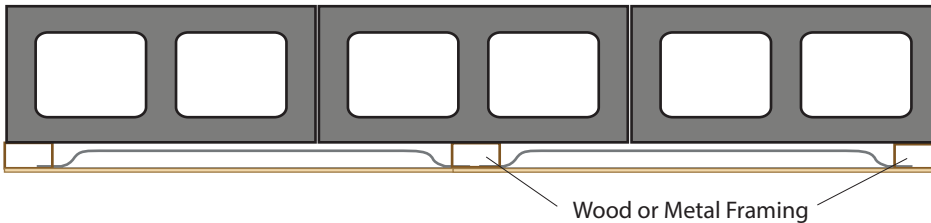




Specification Sheet

Fi-Foil AA2 Vapor Shield™ is a reflective insulation intended for use on furred-out masonry walls. The inside layer is aluminum foil. The outer layer is 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. AA2 Vapor Shield is available in both staple tab (for wood furring) and tape tab (for metal framing). The perforated version is recommended in hot-humid climate zones.



Definition of Reflective Insulation

Reflective insulation is used to reduce the transport of energy across air spaces in a building envelope and consists of one or more low emittance surfaces (0.10 or less), bounding one or more enclosed air spaces. Reflective insulation can also use other layers of materials such as paper or plastic to form enclosed air spaces as part of the system. The performance of the reflective insulation system is determined by the emittance of the material(s), the lower the better, and the size of the enclosed air spaces. The smaller the enclosed air space, the less heat will transfer by convection. Reflective insulation is recognized by ASTM, The Federal Trade Commission and Code Bodies as an accepted insulation technology. R-values can be both tested or calculated using established ASTM standards.

Test Data

	SOLID	PERFORATED
ASTM E96 Water Vapor Permeance, Method A	< 1.0	6.5
FLAMMABILITY - CLASS B		
ASTM E84 - in accordance with mounting method E2599		
Flame Spread	<75	<75
Smoke Developed	<450	<450
ASTM D3310 Corrosivity	None	None
ASTM C1224 - Section 9 Adhesive Performance		
Bleeding	None	None
Delamination	None	None
Pliability	No signs of cracking or delamination	No signs of cracking or delamination
ASTM C1338 Mold & Mildew	Pass	Pass
ASTM C 1371 Foil Emittance	0.03	0.03

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, the amount of insulation already in your house, 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.

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		
Cavity Depth	Solid	Perforated
3/4"	R 4.2 ²	R 4.1 ¹
7/8"	R 4.7 ²	R 4.6 ²
1-1/2" - 1-5/8"	R 5.2 ²	R 5.1 ²

1 R-values tested in accordance with ASTM C1224/1363
 2 R-values tested in accordance with ASTM C1224/236
 R-value of AA2 Vapor Shield will increase with the depth of cavity or furring strips. The R-values shown here are for added insulation which includes adjacent reflective air spaces.
 R-values of structural building materials such as framing members, concrete blocks or gypsum board are not included.

Compliance and Approvals

Meets: ASTM C1224

Compliance with the following code *

- 2018, 2015, 2012, 2009 International Building Code (IBC)
- 2018, 2015, 2012, 2009 International Residential Code (IRC)
- 2018, 2015, 2012, 2009 International Energy Conservation Code (IECC)
- 2020, 2017 Florida Building Code (FBC)
- 2020, 2017 Florida Residential Code (FRC)
- 2020, 2017 Florida Energy Conservation Code (FECC)

Evaluated in accordance with *

- ICC-ES AC 02 - Acceptance Criteria for Reflective Insulation, revised March 2017

Discussion and Comparison of Test Methods

ASTM C236 and ASTM C1363 R&D Services 2019; available under Resources in Technical Library at Fifiol.com

* Engineering Certification Letter (FL)

2020, David Yarbrough, PhD, PE, R&D Services, License 50959

Verified Recycled Content > 20%

AA2 Width	16"	24"
Pre-Consumer	2.7	3.2
Post-Consumer	42.4	37.4
Total	45.1	40.6

