

# Sustainable Insulation® SoftTouch™ Duct Wrap

## HVAC DUCT WRAP

SoftTouch™ Duct Wrap Insulation is used to insulate rectangular and round heating, ventilating and air-conditioning ductwork.

### Features & Benefits

SoftTouch Duct Wrap provide 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 & Materials

SoftTouch Duct Wrap is a blanket-type insulation composed of tan, uniformly textured, inorganic fiberglass formed with a formaldehyde-free, plant-based binding agent. It is available unfaced or with FSK or white PSK vapor retarder facing. On faced products, a stapling/taping tab is provided on one edge.

### Application

The product should be kept clean and dry from the time of manufacture through job site installation and system operation.

SoftTouch 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.

### Installation

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

To ensure installed thermal performance, Duct Wrap must 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 next page. 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.

SoftTouch Duct Wrap are 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 must be stapled with outward-clinching staples on approximately 6” centers. When a vapor retarder is required, all seams, joints, tears, punctures and/or other penetrations of the duct wrap must 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, Duct Wrap must 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).

### 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 and ISO 14001 standards.



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### APPLICABLE STANDARDS, CODE COMPLIANCE

Model Building Codes:

- ICC

Material Standards:

- ASTM C1290  
Type I, Unfaced  
Type III, FSK & PSK - White
- ASTM C553  
Type I, Type 75 Duct Wrap  
Type II, Type 100 & 150 Duct Wrap  
Type III, Type 150 Duct Wrap
- ASTM C1136: FSK & White PSK  
Type II, Type IV

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

PROPERTY (UNIT)	TEST	VALUE
<b>Operating Limits:</b> Faced Unfaced	ASTM C411	250°F / 121°C 450°F / 232°C
<b>Water Vapor Sorption:</b>	ASTM C1104	≤ 5%
<b>Water Vapor Transmission (Facing):</b>	ASTM E96, Desiccant Method	0.02 perms (1.15 x 10 <sup>-9</sup> g/ Pa·s·m <sup>2</sup> )
<b>Odor Emission:</b>	ASTM C1304	Pass
<b>Corrosion Resistance:</b>	ASTM C665	Pass
<b>Fungi Resistance:</b>	ASTM C1338	Pass
<b>Stainless Steel:</b>	ASTM C795	Pass



SAINT-GOBAIN

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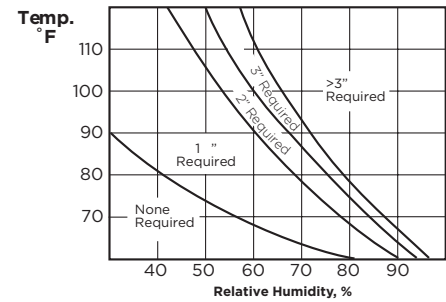
## HVAC DUCT WRAP

### Available Sizes

Available standard sizes are listed in the table. Contact CertainTeed for non-standard sizes.

TYPE	THICKNESS		LENGTH		WIDTH	
	IN	MM	FT	M	IN	MM
75	1	25	100	30.5	48	1219
	1-1/2	38	100	30.5		
	2	51	75	22.9		
	2-1/2	54	75	22.9		
	3	76	50	15.2		
	4	102	50	15.2		
100	1	25	100	30.5	48	1219
	1-1/2	38	100	30.5		
	2	51	75	22.9		
150	1	25	100	30.5	48	1219
	1-1/2	38	75	22.9		
	2	51	50	15.2		

### 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.

### THERMAL PERFORMANCE

TYPE	PRODUCT		UNCOMPRESSED R-VALUE		INSTALLED DUCT R-VALUE		UNCOMPRESSED K-VALUE		INSTALLED DUCT K-VALUE	
	THICKNESS		H·FT <sup>2</sup> ·°F BTU	M <sup>2</sup> ·°C W	H·FT <sup>2</sup> ·°F BTU	M <sup>2</sup> ·°C W	BTU·IN H·FT <sup>2</sup> ·°F	W M·°C	BTU·IN H·FT <sup>2</sup> ·°F	W M·°C
	IN	MM								
75	1	25	3.4	0.61	2.8	0.49	0.29	0.042	0.27	0.039
	1-1/2	38	5.2	0.91	4.2	0.74	0.29	0.042	0.27	0.039
	2	51	6.9	1.21	5.6	1.00	0.29	0.042	0.27	0.039
	2-1/8	54	7.3	1.29	6.0	1.06	0.29	0.042	0.27	0.039
	3	76	10.3	1.82	8.3	1.46	0.29	0.042	0.27	0.039
	4	102	13.8	2.43	11.0	1.94	0.29	0.042	0.27	0.039
100	1	25	3.8	0.68	3.0	0.53	0.26	0.038	0.25	0.036
	1-1/2	38	5.8	1.02	4.5	0.79	0.26	0.038	0.25	0.036
	2	51	7.7	1.35	6.0	1.06	0.26	0.038	0.25	0.036
150	1	25	4.2	0.73	3.2	0.56	0.24	0.035	0.23	0.033
	1-1/2	38	6.3	1.10	4.8	0.85	0.24	0.035	0.23	0.033
	2	51	8.3	1.47	6.4	1.13	0.24	0.035	0.23	0.033

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 are 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 <sup>1</sup>					
IN	MM	IN	MM	P+	ROUND DUCT		SQUARE DUCT		RECTANGULAR DUCT	
					IN	MM	IN	MM	IN	MM
1	25	0.75	19	P+	7	178	6	152	5	127
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
4	102	3.00	76	P+	22	559	18.5	470	14.5	368
4-1/2	114	3.375	86	P+	24.5	622	20.7	526	16.1	408

<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.

### 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.

### MAINTENANCE

No maintenance required.

### AVAILABILITY & COST

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

### WARRANTY

Refer to CertainTeed's Limited Warranty. Full warranty information can be found at [certainteed.com/warranty](http://certainteed.com/warranty).



**CertainTeed**

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