

METROCLAD®

EASY INSTALL, LOW COST CLADDING



A Met-TECH™ GUIDE

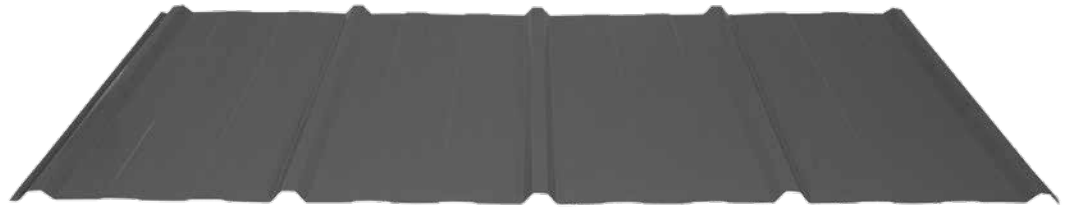
SEPTEMBER 2021



Metroll®

BETTER SERVICE • BETTER BUILDING SOLUTIONS

METROCLAD®



Cover: 864mm Height: 11mm

Metroclad® is low rib, custom length, high tensile steel wall cladding manufactured from 0.35mm and 0.42mm BMT COLORBOND®, ZINCALUME® and galvanised steel. Metroclad® is an ideal profile for rural, commercial and domestic applications; including tilt-up garage doors, screens, soffits, fascia and facade work.

FEATURES & BENEFITS

- Low rib
- Easy installation
- Cost effective
- Custom lengths
- Versatile & durable

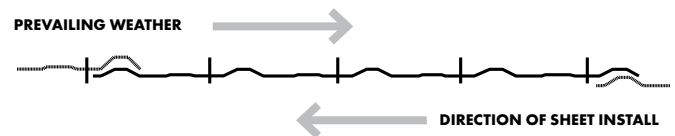
METROCLAD® - WALLING

BMT mm	Steel Base Mpa	Mass Colorbond® kg/m ²	Mass Zinc kg/m ²
0.35*	G550	3.20	3.14
0.42	G550	3.79	3.73

*Not available in all locations. Check with your local Metroll branch.

FASTENERS

Metroclad® may be fastened to timber or steel supports by pan fixing adjacent to the overlapping rib. There should be 4 fasteners per sheet at every support. Always face side laps away from the prevailing weather.



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

WALL FIXING

TIMBER OR METAL SUPPORTS ≤ 1.0mm

M6 x 25mm Hex Head Roof Zips, OR
#10 x 25mm Hex Head Type 17

TIMBER OR METAL SUPPORTS > 1.0mm

M6 x 25mm Hex Head Roof Zips, OR
#10 x 16mm Hex Self Drilling Screws

SIDE LAPS

It is considered good practice to use fasteners on side laps, although these are generally not necessary when the sheeting is supported as indicated in the maximum span table or for wall cladding spans under 1200mm. Side lap fastening should be considered if the weather resistance of the joint is questionable for any reason.

LENGTH

Metroll supplies Metroclad® cut to order as required. Maximum recommended length is 8m. Lengths for manufacture need to be site measurements and not taken off plans. Length tolerance for Metroclad® is +0mm, -15mm.

METROCLAD® OVERHANGS

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

WALLING		
BMT (mm)	Plain (mm)	Stiffened (mm)
0.35	100	150
0.42	150	200

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

MATERIAL SPECIFICATION & SCOPE

All walling should be specified on drawings as Metroclad®, manufactured by Metroll and installed in accordance with the manufacturers recommendations. Base sheet steel is G550 with specified finish.

MATERIAL COMPATIBILITY

Never use lead flashings with Metroclad® sheeting made from COLORBOND® and ZINCALUME® steels. Lead, copper, bare metal and some chemically treated timbers are not compatible with Metroclad®.

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 and used and high temperature variations occur. Metroll recommends the following maximum runs:

	Dark Colours	Light Colours
Metroclad®	Up to 17m	Up to 24m

CARE, HANDLING & STORAGE

Care should be taken at all times when handling sheets to preserve the quality of the finish. Keep packs 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.

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 wall surface and/or inside gutters. Failure to do so may result in premature corrosion of the wall or gutters.

CUTTING

Cut sheets with a method and in a location so that damage is avoided to sheets and other building products. Material should be cut on the ground and not above other materials. Remove all swarf and debris from the work and installation area. Sheets may be cut using a power saw with a steel cutting blade, a power nibbler or with tin snips. Avoid using abrasive discs as these can cause edge and coating damage.

AVAILABILITY & DELIVERY

Metroclad® is available from the national network of Metroll branches. Contact your local Metroll branch for lead times, colours and availability.

Ensuring suitable arrangements are made to assist the unloading of Metroll trucks will help supply material in good order. When lifting long lengths by crane please ensure the load is evenly spread. Where a crane cannot be made available it is the customers responsibility to provide sufficient labour to assist the driver in unloading.

ADVERSE CONDITIONS

Ensure dirt or foreign material is not stacked against Metroclad® walls.

