EWI 3

Specification - As a rendered external insulation board on top of a timber clad wooden or metal wall frame.

Product Ref: **Marmox Multiboard 10mm and thicker**

Product Use: External insulation of timber or metal framed walls to be render coated.

Manufacturer: Marmox Ltd
Address: Marmox UK Ltd, Caxton House, 101 Hopewell Drive, Chatham, Kent ME5 7NP.
01634 835290; Email: sales@marmox.co.uk; http://www.marmox.co.uk/..

Description: Extruded polystyrene covered on both sides with fibreglass mesh encased in a c.0.75mm layer of polymer modified concrete which permanently bonds the mesh to the polystyrene.

Dimensions: Width = 600mm, Length = 1250mm or 2500mm, Thickness = 10, 12.5mm

Properties: Low thermal conductivity (0.034W/mK) unaffected by moisture.
Does not expand or contract as temperature and humidity alters.

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

Fixing Method:	**Marmox Multiboard is screw fixed to a layer of timber sheeting which has already been fixed to a metal or wooden frame.**

(Marmox Multiboard sheets 20mm and thicker may be fixed directly to the battens – see EWI 4)

- A layer of plywood (*min thickness 12mm*) is fixed to the steel frame or timber frame with battens over the breather membrane to provide a ventilated space.
- Marmox Multiboard, 600mm x ….mm x ….mm is fixed onto on to that plywood using screws + Marmox washers at 300mm centres.
- When practical, the boards are aligned so that the screws going through the Marmox board edges pass through the timber sheeting into the studwork directly underneath.
- All Marmox board edges are sealed using a bead of Marmox MSP-360. Sufficient sealant should be used to enable it to also make contact with the timber cladding below.
- A 5mm gap between the board and the wall/roof junctions is left and filled with MSP360 which is also be used to seal the fixing holes

EWI 3

Specification - As a rendered external insulation board on top of a timber clad wooden or metal wall frame.

Notes:

1) Sealing the boards together with MSP-360 ensures a continuous waterproof barrier protecting against ingress of water. Gaps in the Marmox board layer could allow moisture to get into the plywood behind causing damage.
2) Sealing the boards together with MSP-360 reduces the risk of localised moisture release from the property through the gaps between boards which can result in efflorescence and differential curing of the render.

Rendering:

Applying render to a boarded surface will result in hairline cracks at the board junctions if the render used has no flexibility after it has cured. Cement renders offer no flexibility and therefore are not ideal recommended for board systems.

Lime based renders and Thin Coat systems are better suited as they offer better flexibility.

The board surface is cement based with low porosity so does not need priming but just dampened with water.

Any exposed (foam) edges should be covered with scrim tape + MSP-360 before rendering.

Limitations:

1) Compounds containing organic solvents must not come into contact with Marmox board.

2) Temperatures in excess of 75^{O}C are not appropriate.

3) Marmox Multiboards are waterproof and consequently not breathable. Consideration must therefore be given to improving the building's ventilation to counteract the increased risk of interstitial condensation.

4) The board is a Class E material and therefore this application is not suitable for use on the outside of buildings at heights above 11m.

5) The board is not suitable to support screwed in fixings. To hang items from Marmox clad walls, screws must be placed through the Marmox board into the substrate behind.

7) Boards should, when possible, be laid in a staggered format.

8) This application is Not suitable for use on the outside of buildings at heights above 11m.

9) Thicker boards can be directly fitted to frames if they are at least 20mm (*see spec EWI 4*)