

# Specifications for Internal Plastering and External Rendering of Insulation Boards

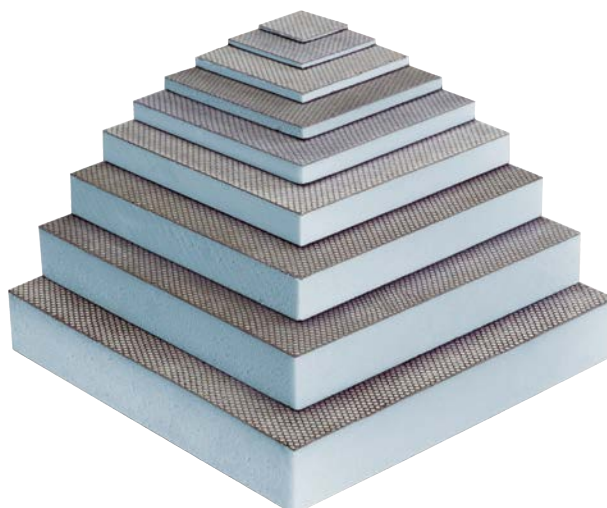


# Specifications for Internal Plastering and External Rendering of Insulation Boards

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## Specifications for Insulation Board - wall and ceiling applications

<b>Product Ref:</b>	<b>Marmox Multiboard</b> – 600mm wide, 1250/2500mm long. 10, 12.5, 20, 30, 40, 50, 60mm thick. Also known as Marmox Board-Pro and Marmox Construction Board
<b>Product Use:</b>	Internal and external board used under plaster or render to improve the U value of a wall or ceiling.

### 1. General Information

This document provides a general introduction to the installation of Marmox Multiboards as internal or external insulating boards with common information followed by links to specific method statements for fitting to various applications.

#### 1.1 Benefit

Marmox Multiboards (*10mm and thicker*) are CE-marked rigid insulation boards with thermal conductivities between 0.033 to 0.036W/mK. The use of Marmox Multiboards as internal or external wall insulation panels will significantly improve that wall's U value and reduce the risks of surface condensation and mould growth.

Marmox Multiboards are significantly lighter than most alternative boards (*for example, 1sq.m of 12.5mm thick Marmox Multiboard weighs 3.7kg whereas a typical plasterboard is 8.7kg*). Coupled with their relatively small size, their low weight makes them easy to fit and reduces manual handling issues, especially on ceilings.

#### 1.2 Applications

Marmox Multiboards are stable and immune to dimensional variations due to changes in temperature and humidity.

Marmox Multiboards should always be fitted in brick-bond pattern so that nowhere do four corners meet and all joints must be covered with Marmox Reinforcement tape

In addition to the four specifications detailed below, Marmox Multiboards can be used to insulate door and window reveals and to create partition walling. Thinner boards such as 6mm are often used in reveals which although not providing as efficient insulation as thicker board will reduce heat loss and typically eliminate the risk of surface condensation and possible subsequent mould growth.

#### 1.3 Storage

Marmox Multiboards must always be stored flat. The boards should be left in their original packaging until being used to keep them clean and dust free.

## Specifications for Insulation Board - wall and ceiling applications

### **1.4 Fire Resistance**

Although Marmox Multiboard is fire resistant, it is a Class E material. Revised building regulations limit the use of any class E materials on the outside of buildings over certain heights and in fire escapes.

Coated with either a cementitious render or gypsum plaster, the fire characteristics of that coating will provide the additional fire resistance commensurate with that coating material. There must be no areas where the foam core is exposed.

### **1.5 water or vapour barrier**

Marmox Multiboards are 100% impermeable to the passage of water. Marmox Multiboards are virtually vapour proof but are not categorised as such therefore a VCL should be incorporated into external specifications.

Note also that they are not breathable so additional ventilation to the property should be considered when installing Marmox Multiboards to external walls.

