Johns Manville

Fiber Glass Insulation

Pipe & Equipment Insulations Product Selection Guide

800 Series Spin-Glas®

Fiber Glass Duct and Equipment Insulation

Spin-Glas®

Fiber Glass Board Insulation

HTB 26 Spin-Glas®

Fiber Glass Blanket Insulation

DESCRIPTION

This fiber glass insulation board is designed for use on equipment in commercial and industrial HVAC, power, and process applications.

Operating Temperature Limit:
0°F to 450°F (-18°C to +232°C)

1000 Series Spin-Glas®
A semi-rigid board used for insulating furnaces, boilers, heated vessels, ducts, tanks, and other systems operating at medium to high temperatures.

Operating Temperature Limit: 850°F (454°C)

Precipitator Spin-Glas®
A semi-rigid board specifically designed for insulating precipitators, ducts, and breechings in power generation plants.

Operating Temperature Limit: 850°F (454°C)

A lightweight insulating blanket specifically designed for insulating irregular surfaces.

Operating Temperature Limit: 1000°F (538°C)

AVAILABILITY

Type	Density pcf	Density kg/m³	Thickness in.	Thickness mm
812	1.50	24	1½-4	38-102
813	2.25	36	1½-4	38-102
814	3.00	48	1-4	25-102
815	4.25	68	1-2½	25-64
817	6.00	96	1-2	25-51

800 Series Spin-Glas is available plain or faced with an AP or FSK vapor retarder jacketing.

1000 Series Spin-Glas (Boards)

	in.	mm
Thickness	1-4 (½" inc.)	25-102 (13 mm inc.)
Width	24, 48	610, 1219
Length	48, 96	1219, 2438

Precipitator Spin-Glas (Boards)

	in.	mm
Thickness	1-4 (½" inc.)	25-102 (13 mm inc.)
Width	12, 24	305, 610
Length	48, 96	1219, 2438

HTB 26 Spin-Glas (Rolls)

	in.	mm
Thickness	1, 1½ ,2 ,3 ,4	25, 38, 51, 76, 102
Width	24, 36, 48	610, 914, 1219
Length	◆	◆

◆ Length determined by thickness.

PERFORMANCE CHARACTERISITICS

THERMAL CONDUCTIVITY ("k")
(ASTM C 177 AND C 518)

Type	Mean Temperature 75°F	Mean Temperature (24°C)
812	0.24*	0.035**
813	0.23*	0.033**
814	0.23*	0.033**
815	0.22*	0.032**
817	0.22*	0.032**

*Btu•in/(hr•ft²•°F) ** W/m • °C

THERMAL CONDUCTIVITY ("k")
(ASTM C 177 AND C 518)

Type	Mean Temperature 75°F	Mean Temperature (24°C)
1000 SSG	0.23*	0.033**
Precipitator SG	0.23*	0.033**

*Btu•in/(hr•ft²•°F) ** W/m • °C

THERMAL CONDUCTIVITY ("k")
(ASTM C 177 AND C 518)

Type	Mean Temperature 75°F	Mean Temperature (24°C)
HTB	0.26*	0.037**

*Btu•in/(hr•ft²•°F) ** W/m • °C

SPECIFICATION COMPLIANCE

ASTM C 612 Type 1A and 1B
- (813, 814, 815, 817)

ASTM C 553, Type III
- (812 Only)

ASTM C 795
ASTM C 1136
- Type I – AP Facing
- Type II – AP and FSK Facing

ASTM E 84, 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-1-24244C
NRC 1.36
Canada: CGSB 51-GP-10M
CAN/ULC S102-M88

ASTM C 612, Type II
ASTM C 795
ASTM E 84, FHC 25/50
ASTM E 136 (Noncombustible)
MIL-I-24244C
MIL-I-22023D, Type I and II, Class 6
USCG 164.009
NRC 1.36
CAN/51-GP-10M

ASTM C 612, Type II
ASTM C 795
ASTM E 84, FHC 25/50
ASTM E 136 (Noncombustible)
HH-I-558C, Form B, Type I, Class 8
- Up to 850°F (454°C)

MIL-I-24244C
USCG 164.009
NRC 1.36
CAN/51-GP-10M

ASTM C 553, Type V
ASTM C 1139, Type I, Grade 2
ASTM C 795
ASTM E 84, FHC 25/50
ASTM E 136 (Noncombustible)
HH-I-558C, Form B, Type I, Class 8
MIL-I-22023D, Type I, Class 3
MIL-I-24244C
USCG 164.009
NRC 1.36
CAN/51-GP-11M

Fabrication Board

Semi-Rigid Fiber Glass Insulation Boards

Fabrication Boards are commonly fabricated into pipe and tank Insulation products used on heated pipes, ducts and equipment. They can also be used in sheet form, plain or faced, for commercial and industrial heating, air conditioning and process equipment.

