Submittal Sheet

Fiberglas® Pipe Insulation

- ☐ **SSL II® All-Service Jacket (ASJ), Self-Sealing Lap**
- ☐ **SSL® I ASJ**
- ☐ **No-Wrap**

Description

Owens Corning Fiberglas® pipe insulations are molded of heavy density resin bonded inorganic glass fibers. These one-piece, 36" (914mm) long, hinged sections are opened, placed over the pipe, closed and secured by means specific to the type as described below.

Fiberglas SSL II® Pipe Insulation is jacketed with a smooth, reinforced, wrinkle-resistant all-service (ASJ) vapor retarder jacket. Factory applied DOUBLESURE† double pressure sensitive adhesive closure provides positive mechanical and vapor sealing of the longitudinal jacket seam. Pressure sensitive butt strip seals complete the positive closure. Available in the most popular sizes.

In larger sizes *Fiberglas* Pipe Insulation is furnished with SSL® I, a single adhesive lap seal.

Fiberglas "No-Wrap" Pipe Insulation is also available without a jacket. It is intended for field installation of jacketing appropriate to the vapor control, damage or corrosion resistance requirements of the application.

Uses

Insulation of hot, cold, concealed and exposed piping operating at temperatures from 0°F (-18°C) to 850°F (454°C) in commercial buildings, industrial facilities and process or power plants.

†DOUBLESURE is a registered trademark of Morgan Adhesives Company.

Features/Benefits

SSL II Positive Closure System

Effective long-term vapor sealing of both longitudinal and butt joints. With double-adhesive lap seal, plus two-part butt strip seal, positive closure is fast, neat and foolproof. No need for staples and mastic, promoting unexcelled jobsite productivity.

Jacket and Lap Shipped Adhered

Short pieces of insulation can be cut without jacket loss; it won't come apart in handling. No "dog-ears" in or out of the carton. Dust and moisture can't reach the seal. Butt strips come in sealed bags inside the carton, staying clean until the moment of use.

Excellent Thermal Performance

Fiberglas Pipe Insulation's low thermal conductivity contributes to lower operating costs of heating and cooling equipment.

Meets Model Code Fire Ratings

Flame spread rating of 25 or less, and smoke developed rating of 50 or less, usually means that *Fiberglas* Pipe Insulation will be granted immediate building code approval.

Availability

Fiberglas Pipe Insulations are available in thicknesses and for pipe sizes as follows:

Insulation Thickness,		Nominal Pipe Sizes, NPS, in. (DN, mm)					
		SSL II		SSL I*		No-Wrap**	
in.	(mm)	Pipe Insulation		Pipe Insulation*		Pipe Insulation**	
½	(13)	½-6	(15-150)			½-6	(15-150)
1	(25)	½-15	(15-375)	16-33	(400-825)	½-33	(15-825)
1½	(38)	½-14	(15-350)	15-33	(375-825)	½-33	(15-825)
2	(51)	½-12	(15-300)	14-33	(350-825)	½-33	(15-825)
2½	(64)	2-11	(50-275)	12-26	(300-650)	½-32	(15-800)
3	(76)	3-10	(75-250)	11-26, 30	(275-650, 750)	½-31	(15-900)
3½	(89)	4½-9	(115-225)	10-18, 20-22, 24	(250-450, 500-550, 600)	½-30	(15-750)
4	(102)	4½-8	(115-200)	9-21, 24, 25	(225-525, 600, 625)	½-29	(15-725)
4½	(114)	6-7	(150-175)	8-10, 12, 14, 16, 18, 20, 24	(200-250, 300, 350, 400, 450, 500, 600)	½-28	(15-700)
5	(127)	6	(150)	7-14, 16-24	(175-350, 400-600)	½-27	(15-675)
5½	(140)					6-26	(150-650)
6	(152)					6-25	(150-625)

* SSL I all made-to-order except 14" x 2" (350mm x 51mm) and 16" x 1", 11/2" and 2" (400mm x 25mm, 38mm and 51mm).
** Consult Packaging Data Supplement (PP1.P5) available upon request for standard and made-to-order sizes.

Specification Compliance

- ASTM C 547, Mineral Fiber Pre-Formed Pipe Insulation, Type I to 850˚F (454˚C)
- ASTM C 1136, Flexible Low Permeance Vapor Retarders for Thermal Insulation: All Types
- ASTM C 795, Thermal Insulation for Use Over Austenitic Stainless Steel*
- Mil. Spec. MIL-I-22344D, Insulation, Pipe, Thermal, Fibrous Glass
- Nuclear Regulatory Commission Guide 1.36, Non-Metallic Thermal Insulation*
- U.S. Coast Guard Approval No. 164.009, Noncombustible Materials (no-wrap)
- New York City MEA No. 344-83
- CAN/CGSB-51.9 – Type 1, Class 2
- NFPA 90A

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

Fiberglas® Pipe Insulation

Physical Property Data

Property	Test Method	Value	
Operating temperature range	ASTM C 411	0 to 850°F* (-18°C to 454°C)*	
Jacket temperature limitation	ASTM C 1136	-20°F to 150°F (-29°C to 66°C)	
Jacket permeance	ASTM E 96, Proc.A	0.02 perm	
Puncture resistance	ASTM D 781	50 units	
Composite surface burning characteristics	UL 723,** ASTM E 84** or CAN/ULC-S102-M**	Flame spread	25**
		Smoke developed	50

*Limited to single layer applications above 650°F (343°C), but not greater than 6" (152mm) thickness.
**The surface burning characteristics of these products have been determined in accordance with UL 723, ASTM E 84 or CAN/ULC-S102-M. These standards 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.