## **Specification - as a plastered, insulating board on a concrete ceiling**

- Product Ref:** Marmox Multiboard (*aka Marmox board, construction board, tile backer board*)
- Product Use:** Lightweight insulating boards fixed to concrete soffit.
- Manufacturer:** Marmox Ltd
- Address:** Marmox UK Ltd, Caxton House, 101 Hopewell Drive, Chatham, Kent ME5 7NP.  
01634 835290; Email: [info@marmox.co.uk](mailto:info@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, 12.5, 20, 30, 40, 50, 60mm
- Properties:** Low thermal conductivity (0.034W/mK) unaffected by moisture.  
Does not expand or contract as temperature and humidity alters.
- Authorities:** ISO9001.
- CE Marking:** Declaration of Performance for an XPS Insulation Board  
EN13164 – T1 – CS(10\Y)400 – CC(2/1/10)115 – WL(T)3
- General Advice** **The Marmox board adhered with a full bed of cement-based tile adhesive, reinforced with screw fixings.**  
Once fitted, the boards should not exhibit any movement or have any gaps.

<p><b>Specification:</b> Determine location of boards on the ceiling. <b>Screw fixings will be one in each corner and one in the middle of the board</b> Mark fixing points and drill 35mm deep and add plugs. Apply a continuous bed of tile adhesive with a 6mm trowel to one side of the board. Press the board evenly into place and immediately fix with the screws and washers.</p>
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- Treatment:** No priming of the Marmox board is necessary.  
A 5mm gap is left around the perimeter which can be filled with Marmox Multibond.  
Scrim tape (Marmox reinforcing tape) is applied over all joints.  
The surface of Marmox Multiboard is suitable to receive skim coating of plaster.
- Plaster:** Dampen the surface of the Marmox board.
- Note:** Marmox Multibond is not like silicone – it can be plastered over without affecting the bond.
- Limitations:** 1) Compounds containing organic solvents (*including organic based tile sealants*) must not come into contact with Marmox board.  
  
2) Temperatures in excess of 75°C are not appropriate therefore Marmox boards must not be used on ceilings with heating or hot lamps in contact with the board.

## **Specification - as an insulating, plasterable board on a plasterboard or already plastered ceiling**

<b>Product Ref:</b>	<b>Marmox Multiboard (aka Marmox board, construction board, tile backer board)</b>
<b>Product Use:</b>	Lightweight insulating boards fixed to existing ceiling to increase the insulation.
<b>Manufacturer:</b>	Marmox Ltd
<b>Address:</b>	Marmox UK Ltd, Caxton House, 101 Hopewell Drive, Chatham, Kent ME5 7NP. 01634 835290; Email: <a href="mailto:info@marmox.co.uk">info@marmox.co.uk</a> ; <a href="http://www.marmox.co.uk/">http://www.marmox.co.uk/</a> .
<b>Description:</b>	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:</b>	Width = 600mm, Length = 1250mm or 2500mm, Thickness = 20, 30, 40, 50, 60mm
<b>Properties:</b>	Low thermal conductivity (0.034W/mK) unaffected by moisture. Does not expand or contract as temperature and humidity alters.
<b>Authorities:</b>	ISO9001.
<b>CE Marking:</b>	Declaration of Performance for an XPS Insulation Board EN13164 – T1 – CS(10\Y)400 – CC(2/1/10)115 – WL(T)3
<b>General Advice</b>	<b>The Marmox board adhered with a continuous layer of solvent-free adhesive, reinforced with screw fixings.</b>

