

### **FASCIA**

### **CONTINUOUS FASCIA**

A flat face ensures a smooth finish with or without gutters. The Continuous Fascia and gutter system is completely compatible with normal building construction.

### **CONTINUOUS OVERFLOW FASCIA**

Clean, simple, modern details combine with functionality in the attractive Continuous Overflow Fascia. Ideal for use on modern and classic homes, the Continuous Overflow Fascia is stylish and easy to install.

### CONTINUOUS OVERFLOW REBATE FASCIA

With a distinctive rebate at the top of the fascia to accommodate the gutter, Rebate Fascia gives a clean finish. Overflow Rebate Fascia adds further stability by tightly integrating the fascia and the gutter together.

### ADDITIONAL FASCIA COMPONENTS

All additional components required to finish off Stratco fascias - Brackets, Mitres, Barge Capping, Barge Apex Covers, Barge Moulds, End Caps and Fascia Joiners.

### **GUTTERS**

• C-SQUARE

• OG BIG ONE

VF GUTTER

• VT GUTTER

• EDGE 160

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• OG

VFC, VFM

• EDGE 200

• QUAD

• QUARTER ROUND

HALF ROUNDHI-SQUARE

• S GUTTER

• HK GUTTER

SMOOTHLINE

### SUSPENSION CLIP

Easily install gutters to fascia with built-in gutter height adjustment.

# ADDITIONAL GUTTER COMPONENTS



# **GUTTER & FASCIA**

**GUTTER. FASCIA & COMPONENTS INSTALLATION GUIDE** 

### **GUTTER & FASCIA TOOLS REQUIRED**

Additional tools and equipment (ladders, scaffolding and fasteners) not listed below may be required depending on install.

RIVET GUN HACKING KNIFE HAMMER TAPE MEASURE TIN SNIPS DRILL WITH 3.5mm DRILL BIT STRING LINE HACK SAW SILICONE & GUN SPIRIT LEVEL

### **FEATURES OF STRATCO FASCIA**

### **FASCIA WITH FORM AND FUNCTION**

Fascia is used as a base to attach the gutters to, or as a cover to hide the fixing space between the roof, eaves and wall. More than just functional, Stratco Fascia is designed to form a neat, attractive edge between the roofing and wall surface. Stratco Fascia is also used as a barge on gable roofs.

Embossed dimples along the fascia create a gap between the gutter and fascia, allowing water to escape behind the gutter rather than entering the building.

Fascia is available in a large range of colours to compliment your home and environment. It's clean, attractive curves will blend with both modern and heritage styled buildings. Installing Stratco Fascia on new or existing homes is easy as the Stratco Fascia system is compatible with normal building construction.

### LASTING INVESTMENT

Stratco Fascia is available unpainted or with a durable colour paint finish that will resist chipping and corrosion, manufactured from 0.45mm BMT hi-tensile steel. It is engineered with strong and deep stiffening ribs to reduce rippling effects in the front face of the fascia.

Large bend radii minimise the risk of paint cracking, which would otherwise cause premature corrosion. The bead at the fascia top provides added stiffness, which will assist in maintaining straightness and minimise any bowing that could occur along the length of fascia.

Unlike timber, Stratco Fascia will provide a consistent, quality product that does not warp or crack and will keep looking good for many years to come.



### SIMPLE INSTALLATION

Stratco Fascia is easy to install. Specially designed Fascia Brackets attach to the rafters, then the Stratco steel fascia is simply clipped into place. Stratco Gutters can then be installed using the Stratco Gutter Suspension Clip, which attaches the gutter to the fascia. Stratco Fascia is lightweight, easy to handle and pre-painted giving it a clear advantage over wooden fascia when installing.

### **ACCESSORIES**

Fascia is finished with internal and external corner mitres or Barge Caps. They are designed to continue the smooth form of the fascia around the corners of the building and provide accurate angles that are easy to install.

Stratco manufactures a wide range of gutters and downpipes that are compatible with the Stratco Fascia system. These include the OG, Quad, Edge and Smoothline® gutters, to name a few.

# **FASCIA DESIGN CONSIDERATIONS**

Stratco fascia and gutter systems are compatible with normal building construction. It is important that the building structure is sound, and that the installer takes adequate measures to ensure their safety when installing the product, particularly when two story construction is involved. Stratco recommends that gutters receive a minimum 1 in 500 fall.

For more information, the Stratco Overflow Solutions Guide and Product Information Guides are available through the Stratco website. These documents comply with the current version (NCC 2019) of the Building Code of Australia (BCA) – Volume 2.

# **FASCIA SUPPORT SPACING**

Sheet roofing will require a purlin or batten immediately behind the fascia to support the sheet end span. Rafter brackets are required at maximum 1200mm centres for sheet roofing. The maximum support spacing for tile roofing is 600mm if the fascia is used to support tiles. If a tilt batten is used adjacent to the fascia to support the end tiles, rafter brackets are allowed at maximum 1200mm centres.

### MATERIAL COMPATIBILITY

Drainage from copper or lead products (including roof flashings) should not be allowed to discharge onto Zinc/Al or pre-painted steel components. Similarly, lead or copper components should not be installed in contact with Zinc/Al steel. Each of these combinations will lead to premature corrosion.



### **FASCIA TYPES**

### **CONTINUOUS OVERFLOW FASCIA**

Clean, simple, modern details combine with functionality in the attractive Continuous Overflow Fascia. Ideal for use on modern and classic homes, Continuous Overflow Fascia is stylish and easy to install.

The perfect solution to create a consistent gap between the gutter and fascia, embossed standoffs allow water to escape through the gap rather than entering the building.

### **CONTINUOUS OVERFLOW REBATE FASCIA**

An attractive fascia that tightly integrates with the gutter system. Benefitting from a functional rebate 'ledge' that houses the gutter system, Stratco Overflow Rebate Fascia adds further stability by tightly integrating the fascia and gutter together.

Installing Overflow Rebate Fascia on new or existing homes is easy as the Rebate Fascia system is compatible with normal building construction. The Rebate Fascia system uses a sturdy end fix bracket which has been specially designed for a quick construction and to eliminate damage to fascia.

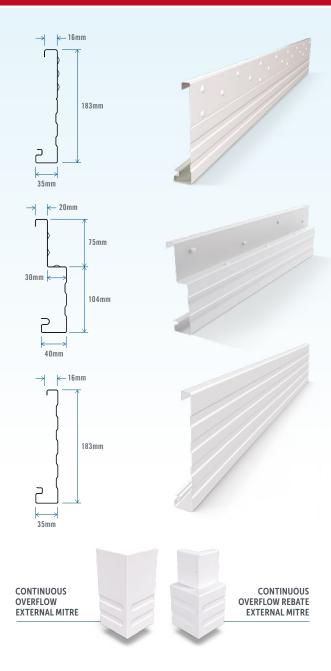
### **CONTINUOUS FASCIA**

A flat face fascia that provides a smooth finish with or without gutters. Stratco Continuous Fascia is completely compatible with normal building construction.

