

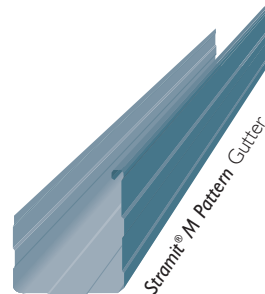
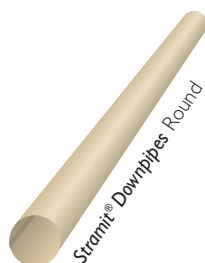
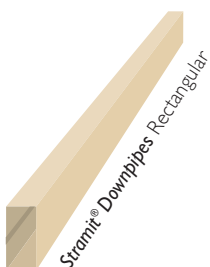
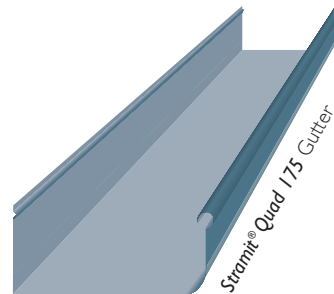
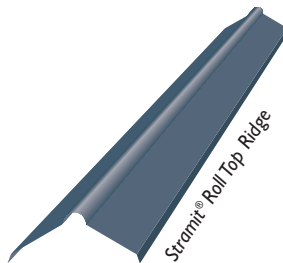
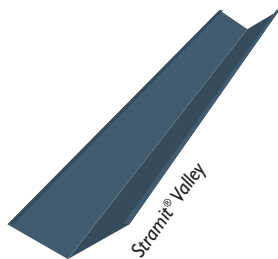
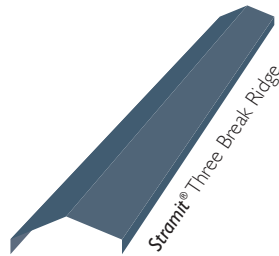
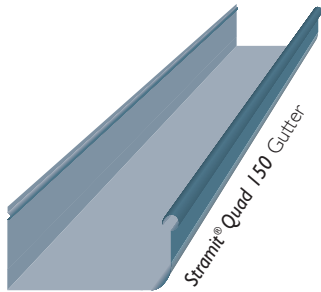
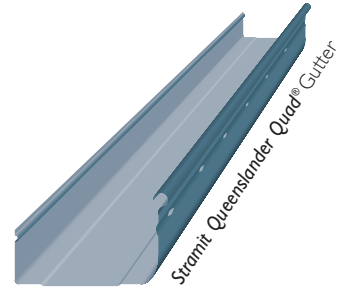
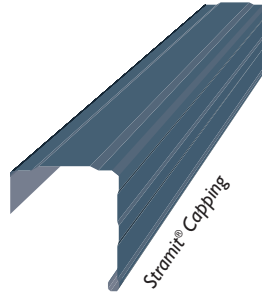
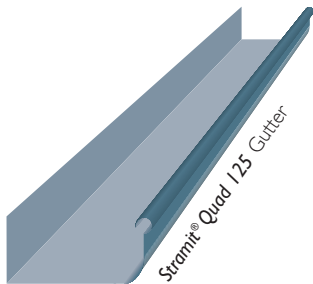


STRAMIT[®]
RAINWATER
PRODUCTS
QLD & NT

product technical manual



STRAMIT[®] RAINWATER PRODUCTS NORTHERN REGION



IMPORTANT NOTE

The information contained within this brochure is as far as possible accurate at the date of publication, however, before application in a particular situation, Stramit Building Products recommends that you obtain qualified expert advice confirming the suitability of product(s) and information in question for the application proposed. While Stramit accepts its legal obligations, be aware however that to the extent permitted by law, Stramit disclaims all liability (including liability for negligence) for all loss and damage resulting from the use of the information provided in this brochure.

Selection & Specification

General Features

- Extensive range – quality rainwater products.
- Both COLORBOND® and ZINCALUME® steel finishes available.
- A comprehensive range of accessories available.
- Comprehensive design data provided.
- Hi-tensile fascias and gutters.

Applications

Stramit® rollformed rainwater products are designed for domestic and light commercial applications, with a comprehensive range of COLORBOND® steel colours to choose from. All products have a wide range of matching accessories.

Stramit® Fascia has a clean yet classic style ideal for all types of home. **Stramit® Quad 125** Gutter is a traditional Queensland pattern for modest sized applications.

Stramit® Quad 150 and **175** Gutters are traditional Queensland patterns for increasingly larger applications.

Stramit Queensland Quad® Gutter is a new yet classical style gutter with recessed chevron slots for medium domestic and commercial applications. **Stramit® M Pattern** Gutter has a larger drainage capacity and is ideal for larger homes and commercial applications.

