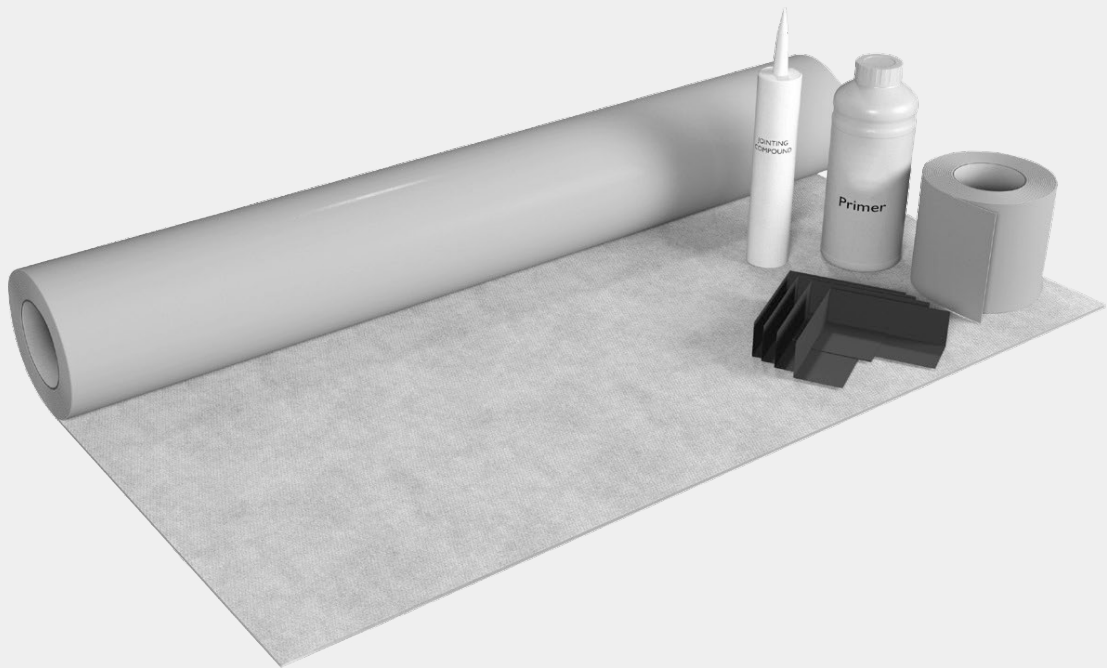




# AKW Formsafe

## INSTALLATION INSTRUCTIONS



Please read all instructions before installation and leave this document with the end user for future reference as it contains important warranty information

## Uses

Formsafe is a heavy duty self-adhesive waterproofing membrane designed for use onto timber and solid floors.

Developed specifically for use in bathrooms, wetrooms and similar wet areas, Formsafe is comprised of a 1.0mm Butyl based membrane, with a copolymer top layer which provides an excellent surface for the adhesion of natural stone, porcelain and ceramic tiles.

Formsafe is quick and easy to apply, providing a consistent waterproof layer, guaranteed not to leak. Formsafe also provides an effective barrier to the transition of water vapour.

## Elements

| 5m <sup>2</sup> AKW Formsafe Kit | 10m <sup>2</sup> AKW Formsafe Kit |
|----------------------------------|-----------------------------------|
| 5m x 1m roll of membrane         | 10m x 1m roll of membrane         |
| 10m Reinforcing Tape             | 15m Reinforcing Tape              |
| 500ml Primer                     | 1L Primer                         |
| 90ml Jointing Compound           | 290ml Jointing Compound           |
| 4 Pre-formed Internal Corners    | 4 Pre-formed Internal Corners     |

