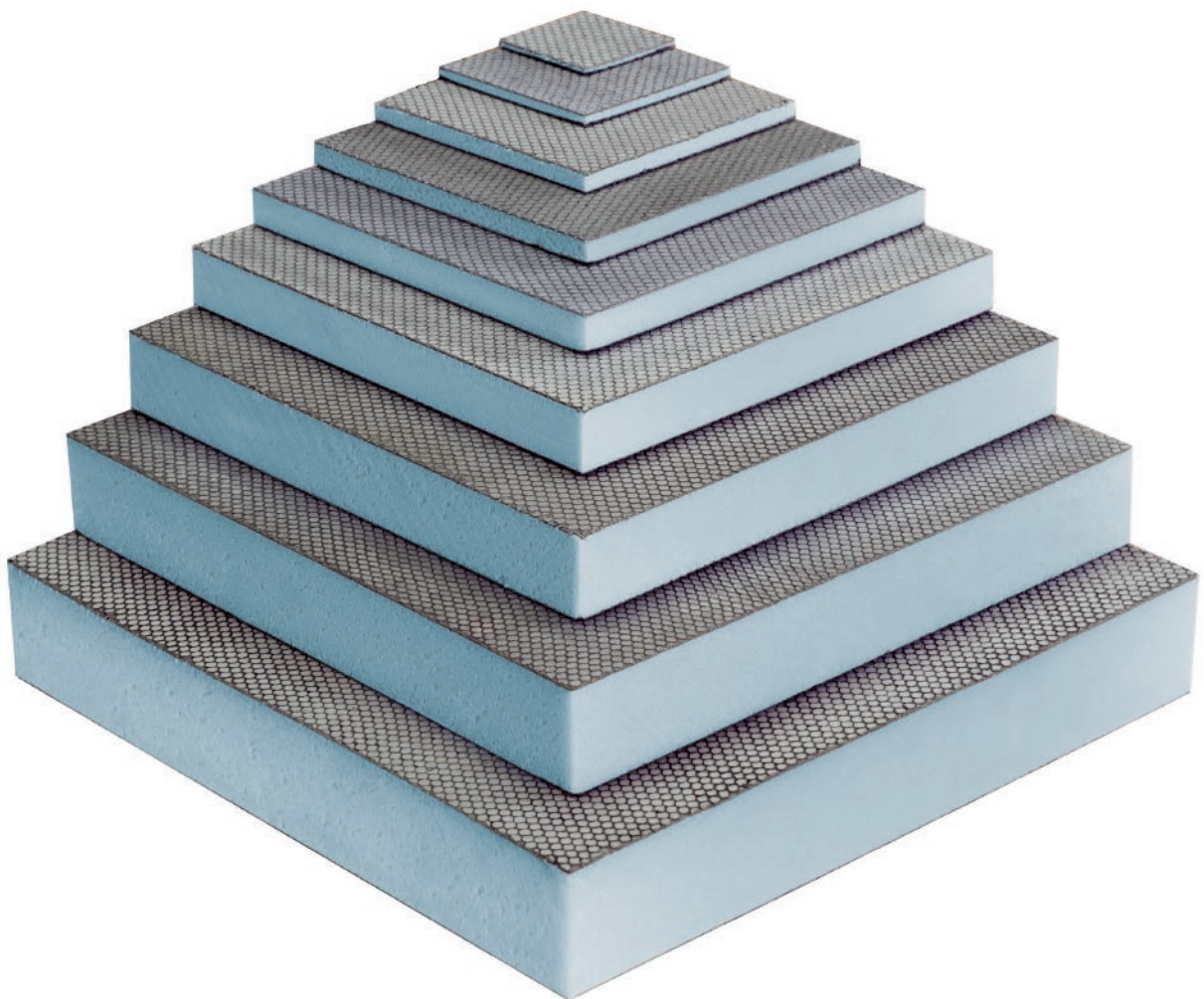


Specifications for Insulation Board wall and ceiling applications



Specifications for Insulation Board - wall and ceiling applications

Product Ref:	Marmox Multiboard – 600mm wide, 1250/2500mm long. 10, 12.5, 20, 30, 40, 50, 60mm thick. Also known as Marmox Board-Pro and Marmox Construction Board
Product Use:	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.

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1.4 Fire Resistance

Marmox Multiboard is a Class 0 material allowing it to meet UK building regulations however, it is also a Euroclass E material and is therefore in certain circumstances considered to be combustible. Its use therefore should not include fire escapes and areas where a higher Euroclass grade is required. 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.

2. Specifications

[Click on the reference below to see the specification sheet](#)

The following links are to the specific Specification:

IB1	Insulation board on ceilings
IB2	Insulation board on internal masonry wall
IB3 (10-12)	Insulation board (10 and 12.5mm) on internal stud wall
IB3 (20-60)	Insulation board (20mm and thicker) on internal stud wall
IB4	Insulation board on external masonry wall

Specification for use as an insulating ceiling board

Product Ref:	Marmox Multiboard
Product Use:	Light-weight insulating boards fixed to timber rafters to create ceilings.
Manufacturer:	Marmox Ltd
Address:	Marmox UK Ltd, Caxton House, 101 Hopewell Drive, Chatham, Kent ME5 7NP. 01634 835290; Email: 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 (Bureau Veritas), Energy Saving Trust Recommended for dry lining insulation.
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 directly to the timber rafters.

