



Fiber Glass Insulation



Pipe & Equipment Insulations
Product Selector Guide

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

For more information, visit us at
specJM.com



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® Insulation†
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® Insulation††
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		Thickness	
	pcf	kg/m ³	in	mm
812	1.50	24	1½-4	38-102
813	2.25	36	1-4	25-102
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 Insulation 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

Thickness	HTB 26 Spin-Glas (Rolls)		
	mm	Width	
in	mm	ft	m
2	51	66	20.1
3	76	44	13.4

PERFORMANCE CHARACTERISTICS

**THERMAL CONDUCTIVITY ("k")
(ASTM C177 AND C518)**

Type	Mean Temperature	
	75°F	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 C177 AND C518)**

Type	Mean Temperature	
	75°F	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 C177 AND C 518)**

Type	Mean Temperature	
	75°F	24°C
HTB 26	0.27*	0.039**

*Btu•in/(hr•ft²•°F)
**W/m • °C

SPECIFICATION COMPLIANCE

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

ASTM C612, Type II
ASTM C795
ASTM E84, FHC 25/50
ASTM E136 (Noncombustible)
MIL-I-24244C
NRC 1.36
CAN/51-GP-10M
† MIL-I-22023D, Type I and II, Class 6
† USCG 164.109/37/0
† HH-I-558B, Form A, Classes 1, 2 and 3
• Replaces ASTM C612
†† HH-I-558C, Form B, Type I, Class 8
• Up to 850° (454°C)

ASTM C553, Type I, II and V
ASTM C1139, Type I, Grade 2
ASTM C795
ASTM E84, FHC 25/50
ASTM E136 (Noncombustible)
HH-I-558C, Form B, Type I, Class 8
MIL-I-22023D, Type I and II, Class 3
USCG 164.009
NRC 1.36
CAN/51-GP-11M
CAN/CGTSB-51.11, Type 1, Class 4

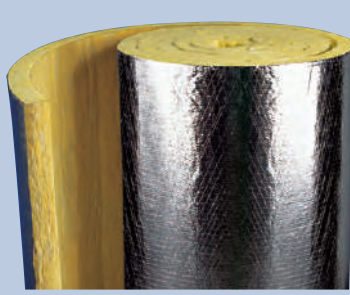


Fabrication Board
Semi-Rigid Fiber Glass Insulation Boards



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)

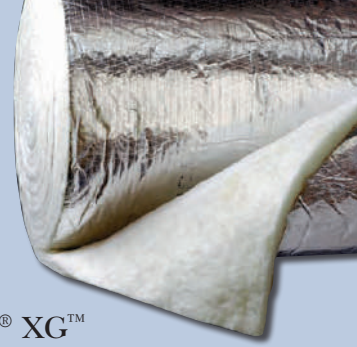


Micro-Flex™
Large Diameter Pipe and Tank Wrap



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)



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

Type	Density		Thickness		High Temp. Limit	
	pcf	kg/m ³	in	mm	°F	°C
3005	3.0	48	1-4	25-102	850	454
3008	3.0	48	1-4	25-102	650	343

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

*Available in 1/2" (13 mm) increments.

Thickness	in		mm	
	in	mm	in	mm
Type 75	1 1/2	38	2	51
	2.3	58	3	76
	3	76		
Type 100	1 1/2	38	2	51
	2	51		
Type 150	1 1/2	38	2	51
	2	51		

THERMAL CONDUCTIVITY ("k")
(ASTM C177 AND C518)

Type	Mean Temperature			
	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

THERMAL CONDUCTIVITY ("k")
(ASTM C177 AND C518)

Mean Temperature	"k"		
	°F	°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

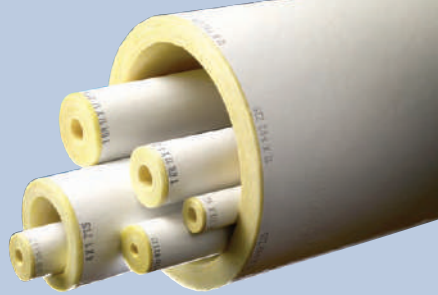
THERMAL PERFORMANCE – INSTALLED
R-VALUE @ 75°F (24°C) MEAN TEMP.

Type	Thickness		R-value	
	in	mm	(hr•ft ² •°F)/Btu	m ² •°C/W
75	1 1/2	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	1 1/2	38	4.5	0.79
100	2	51	6.0	1.06
150	1 1/2	38	4.7	0.83
150	2	51	6.3	1.11

ASTM C612
• Class 1 and 2
• Class 3 (3005 Only)
ASTM C795
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

ASTM C1393, Type III A
ASTM E84
NYC MEA # 360-03-E

ASTM C553
• Type II – Type 75, 100 and 150
• Type III – Type 150
ASTM C1290
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



Micro-Lok® HP
High-Performance Fiber Glass Pipe Insulation



A rigid, preformed, one-piece, high-performance fiber glass pipe insulation. Micro-Lok HP insulation is designed for use on commercial, power or process lines.

