

MAPETHENE HT AP

Self-adhesive bitumen membrane suitable for application at high temperatures up to +35°C for waterproofing underground structures and roofs



WHERE TO USE

Mapethene HT AP is used to waterproof the following areas and protect them from water and rising damp: foundations, cellars, dens, garages, basements, living areas below ground level, flat roofs (not exposed).

ADVANTAGES

- **Mapethene HT AP** is cold applied in complete safety, without using flames.
- Highly flexible; simple, quick and easy to apply.
- Adheres perfectly to substrates, thanks to **Mapethene Primer**.
- Preformed membrane; more control on its thickness during production and total uniformity of the mix.
- **Mapethene HT AP** is impermeable to radon.

TECHNICAL CHARACTERISTICS

Mapethene HT AP is a waterproofing, pre-formed self-adhesive bitumen membrane made from a mixture of bitumen and special polymers bonded to a double laminated film of high density polyethylene (HDPE). **Mapethene HT AP** is provided with a selvedge for a quick, accurate and strong bond between adjacent rolls of membrane. The adhesive selvedge guarantees the watertight properties also around joints. The special mixture used to make **Mapethene HT AP** allows the product to be applied in hot weather at temperatures up to +35°C. In cold weather, use **Mapethene LT AP**, which has a special bitumen mix that has been specifically developed to be applied in cold conditions and to ensure good adhesive properties. Once it has been applied **Mapethene HT AP** is immediately waterproof, including in case of sudden rainfall. **Mapethene HT AP** meets the requirements of EN 13969 ("*Plastic and rubber damp proof sheets including plastic and rubber basement tanking sheet*") and EN 13707 ("*Reinforced bitumen sheets for roof waterproofing*").

RECOMMENDATIONS

- Do not expose **Mapethene HT AP** permanently to UV rays.
- Do not apply **Mapethene HT AP** in presence of dew or surface free standing water.
- Do not apply **Mapethene HT AP** without a protective layer if exposed to direct mechanical loads.

APPLICATION PROCEDURE

Preparation of the substrate

Mapethene HT AP 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 high pressure water jets and wait until all the water has dried off. Completely remove all traces of any old waterproofing layers. If the reinforced concrete to be waterproofed has gravel clusters or other irregularities, remove them with hand or power tools or by hydroblasting. Carefully clean any exposed pieces of rebar, treat them with a coat of **Mapefer 1K Zero** anti-corrosion cementitious mortar and fill all gaps and demolished areas with **Planitop Smooth & Repair R4 Zero**, thixotropic cementitious structural mortar With quick-setting and compensated-shrinkage, or a suitable product from the **Mapegrout** range of mortars. For application on the surface of bricks or blocks, on the other hand, completely remove all traces of mortar protruding from between the blocks, skim over any defects and grout any gaps in the joints with **Mapegrout 430 Zero** fine-textured thixotropic mortar or **MapeWall Render & Strengthen** high strength, natural hydraulic lime-based rendering and masonry mortar. Then in correspondence of the structural joints, blend in all the corners between the foundations and walls and between **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, at a rate of approx. 100-200 g/m², or alternatively, **Mapeproof SA Primer**, one-component and quick-drying primer, at a rate of 200 g/m².

Application

Any through objects on horizontal and vertical substrates must be sealed using two pieces of **Mapethene HT AP** cut to shape to form a collar between the object passing through the surface and the substrate, as shown in the figures 1, 2 and 3. After the primer has dried, Apply **Mapethene HT AP** rolls on vertical surfaces, fastening the membrane in place From the top, using a strips of metal profile or batons and seal the ends with **Mapeproof Liquid Membrane**. Place the rolls in position and unroll them (while removing the protective film). Press the rolls firmly against the wall by going over the surface with a roller. When applying the membrane on horizontal surfaces, remove the first 20 cm of protective film, line up the roll in the direction it is to be applied and unroll **Mapethene HT AP**. Remove the film as you unroll the membrane so that it adheres evenly to the substrate, using the suitable rubber roller.

Adjacent sheets must overlap of at least 7 cm.

Carry out localised repairs to areas that have been accidentally damaged with pieces of **Mapethene HT AP** cut from the roll of membrane.

Protecting the waterproofing layer

Within 24 hours of applying **Mapethene HT AP**, protect all waterproofed surfaces with a protective drainage membrane, such as **Polyfond Kit Drain** made by Polyglass S.p.A., which protects **Mapethene HT AP** when holes and trenched are filled in.

