

Application Recommendations

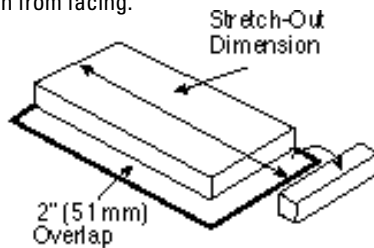
The "R-Value" will vary depending upon how much the insulation is compressed during installation. To obtain the published installed "R-Values," the insulation stretch-out should be determined using the following table.

Duct Wrap Stretch-Outs

| Labeled Thick. (in) | Installed | | | |
|---------------------|---------------------------|----------|----------|-------------|
| | Compressed Thickness (in) | Round | Square | Rectangular |
| 1.0 | 0.75 | P+ 7.0" | P+ 6.0" | P+ 5.0" |
| 1.5 | 1.125 | P+ 9.5" | P+ 8.0" | P+ 7.0" |
| 2.0 | 1.50 | P+ 12.0" | P+ 10.0" | P+ 8.0" |
| 2.3 | 1.75 | P+ 13.0" | P+ 11.0" | P+ 8.5" |
| 3.0 | 2.25 | P+ 17.0" | P+ 14.5" | P+11.5" |

Stretch-outs include 2" (51mm) for overlap. P = Perimeter of duct to be insulated.

Prepare overlap by removing approximately 2" (51 mm) of insulation from facing.



Before applying duct wrap, sheet metal duct shall be clean, dry and tightly sealed at all joints and seams.

Wrap insulation around duct with facing to the outside so the 2" (51 mm) flap completely overlaps facing and insulation at the other end of stretch out. Insulation shall be snugly butted.

Secure seams with outward clinching staples placed approx. 6" (152 mm) on center. If required, seal seam with pressure-sensitive tape designed for use with duct insulation. Insulation on the underside of ducts spanning 24" (610 mm) or greater shall be secured with mechanical fasteners and speed clips spaced approximately 18" (457 mm) on center. Fasteners should be cut off flush after the speed clips are installed, and when required, sealed with the same tape as specified above.

Adjacent sections of duct wrap insulation shall be snugly butted with the circumferential 2" (51 mm) tape flap overlapping and secured as recommended for longitudinal seam. When a vapor seal is required, two coats of vapor retarder mastic reinforced with one layer of 4" (102 mm) wide, open weave glass fabric may be used in lieu of pressure-sensitive tape.

Thermal Conductivity (ASTM C 518)

| Type | k* Compressed Thickness | | k Labeled Thickness | |
|------|-------------------------|--------|---------------------|--------|
| | Btu•in/(hr•ft²•°F) | W/m•°C | Btu•in/(hr•ft²•°F) | W/m•°C |
| 75 | .27 | .039 | .29 | .042 |
| 100 | .25 | .036 | .27 | .039 |
| 150 | .24 | .035 | .25 | .036 |

Conductivity at 75°F (24°C) mean temperature. *Tested with material thickness compressed 25%.

Installed R-Values

| Type | Labeled Thickness | | Installed "R" [†] | | Out of Pkg. "R" | |
|------|-------------------|----|----------------------------|---------|-----------------|---------|
| | in | mm | (hr•ft²•°F)/Btu | m²•°C/W | (hr•ft²•°F)/Btu | m²•°C/W |
| 75 | 1½ | 38 | 4.2 | 0.74 | 5.2 | 0.92 |
| | 2 | 51 | 5.6 | 0.99 | 6.9 | 1.22 |
| | 2.3 | 59 | 6.5 | 1.14 | 8.0 | 1.41 |
| 100 | 3 | 76 | 8.3 | 1.46 | 10.3 | 1.81 |
| | 1½ | 38 | 4.5 | 0.79 | 5.6 | 0.99 |
| 150 | 2 | 51 | 6.0 | 1.06 | 7.4 | 1.30 |
| | 1½ | 38 | 4.7 | 0.83 | 6.0 | 1.06 |
| | 2 | 51 | 6.3 | 1.11 | 8.0 | 1.41 |

[†] Installed R-Value calculated with a material thickness compressed to a maximum of 25% following recommended duct wrap stretch-outs.



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