



HVAC Duct Insulation FI-FOIL® RBI SHIELD™ HVAC



HIGH THERMAL PERFORMANCE REFLECTIVE INSULATION

R-4.2

R-6.0

R-8.0

FI-FOIL® HVAC Reflective Duct Insulation improves thermal performance with low-e surfaces that reflect heat rather than absorb it—resulting in greater efficiency and resiliency.

Save Labor & Material Costs. Install it Faster with an Itch-Free, Low-e Duct Solution.

- ✓ Class A / Class 1 Flammability Ratings
- ✓ Class 1 Vapor Retarder
- ✓ Clean, Sustainable Insulation that Keeps Buildings Cooler in the Summer & Warmer in the Winter

- ✓ Blocks 94% of Radiant Heat Transfer
- ✓ Improves Duct Performance and Reduces Load on HVAC Systems
- ✓ Less Load on HVAC Systems Increases Energy Efficiency & Lowers Monthly Utility Bills
- ✓ Reduces Condensation to Improve Indoor Air Quality & Building Resiliency



- Tested to Meet Standards for:
- ✓ ASTM C1224 Reflective Insulation
 - ✓ ASTM C1668 Reflective Insulation on Rigid Ducts
 - ✓ ASTM E84 & E2599 Surface Burning Characteristics
 - ✓ ASTM C411 Hot Surface Performance
 - ✓ ASTM C335 Thermal Resistance
 - ✓ ASTM E96 Water Vapor Permeance
 - ✓ ASTM C1338 Fungi Resistance
 - ✓ ASTM C1668 Pliability, Bleeding & Delamination
 - ✓ ASTM C1258 Aging Resistance - Corrosion & Delamination



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Technical Data

FI-FOIL® RBI SHIELD™ HVAC

FI-FOIL® Reflective HVAC Duct Insulation is an ideal alternative to fiberglass providing both a path to improve overall system performance and an easier, itch-free installation. FI-FOIL® RBI Shield™ HVAC is a low-e double bubble insulation that cuts and fits easily around interior rectangular or round ductwork. The product provides three (3) R-value options that vary with the amount of enclosed air space.

FI-FOIL® HVAC Duct Insulation consists of two (2) low-e layers of reflective film bonded to two (2) premium inner layers of polyethylene to form a strong and durable double bubble insulation. The Low-e surfaces of FI-FOIL® reflect heat rather than absorb it providing a superior solution to reduce the load on HVAC systems and the environment while lowering monthly utility costs. For quick and easy identification, key product performance and flammability compliance is printed on the entire length of the roll.



TECHNICAL DATA

Temperature Range	up to 250°F
Nominal Thickness	5/16"
Weight	0.77 oz. per sqft.
FLAMMABILITY	
ASTM E84 In accordance with E2599	CLASS A
ASTM E84 Flame Spread	0
ASTM E84 Smoke Developed	<50
STRENGTH & PERFORMANCE	
AASTM C1371 Thermal Emittance	0.06
ASTM E96 Water Vapor Permeance	0.01 PERMS
ASTM C1258 Aging Resistance - Corrosion	No Corrosion
ASTM C1258 Aging Resistance - Delamination	No Delamination
ASTM C1668 Bleeding & Delamination	No Bleeding or Delamination
ASTM C1668 Pliability	No Cracking or Delamination
ASTM C1668 Fungi Resistance	No Fungi Growth
ASTM C411 Hot Surface Performance	PASS (up to 250°F)

FI-FOIL® HVAC DUCT INSULATION PRODUCTS

Item Number	Description	Width	Length	Coverage	Roll Diameter	Roll Weight
F-HVAC24200-RBI	HVAC Duct Insulation - Reflective Bubble Roll	24"	100'	200 SF	21 in	13 lb
F-HVAC24250-RBI	HVAC Duct Insulation - Reflective Bubble Roll	24"	125'	250 SF	24 in	15 lb
F-HVAC48400-RBI	HVAC Duct Insulation - Reflective Bubble Roll	48"	100'	400 SF	21 in	24 lb
F-HVAC48500-RBI	HVAC Duct Insulation - Reflective Bubble Roll	48"	125'	500 SF	24 in	28 lb
F-HVACSPACER-RBI	HVAC Duct Insulation Spacers - Reflective Bubble Roll	2"	100'	24 ROLLS	22 in	28 lb

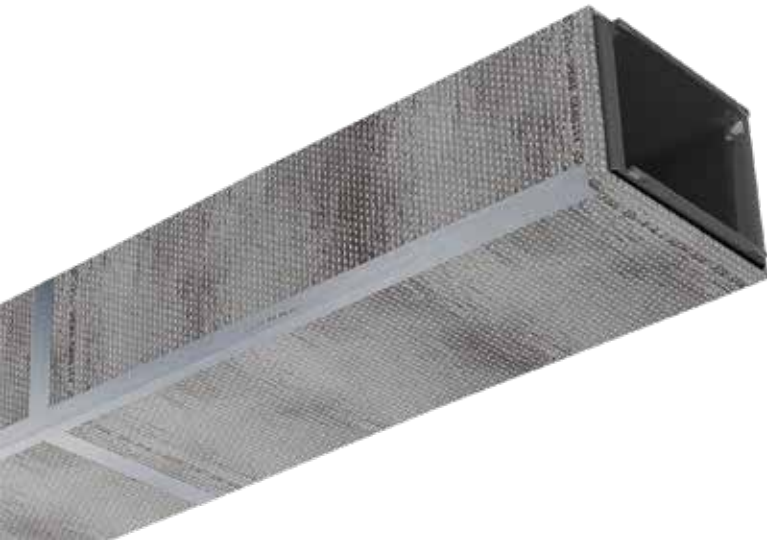


Installation Guide

FI-FOIL® RBI SHIELD™ HVAC

MANUFACTURER'S INSTALLATION INSTRUCTIONS

R-4.2



1. Be sure all metal joints, seams, and penetrations are sealed properly.
2. Measure circumference of the duct.
3. Cut FI-FOIL® HVAC bubble insulation longer than the circumference of duct to allow an overlap on both sides and top of duct.
4. Wrap bubble insulation loosely around the duct to create a 3/4" air space between the duct and insulation; be sure the printed compliance is facing outward and clearly visible.
5. Tape all linear and circumference joints, overlap by 1"-2" using a UL181 foil tape; be sure tape is firmly secured to create an airtight seal.
6. Repeat Steps 1-5 to cover entire length of ductwork.

