

LinaTex® Textile Fiber Duct Liner

Description

LinaTex textile fiber duct liner is a flexible duct liner made from continuous glass filament fibers bonded with a thermosetting resin. The airstream surface is protected with a black, high-density glass mat, which provides a tough, damage-resistant surface.

Factory-Applied Edge Coating

Edge coating is factory applied to the edges of the liner core, assuring coverage of the leading edges per NAIMA/SMACNA requirements. Shop fabrication cuts may be coated with the SuperSeal® Duct Butter and Edge Treatment products (refer to publication AHS-202).

Uses

LinaTex duct liner is specifically designed for lining sheet metal ducts in air conditioning, heating and ventilating systems.

General Properties

Operating temperature (max.) – ASTM C411	250°F (121°C)
Air velocity (max.) – ASTM C1071	5,000 fpm (25.4 m/sec)
Fungi resistance – ASTM C1338	Does not breed or promote
Fungi resistance – ASTM G21	No growth
Bacteria resistance – ASTM G22	No growth

Standard Thicknesses and Packaging

Thickness	Type	in	mm
	150	1, 1½	25, 38
	200	½	13
	300	½, 1	13, 25
Roll Width*	in	mm	
	35 to 36	889 to 914	
	44 to 48	1,118 to 1,219	
	56 to 60	1,422 to 1,524	
Roll Length**	lineal feet	lineal meters	
	50	15	
	100	31	

*Available in ¼" (6.4 mm) increments. **Check with your Regional Sales Office.

Surface Burning Characteristics

LinaTex duct liner meets the Surface Burning Characteristics and Limited Combustibility of the following standards:

Standard/Test Method

- ASTM E84
- NFPA 90A and 90B

Maximum Flame Spread Index	25
Maximum Smoke Developed Index	50

Specification Compliance

- ASTM C1071, Type I
- ASHRAE 62
- SMACNA Application Standards for Duct Liners
- NAIMA Fibrous Glass Duct Liner Installation Standard
- State of Washington Building Services Department requirements for emissions of total volatile organic compounds (TVOC) and formaldehyde (CHOH) in accordance with ASTM D5116

Advantages



Improves Indoor Building Environment. LinaTex duct liner improves indoor environmental quality by helping to control both temperature and sound.

Absorbs Disturbing Sound. Duct-transmitted noise, such as crosstalk and sound energy from air movement and mechanical equipment, is noticeably reduced.

Conserves Energy. The unique glass fiberization process used in the manufacture of LinaTex duct liner provides very good thermal properties.

Will Not Support Microbial Growth. The glass mat is treated with a protective agent to protect it against potential growth of fungi and bacteria. The protective agent is EPA registered for use in HVAC applications and designed to last the life of the system.

LinaTex duct liner meets all requirements of ASTM C1071 for fungi and bacterial resistance. Tests were conducted in accordance with ASTM C1338, ASTM G21 (fungi testing) and ASTM G22 (bacteria-resistance testing). Detailed information is available in Johns Manville fact sheet HSE-103FS.

Note: As with any type of surface, microbial growth may occur in accumulated duct system dirt, given certain conditions. This risk is minimized with proper design, filtration, maintenance and operation of the HVAC system.

Withstands High Velocity. LinaTex duct liner has been tested to the recommended maximum velocity of 5,000 fpm (25.4 m/sec) per ASTM C1071. Fiber-erosion test results were determined using the Isokinetic Sampling Method described in JM Fiber Erosion Testing Fact Sheet HSE-133FS.

Cleanability. If HVAC system cleaning is required, the airstream surface may be cleaned with industry-recognized dry methods. See the North American Insulation Manufacturers Association (NAIMA) "Cleaning Fibrous Glass Insulated Air Duct Systems."

Easy to Fabricate. LinaTex duct liner is lightweight, very tough and easy to handle. Clean, even edges can be accurately cut with regular shop tools.

Thermal Performance

Type	Thickness		R-value		Conductance	
	in	mm	(hr•ft²•°F)/Btu	m²•°C/W	Btu/(hr•ft²•°F)	W/m²•°C
300	½	13	2.6	0.45	0.38	2.16
300	1	25	4.2	0.74	0.24	1.36
200	½	13	2.4	0.42	0.41	2.33
150	1	25	3.7	0.65	0.27	1.53
150	1½	38	5.5	0.97	0.18	1.02

R-value and conductance are calculated from the material thermal conductivity tested in accordance with ASTM C518 at 75°F (24°C) mean temperature.

Sound Absorption Coefficients (Type "A" Mounting)

Type	Thickness		Sound Absorption Coefficient at Frequency (Cycles per Second) of						
	in	mm	125	250	500	1,000	2,000	4,000	NRC
300	½	13	0.03	0.14	0.30	0.55	0.72	0.84	0.45
300	1	25	0.08	0.27	0.62	0.86	0.92	0.91	0.65
200	½	13	0.06	0.13	0.28	0.52	0.71	0.74	0.40
150	1	25	0.09	0.24	0.50	0.70	0.86	0.87	0.60
150	1½	38	0.18	0.37	0.68	0.90	1.02	0.93	0.75

Coefficients were tested in accordance with ASTM C423 and ASTM E795.

Recycled Content

Type	Thickness		Recycled Content (%) [*] Post Industrial
	in	mm	
300	½	13	66
300	1	25	83
200	½	13	69
150	1	25	72
150	1½	38	75

^{*}Average values.



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