Duct Insulation R-6.0 - Outdoor

Reflectix® Duct Insulation is an alternative to other types of fibrous insulation products. Ease of handling and quick installation make Reflectix® the first choice when selecting insulation for outdoor round or rectangular ductwork. The product provides an R-6.0 when installed with a 0.75” air gap between the duct and the insulation. There is a choice of three spacer configurations that create the required air space.

Product Description
Reflectix® Outdoor Duct Insulation consists of two outer layers of aluminum foil that reflect 97% or radiant heat. The outside layer of foil is made of heavier foil. Each layer of foil is bonded to a tough layer of polyethylene for strength. Two inner layers of insulating bubbles resist conductive heat flow while a center layer of polyethylene gives Reflectix® high reliability and strength.

Benefits
- Non-toxic / non-carcinogenic
- Fiber-free
- Lowers heating and cooling costs
- Reflects 97% radiant heat
- Costs less to install
- Lightweight and clean
- Does not promote nesting of birds, insects or rodents
- Not affected by moisture or humidity
- Resists growth of fungi, mold and mildew
- Does not require protective clothing or respirators to install
- ISO 9001:2015 Certified Manufacturing Location

Applications
Install Reflectix® Outdoor Duct Insulation on the exterior of rectangular or round sheet metal ducts and spaces, or surfaces where temperature and condensation must be controlled.

Reflectix® Duct Insulation Part Numbers and Stock Sizes
- CDW48050 (48” x 50’)

Technical Data:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature Range:</td>
<td>250°F Operational</td>
</tr>
<tr>
<td>Nominal Thickness:</td>
<td>5/16 inch (.312)</td>
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<tr>
<td>Weight:</td>
<td>1.25 oz./sq. ft.</td>
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<tr>
<td>Flame Spread Index (ASTM E 84):</td>
<td>Less than 25</td>
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<tr>
<td>Smoke Developed Index (ASTM E 84):</td>
<td>Less than 50</td>
</tr>
<tr>
<td>Fire Rating:</td>
<td>Class A/Class 1</td>
</tr>
<tr>
<td>Linear Shrinkage:</td>
<td>None</td>
</tr>
<tr>
<td>Reflectance (IR):</td>
<td>97%</td>
</tr>
<tr>
<td>Water Vapor Transmission (ASTM E 96):</td>
<td>0.02</td>
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<tr>
<td>Puncture Resistance:</td>
<td>60 lb./in.</td>
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<tr>
<td>Mold and Mildew:</td>
<td>No Growth</td>
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<tr>
<td>Emittance:</td>
<td>0.03</td>
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<tr>
<td>Tensile Strength:</td>
<td>3.7 N/mm</td>
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<tr>
<td>Pliability:</td>
<td>No Cracking</td>
</tr>
<tr>
<td>Hot Surface Performance:</td>
<td>Passed</td>
</tr>
</tbody>
</table>

Note: Not for use in direct contact on surface temperatures that are 180°F or greater.
TESTING & CERTIFICATIONS

- Thermal Performance ASTM C518
- Hot Surface Performance ASTM C411
- Flame Spread and Smoke Density ASTM E84
- Fungus Resistance Mil-Std 810B Method 508
- Pliability Test ASTM C1224
- Water Vapor Transmission ASTM E96
- Tensile Strength ASTM C751
- Emittance Testing ASTM C1371
- State of California
- State of California Licensed Insulation Manufacturer
- State of Minnesota: Filed with Minnesota Insulation Standards Program
- R&D Services Emittance Testing
- Warnock Hersey Professional Services, LTD: Physical Properties Sheet Width, Length, Pliability, Water Vapor Permanence and Aged Water Vapor Permanence Report # 1/92
- Warnock Hersey Professional Services, LTD: Water Vapor Transmission Test ASTM-E96 (Dessicant Method) Report # 1/91

MANUFACTURER’S SUGGESTED INSTALLATION INSTRUCTIONS

THERE ARE 3 OPTIONS - METHODS 1 & 2 ARE APPLICABLE TO EITHER ROUND OR RECTANGULAR DUCTS: NOTE:
Installation instructions and illustrated drawings are recommendations only, while proper local construction methods are the responsibility of the installer.

1. SPACER PERPENDICULAR TO DUCT DIRECTION METHOD

SPACER: HVSPW02025 - REFLECTIX® SPIRAL PIPE WRAP 2”x 25’

- Refer to the top two diagrams above.
- Make sure all sheet metal joints, seams and penetrations are sealed.
- Double wrap and secure spacer material to the duct at 24” to 36” intervals. Use Butyl Foil Tape to fasten the spacer in place.
- Verify the circumference of the duct at the mid-point of a spacer strip.
- Cut the Reflectix® product to this length plus 1”.
- Wrap the product around the duct and securely tape the linear and circumference seams (overlapping 1” - 2”) with Butyl Foil Tape (goal is an air-tight, snug seam seal). Note: The heavier “reflective layer” side of the product should face the environmental elements.
- Do not leave any exposed duct or space where air can enter between the duct and the Reflectix®.

2. SPACER WRAPPED IN CANDY CANE FASHION METHOD

SPACER: HVSPW02025 - REFLECTIX® SPIRAL PIPE WRAP 2”x 25’

- Refer to the third and fourth (from the top) diagrams above.
- Make sure all sheet metal joints, seams and penetrations are sealed.
- Double wrap and secure spacer material to the duct in a candy cane fashion. First, proceed down the duct in one direction, then reverse direction and crisscross (overlap) the spacer in the other direction. Use Butyl Foil Tape to fasten the spacer in place.
- Verify the circumference of the duct with the spacer strips in place.
- Cut the Reflectix® product to this length plus 1”.
- Wrap the product around the duct and securely tape the linear and circumference seams (overlapping 1”- 2”) with Butyl Foil Tape (goal is an air-tight, snug seam seal). Note: The heavier “reflective layer” side of the product should face the environmental elements.
- Do not leave any exposed duct or space where air can enter between the duct and the Reflectix®.

3. HV SPACERS AFFIXED TO CORNERS METHOD (RECTANGULAR DUCTS ONLY)

SPACER: HVSPACER - REFLECTIX® HARD PLASTIC CORNER SPACER

- Refer to the lower two diagrams above.
• Make sure all sheet metal joints, seams and penetrations are sealed.
• Make sure the duct is free from dust and dirt by wiping it down with a shop rag.
• Install the HV Spacers to all 4 corners of the duct.
• Place the spacers every 24”.
• Verify the circumference of the duct over the top of the spacers.
• Cut the Reflectix® to this length plus 1”.
• Wrap the product over the spacers. Note: The heavier “reflective layer” side of the product should face the environmental elements.
• Fasten the Reflectix® by either taping the seam with Butyl Foil Tape, or plier stapling the two edges together (goal is an air-tight, snug seam seal).
• If the duct is supported with saddle clamps, make sure to install a spacer on the two bottom edges of the duct directly between the clamp and the duct.
• If the clamps are installed around the duct (such as plumbers tape), make sure that the seam is taped to prevent air movement.

PLEASE NOTE REGARDING HANGERS:
Strap Hanger: Wrap Reflectix® with the seam at the hanger. Tape seam tightly around hanger.
Saddle Hanger: Make sure that there is a spacer below the hanger, between the insulation and the duct, to prevent the insulation from touching the duct.

NOTE: Not to be used as duct liner.