

WideWrap™ Duct Wrap Insulation



1. PRODUCT NAME

CertainTeed WideWrap™
Duct Wrap Insulation

2. MANUFACTURER

CertainTeed Corporation
P.O. Box 860
Valley Forge, PA 19482-0105
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800-233-8990
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3. 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. It's 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

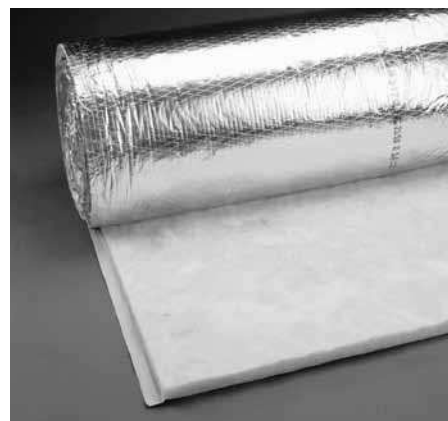
to 232°C) for unfaced WideWrap Duct Wrap.

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

4. TECHNICAL DATA

Applicable Standards:

- Model Building Codes:
 - ICC
- Material Standards:
 - ASTM C1290
 - ASTM C553
 - Type I; Type 75 Duct Wrap
 - Type II; Type 100 & 150 Duct Wrap
 - Type III; Type 150 Duct Wrap
 - CAN/CGSB-51.11-92
 - ASTM C1136
- Fire Safety Standards:
 - NFPA 90A, NFPA 90B
- Fire Resistance:**
 - Fire Hazard Classification:
 - UL 723, ASTM E84, NFPA 255, CAN/ULC-S102-M88
 - 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 10⁻⁹g/Pa•s•m²
 - Corrosiveness: ASTM C665
 - Pass test requirements



- Fungi Resistance: ASTM C1338
 - Pass test requirements
- Odor Emission: ASTM C1304
 - Pass test requirements

Quality Assurance: CertainTeed's commitment to quality and environmental management has ensured the registration of the Athens, Chowchilla and Kansas City plants to ISO 9001:2000 and ISO 14001:2004 standards. The GREENGUARD Environmental Institute has certified WideWrap Duct Wrap for low emissions of total particle, formaldehyde and other Volatile Organic Compounds (VOCs).

5. INSTALLATION

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

To ensure installed thermal performance, CertainTeed WideWrap Duct Wrap shall 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 other side. 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.

CertainTeed 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 shall

AVAILABLE SIZES							
Product Type	Facing	Thickness		Length		Width	
		in.	mm	ft	m	in.	mm
75 (0.75lbs./cu. ft.)	FSK/ Unfaced	1½	38	75	22.9	60	1219
		2	51	75	22.9		
		2½	54	75	22.9		
		3	76	50	15.2		

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 shall 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, CertainTeed WideWrap Duct Wrap shall 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).

6. AVAILABILITY AND COST

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

7. WARRANTY

Refer to CertainTeed's Limited One-Year Warranty for Fiber Glass Duct Wraps (30-29-047).

8. MAINTENANCE

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

9. TECHNICAL SERVICES

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

10. FILING SYSTEMS

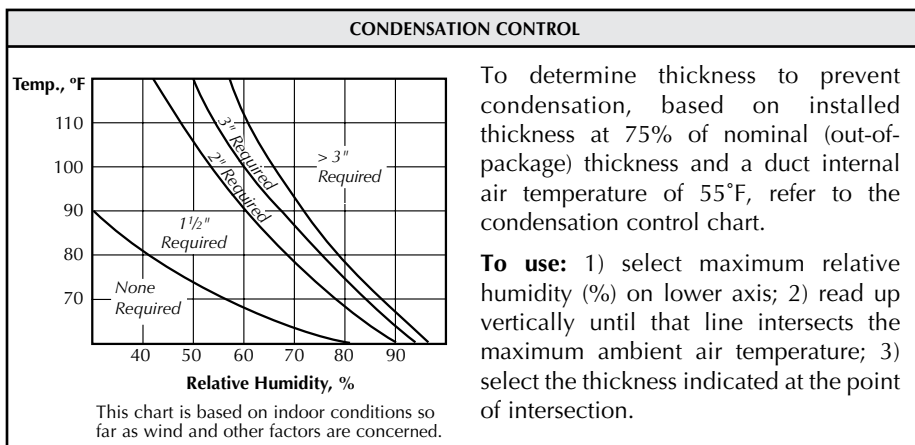
- CertainTeed Pub. No. 30-36-081
- Sweet's Catalog Files, 230700
- Additional product information available upon request.

THERMAL PERFORMANCE										
Product			R-Value		Installed R-Value		K-Value		Installed K-Value	
Type	Thickness		$\frac{\text{h}\cdot\text{ft}^2\cdot^\circ\text{F}}{\text{Btu}}$	$\frac{\text{m}^2\cdot^\circ\text{C}}{\text{W}}$	$\frac{\text{h}\cdot\text{ft}^2\cdot^\circ\text{F}}{\text{Btu}}$	$\frac{\text{m}^2\cdot^\circ\text{C}}{\text{W}}$	$\frac{\text{Btu}\cdot\text{in}}{\text{h}\cdot\text{ft}^2\cdot^\circ\text{F}}$	$\frac{\text{W}}{\text{m}\cdot^\circ\text{C}}$	$\frac{\text{Btu}\cdot\text{in}}{\text{h}\cdot\text{ft}^2\cdot^\circ\text{F}}$	$\frac{\text{W}}{\text{m}\cdot^\circ\text{C}}$
	in.	mm								
75 (0.75lbs/cu. ft.)	1½	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
	2⅞	54	7.3	1.29	6.0	1.06	0.29	0.042	0.27	0.038
	3	76	9.6	1.69	8.3	1.41	0.31	0.045	0.28	0.041

Tested in accordance with ASTM C518 and/or ASTM C177 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.

INSTALLATION STRETCH-OUT DIMENSIONS										
Product Label Thickness		Average Installed Thickness		Stretch-Out Dimensions¹						
				perim.	Round Duct		Square Duct		Rectangular Duct	
in.	mm	in.	mm		perim.	in.	mm	in.	mm	in.
1½	38	1.13	29	P+	9.5	241	8	203	7	178
2	51	1.50	38	P+	12	305	10	254	8	203
2⅞	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

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



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