



**m a r m o x**

**Construction Boards**  
**MANUAL**

**Quick cost-effective solutions for the building industry**



## WARRANTY

Marmox Boards come with 10 years warranty from the date of purchase.

Marmox Australia believes that information and recommendations in this brochure are accurate and reliable. However, it is not intended to be a complete statement of all relevant data.

Marmox Australia warrants that its products are free from defects caused by faulty manufacture or materials.

As we do not have knowledge of site conditions or execution of fixing the boards we accept no liability for damage which may arise as a result of installation. It is the buyer's responsibility to determine whether Marmox products are suitable for their specific need or not.

For Warranty details contact us on 1300 783 693.



## STORAGE AND HANDLING

These products must be stored flat on level platform away from exposure to direct sunlight.

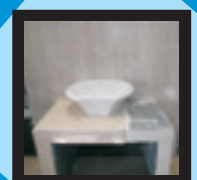
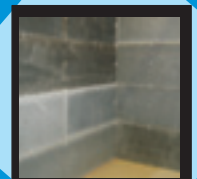
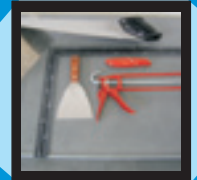
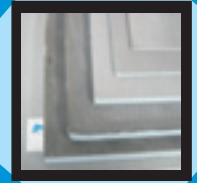
Materials must be kept dry during installation.

Care must be taken to avoid damage to edges, corners and surfaces.

Wear protective gear i.e. dust mask, safety goggles when working with Marmox boards.

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What is

**m** a r m o x

Marmox is a high performance waterproof **EXTRUDED POLYSTYRENE BOARD** faced on both sides with fibreglass mesh embedded into cement polymer mortar. It can be used on walls, ceilings, floors; in bathrooms, kitchens, etc.

Characteristics of

**m** a r m o x



- High compressive strength (withstand 30 t/m<sup>2</sup>)
- Rigid
- Waterproof
- Excellent heat insulation
- Sound insulation (20 decibels)
- High U-value (2.7 W/m<sup>2</sup>k for 10 mm)
- Extruded polystyrene closed cell structure retains R-value even in moist conditions

Advantages of

**m** a r m o x



- Ideal substrate for thin bed tiling
- Easy to cut with knife or saw
- Will not rot
- Light weight (3.4 kg/m<sup>2</sup> for 10mm thickness) easily carried by one person
- Environmentally friendly, CFC and HCFC free
- Cost-effective
- There is no limitations for applications

**m a r m o x** *BOARDS*

can be fixed to timber or concrete floors using flexible tile adhesive and fasteners.

**m a r m o x** *BOARDS*

can be fixed to metal or timber frame walls and ceilings using fasteners.

**m a r m o x** *BOARDS*

can be used to bring uneven walls to level, an ideal feature for renovation works.

**m a r m o x** *BOARDS*

can be fixed on top of existing tiles or plaster boards.

**m a r m o x** *BOARDS*

can be installed under tile floor heating as barrier against heat loss in the slab, saving on heat-up time and running cost.

**m a r m o x** *BOARDS*

can be used for enclosing the simplest rectangular to the most intricate shaped bathtub.

**m a r m o x** *BOARDS*

can be used for bathroom furniture construction, such as shelves, vanity units, shower seats, etc.

**m a r m o x** *BOARDS*

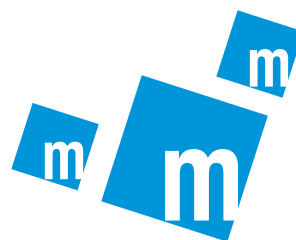
are ideal for shower partitions in health clubs.

**m a r m o x** *BOARDS*

can be used to build planter boxes.

