



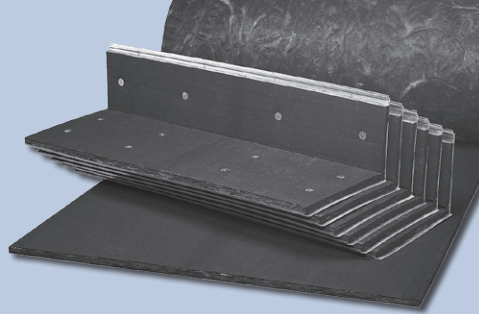
Fiber Glass Insulation



# Air Handling Systems Product Selector Guide

	Icon Key
	Thermal
	Acoustical
	Fire Resistant
	Moisture Control
	Recycled Content
	<b>Formaldehyde-free™</b> Products for improved indoor air quality

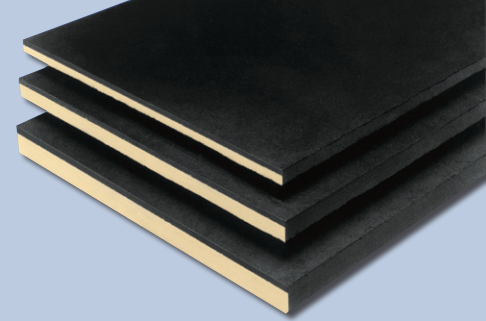
For more information, visit us at  
**specJM.com**



Permacote® Linacoustic® HP  
Fiber Glass Duct Liner



LinaTex®  
Textile Fiber Duct Liner



Permacote® Linacoustic® R-300  
Rigid Fiber Glass Plenum Liner Board



DESCRIPTION

Permacote Linacoustic HP insulation is a flexible duct liner made from strong glass fibers bonded with a thermosetting resin. The airstream surface is protected with Permacote, a state-of-the-art acrylic surface coating system. The exclusive Permacote coating system offers exceptional durability in exposure to air velocity, as well as superior acoustical and thermal performance.

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

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

LinaTex duct liner is a flexible duct liner made from continuous glass fibers bonded with a thermosetting resin. The airstream surface is protected with a black, high-density glass mat. The mat offers exceptional durability in exposure to air velocity in systems operating at velocities up to 5,000 fpm (25.4 m/sec).

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

**Maximum Air Velocity:**  
5,000 fpm (25.4 m/sec)

R-300 insulation is a rigid fiber glass plenum liner board with the durable acrylic Permacote surface treatment.

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

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

DESCRIPTION DESCRIPTION

**THERMAL PERFORMANCE  
R-VALUE @ 75°F (24°C) MEAN TEMP.**

in	mm	(hr-ft <sup>2</sup> -°F)/Btu	m <sup>2</sup> -°C/W	Btu/hr-ft <sup>2</sup> -F	W/m <sup>2</sup> -°C
1	25	4.3	0.76	0.23	1.31

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

**THERMAL PERFORMANCE  
R-VALUE @ 75°F (24°C) MEAN TEMP.**

Type	in	mm	(hr-ft <sup>2</sup> -°F)/Btu	m <sup>2</sup> -°C/W
300	½	13	2.6	0.45
300	1	25	4.2	0.74
200	½	13	2.4	0.42
150	1	25	3.7	0.65
150	1½	38	5.5	0.97

**THERMAL PERFORMANCE  
R-VALUE @ 75°F (24°C) MEAN TEMP.**

in	mm	(hr-ft <sup>2</sup> -°F)/Btu	m <sup>2</sup> -°C/W
1	25	4.3	0.76
1½	38	6.3	1.11
2	51	8.7	1.53

**ASTM C423, TYPE "A"  
MOUNTING, FREQUENCY (HZ)**

in	mm	125	250	500	1000	2000	4000	NRC
1	25	0.04	0.24	0.69	0.96	1.05	1.01	0.75

**ASTM C423, TYPE "A"  
MOUNTING, FREQUENCY (HZ)**

Type	in	mm	125	250	500	1000	2000	4000	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

**ASTM C423, TYPE "A"  
MOUNTING, FREQUENCY (HZ)**

in	mm	125	250	500	1000	2000	4000	NRC
1	25	0.04	0.26	0.69	1.00	1.07	1.02	0.75
1½	38	0.14	0.52	1.01	1.07	1.03	0.97	0.90
2	51	0.26	0.73	1.10	1.10	1.04	1.03	1.00

