



SOFT[®] DUCT WRAP FRK

FIBERGLASS INSULATION

SOFT[®] Duct Wrap is a blanket of glass fiber insulation factory-laminated to FRK vapor retarder facing. A 2" (50 mm) stapling and taping flange is provided on one edge. This product is designed to meet existing performance standards and other model building and energy codes. SOFT[®] Duct Wrap FRK flexible design makes it easy and fast to install, helps prevent duct condensation, and increases building occupants thermal comfort.



Features

- Condensation control
- Enhanced comfort control
- Easy to clean surface
- Flexible and easy to install

Applications

- SOFT[®] Duct Wrap FRK is used for external insulation of commercial and residential heating, air conditioning and dual-temperature ducts operating at temperatures from 40°F (4°C) to 250°F (121°C). This insulation, when applied in accordance with installation instructions (Pub. 10021577), will provide the "installed R-value" as published for the product and printed on the facing, assuring specified in-place thermal performance and condensation control.

Limitations

- SOFT[®] Duct Wrap FRK is not recommended for use on duct systems subject to continuous service at temperatures in excess of 250°F (121°C). It should not be used in conditions where condensation might occur on the facing nor exposed to weathering or mechanical abuse without proper protection. It should not be used on the inside of ducts.

Physical Properties

PROPERTY	TEST METHOD	VALUE		
Operating Temperature	ASTM C411	Up to 250°F (121°C)		
Insulation Jacket Temperature Limit	ASTM C1136	Up to 150°F (66°C)		
Jacket Puncture Resistance	ASTM C1136	25 units (0.7 joules)		
Water Vapor Permeance	ASTM E96	0.02 perms		
Water Vapor Sorption	ASTM C1104	<3% by weight at 120°F (49°C), 95% R.H.		
Fungi Resistance	ASTM C1338	Meets requirements		
Thermal Conductivity <u>Out-of-Package k-Value</u> k Btu • in/hr • ft ² • °F (λ at 24°C Mean, W/m • °C)	ASTM C518	Type 75 0.30 (0.043)	Type 100 0.27 (0.039)	Type 150 0.25 (0.036)
<u>Installed (Compressed) k-Value</u> k Btu • in/hr • ft ² • °F (λ at 24°C Mean, W/m • °C)		Type 75 0.27 (0.039)	Type 100 0.25 (0.036)	Type 150 0.23 (0.033)
Surface Burning Characteristics ¹	ASTM E84	Flame Spread 25 Smoke Developed 50		

1. The surface burning characteristics of these products have been determined in accordance with ASTM E84. Values are reported to the nearest 5 rating.

Availability

Standard roll width: 48" (1.2m)
Installed R (RSI) values: When installed in accordance with installation procedures, SOFTR® Duct Wrap FRK will provide installed R (RSI) values as follows:

NOMINAL THICKNESS		OUT-OF-PACKAGE R (RSI) VALUE ²		INSTALLED THICKNESS ³		INSTALLED R (RSI) VALUE ^{2,3}	
IN	MM			IN	MM		
Type 75 – 0.75 pcf (12 kg/m ³)							
1½	(38)	5.1	(0.90)	1⅛	(29)	4.2	(0.74)
2.0	(50)	6.8	(1.17)	1½	(38)	5.6	(0.98)
2.2	(56)	7.4	(1.30)	1⅝	(42)	6.0	(1.06)
3	(76)	10.0	(1.76)	2¼	(57)	8.3	(1.46)
Type 100 – 1.00 pcf (16 kg/m ³)							
1½	(38)	5.6	(0.99)	1⅛	(29)	4.5	(0.79)
2	(51)	7.4	(1.30)	1½	(38)	6.0	(1.06)
Type 150 – 1.50 pcf (24 kg/m ³)							
1½	(38)	6.0	(1.06)	1⅛	(29)	4.8	(0.85)
2	(51)	8.0	(1.41)	1½	(38)	6.4	(1.13)

2. hr • ft² • °F/Btu (m² • °C/W) at 75°F (24°C) mean temperature.
3. Assumes 25% compression of insulation.

Material Requirements to Achieve Installed R-Value

STRETCH-OUT DIMENSIONS			
OUT-OF PACKAGE THICKNESS	INSTALLED THICKNESS	ROUND AND OVAL DUCTS	SQUARE AND RECTANGULAR DUCTS
IN	IN	P + IN	P + IN
1 1/2	1 1/8	P + 9 1/2	P + 8
2	1 1/2	P + 12	P + 10
2 3/16	1 5/8	P + 13	P + 11
3	2 1/4	P + 17	P + 14 1/2

P = measured duct perimeter

Specification Compliance

- ASTM C 1290, Flexible Fibrous Glass Blanket Insulation Used to Externally Insulate HVAC Ducts, Type III
- ASTM C 1136, Flexible Low Permeance Vapor Retarders for Thermal Insulation, Type II (facing only)
- ASTM C 553 Mineral Fiber Thermal Insulation:
Type I – Fiberglas™ Duct Wrap Type 75; Type II – SOFTR® Duct Wrap FRK Types 100 and 150. (Operating temperatures to 250°F (121°C) and thermal values to 150°F (66°C) mean.)

4. Preferred specification is ASTM C1290.

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.

Certificates and Sustainable Features

- Environmental Product Declaration (EPD) has been certified by UL Environment*
- Health Product Declaration® (HPD)



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