The extensive range of **Stramit® Downpipes** provides for the full range of domestic, commercial and most industrial applications. Smaller sizes are available in COLORBOND® steel colours. The full complement of **Stramit® Rainwater Products** is completed with valley gutter, ridge capping, edge roll, cappings and flashings.

For larger commercial and industrial applications folded **Stramit® Custom Flashings** are available to suit any box gutter or eave gutter design.

Stramit® rainwater products are only intended for use in commercial/industrial/residential rainwater applications. Do not use for any other purpose.

Availability

All of the **Stramit® Rainwater Products** listed in this manual are available in Queensland & the Northern Territory. However, items available cut-to-length or from stock vary at each Stramit location. Please check with your nearest Stramit office or the Stramit South Queensland, North Queensland and Darwin Price & Service Guide for a schedule of availability.

Materials

Stramit® Rainwater Products are manufactured from G550 and G300 ZINCALUME® (AZ150) steel or galvanized (Z275) in accordance with AS1397, and COLORBOND® steel with a coating conforming to AS2728. Other coatings, grades and materials may be available, subject to enquiry. The mass and steel grade for the primary **Stramit® Rainwater Products** are shown below:

| | steel | mass (kg/m) | |
|--|-------|-------------|------------|
| | grade | ZINCALUME® | COLORBOND® |
| Stramit® Fascia | G550 | 1.07 | 1.09 |
| Stramit® Quad 125 Gutter | G300 | | |
| Stramit® Quad 150 Gutter | G550 | 1.04 | 1.06 |
| Stramit® Quad 175 Gutter | G550 | 1.67 | 1.69 |
| Stramit® M Pattern Gutter | G550 | 1.25 | 1.27 |
| Stramit Queensland Quad® Gutter | G550 | 1.07 | 1.09 |
| Stramit® Capping | G550 | | various |
| Stramit® Roll Top Ridge | G300 | | various |
| Stramit® Three Break Ridge | G300 | | various |
| Stramit® Valley | G300 | | various |
| Stramit® Downpipes | G300 | | various |

Adverse Conditions

Stramit® Rainwater Products manufactured from COLORBOND® and ZINCALUME® steel will give excellent durability in almost all locations more than 1km from a rough, active surf coastline, or more than 100m from calm still salt water. However, it is suggested that ZINCALUME® steel products be painted to enhance durability further.

Installations closer to the coastline are possible, but will require complete surface painting (including accessories). Contact Stramit to obtain specific painting instructions.

Applications within 500m of industrial or unusually corrosive environments will need to be individually assessed for durability. Contact your nearest Stramit office for advice.

External brackets for **Stramit® Quad** Gutters should only be used in benign locations.

Colours

Most **Stramit**[®] products are available in the full range of COLORBOND[®] steel colours. In addition other colours, including gloss finish are stocked at some locations. Please check with your nearest Stramit office or distributor for availability.

Material Compatibility

Drainage from copper or lead products (including roof flashings) should not be allowed to discharge on to ZINCALUME[®] or COLORBOND[®] steel components. Similarly, lead or copper components should not be installed in contact with ZINCALUME[®]. Each of these combinations will lead to premature corrosion.

Drainage from copper, COLORBOND[®], ZINCALUME[®] steel, translucent (or other inert material) should not be allowed to discharge onto, or into, galvanised products.

Fascia/Gutter Compatibility

Only **Stramit**[®] gutters may be used with **Stramit**[®] *Fascia*. Similarly only authentic **Stramit**[®] accessories are suitable for connecting **Stramit**[®] Gutters to **Stramit**[®] *Fascia*.

Testing

Stramit has in-house, purpose built testing equipment used to design, develop and improve products for the Australian market. In addition many **Stramit**[®] products are tested or witnessed by independent organisations.

These include:

- University of Technology, Sydney
- Cyclone Structural Testing Station (James Cook University)
- The University of Sydney
- CSIRO

The ongoing research and development activity ensure that Stramit remains at the forefront of innovation, design and consumer information.

Standards Conformance

All **Stramit**[®] *Rainwater Products* have been designed and manufactured to conform with AS3500.3.2, AS3500.3.1 or AS2179.

Architectural Specification

A similar specification for each product can be found on the Stramit web site and can easily be downloaded onto your documentation.

The [product type – e.g. gutter] shall be Stramit [product name – e.g. M Pattern] or agreed exact equivalent in size and performance. Material shall be protected steel sheet to Australian Standard AS1397 with a minimum yield stress of 550MPa* and an AZ150 zinc-aluminium coating* [with a (nominate colour) oven baked paint film]. All accessories are to be fully compatible as recommended by the manufacturer. The product and its accessories shall be installed strictly in accordance with the manufacturer's recommendations. Flashings and all adjacent products shall be supplied in compatible materials as specified. All work shall be fixed in a workman like manner, leaving the job clean and weather tight. All debris (screws, rivets, cuttings and filings, etc) shall be cleaned off daily. Repair all minor blemishes with touch up paint supplied by the manufacturer.

