

NORSEAL®

FS1000 Series

Providing protection in your environment



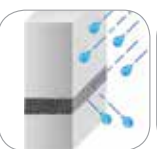

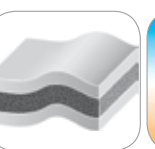

Intumescent, Airtight, Watertight and Resilient Sealing Foam

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 30%, 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.

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

					
Intumescent	Airtight	Watertight	Compressible and resilient	Conformable	Thermally insulating

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		-	in (mm)	.18 - .24 - .35 - .51 (4.5 - 6.0 - 9.0 - 13.0)			
Density		ASTM D1056	kg/m ³	240			
Dynamic properties	Force to Compress	@20%	ASTM D1667	psi	13 - 36		
		@40%			43.5 - 101.5		
		@60%			119 - 232		
	Compression Force Deflection	@20%			5.8 - 16		
		@40%			17.5 - 43.5		
		@60%			49.5 - 104.5		
	Tensile Strength				ASTM D412 A	psi	26 - 32
	Elongation at Break					%	85 - 120
Compression Set @15 days at 50% at 23°C		ASTM D1667	%	5			
Combustion	ASTM 4986	ASTM 4986	Classification	V0			
	Limit oxygen index	ISO 4589-2		27.5			
	EU small flame test	ISO 11925-2	Equivalent classification	B			
	Expansion ratio	PRT129	%	200			
	Temperature of activation	PRT130	°C	200			
Insulation properties	Heat conductivity	Internal	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		

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.

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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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