## Application

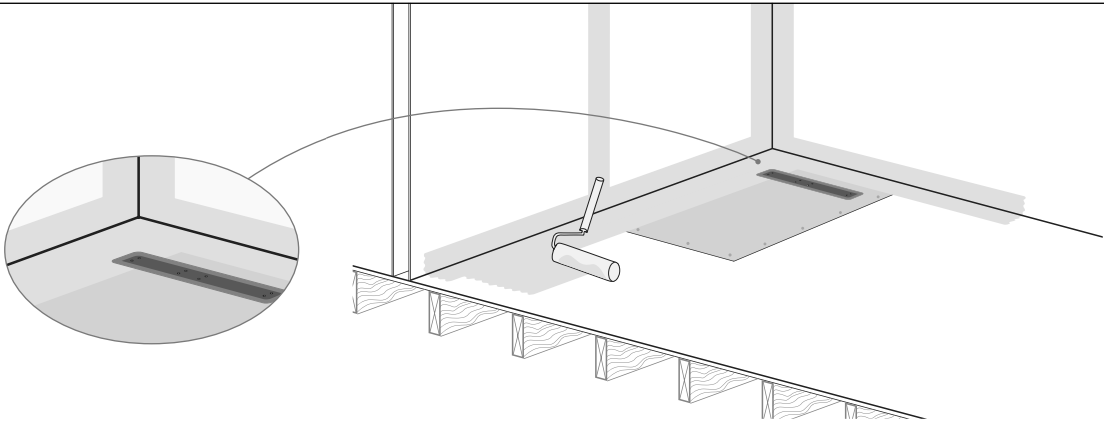
Please ensure that you read these instructions in full before commencing work. The complete system should be applied strictly in accordance with these instructions.

Surfaces must be smooth, solid and sound. Ensure all surfaces are clean, dry and free from all contaminants. Oily or greasy surfaces should be cleaned with suitable proprietary cleaner and thoroughly rinsed and allowed to dry.

Ensure that both primer and membrane are compatible with any existing coatings. If in doubt please refer to the manufacturer.

Care should be taken to ensure the ambient room temperature is at least 5oC. Conditioning of the membrane in a warm area prior to use will enhance its adhesion properties during the application.

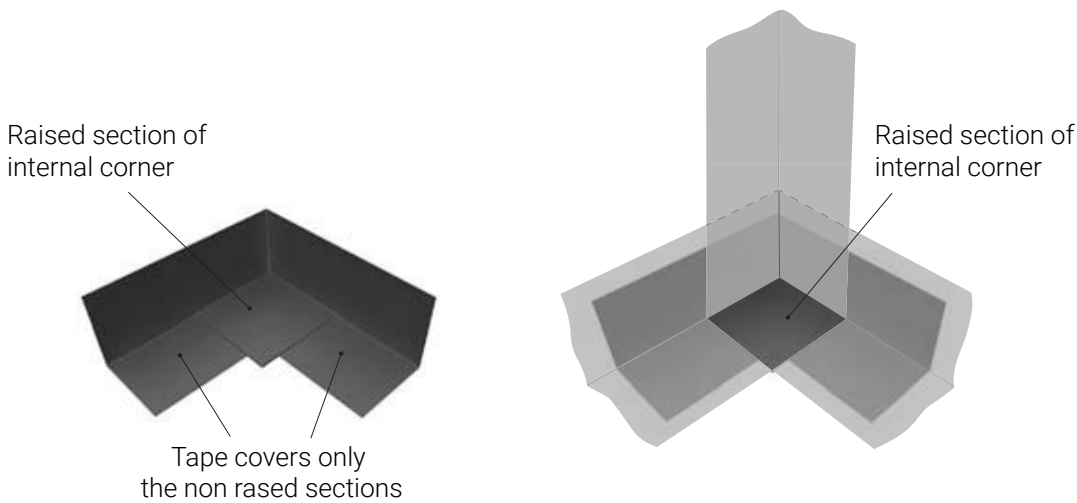
1



**Prime Floor:** use a pad, brush or roller to apply the primer along wall-floor junctions and across the floor area to be waterproofed. Allow primer to fully dry before proceeding with next step.

⚠ Do not apply primer to ABS plastic drainage component.

2



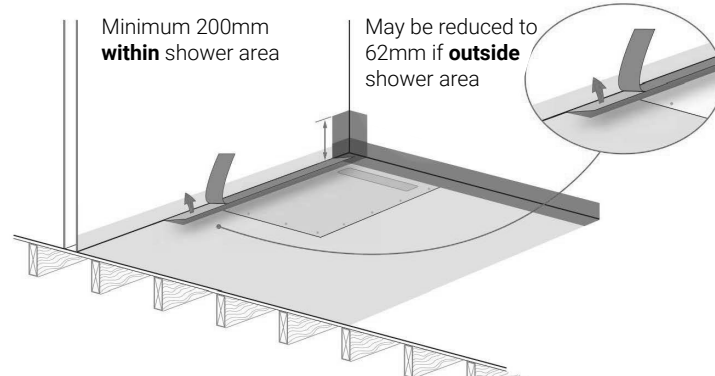
**Pre-formed internal corner:** apply a small bead of the jointing compound to the back of the pre-formed corner and place into position, pressing firmly into place.

