



HVAC AIR DUCT INSULATION CATALOG

Residential and Commercial Applications



rFOIL® Reflective Insulation is a Patented Technology manufactured by Covertech. It's designed to reduce the radiant heat gain/loss in residential, commercial and HVAC applications. Applications include walls, ceilings, crawl space, floors, between joist, ductwork, under vinyl siding, attics, roofs and many other applications. Adding rFOIL® to any construction or retrofit project will improve the insulation value and significantly increases its energy efficiency.

rFOIL® insulation materials are tested under:

- ASTM 1224 Standard Specifications for reflective insulation in building applications.
- Class 1 / Class A Fire Rating
- NFPA 286 Full Room Burn Test
- ASTM E84 Fire Test
- ASTM G155 UV Testing
- ASTM C1149 Resistance to Fungi and Bacteria
- ASTM D3310-00 Corrosiveness Testing
- rFOIL® BIG-8 has been evaluated under the new stricter IECC (International Energy Conservation Code) by ICC Evaluation Service (Evaluation report # 1236).

Covertech is a member of Reflective Insulation Manufacturers Association International (RIMA-I); the only worldwide trade association representing the reflective insulation, radiant barrier and interior radiant control coating industries. The Rima Verification program was established to identify reflective products that have fulfilled test requirements in accordance with the current applicable code standards. **All Covertech products are RIMA Verified.**

Covertech is a North American industry leader in the manufacturing and distribution of reflective based insulation and radiant barrier products known and sold under the brand name rFOIL® and NT radiant barrier.



Call Toll Free: 1-800-837-8961 Email: sales@rfoil.com Website: www.rfoil.com

rFOIL® Benefits:

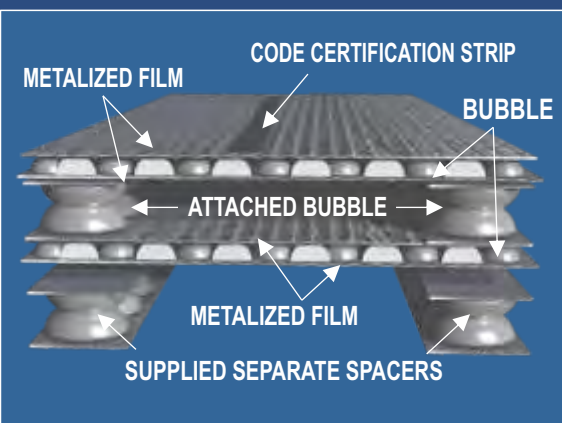
- R-Value = 8.0... Improves HVAC System Efficiency
- No Foam Corner Spacers Needed
- The First R-8.0 without a Mineral Fiber / Fiber Glass Core... NO ITCH!
- Thermal Value Unaffected by Moisture or Humidity
- Will NOT harbor Mold, Mildew, or other Fungi
- Prevents Exterior Build-Up of Condensation
- Saves Energy, Money, and it's Easy to Install



rFOIL® BIG-8 Reflective Duct Insulation consists of two layers of thick polyethylene bubble pack reflective insulation connected by 2-inch wide spacers.

Install the separate set of 2" Spacer Strips (included with the BIG-8 product) around the perimeter of the duct at 2ft intervals followed by wrapping the BIG-8 over the spacers. This product has on it a code certification strip that identifies the brand name and pertinent testing information for duct applications. This inspector friendly tape means no hassles at the jobsite and peace of mind for installers.

The BIG-8 Reflective Duct Insulation has been tested to an R-8.0 and is classified as Class 1/Class A in accordance with the ASTM E84 fire test standard. The product was mounted in accordance to ASTM-E2599.