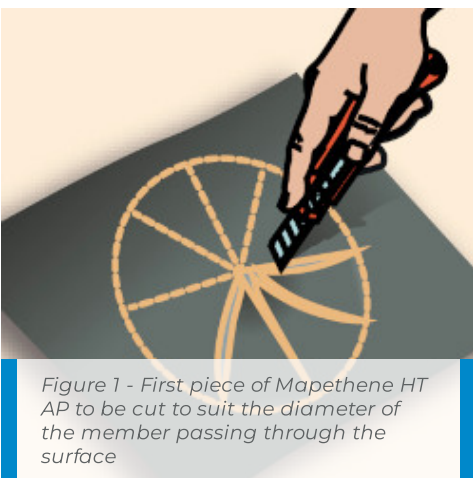


Figure 1 - First piece of Mapethene HT AP to be cut to suit the diameter of the member passing through the surface

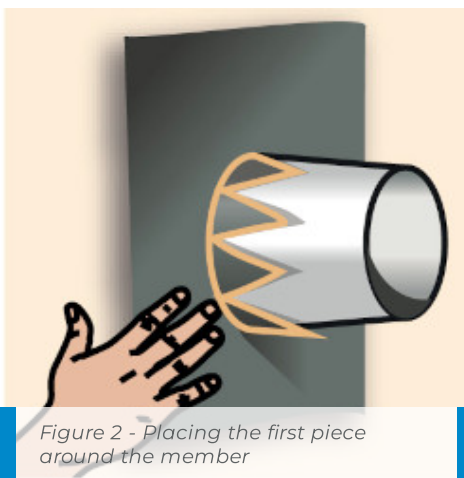


Figure 2 - Placing the first piece around the member

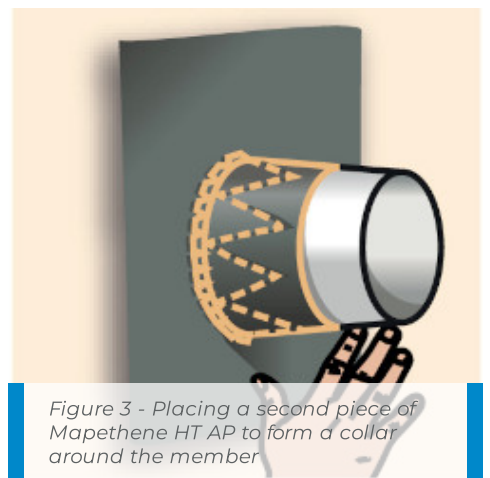


Figure 3 - Placing a second piece of Mapethene HT AP to form a collar around the member

PACKAGING

Supplied in 20 m² rolls (width 1 m).

STORAGE

Mapethene HT AP may be stored for 15 months in its original packaging. Protect from frost. It is recommended to store the product in its original, sealed packaging in a dry area at +5°C to +35°C. To keep the rolls in good condition prior to use, avoid exposing them to direct sunlight, rain, snow and extreme weather conditions.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Mapethene HT AP is an article and referring to the current European regulations (Reg. 1906/2007/EC - 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.

TECHNICAL DATA (typical values)

Mapethene HT AP: flexible waterproofing HDPE membrane in compliance with EN 13969 and 13707

PRODUCT IDENTITY

Width:	1000 mm (930 mm + 70 mm vulcanised sheet)
Thickness:	1.50 mm
Weight:	1.8 kg/m ²

APPLICATION DATA

Application temperature:	from +10°C to +35°C
--------------------------	---------------------

FINAL PERFORMANCE

Radon gas diffusion coefficient (m ² s ⁻¹):	1.99 E-13
Tensile strength (ASTM D 412):	2.5 MPa
Elongation at break (ASTM D 412):	200%
Hydrostatic pressure resistance (ASTM D5385):	70 m
Puncture resistance (ASTM E 154):	200 N

Performance characteristic	Reference method	Requirements according to EN 13969 and EN 13707	Performance results Mapethene HT AP
Tensile strength:	EN 12311-1	value declared by the manufacturer	≥ 200 N/50 mm
Elongation at break:	EN 12311-1		≥ 200%
Impermeability:	EN 1928		pass, method A

Resistance to impact:	EN 12691		pass, 300 mm
Joints strength:	EN 12317-1		≥ 100 N/50 mm
Flexibility at low temperatures:	EN 1109		-25°C
Static load resistance:	EN 12730		pass, method B 15 kg
Tear strength (nail method):	EN 12310-1		≥ 60 N
Reaction to fire:	EN 13501-1	Euroclass	E

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.com

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.com.

ANY ALTERATION TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS EXCLUDES THE RESPONSIBILITY OF MAPEI.

599-7-2023 en (IT)

Any reproduction of texts, photos and illustrations published here is prohibited and subject to prosecution

