K-FLEX USA

PRODU<u>ct guide</u>

	K-FLEX® ELASTOMERIC TUBE	K-FLEX® ELASTOMERIC Sheet/Roll	K-FIT®	K-FLEX DUCT® LINER GRAY	K-FLEX EC0®	K-FLEX ACCESSORIES	K-FLEX CLAD® AL	K-FLEX CLAD® WT	K-FLEX CLAD® IN	K-FONIK® GK / GV	K-FONIK® AB
				Solution		Varies by product	•	•			
DESCRIPTION	Closed cell flexible elastomeric foam insula- tion tubes designed for use on HVAC/R and Industrial Process piping and equipment. The product offers a high resistance to moisture vapor intrusion and a low thermal conductivity. For most indoor applications, no additional jacketing is required. Availa- ble in NBR/PVC (technical data below) and EPDM* elastomeric blends. *EPDM (300°F high temperture) designed for special applications and available in limited sizes (1/2", 3/4", 1"). Contact K-FLEX technical support for additional information.	Closed cell flexible elastomeric foam insulation sheets / rolls designed for use on HVAC/R and Industrial Process ductwork, vessels, equipment and large ID piping (>8" IPS). The product offers a high resistance to moisture vapor intru- sion and a low thermal conductivity. For most indoor applications, no additional jacketing is required. Available in NBR/ PVC (technical data below) and EPDM* elastomeric blends. *EPDM (300°F high temperture) designed for special applications and available in limited sizes (<i>I/2</i> ", <i>3/4</i> ", <i>I</i> "). Contact K-FLEX technical support for additional information.	Closed cell flexible elastomeric foam insu- lation in factory-made fitting form (elbows, tees, p-traps, grooved fittings) designed for use on HVAC/R pipe bends, intersections and curvatures. Fittings are produced in a controlled manufacturing environment using an automated process to ensure uniformity, compression fit and water-tight seams.	resistance to moisture vapor intrusion, low thermal conductivity and does not require additional facing.	Halogen-free, closed cell flexible elasto- meric foam insulation tubes and sheets / rolls designed for use on marine, commercial and industrial piping, tanks, vessels and equipment. The product of- fers a high resistance to moisture vapor intrusion and a low thermal conductivity. As a halogen-free material, it is ideal for use on stainless steel applications or where corrosive smoke and environmen- tal issues (toxicity) are critical.	 K-FLEX® Elastomeric Foam Tape Foam tape rolls with a smooth, black surface. K-FLEX CLAD® Joint Sealing Tape Tapes for sealing joints and edges of Clad jacketing. K-FLEX® Contact Adhesives (320, 373, 420, 620, 720) Air-drying, solvent-based adhesives for joining seams and joints. Available for quick (320, 620) or slow (373) drying, color preference, Low VOC (720), and high temperature use (420). K-FLEX® 374 Protective Coating Water-based coating that provides UV protection. K-FLEX® Insulated Pipe Supports 360° position free, rigid polyurethane core with elastomeric insulation collars and outer PVC jacketing with overlapping tab. 		A multi-ply laminate jacketing consisting of a PVC backing and aluminum foil coated with a white protective polyester film. Ideal for wash down or clean room applications, the 25/50-rated and NSF-approved jacket provides low permeance and excellent puncture and dent resistance. The outer film offers dirt and chemical resistance, cleanability and a high emissivity value (0.80). Jacketing is available in roll form for use on all insulation types or factory-adhered to K-FLEX elastomeric tubes, sheets and rolls.	A flexible, non-metallic, polymeric (CPE/PVC) protective jacketing that is ideal for industrial plants, operating mills (pulp and paper), offshore platforms, FPSOs, LNG terminals and marine applications. The 100% sealable jacket provides excellent resistance against UV, high humidity, salt spray, weather, acids, oils, chemicals, impact and mechanical abuse, corrosion under insulation (CUI) and moisture vapor intrusion. Jacketing is avai- lable in roll form for use on all insulation types or factory-adhered to K-FLEX elastomeric tubes, sheets and rolls.	Flexible, non-reinforced, resilient mass-loaded elastomeric noise barriers. K-FONIK® GK is for general purpose applica- tions and K-FONIK® GV is halogen-free for use on stainless steel, IMO-recognized marine applications and mass transit / transportation applications.	Flexible, open cell sound absorber comprised of recycled, closed cell foam particles bonded together. The combination of closed cell material re-engineered into an open cell structure results in a unique set of properties that readily accept and dissipate sound waves, ensuring maximum acoustical absorption.
