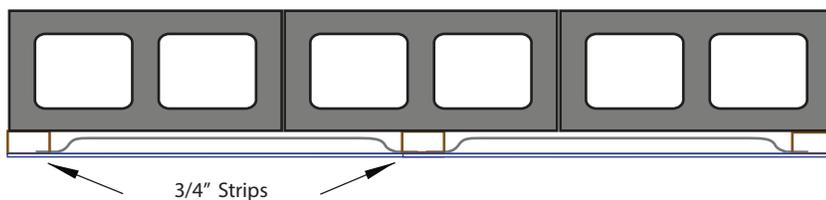




Specification Sheet

M-Shield is an advanced reflective insulation technology for use on furred-out masonry walls. M-Shield incorporates a premium grade of aluminum foil and specially designed synthetic polymers that contain no cellulose, a food for mold. The layers separate with internal expanders creating a reflective air space when installed. An additional airspace is formed when M-Shield is installed on wood or metal furring strips spaced 16" or 24" on center. The second reflective air space is dependent upon the thickness of the furring strip selected. R-values range from R-4.2 to R-5.1. When tested in accordance with ASTM standards, M-Shield exhibited zero growth of mold or mildew. The design incorporates small perforations throughout the product allowing vapor transmission for applications not requiring a vapor retarder.



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

ASTM E96 Water Vapor Permeance	7.46
ASTM E84-11 in accordance with ASTM E2599 Flammability	
Flame Spread	<25
Smoke Developed	<450
Interior Wall & Ceiling Finish Application	Class A
ASTM D3310 Corrosivity	None
ASTM C1224 - Section 9 Adhesive Performance	
Bleeding	None
Delamination	None
Pliability	No signs of cracking or delamination
ASTM C1338 Mold & Mildew	No Growth
ASTM C 1371 Foil Emittance	0.034

Product Information

Furring/Stud Spacing	16" O.C.	24" O.C.
Width Expanded	17.5"	25.5"
Lineal Footage	375'	250'
Coverage	500 sqft	500 sqft
Weight	16 lbs.	16 lbs.
Pallet Quantity	36 Rolls	40 Rolls

R Values

Heat Flow Horizontal

3/4" Cavity	R 4.2 ¹
7/8" Cavity	R 4.5 ¹
1-1/2" Cavity	R 5.1 ²

¹ R-values tested in accordance with ASTM C1224/1363

² R-values tested in accordance with ASTM C1224/236

The R values of M-Shield increase with the thickness of the cavity or furring strips.

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
- State of California Bureau of Home Furnishings and Thermal Insulation License #T1390, Registry #CA-T390 FL

