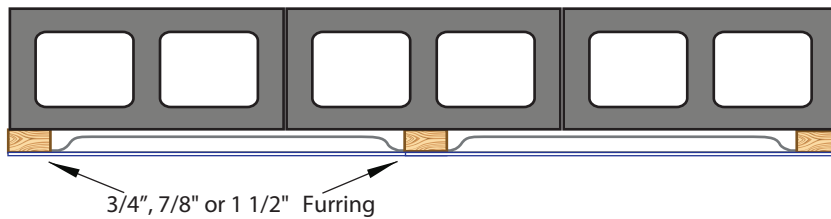




Specification Sheet

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 air space 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-4.1 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. Standards and requirements for Reflective Insulation have been established by the American Society for Testing and Materials (ASTM) and the Federal Trade Commission.

Reflective Insulation

PRODUCT PACKAGE 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 - 4.1
7/8" Cavity	R - 4.6
1-1/2" Cavity	R - 5.1

The R-values noted are in accordance with ASTM C1224. The R-values of M-Shield increase with the thickness of furring strips.

TEST DATA

ASTM E 96 - Water Vapor Permeance.....	7.46
Classification: Not A Vapor Retarder	
ASTM E 84 - Flammability	
Flame Spread Rating.....	< 25
Smoke Development.....	< 50
Interior Wall & Ceiling Finish Application.....	Class A
ASTM D3310 - Corrosivity.....	Pass
ASTM C1244/Section 9 - Adhesive Performance	
Bleeding.....	None
Delamination.....	None
Pliability.....	No signs of cracking or delamination
ASTM C 1388 - Mold & Mildew.....	No Growth
ASTM D 1371 - Emissivity.....	0.034

Compliance and Approvals

- Meets: ASTM C1224
 - Compliance with the following code *
 - 2012, 2009, and 2006 International Building Code (IBC)
 - 2012, 2009, and 2006 International Residential Code (IRC)
 - 2012, 2009, and 2006 International Energy Conservation Code (IECC)
 - 2014, 2010 and 2007 Florida Building Code (FBC)
 - 2014, 2010 and 2007 Florida Residential Code (FRC)
 - 2014, 2010 and 2007 Florida Energy Conservation Code (FECC)
 - Evaluated in accordance with *
 - ICC-ES AC 02 - Acceptance Criteria for Reflective Insulation, approved June 2011
 - State of California Bureau of Home Furnishings and Thermal Insulation License #T1390, Registry #CA-T390 FL
- *See IAPMO-ES Report #0291



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