### **DIFFERENCES BETWEEN FASCIAS**

The shape of individual components will vary depending on the fascia type used. Each fascia type includes its own variant of the parts listed within 'Additional Fascia Components', yet all have a similar shape and installation process (unless otherwise noted).

For example, the Continuous Overflow External Mitre and Continuous Overflow Rebate External Mitre have differences yet both carry the same overall shape, function and installation.



# **ADDITIONAL FASCIA COMPONENTS**

Multiple variants of the Rafter Bracket, Fascia Joiner, Barge Capping, Apex Cover, End Cap and Mitres are available as required for each job and fascia type.



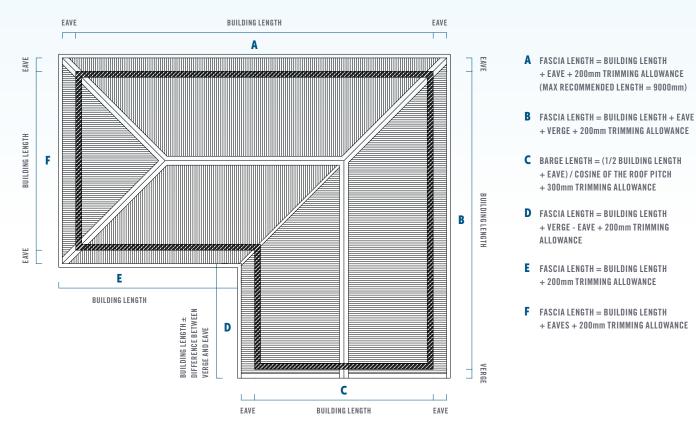
### **MEASURING YOUR PROJECT**

If you have an accurate plan drawing of your building, the lengths of fascia required for your project can be determined by measuring off the plan. Alternatively you can physically measure your building to determine fascia lengths.

Measure each run of fascia and add an additional 200mm trimming allowance to each length to obtain your order length, adding an additional 100mm per join if using a slip join. For long fascia runs we suggest ordering multiple lengths and joining sleeves to reduce delivery costs and to increase ease of handling. Recommended maximum length = 9000mm.

If using fascia as a barge, refer to example 'C' in the Figure below. Firstly, determine the distance from the ridge line to the building edge + eave. Divide this distance by the cosine of the roof pitch to give the barge length. Add 300mm trimming allowance to obtain your order length (Figure 1.0).

Alternatively you can physically measure your building's barge length and add a 300mm trimming allowance.



### FIGURE 1.0

## **ORDERING COMPONENTS**

Stratco fascias are custom rolled to your required length, allowing you to minimise waste and reduce the number of joins. Our minimum roll length is 1000mm. If you require a length less than the minimum, add it to another length and then trim on-site to minimise unusable off-cut.

## Include:

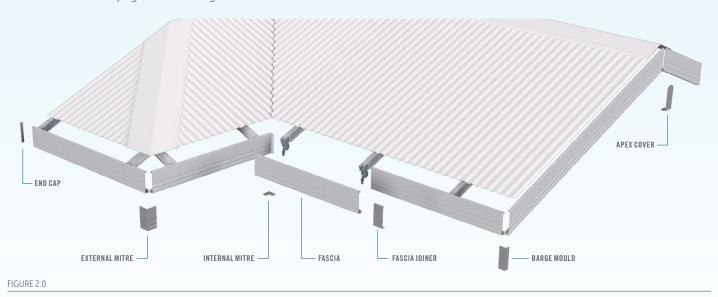
- All lengths of fascia, including lengths used as barge.
- Barge Capping: same as barge lengths.
- Barge Moulds: a left and right hand barge mould for each barge.
- Rafter Brackets: total length (in metres) of all fascia lengths divided by 1.2 for steel roofs and tile roofs with tilt batten, or divided by 0.6 for tile roofs without tilt batten + one bracket per length of fascia + round up to the nearest 10.

- Internal Mitres: total number of internal fascia corners.
- External Mitres: total number of external fascia corners.
- Joining Sleeves: where two lengths join together on a straight run.
- End Caps: one at every fascia end that does not lead into a mitre or barge mould.
- Apex Covers: at the apex of every barge.



### **FASCIA ASSEMBLY**

The below assembly illustrates all Stratco Fascia components within a typical assembly (Figure 2.0). See instructions on page 7 if installing the Clickfast Fascia Cover.



### **FASCIA INSTALLATION**

### **CHECK COMPONENTS**

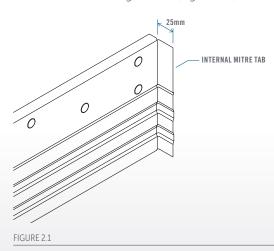
When your material has arrived on site, check each piece against the cartnote supplied. Carefully read this installation guide to ensure that you are familiar with all the steps involved. Ensure you have adequate tools for the job.

### **MEASURING & CUTTING**

Refer to measurements made in the 'MEASURING YOUR PROJECT' section. Add 100mm to any fascia length that is to be slip joined over another fascia length. Wherever an internal mitre occurs, add an additional 25mm to one of the fascia ends used in the mitre.

Cut fascia to required lengths with a hacksaw or tinsnips. Tinsnips are recommended as they do not leave metal filings thus reducing potential rust spots.

Once all fascia lengths are cut, internal mitres can be fabricated. Determine the fascia ends that will make up the internal mitre. To fabricate an internal mitre, cut out and fold a 25mm tab in one of the fascia length ends (Figure 2.1).



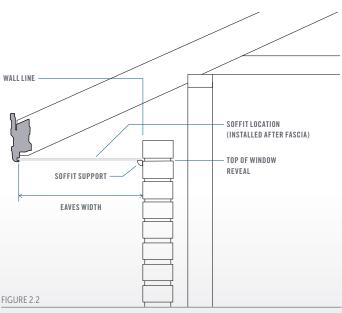
### **BRACKET & FASCIA INSTALLATION**

After checking that the rafter plumb cuts are correct, determine the eaves/soffit height by reference to the building plan and location of soffit supports. The soffit usually finishes at the top of the window reveal, unless otherwise specified (Figure 2.2).

The distance from the inside of the soffit groove in the Rafter Bracket to the wall line is the eaves width.

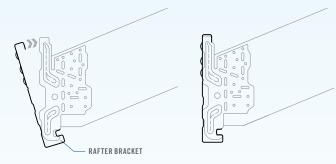
Using these two dimensions, Rafter Brackets at either end of the house can be located. Fasten the Rafter Brackets to the rafter. Rafter Brackets should be secured to rafters with at least three fasteners (only one fastener in a slotted hole). For timber rafters three 12g x 25mm Type 17 screws should be used and for steel rafters, three 10g x 16mm tek screws.

