



Fiberglas™ Pipe and Tank 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

- The ASJ Max jacket with a polymer film exterior is tougher¹ than standard ASJ. The polymer coating that helps resist water staining and does not support mold or mildew growth²
- The ASJ Max jacket can resist short durations of liquid water exposure that can occur during construction
- High compressive strength with a vertical fiber orientation makes this one of the strongest, most abuse-resistant Fiberglas™ Pipe Insulation products available
- ASJ Max vapor retarder jacket matches the ASJ Max jacket of Fiberglas™ Pipe Insulation for uniformly good appearance in mechanical rooms
- 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. Based on burst strength testing.

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

Physical Properties

Property	Test Method	Value
Pipe or equipment operating temperature range ³	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/ft ⁴ (5985 Pa) minimum
Composite Surface Burning Characteristics ³	ASTM E84	25
Flame Spread		
Smoke Developed		

3. Limited to single layer application.

4. The surface burning characteristics of these products have been determined in accordance with ASTM E84. This standard should be used to measure and describe the properties of materials, products or assemblies in response to heat and flame under controlled laboratory conditions and should not be used to describe or appraise the fire hazard or fire risk of materials, products or assemblies under actual fire conditions. However, results of this test may be used as elements of a fire risk assessment which takes into account all of the factors which are pertinent to an assessment of the fire hazard of a particular end use. Values are reported to the nearest 5 rating.

Availability

Thickness		Recommended Pipe Size NPS in. (DN, mm)	Roll Length	
in.	(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)

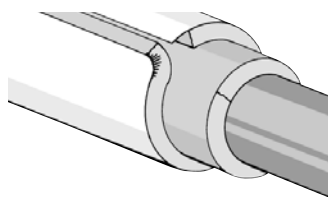
Applications

- 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

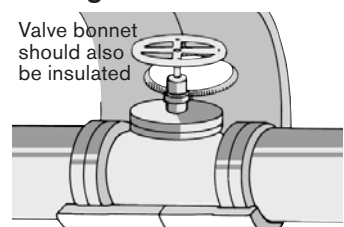
Installation

- 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 filet 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

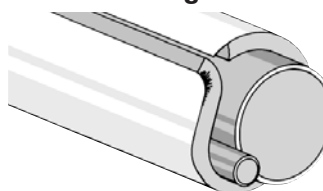
Re-Insulation



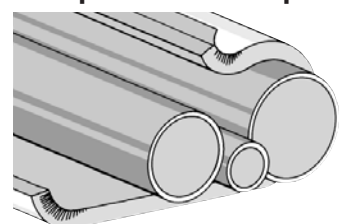
Fittings And Valves



Steam Tracing



Groups of Parallel Pipes



Thermal Performance

ASTM C680

Insulation		Pipe Operating Temperature, °F (°C)									
NPS x Thk. in.	(DN x Thk. mm)	300 (149)				450 (232)				600 (316)	
		HL	ST	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)
18 x 3½	(450 x 89)									449	(432)
24 x 3½	(600 x 89)									576	(554)
30 x 3½	(750 x 89)									702	(675)

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.

Thermal Conductivity

k		λ	
Mean Temp. °F	Btu·in/ hr·ft²·°F	Mean Temp. °C	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

Standards, Codes Compliance

- ASTM C1393 “Standard Specification for Perpendicularly Oriented Mineral Fiber Roll and Sheet Thermal Insulation for Pipes and Tanks”; Types I, II IIIA, IIIB; Category 2
- ASTM C795, Thermal Insulation for Use Over Austenitic Stainless Steel⁵
- ASTM C1136, Flexible Low Permeance Vapor Retarders for Thermal Insulation, Types I, II, III and IV
- Mil. Spec. MIL-I-24244C, Insulation Materials, Special Requirements, Type XVIIh⁵
- Nuclear Regulatory Commission Guide 1.36, Non-Metallic Thermal Insulation⁵
- Meets fire retardant decabrominated diphenyl ether (decaBDE)

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

Environmental and Sustainability

Owens Corning is a worldwide leader in building material systems, insulation and composite solutions, delivering a broad range of high-quality products and services.

Owens Corning is committed to driving sustainability by delivering solutions, transforming markets and enhancing lives. More information can be found at www.owenscorning.com.

Certifications and Sustainable Features

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



Disclaimer of Liability

Technical information contained herein is furnished without charge or obligation and is given and accepted at recipient's sole risk. Because conditions of use may vary and are beyond our control, Owens Corning makes no representation about, and is not responsible or liable for the accuracy or reliability of data associated with particular uses of any product described herein.

SCS Global Services provides independent verification of recycled content in building materials and verifies recycled content claims made by manufacturers. For more information, visit www.SCSglobalservices.com.

LEED® is a registered trademark of the U.S. Green Building Council.



OWENS CORNING INSULATING SYSTEMS, LLC
 ONE OWENS CORNING PARKWAY
 TOLEDO, OHIO, USA 43659
1-800-GET-PINK®
www.owenscorning.com

Pub. No. 14728-Q. Printed in U.S.A. January 2017.
 THE PINK PANTHER™ & © 1964–2017 Metro-Goldwyn-Mayer Studios Inc.
 All Rights Reserved. The color PINK is a registered trademark of Owens Corning.
 © 2017 Owens Corning. All Rights Reserved.