<b>Specification:</b>	Ensure that the existing ceiling is flat. Determine location of boards on the ceiling. Determine the location of the ceiling joists so that screws can be put through the corners of each board (or near each corner) through the plasterboard into the joists behind. If the texture of the existing ceiling is smooth and flat, coat the back surface of the board with 2 to 3mm layer of tile adhesive or a solvent-free grab adhesive. <i>If the existing ceiling is rough or slightly uneven, coat the back surface of the Marmox board with 3 to 5mm of tile adhesive.</i> Using Marmox washers, screw fix the boards into the joists Add an additional screw in the middle of the board for further support – ideally this should also pass into a timber joist if possible. A 5mm gap is left around the perimeter which can be filled with Marmox Multibond. Scrim tape (Marmox reinforcing tape) is applied over all joints
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<b>Treatment:</b>	No priming of the Marmox board is necessary. The surface of Marmox Multiboard is suitable to receive skim coating of plaster.
<b>Plaster:</b>	Dampen the surface of the Marmox board.
<b>Limitations:</b>	1) Compounds containing organic solvents ( <i>including organic based tile sealants</i> ) must not come into contact with Marmox board.  2) Temperatures in excess of 75°C are not appropriate therefore Marmox boards must not be used on ceilings with heating or hot lamps in contact with the board.

## Specification - as a plastered, insulating ceiling board on rafters

<b>Product Ref:</b>	<b>Marmox Multiboard</b>
<b>Product Use:</b>	Light-weight insulating boards fixed to timber rafters to create ceilings.
<b>Manufacturer:</b>	Marmox Ltd
<b>Address:</b>	Marmox UK Ltd, Caxton House, 101 Hopewell Drive, Chatham, Kent ME5 7NP. 01634 835290; Email: <a href="mailto:info@marmox.co.uk">info@marmox.co.uk</a> ; <a href="http://www.marmox.co.uk/">http://www.marmox.co.uk/</a> .
<b>Description:</b>	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:</b>	Width = 600mm, Length = 1250mm or 2500mm, Thickness = 10, 12.5, 20, 30, 40, 50, 60mm
<b>Properties:</b>	Low thermal conductivity (0.034W/mK) unaffected by moisture. Does not expand or contract as temperature and humidity alters.
<b>Authorities:</b>	ISO9001.
<b>CE Marking:</b>	Declaration of Performance for an XPS Insulation Board EN13164 – T1 – CS(10\Y)400 – CC(2/1/10)115 – WL(T)3
<b>General Advice</b>	<b>The Marmox board is screw fixed directly to the timber rafters.</b> Once fitted, the boards should not exhibit any movement or have any gaps.

**Specification:** Marmox Multiboards (600 x 1250 x .....mm) are aligned so that all long sides are either supported by a rafter or overhang no more than 100mm<sup>1</sup>. Short edges are supported either with a noggin directly above the edge or no more than 100mm from it.  
Boards are fixed to the underside of the rafters and noggins with wood screws and Marmox washers every 300mm along each timber and sealed to each other with a bead of Marmox Multibond.  
A 5mm gap is left around the perimeter and this board to ceiling gap is filled with a bead of Marmox Multibond.

**Treatment:** No priming of the Marmox board is necessary<sup>2</sup>.  
The boards are sealed to each other by running a bead of Multibond along each board edge during installation.  
Marmox Multibond is also used to seal the fixing holes<sup>3</sup>.  
Scrim tape (Marmox reinforcing tape) is applied over all joints.  
The surface of Marmox Multiboard is suitable to receive skim coating of gypsum plaster.

**Plaster:** Dampen the surface of the Marmox board.  
Apply approximately 3mm of plaster (*or two coats approximately 2mm + 1mm thick*) onto the Marmox board surface.

**Notes:** 1) The cementitious coating is modified to have low porosity making this an ideal substrate for typical gypsum plasters. There may however be some unusual surface coatings which require cementitious substrates to be primed in which case those manufacturer's instructions should be adhered to.  
2) Marmox Multibond is not like silicone – it can be plastered over without affecting the bond.

**Limitations:** 1) Compounds containing organic solvents (*including organic based tile sealants*) must not come into contact with Marmox board.  
2) Temperatures in excess of 75°C are not appropriate therefore Marmox boards must not be used on ceilings with heating or hot lamps in contact with the board.