**Recycled Content:**  
20% post consumer  
5% pre consumer

**Recycled Content:**  
66%–83% pre consumer,  
dependent on material type

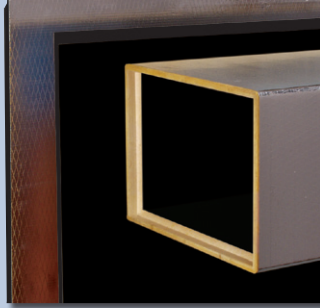
**Recycled Content:**  
20% post consumer  
5% pre consumer

SPECIFICATION COMPLIANCE

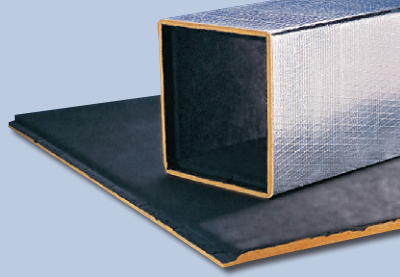
ASTM C1071, Type I  
Conforms to ASHRAE 62  
California Title 24  
MEA 353-93-M  
SMACNA Application Standards for Duct Liners  
NAIMA Fibrous Glass Duct Liner Installation Standard  
ASTM D5116-State of Washington  
Canada: CGSB 51-GP-11M and CAN/ULC S102-M88

ASTM C1071, Type I, Flexible  
ASTM G21 and G22  
ASTM D5116-State of Washington  
SMACNA Application Standards for Duct Liners  
NAIMA Fibrous Glass Duct Liner Installation  
NFPA 90A and 90B, FHC 25/50  
Conforms to ASHRAE 62  
California Title 24  
Canada: CGSB 51-GP-11M and CAN/ULC S102-M88

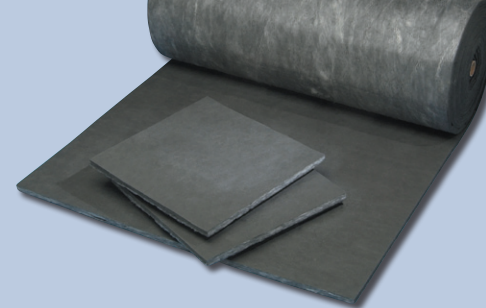
ASTM C1071, Type II  
ASTM G21 and G22  
ASTM D5116-State of Washington  
SMACNA Application Standards for Duct Liners  
NAIMA Fibrous Glass Duct Liner Installation  
NFPA 90A and 90B, FHC 25/50  
Conforms to ASHRAE 62  
California Title 24  
NYC MEA # 353-93-M  
Canada: CGSB 51.10 and CAN/ULC S102-M88



**Mat-Faced Micro-Aire®**  
Fiber Glass Duct Board



**SuperDuct® RC System**  
Coated High-Performance Air Duct Board



**Linacoustic® RC**  
Fiber Glass Duct Liner with Reinforced Coating



Fiber glass duct board for fabrication into rectangular ductwork, the airstream side of the duct board features a fiber glass mat for use at velocities up to 5,000 fpm (25.4 m/sec).

- Type 475 & Type 800

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

**Maximum Air Velocity:**  
5,000 fpm (25.4 m/sec)

SuperDuct RC Air Duct Board is the primary component of the system, which also consists of SuperSeal® coating products. SuperDuct RC duct board features an airstream surface protected with JM's exclusive Reinforced Coating System that combines state-of-the-art Permacote acrylic coating with a flexible glass cloth reinforcement.

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

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

Flexible duct liner insulation with the airstream surface protected with JM's exclusive Reinforced Coating System that combines state-of-the-art Permacote acrylic coating with a flexible glass cloth reinforcement.

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

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

**THERMAL PERFORMANCE**  
R-VALUE @ 75°F (24°C) MEAN TEMP.

in	mm	Type	(hr•ft <sup>2</sup> •°F)/Btu	m <sup>2</sup> •°C/W
1	25	475	4.3	0.76
1½	38	800	6.5	1.15
2	51	800	8.7	1.53

**THERMAL PERFORMANCE**  
R-VALUE @ 75°F (24°C) MEAN TEMP.

in	mm	Type	(hr•ft <sup>2</sup> •°F)/Btu	m <sup>2</sup> •°C/W
1	25	475	4.3	0.76
1½	38	800	6.5	1.15
2	51	800	8.7	1.53

