

# AEROFOAM<sup>®</sup> XLPE

## INSULATION SOLUTIONS

CLASS 0 ASTM E84 E361452     

**CROSS LINKED CLOSED-CELL  
POLYOLEFIN FOAM SUITABLE  
FOR CONDENSATION CONTROL,  
THERMAL INSULATION &  
SOUND ABSORPTION**





# 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 0 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 VAPOR 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 (CODE: AFMT-TPFNF-...)

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	-	-	140x15	140x20	140x25	140x30	140x40	140x50
	160	-	-	160x15	160x20	160x25	160x30	160x40	160x50
6"	166	-	-	166x15	166x20	166x25	166x30	166x40	166x50
	168	-	-	168x15	168x20	168x25	168x30	168x40	168x50
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

Pipe section length: <6":1.5 meters; ≥6":1.2 meters; Tolerance: Thickness : ±1.5 mm; Length: ±1.5cm  
Tubes without foil and other diameters up to 40" are also available upon special request.

## AEROFOAM® XLPE ROLLS (CODE: AFMR-TPFAF-...) & SHEETS (CODE: AFMS-TPFAF-...)

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

Tolerance: Thickness : ±1.5 mm; Length: ±2cm

SA- self adhesive; AL - alupet foil; N CLAD-No Cladding

### ACCESSORIES

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



# 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/ Assessment	Tested acc. to:
<b>Temperature range</b> 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
<b>Thermal conductivity</b> $\lambda[\text{W}/(\text{m}\cdot\text{K})]$ at 23[°C]	0.032	ASTM C518 : 2015
<b>Water vapour diffusion resistance factor (<math>\mu</math>)</b>	54,700	BS EN 12086 : 1997
<b>Water vapor permeance [perms]</b>	0	ASTM E96
<b>Water absorption [Kg/m<sup>2</sup>]</b>	0.05 0.00008	BS EN 12087:1997 JIS K6767 : 1995 (method-A)
<b>Reaction to fire</b>	Class 0 Class A FM Certificate HF-1 B-s1,d0 0,0,0,1	BS 476 Parts 6&7 ASTM E84 FM Global UL 94 DIN EN 13501-1 AS1530.3
<b>Smoke and toxicity</b>		
1. Smoke toxicity levels	Passed	IMO MSC 61 (67); A. 1, P. 2
2. Toxic smoke	Complied	BS 6853: 1999
<b>Sound absorption</b>	$\alpha = 0.35$ (25mm)	ISO 354
<b>UV resistance *</b>	Excellent	ASTM G155
<b>Resistance to corrosion (Salt Fog Test)</b>	Excellent	ASTM B117
<b>Compression set</b>	35.77% (for 25mm) 34.22% (for 32mm)	ASTM D3574
<b>Resistance to fungi</b>	Zero Growth	ASTM G21: 2009
<b>Resistance to bacteria</b>	Passed	ISO 22196 : 2007
<b>Chemical Analysis (Leachable ions)</b> <b>Emission (VOC level) Leed support</b> <b>Environment friendly</b> Ozone resistance Ozone Depletion Potential Global Warming Potential CFC & HCFC, dust, fibres & asbestos	Very low <4 $\mu\text{g}/\text{m}^2/\text{hr}$  Excellent 0 <5 Free	ASTM C871 ASTM D5116

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

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