



PVC/Nitrile Foam Single Sided Tape

Single Sided Self-Adhesive PVC Nitrile Elastomeric Foam Tape

General Description

A single-sided self-adhesive foam tape combining Kaiflex ST, a closed-cell elastomeric PVC nitrile (synthetic-rubber FEF) insulation foam, with WTI-81, an acrylic based permanent adhesive on a nonwoven carrier supplied with a Havana paper release liner. Kaiflex ST offers low thermal conductivity, very high water vapour resistance, certified fire performance and built-in resistance to mould and bacteria, and is fibre-free for high-hygiene environments, while the high-temperature acrylic adhesive bonds permanently to dry, damp, smooth, slightly rough and curved surfaces.

Application & Use

- Thermal insulation of HVAC ductwork, chilled water and air-conditioning systems
- Insulation of refrigeration and refrigerant lines
- Condensation control and anti-corrosion protection on pipework and ducting
- Sealing, gasketing and acoustic insulation in public, commercial and marine environments
- Applications with strict fire and hygiene requirements (healthcare, food processing, leisure)

Technical Details

Property	Method	Unit	Typical Value
Foam Substrate — Kaiflex ST (Closed Cell PVC Nitrile Elastomeric Foam, FEF)			
Material Type	—	—	Elastomeric foam based on synthetic rubber (FEF)
Cell Structure	—	—	Closed cell
Colour	—	—	Anthracite
Max. Service Temperature	—	°C	+85
Min. Service Temperature	—	°C	-50
pH Value	—	—	7
Thermal Conductivity (λ) at -10 °C	DIN EN 12667	W/(m·K)	0.032
Thermal Conductivity (λ) at 0 °C	DIN EN 12667	W/(m·K)	0.033
Thermal Conductivity (λ) at +10 °C	DIN EN 12667	W/(m·K)	0.034
Water Vapour Resistance (μ)	DIN EN 12086	—	$\geq 10,000$
Fire Class (Euroclass)	DIN EN 13501-1	—	B-s3, d0
Building Regulations Class	UK Building Regs	—	Class 0
Surface Spread of Flame	BS 476-7	—	Class 1
Reaction to Fire (UL94)	UL94	—	V-0 / HF-1
Corrosion Resistance	DIN 1988	—	Satisfies requirements



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Property	Method	Unit	Typical Value
Mould Resistance	DIN EN ISO 846 A+C	—	No growth
Bacteria Resistance	VDI 6022	—	No growth
Adhesive System — WTI-81 (Acrylic, Permanent)			
Adhesive Type	—	—	Acrylic, permanent
Carrier	—	—	Nonwoven
Carrier Basis Weight	ISO 536	g/m ²	12 ± 1
Carrier Thickness	ISO 534	µm	23 ± 2
Peel Adhesion 180°	AFERA 5001	N/25mm	Min. 30
Shear	AFERA 5012	h	Min. 25
Min. Application Temperature	—	°C	0
Adhesive Service Temperature	—	°C	-10 / +120
Release Liner	—	—	Havana paper
Liner Basis Weight	ISO 536	g/m ²	80 ± 4
Liner Thickness	ISO 534	µm	65 ± 4
Adhesive Laminate Thickness (excl. foam)	ISO 534	µm	175 ± 9
Combined Product			
Construction	—	—	Single-sided: PVC nitrile (FEF) foam + acrylic adhesive + paper liner
Adhesive Added Thickness (excl. liner)	—	mm	≈ 0.11
Combined Service Temperature (continuous)	—	°C	-10 / +85

Flame rating note: The Euroclass B-s3 d0, Class 0, BS 476 and UL94 fire ratings apply to the Kaiflex ST foam substrate only. The WTI-81 acrylic adhesive and paper release liner are not independently flame-rated, and the flammability of the complete laminated tape has not been classified. Suitability should be verified for any application requiring a specified flame rating.

Key Characteristics

- Certified fire performance: Euroclass B-s3, d0 (EN 13501-1) and Class 0 to UK Building Regulations; self-extinguishing with no flaming droplets
- Additional approvals: UL94 V-0 / HF-1, FM-approved, CE-compliant, marine classified (DNV and Lloyd's Register)
- Closed-cell structure with high water vapour resistance ($\mu \geq 10,000$) — no separate vapour barrier required; prevents condensation
- Fibre-free and dust-free; resists mould and bacterial growth; free from cadmium, lead and formaldehyde
- Highly flexible and lightweight for easy cutting and fitting around complex shapes



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- ☐ For outdoor use, protect from UV with a UV-resistant paint or cladding to prevent degradation

Availability

Colour: Black (anthracite).

Foam Thickness: 3mm, 5mm, 6mm, 10mm, 16mm, 19mm and 25mm.

Width: Supplied 1 metre (1000mm) wide as standard; can be slit to specified widths.

Shelf Life & Storage Conditions

12 months when stored away from direct sunlight and heat, in a dark, dry place at a temperature of 20 °C ± 3 °C with a relative humidity of 50% ± 20%.

All information and recommendations about products are based on our existing knowledge and experience but do not mean a guarantee or warranty. As the products are used for different applications we recommend checking suitability of product prior to use. All information is subject to change without notice. End user is obliged to verify the above information before using the material.