

TECHNICAL DATA SHEET

EFFISIUS BREATHER FR SYSTEM

A1 CLASS FIRE RATED WEATHERPROOFING BREATHABLE MEMBRANE

 [View on the website](#)

CLASS A2-s1, d0

- ✓ Membrane
- ✓ Fastening Accessories
- ✓ Overlaps Accessories
- ✓ Penetrations Sealing

Tested & Approved

EFFISIUS
Excellence in Weatherproofing

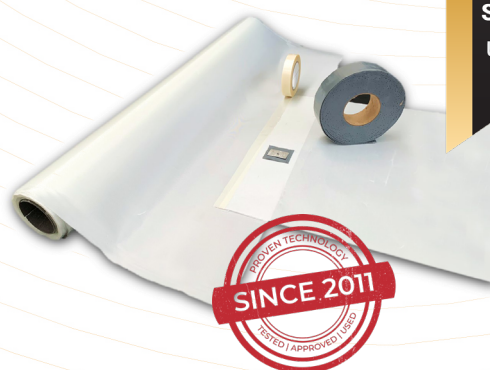
THE ONE AND ONLY

A1 FIRE RATED MEMBRANES
A2 FIRE RATED SYSTEMS
SINCE 2011
UNBEATABLE VALUE

EFFISIUS BREATHER FR MEMBRANE

Effisus Breather FR membrane was designed for protection of facades against moisture, driving rain and wind avoiding corrosion, insulation deterioration and mould growth on the facade elements.

It has an exceptional UV resistance and the existence of a large range of accessories allows its installation on the most demanding project requirements.



EFFISIUS ACCESSORIES SYSTEM

X2 SYSTEM POSSIBILITIES

Effisus 2Bond DS Tape

Function

Perimeter sealing; sealing nail/screw perforations



Substrates compatibility

Concrete or similar porous surfaces; Aluminum; Gypsum Sheathing Board, Calcium Silicate Boards, Cement Basis or similar; EPDM; Roofing membrane; Gas membrane

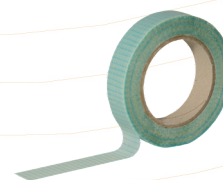
Special notes

Accessory with elongation and with 1.54mm thickness to allow movements

Effisus 2Adjoin DF Tape

Function

Fixing and membrane overlaps



Substrates compatibility

Galvanized Studs or similar metallic smooth surface and Gypsum Sheathing Board, Calcium Silicate Boards, Cement Basis or similar

CERTIFICATIONS ON GOING



TECHNICAL DATA



Essential characteristics

METHOD

RESULT

Essential characteristics	METHOD	RESULT
Thickness	EN ISO 12572	0.21 ± 0.021 mm
Length	-	93.45 m
Width	-	1.07 m
Reaction to fire	System ASTM E84 EN 13501-1 ^{a)}	Class A (or Class 1) A2 - s1, d0
	Membrane EN 13501-1	A1
Resistance to water penetration	EN 1928/EN 13111	W2, pass
Density of vapour flow rate, g (kg/(m ² .s))	EN ISO 12572	8.31 x 10 ⁻⁶ ± 2.81 x 10 ⁻⁷
Water vapour transmission properties (sd-value) (m)	EN ISO 12572	0.013 ± 0.001
Tensile Strength MD/CD (N/50mm)	EN 12311-1	2015 / 1725
Joint Strength (N/50 mm)	EN 12317-2	327 (N/50 mm)
Elongation at Break MD/CD (%)	EN 12311-1	4/ 3
Nail tear resistance MD/CD (N)	EN 12310-1	328 / 255
Flexibility at low temperatures (- 40 °C)	EN 1109	No cracks
Artificial ageing by long term exposure to the combination of UV radiation and elevated temperature and heat	Elongation ^{b)} (%)	5 / 4
	Tensile Strength ^{b)} (N/50mm)	2800 / 2210
	Resistance to water penetration ^{c)}	W2, pass

^{a)} The fire classification was obtained with Effisus accessories (double side adhesive tapes) tested as a system.

^{b)} In accordance with Annex C of EN 13859-2 (EN 12311-1)

^{c)} In accordance with Annex C of EN 13859-2 (EN 1928/EN 13111)

ACCESSORIES SELECTOR

Effisus Breather FR System achieved a fire reaction Class A2-s1,d0 as a system with Effisus accessories (double side adhesive tapes).



EFFISUS 2BOND DS
(double side tape)



EFFISUS 2ADJOIN DF
(double side tape)



Membrane Fixing

Concrete or similar porous surfaces



Aluminium Foil (insulation)



Gypsum Sheathing Board, Calcium Silicate Boards, Cement Basis or similar



Membrane Overlaps



Perimeter Sealing

Concrete or similar porous surfaces



Aluminium



Gypsum Sheathing Board, Calcium Silicate Boards, Cement Basis or similar



Perforations Sealing

Pipes



Electrical Cables



Nail/screw



EFFISUS 2BOND DS TAPE

Double-sided self-sealing adhesive tape creating a permanent weatherproofing seal on concrete, aluminium, sheathing boards and many other substrates. Specially designed to perimeter seal the membrane edges ensuring an effective sealant on membranes nail/screw perforations.

CLASS A2-s1, d0










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EFFISUS 2BOND DS

TECHNICAL DATA

 Elongation	> 500% ± 100
 Standard roll sizes	25mm x 15,25 lm 50mm x 15,25 lm
 Temperature resistance	-57°C to >+93°C
 Total thickness	1.54mm
 Water vapour test (EN 1931)	W1
 Shear resistance EN 12317-2^{a)}	> 73 (N/50 mm)
 Elongation at Break EN 12317-2^{a)}	18 mm
 Elongation (47N / 50 mm)	25 mm
 Application temperature	66°C to -29°C ambient

^{a)} Results obtained based on shear resistance test standard EN 12317-2 between the Effisus 2Bond DS tape and the Effisus Breather FR membrane;

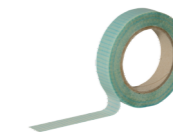
CLASS A2-s1, d0

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EFFISUS 2ADJOIN DF TAPE

Double-sided airtight and moisture resistant sealing tape suitable to fix the Effisus Breather FR membrane to aluminium, SFS metal studs and Effisus Breather FR membrane overlaps.



EFFISUS 2ADJOIN DF

TECHNICAL DATA

 Temperature resistance	-40°C to 90°C
 Standard roll size	2.5cm x 20.0 lm
 Shear resistance EN 12317-2^{a)}	327 (N/50 mm)
 T-Peel EN 12316-2^{a)}	47 (N/50 mm)

^{a)} Results obtained based on shear resistance test standard EN 12317-2 and T-peel test standard EN12316-2 of Effisus Breather FR membrane joint and Effisus 2Adjoin DF tape.