**m a r m o x** *ANGLES*

are used for enclosing pipes,



## Specifications

Density	DIN53420	36 kg/m <sup>3</sup>
Thermal conductivity	DIN52612	0.027 W/mk
Thermal conductivity (5 years)	DIN52612	0.032 W/mk
Compressive strength	DIN53421	300 KN/m <sup>2</sup>
Water absorption (immersion)	DIN53428	0.2% by vol.
Water absorption (capillary)	DIN53428	NIL
Flammability	BS 476 part 6,7	class 0
	DIN4102	B1
Coef. of expansion		30x10 <sup>-6</sup>

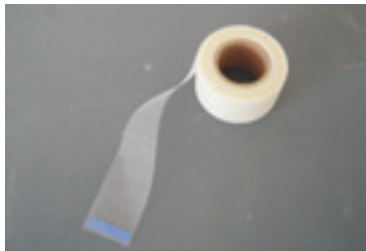
## Board dimensions (mm)

There is a recommended thickness for each application

THICKNESS	WIDTH	LENGTH
4	600	1250
6		
10	600	1250/2500
12.5		
20		
30		
40		
50		
60		
80		



# Accessories



Fibreglass tape



36 mm washers

**Marmox boards  
supplied  
with accessories  
for easy  
installation**

## WB (wall brackets)

**WBs** are used for connecting the boards with the wall or floor

The bracket spikes are pressed firmly into the surface of the board, then the board is positioned and screwed through the holes.

## PB (perpendicular brackets)

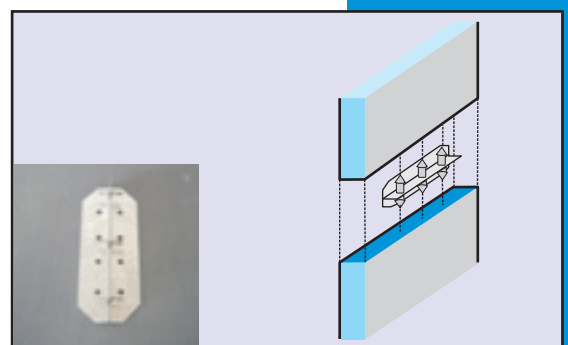
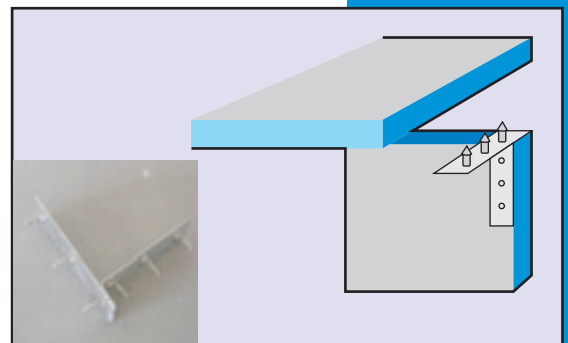
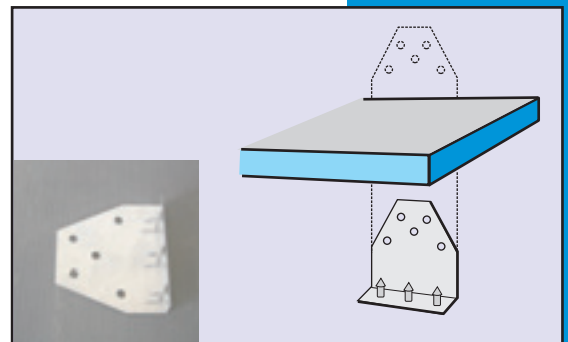
**PBs** are used to hold two boards perpendicular (such as bath tub corners) while the adhesive is drying.

The bracket spikes are pressed firmly into the surface of each board after applying silicone on adjoining areas.

## JB (joint brackets)

**JBs** are used to connect two boards together in line (i.e. partition walls).

The bracket spikes are pressed in the blue core of each board after applying silicone on joining surfaces.



## Jagged Boards

Prefabricated curved boards have countless applications in the building industry. They are especially useful in bathroom constructions and apart from having aesthetic values they are proven time savers.