**THERMAL PERFORMANCE**  
R-VALUE @ 75°F (24°C) MEAN TEMP.

in	mm	(hr•ft <sup>2</sup> •°F)/Btu	m <sup>2</sup> •°C/W
½	13	2.2	0.39
1	25	4.2	0.74
1½	38	6.3	1.11
2	51	8.0	1.41

**ASTM C423, TYPE "A"**  
MOUNTING, FREQUENCY (HZ)

Type	in	mm	125	250	500	1000	2000	4000	NRC
475	1	25	0.07	0.25	0.63	0.90	0.97	1.00	0.70
800	1½	38	0.10	0.42	0.91	1.04	1.04	1.04	0.85
800	2	51	0.17	0.63	1.10	1.05	1.04	1.06	0.95

**ASTM C423, TYPE "A"**  
MOUNTING, FREQUENCY (HZ)

Type	in	mm	125	250	500	1000	2000	4000	NRC
475	1	25	0.04	0.27	0.71	0.96	1.03	0.99	0.75
800	1½	38	0.11	0.45	0.96	1.07	1.06	1.00	0.90
800	2	51	0.14	0.81	1.10	1.07	1.03	1.01	1.00

**ASTM C423, TYPE "A"**  
MOUNTING, FREQUENCY (HZ)

in	mm	125	250	500	1000	2000	4000	NRC
½	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
1½	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

**Recycled Content:**  
20% post consumer  
5% pre consumer

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20% post consumer  
5% pre consumer

**Recycled Content:**  
20% post consumer  
5% pre consumer

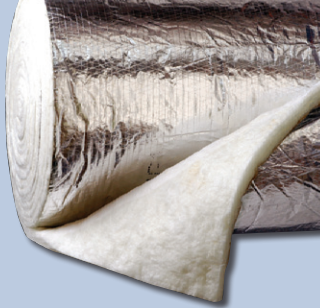
UL 181, Class 1 Rigid Air Duct Listed  
ASTM G21 and G22  
Conforms to ASHRAE 62  
ICC Compliant  
NFPA 90A and 90B

UL 181, Class 1 Rigid Air Duct Listed  
NFPA 90A and 90B  
Conforms to ASHRAE 62  
ASTM G21 and G22  
Canada: CGSB 51.10  
CAN/ULC-S110M

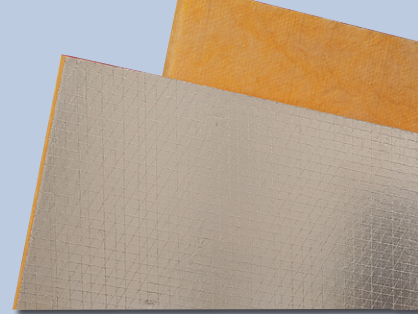
ASTM C1071, Type I, Flexible  
ASTM G21 and G22  
SMACNA Application Standards for Duct Liners  
NAIMA Fibrous Glass Duct Liner Installation  
NFPA 90A and 90B, FHC 25/50  
ICC Compliant  
Conforms to ASHRAE 62  
California Title 24  
Canada: CGSB 51-GP-11M  
CAN/ULC S102-M88



**Spiracoustic Plus® System**  
Fiber Glass Liners for Round Metal Ducts



**Microlite® XG™**  
Formaldehyde-free™ Fiber Glass Duct Wrap



**800 Series Spin-Glas®**  
Fiber Glass Duct and Equipment Insulation



A group of fiber glass duct liners for round ducts of virtually any size. Products have the durable acrylic Permacote surface treatment.

- VSD for very small diameters
- SD for small diameters
- LD for large diameters

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

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

Fiber glass duct wrap insulation used on the exterior of rectangular and round metal ducts as thermal insulation.

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

800 Series Spin-Glas insulation can be used in plain or faced form to insulate heating ducts and equipment. 800 Series Spin-Glas insulation is ideal for application on commercial and industrial heating, air conditioning, power and process equipment.

**Operating Temperature Limit:**  
Unfaced: 450°F (232°C)  
Faced: unfaced side 450°F (232°C)  
faced side 150°F (66°C)

**THERMAL PERFORMANCE**  
R-VALUE @ 75°F (24°C) MEAN TEMP.

in	mm	(hr•ft²•°F)/Btu	m²•°C/W
1	25	4.3	0.76
1½	38	6.4	1.13
2*	51	8.4	1.48

\*2" is not stocked; special order only.