Note – *some products supplied in 300MPa steel with galvanised Z275 coating.

Further Information

As well as the standard range of Technical Manuals, Installation Leaflets, Case Studies and other promotional literature, Stramit has a series of Guides to aid design.

These include:

- Roof Slope Guide
- Concealed Fixed Decking
- Foot Traffic Guide
- Roof and Wall Sheeting
- Lightweight Structural Sections
- Truss Components
- Gutters and Downpipes
- Custom Flashings
- Insulation Products

Other Products

Stramit offers a wide range of building products including:

- Purlins and Girts
- Formwork Decking
- Roof and Wall Sheeting
- Lightweight Structural Sections
- Truss Components
- Gutters and Downpipes
- Custom Flashings
- Insulating Products

Design

GENERAL

Performance

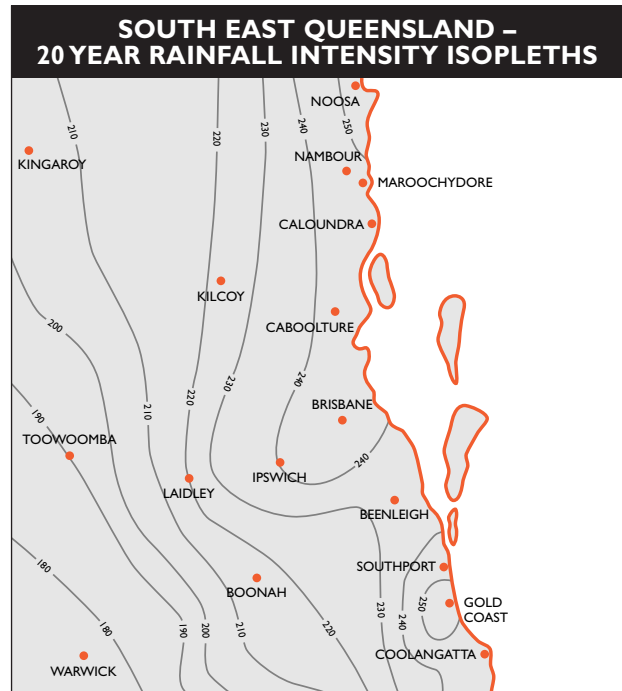
Stramit® Rainwater Products have been designed and/or tested to all appropriate loadings and design action effects. These include wind, atmospheric corrosion, rainwater flow, rainwater mass, foot traffic loads, dead loads and ladder loads. The performance information for each product indicates those action effects accounted for in each case.

Rainfall Intensity

Values of rainfall intensity in the table and maps are for 20 year ARI, 5 minute durations and have been derived from AS3500 part 3.2 'Stormwater drainage – Acceptable solutions'. It should however be emphasised that the extent and longevity of records in Australia are limited and any such data therefore carries with it a degree of uncertainty. The 20 year ARI values should only be used for external eave gutters. For internal/box gutters use 100 year ARI values such as those in the Stramit Design Guide – 'Roof Slope'.

| 20 YEAR RAINFALL INTENSITIES (mm/hr) | |
|--------------------------------------|-----|
| Northern Territory | |
| Alice Springs | 139 |
| Darwin | 285 |
| Katherine | 230 |
| Queensland | |
| Brisbane | 251 |
| Bundaberg | 241 |
| Cairns | 282 |
| Charleville | 170 |
| Charters Towers | 218 |
| Cloncurry | 172 |
| Goondiwindi | 182 |
| Gympie | 228 |
| Innisfail | 254 |
| Longreach | 189 |
| Mackay | 273 |
| Mt. Isa | 169 |
| Noosa | 253 |
| Proserpine | 272 |
| Rockhampton | 248 |
| Southport | 246 |
| Toowoomba | 189 |
| Townsville | 260 |
| Warwick | 178 |

The map is only intended to indicate the variability of rainfall intensity within the region shown. Specific data for any location can be obtained from the Commonwealth Bureau of Meteorology in Melbourne.



Hail

Stramit® Steel Gutters are able to resist impact from significantly sized hail without damage. However, in hail prone areas consideration should be given to ensuring that gutter fronts are well below roof level. This should avoid the damming effect of hail which, if it builds up onto the roof, can lead to overloading and failure of the gutter.

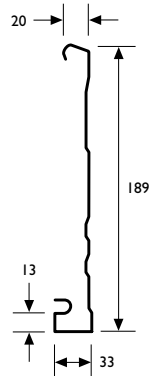
Leaves

Leaves in gutters can be a problem. They come in many shapes and sizes and roof debris may also include branches, twigs and both organic and inorganic particles. Many systems have been and are used to try to solve this problem. The optimum solution will vary with each situation and may be influenced by a number of factors that include the nature and proximity of vegetation, the level of maintenance and the primary motivation (eg water collection, maintenance reduction, gutter system durability, bushfire hazard reduction etc)

One method is to use adequately sized gutters set well below the roof edge with a good fall and large downpipes with well angled offsets to avoid corner blockages, clear frequently and remove overhanging vegetation.

