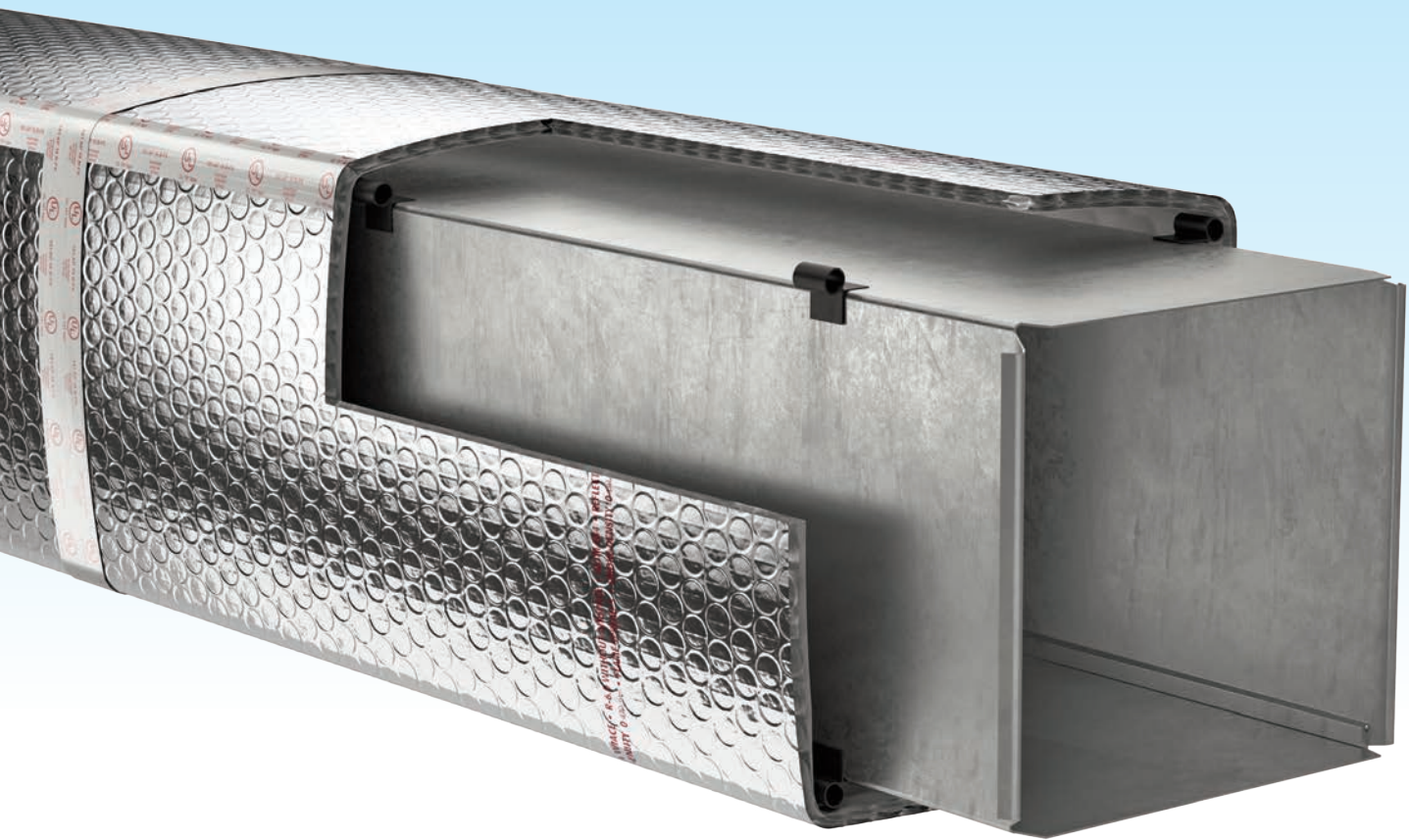


Reflectix[®] Insulation

Solutions

For Today's HVACR Professional



Providing Technologically Advanced Products
and Accurate Information for the HVACR Professional

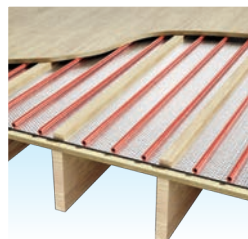
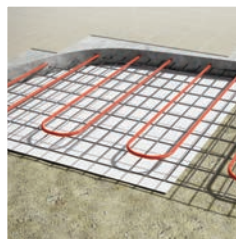
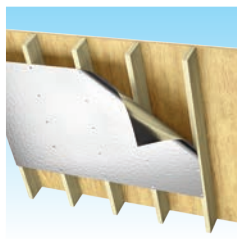
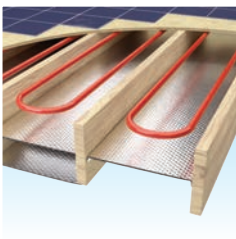
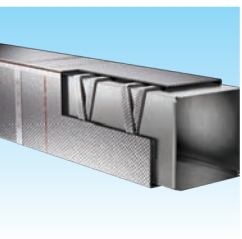


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Reflectix is the Industry Leader!