Before applying the reinforcing tape (see next section) ensure that it is cut square in order for it to butt up neatly to the tape stop (see diagram).

Note: the reinforcing tape should not be applied over the raised section of the pre-formed internal corner.

⚠ Do not apply primer to the pre-formed internal corner. Clean with alcohol wipe before applying the tape.

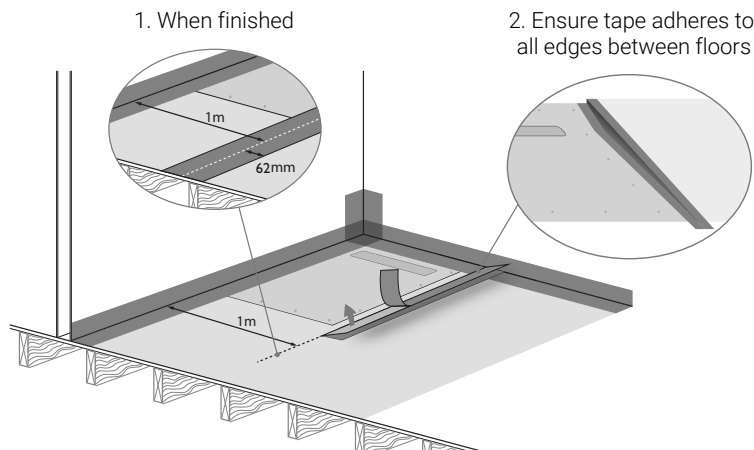
3



**Tape wall-floor junctions:** apply reinforcing tape to all wall-floor junctions as follows:

- cut tape to required length
- fold in half along the pre-scored line ensuring that the backing paper is visible on both sides. Offer up to the wall, with the fold towards the wall
- remove upper half of backing paper and stick to the wall
- lift up lower lip, remove backing paper and stick to the floor
- repeat this process until all wall-floor junctions have been taped
- apply a minimum of 200mm strip of reinforcing tape (within the shower area) vertically to all the corner wall-wall junctions.

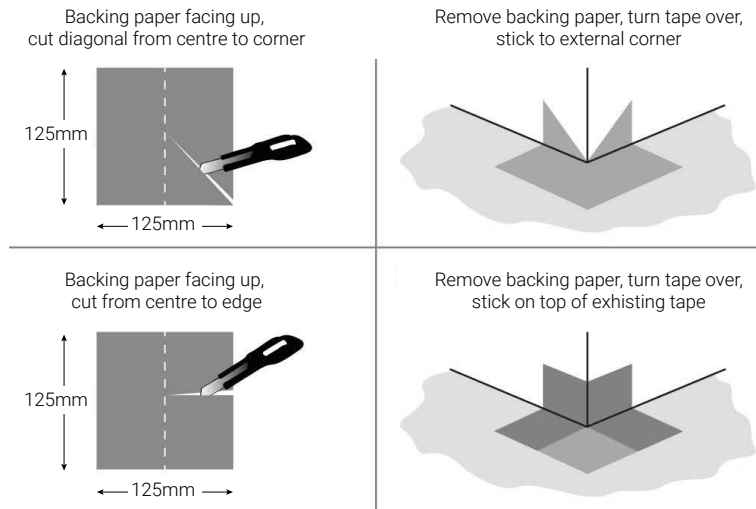
4



**Tape membrane junctions:** ensure reinforcing tape is applied to the floor where membrane sections will meet.

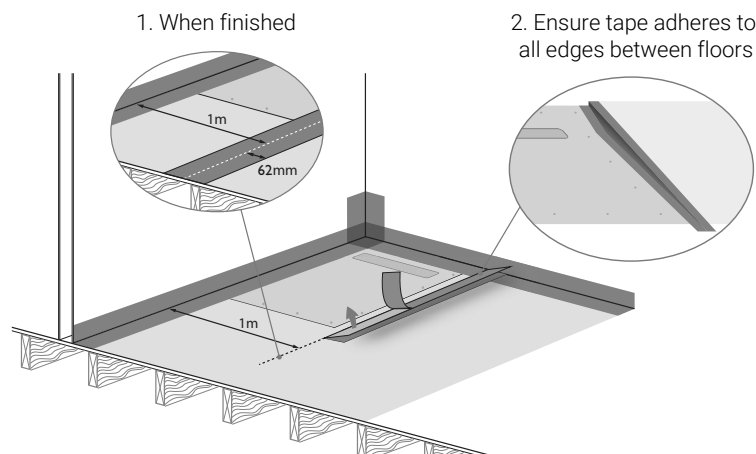
- measure width of the membrane (diagram shows membrane width of 1m)
- cut reinforcing tape to the required length for the area being waterproofed (width of room, if whole room is to be waterproofed)
- position reinforcing tape so that when overlaid, each section of membrane will overlap tape by 62mm
- remove backing paper and stick tape down, ensuring tape adheres into corners at the side of the shower area
- repeat floor taping until all membrane junctions have been covered.