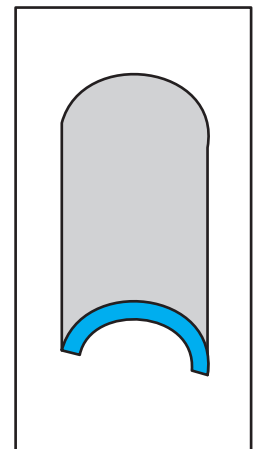
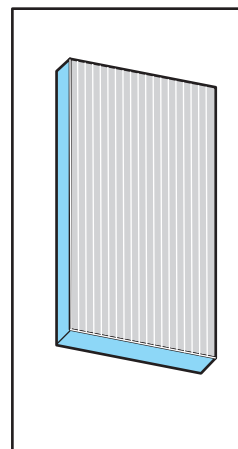
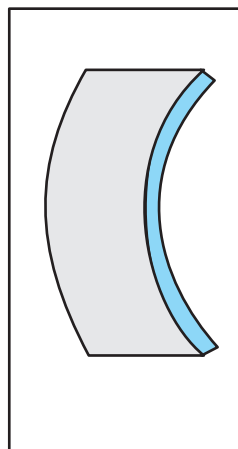
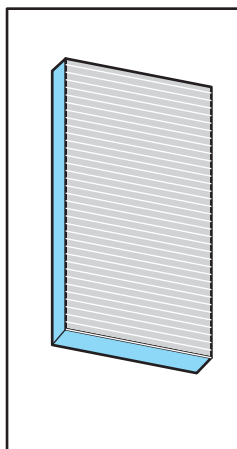
Jagged boards are pre cut boards either in the longitudinal or transverse directions.

It is ideal to form rounded steps around bath tubs, cladding around columns.

It can be used in conjunction with all Marmox fixing accessories. All joints must be reinforced with fibreglass tape embedded in a layer of flexible tile adhesive.

THICKNESS	WIDTH	LENGTH
20	600 (longitudinal)	2500
30	600 (longitudinal)	2500
20	600 (transverse)	1250
30	600 (transverse)	1250

Measurements in mm

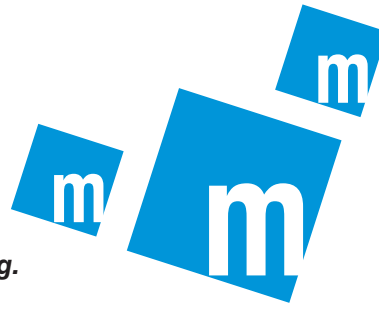


*Transverse jaggings*

*Longitudinal jaggings*



# Pipe boxes



*Enclosing pipes by prefabricated angle boards make the job easy especially in wet areas. They are strong providing ideal surfaces for tiling.*

## PROCEDURES

Use **WBs** to fix the box to the wall.

For waterproofing place a bead of silicone to the edges of the board before offering in place, and inside angle of the boards prior to folding.

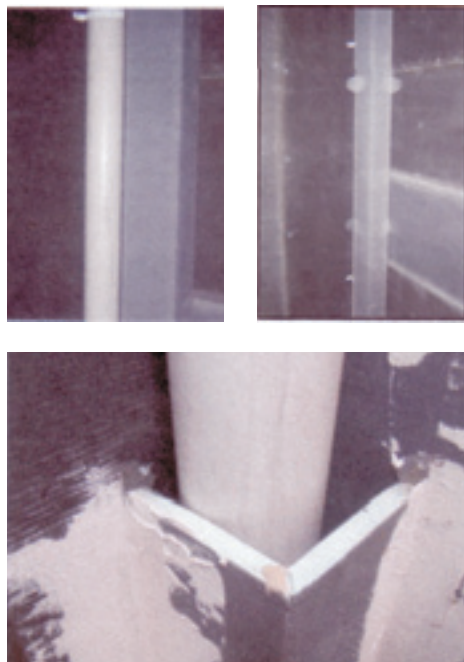
Finish the joints with fibreglass tape and flexible tile adhesive.

