

K-FLEX CLAD® AL COVERS

Multi-Layer Laminate Protective Jacketing
Designed for Elastomeric Insulation Elbows



DESCRIPTION

K-FLEX CLAD® AL Segmented Fitting Covers are multi-ply laminate jacketing (PVC backing and aluminum foil coated with a transparent protective polyester film) fitting covers designed to fit over closed cell, flexible elastomeric foam insulation elbows. The product is made in K-FLEX USA's ISO 9001:2008-certified manufacturing facility in North Carolina.

AVAILABILITY

K-FLEX CLAD® AL Segmented Fitting Covers are silver in color and are available to fit elastomeric elbows 1/2" to 2" wall thickness in diameter sizes ranging from 1/2" I.D. to 6" IPS (ID range is subject to variation depending on wall thickness).

APPLICATIONS

K-FLEX CLAD® AL Segmented Fitting Covers are recommended for applications with service temperatures ranging from -40°F (-40°C) to +220°F (+104°C) when installed over NBR/PVC-based FEF insulation. K-FLEX CLAD® AL is an ideal choice for outdoor applications as it is resistant to UV, weather, dirt, oxidation, staining and a broad range of chemicals, salts and oils.

INSTALLATION

K-FLEX CLAD® AL is durable (resistant to punctures, dents and tearing), safe to handle (non-dusting and free of sharp edges), and lightweight for an efficient installation. It requires little to no maintenance and allows for removal and reapplication for pipe inspection. The jacket can be cleaned with a cloth free of detergents and can be painted for aesthetic

purposes using a paint suitable for painting furniture, such as rustoleum plastic spray paint. K-FLEX recommends that insulation is installed on non-operational systems with clean, dry surfaces in ambient conditions between 40°F and 100°F. After the elastomeric elbow and Clad® AL tube have been installed, the Clad® AL fitting cover should be applied over the elbow and sealed at the seam via the attached PSA liner. Rivets should be used to mechanically fasten the longitudinal seam, which should then be covered by Clad® AL Tape (butt strips). Tape should also be used to secure the adjoining tube butt joint. For applications subject to heavy moisture, K-FLEX recommends caulking all seams with a marine-grade sealant. The *K-FLEX Installation Guide* should be used as a comprehensive installation manual.

PHYSICAL PROPERTIES	K-FLEX CLAD® AL JACKET	TEST METHODS
Main Composition	Multi-ply laminate (PVC backing and aluminum foil coated with a transparent polyester film)	
Thickness	0.012"	
Weight	0.1 lb/ft ²	
Flame Spread / Smoke Development	<25/450 (Class A)	ASTM E84
Water Vapor Permeance	0.001 perms	ASTM E96
UV Resistance	Excellent (Sunlight & Rain / Dew) UV Stability: >10 years Artificial Aging: >2000 hours (320 MJ/m ²) Solar Radiation: >3,600,000 kJ/m ²	ASTM G53 Internal Weatherometer Test EN 13859-1
Corrosion Risk	Protects against corrosion under insulation: 100% sealable, high emissivity, resistant to moisture vapor intrusion, puncture and tear	
Chemical Resistance	Resistant to Acids (Acetic, 50% Formic, 10% hydrochloric, 35%hydrofluoric, 10% nitric, 85% phosphoric), Aldehydes (acetaldehyde, formaldehyde), Alcohols (cyclohexanol, ethyl, glycerine, glycol, isopropyl, methyl), Esters (ethyl acetate), Hydrocarbons (aliphatic, benzene, petroleum, mineral oil, toluene, xylene), Acetone, Ether, Salt Solutions (bichromates, cyanides, fluorides). Partial resistance to Alkaline solutions, Chlorinate solvents, and select Alcohols and Acids. Additional Compatibility Data Available On Request.	
Fungi / Bacteria Resistance	Excellent	ASTM G21
Impact / Puncture Resistance	No Failure: 20mm diameter punch from 1 kg mass 100 N	UNI EN 12691 prEN 14 477
Emissivity	0.80	ASTM C1371
Tensile Strength	90 lbf/in	ASTM D828
Burst Strength	200 psi	ASTM D774
Dimensional Stability	-1% (length change)	ASTM D1204
Surface Temperature Exposure	Pass: No Cracks or Delamination (-20°F to +150°F)	ASTM C1263
Color	Silver	