

Technical Data Sheet

ME010

FR Window & Door Sealing Membrane

Class B, W1+ Window & Door Sealing Membrane

26-03-2025 / V 1

Description

FR Window & Door Sealing Membrane (ME010) is a Class B permanently UV resistant, high strength polyester, airtight and fully watertight membrane used as a perimeter membrane seal to the external side of glazed units such as windows and doors. When correctly installed with illbruck FR Membrane Adhesive (SP025), it provides an air and fully watertight seal over the construction joint which remains breathable to enable any trapped incidental moisture or condensation to escape out through to the external side of the wall construction. It can also be used to seal and protect horizontal and vertical linear joints between sheathing boards and the main structure.

FR Window & Door Sealing Membrane (ME010) meets the fire performance requirements for membranes installed on "relevant and higher risk" building types as defined in Approved Document B of the Building Regulations for England and Wales.

It is available in 50 m rolls with a range of pre-cut slit widths from 60 mm to 400 mm wide and when installed over compatible substrates with a minimum Class A2-s1, d0 fire performance provides a fire Class B performance in accordance with EN 13501-1.

When tested for water resistance in accordance with EN 1928 with a 2 kPa head of water, FR Window & Door Sealing Membrane (ME010) achieves the criteria for Class W1 in accordance with EN 13859-2 and also remains watertight when tested over for an extended 24 hours test duration.

Illbruck's FR Window & Door Sealing Membrane (ME010) should be bonded back to the frame and substrate using illbruck FR Membrane Adhesive (SP025) and can be used in combination with a compatible illbruck FR Breather Membrane to provide a full façade solution. When used together they form a continuous weather and airtight barrier around the full building envelope including structural openings.

It is important that FR Window & Door Sealing Membrane (ME010) is installed in the correct orientation with the smooth/coated side always facing outwards towards the external environment.



Features and Benefits

- Permanently UV-resistant
- Class B-s1, d0 to EN 13501-1 when bonded with FR Membrane Adhesive (SP025).
- Easy to apply, fold, and manipulate
- Water resistant to EN 1928 at 24 hours and resistant to wind driven rain.
- Airtight and can achieve Passiv Haus standards.
- Breathable (vapour open)
- High range of in-service temperature resistance
- Environmentally friendly EC1+
- Non branded, plain black finish – suitable for visible applications.

Packaging

Available in the below size (Roll Width (mm) x Roll Length (m)). All items are supplied in a single unit.

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60 x 50
100 x 50
150 x 50
200 x 50
250 x 50
300 x 50
350 x 50
400 x 50

Available Colour

Black

Technical Characteristics

Grammage	EN 1849-2	Nominal 180 g/m ²
Thickness	EN 1849-2	Nominal 0.4 mm
Fire Classification	EN 13501-1	Class B-s1, d0 when installed directly over a mineral substrate with a fire Classification of A1 or A2-s1, d0 and a density ≥ 615 kg/m ³ bonded with SP025.
Resistance To Water Penetration	EN 1928 (EN 13859-2)	Class W1 (before and after ageing) Class W1+ after an extend 24 hours test duration
Tear Resistance	EN 12310-1	Longitudinal > 45 N Transverse > 105 N
Driving Rain Resistance	EN 1027	1,200 Pa
Water Vapour Resistance	EN ISO 12572	< 0.60 MNs/g
Water Vapour Transmission	EN ISO 12572	Sd < 0.12 m
Air Permeability	EN 12114	≤ 0.1 m ³ /m ² .h@50 Pa
UV Resistance	EN 1296/97	Exposed - 12 months Covered - Permanent (including open joints max. 50 mm)
Application Temperature		+5°C to +30°C
Flexural Behaviour In Cold Conditions	EN 1109	-30°C
Tensile Strength	EN 12311-1	Longitudinal: > 450 N/50 mm Transverse: > 180 N/50 mm > 75% (after ageing)
Elongation	EN 12311-1	Longitudinal: < 30% Transverse: < 35%
Service Temperature		-40°C to +150°C

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Certifications	BBA	23/6999
Storage	Store in shaded dry conditions between +5°C and 25°C, away from direct exposure to weather. Avoid stacking pallets.	
Shelf Life		24 months when stored as recommended in original unopened packaging.

