Firemaster Wall_Lite_NBS_Specification

H43 Metal composite panel cladding/ covering

To be read with Preliminaries/ General conditions.

120A METAL COMPOSITE PANELS
Manufacturer: Euroclad Group Ltd

Panels: Eurobond Firemaster Wall Panels
Manufacturer: Euroclad Group Ltd
Wentloog Corporate Park
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Cardiff
CF3 2ER
Tel: (+44) 029 20 776677
Fax: (+44) 029 20 369161
Email: panel.technical@eurocladgroup.com
Web: www.eurobond.co.uk

- Product reference: Firemaster Wall Lite (Fixed Horizontally or Vertically).

To pass Ash, Combustion and Heat tests. Fire resistance tested from both sides, of up to 120 minutes Integrity & 90 minutes Insulation when tested to EN1364-1:1999
- LPCB LPS1181 Grade INT-30 to INT-90 Approved, Certificate number 545b
- LPCB LPS1208 Grade FR30 – FR90 Approved, Certificate number 545a

- External facing material:

  Flat (non-ribbed) 0.5mm White Foodsafe Laminate or White Polyester. Substrate must be ZA275 Galvatite hot-dip zinc coated steel to BS EN 10147. Metal thickness to be a nominal 0.5mm (including zinc).

- Finish: TATA PE25 White Polyester. Colour: RAL9010.

- Internal facing material: 0.5mm TATA Steel Pre-Coated Galv Steel

  Finish : TATA PE25 White Polyester. Colour: RAL9010.

- Core insulation: Non-Combustible Stonewool (K-value 0.042W/m²K)

- Module Width: 1200mm module

- Panel thickness: 100mm - 240mm

100mm - 0.39 W/m²K
125mm - 0.31 W/m²K
150mm - 0.26 W/m²K
175mm - 0.22 W/m²K
200mm - 0.19 W/m²K
240mm - 0.17 W/m²K

- Accessories:

- Flashings, trims, drips, cappings to match/contrast as required (available via Eurobond Doors)

- Primary fasteners: Self drilling and tapping stainless steel screws complete

- Number and location of fasteners: Minimum of three fasteners at each end of panel

- Depth gauges on fixing guns must be used to ensure correct compression of the fixings and therefore no distortion of the panel face

GENERAL REQUIREMENTS

170 DESIGN

- Cladding: Complete detailed design of the cladding system and submit before commencement of fabrication.
  - Standard: To BS 5427-1.
- Related works: Coordinate in detailed design.

172 THERMAL PERFORMANCE/ BRIDGING

- Requirement: Complete thermal design of the cladding/ covering system to avoid excessive thermal bridging.
  - Standard: MCRMA Technical Paper 14 and BRE Information Paper 1/06.

175 PRODUCT SAMPLES

- General: Before commencing detailed design, submit labelled samples of the following:

_____

176 FASTENER SAMPLES

- General: During detailed design, submit labelled samples of each type of fastener.

DESIGN/ PERFORMANCE REQUIREMENTS

185 PERFORMANCE COMPLIANCE

- Verification: Before commencing fabrication, submit evidence based on laboratory testing or computer modelling.
  - Verifying authority:

    Verifying authority: Euroclad Group Ltd
    Wentloog Corporate Park
    Wentloog Road
    Cardiff
    CF3 2ER
    Tel: (+44) 029 20 776677
    Fax: (+44) 029 20 369161

192 SOUND TRANSMITTANCE OF CLADDING/ COVERING SYSTEM

- Minimum weighted sound reduction index (Rw) within 100 to 3150 Hz frequency range to BS 5821-3:

  100mm - 31Rw (db)
  125mm - 32Rw (db)
  150mm - 32Rw (db)
  175mm - 33Rw (db)
  200mm - 34Rw (db)
  240mm - 34Rw (db)

