

TECHNICAL PERFORMANCE

OF WDF-FLEX® RUBBER INSULATION MATERIAL CLASS 1



Physical properties		WDF-FLEX			Test Method
Cell Structure		Closed cell			—
Density Kg/m ³		≥65			ASTM D 1667
Thermal Conductivity BTU .in/ft2. hr. °F W/ (m.k)	Mean Temp	-4°F (-20°C)	32°F (0°C)	104°F (40°C)	ASTM C117 & C518
	K-value	0.22 (0.030)	0.23 (0.032)	0.26 (0.037)	
Water Vapor Permeability g/(m.s.Pa)		1.96 x 10 ⁻¹¹			ASTM E96
Moisture Resistance (μ value)		μ≥10 000			DIN 52615
Flammability Smoke Density		V-0			UL-94
		25/50			ASTM E84
		Self Extinguishing			ASTM D635
		Class 1			BS 476:Part 7
		Pass			IMO FTPC Annex 1 part 5
Water absorption (weight%)		≤5			ASTM D1056
Flexibility		Excellent			—
Ozone Resistance		No crack			ASTM D1171
Serviec Temperature		-70°F to 257°F (-57°Cto + 125°C)			—

National construction engineering materials quality supervision and inspection center test report



The Test Items		Standard value	Test Results	Item conclusion
	FIGRA 0.2 MJ,W/S	≤ 270	138	Pass
1	single burning item test	Flame transverse spread LFS	< The sample edge	Pass
		Total heat added in the first 600 seconds THR 600s, MJ	≤ 7.5	1.3 Pass

2	flammability	Flame tip height in 60 seconds after 30s of Ignition	≤ 150	≤ 150	Pass
		phenomenon of flaming droplets ignites the filter paper	None	None	Pass

3	characteristics of smoke production	SMOGR, m^2/s^2	≤580	453	Pass
		TSP 600s, m^2	≤1600	218	Pass

4	flaming droplets/particles	d0	No drip in the combustion process in 600s	No drip in the combustion process in 600s	Pass
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