



Protection of water-sensitive backgrounds

PROTECTION OF WATER-SENSITIVE BACKGROUNDS

Most backgrounds used in the UK are water-sensitive i.e. Plaster, plaster-board, timber etc.

To ensure the longevity of a tiled project these backgrounds require some type of protective layer over the surface to protect them from the ingress of moisture.

This can be done in various ways depending upon what type of service environment they will be put into once commissioned.

Liquid Applied membrane

Application of a liquid tanking system for the protection of water-sensitive backgrounds



1. Concrete substrate
2. Separating layer
3. Screed
4. Ready-to-use waterproofer (2 coats)
5. Adhesive
6. Ceramic tiles
7. Grout
8. Sealant
9. Rubber tape
10. Gypsum-board
11. Ready-to-use waterproofer (2 coats)
12. Adhesive
13. Ceramic tiles
14. Grout
15. Sealant

This can be done with the use of Mapei Mapelastac Aquadefense, which can be used for the protection of both walls and floors. Other similar products are: Ardex WPC; Norcros Wet Seal or BAL WP1 Tanking all of which will require the use of a flexible sealing tape for corners.

For use over tongue and groove floorboards over-boarding with a minimum of 15mm exterior grade plywood is recommended prior to the application of the liquid membrane.

Waterproofing and decoupling membranes

Alternatively, the use of a waterproofing and decoupling membrane can be used in wet and damp areas, for residential and commercial buildings such as domestic and hotel bathrooms, private or commercial showers and for small sized balconies, the use of a waterproofing and decoupling membrane can be used on wet and damp areas (such as gypsum plasters, gypsum-fibre board) and mineral surfaces (such as cement plaster, porous concrete, concrete & cement screeds). Priming of the background may be required, depending on the type, and the membrane can be fixed using a cementitious adhesive such as Mapei Keraquick or Mapei Keraflex Maxi.

Mapei Mapeguard WP 200/ Schlüter Kerdi - waterproofing & decoupling fabric membrane:



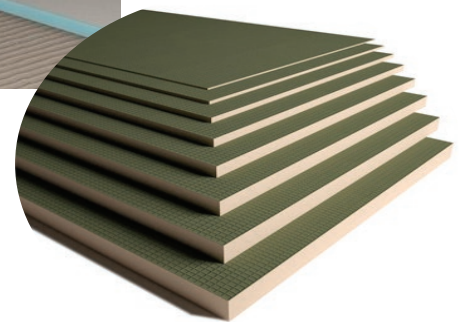
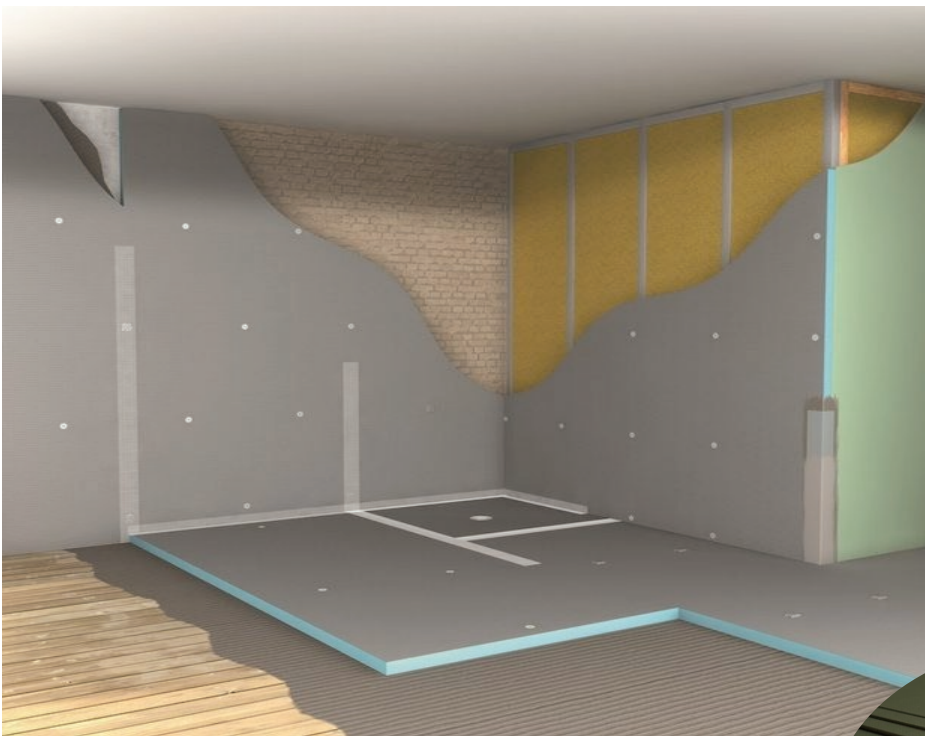
With this type of application it is possible to proceed directly with the installation of tiles.



