

ISO-THERM MEMBRANE

Ultra thin, breathable thermal membrane for internal wall insulation (TIWI) and damp / mould control



BENEFITS AND FEATURES

- Improves thermal efficiency by lowering heat loss
- Improves breathability
- Inhibits mould growth
- Provides protection against damp
- Fast and easy to apply

TECHNICAL CHARACTERISTICS

Iso-therm Membrane is vapour permeable, but waterproof, thereby resisting any lateral damp transference. Because of its thermal benefit and the withholding of any natural damp transference, it is highly resistant to any formation of surface mould. **Iso-therm Membrane** complies with the principles defined as EN 13984 ("Compliance with this standard is essential for ensuring the quality, performance, and durability of these membranes, used to effectively seal interfaces on facades and around windows, preventing water ingress and maintaining the integrity of the building envelope").

WHERE TO USE

- Damp wall restoration (internal)
- Mould and condensation remediation for internal walls
- Thermal insulation for ceilings, floors, and walls

APPLICATION PROCEDURE

Preparation of the substrate

It is recommended that the rolls are prepared prior to installation by cutting them to the required dimensions of the wall. Wet the darker side of the cut sections with water using a spray then lay on a flat surface to allow the material to flatten to accelerate application and enhance the final bond and wait for around 2 minutes before application. The material can be easily cut using a standard utility knife and is suitable for installation by both professional applicators and competent DIY users. For the preparation of the substrate and the preparation of the **Iso-therm Bond Plus**, refer to the Technical Data Sheet of **Iso-therm Bond Plus** product.

Application

First apply **Iso-therm Bond Plus** to the prepared wall surface using a 6 mm notched trowel to form horizontal ribs on the wall surface, final finish on bed of adhesive should be 1 - 1.5 mm in thickness. Only apply enough adhesive to an area that can be covered with the **Iso-therm Membrane** within a 20-minute period. Ensure the adhesive bed depth does not exceed 3 mm, excessive depth of adhesive will lead to prolonged drying times and slower strength development. Measure the dimensions of the wall and cut sections of **Iso-therm Membrane** to this length using a standard utility knife, allowing the membrane to flatten before application. Wet the darker side of the membrane with a light spray of water and wait for approx. 2 minutes. Doing so, will accelerate application and enhance the final bond. Place the **Iso-therm Membrane**, making sure to stick the light side of the roll to the substrate, pressing it first with hands and then roll flat with a suitable roller to eliminate any air bubbles. Place the membrane sheets side by side to avoid overlapping. Next, tape all joints between the cut lengths of **Iso-therm Membrane** with extra sticky scrim tape. Allow the **Iso-therm Bond Plus** adhesive to dry for a minimum of 24 hours before finishing with an application of multi-finish plaster directly onto the **Iso-therm Membrane**. Once the plaster has fully cured, the surface can be completed by using a suitable breathable paint for the desired decorative finish.

CLEANING

Tools and hands can be cleaned with water; surfaces should be cleaned with a damp cloth; water should be used only in moderate quantities and after a few hours.

PACKAGING

Iso-therm Membrane is supplied as a roll of 7.5m x 0.95m (7.125m²)

STORAGE

Iso-therm Membrane when kept upright and covered, has a shelf life of 5 years.

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.

PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA

PRODUCT IDENTITY	
Type	membrane
Colour	Orange
Materials	Woven Polyester
Thickness	5 mm +/- 10%

APPLICATION DATA	
Application temperature:	+5°C to +35°C

FINAL PERFORMANCE	
Durability:	
- water vapour resistance after artificial ageing (EN 1296 + EN 1931):	Pass (water vapour resistance variation ≤ 50 %)
- chemical resistance (EN 1847 + EN 12311-2):	Pass (tensile strength reduction ≤ 50 %)
Resistance to tearing (EN 12310-1):	longitudinal resistance to tearing (nail shank) ≥ 185 N transversal resistance to tearing (nail shank) ≥ 235 N
Water vapour resistance: (EN 1931):	$\mu = 57 \pm 13.5$
Tensile properties (EN 12311-2):	longitudinal tensile strength ≥ 2.8 N/mm transversal tensile strength ≥ 2.0 N/mm longitudinal elongation $\geq 35\%$ transversal elongation $\geq 45\%$
Thermal conductivity (EN 12667):	0.037 W/mK

N.B.

Whilst we try to ensure that any advice, recommendations or information given in our literature is accurate and correct, we have no control over the circumstances in which our product is used. It is therefore important that the end users satisfy themselves that the product and conditions are suitable for the envisaged application.

No warranty can be given, or responsibility accepted other than, that the product supplied by us will meet our written specification.

End users should ensure that our latest product data and safety information sheets have been consulted prior to use.

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.

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

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