



Interested Parties  
Reflective Insulation and The Florida Building Code

Greetings,

This letter concerns the insulation product rating for Reflective Insulation product AA2 manufactured by Fi-Foil Company located in Auburndale, Florida. The Florida Building Code-Energy Conservation 7<sup>th</sup> Edition (2020) R303.1.1.1 states that "The Thermal Resistance (R-value) of insulation shall be determined in accordance with the U.S. Federal Trade Commission R-value rule (CFR Title 16, Part 460) in units of  $h \cdot ft^2 \cdot ^\circ F / Btu$  at a mean temperature of 75°F (24°C)."

CFR Title 16, Part 460 §460.5 paragraph (c) requires R-value tests for reflective insulation systems be performed in accordance with ASTM test method C1363-11 with a test panel constructed according to ASTM C1224-15.

Reflective insulation identified as AA2 manufactured by Fi-Foil Company located in Auburndale, Florida has been tested according to the Federal Trade Commission requirements by CAN-BEST (Canadian Building Envelope Science and Technology) a laboratory located in Brampton, Ontario, Canada that is accredited in accordance with ISO 17025.

I have reviewed the CAN-BEST report number L20-1368-5820 dated June 24, 2020 that was provided to me by Fi-Foil Company. Test report L20-1368-5820 contains the result: Thermal Resistance (R-value) of 4.1  $h \cdot ^\circ F \cdot ft^2 / Btu$  for product AA2. The R-value result 4.1  $h \cdot ^\circ F \cdot ft^2 / Btu$  was obtained at a cavity mean temperature of 71.1°F and a temperature difference ( $\Delta T$ ) across the insulated cavity of 29.9°F. These test conditions satisfy the requirements in section 9.7.3 of ASTM C1224 ( $T_{mean} = 75 \pm 4$  °F and  $\Delta T = 30 \pm 2$  °F). The cavity depth for this test was 0.805 to 0.810 inches which includes the staple tab thickness. The reflective insulation was mounted on nominal 1 by 2 inch furring that was spaced 16 inches on-center.

The product R-value declared by Fi-Foil Company is 4.1  $h \cdot ^\circ F \cdot ft^2 / Btu$  for the system tested. It is my opinion that the test report identified above validates the F-Foil Product R-value claim.

Respectfully,

A handwritten signature in black ink that reads 'David W. Yarbrough'.

David W. Yarbrough, PhD, PE (Florida 50959)  
January 4, 2021