AVAILABILITY	 Non-slit for slide-on applications Self-Seal (Pre-Slit / Pre-Glued / DoubleSeal closure system) for retrofit applications Thickness: 3/8" (1/2" DoubleSeal) to 2" ID: 3/8" to 4" IPS (self-seal), 8" IPS (non-slit) Length: 6', continuous coils (non-slit) Color: Black or White Technical Data referenced in this document pertains to K-FLEX® NBR/PVC-based black elastomeric insulation. For technical information for K-FLEX® White, please see re- spective product sheet as availability, technical properties, specification compliance, and installation recommenda- tions are subject to change. 	 Sheets: 3' x 4' Rolls: 4' width Color: Black 	 Type: Elbows, Tees, P-Traps, Grooved (elbows, tees, couplings) Thickness: 1/2" to 2" ID: 3/8" to 6" IPS (standard fittings) or 12" IPS (grooved) Color: Black, White, Green (ECO) Technical Data referenced in this document pertains to K-Fit [®] fittings made from K-FLX [®] NBR/PVC-based black elastomeric insulation. For technical information for K- FIt [®] White and K-FIT [®] ECO, please see respective product sheets as availability, technical properties, specification compliance, and installation recommendations are subject to change.	 S2S (skin-two-side) or Factory-applied PSA (adhesive) Thickness: 1/2" to 2" Sheets: 3' x 4' Rolls: 46.25", 47", 48", 56.25", 59", and 60" widths Color: Gray 	 Color: Green Tubular Form: Non-slit Thickness: ½", ¾", 1" ID: 3/8" to 8" IPS Length: 6' Sheet / Roll Form: S2S (skin-two-side) or Factory-applied PSA (adhesive) Thickness: ½", ¾", 1" Sheets: 3' x 4' Rolls: 4' width 	 K-FLEX® Elastomeric Foam Tape Thickness: 1/8"; Width: 2"; Length: 30' K-FLEX CLAD® AL/WT Joint Sealing Tape Width: 2", 4" or 6"; Length: 45' K-FLEX® Contact Adhesives (320, 373, 420, 620, 720) 320 (amber) & 620 (black): 1/2 Pints, Pints, Quarts, Gallons 373: Pints, Quarts, Gallons 420 & 720: Quarts K-FLEX® 374 Protective Coating Gallons K-FLEX® Insulated Pipe Supports Thickness: 1/2" to 2" ID: 3/8" to 6" IPS	Jacketing • With or without Factory-applied PSA • Thickness: 0.012" • Size: 48" width x 75' length • Color: Silver Jacket Factory-applied to Elastomeric Tube • Non-slit or Pre-Slit / Pre-Glued option • Thickness: ½" to 2" • ID: ½" to 4" IPS • Length: 3' • Segmented Elbow Covers Available Jacket Factory-applied to Elastomeric Sheet / Roll • S2S (skin-two-side) or Factory-applied PSA (adhesive) • Thickness: ½" to 2" • Sheets: 3' x 4'; Rolls: 4' width	Jacketing • With or without Factory-applied PSA • Thickness: 0.012" • Size: 48" width x 75' length • Color: White Jacket Factory-applied to Elastomeric Tube • Non-slit or Pre-Slit / Pre-Glued option • Thickness: ½" to 2" • ID: ½" to 4" IPS • Length: 3' • Molded Elbow / Tee Covers Available Jacket Factory-applied to Elastomeric Sheet Factory-applied PSA (adhesive) • Thickness: ½" to 2" • S2S (skin-two-side) or Factory-applied PSA (adhesive) • Thickness: ½" to 2" • Sheets: 3' x 4'; Rolls: 4' width	Jacketing Thickness: 0.045" Size: 39" width x 75' length Color: Gray or Black Jacket Factory-applied to Elastomeric Tube (Pre-Slit) Thickness: 1", 1 ½" ID: 1/2" to 4" IPS Length: 3' Elbow Covers Available Jacket Factory-applied to Elastomeric Sheet / Roll S2S (skin-two-side) or Factory-applied PSA (adhesive) Thickness: ½" to 2" Sheets: 3' x 4'; Rolls: 3' width	 K-FONIK[®] GK Mass (lb/ft²): 0.5, 1.0, 1.5 Roll Width: 48" Color: Black K-FONIK[®] GV Mass (lb/ft²): 0.75, 1.0, 1.5 Roll Width: 48" Color: Gray 	 Density (lb/ft³): 10, 15 Dimensions: 2.5m x 1.5m Thickness: ½", 1", 1 ½", 2", 13" (bun form)
