

KlasseCLAD® Foil Barrier Jacketing

Product description:

KlasseCLAD® is a flexible vapour barrier jacketing material designed for use over insulation on commercial ductwork, piping and equipment. It is comprised of a 6-ply aluminium and polymer laminated film with an aggressive pressure sensitive adhesive and release liner. The special multi-ply laminate film contains an outer protective coat that improves resistance to UV and environmental contaminants. It has extremely low permeability and has excellent resistance to puncture and tearing. KlasseCLAD® provides protection to the insulation from weather, moisture ingress and physical abuse.

Features & Benefits:

- Fire Rated to Class A2 (Tested to EN13501-1:2018 on the external face)
- UV resistant
- Tested to BS EN ISO 4892-2:2013 (Accelerated Weathering Performance)
- Strong acrylic adhesive to ensure longevity and durability
- Vapour sealing
- Higher adhesion and tack than traditional duct tapes
- Excels in high heat
- Moisture resistance in humid conditions
- Easy to cut and install
- Lightweight and flexible for challenging surfaces
- Suitable for external & internal applications
- An attractive aesthetic finish to any ductwork.

Product Range

Colour	Style	Widths (mm)	Length (m)
Black	Smooth	500, 1200	50
White	Smooth	500, 1200	50
Silver	Smooth	500, 1200	50
Silver	Embossed	500, 1200	50
Grey	Smooth	500, 1200	50

Technical Data

TEST	VALUE	TEST METHOD
Product Thickness (Total)	180 microns	PSTC-133/ASTM D 3652
Peel Adhesion	32 N/25mm	PSTC-101/ASTM D 3330
Tensile Strength	140 N/cm	PSTC-131/ASTM D 3759
Water Permeability	0.00g/m ² /24hrs	ASTM F1249 ISO 15106-2
Puncture Resistance	>100 Newtons	DIN EN 14477
Elongation	25%	PSTC-131/ASTM D 3759
Service Temperature	-40°C to +150°C	
Fire Testing	Class A2-s1, d0 Class A Class 0	EN 13501-1:2018 (external face only) ASTM E84/UL 723 BS476 Part 6 and 7

Surface Preparation:

Ensure that all surfaces are dry and clean, free from dust, oil and grease/silicone. Please do not apply to damp, frosty or contaminated surfaces. All insulation should be taped securely, giving an even surface for the KlasseCLAD® application. All adhesives work best when firmly "wetted out" to the substrate surfaces.

Application Instructions:

Application should be by skilled professionals only. When applying, partly peel back and crease the liner so enough adhesive is available to attach the KlasseCLAD® in the correct position. Then, with a spreader, progressively remove the liner while smoothing, until the entire sheet has been applied. Continuously apply the KlasseCLAD® onto the surface until it meets itself, a 75mm overlap is recommended to give a strong, weatherproof seal. Prepare the wrap so that the edge of the sealing flap faces down.

For more detailed instructions on installations for square ductwork, circular ductwork and repairs, please request our Installation Instructions document.

Physical & Chemical Stability:

Acids	acetic acid (all concentrations)	Resistant
	50% formic acid	Resistant
	10% hydrochloric acid	Resistant
	30% hydrochloric acid	Partially Resistant
	10% and 25% hydrofluoric acid	Resistant
	10% nitric acid	Resistant
	65% and 100% nitric acid	Not Resistant
	30% and 85% phosphoric acid	Resistant
	20% sulphuric acid	Partially Resistant
	80% and above sulphuric acid	Not Resistant
Aldehydes	acetaldehyde	Resistant
	formaldehyde	Resistant
Alcohols	benzyl alcohol	Partially Resistant
	cyclohexanol	Resistant
	ethyl alcohol	Resistant
	glycerine	Resistant
	glycol	Resistant
	isopropyl alcohol	Resistant
	methyl alcohol	Resistant
Aqueous alkaline solutions	ammonium hydroxide	Not Resistant
	calcium hydroxide	Partially Resistant
	sodium hydroxide	Not Resistant
Chlorinated hydrocarbons	carbon tetrachloride	Partially Resistant
	chlorinated biphenyls	Partially Resistant
	chloroform	Resistant
	trichloroethylene	Resistant
Esters	ethyl acetate	Resistant
Hydrocarbons	aliphatic hydrocarbons	Resistant
	benzene	Resistant
	gasoline (petrol)	Resistant
	mineral oils	Resistant
	toluene	Resistant
	xylene	Resistant
Miscellaneous substances	calcium hypochlorite	Resistant
	chlorine	Resistant
	hydrogen peroxide	Resistant
	oxygen	Resistant
	sodium hypochlorite	Resistant
	water*	Resistant

Other organic solutions	acetone	Resistant
	diethylether	Resistant
	nitrobenzene	Not Resistant
	phenol	Not Resistant
Salt solutions	alkaline carbonates	Resistant
	bichromates	Resistant
	cyanides	Resistant
	fluorides	Resistant
	sodium chloride	Resistant

*At elevated temperatures (approx. > 100°C) and in the presence of water (vapour), the KlasseCLAD cover film tends to become brittle as a result of hydrolysis.

Product Use: Many factors beyond Klasse’s control and uniquely within user’s knowledge and control can affect the use and performance of a Klasse product in a particular application. Given the variety of factors that can affect the use and performance of a Klasse product, user is solely responsible for evaluating the Klasse product and determining whether it is fit for a particular purpose and suitable for user’s method of application.

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