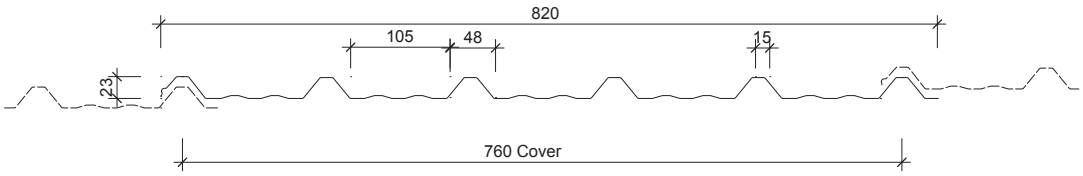
Dimond Roofing™

SIX RIB
PRODUCT TECHNICAL STATEMENT



PRODUCT DESCRIPTION

Six Rib like Veedek,® Styleline and Hi Five is designed to produce contrasts of light and shade, but being a slightly lower profile to the other three offers a slightly softer appearance when used as either roof or wall cladding.

DESIGN GUIDELINES

Recommend use when:

- Roof pitch is 4° and above
- Max purlin spacing does not exceed wind uplift load from the Six Rib load span charts
- Specify coating on steel to match the environment
- Specify fixing type and length to be used with the correct purlin material
- Ensure there is an allowance for thermal expansion
- Can be used for wall cladding when install on top of a ventilated cavity batten

BUILDING CODE COMPLIANCE

The product will, if employed in accordance with the supplier's installation and maintenance requirements, assist with meeting the following provisions of the building code for a period of 15 years:

- Clause B2 Durability B2.3.1
- Clause C3 Fire affecting areas beyond the fire source: Buildings C3.3
- Clause E2 External moisture E2.3.1, E2.3.2
- Clause F2 Hazardous building materials: Performance F2.3.1

EVIDENCE MEETS NZBC

Test information available from Pacific Coilcoaters and New Zealand Steel, and past history of use of long rum metal roofing and cladding products in New Zealand indicate that, provided the product use and maintenance is in line with guidelines contained in the current literature reference, Dimond® Roofing long run metal roofing and wall cladding systems can be expected to meet the performance criteria in clause B2, C3, E2 and F2 of the New Zealand Building Code, for a period of not less than 15 years.

SUPPORTING EVIDENCE

The product has and can make available the following additional evidence to support the above statements:

NZ Metal Roofing Manufacturers Association Inc. (NZMRM)
Code of Practice

ColorCote® The right roof always lasts longer

COLORSTEEL® NEW ZEALAND'S FAVOURITE ROOF

ENVIRONMENTAL

Manufactured from coated steel produced by New Zealand Steel at Glenbrook from Ironsand mined off North Island's West coast and Zincalume® coated.

COLOURSTEEL® is factory painted at New Zealand Steel, Glenbrook or if its ColorCote® its painted at Pacific Coilcoaters Penrose. ColorCote® MagnaFlow™ base coated steel and coating is imported from Asia, but painted at Pacific Coilcoaters in Penrose. Both NZ sites operate within strict environmental controls and recycle cleaning and washing water and control that is exhausted into the environment.

Dimond® Roofing recycle all steel scrap waste and offcuts which can then be remelted down and reused in other steel based products.

At the end of its useful life as a roofing profile can be recycled back by remelted down.

Aluminium is imported from overseas and painted at New Zealand at Pacific Coilcoaters.

COATINGS & CLASSES

Manufactured using different paint coatings available from New Zealand Steel or Pacific Coilcoaters depending on the durability required for the environment the roof or wall will be installed in, in accordance with AS/NZS 2728. As a guide for areas 1m to 50m of breaking surf, use ColorCote® AlumiGard™ or plain unpainted aluminium. Sites within 50m to 100m of breaking surf COLOURSTEEL® MAXX® can be used, then at 100 m (Category 4) ColorCote® MagnaFlow™ (ZM8) can be used, beyond 200m (Category 3) then ColorCote® ZinaCore™ (ZR8) or COLOURSTEEL® ENDURA,® and beyond can use Zincalume.®

Refer to environmental literature available from Pacific Coilcoaters or New Zealand Steel or contact Dimond® Roofing on 0800 766 377.