5



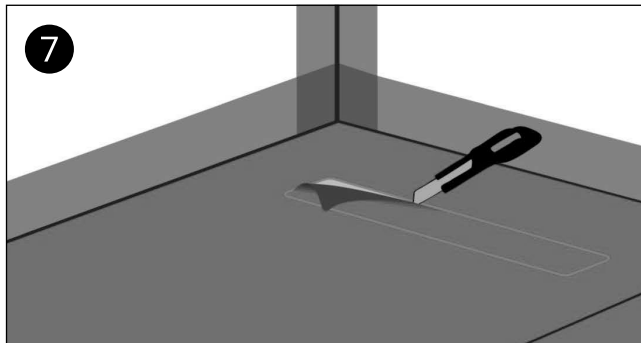
**Tape external corners:** use reinforcing tape to make up two sections to cover an external corner according to the steps in the diagram.

6

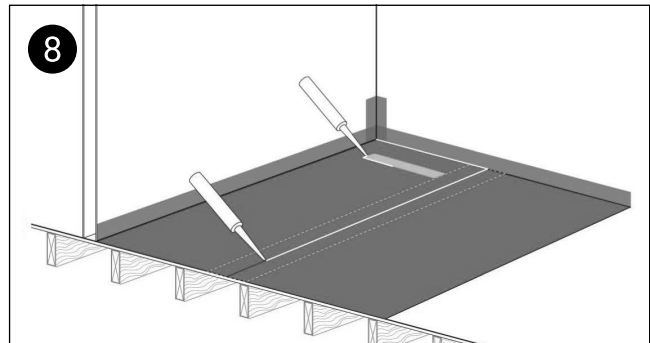


**Lay floor membrane:** lay membrane onto wetroom floor as follows:

- cut membrane to required length
- wipe the surface of the drainage component and all reinforcing tape with alcohol wipe supplied in the kit BEFORE applying the membrane
- score and remove 150mm of backing paper from the end of the membrane roll and turn over so backing faces floor
- position sticky edge of membrane into corner and smooth out any air pockets
- roll up membrane into the corner
- slowly un-roll membrane away from the wall, removing the backing paper as you go, sticking it to the floor and smoothing out any potential air bubbles
- repeat this process until the membrane covers the required area



**Lay floor membrane:** To reveal drain use a sharp knife to carefully cut around the INNER EDGE of the drainage component, then remove the membrane from inner section of the drainage component.



**Apply jointing compound:** When all of the floor area has been covered with membrane, the floor is then ready for application of the jointing compound.

- using an applicator gun, apply jointing compound to:
  - all butt joints (see diagram)
  - pipe penetrations
  - perimeter of drain (see diagram)
  - all wall to wall and wall to floor junctions

## Technical Data

Formsafe Membrane is a unique, pre-formed flexible self-adhesive waterproof membrane. It is ideal for use on substrates such as timber, masonry, concrete, plasterboards, gypsum and existing ceramic or natural stone. Once applied, Formsafe Membrane is ready to tile immediately.

Formsafe Membrane is cold applied, consisting of a 1mm thick Butyl waterproof layer, incorporating a non-woven PP fleece

