

metroll
architectural
collection

MAC Distinction®

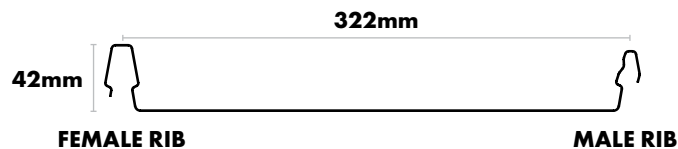
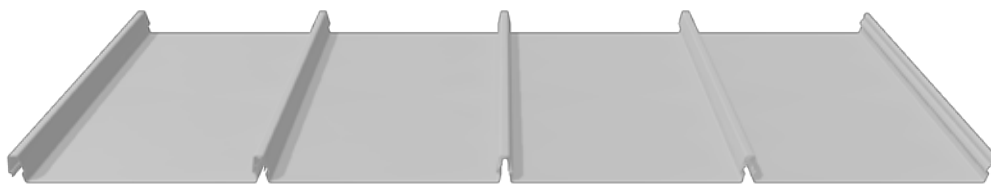


**DESIGN WITH
DISTINCTION**
BUILD WITH STYLE

Colorbond®

 **Metroll®**
BETTER SERVICE • BETTER BUILDING SOLUTIONS

MAC DISTINCTION®



FEATURES & BENEFITS

- Architectural appeal
- Unique rib
- Suitable for roofing & walling
- Excellent water carrying capacity
- 0.60 BMT allows for better spans & wind capacity
- Concealed clip fix
- 1 degree roof pitch

MAC Distinction® roofing and walling is an innovative concealed fix panel system with a vast range of design applications for residential and commercial projects. This exceptional product has received phenomenal response due to its long lines, abundant capacity for creative application and ease of install. MAC Distinction® is available in WA, SA, QLD and NSW. Enquire with your Metroll branch for availability.

MAC DISTINCTION® - ROOFING

BMT mm	Steel Base MPa	Mass CB* kg/m ²	Min. Pitch °	Max Spans mm**	
				End	Internal
0.60	G300	6.99	1	900	1200

MAC DISTINCTION® - WALLING

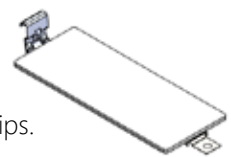
0.60	G300	6.99		1200	1500
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*CB = Colorbond®

** Max. Spans are based on N2 Wind Category and 1.5mm substrate

CLIPS & FASTENERS

MAC Distinction® is fixed to supports by MAC Distinction® clips.



TIMBER SUPPORTS HARD OR SOFT

M6 x 25mm Architectural Hex Head Self Drilling Fastener or,
#10 x 25mm Architectural Type 17

STEEL SUPPORTS < 1.9mm

M6 x 25 mm Architectural Hex Head Self Drilling Fastener or,
#10 x 16 mm Architectural Hex Head Self Drilling Fastener

