



REFLECTIX® SUBMITTAL SHEET

Reflectix® RAP - Bubble Return Air Duct Panning

Reflectix® RAP (Bubble) is an alternative to conventional sheet metal and corrugated aluminum panels for return air ducts. In wood frame construction, it may be used to enclose the bottom of return air plenums, between the joist spaces, stud cavities, and wall and ceiling cavities.

PRODUCT DESCRIPTION

The Reflectix® RAP (Bubble) consists of one outer layer of highly reflective film (96% reflectivity) and one outer layer of white polyethylene. Two inner layers of insulating bubbles resist conductive heat flow while a center layer of polyethylene provides our product with high reliability and strength (nominal thickness 5/16"). 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® Return Air Panning · ASTM E84 · Class A / Class 1 · ASTM C411 Passed



Features AT A GLANCE:

Reduces duct noise

Shop fabricating is not required

Staple to floor joists and stud cavities

Easy to install

Reduces labor costs

Lightweight

WAREHOUSE LOCATIONS:

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

Reflectix, Inc.

A Division of Balkan Innovations Inc.

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BENEFITS

- 30 to 40% less costly than sheet metal and corrugated aluminum panels
- Class A / Class 1 Fire Rating
- Not affected by moisture or humidity
- Reduces noise through plenum
- Resists growth of fungi, mold and mildew
- Saves labor cost of installation
- Non-toxic / non-carcinogenic
- Lightweight and clean

REFLECTIX® RAP (BUBBLE) PART NUMBERS AND STOCK SIZES

- HVRDBW1602503 - 16" x 25'
- HVRDBW2402502 - 24" x 25'

APPLICATIONS

In wood frame construction, it may be used to enclose the bottom of return air plenums, between the joist spaces and stud cavities, and wall and ceiling cavities.

TECHNICAL DATA

Temperature Range:	-30° 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
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 C518
- Hot Surface Performance ASTM C411
- Heat Transfer (Heat Flow Up, Down, Horizontal) ASTM C1363
- Flame Spread and Smoke Density ASTM E84
- Mounting Method ASTM E2599
- Fungus Resistance Mil-Std 810B Method 508
- Pliability Test ASTM C1224
- 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.

- Always install the product with the reflective side facing out. This allows code officials easy access to code information on the product.
- 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 (Bubble) to the sub-floor just behind the return air grate.
- Staple Reflectix® RAP (Bubble) 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 a UL181 Tape with Acrylic Adhesive.

IMPORTANT INFORMATION

- Sheet Metal has traditionally been used for both stud cavity and joist space plenums. However, code does not specify types of materials allowed for panning. Check your local codes before installation for compliance in your area.
- In the 2018 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.
- Check your local codes before installation for compliance in your area.
- Installation instructions and illustrated drawings are recommendations only, while proper local construction methods are the responsibility of the installer.