The location of the remaining Rafter Brackets can be found by running a string line between the Rafter Brackets.



Once the Rafter Brackets are installed, clip the fascia into place. The bottom channel of the fascia is hooked over the bottom part of the Rafter Bracket. The top channel of the fascia is slid over the top part of the Rafter Bracket so that it clips over the tab (Figure 2.3).

Ensure the fascia lengths with internal mitre tabs are installed in the correct location.

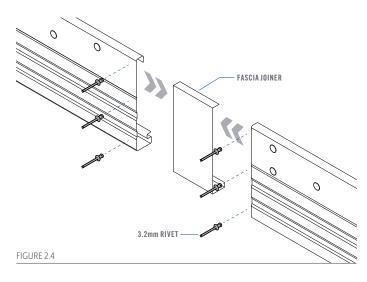


# JOINER, APEX COVER & END CAP INSTALLATION

FIGURE 2.3

Fascia lengths are joined together using either a Fascia Joiner or with a slip join. To join with a Fascia Joiner, slide the two fascia ends over the Fascia Joiner until they meet in the middle. Fix in place using 3.2mm rivets (Figure 2.4).

To fabricate a slip join, overlap the two fascia lengths by 100mm and rivet together.



Fix the Fascia End Cap into the end of the fascia length. Rivet in place using 3.2mm rivets (Figure 2.5).

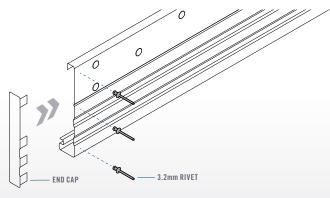
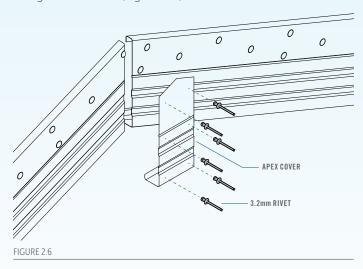


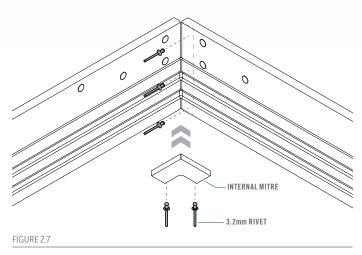
FIGURE 2.5

Fix the Apex Cover up against the Barge Apex. Rivet in place using 3.2mm rivets (Figure 2.6).



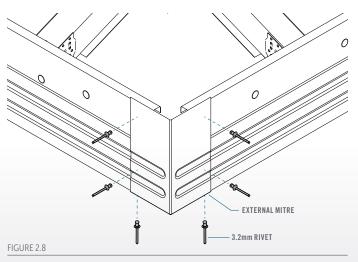
### **INTERNAL MITRES**

Rivet all internal mitre fascia lengths together (as fabricated in Figure 2.1). Rivet the Internal mitre to the underside of the two fascia lengths (Figure 2.7).



### **EXTERNAL MITRES**

Rivet all External Mitres to fascia lengths that meet at an external corner (Figure 2.8).





### **BARGE MOULDS**

Rivet all Barge Moulds to the corners where fascia and barge lengths join.

Ensure the short side of the Barge Mould is riveted to the barge and long side is riveted to the fascia (Figure 2.9).

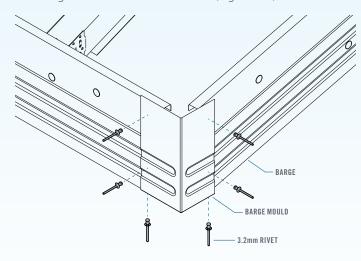


FIGURE 2.9

### **BARGE CAPPING & GUTTERS**

Barge Capping/Gutter is fitted onto the junction between the Fascia Barge and roofing. Barge Capping/Gutter is fastened using 8g screws at 1200mm spacings (Figure 2.10).

Barge Capping is available in multiple rolled or square profiles. Check the Stratco website for all available profiles.

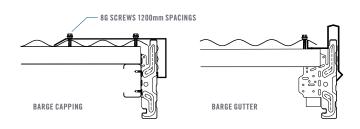


FIGURE 2.10



### **CLICKFAST FASCIA COVER INSTALLATION**

### (SKIP THIS SECTION IF INSTALLING NEW FASCIA)

Easily give a new look to your existing timber fascia with the Clickfast Fascia Cover. If installing the Clickfast Fascia Cover, follow the steps in this section.

If installing any of the new Continuous Fascia systems, skip this section.

Remove the existing gutter, brackets and downpipes. Do not remove soffit lining (Figure 3.0).

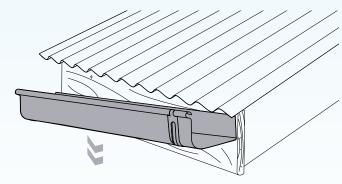


FIGURE 3.0

Remove residual dirt, nails and brackets. Measure and cut required fascia cover lengths. Install the Clickfast Fascia Cover over the existing timber fascia (Figure 3.1).

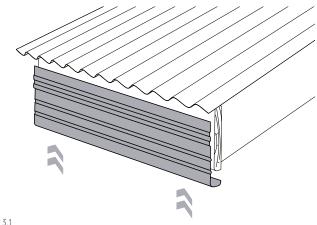
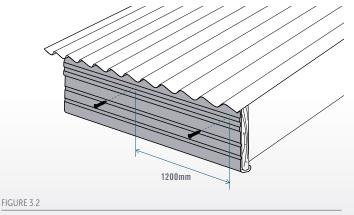


FIGURE 3.1

Fix the Clickfast Fascia Cover to the timber fascia using 8g x 20mm Type 17 countersunk head screws spaced 1200mm apart (Figure 3.2).



### FEATURES OF STRATCO GUTTERS

### **OVERVIEW**

Stratco Gutters, Downpipes, Overflow Solutions and accessories are both fashionable and functional, enhancing the look of your home. Multiple solutions are offered to greatly reduce the risk of water damage.

Stratco offer a complete range of quality gutter products, tools, advice and information required to complete a quality installation. Do not underestimate the damage poor gutters and downpipes can cause, visit your local Stratco store to discover what solution will work for your home.

### STYLES AND COMPATIBILITY

Stratco has designed an extensive choice of gutter styles, from the more traditional colonial styles to today's modern contemporary designs.

Stratco gutters can be fixed to fascia using brackets or the Stratco Suspension Clip, the system which has proudly received an Australian Classic Design Award. Dimpled fascia with Suspension Clips is an easy and reliable way to meet overflow requirements. Timber Fix Gutter Clips are available for use on timber fascia.

### ADDITIONAL INFORMATION

Up to date information about Stratco products, spans, installation requirements and technical advice can be found on our website at: www.stratco.com.au.

