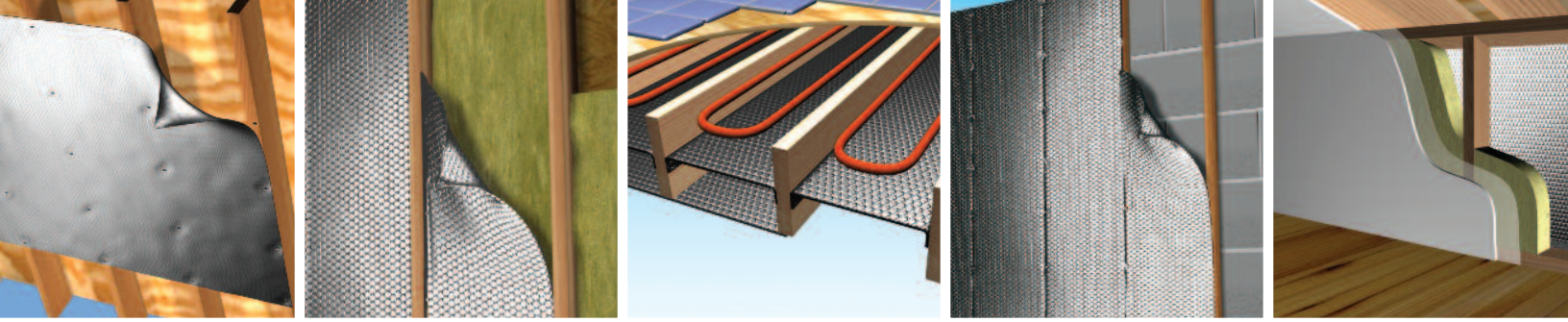

Solutions for the Pro

REFLECTIX®

The Latest in Energy-Saving Insulation

Reflectix® Double Reflective Double Bubble Insulation

Improving Your Home's Envelope

Reflectix® Insulation has more than 15 residential applications. When installed properly, our product helps ensure that homes stay comfortable and energy efficient all year long.

Note: An air space facing one reflective (shiny) side of the product is required. R-values may be calculated when a reflective product surface faces an enclosed air space (a cavity without free air flow). The air space required to meet these applications are included in the installation instructions on the reverse of the product label. Additionally, this information can be found at www.reflectixinc.com/r-values.

Reflectix application information always at your fingertips with our new Reflectix Mobile Website!

www.reflectixinc.com

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 9001:2008 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?

"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® also has an extensive bank of testing for fire safety, vapor transmission, mold and mildew resistance, emittance and smoke density, along with a full line of physical properties tests. Our products and applications have been evaluated by an impressive and ever growing list of agencies including: ICC-ES, RIMA-I,* R&D Services and the states of California, Wisconsin and Minnesota.

Reflectix goes the extra mile to provide you with accurate information.

Over the years, Reflectix has collected and continues to collect test data on the more popular applications using our insulation products. This brochure is the culmination of that research. On the following pages, we will review many of these applications in detail including their R-values, additional benefits and installation procedures.

Through the use of independent certified labs and government approved laboratories, Reflectix conducted tests on complete wall, floor, pipe and duct assemblies insulated with Reflectix®. These tests have enabled us to provide you with the most accurate and useful information possible on thermal performance or system R-values.

System R-values report the thermal resistance of complete assemblies, including insulation, studs, floor joists, furring strips and any other building materials a particular application may involve.

If you have questions on a specific application, feel free to call our toll free number at (800) 879-3645, or visit our website at www.reflectixinc.com.

* ICC-ES: International Code Council Evaluation Service; Reflective Insulation Manufacturers Association - International Verification Program

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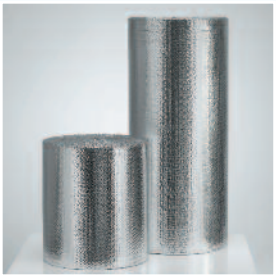
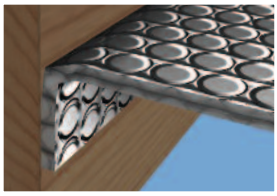
Reflectix® Pro Products

Reflectix® Double Reflective Insulation





Staple Tab Edge (ST) Product

- ✔ Product Ordering Prefix: "BP" or "ST"
- ✔ HVAC Products Ordering Prefix: "HV"

Our Premium Reflective Insulation Product:

- Easy to install and handle - Does not require any specialized tools or equipment for installation
- Diverse - Multiple applications for a wide range of structures
- Reflects 94%+ of radiant heat

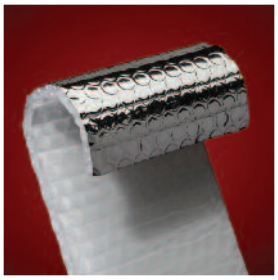
Product Description:

- A reflective insulation consisting of two outer layers of 94%+ reflective material, bonded to two layers of heavy gauge polyethylene bubbles (nominal thickness: 5/16")
- Product is manufactured in 16 inch to 10 foot widths by 50 foot to 125 foot lengths
- Heavy gauge polyethylene double bubble interior for superior strength and easy handling
- Available in a Standard Edge or Staple Tab Edge configuration (Refer to diagram to the left)
- Staple Tab Edge products are recommended when installing the insulation in 16" or 24" cavities
- Product Name: Reflective/Bubble/Bubble/Reflective - Roll ("BP")
- Product Name: Reflective/Bubble/Bubble/Reflective, Staple Tab - Roll ("ST")

Applications:

- Attic
- Crawl Space
- Duct Insulation
- Metal Bldg - Roof
- Metal Bldg - Wall
- Pipe Wrap
- Post Frame - Roof
- Post Frame - Wall
- Radiant Flr - Wd Joists
- Wall - Exterior
- Wall - Knee
- Wall - Masonry

Reflectix® Single Reflective / White Insulation



- ✔ Product Ordering Prefix: "RDBW"

Ideal for Metal and Post Frame Buildings:

- Economical - For applications where our Single Sided Reflective Insulation is most advantageous
- Easy to install and handle - Does not require any specialized tools or equipment for installation
- Manufactured in large contractor size rolls

Product Description:

