



Mapegum WPS



**Quick-drying, flexible
paste membrane for
waterproofing internal
surfaces**



WHERE TO USE

Waterproofing indoor floor and wall surfaces that are not subject to rising damp nor in permanent water immersion.

Flexible, anti-fracture membrane. Apply before installing ceramic tiles or natural stone.

Mapegum WPS may be used on the following:

- plasterboard, gypsum or cementitious render, lightweight cement blocks or marine plywood or other moisture-stable boards suitable for wet rooms (wet room panels);
- cementitious, anhydrite, wooden and magnesite substrates and existing ceramic and natural stone after the application of **Eco Prim Grip**, **Primer G** or **Eco Prim T**. Magnesite must be primed with **Primer VT-Plus**.

ADVANTAGES

- The product is certified in accordance with EC1 Plus by the GEV Institute (Gemeinschaft Emissions-Kontrollierte Verlegewerkstoffe e.V) as a product with very low emissions of volatile organic compounds.
- M1-certified.
- Ready to use.
- Rapid application.
- Tiles can be laid after 12 hours.
- Excellent elongation properties.

- No reinforcement required.

The following are included in the updated Technical Approval from SINTEF, TG 2402:

Primers:

Primer G and **Eco Prim T**.

If you need to achieve an S_D requirement greater than 10 m, **Primer VT Plus** must be used.

Gaskets:

Mapeguard PC: 10–24 mm to 100–130 mm. **VR Collar**: 10–24 mm to 100–130 mm

Sealing tape: **Mapeguard ST**, **Mapeband Easy**, **Mapeband B T** or **VR sealing tape**.

Drain Collar:

Mapeband B DC 37 × 37 cm

Mapeband B DCL 37 × 100 cm

B=Butyl

DC= Drain cover (drain collar)

DCL=Drain cover long (drain collar long)

Collars in sizes 75–110 mm and 100–130 mm must also be covered with **Mapegum WPS** up on the pipe.

Some application examples

- Waterproofing of walls and floors in bathrooms and recessed showers, before laying ceramic tile or natural stone.
- Waterproofing of kitchen walls, floors or worktops before laying ceramic tile or natural stone.

TECHNICAL CHARACTERISTICS

Mapegum WPS is a ready-to-use, solvent-free, one-

Mapegum WPS



Installation of Mapei IC/EC corner gasket using Mapegum WPS



Installing Mapei ST sealing tape using Mapegum WPS, floor/wall transition



Installing Mapei ST sealing tape using Mapegum WPS, wall

TECHNICAL DATA (typical values)

PRODUCT IDENTITY

Consistency:	paste
Colour:	light grey
Density (g/cm ³):	1.45
pH:	9.0
Dry solids content (%):	73
Brookfield viscosity (mPa·s):	120,000 (rotor E – 5 revs)
EMICODE:	EC1 Plus – very low emissions

PRODUCT APPLICATION DATA (at +23 °C, 50% RH.)

Minimum film-forming temperature:	+5 °C
Application temperature range:	from +5 °C to +35 °C
Waiting time between first and second coat:	approx. 60 min (touch dry)
Waiting time before laying coating material:	12–24 hours
Completely dry (2 mm of thickness) at +23 °C:	5 hours
Completely dry (2 mm of thickness) at +5 °C:	12 hours

FINAL PERFORMANCES

Initial adhesion according to EN 14891-A.6.2 (N/mm ²):	1.6
Adhesion after water immersion according to EN 14891-A.6.3 (N/mm ²):	1.2
Adhesion after heat ageing according to EN 14891-A.6.5 (N/mm ²):	1.6
Adhesion after freeze/thaw cycles according to EN 14891-A.6.6 (N/mm ²):	1.0
Adhesion after immersion in basic water (saturated solution of lime) according to EN 14891-A.6.9 (N/mm ²):	1.2
Adhesion after immersion in sodium hypochlorite solution in compliance with EN 14891-A.6.7 (N/mm ²):	0.6
Impermeable to water according to EN 14891-A.7 (1.5 bar) 7 days: (2 × Primer VT Plus and 2 × Mapegum WPS):	no penetration
Vapour diffusion resistance measured at 0.4 mm membrane thickness according to EN ISO 12572: (2 × Primer VT Plus and 2 × Mapegum WPS):	S _D ≥ 27 m



component, grey-coloured paste with a base of synthetic resins in water dispersion.

Mapegum WPS has a thixotropic consistency which makes it easy to apply on horizontal, sloping and vertical surfaces. After rapid evaporation of the water content, **Mapegum WPS** forms a flexible membrane which is not sticky and which is strong enough to withstand light pedestrian traffic. It also forms an excellent surface which bonds perfectly to adhesives used for laying ceramics, marble and natural stone.

The flexibility of **Mapegum WPS** enables it to withstand normal expansion and contraction movements of the substrate due to temperature variations and vibrations. Due to its flexibility, **Mapegum WPS** also acts as an anti-fracture membrane for substrates which are subject to light cracking (< 1 mm).

Mapegum WPS is resistant to water, limewater (pH > 12), water which contains chlorides and normal household detergents and cleaning products.

Systems based on the use of **Mapegum WPS** flexible membrane, on which various types of tiles have been laid using Mapei cementitious-based adhesives such as **Adesilex P9**, **Keraflex**, **Ultralite S1**, **Ultralite S2**, **Ultralite S2 Quick**, **Keraflex Vario Quick S1**, **Megafix**, **Megafix R**, **Megalite S1**, **Megalite S2**, **Megalite S2 Quick**, **Megarapid 2K** have been certified for use in damp environments by the following institutes:

- SäureFliesner-Vereinigung e.V., (certification body for wall and floor coverings) (Germany);
- Sp Swedish National Testing & Research Institute (Sweden);
- SINTEF Building and Infrastructure (Norway).

