

# R4.2 and R6.0 Duct Insulation

## SUBMITTAL SHEET

#### **CERTIFICATION & INSTALLATION TECHNICAL DATA**

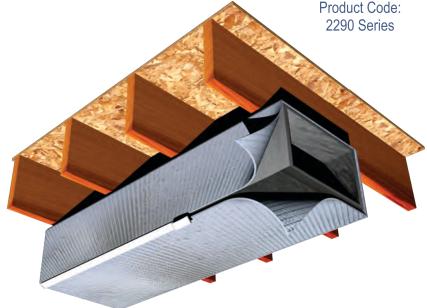
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### **rFOIL™Applications**:

- Suitable for wrapping rectangular or round duct work in HVAC applications
- Residential and Commercial Applications
- R-4.2 and R-6.0

### rFOIL™ Benefits:

- Meets R-4.2 and R-6.0 code requirements
- Improves HVAC system efficiency
- Non-toxic / non carcinogenic
- Lightweight, clean and fibre free
- Thermal value unaffected by moisture or humidity
- Will NOT harbor mold, mildew or other fungi
- Prevents exterior build-up of condensation
- No need for protected garments or respirators when installing
- Permanent and maintenance free
- Environmentally safe
- Reflects 96% radiant heat
- Energy efficient
- No nesting characteristics for birds, insects or rodents



Duct Insulation Direct Wrap for an R-4.2 Value (Without Spacer Strips)

rFOIL<sup>™</sup> Reflective Duct insulation is manufactured from a double layer of polyethylene bubble, bonded to and sandwiched between two metalized surface film.

rFOIL<sup>™</sup> is specially designed to reduce radiant heat gain/loss in all residential and commercial duct applications. rFOIL<sup>™</sup> also helps control condensation by providing an airtight thermal break around the duct.







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# **R4.2** and **R6.0** Duct Insulation



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#### **Testing & Certifications**

All testing on rFOIL<sup>™</sup> duct insulation have been performed at either nationally approved independent laboratories or at leading Universities. Test have been performed to current ASTM-American Society of Testing and Materials Standards. For a copy of any of the actual test reports, call 1-800-837-8961.

- · Thermal Performance- Duct Insulation ASTM C335
- · Thermal conductivity and thermal resistance ASTM C518
- · Hot surface performance ASTM C411
- · Flame Spread and Smoke Density ASTM E84-10
- · Fungus Resistance & Bacteria ASTM C1338-08
- Pliability Test ASTM C1224-03
- · Bleeding & Delamination ASTM C1224-03
- · Water Vapor Transmission ASTM E96
- · Tensile Strength
- · Emittance ASTM C1371
- · Corrosiveness ASTM D3310
- · Humidity resistance ASTM C1258
- · State of California Licensed Insulation Manufacturer

Physical Properties	Test	<b>Results</b> 2290 Series
THERMAL RESISTANCE	ASTM C335	R-4.2 DIRECT WRAP (No Spacers) R-6.0 with BUBBLE SPACERS
TEMPERATURE RANGE	ASTM C411	-50°F to 180°F
FLAME SPREAD INDEX	ASTM E84-10	0
SMOKE DEVELOPMENT INDEX	ASTM E84-10	0
FIRE RATING	ASTM E84-10	CLASS 1 / CLASS A
EMISSIVITY	ASTM C1371	0.04
REFLECTANCE (IR)		0.96
WATER VAPOR PERMEABILITY	ASTM E96	0.029 Perms
RESISTANCE TO FUNGI & BACTERIA	ASTM C1338-08	DOES NOT PROMOTE GROWTH
BLEEDING and DELAMINATION	ASTM C1224-03	NO BLEEDING or DELAMINATION
PLIABILITY	ASTM C1224-03	NO CRACKING
TEMPERATURE and HUMIDITY RESISTANCE	ASTM C1258	Evidence of Delamination - NONE Evidence of Corrosion - NONE Loss of Metallaization - MINIMAL
HOT SURFACE PERFORMANCE	ASTM 518	PASSED (250°F)

#### Installation Instructions

R-4.2 direct wrap (no spacer strips required) It is recommended that the product be loosely wrapped around the duct. Installed loosely will create small airspaces between the outer duct wall and the insulation. These pockets of air will enhance the thermal value of the system.

1. Determine the exact perimeter around the duct

2. Wrap the duct with the material length that is approximately 5% longer than the actual duct perimeter. Ensure that the printed Code Certification Strip is facing outward. This information must be visible to inspectors.

 Tape all seams and joints using rfoil metalized tape specially formulated to adhere to rfoil Duct Insulation. Tape Products: Item code 15112 (2" x150') / Item code 15113 (3"x 150')

4. Repeat the above steps for the entire length of the duct work.

R-6.0 with spacer strips (spacers must be used to create the air space required between the outer duct wall and the insulation to achieve the enhance thermal value of the system)

- 1. Create spacers by attaching 2" wide strips of rFoil duct insulation (spacers sold separately). Spacers should be wrapped around the perimeter at approximately 2' intervals.
- 2. Follow instructions above starting at point (2) for the remainder of the installation.



**Reflective Tape** 

Duct Insulation Spacer Wrap for an R-6.0 Value (With Spacer Strips)



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