We manufacture the highest quality, most extensively tested, readily available, reflective based insulations and radiant barriers in the world! With Reflectix® products, there is no middleman. We are the manufacturer and we operate with an ISO 9001:2015 Certified Quality System. Our testing and validation requirements are second to none. Distribution of our products is worldwide through Do-It-Yourself Retailers, Contractor Sales Groups and Industrial/Commercial Building Product Suppliers.

What are the Advantages of Reflectix® Products?

Ease of installation and diversity of applications are two major advantages. Reflectix® Insulations and Radiant Barriers are very easy to handle and install. All that is required are simple hand tools and access to the installation area. Reflectix® products are some of the most diverse, energy conserving building materials available, with over forty verified applications for residences, industrial/commercial buildings and agricultural structures.

What About R-values?

The “R” in R-value means the resistance to heat flow. For a reflective insulation to provide the most effective thermal performance (R-value), it must be installed with air spaces on (one or both of) the reflective side(s) of the product. The thermal value of the insulation system will vary depending on the size of the air spaces and the direction of heat flow. This is why with one basic product, we can achieve several different R-values. The system R-values provide you with a more accurate performance report of our product. You can feel confident specifying Reflectix® on your next job, knowing that we’ve left nothing to question.

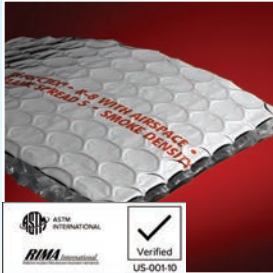


Reflectix, Inc.

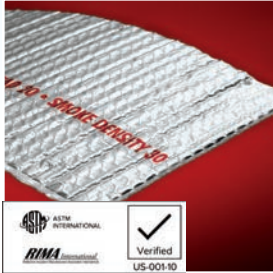
#1 School Street (P.O. Box 108)
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(765) 533-4332
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www.reflectixinc.com



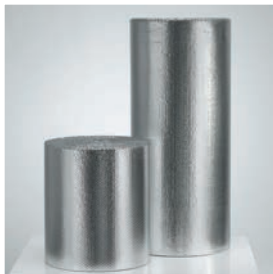
Reflectix® HVAC/R Duct Insulation Products



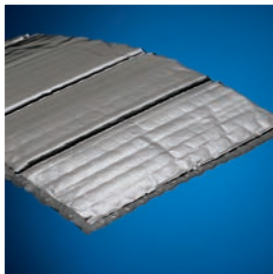
Big Bubble Reflective Duct Insulation



Standard Bubble Reflective Duct Insulation



100 Linear Foot Rolls



All-Weather Outdoor Duct Insulation



2" Bubble Spacer

Big Bubble Reflective Duct Insulation

Innovative New Product: ✓ Product Ordering SKU: "HVBB48075"

- R-8.0 with a 3/4" air space around the duct
- R-6.0 when wrapped loosely around the duct
- Requires less space than fiberglass to achieve an R-8.0

Product Description:

- A reflective duct insulation with two outer reflective surfaces enclosing a 1" double big bubble layer
- Product is available in a 48 inch x 75 foot roll
- Printed code certification runs the length of the product

Standard Bubble Reflective Duct Insulation

Our Most Versatile Product: ✓ Product Ordering Prefix: "HVBP"

- R-6.0 with a 3/4" air space around the duct
- R-4.2 when wrapped loosely around the duct
- Easy to handle and quick to install

Product Description:

- A reflective duct insulation consisting of two outer reflective surfaces enclosing two high strength bubble layers
- Product is available in 12, 16, 24, 36, 48 & 60 inch widths by 50, 100 & 125 foot lengths
- Printed code certification runs the length of the product

All-Weather Outdoor Duct Insulation

Heavy Duty for Harsher Environments: ✓ Product Ordering SKU: "CDW48050"

- R-6.0, R-5.6 and R-4.2
- Use for outdoor, rooftop or exposed duct applications
- R-8.0 with (2) 3/4" air spaces around the duct

Product Description:

- Consists of two outer reflective surfaces enclosing two high strength bubble layers (outer facing reflective layer is 10x thicker)
- Product is offered in a 48 inch x 50 foot roll

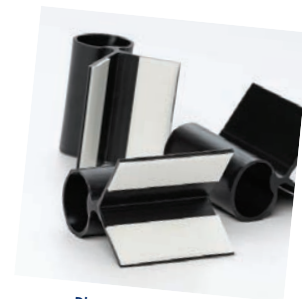
Spacers for Duct Products

✓ Product Ordering SKU: "HVSP02025"

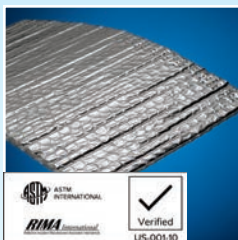
- Two inch wide Standard Bubble product used to create air spaces
- Available in a 2 inch x 25 foot roll

✓ Product Ordering SKU: "HVSPACER"

- Hard plastic corner spacers for use on rectangle ducts to create the required air spaces



Plastic Corner Spacers



Staple Tab Bubble Insulation



100 Linear Foot Rolls



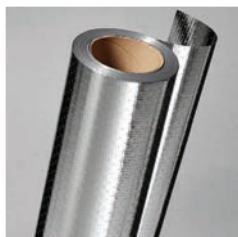
Concrete Slab Insulation



Reflectix RAP "HVRDBW"



Reflectix RAP "HVRC"



