

metroll  
architectural  
collection

# MAC Nail Strip

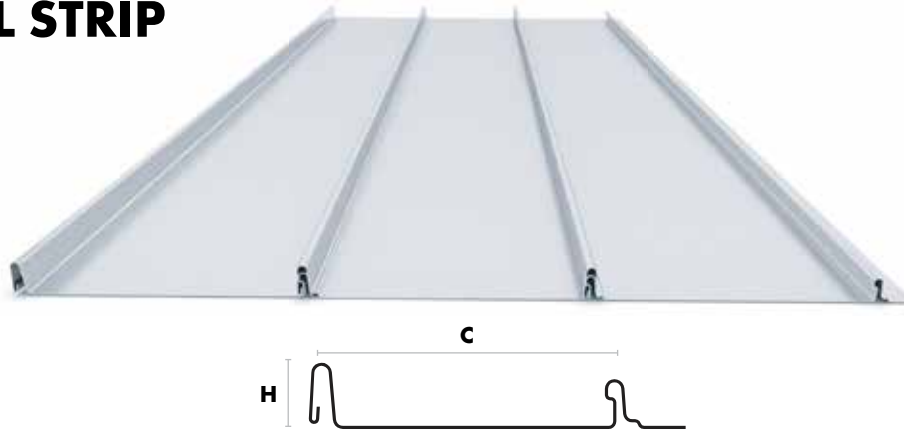


SWIFTLY  
INSTALLED  
SUPERIOR  
STYLE

Colorbond®

 Metroll®  
BETTER SERVICE • BETTER BUILDING SOLUTIONS

# MAC NAIL STRIP



## FEATURES & BENEFITS

- Architectural appeal
- Suitable for roofing & walling
- Excellent water carrying capacity
- Quick & easy installation
- Concealed fix
- Easy to handle tray size

MAC Nail Strip roofing and walling is a concealed fix profile ideal for modern and traditional façades. MAC Nail Strip has an adjustable recessed pan with a raised seam of either 25 or 38 mm. The effect of a structure covered with this cladding is a series of continuous wide bands neatly framed by thin ribs. MAC Nail Strip is available in WA, SA, QLD and NSW. Enquire with your Metroll branch for availability.

STATE	RIB HEIGHT (H) mm	COVER WIDTH (C) mm	BMT mm	Steel Base MPa	Mass CB kg/m <sup>2</sup>	Min. Pitch °
WESTERN AUSTRALIA	25	190	0.55	G300	7.00	3
		283			6.29	
	38	260	6.85			
SOUTH AUSTRALIA	25	192	0.55	G300	6.93	3
		292			6.10	
	38	265			6.72	
		465			5.76	
QUEENSLAND & NEW SOUTH WALES	25	195	0.55	G300	7.03	3
		295	6.16			
	38	270	0.55	6.59		

## FASTENERS

MAC Nail Strip uses concealed fasteners and requires no specialised tools for installation.

<b>TIMBER SUPPORTS or 19mm STRUCTURAL PLYWOOD</b>	#10 x 25mm Wafer Head Wood Fastener, or M5.4 x 28mm Ultra Low Fastener
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<b>STEEL SUPPORTS ≤1.9mm</b>	M5.4 x 28mm Ultra Low Fastener
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<b>STEEL SUPPORTS TO METAL BATTENS 0.55 - 1.0mm</b>	#10 x 16mm Wafer Head Fastener
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## FRONT COVER PHOTOGRAPHY

Courtesy of Code Lime

## MATERIAL AVAILABILITY

COLORBOND® Steel  
 COLORBOND® Ultra  
 COLORBOND® Matt

Copper, Aluminium and other materials may be available, check with your Metroll branch. Material compatibility must be considered.

# MAC NAIL STRIP LIMIT STATE CAPACITY TABLE

Tables and values must be used in conjunction with the Design Notes.

