

## SoftTouch™ Duct Wrap Insulation

### 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 tan, uniformly textured, inorganic fibrous glass formed with a formaldehyde-free, plant-based binding agent. 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:** See table on back for available sizes. Contact CertainTeed for other sizes and minimum order quantities.

### INSTALLATION

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

To ensure installed thermal performance, SoftTouch 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 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.

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 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, SoftTouch 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).

### AVAILABILITY AND COST

Manufactured in the United States. Available in select Western U.S./Canada regions. 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 for Fiber Glass Duct Wraps (30-32-113).



|                     |  |
|---------------------|--|
| <b>Product Name</b> | CertainTeed SoftTouch™ Duct Wrap Insulation  |
| <b>Manufacturer</b> | CertainTeed Corporation  |
| <b>Address</b>      | 20 Moores Road<br>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
    - Type I, Unfaced
    - Type II, PSK – Grey
    - 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
  - CAN/CGSB-51.11-92
  - ASTM C1136: FSK & White PSK, Type II, Gray PSK, 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

- 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, Desiccant Method
    - FSK and white PSK: Max. 0.02 perms (1.15 x 10<sup>-9</sup> g/Pa•s•m<sup>2</sup>)
    - Gray PSK: Max. 0.09 perms (5.17 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

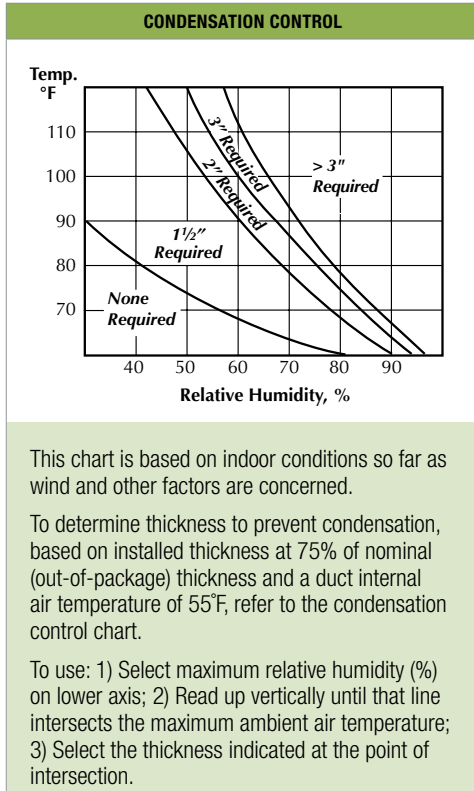


## MAINTENANCE

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.



| THERMAL PERFORMANCE |                   |    |                           |                      |                           |                      |                              |                      |                           |                      |
|---------------------|-------------------|----|---------------------------|----------------------|---------------------------|----------------------|------------------------------|----------------------|---------------------------|----------------------|
| Type                | Product Thickness |    | R-Value                   |                      | Installed R-Value         |                      | K-Value                      |                      | Installed K-Value         |                      |
|                     | in.               | mm | 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 <sup>2</sup> •°C | h•ft <sup>2</sup> •°F/btu | m <sup>2</sup> •°C/w |
|                     | 75<br>(0.75 pcf*) | 1  | 25                        | 3.8                  | 0.67                      | 3.0                  | 0.53                         | 0.26                 | 0.038                     | 0.25                 |
| 1 1/2               |                   | 38 | 5.2                       | 0.92                 | 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                |
| 2 1/2               |                   | 64 | 8.6                       | 1.51                 | 7.1                       | 1.25                 | 0.29                         | 0.042                | 0.26                      | 0.037                |
| 3                   |                   | 76 | 10.2                      | 1.80                 | 8.3                       | 1.46                 | 0.29                         | 0.42                 | 0.27                      | 0.039                |
| 100<br>(1.0 pcf*)   | 1                 | 25 | 3.8                       | 0.67                 | 3.0                       | 0.53                 | 0.26                         | 0.038                | 0.25                      | 0.036                |
|                     | 1 1/2             | 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<br>(1.5 pcf*)   | 1                 | 25 | 4.1                       | 0.72                 | 3.2                       | 0.56                 | 0.24                         | 0.035                | 0.23                      | 0.034                |
|                     | 1 1/2             | 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 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.

\*pcf. is pounds per square foot

| INSTALLATION STRETCH-OUT DIMENSIONS |     |                             |    |        |                                     |     |             |     |                  |     |
|-------------------------------------|-----|-----------------------------|----|--------|-------------------------------------|-----|-------------|-----|------------------|-----|
| Product Label Thickness             |     | Average Installed Thickness |    | perim. | Stretch-Out Dimensions <sup>1</sup> |     |             |     |                  |     |
| in.                                 | mm  | in.                         | mm |        | Round Duct                          |     | Square Duct |     | Rectangular Duct |     |
| 1                                   | 25  | 0.75                        | 19 | P+     | 7.0                                 | 178 | 6.0         | 152 | 5.0              | 127 |
| 1.5                                 | 38  | 1.13                        | 29 | P+     | 9.5                                 | 241 | 8           | 203 | 7                | 178 |
| 2                                   | 51  | 1.50                        | 38 | P+     | 12                                  | 305 | 10          | 254 | 8                | 203 |
| 2.125                               | 54  | 1.59                        | 40 | P+     | 12.6                                | 321 | 10.4        | 270 | 8.4              | 213 |
| 2.5                                 | 64  | 1.875                       | 48 | P+     | 14.5                                | 368 | 12.5        | 318 | 9.5              | 241 |
| 3                                   | 76  | 2.25                        | 57 | P+     | 17                                  | 432 | 14.5        | 368 | 11.5             | 292 |
| 4                                   | 106 | 3.00                        | 76 | P+     | 22.0                                | 559 | 18.5        | 470 | 14.5             | 368 |

<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.

| AVAILABLE SIZES  |         |           |     |        |      |       |          |
|------------------|---------|-----------|-----|--------|------|-------|----------|
| Product Type     | Facing  | Thickness |     | Length |      | Width |          |
|                  |         | in.       | mm  | in.    | m    | in.   | mm       |
| 75<br>(0.75 pcf) | UNFACED | 1         | 25  | 150    | 45.7 | 9-72  | 229-1829 |
|                  |         | 1 1/2     | 38  | 150    | 45.7 |       |          |
|                  |         | 2         | 51  | 75     | 22.9 |       |          |
|                  |         | 2 1/2     | 64  | 75     | 22.9 |       |          |
|                  |         | 3         | 76  | 50     | 15.2 |       |          |
|                  |         | 4         | 102 | 50     | 15.2 |       |          |
|                  | FSK/PSK | 1 1/2     | 38  | 100    | 30.5 | 48    | 1219     |
|                  |         | 2         | 51  | 75     | 22.9 |       |          |
|                  |         | 2 1/8     | 54  | 75     | 22.9 |       |          |
|                  |         | 2 1/2     | 64  | 75     | 22.9 |       |          |
| 100<br>(1.0 pcf) | Unfaced | 1         | 25  | 150    | 45.7 | 9-72  | 229-1829 |
|                  | FSK/PSK | 1         | 25  | 100    | 30.5 | 48    | 1219     |
|                  |         | 1 1/2     | 38  | 100    | 30.5 |       |          |
| 150<br>(1.5 pcf) | FSK/PSK | 1 1/2     | 38  | 75     | 22.9 | 48    | 1219     |
|                  |         | 2         | 51  | 50     | 15.2 |       |          |
|                  |         | 2         | 51  | 50     | 15.2 |       |          |



### CertainTeed Corporation

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