It is advisable to obtain current information prior to ordering any materials. Further details about complying with legislation can be found in the Stratco 'Selection, Use and Maintenance' document found on our website.

# **GUTTER DESIGN CONSIDERATIONS**

### WATER OVERFLOW

It is important when designing a roof drainage system that appropriate overflow measures are considered in order to ensure water does not flow back into the building. This is particularly important for the most commonly used gutters which are high fronted and designed to hide the lower edge of the roof tiles and cladding. This results in the front edge of the gutter sitting at or above the top of the fascia level, allowing water to flow back over the fascia and into the eaves, often resulting in water damage.

This information has been developed by Stratco for compliance with the current version (NCC 2019) of the Building Code of Australia (BCA) – Volume 2 which requires that adequate overflow measures are applied. This requirement ensures overflow from rainfall calculated at a 5 minute rainfall intensity duration, for a 100 year average recurrence interval, is diverted away from the building.

Specific information on calculating overflow, rainfall and solutions can be found in the 'Gutters Overflow Solutions' document on the Stratco website. Overflow solutions may be applied individually or in combination to achieve the required overflow capacity.

### **BUILDING CODES**

The design and installation of gutters and downpipe systems must comply with the Building Code of Australia and Australian Standards AS/NZS 3500.3 Plumbing and Drainage, Stormwater Drainage. It is also important that relevant State regulations are satisfied. For example, New South Wales legislation requires all gutter and downpipe installations be undertaken by a suitably licensed installer who holds a current certificate issued by the NSW Office of Fair Trading.

### **MAINTENANCE**

Regular maintenance is essential to maintain the good looks of all Stratco steel products and to ensure you receive the maximum life-span possible in your area. Gutter systems must be regularly cleaned to prevent the build up of leaf debris, fungus or any other material that could prevent the free drainage of water from the roof.

Refer to the Stratco 'Selection, Use and Maintenance' document found on our website for further information.

### RESPONSIBILITIES OF THE INSTALLER

It is the responsibility of the installer to ensure that the project is installed as required by the rainwater goods designer. Adequate fall towards the downpipes must be given to gutters (a minimum of 1 in 500 for eaves gutters and 1 in 200 for internal gutters).

The installer must ensure that the correct number of downpipes of sufficient size are installed, that they are clear of debris and able to discharge correctly.

### RESPONSIBILITIES OF THE DESIGNER

It is the responsibility of the designer of the rainwater goods system (who may be the architect, builder, hydraulic engineer, home owner, roofing or guttering contractor) to design a rainwater system which allows adequate drainage to occur.

- For eaves gutters they must determine the rainfall intensity values (ARI) shown in AS/NZS 3500.3 Plumbing and Drainage – Stormwater Drainage.
- For a specific rainfall intensity they should determine the cross sectional area of gutter best suited to their situation, when the roof catchment area is taken into account. While you can choose whether slotted or non-slotted gutter best suits your needs, Stratco recommend the slotted option where possible.
- Where the designer is aware of specific local factors that may impact negatively on the standard design then this must be taken into account. For example if the rainwater goods system is required to be used in a leafy area, then adequate leaf guards may need to be specified. Smaller mesh leaf guards may be required for fine needle like leaves, and these may need to be removable to prevent fungal build-up. All leaf guards need to be removed regularly and the gutter cleaned. In snow or hail prone areas, the gutter either may not be suitable, or may need to be situated well below the level of the fascia with snow breaks installed.
- For additional information refer to the Stratco website which shows a roof drainage calculator, tables of rainfall and drainage.



Where there is any doubt as to the adequacy of the design, or where the designer wishes to introduce a further level of safety, there are a number of additional protective measures that can be included in the design.

A list of products and solutions can be found in the 'Gutters Overflow Solutions' document on the Stratco website.

These measures can either be used singly, or in combination with each other and will increase the capacity of the gutter to move the required volume of water.

### **GUTTER PROFILES**

### QUAD

Quad Gutter is so adaptable because of its classic form. It can blend perfectly with older style colonial and cottage homes and is also used extensively in new home construction.

### OG

OG Gutter is a traditional gutter with a charismatic profile. 'OG' stands for 'Old Gothic'. Its style makes it the ideal choice for use on both traditional and modern homes.



OG Big One has a clean, stylish, 'Old Gothic' face and is designed for commercial buildings. It is capable of carrying large amounts of water. The width can be varied to suit your needs and is available in long lengths of up to 6.5m reducing installation costs.

### HALF ROUND

The appealing shape of Half Round Gutter is largely self cleaning and has a good water carrying ability due to its wide 150mm diameter. Half Round is ideal for modern homes and is also popular on industrial and office buildings because of its clean, smooth, practical shape.

### QUARTER ROUND

Quarter Round Gutter features a partially flat base that enables the gutter to be used on any rebate fascia. The Quarter Round profile of the gutter efficiently channels even the smallest amount of water to the back of the gutter for disposal, thereby reducing silt and debris build up.

# **EDGE 160**

Modern, architecturally designed homes require a gutter with simple, clean and refined lines. Edge Gutter features the latest cutting edge styling.

### **EDGE 200**

Edge 200 gutter has a larger width to carry a greater capacity of water. As with the Edge 160, it is available in a large range of colours.





### **HI-SQUARE**

Hi-Square Gutter has a 130mm high front that will provide a visual cover to the end of roof sheets and roof tiles. Its square front design delivers a neat finish to any home or building. It also can be used with the Torrent Spacer Gutter Clip to reduce water overflow into the building.

### **C-SQUARE**

Designed specifically for verandah and carport applications, C or 'Commercial' Square Gutter is commonly used in commercial applications where a modern, attractive gutter is required. A unique fold at the back of the gutter enables it to be easily secured to roof sheeting.



When attached to fascia, Smoothline Gutter has the same appearance as Half Round Gutter. However unlike Half Round Gutter, Smoothline has a flat back. Smoothline Gutter is easy to fix, easy to maintain and is economical as it uses internal brackets.

### **S GUTTER**

S Gutter has a colonial homestead style that is reflected in the gentle curves of its profile. It is ideal for period restorations and modern homes with a traditional feel. It features a 90mm high front to hide the roofline and can be used with the Torrent Spacer Gutter Clip to allow water to overflow.

# VFC, VC GUTTER

VFC & VC Gutter has a compact, modern appearance that suits contemporary homes. It has a square front that is designed to hide the end of the roof sheets, providing a neat face to your roof. It is able to be used with Torrent Spacer Gutter Clip to allow excess water overflow.

### **VF GUTTER**

VF Gutter has been specifically designed for verandah and carport applications. It has an attractive square front and a unique fold at the back of the gutter that enables it to be easily secured to the roof sheeting. It is often used in industrial roofing applications as well.

