# RAINWATER GOODS

## GUTTERS, FASCIA & ACCESSORIES

## A Met-TECH™ GUIDE

MARCH 2019

Metroll®

BETTER SERVICE • BETTER BUILDING SOLUTIONS

# METROLL RAINWATER GOODS

Made from COLORBOND®, ZINCALUME® and galvanised steels, the Metroll range of gutters, fascia and accessories are practical and designed to suit the demanding needs of any building and environment.

### WIDE RANGE OF APPLICATIONS

Whether you require a standard or custom item, Metroll rainwater goods are available for a wide range of applications across commercial, domestic, industrial or rural buildings.

### STYLE & COLOUR CHOICE

Metroll's style, material and colour range is extensive to ensure your rainwater goods are both durable and complementary to your roof and building design.

### DOWNPIPES & ACCESSORIES

The Metroll rainwater accessory range includes downpipes, flashings, gutter brackets, straps, stop ends, mitres, corners and angles.

Rectangular downpipes are the most popular. Round downpipes and PVC downpipes are also available. Check with your local Metroll branch for availability and lead times.

# MATERIAL & INSTALLATION INFO

### MATERIAL COMPATIBILITY

Never use lead flashings with rainwater items made from COLORBOND® and ZINCALUME® steels. Avoid drainage from copper roofs onto COLORBOND®, ZINCALUME® or galvanised steel rainwater products.

### ADVERSE CONDITIONS

Localised environmental conditions can impact the corrosive nature of a site which may impact on material choice. Conditions that may impact on material choice include; direction of prevailing winds, rainfall intensity, duration of exposure, temperature, shelter and areas not washed by rainfall. Contact your local Metroll branch if you intend to use any Metroll rainwater goods within 1km of industrial, chemical, marine or corrosive environments.

### MEASUREMENTS & INSTALLATION

Rainwater goods must be installed with special consideration given to roof fall and overall design of the drainage system. Measure along the roof edges to calculate how many sections of gutter are required. Add 10% to allow for fitting and wastage. Combine roof measurements with the gutter layout plan to calculate and assess all other required gutter components.

### CLEAN UP

Prior to departing the work site remove all foreign debris, screws, rivets and especially any swarf created by drilling or cutting from the roof surface and/or inside gutters. Failure to do so may result in premature corrosion of the roof and/or gutters.

## What is Met-TECH™?

Met-TECH™ is Metroll's Technical Resource Centre. It is the one stop shop for all of Metroll's product and technical information. Perfect for builders, contractors and specifiers to source all the information they may require. You can find other Met-TECH™ items on our website **www.metroll.com.au/resources**

# RAINWATER OVERFLOW DESIGN & PROVISION

When designing a roof drainage system there are a range of factors that must be considered. These include:

- Rainfall intensity
- Roof area
- Gutter size
- Gutter capacity
- Gutter fall
- Downpipe size
- Downpipe quantity
- Downpipe placement
- Overflow systems

The NCC 2016, Part 3.5.2 details the appropriate performance requirements for overflow measures of eave and valley gutters. This has recently been updated and incorporates requirements for rainfall intensities of 1 in 20 years and 1 in a 100 years intervals for locations Australia wide.

## CONSTRUCTION & COMPLIANCE

It is important that the drainage system diverts water away from the building. NCC 2016, Part 3.5.2 sets out acceptable construction practices and gives consideration to materials, gutter selection, gutter installation, downpipe size and downpipe installation. The NCC 2016 code also provides information on rainfall duration intensities, overflow volumes and acceptable overflow measures both continuous and dedicated.

## OVERFLOW MEAURES & DRAINAGE SYSTEM DESIGN

It is important to note that a combination of overflow measures may be required in order to achieve a drainage system that complies. Overflow systems must be considered in totality of the drainage system as it may not be sufficient to rely on gutter capacity alone.

## CLASS 1 DWELLING PROVISION

The NCC requires that eave gutters on Class 1 dwellings be designed to prevent water entry to the building under severe rain conditions. Severe is defined as the 100 year, 5 minute duration average recurrence interval event (100Yr ARI).

