



**800 Series Spin-Glas®**

Fiber Glass Duct and Equipment Insulation

**Description**

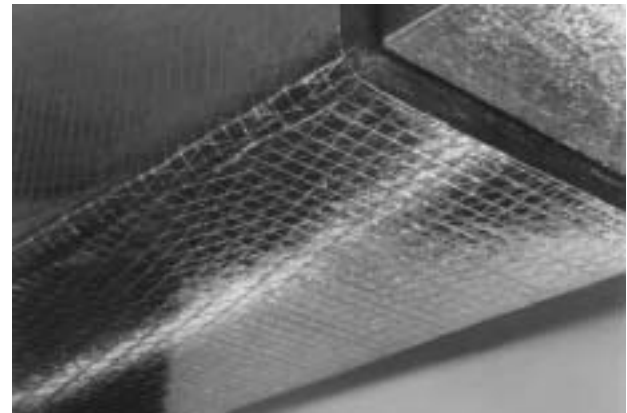
800 Series Spin-Glas duct and equipment insulation is manufactured from inorganic glass fibers bonded together with thermosetting resin. 800 Series Spin-Glas is available plain or faced in a variety of densities for use on systems which operate up to 450°F (232°C). For faced products, surface temperature 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 utilizing 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 which operate below ambient temperatures where vapor barrier protection is required. 800 Series Spin-Glas is ideal for application on 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 air stream. On systems operating below ambient temperatures, all seams should be tightly sealed with quality ASJ, Foil, or FSK tapes depending on the desired finish.

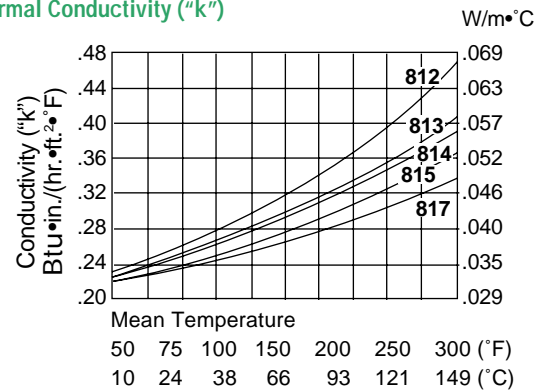
**Specification Compliance**

Type	812	813	814	815	817
ASTM C 612 Type IA		X	X	X	X
ASTM C 612 Type IB		X	X	X	X
ASTM C 553, Type III (Plain material only)	X				
HH-I-558C (Replaces HH-I-558B)					
Form B, Type I, Class 7	X	X	X	X	
ASTM E 84, UL 723, NFPA 255					
CAN/ULC S102-M88					
FHC 25/50, Surface Burning Characteristics (Composite)	X	X	X	X	X
NRC 1.36					
MIL-I-24244C					
ASTM C 795 (Cleburne Material Only)	X	X	X	X	X
State of California, Title 20	X	X	X	X	X
Canada: CGSB 51-GP-10M	X	X	X	X	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")**



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 <sub>2</sub> O
Corrosivity	Does not accelerate
Odor	None
Shrinkage	None
Resistance to fungi and bacteria	Does not breed or promote
Moisture vapor transmission—FSK & AP	0.02 perms max.

# 800 Series Spin-Glas®

## Fiber Glass Duct and Equipment Insulation

### Available Densities, Thicknesses and Facings

Type	Density		Thickness (in 1/2" [13 mm] increments)				
			Faced		Plain		
	pcf	kg/m <sup>3</sup>		in.	mm	in.	mm
812	1.50	24	FSK	1 1/2 - 4	38 - 102	1 1/2 - 4	38 - 102
813	2.25	36	FSK, AP	1 1/2 - 4	38 - 102	1 1/2 - 4	38 - 102
814	3.00	48	FSK, AP	1 - 4	25 - 102	1 - 4	25 - 102
815	4.25	68	FSK, AP	1 - 2 1/2	25 - 64	1 - 2 1/2	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)

Type (Plain)	Thickness		Frequency (Hz)						
	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

### Available Rolls (no facing)

Type	Density		Thickness	
	pcf	kg/m <sup>3</sup>	in.	mm
812	1.50	24	1 1/2, 2	38, 51

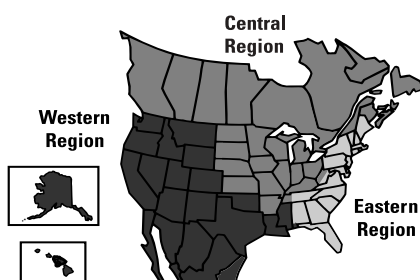
### Facing Information

**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 yarn. 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.



### North American Sales Offices, Performance Materials Division

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Fax: (419) 784-7866

#### Central Region & Western Region

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(800) 368-4431  
Fax: (303) 978-4661

#### Outside North America

(303) 978-4655  
Fax: (303) 978-2627



### Performance Materials Division

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The physical and chemical properties of 800 Series Spin-Glas® insulation 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 this 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 Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville Limited Warranty and Limitation of Remedy, call the 800 number below.** For information on other Johns Manville thermal insulations and systems and a copy of the Spec-Line® CSI formatted specification, call **1-800-654-3103**. To access automated fax-on-demand service in the United States and Canada, simply call **1-888-INSULFX** (1-888-467-8539) from a fax or phone.