Radiant Barrier

Staple Tab Bubble Reflective Insulation

Designed for Wall and Floor Systems:

- ✓ **Product Ordering Prefix:** "HVST"
- Staple Tab provides ease of installation on 16" and 24" on-center applications
- Versatile and easy to install

Product Description:

- A reflective insulation consisting of two outer reflective surfaces enclosing two high strength bubble layers and staple tab edges
- Product is available in 16, 18, 24, & 48 inch widths by 50, 100 & 125 foot lengths



Concrete Slab Insulation

- ✓ **Product Ordering SKU:** "DBWEF48125"

- Product consists of two outer white poly sheets that encapsulate a foil and two high strength bubble layers
- Available in a 48 inch x 125 foot roll

Return Air Duct Panning - 2 Product Options (Bubble or Corrugated) Takes the Place of Metal Return Air Ducts:

- ✓ **Product Ordering Prefix:** "HVRDBW" (Bubble)
- ✓ **Product Ordering Prefix:** "HVRC" (Corrugated) Sheets
- For installation between floor joists, walls or ceiling cavities and open trusses

Product Description:

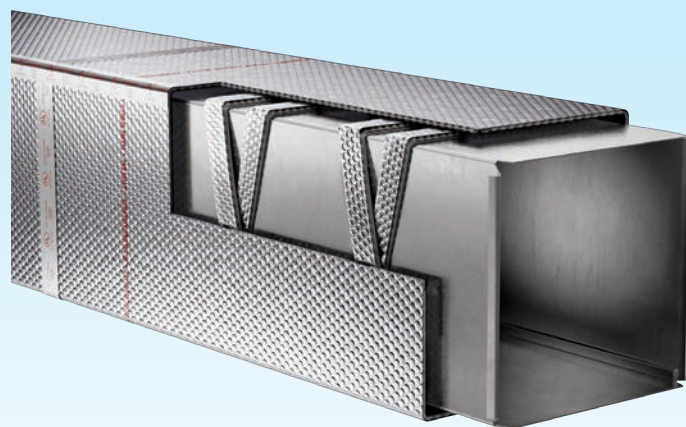
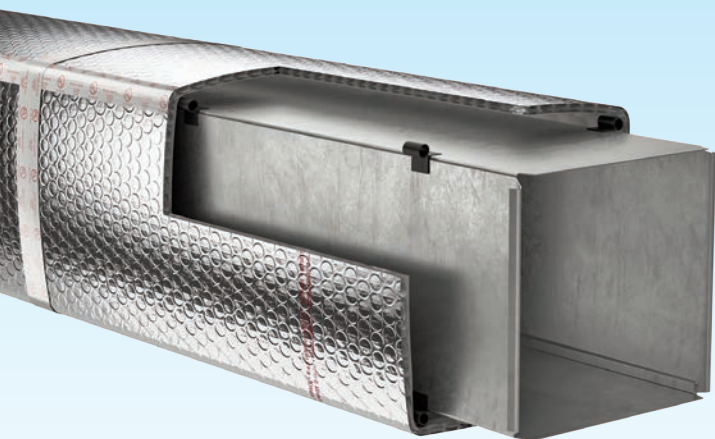
- The Reflectix RAP (Bubble) "HVRDBW" product has an outer "reflective surface" bonded to two high strength bubble layers - Product is available in 16", 24" and 32" widths by 25' length
- The Reflectix RAP "HVRC" sheets are reflective on both sides with a corrugated center
The HVRC is available in 16", 19.5", 24" and 32" widths by 4' sheets. Note the 32" is 36" in length

Pipe Wrap - Spiral

- ✓ **Product Ordering SKU:** "HVSPW0402512", "HVSPW0602508" & "HVSPW0902505"
- R-2.0
- Made from our Standard Bubble product, and is available in 4, 6 and 9 inch widths by 25 feet

Radiant Barrier

- ✓ **Product Ordering SKU:** "RB4812550"
- Constructed of two outer 96% reflective films bonded together enclosing a heavy polyethylene fabric
- Product is offered in a 48 inch x 125 foot roll



Duct Insulation - Big Bubble

R-8.0

Benefits:

- Requires less space than fiberglass to achieve R-8.0 (with 3/4" air space)
- Costs less to install
- Itch and fiber free
- Class A/Class 1 Fire Rated
- Inhibits condensation

Recommended Products:

Big Bubble Duct Insulation, Product Ordering Code "HVBB48075" (48" x 75')

Three Installation Options – Depicted on Page 5 All Require a Spacer:

1. Spacer Perpendicular to Duct Direction Spacer:

HVSPW02025 (2" x 25' Spiral Pipe Wrap)

- Double wrap and secure spacer to the duct at 24" to 36" intervals.
- Verify the circumference of the duct at the midpoint of a spacer strip. Cut the insulation to this length plus 2".
- Wrap the product around the duct overlapping the seams 1" to 2". Securely tape the linear and circumference seams with UL181 Tape with Acrylic Adhesive.

2. Spacer Wrapped in Candy Cane Fashion Crisscrossed Spacer:

HVSPW02025 (2" x 25' Spiral Pipe Wrap)

- Double wrap the spacer in a candy cane crisscross fashion.
- To wrap product, refer to bullets 2 & 3 in Option #1 (above).

