brackets fixed to the side of the house rafters. It is the builder's responsibility to determine the adequacy of the fascia and rafters and the frequency of the brackets for each individual situation.

Deburr any cut ends and remove the swarf. Run a bead of silicone along the rear of the back channel near the top and lift it into place on the wall or fascia. Ensure that any gaps between the back channel and the fascia or wall are sealed.

When fixing the back channel to timber fascia use either 6x38mm coach screws or 12x40mm Type 17 screws, refer to figure 1.0. When fixing the back channel to brickwork use either M6.5x55mm masonry anchors or 6.5x32mm Tapper screws, refer to figure 1.1. For steel fascias use 10x16mm self-drilling screws and M10x25 hex bolts to fasten the back channel to the steel fascia brackets, refer to figure 1.2. Insert the BIP foam into the back channel. The BIP foam will act as a weather seal when the roof sheets are pressed into it.

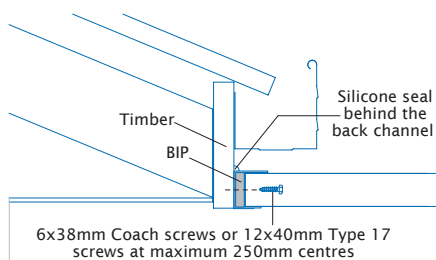


Figure 1.0

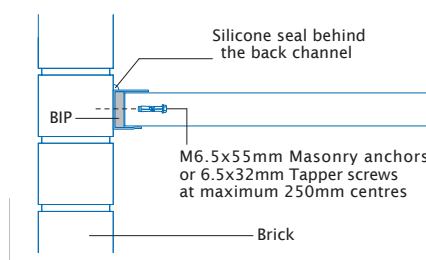


Figure 1.1

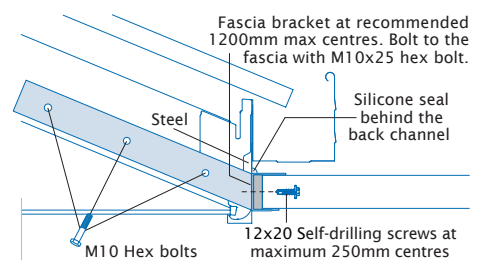


Figure 1.2

ASSEMBLING THE FRAMEWORK

Wall Brackets

Pre-drill two holes in the back of the wall bracket which are large enough to take the wall or fascia fixings. Mark the position of the wall brackets and the holes on the wall or fascia. Hold the bracket in the correct position and mark the location of the fasteners. Drill and fasten the brackets to brickwork using two M8x75mm masonry anchors or 6.5x70mm Tappers. For timber use two 6x38mm coach screws or 12x40mm Type 17 screws. Ensure that the top of the wall bracket sits flush with the bottom of the back channel.

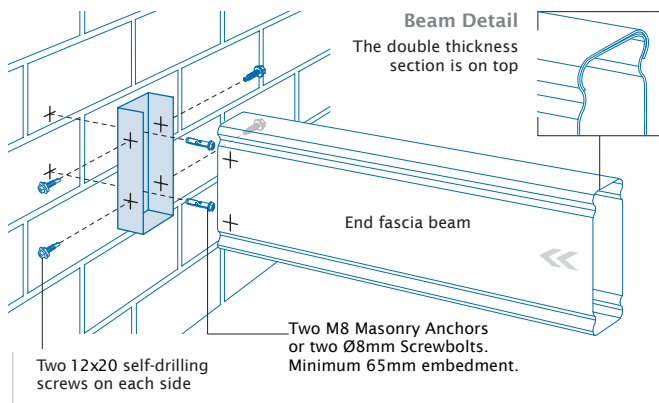


Figure 2.0

Suspension Brackets

This bracket is used when a beam is suspended from the fascia. The suspension brackets fit between the back channel and fascia. Locate the bracket in the correct position and fix the screws through the back channel and suspension bracket into the fascia. For timber use two 6x38mm coach screws or two 12x40mm Type 17 screws. For steel use two 12x20mm self-drilling screws.

