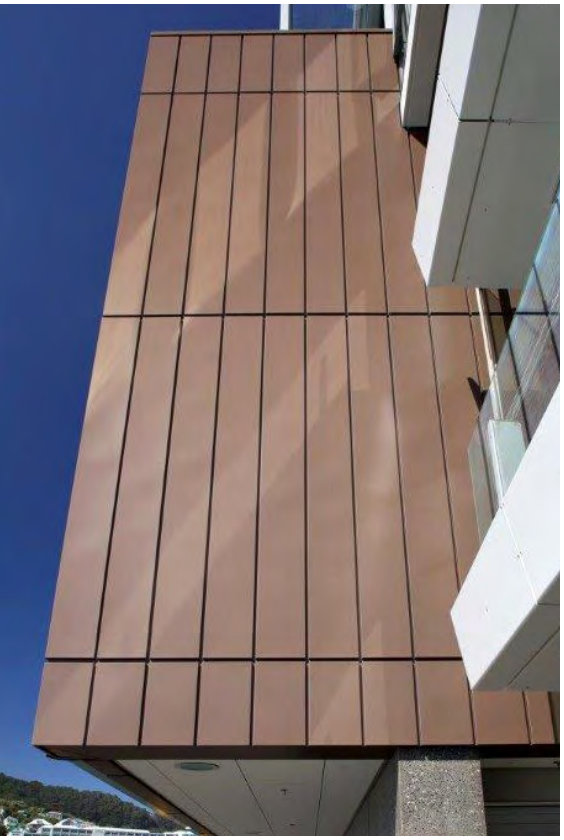
VMZINC

FACADE

VMZINC® Interlocking panel



VM BUILDING SOLUTIONS

The VMZINC Interlocking Panel system is designed for any facade to be cladded with a rainscreen system. It involves laying interlocking panels on a metal framework (cladding rails in aluminium or galvanized steel) fixed to the main structure (concrete, masonry or metal structure). The panels are simply connected by the use of an interlocking groove giving the elegant appearance of a recessed joint. They are fixed onto the metal framework using self tapping screws which are concealed in the inside edge of the groove.

Area of Application

- New construction or refurbishment
- All flat facades, on vertical walls
- Can be used for both exterior and interior applications

Characteristics

- Popular traditional wall cladding technique
- Horizontal or vertical installation of interlocking panels
- Aesthetics of recessed joints
- Simple connection by an interlocking groove making it easy to install

Technical specifications

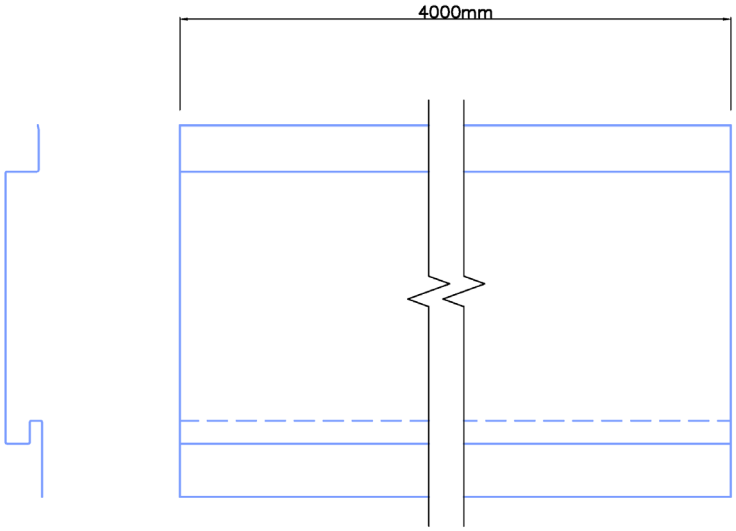
Aspect	QUARTZ-ZINC® ANTHRA-ZINC® PIGMENTO® AZENGAR® NATURAL-ZINC
Thickness	1.0mm
Panel Length	Maximum 4m for vertical laying
Panel Width	200 - 300mm
Side Width	24mm
Joint Width	10mm or 20mm
Weight of panel	About 9.85 – 11.18kg/m^2

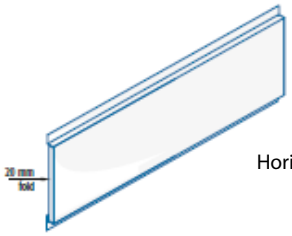
VMZINC Interlocking Panel installation

The interlocking panels can be installed vertically or horizontally. The choice of direction offers different aesthetics and technical solutions for the main flashings.