An often-used method is an additional mesh guard or perforated gutter covering. Those of a very fine mesh will keep most debris from the gutters but can be prone to dirt and algal build up leading to mesh blockage. This does keep leaves from the gutter and downpipe, but ultimately it may not allow water to pass into the gutter. Any water trapped within the gutter may not dry out which could compromise durability. Larger mesh guards stop large leaves and branches from entering the gutter but it may be possible for twigs and branches to catch in the mesh ultimately creating a dam causing water to flow back into the building eaves. It is also important, if a cover or leaf guard is used, that it is material-compatible with the gutter and that both the gutter and the guard are cleared regularly.

STRAMIT® FASCIA



Spans

The spanning capability of **Stramit® Fascia** shown has been determined by testing (in accordance with AS4040.1) for a combination of roof tile and foot traffic loads. The maximum spacing of **Stramit® Fascia** rafter brackets is:

– **Where a separate tilt/roof batten is fitted adjacent to the fascia:**

- internal spans 1500
- end spans 1200 maximum (200 minimum)

Note that for a jack rafter to be considered as a support position it must be adequately connected to the hip rafter.

– **Where the fascia is used as the tilt batten:**

- internal spans 1200
- end spans 900

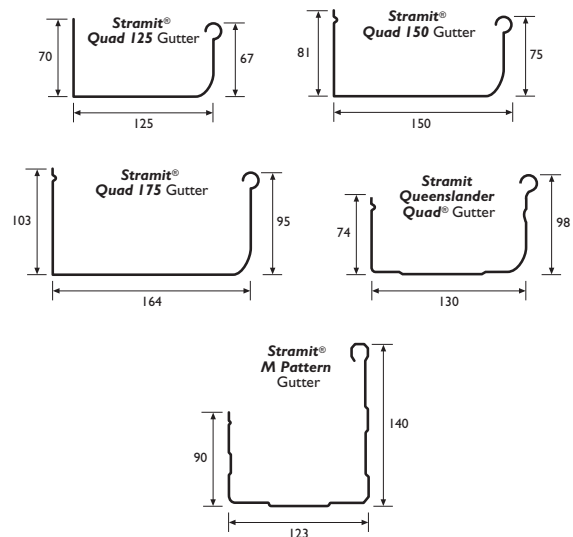
Pressures

The wind resistance of **Stramit® Fascia** has then been determined at these spans by testing in accordance with AS4040.2 – and for each of the spans is suitable for use in areas of up to: 0.92 kPa SERVICEABILITY LIMIT-STATE, 2.25 kPa STRENGTH LIMIT-STATE. These pressures are equivalent to: N3 (Region A – rural, Region B – exposed suburban).

STRAMIT® GUTTERS

STRAMIT® GUTTERS – CROSS SECTIONAL AREA (mm²)

| | |
|--|-------|
| Stramit® Quad 125 Gutter | 6200 |
| Stramit® Quad 150 Gutter | 8600 |
| Stramit® Quad 175 Gutter | 14500 |
| Stramit® M Pattern Gutter | 7900 |
| Stramit Queensland Quad® Gutter | 8100 |



Note: All dimensions are nominal

Spans

Stramit® Gutters require the correct proprietary **Stramit®** brackets (or snap clip/stiffener bracket combination) for support at spacing no greater than those shown in the following table.

| STRAMIT® GUTTERS – MAXIMUM SUPPORT SPACINGS (mm) | |
|--|------|
| Stramit® Quad 125 Gutter | 1000 |
| Stramit® Quad 150 Gutter | 1000 |
| Stramit® Quad 175 Gutter | 900 |
| Stramit® M Pattern Gutter | 1200 |
| Stramit Queensland Quad® Gutter | 1200 |

Thermal Expansion

Gutter runs in excess of 20m require the provision of an expansion joint.

Fall

Stramit recommends that an absolute minimum fall of 1 in 500 be used for all gutters, this being a design requirement for the gutter and downpipe selection table [on the facing page]. Good fall reduces the risk of leaf and debris deposition that could otherwise effect durability.

Gutter Capacity

In theory any size of gutter can be used to drain any roof catchment. What controls design is the number of downpipes needed to perform within the capacity of each gutter. In practice the larger the gutter the less the number of downpipes required, as indicated in the table [opposite].

