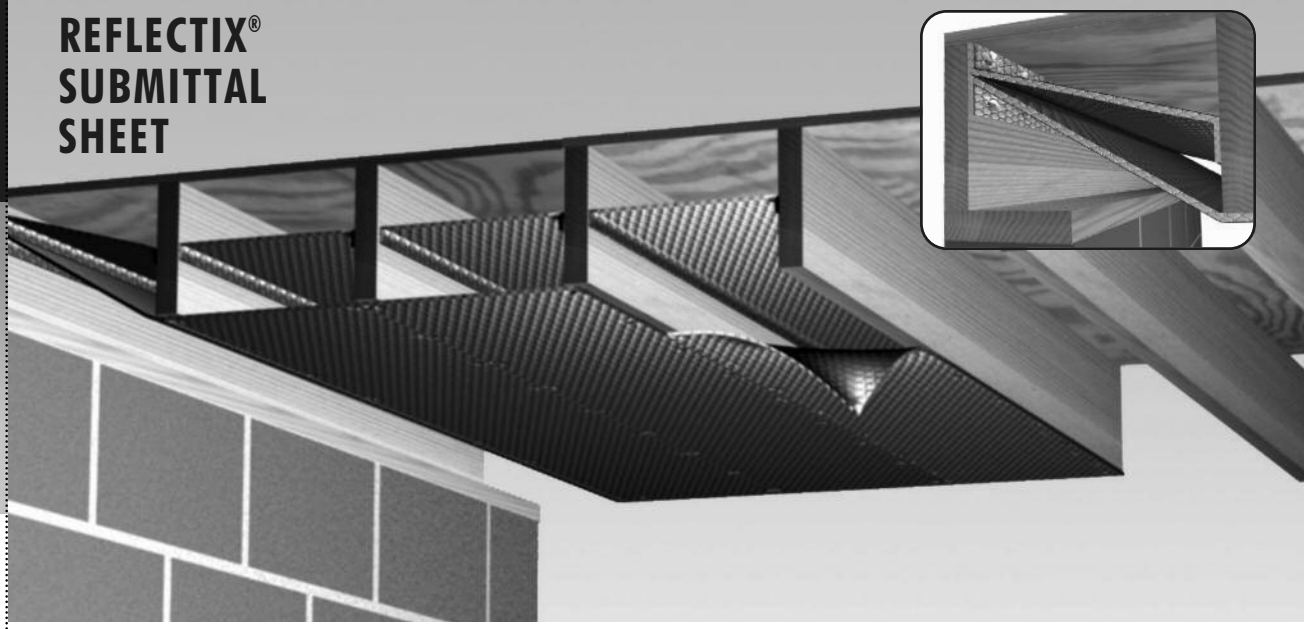
R-21

REFLECTIX® SUBMITTAL SHEET



★ MADE IN THE ★ USA WITH DOMESTIC AND IMPORTED COMPONENTS

Features AT A GLANCE:

Reflectix® Insulation is a labor reducer because of its easy to handle and install characteristics

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No need to insulate ducts or pipes between the product and the sub-floor

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Works great for retrofit installations

WAREHOUSE LOCATIONS:

Markleville, IN

Phoenix, AZ

Greenville, SC

Needham, MA

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CRAWL SPACE INSULATION R-21

When considering options for a crawl space, Reflectix® Double Reflective Insulation is the easiest (to handle) choice available. It comes in convenient roll sizes that install clean and quickly. The product is dust and fiber-free, and does not require any protective garments or respirators to work with.

PRODUCT DESCRIPTION

The Reflectix® Double Reflective 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 and a center layer of polyethylene provide this easy to handle product with high strength and reliability.

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° F or greater.

REFLECTIX® DOUBLE REFLECTIVE INSULATION PART NUMBERS AND STOCK SIZES

- HVST16050 (16" x 50')
- HVST24050 (24" x 50')
- HVST48050 (48" x 50')
- HVST16100 (16" x 100')
- HVST24100 (24" x 100')
- HVST48100 (48" x 100')
- HVST16125 (16" x 125')
- HVST24125 (24" x 125')
- HVST48125 (48" x 125')