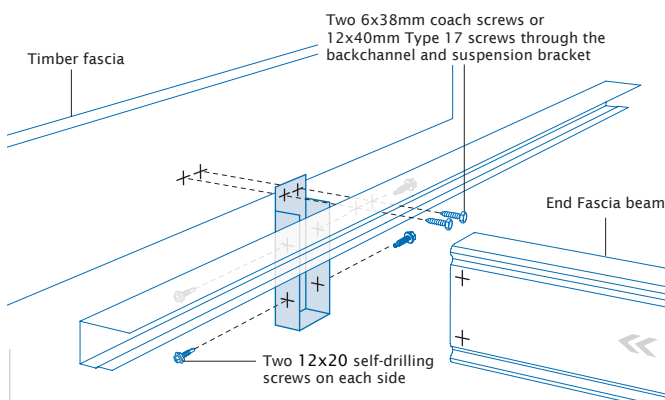


Figure 2.1

End Fascia Beam

Important: When installing all beams, ensure the double thickness section of beam is on top, refer to the detail in figure 2.0.

Install the end fascia beam furthest from the downpipe first. Lift the back channel end of the end fascia beam and slide it 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 (min 1°). Fasten the end fascia beam to the bracket with four 12x20 self-drilling screws.

Corner Connection

Attach two beam brackets to the adjacent faces of the corner post, with three 12x20mm self-drilling screws. Refer to figure 2.2.

If you are fixing the posts into the ground, dig the first hole to the specified size. Place a half brick in the bottom of the hole. Measure from the top of the beam to the top of the half brick and cut the post to this length. Place the bottom of the post on the half brick. Slide the beam bracket at the top of the post, over the end fascia beam. Ensure the other bracket on the post is pointing towards the next beam to be installed. Square the post using a spirit level and fix the beam to the beam bracket with four 12x20 self-drilling screws.

Do not concrete the posts into position at this stage, as this is done after the decking and gutters have been installed and a final check for squareness has been completed.

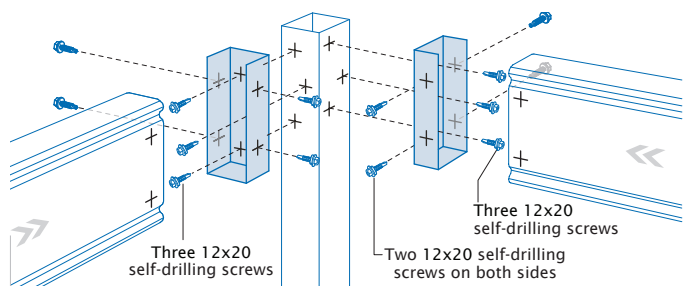


Figure 2.2

Front Fascia Beam

Lift the corner end of the front fascia beam and slide it into the beam bracket already attached to the post, while supporting the other end on an adjustable construction prop. Adjust the construction prop to allow for the fall towards the downpipe end of the structure. Fix the beam to the beam bracket with four 12x20 self-drilling screws.

Intermediate Post Connection

Dig the hole for the intermediate post. Fix two beam brackets on opposite sides at the top of the post with three 12x20 self-drilling screws. Move the post into position and slide the beam bracket over the free end of the first section of front fascia beam. Square the post using a spirit level and fix it to the beam using four 12x20 self-drilling screws. Slide the next section of the front fascia beam into the beam bracket on the intermediate post, while supporting the free end on an adjustable construction prop. Adjust the construction prop to continue the fall towards the downpipe end of the structure and fix the beam to the bracket with four 12x20 self-drilling screws.

Final End Fascia Beam

Install the corner post in the same way as the first corner post was installed (figure 2.2). Slide one end of the end fascia beam into the wall or suspension bracket below the back channel, and the other end into the bracket at the post end, and temporarily support the beam with adjustable construction props. Fix the beam to the brackets with two 12x20 self-drilling screws on each side.

End Caps

To prevent moisture from entering the beams and for aesthetics, any beams that have exposed ends should have beam brackets fitted (to form an end cap). Fix the beam brackets with two 12x20 self-drilling screws on each side.

Intermediate Beams

If intermediate beams are required, they can be fitted at this stage. Begin by locating the beam brackets in the correct position on the fascia beam, post, fascia or wall and fix as previously described with the appropriate fasteners. The intermediate beams are lifted into place and slid into the beam bracket at each end and temporarily supported with adjustable construction props. Hold the beam firmly in the brackets at each end, and fix the beam to the brackets with two 12x20 self-drilling screws on each side, refer to figure 2.3.

