Reflectix® RA P (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® Return Air Duct Panning 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

**BENEFITS**

- Reduces duct noise
- Shop fabricating is not required
- Staple to floor joists and stud cavities
- Easy to install
- Reduces labor costs
- Lightweight

**Technical Data:**

- **Temperature Range:** -60° to 180°F
- **Nominal Thickness:** 5/16 inch (.312)
- **Weight:** 0.771 oz./sq. ft.
- **Flame Spread Index (ASTM E84):** Less than 25
- **Smoke Developed Index (ASTM E84):** Less than 50
- **Fire Rating:** Class A/Class 1
- **Linear Shrinkage:** None
- **Reflectance (IR):** 96%
- **Water Vapor Transmission (ASTM E96):** 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® RAP (BUBBLE) PART NUMBERS AND STOCK SIZES**

- HVRDBW1602503 - 16" x 25' 
- HVRDBW2402502 - 24" x 25'
- HVRDBW3202501 - 32" 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.
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

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.

1. In the 2015 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 your 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.