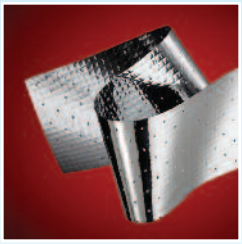
- A reflective insulation consisting of one outer layer of 94%+ reflective material and one outer layer of white polyethylene, both bonded to two layers of heavy gauge polyethylene bubbles (nominal thickness: 5/16")
- Product is manufactured in 16 inch to 10 foot widths by 100 foot and 125 foot lengths
- Heavy gauge polyethylene double bubble interior for superior strength and easy handling
- Product Name: Reflective/Bubble/Bubble/White - Roll ("RDBW")

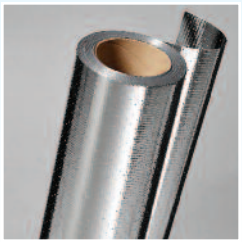
Applications:

- Metal Bldg - Roof
- Metal Bldg - Wall
- Post Frame - Roof
- Post Frame - Wall
- Pipe Wrap
- Radiant Flr - In a Subfloor

Reflectix® Radiant Barrier

✔ Product Ordering SKU: "RB4812550"





Saves Energy Dollars on AC Usage:

- Reduces AC usage up to 10%
- Blocks 94%+ of radiant heat from entering structure
- Increases efficiency of attic mounted ducts

Product Description:

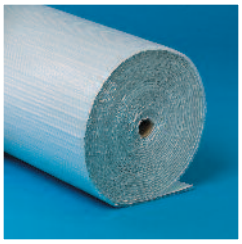
- A radiant barrier consisting of two outer layers of 94%+ reflective film bonded together enclosing a heavy gauge woven polyethylene
- Product is manufactured in 4 foot widths by 125 foot lengths
- Product Name: Reflective/Woven Fabric/Reflective, Radiant Barrier (Heavy Duty) - Roll ("RB")

Applications:

- Attic, Cathedral Ceiling and House Wrap Behind Siding or Brick

Reflectix® Concrete Slab Insulation

✔ Product Ordering Prefix: "DBWEF"



Improves Performance of Radiant Floor Systems:

- Easy to install and handle
- Spreads out the heat signature in radiant floors
- Vapor / radon retarder

Product Description:

- An insulation consisting of one layer of aluminum bonded to an external layer of white polyethylene and internally bonded to two layers of heavy gauge polyethylene bubbles (nominal thickness: 5/16")
- Product is manufactured in 4 foot widths by up to 125 foot lengths
- Product Name: White/Reflective/Bubble/Bubble, Concrete Slab Insulation - Roll ("DBWEF")

Applications:

- Concrete Slab, Radiant Floor - Concrete Slab, Radiant Floor - Over Existing Floor and Snow Melt

Expansion Joint

✔ Product Ordering SKU: EXP04050 (4"x 50") and EXP06050 (6"x 50')

- Lightweight, shapes to contours, sturdy, resistant to termites and moisture
- A closed cell, foam expansion joint - Manufactured 0.5" thick, 4" or 6" wide x 50' in length

Sill Seal

✔ Product Ordering Prefix: "CF" (example: CF30550)

- Easy installation and convenient roll sizes
- A ribbed polyethylene foam sill seal (nominal thickness: 3/16") - In widths of 3.5", 5.5", 7.5" and 9.5" by 50'

Tapes

- Foil Tape - Utilize for seaming on the reflective sides of our insulation - Manufactured in 2" and 3" widths by 30' and 150' lengths - Product Ordering Prefix: "FT" (example: FT250)
- White Poly Tape - Utilize for seaming on our white poly insulation - Manufactured in a 3" width by 165' length - Product Ordering SKU: WPT355

Residential Pro Applications

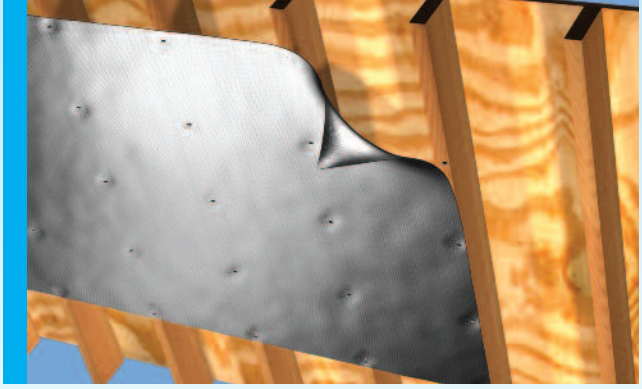
Reflectix has a wide variety of installation options for the Professional Residential Builder. Increasing energy efficiency is a solid direction to build greater demand (and net pricing) for a new home in today's highly competitive market.

- Upgrade and Focus on Energy Efficiency
- Up-Sell the Structure
- Increase Sales and Return
- Pays Dividends to the New Owner for the Life of the Home

Reflectix is World's Largest Manufacturer of Reflective Insulation Products

Our company is dedicated to the research, development, and manufacture of technically-advanced energy barriers designed to reduce consumption and be non-detrimental to our environment. Products or systems will be safe, easy to use, and provide significant economy for the user wherever there is a desire to control heating and cooling, or isolate temperature.

Reflectix® Reflective Insulations and Radiant Barriers greatly enhance the overall performance of the building assemblies in which they are installed. Our products are second to none in quality, ease of installation, versatility and performance.



Attic

Radiant Barrier

Benefits:

- Blocks 94%+ 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 wherever they are installed. Verify your location with our 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 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).

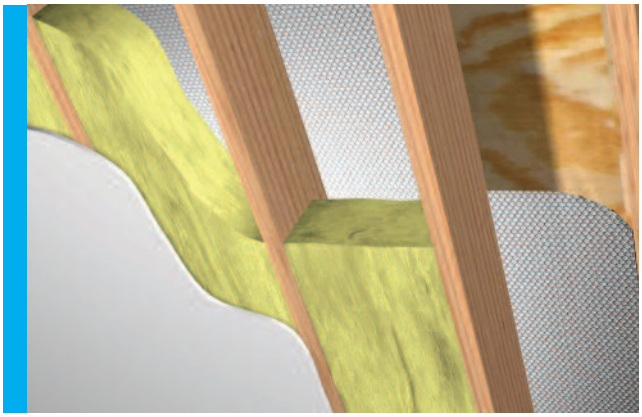
Between the Trusses (Reflective/Bubble Product):

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

Cathedral Ceiling

Northern Zone: R-7.0 Summer & R-1.0 Winter
Southern Zone: R-6.0 Summer & R-2.0 Winter

Note: Verify your location with our Zip Code Zone Locator at www.reflectixinc.com/zip-code-zone-locator, or call (800) 879-3645.