Size:	48" x 50'	48" x 75'
Part No.	2280-48-050	2280-48-075

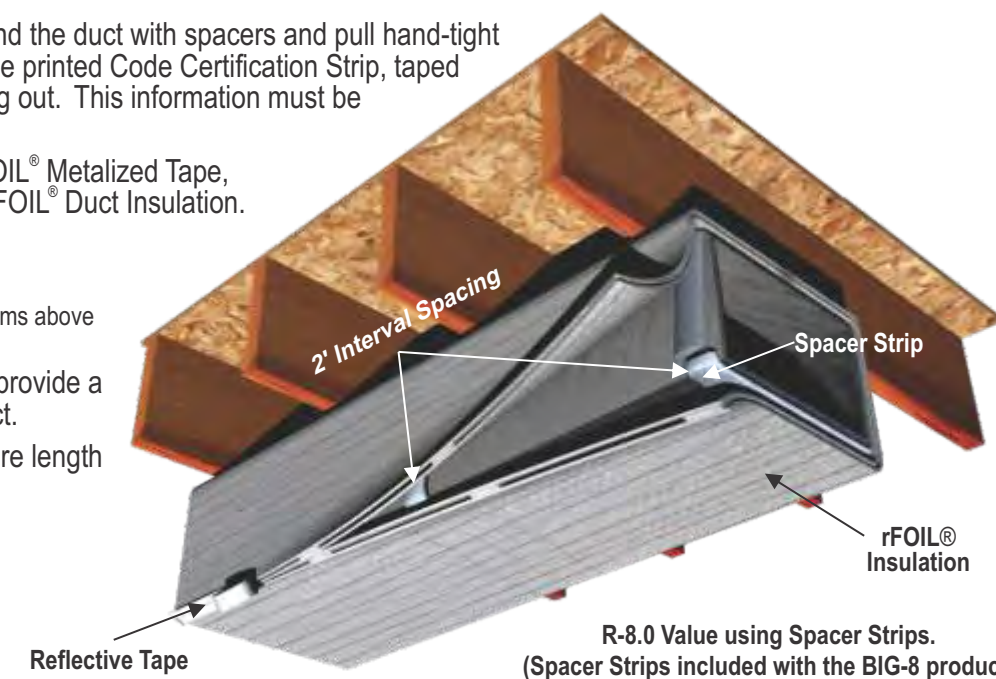


PRODUCT SPECIFICATIONS

PHYSICAL PROPERTIES	TEST	VALUE
THERMAL RESISTANCE	ASTM C335	R-8.0 with BUBBLE SPACERS
TEMPERATURE RANGE	ASTM C411	-50°F to 180°F
FIRE RATING	ASTM E84-10	CLASS 1 / CLASS A
	CAN/ULC-S102-10	FLAME SPREAD = 15 / SMOKE DEVELOPED = 50
EMISSIVITY	ASTM C1371	0.04
REFLECTIVITY	ASTM E903	0.96
WATER VAPOR PERMEABILITY	ASTM E96	0.029 Perms
RESISTANCE TO FUNGI and BACTERIA	ASTM C1338	DOES NOT PROMOTE GROWTH
BLEEDING and DELAMINATION	ASTM C1224-03	NO BLEEDING or DELAMINATION
PLIABILITY	ASTM C1224-03	NO CRACKING
FIRE RATING - FULL ROOM BURN	NFPA 286	PASSES
TEMPERATURE and HUMIDITY RESISTANCE	ASTM C1258	EVIDENCE of DELAMINATION - NONE
		EVIDENCE of CORROSION - NONE
		LOSS of METALLIZATION - MINIMAL

INSTALLATION METHOD

1. 2" wide spacer strips to be wrapped around the perimeter of the duct (spacers strips are included with the BIG-8 product). Spacer strips to be installed at 2' intervals.
2. Wrap rFOIL® BIG-8 Insulation around the duct with spacers and pull hand-tight (for and R-8 value). Ensure that the printed Code Certification Strip, taped the entire length of the roll, is facing out. This information must be visible to inspectors.
3. Tape all seams and joints using rFOIL® Metalized Tape, specially formulated to adhere to rFOIL® Duct Insulation.
 - Item Code 15112 (2" x 150')
 - Item Code 15113 (3" x 150')
 - Use of any tape other than the rFOIL® items above will void the manufacturer's warranty.
4. Properly installed, the spacers will provide a consistent airspace around the duct.
5. Repeat the above steps for the entire length of the ductwork.



SUGGESTED PRODUCTS	rFOIL INSULATION PRODUCT	2280 BIG-8 Series
	rFOIL TAPES	15113 (3" Premium Metalized Foil)



Product Video
CLICK HERE



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rFOIL® Benefits:

- Meets R-6.0 Insulation Code Requirements
- Pre-Attached Spacers Save Time, Labor, and Simplify Installation
- Clean, Safe, Environmentally Friendly, and No-Itch
- Greatly Improves HVAC System Efficiency
- Saves \$\$\$\$\$ By Lowering Energy Usage and Utility Bills
- Lowers Run-Time and Increases Lifespan of Heating and Cooling Systems
- Will Not Harbor Mold, Mildew, or other Fungi
- Impermeable Thermal Core Provides Ultimate Condensation Control
- Reflective and Low-Emissive Surfaces Provide Unmatched Thermal Performance