SPANS

Product	Material	Thickness BMT (mm)	Roofing Max. Span End Span (m)*	Roofing Max. Span Internal Span (m)*	Walls Max. Span End Span (m)	Walls Max. Span Internal (m)
Six Rib (min. pitch 4°)	Steel (G550)	0.40	1.00	1.50	1.60	2.40
		0.55	1.50	2.20	2.00	3.00
	Aluminium (H36)	0.70	0.80	1.20	1.20	1.80
		0.90	1.10	1.70	1.70	2.60

Spans for roofing where the serviceability wind uplift load does not exceed 1.5kPa or under foot traffic is suitable for a restricted access roof
Spans for walls are limited by an acceptable appearance or an serviceability wind uplift of 12.0kPa
*Restricted Access Roofing
For more information, please refer to Dimond Roofing website www.dimond.co.nz

FIXINGS

Purlin material	Screw fastener			
	Roofing rib		Wall cladding (pan fixed)	
	Screw length* (mm)	Designation (mm)	Screw length* (mm) over a vented cavity	Designation over a vented cavity (mm)
Timber with steel based sheet	65	Type 17 Class 4 12g x 65mm Timbertite	50	Type 17 Class 4 12g x 50mm Timbertite
Timber with aluminium based sheet	73	14g x 73mm Alutite with 8mmØ clearance hole and an aluminium profile washer and 36Ø EPDM seal	73	14g x 73mm Alutite with 8mmØ clearance hole and a19 dia aluminium round washer and seal
Steel	45	Type 17 Class 4 12g x 45mm Steeltite	55	Class 4 12 x 45mm Steeltite

*If sarking, cavity batten or insulation is used over the purlins the screw length will need to be increased by at least the sarking, insulation or cavity batten thickness.

The Limited State Load/Span Capacity Chart is based on 5 screw fasteners/sheet/purlin without the use of load spreading washers (except for 0.40mm steel, 0.70mm aluminium material, which must have oversized 12mm holes drilled and be fitted with a profile metal washers and 36mm EPDM seals). Spans may require the specification and use of a side lap stitching screws.

Materials	Thickness (mm)	Maximum Side Lap Fastener Spacing's (mm)
Steel	0.40 0.55	1500 2000 2400
Aluminium	0.70 0.90	1500 2000

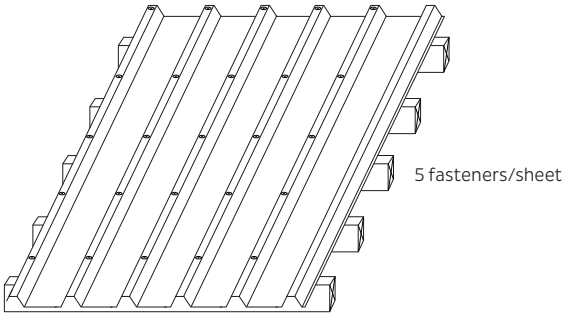
Our recommended side-lap fasteners for stitching sheets together are:

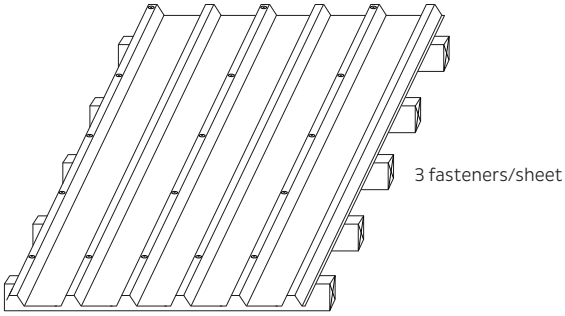
Metal Sheeting

Tek screws 10g - 16 x 16mm	Hex head
Type 17 screws 10 - 12 x 20mm	Hex head

INSTALLATION REQUIREMENTS

Dimond Six Rib Fastener Layout Options





Can be directly installed over plastic cavibat battens.

For more information, please refer to Dimond® Roofing website.

SPECIAL CONDITIONS

Manufactured in Invercargill.