Specification Sheet

CertainTeed
SAINT-GOBAIN

SoftTouch™ Duct Wrap Insulation

MEETS OREGON DECA-BDE REQUIREMENTS

1. PRODUCT NAME
CertainTeed SoftTouch™
Duct Wrap Insulation

2. MANUFACTURER
CertainTeed Corporation
P.O. Box 860
Valley Forge, PA 19482-0105
Phone: 610-341-7000
　　　　800-233-8990
Fax:　　610-341-7571
Website: www.certainteed.com/insulation/
hvac-mechanical

3. PRODUCT DESCRIPTION
Basic Use: SoftTouch Duct Wrap Insulation is used to insulate rectangular and round heating, ventilating and air conditioning ductwork.

Benefits: SoftTouch 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.

Composition and Materials: SoftTouch Duct Wrap is a blanket-type insulation composed of glass fibers bonded together with a thermosetting resin. It is available unfaced or with FSK, gray PSK or white PSK vapor retarder facing. On faced products, 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.

SoftTouch 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 SoftTouch Duct Wrap, and from 35°F to 450°F (1.7°C to 232°C) for unfaced SoftTouch 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
　　　FSK and white PSK, Type II
　　　Gray PSK, Type IV
• 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 tests 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 and white PSK: Max. 0.02 perms
　　1.15×10^{-9} g/Pa•s•m^2
　– Gray PSK: Max. 0.09 perms
　　5.17×10^{-9} g/Pa•s•m^2
• 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 SoftTouch 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 SoftTouch Duct Wrap.

To ensure installed thermal performance, CertainTeed SoftTouch 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

AVAILABLE SIZES							
Product Type	Facing	Thickness		Length		Width	
		in.	mm	ft	m	in.	mm
75 (0.75lbs./cu. ft.)	Unfaced	1	25	150	45.7	9 – 72	229 – 1829
		1½	38	150	45.7		
		2	51	75	22.9		
		2½	64	75	22.9		
		3	76	50	15.2		
	FSK/PSK*	1½	38	100	30.5	48	1219
		2	51	75	22.9		
		2⅛	54	75	22.9		
		2¼	57	75	22.9		
		2½	64	75	22.9		
		3	76	50	15.2		
		4	102	50	15.2		
100 (1.0lbs./cu. ft.)	Unfaced	1	25	150	45.7	9 – 72	229 – 1829
	FSK/PSK*	1	25	100	30.5	48	1219
		1½	38	100	30.5		
		2	51	75	22.9		
150 (1.5lbs./cu. ft.)	FSK/PSK*	1½	38	75	22.9	48	1219
		2	51	50	15.2		

* PSK Faced products are made-to-order

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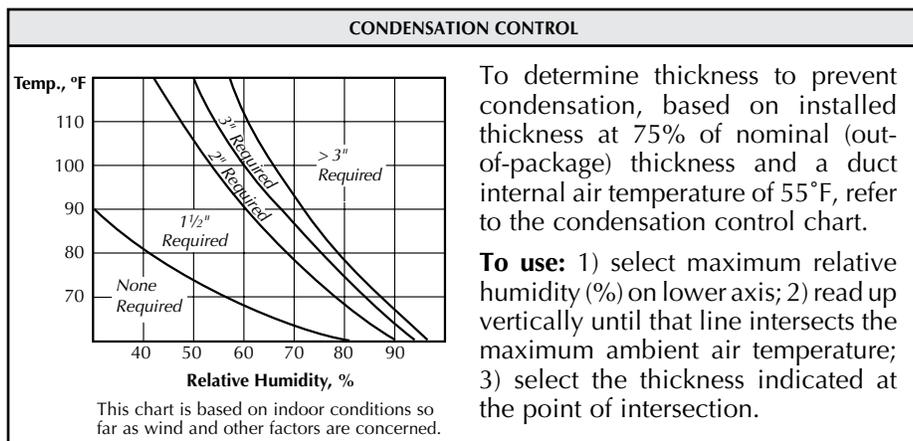
10. FILING SYSTEMS
- CertainTeed Pub. No. 30-36-081
- Sweet's Catalog Files, 230700
- Additional product information available upon request.

THERMAL PERFORMANCE

Product			R-Value		Installed R-Value		K-Value		Installed K-Value	
Type	Thickness		$\frac{h \bullet ft^2 \bullet °F}{Btu}$	$\frac{m^2 \bullet °C}{W}$	$\frac{h \bullet ft^2 \bullet °F}{Btu}$	$\frac{m^2 \bullet °C}{W}$	$\frac{Btu \bullet in}{h \bullet ft^2 \bullet °F}$	$\frac{W}{m \bullet °C}$	$\frac{Btu \bullet in}{h \bullet ft^2 \bullet °F}$	$\frac{W}{m \bullet °C}$
	in.	mm								
75 (0.75lbs./cu. ft.)	1	25	3.8	.67	3.0	0.53	0.26	0.038	0.25	0.036
	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
	2⅛	54	7.3	1.29	6.0	1.06	0.29	0.042	0.27	0.038
	2¼	57	7.8	1.37	6.5	1.14	0.29	0.042	0.26	0.037
	2½	64	8.6	1.51	7.1	1.25	0.29	0.042	0.26	0.037
	3	76	9.6	1.69	8.3	1.41	0.31	0.045	0.28	0.041
	4	102	13.5	2.38	11.0	1.94	0.30	0.043	0.27	0.039
100 (1.01lbs./cu. ft.)	1	25	3.8	0.67	3.0	0.53	0.26	0.038	0.25	0.036
	1½	38	5.7	1.00	4.5	0.79	0.26	0.038	0.25	0.036
	2	51	7.6	1.34	6.1	1.07	0.26	0.038	0.25	0.035
150 (1.5lbs./cu. ft.)	1	25	4.1	0.72	3.2	0.56	0.24	0.035	0.23	0.034
	1½	38	6.2	1.09	4.8	0.85	0.24	0.035	0.23	0.034
	2	51	8.3	1.46	6.4	1.13	0.24	0.035	0.23	0.034

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 Dimensions[1]						
					Round Duct		Square Duct		Rectangular Duct	
in.	mm	in.	mm	perim.	in.	mm	in.	mm	in.	mm
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
2¼	57	1.69	43	P+	13.5	343	11.5	292	9	229
2⅛	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
4	102	3.00	76	P+	22.0	559	18.5	470	14.5	368

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

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.

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