### **HK GUTTER**

HK Gutter or 'Household K' presents a neat, smooth, modern appearance. Lengths are cut to your requirements, in a wide range of un-painted or painted finishes. HK Gutter can be used with Torrent Spacer Gutter Clip to minimise overflow during heavy downpours.

# **VT GUTTER**

Designed to hide the roof sheets or roof tiles from view, VT Gutter has a smooth face with simple lines that will complement any style of home from colonial to contemporary. It is able to be used with Torrent Spacer Gutter Clip to allow excess water to overflow during heavy downpours.





### **VFM GUTTER**

VFM Gutter has a 138mm square front that is ideal for covering the end of roof sheets or roof tiles. It has a clean profile and a suspension rib in the back face for strength. VFM Gutter has excellent water carrying abilities and can be used with Torrent Spacer Gutter Clip to allow for water overflow.



## **ADDITIONAL GUTTER COMPONENTS**

### SUSPENSION CLIP

Stratco Suspension Clips are specially designed clips made of spring steel and are placed at approximately 1200mm intervals along the fascia. The revolutionary suspension clip allows you to select the amount of fall the gutter receives. Your gutters can even be adjusted later to correct house settlement.



### **INTERNAL STR-8-LINE STRAP**

Internal gutter straps hold the face of the gutter into position. They are installed internally at 1200mm intervals and are not visible on the external face.



## **GP BRACKET**

GP brackets are fixed at 1200mm intervals and are generally used when replacing existing gutters.



### **EXTERNAL BRACKET**

External gutter brackets are fixed to the fascia at 1200mm intervals using a string line. They provide a traditional look and are visible on the external face.



### **INTERNAL AND EXTERNAL MITRES**

Gutter mitres manufactured from the same gutter profile can be supplied, ready to use on site. These mitres provide a continuous line around the corners and can be made to any angle required to suit the design of the building.



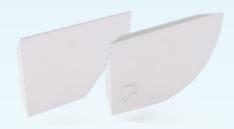
# **INTERNAL AND EXTERNAL CAST MITRES**

Pre-made cast internal and external mitres are an easy solution to gutter mitres. They are neat, practical and aesthetically pleasing, providing a clean and modern look around the corners of the building.



### **STOP ENDS**

Individual stop ends can be supplied in left and right hand ready for on site installation.



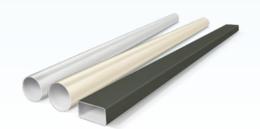
### STEEL DOWNPIPES

Stratco contour, round, square and rectangular downpipes are available in sizes to suit any application from industrial to residential buildings. They are available in galvanised, Zinc/Al and a huge range of roofing colours. Lengths are 1800mm or 2400mm, check your State for availability.



### COLOURED PVC (CO-EXTRUDED) DOWNPIPES

The Stratco coloured PVC downpipe system for patios and housing is co-extruded with an exceptional high gloss exterior grade finish. Downpipes, with accompanying elbows/joiners, provide a superior long lasting protection and colour to any outdoor area or building.



### **DOWNPIPE ACCESSORIES**

Offsets are available to fit either a 450mm or 600mm eaves overhang. Downpipe straps attach the downpipe to the wall, shoes (135 degrees) and elbows (90 degrees) help water flow to a specific area. Downpipe outlets channel water from the gutter to the downpipe.



# **RAINHEADS**

Stratco can manufacture any custom rainhead design to suit your building's architecture. Or choose from one of our standard styles of rainhead.

Styles to choose from are clearly outlined on our website, plus you can download a specification sheet to help when ordering at www.stratco.com.au.

All rainheads include a fitted downpipe outlet and are available in a wide range of sizes. Zinc/Al and a wide range of pre-painted roofing colours are available.



# **SUMPS**

Sumps are usually attached between a box gutter and the downpipe. They collect storm-water before being carried away by the downpipe and they also serve to catch any debris before it enters the downpipe.

Sumps can be made to order but are commonly manufactured in either 100mm and 150mm depths. They are available in Zinc/Al and a wide range of pre-painted roofing colours to suit your project.





### **MEASURING YOUR PROJECT**

If you have an accurate plan drawing of your building, the lengths of gutter required for your project can be determined by measuring off the plan. Alternatively you can physically measure your building to determine gutter lengths.

To determine the total length of each gutter piece, measure the length of fascia and add an additional 200mm trimming allowance. Then add an additional length for any stop ends, external mitres or joins that the gutter piece contains.

If installing pre-made stop ends, no additional length for the stop end section is required. If fabricating stop ends from the gutter, add the width of the gutter to the gutter length.

If installing Cast External Mitres, add the width of the gutter to both gutter pieces used in the mitre. Cast Internal Mitres require no additional length added.

If installing pre-fabricated gutter mitres, no additional length is required.

If fabricating external and/or internal mitres from the gutter, add 600mm to one of the pieces used in the mitre.

Add an additional 100mm to any gutter piece that will overlap/join to another gutter length.

For long gutter runs we suggest ordering multiple lengths (to be joined together during installation) to reduce delivery costs and to increase ease of handling. Recommended maximum length - 9000mm.

PVC downpipes are available in 1800mm or 2400mm lengths. Steel downpipes can be supplied at required lengths. The length of downpipe required will be the height of the building, plus the width of the eaves.

Downpipes can be supplied with steel or PVC outlets, footings, elbows and straps.

Stratco can supply a complete downpipe offset, made to suit the eaves width and building height.

### ORDERING COMPONENTS

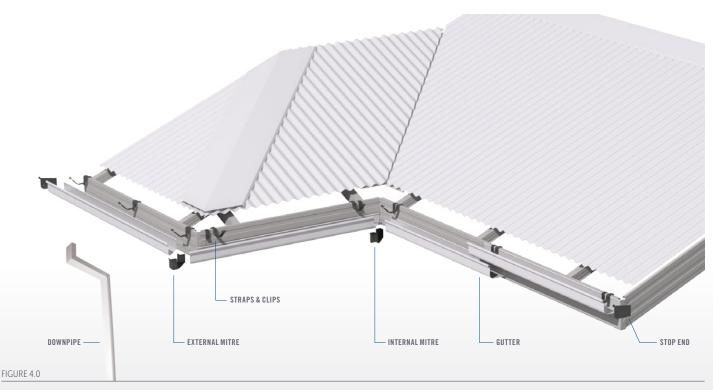
Stratco gutters are custom rolled to your required length, allowing you to minimise waste and reduce the number of joins. Our minimum roll length is 1000mm. If you require a length less than the minimum, add it to another length and then trim on-site to minimise unusable off-cut.