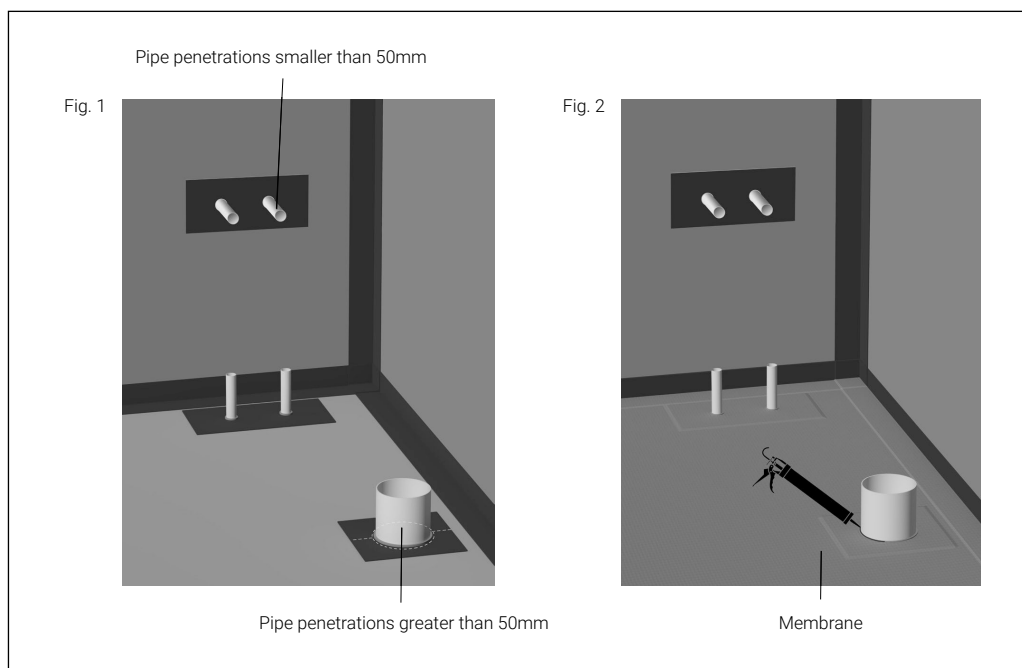
It has been developed for use prior to the fixing of ceramic or porcelin tiles and natural stone and is applied using a flexible rapid-set tile adhesive, which is key to the fabric. As the adhesive dries it forms a strong permanent bond to the membrane.

Formsafe Membrane and ancillary products should be stored in the original cartons, kept upright, protected from frost, and out of direct sunlight ie below 35°C. Cartons should not be over stacked.

|  |                               |
|--|-------------------------------|
| Membrane Thickness   | 1mm                           |
| Reinforcing Tape Thickness   | 1mm                           |
| Tensile Strength (ASTM D882)   | 115N/50mm - (Cross Direction) |
| Elongation at break (ASTM D882)  | 120% - (Cross Direction)      |
| Peel Adhesion at 180o angle (ASTM 3330)  | ≥ 11N /10mm                   |
| Compatible with electric underfloor heating up to 150w per m <sup>2</sup><br>Compatible with wet underfloor heating systems up to 30 , provided the pipework does not come into direct contact with the membrane |                               |

## Pipe penetrations/entries

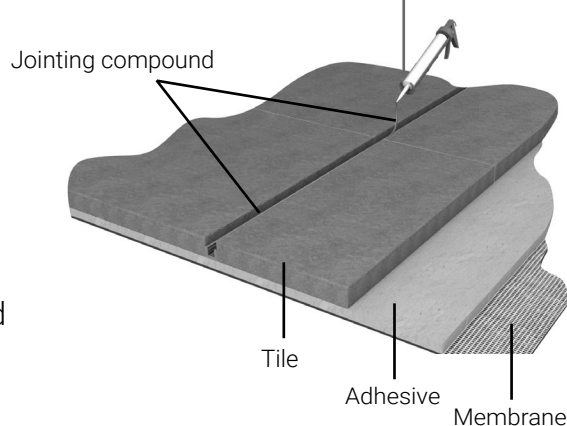
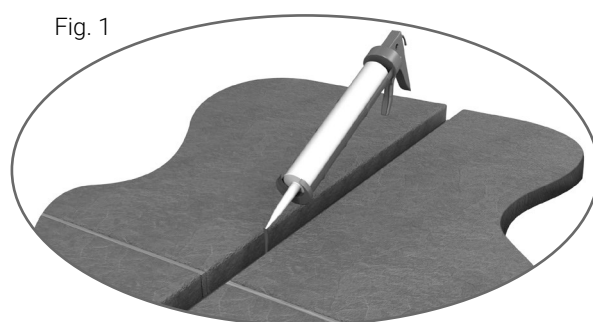
1. Pipe penetrations should be examined to ensure that the membrane will be fully supported.
2. Any voids around the pipe penetrations should be filled using appropriate filler and allowed to dry.
- 3a. For small pipe penetrations (smaller than 50mm) cut a hole in the Reinforcing Tape to suit the pipe size, remove release liner, then press down on the Reinforcing Tape to ensure it has fully adhered to the substrate (fig i).
- 3b. For large pipe penetrations (greater than 50mm) apply two pieces of Reinforcing Tape around the pipe, by carefully cutting the Reinforcing Tapes to suit the pipe entry size, remove release liner, then press down on the Reinforcing Tape to ensure it has fully adhered to the substrate (fig i).
4. When applying the membrane, cut holes in the membrane approximately 5mm - 10mm larger than the penetration (to assist with applying membrane over the pipe penetration), as per 3a or 3b. Apply the membrane over the Reinforcing Tape, removing the release liner as you go.
5. Apply Jointing Compound onto the Reinforcing Tape joints, around the pipe penetrations and on to the membrane to Reinforcing Tape joints (fig i).
6. Repeat the process of either 3a or 3b for pipe penetrations on the wall.