### DIMENSIONS (mm)

THICKNESS	WIDTH	LENGTH
20	150x150	1250/2500
20	200x200	1250/2500
20	300x300	1250/2500
20	200x400	1250/2500

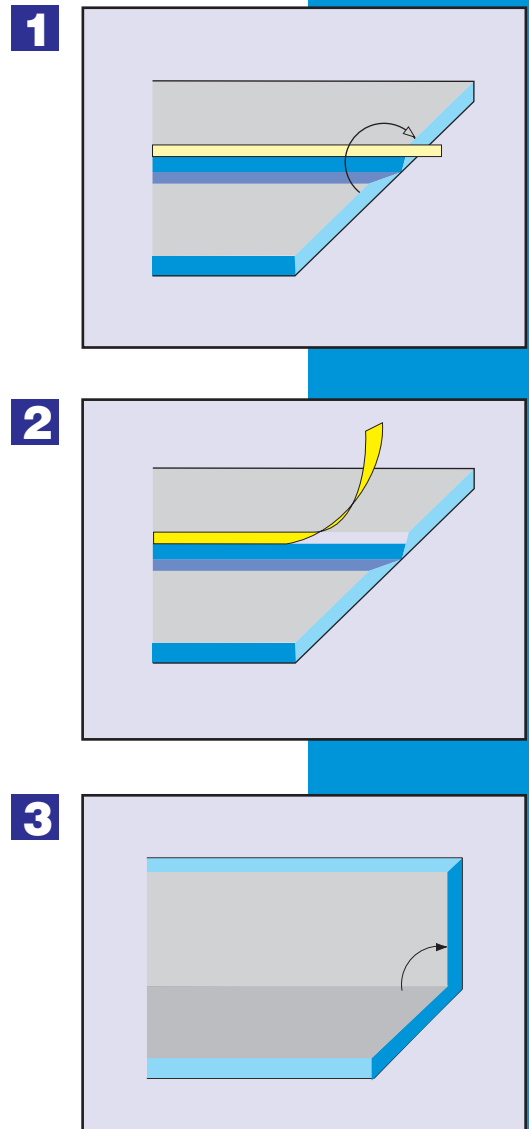
*Boards can be tiled or plastered and painted.*

## Prefab angle boards

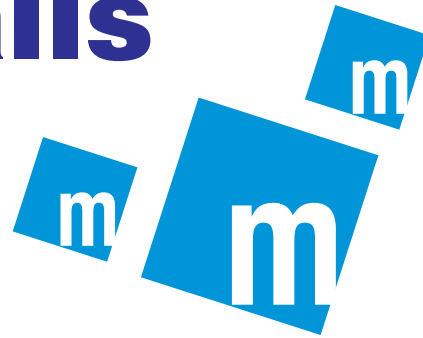


# Pipe boxes

## Installation



# Walls



## How to use Marmox boards on walls?

### METAL AND TIMBER FRAME WALLS

**Marmox boards can be fixed horizontally or vertically to timber or metal frame walls.**

**For better thermal insulation use thicker boards (min. 20mm) closely butted.**

#### PROCEDURES

Vertical studs are at 600 mm, noggins at 600 mm. Board edges must be supported by noggings.

Cut around all penetrations.

Use 15 galvanized screws per board, min. 30 mm from edges.

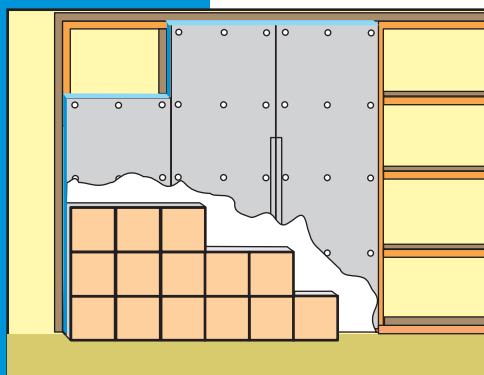
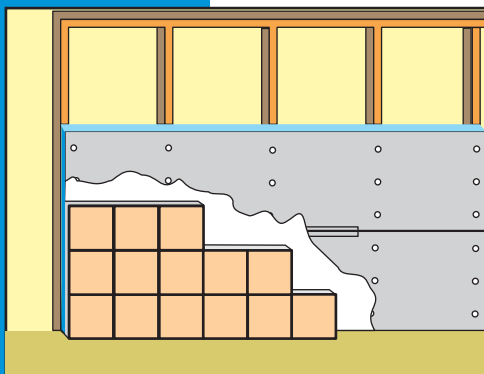
Screws to be tightened till washers bite the board surface then level the washer with a rubber mallet.

Cover joints by self adhesive fibreglass tape embedded in a layer of flexible tile adhesive.

Once the adhesive has hardened tiles can be fixed and grouted.

#### WATERPROOFING

For waterproof construction all joints, penetrations and fastener locations must be treated by approved polyurethane waterproof as per manufacturer's recommendation.



