



XLPE POLYOLEFIN INSULATION

DATASHEET



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Fire Class & Smoke Emission

Delta Duct XLPE is CLASS O rated (BS 476 Parts 6 & 7) and passed ASTM E84.

Zero Water Vapor Permeability & Low Water Absorption Rate

Delta Duct XLPE can be installed on ducts or pipes without any other additional water vapor barriers. The excellent protection against condensation ensures a long-term.

Excellent Thermal Efficiency

Delta Duct XLPE has low thermal conductivity of 0.033 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 of the longest technical life of the products.

Environment Friendly Foam

Delta Duct 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). Delta Duct XLPE very low emission level (VOC).

Cost Saving

Delta Duct XLPE requires a limited number of accessories (tape and glue); this facilitates a short installation time and low installation costs. Delta Duct XLPE is specially recommended for medical, pharmaceutical and food processing facilities as well as schools and hospitals.

1. DELTA DUCT XLPE TUBE

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

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

2. DELTA DUCT XLPE ROLLS & SHEETS

Thickness		Product Range							
Inch	mm	Size	Total SQM	Type	XLPE	XLPE SA	XLPE AL	XLPE SA-AL	XLPE SA RAL
	3	1.2 m x 20 m	24 m ²	Roll	3	3 SA	3 AL	3 SA-AL	
1/4"	5	1.2 m x 20 m	24 m ²	Roll	5	5 SA	5 AL	5 SA-AL	
3/8"	10	1.2 m x 20 m	24 m ²	Roll	10	10 SA	10 AL	10 SA-AL	
1/2"	12	1.2 m x 20 m	24 m ²	Roll	12	12 SA	12 AL	12 SA-AL	12 SA RAL
	15	1.2 m x 20 m	24 m ²	Roll	15	15 SA	15 AL	15 SA-AL	15 SA RAL
3/4"	20	1.2 m x 20 m	24 m ²	Roll	20	20 SA	20 AL	20 SA-AL	20 SA RAL
1"	25	1.2 m x 10 m	12 m ²	Roll	25	25 SA	25 AL	25 SA-AL	25 SA RAL
1 1/4"	30	1.2 m x 8 m	9.6 m ²	Roll	30	30 SA	30 AL	30 SA-AL	
	35	1.2 m x 8 m	9.6 m ²	Roll	35	35 SA	35 AL	35 SA-AL	
1 1/2"	40	1.2 m x 2.4 m	2.88 m ²	Sheet	40	40 SA	40 AL	40 SA-AL	
2"	50	1.2 m x 2.4 m	2.88 m ²	Sheet	50	50 SA	50 AL	50 SA-AL	
Length: ±2 cm									
Thickness	3-10 mm= ±1 mm								
	10-30 mm= ±1.5 mm								
	30-50 mm= -2 mm +3.5 mm								

Name
Delta Duct XLPE Glue 2.5
Delta Duct Foam Tape 2"
Delta Duct Alu-PET Tape

TECHNICAL DETAILS

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 ±3 kg/m³ (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 Our Customer Service Center should be consulted for applications with temperatures below -80°C	+105°C -80°C	DIN EN 14706 : 2005 (E) ASTM C411
Thermal conductivity λ[W/(m·K)] at 23[°C]	0.033	ASTM C518 : 2010
Water vapour diffusion resistance factor ()	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 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	$\alpha = 0.35$ (25 mm)	ISO 354
UV resistance*	Excellent	ASTM G155
Resistance to corrosion	Excellent	ASTM B117
Compression set	35.77% (for 25 mm) 34.22% (for 32 mm)	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 g/m ² /hr.	ASTM D5116
Environment friendly Ozone resistance Ozone depletion potential Global warming potential CFC & HCFC, dust, fibres, asbestos	Excellent 0 <5 Free	
Storage life Can be stored in dry, clean rooms at normal relative humidity (50% to 70%) and ambient temperature (0°C - 45°C).	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 Delta Duct range of products we recommend Delta Duct N Clad with integrated durable foil.



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