Tile-backer boards

A third method of protecting water-sensitive backgrounds is to use a tile backer-board; these are available in sheet form and can be used to protect walls and floors. They are usually constructed from either a solid fibre-cement board (such as Hardi-Backer or No More Ply) or from a rigid extruded polystyrene foam. The rigid foam is reinforced with fibre-glass mesh on both sides and coated with a synthetic polymer resin mortar, such as Wedi Boards or Norcros Pro-board.

Wedi Board / Norcros Pro Board



They can be fixed to the background using either a flexible cementitious adhesive, mechanical fixings or a combination of both. The joints where the boards meet will require taping with a waterproof tape to ensure water-tightness e.g. Wedi waterproof sealing tape or Mapei Mapeband. Sealing gaskets are also available for pipe penetrations.

All of the above methods, provided that they are installed correctly will provide waterproof protection for water-sensitive backgrounds and can be used for both wall and floor applications.



Specification extract with regards to protection of water sensitive backgrounds

TANKING SYSTEMS

Frequently wet areas

MAPELASTIC AQUADEFENSE

Prime surface if necessary with PRIMER G or Eco Prim T

At locations – Internal and external corners of wall partitions and their junctions, and bases up-stands and columns etc, pipe penetration, drainage channel and outlets, junctions of different base/backgrounds, cracks or joints.

Mapeband tape or gussets should be applied with tanking system Mapelastic Aquadefense. Two coats, each approx 0.4mm thick, to achieve an overall application to a minimum of 0.8 mm thickness.

Pool tanks and constantly wet areas

MAPELASTIC SMART system

The surface to be treated must be perfectly clean and solid. Concrete/cementitious rendered surfaces must be cleaned of all dust, laitance, form release oil, mould, loose materials and rust. Dampen dry surfaces before installing the Mapelastic Smart system. Apply Mapelastic Smart in accordance with details contained in the Technical Data sheet.

Tanking Systems

MAPEGUARD WP200

For direct application under ceramic and natural stone tiles only:

Commercial and private, shower & bathroom applications:

The surface to be treated must be perfectly clean and solid. Concrete/cementitious rendered surfaces must be cleaned of all dust, laitance, form release oil, mould, loose materials and rust. Apply Mapeguard WP200 in accordance with details contained in the technical data sheet.

Mapeguard WP200 can also be used as a decoupling membrane; see relevant data sheet for installation instructions.



Solus have a broad range of services on offer. In addition to an impressive range of services and advice, Solus also have a comprehensive library of technical information and are able to provide fixing specifications which can be added into NBS Plus specifications.

- “Don’t Slip Up” RIBA approved CPD seminar
- “An overview of tile specification” RIBA approved CPD seminar
- Product awareness seminar
- BIM
- NBS Plus specification
- Advice on standards
- Fixing specifications
- Cleaning & maintenance
- Environmental information
- Pendulum testing
- Technical data sheets
- Tile matching
- Next day sample service
- Waterjet cutting
- Design and fabrication

supplying your imagination