Benefits:

- Easy to handle and install
- Excellent upgrade for custom homes
- Class A / Class 1 Fire Rating

Recommended Products:

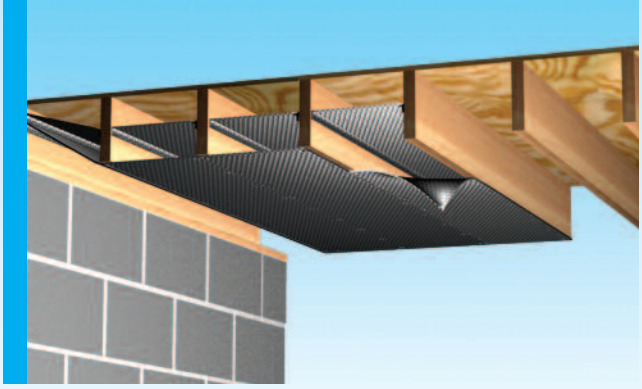
Double Reflective Insulation, Product Ordering Code "BP"

Double Reflective Insulation, Product Ordering Code "ST"

Installation Instructions:

Northern Zone: Install venting and mass insulation per local codes and manufacturer's installation instructions - A minimum of a 0.75" air space is required on the underside of the Reflectix® product. Two options available: 1. Tuck the product up into the cavity and staple every 2 to 3 inches fully enclosing the cavity 2. Staple the product directly to the underside of the rafter every 2 to 3 inches - Nail a 1"x 2" furring strip to the underside of the rafter creating a continuous 0.75" cavity.

Southern Zone: Begin at the top of the cavity - Staple product flush to the decking, parallel to the rafter - Do not block any venting - Ensure a continuous 0.75" air space is present on the bottom side of the insulation.



Crawl Space

R-21

Benefits:

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

Recommended Products:

Double Reflective Insulation, Product Ordering Prefix: "BP"

Double Reflective Insulation, Product Ordering Prefix: "ST"

Installation Instructions:

• Inspect the crawl space and make any needed repairs before installing the Reflectix® Reflective/Bubble product.

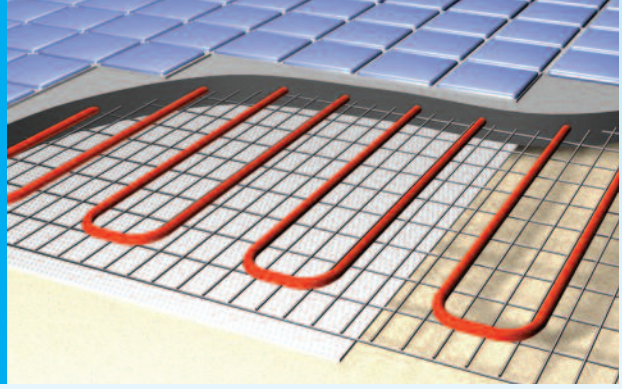
• For floor joists that are 16" on-center, the installation is easiest with the Reflectix® Staple Tab (ST) product.

• Determine if there are water pipes and heating ducts which hang below the floor joists. They will need to be insulated. Our Pipe Wrap and Duct Insulations are designed specifically for this use. There is no need to wrap water pipes or duct work between floor joists. Reflectix® provides 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). Running the product parallel to the joists makes for the easiest installation.

• 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.



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"

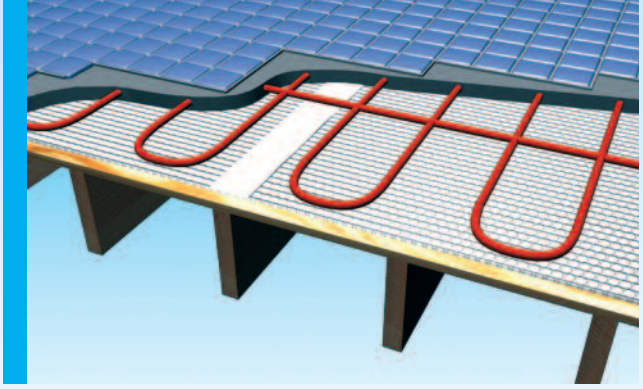
Installation Instructions:

• 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.

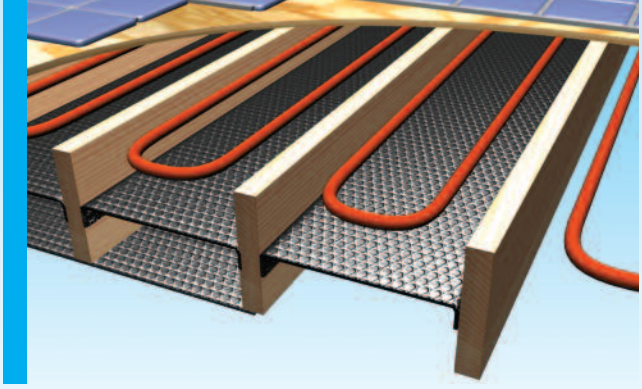
• Butt the seams of the product - Seal with 3" wide white poly tape.

Note: Utilize a flat edge taping tool for good adhesion on all tape.

• Install Radiant Floor System per manufacturer's specifications.

Review These Important Safety Guidelines Prior to Installation:

- ALWAYS check local building codes before installing Reflectix®.
- ALWAYS check the area you are insulating and make any needed repairs. Any worn wiring should be replaced before you begin installing Reflectix®.
- 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 when 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.



Radiant Floor Wood Joists

Benefits:

- Reflects 94%+ 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: "BP"

Double Reflective Insulation, Product Ordering Prefix: "ST"

1. Underside of Floor Joist - R-21:

• Install product per "Crawl Space" application on page 6.

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:

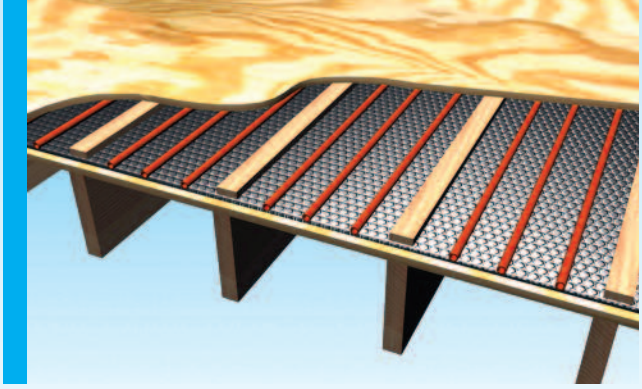
• Install a single layer of the product inside the joist cavity above a mass insulation batt - Utilize Reflectix® Staple Tab product (Refer to method #2).