196A INTEGRITY OF CLADDING/ COVERING

- Requirement: Determine profiles, sizes and thicknesses of panels and sheets, the sizes, number and spacing of fixings, and incorporation of other accessories and fittings to ensure cladding/ covering system will resist factored dead, imposed and design live loads, and accommodate deflections and thermal movements without damage, in accordance with BS 5427-1.
- Primary fasteners: Not to be subjected to any bending moment.
- Wind loads: Calculate to Eurocode 1 (EN1991.4) Standard Method and BS 5427-1 appropriate to location, exposure, height, building shape and size, taking account of existing and known future adjacent structures.
  In order for Eurobond to run span/load calculations for the panels in question we require the specific wind loads acting upon the cladding.
  Normally, we would expect to see the loads split across 3 zones, these being Zone A (corners of the building), Zone B (just in from the corners) and Zone C (remainder of elevation).
  Eurobond specifically require pressure & suction wind loads represented in kN/m2.
  If we are supplied with wind speeds we cannot run calculations based upon this information.
  If these loads are not available, the appointed Structural Engineer would normally be actioned to raise these by the nominated Contractor or (if applicable) the Contractor will action the wind load analysis 'in house'.
  If site specific wind loads are not available or can be calculated a site specific postcode is to be provided to allow indicative wind load values to be calculated through wind load modeler. All calculations must be reviewed by a Structural Engineer to ensure that the calculations conform to the site specific requirements.

198 WATER PENETRATION

- Requirement: Under site exposure conditions, moisture must not penetrate onto internal surfaces, or into cavities not designed to be wetted.

202 AVOIDANCE OF SURFACE CONDENSATION

- Requirement: Determine surface condensation risk of cladding system using the method described in BS EN ISO 13788. If necessary, revise thermal insulation to provide satisfactory temperature factor (fmin). Ensure that damage and nuisance from surface condensation and does not occur.

FIXING CLADDING/ COVERING

Support structure: As specified by structural engineer, minimum thickness 1.5mm.

- Bearing width: Minimum 140mm

215 PAINTING STRUCTURE

- Sequence: Paint outer surface of supporting structure before fixing cladding/ covering.

219A FASTENERS

- Recommended for the purpose by the cladding/ covering manufacturer.

Eurobond recommends the use of stainless steel fasteners. The exact specification depends upon the gauge of the steel work to which the panels are to be positively fixed.

221 FITTINGS AND ACCESSORIES

- Unspecified fittings and accessories: Recommended for the purpose by the cladding/ covering manufacturer.

223 PREVENTION OF ELECTROLYTIC ACTION

- Isolating tape: Type recommended by cladding/ covering manufacturer.
  - Location: To contact surfaces of supports and sheets of dissimilar metals.

275 CONTINUITY THERMAL INSULATION

- Material: .
  - Manufacturer: .
    Product reference: .
- Recycled content: .
- Installation: Secure and continuous with cladding/ covering insulation.

410 FIXING PANELS AND SHEETS GENERALLY

- Cut edges: Clean true.
- Penetrations: Openings to minimum size necessary.
  - Edge reinforcement: .
- Orientation: Exposed joints of side laps away from prevailing wind unless shown otherwise on drawings.
- Panel and sheet ends, laps and raking cut edges: Fully supported and with fixings at top of lap.
- Fasteners: Drill holes. Position at regular intervals in straight lines, centred on support bearings.
  - Position of fasteners in oversized drilled holes: Central.
  - Fasteners torque: Sufficient to correctly compress washers.
- Debris: Remove dust and other foreign matter before finally fixing panel and sheets.
- Completion: Check fixings to ensure weathertightness and that panels and sheets are secure.
- Cut edges: Paint to match face finish.

470 STRUCTURAL MOVEMENT JOINTS

- Type: Cover flashing fixed on one side over gap between panels.
- Location: Coincident with structural movement joint.
- Width of gap: To match structural movement joint requirements.
- Requirement: Weathertight.

480 FLASHINGS/ TRIMS GENERALLY

- Lap joint treatment:
  - Vertical and sloping flashings/ trims: End laps to be same as for adjacent panels.
  - Horizontal flashings/ trims: End laps to be 150 mm, sealed and where possible arranged with laps away from prevailing wind.
- Method of fixing: To structure in conjunction with adjacent panels. Otherwise to panels.
  - Fasteners: .

540 ABUTMENTS

- Junctions with flashings: Weathertight and neatly dressed down.