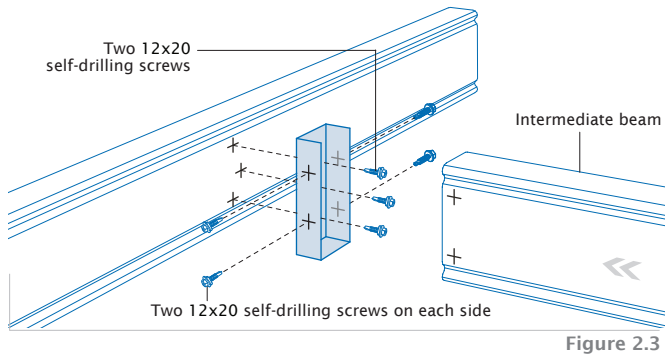


Figure 2.3

Framework Check

Check the basic framework is square by ensuring the diagonal measurements are the same from A to C and B to D in figure 2.4. Re-check that the fall is correct for the roof and gutter.

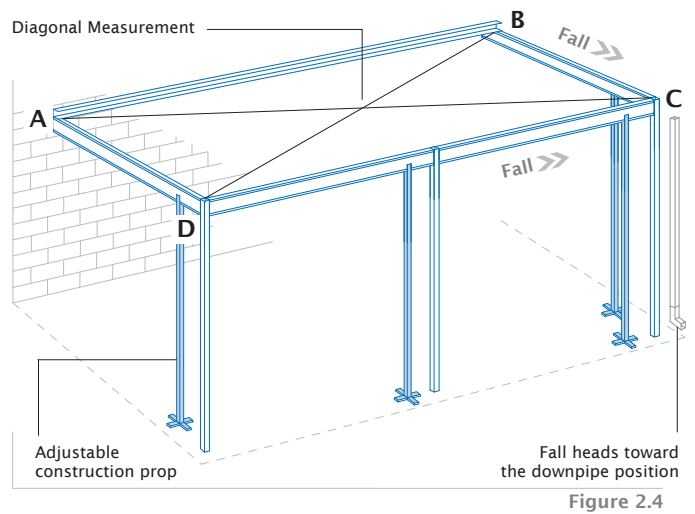


Figure 2.4

ALTERNATIVE BEAM AND POST CONNECTIONS

Alternative Corner Connection

Another method for fixing a corner connection is to use two M10 bolts fixed through the beam and post. To do this, firstly attach a beam bracket (end cap) over the end of the beam to be bolted to the post (normally the front fascia beam), followed by another beam bracket on the side of this beam, with the bracket facing the end fascia beam. This bracket is later fixed to the end fascia beam.

Mark the position of the two bolt holes on the post and beam. When marking the position of the post allow adequate distance for the end fascia beam and side fixings (60mm). Drill the two holes using an 11mm diameter drill bit. To allow for the spacers, enlarge the holes on the outside of the front fascia beam only, using a 16mm diameter drill bit.

To install the front fascia beam, slide the end fascia beam into the beam bracket (attached to the side of the front fascia beam), while supporting the other end of the front fascia beam on an adjustable construction prop. Fix with four 12x20 self-drilling screws (figure 3.0). With the posts cut at the required length, move them into the pre-marked position. Slide the spacer over the M10 bolt and insert the bolt into the enlarged holes on the outside of the front fascia beam, and through the beam and post. Tighten the nuts to finger tight. Square the post using a spirit level and tighten the bolts.

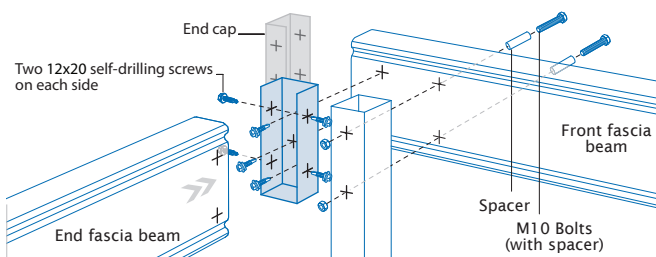


Figure 3.0

Alternative Intermediate Post Connection

An alternative method of installing the intermediate post is using two M10 bolts with spacers fixed through the beam and post as described in the alternative corner connection.

Inline Beam Connector

Inline beam connectors are used to butt join fascia beams where more than one length is required. The inline beam connector cannot be used mid span between posts. The connector must be positioned so that the butt joint is inline with the edge of the post, refer to figure 3.1. Fit the inline beam connector prior to fitting the post. Slide it half way inside the installed front fascia beam.

