

## Specification: Tile backer board on external masonry Walls

This document contains three related specifications / applications for using Marmox Multiboard as a tile backer board on external masonry walls.

- Ext Wall 1 = tiling a brick / concrete / concrete block wall
- Ext Wall 2 = if the wall is aircrete / thermal block
- Ext Wall 3 = if the wall has a render coating or has been painted

## Specification: Tile backer board on external masonry Walls

**Product Ref:** Marmox Multiboard

**Product Use:** Intermediate substrate to ceramic and stone tiling on uncoated external concrete or brick walls.

**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/>.

**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 application:</b>	STD. Width: 600mm, Length: 1200mm, Thickness: 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:** Decoupling between the tiled surface and the sub-structure, thermal Insulation unaffected by moisture, waterproofing, and enhanced tile adhesion.

**Authorities:** ISO9001  
BS EN 5385-2: Code of practice for the design and installation of external ceramic wall tiling.

**CE+UK Marking:** EN13164 – T1 – CS(10\Y)400 – CC(2/1/10)115 – WL(T)3

**Fixing Method:** The Marmox board is fixed to the bare masonry wall with a continuous layer of tile adhesive.

- The concrete, concrete blocks or bricks should be primed in accordance with the tile adhesive manufacturer's recommendations.
- Boards can be aligned vertically or horizontally in a staggered (*Brick-bond*) format.
- Marmox Multiboards are fixed onto a continuous bed of external grade tile adhesive (3-5mm thick).
- A bead of Marmox sealant (Marmox MSP-360) is applied to all board edges.
- For tiling above a height of 2 metres, the boards are also mechanically fixed with screws and washers positioned every 600mm.
- All screw-fixings are sealed with Marmox MSP-360.
- Scrim tape (*reinforcing tape*) should be placed over all board joints prior to tiling with adhesive.

## Specification: Tile backer board on external masonry Walls

### Notes:

1. A 5mm movement gap should be left between the Multiboard and any restraining surface which should subsequently be filled with Marmox MSP-360.
2. Sealing the boards together with Marmox exterior grade sealant (MSP360) ensures a continuous waterproof barrier protecting against ingress of water. This sealant should be squirted into the fixing holes before inserting the anchors.
3. Compounds containing organic solvents must not come into contact with Marmox board.
4. Temperatures in excess of 75°C are not appropriate.
5. Fixing by the dot and dab method (*using tile adhesive and concrete dowels*) is not ideal for external use as this could create unventilated voids behind the boards which could accumulate moisture.
6. This application is not suitable for use on the outside of buildings at heights above 18m in the England + Wales or above 11m in Scotland or Ireland.

## Specification: Tile backer board on external aircrte block Walls

**Product Ref:** Marmox Multiboard

**Product Use:** Intermediate substrate to ceramic and stone tiling on external walls made from aircrte, AAC type block.

**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/>.

**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 application:</b>	STD.	Width: 600mm, Length: 1200mm, Thickness: 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:** Decoupling between the tiled surface and the sub-structure, thermal Insulation unaffected by moisture, waterproofing, and enhanced tile adhesion.

**Authorities:** ISO9001  
BS EN 5385-2: Code of practice for the design and installation of external ceramic wall tiling.

**CE+UK Marking:** EN13164 – T1 – CS(10\Y)400 – CC(2/1/10)115 – WL(T)3

**Fixing Method:** The Marmox board is fixed to the brick, concrete or aircrte block wall with screws and washers or for aircrte type blocks, 'thermal block fixings' and washers.

- Ensure the wall is flat, *i.e.* <3mm over a 2m span.
- Boards can be aligned vertically or horizontally in a staggered (*Brick-bond*) format.
- Boards are fixed to the blocks using corrosion resistant screws and plugs and Marmox washers or for AAC type blocks, 'thermal block fixings' with washers (*approx. 40mm*) which are compatible with that fixing.

### If the boards are aligned vertically,

- Marmox Multiboard - 600 x 1200mm is fixed to the wall with three vertical rows c.300mm apart, of four thermal block fixings + washers (*12 per STD board*)
- Marmox Multiboard - 600 x 2400mm is fixed to the wall with three vertical rows c.300mm apart, of seven thermal block fixings + washers (*21 per LONG board*)
- Marmox Multiboard - 1200 x 2400mm is fixed to the wall with five vertical rows c.600mm apart, of seven thermal block fixings + washers (*35 per BIG board*)

## Specification: Tile backer board on external aircrete block Walls

### If the boards are aligned vertically,

- Marmox Multiboard - 600 x 1200mm is fixed to the wall with five vertical rows c.300mm apart, of three fixings + washers (*15 per STD board*)
- Marmox Multiboard - 600 x 2400mm is fixed to the wall with nine vertical rows c.300mm apart, of three fixings + washers (*27 per LONG board*)
- Marmox Multiboard - 1200 x 2400mm is fixed to the wall with nine vertical rows c.300mm apart, of four thermal block fixings + washers (*36 per BIG board*)
- Scrim tape (*reinforcing tape*) should be placed over all board joints prior to tiling with adhesive.