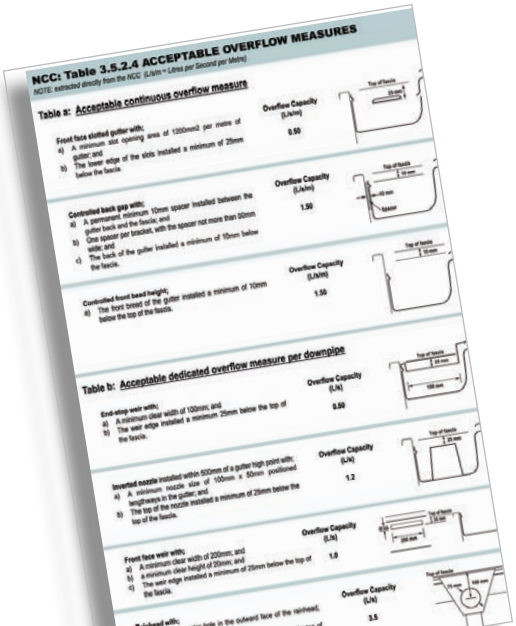

NCC: Table 3.5.2.4 ACCEPTABLE OVERFLOW MEASURES

Table a: Acceptable continuous overflow measure

Table b: Acceptable dedicated overflow measure per downpipe

**Refer to the NCC 2016, Part 3.5.2 which details the appropriate performance requirements for overflow measures of eave and valley gutters.**

## DESIGNER RESPONSIBILITY

The designer may be the builder, hydraulic engineer, architect, building designer, roof and guttering contractor or homeowner. In all cases it is up to the designer to design a complete rainwater drainage system that meets the requirements of the NCC Building Code and relevant Australian Standards. Designers should take note of AS/NZS 3500.3 and AS/NZS 3500.5.

Broadly the items for consideration when designing a rainwater drainage system are:

- Ascertain rainfall intensity duration.
- Consider roof design, roof catchment area, slope, downpipe quantity, downpipe position, gutter length and ridge to gutter length.
- Calculate overflow volume.
- Select suitable downpipes, gutters and overflow measures based on overflow volume.

## INSTALLER RESPONSIBILITY

The installer is responsible for installing the rainwater drainage system as per the design provided by the designer. The minimum requirements for the installation of gutters is set out in the NCC 2016, Section 3.5.2.4.