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



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:

Double Reflective Insulation, Product Ordering Prefix: "BP"

Installation Instructions:

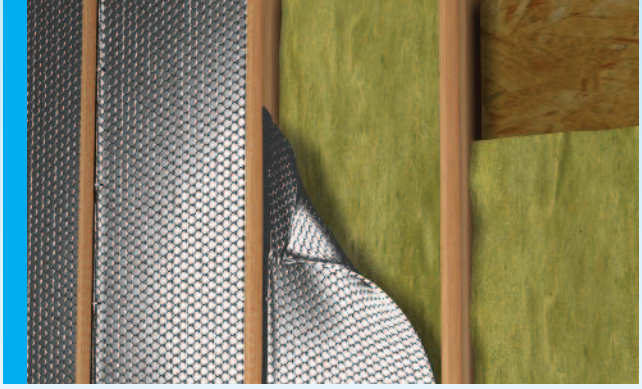
• Unroll the Reflectix® product over the existing floor - Cut the product flush with the walls.

• Butt the seams and seal with 2" wide 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.

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



Wall - Exterior

R-14 to R-21 (w/a Fiberglass Batt)

Benefits:

- Excellent upgrade for custom homes
- Vapor retarder and moisture barrier
- Resists growth of fungi, mold and mildew

Recommended Products:

Double Reflective Insulation, Product Ordering Prefix: "BP"

Double Reflective Insulation, Product Ordering Prefix: "ST"

2 x 4 Wall (R-14) or 2 x 6 Wall (R-21):

• Install R-13 in a 2 x 4 wall (R-19 in a 2 x 6 wall) un-faced, per manufacturer's specifications.

• Place one corner edge of the Reflectix® in an upper corner of the stud cavity.

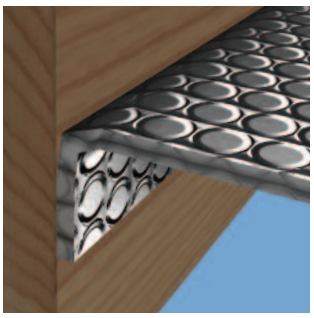
• Staple the product to the side of the stud (creating a 3/4" tab on the product and compressing into the fiberglass (3/4" as well)).

• The edge of the product should be flush with the forward corner of the stud.

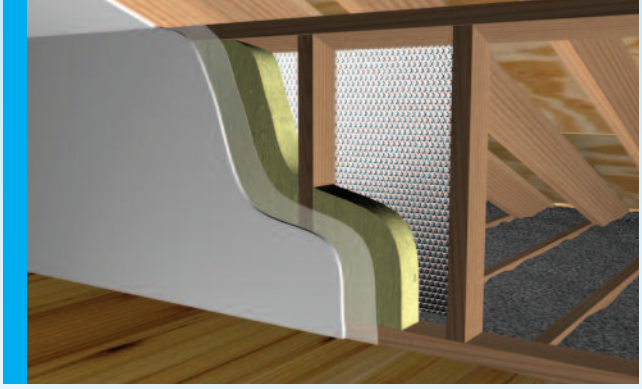
• Proceed "down" stapling to the side of the stud every 2"- 3".

• Repeat procedure on opposite stud.

• The Goal: Create a continuous 3/4" air space between the product and the interior panel.



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



Wall - Knee

R-16 or R-19 (w/a Fiberglass Batt)

Benefits:

- Reflects 94%+ radiant energy back into attic space
- Excellent upgrade for a knee wall system
- Increases room comfort levels

Recommended Products:

Double Reflective Insulation, Product Ordering Prefix: "BP"

Double Reflective Insulation, Product Ordering Prefix: "ST"

1. In Back of Knee Wall Cavity - R-16 and a Radiant Reflector (with R-13 Fiberglass Batt):

• Install the Reflectix® Staple Tab (ST) product to the inside back of the stud cavity - Continue downward stapling every 3" to 4" - Repeat on opposite stud - Insure there is a continuous 1/2" air gap across the bottom of the cavity.

• If utilizing the non-staple tab product (BP), staple the edge of the product to the back face of the stud, splitting the stud - Insure there is a continuous 1/2" air gap across the bottom of the cavity.

• Install fiberglass batt per manufacturer's instructions.

• Install a vapor barrier on the inside of the knee wall if your building code dictates.

2. In Back of Knee Wall Cavity - R-19 and a Radiant Reflector (with R-13 Fiberglass Batt and 0.75" Furring (on the back of the Knee Wall)):

• Prior to placing the knee wall and nailing it to the floor and rafters, attach a 1"x 2" (nominal) furring strip to the back of each knee wall stud - Install Reflectix® per instruction in Method #1.

Wall - Masonry

R-3.7, R-4.2 or R-6.1 and a Vapor / Moisture Barrier

Benefits:

- Easy to handle and install
- Vapor retarder / moisture barrier
- Not affected by moisture or humidity

Recommended Products:

Double Reflective Insulation, Product Ordering Prefix: "ST"

1. R-3.7 (1"x 2" Nominal Furring):

• Attach 1"x 2" (nominal) furring strips vertically at an interval of 16" (or 24" per code) on center to the masonry wall (with an adhesive or fastener that is specified for this application).

• Cut the Reflectix® Staple Tab product (using scissors or a utility knife) into lengths equal to the height of the wall (floor to ceiling).

• Staple the product to the face of the furring strip - Product seams should split on a furring strip - One air space is created between the Reflectix® and the masonry wall.

2. R-4.2 (2"x 2" Nominal Furring):

• Same as above except utilize 2"x 2" (nominal) furring.

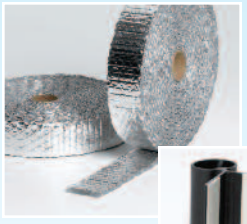
3. R-6.1 (2"x 2" Nominal Furring):

• Same as above, except the product is not stapled to the face of the furring strip - Staple the product to the side of the furring strip at a depth of 3/4" - The goal is to split the cavity (in two) into approximately equal air spaces.