RECOMMENDATIONS

- Do not apply **Mapegum WPS** if the temperature is lower than +5 °C.
- Create sloping surfaces where necessary to avoid the formation of puddles of water.

- Do not apply **Mapegum WPS** on damp cementitious substrates or on substrates which are subject to rising damp.
- Do not use **Mapegum WPS** on surfaces continuously immersed in liquid such as swimming pools, fountains, storage tanks, etc. Use **Mapelastic** or **Mapelastic Smart** for these types of application.
- Do not use **Mapegum WPS** to cover cracks/fractures exposed to shear forces.
- **Mapegum WPS** must be protected from abrasion caused by pedestrian traffic by installing ceramic tiles or natural stone.

APPLICATION PROCEDURE

Preparation of the substrate

Substrates must be solid, clean, dry and free of oil, grease, old paintwork or any other material which could compromise bonding. The substrate to be waterproofed must be washed thoroughly and old flooring, old bitumen membranes, asphalt, metal surfaces, etc. must be removed. Mechanically remove mould and loose material by brushing, washing or high-pressure rinsing. Substrates of cementitious materials must be solid, dry and not exposed to rising damp. Substrates which are highly absorbent or gypsum must be pre-treated with **Primer G**, **Eco Prim T** (usually diluted with water at a ratio of 1:1 or 1:2 to ensure thorough penetration) or **Primer VT Plus**. Wait several hours until the coating of **Primer G**, **Eco Prim T** or **Primer VT Plus** is completely dry.

Anhydrite or gypsum substrates must be perfectly dry (maximum residual humidity 0.5%), sanded and treated with a coat of **Primer G**, **Primer S** or **Primer VT Plus**. Existing substrates of ceramic tiles or natural stone must be treated with **Eco Prim T** primer before applying **Mapegum WPS**. If a slope has to be created or the base needs to be smoothed off before spreading on **Mapegum WPS**, use **Plan R35 Plus** up to 10 mm, or suitable putty.

Application of the product

To guarantee a cohesive waterproofing membrane, use Mapei sealing tape, **Mapeguard ST**, **Mapeband Easy**, **Mapeband BT** or **VR Sealing Tape** in the transition between the floor and walls and contiguous walls. The sealing tape is laid on **Mapegum WPS** while the product is still fresh.

Mapei corner profiles, **Mapeguard**, **Mapeband Easy** or **VR IC/EC**, inside/outside corners, **Mapeguard PC** collar or **VR Collar**, and drain collar adapted to the system must be used. These are attached to the substrate with **Mapeband B DC** 37 × 37 cm or **Mapeband DCL** 37 × 100 cm with the self-adhesive back and applied **Mapegum WPS** across the entire surface before the compression fitting is installed on the dry membrane. **Mapegum WPS** may be applied with a trowel, paint roller, brush or spray gun. The product must be applied evenly, in several layers until the functional requirement of the membrane is met. Wait until the first coat is dry before



Mapei VR Collar installed in Mapegum WPS



Butyl gasket (self-adhesive end) is laid over the drain (on primed floor). Then apply Mapegum WPS over the gasket and the rest of the floor



Application of Mapegum WPS membrane with e.g. a roller

Mapegum WPS



applying further coats crossways (1–2 hours depending on ambient conditions). The final thickness of **Mapegum WPS** depends on the area of use, so that a continuous, flexible and even layer is created, which protects against defects and holes in the membrane. After 12–24 hours from applying the final coat of **Mapegum WPS** (depending on ambient conditions), the surface is ready for laying ceramic tiles or natural stone using Mapei's range of bonding products. Use an adhesive from the MAPEI range to lay ceramic tiles and natural stone.

Laying tiles

After applying **Mapegum WPS** wait:

- 12–24 hours on absorbent substrates;
- 4–5 days on substrates which are not absorbent.

Use an adhesive from the MAPEI range: **Adesilex P9, Keraflex, Ultralite S1, Ultralite S2, Ultralite S2 Quick, Keraflex Vario Quick S1, Megafix, Elastorapid, Megalite S1, Megalite S2, Megalite S2 Quick, Megarapid 2K**; the width of the joints depends on the size of the tiles to be laid. Grout the joints using **Ultracolor Plus, Keracolor FF, Keracolor GG, Megafug F** or **Megafug G** with **Fugolastic**, or with **Kerapoxy Design** or **Kerapoxy CQ**, available in a variety of colours. Expansion joints must be sealed using flexible sealants from MAPEI, such as **Mapeflex MS 45**.

Cleaning

Mapegum WPS can be removed from hands, tools and surfaces with water, while it is still fresh.

CONSUMPTION

The consumption of **Mapegum WPS** is approximately 0.9 kg/m² for 0.5 mm of thickness and approximately 1,8 kg/m² for 1 mm of thickness.

PACKAGING

Mapegum WPS is available in 20, 10 and 5 kg drums.

STORAGE

24 months in original sealed packaging. Protect against frost.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Instructions for the safe use of our products can be found on the latest version of the SDS available from our website www.mapei.no

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.

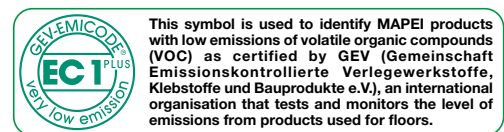
Please refer to the current version of the **Technical Data Sheet**, available from our web site www.mapei.no

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Application of tile adhesive



All relevant references for the product are available upon request and from www.mapei.no



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