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

3-Foot (0.92 m) Sections
IPS: ½" – 24" (13 mm – 610 mm)*
CT: ⅝" – 6⅞" (16 mm – 156 mm)

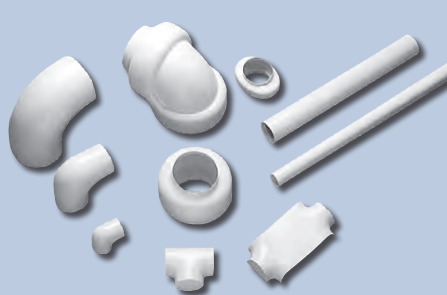
Micro-Lok HP insulation is available in thicknesses of:

½" – 5" (13 mm – 127 mm)*
in ½" (13 mm) increments.

*Check for current availability.

**THERMAL CONDUCTIVITY ("k")
(ASTM C335)**

Mean Temperature		"k"	
°F	°C	Btu•in/(hr•ft²•°F)	W/m•°C
100	38	0.24	0.035
200	93	0.28	0.040
300	149	0.34	0.049
400	204	0.44	0.063
500	260	0.55	0.079



Zeston® 2000 PVC
Insulated Fitting Covers and Jacketing



These PVC fitting covers and jacketing, when combined, form a completely sealed system, which meets the requirements of the USDA and FDA approval for food, beverage and pharmaceutical facilities.

Operating Temperature Limit:
PVC: 0°F to 150°F (-18°C to +66°C)
Insert: 0°F to 450°F (-18°C to +232°C)

Fitting covers, rolls and Cut & Curled™ jacketing are available in white only. Zeston installation accessories complete a systems package, which features ease of installation, uniform appearance and long-term insulation and protection. Zeston insulation installation accessories include: Perma-Weld® solvent welding system adhesive and applicator • PVC Z-Tape • White, stainless steel thumb tacks.

**THERMAL CONDUCTIVITY OF HI-LO® TEMP
FIBER GLASS INSULATION INSERT**

Mean Temperature		"k"	
°F	°C	Btu•in/(hr•ft²•°F)	W/m•°C
75	24	0.28	0.040
150	66	0.34	0.049
300	149	0.45	0.065

ASTM D1784, Class 16354-C
L-P-535E, Composition A, Type II, Grade GU
L-P-1035A, Composition A, Type II, Grade GU
ICBO
SBCCI
BOCA
NYC MEA # 7-87
Canada: CGSB 51-GP-53M
CAN/ULC S102-M88
USDA, Agriculture Canada



Zeston® 300 Series PVC
Fitting Covers and Jacketing for Industrial Use



These heavy-duty PVC insulated fitting covers and jacketing are specifically designed for industrial and institutional pipe applications.

Operating Temperature Limit:
PVC: 0°F to 150°F (-18°C to +66°C)

Fitting covers, rolls and Cut & Curled™ jacketing are available both in white and in colors. Made from the same rugged, pliable PVC material, Zeston PVC jacketing is designed to match the Zeston 300 Series fitting covers. For use over insulated pipe and bare metal, the PVC jacketing is easy to install and maintain, provides an inherent vapor retarder and will withstand water and most chemical and low-solvency washdowns.

Zeston 300 Series heavy gauge PVC fitting covers are available in many shapes and sizes. Its two-piece or two-piece-welded construction provides ease of fabrication in the field not available in a traditional one-piece fitting cover. This construction is engineered to accommodate various types of fabricated insulation fittings and an improved "matched" fit in the fitting throat area when solvent welding.

Zeston 300 Series heavy gauge is available in shapes for 90° and 45° (1.6 and 0.8 rad.) short- and long-radius elbows, tees and valves plus a wide variety of other fittings, flanges, reducers, end caps, soil pipe hubs, traps and mechanical line fittings. IPS sizes are available from ½" through 24" (13 mm through 610 mm); CT sizes from ⅝" through 6⅞" (16 mm through 156 mm).

ASTM D1784, Class 16354-C
L-P-535E, Composition A, Type II, Grade GU
L-P-1035A, Composition A, Type II, Grade GU
ICBO
SBCCI
BOCA
NYC MEA # 7-87
Canada: CGSB 51-GP-53M
CAN/ULC S102-M88
USDA, Agriculture Canada

ASTM C547, Type I
ASTM C585
ASTM C1136
MIL-I-22344D
NRC 1.36
ASTM C795
FHC 25/50
MIL-I-24244C
USCG 164.109/56/0 - Complies; Certification Pending
NYC MEA # 330-85-M

The physical and chemical properties of the Pipe & Equipment Insulations 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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