



Johns Manville

Linacoustic RC™

Fiber Glass Duct Liner With Reinforced Coating System

Description

Linacoustic RC is a flexible duct liner insulation made from strong, glass fibers bonded with a thermosetting resin. The airstream surface is protected with JM's exclusive Reinforced Coating System, which combines our state-of-the-art Permacote® acrylic coating with a flexible glass cloth reinforcement.

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

Linacoustic RC is specifically designed for lining sheet metal ducts in air conditioning, heating and ventilating systems, providing superior acoustical and thermal performance.

Advantages

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

Resistant to Dust and Dirt. The tough, acrylic polymer Permacote coating helps guard against the incursion of dust or dirt into the substrate, minimizing the potential for biological growth.

Will Not Support Microbial Growth. Permacote coating is formulated with an immobilized, EPA-registered, protective agent to protect the coating from potential growth of fungus and bacteria.

Linacoustic RC 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.

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.

GREENGUARD®. This certification is proof that the product meets the Environmental Institute's indoor air quality standards for VOCs.



Cleanability. If HVAC system cleaning is required, the Reinforced Coating 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."

Minimizes Pre-Installation Damage. Linacoustic RC's Reinforced Coating System is highly resistant to damage that can occur during in-shop handling, fabrication, jobsite shipping, and installation.



Highly Resistant to Water. The Reinforced Coating surface provides superior resistance to penetration of incidental water into the fiber glass wool core.

Easy to Fabricate. Linacoustic RC is light in weight and easy to handle. Clean, even edges can be accurately cut with regular shop tools.

Available Forms

Thickness	(in)	(mm)
	1/2	13
	1	25
	1 1/2	38
	2	51
Roll Width*	(in)	(mm)
	34 to 36	864 to 914
	44 to 48	1118 to 1219
	56 to 60	1422 to 1524
	66 to 72	1676 to 1829
Roll Length**	(lineal feet)	(lineal meters)
	50	15
	100	31
	150	46
	200	61

*Available in 1/4" (6.4 mm) increments. **Check with plant for availability.

Performance Limits

Maximum Air Velocity 6,000 fpm (30.5 m/sec).

Maximum Operating Temperature 250°F (121°C)

Water Repellency

Per Cent Mass Gain (JM 436-1006) 6.2% (avg.)

INDA IST 80.6-92 ≥ 6

Installation

Linacoustic RC installation must be performed in accordance with the requirements of the NAIMA Fibrous Glass Duct Liner Standard, or SMACNA HVAC Duct Construction Standard. All transverse edges, or any edges exposed to airflow, must be coated with an approved duct liner coating material, such as Johns Manville SuperSeal® products.

Specification Data

Linacoustic RC Fiber Glass Duct Liner With Reinforced Coating System

Thermal Performance

Thickness		R-Value		Conductance	
(in)	(mm)	(hr•ft ² •°F)/Btu	m ² •°C/W	Btu/(hr•ft ² •°F)	W/m ² •°C
1/2	13	2.2	0.38	.46	2.61
1	25	4.2	0.74	.24	1.36
1 1/2	38	6.3	1.11	.16	0.91
2	51	8.0	1.41	.13	0.74

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)

Thickness		Sound Absorption Coefficient at Frequency (Cycles per Second) of						
(in)	(mm)	125	250	500	1000	2000	4000	NRC
1/2	13	0.07	0.20	0.44	0.66	0.84	0.93	0.55
1	25	0.08	0.31	0.64	0.84	0.97	1.03	0.70
1 1/2	38	0.10	0.47	0.85	1.01	1.02	0.99	0.85
2	51	0.25	0.66	1.00	1.05	1.02	1.01	0.95

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

ISO 9000 Certification

Johns Manville mechanical insulation products are designed, manufactured and tested in our own facilities, which are certified and registered to stringent ISO 9000 (ANSI/ASQC 90) series quality standards. This certification, along with regular, independent third-party auditing for compliance, is your assurance that Johns Manville products deliver consistent high quality.

Surface Burning Characteristics

Flame Spread	not over 25
Smoke Developed	not over 50

Per UL 723, ASTM E 84 and CAN/ULC S102-M88 test methods. If UL labels are required, they may be requested at time of order.

Specification Compliance

- ASTM C 1071, Type I, Flexible (Replaced HH-I-545B and NAIMA AHC 101)
- ASTM G 21 and G 22
- ICC Compliant
- California Title 24
- 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 62-2001
- Canada: CGSB 51-GP-11M
CAN/ULC S102-M88



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The physical and chemical properties of Linacoustic RC™ Fiber Glass Duct Liner with Reinforced Coating System 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, call the 800 number below.** For information on other Johns Manville thermal insulations and systems and a copy of the Spec-Line® CSI formatted specifications, call **(800) 654-3103**.