PROFILE	LIMIT STATE	SPAN TYPE	PRESSURE (kPa) FOR SPAN (mm)			
			450	600	900	1200
<b>25mm Rib</b> Cover from <b>190 - 295mm</b>	Serviceability	Internal	0.80	0.80	0.80	0.80
		End	0.80	0.80	0.74	0.65
	Strength	Internal	4.02	3.35	2.30	1.59
		End	3.22	2.68	1.95	1.28
<b>38mm Rib</b> Cover from <b>260 - 270mm</b>	Serviceability	Internal	0.78	0.78	0.78	0.78
		End	0.78	0.78	0.78	0.78
	Strength	Internal	3.75	3.04	2.25	1.46
		End	3.01	2.44	1.81	1.18

## DESIGN NOTES:

- Metal supports are produced from minimum 0.55mm high tensile steel.
- For most economic results use longer internal spans than end spans (in a ratio of 10:8).
- Equal span systems must be designed using end span values.

# MAC NAIL STRIP SPAN CHART

Tables and values must be used in conjunction with the Design Notes.

PROFILE		WIND CATEGORY	INTERNAL SPAN (mm)	END SPAN (mm)
<b>25mm Rib</b> Cover from <b>190 - 295mm</b>	ROOF	N1	900	600
		N2	900	600
	WALLS	N1	1200	1000
		N2	1200	1000
<b>38mm Rib</b> Cover from <b>260 - 270mm</b>	ROOF	N1	900	600
		N2	900	600
	WALLS	N1	1200	1000
		N2	1200	1000

## DESIGN NOTES:

- Spans shown reflect the minimum value of the Serviceability, Strength and Foot Traffic values of the Limit State Capacity table.
- Wind category is based on AS 4055 and results include an allowance for local pressure factors.
- If roof pitch is less than 10 degrees, increase the wind load category upwards by 1 and apply the higher load to an area not less than 1.2m from all corners.
- Table based on 0.55mm hi tensile steel battens or 19mm structural plywood.
- For most economic results use longer internal spans than end spans (in a ratio of 10:8).
- Equal span systems must be designed using end span values.

## MAC NAIL STRIP OVERHANGS

The overhangs on MAC Nail Strip are limited to the values in the table. Overhangs have a minimum length of 50mm. Stiffened overhangs incorporate an angle or gutter attached to the sheet end.

	PLAIN	STIFFENED
ROOFING	125mm	300mm
WALLING	200mm	400mm

### NOTE:

- Plain overhangs are limited to 20% of the adjacent end span.
- Stiffened overhangs are limited to 33% of the adjacent end span.

## MAC NAIL STRIP FOOT TRAFFIC

MAC Nail Strip can be walked on. However, like all flat, unstiffened tray profiles, extra care is required to prevent stretching or buckles in the material. To reduce the possibility of marks from foot traffic, or to increase the foot traffic limit, MAC Nail Strip can be installed over 19mm structural plywood.

RIB HEIGHT	INTERNAL SPAN	END SPAN
25mm	900mm	600mm
38mm	900mm	600mm

### NOTE:

- Foot traffic limits are based on AS/NZS 1170.1 for R2 - Other roofs.
- All traffic must use the designated foot traffic path and, at all times, follow safe practices.
- When walking on MAC Nail Strip roof sheeting always wear flat rubber soled shoes and walk only in the roof pans. Walk only above supports where possible.

## PANEL LENGTH

MAC Nail Strip is made to order to suit the project.

MIN. PANEL LENGTH	800mm
RECOMMENDED MAX. PANEL LENGTH	8000mm

Lengths greater than 8000mm may be available.

Please enquire with your Metroll branch.

Transport length restrictions may apply.

Lengths greater than 8000mm require additional care to reduce the possibility of oil canning.

## DRAINAGE & OVERFLOW

When installed with the minimum pitch of 3 degrees, MAC Nail Strip can drain up to 40m in panel length for rainfall intensities up to 400mm/ hour. For roof pitches below 7.5°, or roof runs exceeding 5m, the side laps should be sealed during installation.

