K-FLEX CLAD® AL JACKETING

Multi-Layer Laminate Protective Jacketing



DESCRIPTION

K-FLEX CLAD® AL Jacketing is a multi-ply laminate jacketing (PVC backing and aluminum foil coated with a transparent protective polyester film) for all insulation types.

AVAILABILITY

K-FLEX CLAD® AL Jacketing is silver in color and is available in 48" wide x 75' long rolls with or without PSA (aggressive acrylic pressure sensitive adhesive). Matching tape and fitting covers complement the offering.

APPLICATIONS

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 Jacketing 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. For field installation of large pipes and round ducts, the jacket should first be measured and cut to fit around the installed insulation with a minimum of 4" longitudinal overlap. The 1st 2" strip of jacket should be adhered to the insulation and then wrapped around and sealed by adhering the jacket overlap directly to the jacket. Plastic rivets should be applied to the overlap seam and jacketing tape should be applied

to longitudinal and circumferential seams. Adjacent jacket sections should allow for a 2" circumferential overlap. For applications subject to heavy moisture, K-FLEX recommends caulking seams. The K-FLEX Installation Manual should be used as a comprehensive installation guide.

PROTECTION AGAINST CUI

K-FLEX CLAD® AL's low permeance jacket is 100% sealable with moisture-tight seams, has a high emissivity value, and is resistant to puncture.

FLAME AND SMOKE RATING

K-FLEX Clad® AL Jacketing has a flame spread rating of 25 or less and a smoke development rating of 450 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 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/ft²	
Flame Spread / Smoke Development	<25/450	ASTM E84
Water Vapor Permeance	0.001 perms	ASTM E96
Water Resistance	Pass: No Unforced Delamination	ASTM C1775
UV Resistance	Excellent (Sunlight & Rain / Dew) UV Stability: >10 years Artificial Aging: >2000 hours (320 MJ/m²) Solar Radiation: >3,600,000 kJ/m²	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
Peel Adhesion (180° peel)	>46 oz/in	ASTM D3330
Color	Silver	