**THERMAL PERFORMANCE**  
R-VALUE @ 75°F (24°C) MEAN TEMP.

INSTALLED				
Type	in	mm	(hr•ft²•°F)/Btu	m²•°C/W
75	1½	38	4.2	0.74
75	2	51	5.6	0.99
75	2.3	58	6.5	1.15
75	3	76	8.3	1.46
100	1½	38	4.5	0.79
100	2	51	6.0	1.06
150	1½	38	4.7	0.83
150	2	51	6.3	1.11

**THERMAL PERFORMANCE**  
(ASTM C177 AND C518)

Type	in	mm	Btu-in/(hr•ft²•°F)	m²•°C/W
812	1½-4	38-102	0.24	0.035
813	1½-4	38-102	0.23	0.033
814	1-4	25-102	0.23	0.033
815	1-2½	25-64	0.22	0.032
817	1-2	25-51	0.22	0.032

**ASTM C423, TYPE "A"**  
MOUNTING, FREQUENCY (HZ)

in	mm	125	250	500	1000	2000	4000	NRC
1	25	0.05	0.21	0.71	1.01	1.07	1.04	0.75
1½	38	0.10	0.39	1.02	1.08	1.04	1.00	0.85
2	51	0.17	0.63	1.10	1.05	1.04	1.06	0.95

**Recycled Content:**  
20% post consumer  
5% pre consumer

ASTM C1071 Air Erosion Test / UL 181  
ASTM G21 and G22  
ASTM E84, FHC 25/50  
NFPA 90A and 90B  
ASTM D5116-State of Washington  
Conforms to ASHRAE 62  
ULC S102-M88

OUT OF PACKAGE				
Type	in	mm	(hr•ft²•°F)/Btu	m²•°C/W
75	1½	38	5.2	0.92
75	2	51	6.9	1.22
75	2.3	58	8.0	1.41
75	3	76	10.3	1.81
100	1½	38	5.6	0.99
100	2	51	7.4	1.30
150	1½	38	6.0	1.06
150	2	51	8.0	1.41

**Recycled Content:**  
20% post consumer  
5% pre consumer

ASTM C553  
• Type II – Type 75, 100 and 150  
• Type III – Type 150  
ASTM C1290  
ASTM C1139, Type II  
• Grade I – Type 75 Faced  
• Grade II – Type 100 Faced  
• Grade III – Type 150 Faced  
ASTM E84, FHC 25/50 – FSK Facing  
ASTM C1136, Type II – FSK Facing  
NYC MEA # 40-75-M  
Canada: CGSB 51-GP-11M and CAN/ULC S102-M88

**ASTM C423, TYPE "A"**  
MOUNTING, FREQUENCY (HZ)

Type	in	mm	125	250	500	1000	2000	4000	NRC
812	1	25	0.07	0.24	0.63	0.87	1.00	1.02	0.70
812	2	51	0.24	0.68	1.10	1.13	1.10	1.07	1.00
813	1	25	0.08	0.27	0.69	0.95	1.05	1.02	0.75
813	2	51	0.19	0.88	1.15	1.14	1.10	1.07	1.05
814	1	25	0.06	0.29	0.75	0.99	1.04	1.02	0.75
814	2	51	0.24	1.00	1.11	1.08	1.06	1.05	1.05
815	1	25	0.03	0.32	0.80	1.04	1.05	1.05	0.80
815	2	51	0.27	0.91	1.11	1.09	1.09	1.09	1.05
817	1	25	0.10	0.35	0.85	1.04	1.05	1.03	0.80
817	2	51	0.38	0.93	1.10	1.07	1.07	1.07	1.05

ASTM C612, Type 1A and 1B  
• (813, 814, 815, 817)  
ASTM C553, Type III  
• (812 Only)  
ASTM C795  
ASTM C1136  
• Type I – AP Facing  
• Type II – AP and FSK Facing  
ASTM E84, UL 723, NFPA 255  
FHC 25/50, NFPA 90A and 90B  
HH-I-558C, Form B, Type I, Class 7  
• (812, 813, 814, 815)  
MIL-I-24244C  
NRC 1.36  
Canada: CGSB 51-GP-10M and CAN/ULC S102-M88



The physical and chemical properties of the Air Handling Systems Products 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 ensure 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 insulations and systems, call (800) 654-3103.**



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Denver, CO 80202  
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[specJM.com](http://specJM.com)

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