## CUSTOM SIZES

MAC Nail Strip can be produced to almost any width from 180mm to approximately 500mm, in both rib heights. Additional care is required as wider trays become more susceptible to oil canning. Wider trays may require the mandatory use of structural plywood beneath the roof sheet to carry foot traffic. Enquire with your Metroll branch for minimum order quantities and technical information.

## TOLERANCES

Consideration should be given to the following manufacturing tolerances:

**Length** +0mm, -15mm      **Width** ± 4mm

## OIL CANNING

Oil canning appears as waviness or rippling in the flat areas of metal panels. It is a characteristic of light gauge cold rolled metal roofing and cladding products. It can occur on all types of metal sheeting and is not considered a defect. Oil canning is a cosmetic issue and does not affect the structural integrity of the product. Oil canning may occur due to installation methods, thermal expansion and contraction and material colour. To minimise the risk of oil canning, when handling the product avoid twisting or bending the sheets. For more information please refer to the Oil Canning Data Sheet on our website.

## THERMAL EXPANSION

Change in temperature will cause all metals to expand and contract. There is minimal effect with steel roofing and walling, however care must be taken when long sheet runs are used and high temperature variations occur. Metroll recommends the following maximum runs:

**Dark Colours: Up to 17m**

**Light Colours: Up to 24m**

## CARE, HANDLING & STORAGE

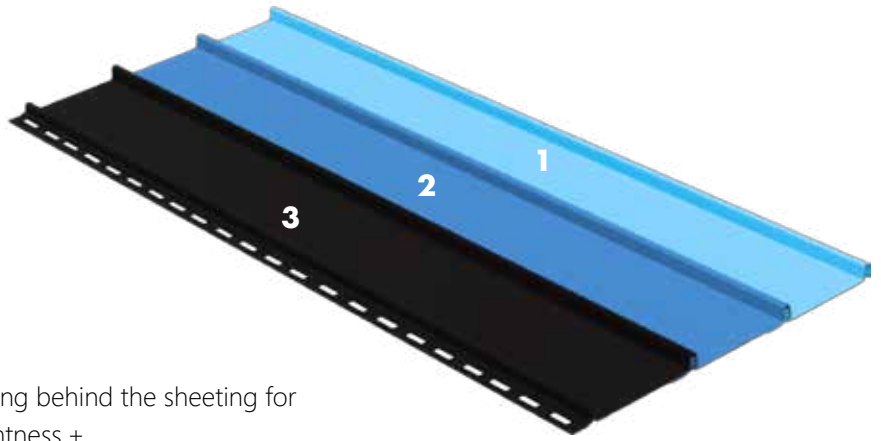
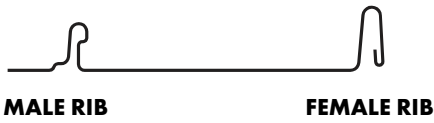
Care should be taken at all times when handling sheets to preserve the quality of the finish. Keep sheets dry, stored clear of the ground and protected from rain and moisture. Any sheets which become wet should be separated, wiped and placed in the open air to dry. To minimise the risk of oil canning, when handling the product avoid twisting or bending the sheets.

## FLAMMABILITY

BlueScope materials used in the production of MAC Nail Strip have been tested in accordance with AS 1530.3, Spread of Flame Index is 0. This is considered non-combustible by the NCC.



