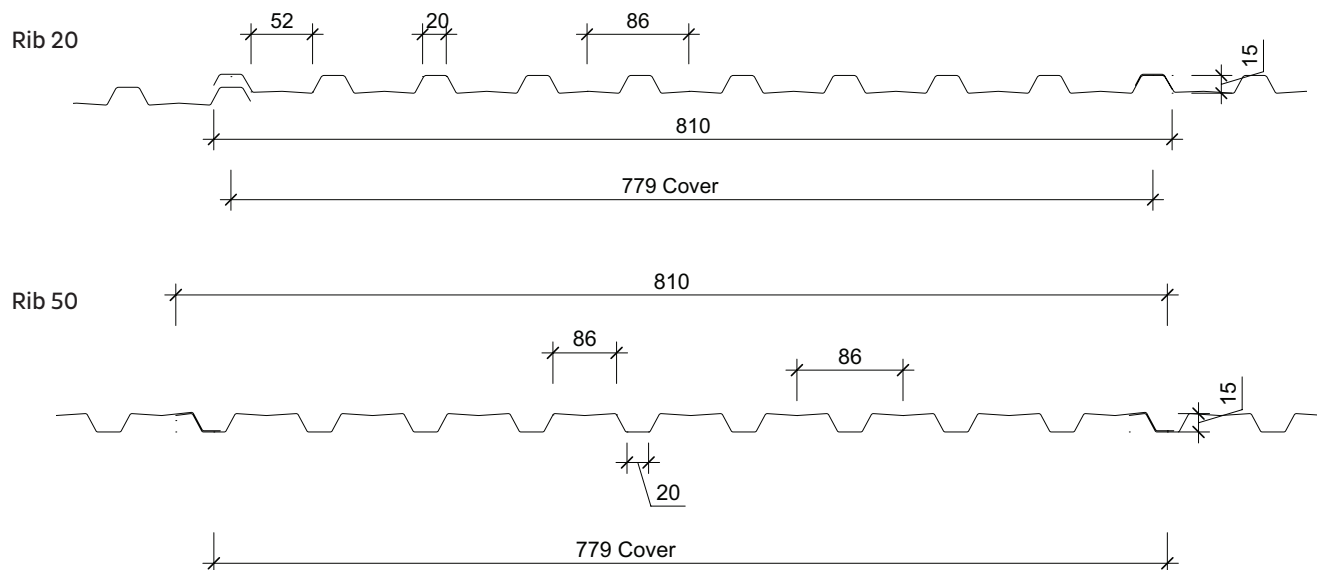


DIMONDCLAD RIB 20 & RIB 50 PROFILE PERFORMANCE



Cover (mm)	779
Sheet width (mm)	810
Minimum Pitch	Wall cladding only

All dimensions given are nominal

Sheet Tolerances

Sheet width: ± 5 mm

Sheet length: +10mm, -0mm. For horizontal wall cladding where notified at time of order of intended use, tighter tolerances can be achieved +3mm, -0mm.

Material Options	Steel	Aluminium	
Thickness (BMT) mm	0.4	0.7	0.9
Nominal weight/lineal metre (kg/m)	3.17	1.78	2.28
Unsupported overhang (1) (mm)	100	75	100

(1) Not intended to support point loads.

Roll-forming facility at: Hamilton

Sheet lengths: Dimondclad Rib 20 and Rib 50 are custom run to order.

Where long sheets are used consideration must be given to:

- Special transportation licences for sheet lengths over 25m
- Site access for special lifting equipment
- Fixing techniques to accommodate thermal expansion.

Refer Section 2.1.3.4.

DIMONDCLAD – DETAILED CLADDING DESIGN

Design Criteria for Limit State Capacities.

a) Serviceability Limit State

No deflection or permanent distortion that would cause unacceptable appearance or side lap leakage due to inward or outward wind loads.

b) Ultimate Limit State

No pull through of fixings or fastener withdrawal resulting in sheet detachment due to wind up-lift (outward) loads.

System Design

The span capacity of Dimondclad Rib 20 and Dimondclad Rib 50 is determined by the serviceability requirement for acceptable appearance and should not exceed 1400mm.

The ultimate windload should not exceed 3 kPa.

The Dimondclad Rib 20 and Dimondclad Rib 50 profiles are not intended for use as roofing products, and must not be used in situations where foot traffic point loads can be applied.

Fastener Design

Dimondclad Rib 20 and Dimondclad Rib 50 should be screw fixed over cavity battens to either timber or steel framing where a high level of appearance is required. Nail fixing to timber may be used in an interior situation not exposed to the weather. The use of the appropriate length of 12g screw will ensure failure by fastener pull out will not occur under the load limitation given.

Framing	Fastener Length (mm)	
	Wall Cladding Pan Fixed - Over Vented Cavity Battens	
	Screw Length* (mm)	Designation
Timber	50	Roofzip M6 x 50mm
Steel	20	Tek - 12 - 14 x 20

*If sarking or insulation is used over the framing, screw length will need to be increased.

For screw size range and fastener / washer assembly refer Section 2.2.3.1.

The Span Capability and Sheet Appearance is based on fasteners at 260mm maximum spacing across the sheet without the use of load spreading washers.

Spans greater than 800mm will require the specification and use of side lap stitching fasteners – see Section 2.3.2C Installation Information: Layout and Fastening, for fastener type.

As a guide for non-specific design the following S.L.S. design loads in accordance with the MRM Roofing Code of Practice can be used for buildings less than 10m high, otherwise AS/NZS 1170.2 should be used

Low wind zone = 0.68kPa, Medium wind zone = 0.93kPa, High wind zone = 1.32kPa, Very high wind zone = 1.72kPa and Extra high wind zone = 2.09kPa.

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DIMONDCLAD FASTENER LAYOUT OPTIONS