3. HV Spacers Affixed to Corners (as depicted above - rectangular ducts) - Spacer: HVSPACER

- Insure the duct is free of dust and dirt. Affix the HV Spacers to all 4 corners of the duct at 36" intervals. Verify the circumference of the duct over the top of the spacers.
- To wrap product, refer to bullets 2 & 3 in Option #1 (above).

Note: For all applications, do not leave exposed duct or space where air can enter between the duct and the Reflectix®.

Note: Not to be used as duct liner.

Duct Insulation Standard Bubble

R-6.0, R-5.6 and R-4.2

Benefits:

- Costs less to install
- Itch and fiber free
- Class A/Class 1 Fire Rated
- Does not promote the growth of mold or fungi

Recommended Products:

Bubble Duct Insulation, Product Ordering Prefix: "HVBP"

R-6.0 Refer to "Duct Insulation - Big Bubble"

- Install the product per instructions provided by one of the three installation options.

R-5.6 Refer to "Duct Insulation - Big Bubble"

- Install the product per instructions provided by either Installation Method #1 or Installation Method #2. Exception: Only one layer of spacer strip is required to net the R-5.6 benefit.

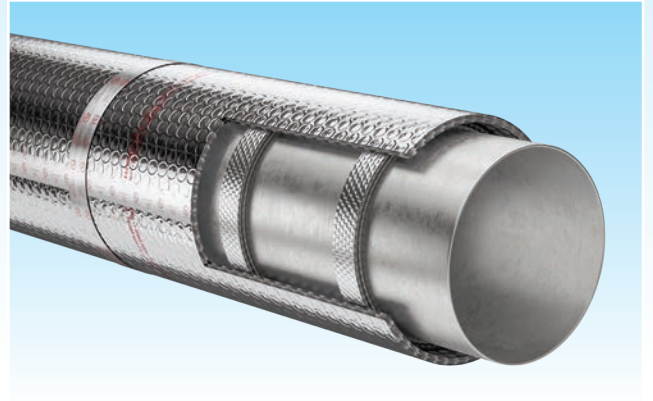
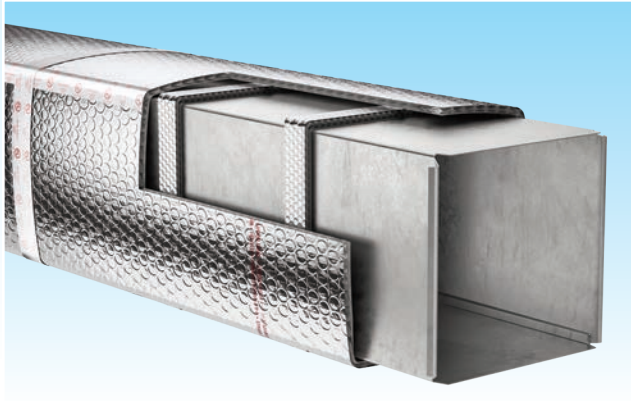
R-4.2

- Verify the circumference of the duct. Cut the insulation to this length plus 2". Wrap the product around the duct overlapping the seams 1" to 2". Securely tape the linear and circumference seams with UL181 Tape with Acrylic Adhesive.

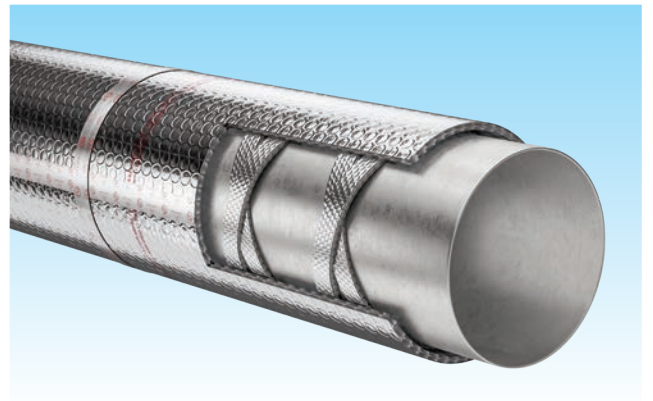
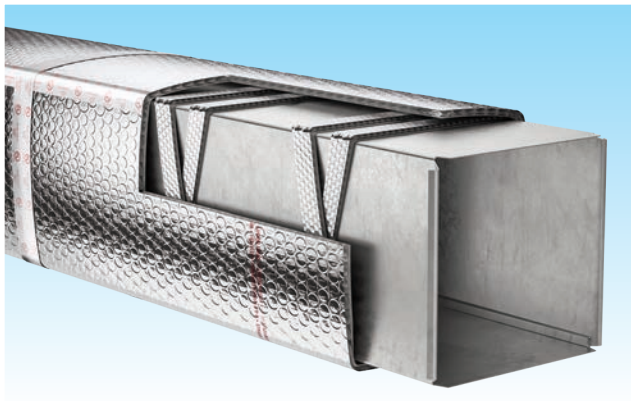
Note: For all applications, do not leave exposed duct or space where air can enter between the duct and the Reflectix®.

Note: Not to be used as duct liner.

