



PRODUCT DESCRIPTION

Dimondek® 630 is a revolutionary concealed clip profile, which can be manufactured on site in lengths up to 100m. Dimondek® 630's onsite manufacturing allows for gutter to gutter sheets in a continuous draped curve. The greater span capability means fewer purlins are required and it's faster to install. With no screw holes through the roof, leaks are virtually eliminated meaning your roof lasts longer. With improved lifecycle costs Dimondek® 630 is the most economical concealed clip roofing profile on the market.

DESIGN GUIDELINES

Recommend use when:

- Roof pitch is 3° and above
- Max purlin spacing does not exceed wind uplift load from the Dimondek® 630 load span charts
- Specify coating on steel to match the environment
- Manufactured on site and sheet length up to 100m
- Clip fixing allowing thermal expansion movement on sheet lengths up to 100m
- Can be installed on top of cavibat ventilation 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: Performance B2.3.1
- Clause C3 Fire affecting areas beyond the fire source: Buildings C3.3
- Clause E2 External moisture: Performance 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 run metal roofing and cladding products in New Zealand indicate that, provided the product use and maintenance is in line with the guidelines contained in the current literature reference, Dimond® Roofing long run metal roofing & 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](#)



ENVIRONMENTAL

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

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. 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 Zinalume[®].

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 (m)*	Walls Max. Span End Span (m)	Walls Max. Span Internal (m)
Dimondek [®] 630 (min. pitch 3°)	Steel (G550)	0.48	2.20	3.30	NR	NR
		0.55	2.40	3.60	NR	NR

Spans for roofing where the ultimate wind uplift load does not exceed 1.5 kPa or under foot traffic is suitable for restricted access. Spans for walls are limited by an acceptable appearance or an ultimate wind uplift load of 2kPa. For more information, please refer to Dimond Roofing website <http://www.dimond.co.nz/>

FIXINGS

Purlin or Frame Material	Screw Fastener for Clip
	Steel based sheet
Timber	M6 x 50mm HG-Z4 Roofzip
Steel 1.5mm to 4.5mm thick	12g x 30mm hex head tek screw

The Limit State Load/Span Capacity Chart is based on 1 clip with 4 fasteners/sheet every purlin.

INSTALLATION REQUIREMENTS

Dimondek[®] 630 is clip-fastened to either timber or steel purlins. The use of the appropriate type and length of fastener for clip fixing into solid structure will ensure failure by fastener pull out will not occur.

One strip (two posts) clip is used for each sheet on every purlin. Strip clips are indexed over the previously laid clip.

SPECIAL CONDITIONS

Manufactured on the project site for large roofs above 2500m² where sheet lengths are above 25m long or can be run at a Dimond branch and transported to the projects site where sheets are under 25m long. Please discuss with Dimond® Roofing phone 0800 Dimond (0800 346 663).

Wind clamps: where the Ultimate wind uplift load exceeds 2.6kPa, Dimond Nylon reinforced wind clamps can be pushed over the middle rib, over the clip to double the wind uplift load to 5.2kPa.