

## Specification – Internal Wall Insulation of Stud Wall clad with Plywood/OSB

**Product Ref:** Marmox Multiboard

**Product Use:** To improve the insulation of a timber clad steel or wooden frame wall which will be coated with plaster.

**Manufacturer:** Marmox Ltd

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

<b>Dimensions allowed for this detail:</b>	STD.	Width: 600mm, Length: 1200mm, Thickness: 4, 6, 10, 12.5, 20, 30, 40, 50, 60mm
	LONG	Width: 600mm, Length: 2400mm, Thickness: 10, 12.5, 20, 30, 40, 50, 60mm
	BIG.	Width: 1200mm, Length: 2400mm, Thickness: 12.5, 20mm

**Properties:** Low thermal conductivity (*c.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 fixed onto a layer of timber sheeting that is fixed to a frame with tile adhesive.

- Boards can be aligned vertically or horizontally ideally in a staggered (*Brick-bond*) format.
- Marmox Multiboard is fixed directly onto stable plywood (*min thickness 12mm*) with a continuous bed of cement-based tile adhesive (*c.3-4mm thick*).
- The boards are sealed to each other by running a bead of MSP-360 along each board edge during installation.
- A 5mm gap is left around the perimeter which is filled with Marmox MSP-360

### Notes:

#### Sealing the boards together with Marmox MSP-360 is important: -

- It 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.
- 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 plaster.
- This method allows items to be subsequently screw fixed to the wall easily
- Marmox MSP-360 is not like silicone – it can be plastered over without affecting the bond.

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**Plastering:** Depending on the required impact resistance required, a single skim or a double application of paster can be put onto the boards.

**To achieve a resistance to impact commensurate with ‘Medium Duty performance’ of plasterboard (as defined by BS5234)**

- Scrim tape (*Marmox reinforcing tape*) is applied over all joints
- Dampen the surface of the Marmox board.
- Apply two coats of plaster – the first onto the Marmox board surface approximately 2mm thick and a further 1mm approximately one hour later.
- (*To achieve heavy duty performance, an additional layer of fibreglass scrim mesh should be added onto the first coating whilst still wet.*)
- Any exposed (*foam*) edges should be covered with scrim tape before plastering.

**For areas where surface impact is will be minimal or light** (*such as above head height*)

- Scrim tape (*Marmox reinforcing tape*) is applied over all joints.
- Any exposed (*foam*) edges should be covered with scrim tape
- Dampen the surface of the Marmox board.
- Apply a single coat of plaster at least 2mm thick.

## Specification - IWI of Stud Wall using a 10mm or 12mm Marmox Multiboard

**Product Ref:** Marmox Multiboard

**Product Use:** IWI – direct to timber or metal framed walls to be plastered.

**Manufacturer:** Marmox Ltd

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

<b>Dimensions allowed for this detail:</b>	STD.	Width: 600mm, Length: 1200mm, Thickness: 10, 12.5mm
	LONG	Width: 600mm, Length: 2400mm, Thickness: 10, 12.5mm
	BIG	Width: 600mm, Length: 2400mm, Thickness: 12.5mm

*THIS SPECIFICATION IS FOR USE WITH 10 AND 12.5MM THICK BOARD WHICH REQUIRE CENTRES AT 300mm. USING BOARDS 20mm OR THICKER ALLOW CENTRES TO BE AT 600mm – SEE IWI-Stud Wall 3*

**Properties:** Low thermal conductivity (c.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:** The Marmox board is screw fixed directly to the steel or wooden frame approximately every 300mm ensuring that all board edges are supported.

### A) IF BOARDS ARE ALIGNED VERTICALLY

- Vertical studs should be 300mm apart.
- Boards should be aligned in a staggered (Brick-bond) format
- Horizontal noggins should be positioned to provide support to board edges every 1200mm
- Boards are fixed with corrosion resistant screws + Marmox washers approximately every 300mm.
  - STD boards are fixed to 3 vertical studs with 5 screws + washers per stud, **15 fixings per board**.
  - LONG boards are fixed to 3 vertical studs with 9 screws + washers per stud, **27 fixings per board**.
  - BIG boards are fixed to 5 vertical studs with 9 screws + washers per stud, **45 fixings per board**.
- A bead of MSP-360 is applied to all board edges so that it forms a waterproof seal between adjacent boards / walls / ceiling / stud frame.
- All screw-fixings are sealed with Marmox MSP-360.

**If sealing between boards and sealing screw holes cannot be guaranteed, a physical VCL membrane should be fitted into the ‘warm side’ of the studs, directly underneath the Marmox board.**

- Boards are now ready to be plastered.

## Specification - IWI of Stud Wall using a 10mm or 12mm Marmox Multiboard

### B) IF BOARDS ARE ALIGNED HORIZONTALLY

- Horizontal studs should be of 300mm apart.
- Boards should be aligned in a staggered (*Brick-bond*) format
- Vertical noggins should be positioned to provide support to board edges 600mm apart.
- Boards fixed with corrosion resistant screws + Marmox washers approximately every 300mm
  - STD boards are fixed to 3 horizontal studs with 5 screws + washers per stud, **15 fixings per board.**
  - LONG boards are fixed to 3 horizontal studs with 9 screws + washers per stud, **27 fixings per board.**
  - BIG boards are fixed to 5 horizontal studs with 9 screws + washers per stud, **45 fixings per board.**
- A bead of MSP-360 is applied to all board edges so that it forms a waterproof seal between adjacent boards / walls / ceiling / stud frame.
- **If sealing between boards and sealing screw holes cannot be guaranteed, a physical VCL membrane should be fitted into the 'warm side' of the studs, directly underneath the Marmox board.**
- Boards are now ready to be plastered.