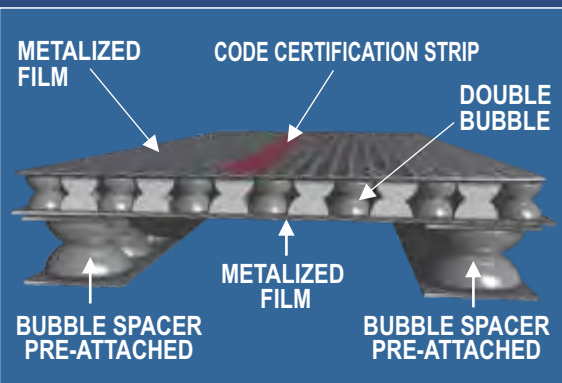


rFOIL® BIG-6 Reflective Duct Insulation is a double layer of polyethylene bubbles sandwiched between two highly reflective metalized film surfaces. 2-inch wide by 1/2 inch thick spacer strips are attached to one side of the material (every 2 ft) creating the necessary air space that is required to provide the thermal properties for the R-6.0 value. This product has on it a code certification strip that identifies the brand name and pertinent testing information for duct applications. This inspector friendly tape means no hassle at the jobsite and peace of mind for installers.

The BIG-6 Reflective Duct Insulation has been tested to an R-6.0 and is classified as Class 1 / Class A in accordance with the ASTM E84 fire test standard. The product was mounted in accordance to ASTM-E2599.



Size:	48" x 75'
Part No.	2260-48-075

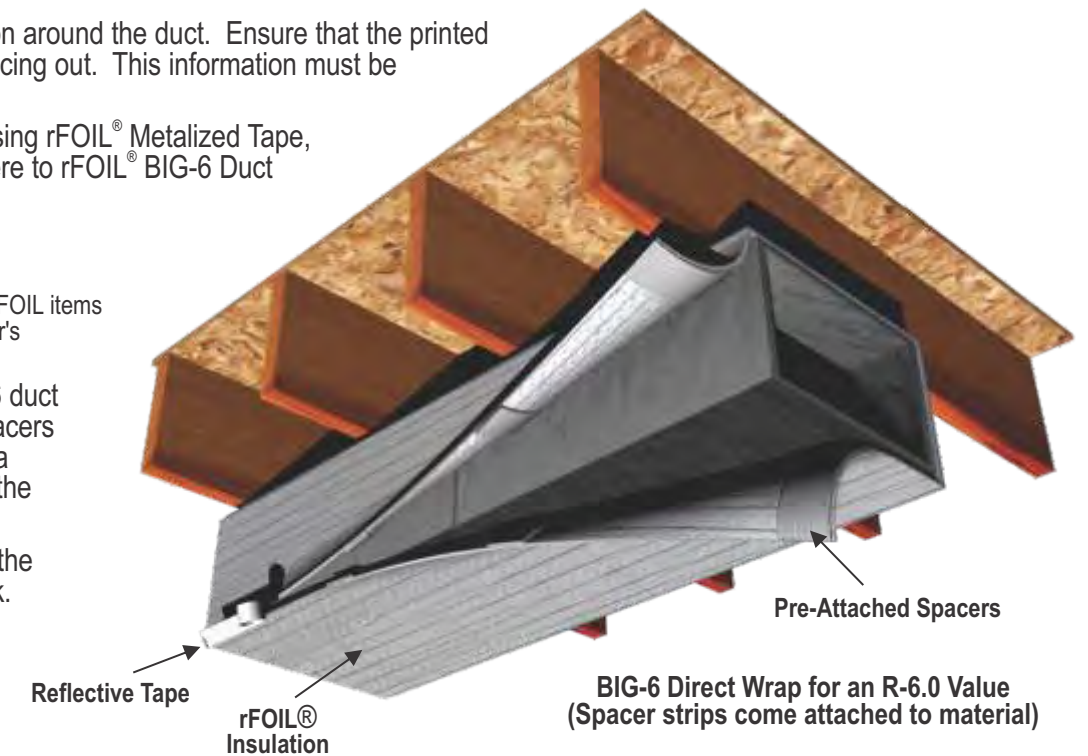


PRODUCT SPECIFICATIONS

PHYSICAL PROPERTIES	TEST	VALUE
NOMINAL THICKNESS	—	5/16"
WEIGHT	—	1.25 OZ / SQ. FT.
TEMPERATURE RANGE	ASTM C411	-50°F to 180°F
FIRE RATING	ASTM E84-08	CLASS 1 / CLASS A
	ASTM E84-08	FLAME SPREAD=0 / SMOKE DEVELOPED=20
	CAN/ULC-S102-10	FLAME SPREAD=0 / SMOKE DEVELOPED=10
FIRE RATING - FULL ROOM BURN	NFPA 286	PASSES
THERMAL RESISTANCE	ASTM C335	R-6.0 (with pre-attached BUBBLE SPACERS)
EMISSIVITY	ASTM C1371	0.04
REFLECTIVITY	ASTM E903	0.96
WATER VAPOR PERMEABILITY	ASTM E96	<0.02 Perms
RESISTANCE TO FUNGI and BACTERIA	ASTM C1338	DOES NOT PROMOTE GROWTH

