**R-8.0** 





## **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

-----

**Reflectix**, Inc. #1 School St. (PO Box 108) Markleville, IN 46056 (800) 879-3645 Fax: (765) 533-2327 www.reflectixinc.com

0



#### **BUBBLE DUCT INSULATION R-8.0** BIG

**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, and R-6.0 when installed direct to the duct without a spacer.

#### **PRODUCT DESCRIPTION**

The Reflectix<sup>®</sup> R-8.0 Duct Insulation is a nominal 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:	
Temperature Range:	-60° to +180°
Nominal Thickness:	1 inch
Weight:	1.25 oz./sq. ft.
Flame Spread Index (ASTM E 84):	Less than 25
Smoke Developed Index (ASTM E 84):	Less than 50
Fire Rating:	Class A/Class 1
Linear Shrinkage:	None
Reflectance (IR):	<b>94%</b> +
Water Vapor Transmission (ASTM E 96):	0.02
Puncture Resistance:	60 lb./in.
Mold and Mildew:	No Growth
Emittance:	Less than 0.06
Tensile Strength:	3.7 N/mm
Pliability:	No Cracking
Hot Surface Performance:	250° 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
- Lowers heating and cooling costs year-round
- Costs less to install

- Requires less space than fiberglass to achieve R-8 (with 3/4" air space)
- Class A / Class 1 Fire Rating
- Does not promote nesting of birds, insects or rodents
- Resists growth of fungi, mold and mildew
- Does not require protective clothing or respirators to install ٠
- Not affected by moisture or humidity
- Reflects 94% + of radiant energy
  Reduces heat loss or gain in a duct system
  - ISO 9001:2008 certified manufacturing location

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

# **TESTING & CERTIFICATIONS**

- Thermal Performance ASTM C335
- Thermal Conductivity and Thermal Resistance of Blanket 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
- Sound Absorption Test ASTM C423 and ASTM E795
- Sound Transmission Loss ASTM E90 and ASTM E413
- Water Vapor Transmission ASTM E96
- Tensile Strength ASTM D751
- Emittance Testing ASTM C1371
- Bleeding and Delamination ASTM C1668
- Intertek: Test for Surface Burning Characteristics of Building Materials ASTM E84-10b (Taped Joint Detail) Test Report # 100402776SAT-001D Rev 1

- Intertek: Test for Surface Burning Characteristics of Building Materials ASTM E84-10 (Unslit) Test Report # 100054110SAT-007G Rev 1
- R&D Services: Resistance to the Growth of Fungi ASTM C1338-00 Test Report # RD10510
- State of California
- State of California Licensed Insulation Manufacturer
- State of Minnesota: Filed with Minnesota Insulation Standards Program
- R&D Services Emittance Testing
- R&D Services: Physical Properties Sheet Width, Length, Pliability, Water Vapor Permanence and Aged Water Vapor Permanence
- R&D Services: Water Vapor Transmission Test ASTM-E96 (Dessicant Method)

# **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 (2) left hand diagrams on page 1. 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 a UL 181 approved 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 a UL 181 approved 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<sup>®</sup>.

## 2. SPACER WRAPPED IN CANDY CANE FASHION METHOD

#### SPACER: HVSPW02025 - REFLECTIX® SPIRAL PIPE WRAP 2"x 25'

- Refer to the middle two diagrams on page 1. 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 a UL 181 approved 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 a UL 181 approved 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<sup>®</sup>.

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

## SPACER: HVSPACER - REFLECTIX® HARD PLASTIC CORNER SPACER

- Refer to the (2) right hand diagrams on page 1. 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 a UL 181 approved 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 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.



F18 Revised 0816