

# WideWrap™ Duct Wrap Insulation

## PRODUCT DESCRIPTION

**Basic Use:** WideWrap™ Duct Wrap Insulation is used to insulate rectangular and round heating, ventilating and air-conditioning ductwork.

**Benefits:** WideWrap Duct Wrap Insulation provides thermal efficiency that reduces unwanted heat loss or gain from equipment and ductwork. When properly installed in the correct thickness, this product virtually eliminates condensation problems on cold duct surfaces. The 5' width accommodates larger ducts and means less labor, less wasted material and a cleaner installed appearance.

**Composition and Materials:** WideWrap Duct Wrap is a blanket-type insulation composed of glass fibers bonded together with a thermosetting resin. It is available unfaced or with FSK vapor retarder facing. On the faced product, a stapling/taping tab is provided on one edge.

**Limitations:** The product should be kept clean and dry from the time of manufacture through job site installation and system operation. WideWrap Duct Wrap is suitable for use with most heating, ventilating and air-conditioning ductwork operating at temperatures from 35°F to 250°F (1.7°C to 121°C) for faced WideWrap Duct Wrap, and from 35°F to 450°F (1.7°C to 232°C) for unfaced WideWrap Duct Wrap.

**Sizes:** See table on back for available sizes. Contact CertainTeed for other sizes and minimum order quantities.

## INSTALLATION

Sheet metal ducts should be clean, dry and sealed tightly prior to insulating with CertainTeed WideWrap Duct Wrap.

To ensure installed thermal performance, WideWrap Duct Wrap should be cut to “stretch-out” dimensions. This requires measurement of the duct perimeter, then cutting the duct wrap to the dimensions (perimeter + add-on) indicated in the stretch-out table on the back. A 2" piece of insulation is removed from the facing at the end of the piece of insulation to form an overlapping stapling and taping flap.

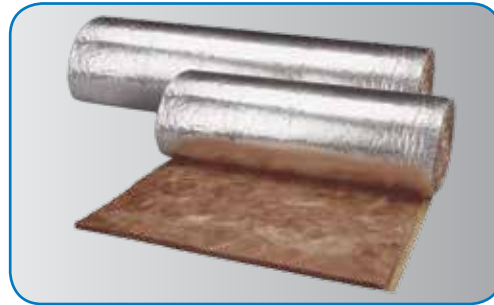
WideWrap Duct Wrap is installed by wrapping the insulation around the perimeter of the duct with the facing out. Adjacent sections of duct wrap are tightly butted with the 2" taping flap overlapping. Seams should be stapled with outward-clinching staples on approximately 6" centers. Where a vapor retarder is required, all seams, joints, tears, punctures and/or other penetrations of the duct wrap should be sealed with a pressure-sensitive vapor retarder tape that matches the facing, or a suitable mastic system.

Where rectangular ducts are 24" in width or greater, WideWrap Duct Wrap should be additionally secured to the bottom of the duct with mechanical fasteners spaced 18" on center to prevent sagging.

For additional installation details, consult the National Commercial and Industrial Insulation Standards (current edition) published by the Midwest Insulation Contractors Association (MICA).

## AVAILABILITY AND COST

Manufactured and sold throughout the United States. For availability and cost, contact your local distributor or call CertainTeed Sales Support Group at 800-233-8990.



<b>Product Name</b>	CertainTeed WideWrap™ Duct Wrap Insulation
<b>Manufacturer</b>	CertainTeed Corporation
<b>Address</b>	20 Moores Road Malvern, PA 19355
<b>Phone</b>	800-233-8990
<b>Website</b>	<a href="http://www.certainteed.com/insulation">www.certainteed.com/insulation</a>

## TECHNICAL DATA

### Applicable Standards

- Model Building Codes:
  - ICC
- Material Standards:
  - ASTM C1290
  - ASTM C553
    - Type I
    - Type III
  - CAN/CGSB-51.11-92
  - ASTM C1136
- Fire Safety Standards:
  - NFPA 90A, NFPA 90B

### Fire Resistance

- Fire Hazard Classification:
  - UL 723, ASTM E84, CAN/ULC-S102
  - Max. Flame Spread Index: 25;
  - Max. Smoke Developed; Index: 50
- Non-Combustible:
  - ASTM E136
  - Meets test requirements

### Physical/Chemical Properties

- Thermal Performance:
  - See table on other side
- Operating Limits:
  - Temperature: ASTM C411
  - Faced: Max. 250°F (121°C)
  - Unfaced: Max. 450°F (232°C)
- Water Vapor Sorption:
  - ASTM C1104
  - < 5% by weight
- Water Vapor Transmission - Facing:
  - ASTM E96, Dessicant Method
  - FSK: Max. 0.02 perms
  - 1.15 x 10<sup>-9</sup>g/Pa•s•m<sup>2</sup>
- Corrosiveness:
  - ASTM C665 / Pass testing
- Fungi Resistance:
  - ASTM C1338 / Pass testing
- Odor Emission:
  - ASTM C1304 / Pass testing



## WARRANTY

Refer to CertainTeed's Limited Warranty for Fiber Glass Duct Wraps (30-32-113).