INSTALLATION METHOD

- Wrap rFOIL® BIG-6 Insulation around the duct. Ensure that the printed Code Certification Strip is facing out. This information must be visible to inspectors.
- Tape all seams and joints using rFOIL® Metalized Tape, specially formulated to adhere to rFOIL® BIG-6 Duct Insulation.
 - Item Code 15112 (2" x 150')
 - Item Code 15113 (3" x 150')
 - Use of any tape other than the rFOIL items above will void the manufacturer's warranty.
- Properly installed, the BIG-6 duct insulation (with attached spacers to the material) will provide a consistent airspace around the duct.
- Repeat the above steps for the entire length of the ductwork.



SUGGESTED PRODUCTS	rFOIL INSULATION PRODUCT	2260 BIG-6 Series
	rFOIL TAPES	15113 (3" Premium Metalized Foil)



Product Video
CLICK HERE

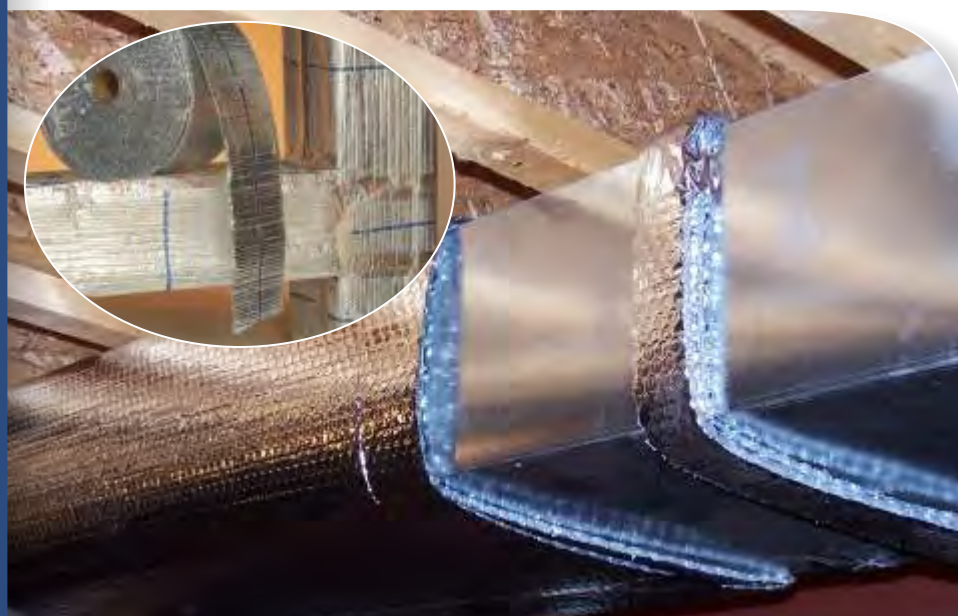


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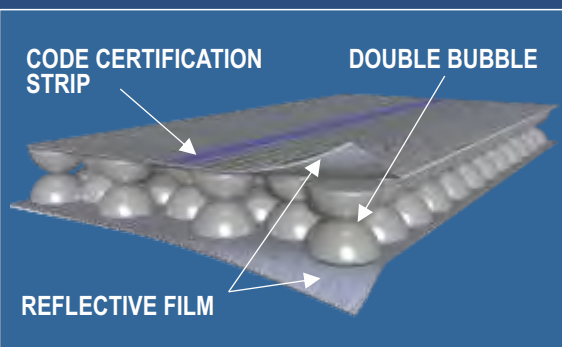
rFOIL® Benefits:

- Meets R-4.2 and/or R-6 Insulation Code Requirements
- Achieve R-Values with Less Material Thickness
- Will Not Harbor Mold, Mildew, or other Fungi
- Greatly Improves HVAC System Efficiency
- Reduces Energy Usage and Utility Bills
- Lowers Run-Time and Increases Lifespan of Heating and Cooling Systems
- Impermeable Thermal Core Provides Tremendous Condensation Control
- Easy, Clean, and Safe to Install
- Printed with Full-Length Code Certification Strip



rFOIL® Reflective Duct Insulation is a double layer of polyethylene bubbles sandwiched between two layers of highly reflective metalized film surfaces. This product has a code certification strip on it that identifies the brand name and pertinent testing information for duct applications. This inspector-friendly tape means no hassles at the jobsite, and peace of mind for installers.