## **Specification - as an internal insulation board on a masonry wall**

**Product Ref:** Marmox Multiboard

**Product Use:** Internal insulation of walls to be plaster coated.

**Manufacturer:** Marmox Ltd

**Address:** Marmox UK Ltd, Caxton House, 101 Hopewell Drive, Chatham, Kent ME5 7NP.  
01634 835290; Email: [info@marmox.co.uk](mailto:info@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, 12.5, 20, 30, 40, 50, 60mm

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

**Authorities:** ISO9001.

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

**General Advice** **The Marmox board is fixed to the wall with a continuous bed of tile adhesive.**  
Once fitted, the boards should not exhibit any movement or have any gaps.

<p><b>Specification:</b> Marmox Multiboards (600 x 1250 x .....mm) are fixed flush against the wall with a cement-based tile adhesive. The edges of the boards are sealed to each other and the adjoining wall and floor with Marmox Multibond.</p>
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**Treatment:** No priming of the Marmox board is necessary<sup>2</sup>.  
The boards are sealed to each other by running a bead of Multibond along each board edge during installation.  
A 5mm gap is left around the perimeter which is filled with Marmox Multibond  
Scrim tape (Marmox reinforcing tape) is applied over all joints.  
The surface of Marmox Multiboard is suitable to receive skim coating of gypsum plaster.

**Plaster:** Dampen the surface of the Marmox board.  
Apply *two coats of plaster approximately 3mm + 2mm thick* onto the Marmox board surface.  
Any exposed (foam) edges should be covered with scrim tape + Multibond before plastering.

**Notes:**

- 1) The wall should be flat enough to allow the boards to be applied without creating any voids behind it. If the wall is too uneven, battens should be considered.
- 2) The cementitious coating is modified to have low porosity making this an ideal substrate for typical gypsum plasters. There may however be some unusual surface coatings which require cementitious substrates to be primed in which case those manufacturer's instructions should be adhered to.
- 3) Marmox Multibond is not like silicone – it can be plastered over without affecting the bond.

**Limitations:**

- 1) Compounds containing organic solvents (*including organic based tile sealants*) must not come into contact with Marmox board.
- 2) Temperatures in excess of 75°C are not appropriate.



**Specification - as a plasterable internal insulation board on a timber-clad wooden or metal wall frame or SIPS Panel**

**Product Ref:** Marmox Multiboard

**Product Use:** Internal insulation of timber or metal framed walls to be plastered.  
**This method (pre-clad with plywood) allows items to be subsequently screw fixed to the wall**

**Manufacturer:** Marmox Ltd  
**Address:** Marmox UK Ltd, Caxton House, 101 Hopewell Drive, Chatham, Kent ME5 7NP.  
01634 835290; Email: [info@marmox.co.uk](mailto:info@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 = 4, 6, 10, 12.5, 20, 30, 40, 50, 60mm

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

**Authorities:** ISO9001

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

**General Advice** Marmox Multiboard is fixed to a layer of timber sheeting fixed to a frame or a SIPS panel with tile adhesive.

**Specification:** Marmox Multiboard, 600mm x ....mm x ....mm is fixed onto stable plywood (min thickness 12mm or SIPS panel) a continuous bed of cement-based tile adhesive (c.3-4mm thick).

All Marmox board edges are sealed using a bead of Marmox Multibond.  
A 5mm gap between the board and the wall/roof junctions is left and filled with Multibond which is also be used to seal the fixing holes

**Notes:**

- 1) Sealing the boards together with Marmox Multibond 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 Multibond 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.

**Plastering:**

*Boards do NOT need priming.*

Dampen the surface of the Marmox board.

All board joints and any exposed (foam) edges should be covered with scrim tape before plastering.

Apply the first plaster coat (c.3mm) onto the Marmox board surface followed subsequently by the finishing coat.

**Limitations:**

1) Scrim tape/sheet must be applied over all joints.

2) 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.

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

4) Temperatures in excess of 75°C are not appropriate.