STEEL SUPPORTS TO METAL BATTENS 0.55 - 1.0mm

M6 x 25 mm Architectural Hex Head Self Drilling Fastener

FRONT COVER PHOTOGRAPHY

Morley Recreational Centre, WA
Courtesy of Byte Construct

MATERIAL AVAILABILITY

COLORBOND® Steel

COLORBOND® Ultra

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

MAC DISTINCTION® LIMIT STATE CAPACITY TABLE

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

LIMIT STATE	SPAN TYPE	SUPPORT THICKNESS (mm)	PRESSURE (kPa) FOR SPAN (mm)					
			300	450	600	900	1200	1500
SERVICEABILITY	Internal	All		1.59	1.48	1.60	1.60	1.66
	End	All	1.59	1.48	1.60	1.60	1.66	
STRENGTH	Internal	1.50+		2.79	2.87	2.58	2.54	2.21
		1.20		2.79	2.87	2.58	2.54	2.21
		1.00		2.79	2.87	2.58	2.07	1.66
		0.75		2.79	2.87	2.07	1.55	1.24
		0.55		2.79	2.87	2.07	1.55	1.24
		0.48		2.79	2.59	1.73	1.29	1.04
	End	1.50+	2.79	2.87	2.58	2.54	2.21	
		1.20	2.79	2.87	2.58	2.54	2.21	
		1.00	2.79	2.87	2.58	2.48	1.86	
		0.75	2.79	2.87	2.58	1.86	1.40	
		0.55	2.79	2.87	2.58	1.86	1.40	
		0.48	2.79	2.87	2.33	1.55	1.16	

DESIGN NOTES:

- For timber battens/purlins, use 1.5+ Support Thickness values.
- Fasteners must penetrate more than 25mm into hardwood or 35mm into softwood.
- Metal supports are produced from 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 DISTINCTION® SPAN CHART

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

FASTENER FREQUENCY	SPAN TYPE	SUPPORT THICKNESS (mm)	ROOF SPANS (mm) FOR WIND CATEGORY			WALL SPANS (mm) FOR WIND CATEGORY		
			N1	N2	N3	N1	N2	N3
1 Fastener/ Sheet/Batten	Internal	1.50+	1200	1200	700	1500	1500	1500
		1.20	1200	1200	700	1500	1500	1500
		1.00	1200	1200	700	1500	1500	1500
		0.75	1200	1050	650	1500	1400	900
		0.55	1200	1050	650	1500	1400	900
		0.48	1200	850	550	1500	1150	750
	End	1.50+	900	900	550	1200	1200	1200
		1.20	900	900	550	1200	1200	1200
		1.00	900	900	550	1200	1200	950
		0.75	900	850	550	1200	1100	700
		0.55	900	850	550	1200	1100	700
		0.48	900	700	450	1200	950	600

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.
- For timber battens/purlins, use 1.5+ Support Thickness values.
- 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 DISTINCTION® OVERHANGS

The overhangs on MAC Distinction® 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 DISTINCTION® FOOT TRAFFIC

MAC Distinction® 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. MAC Distinction® can be installed over 19mm structural plywood if desired.

BMT (mm)	INTERNAL SPAN	END SPAN
0.60	1200mm	900mm

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 Distinction® roof sheeting always wear flat rubber soled shoes and walk only in the roof pans. Walk only above supports where possible.

PANEL LENGTH

MAC Distinction® 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 1 degree, MAC Distinction® can drain over 40m in panel length for rainfall intensities up to 400mm/ hour.