Covertch has developed and tested two methods of installation that will yield thermal resistance of R-4.2 and R-6.0. All products within this line are classified as Class 1/Class A in accordance with the ASTM E84 fire test standard. The product was mounted in accordance to ASTM-E2599.



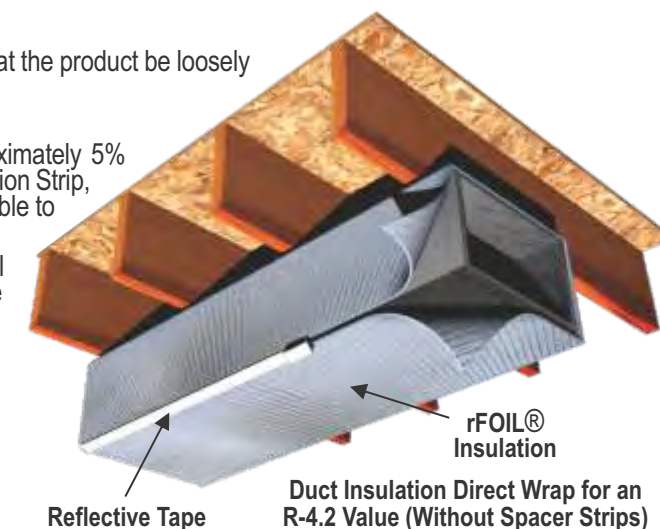
Size	Part No.
36" x 50'	2290-36-050
48" x 50'	2290-48-050
48" x 100'	2290-48-100
48" x 125'	2290-48-125
60" x 100'	2290-60-100
60" x 125'	2290-60-125



PHYSICAL PROPERTIES	TEST	VALUE
NOMINAL THICKNESS	—	5/16"
WEIGHT	—	1.25 OZ / SQ. FT.
TEMPERATURE RANGE	ASTM C411	-50°F to 180°F
FIRE RATING	ASTM E84-08	CLASS 1 / CLASS A
	ASTM E84-08	FLAME SPREAD=0 / SMOKE DEVELOPED=20
	CAN/ULC-S102-10	FLAME SPREAD=0 / SMOKE DEVELOPED=10
FIRE RATING - FULL ROOM BURN	NFPA 286	PASSES
THERMAL RESISTANCE (SYSTEM)	ASTM C335	R-4.2 (WITHOUT SPACERS)
		R-6.0 (with BUBBLE SPACERS)
EMISSIVITY	ASTM C1371	0.04
REFLECTIVITY	ASTM E903	0.96
WATER VAPOR PERMEABILITY	ASTM E96	0.02 Perms
RESISTANCE TO FUNGI and BACTERIA	ASTM C1338	DOES NOT PROMOTE GROWTH

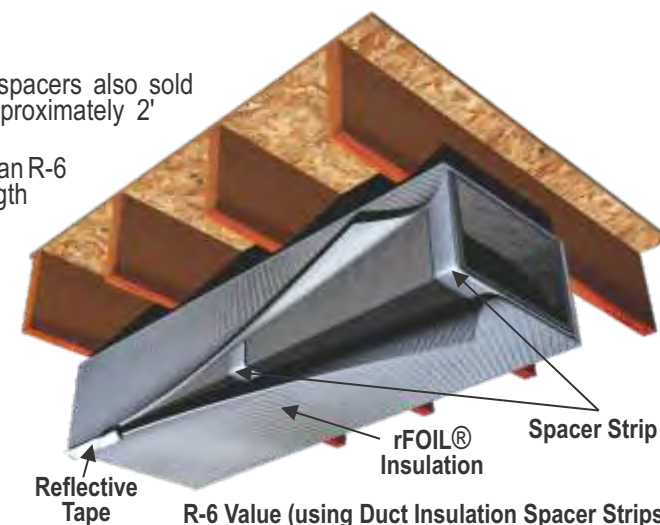
INSTALLATION METHOD #1: R-4.2 (without Spacer Strips)

1. This method does not require spacer strips. However, it is recommended that the product be loosely wrapped around the duct (for an R-4.2 value).
2. Determine the exact perimeter around the duct.
3. For optimal performance, wrap the duct with material length that is approximately 5% longer than the actual duct perimeter. Ensure that the printed Code Certification Strip, taped the entire length of the roll, is facing out. This information must be visible to inspectors.
4. Installed loosely, this will create small airspaces between the outer duct wall and the insulation. These pockets of air will enhance the thermal value of the system.
5. Tape all seams and joints using rFOIL® Metalized Tape, specially formulated to adhere to rFOIL® Duct Insulation.
 - Item Code 15112 (2" x 150')
 - Item Code 15113 (3" x 150')
 - Use of any tape other than the rFOIL® items above will void the manufacturer's warranty.
6. Repeat the above steps for the entire length of the ductwork.



