

# K-FLEX CLAD® AL - ECO

Elastomeric Insulation Clad with Aluminum Foil Laminated to Plastic Sheet



## DESCRIPTION

K-FLEX Clad® AL - ECO, available in tube or sheet form, is a composite product comprised of halogen-free, closed cell elastomeric insulation adhered to a plastic sheet laminated to aluminum foil.

K-FLEX Clad® AL - ECO is fiber-free, non-porous, CFC- and HCFC-free. K-FLEX Clad® AL is GREENGUARD® certified as a low VOC material, meeting the requirements of the "Indoor Air Quality" classification. These characteristics allow it to comply with *Health, Safety and Environmental requirements*.

K-FLEX Clad® AL - ECO 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. Sheets and rolls up to 1-1/2" thick are available with an aggressive pressure sensitive adhesive (PSA) with fiberglass scrim reinforcement and a moisture/tear resistance polyolefin easy release liner.

The plastic / aluminum cladding provides a secondary moisture vapor barrier to the inherently moisture-resistant closed cell foam core.

## APPLICATIONS

K-FLEX Clad® AL - ECO is an ideal choice for outdoor applications (roof top), food processing plants, pharmaceutical facilities, film processing, electronics and other clean room applications subject to code compliance. K-FLEX Clad® AL - ECO is well-suited for stainless steel applications since it does not contain any halogens that can contribute to corrosion. K-Fit® ECO factory-fabricated fittings and K-FLEX Clad® AL - ECO Covers complete the installation.

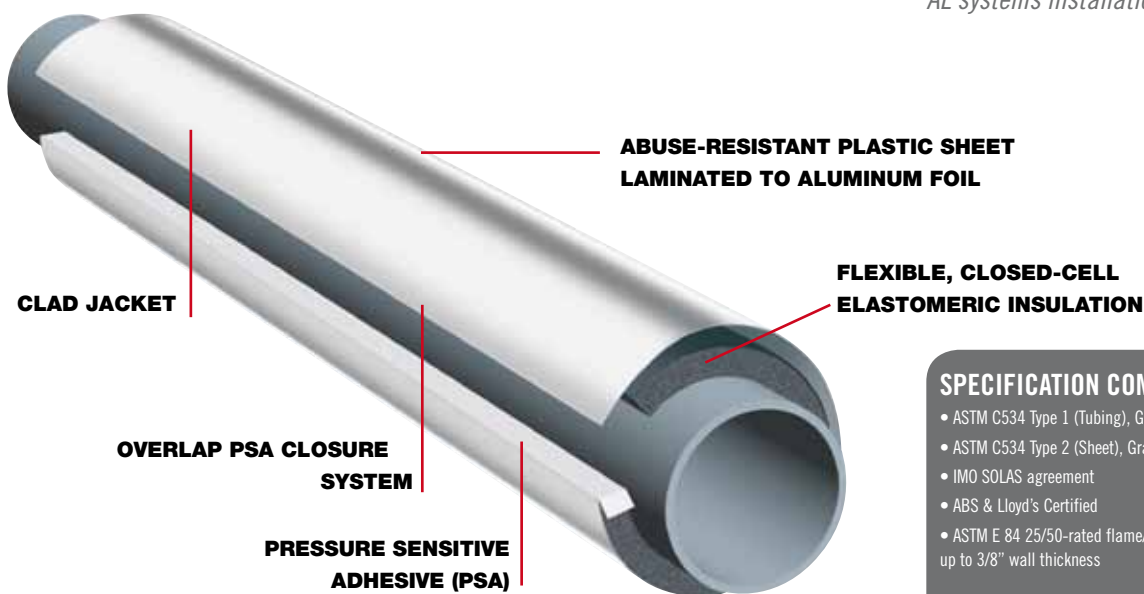
The cladding provides weather and abuse resistance, as well as protection from UV rays. The smooth shiny surface is easy to clean, dust-free, resistant to acids, alkali, salts, oil, fats, and aliphatic hydrocar-

bons, and is highly impermeable to gases and moisture. The cladding does not dent like traditional metal jackets, has excellent appearance and is easy to maintain. The K-FLEX Clad® AL - ECO system allows for quick and easy replacement if necessary.

K-FLEX Clad® AL - ECO can be used as the foam core on stainless steel applications above 100°F and has a temperature range for of -297°F to +300°F.

## INSTALLATION

A unique overlap closure system, which eliminates through seams on longitudinal seams, ensures against moisture penetration. Light and easy to handle, the K-FLEX Clad® AL - ECO system provides installed cost savings over traditional metal jacket or mastic systems with improved performance. K-FLEX® 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® AL systems installation guide*.



