

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

Material

Polyethylene copolymer film with non-woven fleece fabric and acrylic self-adhesive or gasket and butyl self-adhesive strips for location to frame and wall respectively.

Description

ME500 Duo Flexible Window Membrane W comprises a tear-proof non-woven fleece fabric with a polyethylene copolymer film including an integrated movement pleat for variable joint sizes and absorption of movement.

The product is BBA accredited and complies with the planning and installation recommendations of DIN 4108-7 and with the RAL Quality Assurance Association for windows and doors. It is attached to the wall with butyl self-adhesive and to the window/door with acrylic self-adhesive strips or gasket. The adhesive strips are located on opposite membrane faces and this version is intended for application to windows & doors prior to installation. The product has a specially designed reactive membrane- water vapour permeability (sd value) changes depending on the humidity inside the joint. This allows the product to perform as an intelligent seal for airtight and vapour tight internal joints. The intelligent reactive system ensures that the joint always dries at the maximum rate.

Colour

Black

Dimensions

Width (mm)	Thickness (mm)	Rolls per Carton	Metres per Carton
W 60 - 80	0.5 mm	6	300
W 80 - 110	0.5 mm	5	250
W 110 - 140	0.5 mm	3	150

Please note, 'W' version has self-adhesive and butyl strips on opposite faces of membrane.

All rolls are 50 m in length.

Priming

Priming with ME901 (brushable) or ME902 (spray) Butyl & Bitumen Primer may be required on dusty or damp substrates, or where the ambient temperature is below 5°C.



ME500-W

Duo Flexible Window Membrane W



Usage / Purpose

ME500-W is an intelligent membrane providing an internal airtight and vapour tight perimeter seal to windows and doors.

Key Benefits

- The variable sd value ensures that the joint dries out quickly, thus protecting against mould and moisture damage
- Intelligent product acts as an internal airtight and vapour tight perimeter seal
- Easy fixing to frame and wall



"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.

Duo Flexible Window Membrane W

Application as Internal Airtight Seal

Please note : the membrane should be attached prior to fitting of the windows/doors.

- Bond membrane with the self-adhesive strip to the outer edge of the window frame ensuring that the expansion pleat fold line is in line with the edge/inner face junction of the frame as fig 1 (note, drawing shows an inward opening window). Start at the centre of bottom frame section.
- Continue around the frame, applying to all sides and leave min 20 mm fold at each corner as fig 2.
- Bend and fold film so that the self-adhesive strip is back to back at the corners.
- Allow a 50 mm overlap of the start and end points of the membrane application.
- Fit fixing brackets to edge of frame over the membrane.
- Fit the window/door. The membrane should be projecting across the internal reveal.
- If insulating the joint between frame and reveal, apply FM230 Pro Foam Window.
- If necessary, prime the reveal area where the butyl adhesive will be located. The corner folds should be opened out to fit into the corners of the reveal.
- Bond membrane to reveal using the butyl strip. Ensure that the membrane is located as in fig 3.
- Consolidate the bond using a seam roller as fig 4.
- Normally, the exposed printed face of the membrane is subsequently dry-lined, however where a wet plaster finish is required, use illbruck ME508 Duo Membrane EW/F which includes a full self-adhesive backing to ensure complete contact with the reveal and good adhesion of the plaster.
- All lap joints and areas of potential air leakage paths (eg. around fixing brackets) must be sealed with SP525.