## HOMEOWNER RESPONSIBILITY

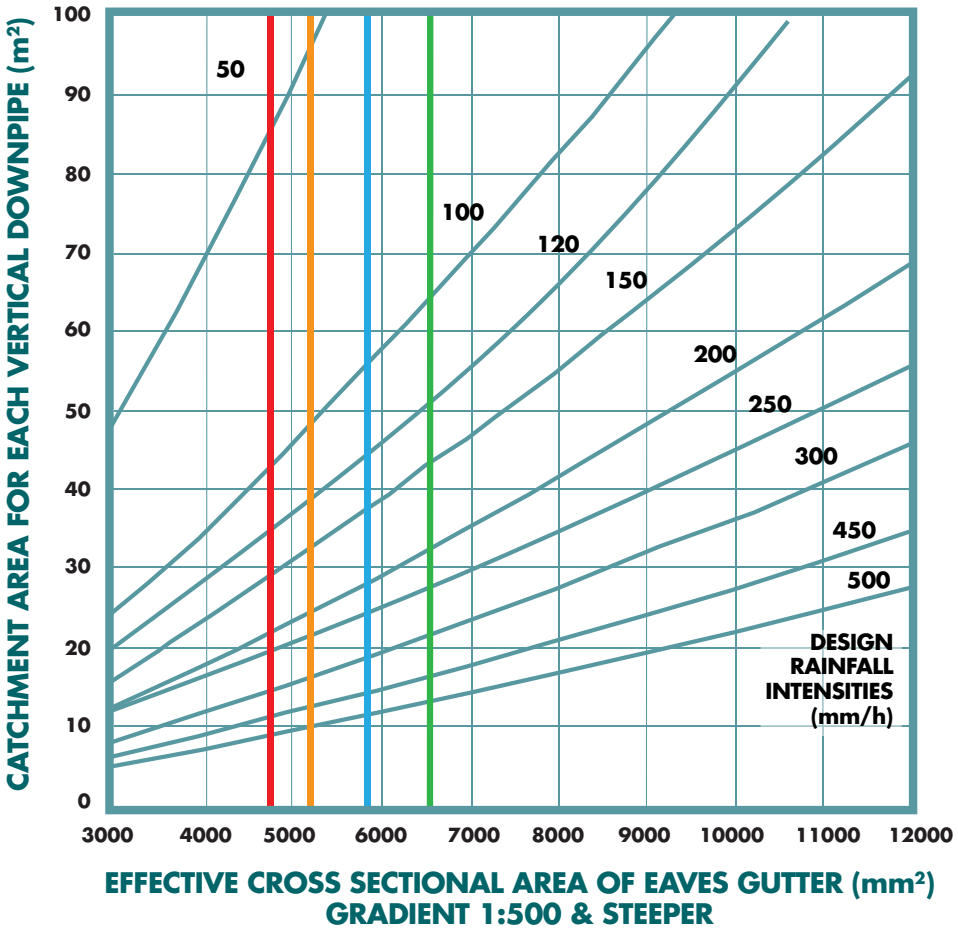
A rainwater drainage system is only as good as the maintenance of the system. Blocked gutters, downpipes or other overflow items will reduce the performance of the drainage system. The homeowner is responsible for ensuring basic maintenance of the drainage system is carried out at regular intervals.

## INFORMATION TO ASSIST ROOF DRAINAGE SYSTEM DESIGNERS

**GRAPH: CATCHMENT AREA (m²) PER VERTICAL DOWNPIPE**

Adapted from AS/NZS 3500.3.2015, Figure 3.5.2 (B)

Gradients 1:500 & Steeper Showing Common Metroll Gutters & Capacities



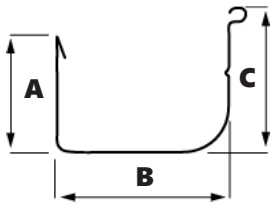

| METROLL SLOTTED GUTTER | ECA mm² | MIN. DOWNPIPE SIZE ASSUMPTIONS | |
|---|---|---|---|
| | | RECTANGULAR | ROUND |
| Hight Front Quad 115 | 4763 | 75 x 50mm | 75mm |
| Metroline Square | 5202 | 100 x 50mm | 80mm |
| High Front Quad 150 | 5852 | 100 x 50mm | 85mm |
| Big M Square | 6634 | 75 x 70mm | 90mm |

# GUTTER RANGE & SPECIFICATION

**TCA:** Total Cross Sectional Area.
**ECA:** Effective Cross Sectional Area.
ECA is 10mm below the overflow level.

**HIGH FRONT QUAD GUTTER** — **NT, SA, QLD, NSW, VIC, TAS**

| Model | Dimensions mm | | | ECA mm² | | TCA mm² | |
|---|---|---|---|---|---|---|---|
| | A | B | C | Standard | Slotted | Standard | Slotted |
| 115 | 61 | 115 | 90 | 5,529 | 4,763 | 6,660 | 5,895 |
| 125 | 68 | 107 | 94 | 5,837 | 4,939 | 6,895 | 5,991 |
| 150 | 69 | 130 | 93 | 7,298 | 5,852 | 8,578 | 7,137 |
| 175 | 71 | 160 | 99 | 9,389 | 7,617 | 10,970 | 9,204 |



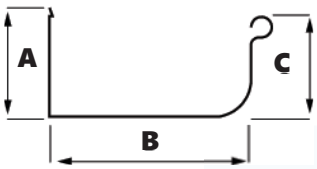

One of our most popular profiles, the high front provides for a stylish finish to any project. This gutter is available with Metroll's MegaFlow slot pattern to assist with overflow compliance requirements. Check with your local Metroll branch for MegaFlow availability.



