

AEROFOAM[®] XLPE

CROSS LINKED CLOSED-CELL POLYOLEFIN FOAM



ASTM E84

CLASS 0



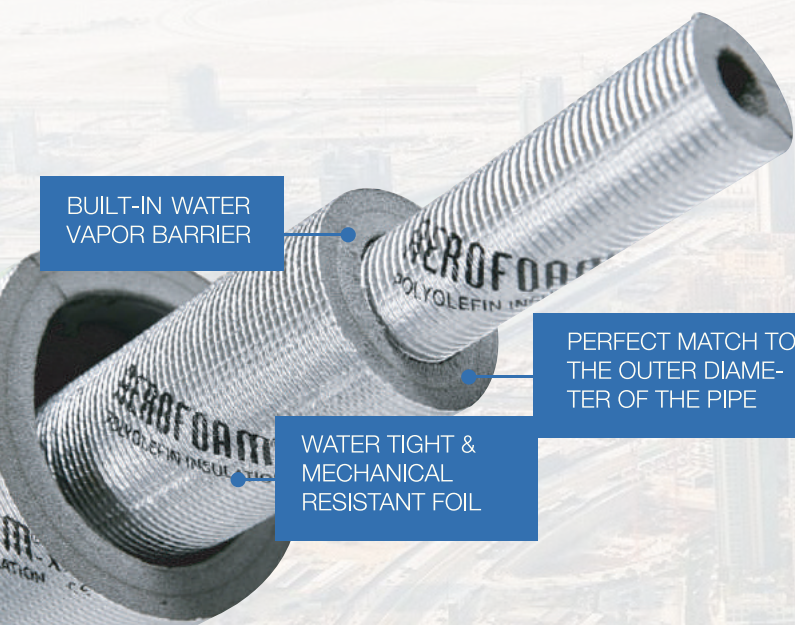
FEATURES OF AEROFOAM® XLPE THERMAL INSULATION



EASY TO APPLY ON
DUCTS AS SHEET
OR ROLL

VERY GOOD THERMAL
SOUND ABSORPTION
PROPERTIES

EASY TO APPLY SELF
ADHESIVE ROLLS
AND SHEETS



BUILT-IN WATER
VAPOR BARRIER

PERFECT MATCH TO
THE OUTER DIAMETER
OF THE PIPE

WATER TIGHT &
MECHANICAL
RESISTANT FOIL

FIRE CLASS AND SMOKE EMISSION

AEROFOAM® XLPE is CLASS O rated (BS 476 Parts 6 & 7) and achieved FSI/SDI of <25/ <50 (ASTM E84). AEROFOAM® XLPE passed the concentration limits of combustion gases (IMO MSC 61/67 1996, Annex 1, Part 2) and achieved $R = 0.77$ (BS 6853).

ZERO WATER VAPOUR PERMEABILITY AND LOW WATER ABSORPTION RATE

AEROFOAM® XLPE can be installed on ducts or pipes without any other additional water vapor barriers. The excellent protection against condensation ensures a long-term thermal efficiency of the installation.

EXCELLENT THERMAL EFFICIENCY

AEROFOAM® XLPE has a low thermal conductivity of 0.032 W/mK (ASTM C518), which guarantees a high thermal performance improvement of the installation. Excellent dimensional properties and full closed cell structure stand for durable values of thermal efficiency. XLPE Insulation can present one of the longest technical life of the products.

ENVIRONMENT FRIENDLY FOAM

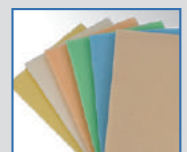
AEROFOAM® XLPE is a CFC and HCFC free product and doesn't contain substances that contribute to the Ozone Depletion Potential (ODP) or to the Global Warming Potential (GWP). AEROFOAM® XLPE doesn't emit any loose fibers and has a very low emission level (VOC).

COST SAVING

AEROFOAM® XLPE requires a limited number of accessories (tape and glue); this facilitates a short installation time and low installation costs.