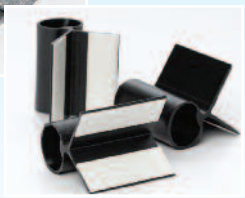
• The two air spaces created are between the Reflectix® and the masonry wall, and the second between the new interior panel and the Reflectix®.

HVAC Pro Products

Duct Bubble Insulation
R-6.0 & R-8.0



Left:
HVSP0202506
2" Spacer
Material



Right:
HVSPACER Plastic
Corner Spacer

Big Bubble Reflective Duct Insulation

- R-8.0 with a 3/4" air space around duct (use spacers)
- Requires less space than fiberglass to achieve an R-8.0
- Non-fibrous / non-irritating

Product Ordering SKU:"HVBB48075"

Standard Bubble Reflective Duct Insulation

- R-6.0 with a ¾" air space around duct (use spacers)
- R-4.2 when wrapped loosely around duct
- Easy to handle and cost less to install

Product Ordering Prefix: "HVBP"

"No Itch" Duct Fiber
Insulation R-8.0

Return Air Panning

Duct "No Itch" Polyester Fiber Insulation R-8.0

- R-8.0 with a ¾" air space around duct (use spacers)
- Reduces overall thickness of conventional R-8.0 wrap (3" to 1.25")
- Class A / Class 1 Fire Rated

Product Ordering SKUs: "HVRP48050" and "HVRP48100"

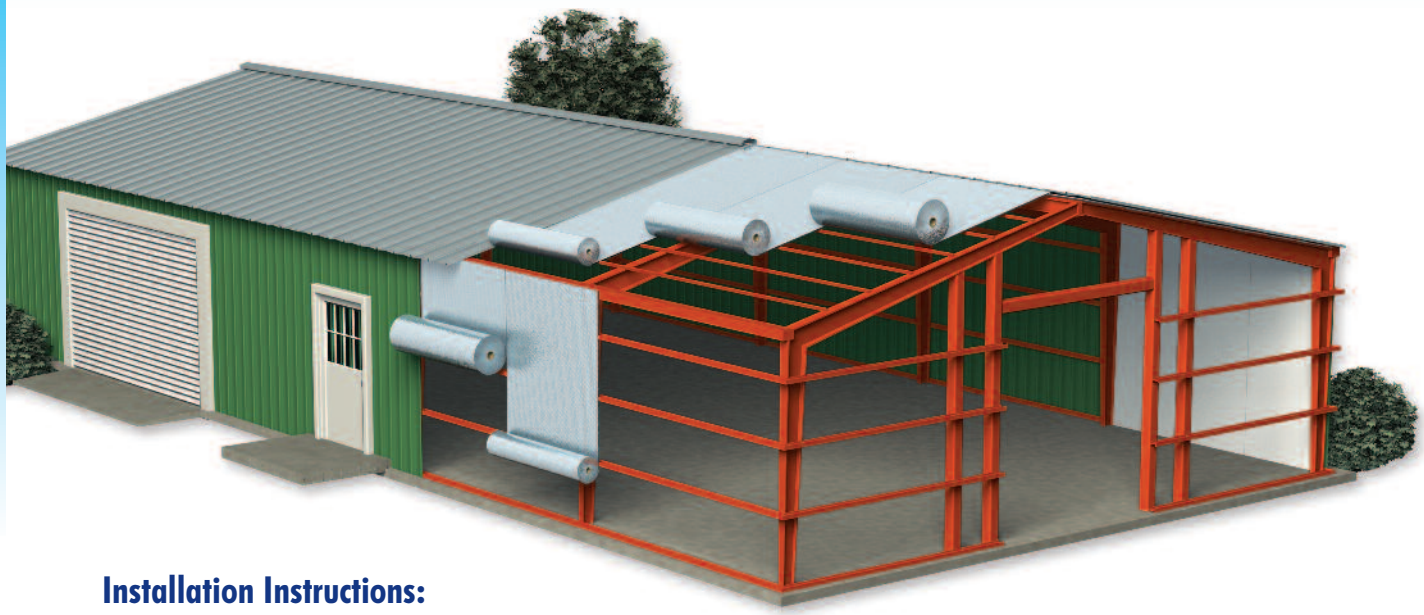
Return Air Duct Panning

- Less costly than sheet metal or aluminum-clad sandwich panels
- Not affected by moisture or humidity
- Reduces plenum noise

Product Ordering SKUs: "HVRBP1610003" and "HVRBP2410002"

Metal Buildings

Reflectix has a variety of product and installation options for the Pro Metal Building Contractor. When it comes to ease of product handling and diversity, our Reflective Insulation Products are second to none. Please review the following information on Metal Building Applications. Additional questions can be addressed on our website at www.reflectixinc.com, or by our Customer Service Group at (800) 879-3645.



Installation Instructions:

Please refer to the diagrams on the adjoining page.

New Construction:

Roof: Install the product over the purlins with 1/2" self-tapping metal screws • Tape the seams with Reflectix® Foil Tape • Install a 3/4" thermal break (optional) • Install roofing either by screwing corrugated metal screws through the thermal break and insulation to the purlin, or install a standing seam roof.

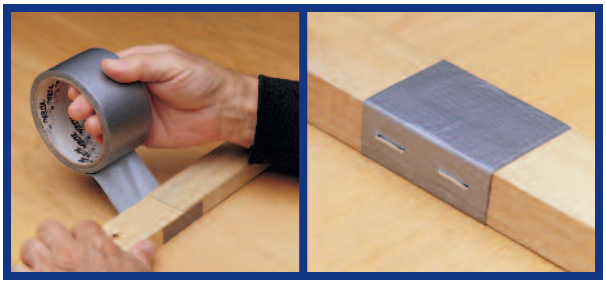
Wall: Install the product vertically, using 1 1/4" self tapping screws to the exterior of the C or Z girts • Tape the seams with Reflectix® Foil Tape • Install a 3/4" thermal break (optional) and attach the corrugated metal exterior finish.

Retrofit:

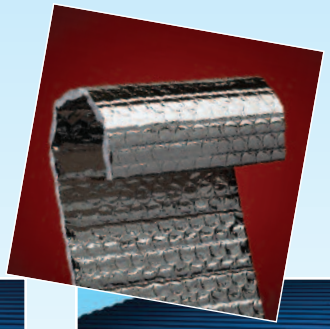
Roof: Install 1"x 2" furring strips on the bottom of and perpendicular to the Z purlins on 22" centers • Utilize 1 1/4" self-taping sheet metal screws to secure the furring strips to the Z purlins • Butt the furring strips together, tape and staple (per the photos to the right) • Staple the edges of the product to the furring strips with 3/4" overlap at the seams • Tape the seams with Reflectix® Foil Tape.

