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MAC Snap Lock

THE
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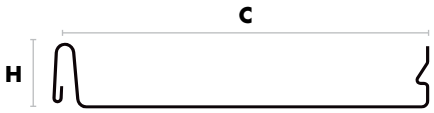
CHOICE

Colorbond®

Metroll®
BETTER SERVICE • BETTER BUILDING SOLUTIONS

MAC SNAP LOCK



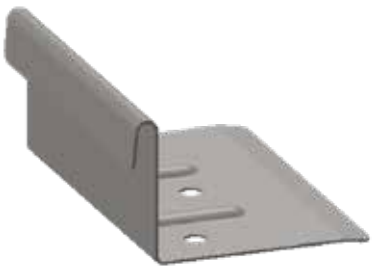
FEATURES & BENEFITS

- Architectural appeal
- Suitable for roofing & walling
- Excellent water carrying capacity
- Quick & easy installation
- Concealed clip fix

MAC Snap Lock is similar to MAC Nail Strip in appearance but uses a robust clip system for fast and simple installation. Male and female ribs snap together to create a strong sealed joint making MAC Snap Lock ideal for buildings exposed to severe weather. MAC Snap Lock is available in WA, SA, QLD and NSW. Enquire with your Metroll branch for availability.

STATE	RIB HEIGHT (H) mm	STD COVER WIDTH* (C) mm	BMT mm	Steel Base MPa	Mass CB kg/m²	Min. Pitch °
WESTERN AUSTRALIA	25	225	0.55	G300	5.91	3
		320			5.55	
	38	187			7.11	
		280			6.36	
SOUTH AUSTRALIA	25	228	0.55	G300	5.83	3
		328			5.43	
	38	190			7.00	
		290			6.14	
QUEENSLAND & NEW SOUTH WALES	25	225	0.55	G300	5.90	3
		324			5.48	
	38	285			6.25	

*Typical standard cover width. Other cover widths available on request.



MAC SNAP LOCK CLIP
Available in 25mm and 38mm.

CLIPS & FASTENERS

MAC Snap Lock installs with clips and concealed fasteners. It requires no specialised tools for installation.

TIMBER SUPPORTS or 19mm STRUCTURAL PLYWOOD	2 x #10 x 16 Wafer Head Fasteners per Clip, or 2 x M5.4 x 28mm Ultra Low Fasteners
STEEL SUPPORTS ≤1.9mm	2 x M5.4 x 28mm Ultra Low Fasteners per Clip
STEEL SUPPORTS TO METAL BATTENS 0.55 - 1.0mm	2 x #10 x 16 Tri Fix Flat Top Fasteners per Clip

MATERIAL AVAILABILITY

COLORBOND® Steel
COLORBOND® Ultra
COLORBOND® Matt

Copper, SUPERDURA® Stainless Steel and other materials may be available, check with your Metroll branch. Material compatibility must be considered.

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MAC SNAP LOCK 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
25mm RIB Cover from 225 - 325mm	Serviceability	Internal	0.55	0.98	0.79	0.53
		End	0.44	0.78	0.79	0.53
	Strength	Internal	4.11	3.38	2.52	1.88
		End	3.30	2.71	2.16	1.66
38mm RIB Cover from 185 - 285	Serviceability	Internal	1.20	1.58	1.52	1.39
		End	1.00	1.27	1.41	1.15
	Strength	Internal	4.23	3.83	3.29	2.82
		End	3.40	3.07	2.64	2.49

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 SNAP LOCK SPAN CHART

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

PROFILE		WIND CATEGORY	INTERNAL SPAN (mm)	END SPAN (mm)
25mm RIB Cover from 225 - 325mm	ROOF	N1	900	600
		N2	900	600
	WALLS	N1	1150	900
		N2	1150	900
		N3	800	600
38mm RIB Cover from 185 - 285	ROOF	N1	900	600
		N2	900	600
		N3	750	600
	WALLS	N1	1200	1050
		N2	1200	1050
		N3	1000	800
		N4	600	550

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 SNAP LOCK OVERHANGS

The overhangs on MAC Snap Lock 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 SNAP LOCK FOOT TRAFFIC

MAC Snap Lock 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 Snap Lock can be installed over 19mm structural plywood.

RIB HEIGHT (mm)	INTERNAL SPAN	END SPAN
25	900mm	600mm
35	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 Snap Lock roof sheeting always wear flat rubber soled shoes and walk only in the roof pans. Walk only above supports where possible.

PANEL LENGTH

MAC Snap Lock is made to order to suit the project.

