



Fiberglas™ Pipe Insulation

SSL II® with ASJ Max | No-Wrap



Description

Owens Corning® Fiberglas™ Pipe Insulation is molded of heavy density resin bonded inorganic glass fibers that come in one-piece, 36" (914mm) long, hinged sections. Sections can be order as factory applied SSL II® with ASJ Max, or as unjacketed No-Wrap.

Applications

- Used to insulate iron, copper, and PVC pipes with operating temperatures between 0°F (-18°C) to 1,000°F (538°C) (with heat up schedule) in commercial & institutional buildings, and industrial facilities
- When installed outdoors an additional weather-protective jacket is required
- No Wrap is intended for field installation with jacketing appropriate to the vapor control, damage, or corrosion resistance requirements of the application
- Also available in select metric sizes (See Fiberglas™ Pipe Dimensional Data and Nesting Information for metric sizing availability: Pub. No. 10018078)

Physical Properties

Property	Test Method	Value
Density (size dependent)	ASTM C302	3.5 to 5.5 pcf
Operating Temperature Range ¹	ASTM C411	0°F to 1,000°F ² (-18°C to 538°C)
Water Vapor Sorption	ASTM C1104	Less than 5% by weight
Corrosion	ASTM C665	Pass – steel, copper, or aluminum
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
Composite Surface Burning Characteristics ³	UL 723, ASTM E84 or CAN/ULC-S102	Flame Spread 25 Smoke Developed 50

1. Limited to single layer applications above 650°F (343°C), but not greater than 6" (152mm) thickness.
 2. With heat up schedule.
 3. The surface burning characteristics of these products have been determined in accordance with UL 723, ASTM E84 or CAN/ULC-S102. Values are reported to the nearest 5 rating.

Features

- 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 growth⁴
- SSL II® Positive Closure System with a new, advanced adhesive that fastens and installs with no need for staples or mastic
- ASJ Max can resist short durations of water exposure that may occur during construction
- The product has a maximum operating temperature of 1,000°F (538°C) (with heat up schedule)
- The product does not contain Polybromodiphenyl ethers (PBDE) (penta-, octa-, or deca-brominated diphenyl)
- UL Labeled for Flame Spread Index of 25 or less and Smoke Developed Index of 50 and is fully building code compliant

4. ASJ Max jacket does not support mold growth as tested in accordance with ASTM C1338.

Standards, Codes Compliance

- ASTM C547, Mineral Fiber Pipe Insulation, Types I and IV
- ASTM C585, Inner and Outer Diameters of Thermal Insulation for Nominal Sizes of Pipe and Tubing
- ASTM C1136, Flexible Low Permeance Vapor Retarders for Thermal Insulation: Types I, II, III, IV
- ASTM C795, Thermal Insulation for Use in Contact with Austenitic Stainless Steel⁵
- MIL-PRF-22344E, Insulation, Pipe, Thermal, Fibrous Glass
- Nuclear Regulatory Commission Guide 1.36, Non-Metallic Thermal Insulation⁵
- MIL-DTL-24244D (Ships) Insulation Material with Special Corrosion, Chloride, and Fluoride Requirements⁵
- US Coast Guard 164.109/70/0 Non-Combustible (No-Wrap only)
- NFPA 90A and 90B

5. Preproduction qualification testing complete and on file. Chemical analysis of each production lot required for total conformance. Certification needs to be specified at time of order.

Thermal Conductivity

Mean Temperature °F	k Btu·in/hr·ft ² ·°F	Mean Temperature °C	λ W/m·°C
50	0.22	10	0.032
75	0.23	25	0.034
100	0.24	50	0.037
150	0.27	100	0.043
200	0.29	125	0.047
250	0.32	150	0.051
300	0.35	175	0.056
350	0.39	200	0.062
400	0.43	225	0.068
450	0.48	250	0.075
500	0.54	275	0.082

Apparent thermal conductivity values determined in accordance with ASTM practice C1045 with data obtained by ASTM Test Method C335. Values are nominal, subject to normal testing and manufacturing tolerances.

Thickness to Prevent Surface Condensation

Owens Corning® ASJ Max Jacket for up to 16" NPS (400mm DN), in. (mm)^{6,7}

Ambient Temperature °F	Relative Humidity (°C)	System Operating Temperatures			
		35°F (2°C)	45°F (7°C)	55°F (13°C)	
110	(43)	70%	1 (25)	1 (25)	1 (25)
		80%	1½ (38)	1½ (38)	1½ (38)
		90%	3½ (89)	3½ (89)	3 (76)
100	(38)	70%	1 (25)	1 (25)	1 (25)
		80%	1½ (38)	1½ (38)	1 (25)
		90%	3½ (89)	3 (76)	2½ (64)
90	(32)	70%	1 (25)	1 (25)	1 (25)
		80%	1½ (38)	1 (25)	1 (25)
		90%	3½ (89)	3 (76)	2½ (64)
80	(27)	80%	1½ (38)	1 (25)	1 (25)
		90%	3 (76)	2½ (64)	2 (51)
		90%	2½ (64)	2 (51)	1 (25)

6. Calculations estimated using NAIMA 3E Plus version 4.0 software. Fixed design conditions: Steel Horizontal Piping, 16" NPS, 0 mph wind speed, Outer Surface Jacket Emissance of 0.9.

7. Thermal conductivity values used in these calculations are subject to normal manufacturing tolerances.

Installation

- Ambient application temperatures are from 25°F (-4°C) to 110°F (43°C).
- For complete installation instructions and recommendations see "Fiberglas™ Pipe Insulation Installation Instructions" (Pub. No. 10021355).

Availability

Fiberglas™ Pipe Insulation are available in thicknesses for NPS and NTS pipe sizes as follows⁸

Insulation Thickness in.	(mm)	Nominal Pipe Size	
		in.	(mm)
½	(13)	½–2½	(15–65)
1	(25)	½–33	(15–825)
1½	(38)	½–33	(15–825)
2	(51)	½–33	(15–825)
2½	(64)	½–32	(15–800)
3	(76)	½–31	(15–775)
3½	(89)	½–30	(15–750)
4	(102)	½–29	(15–725)
4½	(114)	½–28	(15–700)
5	(127)	½–27	(15–675)

8. Please refer to product packaging and data guide for load factors, standard products, and minimum order quantity and carton sizes. Contact your customer service representative for product lead time.

NOTE: Most pipe sizes at 4½" and 5" insulation thickness are made-to-order (MTO). Consult your local Owens Corning sales representative.

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
- GREENGUARD Certified products are certified to GREENGUARD standards for low chemical emissions into indoor air during product usage. For more information, visit ul.com/gg
- Environmental Product Declaration (EPD) has been certified by UL Environment
- Material Health Certificate from Cradle to Cradle Products Innovation Institute



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