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 Metroclad® within 1 km of industrial, chemical, marine or corrosive environments.

0.35mm METROCLAD® LIMIT STATE CAPACITY TABLES

Tables and values must be used in conjunction with the Design Notes to Limit State Capacity Tables.

0.35 is not available in all locations. Check with your local Metroll branch.

0.35mm METROCLAD® WITH #10 SCREWS

LIMIT STATE	SPAN TYPE	SUPPORT THICKNESS (mm)	PRESSURE (kPa) FOR SPAN (mm)				
			600	900	1200	1500	1800
SERVICEABILITY	Internal	All	2.96	1.70	1.16	0.76	0.40
	End	All	2.29	1.18	0.66	0.42	0.30
STRENGTH	Internal	1.50+	9.69	6.52	4.63	3.49	2.76
		1.20	8.49	5.66	4.24	3.40	2.76
		1.00	6.17	4.12	3.09	2.47	2.06
		0.75	4.63	3.09	2.31	1.85	1.54
		0.55	4.63	3.09	2.31	1.85	1.54
		0.48	3.86	2.57	1.93	1.54	1.29
	End	1.50+	7.89	5.00	3.39	2.44	1.82
		1.20	7.64	5.00	3.39	2.44	1.82
		1.00	5.56	3.70	2.78	2.22	1.82
		0.75	4.17	2.78	2.08	1.67	1.39
		0.55	4.17	2.78	2.08	1.67	1.39
		0.48	3.47	2.31	1.74	1.39	1.16

0.35mm METROCLAD® WITH M6 SCREWS

LIMIT STATE	SPAN TYPE	SUPPORT THICKNESS (mm)	PRESSURE (kPa) FOR SPAN (mm)				
			600	900	1200	1500	1800
SERVICEABILITY	Internal	All	2.96	1.70	1.16	0.76	0.40
	End	All	2.29	1.18	0.66	0.42	0.30
STRENGTH	Internal	1.50+	9.69	6.52	4.63	3.49	2.76
		1.20	9.69	6.52	4.63	3.49	2.76
		1.00	9.69	6.52	4.63	3.49	2.76
		0.75	8.49	5.66	4.24	3.40	2.76
		0.55	5.40	3.60	2.70	2.16	1.80
		0.48	4.63	3.09	2.31	1.85	1.54
	End	1.50+	7.89	5.00	3.39	2.44	1.82
		1.20	7.89	5.00	3.39	2.44	1.82
		1.00	7.89	5.00	3.39	2.44	1.82
		0.75	7.64	5.00	3.39	2.44	1.82
		0.55	4.86	3.24	2.43	1.94	1.62
		0.48	4.17	2.78	2.08	1.67	1.39

DESIGN NOTES

- For timber battens/purlins, use 1.50+ support thickness values.
- Type 17 screws must penetrate more than 25mm into hardwood or 35mm into softwood.
- Metal supports are produced from hi-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.

0.42mm METROCLAD® LIMIT STATE CAPACITY TABLES

Tables and values must be used in conjunction with the Design Notes to Limit State Capacity Tables

0.42mm METROCLAD® WITH #10 SCREWS

LIMIT STATE	SPAN TYPE	SUPPORT THICKNESS (mm)	PRESSURE (kPa) FOR SPAN (mm)				
			600	900	1200	1500	1800
SERVICEABILITY	Internal	All	3.85	2.10	1.35	0.87	0.51
	End	All	2.96	1.64	1.05	0.68	0.41
STRENGTH	Internal	1.50+	12.09	7.97	5.53	4.15	3.38
		1.20	8.49	5.66	4.24	3.40	2.83
		1.00	6.17	4.12	3.09	2.47	2.06
		0.75	4.63	3.09	2.31	1.85	1.54
		0.55	4.63	3.09	2.31	1.85	1.54
		0.48	3.86	2.57	1.93	1.54	1.29
	End	1.50+	10.47	6.81	4.64	3.35	2.59
		1.20	7.64	5.09	3.82	3.06	2.55
		1.00	5.56	3.70	2.78	2.22	1.85
		0.75	4.17	2.78	2.08	1.67	1.39
		0.55	4.17	2.78	2.08	1.67	1.39
		0.48	3.47	2.31	1.74	1.39	1.16

0.42mm METROCLAD® WITH M6 SCREWS

LIMIT STATE	SPAN TYPE	SUPPORT THICKNESS (mm)	PRESSURE (kPa) FOR SPAN (mm)				
			600	900	1200	1500	1800
SERVICEABILITY	Internal	All	3.85	2.10	1.35	0.87	0.51
	End	All	2.96	1.64	1.05	0.68	0.41
STRENGTH	Internal	1.50+	12.09	7.97	5.53	4.15	3.38
		1.20	10.80	7.20	5.40	4.15	3.38
		1.00	10.03	6.69	5.02	4.01	3.34
		0.75	8.49	5.66	4.24	3.40	2.83
		0.55	5.40	3.60	2.70	2.16	1.80
		0.48	4.63	3.09	2.31	1.85	1.54
	End	1.50+	10.47	6.81	4.64	3.35	2.59
		1.20	9.72	6.48	4.64	3.35	2.59
		1.00	9.03	6.02	4.51	3.35	2.59
		0.75	7.64	5.09	3.82	3.06	2.55
		0.55	4.86	3.24	2.43	1.94	1.62
		0.48	4.17	2.78	2.08	1.67	1.39

DESIGN NOTES

- For timber battens/purlins, use 1.50+ support thickness values.
- Type 17 screws must penetrate more than 25mm into hardwood or 35mm into softwood.
- Metal supports are produced from hi-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.