**NOTE: There may be slight variations in dimensions across Metroll's manufacturing locations.**

## LOW FRONT QUAD GUTTER QLD Only

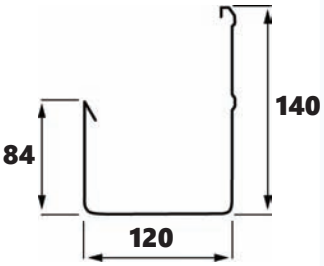
| Model | Dimensions mm | | | ECA mm² | TCA mm² |
|---|---|---|---|---|---|
| | A | B | C | Standard Only | |
| 150 | 76 | 141 | 70 | 8,239 | 9,762 |
| 175 | 105 | 175 | 100 | 15,430 | 17,291 |




The Low Front Quad is a traditional gutter that conceals the roofline and is easy to install and reduce denting.

## BIG M GUTTER
QLD Only

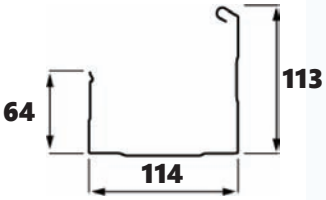
| | Standard | Slotted |
|---|---|---|
| ECA mm² | 8,564 | 6,634 |
| TCA mm² | 9,727 | 7,813 |




This contemporary profile provides excellent water carrying capacity with clean, straight lines.

## METROLINE SQUARE GUTTER
QLD, NSW, VIC

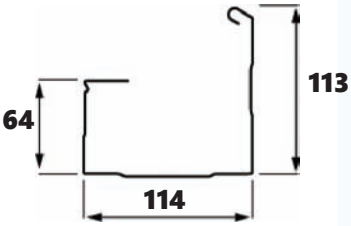
| | Standard | Slotted |
|---|---|---|
| ECA mm² | 5,874 | 5,202 |
| TCA mm² | 6,971 | 6,305 |




The Metroline Square Gutter has been designed with a high front and angled top edge to hide the ends of roof tiles or roof sheets.

## METROLINE FASCIA GUTTER
QLD, NSW, VIC

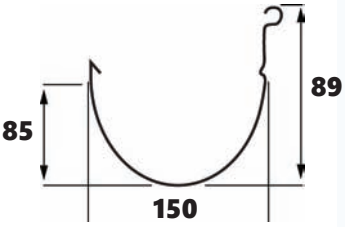
| | Standard | Slotted |
|---|---|---|
| ECA mm² | 5,874 | 5,202 |
| TCA mm² | 6,971 | 6,305 |




The Metroline Fascia Gutter has been designed for use with patios, verandahs, carports and garages. The wide return fold at the back of the gutter allows it to be fixed to the roof sheeting.

## 150 HALF ROUND GUTTER
QLD, NSW, VIC

| | Standard | Slotted |
|---|---|---|
| ECA mm² | 8,303 | 4,811 |
| TCA mm² | 9,791 | 6,232 |



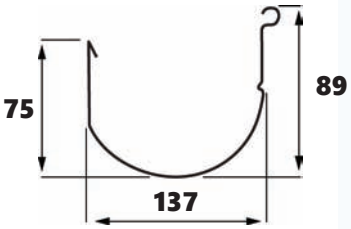

The curves of the 150 Half Round Gutter are perfect for a softer finish on both classic and contemporary buildings. This gutter has excellent water carrying capacity.

**Check with your local Metroll branch for dimensions, lead times and availability.**

## SKYLINE HALF ROUND GUTTER
**QLD, NSW, VIC**

| | Standard | Slotted |
|---|---|---|
| **ECA mm²** | 8,005 | 4,706 |
| **TCA mm²** | 9,364 | 6,039 |

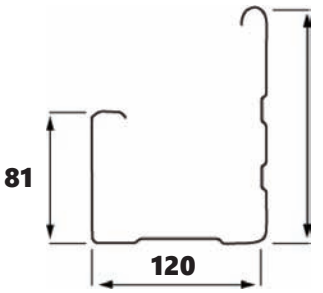
The Skyline Half Round Gutter is an elegant, modern gutter well suited to high-end architectural applications.




