

800 Series Spin-Glas®

Fiber Glass Duct and Equipment Insulation

Description

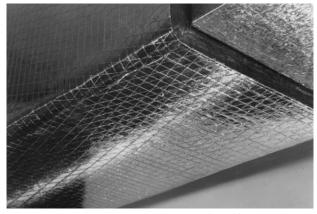
800 Series Spin-Glas duct and equipment insulation is manufactured from inorganic glass fibers bonded together with thermosetting resin. 800 Series Spin-Glas is available plain or faced in a variety of densities for use on systems that operate up to 450°F (232°C). For faced products, surface temperature should not exceed 150°F (66°C). AP or FSK vapor retarder-faced material meets the requirements of NFPA 90A and 90B. Types 813, 814, 815 and 817 provide neat square corners for an excellent finished appearance on duct and equipment systems. Spin-Glas can be readily cut with an ordinary knife and secured with mechanical fasteners and/or adhesives.

Uses

800 Series Spin-Glas can be used in plain or faced form to insulate heating ducts and equipment. Faced 800 Series Spin-Glas is designed for systems that operate below ambient temperatures where vapor barrier protection is required. 800 Series Spin-Glas is ideal for application in commercial and industrial heating, air conditioning, power and process equipment. These products are not designed for use inside air distribution duct work or equipment where the insulation will be directly exposed to an airstream. On systems operating below ambient temperatures, all seams should be tightly sealed with quality ASJ, foil or FSK tapes depending on the desired finish.

Specification Compliance

Туре	812	813	814	815	817			
ASTM C 612, Type IA		Χ	Х	Х	X			
ASTM C 612, Type IB		Χ	Х	Х	X			
ASTM C 553, Type III	Χ							
(Plain material only)								
HH-I-558C (Replaces								
HH-I-558B, Form B,								
Type I, Class 7	Χ	Χ	Χ	Χ				
ASTM E 84, UL 723, NFPA 25	5							
CAN/ULC S102-M88								
FHC 25/50,								
Surface Burning								
Characteristics								
(Composite)	Χ	Χ	Χ	Χ	Χ			
NRC 1.36								
MIL-I-24244C								
ASTM C 795	ASTM C 795							
(Cleburne Material Only) X X X								
State of California,								
Title 20	Χ	Χ	Χ	Χ	X			
Canada:								
CGSB 51-GP-10M	Χ	Χ	Χ	Χ	X			
ASTM C 1136, Type I AP Facing								
Type II AP & FSK Facing								
(Replaces HH-B-100B, Type I & II)								
NFPA 90A & 90B, FHC 25/50 & Limited Combustibility								
ISO 9000 (ANSI/ASQC 90) Certification								



Operating Temperature Limit: Up to 450°F (232°C)

Thermal Conductivity ("k") W/m•°C .069 063 .44 Conductivity ("k") Btu•in/(hr•ft²•°F) .40 .057 813 ∠**8**14: .36 .052 815 .32 046 817 .28 040 .24 .035 .20 .029 **Mean Temperature** 75 100 150 250 300 (°F) 121 149 (°C) 24 38 66 93

Type	812	813	814	815	817	
"k" @ 75°F mean	.24	.23	.23	.22	.22	
"k" @ 24°C mean	.035	.033	.033	.032	.032	

Physical Properties

Temperature limit (maximum)	
Unfaced	450°F (232°C)
Faced—unfaced side	450°F (232°C)
—faced side	150°F (66°C)
Moisture sorption	Less than 5.0% by weight
Alkalinity	Less than 0.6% expressed as Na ₂ 0
Corrosivity	Does not accelerate
Odor	None
Shrinkage	None
Resistance to fungi	Does not breed
and bacteria	or promote
Moisture vapor	0.02 perms max.
transmission—FSK & AP	

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Available Densities, Thicknesses and Facings

Thickness (in ½" [13 mm] increments)

	Density		Faced		Plain	Plain		
Type	pcf	kg/m³		in	mm	in	mm	
812*	1.50	24	_	_	_	1½-4	38-102	
813*	2.25	36	FSK, AP	1–4	25-102	1–4	25-102	
814	3.00	48	FSK, AP	1–4	25-102	1–4	25-102	
815	4.25	68	FSK, AP	1-21/2	25-64	1-21/2	25-64	
817	6.00	96	FSK, AP	1–2	25-51	1–2	25-51	

Standard Sheet Size: 24" x 48" (610 mm x 1219 mm). Non-standard sizes available upon request.

Sound Absorption Coefficients (ASTM C 423 - Type "A" Mounting)

	Thick	ness	Frequency (Hz)						
Type (Plain)	in	mm	125	250	500	1000	2000	4000	NRC
812	1.0	25	0.07	0.24	0.63	0.87	1.00	1.02	0.70
	2.0	51	0.24	0.68	1.10	1.13	1.10	1.07	1.00
813	1.0	25	0.08	0.27	0.69	0.95	1.05	1.02	0.75
	2.0	51	0.19	0.88	1.15	1.14	1.10	1.07	1.05
814	1.0	25	0.06	0.29	0.75	0.99	1.04	1.02	0.75
	2.0	51	0.24	1.00	1.11	1.08	1.06	1.05	1.05
815	1.0	25	0.03	0.32	0.80	1.04	1.05	1.05	0.80
	2.0	51	0.27	0.91	1.11	1.09	1.09	1.09	1.05
817	1.0	25	0.10	0.35	0.85	1.04	1.05	1.03	0.80
	2.0	51	0.38	0.93	1.10	1.07	1.07	1.07	1.05

Facing Information

FSK Reinforced Foil and Paper (Foil-Scrim-Kraft). Aluminum foil reinforced with fiber glass yarn and laminated with fire-resistant adhesive to kraft paper.

AP (All Purpose). The AP facing is white kraft bonded to aluminum foil, reinforced with fiber glass varn. The kraft paper is laminated with a fire-resistant adhesive that minimizes the possible corrosion of the foil.

Government Certification

When ordering material to comply with any government specification or any other listed specification, a statement of that fact must appear on the purchase order. Government regulations and other listed specifications require specific lot testing and prohibit the certification of compliance after shipment has been made. There may be additional charges associated with specification compliance testing.





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CI-9 03/10 (Replaces 10/08)

North American Sales Offices, Insulation Systems

Eastern Region

P.O. Box 158 Defiance, OH 43512 (800) 334-2399 Fax: (419) 784-7866

Western Region and Canada

P.O. Box 5108 Denver, CO 80217 (800) 368-4431 Fax: (303) 978-4661 The physical and chemical properties of 800 Series Spin-Glas® Insulation 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.

^{*}Available from Defiance, OH, only