With the inline beam connector in place, drill the holes with an 11mm drill bit. To allow for the spacers, drill a 16mm hole on the outside face of the beam and connector only. Install the bolts and spacers as per the "Alternative Corner Connection".

The next section of fascia beam is slid over the inline connector until both beams meet flush, while supporting the other end with an adjustable construction prop. Adjust the construction props to allow for the fall toward the downpipe end of the structure. Fix each side of the beam with four 12x20 self-drilling screws.

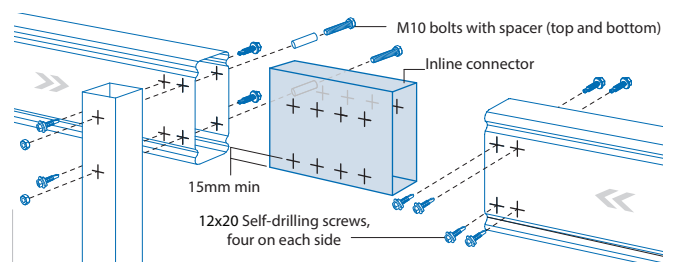


Figure 3.1

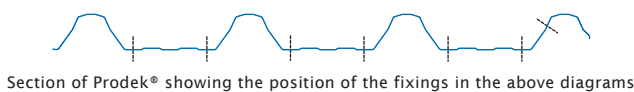
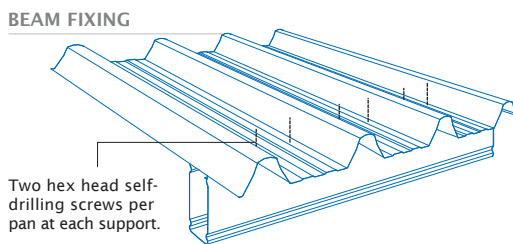
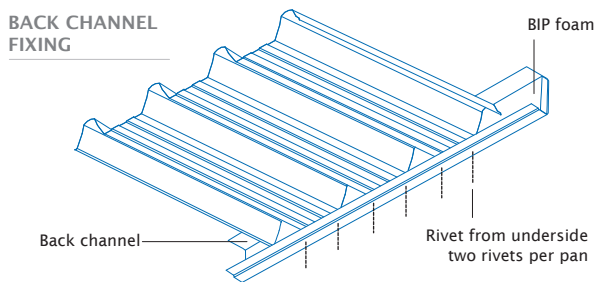
ROOFING

Roof 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.

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. Ensure that all of the sheet overlaps are facing the same direction. Mark the back channel and front fascia beam every 1000mm to check that the decking is laid square.

Begin installing the first sheet of decking. Lift the first sheet into place and slide it firmly into the BIP foam in the back channel to guarantee the correct weather proofing. Check the sheet is square



Section of Prodek® showing the position of the fixings in the above diagrams

Figure 4.0

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, using two 3mm rivets per pan. Weatherproof with silicone. At each supporting beam fasten down the sheet from above using two 10x16 self-drilling screws per pan. Remove any swarf.

Lay each sheet of decking over the sidelap of the previous sheet and slide the decking firmly into the BIP foam. Fasten as previously described and remove any swarf.

For Prodek® spans between 2800 and 3900mm, one 4.8mm rivet is required mid-span of the lap. For Prodek® spans between 3900 and 4500mm, two 4.8mm rivets are required evenly spaced along the lap. All rivets are to be weather proofed with silicone.

Fibreglass Sheeting

Where extra natural light is required, fibreglass sheets can be used. Fibreglass sheets must be installed with both sides overlapping the ribs of the adjoining metal decking. To maintain the strength of the roof a minimum of two metal sheets are required either side of each fibreglass sheet.

Place the side crest of the roof light over the metal decking and slide the roof light firmly into the BIP foam in the back channel. Drill 4.5mm holes through the raised edge of the bottom of the back channel at the rate of two per pan. Fasten with split tail soft pull rivets and weatherproof with silicone.

Pre-drill 7mm holes through the roof light at each supporting beam to allow for expansion. Fasten the roof light using 10x16 self-drilling screws and 20mm weatherseal washers at the rate of two fasteners per pan. Remove any swarf.

