Fiberglas™ Pipe and Tank Fiberglass Insulation

Description

Fiberglas™ Pipe and Tank Insulation is made of semi-rigid fibrous glass board material, factory-jacketed with an FRK or ASJ Max jacket. The insulation is adhered with the end grain perpendicular to the jacket. This provides a flexible product that is easily wrapped around pipes, tanks or irregularly shaped objects, while providing good rigidity and abuse resistance.

Features

- ASJ Max is an all-service-jacket with a polymer film exterior surface that is smooth, durable, cleanable, wrinkle-resistant, resists water staining and doesn't support mold or mildew growth[1]
- ASJ Max can resist short durations of water exposure that may occur during construction
- ASJ Max vapor retarder jacket matched the ASJ Max jacket of Fiberglas™ Pipe Insulation for uniformly finished appearance in mechanical rooms
- High compressive strength with a vertical fiber orientation makes this one of the strongest, most abuse-resistant Fiberglas™ Pipe Insulation products available
- Fits all pipes and equipment of 10" NPS (250mm DN) and larger, eliminating the need to stock as many as 60 different pipe insulation thickness and diameter variations

1. ASJ Max jacket does not support mold growth when tested in accordance with ASTM C1338.

Applications

- Apply to pipes and tanks 10" NPS (250mm DN) and larger. Fiberglas™ Pipe and Tank Insulation can also be used to insulate pipe flanges, valves, groups of parallel pipes, pipes with heat tracing lines and more. It may be applied over existing insulation to increase thickness and satisfy demands for increased energy conservation in already-operating systems.

Physical Properties

Property	Test Method	Value
Pipe or equipment operating temperature range[2]	ASTM C411	0 to 650°F (-18°C to 343°C)
Insulation jacket temperature limitation	ASTM C1136	-20°F to 150°F (-29°C to 66°C)
Jacket Permeance	ASTM E96, Proc. A	0.02 perm
Burst Strength, min.	ASTM D774/ D774M	100 psi
Compressive Strength at 10% Deformation	ASTM C165	125 lb/ft² (5985 Pa) minimum
Composite Surface Burning Characteristics[3]	ASTM E84	Flame Spread 25 Smoke Developed 50

2. Limited to single layer application.
3. The surface burning characteristics of these products have been determined in accordance with ASTM E84. Values are reported to the nearest 5 rating.

Standards, Codes Compliance

- ASTM C1393 "Standard Specification for Perpendicularly Oriented Mineral Fiber Roll and Sheet Thermal Insulation for Pipes and Tanks"; Types I and II, Category 1
- ASTM C1136, Flexible Low Permeance Vapor Retarders for Thermal Insulation, Types I, II, III and IV
- Nuclear Regulatory Commission Guide 1.36, Non-Metallic Thermal Insulation[4]
- ASTM C795, Thermal Insulation for Use Over Austenitic Stainless Steel[4]
- Mil. Spec. MIL-I-24244C, Insulation Materials, Special Requirements, Type XVIh[4]
- Meets fire retardant decabrominated diphenyl ether (decaBDE)

4. Preproduction qualification testing complete and on file. Chemical analysis of each production lot required for total conformance.

Thermal Conductivity

Mean Temperature °F	k Btu•in/ hr•ft²•°F	Mean Temperature °C	λ W/m•°C
50	0.26	10	0.037
75	0.27	25	0.040
100	0.29	50	0.045
150	0.33	75	0.050
200	0.38	100	0.056
250	0.43	125	0.063
300	0.49	150	0.070
350	0.55	175	0.078

Availability

Thickness		Recommended Pipe Size	Roll Length	
in.	(mm)	NPS in. (DN, mm)	ft.	(m)
1	(25)	10 (250) & up	42	(12.8)
1½	(38)	10 (250) & up	27	(8.2)
2	(51)	10 (250) & up	20	(6.1)
2½	(64)	14 (350) & up	26	(7.9)
3	(76)	17 (425) & up	21	(6.4)
3½	(89)	20 (500) & up	18	(5.5)
4	(102)	23 (575) & up	16	(4.9)

Thermal Performance

ASTM C680

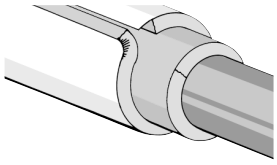
Insulation		Pipe Operating Temperature, °F (°C)											
		300 (149)				450 (232)				600 (316)			
NPS x Thk. in.	(DN x Thk. mm)	HL		ST		HL		ST		HL		ST	
12 x 1	(300 x 25)	251	(241)	121	(49)								
18 x 1	(450 x 25)	345	(332)	122	(50)								
24 x 1	(600 x 25)	453	(436)	123	(51)								
30 x 1	(750 x 25)	561	(539)	123	(51)								
12 x 2	(300 x 51)					292	(281)	122	(50)				
18 x 2	(400 x 51)					414	(398)	126	(52)				
24 x 2	(600 x 51)					539	(518)	127	(53)				
30 x 2	(750 x 51)					663	(637)	127	(53)				
12 x 3	(300 x 76)									370	(356)	127	(53)
18 x 3½	(450 x 89)									449	(432)	124	(51)
24 x 3½	(600 x 89)									576	(554)	125	(52)
30 x 3½	(750 x 89)									702	(675)	126	(52)

Heat Loss (HL), Btu/hr•ft (W/m); Surface Temperature (ST), °F (°C).
Design Conditions: Horizontal piping, 80°F (27°C) average ambient temperature, 0 mph wind speed, ASJ Max jacket.

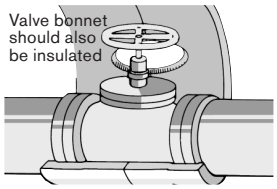
Installation

- Measure the length of insulation required according to the fabrication guide located on the carton. Cut completely through the insulation and jacket. Use a flap tool to fillet a stapling flange on one end of the insulation
- Each 36" (914mm) section of insulation may be secured around the pipe using outward clenching staples and mastic, or by applying outward clenching staples and pressure sensitive vapor retarder tape. Special care must be taken to vapor seal systems operating below ambient temperatures. Adjacent sections must be tightly butted together, then sealed with vapor retarder tape
- If indoor applications will be painted, use only a water base latex paint
- Outdoor applications require protection against weather

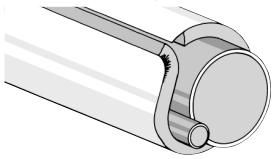
Re-Insulation



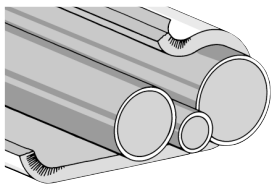
Fittings And Valves



Steam Tracing



Groups of Parallel Pipes



Environmental and Sustainability

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Certifications and Sustainable Features

- Certified by SCS Global Services to contain an average of 53% recycled glass content, 31% pre-consumer and 22% post-consumer

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AVERAGE 53% RECYCLED CONTENT
31% PRE-CONSUMER
22% POST-CONSUMER

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