Operating Temperature Limit: 850°F (454°C)

	Density		Thickness		High Temp. Limit	
Type	pcf	kg/m³	in	mm	°F	°C
3005	3.0	48	1-4	25-102	850	454
3008	3.0	48	1-4	25-102	650	343

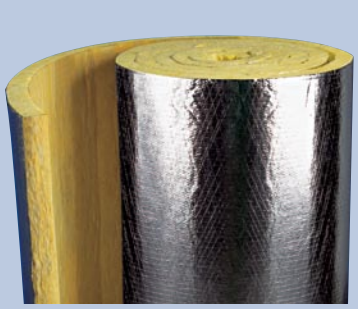
THERMAL CONDUCTIVITY ("k")
(ASTM C 177 AND C 518)

	Mean Temperature			
Type	75°F	(24°C)	300°F	(149°C)
3005	0.23*	0.033**	0.33*	0.048**
3008	0.23*	0.033**	0.36*	0.052**

*Btu•in/(hr•ft²•°F) ** W/m • °C

ASTM C 612
- Class 1 and 2
- Class 3 (3005 Only)

ASTM C 795
HH-I-558B, Form A, Class 1 and 2
ASTM E 84, UL 723, NFPA 255
FHC 25/50, NFPA 90A and 90B
MIL-I-24244B
NRC 1.36



Micro-Flex™

Large Diameter Pipe and Tank Wrap

Unique fiber orientation gives it increased compressive strength, and permits close installation on round surfaces without reducing the thickness of insulation resulting in a loss of insulation efficiency. It is ideally suited for application on rounded shapes such as pipes, tanks, ducts and vessels.

Operating Temperature Limit:
0°F to 850°F (-18°C to 454°C)

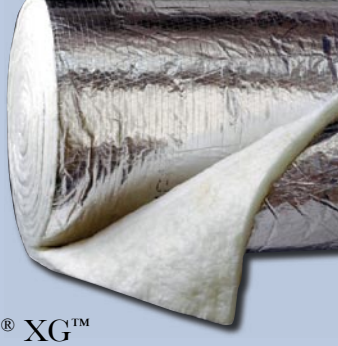
Thickness*		Width	
in	mm	ft.	m
1-4	25-102	3	0.92
1-4	25-102	4	1.22

*Available in ½" (13 mm) increments.

THERMAL CONDUCTIVITY ("k")
(ASTM C 177 AND C 518)

Mean Temperature		"k"	
°F	°C	Btu•in/(hr•ft²•°F)	W/m•°C
75	24	0.24	0.035
150	66	0.28	0.040
200	93	0.32	0.046
300	149	0.39	0.056
400	204	0.46	0.066
500	260	0.58	0.084

ASTM C 1393, Type III A
ASTM E 84
NYC MEA # 360-03-E



Microlite® XG™

Formaldehyde-free™ Fiber Glass Duct Wrap

Microlite XG Formaldehyde-free™ duct wrap insulation is recommended as thermal insulation for the exterior of HVAC systems or other spaces or surfaces where temperature and acoustical control is required.

Operating Temperature Limit:
40°F to 250°F (4°C to 121°C) faced

Thickness	in.	mm
Type 75	1½	38
	2	51
	2.3	59
	3	76
Type 100	1½	38
	2	51
Type 150	1½	38
	2	51

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

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	59	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

ASTM C 553-92
- Type II – Type 75, 100 and 150
- Type III – Type 150

ASTM C 1290-95
ASTM C 1139-90, Type II
- Grade I – Type 75 Faced
- Grade II – Type 100 Faced
- Grade III – Type 150 Faced

ASMT E 84, FHC 25/50 – FSK Facing
ASTM C 1136, Type II – FSK Facing
NYC MEA # 40-75-M
Canada: CGSB 51-GP-11M
CAN/ULC S102-M88