Normally catchment calculations must take into account the increased area due to roof slope. The required downpipe table incorporated into this manual takes account of roof slopes up to 23°. Therefore the roof area for use with this table requires only the simple calculation of plan area. Gutter overflow may need to be considered when designing and installing gutter systems.

| Gutter Style | | | | | Max area per downpipe (m ²) | STRAMIT® GUTTERS & DOWNPIPES – NUMBER OF DOWNPIPES REQUIRED FOR TYPICAL ROOF INSTALLATION | | | | | | | | | | | |
|-----------------------------|-------------------|-------------------|----------------------------|--------------------|---|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Stramit® Quad 125 | Stramit® Quad 150 | Stramit® Quad 175 | Stramit Queenslander Quad® | Stramit® M Pattern | | roof plan area (m ²) – for roofs up to 23° | | | | | | | | | | | |
| Location Rainfall Intensity | | | | | | 100 | 120 | 140 | 160 | 180 | 200 | 220 | 240 | 260 | 280 | 300 | |
| | | 140 | | | 134 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | |
| | | 150 | | | 125 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | |
| | | 170 | | | 111 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | |
| | | 190 | | | 99 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | |
| | | 210 | | | 90 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | |
| | | 230 | | | 82 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | |
| | | 250 | | | 75 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | |
| | 140 | 270 | | | 70 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | |
| | | 280 | | | 68 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | |
| | 150 | 290 | 140 | | 65 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | |
| | | 300 | | 140 | 63 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 6 | 6 | |
| | 160 | | 150 | | 60 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 6 | 6 | |
| | 170 | | 160 | 150 | 58 | 2 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 6 | 6 | 6 | |
| | | | 160 | | 55 | 2 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 6 | 6 | 6 | |
| | 180 | | 170 | | 53 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 7 | |
| | 190 | | 180 | 170 | 51 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 7 | |
| | 200 | | | 180 | 49 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | |
| 140 | 210 | | 190 | | 47 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 7 | 7 | |
| | 220 | | 200 | 190 | 45 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | |
| 150 | | | | 200 | 44 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | |
| | 230 | | 210 | 210 | 42 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | |
| 160 | 240 | | 220 | | 41 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | |
| | | | 230 | 220 | 40 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 8 | 8 | 9 | |
| | 250 | | | | 39 | 3 | 4 | 4 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | |
| 170 | 260 | | 240 | 230 | 38 | 3 | 4 | 4 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | |
| | | | 240 | | 37 | 3 | 4 | 5 | 5 | 6 | 6 | 7 | 8 | 8 | 9 | 9 | |
| 180 | 270 | | 250 | | 36 | 4 | 4 | 5 | 5 | 6 | 7 | 7 | 8 | 8 | 9 | 10 | |
| | 280 | | 260 | 250 | 35 | 4 | 4 | 5 | 5 | 6 | 7 | 7 | 8 | 9 | 9 | 10 | |
| 190 | 290 | | 270 | 260 | 34 | 4 | 4 | 5 | 6 | 6 | 7 | 8 | 8 | 9 | 9 | 10 | |
| 200 | 300 | | | 270 | 33 | 4 | 4 | 5 | 6 | 6 | 7 | 8 | 8 | 9 | 10 | 10 | |
| | | | 280 | 220 | 32 | 4 | 4 | 5 | 5 | 6 | 7 | 7 | 8 | 9 | 9 | 10 | |
| 210 | | | 290 | 280 | 31 | 4 | 5 | 5 | 6 | 7 | 7 | 8 | 9 | 9 | 10 | 11 | |
| 220 | | | 300 | 290 | 30 | 4 | 5 | 6 | 6 | 7 | 8 | 8 | 9 | 10 | 11 | 11 | |
| | | | | 300 | 29 | 4 | 5 | 6 | 6 | 7 | 8 | 9 | 9 | 10 | 11 | 12 | |
| 230 | | | | | 28 | 4 | 5 | 6 | 7 | 7 | 8 | 9 | 10 | 11 | 11 | 12 | |
| 240 | | | | | 27 | 5 | 5 | 6 | 7 | 8 | 9 | 9 | 10 | 11 | 12 | 13 | |
| 250 | | | | | 26 | 5 | 6 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 12 | 13 | |
| 260 | | | | | 25 | 5 | 6 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 12 | 13 | |
| 270 | | | | | 24 | 5 | 6 | 7 | 8 | 9 | 9 | 10 | 11 | 12 | 13 | 14 | |
| 280 | | | | | 23 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | |
| 290 | | | | | 22 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | |
| 300 | | | | | 21 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | |

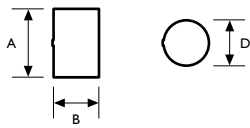
Intensities for Brisbane

The selection of the number of downpipes is carried out in accordance with AS3500.3.2 (Stormwater drainage – acceptable solutions.)

However, the larger the gutter the larger the downpipe required. The minimum size of downpipe associated with each **Stramit®** Gutter is given in the **Stramit® Downpipes** section that follows.

