



## ACHIEVING GRADE 1 INSTALLATION STANDARDS MULTI-LAYER REFLECTIVE INSULATION FOR MASONRY WALL APPLICATIONS

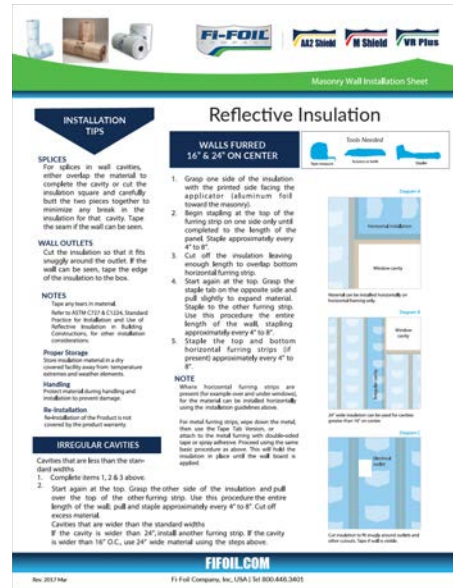
### INSTALLATION INSTRUCTIONS

Fi-Foil's installation instructions are detailed and if followed, should provide a high quality installation. The instructions for each product can be found on the Products page of our website:

<http://www.fifoil.com/products/reflective-insulation>.

Typically, the framing or furring has been installed 16" or 24" on-center prior to the start of installation.

The insulation should be attached to the face of furring strips (metal or wood), expanded and cover the cavity with no or minimal exposed block showing.



### HOW DO RATERS INSPECT MULTI-LAYER INSULATION?

#### GRADE 1 INSULATION – MINOR DEFECTS

Grade 1 installation requires that the insulation material is installed with the direction of the framing. Most framing is installed vertically except windows or doors which often are framed horizontally on the walls.

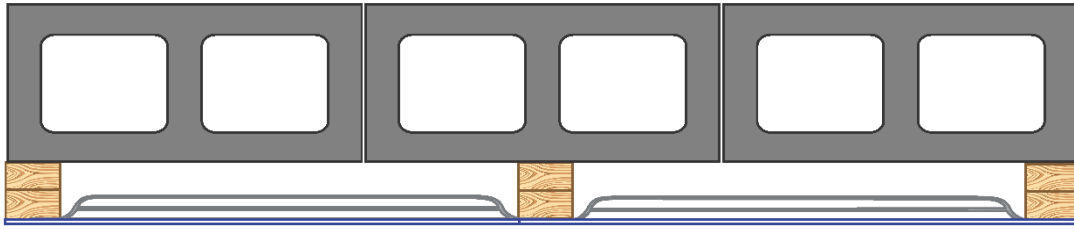
To attain a rating of "Grade 1", wall insulation will cover almost the entire cavity – only minor defects (2% or less of the area is not insulated such that the building envelope (wall) is visible from the building's interior).

For building code compliance, insulating materials with a flame spread rating greater than 25, the insulation facing should be in substantial contact with the drywall (insure that the product has been adhered to the face of the framing – no inset stapling).

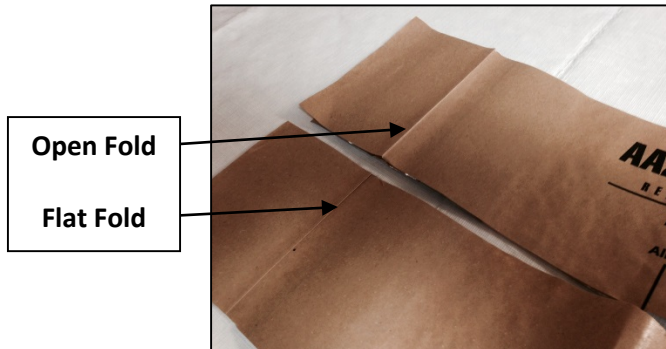
- Coverage: Make sure the insulation covers the entire wall cavity and is attached securely with staples approximately every 4" to 8" or glued, and/or tape tab is secure at both sides, top, and bottom.
- Facing Side / Reflective Side: The paper side should be facing the inside of building – the reflective side should face the block wall.



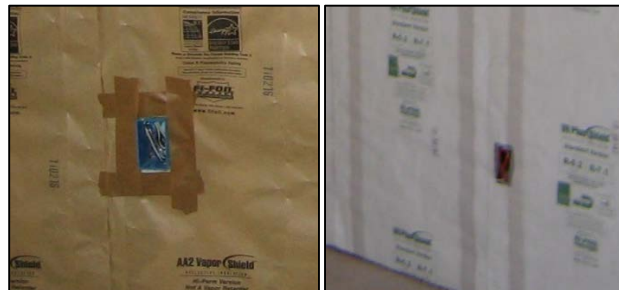
- Internal Reflective Air Spaces: Multi-layer reflective insulation requires air spaces between the reflective layers to function at the optimum R-value.



- The folded crease on each side of insulation (located near the edge) should be un-creased or is no longer completely flat. This will indicate that the layers have separated internally or that air spaces exist between the reflective layers and the insulation facing.



- Make sure the insulation is cut so that it fits snugly around the outlet boxes – the block wall should not be visible around outlets or any penetrations. Taping is acceptable where gaps exist.



- For cavities that are less than standard widths, the excess material shall be trimmed or the over-lap must be to the outside of adjacent installed cavity.
- When there is a splice in wall cavity, the reflective insulation seam shall be butted, over-lapped or taped so the wall is not visible.

### GRADE 2 INSULATION – MODERATE DEFECTS

Grade 2 installation requires that the insulation be installed per Grade 1 with the following exceptions.

- To attain a rating of “Grade 2”, wall insulation should cover most of the entire cavity. Thus defects or areas not insulated (where the building envelope or block wall is visible from the building’s interior) are greater than 2% but not more than 10%.

### GRADE 3 INSTALLATION WHEN THE ABOVE REQUIREMENTS ARE NOT MET.