

Precipitator Spin-Glas®
High Temperature Fiber Glass Board Insulation

Description

Precipitator Spin-Glas is a 2.4 pounds per cubic foot (38.5 kg/m³), semi-rigid, lightweight, felted board composed of fine rotary process fibers bonded with a special organic resin. Density, binder content and thickness are carefully controlled to assure full insulating value and strength.

Applications

Specifically designed for insulating precipitators, baghouses, scrubbers, ducts and breechings in power generation plants. Also suited for boilers, heaters, ovens and other industrial equipment operating at temperatures up to 850°F (454°C).

Available Sizes

Furnished in thicknesses from 1" to 4" (25 mm to 102 mm) in 1/2" (13 mm) increments; lengths of 48" and 96" (1.22 m and 2.44 m) available in 12" and 24" (305 mm and 610 mm) widths. Other sizes are available on special order.

Advantages

Superior Strength. Precipitator Spin-Glas Insulation, with long fibers uniformly distributed and held by an organic binder, is resilient, strong, shot-free and highly resistant to damage in shipping, handling and installation. Highly resistant to damage from vibration.

Simple Installation, Low Installed Cost. Has a clean, "friendly" feel and is substantially lighter in weight than many mineral wools with comparable thermal performance. Adaptable to flat or curved surfaces; easy to make tight butt joints; easy to cut and shape around obstructions. May be installed using pins, wire, mesh, or in prefabricated panels. Experienced mechanics can install more boards in the same period of time.

Low Thermal Conductivity. Uniform fiber orientation and thickness provide dependable conductivity ratings.

Thermal Conductivity (k)

Mean Temperature	°F	75	300
	°C	24	149
Btu·in./[hr·ft ² ·°F)		.23	.33
W/m·°C		.033	.048



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

Qualifications for Use

1. Precipitator Spin-Glas may be used to 850°F (454°C) with a maximum thickness of 6" (152 mm). Double-layer construction with staggered joints is recommended when equipment expansion is such that gaps begin to open between insulation sections (usually 400-600°F [204-316°C]).

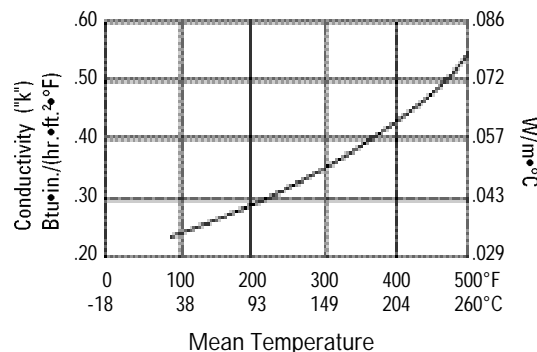
950°F (510°C) intermittent temperature exposure is acceptable for periods less than one hour as long as the product has been stabilized at 850°F (454°C) for at least 24 hours.

2. Initial Heat-Up

During initial heat-up to operating temperatures above 350°F (177°C) an acrid odor and some smoke may be given off as the organic binders used in the Spin-Glas insulation begin to decompose. When this occurs, caution should be exercised to ventilate the area well.

For applications above 650°F (343°C), Precipitator Spin-Glas must be allowed to stabilize at 650°F (343°C) for at least 2 hours prior to heating up to 850°F (454°C). This applies only to the first heat up.

Thermal Conductivity (ASTM C 518)



Precipitator Spin-Glas®

High Temperature Fiber Glass Board Insulation

Specification Compliance (Request for certification must accompany purchase order.)

Government	Coast Guard	ASTM
HH-I-558C, Form B, Type I, Class 8 up to 850°F (454°C)	164.009	C 612, Type II
CAN/51-GP-10M		C 795
MIL-I-24244C		E 84 Flame Spread - 25 or less
NRC 1.36		Smoke Developed - 50 or less
		E 136 (noncombustible)

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

Thickness		Frequency (Hz)						
(in)	(mm)	125	250	500	1000	2000	4000	NRC*
1.0	25	0.08	0.32	0.68	0.95	1.06	1.04	0.75
2.0	51	0.20	0.85	1.11	1.11	1.07	1.07	1.05
3.0	76	0.52	1.23	1.16	1.09	1.07	1.10	1.15
4.0	102	0.80	1.23	1.10	1.09	1.08	1.08	1.10

*Noise Reduction Coefficients - The average of the coefficients at 250, 500, 1000 and 2000 Hz expressed to the nearest integral multiple of 0.05.



North American Sales Offices, Commercial & Industrial Division

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The physical and chemical properties of Precipitator Spin-Glas® high temperature fiber glass board 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 your Regional Sales Office 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.

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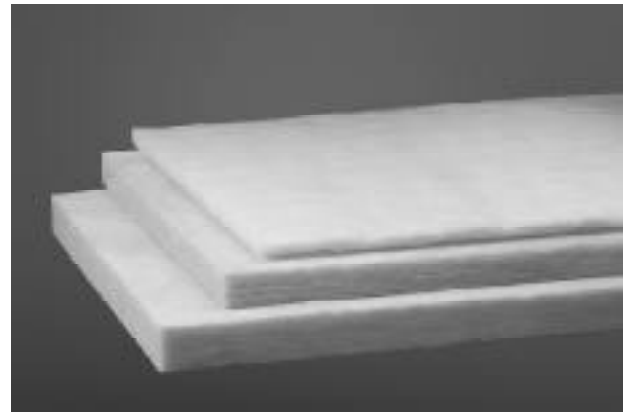
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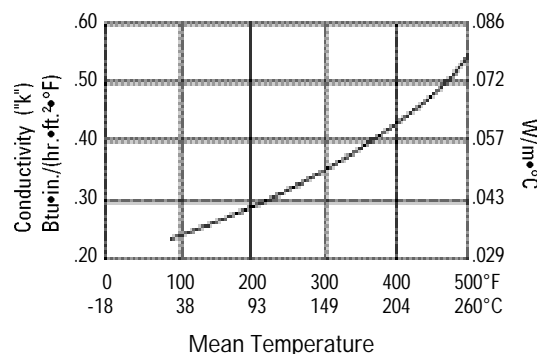
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