

CI/SfB	(31)	Ln6
CAW P10		
Uniclass L6631:P91		

## Description

ME501 is a high strength, tear resistant 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. It is also available with gasket options for fixing to window profiles.

The product meets the recommendations of the RAL Quality Assurance Association for windows and doors. Successfully tested by MPA Hannover to EN1026 (airtightness) & EN1027 (weathertightness). The membrane is attached to the window with SP525 adhesive, enhanced acrylic adhesive + strip, or integral gasket and to the construction reveal material with SP525 adhesive.

## Product Variants

- ME501 Duo Window Membrane HD – membrane slit to required width, without adhesive (use SP525 to bond to frame and structure).
- ME501 Duo Window Membrane HD – standard widths of 150 mm & 300 mm, with gasket (use SP525 to bond to structure). There are four gasket options – see ‘Gasket Options’ on next page.
- ME501 Duo Window Membrane HD- with enhanced acrylic adhesive + strip for bonding to frame (use SP525 for bonding to structure).

## Colour

Black

## Packaging

ME501 Duo Window Membrane HD is supplied on 25 m rolls.

## Dimensions

- Slit to width 60- 1,500 mm
- Membrane thickness 0.6 mm
- Length Tolerances to DIN 7715 P3
- Width dimensions to tolerance  $\pm 2.5$  mm

## Application - Bonding with SP525 Adhesive After Frame Installation

### For full details - refer to Method Statement

(suitable for single windows and curtain walling/multiple coupled windows)

- Apply a 10 mm dia bead of SP525 Adhesive to align 15 mm from one edge of the back (shiny) face of the membrane and bond to the window frame face or edge (ensure frame is dry and clean), consolidating with a seam roller, taking care that the adhesive does not exude out onto the frame. The compressed bead should now be approximately 20-30 x 2-3 mm. If it is not possible to apply a consolidated bead of minimum 20 mm, please consult tremco illbruck technical department.

### NOTE:

- For further information regarding SP525 adhesive, please consult technical data sheet, available from website ([www.tremco-illbruck.co.uk](http://www.tremco-illbruck.co.uk)).



## ME501

### Duo Window Membrane HD

#### Usage / Purpose

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.

#### Key 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

# ME501

## Duo Window Membrane HD

### Application - Bonding with Enhanced Acrylic Adhesive + Strip

- Bond the ME501 to the edge or face of previously cleaned frame and to construction material with SP525 adhesive

### Gasket Option

As an alternative fixing method to the frame, there are four gasket options which can be used, dependent on a suitable groove on the frame profile. The gasketed membrane is fixed to the construction material using SP525 Adhesive as in previous application details above.

ME501 Duo Window Membrane HD is the world's first intelligent (sd variable) window membrane with gasket attachment and RAL approval. This guarantees highest quality and durability and the air tightness and weather tightness performance can be maintained.

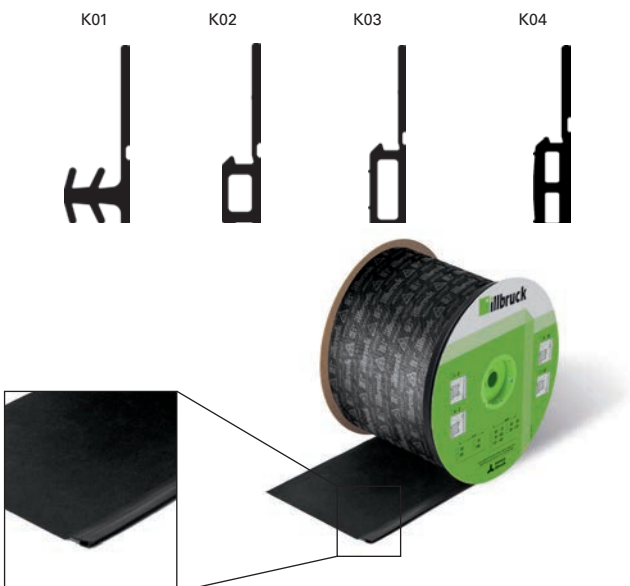
When using the gasket fixing option, if the frame is being installed into a reveal, the membrane will need to be applied prior to installation. If installing where the frame projects forward of the opening, the membrane can be applied after installation.