AEROFOAM® XLPE is specially recommended for medical, pharmaceutical and food processing facilities as well as schools and hospitals.

XLPE foam is available also in other colors on request. Also alupet foil of different colors (blue, black, golden) permanently bonded on the foam can be offered on request.





AEROFOAM® XLPE TUBE

Pipe Size		Thickness							
Inch	mm	10mm	12mm	15mm	20mm	25mm	30mm	40mm	50mm
	6	6x10	6x12	6x15	6x20	6x25	6x30	6x40	
	9	9x10	9x12	9x15	9x20	9x25	9x30	9x40	
	12	12x10	12x12	12x15	12x20	12x25	12x30	12x40	
	16	16x10	16x12	16x15	16x20	16x25	16x30	16x40	
	19	19x10	19x12	19x15	19x20	19x25	19x30	19x40	
	20	20x10	20x12	20x15	20x20	20x25	20x30	20x40	
1/2"	22	22x10	22x12	22x15	22x20	22x25	22x30	22x40	
	25	25x10	25x12	25x15	25x20	25x25	25x30	25x40	
3/4"	28	28x10	28x12	28x15	28x20	28x25	28x30	28x40	
	32	32x10	32x12	32x15	32x20	32x25	32x30	32x40	32x50
1"	35	35x10	35x12	35x15	35x20	35x25	35x30	35x40	35x50
	40	40x10	40x12	40x15	40x20	40x25	40x30	40x40	40x50
1 1/4"	43	43x10	43x12	43x15	43x20	43x25	43x30	43x40	43x50
1 1/2"	50	50x10	50x12	50x15	50x20	50x25	50x30	50x40	50x50
2"	60	60x10	60x12	60x15	60x20	60x25	60x30	60x40	60x50
	75	75x10	75x12	75x15	75x20	75x25	75x30	75x40	75x50
2 1/2"	77	77x10	77x12	77x15	77x20	77x25	77x30	77x40	77x50
3"	90	90x10	90x12	90x15	90x20	90x25	90x30	90x40	90x50
	110	110x10	110x12	110x15	110x20	110x25	110x30	110x40	110x50
4"	115	115x10	115x12	115x15	115x20	115x25	115x30	115x40	115x50
	125	125x10	125x12	125x15	125x20	125x25	125x30	125x40	125x50
5"	140				140x20	140x25	140x30	140x40	140x50
	160				160x20	160x25	160x30	160x40	160x50
6"	166				166x20	166x25	166x30	166x40	166x50
8"	220				220x20	220x25	220x30	220x40	220x50
10"	273				273x20	273x25	273x30	273x40	273x50
12"	323				323x20	323x25	323x30	323x40	323x50
14"	356				356x20	356x25	356x30	356x40	356x50
16"	406				406x20	406x25	406x30	406x40	406x50
18"	457				457x20	457x25	457x30	457x40	457x50

Tubes without foil and other diameters up to 40" are also available upon special request.

Pipe section length: >6":1.5 meters; 6":1.2 meters; Tolerance: Thickness : 10-25mm= ±1.5mm, 25-50mm= -2mm +3.5mm; Length: ±1.5cm
 ID : 6-50mm= ±1.5mm, 50mm up= ±2.5mm

