

EXPANSION JOINT TECHNICAL DATA

Seismic Pre-Compressed Vertical Foam System RECESSED APPLICATION (SES)



PRECOMPRESSED FOAM SEAL

Nystrom **SES** provides a primary water-tight seal for vertical applications.

PHYSICAL PROPERTIES	TEST METHODS	REQUIREMENTS
Impregnation	Not Applicable	Proprietary modified acrylic
Base Foam	Not Applicable	Open Cell Polyurethane Foam
Weatherometer	ASTM C510, ASTM G26-77	Xenon Arc Weatherometer 2000 hrs – No visible deterioration
Temperature Service Range	ASTM C711	-40 to 185 °F (-40 to 85 °C)
Temperature Stability, Bleeding, Staining and Recovery Under Field Conditions	Material will not bleed or stain after withstanding up to 150°F (65°C) for 3 hours while compressed down to -50% of nominal material size and after cooling to room temperature, 68°F (20°C), the material will self-expand to +50% of nominal material size with 24 hours	
R-Value	ASTM C518-04	2.15 per 1-inch (25mm) depth at as-installed nominal joint size compression
STC Rating	ASTM E90-09	STC 52 (in a STC 56 wall)
OITC Rating	ASTM E90-09	OITC 38 (in a OITC 38 wall)
Air Permeability ABBA air leakage limits for materials – not to exceed .02 L/(s·m ²) @ 75 DP(Pa)	ASTM E283-04	ABBA Compliant 0.0078 L/(s·m ²) @ 75 DP(Pa) 0.0118 L/(s·m ²) @ 250 DP(Pa)
Water Penetration	ASTM E331-00	No water penetration after consecutive 15 minute soak durations under pressures of: 500 ΔP(Pa), 65 mph equivalent wind driven rain, 1000 ΔP(Pa), 92 mph wind driven rain, 5000 ΔP(Pa), 205 mph wind driven rain

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Cycling Movement	ASTM E1399	Meets the requirements @ +/-50%
Wind Loading Hurricane Standard Miami-Dade County, FL = 150 mph	ASTM E330	-0.1mm Net Deflection of Span @ +2730 ΔP (Pa), 150 mph equivalent. +0.1mm Net Deflection of Span @ -2730 ΔP (Pa), 150 mph equivalent. -0.6mm Net Deflection of Span @ +4854 ΔP (Pa), 200 mph equivalent. +0.5mm Net Deflection of Span @ -4854 ΔP (Pa), 200 mph equivalent.
Back Pressure		~2.5 psi Note: substrates must be capable of resisting , without deflection, ~2.5 psi backpressure from the foam across the area of contact as determined by the supplied materials' nominal dimensions

SEALANT FACE

The Nystrom **SES** silicone sealant face provides watertightness, thermal insulation, 100% movement capability, UV stability and color coordination with substrates. Profiled sealant bellows face enables cycling through movement range.

PHYSICAL PROPERTIES	TEST METHODS	REQUIREMENTS
Durometer (Shore A)	ASTM C661	Not to exceed 25 pts (± 5)
Primary Surface Weathering	ASTM C793, ASTM G155	Atlas Weatherometer 3000 hrs – minimal hardness change