## Installing a glass screen onto membrane

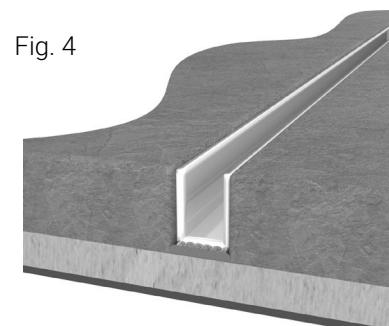
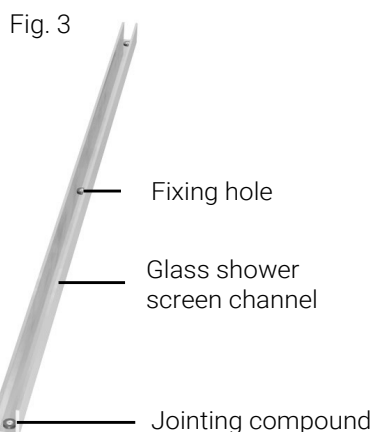
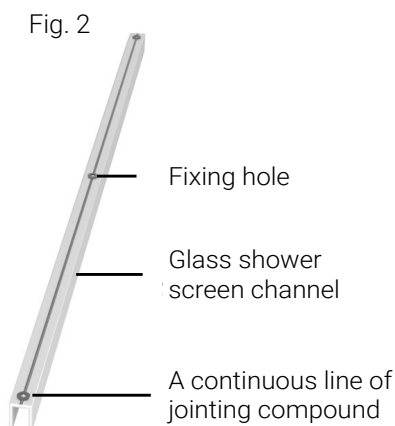
### Concrete floor

1. place glass shower screen channel into position and mark the fixing points
2. remove the glass shower screen channel, drill the marked fixing points and apply a small amount of jointing compound directly into the hole (Fig. 1)
3. insert appropriate fixings and apply another small amount of jointing compound on top of the plug
4. apply a continuous line of jointing compound to the underside of the glass shower screen channel (Fig. 2)
5. align glass shower screen channel and fix into position using appropriate fixings
6. apply a suitable amount of jointing compound around and on top of all fixings (Fig. 3)
7. finished view of glass shower screen once installed (Fig. 4)



### Timber floor

1. place glass shower screen channel into position and mark the fixing points
2. apply a continuous line of jointing compound to the underside of the glass shower screen channel (Fig. 2)
3. replace glass shower screen channel & fix in place using suitable fixings
4. apply a suitable amount of jointing compound around and on top of all fixings (Fig. 3)
5. finished view of glass shower screen once installed (Fig. 4)