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

**Specification - as a plasterable internal insulation board direct on a wooden or metal wall frame**

**Product Ref:** Marmox Multiboard

**Product Use:** Internal insulation of 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: [info@marmox.co.uk](mailto:info@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, 12.5, 20, 30, 40, 50, 60mm

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

**Authorities:** ISO9001

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

**General Advice** Marmox Multiboard is screw fixed to a timber or metal frame.

**Specification:** USING SHORT BOARDS (600 X 1250mm)

The frame must support all board edges with centres no greater than 300mm if using 10 or 12.5mm thick board or 600mm if using 20mm board or thicker.

Marmox Multiboards 600mm x 1250mm x ....mm are flush against the frame with all four edges of the board supported. The boards are fixed with screws and washers every 300mm. The board edges are sealed to each other and to the frame beneath and/or adjoining wall/floor using Marmox Multibond.

or

USING LONG BOARDS (600 X 2500mm)

The frame must support all board edges with centres no greater than 300mm if using 10 or 12.5mm thick board or 600mm if using 20mm board or thicker.

Marmox Multiboards 600mm x 2500mm x ....mm are flush against the frame with horizontal noggins placed approximately every 1.2m. The boards are fixed using screws and washers every 300mm along each member. The board edges are sealed to each other and to the frame beneath and/or adjoining wall/floor using Marmox Multibond.

- Notes:**
- 1) Sealing the boards together with Marmox Multibond 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 Multibond 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.

**Plastering:** *Boards do NOT need priming.*  
Dampen the surface of the Marmox board.  
All board joints and any exposed (foam) edges should be covered with scrim tape before plastering. Apply the first plaster coat (c.3mm) onto the Marmox board surface followed subsequently by the finishing coat.

- Limitations:**
- 1) Scrim tape/sheet must be applied over all joints.
  - 2) 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.
  - 3) Compounds containing organic solvents must not come into contact with Marmox board.
  - 4) Temperatures in excess of 75°C are not appropriate.
  - 5) Boards should, when possible, be laid in a staggered format.

## Specification - as a renderable external insulation board fixed with adhesive to a masonry wall

**Product Ref:** Marmox Multiboard

**Product Use:** External insulation cladding and render carrier board for external walls.

**Manufacturer:** Marmox Ltd

**Address:** Marmox UK Ltd, Caxton House, 101 Hopewell Drive, Chatham, Kent ME5 7NP.  
01634 835290; Email: [info@marmox.co.uk](mailto:info@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, 12.5, 20, 30, 40, 50, 60mm

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

**Authorities:** ISO9001.

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

**General Advice:** Marmox Multiboard is fixed to the wall with a continuous bed of tile adhesive.

<p><b>Specification:</b> Marmox Multiboard, 600mm x ....mm x ....mm is fixed onto external walls with a 3 to 5mm layer of flexible grade cement-based tile adhesive applied as a continuous layer. All board edges are sealed using a bead of Marmox MSP-360. Once fitted, the boards should not exhibit any movement or have any gaps. For tiling above a height of 2 metres, the boards should also be mechanically fixed with Marmox fixing dowels or screws and washers positioned every 600mm</p>
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**Treatment:** No priming of the Marmox board is necessary.  
Remove previous coating and fix the board directly onto the brickwork/blockwork – when not possible see alternative specification IB6  
It is very important that the boards are sealed to each other by running a bead of MSP-360 along each board edge during installation.

**Render:** Dampen the surface of the Marmox board.  
Any exposed (foam) edges should be covered with scrim tape + MSP-360 before rendering.  
Apply a first coat of render onto the Marmox board surface.  
Before this hardens, press fibreglass tape into this material.  
Apply the finishing layer of render.