### Include:

- All lengths of gutter.
- Type and quantity of overflow accessories (if any are required) to complete your project.
- Clips and Gutter Supports: total length (in metres) of all gutter lengths divided by 1.2 + one per length of gutter + round up to the nearest 10. Ensure to specify the type of gutter support (internal straps or external brackets).
- Internal Mitres: total number of internal gutter corners.
- External Mitres: total number of external gutter corners.
- Downpipes, Elbows, Straps and Outlets: One downpipe outlet and three downpipe straps for each downpipe. The size, type, length of downpipe and any required elbows or joiners.
  Pre-made downpipe offsets are available.
- Stop Ends: one at every gutter end that does not lead into a mitre.

## **GUTTER ASSEMBLY**

The below assembly illustrates all Stratco Gutter components within a typical assembly (Figure 4.0).



### **GUTTER PRE-INSTALLATION**

### **DETERMINE GUTTER SUPPORT**

There are four basic gutter support types, with Suspension Clips being most common. Once the gutter support type has been determined, follow the appropriate instructions as described in the following sections.

Gutter support types:

- 1. Suspension Clip with Internal Straps
- 1. Timber Suspension Clip with Internal Straps
- 2. Internal Straps and P Type Clips
- 3. External Brackets

### CHECK COMPONENTS

When your material has arrived on site, check each piece against the cartnote supplied. Carefully read this installation guide to ensure that you are familiar with all the steps involved. Ensure you have adequate tools for the job, as outlined in the 'TOOLS REQUIRED' section on page 2.

### **FABRICATION TIPS**

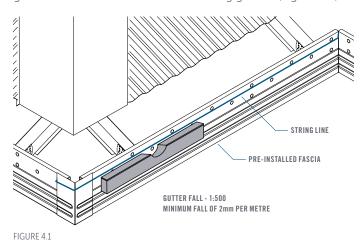
Ensure each component does not have residual swarf from cutting. Clean out gutters after fabricating, removing metal particles to ensure they do not cause rust spots.

Every join should have a thin and uniform bead of silicone applied once surfaces have been riveted in place. Wipe off excess silicone to ensure it does not obstruct water flow.

### **DETERMINE GUTTER FALLS**

(SKIP THIS STEP IF USING SUSPENSION CLIPS)

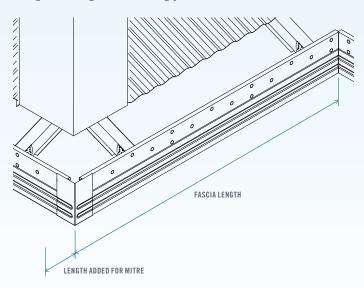
Run a string line taut from corner to corner. Use a spirit level to check the fall. If physically measuring fall is hard, rely on spirit level readings as opposed to measurements. Mark the gutter fall and reference when installing gutters (Figure 4.1).



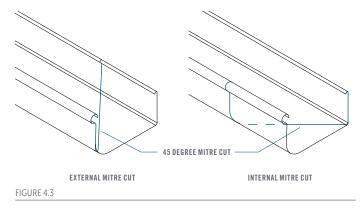
# MEASURING AND MARKING GUTTER LENGTHS

Refer to measurements made in the 'MEASURING YOUR PROJECT' section. To determine the total length of each gutter piece, firstly measure the length of fascia. Then add an additional length for any stop ends, external mitres or joins that the gutter piece contains (Figure 4.2).

The type of mitre and stop ends used (either cast, pre-fabricated or fabricated from gutter on-site) will determine the gutter length for each piece. Check which type is used and mark up the gutter lengths accordingly.



If using cast mitres, mark the gutter mitre ends at a 45 degree angle (Figure 4.3).



### **CUTTING AND FABRICATING**

Cut all gutter lengths with a hacksaw or tinsnips from measurements made in the 'MEASURING AND MARKING GUTTER LENGTHS' section. Tinsnips are recommended as they do not leave metal filings, therefore reducing rust spots.

# FABRICATE STOP ENDS, MITRES & DOWNPIPES (IF REQUIRED)

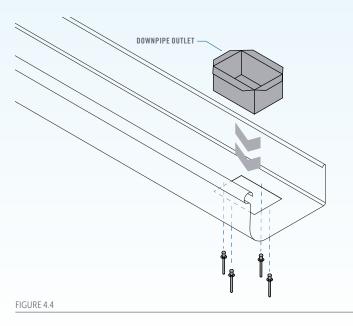
If stop-ends, mitres, or downpipes are to be fabricated from the gutter lengths supplied (as opposed to using pre-made components) refer to fabrication instructions on page 18-20. Stratco offer a range of pre-made stop-ends, mitres, outlets and downpipes. Using Stratco components ensures an easy and professionally finished gutter installation.

Ensure all components are fabricated before continuing. If using pre-made stop ends, rivet and silicone them to the gutter ends as required.

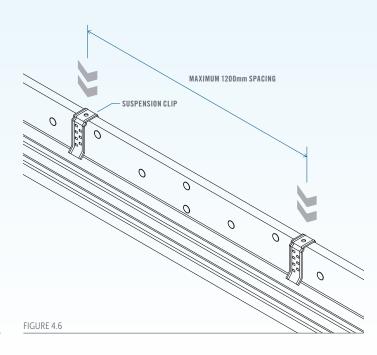


### **DOWNPIPE OUTLETS**

Determine the location of downpipes in the gutter lengths. Cut an outlet hole in every downpipe location with a hacking knife. Rivet and silicone the Downpipe Outlet into position from the underside of the gutter (Figure 4.4).



Knock the Suspension Clip down with a dead blow hammer or mallet. Ensure all clips are spaced no more than 1200mm apart (Figure 4.6).



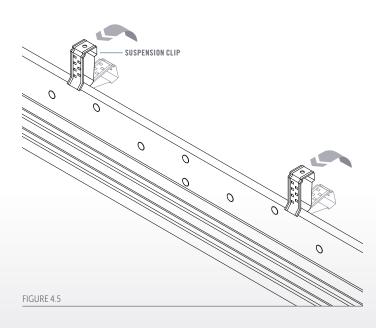
# **INSTALLING GUTTER TO FASCIA**

Once all the components have been made, the gutters and brackets can be installed. Different gutter support types will require specific instructions to install. The following sections illustrate the different methods of gutter attachment.

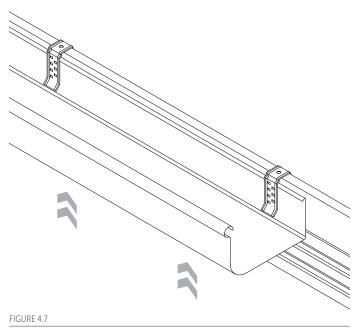
# **GUTTER INSTALLATION WITH SUSPENSION CLIPS**

The fall of the gutter is obtained by a series of teeth placed on the Suspension Clip. The highest end of the gutter should clip into the top tooth. The lowest end should clip into the second to bottom tooth (minimum 1: 500 fall required).

