

NORSEAL®

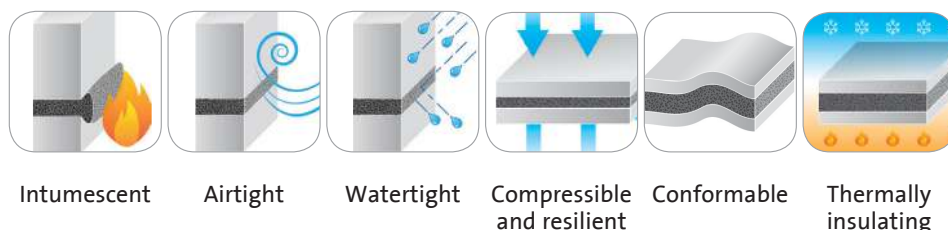
FS1000 Series

Providing protection in your environment

Intumescent, Airtight, Watertight and Resilient Sealing Foam

Saint-Gobain Norseal FS1000 Series is a proprietary, high-performance foam tape designed with a unique combination of sealing properties. FS1000 is expandable and fire resistant, blocking smoke, air and water. In its natural state, FS1000 is soft, conformable, and easy to attach to complex surfaces.

- Expandable and fire resistant. When heated to more than 200°C, FS1000 will expand and form a fire-resistant char, blocking fire, smoke and hot gases.
- Airtight. Compressed by 15%, FS1000 is airtight up to a pressure of 1000 Pa, depending on the surface of the application.
- Watertight. FS1000 is watertight when compressed by 30%.
- Compressible and resilient. It can be easily compressed and comes back to its original thickness after compression.
- Vibration damping. As a result of its resilience, FS1000 is able to damp vibrations and decouple two elements.
- Conformable. Soft; will conform to uneven surfaces.
- Easy installation. Produced in various thicknesses, delivered with or without adhesive on one side.
- Environmentally friendly. Contains no halogen compounds, and there are no concerns of toxic gas emissions when heated. The material does not disperse dust during installation, so it is safe for workers and other people nearby.



Intumescent

Airtight

Watertight

Compressible
and resilient

Conformable

Thermally
insulating

Applications

- Construction: joints in walls, floors, ceilings, windows and doors, HVAC and many other critical areas requiring fire compartmenting
- Automotive: protection of fuel tanks, (H)EV battery packs, etc.
- Aerospace: seats, freight compartments and other critical areas

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Norseal FS1000 Series – Properties

Performance tests are run using standard test procedures. The values presented are typical values and should not be used for specification purposes.

Category	Property		Standard	Unit	Value
Thickness			-	mm (in)	4.5 - 6.0 - 9.0 - 13.0 (.18 - .24 - .35 - .51)
Useable width			-	mm	min. 1360
Density			ISO 6916-1	kg/m ³	240
Dynamic properties	Force to Compress	@30%	ASTM D1667	kPa	10 - 30
	Compression Force Deflection	@30%			5 - 15
	Tensile Strength		ISO 1798	kPa	180 - 200
	Elongation at Break				%
	Compression Set @15 days at 50% at 23°C		ASTM D1667	%	5
Combustion	ASTM 3801		ASTM 3801	Classification	V0
	Limit oxygen index		ISO 4589-2		30
	EU small flame test		ISO 11925-2	Equivalent classification	B
	Expansion ratio (volume)		PRT129	%	200
	Temperature of activation		PRT130	°C	200
	Fire Resistance		EN 45545	Classification	HL2
	Fire Resistance		EN 1366-4/rating EN 13501-2	Classification	EI 45 – EI 180 depending on the configuration
Insulation properties	Thermal Conductivity		ISO 8302	W/m.K	0.039
Tightness properties	Water tightness	30 % compression	NTP 38* (U-Test 100mm)	Hours before leakage	> 72
	Air tightness	1000 Pa 30 % compression	PRT128*	Air leakage in ml/m.min	0

*NTP refers to Norton Test Procedure; PRT refers to Internal Technical Procedure

Important Instructions

Because Saint-Gobain cannot anticipate or control every potential application, we strongly recommend testing of this product under individual application conditions prior to commercial use. Our labs can support in prototyping.

Shelf Life

12 months after production date. Storage conditions should remain below 30°C without exposure to sunshine.

Norseal is a registered trademark of Saint-Gobain Performance Plastics.



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Limited Warranty: For a period of 6 months from the date of first sale, Saint-Gobain Performance Plastics warrants this product(s) to be free from defects in manufacturing. Our only obligation will be to provide replacement product for any portion proving defective, or at our option, to refund the purchase price thereof. User assumes all other risks, if any, including the risk of injury, loss or damage, whether direct or consequential, arising out of the use, misuse, or inability to use this product(s).

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