FOR SPECIFIC INSTALLATION INSTRUCTIONS  
SEE K-FLEX CLAD® INSTALLATION GUIDE

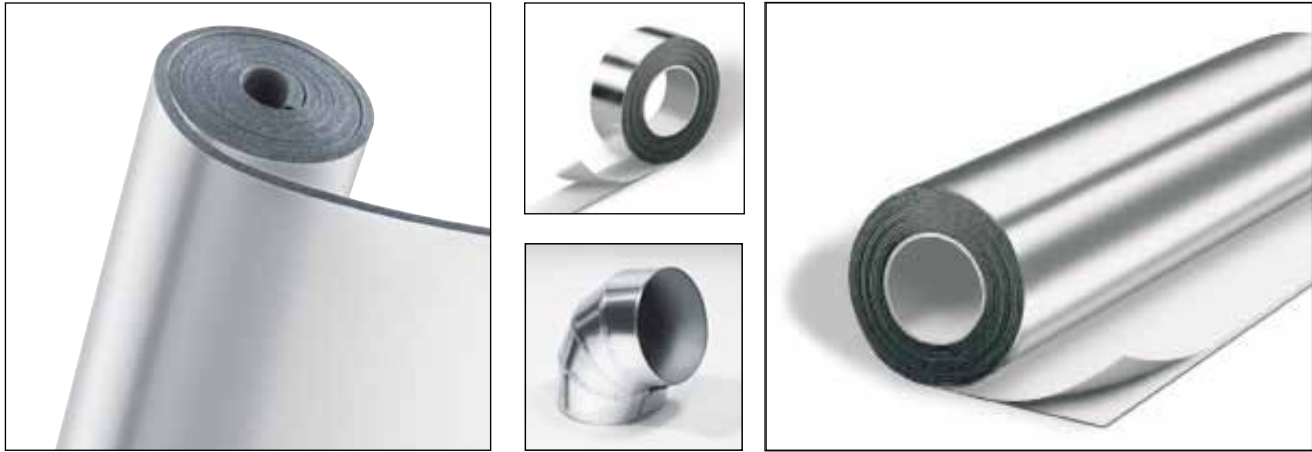
## SPECIFICATION COMPLIANCE

- ASTM C534 Type 1 (Tubing), Grade 3
- ASTM C534 Type 2 (Sheet), Grade 3 US Navy EB4013
- IMO SOLAS agreement
- ABS & Lloyd's Certified
- ASTM E 84 25/50-rated flame/smoke rated up to 3/8" wall thickness



# K-FLEX CLAD® AL - ECO PRODUCT DATA

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



## PHYSICAL PROPERTIES OF ALUMINUM LAMINATE MATERIAL

ATTRIBUTES	K-FLEX CLAD® AL	TEST METHODS
THICKNESS	0.016"	
REACTION TO FIRE	25/450	ASTM E 84
WATER VAPOR PERMEABILITY	0.001 PERM-IN	ASTM E 96
WEATHER, UV RESISTANCE	EXCELLENT	ASTM G 53
CORROSION RISK	THE SYSTEM PROVIDES PROTECTION FOR CORROSION UNDER INSULATION	
SALT SPRAY RESISTANCE	EXCELLENT	BS 903 F12
WEAR RESISTANCE	EXCELLENT	BS 903 A2
OZONE RESISTANCE	EXCELLENT	BS 903 A43, ASTM D1171
CHEMICAL RESISTANCE	EXCELLENT	ACIDS, ALCOHOLS, ALKALIES, OILS
EMISSIVITY	0.80	ASTM C 1371
COLOR	SILVER	

## PHYSICAL PROPERTIES OF ELASTOMERIC CORE MATERIAL (ECO™)

THERMAL CONDUCTIVITY (K) BTU/HR/FT <sup>2</sup> /°F/IN (W/MK)	90°F MEAN: .282 (.041) 75°F MEAN: .270 (.039) 50°F MEAN: .263 (.038)	ASTM C 177
OPERATING TEMPERATURE RANGE UPPER (1" THICKNESS MINIMUM) LOWER	300°F -297°F	
DENSITY	4.5 LBS/FT <sup>3</sup>	ASTM D 1056
OPTICAL SMOKE DENSITY	<150	ASTM E 662
WATER VAPOR PERMEABILITY	EXCELLENT (0.03 PERM-IN)	ASTM E 96
TOXICITY	HALOGEN-/DIOXIN-/CFC-FREE	EB 4013
FLEXIBILITY	EXCELLENT	EB 4013
MEETS IMO SOLAS AGREEMENT	YES	MSC 61 (67), A 653
ABS AND LLOYD'S CERTIFIED	YES	SOLAS AGREEMENT (IMO)
FLAME & SMOKE	US NAVY STANDARD FOR 50 LB STEAM USE 25/50-RATED UP TO 3/8"	EB 4013 ASTM E 84

## PHYSICAL PROPERTIES OF COMPOSITE SYSTEM

WATER VAPOR PERMEABILITY	0.001 PERM-IN	ASTM E 96
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