# MAC NAIL STRIP INSTALLATION

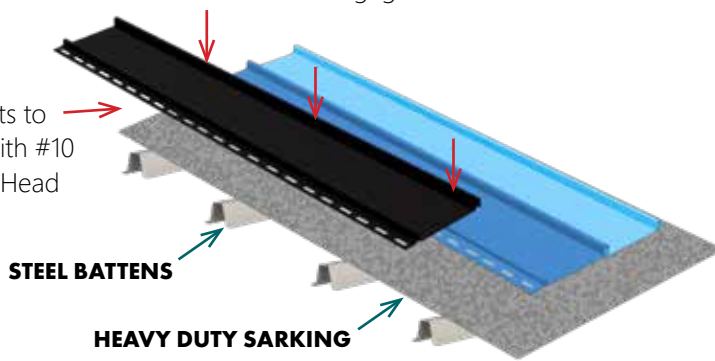


Metroll recommends the use of heavy-duty sarking behind the sheeting for condensation control and to ensure weather tightness.+

## FIXING TO STEEL BATTENS (NON CYCLONIC)

Press down firmly to ensure the female rib engages with the male rib.

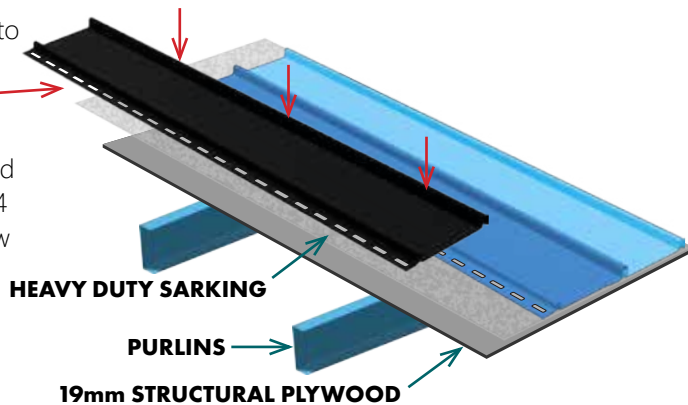
Fix through slots to steel battens with #10 x 16mm Wafer Head Fasteners



## FIXING TO PLYWOOD

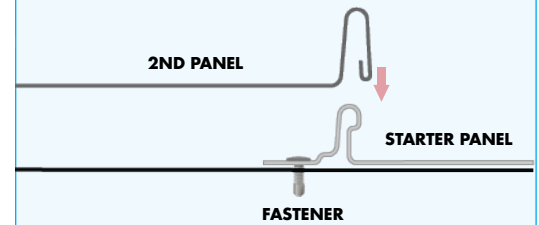
Press down firmly to ensure the female rib engages with the male rib.

Fix through slots to 19mm structural plywood with #10 x 25mm Wafer Head Wood fasteners, or M5.4 x 28mm Ultra Low Fasteners



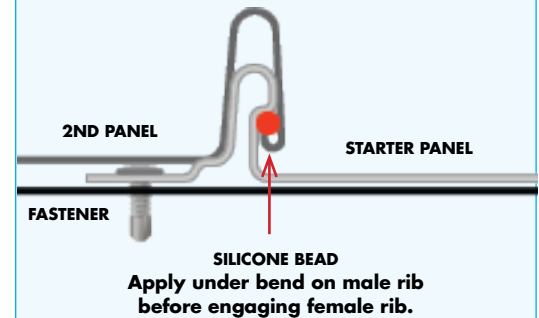
## LAP TYPES

### STANDARD LAP



### LAP #2

Use this lap fixing when roof pitch is below 7° or combined panel length is over 5m.



**MAC Nail Strip is available in WA, SA, QLD & NSW.**  
**Enquire with your Metroll branch for availability.**  
**[www.metroll.com.au](http://www.metroll.com.au)**

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All reasonable care has been taken in the compilation of the information contained in this brochure. All recommendations on the use of Metroll products are made without guarantee as conditions of use are beyond the control of Metroll. It is the customers responsibility to ensure that the product is fit for its intended purpose and that the actual conditions of use are suitable. Metroll pursues a policy of continuous development and reserves the right to amend specifications without prior notice. The Metroll M and Logo are registered trademarks of Metroll. COLORBOND® is a registered trademark of BlueScope Steel Limited.



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