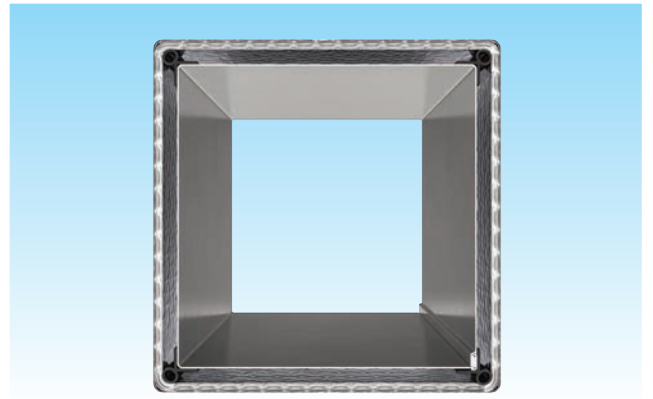
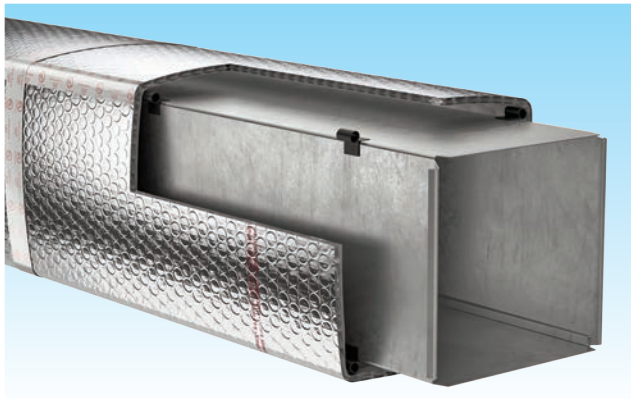
Spacer Options for the R-8.0 Big Bubble and the R-6.0 Standard Bubble



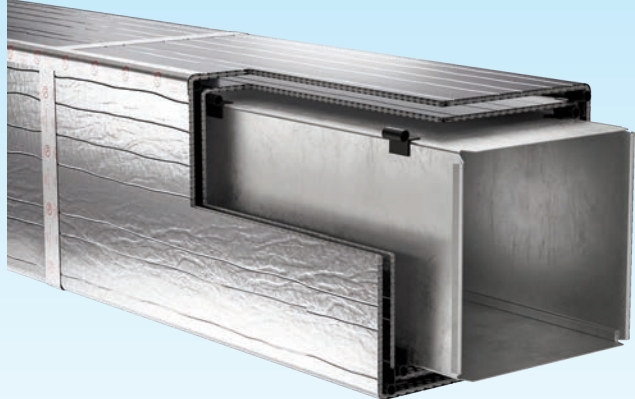
2" Spacer Perpendicular to Duct (Square and Round Ducts)



2" Spacer Candy Cane Crisscross (Square and Round Ducts)



Corner Spacers / Cross Section (Square and Round Ducts)



Duct Insulation - Outdoor

R-8.0, R-6.0, R-5.6 and R-4.2

Benefits:

- Outside layer of foil is a heavier gauge material designed to better weather the elements
- Fiber free and costs less to install
- Not affected by moisture or humidity

Recommended Products:

Duct Insulation Outdoor, Product Ordering Code "CDW48050"

Installation Instructions:

- Refer to page 4 (right column), "Duct Insulation - Standard Bubble"
- R-8.0 - an option with (2) 3/4" air spaces around the duct

Note: Not to be used as duct liner.

Pipe Wrap

R-2.0

Benefits:

- Easy to handle and costs less to install
- Reduces condensation on cold pipes
- Does not compress, collapse or disintegrate

Recommended Products:

Spiral Pipe Wrap, Product Ordering Prefix "SPW"

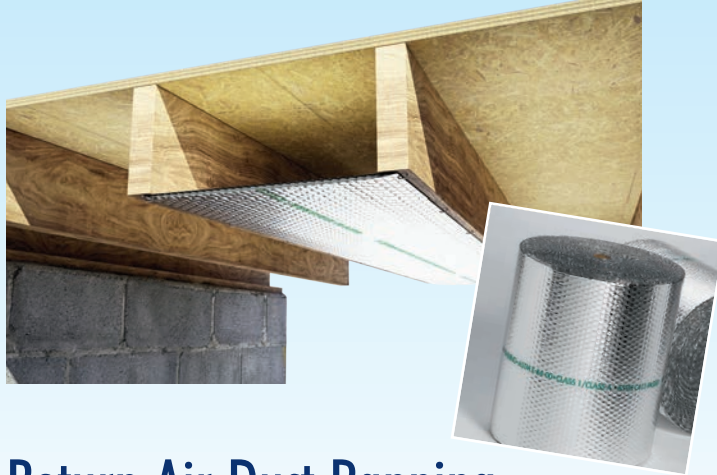
Spiral Pipe Wrap Installation Instructions:

- Spiral wrap the product overlapping a minimum of 1/2" inch
- Securely tape the seams with a Reflectix® Foil Tape. (Goal is an air-tight, snug seam seal.)

