SPECIFICATION SHEET

Division 7
072153

AA2 Vapor Shield™
REFLECTIVE INSULATION
Comfort and Energy Solutions. It's our Business.

Standard and Hi-Perm Versions

Fi-Foil AA2 Vapor Shield™ is a reflective insulation intended for use on furred-out masonry walls. The inside layer is a minimum .00035" aluminum foil. The outer layer is 35lb. natural Kraft paper coated with polyethylene, laminated to flange boards or expanders that separate paper from foil creating a reflective air space. When installed on furring strips spaced 16" or 24" on center, a second reflective air space is formed. This air space is dependent upon the thickness of the furring strip selected. The Hi-Perm version includes small perforations for applications not requiring a vapor retarder. Available in both staple tab (for wood furring) and tape tab (for metal framing).

How Reflective Insulation Work

Heat is transferred by one of three methods, which include conduction, convection and radiation. In general, any material added to a cavity increases conduction across that air space. Most insulating products on the market resist heat transfer by forming small air or gas pockets between layers of building materials, such as fiberglass, recycled paper and foam. The small spaces restrict air movement, thereby reducing heat flow by convection. However, these standard building materials are not as effective against radiant heat transfer. Reflective insulation functions by forming these dead air spaces with layers of paper, plastic and aluminum. The high reflectivity and low emissivity of the aluminum material has the added benefit of blocking radiant energy, so heat transfer through radiation is also significantly reduced. Reflective insulation provides resistance to heat gain in summer conditions and heat loss in winter conditions. This lowers both cooling and heating costs, reducing energy expenditures throughout the year.

Test Data

Product Version	Perforated	Non-Perforated
ASTM E-96 Water Vapor Permeance	8.67	0.802
ASTM E-84-94 Flammability		
Flame Spread Rating	45	45
Smoke Developed Rating	10	10
National Fire Protection Association Rating	Class B	Class B
ASTM D-3310 Corrosivity	None	
ASTM C-1244/Section 9 Adhesive Performance		
Bleeding	None	
Delamination	None	
Pliability	No signs of cracking or delamination	
ASTM C-1338 Mold & Mildew	Pass	
ASTM C-1371 Foil Emittance	0.034	

COMPLIANCE AND APPROVALS

Meets ASTM C-1244 Standard Specification for Reflective Insulation
Meets National/Florida Building & Energy Code Requirements

Product Information

Furring/Stud	16" O.C.	24" O.C.
Width Expanded	17.5"	25.5"
Diameter	10"	8"
Lineal Footage	375'	250'
Coverage	500 sq. ft.	500 sq. ft.
Weight	21 lbs.	19 lbs.

R-Values

Heat Flow Horizontal

	Vapor Shield	Vapor Shield Hi-Perm
3/4" Cavity	R-4.2	R-4.1
7/8" Cavity	R-4.5	R-4.6
1-1/2" to 1-5/8" Cavity	R-5.2	R-5.1

ASTM C-236 R-Value Test. The R-values of AA2 Vapor Shield™ increase with the thickness of furring strips. With the use of AA2 Vapor Shield™, the thickness of furring strips are slightly increased because it is applied to the surface of the strips and overlaps. Therefore all measurements are considered nominal.

Read This Before You Buy

The label shows the R-value of the insulation. R means resistance to heat flow. The higher the R-value, the greater the insulating power. Compare insulation R-values before you buy. There are other factors to consider. The amount of insulation you need depends mainly on the climate you live in. Also, your fuel savings from insulation will depend on the climate, the type and size of your house, and your fuel use patterns and family size. If you buy too much insulation, it will cost you more than what you will save on fuel. To get the marked R-value, it is essential that this insulation be installed properly.

AA2 Vapor Shield™ - Reflective Insulation

25 YEARS

Fi-Foil® COMPANY
RADIANT INSULATION SOLUTIONS

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Our Solutions **Reflect on You**

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Rev. 7/2012