

H74

Zinc strip/ sheet coverings/ flashings

Clauses

2 To be read with preliminaries/ general conditions.

Types of zinc work

130A Cladding

1. Description: Zinc skirt to low level external stone wall.
2. Cladding system: VMZINC Flat lock vertical cladding.
3. Substrate: Exterior grade 18mm plywood (EN314-3 & EN636-2). The plywood deck must be even and flush with all joints being less than 2mm in height. Nails should be driven into the plywood so as to avoid abrasive contact with the underside of the zinc sheets. Ensure that any treatment which the plywood may have received (fungicides or insecticides) is compatible with the zinc cladding sheets. A continuous airspace of at least 38mm must be allowed for between the plywood and insulation (which can be protected by the VMZINC membrane)
4. Underlay: No underlay is required but a VMZINC membrane can be installed over the plywood.
5. VMZINC: As clause 520.
 - 5.1. Finish: VMZINC PLUS in Anthra-Zinc
 - 5.2. Thickness: 0.8mm
6. Longitudinal joints: 25mm hem forming a single welt.
 - 6.1. Spacing: maximum 3m.
7. Cross joints: 25mm hem forming a single welt.
 - 7.1. Spacing: maximum 3m. Only spacing in one direction can be over 600mm
8. Description: To be installed in accordance with manufacture's guidance.

General requirements/ preparatory work

512 Workmanship generally

1. Standard: Generally to CP 143-5.
2. Fabrication and fixing: To provide a secure, free draining and completely weather tight installation.
3. Installation Company and operatives: Trained in the application of zinc coverings/flashings. Submit records of experience on request. VMZINC at Work installers offer evidence of successfully completed projects, records of VMZINC training and extended material warranties.
4. Measuring, marking, cutting and forming: Prior to assembly wherever possible.
5. Metal temperature: Do not form zinc when the metal temperature is below 7°C. (10°C for Pigmento).
6. Marking out: With pencil, chalk or crayon. Do not use scribes or other sharp instruments without approval.
7. Folding: With mechanical or manual presses to give straight, regular and tight bends, leaving panels free from ripples, kinks, buckling and cracks. Use hand tools only for folding details that cannot be pressed. The minimum bending radius is thickness x 2 (x 3 for Pigmento).
8. Sharp metal edges: Fold under or remove as work proceeds.
9. Sealants: Do not use in joints to attain waterproofing.
10. Solder: Use only where specified.
11. Finished zinc work: Fully supported, adequately fixed to resist wind uplift and able to accommodate thermal movement without distortion or stress.

12. Protection: Prevent staining, discolouration and damage by subsequent works. All instructions and recommendations contained in the guidelines for specification and installation of VMZINC standing seam to be applied. Plastic film must be removed within 2 months of installation and in such a way so as not to trap water between the partially removed film and the zinc. .

521 Zinc strip/ sheet - standard temper alloy

1. Zinc-titanium-copper alloy:
 - 1.1. To BS EN 501 and BS EN 988.
2. Zinc manufactured following ISO 14001 (environmental management), ISO 9001 (quality management) and ISO 18001 safety management.
 - 2.1. Stamped or labelled with type, finish and thickness.
 - 2.2. Zinc to be coated on underside with a protective 60 micron lacquer.
3. Manufacturer:
 - 3.1. VMZINC, Collier House Mead Lane Hertford Herts SG13 7AX
4. Tel: 01992 822 288 Fax: 01992 584 460 Email: vmzinc.uk@vmzinc.com Web: www.vmzinc.co.uk
 - 4.1. Product reference:
5. VMZINC in VMZINC PLUS in QUARTZ-ZINC, ANTHRA-ZINC or Pigmento Red, Green, Blue, Brown or Azengar.

530 Integrity of zinc

1. Requirement: Design coverings/ flashings and methods of attachment to prevent loss of weathertightness and permanent deformation due to wind pressure or suction.
2. Structural requirements
 - 2.1. Wind loads: Calculate to BS 6399-2.

555 Layout

1. Setting out of joints in direction of fall and cross joints: Submit proposals.

610 Suitability of substrates

1. Condition: Dry and free of dust, debris, grease and other deleterious matter.

631 Plywood underlay

1. Standard: Manufactured to an approved national standard and to BS EN 636, section 8 (plywood for use in humid conditions).
 - 1.1. Sheet size: 2400 or 1200 x 1200 mm and 22 mm thick.
2. Laying: Parallel to perimeter edges with cross joints staggered and a 0.5 to 1 mm gap between sheets.
3. Fixing: With 25 mm annular ringed shank galvanized, sherardized or stainless steel nails, at 300 mm grid centres over the area of each sheet and at 150 mm centres along edges, set in 10 mm from perimeter edges and in pairs across joints.
 - 3.1. Nail heads: Set flush with or just below surface.

640 Timber for use with zinc work

1. Quality: Planed, free from wane, splits, pitch pockets, decay and insect attack (ambrosia beetle excepted).
2. Moisture content: Not more than 22% at time of fixing and covering.
3. Preservative treatment: Organic solvent as section Z12, and Wood Protection Association Commodity Specification C8.

651 Laying underlay

1. Vm zinc membrane
2. VMZ Membrane installed over plywood.
3. Handling: Prevent tears and punctures.
4. Laying: Overlapped joints onto a dry substrate with staples (membrane is supplied with self-sealing joints).
5. Overlap the VMZ Membrane by 150mm.
 - 5.1. Slopes lower than 22° the overlap should be 200mm.

Fixing zinc

711 Fixings for clips

1. Stainless steel or Galvanised steel (not in a coastal environment)
 - 1.1. Flat head screws or ringed shanked nails.

716 Securing zinc clips

1. Stainless Steel, Zinc or Galvanised steel (not in a coastal environment).
2. Fixing: Secure each clip to substrate with two fixings.
3. Each clip to withstand a pulling force of 50 daN.
4. Minimum of 4 clips per panel.
5. Typical spacing: clip at least every 330mm

760 Continuous clips

1. Material: Zinc of same thickness as that being secured.
2. Dimensions
 - 2.1. Width: To suit detail.
 - 2.2. Length: Not more than 1800 mm.
3. Fixing: To substrate at 200 mm centres. Welt edge of strip/ sheet being fixed to continuous clip and dress down.

Jointing zinc

810 Forming details

1. Folds and welts: Form without thinning, or splitting the strip/ sheet.
2. Thermal movement: Form details with appropriate allowance for movement, without impairment of security at full expansion or contraction.

826 Soldering details

1. All zinc must be cleaned back to its natural state.
2. The protective coat on the underside of the upper panel must be removed over a width of 20mm either chemically, using DECALAQ, or mechanically, using a 3 MTM Roloc™ Bristle Disc brush mounted on a small disc sander.
3. The pre-weathering must be removed from the parts to be soldered. ZINN7 (flux) to be applied to allow spot soldering with solder (40% tin 60% lead) ZINN7 applied over whole length of joint and then soldered. Wipe clean

Ω End of Section