PERFORMANCE Characteristics	Temperature Range: -297°F* to +220°F -40°F to +220°F (self-seal) Thermal Conductivity (K-value, ASTM C177): 0.245 Btu-in/(h-ft ² -°F) Water Vapor Permeability (ASTM E96): <0.01 perm-in *For applications below -40°F, please consult K-Flex technical support.	Temperature Range: -297°F* to +220°F -40°F to +200°F (with PSA) Thermal Conductivity (K-value, ASTM C177): 0.245 Btu-in/(h-ft²-°F) <i>R</i> -Value: 1" = 4, 2" = 8 Water Vapor Permeability (ASTM E96): <0.01 perm-in	Temperature Range: -297°F* to +220°F Thermal Conductivity (k-value, ASTM C177): 0.245 Btu-in/(h-ft²-°F) Water Vapor Permeability (ASTM E96): <0.01 perm-in *For applications below -40°F, please consult K-Flex technical support.	NRC (ASTM C423): 0.55 (1")Temperature Range: $-297^{\circ}F to +220^{\circ}F$ $-40^{\circ}F to +200^{\circ}F$ (with PSA)Thermal Conductivity (k-value, ASTM C177): 0.25 Btu-in/(h-ft ² -°F) R -Value: 1" = 4.2, 2" = 8 Water Vapor Permeability (ASTM E96): <0.06 perm-in	Temperature Range: -297°F* to +250°F Thermal Conductivity (k-value, ASTM C177): 	<i>K-FLEX® Elastomeric Foam Tape</i> <i>Temperature Range:</i> -40°F to +200°F <i>K-FLEX CLAD® Joint Sealing Tape</i> <i>Water Vapor Permeance (ASTM E96):</i> 0.001 perms <i>K-FLEX® Contact Adhesives (320, 373, 420, 620, 720)</i> 320 & 620: Quick drying (2-4 minutes) 373: Slow drying (5-10 minutes minimum) 420: High heat resistance 720: VOC = 0 g/L; halogen-free <i>K-FLEX® 374 Protective Coating</i> Resists UV for 2-3 years <i>K-FLEX® Insulated Pipe Supports</i> Compressive Strength: 72 psi	Temperature Range*: Service temperature matches insulation used Thermal Conductivity (k-value, ASTM C177): Matches insulation used Water Vapor Permeance (ASTM E96): 0.001 perms Emissivity: 0.80	Temperature Range *: Service temperature matches insulation used Thermal Conductivity (k-value, ASTM C177): Matches insulation used Water Vapor Permeance (ASTM E96): 0.001 perms Emissivity: 0.80 *For applications below -40°F, please consult K-Flex technical support.	Temperature Range*: Service temperature matches insulation used High surface temperature: +175°F Cold temperature flexibility (installation): -4°F Thermal Conductivity (k-value, ASTM C177): Matches insulation used Water Vapor Permeance (ASTM E96): 0.08 perms Emissivity: 0.90	Temperature Range: -40°F to +158°F Sound Transmission Loss (ASTM E90): 21 dB: 0.5 lb/ft² (GK only) 25 dB: 0.75 lb/ft² (GV only) 26 dB: 1.0 lb/ft² 29 dB: 1.5 lb/ft²	Temperature Range: -40°F to +185°F NRC (ASTM C423): 0.75 (1") 0.85 (2") Thermal Conductivity (k-value, ASTM C177): 0.30 Btu-in/(h-ft²-°F)
SPECIFICATION Compliance	 ASTM C534 (Type 1, Grade 1) ASTM E84 (25/50-rated to 2") UL 94-5V (#300774) Mil-P-15280, Form T (non-slit tube) Factory Mutual Approved Meets energy code requirements of ASHRAE 90.1 and 189.1 UL GREENGUARD[®] Gold Certified 	 ASTM C534 (Type 2, Grade 1) ASTM E84 (25/50-rated to 2") UL 94-5V (#300774) Mil-P-15280, Form S (S2S sheet) Meets energy code requirements of ASHRAE 90.1 and 189.1 UL GREENGUARD[®] Gold Certified 	 ASTM C534 (Type 1, Grade 1) ASTM E84 (25/50-rated to 2") Meets energy code requirements of ASHRAE 90.1 and 189.1 UL GREENGUARD[®] Gold Certified 	 ASTM C1534 ASTM C534 (Type 2, Grade 1) ASTM E84 (25/50-rated to 2") Meets energy code requirements UL GREENGUARD[®] Gold Certified 		 K-FLEX® Elastomeric Foam Tape ASTM E84 (25/50-rated) K-FLEX CLAD® Joint Sealing Tape ASTM E84 (WT: 25/50-rated; AL: 25/450-rated) K-FLEX® Contact Adhesives 320, 620, 720: ASTM E84 (25/50-rated) 373: Mil-A-24179A Type 2, Class 1 720: EPA 40 CFR-59 sub part 1, SCAQMD Rule 1168 & LEED K-FLEX® 374 Protective Coating ASTM E84 (25/50-rated) 	Jacketing • ASTM E84 Class A (25/450-rated) Jacket Factory-applied to Elastomeric Tubes, Sheets or Rolls • ASTM C534, Type 1 or 2, Grade 1 • UL GREENGUARD® Gold Certified	Jacketing • ASTM E84 (25/50-rated) Jacket Factory-applied to Elastomeric Tubes, Sheets or Rolls • ASTM C534, Type 1 or 2, Grade 1 • NSF/ANSI Standard 169 (tubing only) • UL GREENGUARD® Gold Certified	Jacketing ASTM E84 Class A (25/450-rated) ABS Det Norske Veritas (DNV) Lloyd's Register Norsok Standard R-004 ed 3 (par. 5.9 non-metallic jacket) Jacket Factory-applied to Elastomeric Tubes, Sheets or Rolls ASTM C534, Type 1 or 2, Grade 1 IMO 61/67 part 2 & 5	 K-FONIK[®] GK/GV ASTM E84 (25/50-rated) - without FSK FMVSS 302 K-FONIK[®] GV only ASTM E162: 25 max ASTM E662: 100 max IMO A653 (CE Marine) IMO FTP Code Part 5 K-FONIK[®] GK only UL 94-HB (#300774) 	 UL 94-HB (pass, not listed) FMVSS 302













