METLOK CYCLONIC 680®

CONCEALED FIX ROOF SYSTEM



A Met-TECH™ GUIDE

OCTOBER 2020



METLOK CYCLONIC 680®



Cover: 684mm Height: 41.5mm

Metlok Cyclonic 680° is a concealed fix roof system designed for long run roofing applications in Wind Regions C1 & C2. It can also be used for walling. Metlok Cyclonic 680° is manufactured in a continuous roll form method from 0.42mm and 0.48mm BMT COLORBOND° and ZINCALUME° steels. Metlok Cyclonic 680° is suitable for use in commercial and industrial applications for roof pitches as low as 1°.

FEATURES & BENEFITS

- Concealed fix
- Ideal for long runs
- Low pitch
- Designed for thermal expansion and contraction
- Easy clip install

METLOK CYCLONIC 680® - ROOFING

BMT mm	Steel Base MPa	Mass CB* kg/m²	Mass Zinc kg/m²	Min. Pitch**
0.42	G550	4.88	4.79	1° (1 in 50)
0.48	G550	5.53	5.39	1° (1 in 50)

METLOK CYCLONIC 680® - WALLING

0.42	G550	4.88	4.79	
0.48	G550	5.53	5.39	

^{*}CB = Colorbond®

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

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LOAD SPAN TABLE - MAXIMUM SPANS (MM)

WIND CATEGORY	0.42 BMT		0.48 BMT	
WIND CATEGORY	END	INTERNAL	END	INTERNAL
C1	1000	1300	1100	1300
C2	900	1150	900	1200

Spans are based on James Cook University Townsville Test Report No: TS965

End and internal spans may be increased when using screw fixing only, but require consultation with a certified engineer.

^{**} Minimum Pitch: Roof Run, Length & Rainfall Intensity must be considered

CLIPS & FASTENERS



METLOK CYCLONIC 680® CLIP

Metlok Cyclonic 680® can be installed by either concealed clip fixing or screw fixing.

CLIP FIXING

To Metal Purlins (G450, Z350 & G500, Z350)	No.14 x 10 x 25mm Metal Teks (1.2mm min. thickness)
To Timber Battens (MGP10, MGP12 PINE)	M5.5 x 40mm Batten Zips
To Timber Battens (HARDWOOD)	Type 17 No.14 x 10 x 25mm
SCREW FIXING	
To Metal	No.14 x 10 x 78mm Metal Teks CYCLONE HIGH RIB ASSEMBLY For cappings & flashings use a 20mm bonded washer
To Timber	Type 17 No.14 x 10 x 75mm CYCLONE HIGH RIB ASSEMBLY For cappings & flashings use a 20mm bonded washer

DRAINAGE & OVERFLOW

Max Roof Run (m) for Slopes & Rainfall Intensity

Rainfall	Metlok Cyclonic 680® Roof Slope						
Intensity mm/hr.	1 in 50 1°	1 in 30 2°	1 in 20 3°	1 in 12 5°	1 in 7.5 7.5°	1 in 6 10°	
100	245	306	365	442	355	610	
150	166	210	245	306	357	416	
200	122	158	179	225	265	310	
250	101	125	142	180	212	250	
300	82	103	120	155	170	210	
400	76	92	107	136	160	186	

- Rainwater run-off and drainage capacity may place some limitations on the total length of a sheet run and must be considered during the design and construction phase of a project.
- The total length of roof sheeting; which shall include end laps, expansion joints or steps and draining the roof in one direction, shall be considered as a single roof run.
- Thermal expansion must also be considered.
- Maximum production and transport lengths may limit availability.

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.

LENGTH

Metroll supplies Metlok Cyclonic 680° cut to order as required; depending on load limit regulations set by local transport authorities. Lengths for manufacture need to be site measurements and not taken off plans. Length tolerance for Metlok Cyclonic 680° is ± 0 -15mm.

To prevent damage when lifting long lengths, ensure sheets are lifted with the use of multiple lift point spreader bars.

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.

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.

WALKING ON METLOK CYCLONIC 680®

When walking on Metlok Cyclonic 680° roof sheeting always wear flat rubber soled shoes and only walk over areas where purlins or batten supports are installed. Walk in either pan next to lapped edge ribs.

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 or gutters.

MATERIAL COMPATIBILITY

Never use lead flashings with Metlok Cyclonic 680° sheeting made from COLORBOND° and ZINCALUME° steels. Avoid drainage from copper roofs onto COLORBOND°, ZINCALUME° or galvanised steel roofing or rainwater products. Lead, copper, bare metal and some chemically treated timbers are not compatible with Metlok Cyclonic 680°.

MATERIAL SPECIFICATION & SCOPE

All roofing and walling should be specified on drawings as Metlok Cyclonic 680®, manufactured by Metroll and installed in accordance with the manufacturers recommendations. Base sheet steel is G550 / AZ150 with specified finish.

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 Metlok Cyclonic 680® within 1 km of industrial, chemical, marine or corrosive environments.

MAINTENANCE

Exterior surfaces not washed by rainfall should be washed on a regular basis.

AVAILABILITY & DELIVERY

Metlok Cyclonic 680® is available from Metroll Cairns, Townsville, Mackay, Rockhampton & Bundaberg only. 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.

QLD		NSW	
Cairns	07 4054 0888	Lismore	02 6622 6677
Townsville	07 4779 8266	Tamworth	02 6765 4799
Mackay	07 4968 1255	Newcastle	02 4954 5799
Rockhampton	07 4920 0900	Sydney	1300 766 346
Bundaberg	07 4155 5999	Dubbo	02 6883 4800
Toowoomba	07 4634 6144	Wagga Wagga	02 5924 4500
Sunshine Coast	07 5493 7872	Canberra	02 6298 2777
Brisbane	07 3375 0100		

ALIGNMENT CHECK DURING INSTALL

From time to time check that sheets continue to be parallel with the first sheet. This is done by taking two measurements across the width of one fixed sheet. Approximately half way through the job, perform a similar check from the finishing line.

STOP ENDS & LIPS - PITCH BELOW 15°

Turn the pans at the top of the sheets up 90° using a turn-up tool to prevent wind driven water entry.

Turn the pans at the bottom of the sheets down 30° using a turn-down tool to prevent water running back along the underside of the sheet.

ROOF PITCH, FLASHINGS & END LAPS

For roofs with continuous sheets and no end laps the minimum roof pitch is 1° (1 in 50). This minimum pitch must be adhered to and all points of the roof to prevent ponding. For roofs with end laps the minimum lap is 200mm for pitches between 5° and 15°, and 150mm above 15°. Allow a minimum of 50mm for projection into gutters.

Flashings must be of a compatible material and 150mm minimum cover.

For walls allow maximum end laps of 100mm. End laps in roofs of less than 5° should be sealed with a suitable sealant. The sealant should be applied in two runs; one at the low end of the lap to prevent moisture being drawn in by capillary action, the other should be at the high end of the lap to prevent condensation that may form under the top sheet from draining down the underside and entering the lap.

VIC		TAS	
Preston	03 9480 3744	Launceston	03 6335 8555
Laverton	03 8369 8300	SA	
Geelong	03 5248 2006	Adelaide	08 8282 3300
Ballarat	03 5335 6416	WA	
Pakenham	03 8710 9300	Perth	08 9365 5444
NT		Bunbury	08 9796 9796
Darwin	08 8935 9555	Albany	08 9841 6966

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