BENEFITS

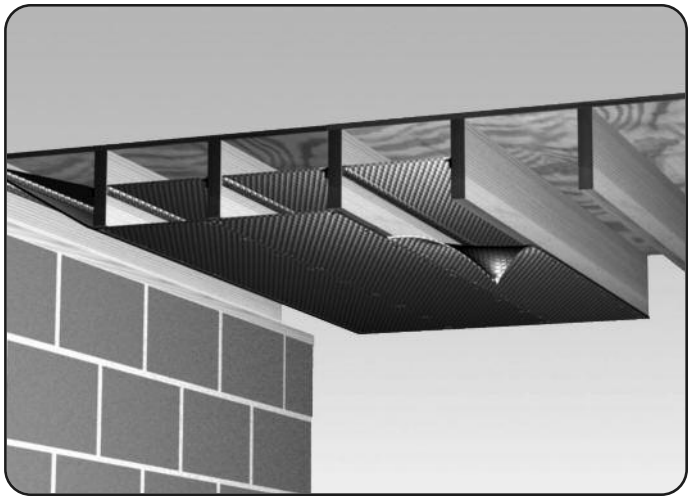
- R-21 and fiber-free
- Costs less to install than alternative insulations
- Does not require protective clothing or respirators to install
- Resists growth of fungi, mold & mildew
- Does not promote nesting of birds, insects or rodents
- Vapor / radon retarder
- When properly installed, prevents ground moisture from causing dry rot
- ISO 9001:2015 Certified Manufacturing Location

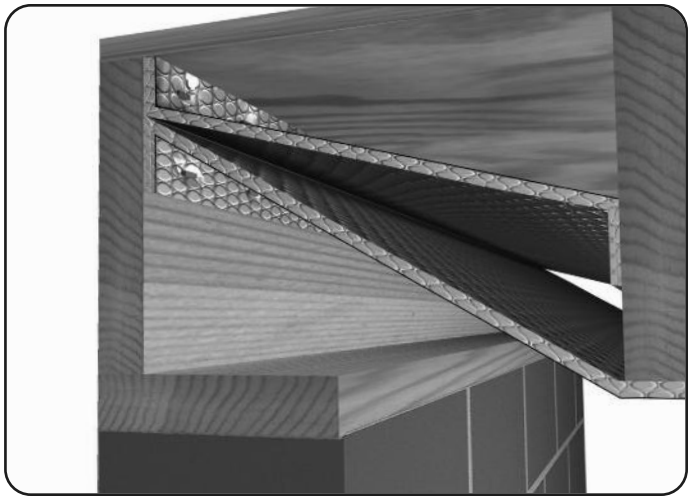
APPLICATIONS

The Reflectix® Double Reflective Insulation is installed in crawl spaces (floor joists) as a standalone (R-21) or as an additional product to existing insulation.

TESTING & CERTIFICATIONS

- Thermal Performance of Wall Systems ASTM C1363
- Thermal Performance of HVAC Duct System 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)





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.

This application meets the thermal performance requirements for new construction in the 2009, 2012 and 2015 International Energy Conservation Codes for Climate Zones 1, 2, 3 and 4.

Note: This product is reflective on both sides and the direction of product installation is not pertinent to thermal performance.

Note: For this application it is recommended to use at least 3/8 inch staples that are Heavy Duty or Galvanized.

- **Inspect the crawl space and make any needed repairs before installing 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. 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 Reflectix® half way up into the joist cavity and staple (at approximately 3" to 4" intervals) the edge of the product to the side of the joist. The resulting product installation will split the cavity into two approximately equal air spaces. It is easiest to utilize the Reflectix® Reflective/Bubble/Bubble/Reflective, Staple Tab product for this step.**
- **For cross bracing, refer to the type of bracing directly below for installation techniques:**
  Solid Wood: Terminate the product at the brace. End staple to the middle of the brace. Continue with the installation on the opposite side, stapling the product to the brace at the approximate mid-point in the cavity.

Metal or Wooden Slats - Cross Braced: Extend the product 5 inches beyond the brace. Cut the product perpendicular to the joist direction at this point. Cut a slit down the middle of the product 3 inches beyond the middle of the cross. Run each flap of product through the cross (one flap on each side), stapling the product to the side of the joist. Continue the product run on the opposite side of the cross brace as before. Tape all seams (horizontal and parallel) with Reflectix® Foil Tape.

- **Continue with the second course of product at one end of a joist cavity (after the first course has been installed) and secure the product "end" with staples to the band board. Proceed down the joists by stapling each edge (or middle of the Reflective/Bubble/Bubble/Reflective 48" wide product) to the face (bottom surface) of each joist. Staple the product at intervals of approximately 3" to 4". At the end of the product run, staple the Reflectix® to the band board.**
- **Seal the seams with Reflectix® Foil Tape. This product is a vapor barrier with the seams sealed, no additional vapor barrier products are necessary.**
- **Any penetrations, openings, rips or tears shall be sealed with Reflectix® Foil Tape or an equivalent.**