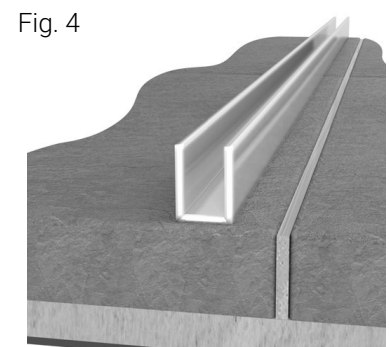
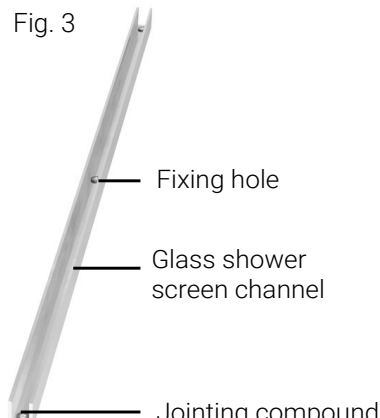
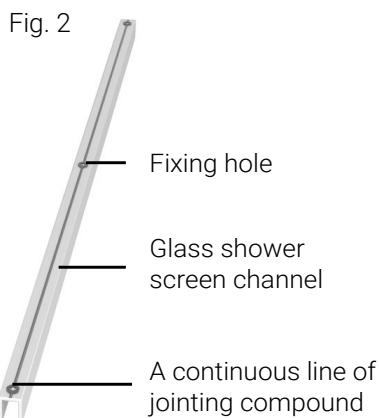
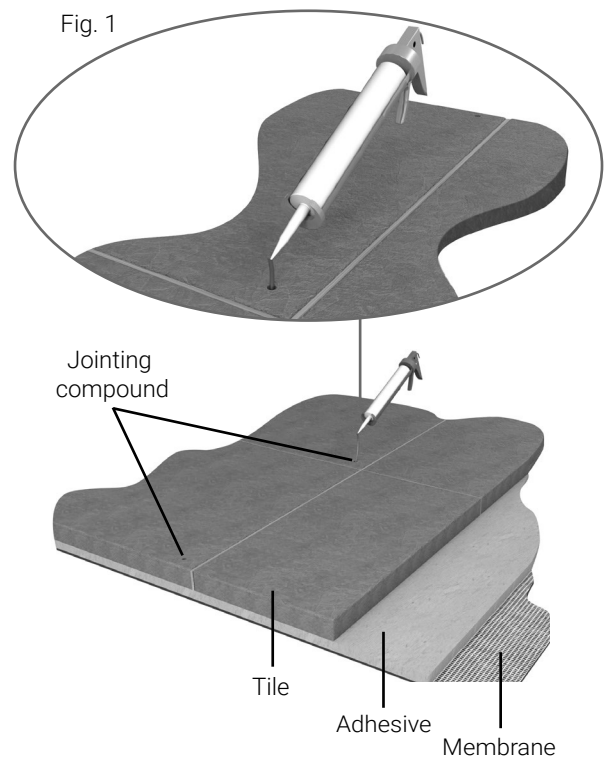
## Installing a glass screen onto tiles

### Concrete floor

1. place glass shower screen channel into position and mark the fixing points
2. remove the glass shower screen channel, drill the marked fixing points to the required depth and apply a small amount of jointing compound directly into the hole (Fig. 1)
3. insert appropriate fixings and apply another small amount of jointing compound on top of the fixings
4. apply a continuous line of jointing compound to the underside of the glass shower screen channel (Fig. 2)
5. align glass shower screen channel and fix into position using appropriate fixings
6. apply a suitable amount of jointing compound around and on top of all fixings (Fig. 3)
7. finished view of glass shower screen once installed (Fig. 4)

### Timber floor

1. place glass shower screen channel into position and mark the fixing points, then remove
2. using the appropriate drill bit carefully drill through the thickness of the tile taking care not to pierce the membrane.
3. apply jointing compound into the hole (Fig. 1)
4. apply a continuous line of jointing compound to the underside of the glass shower screen channel (Fig. 2)
5. align glass shower screen channel & fix into position using appropriate fixings
6. apply jointing compound around and on top of all fixings (Fig. 3)
7. finished view of glass shower screen once installed (Fig. 4)