## SQUARELINE GUTTER
**WA Only**

| | Standard | Slotted |
|---|---|---|
| **ECA mm²** | 8,302 | 6,734 |
| **TCA mm²** | 9,471 | 7,293 |

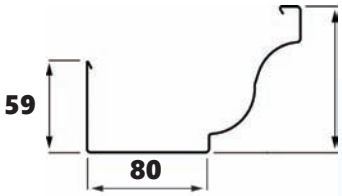
The Squareline Gutter has been designed with a high front and angled top edge to hide the ends of roof tiles or roof sheets.




## ROOFLINE COLONIAL GUTTER
**WA Only**

| | Standard | Slotted |
|---|---|---|
| **ECA mm²** | 4,729 | 3,222 |
| **TCA mm²** | 5,849 | 4,329 |

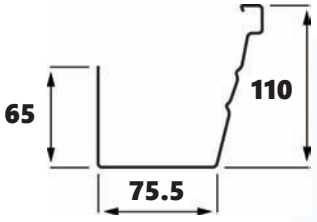
A traditional gutter that is sometimes referred to as an OG Gutter. This profile is particularly well suited to traditional styles, but can add a dramatic finish to any building.




## EAVESLINE GUTTER
**WA Only**

| | Standard | Slotted |
|---|---|---|
| **ECA mm²** | 4,729 | 3,222 |
| **TCA mm²** | 5,849 | 4,329 |

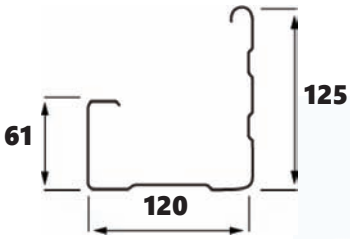
The slim base and high face of this gutter make it the perfect choice for contemporary designs, both commerical or residential.

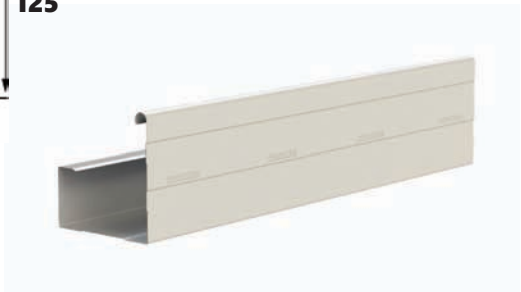



## PATIOLINE GUTTER
**WA Only**

| | Standard | Slotted |
|---|---|---|
| **ECA mm²** | 5,924 | 5,195 |
| **TCA mm²** | 7,097 | 6,378 |

The Patioline Gutter has been designed for use with patios, verandahs, carports and garages. The wide return fold at the back of the gutter allows it to be fixed to the roof sheeting.



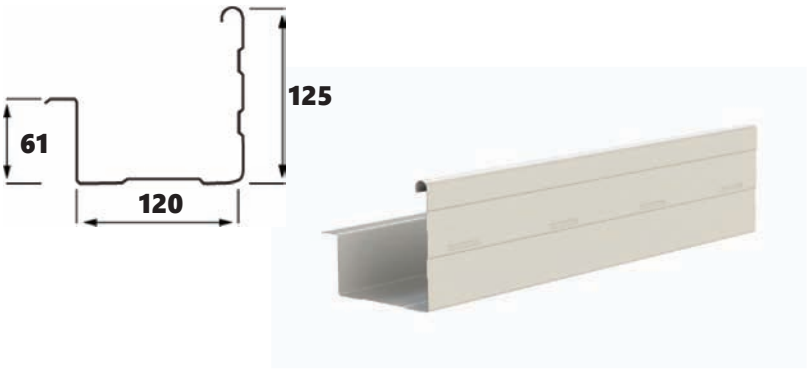


**NOTE: There may be slight variations in dimensions across Metroll's manufacturing locations.**

**QUICKFIX GUTTER**
**WA Only**

| | Standard | Slotted |
|---|---|---|
| **ECA mm²** | 5,924 | 5,195 |
| **TCA mm²** | 7,097 | 6,378 |

The Quickfix Gutter with its rear facing tab makes installation a breeze. Perfect for home improvement specialists or the home handyman.

