800 SERIES SPIN-GLAS®

FIBERGLASS DUCT AND EQUIPMENT INSULATION

DATA SHEET

DESCRIPTION

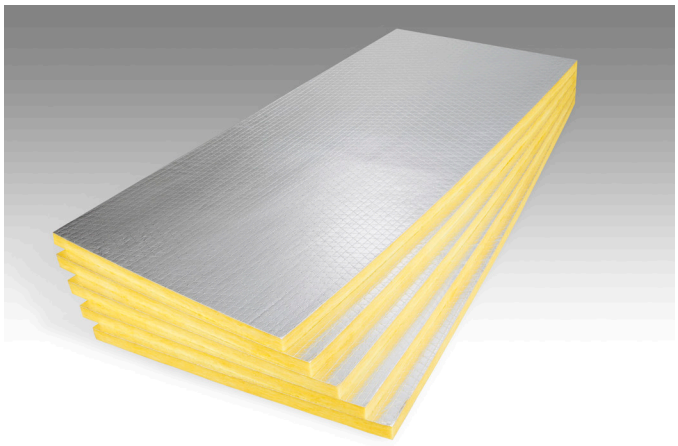
800 Series Spin-Glas duct and equipment insulation is manufactured from inorganic glass fibers bonded together with thermosetting resin. 800 Series Spin-Glas insulation is available plain or faced in a variety of densities for use on systems that operate up to 450°F (232°C). For faced products, surface 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 insulation can be readily cut with an ordinary knife and secured with mechanical fasteners and/or adhesives.

APPLICATIONS

800 Series Spin-Glas insulation can be used in plain or faced form to insulate heating ducts and equipment. Faced 800 Series Spin-Glas insulation is designed for systems that operate below ambient temperatures where vapor barrier protection is required. 800 Series Spin-Glas insulation 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.

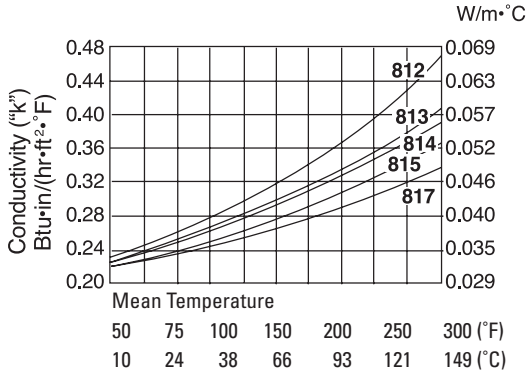
SPECIFICATION COMPLIANCE

Type	812	813	814	815	817
ASTM C612, Type IA		X	X	X	X
ASTM C612, Type IB		X	X	X	X
ASTM C553, Type III (Plain material only)	X				
HH-I-558C (Replaces HH-I-558B, Form B, Type I, Class 7	X	X	X	X	
ASTM E84, UL 723, NFPA 255 CAN/ULC S102-M88 FHC 25/50, Surface Burning Characteristics (Composite)	X	X	X	X	X
NRC 1.36 ASTM C795, MIL-DTL-24224D (Cleburne Material Only)			X	X	X
State of California, Title 20	X	X	X	X	X
Canada: CGSB 51-GP-10M	X	X	X	X	X
ASTM C1136, Type I	AP Facing				
Type II (Replaces HH-B-100B, Type I & II)	AP & FSK Facing				
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	0.24	0.23	0.23	0.22	0.22
"k" @ 24°C mean	0.035	0.033	0.033	0.032	0.032

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_2O
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®

FIBERGLASS DUCT AND EQUIPMENT INSULATION

AVAILABLE DENSITIES, THICKNESSES AND FACINGS

	Density		Thickness (in ½" [13 mm] increments)				
			Faced			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	1–2½	25–64	1–2½	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.

**Available from Defiance, OH, only.*

SOUND ABSORPTION COEFFICIENTS (ASTM C423 - TYPE "A" MOUNTING)

	Thickness		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 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.

CERTIFIED RECYCLED CONTENT SCS GLOBAL SERVICES

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Fax: 303-978-4661

The physical and chemical properties of 800 Series Spin-Glas® high-temperature fiberglass board 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.

All Johns Manville products are sold subject to Johns Manville's standard Terms and Conditions, which includes a Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville standard Terms and Conditions or for information on other Johns Manville thermal insulation and systems, visit www2.jm.com/terms-conditions or call (800) 654-3103.