


TECHNICAL DATA SHEET

# EFFISIUS BREATHER FR SYSTEM

## A1 CLASS FIRE RATED WEATHERPROOFING BREATHABLE MEMBRANE

 [View on the website](#)

### 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



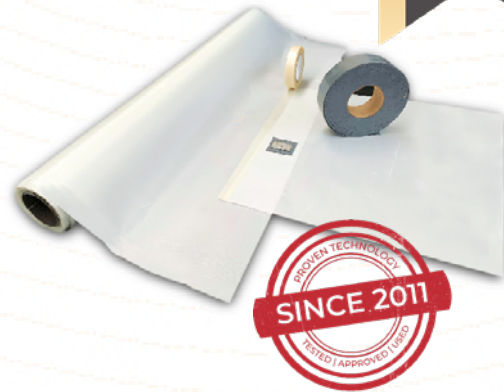
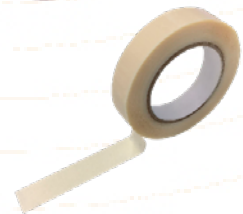
#### Effisus 2Adjoin DF Tape

**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



## TECHNICAL DATA



Essential characteristics		METHOD	RESULT
	Thickness	EN ISO 12572	0.21 ± 0.021 mm
	Length	-	78.74 m
	Width	-	1.27 m
	Reaction to fire	System	ASTM E84 EN 13501-1 <sup>a)</sup>
		Membrane	EN 13501-1
	Resistance to water penetration	EN 1928/EN 13111	W2, pass
	Density of vapour flow rate, g (kg/(m2.s))	EN ISO 12572	8.31 x 10 <sup>-6</sup> ± 2.81 x 10 <sup>-7</sup>
	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 <sup>b)</sup> (%)	5 / 4
		Tensile Strength <sup>b)</sup> (N/50mm)	2800 / 2210
		Resistance to water penetration <sup>c)</sup>	W2, pass

<sup>a)</sup> The fire classification was obtained with Effisus accessories (double side adhesive tapes) tested as a system.

<sup>b)</sup> In accordance with Annex C of EN 13859-2 (EN 12311-1)

<sup>c)</sup> 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  
System

- ✓ Membrane Class A1
- ✓ Fastening Accessories
- ✓ Overlaps Accessories
- ✓ Penetrations

Tested & Approved



### TECHNICAL DATA

### EFFISUS 2BOND DS

	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 <sup>a)</sup>	> 73 (N/50 mm)
	Elongation at Break EN 12317-2 <sup>a)</sup>	18 mm
	Elongation (47N / 50 mm)	25 mm
	Application temperature	66°C to -29°C ambient

<sup>a)</sup> Results obtained based on shear resistance test standard EN 12317-2 between the Effisus 2Bond DS tape and the Effisus Breather FR membrane;

**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.

**CLASS A2-s1, d0 System**

- ✓ Membrane Class A1
- ✓ Fastening Accessories
- ✓ Overlaps Accessories
- ✓ Penetrations

**Tested & Approved**



**TECHNICAL DATA**

**EFFISUS 2ADJOIN DF**



**Temperature resistance**

-40°C to 90°C



**Standard roll size**

2.5cm x 20.0 lm



**Shear resistance EN 12317-2<sup>a)</sup>**

327 (N/50 mm)



**T-Peel EN 12316-2<sup>a)</sup>**

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.