Interlocking panels are available in three different centre-to-centre sizes: 200mm, 250mm and 300mm. Interlocking panels are supplied in lengths determined by the scheme layout which can be from 0.5m to 4m maximum. The joint width formed by the longitudinal junction between the two interlocking panels can be 10 or 20mm.

Panel dimensions





Horizontal Fixing

Installation sequence

Installing horizontal interlocking panels:

Interlocking panels in horizontal direction are installed from top to bottom. The upper edge of each panel is locked into the lower edge of the panel above. The panels are mechanically fixed to the substructure using self tapping screws.

Longitudinal joint

When the first row of panels is fixed onto the framework, lock the second row down into the groove of the upper panels.

Transverse joint

An element of the metal framework must be aligned with each vertical joint between the panels (with turned down edges). The framework must ensure a minimum support of 100mm. A flat inverted slider with two 15mm folds is first fixed onto the framework elements (rail and bracket) to ensure that the transverse joints are watertight. The interlocking panels are then fixed over it.

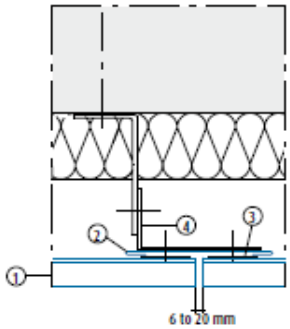
Installing vertical interlocking panels:

Interlocking panels in vertical direction are installed from bottom to top. The interlocking direction for vertical panels must be defined by the layout. Fixing usually starts at the corner of the building.

Transverse joint

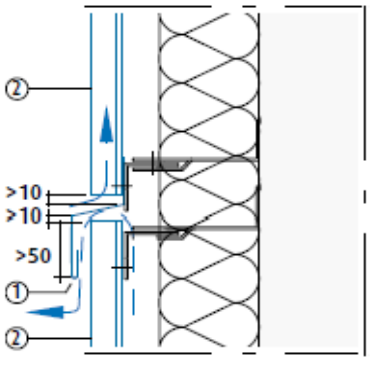
After laying the lower panels, an apron is fixed on the installed framework to overlap them by 50 mm. The upper panels are then secured.

Horizontal laying, need to fold 20mm at the edge of panel



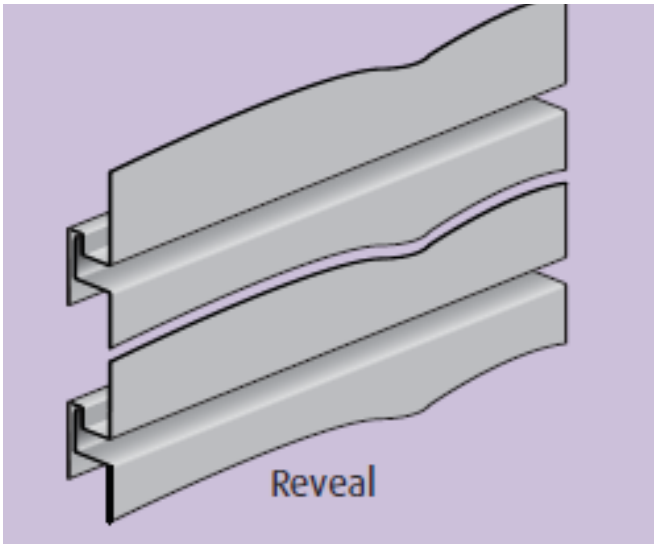
① Interlocking panel
② Flat inverted slider
③ Fixing clip
④ Rail and bracket

