Johns Manville

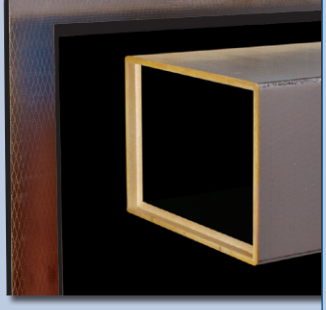
Fiber Glass Insulation

Air Handling Systems Product Guide

HEALTH SAFETY QUALITY

	Icon Key
	Thermal
	Acoustical
	Fire Resistant
	Moisture Control
	Recycled Content
	Formaldehyde-free™ Products for improved indoor environmental quality

For more information, visit us at
specJM.com



Mat-Faced Micro-Aire®

FIBER GLASS DUCT BOARD

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 5000 fpm (25.4 m/sec.).

- Type 475 & Type 800

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

Maximum Air Velocity:
5000 fpm (30.5 m/sec)

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

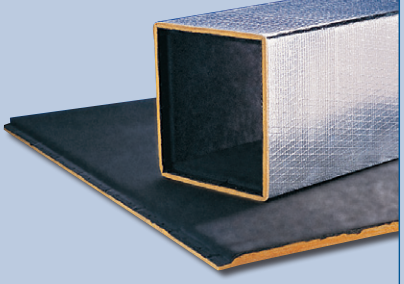
in	mm	Type	(hr•ft²•°F)/Btu	m²•°C/W
1	25	475	4.3	0.76
1½	38	800	6.5	1.15
2	51	800	8.7	1.53

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

Recycled Content:
20% post consumer

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



SuperDuct® RC System

COATED, HIGH-PERFORMANCE AIR DUCT BOARD

SuperDuct RC Air Duct Board is the primary component of the system, which also consists of SuperSeal® coating products. SuperDuct RC 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:
6000 fpm (30.5 m/sec)

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

in	mm	Type	(hr•ft²•°F)/Btu	m²•°C/W
1	25	475	4.3	0.76
1½	38	800	6.5	1.15
2	51	800	8.7	1.53

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

Recycled Content:
20% post consumer

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

EnviroAire™

FORMALDEHYDE-FREE™ FIBER GLASS DUCT BOARD

EnviroAire Formaldehyde-free™ Fiber Glass Duct Board* is produced from durable glass fibers, bonded with a thermosetting resin. EnviroAire Duct Board is ideal for residential HVAC applications to quietly and efficiently distribute cool or warm air for greater room-to-room comfort.

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

Maximum Air Velocity:
6000 fpm (30.5 m/sec)

**Limited availability. Contact your local JM sales representative for further information.*

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

in	mm	(hr•ft²•°F)/Btu	m²•°C/W
1½	38	6.5	1.14

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

Type	in	mm	125	250	500	1000	2000	4000	NRC
800	1½	38	0.11	0.45	0.96	1.07	1.06	1.00	0.90

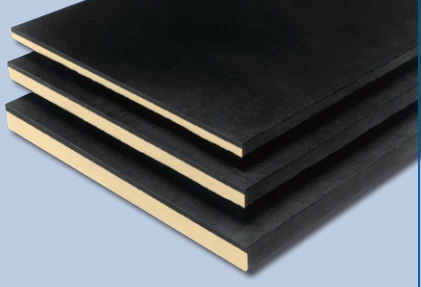
UL 181, Class 1 Rigid Air Duct Listed
NFPA 90A and 90B
Conforms to ASHRAE 62
ASTM G21 and G22
ICC Compliant
Canada: CGSB 51.10
CAN/ULC-S110M

Linacoustic® RC

FIBER GLASS DUCT LINER WITH REINFORCED COATING

LinaTex™

TEXTILE FIBER DUCT LINER



Permacote® Linacoustic® R-300

RIGID FIBER GLASS PLENUM LINER BOARD

DESCRIPTION

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:
6000 fpm (30.5 m/sec)

LinaTex 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 5000 fpm (25.4 m/sec).

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

Maximum Air Velocity:
5000 fpm (25.4 m/sec)

R-300 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:
6000 fpm (30.5 m/sec)

PERFORMANCE CHARACTERISTICS

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

in	mm	(hr•ft²•°F)/Btu	m²•°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

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

Type	in	mm	(hr•ft²•°F)/Btu	m²•°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•ft²•°F)/Btu	m²•°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
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

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
½	13	0.04	0.26	0.69	1.00	1.07	1.02	0.75
1	25	0.14	0.52	1.01	1.07	1.03	0.97	0.90
1½	38	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

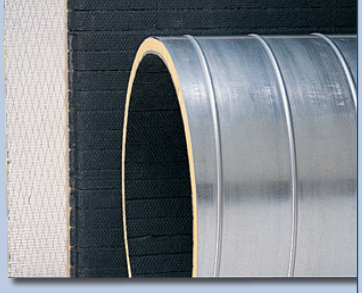
Recycled Content:
20% post consumer

SPECIFICATION COMPLIANCE

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
ICC Compliant
Conforms to ASHRAE 62
California Title 24
Canada: CGSB 51-GP-11M
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
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
CAN/ULC S102-M88



Spiracoustic Plus™ System

FIBER GLASS LINERS FOR ROUND METAL DUCTS

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:
6000 fpm (30.5 m/sec)

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

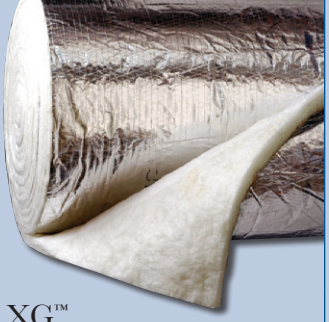
*2 in. is not stocked; special order only.

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

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
ASHRAE 62
ULC S102-M88



Microlite® XG™

FORMALDEHYDE-FREE™ FIBER GLASS DUCT WRAP

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)

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

OUT OF PACKAGE

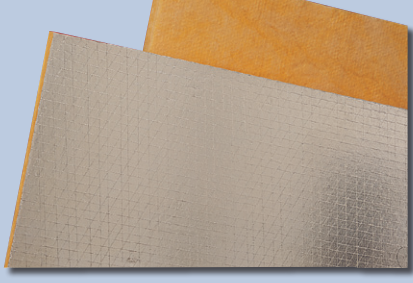
Type	in	mm	(hr•ft²•°F)/Btu	m²•°C/W
75	1½	38	5.2	0.92
75	2	51	6.9	1.22
75	2.3	58	8.0	1.41
75	3	76	10.3	1.81
100	1½	38	5.6	0.99
100	2	51	7.4	1.30
150	1½	38	6.0	1.06
150	2	51	8.0	1.41

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

ASMT E84, FHC 25/50 – FSK Facing
ASTM C1136, Type II – FSK Facing
NYC MEA # 40-75-M
Canada: CGSB 51-GP-11M
CAN/ULC S102-M88



800 Series Spin-Glas®

FIBER GLASS DUCT AND EQUIPMENT INSULATION

800 Series Spin-Glas can be used in plain or faced form to insulate heating ducts and equipment. 800 Series Spin-Glas 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 CONDUCTIVITY ("k")
(ASTM C 177 AND C 518)

Type	in	mm	Btu•in/(hr•ft²•°F)	W/m•°C
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)

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
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.**

Johns Manville

717 17th St.
Denver, CO 80202
(800) 654-3103
specJM.com

AHS-187 05/10 (Replaces 10/08)

Printed on recycled paper.