

Technical Data Sheet

ME007**FR Window & Door Sealing Membrane HD**

Class B , W1+ Window & Door Sealing Membrane

17-06-2024 / V 1

Description

FR Window & Door Sealing Membrane HD (ME007) is a Class B-s1, d0, 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 HD (ME007) 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 Class B-s1, d0 fire 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 HD (ME007) 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 HD (ME007) 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 HD (ME007) is installed in the correct orientation with the smooth/coated side always facing outwards towards the external environment.

Features and Benefits

- Permanently UV resistant
- Reaction to Fire Class B-s1, d0
- Easy to apply, fold, and manipulate
- Water resistant to EN 1928 at a 2 kPa head of water for 24 hours
- Airtight and can achieve Passiv Haus standards.
- High range of in-service temperature resistance
- Environmentally friendly EC1+
- Non branded, plain black finish – suitable for visible applications
- High strength

Packaging

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

60 x 50
100 x 50
150 x 50

Technical Data Sheet

ME007

FR Window & Door Sealing Membrane HD

200 x 50

250 x 50

300 x 50

350 x 50

400 x 50

Available Colour

Black

Shelf Life

1 year when stored as recommended in original unopened packaging

Storage

Store in shaded, dry conditions and avoid stacking pallets

Technical Characteristics

Grammage	EN 1849-2	210 g/m ²
Thickness	EN 1849-2	Nominal 0.4 mm
Dimensional Stability	EN 1107-2	< 1%
Reaction To Fire	EN 13501-1	B-s1, d0
Resistance To Waterpenetration	EN 1928 (EN 13859-2)	Class W1 (before and after ageing) Class W1+ after an extend 24 hours test duration
Maximum Tensile Strength Lengthwise/Crosswise	EN 12311-1	300/200 N/50 mm (before ageing) 290/190 N/50 (after ageing)
Tear Growth Resistance	EN 12310-1	120/120 N
Water Vapour Diffusion	EN ISO 12572	0.04 m 0.20 MNs/g
Air Permeability	EN 12114	≤ 0.03 m ³ /m ² .h.50 Pa
Uv Resistance		Exposed - 12 months Covered - Permanent (including open joints max. 50 mm)
Flexural Behaviour In Cold Conditions	EN 1109	-40°C
Elongation At Break	EN 12311-1	25/25% (before ageing) 20/20% (after ageing)
Service Temperature	EN 13859-1	-40°C to +150°C
Storage		Store in shaded, dry conditions and avoid stacking pallets.
Shelf Life (Dry Room And Unopened)		1 year when stored as recommended in original unopened packaging.

Necessary Tools

Tape measure, cutting shears and application gun.

Technical Data Sheet

ME007**FR Window & Door Sealing Membrane HD****Preparation**

Ensure surfaces are clean, dry, free from dust, debris and any other contaminants that may affect adhesion.

Application

FR Window & Door Sealing Membrane HD (ME007) 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 HD (ME007) 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 HD (ME007) 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 HD (ME007) 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 HD (ME007) 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 (ME007) using ME316 Endurance Tape.

For linear joint seals, a suitable width roll of FR Window & Door Sealing Membrane HD (ME007) 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 30 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

Technical Data Sheet

ME007

FR Window & Door Sealing Membrane HD

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. No liability can be accepted for the information provided in this leaflet although it is published in good faith and believed to be correct.

Tremco CPG UK Limited reserves the right to alter product specifications without prior notice, in line with Company policy of continuous development and improvement.

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.

Technical Data Sheet

ME007

FR Window & Door Sealing Membrane HD

Certification