Vertical Fixing



① Drip
② Interlocking panel

Installation view

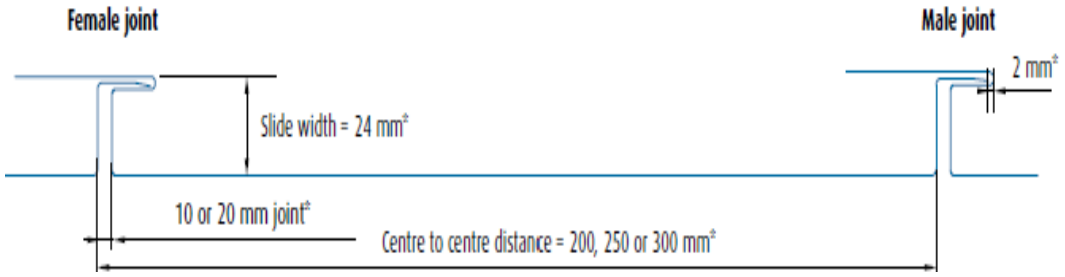


Fixing

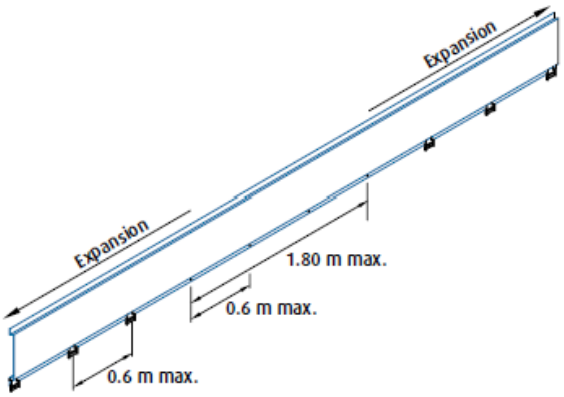
Interlocking Panels are fixed onto a metal framework using concealed fixing elements.

The panels are fixed directly onto the metal framework (cladding rails in alumiunium or galvanized steel) with self tapping screws over a fixed area which is maximum 1.80m long (at the top of the panel for vertical fixing and in the middle for horizontal fixing).

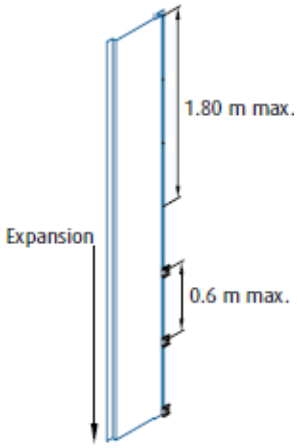
Outside the fixed area, the panels are held in place by fixing clips (0.5mm Thick 304 Stainless Steel) which allow for expansion and contraction of the zinc metal, or slot hole fixings with neoprene washers.



Positioning of fixings



Horizontal panel

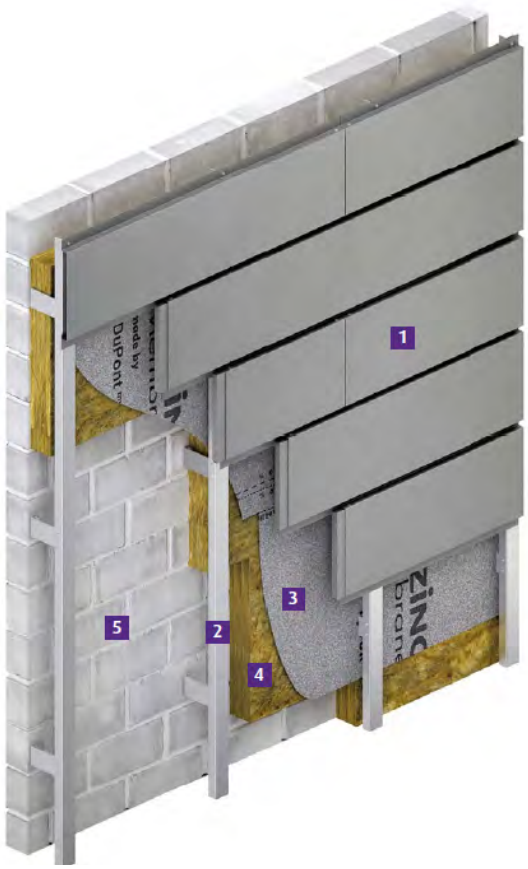


Vertical panel

Interlocking panels are fixed on a metal framework composed of adjustable brackets and cladding rails made of aluminium or galvanized steel. To meet the requirements for mechanical resistance (intrinsic weight and wind pressure loads), the maximum centre to centre distance between the brackets is 600mm.

The brackets fixed to the structure are used to adjust the cladding rails (minimum thickness: 2.5mm for aluminium and 1.5mm for galvanized steel) which act as a support for the cladding. The minimum support of the rails is 40mm.

Typical VMZINC interlocking panel system build-up



1. VMZINC Interlocking Panel in 1.0mm
2. Metal Rails (Top Hats)
3. Breathable waterproofing membrane
4. Insulation
5. Main Structure (By others)

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