## BRICK AND CONCRETE WALLS

### EVEN WALLS

#### How to fix Marmox boards to even walls?

##### PROCEDURES

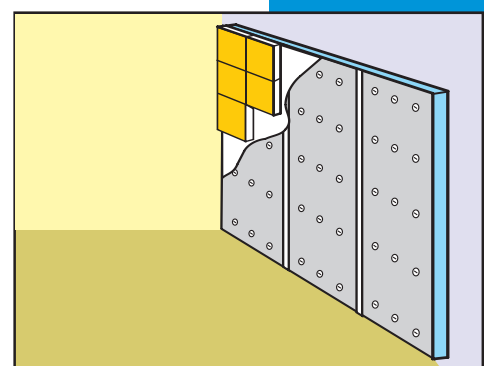
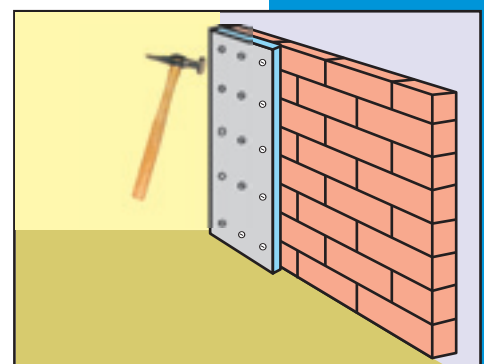
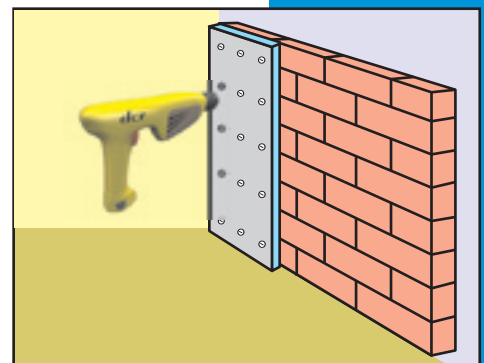
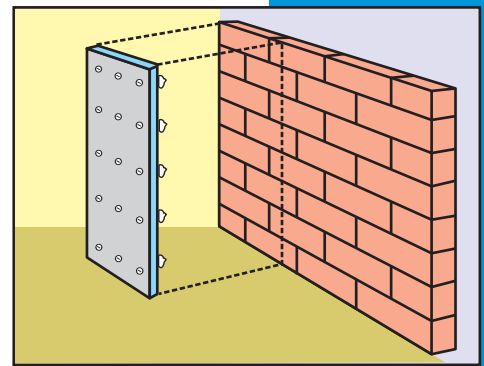
For clean and sound wall use flexible tile adhesive. Coat the wall surface or apply adhesive directly to the board surface (min. thickness 10 mm).

Comb out with 10 mm trowel creating a ribbed adhesive bed. Offer up boards and align vertically and horizontally bed firmly into place.

If adhesion can not be achieved by adhesive use dowels, screws and washers at the rate of 15 per sheet. Use min. 20 mm boards.

Cover all joints with fibreglass tape embedded in flexible tile adhesive.

Fixing uneven walls



### UNEVEN WALLS

#### How to fix Marmox boards to uneven walls?

*Uneven wall surfaces should be battened out. If it is not possible use dowels, screws and washers.*



##### PROCEDURES

Drill the board at the rate of 15 dowels per board (min. 20 mm thick).

Place dabs of adhesive on the holes then offer up and align the boards vertically and horizontally bed firmly into position.

When the adhesive dried drill the board through the holes and the wall, insert and hammer dowels, screws and washers to finish level with board surface.

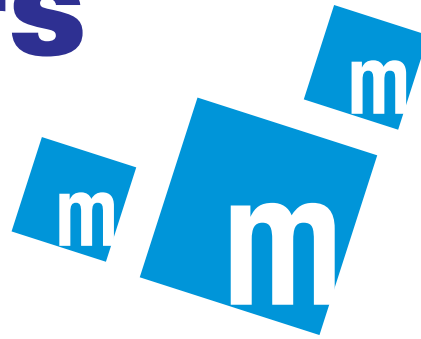
Tape all joints embedded in flexible tile adhesive.

For excessive gaps use Marmox strips to fill behind the board.

##### WATERPROOFING

For waterproof construction all joints, penetrations and fastener locations must be treated by approved polyurethane waterproof as per manufacturer's recommendation.

