

## PRODUCT DESCRIPTION

# K-Flex Clad<sup>®</sup> AL

### Elastomeric Insulation Clad with Aluminum Foil/Laminated to Plastic Sheet

K-Flex Clad<sup>®</sup> AL, available in tube or sheet form, is a composite product comprised of flexible closed cell elastomeric insulation adhered to a plastic sheet laminated to aluminum foil. It is an ideal choice for outdoor applications (roof top), food processing plants, pharmaceutical, film processing, electronics and other clean room applications subject to code compliance. The plastic / aluminum cladding provides a secondary moisture vapor barrier inherent to the closed cell foam core.

The primary function of the cladding is weather resistance, abuse resistance (does not dent like traditional metal jackets), clean ability and protection from UV rays. The smooth shiny surface is tough, impact resistant and dust free, resistant to acids, alkali, salts, oil, fats, aliphatic hydrocarbons and is highly impermeable to gases and moisture. The K-Flex Clad<sup>®</sup> AL system allows for quick and easy replacement if necessary.

The unique overlap closure system leaves no through seams, ensuring against moisture penetration. Light and easy to handle, the K-Flex Clad<sup>®</sup> AL system provides installed cost savings over traditional metal jacket or mastic systems with improved performance. K-Flex<sup>®</sup> Rivets are included with the tube product and should be applied along the longitudinal seam during installation. For complete installation instructions, reference the K-Flex Clad<sup>®</sup> AL systems installation guide.

This composite product has a low thermal conductivity, a high water vapor diffusion resistance factor, and reduces under insulation corrosion. Preformed elbows and matching tape make installation quick, while delivering excellent appearance and durability.

Standard K-Flex Clad<sup>®</sup> AL can be used within a wide range of temperatures from -297°F to +220°F. K-Flex Clad<sup>®</sup> AL - ECO should be requested as the foam core on stainless steel applications above 100°F. The temperature range for K-Flex Clad<sup>®</sup> AL - ECO is from -297°F to +300°F.

K-Flex Clad<sup>®</sup> AL is a fiber free, non-porous insulation product. K-Flex Clad<sup>®</sup> AL is CFC and HCFC free, with an Ozone Depletion Potential of Zero. K-Flex Clad<sup>®</sup> AL is GreenGuard<sup>®</sup> Certified for VOC content, meeting the "Children and Schools" criteria and is GreenGuard<sup>®</sup> listed as mold resistant. These characteristics make it easy to comply with Health, Safety and Environmental requirements.

K-Flex Clad<sup>®</sup> AL tubes are available in 1/2", 1" and 1-1/2" wall thicknesses in 3 foot lengths. Sheet product is available in 36" x 48" dimensions or 48" wide rolls up to 2" thick. The sheets and rolls are available with an aggressive acrylic pressure sensitive adhesive (PSA) with fiberglass scrim reinforcement and a moisture/tear resistance polyolefin easy release liner.



For specific installation instructions see K-Flex Clad installation guide

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# K-Flex Clad<sup>®</sup> AL

The all inclusive insulation system with factory applied finish and a full range of accessories.



## PHYSICAL PROPERTIES OF ALUMINUM LAMINATE MATERIAL

<b>Thickness</b>	<b>0.016"</b>	
<b>Reaction to Fire</b>	<b>25/450</b>	<b>ASTM E 84</b>
<b>Water Vapor Permeability</b>	<b>0.0 perm-in</b>	<b>ASTM E 96</b>
<b>Weather, UV Resistance</b>	<b>Excellent</b>	<b>ASTM G 53</b>
<b>Corrosion Risk</b>	<b>The system provides protection for corrosion under insulation</b>	
<b>Salt Spray Resistance</b>	<b>Excellent</b>	<b>BS 903 F12</b>
<b>Wear Resistance</b>	<b>Excellent</b>	<b>BS 903 A2</b>
<b>Ozone Resistance</b>	<b>Excellent</b>	<b>BS 903 A43</b>
<b>Chemical Resistance</b>	<b>Excellent</b>	<b>Acids, Alcohols, Alkalies, Oils</b>
<b>Emissivity</b>	<b>0.80</b>	<b>ASTM C 1371</b>
<b>Color</b>	<b>Silver</b>	

## PHYSICAL PROPERTIES OF ELASTOMERIC CORE MATERIAL (STANDARD)

<b>Temperature Range/Sheet</b>	<b>-297°F to +220°F</b>	<b>ASTM C 411</b>	
<b>Color</b>	<b>Black</b>		
<b>Thermal Conductivity</b>	<b>75°F Mean temp</b>	<b>0.25 BTU-in/hr-ft<sup>2</sup>-°F</b>	<b>ASTM C 177, ASTM C 518</b>
<b>Water vapor permeability</b>	<b>&lt;0.06 perm-in</b>	<b>ASTM E 96</b>	
<b>Water absorption %</b>	<b>&lt;0.2 by volume</b>	<b>ASTM C 209</b>	
<b>Resistance to oil &amp; greases</b>	<b>Good</b>		
<b>Density</b>	<b>3 lbs. pcf to 4 lbs. pcf</b>	<b>ASTM D 1622, ASTM D 3575</b>	
<b>Resistance to U.V. &amp; weather</b>	<b>Good</b>		
<b>Odor</b>	<b>Negligible</b>		
<b>Ozone resistance</b>	<b>Good</b>		
<b>% closed cells</b>	<b>&gt;90</b>		
<b>Dimensional Stability</b>	<b>&lt;4.0</b>	<b>@ 220°F</b>	<b>ASTM C 534</b>
<b>Flame Spread (up to 1-1/2" thickness)</b>	<b>Not greater than 25</b>	<b>ASTM E 84</b>	
<b>Smoke Developed (up to 1-1/2" thickness)</b>	<b>Not greater than 50</b>	<b>ASTM E 84</b>	
<b>Flexibility</b>	<b>Excellent</b>		

## PHYSICAL PROPERTIES OF COMPOSITE SYSTEM

<b>Water Vapor Permeability</b>	<b>0.0 perm-in</b>	<b>ASTM E 96</b>
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