

# **Duct Insulation R-4.2**

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-4.2 when installed directly to the duct.

### PRODUCT DESCRIPTION

Reflectix® Duct Insulation consists of two layers of highly reflective film (96% reflectivity) that are bonded to two tough layers of polyethylene. Two inner layers of insulating bubbles resist conductive heat flow while a center layer of polyethylene gives Reflectix® high reliability and strength. The product has a tape running the length of the roll for easy identification by code officials. The tape identifies the manufacturer and ASTM Testing: Reflectix® Duct Insulation · ASTM E84 · Class A / Class 1 · ASTM C411 Passed

# **BENEFITS**

- · Non-toxic / non-carcinogenic
- · Fiber-free
- · Resists growth of fungi, mold, mildew
- · Costs less to install
- · Lightweight and clean

- Not affected by moisture or humidity
- · Does not promote nesting of birds, insects or rodents
- · Does not require protective clothing or respirators to install
- · Lowers heating and cooling costs year-round
- · ISO 9001:2015 Certified Manufacturing Location

# round ductwork in HVAC applications ----Heating costs can be greatly reduced

**Features** 

AT A GI ANCE:

Reflectix® Duct Insulation may be

installed by wrapping rectangular or

Eliminate unnecessary heat loss/gain and air leakage

Helps to ensure consistent temperatures

# WAREHOUSE LOCATIONS:

Markleville, IN · Phoenix, AZ Greenville, SC · Needham, MA

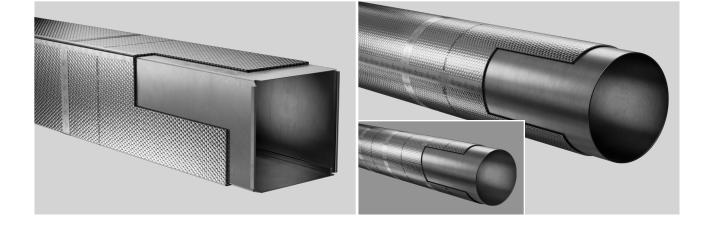
Reflectix, Inc. #1 School St. (PO Box 108) Markleville, IN 46056 (800) 879-3645 Fax: (765) 533-2327 www.reflectixinc.com

# REFLECTIX® DUCT INSULATION PART NUMBERS AND STOCK SIZES

· HVBP12050 (12"x 50') HVBP12100 (12"x 100') · HVBP12125 (12"x 125') · HVBP16125 (16"x 125') HVBP16050 (16"x 50") HVBP16100 (16"x 100') · HVBP24050 (24"x 50') · HVBP24100 (24"x 100') · HVBP24125 (24"x 125') HVBP36100 (36"x 100') · HVBP36125 (36"x 125') · HVBP36050 (36"x 50') HVBP48050 (48"x 50') HVBP48100 (48"x 100') · HVBP48125 (48"x 125') HVBP60050 (60"x 50") HVBP60100 (60"x 100') HVBP60125 (60"x 125")

### **APPLICATIONS**

Rectangular and round return and supply ductwork in HVAC systems



### DOUBLE REFLECTIVE TECHNICAL DATA

Temperature Range:	-60° to 180° F
Nominal Thickness:	5/16 inch (.312)
Weight:	0.771 oz./sq. ft.
Flame Spread Index (ASTM E 84):	Less than 25
Smoke Developed Index (ASTM E 84):	Less than 50
Mounting Method (ASTM E 2599)	_
Fire Rating:	Class A/Class 1
Linear Shrinkage:	None
Reflectance (IR):	96%
Water Vapor Transmission (ASTM E 96)	: 0.02
Puncture Resistance:	60 lb./in.
Mold and Mildew:	No Growth
Emittance:	0.04
Tensile Strength:	3.7 N/mm
Pliability:	No Cracking
Hot Surface Performance:	Passed (250° F)

Note: Not for use in direct contact on surface temperatures that are  $180^{\circ}$  F or greater.

### TESTING & CERTIFICATIONS

- · Thermal Performance ASTM C335
- 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
- · Bleeding and Delamination ASTM C1668
- Intertek: Surface Burning Characteristics of Building Materials ASTM E84-08 (Taped Joint Detail) Test Report # 3166908SAT-012
- Intertek: Surface Burning Characteristics of Building Materials ASTM E84-08 (Unslit) Test Report # 3166908SAT-011
- R&D Services: Resistance to the Growth of Fungi ASTM C1338-00 Test Report # RD072713FR
- · State of California
- · State of California Licensed Insulation Manufacturer

- State of Minnesota: Filed with Minnesota Insulation Standards Program
- · R&D Services Emittance Testing ASTM C1371
- 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

NOTE: Installation instructions and illustrated drawings are recommendations only, while proper local construction methods are the responsibility of the installer.