Necessary Tools

Tape measure, cutting shears, seam roller and application gun.

Preparation

Ensure surfaces are clean, dry, free from oil, grease, dust, debris and any other contaminants that may affect adhesion. To maximise the adhesive bond we recommend priming the substrate with a compatible illbruck primer.

Application

FR Window & Door Sealing Membrane (ME010) is applied in accordance with illbruck best practice, specification guidance and method statements. For a detailed step by step guidance on applying FR Window & Door Sealing Membrane (ME010) as a perimeter membrane seal, please refer to "Application of illbruck membranes using paste adhesive", available on Tremco CPG UK website.

A minimum 20 mm clear bonding zone is required to both the frame and substrate. The membrane is installed by applying a 10 mm diameter bead of adhesive which is fully consolidated using a stout seam roller once the membrane is in place.

To provide maximum UV resistance and to maintain the fire performance of the product, the FR Window & Door Sealing Membrane (ME010) must always be installed in the correct orientation with the smooth/coated side facing outwards towards the external environment. The textured side of the membrane is always bonded back to the substrate to maximise the adhesive bond when using FR Membrane Adhesive (SP025).

When installed around windows or doors, FR Window & Door Sealing Membrane (ME010) is applied to all four sides of the glazed frame with the application starting at the sill, followed by the jambs, and finishing with the head. All membrane overlaps must be a minimum 100 mm and formed in a downwards direction to provide a robust seal.

If the membrane interfaces with a third-party material such as sealants, hot melt, torch-down or cold applied liquid waterproofing membrane, the compatibility of the FR Membrane Adhesive (SP025) should be confirmed by consulting with Tremco CPG UK technical department. When bonding FR Membrane Adhesive (SP025) to silicone-based sealants (e.g. on sheathing board joints), the area should be primed using illbruck AT140 Primer applied directly over the cured sealant areas.

At any door sills or low thresholds (such as balconies) where it has been assessed that there is a risk of standing water or long-term submersion of the membrane, please consult with Tremco CPG UK technical department.

When applying FR Window & Door Sealing Membrane (ME010) with an illbruck FR Breather Membrane full façade membrane, the window application should be completed first, followed by the façade application. The breather membrane should form an overlap which is sealed to the FR Window & Door Sealing Membrane (ME010) using ME316 Endurance Tape.

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For linear joint seals, a suitable width roll of FR Window & Door Sealing Membrane (ME010) is used, and bonded either side of the joint with FR Membrane Adhesive (SP025). The minimum overlap on either side of the joint should be 50 mm.

Applicators are advised to obtain full on-site training and consult the relevant method statements and installation guides in addition to reading this Technical Data Sheet.

For further information regarding FR Membrane Adhesive (SP025) adhesive please consult technical data sheet, available from website (www.tremcocpg.eu).

Guarantee / Warranty

Tremco CPG UK Ltd products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with Tremco CPG UK Ltd written instructions and (b) in any application recommended by Tremco CPG UK Ltd, but which is proved to be defective, will be replaced free of charge. Tremco CPG UK Ltd shall not be held liable for any direct, indirect, incidental, special, or consequential damages arising out of or in connection with the use of the guidance/recommendations provided. Tremco CPG UK Ltd reserves the right to modify or discontinue any recommendations at any time without prior notice.

Health And Safety Precautions

Safety data sheet must be read and understood before use.

Technical Service

Tremco CPG UK Limited has a team of experienced Technical Sales Representatives who provide assistance in the selection and specification of products. For more detailed information, service and advice, please call Customer Services on 01942 251400.

Certification

Construction Products Group

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