0.35mm METROCLAD® SPAN CHART

Tables and values must be used in conjunction with the Design Notes to Limit State Capacity Tables.

0.35 is not available in all locations. Check with your local Metroll branch.

0.35mm METROCLAD® WITH #10 SCREWS

FASTENER	SPAN TYPE	SUPPORT THICKNESS (mm)	WALL SPANS (mm) FOR WIND CATEGORY					
			N1	N2	N3	N4	N5	N6
#10	Internal	1.50+	1650	1650	1400	1150	850	700
		1.20	1650	1650	1400	1150	850	700
		1.00	1650	1650	1400	1150	850	600
		0.75	1650	1650	1350	900	600	
		0.55	1650	1650	1350	900	600	
		0.48	1650	1650	1150	750		
	End	1.50+	1300	1300	1100	850	650	
		1.20	1300	1300	1100	850	650	
		1.00	1300	1300	1100	850	650	
		0.75	1300	1300	1050	700		
		0.55	1300	1300	1050	700		
		0.48	1300	1300	900	600		

0.35mm METROCLAD® WITH M6 SCREWS

FASTENER	SPAN TYPE	SUPPORT THICKNESS (mm)	WALL SPANS (mm) FOR WIND CATEGORY					
			N1	N2	N3	N4	N5	N6
M6	Internal	1.50+	1650	1650	1400	1150	850	700
		1.20	1650	1650	1400	1150	850	700
		1.00	1650	1650	1400	1150	850	700
		0.75	1650	1650	1400	1150	850	700
		0.55	1650	1650	1400	1050	750	
		0.48	1650	1650	1350	900	600	
	End	1.50+	1300	1300	1100	850	650	
		1.20	1300	1300	1100	850	650	
		1.00	1300	1300	1100	850	650	
		0.75	1300	1300	1100	850	650	
		0.55	1300	1300	1100	800	600	
		0.48	1300	1300	1050	700		

DESIGN NOTES

- For timber battens/purlins, use 1.50+ support thickness values.
- Type 17 screws must penetrate more than 25mm into hardwood or 35mm into softwood.
- Metal supports are produced from hi-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.

0.42mm METROCLAD® SPAN CHART

Tables and values must be used in conjunction with the Design Notes to Limit State Capacity Tables

0.42mm METROCLAD® WITH #10 SCREWS

FASTENER	SPAN TYPE	SUPPORT THICKNESS (mm)	WALL SPANS (mm) FOR WIND CATEGORY					
			N1	N2	N3	N4	N5	N6
#10	Internal	1.50+	1750	1750	1500	1250	1000	800
		1.20	1750	1750	1500	1250	1000	800
		1.00	1750	1750	1500	1200	850	600
		0.75	1750	1750	1350	900	600	
		0.55	1750	1750	1350	900	600	
		0.48	1750	1750	1150	750		
	End	1.50+	1400	1400	1200	1000	800	600
		1.20	1400	1400	1200	1000	800	600
		1.00	1400	1400	1200	950	650	
		0.75	1400	1400	1050	700		
		0.55	1400	1400	1050	700		
		0.48	1400	1400	900	600		

0.42mm METROCLAD® WITH M6 SCREWS

FASTENER	SPAN TYPE	SUPPORT THICKNESS (mm)	WALL SPANS (mm) FOR WIND CATEGORY					
			N1	N2	N3	N4	N5	N6
M6	Internal	1.50+	1750	1750	1500	1250	1000	800
		1.20	1750	1750	1500	1250	1000	800
		1.00	1750	1750	1500	1250	1000	800
		0.75	1750	1750	1500	1250	1000	800
		0.55	1750	1750	1500	1050	750	
		0.48	1750	1750	1350	900	600	
	End	1.50+	1400	1400	1200	1000	800	600
		1.20	1400	1400	1200	1000	800	600
		1.00	1400	1400	1200	1000	800	600
		0.75	1400	1400	1200	1000	800	600
		0.55	1400	1400	1200	800	600	
		0.48	1400	1400	1050	700		

DESIGN NOTES

- For timber battens/purlins, use 1.50+ support thickness values.
- Type 17 screws must penetrate more than 25mm into hardwood or 35mm into softwood.
- Metal supports are produced from hi-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.

Can we assist with any additional
Steel Building Products?



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