



# **Duct Liner PM**

Fiber Glass Duct Liner

## **Description**

Duct Liner PM is a flexible duct liner insulation made from strong, glass fibers bonded with a thermosetting resin. The airstream surface is protected using a durable glass mat facing that contains an EPA-registered antimicrobial agent. The flexible glass mat also provides a smooth airstream surface.

### **Factory-Applied Edge Coating**

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

#### **Uses**

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

## **General Properties**

Operating temperature (max.) – ASTM C	411 250°F (121°C)
Air velocity (max.) – ASTM C 1071	5000 fpm (25.4 m/sec)
Fungi resistance – ASTM C 1338	Does not breed or promote
Fungi resistance – ASTM G 21	No growth
Bacteria resistance – ASTM G 22	No growth

## **Standard Thicknesses and Packaging**

Thic	Thickness Roll Length		Roll Widths for All Thicknesse		
in	mm	lineal feet	lineal meters	in	mm
1/2	13	100, 150, 200	31, 46, 61	34 to 36	864 to 914
1	25	50,100,150,200	15, 31, 46, 61	44 to 48	1118 to 1219
1½	38	50, 100	15, 31	56 to 60	1422 to 1524
2	51	50	15	66 to 72	1676 to 1829

<sup>\*</sup>Available in ¼" (6.4 mm) increments.

Contact your Regional Sales Office for stock items and availability of special sizes.

## **Surface Burning Characteristics**

Duct Liner PM meets the Surface Burning Characteristics and Limited Combustibility of the following standards:

Standard/Test Method

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UL 723NFPA 255

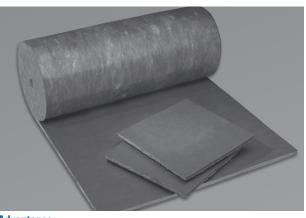
Maximum Flame Spread Index 25 Maximum Smoke Developed Index 50

- NFPA 90A and 90B
- NFPA 259
- CAN/ULC S102-M88

UL labels supplied on packages when requested on order.

#### **Specification Compliance**

- ASTM C 1071, Type I
- ICC Compliant
- California Title 24
- ASHRAE 62
- MEA 353-93-M
- . SMACNA Application Standards for Duct Liners
- NAIMA Fibrous Glass Duct Liner Installation Standard
- Canada: CGSB 51-GP-11M and CAN/CGSB 51.11



#### **Advantages**

Improves Indoor Building Environment. Duct Liner PM improves indoor environmental quality by helping to control both temperature and sound.

Will Not Support Microbial Growth. The airstream surface of Duct Liner PM is treated with an antimicrobial agent specifically registered with the EPA for HVAC applications to resist potential growth of fungus or bacteria on the airstream surface.

Duct Liner PM duct liner meets all requirements 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.

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."

## **Green Building Attributes**

GREENGUARD® certification is not intended for residential environments. Instead, the certification is intended only for buildings meeting ASHRAE 62.1-2007 commercial building ventilation rates. This certification is proof that the product meets the GREENGUARD Environmental Institute's indoor air quality standards and product emission standards for VOCs.



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#### Installation

Duct Liner PM installation must be performed in accordance with the requirements of the NAIMA Fibrous Glass Duct Liner Standards 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.

**Minimizes Pre-installation Damage.** Duct Liner PM's durable glass mat facing is resistant to damage that can occur during in-shop handling, fabrication, jobsite shipping and installation.

Easy to Fabricate. Duct Liner PM is lightweight and easy to handle. Clean, even edges can be accurately cut with regular shop tools.

#### **Thermal Performance**

Thickness F		R-value		Conductance		
in	mm	(hr•ft²•°F)/Btu	m²•°C/W	Btu/(hr•ft2•°F)	W/m²•°C	
1/2	13	2.2	0.39	0.46	2.61	
1	25	4.2	0.74	0.24	1.36	
1½	38	6.3	1.11	0.16	0.91	
2	51	8.0	1.41	0.13	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)**

Sound Absorption Coefficient at Frequency

Thic	kness	(Cycle	(Cycles per Second) of					
in	mm	125	250	500	1000	2000	4000	NRC
1/2	13	0.08	0.17	0.42	0.63	0.77	0.89	0.50
1	25	0.14	0.28	0.64	0.85	0.97	1.09	0.70
1½	38	0.24	0.51	0.90	0.99	1.01	1.10	0.85
2	51	0.26	0.69	1.02	1.08	1.03	1.10	0.95

Coefficients were tested in accordance with ASTM C 423 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.



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P.O. Box 5108 Denver, CO 80217 (800) 368-4431 Fax: (303) 978-4661 The physical and chemical properties of Duct Liner PM 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 standard Terms and Conditions, including Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville standard Terms and Conditions, Limited Warranty and Limitation of Remedy, and information on other Johns Manville thermal insulation and systems, call (800) 654-3103.