STRAMIT® DOWNPIPES

Stramit offer a wide range of round and rectangular downpipes, each of which is tapered to permit easy assembly.



Sizing of minimum downpipe size relates only to the cross-sectional area of the chosen gutter. The table below gives the minimum round and rectangular downpipe size for each **Stramit®** Gutter.

| STRAMIT® DOWNPIPES – MINIMUM SIZES (mm) | | |
|---|-------------------|--------------|
| Gutter | round* (diameter) | rectangular* |
| Stramit® Quad 125 Gutter | 100 | 100 x 75 |
| Stramit® Quad 150 Gutter | 125 | 100 x 100 |
| Stramit® Quad 175 Gutter | 150 | 150 x 100 |
| Stramit® M Pattern Gutter | 100 | 100 x 75 |
| Stramit® Queenslander Quad® Gutter | 100 | 100 x 75 |

* Smaller downpipes may be used provided the gutter capacity is reduced in drainage calculations.

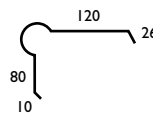
OTHER STRAMIT® RAINWATER & FLASHING PRODUCTS

Stramit® Custom Flashings

Stramit® Custom Flashings are available in an almost infinite variety of shapes and sizes. Preferred girth widths are 150, 250, 300 and 400mm and lengths of up to 8m are possible. The details of all **Stramit® Custom Flashings** must be provided in hard copy (e.g. fax). Contact the nearest Stramit branch for more details or refer to the Stramit Price & Service Guide for the area.

Stramit® Standard Flashings

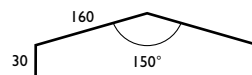
All of the following products require nominally continuous support.



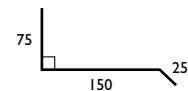
Stramit® Roll Barge Cap



Stramit® Edge Roll



Stramit® Three Break Ridge

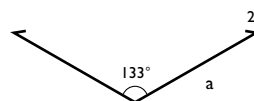


Stramit® Apron/Under Flashing



Stramit® Roll Top Ridge

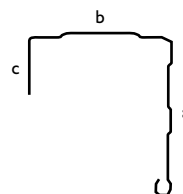
| STRAMIT® ROLL TOP RIDGE | |
|-------------------------|-----|
| girth | a |
| 400 | 120 |
| 450 | 155 |



Stramit® Valley

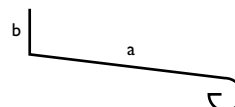
| STRAMIT® VALLEY | |
|-----------------|-----|
| girth | a |
| 400 | 165 |
| 450* | 200 |

*available plain or ribbed



Stramit® Barge Capping

| STRAMIT® BARGE CAPPING | | | |
|------------------------|-----|-----|----|
| | a | b | c |
| Compact | 111 | 116 | 27 |
| M Pattern | 140 | 125 | 25 |



Stramit® Window Flashings

| STRAMIT® WINDOW FLASHING | |
|--------------------------|----|
| a | b |
| 40 | 38 |
| 50 | 38 |
| 75 | 38 |
| 113 | 75 |

Procurement

Accessories

Use only the correct, authentic **Stramit**® Accessories with **Stramit**® Rainwater Products.

The following accessories are available for each product:

Stramit® Fascia

- 45°/90° External Corners
- 45°/90° Internal Corner Caps
- Rafter Bracket
- Barge Bracket
- LH/RH Barge Corner
- Apex Cover Plate
- Splice Plate

Stramit® Quad Gutters (not all accessories available for all gutters)

- Concealed Bracket
- Spike Bracket
- Gutter Stiffener (for use with Snap Clip)
- External Bracket (T-Head)
- Overstrap
- LH/RH Stop End Plates
- Internal Pre-made Angles
- External Pre-made Angles

Stramit® Fascia Gutters

- Concealed Bracket
- Gutter Stiffener (for use with Snap Clip)
- Stop End Plates

Stramit® Downpipes

- Astragals/Stops
- Nozzles/Pops/Drops

Note that in most cases the components shown are different for each particular gutter style or downpipe size.

Associated products

- Roofing – wide range of profiles available.
- Roof & ceiling battens – range of top hats available.
- Flue & sewer accessories.
- Silicone – for all sealing requirements.
- Flashings & cappings – range of standard and custom flashings available.
- Rainwater heads – to suit most downpipe sizes.
- Edge roll – for neat edge finishing.

Prices

Prices of products can be obtained from your nearest Stramit location or distributor of **Stramit**® products. As Stramit does not provide an installation service, ask your tradesperson for a supply and fix price. Contact your nearest Stramit location for the names of tradespeople in your area.

Handling/Storage

Stramit® Rainwater Products should be handled with care at all times to preserve the product capabilities and quality of the finish. Packs should always be kept dry and stored above ground level while on site. If the products become wet, they should be separated, wiped and placed in the open to promote drying.