### Notes:

1. Marmox washers or similar washers of similar diameter (c.40mm) must be used with the thermal block fixings holding the Marmox boards.
2. All connections to building features e.g. window frames, are sealed with Marmox MSP-360.
3. Sealing the boards together with Marmox exterior grade sealant ensures a continuous waterproof barrier protecting against ingress of water. This sealant should be squirted into the fixing holes before inserting the anchors.
4. A 5mm movement gap should be created between the Multiboard and any restraining surface which should be filled with Marmox MSP360.
5. Compounds containing organic solvents must not come into contact with Marmox board.
6. Temperatures in excess of 75°C are not appropriate.
7. This application is not suitable for use on the outside of buildings at heights above 18m in the England + Wales or above 11m in Scotland or Ireland.
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## Specification: Tile backer board on external rendered Walls

**Product Ref:** Marmox Multiboard

**Product Use:** Intermediate substrate to ceramic and stone tiling external walls which have an existing render coating.

**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/>

**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 application:</b>	STD. Width: 600mm, Length: 1200mm, Thickness: 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:** Decoupling between the tiled surface and the sub-structure  
thermal Insulation unaffected by moisture  
waterproofing  
enhanced tile adhesion.

**Authorities:** ISO9001  
BS EN 5385-2: Code of practice for the design and installation of external ceramic wall tiling.

**CE+UK Marking:** EN13164 – T1 – CS(10\Y)400 – CC(2/1/10)115 – WL(T)3

**Fixing Method:** The Marmox board is fixed to the wall with both tile adhesive and fixings. The rendering must be level and sound with no damaged or loose areas of render.

- The rendered surface must be sound and flat and any loose sections should be removed and replaced with concrete.
- Boards can be aligned vertically or horizontally in a staggered (*Brick-bond*) format.
- Boards are waterproof so can be in contact with the ground.
- Marmox Multiboard is fixed onto a continuous bed of external grade tile adhesive (3-5mm thick). *The tile adhesive must completely cover the layer of existing render.*
- Determine the nature of the wall behind the render and select appropriate fixings for that type of wall. After curing, the bonding is reinforced with mechanical fixings and Marmox washers.
- As an alternative to screws, washers and plugs, Marmox Dowel fixings may be used for concrete (*but not aircrete*) blocks.

## Specification: Tile backer board on external rendered Walls

### If the boards are aligned vertically,

- Marmox Multiboard - 600 x 1200mm is fixed to the wall with three vertical rows c.300mm apart, of four thermal block fixings + washers (**12 per STD board**)
- Marmox Multiboard - 600 x 2400mm is fixed to the wall with three vertical rows c.300mm apart, of seven thermal block fixings + washers (**21 per LONG board**)
- Marmox Multiboard - 1200 x 2400mm is fixed to the wall with five vertical rows c.600mm apart, of seven thermal block fixings + washers (**35 per BIG board**)

### If the boards are aligned vertically,

- Marmox Multiboard - 600 x 1200mm is fixed to the wall with five vertical rows c.300mm apart, of three fixings + washers (**15 per STD board**)
- Marmox Multiboard - 600 x 2400mm is fixed to the wall with nine vertical rows c.300mm apart, of three fixings + washers (**27 per LONG board**)
- Marmox Multiboard - 1200 x 2400mm is fixed to the wall with nine vertical rows c.300mm apart, of four thermal block fixings + washers (**36 per BIG board**)
- Marmox MSP-360 sealant should be used to seal the board edges together
- Scrim tape (reinforcing tape) should be placed over all board joints prior to tiling with adhesive.

### Notes:

1. Marmox washers or similar washers of similar diameter (c.40mm) must be used with the thermal block fixings holding the Marmox boards.
2. A 5mm movement gap should be left between the Multiboard and any restraining surface which should be filled with Marmox MSP360.
3. Compounds containing organic solvents must not come into contact with Marmox board.
4. This application is not suitable for use on the outside of buildings at heights above 11m.