INSTALLATION METHOD #2: R-6.0 (with Spacer Strips)

1. Create spacers by attaching 2" wide strips of rFOIL® Duct Insulation (spacers also sold separately). Spacers should be wrapped around the perimeter at approximately 2' intervals.
2. Wrap rFOIL® insulation around the duct with spacers and pull hand-tight (for an R-6 value). Ensure that the printed Code Certification Strip, taped the entire length of the roll, is facing out. This information must be visible to inspectors.
3. Tape all seams and joints using rFOIL® Metalized Tape, specially formulated to adhere to rFOIL® Duct Insulation.
 - Item Code 15112 (2" x 150')
 - Item Code 15113 (3" x 150')
 - Use of any tape other than the rFOIL® items above will void the manufacturer's warranty.
4. Properly installed, the spacers will provide a consistent airspace around the duct.
5. Repeat the above steps for the entire length of the ductwork.



SUGGESTED PRODUCTS	rFOIL INSULATION PRODUCT	2290 Series
	rFOIL TAPES	15113 (3" Premium Metalized Foil)



Product Video
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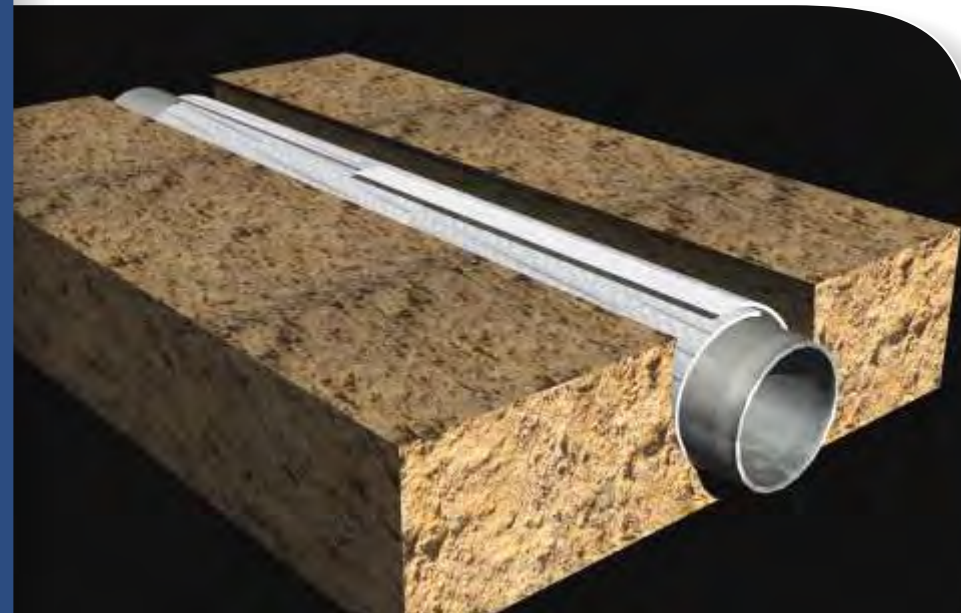


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rFOIL® Benefits:

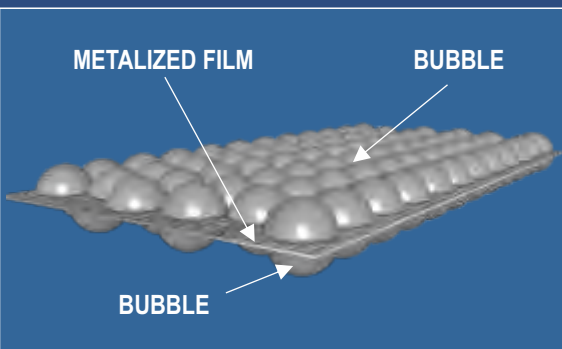
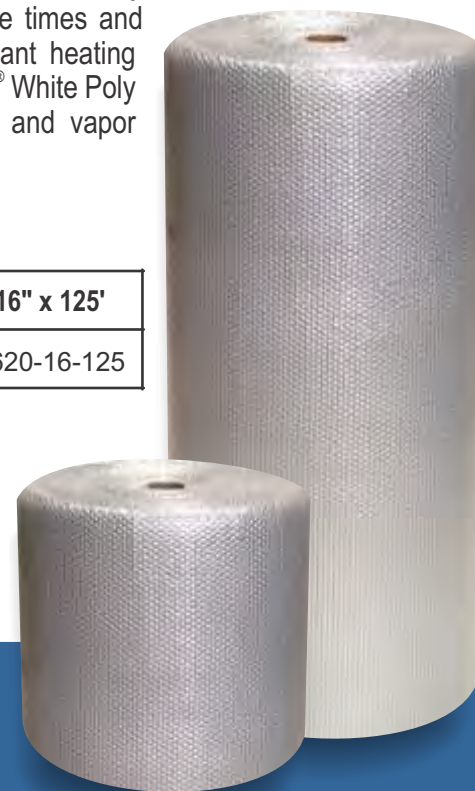
- Reduces Radiant Heat Loss Making Floors Warmer and more Comfortable
- Multi-Layer Vapor and Radon Barrier (14.2 mil)
- Cost-Effective Alternative to Rigid Foam Insulation
- Improves Efficiency of In-Floor Radiant Heating Systems
- Saves Energy Usage and Utility Costs
- Easy to Form around Obstructions and Conforms Easily to Uneven Grades
- Installs Easily Over any Grade
- Withstands Job Site Traffic