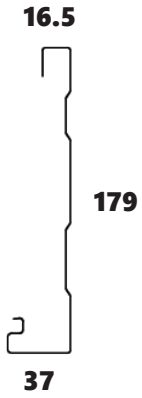



**TCA:** Total Cross Sectional Area.
**ECA:** Effective Cross Sectional Area. ECA is 10mm below the overflow level.

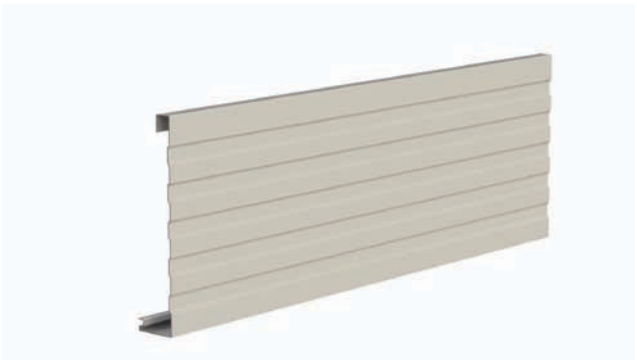
# METROLL FASCIA

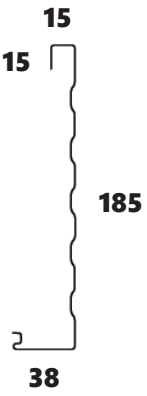
Metroll's high tensile fascia is designed to create a totally co-ordinated rainwater system that is both functional and aesthetically pleasing. Please note there may be slight variations in dimensions across Metroll's manufacturing locations, check with your local branch for dimensions, lead times and availability.

