

Specification – Curved Rendered Wall board on a frame

Product Ref: Marmox Multiboard

Product Use: Provision of an external curved substrate on a frame for a render coating.

Manufacturer: Marmox Ltd

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Description: Curved Multiboard is a flexible board comprising a layer of extruded polystyrene covered on both sides with a 1mm thick coating of flexible fibre reinforced polymer concrete.
One face has 2mm wide slices every 20mm running across the 600mm width which penetrate 75% into the board so when squeezed together it can be curved in on itself to create a radius as small as 200mm. The un-serrated face is designed to be tiled/plastered/rendered.

Dimensions: Available in one size only - Width: 600mm, Length: 1200mm, Thickness: 20mm
Curvature: the cuts are only across the 600mm width

Properties: Durable concrete substrate for render systems.
Waterproof barrier.
Thermal Insulation - low thermal conductivity (*c.0.034W/mK*) unaffected by moisture.
Does not expand or contract as temperature and humidity alters.
Fire Classification (with render) = Euroclass B

Authorities: ISO9001.

CE + UKCA: Declaration of Performance for an XPS Insulation Board
EN13164 – T1 – CS(10\Y)400 – CC(2/1/10)115 – WL(T)3

Method 1: **For most domestic applications** the Marmox Curved board is fixed directly to the frame with screws and washers every 300mm with the serrated side on the inside (*in contact with the frame*).

Method 2: **In areas of high traffic, high winds and the potential of impact with the wall,** The Marmox Curved board is fixed onto an intermediate layer of GRG etc. with screws and washers secured through the Marmox layer into the frame behind

Choice of Render: Hairline cracks at the board junctions can occur if the render used has no flexibility after it has cured such as with a 'cement-only' render. Used with an appropriate mesh, Silicone renders, Lime based renders and Thin Coat systems are better suited as they offer flexibility.

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METHOD 1 – DOMESTIC APPLICATIONS

BOARDS LAID VERTICALLY (“PORTRAIT RATHER THAN “LANDSCAPE”)

- Vertical studs supporting the long edges should be 300mm apart so that when the Marmox boards are subsequently fitted, both edges and the middle of these boards will be supported
- Boards should be aligned in a staggered (*Brick-bond*) format when feasible.
- They are fixed with corrosion resistant screws + Marmox washers every c.300mm (*i.e. fixed to 3 vertical studs with 5 screws + washers per stud, 15 fixings per board.*)

BOARDS LAID HORIZONTALLY (“LANDSCAPE” RATHER THAN “PORTRAIT”)

- Vertical studs supporting the short edges should be 300mm apart so that when the Marmox boards are subsequently fitted, both short edges will be supported.
- Boards should be aligned in a staggered (*Brick-bond*) format when feasible.
- They are fixed with corrosion resistant screws + Marmox washers every c.300mm (*i.e. fixed to 5 studs with 3 screws + washers per stud, 15 fixings per board.*)

MARMOX BOARD LAYER FOR BOTH ALIGNMENTS

- A generous bead of MSP-360 is applied to all board edges as the boards are being installed so that it adheres the edge of the board to the next board and also to the frame behind.
- A 5mm expansion gap is left between the boards and the wall which is filled with Marmox MSP-360.
- All screw-fixings are sealed with Marmox MSP-360.
- All connections to building features e.g. window frames are sealed with Marmox MSP-360.

METHOD 2 – COMMERCIAL APPLICATIONS

For use in highly trafficked areas or where the wall is exposed to strong winds

SUB LAYER AND STUDWORK

- Studs should be 300mm apart so that when the Marmox boards are subsequently fitted, all the edges of these boards will be supported - additional horizontal noggins may therefore be required.
- Suitable intermediate stabilising layers are glass reinforced gypsum (GRG) panels, Tricoya sheathing etc. One single layer of 6mm panels would be suitable for most applications.
- When used externally or above first floor height internally, two layers of 6mm panels may be considered.
- The intermediate boarding is fixed to the stud frame in accordance with the manufacturer’s recommendations and must not show any deflection.

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METHOD 2 – COMMERCIAL APPLICATIONS - *CONTINUED*

MARMOX BOARD LAYER

Boards can be laid 'landscape' or 'portrait' providing the board edges are in line with the studs behind the cladding.

- Use corrosion resistant screws approximately 20mm longer than the combined thickness of the Marmox board and the cladding.
- Screws should be placed about 10mm from the edge of the board approximately every 300mm along each stud (*i.e. 15 per board*).
- A bead of MSP-360 is applied to all board edges as the boards are being installed so that it adheres the edge of the board to the next board and also to the cladding behind.
- A 5mm expansion gap is left between the boards and the wall which is filled with Marmox MSP-360.
- All screw-fixings are sealed with Marmox MSP-360.
- All connections to building features e.g. window frames are sealed with Marmox MSP-360.

RENDERING

A traditional two coat silicone render system is recommended.

- Scrim tape (*reinforcing tape*) should be placed over all board joints.
- The board surface is cement based with low porosity so does not need priming prior to rendering, just dampened with water (*Marmox boards do not need priming*).
- Any exposed (XPS) edges should be covered with beading prior to rendering.
- Apply the base coat followed by a layer of reinforcement mesh (*typically 150g/m²*) which is worked into the wet base coat.
- At least 24 hours later, apply the silicone render/top coat.

Limitations:

- Using timber frames which are susceptible to expansion and contraction would increase the risk of hairline cracks at the board joints so should not be used.
- The serrated side of the Marmox Curved board must not be left exposed.
- Compounds containing organic solvents should not come into contact with Marmox board.