Specification:	Marmox Multiboards (600 x 1250 xmm) are aligned so that all long sides are either supported by a rafter or overhang no more than 100mm ¹ . 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.
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Treatment: No priming of the Marmox board is necessary.
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
Marmox Multibond is also used to seal the fixing holes³.
Marmox reinforcement tape (scrim 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 joists should be no more than approximately 450mm apart.
- 2) The cementitious coating is modified to have low porosity making this an ideal substrate for conventional gypsum plaster. 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 therefore Marmox Multiboards 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 ; 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 (Bureau Veritas), Energy Saving Trust Recommended for dry lining insulation.
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.

Specification:	Marmox Multiboards (600 x 1250 xmm) 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.
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Treatment: No priming of the Marmox Multiboard is necessary.
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
Marmox reinforcement tape (scrim 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 Multiboard.
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 conventional gypsum plaster. 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 Multiboard.

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

Specification - as an internal insulation board fixed to a wall frame

- Product Ref:** Marmox Multiboard (10mm + 12.5mm thickness)
- 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; <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 (Bureau Veritas), Energy Saving Trust Recommended for dry lining insulation.
- 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 timber or metal studwork.

Specification: USING SHORT BOARDS (600 X 1250mm)
The frame must support all board edges with centres no greater than 300mm. Marmox Multiboards 600mm x 1250mm xmm 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 the 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. Marmox Multiboards 600mm x 2500mm xmm 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 the adjoining wall/floor using Marmox Multibond.

- Treatment:** No priming of the Marmox Multiboard is necessary.
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
Marmox reinforcement tape (scrim 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.

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Notes:

- 1) The frame should be constructed to ensure that all board edges are supported irrespective of board thickness.
- 2) The cementitious coating is modified to have low porosity making this an ideal substrate for conventional 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 must not come into contact with Marmox board.
- 2) Centres MUST be no more than 300mm irrespective of the board thickness
- 3) Temperatures in excess of 75^oC are not appropriate.

Specification - as an internal insulation board fixed to a wall frame

- Product Ref:** Marmox Multiboard (20mm or thicker)
- 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; <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 = 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 (Bureau Veritas), Energy Saving Trust Recommended for dry lining insulation.
- 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 timber or metal studwork.

Specification: USING SHORT BOARDS (600 X 1250mm)
Marmox Multiboard 600mm x 1250mm xmm 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 the adjoining wall/floor using Marmox Multibond.

or

USING LONG BOARDS (600 X 2500mm)
Marmox Multiboard 600mm x 2500mm xmm 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 the adjoining wall/floor using Marmox Multibond.

- Treatment:** No priming of the Marmox Multiboard is necessary.
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
Marmox reinforcement tape (scrim 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.

Specifications for Insulation Board - wall and ceiling applications

Notes:

- 1) The frame should be constructed to ensure that all board edges are supported irrespective of board thickness.
- 2) The cementitious coating is modified to have low porosity making this an ideal substrate for conventional 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 must not come into contact with Marmox Multiboard.
- 2) Temperatures in excess of 75°C are not appropriate.

Specification - as an external insulation board on a masonry wall

- Product Ref:** Marmox Multiboard
- Product Use:** External insulation cladding of 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; <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.
Immune to freeze-thaw damage. Does not expand or contract as temperature and humidity alters.
- Authorities:** ISO9001 (Bureau Veritas), Energy Saving Trust Recommended for dry lining insulation.
- 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>Specification: Marmox Multiboard, 600mm xmm xmm is fixed onto external walls with a 3 to 5mm layer of flexible grade cement-based tile adhesive applied as a continuous layer and all board edges are sealed using a bead of Marmox Multibond. For tiling above a height of 2 metres, the boards should also be mechanically fixed with screws and washers positioned every 600mm.</p>
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- Treatment:** No priming of the Marmox board is necessary.
When practical, remove previous coating and fix the board directly onto the brickwork/blockwork.
- Ensure there are no air voids between the board and the wall and fill in any voids with a simple sand/cement concrete.
Marmox Multiboards are sealed to each other by running a bead of Multibond along each board edge during installation.
- Render:** Dampen the surface of the Marmox board.
Any exposed (foam) edges should be covered with scrim tape + Multibond 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.

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- Limitations:**
- 1) Marmox Reinforcement Tape (scrim tape) must be applied over all joints, Marmox self-adhesive waterproof tape should not be used beneath render.
 - 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 Multiboard.
 - 4) Temperatures in excess of 75°C are not appropriate.
 - 5) It is not possible to hang items to Marmox Multiboard clad walls simply by screw-fixing into the Marmox Multiboard. To attach items such as shelving, gate posts etc., screws must be placed through the Marmox board and fixed into the substrate beneath.
 - 6) 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.
 - 7) Marmox Multiboards should, when possible, be installed in a staggered format.