**METROLINE FASCIA**
**SA, QLD, NSW, VIC, TAS**

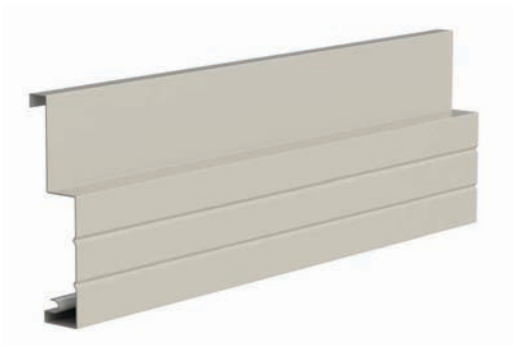


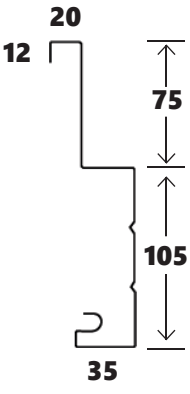

**RIBBED FASCIA**
**CAIRNS & DARWIN Only**





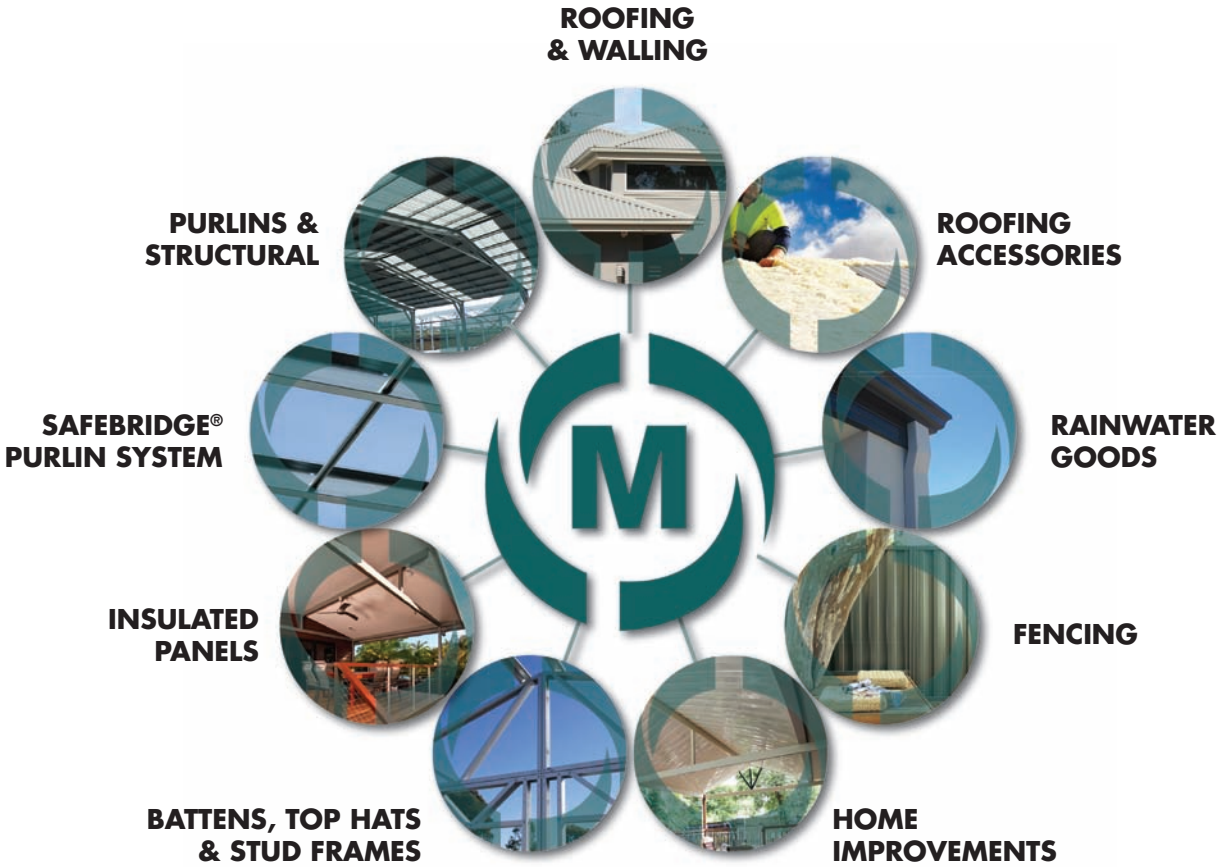

**WA FASCIA**
**WA only**






**Check with your local Metroll branch for dimensions, lead times and availability.**

# Can we assist with any additional Steel Building Products?




**QLD**

| | |
|---|---|
| Cairns | 07 4054 0888 |
| Townsville | 07 4779 8266 |
| Mackay | 07 4968 1255 |
| Rockhampton | 07 4920 0900 |
| Bundaberg | 07 4155 5999 |
| Toowoomba | 07 4634 6144 |
| Sunshine Coast | 07 5493 7872 |
| Brisbane | 07 3375 0100 |

**NSW**

| | |
|---|---|
| Lismore | 02 6622 6677 |
| Tamworth | 02 6765 4799 |
| Newcastle | 02 4954 5799 |
| Sydney | 1300 766 346 |
| Dubbo | 02 6883 4800 |
| Wagga Wagga | 02 5924 4500 |

**ACT**

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|---|---|
| Canberra | 02 6298 2777 |

**VIC**

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| Preston | 03 9480 3744 |
| Laverton | 03 8369 8300 |
| Geelong | 03 5248 2006 |
| Ballarat | 03 5335 6416 |
| Pakenham | 03 8710 9300 |

**SA**

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|---|---|
| Adelaide | 08 8282 3300 |

**TAS**

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|---|---|
| Launceston | 03 6335 8555 |

**NT**

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|---|---|
| Darwin | 08 8935 9555 |

**WA**

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