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

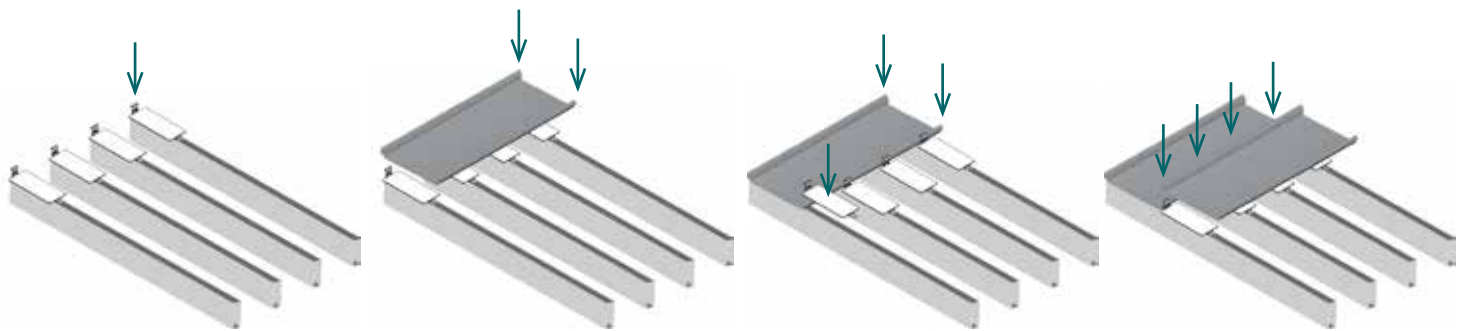
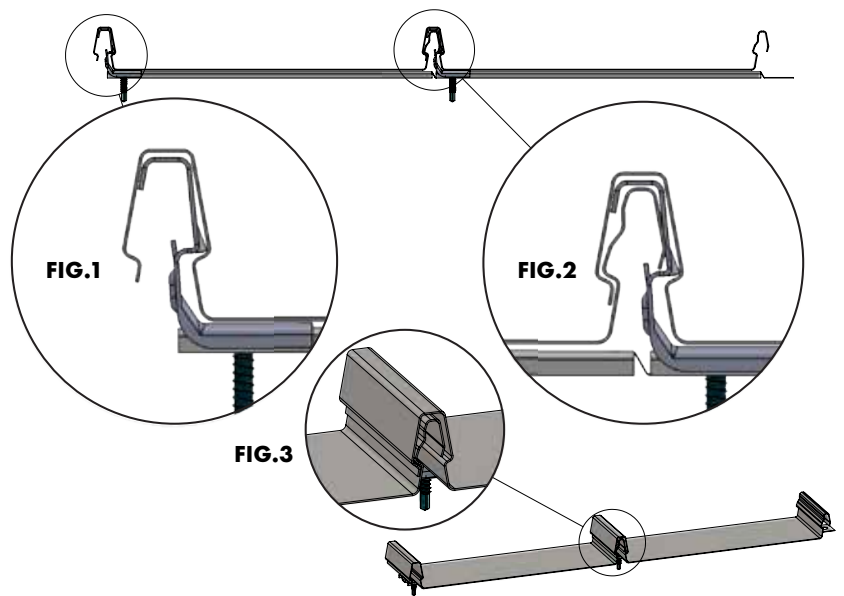
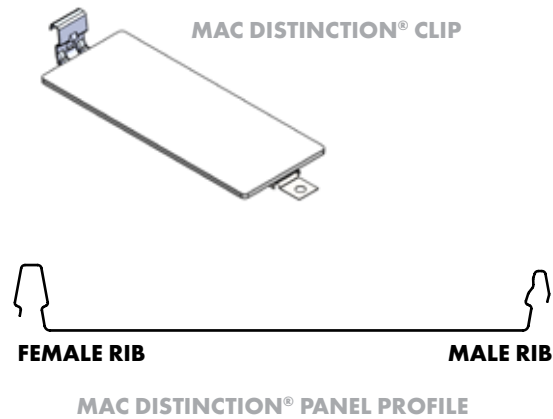
Care should be taken at all times when handling sheets to preserve the quality of the finish. Keep sheets dry, stored clear of the ground and protected from rain and moisture. Any sheets which become wet should be separated, wiped and placed in the open air to dry. To minimise the risk of oil canning,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

FLAMMABILITY

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

MAC DISTINCTION® INSTALLATION

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



STEP 1

- Fix the MAC Distinction® clips to supports with the specified fasteners.
- Ensure the tail of the clip runs in the direction of lay
- Install sheeting so overlaps face away from the direction of the prevailing weather.

STEP 2

- Install the first sheet ensuring correct orientation so the female rib engages with the first line of clip heads.
- Press down firmly to ensure the rib engages with the clip (FIG.1).

STEP 3

- Install the next line of clips by fixing them over the top of the male rib on the previously installed sheet.
- Fix clips in place with the specified fasteners.

STEP 4

- Install the next panel by clipping it onto the clips (FIG.2). When installed correctly the clip sits between the male and female ribs (FIG.3).
- Use a string line to check alignment during installation.

**MAC Distinction® is available in WA, SA, QLD & NSW.
Enquire with your Metroll branch for availability.
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.

