

Thermally Broken Bracket

Features

Mitrex Thermally Broken Bracket reduces thermal bridging in external rainscreen assemblies and improves insulation effective R-values while allowing for flexible facade design

It creates a thermal break between the building's interior and exterior and minimizes thermal transfer through the building envelope.

The system accommodates various insulation thicknesses or wall depths without the need for shims.

Suitable for concrete, concrete block, steel studs, or wood substrates.

The Mitrex Thermally Broken Bracket is recommended for high-performance building envelopes and supports energy conservation and sustainable building practices.

The clip is comprised of a 14-gauge galvanized steel bracket attached to a glass fibre reinforced polyamide thermal insulator pad.



Thermally Broken Bracket - Polyamide Section

General Properties

	Test	Imperial	Metric
Density	ISO 1183	0.05 lb/in ³	1.29 g/cm ³
Water Absorption: At saturation in air of 23°C / 50% R.H.	ISO 62	1.7%	
At saturation in water 23°C	ISO 62	5.5%	

Mechanical Properties

	Test	Imperial	Metric
Tensile Stress at Yield and Break	ISO 527	12,328psi	85N/mm ²
Tensile Modulus of Elasticity	ISO 527	725,188psi	5000N/mm ²
Compression Test: -1% Strain After 1,000 Hrs	ISO 899	6,236psi	43N/mm ²
Ball Indentation Hardness	ISO 2039	23,931psi	165N/mm ²
Charpy Impact Strength - Unnotched	ISO 179-1/1eA	2.38 10 ⁷ ftlb/in ²	50KJ/mm ²
Charpy Impact Strength - Notched	ISO 179-1/1eU	2.85 10 ⁶ ftlb/in ²	6 KJ/mm ²
Shore Hardness	ISO 2039	76 D	
Coefficient of Friction to Steel	ISO 8295	-	
Elongation at Break	ISO 527	0%	

Electrical Properties

	Test	Imperial	Metric
Volume Resistivity	ISO 93	-	10 ¹² Ωcm
Dielectric Strength	ISO 243	686KV/in	27KV/mm
Dielectric Constant	ISO 250	7	
Dissipation Factor Tan Δ at 1 MHz	ISO 250	0.04	

Thermal Properties

	Test	Imperial	Metric
Melting Temperature	ISO 3156	500°F	260°C
Deformation Temperature	ISO 75	302°F	150°C
Max. Allowable Service Temperature In Air:			
Continuously	-	248°F	120°C
Short Periods	-	68°F	20°C
Minimum Service Temperature	-	-68°F	-20°C
Thermal Conductivity at 23°C	ISO 22007.2	-	0.3W/m.K
Flamability			
Oxygen Index	ISO 4589	-	0%
According to UL94 (3/6 Thickness)	UL94	-	HB
Coefficient of Linear Thermal Expansion: Average Value between 23°C and 60°C	ISO 11359	-	50 10 ⁻⁶ m(m.K)

