Submittal Sheet

OWENS CORNING ®

INNOVATIONS FOR LIVING™

Fiberglas® FlexWrap

Pipe and Tank Wrap

Description

Fiberglas FlexWrap is a flexible insulation product made from fiberglass blanket bonded together with a thermosetting resin. The fibers are oriented to provide good compressive strength while providing flexibility during installation. FlexWrap is suitable for operating temperatures up to 850°F (454°C) and is available with either PSK (Poly-Scrim-Kraft) or FRK (Foil-Reinforced Kraft) facings.

Uses

Fiberglas FlexWrap is used to insulate either hot or cold surfaces of pipes, tanks, storage vessels, ducts, and similar round or irregular shaped surfaces. All joints and facing penetrations must be sealed with appropriate pressure sensitive tape or vapor retarder mastic when the application requires a vapor seal. The product is intended for indoor use and should be weather protected for use outdoors.

Features and Benefits

Cost Effective Substitute of Pre-formed Pipe Insulation

FlexWrap is a cost effective alternative to larger sized pre-formed pipe insulation. FlexWrap fits all pipes and equipment of 10" NPS and larger which reduces inventory requirement caused by multiple

Quick, Easy Installation

FlexWrap installs easily. The continuous blanket of material easily wraps tanks, pipes, and irregular shaped objects without the efficiency losses related to strip delamination of fabricated and segmented wrap.

Low Thermal Conductivity

Low thermal conductivity compared to segmented products means less thickness is required for equivalent heat flow.

Specification Compliance

FlexWrap complies with ASTM C 1393 Types I, II, IIIA, and IIIB, Category 2., "Standard Specification for Perpendicularly Oriented Mineral Fiber Roll and Sheet Thermal Insulation for Pipes and Tanks".

Availability

FlexWrap is available in rolls 48" in width and thicknesses from 1 to 3 inches. Standard roll lengths are

Available Sizes

Thickness (mm) in.		Width (mm) ft.		Length (m)		Minimum Wrap Diameter	in. (NPS)
1"	(25)	48"	(1,219)	52'	(15.85)	6"	(152)
1.5"	(38)	48"	(1,219)	30'	(9.14)	8"	(203)
2"	(51)	48"	(1,219)	26'	(7.92)	10"	(254)
2.5"	(64)	48"	(1,219)	20'	(6.10)	12"	(305)
3"	(76)	48"	(1,219)	18'	(5.48)	16"	(406)

Physical Property Data

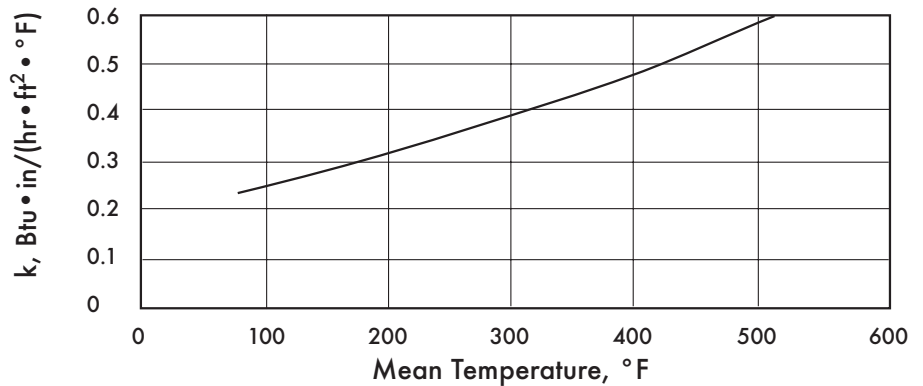| Property	Test Method	Value
Max use temperature	ASTM C 411	850°F (454°C)
Density	ASTM C 303	2.5 pcf (40 kg/m³)
Compressive resistance	ASTM C 165	25 psf (1200 Pa)
Composite surface burning characteristics	ASTM E 84	Flame spread 25 Smoke developed 50
Corrosiveness	ASTM C 665	Meets requirements
Fungi resistance	ASTM C 1338	Meets requirements
Facing temperature limit	ASTM C 1136	150°F (66°C)
Water vapor permeance (facing)	ASTM E 96	0.02 perm

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Application Recommendations

When determining the length required, simply determine the circumference of the piece being insulated and remember to add twice the thickness of the FlexWrap when calculating the diameter. If a lap is desired, add 3-4" of length and remove the additional insulation to form the lap. Take care to not cut the facing when removing the lap portion of the insulation. The FlexWrap is installed around the surface to be insulated, secured and either stapled or taped. If necessary, a vapor retarder mastic is applied. Adjacent sections should be butted together and sealed with tape. Use of bands or impalement pins for securement purposes are permitted but should be sealed as necessary with mastic.

Thermal Conductivity

Mean Temp, °F	k, Btu·in/(hr·ft²·°F)	Mean Temp, °C	λ W/m·°C
75	.23	25	0.034
100	.25	50	0.038
200	.32	100	0.047
300	.40	150	0.057
400	.48	200	0.069
500	.58	250	0.081

k vs Temperature

Stretch-Out Requirements

The following table may be used to estimate stretch-out lengths for various standard pipe sizes.

NPS	Pipe OD in.	FlexWrap Thickness									
		1" (25mm) in.	mm	1.5" (38mm) in.	mm	2" (51mm) in.	mm	2.5" (64mm) in.	mm	3" (76mm) in.	mm
6	6.6	27.1	689								
8	8.6	33.4	849	36.5	928						
10	10.8	40.3	1,024	43.5	1,104	46.6	1,184				
12	12.8	46.6	1,184	49.7	1,263	52.9	1,343	56.0	1,423		
14	14	50.4	1,279	53.5	1,359	56.6	1,439	59.8	1,519		
16	16	56.6	1,439	59.8	1,519	62.9	1,598	66.1	1,678	69.2	1,758
18	18	62.9	1,598	66.1	1,678	69.2	1,758	72.4	1,838	75.5	1,917
20	20	69.2	1,758	72.3	1,838	75.5	1,917	78.6	1,997	81.8	2,077
22	22	75.5	1,917	78.6	1,997	81.8	2,077	84.9	2,157	88.0	2,236
24	24	81.8	2,077	84.9	2,157	88.1	2,236	91.2	2,316	94.3	2,396
26	26	88.1	2,236	91.2	2,316	94.3	2,396	97.5	2,476	100.6	2,555
28	28	94.3	2,396	97.5	2,476	100.6	2,555	103.7	2,635	106.9	2,715
30	30	100.6	2,555	103.7	2,635	106.9	2,715	110.0	2,795	113.2	2,874
32	32	106.9	2,715	110.0	2,795	113.2	2,874	116.3	2,954	119.5	3,034
34	34	113.2	2,874	116.3	2,954	119.4	3,034	122.6	3,114	125.7	3,193
36	36	119.4	3,034	122.6	3,114	125.7	3,193	128.9	3,273	132.0	3,353

Note: Lengths provided in table do not include a staple flap. Add 3-4 inches of length if a staple flap is desired.

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