VMZINC

ROOFING

VMZINC® Single-screw fixing system®

For Standing seam

Description

Due to the reinforced design of the single hole clip not only is only 1 screw required per clip (both fixed and sliding) but the centre to centre distance between clips is greater than more traditional clips thus saving on screws, clips and installation time.

This document describes fixing clips that can be used for a standing seam zinc roof.

The correct use of the fixing clips remains the responsibility of the designer and contractors involved on the project in question.

Regulatory requirements

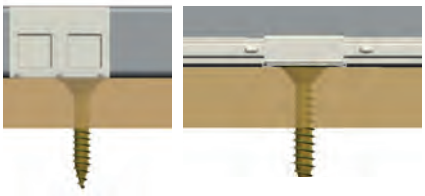
The contractor of this package must provide as part of their overall price all the essential work necessary for the complete completion of the work, in accordance with the regulations, and standards relating to construction (personnel safety, environment, etc).

Materials

BS EN 988: Zinc and zinc alloys specifications for flat rolled products for buildings.

BS EN 501: Metal sheet roofing products specifications for fully supported zinc sheet roofing products.

BS Code of Practice 143–5: Deals with zinc roof coverings and gives recommendations based on accepted good practice in the UK for laying zinc roofs.



Fixing the timber substrate and clips

Appropriate wood screws should be used.

Timber substrates

Exterior grade 18mm plywood (EN314-3 & EN636-2). The plywood deck must be dry (max moisture content 22%) even and flush with all joints being less than 2mm in height. Screws should be driven into the plywood so as to avoid abrasive contact with the underside of the zinc roofing sheets. Solid pine roof boards can also be used. Ensure that any treatment which the solid pine boards may have received (fungicides or insecticides) is compatible with the zinc cladding sheets.

Area of use

The fixing system which uses standing seam zinc is only for timber substrates:

- Minimum slope 3 degrees (as built).
- Barrel and other curved roofs are possible.
- The system can be used in all regions although for exposed sites 430mm wide panels should be considered.

Application

Installation

Dimensions

The standing seam roofing will be made of BS EN 988 zinc by VMZINC® with a thickness of 0.70 mm or 0.80 mm using panels 430mm, 530mm or 600mm wide. 430mm wide panels should be used in exposed areas.

Fixing clips

The panels will be fixed to the substrate using fixed (100 per box) and sliding (100 per box) VMZINC single-screw clips made from 0.4 mm thick X5CrNi 18-10 stainless steel. They will be fixed using zinc-plated steel or stainless steel wood screws, diameter 5mm or 6 mm with a continuous thread (6 x 40mm screw in boxes of 500 are available), flat countersunk head and smooth sub-head, length minimum 40mm.

The screw must have a minimum pull-out resistance of 95 daN. A gap of 5 mm must be left between two panels. The maximum centre/centre distance between the sliding clips is 500mm but this should be reduced to 330mm for edge areas and 150mm in corner areas. The edge zone is 1.1m or 1/8 of the projected roof. With the corner areas being where 2 edges meet. 5 fixed clips should be used on all panels but the positioning of 1.5m fixed zone will depend on panel length and slope.

Installation of the clips

When installing the sliding clips ensure that both sides of the clip are hooked onto the standing seam and that the clip is centred thus allowing full expansion and contraction. When installing the fixed clip ensure that the clip is completely parallel to the standing seam after being screwed into place.

Surface aspect

The sheets and coils of EN 988 by VMZINC® exist in mill finish natural zinc, QUARTZ-ZINC®, ANTHRA-ZINC®, PIGMENTO®, and AZENGAR®. All finishes exist in VMZINC PLUS a product with a protective underside coating that can be used for non compatible / non vented substrates. For more information on recommended substrates and where different aspects can be used please visit: www.vmzinc.co.uk

Details and flashings

Whilst the minimum slope as build for a zinc roof is 3 degrees, not all details can be used at this slope. For detailed information on acceptable details please visit: the Standing Seam Installation Guide

Ventilated roofs

For vented roofs BS 5250 should be followed and the space between the timber deck and the insulation must be at least 50mm deep and vented at the eave and ridge by a continuous linear open vent of 10mm.

Item

This document is intended for specifiers (architects and project managers responsible for the design of the works) and contractors (contractors responsible for execution on site) of the reference product or system.
It contains the main data, texts and diagrams relating to the specification and implementation of the product or system mentioned: presentation, field of application, description of components, implementation (including supports) and finishes. Any use or specification outside the scope of application indicated and/or the specifications in this installation guide requires specific consultation with the technical services of VM Building Solutions Benelux, without the latter being held responsible for the feasibility of the design or execution of the projects concerned.

Territory concerned

This document applies only to the implementation of the product or system mentioned on construction sites located in Belgium, the Grand Duchy of Luxembourg and the Netherlands.

Qualifications and reference documents

We would like to remind you that the specification of complete construction systems for a specific structure is the sole responsibility of the building contractors, who must ensure that the use of the specified products is appropriate for the construction objective of the structure and that it is compatible with the other products and techniques used.
It should be noted that, in order to make proper use of this guide, knowledge of VMZINC® zinc material and the roofing and zinc work trade is required.
When starting work, it is essential to comply with all the standards in force in the country where the work will be carried out.
In this regard, VM Building Solutions organises training courses reserved for professionals.

Responsibility

Unless otherwise agreed in writing by VM Building Solutions, the latter cannot be held liable for any damage resulting from a prescription or implementation that does not comply with all of VM's specifications.

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