An airtight seal of all joints and penetrations will create an enclosed air space for thermal performance of R-4.2 when FI-FOIL® HVAC insulation is loosely wrapped; be sure to start installation at the end of the duct and do not leave any exposed duct to ensure maximum performance of the system.

NOTES:

- 1- The installation instructions in this guide are meant as recommendations only; checking local building codes and following required construction methods is the responsibility of the installer. Instructions are meant to illustrate relative placement of FI-FOIL® HVAC insulation products and FI-FOIL® makes no claims that these assemblies are universally accurate.
- 2- FI-FOIL® HVAC Insulation products are designed for indoor applications only; all warranties are void if used in exterior building applications.
- 3- Not to be used as duct liner.



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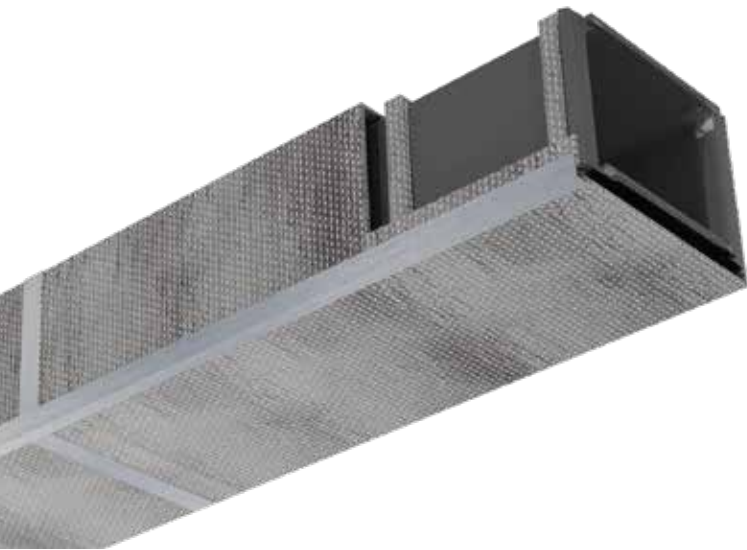
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Installation Guide

FI-FOIL® RBI SHIELD™ HVAC

MANUFACTURER'S INSTALLATION INSTRUCTIONS

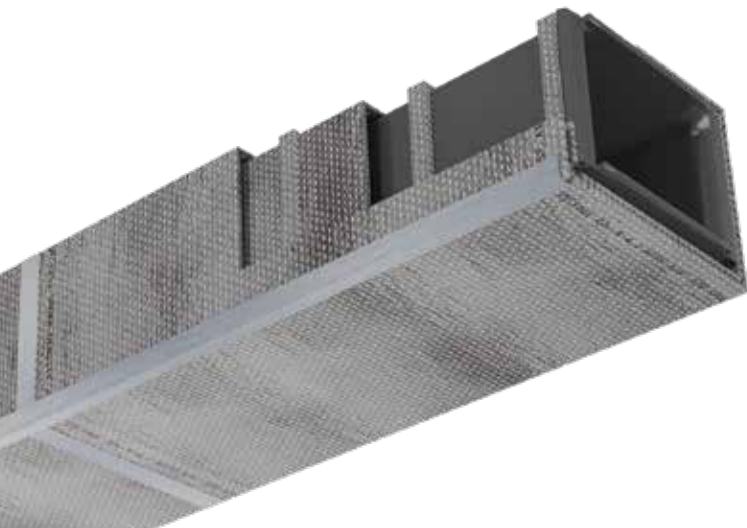
R-6.0



1. Be sure all metal joints, seams, and penetrations are sealed properly.
2. Wrap FI-FOIL® HVAC 2" spacer material around the duct three (3) times and secure to duct at approximately 20"-24" intervals along length of ductwork.
3. Measure circumference of duct at mid-point over the spacers.
4. Cut FI-FOIL® HVAC bubble insulation longer than the circumference of duct with spacers to allow an overlap.
5. Wrap bubble insulation around the duct with spacers to create a 7/8" air space between the duct and insulation; be sure the printed compliance is facing outward and clearly visible.
6. Tape all linear and circumference joints, overlapping by 1"-2" using a UL181 foil tape; be sure tape is firmly secured to create an airtight seal.
7. Repeat Steps 1-6 to cover entire length of ductwork.

An airtight seal of all joints and penetrations will create an enclosed air space for thermal performance of R-6.0 when FI-FOIL® HVAC insulation is wrapped over spacers; be sure to start installation at the end of the duct and do not leave any exposed duct to ensure maximum performance of the system.

R-8.0



1. Follow Steps 1-7 above under R-6.0 instructions.
2. Repeat Steps 2-7 again for an R-8.0 installation.

A double wrap of spacers with an airtight seal of all joints and penetrations will create two (2) enclosed air spaces for thermal performance of R-8.0 when FI-FOIL® HVAC insulation is wrapped over spacers in each layer; be sure to start installation at the end of the duct and do not leave any exposed duct to ensure maximum performance of the system.



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