### PLASTERING:

- Scrim tape (*Marmox reinforcing tape*) is applied over all joints
- Dampen the surface of the Marmox board (*Marmox boards do not need priming*)
- Apply two coats of plaster – the first onto the Marmox board surface approximately 2mm thick and a further 1mm approximately one hour later.
- Any exposed (foam) edges should be covered with scrim tape before plastering.

**To achieve a resistance to impact commensurate with 'Medium Duty performance' of plasterboard (as defined by BS5234)** An additional layer of fibreglass scrim must be added between the two applications of plaster. This additional scrim layer is not necessary when only 'Light Duty performance' is required.

### Notes:

- 1) Sealing the boards together with Marmox MSP-360 ensures a continuous waterproof barrier protecting against ingress of water.
- 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 plaster.

## Specification - IWI of Stud Wall using Marmox Multiboard 20mm and thicker

**Product Ref:** Marmox Multiboard

**Product Use:** IWI - timber or metal framed walls to be plastered.

**Manufacturer:** Marmox Ltd

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

<b>Dimensions allowed for this detail:</b>	STD.	Width: 600mm, Length: 1200mm, Thickness: 20, 30, 40, 50, 60mm
	LONG	Width: 600mm, Length: 2400mm, Thickness: 20, 30, 40, 50, 60mm
	BIG	Width: 600mm, Length: 2400mm, Thickness: 20mm

*THIS SPECIFICATION IS FOR USE WITH BOARDS AT LEAST 20mm OR THICKER WHICH CAN HAVE CENTRES AT 600mm. USING BOARDS THINNER BOARDS REQUIRED CENTRES TO BE AT 300mm – SEE IWI Stud Wall 2*

**Properties:** Low thermal conductivity (c.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

<b>Fixing Method:</b>	<b>The Marmox board is screw fixed directly to the steel or wooden frame approximately every 300mm ensuring that all board edges are supported.</b>
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### A) IF BOARDS ARE ALIGNED VERTICALLY

- Vertical studs are 600mm apart.
- Boards should be aligned in a staggered (Brick-bond) format
- Horizontal noggins should be positioned to provide support to board edges every 1200mm
- Boards are fixed with corrosion resistant screws + Marmox washers approximately every 300mm
  - STD boards are fixed to both vertical studs with 5 screws + washers per stud, **10 fixings per board.**
  - LONG boards are fixed to both vertical studs with 9 screws + washers per stud, **18 fixings per board.**
  - BIG boards are fixed to 3 vertical studs with 9 screws + washers per stud, **27 fixings per board.**
- A bead of MSP-360 is applied to all board edges so that it forms a waterproof seal between adjacent boards / walls / ceiling / stud frame. All screw-fixings are also sealed with Marmox MSP-360.
- **If sealing between boards and sealing screw holes cannot be guaranteed, a physical VCL membrane should be fitted into the 'warm side' of the studs, directly underneath the Marmox board.**
- Boards are now ready to be plastered

## Specification - IWI of Stud Wall using Marmox Multiboard 20mm and thicker

### B) IF BOARDS ARE ALIGNED HORIZONTALLY

- Horizontal studs are 600mm apart.
- Boards should be aligned in a staggered (Brick-bond) format
- Vertical noggins should be positioned to provide support to board edges every 600mm.
- Additional vertical noggins are required to provide support to all short (vertical) edges.
- Horizontal studs may be a maximum of 600mm apart.
- Boards are aligned to the horizontal studs so that both of their long edges are supported by the frame. They are fixed with corrosion resistant screws + Marmox washers approximately every 300mm.
  - STD boards are fixed to both horizontal studs with 5 screws + washers per stud, **10 fixings per board.**
  - LONG boards are fixed to both horizontal studs with 9 screws + washers per stud, **18 fixings per board.**
  - BIG boards are fixed to 3 horizontal studs with 9 screws + washers per stud, **27 fixings per board.**
- A bead of MSP-360 is applied to all board edges so that it forms a waterproof seal between adjacent boards / walls / ceiling / stud frame.
- **If sealing between boards and sealing screw holes cannot be guaranteed, a physical VCL membrane should be fitted into the 'warm side' of the studs, directly underneath the Marmox board.**
- Boards are now ready to be plastered

### PLASTERING:

- Scrim tape (*Marmox reinforcing tape*) is applied over all joints
- Dampen the surface of the Marmox board (*Marmox boards do not need priming*)
- Apply two coats of plaster – the first onto the Marmox board surface approximately 2mm thick and a further 1mm approximately one hour later.
- Any exposed (foam) edges should be covered with scrim tape before plastering.

**To achieve a resistance to impact commensurate with 'Medium Duty performance' of plasterboard (as defined by BS5234)** An additional layer of fibreglass scrim must be added between the two applications of plaster. This additional scrim layer is not necessary when only 'Light Duty performance' is required.

### Notes:

- 1) Sealing the boards together with Marmox MSP-360 ensures a continuous waterproof barrier protecting against ingress of water.
- 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 plaster.