Wall: Install 1"x 2" furring strips on the inside and perpendicular to the Z girts on 22" centers • Utilize 1 1/4" self-taping sheet metal screws to secure the furring strips to the Z girts • Butt the furring strips together, tape and staple (per the photos below) • Staple the edges of the product to the furring strips with 3/4" overlap at the seams • Tape the seams with Reflectix® Foil Tape • Staple the product at approximately 4" intervals down the middle of the sheet into the furring strip parallel and centered.

Note: The installation instructions are the same for both reflective insulations featured on the next page. The only difference is that the Reflective One Side (product) is installed with the White Poly Side towards the interior of the building.



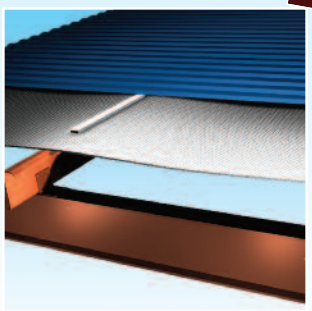
Metal Building Pro Applications
Reflectix® Insulation - Reflective Both Sides



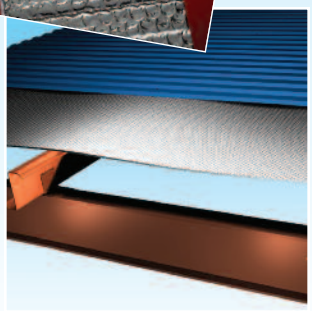
- ✔ Double Reflective Insulation, Product Ordering Prefix: "BP"
- ✔ Double Reflective Insulation, Product Ordering Prefix: "ST"

R-values: Reflective insulation assemblies in roof cavities are tested for heat flow direction "Up" and "Down" - Homogeneous mass insulation products, when tested in the same manner, provide the same level of benefit (same R-value) for both heat flow directions.

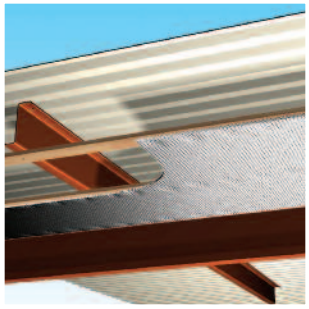
Product Name: Reflective/Bubble/Bubble/Reflective - Roll ("BP")
Product Name: Reflective/Bubble/Bubble/Reflective, Staple Tab - Roll ("ST")



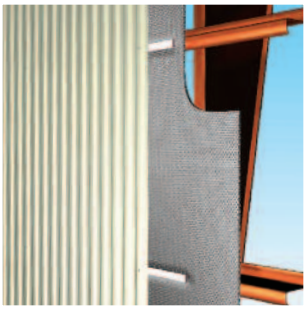
Roof / New*
(Thermal Break)
R-10 Heat Flow Down
R-4.5 Heat Flow Up



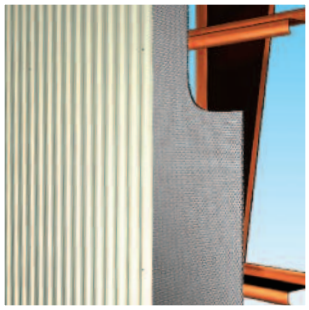
Roof / New*
(No Thermal Break)
R-7.6 Heat Flow Down
R-3.9 Heat Flow Up



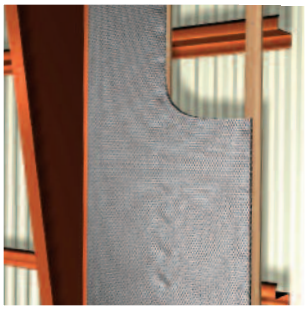
Roof / Retro*
R-11 Heat Flow Down
R-4.4 Heat Flow Up



Wall / New
(Thermal Break)
R-6.0 Heat Flow Horiz

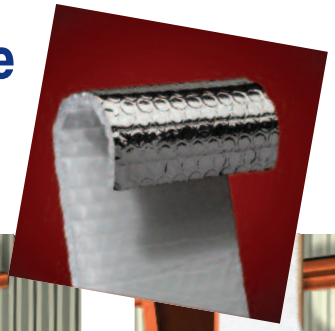


Wall / New
(No Thermal Break)
R-4.7 Heat Flow Horiz



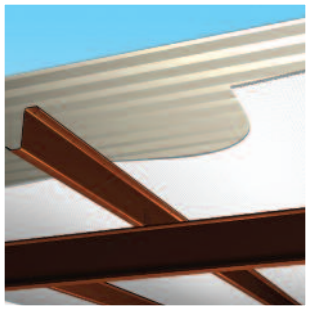
Wall / Retro
R-4.5 Heat Flow Horiz

Reflectix® Insulation - Reflective One Side



- ✔ Single Reflective Insulation, Product Ordering Prefix: "RDBW"

Product Name: Reflective/Bubble/Bubble/White - Roll ("RDBW")



Roof / New*
R-4.0 Heat Flow Down
R-3.2 Heat Flow Up

Roof / Retro*
R-7.5 Heat Flow Down
R-3.6 Heat Flow Up

Wall / New
R-3.7 Heat Flow Horiz

Wall / Retro
R-3.5 Heat Flow Horiz

* Please Note: In addition to the stated R-value, this application also provides a Radiant Barrier. As a result, a 94%+ reduction of the radiant energy that ordinarily would be transmitted to the interior of the building is blocked.

Post Frame Buildings

Reflectix® Insulation has options for the Post Frame Building Contractor. The "easy to install and handle" feature reduces the labor necessary to install, and provides an "itch free" installation experience. Please review the following information on Post Frame Building Applications. Additional questions can be addressed on our website at www.reflectixinc.com, or by our Customer Service Group at (800) 879-3645.

Installation Instructions:

Please refer to the diagrams on the adjoining page.

New Construction:

Roof - Below the Purlin: After the trusses are set, run two purlins to make sure the trusses stay true • Attach the product to the first truss with at least 5/16" staples • Temporarily nail a 2"x 4" block over the end of the product to prevent it from pulling away • Roll out the product across the top of the trusses, pull tight and staple • Run subsequent courses of the product with the 3/4" staple tabs overlapping at the seams • Tape the seams with a Reflectix® Foil Tape • Install purlins over the insulation • Nail or screw to the trusses through the product.

