Technical Data Sheet

ME501

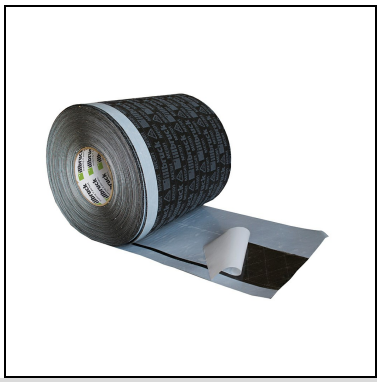
Duo Window Membrane HD

Class W1 Window Sealing Membrane

30-10-2026 / V 1

Description

ME501 is a high strength, tear resistant, air and weathertight, window & door sealing membrane made from polyethylene copolymer film with non-woven fabric. It can be applied before or after window installation to suit on-site details and programming. The membrane is attached to the window and construction material with SP525 Frame and Facade Sealant & Adhesive. ME501 is also available as a self-adhesive ME501VV.



Features and Benefits

- Complies with principle of 'inside tighter than outside' in order to facilitate efficient vapour control
- BBA accredited alternative to EPDM in many applications
- Excellent drying potential (due to the membrane's vapour permeability) avoiding mould growth and physical damage
- UV stable - will tolerate up to 12 months direct exposure prior to covering
- Fully compatible with illbruck Building Protection Membranes
- Weathertight against driving rain to 1200 Pa
- ME501VV self adhesive version also available

Usage Purpose

ME501 provides a high performance seal to the perimeter joint between the window/curtain wall and the construction reveal. Due to the intelligent, variable vapour permeability (sd value), when used in an internal UK (warm) environment, it will be vapour-tight, and when used in an external UK (cold) environment it will be vapour open. This means that the membrane is suitable for interior and exterior use providing an air-tight and weather-tight seal whilst always complying with inside tighter than outside principles.

Packaging

ME501 is supplied on 25 m rolls in slit widths between 60 and 1500 mm.

Available Colour

Black

Technical Data Sheet

ME501

Duo Window Membrane HD

Technical Characteristics

Thickness		Nominal 0.6 mm
Fire Classification	EN 13501-1	Class E
Resistance To Driving Rain	EN 1027	1200 Pa
Water Tightness	EN 1928 (EN 13859-2)	Class W1
Water Vapour Permeability (Sd)	EN ISO 12572	Sd value ranges between 0.3 and 20 m The Sd value will depend on average atmospheric humidity, and acts as an intelligent vapour barrier
Water Vapour Resistance Factor (μ)	EN ISO 12572	500 - 33000
Air Tightness	EN 1026	≤ 0.1 $m^3/m^2.h@50$ Pa
UV Resistance		12 months
Adhesion Of The Self-Adhesive		≥ 12 N/25 mm
Service Temperature		-40°C to +80°C
Compatibility With Traditional Building Materials	DIN 18542	Passed
Storage		12 months

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

ME501 is applied in accordance with illbruck best practice, specification guidance and method statements. For a detailed step by step guidance on applying ME501 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 SP525 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 ME501 must always be installed in the correct orientation with the shiny 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 SP525.

When installed around windows or doors, ME501 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 SP525 should be confirmed by consulting with Tremco CPG UK technical department. When bonding SP525 to silicone-based sealants (e.g. on sheathing board joints), the area should be primed using

Technical Data Sheet

ME501

Duo Window Membrane HD

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 ME501 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 ME501 using ME315 Total Protection Tape or ME316 Endurance Tape.

For linear joint seals, a suitable width roll of ME501 is used, and bonded either side of the joint with SP525. 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 SP525 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. 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

ME501

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Certification

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