# Floors



## How to use Marmox boards on floors?

### FIXING TO CONCRETE FLOORS

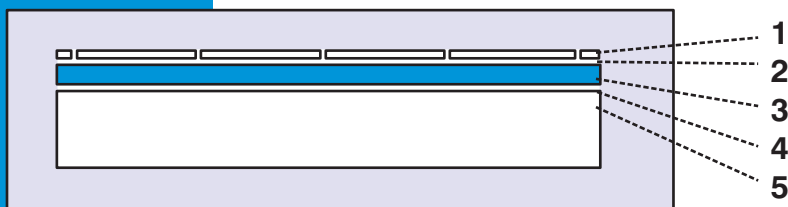
**The concrete floor should be level and dust free. New concrete should be cured before fixing Marmox boards.**

#### PROCEDURES

Allow 3 mm gap between wall and edge of board. Apply a bed of flexible adhesive to the concrete slab with a 10 mm notched trowel. Boards to be bedded in a staggered pattern ensuring no voids remain beneath them. Depressions should be filled with mortar.

When the adhesive dry tape all joints with fibreglass tape embedded in flexible tile adhesive. Install tiles using flexible tile adhesive.

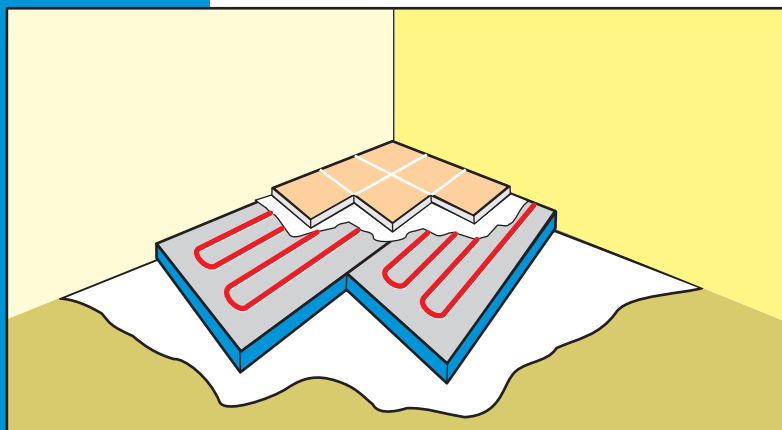
NB: Movement joints must not be bridged by Marmox boards. Joints should be maintained through the board and tile bed, and should be sealed in the appropriate manner.



1 Ceramic tiles 2+4 Flexible tile adhesive  
3 Marmox board 5 Concrete floor

#### WATERPROOFING

For waterproof construction all joints, penetrations must be treated by approved polyurethane waterproof membrane as per manufacturer's recommendation.



### **m a r m o x** BOARDS

*are high performance insulation boards. When placed under tile heating systems Marmox act as a barrier preventing heat loss through the slab, saving on heat up time and running cost.*

## FIXING TO TIMBER FLOORS

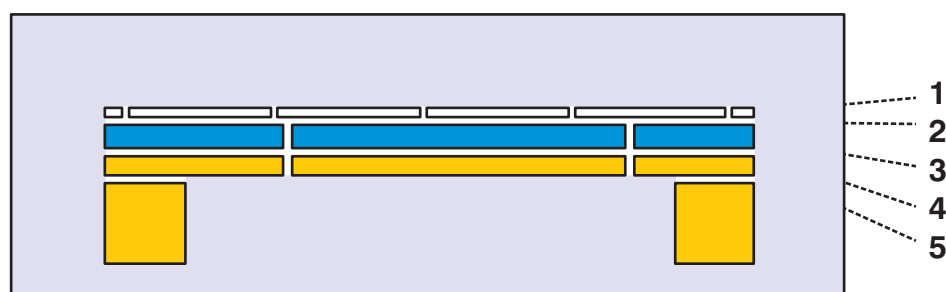
**The timber floor must be rigid and flat. It must be clean and completely dry before fixing Marmox boards.**

### PROCEDURES

Apply a bed of suitable flexible tile adhesive (not solvent based) to the timber floor with a 10 mm notched trowel. Boards (min. 10 mm) must be laid in a staggered pattern. Ensure no voids remain under boards.

When adhesive dried tape all joints with fibreglass tape embedded in flexible tile adhesive. Secure the boards with screws and washers at the rate of 15 per board till the washers bite the surface of the board starting at min. 30 mm from edges.

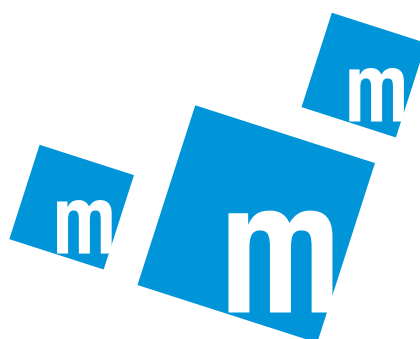
Floor heating elements can be installed on top of the Marmox board above the timber floor.