Ordering

Stramit® Rainwater Products can be ordered directly through distributors, or supplied and fixed from an installer.

Lengths

Most rainwater products are available as stock lengths. **Stramit**® Fascia, gutters and valleys are available cut-to-length from some branches.


Delivery/Unloading


Delivery can normally be made within 48 hours, subject to the delivery location and material availability, or can be at a pre-arranged date and time. Please ensure that suitable arrangements have been made for truck unloading, as this is the responsibility of the receiver. When lifting fascia gutter and flashings, care should be taken to ensure that the load is spread to prevent damage. The protective strippable coating on COLORBOND® steel product should not be exposed to sunlight for more than about one week or this may become difficult to remove.

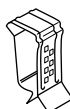
Installation


Fasteners


All fastening screws must conform to AS3566 – Class 3.
For connecting brackets use:

 For fixing **Stramit® Fascia** rafter brackets to steel trusses (up to 2.5mm) – No. 10 x 16mm hex-head self drilling & threading screws.

 For timber – No. 10 x 25mm hex-head type 17 self-drilling screws.

 For fixing gutters to **Stramit® Fascia** – **Stramit®** Snap Clip (also requires a stiffener bracket).

 For fixing Gutter Brackets to timber fascia – No. 10 x 25mm wafer head self-drilling type 17 screws, or

 – 40mm galvanised fluted nails.

For lap joints and accessories
– 3.2mm diameter aluminium pop rivets.

Site Induction

Consideration should be given to handling and installation issues as part of site induction safety procedures. Specific consideration should be given to pack handling, avoidance of cuts, trips, slips and falls, long section handling, particularly in windy conditions, section cutting procedures and surface temperature on sunny days. Personal Protection Equipment (PPE) should always be used.

Cutting

Stramit® Rainwater Products can be easily cut, where required, using a fine-toothed hacksaw and tin snips. Please dispose of any off-cuts carefully.

Sealing

Use only neutral-cure silicone for sealing joints when using **Stramit® Rainwater Products**. Take care to avoid pockets in joints which may hold moisture and potentially reduce durability.

Good Practice

Stramit® recommends that good trade practice be followed when using the products such as that found in *Standard Australia Handbook – HB39*. “Installation code for metal roofing and wall cladding”.

Section Handling

Cut resistant or leather gloves should be worn when handling and transporting product.

Painting

Stramit® Rainwater Products are available in COLORBOND® steel colours. However should painting of ZINCALUME® products be required, use the following procedure.

A ‘weathering’ period of two weeks following installation will make painting easier. Clean the gutter/fascia immediately prior to painting. Dirt can be washed off using water with mild detergent. Any grease marks should be wiped away with paint thinners. In benign locations good quality acrylic paint will give satisfactory performance. First use a low-gloss water-borne acrylic primer. Finish with water-borne acrylic gloss (or your choice of gloss level).

WARNING – Never use paint thinners or other solvents on COLORBOND® steel surfaces.

Strippable Coating

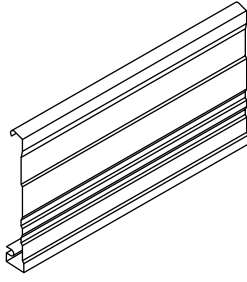
Some **Stramit® Rainwater Products** are supplied with a protective strippable coating. This should be removed at the last possible stage during the installation process. It is possible to selectively move the coating to one side to avoid fastenings and joints. Then finally remove the coating from the installed product.

WARNING – Do not leave products with strippable coating exposed to direct sunlight for more than about a week or it can become difficult to remove.

Installation Steps

Stramit® Fascia

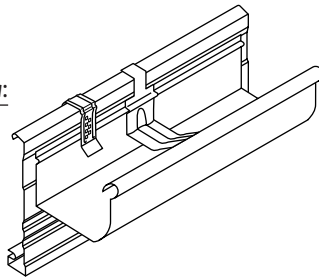
1. Cut **Stramit® Fascia** to suit a straight run.
2. Position and level rafter brackets near each end of the run (ensuring correct eave overhang and soffit height) and fix to the rafters.
3. Slide **Stramit® Fascia** over one end and slide along to the other end (or lift over brackets).
4. Insert remaining rafter brackets at required spacings and fix to rafters.
5. Repeat for each straight run, and then attach accessories.