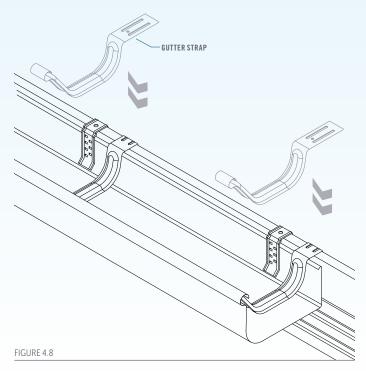
Push the Suspension Clip up from the rear of the fascia and into the vertical position (Figure 4.5).



Push the gutter upwards and into the Suspension Clip. Change the fall of the gutter by adjusting the Suspension Clip tooth that the gutter lip sits in (Figure 4.7).



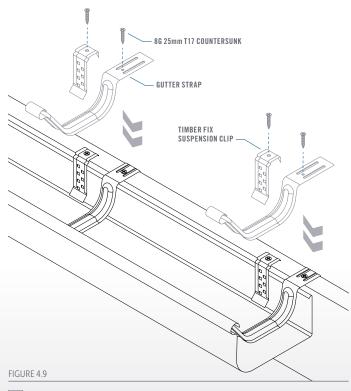
Position Gutter Straps into the gutter bead. Press the rear tab of the Gutter Strap over and around the top of the fascia. Place at intervals no more than 1200mm (Figure 4.8).



## **GUTTER INSTALLATION WITH OTHER FIXINGS - TIMBER** SUSPENSION CLIP & INTERNAL STRAPS

For timber fascia, fasten the Timber Fix Suspension Clip to the fascia using 8G x 25mm T17 Countersunk screws at 1200mm spacings.

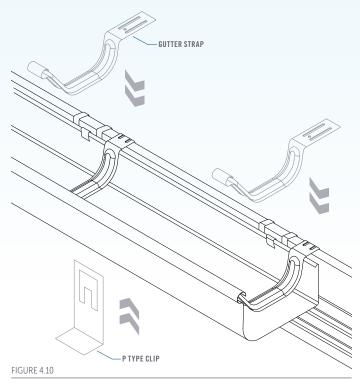
Install the Gutter and fasten the Gutter Straps to the fascia using 8G x 25mm T17 Countersunk screws at 1200mm spacings (Figure 4.9).



## 'P' TYPE CLIPS & INTERNAL STRAPS

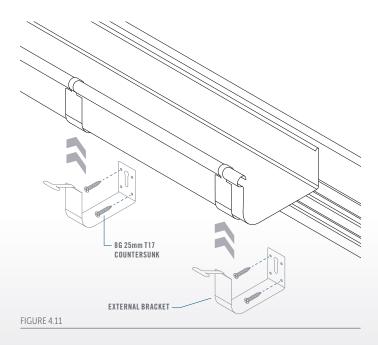
Press the outer tab of the P Type Clip over and around the top of the fascia. Sit gutters onto the P Type Clip lip. Bend the small tag of P Type Clip over the back of gutter to hold the gutter into position.

Position gutter straps into the gutter bead. Press the rear tab of the Gutter Strap over and around the top of the fascia. Place at intervals no more than 1200mm (Figure 4.10).



### **EXTERNAL GUTTER BRACKETS**

Fasten the External Brackets to the fascia using 8G x 25mm T17 Countersunk screws at 1200mm spacings. Place gutters into the External Brackets. Bend the tag of the External Bracket over the gutter bead to hold it in place (Figure 4.11).



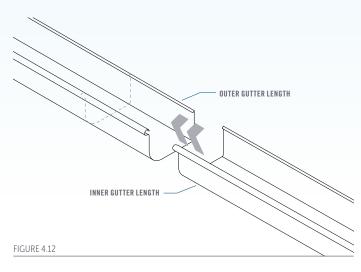


### **CONNECTING GUTTER LENGTHS**

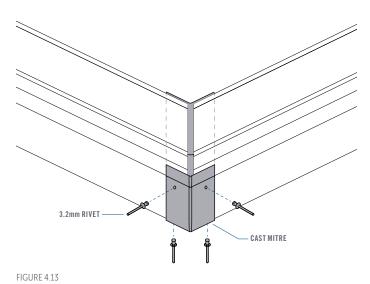
Joins will occur when connecting two gutter lengths together and at fabricated internal/external mitres. Joins should always be overlapped to allow water to flow over the join instead of into the join.

Prior to joining, clean all metal filings (swarf) from the gutter. Open the bead of the outer gutter length with a pair of pliers, and close up the bead of the inner gutter length.

Slide the upstream gutter length into the downstream gutter length, allowing at least a 100mm lap (Figure 4.12). Rivet and silicone the two gutter lengths together, ensuring that adequate silicone is used to create a complete seal in the join. Smooth excess silicone to ensure that the passage of water is not impeded.



If using Cast Mitres, fit the mitre up against the gutter corner. Rivet through the Cast Mitre pilot holes into the gutter lengths and seal with silicone (Figure 4.13).



### STRAIGHT DOWNPIPES

Measure the distance between the underside of the gutter to 100mm above ground level. Cut the downpipe to this length. If using pre-made Downpipe Shoes, attach to the downpipe end with rivets and silicone. If fabricating the Downpipe Shoe from the downpipe, refer to fabrication instructions in Figure 5.8 on Page 19.

With the Downpipe Shoe end facing the ground, slide the opposite end of the downpipe over the gutter outlet. Rivet and silicone the downpipe to the outlet. Use the Downpipe Straps to secure the downpipe to the wall (Figure 4.14).

### **OFFSET DOWNPIPES**

Buildings with eaves will require an offset downpipe. Refer to instructions on page 18 if fabricating downpipe offsets from downpipe lengths.

Stratco can supply a complete downpipe offset, made to suit the building eaves dimension and building height. Stratco Offset Downpipes include a slip join, accommodating for small variances in eaves sizes. Steel downpipe components are joined with rivets and silicone. PVC downpipe components are joined with PVC glue (Figure 4.14).

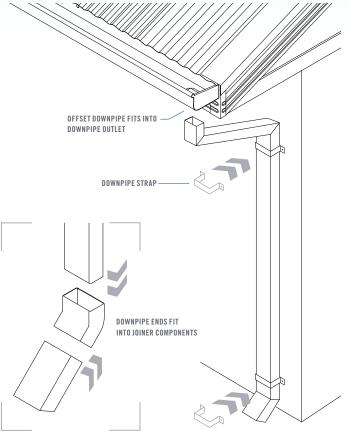


FIGURE 4.14

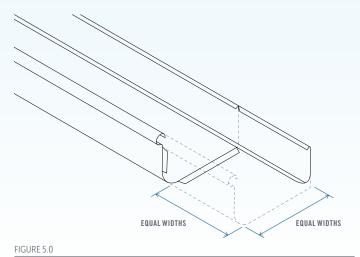
### **FABRICATING GUTTER COMPONENTS**

### STOP-END FABRICATION

Return stop-ends are used to close off the end of gutter lengths. Stratco pre-made stop-ends are also available.

