

MAPETHENE EQ

Self-adhesive bituminous membrane for waterproofing structures below ground level



WHERE TO USE

Mapethene EQ is a self-adhesive bituminous membrane made from a mixture of bitumen and special polymers bonded to a film of high density polyethylene (HDPE).

Mapethene EQ is used to waterproof vertical and horizontal surfaces, foundation slabs, foundations, underground garages and cellar walls. As well as all known and suitable mineral substrates.

ADVANTAGES

- **Mapethene EQ** is applied cold in complete safety without using flames.
- Highly flexible which makes it simple, quick and easy to apply.
- Adheres perfectly to substrates. Thanks to the use of **Mapethene Primer W** with may be applied at low temperatures and on slightly damp substrates.
- Good crack-bridging properties once applied.
- Impermeable up to a positive pressure of 4 bar.
- Preformed membrane: more control on its thickness during production and complete uniformity of the mix.
- 50 mm vulcanisation selvedge strip for secure adhesion of seams.
- Waterproofing structures permanently against ground damp (capillary water, retained water), non-standing seepage water, pressure free water and as a water retardant under screeds.
- Solvent free and environmentally friendly, applicable all year round.
- Immediate resistance to water and driving rain.

TECHNICAL CHARACTERISTICS

Mapethene EQ is a self-adhesive preformed bituminous waterproofing membrane made from a special mixture of bitumen admixed with polymers bonded to a film of HDPE, forming an impermeable sheet resistant to tearing.

Once applied **Mapethene EQ** is immediately resistant to water, including sudden rainfall. **Mapethene EQ** does not contain solvents.

RECOMMENDATIONS

Do not use **Mapethene EQ** in the following cases:

- During rainy weather;
- On substrates with condensation or free-standing water on the surface;
- Transport and store **Mapethene EQ** vertically

APPLICATION PROCEDURE

Substrate preparation

Mapethene EQ may be applied on concrete, solid bricks and vibro-compressed concrete blocks. Substrates must be flat, sound and clean. Remove cement laitance, loose and crumbling parts and traces of dust, grease and form release agents with a pressure washer and wait until all the water has dried off. Remove all traces of old waterproofing material.

If the reinforced cement structure to be waterproofed has gravel clusters or other irregularities, remove them with hand or power tools or by hydro-demolition. Carefully clean any exposed rebar, treat them with a coat of **Mapecer 1K Zero** anti-corrosion cementitious mortar and then fill all the gaps and demolished areas with **Planitop Smooth & Repair R4 Zero** quick-setting, compensated-shrinkage, thixotropic cementitious structural mortar or a suitable product from the **Mapecrout** line of mortars. When applying the product on bricks or blocks, on the other hand, completely remove all traces of mortar protruding from between the blocks, skim over any areas with defects and grout any gaps in the joints with **Planigrout Fast 330** fine-textured thixotropic mortar or **Mapecrout** **Render** & Strengthen high strength, natural hydraulic lime-based rendering and masonry mortar.

Blend in all the corners between the foundations and walls and between adjacent vertical walls with the same products used to repair the surfaces and round off any sharp edges or corners. Seal structural joints with **Mapeband TPE** tape bonded to the substrate with **Adesilex PG4** epoxy adhesive broadcast with **Quartz 0.5**. After preparing the substrate as specified, apply a coat of **Mapethene Primer** one-component, solvent-free bitumen emulsion. As an alternative at low temperatures, it is possible to use **Mapethene Primer W** one component, ready-mixed primer. The consumption rate for these types of primer varies depending on the absorbency of the substrate and is generally around 150-200 g/m².

Application

Seal any elements passing through horizontal and vertical surfaces with two pieces of **Mapethene EQ** cut to shape to form a collar between the object passing through the surface and the substrate, as shown in the figure below. When applying the membrane on horizontal surfaces, remove the first 20 cm of silicone film, line spacing it is to be applied and unroll the **Mapethene EQ**. Remove the film as you unroll the membrane so that it adheres evenly to the substrate. Overlaps between adjacent rolls of membrane must be at least 5 cm wide. Line up the membrane on the HDPE film of the roll of membrane already, ensuring the film on the selvage is removed and bond the next roll of membrane. Make sure the joints between the pieces of membrane are staggered and then go over the overlaps carefully with a rubber roller. When applying the membrane on vertical surfaces, we recommend cutting **Mapethene EQ** according to the height of the surface to be waterproofed. Remove around 30 cm of silicone film, line up the sheet according to the direction it is to be applied and bond it to the substrate starting from the highest point. Then apply the **Mapethene EQ**, making sure there is an overlap at least 5 cm wide, as described in the procedure for applying on horizontal surfaces. To prevent damaging the upper edge of the membrane, we suggest applying **Mapeband SA** self-adhesive butyl tape with alkali-resistant, non-woven fabric backing, between the **Mapethene EQ** and the substrate. Carry out localised repairs to areas that have been accidentally damaged with pieces of **Mapethene EQ** cut to suit from the roll of membrane.

Protecting the waterproofing layer

Within 48 hours of applying **Mapethene EQ**, protect all waterproofed surfaces with a protective drainage membrane, such as **Polyfond Kit Drain** made by Polyglass S.p.A., which protects the **Mapethene EQ** when holes and trenches are filled in.

CLEANING

Clean hands with lukewarm water and tools with water or thinners.

PACKAGING

Supplied in 20 m² rolls (width 1 m) packed in a cardboard box.

STORAGE

Mapethene EQ may be stored for 12 months in its original packaging. Protect from freezing weather.

TECHNICAL DATA (typical values)

Mapethene EQ: flexible bituminous waterproofing membrane in compliance with EN 13969 standard

PRODUCT IDENTITY

Width (mm):	1,000 (950 + 50 vulcanized selvedge ship)
Thickness (mm):	1.2
Weight (kg/m ²):	1.2

APPLICATION DATA OF PRODUCT (at +20°C - 50% R.H.)

Application temperature:	-5°C to +30°C
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FINAL PERFORMANCE

Impermeable to water (bar):	4
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Performance characteristic	Reference Method	Requirements according to EN 13969	Performance figures for Mapethene EQ
Tensile strength (N/50 mm):	EN 12311-1	Value declared by manufacturer	160
Longitudinal elongation at failure (%):	EN 12311-1		500
Transversal elongation at failure (%):	EN 12311-1		800
Permeability to water vapour SD (m):	EN 1931		320
Impact resistance:	EN 12691		pass, method A ≤ 100
Flexibility at low temperatures (°C):	EN 1109		- 5
Resistance to static loads:	EN 12730		pass, method B ≤ 5
Resistance to tearing (nail method) (N):	EN 12310-1		110 \pm 30
Durability, expressed as watertightness after artificial ageing:	EN 1296, test in compliance with EN 1928	impermeability at 60 kPa	Pass
Durability, expressed as watertightness after exposure to chemicals:	EN 1847, test in compliance with EN 1928	impermeability at 60 kPa	Pass
Reaction to fire: (Euroclass)	EN 13501-1	Euroclass	E

N.B.


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