K-FLEX ECO® FOAM TAPE

Closed Cell Flexible Elastomeric Foam Insulation Halogen-Free

DESCRIPTION

K-FLEX ECO® Foam Tape is a halogen-free NBR-based closed cell, flexible elastomeric foam insulation tape with a factory-applied pressure sensitive adhesive that adheres firmly and forms a long-lasting bond. It is environmentally-friendly as it is free of CFCs, HFCs, HCFCs, PBDEs, formaldehyde and fibers. It does not contain carbon black or PVC in accordance with US Navy Environmental Department standards. An EPA-registered antimicrobial agent is incorporated into the product providing additional protection against mold, fungal and bacterial growth. The product is made in K-FLEX USA's ISO 9001:2008-certified manufacturing facility in North Carolina.

AVAILABILITY

K-FLEX ECO® Foam Tape is green in color and available in 1/4" thick by 2" wide by 30' long rolls.

APPLICATIONS

K-FLEX ECO® Foam Tape is recommended for applications with service temperatures ranging from -40°F (-40°C) to +200°F (+93°C). The product is used to retard heat gain/loss on below-ambient to medium hot applications. It is ideal for insulating short runs of pipes or valves and fittings where it is impractical to install tubing insulation. The tape can be applied in multiple layers to meet various service conditions. It is not recommended for use with heat trace tapes for freeze protection applications. It is designed for applications where corrosive smoke and environmental issues (toxicity) are critical.

OUTDOOR APPLICATIONS

K-FLEX ECO® Foam Tape is recommended for indoor use only to protect it from external environment conditions.

INSTALLATION

K-FLEX ECO® Foam Tape is flexible (even at low temperatures), durable (non-fracturing and resistant to tearing from handling and environment), safe to handle (non-dusting and non-abrasive), and lightweight for an efficient installation. K-FLEX recommends that insulation is installed on non-operational systems with clean, dry surfaces in ambient conditions between 40°F and 100°F. K-FLEX ECO® Foam Tape can be applied to all diameter pipes by spiral winding with 50% overlap per layer until the desired thickness is obtained (removing the release paper as the tape is wrapped). Stretching should be avoided, edges may be butted or overlapped, and seams should be sealed with proper pressure, which is critical as the PSA backing is application temperature sensitive.

RESISTANCE TO MOISTURE VAPOR FLOW

The expanded closed cell structure and unique formulation inherently resists moisture vapor intrusion. For most indoor applications, K-FLEX ECO® Foam Tape needs no additional protection. Additional vapor barrier protection may be necessary when installed on cold surfaces that are exposed to continuous high humidity.

FLAME AND SMOKE RATING

K-FLEX ECO® Foam Tape has a flame spread rating of 25 or less and a smoke development rating of 50 or less as tested to ASTM E84.

Numerical flammability ratings alone may not define the performance of products under actual fire conditions. They are provided only for use in the selection of products to meet limits specified when compared to a known standard.

PHYSICAL PROPERTIES	K-FLEX ECO® FOAM TAPE	TEST METHODS
Main Composition	Flame-retarded, halogen-free NBR-based elastomeric foam with a solvent-free, acrylic dispersion high tack adhesive with good resistance to moisture and aging	
Thermal Conductivity (Btu-in/hr-Ft²-°F) 75°F (24°C) Mean Temp	0.270	ASTM C177
Density	3-5 lb/ft³	ASTM D1667
Operating Temperature Range	-40°F (-40°C) to +200°F (+93°C)	ASTM C534
Water Vapor Permeability (Dry Cup)	<0.10 perm-in	ASTM E96
Optical Smoke Density	<150	ASTM E662
Flame Spread / Smoke Development (up to 3/4")	<25/50	ASTM E84
Flexibility	Pass: Cold Crack Test at -40°F (-40°C)	ASTM D1056
Freight Classification	Tape, insulation, NOIBN. No label required.	
Adhesive Thickness	0.07 mm	
Adhesive Peel Resistance	≥20 N / 25 mm	DIN EN 1939
Adhesive Shear Adhesion	500 g/625 mm²	DIN EN 1943

THICKNESS RECOMMENDATIONS (LAYERS OF 1/4" TAPE)		
Ambient Conditions	**50°F (10°C) Process Temperature**	**32°F (0°C) Process Temperature**
77°F (25°C) / 50% RH	1 Layer	1 Layer
85°F (29°C) / 70% RH	2 Layers	3 Layers

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K-FLEX USA INNOVATION IN INSULATION

Made in USA