Review These Important Safety Guidelines Prior to Installation:

- ALWAYS check local building codes before starting.
- ALWAYS check the area you are insulating and make any needed repairs. Any worn wiring should be replaced.
- ALWAYS make sure work areas are well ventilated and well lighted.
- ALWAYS use eye protection when operating a staple gun.
- ALWAYS use caution and common sense when using a staple gun. Be aware of where electrical wiring is located. Stapling into a wire can cause severe shock or death. NEVER staple into electrical wiring.
- ALWAYS be careful working with large pieces of Reflectix® on windy days.
- When installing Reflectix® on bright sunny days, it is best to wear sun glasses.
- Do not work in areas such as attics when temperatures are too hot.
- Visit our website at www.reflectixinc.com for additional product and installation information.





Return Air Duct Panning Reflectix RAP (Bubble)

Single Reflective with
Double High Strength Bubble

Benefits:

- 30% to 40% less costly than sheet metal and corrugated aluminum panels - easier to install
- Reduces noise through plenum
- Class A/Class 1 Fire Rated

Recommended Products:

Reflectix RAP, Product Ordering Codes "HVRDBW1602503" and "HVRDBW2402502"

Installation Instructions:

- Staple Reflectix RAP between the floor joist, or to the side of the floor joist. Open web trusses are acceptable.
- Start at the end of the house and staple Reflectix RAP to the sub-floor just behind the return air grate. Products are always installed with print side out or down.
- Staple Reflectix RAP to the bottom of the floor joist every 2" to 3". Additional approved attachment methods include steel staples, sheet metal screws and roofing nails. Seal the seams with UL181 Tape with Acrylic Adhesive.

Important Information for both Duct Panning Applications:

1. In the 2021 International Mechanical Code Commentary - Section 602.3; sheet metal has traditionally been used for both stud cavity and joist space plenums. Code does not specify types of materials allowed for panning the bottom of open joists to create joist plenums. Traditionally, sheet metal has been used, however, composite materials have and are used.
2. Check local codes before installation for compliance in your area.
3. Installation instructions and illustrated drawings are recommendations only, while proper local construction methods are the responsibility of the installer.



Return Air Duct Panning Reflectix RAP (Corrugated)

Double Reflective with Corrugated Center

Benefits:

- No shop fabrication required
- Class A/Class 1 Fire Rated
- Saves on labor cost of installation

Recommended Products:

Reflectix RAP, Product Ordering Prefix: "HVRC"

Note: Products are always installed with print side out or down.

Note: Approved attachment methods include; steel staples, sheet metal screws and roofing nails.

Installation Instructions:

Starting before return air trunk has been installed:

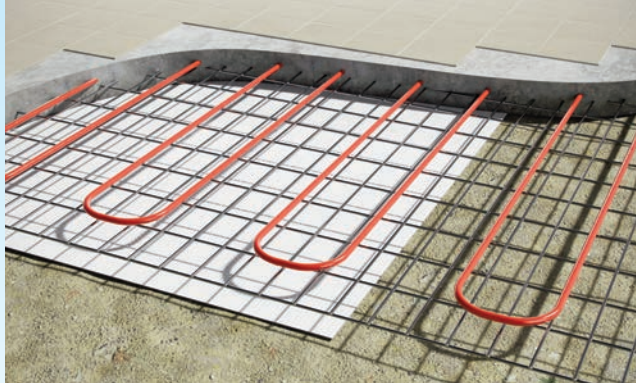
- a) Install Reflectix RAP "HVRC" centered between joists & 2" or more past the top side of the duct. This provides for a tight seal when final trunk has been installed.
- b) Staple tabs to the bottom of the joists using a minimum 3/8" staple every 2".

Starting after return air trunk, beam or wall plate:

- a) Install RAP "HVRC" by scoring 1" lip across the end of the panel and bend down 90 degrees. b) Center product between the bottom of joist. Butt it tightly to existing trunk, beam or plate. c) Tape seams with an aluminum tape or UL181 Tape with Acrylic Adhesive. d) Staple side tabs to the bottom of the joists using a minimum 3/8" staple every 2".

Adding the next section of Reflectix RAP "HVRC":

- a) Butt leading edge of sheet to the next butt edge of sheet tightly. b) Staple and tape seams as before (described above). c) Continue repeating the process until you have reached the end of the return.



Radiant Floor in a Concrete Slab

R-1.1

Benefits:

- Easy to handle and install
- Promotes even heat distribution
- No nesting characteristics for insects

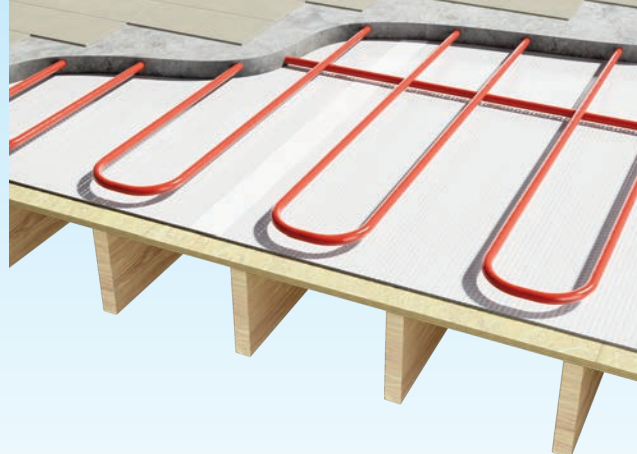
Recommended Products:

Concrete Slab Insulation, Product Ordering Prefix: "DBWEF"

Installation Instructions:

- Unroll the Reflectix® Concrete Slab Insulation product over the base material prior to pouring the concrete.
- Butt the seams of the product and seal with 3" wide white poly tape.