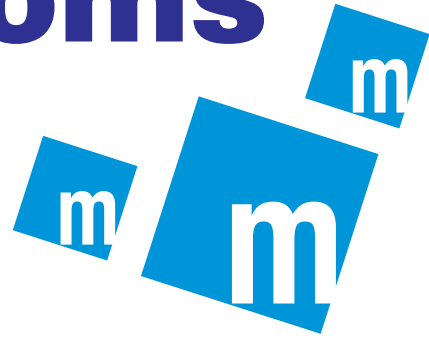
- 1 Ceramic tiles
- 2 Flexible tile adhesive
- 3 Marmox board
- 4 Flexible tile adhesive
- 5 Wood structural floor

### WATERPROOFING

For waterproof construction all joints, penetrations must be treated by approved polyurethane waterproof membrane as per manufacturer's recommendation.



# Bathrooms



## How to use Marmox boards in bathrooms?

### ENCLOSING BATH TUBS

*Enclosing bath tubs could be frustrating and time consuming for tilers. With Marmox boards the job can be done in 4 easy steps.*

#### PROCEDURES

Measure two sides of the tub to be enclosed. Cut the boards to suit.

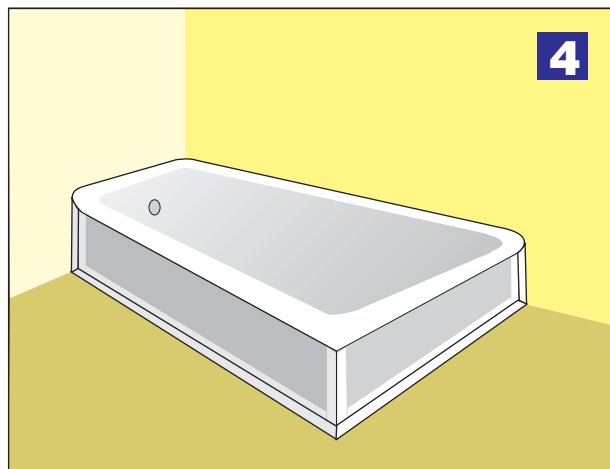
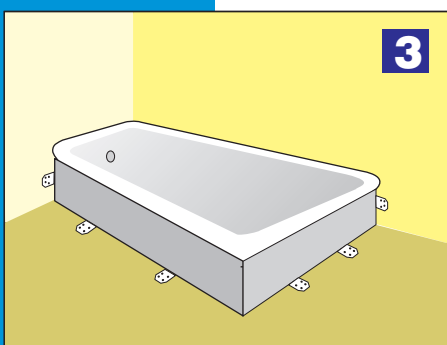
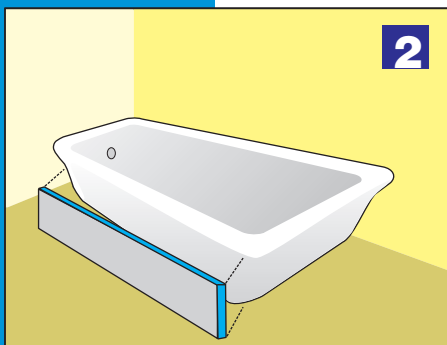
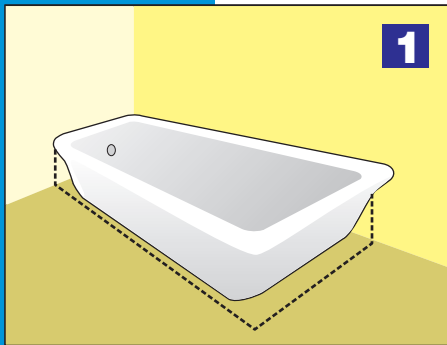
Mark location of **WBs** (wall brackets) on the floor allowing for thickness of tile, adhesive and 30 mm board.

Use brackets (**WB** on sides and floor, **PB** to hold the sides together at 90°).

For waterproofing apply silicone to all edges of the panels.

Apply fibreglass tape embedded in flexible tile adhesive to all joints.