Thermal Performance, ASTM C 680

Insulation NPS x Thk. (DN x Thk. in.	mm)	Pipe Operating Temperature, °F (°C) 300 (149) HL	ST	500 (280) HL	ST	700 (371) HL	ST
2 x 1½	(50 x 13)	77 (74)	128 (53)				
4 x 1	(100 x 25)	78 (75)	109 (43)				
8 x 1	(200 x 25)	140 (135)	112 (44)				
12 x 1	(300 x 25)	199 (191)	113 (45)				
2 x 1½	(50 x 38)			88 (85)	116 (47)		
4 x 1½	(100 x 38)			142 (137)	123 (51)		
8 x 1½	(200 x 38)			242 (233)	128 (53)		
12 x 1½	(300 x 38)			330 (317)	129 (54)		
2 x 2	(50 x 51)					139 (134)	127 (53)
4 x 2½	(100 x 64)					188 (181)	125 (52)
8 x 2½	(200 x 64)					295 (284)	129 (54)
12 x 3	(300 x 76)					359 (345)	125 (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 jacket.

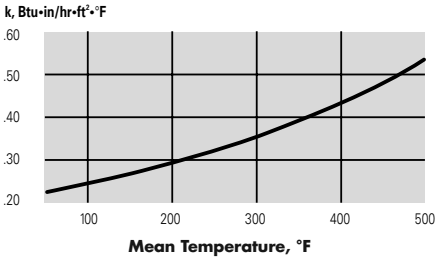
Thickness to Prevent Surface Condensation

Owens Corning ASJ Jacket for up to 16" NPS (400mm DN)(1), in. (mm)

Ambient Temperature, °F	(°C)	Relative Humidity(2)	System Operating Temperatures 35°F (2°C)	45°F (7°C)	55°F (13°C)
110	(43)	50%-70%	1 (25)	1 (25)	1 (25)
		80%	1½ (38)	1½ (38)	1 (25)
		90%	3½ (89)	3 (76)	2½ (64)
100	(38)	50%-70%	1 (25)	1 (25)	1 (25)
		80%	1½ (38)	1½ (38)	1 (25)
		90%	3 (76)	3 (76)	2½ (64)
90	(32)	50%-70%	1 (25)	1 (25)	1 (25)
		80%	1½ (38)	1 (25)	1 (25)
		90%	3 (76)	2½ (64)	2 (51)
80	(27)	50%-80%	1 (25)	1 (25)	1 (25)
		90%	2½ (64)	2 (51)	1½ (38)
70	(21)	50%-80%	1 (25)	1 (25)	1 (25)
		90%	1½ (38)	1½ (38)	1 (25)

(1) For NPS (DN) greater than 16" (400mm), please contact your local Owens Corning Representative.
(2) If humidity exceeds 90%, some condensation is to be expected; therefore, a coating of a mastic or PVC jacket overwrap is recommended as repeated or continual wetting of the ASJ jacket will degrade its vapor retarder performance.

Thermal Conductivity



Apparent thermal conductivity curve determined in accordance with ASTM Practice C 1045 with data obtained by ASTM Test Method C 335. Values are nominal, subject to normal testing and manufacturing tolerances.

Mean Temp. °F	k Btu•in/hr•ft²•°F	Mean Temp. °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

Application Recommendations

The hinged sections of *Fiberglas* Pipe Insulation are opened, placed over the pipe, carefully aligned, and sealed or jacketed as required by the form of the insulation and the application.

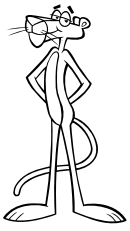
Fiberglas SSL II Pipe Insulation is shipped with the jacket and longitudinal lap closed, the two adhesives separated by a release strip. The insulation is opened by pulling the release strip from between the two adhesive strips. The insulation is placed on the pipe, carefully aligned, and the two adhesives rubbed firmly together to close and seal. The two part butt strip seal completes the positive closure. Application may be at ambient temperatures from 25°F (-4°C) to 110°F (43°C).

Fiberglas "No-Wrap" Pipe Insulation is designed for field-jacketing with pipe covering secured by wires or bands, vapor sealed where required.

Outdoor applications must be protected from weather. If painting is required, use only water base latex paint.

OWENS CORNING®
INNOVATIONS FOR LIVING™

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



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