AEROFOAM® XLPE ROLLS & SHEETS

Thickness		Product Range							
Inch	mm	Size	Surface	Type	XLPE	XLPE SA	XLPE AL	XLPE SA-AL	XLPE SA RAL
	3	1.2mx20m	24m ²	Roll	3	3 SA	3 AL	3 SA-AL	
1/4"	5	1.2mx20m	24m ²	Roll	5	5 SA	5 AL	5 SA-AL	
3/8"	10	1.2mx20m	24m ²	Roll	10	10 SA	10 AL	10 SA-AL	
1/2"	12	1.2mx20m	24m ²	Roll	12	12 SA	12 AL	12 SA-AL	12 SA RAL
	15	1.2mx20m	24m ²	Roll	15	15 SA	15 AL	15 SA-AL	15 SA RAL
3/4"	20	1.2mx20m	24m ²	Roll	20	20 SA	20 AL	20 SA-AL	20 SA RAL
1"	25	1.2mx2.4m	2.88m ²	Sheet	25	25 SA	25 AL	25 SA-AL	25 SA RAL
1 1/4"	30	1.2mx2.4m	2.88m ²	Sheet	30	30 SA	30 AL	30 SA-AL	
	35	1.2mx2.4m	2.88m ²	Sheet	35	35 SA	35 AL	35 SA-AL	
1 1/2"	40	1.2mx2.4m	2.88m ²	Sheet	40	40 SA	40 AL	40 SA-AL	
2"	50	1.2mx2.4m	2.88m ²	Sheet	50	50 SA	50 AL	50 SA-AL	

Length: ±2cm

Thickness	3-10mm= ±1mm
	10-30mm= ±1.5mm
	30-50mm= -2mm +3.5mm

ACCESSORIES

Name	Unit
AEROFOAM® XLPE glue 2.5	litre
AEROFOAM® foam tape 2"	roll
AEROFOAM® alupet tape	roll



SA- self adhesive; AL - alupet foil; RAL - reinforced foil

TECHNICAL DATA

Description: Flexible closed cell insulation material with high water vapor diffusion resistance and low thermal conductivity.

Material: Cross linked polyolefin foam with density of $25 \pm 3 \text{ kg/m}^3$ (foam core only) and grey color.

Self-adhesive coating: Pressure sensitive adhesive coating.

Applications: Thermal insulation / protection for pipes, air ducts, vessels (incl. elbows, fittings, flanges, etc.) and process equipment to prevent condensation, save energy and block sound propagation.

Property	Value/ Assesment	Tested acc. to:
Temperature range Max. line temperature Min. line temperature <i>Our Customer Service Center should be consulted for applications with temperatures below -80° C</i>	+105° C -80° C	DIN EN 14706 : 2005 (E) ASTM C411
Thermal conductivity λ[W/(m•K)] at 23[°C]	0.032	ASTM C518 : 2010
Water vapour diffusion resistance factor (μ)	54,000	BS EN 12086 : 1997
Water vapour permeance [perms]	0	ASTM E96
Water absorption [kg/m²]	0.05	BS EN 12087:1997
Reaction to fire	Class O FSI < 25 & SDI < 50 class A	BS 476 Parts 6&7 ASTM E84
Smoke and toxicity 1. Smoke toxicity levels 2. Toxic smoke	Passed R=0.77	IMO MSC 61 (67); A. 1, P. 2 BS 6853: 1999
Sound absorption	$\alpha = 0.35$ (25mm)	ISO 354
UV resistance *	Excellent	ASTM G155
Resistance to corrosion	Excellent	ASTM B117
Compression set	35.77% (for 25mm) 34.22% (for 32mm)	ASTM D3574
Resistance to fungi	Passed	ASTM G21: 2009
Resistance to bacteria	Passed	ISO 22196 : 2007
Chemical Analysis (Leachable ions)	Very low	ASTM C871
Emission (VOC level)	<4 $\mu\text{g/m}^2/\text{hr}$	ASTM D5116
Environment friendly Ozone resistance Ozone Depletion Potential Global Warming Potential CFC & HCFC, dust, fibres & asbestos	Excellent 0 <5 Free	
Storage life <i>Can be stored in dry, clean rooms at normal relative humidity (50% to 70%) and ambient temperature (0°C - 45°C).</i>	1 year for self-adhesive sheets/rolls self-adhesive tapes	

*XLPE foam is generally resistant to UV radiation. However, we must use additional cladding in all outdoor application (metal or mastic) from Aerofoam range of products we recommend Aerofoam N Clad with integrated durable foil.

Disclaimer: This information on Hira Industries products is presented to the best of our knowledge. All product data is based on average values and is for guidance only. As these products are subject to constant research and development, we reserve the right to update the contents without notice.

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