MIN. PANEL LENGTH	1000mm
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 Snap Lock 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 Snap Lock 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

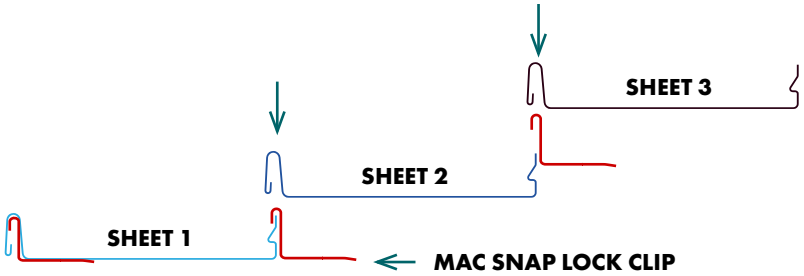
Care should be taken at all times when handling sheets to preserve the quality of the finish. Keep sheets dry, stored clear of the ground and protected from rain and moisture. Any sheets which become wet should be separated, wiped and placed in the open air to dry. To minimise the risk of oil canning,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

FLAMMABILITY

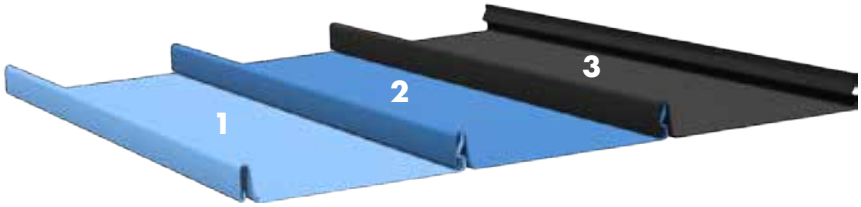
BlueScope materials used in the production of MAC Snap Lock have been tested in accordance with AS 1530.3, Spread of Flame Index is 0. This is considered non-combustible by the NCC.

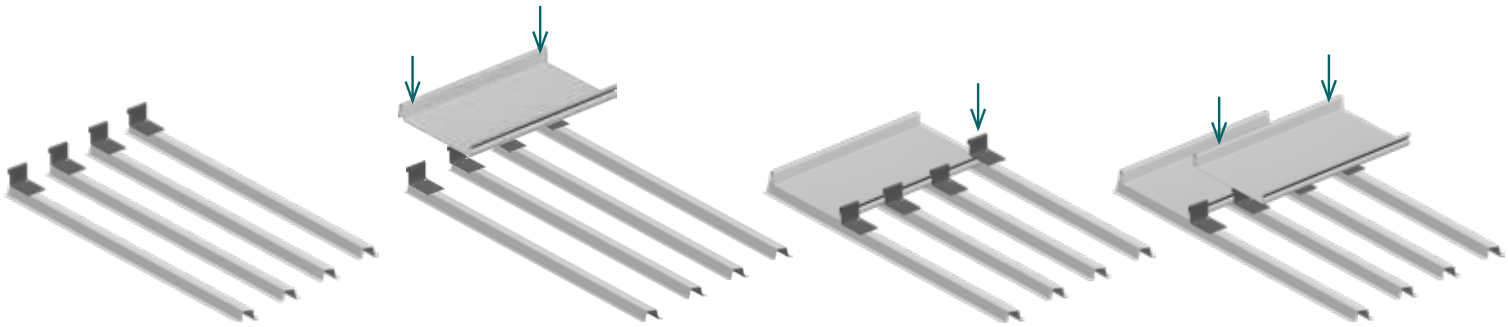
MAC SNAP LOCK INSTALLATION

FEMALE RIB MALE RIB



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





STEP 1

- Ensure the structure is square, flat and in plane
- Use a string line to position the first row of MAC Snap Lock clips and fasten with 2 screws per clip using the appropriate fasteners.

STEP 2

- Position first sheet over clips to the correct location and carefully press down to snap clips into place.

STEP 3

- Secure the first sheet into position with fasteners through the tray (if covered by full pan flashing), or with a fastener positioned horizontally through each clip and sheet ridge.
- Install the second row of clips over the trailing rib.
- If the roof pitch is less than 7.5°, seal the side laps before installing the next sheet.

STEP 4

- Continue installing the following sheets.
- Use a string line to check alignment and check every 4th sheet for fanning or cover variation.
- Turn roof sheets up at the top of the run and down at the gutter end.

MAC Snap Lock is available in WA, SA, QLD & NSW. Enquire with your Metroll branch for availability. www.metroll.com.au

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