Roof - Above the Purlin: Per the instructions above, except install product after installing the purlins (Insure a drape of 3/4" (middle of cavity)) is present.

Wall - Inside the Girts: Staple the product to the outside of the top girt • Staple the product to the inside of the remaining girts • Tape the seams with a Reflectix® Foil Tape.

Wall - Outside the Girts: Staple the product to the outside of the top girt • Staple the product to the outside of the remaining girts • Insure there is a drape of at least 3/4" (towards the interior of the building) at the center of each cavity • Tape the seams with a Reflectix® Foil Tape.

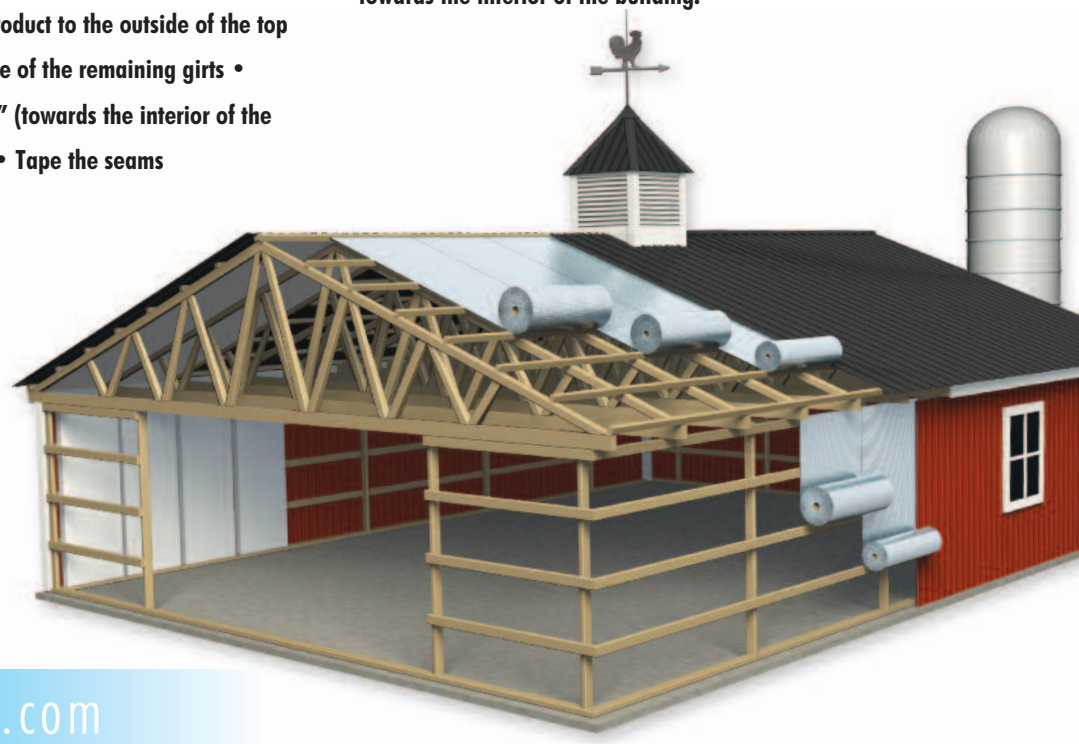
Retrofit:

Roof - Below the Purlin: Refer to the New Construction installation instructions prior.

Roof - Bottom of Truss: Nail 1"x 2" furring strips on the bottom of and perpendicular to the trusses on 22" centers • Butt the furring strips together, tape and staple (Refer to photos at the bottom of page 11) • Staple the edges of the product to the furring strips with the 3/4" tabs • Tape the seams with a Reflectix® Foil Tape • Tape any butt seams with Reflectix® Foil Tape, insure taped seam has a good full continuous bond • Staple product at approximately 4" intervals down the middle of the sheet into the furring strip above.

Wall: The product can be installed either vertically or horizontally • Attach the product to the inside of the girts using 5/16" staples • Tape the seams with a Reflectix® Foil Tape • Staple product at approximately 4" intervals into the girt.

Note: The installation instructions are the same for both reflective insulations featured on the next page. The only difference is that the Reflective One Side (product) is installed with the White Poly Side towards the interior of the building.

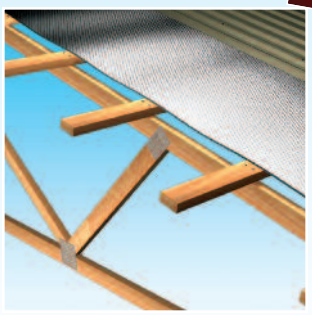


Post Frame Building Pro Applications
Reflectix® Insulation - Reflective Both Sides

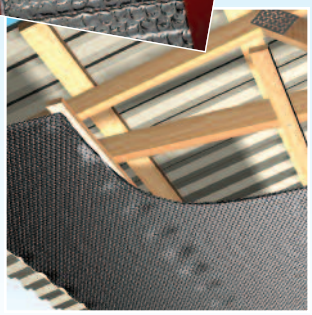
- ✔ Double Reflective Insulation, Product Ordering Prefix: "BP"
- ✔ Double Reflective Insulation, Product Ordering Prefix: "ST"

R-values and Air Spaces: Please take note as you review the featured applications, all building assemblies include an air space on one or both sides of our products (always on the reflective side of the "Reflective One Side" product). These air spaces are required to provide the stated R-values and must be included in the finished structure.