Note: Utilize a flat edge taping tool to assure good adhesion on all tape. Install Radiant Floor System per manufacturer's specifications.



Radiant Floor Over an Existing Floor

R-1.1

Benefits:

- Promotes even heat distribution
- Vapor retarder
- Increases system efficiency

Recommended Products:

Concrete Slab Insulation, Product Ordering Prefix: "DBWEF"

Installation Instructions:

- Unroll the Reflectix® Concrete Slab Insulation product over the existing floor prior to pouring the concrete (white poly side up). Cut the product flush with the walls.
- Butt the seams of the product. Seal with 3" wide white poly tape.

Note: Utilize a flat edge taping tool for good adhesion on all tape. Install Radiant Floor System per manufacturer's specifications.

Duct Spacers:



Left:
HVSP0202506
2" Spacer
Material

Right:
HVSPACER
Plastic Corner
Spacer



Reflectix® - The most diverse insulation product for the home with over 20 proven applications.



Radiant Floor in a Sub-Floor

R-4.6

Benefits:

- Directs heat into living space
- Easy to handle and install
- Cuts with a utility knife

Recommended Products:

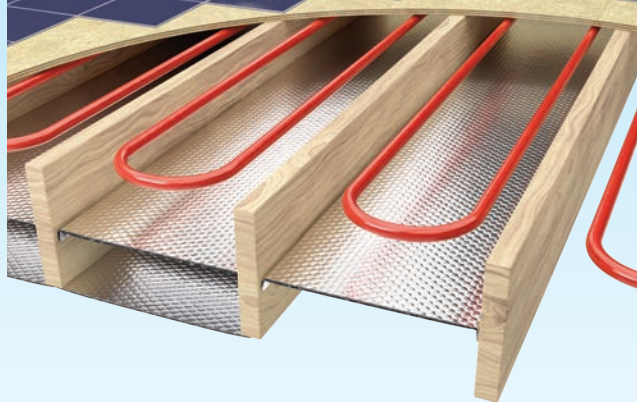
Single Reflective Insulation, Product Ordering Prefix: "HVDBW"

Installation Instructions:

- Unroll the Reflectix® product over the existing floor (reflective side facing up).
 - Cut the product flush with the walls.
 - Butt the seams and seal with 2" wide Reflectix® Foil Tape.
- Note:** Utilize a flat edge taping tool for good adhesion on all tape.
- Install Radiant Floor System per manufacturer's specifications, sleepers and new (top) subfloor.



Pictured:
Our Staple Tab product easily and accurately bends to achieve the necessary 3/4" air space.



Radiant Floor Wood Joists

Up to R-21

Benefits:

- Reflects 96% radiant energy back into sub-floor
- Product is dust and fiber free
- No nesting characteristics for insects

Recommended Products:

Double Reflective Insulation, Product Ordering Prefix: "HVBP"

Double Reflective Insulation, Product Ordering Prefix: "HVST"

1. Underside of Floor Joist - R-21:

- Install product per "Crawl Space" application on page 10.

2. Inside Joist Cavity -

Air Space Dependent R-value / Radiant Reflector:

- Install a single layer of the Reflectix® Staple Tab product inside the joist cavity. Allow 0.75" to 3.5" below the heating coils (as recommended by the manufacturer).

Examples of benefits based on air space depth above product:

0.75" air space = R-4.6 · 3.5" air space = R-8.2

3. Inside Joist Cavity w/Mass Insulation Below -

Air Space Dependent R-value / Radiant Reflector:

- Install a single layer of the product inside the joist cavity above a mass insulation batt. Utilize Reflectix® Staple Tab product (Refer to method #2).

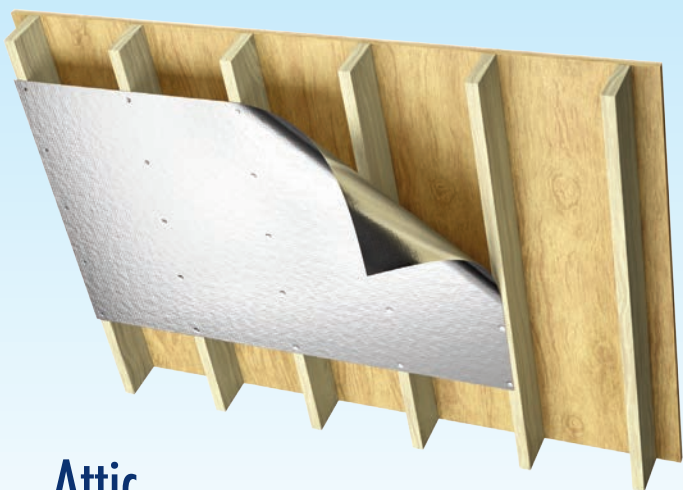
Note: Verify that this method is acceptable for the type of radiant floor system being installed.

4. Inside Joist Cavity w/Mass Insulation Above - R-2.7 to R-4.6:

- Install a single layer of the Reflectix® Staple Tab product to the side of the floor joist below the mass insulation.