When dry the surfaces are ready for tiling.



## BUILD AROUND CORNER BATHS/SPAS

**Corner baths and spas are hard to be enclosed as pipes and access panels often causing problems. Access for pump maintenance is usually difficult.**

**Using Marmox boards cutting construction time considerably and finished surfaces are ready for tiling.**

### PROCEDURES

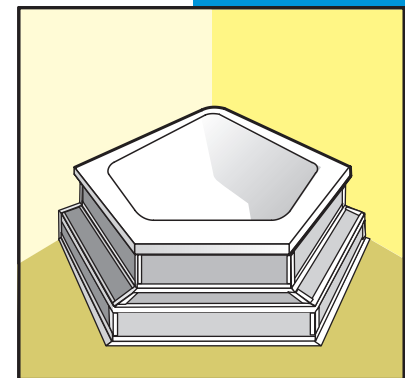
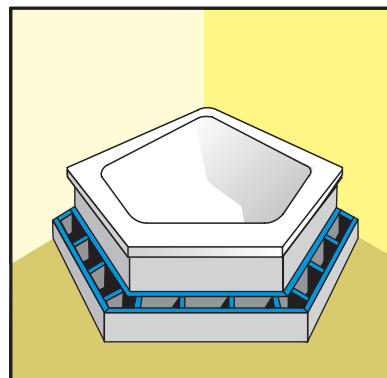
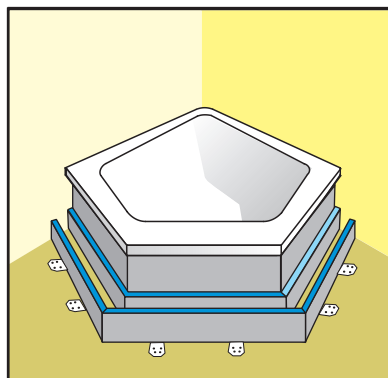
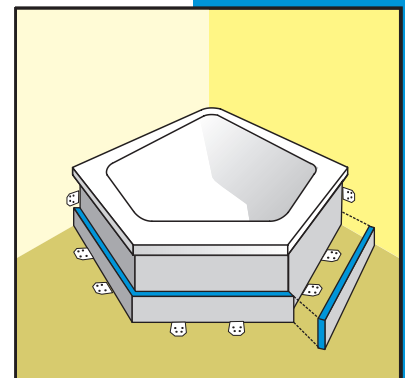
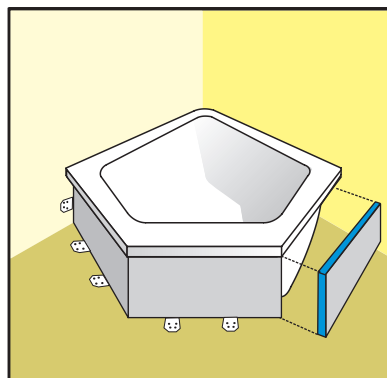
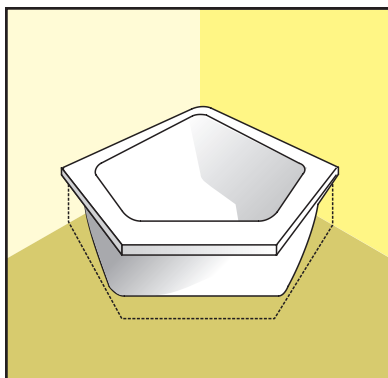
Mark the line of the bathtub allowing for tiles, boards and tile adhesive. Use **WBs** (wall brackets) to connect 30 mm boards to the walls and floor. Use silicone bead on all boards edges for waterproofing.

Cut one set of strips (30 mm boards) to suit the length of each side of the bath to the height of the step minus 50 mm. Fix one strip to the board using cement based adhesive.

Calculate the length of the other set of strips, cut them to the same high as the previous set and fix them at a distance equal to the required width of the step using **WB** (wall brackets).

Cut stiffeners to suit the step profile using 50 mm boards, insert them between the 30 mm boards at max. 300 mm spacing.

Cut the step tread to suit the profile and affix to the step stiffeners using silicone.





ABN 67 065 513 671

**E N Q U I R I E S**

**1300 783 693 / [tomcrete@optusnet.com.au](mailto:tomcrete@optusnet.com.au) / [www.marmox.com.au](http://www.marmox.com.au)**