## MAINTENANCE

An inspection and preventative maintenance program for the HVAC system is recommended to ensure optimum performance.

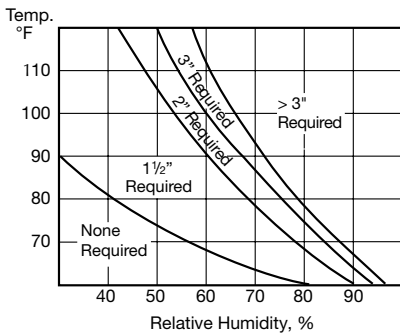
## TECHNICAL SERVICES

Technical assistance can be obtained either from your local CertainTeed sales representative, or by calling CertainTeed Sales Support Group at 800-233-8990.

AVAILABLE SIZES							
Product Type	Facing	Thickness		Length		Width	
		in.	mm	ft	m	in.	mm
75 (0.75 lbs./cu. ft.)	FSK/ Unfaced	1-1/2	38	75	22.9	60	1219
		2	51	75	22.9		
		2-1/8	54	75	22.9		
		3	76	50	15.2		

Sizes: Available sizes as shown in the table above. Contact CertainTeed for other sizes and minimum order quantities.

## CONDENSATION CONTROL



This chart is based on indoor conditions so far as wind and other factors are concerned.

To determine thickness to prevent condensation, based on installed thickness at 75% of nominal (out-of-package) thickness and a duct internal air temperature of 55°F, refer to the condensation control chart.

To use: 1) Select maximum relative humidity (%) on lower axis; 2) Read up vertically until that line intersects the maximum ambient air temperature; 3) Select the thickness indicated at the point of intersection.

## INSTALLATION STRETCH-OUT DIMENSIONS

Product Label Thickness		Average Installed Thickness		Stretch-Out Dimensions <sup>1</sup>						
in.	mm	in.	mm	perim.	Round Duct		Square Duct		Rectangular Duct	
					in.	mm	in.	mm	in.	mm
1-1/2	38	1.13	29	P+	9.5	241	8	203	7	178
2	51	1.50	38	P+	12	305	10	254	8	203
2-1/8	54	1.59	40	P+	12.6	321	10.4	270	8.4	213
3	76	2.25	57	P+	17	432	14.5	368	11.5	292

<sup>1</sup>The stretch-out dimension is equal to the duct perimeter (P) plus the add-on factor for the type of duct being installed.

## THERMAL PERFORMANCE

Type	Product		R-Value		Installed R-Value		K-Value		Installed K-Value	
	Thickness		$\frac{h \cdot ft^2 \cdot ^\circ F}{btu}$	$\frac{m^2 \cdot ^\circ C}{w}$	$\frac{h \cdot ft^2 \cdot ^\circ F}{btu}$	$\frac{m^2 \cdot ^\circ C}{w}$	$\frac{btu \cdot in}{h \cdot ft^2 \cdot ^\circ F}$	$\frac{w}{m \cdot ^\circ C}$	$\frac{btu \cdot in}{h \cdot ft^2 \cdot ^\circ F}$	$\frac{w}{m \cdot ^\circ C}$
	in.	mm								
75 (0.75 lbs./cu. ft.)	1-1/2	38	5.2	.92	4.2	0.74	0.29	0.042	0.27	0.039
	2	51	6.9	1.22	5.7	1.00	0.29	0.042	0.26	0.038
	2-1/8	54	7.3	1.29	6.0	1.06	0.29	0.042	0.27	0.038
	3	76	10.2	1.69	8.3	1.41	0.31	0.045	0.28	0.041

Tested in accordance with ASTM C518 at 75°F (24°C) mean temperature. R means resistance to heat flow.

The higher the R-Value, the greater the insulating power. The installed R-Value and K-Value based upon 25% compression of the product thickness during installation. To get the installed R-Value, it is essential that this insulation be installed properly. If you do it yourself, follow the installation instructions carefully.



## CertainTeed Corporation

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20 Moores Road Malvern, PA 19355 Professional: 800-233-8990 Consumer: 800-782-8777 [certainteed.com](http://certainteed.com)