

**LinaTex™**  
Textile Fiber Duct Liner

**Description**

LinaTex is a flexible duct liner made from continuous glass fibers bonded with a thermosetting resin. The airstream surface is protected with an improved black, high density glass mat which has a tougher surface and is more damage resistant.

**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 is specifically designed for lining sheet metal ducts in air conditioning, heating and ventilating systems. The improved mat offers exceptional durability in exposure to air velocity in systems operating at velocities up to 6,000 fpm (30.5 m/sec) and operating temperatures up to 250°F (121°C).

**Advantages**

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

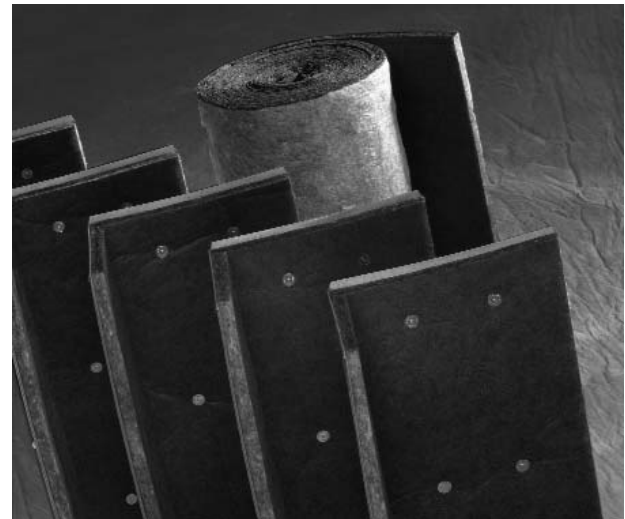
**Withstands High Velocity.** LinaTex has been tested to the recommended maximum velocity of 6,000 fpm (30.5 m/sec). Fiber erosion test results were determined using the Isokinetic Sampling Method described in JM Fiber Erosion Testing Fact Sheet HSE-133FS (test results pending).

**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 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 fungus 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 C 1071 for fungi and bacterial resistance. Tests were conducted in accordance with ASTM C 1338 and ASTM G 21 (fungi testing) and ASTM G 22 (bacteria resistance testing). Detailed information is available in Johns Manville fact sheet HSE-103FS.



**Operating Temperature Limit: 250°F (121°C)**

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.

**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 is light in weight, very tough, and easy to handle. Clean, even edges can be accurately cut with regular shop tools.

**Available Forms**

Type	Density		Thickness	
	pcf	kg/m <sup>3</sup>	(in)	(mm)
300	3.0	48	1	25
200	2.0	32	1/2	13
200	2.0	32	1	25
200	2.0	32	2	51
150	1.5	24	1	25
150	1.5	24	1 1/2	38
Roll Length*	(lineal feet)		(lineal meters)	
	50		15	
	100		31	

\* Check with plant for availability.

# Specification Data

## Textile Fiber Duct Liner

### Thermal Performance

Type	Thickness		R-Value (hr•ft <sup>2</sup> •°F)/Btu	m <sup>2</sup> •°C/W	Conductance	
	(in)	(mm)			Btu/(hr•ft <sup>2</sup> •°F)	W/m <sup>2</sup> •°C
300	1	25	4.2	0.74	0.24	1.36
200	1/2	13	2.5	0.44	0.40	2.27
200	1	25	3.8	0.67	0.26	1.48
200	2	51	7.6	1.34	0.13	0.74
150	1	25	3.7	0.65	0.27	1.53
150	1 1/2	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 C 518 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	1000	2000	4000	NRC
300	1	25	0.09	0.28	0.63	0.86	0.91	0.92	0.65
200	1/2	13	0.06	0.13	0.28	0.52	0.71	0.74	0.40
200	1	25	0.10	0.26	0.53	0.76	0.83	0.84	0.60
200	2	51	← TO BE DETERMINED →						
150	1	25	0.09	0.24	0.50	0.70	0.86	0.87	0.60
150	1 1/2	38	0.18	0.37	0.68	0.90	1.02	0.93	0.75

Coefficients were tested in accordance with Test Method ASTM C 423-90 and ASTM E 795.

### Recycled Content

Type	Thickness		Recycled Content (%) <sup>*</sup> (Post Industrial)
	(in)	(mm)	
300	1	25	83
200	1/2	13	69
200	1	25	77
200	2	51	87
150	1	25	72
150	1 1/2	38	75

\* Average values

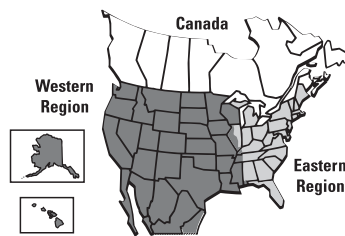
### Surface Burning Characteristics

Flame Spread	not over 25
Smoke Developed	not over 50

Per ASTM E 84 and UL 723.

### Specification Compliance

- ASTM C 1071, Type I, Flexible (Replaced HH-I-545B and NAIMA AHC 101)
- ASTM G 21 and G 22
- SMACNA Application Standards for Duct Liners
- NAIMA Fibrous Glass Duct Liner Installation Standard
- NFPA 90A and 90B, FHC 25/50 and Limited Combustibility
- Conforms to ASHRAE 62-01
- State of Washington Building Services Department requirements for emissions of total volatile organic compounds (TVOC) and formaldehyde (CHOH) in accordance with ASTM D 5116-90



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The physical and chemical properties of the LinaTex™ Textile Fiber Duct Liner listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Numerical flame spread and smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Check with the Regional Sales Office nearest you to assure current information. **All Johns Manville products are sold subject to Johns Manville's Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville Limited Warranty and Limitation of Remedy, and information on other Johns Manville thermal insulations and systems, call (800) 654-3103.**