### Benefits

- Weather and surface-independent attachment to the window
- Four gasket options to suit most window/curtain walling profiles
- High security
- RAL-tested

### Gasket Dimensions

Gasket Type	Minimum Groove Depth	
	(mm)	Groove Width (mm)
K01	Approx 6.5	Approx 3- 5
K02	Approx 4.0	Approx 5- 7
K03	Approx 4.0	Approx 7- 10
K04	Approx 4.0	Approx 13- 15



### Technical Information

Property	Test Method	Result
Building Material Class	DIN 4102	B2 (ABP P-NDS04-776)
Water Vapour Permeability	EN ISO 12572	sd value between 0.3 and 20 m, depending on average atmospheric humidity, and acts as an intelligent vapour barrier
Water Vapour Resistance Factor ( $\mu$ )	DIN 52615	500- 33000
Weathertight Against Driving Rain	EN 1027	> 600 Pa
Airtightness	DIN 18542 EN 1026	< 0.1 m <sup>3</sup> /[h m (daPa)n]
Adhesion of the Self-Adhesive	AFERA 4001 P11	minimum 12 N/25 mm
Compatibility with Traditional Building Materials in Contact	DIN 18542	Passed
UV Resistance of the Non-Woven Film Composite (Non-Woven Composite, Weathered Fleece Side Free)		12 months
Temperature Resistance		-40°C to +80°C
Processing Temperature		+5°C to +45°C
Storage Period		1 year

### Please Note

- For thermal and/or acoustic insulation to the window/ construction interface, we recommend FM230 Pro Foam Window or FM330 Pro Foam Air Seal to be applied into the perimeter gap.
- SP525 adhesive is a 'green' alternative to traditional polyurethane sealants/adhesives and does not contain solvents or isocyanates and is a very low odour material. The product is supplied in 400 ml and 600 ml foils which results in easy disposal.
- Contact with certain construction materials may result in interactions. Compatibility must be tested in individual cases. Please consult separate technical data sheet for further information.
- Bonding to wall and frame surfaces: surfaces must be dry and free of oil, grease, dust and other anti-adhesive components. Do not apply ME501 Duo Window Membrane HD in temperatures below 5°C.
- Certain substrates may require priming- this should be checked in advance of application. Please consult tremco illbruck Technical Services Department for choice of primer..
- A metal clamping strip may be necessary on some applications to enhance the fixing of the membrane to the window frame when using SP525 Adhesive or the enhanced acrylic self-adhesive+.

- If intending to apply wet finishes over the membrane, ensure application to the non-shiny 'fleece' face. For large areas and improved adhesion of the wet finish, a plaster mesh version of illbruck ME501 Duo Window Membrane HD is available, subject to minimum order quantity and 3 weeks delivery.
- ME501 should always be installed with the non-shiny (fleece face) 'facing the outside'. This is to ensure UV resistance for up to 12 months and to facilitate over – plastering. If the shiny face is installed 'as seen', the air and weather tightness properties will not be affected but the membrane must be covered within 2 weeks to avoid UV degradation. If there are small gaps such as between partially open rainscreen panels, this is classed as exposed.
- ME501 is fully compatible with illbruck Building Protection Membranes- see separate literature.
- For curtain walling applications, it may be necessary to apply the ME501 with an amount of 'play' across the membrane width ie do not bond tightly across the joint but allow excess material so that in the event of movement, the membrane will not be stretched tightly. For applications where significant movement is expected, illbruck ME220 EPDM Membrane should be used.
- Always bond both membrane edges within 72 hours maximum to avoid damage due to unsecured membrane becoming exposed to UV (to the shiny face) and/or mechanical abrasion due to contact with other components during periods of wind pressure.

### Health & Safety Precautions

Safety data sheet must be read and understood before use.



"i3" Window Sealing System; Part of the state of the art, ift- approved sealing system, with a 10 year guarantee.\* This system fulfils the EnEV requirements with regards to airtightness.; \*Under the conditions specified by the manufacturers. Only valid on receipt of the correct registration documents in accordance with terms and conditions, available on request.



BBA Accredited Certificate N° 12/4891 as part of the i3 system.



#### Technical Service

tremco illbruck 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.

#### Guarantee / Warranty

tremco illbruck products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with tremco

illbruck written instructions and (b) in any application recommended by tremco illbruck, but which is proved to be defective, will be replaced free of charge.

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