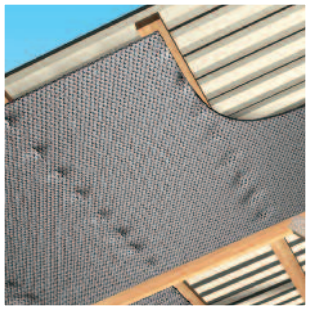
Product Name: Reflective/Bubble/Bubble/Reflective - Roll ("BP")
Product Name: Reflective/Bubble/Bubble/Reflective, Staple Tab - Roll ("ST")



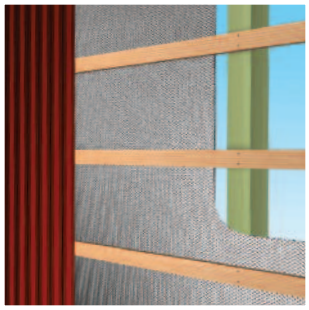
Roof / New*
(Above Purlins)
R-6.4 Heat Flow Down
R-4.3 Heat Flow Up



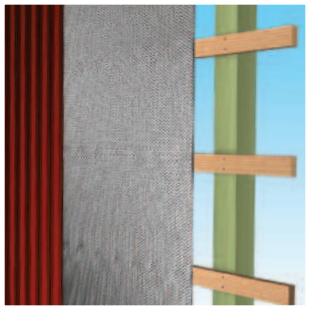
Roof / New / Retro*
(Bottom of Trusses)
R-10 Heat Flow Down
R-3.7 Heat Flow Up



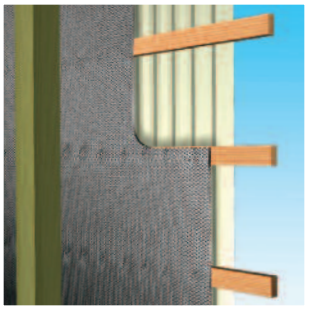
Roof / Retro*
(Below Purlins)
R-9.0 Heat Flow Down
R-4.4 Heat Flow Up



Wall / New
(Product Inside Girts)
R-5.3 Heat Flow Horiz

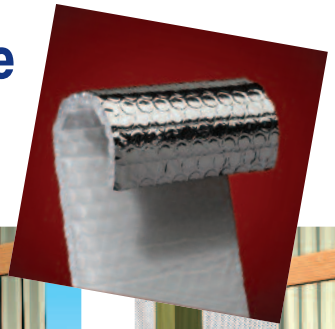


Wall / New
(Product Outside Girts)
R-4.7 Heat Flow Horiz



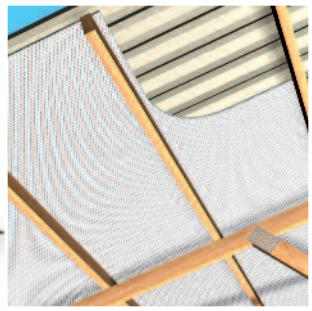
Wall / Retro
(Product Inside Girts)
R-5.3 Heat Flow Horiz

Reflectix® Insulation - Reflective One Side

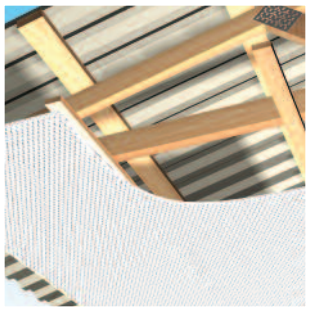


- ✔ Single Reflective Insulation, Product Ordering Prefix: "RDBW"

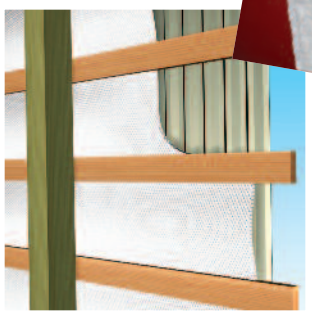
Product Name: Reflective/Bubble/Bubble/White - Roll ("RDBW")



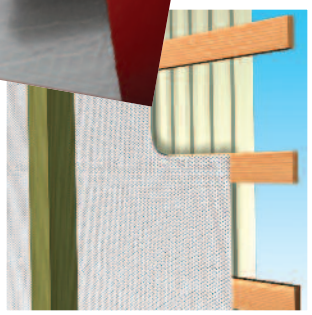
Roof / New*
R-3.8 Heat Flow Down
R-3.5 Heat Flow Up



Roof / Retro*
R-6.6 Heat Flow Down
R-3.0 Heat Flow Up



Wall / New
R-3.7 Heat Flow Horiz



Wall / Retro
R-4.2 Heat Flow Horiz

* Please Note: In addition to the stated R-value, this application also provides a Radiant Barrier. As a result, a 94%+ reduction of the radiant energy that ordinarily would be transmitted to the interior of the building is blocked.

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 any additional product specifications 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	-60° 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	Less than 0.06
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.

Reflectix® products have been evaluated by the following:

- ICC-ES Evaluation Report Number ESR-1362

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
- 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
- State of Wisconsin: Wisconsin Material Approval, Safety and Buildings Division Approval # 920088-1
- 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)

Total Design Calculations

Crawl Space

Two layers of product - The first course installed to split the 2"x 10"joist cavity and the second course installed on the bottom of the 2"x 10" joists, 16" OC - Heat Flow Downward

Construction Components:	R-values At Framing:	At Cavity:
Inside Air Film	.68	.68
Inside Air Film	.92	.92
3/4" Wood Subfloor	.75	.75
5/8" Particle Board Underlayment	.82	.82
2"x 10" Wood Floor Joists 16" OC	10.07	---
9.5" Air Space	---	13.8
Reflectix® Insulation	0.92	0.92
Outside Air Film	4.55	4.55
Total:	18.03	21.76

Total Design "U"=.20/18.03+.80/21.76=.0479
Total Design "R"=1/.0479=20.88

Note: The above assembly R-value of R-21 includes a 4.55 value for the reflective air film.

Wall - Exterior

Product installed on 2"x 6" studs, 16" OC - Inside the cavity compressing the mass insulation R-19 batt 3/4" - Heat Flow Horizontal

Construction Components:	R-values At Framing:	At Cavity:
Inside Air Film	.68	.68
1/2" Plaster Board	.45	.45
Reflectix® Insulation	---	*3.87
2"x 6" Stud	6.88	---
R-19 Batt	---	15.70
1/2" Plywood	.62	.62
Total:	8.63	21.32

Total Design "U"=.14/8.63+.86/21.32=.0566
Total Design "R"=1/.0566=17.67

* Includes the thermal resistance for Reflectix® Insulation and the airspace on one side of the product.

Wall - Masonry

Product installed on 1"x 2" furring strips, 16" OC to block or concrete wall - Heat Flow Horizontal

Construction Components:	R-values At Framing:	At Cavity:
Inside Air Film	.68	.68
1/2" Plaster Board	45	.45
Reflectix® Insulation	---	*3.30
Furring Strips	1.59	---
8" Concrete Block	1.11	1.11
Total:	3.83	7.13

Total Design "U"= .14/3.83+.86/5.54=.1918
Total Design "R"=1/.1918=5.21

* Includes the thermal resistance for Reflectix Insulation and the airspace on one side of the product.