

APP Modified Torch-Applied Bituminous Waterproofing Membrane

WHERE TO USE

Mapethene TA is a quality APP modified bituminous membrane, developed using the most up to date technology that enables it to perform over time and give long lasting waterproofing characteristics.

TECHNICAL CHARACTERISTICS

- Positive barrier to water.
- Excellent resistance to atmospheric pressure.
- High flexibility at low temperature.
- Withstands thermal shocks, ideal for exposed system.
- · Easy application.
- General purpose membrane for various waterproofing jobs; roofing wet areas, basements, reroofing etc.
- It is manufactured with non-woven polyester reinforcements, stabilized with longitudinal glass wire that are impregnated and coated with a mixture of APP polymer modified bitumen.

Thickness, Size & Surface Finish

Mapethene TA is available in a variety of thickness to suit all application requirements. Standard roll size is 1x10 meters lengths.

The upper surface can be finished in sand or mineral finish. The lower surface has a polyethylene film which melts when torched.

HOW TO USE

Preparing the substrate

The application of **Mapethene TA** Roofing and waterproofing membrane is easy and quick.

Laying the membrane

After having mopped the surface to be water proofed with 200-300 grms/m² of Isamite SP (ASTM D41), allow a drying time up to 24 hours.

In all cases, it is always necessary to unroll the membrane on the surface in its final position and then re-roll it ready for bonding. This procedure allows to detect in time any possible defect either in the waterproofing sheet or in the substrate. A check must be made to ensure that the correct, torchable side of the membrane is the one in contact with the substrate. The torch flame must touch lightly the surface of the membrane and be in the direction of the substrate. This brings the bituminous compound to the correct fluidity without damaging its plastomeric components, and at the same time prepares (by heating it) the substrate which is then in the ideal condition to "receive" the adhesion of the waterproofing compound. A valid indication of the time of heating of the bituminous compound is given by the colour of the torch flame. When it changes from blue-yellow to red with emission of smoke, this means that combustion has started and melting of the membrane will follow. This is when the heating of the membrane must stop.

The joints

Jointing must be carried out by overlapping the edges



TECHNICAL DATA (typical values)

TEST METHOD	TECHNICAL FEATURES	UNITS OF MEASURE		NOMINAL VALUES		NOMINAL VALUES
EN 1848-1	LENGTH	m		(10-1%)		(10-1%)
EN 1848-1	WIDTH	m		(1-1%)		(1-1%)
EN 1848-1	STRAIGHTNESS	mm/10 m		through		through
EN 1849-1	THICKNESS	mm		3-4 (± 10%)		NPD
EN 1849-1	MASS PER UNIT AREA	kg/m²		NPD		4-4,5-5 (± 10%)
EN 1928-B	WATERTIGHTNESS	kPa		through		through
EN 1928-B EN 1296	DURABILITY OF WATERTIGHTNESS AGAINST ARTIFICIAL AGEING	kPa		through		through
EN 1928-B EN 1847	DURABILITY OF WATERTIGHTNESS AGAINST CHEMICALS	kPa		through		through
EN 13897	WATERTIGHTNESS AFTER STRETCHING	%		-		-
EN 13501-5	EXTERNAL FIRE PERFORMANCE	-		F _{Roof}		F _{Roof}
EN 13501-1	REACTION TO FIRE	-		F		F
EN 12316	PEEL RESISTANCE	N/50 mm		-		-
EN 12317	SHEAR RESISTANCE	N/50 mm		-		-
EN 12311-1	MAXIMUM LOAD AT BREAK - longitudinal: - transversal:	N/50 mm N/50 mm	ENE TA	750 (–20%) 550 (–20%)	ETHENE TA	750 (–20%) 550 (–20%)
EN 12311-1	ELONGATION AT BREAK - longitudinal: - transversal:	% %	MAPETHENE	40 (–15) 40 (–15)	MINERAL MAPETHENE	40 (–15) 40 (–15)
EN 12691-A	RESISTANCE TO IMPACT	mm		≥ 700	M	≥ 700
EN 12730-A	RESISTANCE TO STATIC LOADING	kg		≥ 10		≥ 10
EN 12310-1	RESISTANCE TO TEARING - longitudinal: - transversal:	N N		150 (–30%) 150 (–30%)		150 (–30%) 150 (–30%)
EN 1107-1	DIMENSIONAL STABILITY	%		≤ 0,3		≤ 0,3
EN 1108	FORM STABILITY UNDER CYCLIC TEMPERATURE CHANGE	%		-		-
EN 1109	COLD FLEXIBILITY	°C		≤ -5		≤ -5
EN 1110	FLOW RESISTANCE AT ELEVATED TEMPERATURE	°C		≥ 110		≥ 110
EN 1110 EN 1296	FLOW RESISTANCE AFTER ARTIFICIAL AGEING	°C		≥ 100		≥ 100
EN 1297 EN 1850-1	ARTIFICIAL AGEING BEHAVIOUR (VISIBLE DEFECTS)	-		ABSENTS		-
EN 12039	ADHESION OF GRANULES	%		-		≤ 30
EN 1931	WATER VAPOUR PROPERTIES	μ		20000		20000
EN 1850-1	VISIBLE DEFECTS	-		ABSENTS		ABSENTS

	SINGLE LAYER		MULTI-LAYER			ROOT BARRIER	VAPOUR BARRIER	FOUNDATIONS		UNDER ROOFING TILE	
PRODUCT			F.	.L.	U	.L.			R.D.	P.	
	E.	U.H.P.	E.	U.H.P.	E.	U.H.P.					
3 mm				•	•	•					
4 mm			•	•	•	•			•		
4 kg Mineral			•								
4,5 kg Mineral			•								
5 kg Mineral			•								

F.L.: Finishing Layer - U.L.: Underlying Layer - R.D.: Rising Damps - P.: Pitch - E.: Exposed - U.H.P.: Under Heavy Protection

of the membranes (laid as "tiles", in a way which allows the down flow of the water), for at least 8 cm in the case of side joints and 12 cm for head joints.

This operation must be carried out with the greatest care, by appropriately dosing the use of the torch, as described above. The application is completed by gently pressing the edges so that some of the melted compound runs out. This can then be smoothed using a hot rounded trowel.

Sheet Arrangement

In case of single layer application, the above general instructions apply; in case of two or more layers, the sheets must be arranged in staggered rows with overlaps of the upper sheets in the middle of the lower sheets. Longitudinal overlaps must be in the same parallel to the slope.

FOR PROFESSIONAL USERS.

WARNING

Although the technical details and recommendations contained in this product

report 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 applications: 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.com

All relevant references for the product are available upon request and from www.mapei.com



