KINGFLEX CLOSED CELL ELASTOMERIC

PRODUCT OVERVIEW

Kingflex Class 0 Flexible Elastomeric Foam Insulation is a high-performance, closed-cell insulation material manufactured from a blend of natural or synthetic rubber and other organic polymers. The formulation is enhanced with specialised additives, including anti-aging agents, flame retardants, stabilisers, and vulcanisation accelerators to ensure durability and long-term performance. This environmentally friendly insulation is produced without the use of CFCs, HFCs, or HCFCs, making it a sustainable choice for modern applications.

Kingflex insulation retains excellent flexibility across a wide temperature range, from -50°C to +105°C, ensuring reliable performance in both extreme cold and high-temperature environments. It also offers strong resistance to ozone and ultraviolet (UV) exposure. For outdoor applications, it is recommended to apply a weather-resistant protective coating to the surface to maximise UV protection and extend service life.

TECHNICAL DATA SHEET

PROPERTIES	CLASS 0	TEST METHODS
Temperature Range	-50℃ to +105℃	GB/T 17794-1999
Density Range (Kg/m3)	48±5	ASTM D 1667 GB/T 6343-2009
Water Vapour Permeability coefficient (Kg/(m.s.pa)	≤1.33X10^{-11}	DIN 52 615 BS 4370 Part 2 1973 GB/T 17794-2021 6.8
Water Vapour Permeability (μ)	≥15000	GB/T 17146-2015
Thermal Conductivity	0.030 W/mK (-20˚C) 0.32 W/mK (0℃) 0.035 W/mK (25℃)	BS 847 Part 2 1986 ASTM C518 DIN52612 DIN52613 GB/T 10295-2008
Fire Resistance	Class 0 Self-Extinguishing V-O	BS 476 Part 6, part 7 ASTM D-635 UL94
Vacuum Water Absorption Rate	0.27%	GB/T 17794-2021 Annex B
Compression Rebound Rate	85%	GB/T 17794-2021 6.9 GB/T 6669-2008
Oxygen Index (%)	≥41.3	GB/T 2406, ISO 4589
Dimension Stability (%)	≤5	ASTM C534
Fungi Resistance	Good	ASTM 21
Ozone Resistance	Good	GB/T 7762-1987
Resistance to UV and weather	Good	ASTM G23
Mildew Resistance	No fungal growth	
Chemical Resistance	Good	
Odour	Negligible	
Flexibility	Excellent	
Production Process	W/O CFC, HFC/HCFC, Asbestos & Fibre	