Examples of benefits based on an enclosed air space depth below product:

0.5" Air Space = R-2.7 · 0.75" Air Space = R-4.6



Attic

Radiant Barrier

Benefits:

- Blocks 96% of radiant energy from entering the home
- Reduces a home's AC usage by up to 10%
- Improves efficiency of attic-mounted HVAC and ducts

Recommended Products:

Radiant Barrier, Product Ordering Prefix: "RB"

Note: Attic Radiant Barriers provide benefit on hot sunny days. For this reason, they are recommended primarily for installation in the Southern Zone of the USA (due to the amount of AC usage) but will provide reduced heat gain into the home regardless of the home's geographic location. Verify your location with our [Zip Code Zone Locator](http://www.reflectixinc.com/zip-code-zone-locator/) at www.reflectixinc.com/zip-code-zone-locator/, or call (800) 879-3645.

Underside of Rafter Method (depicted above):

- Check the attic for any needed repairs. Unroll the Reflectix® as you work and cut it to suitable lengths (8' to 12') with scissors or utility knife. Allow for proper ventilation. Install product perpendicular to the rafters with a 2" overlap on the seams (No taping required). Staple to the rafters at 2" to 3" intervals. Leave a 2" to 3" gap on each side of the roof peak and a gap at the lower edge of the roof line. Staple to the face of the studs on gables and insure at least a 1" gap around all vents.

Rafter/Truss Cavity Method:

Southern Zone of USA ONLY - Verify location recommendation with our [Zip Code Zone Locator](http://www.reflectixinc.com/zip-code-zone-locator/) at www.reflectixinc.com/zip-code-zone-locator/, or contact our Customer Service Group at (800) 879-3645.

- Staple directly to the decking (in between rafters/trusses).

Between the Trusses (Reflective/Bubble Product):

- Install Staple Tab (HVST) product to the side of the trusses or rafters (No product in contact with decking).



Crawl Space

R-21

Benefits:

- Fiber / itch free install
- Vapor / moisture retarder
- Perfect for retrofit

Recommended Products:

Double Reflective Insulation, Product Ordering Prefix: "HVB"

Double Reflective Insulation, Product Ordering Prefix: "HVST"

Installation Instructions:

- Inspect the crawl space and make any needed repairs before installing the Reflectix® Reflective/Bubble product.
- For floor joists that are 16" on-center, the installation is easiest with the Reflectix® Staple Tab (ST) product.
- Determine if there are pipes and ducts which hang below the floor joists. They will need to be insulated. Reflectix® Pipe Wrap and Duct Insulations are designed specifically for this use. There is no need to wrap water pipes or duct work that fall between floor joists. Reflectix® will provide adequate insulating without extra wrapping.
- Begin at one end of the house and staple the first course of product to the top of the band board or the subfloor (also terminating this course in this fashion).
- Insert the first course of product half way up into the joist cavity and staple the edge of the product to the side of the joist. The goal is to split the joist cavity into two approximately equal enclosed air spaces.
- Follow this step with a second course of product on the bottom surface of the joist. Face staple the edge of the product to the bottom of the floor joists. Seal seams with Reflectix® Foil Tape to create a vapor barrier. At each end of the joist cavity, staple the product up to the band board.

Testing & Certifications

All tests on Reflectix® Insulation products are performed at either nationally approved independent laboratories or at leading universities. Tests are performed to current American Society of Testing and Materials (ASTM) Standards when a standard exists.

Testing results on our Reflective Insulation (Reflective/Bubble/Bubble/ Reflective) product are listed below. For additional information for this product (or any other), please refer to our website at www.reflectixinc.com, or feel free to call our Customer Service Group at (800) 879-3645.

Nominal Thickness	5/16" (.312)
Weight	0.771 oz./ft ²
Temperature Range	-30° to 180° F
Flame Spread	Less than 25*
Smoke Development	Less than 50*
Perm. Rating	0.02**
Puncture Resistance	60 lb./in.***
Vapor Transmission	0.02
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.

* Intertek Testing ASTM Test Method E-84 **ASTM Test E-96 ***FSTM 101 B Method 2031

Product Standards

Resistance to fungi or bacteria: Reflectix® does not promote the growth of fungi or bacteria.

Testing and Certification Documents

- Thermal Performance ASTM C1363
- Thermal Performance of Wall Systems ASTM C1363
- Thermal Performance ASTM C335
- Thermal Performance of Crawl Space ASTM C1363
- Hot Surface Performance ASTM C411
- Heat Transfer (Heat Flow Up, Down, Horizontal) ASTM C1363
- Thermal Performance of Reflectix® and Fiberglass in Walls ASTM C1363
- Heat Transfer of Air-Handling Ducts with Reflectix®
- Flame Spread and Smoke Density ASTM E84
- Mounting Method ASTM E2599
- 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
- Emittance Testing ASTM C1371
- Thermal Performance of Water Heater Jackets
- Intertek: Surface Burning Characteristics of Building Materials ASTM E84 (Taped Joint Detail) Test Report # 3166908SAT-012
- Intertek: Surface Burning Characteristics of Building Materials ASTM E84 (Unslit) Test Report # 3166908SAT-011
- R&D Services: Resistance to the Growth of Fungi ASTM C1338 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)



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