



### **Features** AT A GLANCE:

Reflectix® Duct Insulation may be installed by wrapping rectangular or round ductwork in HVAC applications

> **Heating costs can** be greatly reduced

Eliminate unnecessary heat loss/gain and air leakage

Helps to ensure consistent temperatures

## **WAREHOUSE LOCATIONS:**

Markleville, IN -----

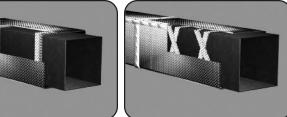
Phoenix, AZ

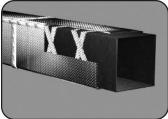
-----Greenville, SC -----

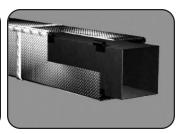
Needham, MA -----

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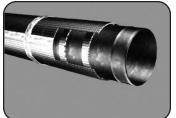
### **REFLECTIX®**







SUBMITTAL SHEET







# **DUCT INSULATION R-8.0**

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 round or rectangular ductwork in HVAC systems. The product provides an R-8.0 when installed with a 0.75" air gap between the duct and the insulation.

### PRODUCT DESCRIPTION

The Reflectix® R-8.0 Duct Insulation is 1" thick and consists of an outer reflective surface, two layers of big bubbles in the center, and a second outer reflective surface. The product has printed code certification that runs the length of the roll. The printed information includes R-value, ASTM numbers, manufacturer's name and testing.

#### Technical Data: 250° Operational **Temperature Range: Nominal Thickness:** 1 inch 1.25 oz./sq. ft. Weight: Flame Spread Index (ASTM E 84): Less than 25 Smoke Developed Index (ASTM E 84): Less than 50 Class A/Class 1 Fire Rating: Linear Shrinkage: None Reflectance (IR): 96% Water Vapor Transmission (ASTM E 96): 0.02 60 lb./in. **Puncture Resistance:** Mold and Mildew: No Growth **Emittance:** 0.04 **Tensile Strength:** 3.7 N/mm **Pliability:** No Cracking **Hot Surface Performance:** Passed

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

### **APPLICATIONS**

Insulate external round and rectangular heating and air-conditioned duct work.

#### APPROVED USAGE

Residential, Commercial, Industrial and Institutional HVAC Systems

#### BENEFITS

- Itch and fiber free
- Inhibits condensation
- Non-toxic/non-carcinogenic
- Lightweight and clean
- Energy efficient
- Reduce heating/cooling cost
- Reflects 96% radiant heat
- Costs less to install

- Requires less space than fiberglass to achieve R-8 (with 3/4" air space)
- Class A/Class 1 Fire Rated
- No nesting characteristics for birds/insects/rodents
- · Resists growth of fungi, mold and mildew
- No need for protective garments or respirators when installing
- Not affected by moisture/humidity
- Reduces heat loss or gain in a duct system
- ISO 9001:2000 certified manufacturing location

REFLECTIX® DUCT INSULATION PART NUMBERS AND STOCK SIZES HVBB48075 (48"x 75')















### **TESTING & CERTIFICATIONS**

- Thermal Performance ASTM C518
- Thermal Conductivity and Thermal Resistance of Blanket ASTM C335
- Hot Surface Performance ASTM C411
- Heat Transfer of Air-Handling Ducts with Reflectix®
- Flame Spread and Smoke Density ASTM E84
- Fungus Resistance Mil-Std 810B Method 508
- Pliability Test
- Sound Absorption Test ASTM C423-90a and ASTM E795-83
- Sound Transmission Loss ASTM E90-90 and ASTM E413-87
- Water Vapor Transmission ASTM E96
- Tensile Strength
- Emittance Testing
- NVLAP Approved Lab Test: Adhesive Bleeding per ICBO Evaluation Service Report # LA 73577
- NVLAP Approved Lab Test: Flame Spread Classification/Smoke Density Developed (Taped Joint Detail) Test Report # LA 62595-1
- NVLAP Approved Lab Test: Flame Spread Classification/Smoke Density Developed (Unslit) Test Report # LA62517-2

- NVLAP Approved Lab Test: Flammability of Interior Materials Report # LA72357-2
- NVLAP Approved Lab Test: Fungus Resistance MIL-STD-810B Method 508 Report # LA 73598
- Southern Building Codes Congress International (SBCCI) Report # PST & ESI 9375
- State of California
- State of California Licensed Insulation Manufacturer
- State of Minnesota: Filed with Minnesota Insulation Standards Program
- State of Wisconsin: Wisconsin Material Approval, Safety and Buildings Division Approval # 920088-1
- 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:

<u>Note</u>: 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 on page 2. 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 UL 181 Acrylic Adhesive 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 UL 181 Acrylic Adhesive Foil
  Tape (goal is an air-tight, snug seam seal). 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 on page 2. 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 UL 181 Acrylic Adhesive Foil Tape to fasten the spacer in place.
- Verify the circumference of the duct with the spacer strips in place. Cut the Reflectix<sup>®</sup> product to this length plus 1".
- Wrap the product around the duct and securely tape the linear and circumference seams (overlapping 1"- 2") with UL 181 Acrylic Adhesive Foil Tape (goal is an air-tight, snug seam seal). 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 on page 2. 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 36" apart. Verify the circumference of the duct over the top of the spacers.
- Cut the Reflectix® product to this length plus 1". Wrap the Reflectix® over the spacers.
- Fasten the Reflectix<sup>®</sup> by either taping the seam with UL 181 Acrylic Adhesive 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 ground 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.