

INTERLOCKING

Architectural Cladding

About INTERLOCKING

The panels are simply connected by the use of an interlocking groove, giving the elegant appearance of a recessed joint. Interlocking Panels do not require a plywood substrate, they are fixed onto 20 mm cavity or structured battens using mechanical fixings which are concealed in the joint. This system can be installed either horizontally or vertically over synthetic building wrap and 20 mm cavity battens.



The KiwiColour® range of pre-painted steel products have been developed specifically to withstand the higher levels of UV and salts spray in the New Zealand environment.

- Combines form, function and durability to meet your design and project requirements from roofing products and rainwater systems through to building cladding and interior.
- Opens a vast world of design possibilities for architects, product designers and manufacturers in an extensive range of colour available on our colour charts.
- Ensures a superior, longer lasting finish to steel products and is available in three paint finishes; VITOR+, VITOR+ZX or LUX, depending on your environmental and aesthetic requirements.



LUX





APPLICATION

Interlocking panels are ideal for use on new homes or existing buildings. They are installed as conventional weatherboard planks, resembling the look of a rusticated weatherboard wood paneling.

Areas of application include:

- Facade
- Soffits
- Fascias
- Chimney cladding
- Interior feature walls

PANEL DETAILS



*All dimensions are in mm

Suitable for wall cladding

Negative joint size 2 – 25 mm (Recommend 12 mm min.) Variable pan size from 155 – 260 mm unsupported. Pan size over 260 mm will require back support. We will use fire rated POLYFOAM 24 mm. Max panel length - 6.0 m for pre-painted steel (depending on panel width & colour) Please consult The Roofing Store for any other material

Can be manufactured in full range of materials:

o Copper o Stainless Steel o Titanium Zinc o Aluminum o VITOR+, VITOR ZX or LUX 0.55 Steel

DIMENSIONS

Panel depth is fixed to 25 mm.

Flat pan is variable from 155 to 260 mm with no back support.

For pan width over 260 mm, backing is required. Max width 400 mm.

Recessed joint width is adjustable from 2 to 25 mm. (Recommend 12 mm min.)

Maximum panel length will depend on the material chosen.

Thermal expansion / contraction are the key deciding factors. We will recommend max 4.0 m lengths for Copper, Zinc, Aluminum or Stainless Steel.

For any pre-painted steel we will recommend 6.0 m maximum. (Depending on colour and panel width)

DESIGN CONSIDERATIONS

Interlocking panels can be installed horizontally, vertically or diagonally.

Specific feature of this cladding is that it is installed from top to bottom when used horizontally.

Special attention is needed to position any penetrations in the walls so that they are aligned with the recessed joints horizontally and /or vertically.

Because of waterproofing requirements.

Please consult with The Roofing Store for specific design considerations.









FIXINGS

Interlocking panels are fixed with concealed screws direct to the framework.

If the material chosen is copper, titanium zinc, aluminum or stainless steel and the length is exceeding 5.0 m, special sliding clips will be necessary.

All fixings to comply with the NZ Building Code, dependent on chosen material & site conditions.

Minimum Class 4 fixings In Galv or Stainless - Min 10 gauge x 55 mm Wafer Head screws.

Fixings through battens to framing unless battens are 45 mm structurally fixed.

THERMAL EXPANSION AND CONTRACTION

The rate of thermal expansion and contraction varies between the metals and also the color of the product. To accommodate this interlocking panels are fixed with combination of fixed and sliding clips.

MATERIAL	EXPANSION	70°C CHANGE
	(mm/m-C)	OVER 6M (mm)
Steel	0.011	4.62
Aluminum	0.023	9.66
Zinc	0.022	9.30
Copper	0.017	7.14

Factors which can affect the lengths of the trays are:

- Manufacturing location
- Access to work area
- Design and detailing
- Choice of profile

TESTING

The product has been tested in Australia and in NZ in accordance with Australian Standard AS 4040.2-1992 & therefore satisfies AS/NZS 1562.1:1992 Design & Installation of sheet proof and wall cladding - metal.

Internal bracing and substructure spacing at the design stage will be required to achieve higher wind loads. (if required) Weathertight testing in Accordance with E2/VM1 satisfies requirements as per AS/NZS 4284:2008.

INSTALLATION

Installation to be carried out by a capable and trained installer.

All fixings to be concealed and tolerance for material thermal movement must be allowed for during installation.

We recommend installing a "breathable vapor barrier" (synthetic underlay) behind the batten substructure to act as a second line of defense to stop any water ingress as well as allowing the building to "breathe".

Flashings associated with the installation are to comply with E2AS1 & the NZ Build Code of Practice.

Flashings must be fixed in the traditional concealed method with allowance for thermal expansion.

For detailed technical specifications, please refer to the PASS mark technical statement or contact us for technical support.



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QUALITY ROOFING MADE EASY

For futher information regarding interlocking or other products within our range please visit or contact your local branch.