- Limitations:**
- 1) Compounds containing organic solvents must not come into contact with Marmox board.
  - 2) Temperatures in excess of 75°C are not appropriate.
  - 3) The board is not suitable to have items screwed to it. To hang items from Marmox clad walls, screws must be placed through the Marmox board into the substrate behind.
  - 4) Fixing by the dot and dab method is not allowed for external use as this will create a void behind the boards as this would create instability.
  - 5) Boards should, when possible, be laid in a staggered format.
  - 6) 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.
  - 8) This application is NOT suitable for use on the outside of buildings at heights above 18m in England and Wales, 15m in Ireland or 11m in Scotland

## Specification - as a renderable external insulation board fixed mechanically to a masonry wall

**Product Ref:** Marmox Multiboard

**Product Use:** External insulation cladding and render carrier board for external walls.

**Manufacturer:** Marmox Ltd

**Address:** Marmox UK Ltd, Caxton House, 101 Hopewell Drive, Chatham, Kent ME5 7NP.  
01634 835290; Email: [info@marmox.co.uk](mailto:info@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, 12.5, 20, 30, 40, 50, 60mm

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

**Authorities:** ISO9001

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

**General Advice:** Marmox Multiboard is fixed to the wall with mechanical fixings.

**VOIDS BEHIND THE BOARDS MUST BE FILLED.** A layer of cement rich render (*e.g. 3:1 sand:cement*) should be applied to the wall to create a reasonably continuous bed before the Marmox boards are mechanically fixed with fixing dowels.

**Specification:** If using 600 x 1250mm boards, use TWELVE fixings per board. Fixings should be c.2cm from the outside of the board aligned in three rows: one row of four fixings down the middle of the board and two rows of four fixings down each edge.

If using 600 x 2500mm boards, use TWENTY-ONE fixings per board. Fixings should be c.2cm from the outside of the board aligned in three rows: one row of seven fixings down the middle of the board and two rows of seven fixings down each edge.

All board edges and fixing holes are sealed using a bead of Marmox MSP-360. Once fitted, the boards should not exhibit any movement or have any gaps.

**Treatment:** No priming of the Marmox board is necessary.  
It is very important that the boards edges and piercings through the boards are sealed with MSP-360.

**Render:** Dampen the surface of the Marmox board.  
Any exposed (foam) edges should be covered with scrim tape + MSP-360 before rendering.  
Apply a first coat of render onto the Marmox board surface.  
Before this hardens, press fibreglass tape into this material.  
Apply the finishing layer of render.

- Limitations:**
- 1) Compounds containing organic solvents must not come into contact with Marmox board.
  - 2) Temperatures in excess of 75°C are not appropriate.
  - 3) The board is not suitable to have items screwed to it. To hang items from Marmox clad walls, screws must be placed through the Marmox board into the substrate behind.
  - 4) Fixing by the dot and dab method is not allowed for external use as this will create a void behind the boards as this would create instability.
  - 5) Boards should, when possible, be laid in a staggered format.
  - 6) 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.
  - 8) This application is NOT suitable for use on the outside of buildings at heights above 18m in England and Wales, 15m in Ireland or 11m in Scotland



**Specification - as a renderable external insulation board on a timber or metal wall frame or SIPS Panel**

**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: [info@marmox.co.uk](mailto:info@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 Marking:** Declaration of Performance for an XPS Insulation Board  
EN13164 – T1 – CS(10\Y)400 – CC(2/1/10)115 – WL(T)3

**General Advice** Marmox Multiboard is screw-fixed to a layer of timber sheeting fixed to a frame or a SIPS panel.

**Specification:** Marmox Multiboard, 600mm x ....mm x ....mm is fixed onto stable plywood (min thickness 12mm or SIPS panel) 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.

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

**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.
- 3) The inclusion or omission of a primary waterproof/vapour-proof barrier on or behind the frame should be considered in the light of fact that the Marmox layer is acting as a partial vapour barrier

**Rendering:**

*Boards do NOT need priming.*

Dampen the surface of the Marmox board.

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

Apply a first coat of render onto the Marmox board surface; before this hardens, press fibreglass tape into this material.

Apply the finishing layer of render.

**Limitations:**

1) Scrim tape/sheet must be applied over all joints.

2) 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.

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

4) Temperatures in excess of 75°C are not appropriate.

5) The board is not suitable to have items screwed to it. 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 18m in England and Wales. 15m in Ireland or 11m in Scotland.

9) Thicker boards can be directly fitted to frames if they are at least 20mm (*see spec IB7*)