Stramit® Gutters

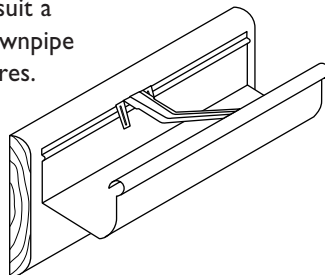
For fixing to Stramit® Fascia:

1. Cut **Stramit® Gutter** to suit a straight run, including downpipe outlet holes and end mitres.
2. If using pre-prepared or cast corners these are generally installed first ensuring the correct height to allow for fall.
3. Push snap clips over fascia at no greater than maximum support spacing for the particular product.
4. Push the back of the gutter under the snap clips to the lowest snap position.
5. Adjust the high point of the run to the desired position then apply the required fall (minimum 1 in 500) to the remainder of the gutter.
6. Attach a gutter stiffener bracket adjacent (within 50mm) to each snap clip.
7. Repeat for each straight run, and then attach accessories.



For fixing to timber fascia using concealed brackets:

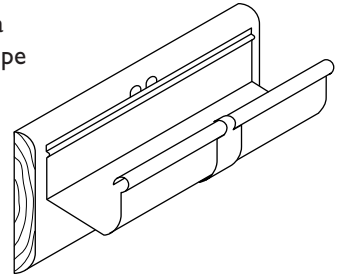
1. Cut **Stramit® Gutter** to suit a straight run, including downpipe outlet holes and end mitres.
2. If using pre-prepared or cast corners these are generally installed first ensuring the correct height to allow for fall.
3. Position and bracket at high end of the run and fix to the fascia.
4. Position and fix bracket at the other end of the run using a string line to set the required fall (minimum 1 in 500).
5. Position and fix intermediate brackets at no greater than maximum support spacing for the particular product.



6. Hook gutter to front of brackets, swing into position and fold down bracket tabs to secure, then for each fascia type.
7. Repeat for each straight run, and then attach accessories.

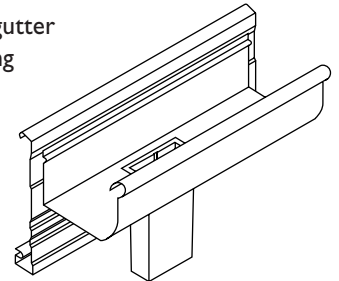
For fixing to timber fascia using external brackets:

1. Cut **Stramit® Gutter** to suit a straight run, including downpipe outlet holes and end mitres.
2. If using pre-prepared or cast corners these are generally installed first ensuring the correct height to allow for fall.
3. Position external bracket at the high end of the run and fix to the fascia.
4. Position and fix bracket at the low end of the run using a string line to set the required fall (minimum 1 in 500).
5. Using the string line as a guide position and fix intermediate brackets at no greater than maximum support spacing for the particular gutter.
6. Place the gutter onto the brackets and secure in position by folding down the front (and back for some products) tabs.
7. Repeat for each straight run, and then attach accessories.



Stramit® Downpipes

1. Attach nozzle (pop/drop) to gutter (usually done prior to installing gutter).
2. Fit or construct the offset, preferably at an angle of at least 15° to ensure good drainage.
3. Adjust downpipe height to suit using taper or, if necessary, by cutting.
4. Secure downpipes to the wall using at least one astragal (downpipe strap) per downpipe length.
5. Attach downpipe shoe.



Additional Information

Maintenance

Exterior surfaces of metal products unwashed by rain can benefit from occasional washing. These areas include portions of fascia and the underside of accompanying gutters.

Registered Designs

Stramit® Fascia, fascia bracket, all gutter stiffener brackets, **Stramit® Barge Gutter** and **Stramit Compact Gutter®** gutter are protected in Australia by registered designs.



The Stramit web page can be found at:

www.stramit.com.au

Details of many **Stramit**® products can also be seen on the AIA site 'Product Selector' at:

www.selector.com.au

Building Products

| | | prices | availability | general | technical |
|--|--------------|----------------------------------|--------------------------------|----------------------------------|----------------------------------|
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| CANBERRA 4 Bass Street, Queanbeyan NSW 2620 | phone fax | (02) 6297 3533 (02) 6297 8089 | | | |
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| NEWCASTLE 17 Nelson Road, Cardiff NSW 2285 | phone fax | (02) 4954 5033 (02) 4954 5856 | | | |
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| BENDIGO Ramsay Court, Kangaroo Flat VIC 3555 | phone fax | (03) 5447 8455 (03) 5447 9677 | | | |
| HOBART 57 Crooked Billett Drive, Brighton TAS 7030 | phone fax | (03) 6263 5536 (03) 6263 6950 | | | |
| LAUNCESTON 289 Hobart Road, Kings Meadows TAS 7249 | phone fax | (03) 6343 7390 (03) 6343 7381 | | | |
| ADELAIDE 11 Stock Road, Cavan SA 5094 | phone fax | (08) 8262 4444 (08) 8262 6333 | | | (08) 8262 4444 (08) 8262 6333 |
| PERTH 605-615 Bickley Road, Maddington WA 6109 | phone fax | (08) 9493 8800 (08) 9493 8899 | | | (08) 9721 8046 (08) 9721 8017 |
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