# MAPELASTIC AQUADEFENSE TANKING KIT

A ready to use kit for the rapid waterproofing of bathrooms, wet rooms and showers to receive tiles after 4 hours











## WHERE TO USE

To form waterproofing layers before applying ceramic, stone and mosaic coatings in:

- bathrooms and shower cubicles;
- wet rooms:
- kitchens.

Mapelastic AquaDefense Tanking Kit may be applied to:

- concrete
- cementitious screeds and screeds made using special binders (Topcem, Topcem Pronto, Mapecem or Mapecem Pronto);
- plasterboard (for internal applications only);
- existing coatings in ceramic, terrazzo and stone;
- cementitious render;
- tilebacker boards.

# **ADVANTAGES**

- The components of Mapelastic AquaDefense Tanking Kit are supplied ready to use.
- · Mapelastic AquaDefense is a rapid product:
- wait I hour after applying the first coat and 4 hours after applying the second coat before applying tiles;
- ceramic tiles may be bonded after 4 hours (at+23°C and 50% R.H. when applied on a dry substrate with less than 3% residual moisture).
- · Mapelastic AquaDefense is elastic: at +23°C it has 3.2 mm crack-bridging capacity without reinforcement.
- Mapeband PE 120 is made from polyester mesh and PVC fabric:
- elastic and deformable:
- impermeable to water and vapour;
- pre-formed corners and gaskets are available separately.

## TECHNICAL CHARACTERISTICS



**Mapelastic AquaDefense** is a totally solvent-free, ready-to-use, ultra-quick drying, one-component light blue, synthetic resin-based paste in water dispersion.

**Mapeband PE 120** (PVC waterproof tape) is used to waterproof corners between adjacent walls and between walls and floors to be treated with **Mapelastic AquaDefense**.

Mapelastic AquaDefense is easy to apply using a long-haired roller, brush or trowel on horizontal, sloping and vertical surfaces. Mapelastic AquaDefense dries very quickly to form a flexible membrane without a sticky surface. It is resistant to light pedestrian traffic after just 3-4 hours and forms an excellent grip with all types of adhesive for laying ceramic, stone material and mosaic of all kinds.

The flexible nature of **Mapelastic AquaDefense** helps it withstand normal movements caused by expansion and shrinkage of the substrate due to temperature variations and vibration.

Tiles laid on floors waterproofed with **Mapelastic AquaDefense** by using C2F-class MAPEI adhesives (such as **Keraquick S1**, **Ultralite Rapid-Flex S1**, etc.) and grouted with **Ultracolor Plus** may be opened to pedestrian traffic within 12 hours of starting the work. **Mapelastic AquaDefense** is resistant to water, lime-water (ph > 12), and detergents commonly used for cleaning residential environments.

# **RECOMMENDATIONS**

- Do not apply Mapelastic AquaDefense if the temperature is lower than +5°C.
- · Mapelastic AquaDefense must always be covered with ceramic, mosaic or stone.
- Do not apply **Mapelastic AquaDefense** on cementitious substrates or on substrates with residual humidity higher than 3% or recurring rising damp.
- Do not apply **Mapelastic AquaDefense** on crumbly cementitious substrates, old floors which are not well bonded to the substrate or surface treatments which impede a good bond.
- Do not use **Mapelastic AquaDefense** to cover cracks.

# **APPLICATION PROCEDURE**

### Preparation of the substrate

Substrates must be well-cured, sound, clean, dry and free of oil, grease, cement laitance, paint and any other substance which could compromise the bond. Cementitious substrates must be stable and dry with no rising damp. Surface dust must be completely removed.

Uneven surfaces may be prepared using a suitable MAPEI levelling/smoothing compound. On old ceramic floors with hollowed or empty tile joints, or whenever slopes on surfaces need to be levelled out before spreading on **Mapelastic AquaDefense**, we recommend applying a smoothing and levelling layer. Substrates in this condition must be thoroughly checked and all coatings, such as wax, water-repellent treatments, etc. must be removed from the surface with a suitable cleaning product such as one from the Mapei **UltraCare** range and/or by abrasion.

Before applying Mapelastic AquaDefense, pay particular attention to expansion joints and fillet joints between horizontal and vertical surfaces. In such cases, apply Mapeband PE 120 bonded in place with Mapelastic AquaDefense. Before applying Mapelastic AquaDefense on old ceramic and natural stone floors, use Eco Prim Grip Plus primer.

### Application of the product

Mapelastic AquaDefense must be applied in two even, coats (approx. 0.4 mm per coat) with a long-haired roller, brush or trowel. Wait until the first coat is dry, making sure the product becomes darker with a matt finish, before applying the second coat diagonally to the first (approximately 1 hour at +23°C and 50% relative humidity of the air and with substrates having residual humidity lower than 3%). The final thickness of the two coats of Mapelastic AquaDefense must be at least 0.8 mm in order to create a robust, flexible and continuous film. Make sure there are no interruptions in the film caused by imperfections in the substrate.

If Mapelastic AquaDefense is applied to form an anti-fracture membrane on cracked substrates, we recommend inserting Mapetex 50 reinforcement in to the first coat while it is still fresh. Mapetex 50 must be pressed down with a bubble-breaker roller on the first coat of Mapelastic AquaDefense while it is still fresh. Wait until the first coat is dry then apply the second coat in order to completely embed Mapetex 50. Drying times may increase as Mapetex 50 insertion increases the final thickness of the applied film. In bathrooms, a water-tightness test may be carried out 12 hours after applying the final coat of Mapelastic AquaDefense. Ceramic, stone and mosaic tiles may be laid 4 hours after applying the second coat (at +23°C and 50% relative humidity of the air) using a C2-class MAPEI adhesive according to EN 12004 standards, to be selected according to the final use of the floor. As an example, for quickly laying tiles use Keraquick S1 (class C2FT S1) or rapid setting products from the Ultralite range. Grout tile joints with a special cementitious grout (such as



**Ultracolor Plus**) or epoxy grout (for example **Kerapoxy**, **Kerapoxy Easy Design** or **Kerapoxy CQ** - class RG). Seal expansion joints with a special MAPEI sealant (such as **Mapesil AC** or **Mapesil LM** according to requirements). For full technical data tables please refer to the latest Technical Data Sheets **Mapelastic AquaDefense** and **Mapeband PE 120**.

# Cleaning

Mapelastic AquaDefense may be removed easily from tools and surfaces while still fresh with water.

## **CONSUMPTION**

Mapelastic AquaDefense: 1 kg/m² for two coats.

## **PACKAGING**

#### Box containing:

- 7.5 kg Mapelastic AquaDefense (liquid waterproofing membrane ready to use from the tub);
- · 10 m Mapeband PE 120 (PVC waterproof tape).

## **STORAGE**

- Mapelastic AquaDefense may be stored for up to 24 months in its original packaging in a dry place. Protect from frost.
- · Mapeband PE 120 should be stored in its original packaging on site.

## SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Instructions for the safe use of our products can be found on the latest version of the Safety Data Sheet, available from our website **www.mapei.co.uk**.

Mapeband PE 120 is an article and referring to the current European regulations (Reg. 1906/2007/CE - REACH) does not require the preparation of the safety data sheet. During use it is recommended to wear gloves and goggles and follow the safety requirements of the workplace.

PRODUCT FOR PROFESSIONAL USE.

## WARNING

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.co.uk

## **LEGAL NOTICE**

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in force at the time of the MAPEI product installation. The most up-to-date TDS can be downloaded from our website www.mapei.co.uk.

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