rFOIL® Ultra CBF is a patented under-concrete insulation product, comprised of a highly reflective metalized film sheet, sandwiched between two layers of industrial strength polyethylene bubbles. This unique design protects the reflective surface from corrosive chemicals, and ensures that an airspace is maintained for optimum thermal performance.

Installing Ultra CBF can result in noticeably warmer floors, faster slab response times and reduced BTU consumption of radiant heating systems. Sealing seams with rFOIL® White Poly Tape ensures a uniform insulator and vapor barrier.

Size:	48" x 125'	16" x 125'
Part No.	1620-48-125	1620-16-125

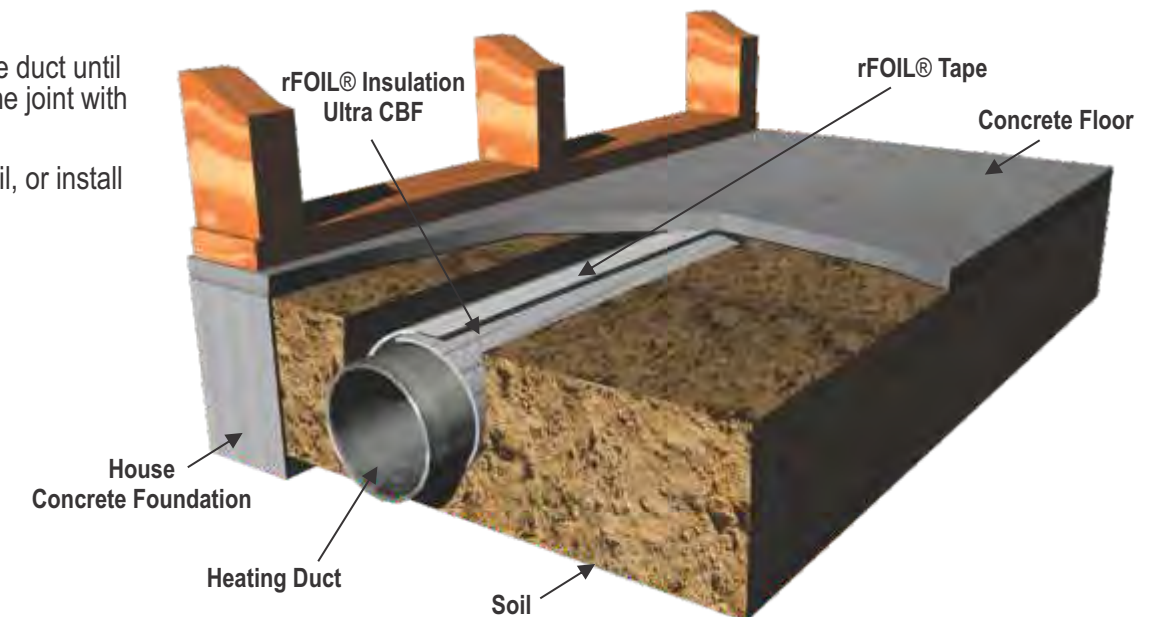


PRODUCT SPECIFICATIONS

PHYSICAL PROPERTIES	TEST	VALUE
NOMINAL THICKNESS	—	5/16"
WEIGHT	—	1.16 OZ / SQ. FT.
TEMPERATURE RANGE	ASTM C411	-50°F to 180°F
EMISSIVITY	ASTM C1371-04A	43%
REFLECTIVITY	ASTM E903	57%
COMPRESSION STRENGTH	ASTM D751	140 PSI
TENSILE STRENGTH	CAN/CGSB - 51.33-M89	21.13 lbs / sq. in.
DEFLECTION	ASTM 1621	<10% under 0.5 PSI
PUNCTURE RESISTANCE	—	85 lbs / sq. in.
WATER VAPOR PERMEABILITY	ASTM E96	0.02 Perms
RESISTANCE TO FUNGI and BACTERIA	ASTM C1149	DOES NOT PROMOTE GROWTH
LINEAR SHRINKAGE	—	NONE
FLEXIBILITY	CAN/CGSB - 51.33-M89	NO CRACKING