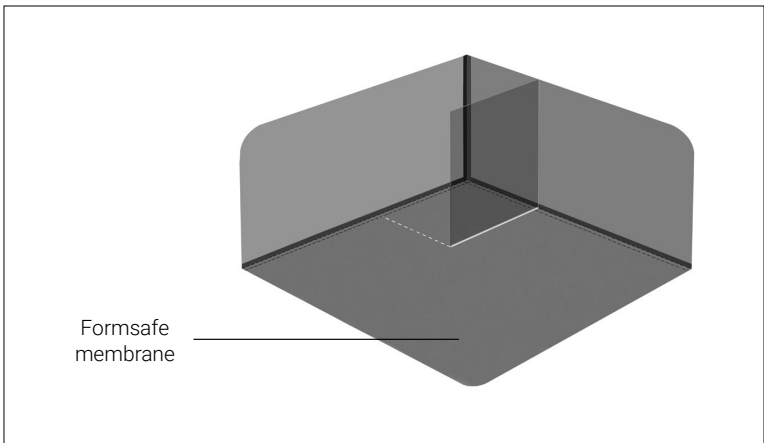


# Installation

## Wetroom waterproofing specification

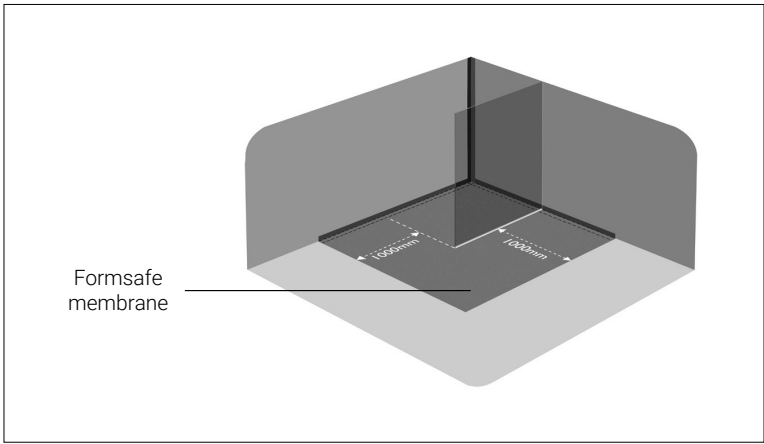
### Formsafe waterproofing membrane - entire bathroom

Formsafe membrane to be applied to the entire bathroom floor area.  
Additional reinforcing tape to be applied to all wall junctions, soap niches and other such detail within the shower area.  
All pipe penetrations to be sealed with Jointing Compound.



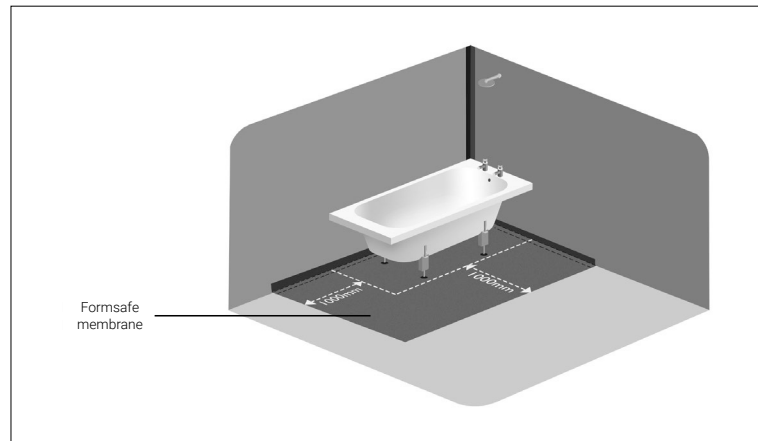
### Formsafe waterproofing membrane - shower area + 1 Metre

Formsafe membrane to be applied to the shower floor area, plus a minimum of 1 metre outside the shower area in all directions.  
Reinforcing tape to be applied to all wall junctions, soap niches and other such detail within the shower area.  
All pipe penetrations to be sealed with jointing compound.



## Over bath specification

Formsafe is to be applied to the floor area under the bath, plus a minimum of 1 metre outside the bath in all directions. Reinforcing tape is to be applied to all wall junctions, soap niches etc within the bath area and overlapping onto the reinforcing tape. All pipe penetrations to be sealed with jointing compound.



## Anhydrite screed, loose laid screed & latex levelling compounds

- the above types of substrate may require sealing prior to priming. This will normally be required approximately 24/48hrs prior to the installation of Formsafe membrane to ensure it is sufficiently dry
- fully sweep the area to be sealed to remove as much dust as possible
- mix the Primer 5:1 ratio with clean water
- fully soak the area with sealer ensuring all areas are covered. (If the area hasn't been sealed 24/48hrs prior to installation, then the sealer must be left to fully soak into the substrate for approximately 15/20min's before being forced dried with the use of heaters & fans)
- when the sealed area has fully dried it can then be primed as normal using the primer
- it is recommended that a bond/adhesion test is carried out prior to the application of the waterproofing membrane.

# Contact Us



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## Warranty

The life time warranty applies only to manufacturing or material defects, conditional on the one-time correct installation of the product.

It does not apply to:

- Inappropriate use or accidental damage.
- Damage or defects that result from incorrect installation.
- Lack of maintenance including the build up of grime.
- Damage or defects that result from repairs or modifications undertaken by unauthorised persons.
- This guarantee excludes general wear and tear through usage.

## What to do if something goes wrong?

If you have a problem with this product, please contact your local installer. If this does not resolve the issue, contact the AKW Technical Enquiries who can provide further advice and, if necessary, arrange for a maintenance engineer to visit and report any issues. See the T&Cs on our website or catalogue for further information. None of the foregoing affects your statutory rights.