Place the following metal sheet under the crest of the roof light, and when correctly nested, slide the metal decking firmly into the BIP foam in the back channel. Fix in the manner previously described for metal decking.

To prevent ponding, the roof lights are to be supported every 1200mm with either 3mm steel strapping or Stratco ceiling batten. The strap or ceiling batten must be fastened to at least the first two ribs of the metal decking on either side of the roof light.

GUTTERS

Preparing the Gutters

When establishing the length of the gutters allow for the mitre cuts and 'tags'. The back face of the front gutter should be the same length as the front fascia beam. The back face of the side gutters should be the same length as the roof decking, less 50mm. Where more than one length of gutter is needed along a straight run, allow for an additional 100mm at the overlap. Cut the gutters to the correct measurements. An option for cutting mitres is described in the Stratco 'DIY Gutter and Downpipe' brochure.

Attach the stop ends to the side gutters using 3mm rivets, remove any swarf and weatherproof with silicone. Determine the position



of the downpipe (this should be in line with a post) and cut a hole in the base of the gutter. Insert the gutter outlet from the inside of the gutter and rivet the outlet in place using 3mm rivets, remove any swarf and weatherproof with silicone.

Installing the Gutters

Temporarily fix the front gutter to the roof decking using clamps at 300mm centres. Adjust the position of the gutter to ensure that the roof decking overhangs 50mm into the gutter. Rivet through the bottom of the decking and back lip of the gutter at maximum 900mm centres, using 3mm rivets.

Using clamps as previously described, temporarily attach the side gutter to the roof decking. Join the front and side gutters at the corner, to form a mitre joint ensure that the 'tags' from one gutter fit neatly into the mitre cut of the other, and clamp together. Adjust the side gutter to make sure that it runs parallel to the roof decking and rivet the two gutters together through the front face, bottom and back face using 3mm rivets.

Rivet through the bottom of the deck and the back lip of the side gutter at maximum 900mm centres using 3mm rivets. Make sure that the gutters and roof are totally free from swarf and silicone seal the mitre joints and any exposed rivets. You may need to temporarily unscrew the self-drilling screws at the corner and lift the decking to be able to properly seal the mitre joints. Once the mitres have been sealed re-tighten the self-drilling screws. Repeat this procedure for the side gutter at the other end.

Gutter Brackets

To install the Universal Deck Strap, roll the curved end into the bead of the gutter and pull it down onto the crest of the decking. Ensure that the front face of the gutter is straight and drill a hole through the bracket and decking. Fix the bracket to the deck using a 3mm rivet. Remove any swarf and weatherproof with silicone.

POSTS

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 construction props.

If fixing the posts to existing concrete, use a footing bracket. Each footing bracket should be fixed to the concrete using a 12x75mm masonry anchor or 12x100mm screwbolt. The post is slid over the footing bracket and secured using an M12 bolt, refer to figure 5.1.

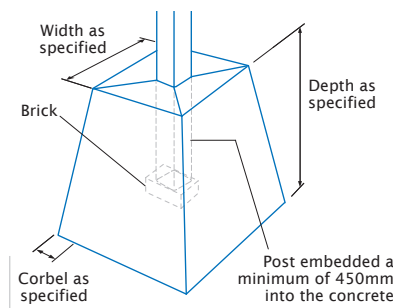


Figure 5.0

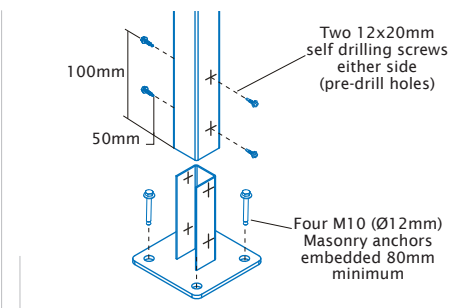


Figure 5.1

Installing the Downpipe

Slide the downpipe over the gutter outlet and rivet into position. Rivet the downpipe strap to the post and in turn, the downpipe to the strap.

MAINTENANCE

Your Stratco Sanctuary™ verandah 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 Sanctuary™ verandah or carport with a soft broom, mop or sponge as frequently as you should wash your car to maintain its duco. More frequent cleaning and rinsing will be required in severe environments. In corrosive industrial or marine environments, the manufacturer recommends the use of colour steel with a stainless steel base. Contact Stratco for further details. ® and ™ are trademarks of Stratco Australia Pty Ltd.