INSTALLATION METHOD

1. Unroll rFOIL® Ultra CBF and position it at the bottom of the duct cavity or trench.
2. Lay duct work directly on to insulation material.
3. Wrap insulation around the duct until it is fully enclosed. Seal the joint with 3" rFOIL® white poly tape.
4. Fill the duct trench with soil, or install floor decking as usual.



SUGGESTED PRODUCTS	rFOIL INSULATION PRODUCT	2260 BIG-6 Series
	rFOIL TAPES	15113 (3" Premium Metalized Foil)



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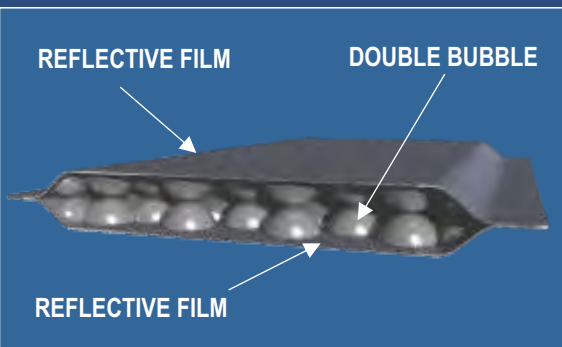
rFOIL® Benefits:

- Staple Tabs for Between Joists
- Minimal Product Thickness
- Vapor Barrier Protection
- Increases Insulating Value of Wall Systems
- Achieve R-Values with Less Material Thickness
- Will Not Harbor Mold, Mildew, or Fungi
- Reduces Energy Usage and Utility Bills
- Impermeable Thermal Core Provides Tremendous Condensation Control
- Easy, Clean, and Safe to Install▪ Staple Tabs for Between Joists



rFOIL® Between-Joist reflective insulation consists of a double layer of polyethylene bubbles sandwiched between two highly reflective metalized film surfaces. This product has been specifically designed for insulating residential wall and ceiling assemblies; tabbed edges help to ensure the product is installed quickly and correctly, every time.

Adding rFOIL® reflective insulation to your construction project improves the insulation value of the building envelope and significantly increases its energy efficiency. As well, all products in this line are classified as Class 1/Class A in accordance with the ASTM-E84 fire test standard. The product was mounted in accordance to ASTM-E2599.



Size	Part No.
16" x 75'	2222-16-075
24" x 75'	2222-24-075
16" x 125'	2222-16-125
18" x 125'	2222-18-125
24" x 125'	2222-24-125

Edges Available	2 Tabs
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PRODUCT SPECIFICATIONS

PHYSICAL PROPERTIES	TEST	VALUE
NOMINAL THICKNESS	—	5/16"
WEIGHT	—	1.25 OZ / SQ. FT.
TEMPERATURE RANGE	ASTM C411	-50°F to 180°F
FIRE RATING	ASTM E84-10	CLASS 1 / CLASS A
FIRE RATING - FULL ROOM BURN	NFPA 286	PASSES
THERMAL RESISTANCE (SYSTEM)	ASTM C1224 (3.5" CAVITY)	R-15.2 (Heat Flow Down)
		R-8.5 (Horizontal Heat Flow)
EMISSIVITY	ASTM C1371	0.04
REFLECTIVITY	ASTM E903	0.96
WATER VAPOR PERMEABILITY	ASTM E96	0.02 Perms
RESISTANCE TO FUNGI and BACTERIA	ASTM C1338	DOES NOT PROMOTE GROWTH

INSTALLATION METHOD

1. Staple rFOIL® insulation between the floor joists or to the side of the floor joists (open web trusses are acceptable).
2. Start at the end of the house and staple the rFOIL® insulation (print side out) to the sub-floor just behind the return air grate.
3. Staple the rFOIL® insulation to the bottom of the floor joist every 2". Other approved attachment methods include: sheet metal screws, roofing nails and steel staples
4. Seal all seams and butt joint using rFOIL® reflective tape.

NOTE: sheet metal has traditionally been used for both stud cavities and joist plenums. However, code does not specify types of materials allowed for panning.



SUGGESTED PRODUCTS	rFOIL INSULATION PRODUCT	2222 Series
	rFOIL TAPES	15113 (3" Premium Metalized Foil)



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