- 1. STANDARD WRAP (CIRCUMFERENCE)
- ROUND OR RECTANGULAR DUCTS
- · Make sure all metal joints, seams and penetrations are sealed.
- · Verify circumference of the duct.
- · 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 UL181 Tape with Acrylic Adhesive (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. SPIRAL WRAP DIRECTLY AGAINST DUCT
- ROUND DUCTS
- · Make sure all metal joints, seams and penetrations are sealed.
- Spiral wrap Reflectix<sup>®</sup> around the duct, overlapping 2" as you proceed.
- If necessary, trim width of product to accommodate bends or diameter changes in the duct.
- Securely tape seams with a UL181 Tape with Acrylic Adhesive (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®.

### PLEASE NOTE REGARDING HANGERS:

<u>Strap Hanger</u>: Wrap Reflectix<sup>®</sup> with the seam at the hanger. Tape seam tightly around hanger.

NOTE: Not to be used as duct liner.

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# Features AT A GI ANCF:

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:

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# **Duct Insulation R-6.0**

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-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® Duct Insulation consists of two layers of highly reflective film (96% reflectivity) that are bonded to two tough layers of polyethylene. Two inner layers of insulating bubbles resist conductive heat flow while a center layer of polyethylene gives Reflectix® high reliability and strength. The product has a tape running the length of the roll for easy identification by code officials. The tape identifies the manufacturer and ASTM Testing: Reflectix® Duct Insulation · ASTM E84 · Class A / Class 1 · ASTM C411 Passed

#### BENEFITS

- · Non-toxic / non-carcinogenic
- · Fiber-free
- · Lowers heating / cooling costs yearround
- · Reflects 96% radiant heat
- · Costs less to install

- · Lightweight and clean
- · Not affected by moisture / humidity
- · Does not promote nesting of insects or rodents
- · Resists growth of fungi, mold and mildew
- · Does not require protective clothing or respirators to install
- · ISO 9001:2015 Certified Manufacturing Location

### REFLECTIX® DUCT INSULATION PART NUMBERS AND STOCK SIZES

- · HVBP12050 (12"x 50')
- · HVBP12100 (12"x 100')
- · HVBP12125 (12"x 125')

- · HVBP16050 (16"x 50')
- · HVBP16100 (16"x 100')
- · HVBP16125 (16"x 125')

- · HVBP24050 (24"x 50')
- · HVBP24100 (24"x 100')
- · HVBP24125 (24"x 125')

- 1115121050 (21 7.50
- 11/DD 21100 (21 x 100 )

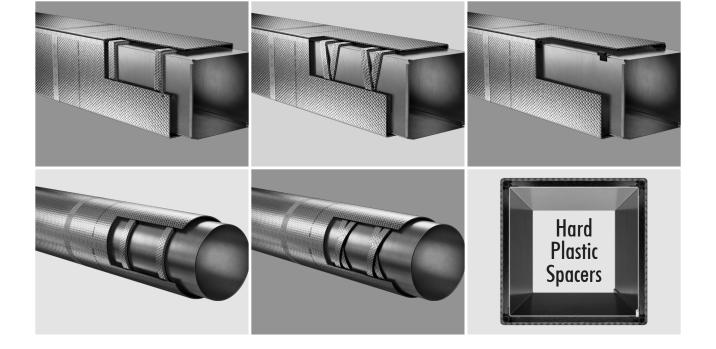
- · HVBP36050 (36"x 50')
- · HVBP36100 (36"x 100')
- · HVBP36125 (36"x 125')

- · HVBP48050 (48"x 50')
- · HVBP48100 (48"x 100')
- · HVBP48125 (48"x 125')

- · HVBP60050 (60"x 50')
- · HVBP60100 (60"x 100')
- · HVBP60125 (60"x 125')

### **APPLICATIONS**

Rectangular and Round return and supply ductwork in HVAC systems



#### DOUBLE REFLECTIVE TECHNICAL DATA

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Smoke Developed Index (ASTM E 84):	Less than 50
Mounting Method (ASTM E 2599)	
Fire Rating:	Class A/Class 1
Linear Shrinkage:	None
Reflectance (IR):	96%
Water Vapor Transmission (ASTM E 96): 0.02	
Puncture Resistance:	60 lb./in.
Mold and Mildew:	No Growth
Emittance:	0.04
Tensile Strength:	3.7 N/mm
Pliability:	No Cracking
Hot Surface Performance:	Passed (250° F)

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

### TESTING & CERTIFICATIONS

- Thermal Performance ASTM C335
- · Hot Surface Performance ASTM C411
- · Flame Spread and Smoke Density ASTM E84
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- · State of California
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- 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 two left hand 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 a UL181 Tape with Acrylic Adhesive 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 UL181 Tape with Acrylic Adhesive (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 two center 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 a UL181 Tape with Acrylic Adhesive 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 UL181 Tape with Acrylic Adhesive (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 two right hand 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 24".
- · 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® by either taping the seam with a UL181 Tape with Acrylic Adhesive, or plier stapling the two edges together (goal is an airtight, 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.