Technical Information

Property	Test Method	Result
Class of Building Material	DIN 4102	(normal flammability), P-NDS04-292
Water Vapour Permeability	DIN 4108-3	sd value between 0.3 and 20 m, depending on average atmospheric humidity, and acts as an intelligent vapour barrier
Water Vapour Resistance Factor (μ)	DIN 52615	600- 40,000
Adhesive Strength of Butyl		12 N/25 mm
Adhesive Strength of Self-Adhesive		12 N/25 mm
Compatibility with Conventional Building Materials	DIN 52 452	passed
UV Resistance - Fleece Face Exposed		approximately 3 months
UV Resistance – Shiny Face Exposed		approximately 2 weeks
Airtightness	DIN 18 542 EN 1026	< 0.1 m ³ /[h m (daPa)n]
Weathertight Against Driving Rain	EN 1027	> 600 Pa
Temperature Resistance		- 40°C to +100°C
Application Temperature		+ 5°C to + 45°C
Storage Period		1 year

Length tolerances in accordance with DIN 7715 P3, width measurements in accordance with tolerance ± 2.5 mm. The self-adhesive strip is 1 to 6 mm in from the edge.

Attachment to Window

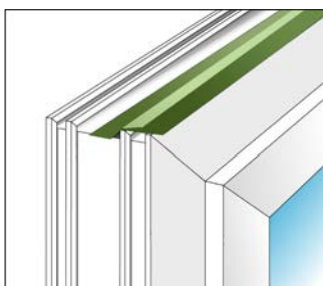


Fig 1
Bond film to edge of window frame



Fig 2
Form a 20 mm fold in the corner area

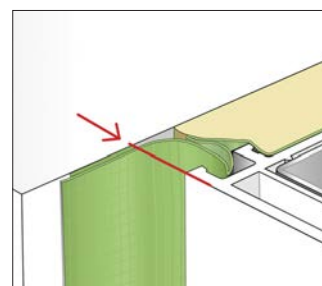


Fig 3
Positioning of the butyl strip



Fig 4
Consolidate the butyl bond using a roller

Attachment to Wall with Butyl

Application as External Weathertight Seal

- Although suitable for external applications as a weathertight perimeter seal, we recommend ME501 Duo Window Membrane HD due to the higher strength and up to 12 months UV exposure capability.

Gasket Option

(Replacing acrylic self-adhesive strip)

In certain application situations such as low temperature or wet weather, or on certain substrates, the standard acrylic self-adhesive strip may require the frame surface to be primed, and as an alternative fixing method, there are four gasket options which can be used dependent on a suitable groove on the frame profile. The gasketed membrane is available with or without butyl self-adhesive strip for fixing to the structure.

ME500 Duo Window Membrane W is the world's first intelligent (sd variable) window membrane with gasket attachment and RAL approval. This guarantees the highest quality and durability and the air tightness performance can be maintained.

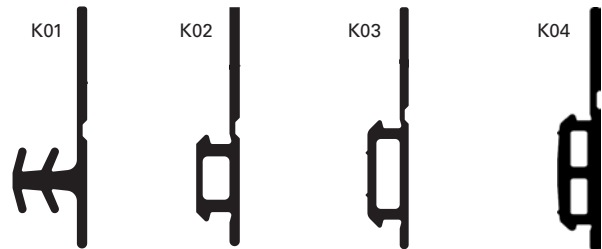
Benefits

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



If using membrane without butyl self-adhesive strip, bond to structure with SP525. Membrane with gasket option does not include a movement fold.

Please Note

- ME500 should be applied with the fleece (printed) face towards the inside. The shiny face must not be exposed to UV for longer than two weeks, therefore if this is likely, the exposed face must be protected temporarily until covered by other elements of the built-up wall.
- Bonding to wall and frame surfaces: bonding surfaces must be dry and free from oil, grease, dust and other anti-adhesive components. illbruck ME901 (brushable) or ME902 (spray) Butyl & Bitumen Primer may be required on some wall surfaces.
- The use of butyl tapes in conjunction with sealing materials may result in interactions.
- The membrane must always be fitted such that the printed face is visible before rendering / finishing.
- We provide a service for testing compatibility of our adhesives with 3rd party materials and would advise that our representative is made aware of this requirement in order to organise appropriate samples and to instigate the required testing (comprehensive testing takes up to 4 weeks).

Health & Safety Precautions

Safety data sheet must be read and understood before use.

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

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