Determine if the end is to be left or right. Mark a line around the gutter at a distance in from the gutter end that is equal to its width. Mark 10mm tabs as required off the first mark.

Cut away the excess material (Figure 5.0).



Fold the two tabs and then the rear face inwards by 90 degrees (Figure 5.1).

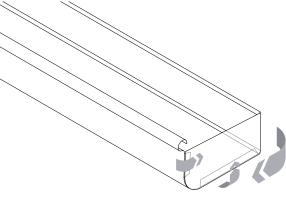


FIGURE 5.1

Rivet and silicone the tabs and gutter end to the rear face as required (Figure 5.2).

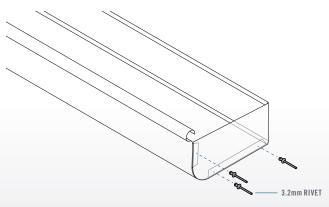
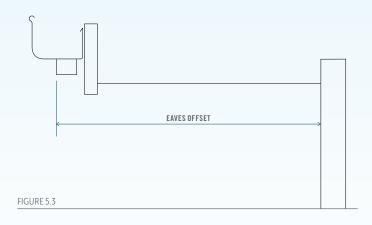


FIGURE 5.2

### DOWNPIPE OFFSET FABRICATION INSTRUCTIONS

A fabricated downpipe offset consists of a top and bottom section that is joined in the middle.

Measure from the wall to the outside of the gutter outlet. Add an additional 350mm plus double the downpipe width to this length (Figure 5.3).



Mark this measurement around the downpipe (Figure 5.4).

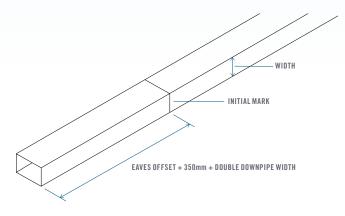
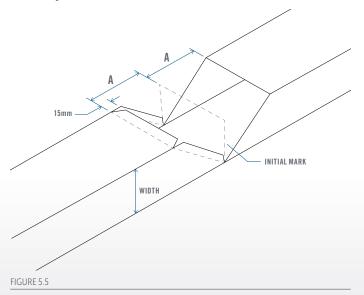


FIGURE 5.4

Mark lines as detailed below (Figure 5.5).

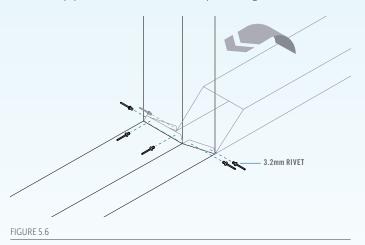
Note: 'A' = Width of downpipe minus 10mm.

Cut away the excess material.

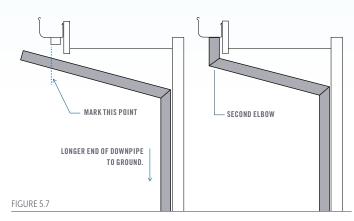




Bend the downpipe up, ensuring the tabs are on the inside of the downpipe. Rivet and silicone in place (Figure 5.6).



Mark a line on the downpipe which is directly below the outer face of the outlet. Use this point as an 'initial mark'. Follow steps from Figure 5.4 - 5.6 (Figure 5.7).

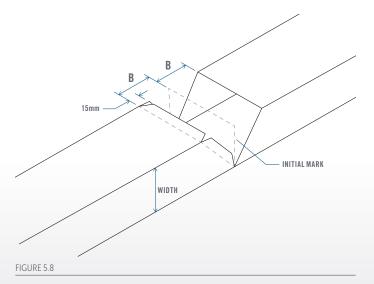


Using a second length of downpipe, measure from the downpipe end to the ground, adding 100mm for a join. Cut the downpipe to this length (Figure 5.8).

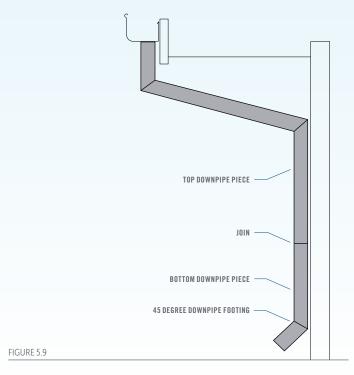
Mark lines as detailed below.

Note: 'B' = Half the width of downpipe minus 10mm.

Cut, rivet and silicone downpipe as per Figure 5.5 - 5.6.



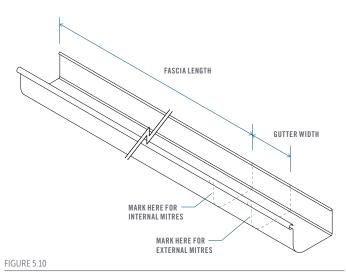
Slide the top section into the bottom section 100mm. Rivet and silicone together (Figure 5.9).



## MITRE FABRICATION INSTRUCTIONS

For internal gutter mitres, measure the fascia length or reference the building plan. Mark this distance onto the fascia.

For external gutter mitres, measure the fascia length or reference the building plan and add the gutter width to this length. Mark this distance onto the fascia (Figure 5.10).

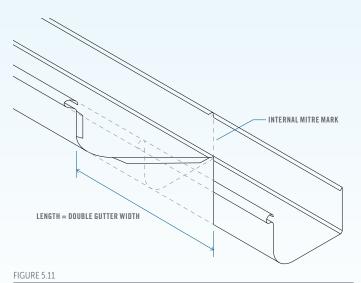


# **GUTTER & FASCIA**



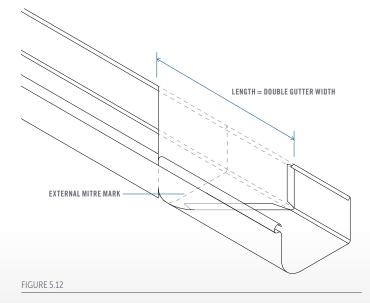
For Internal Mitres, mark lines as detailed below. The marked out section should consist of a 90 degree triangle with two tabs on one side.

Cut away the excess material (Figure 5.11).

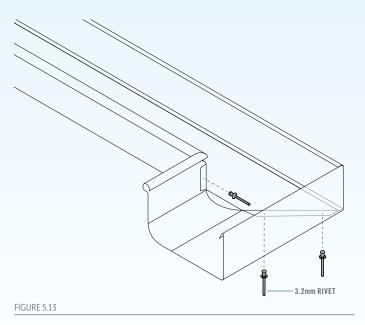


For External Mitres, mark lines as detailed below. The marked out section should consist of a 90 degree triangle with two tabs on one side.

Cut away the excess material (Figure 5.12).



Once mitres have been cut, fold 90 degrees. Rivet and silicone in place (Figure 5.13).







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