
Question 1:
The Florida Commercial Building Code has two compliance methods – Prescriptive and Performance-based. What is the difference?
Answer 1:
The Prescriptive requirements have pre-assigned minimums for each component of the building; the Performance-based compliance allows customization and assigns points for each selection. [Prescriptive requirements are outlined in Section C402] [Performance-based requirements are outlined in Section C407]

Question 2:
The Prescriptive requirements minimum is R-7.6ci (Climate Zone 2/Group R) for mass walls; does this mean my only option is to use insulation that is an R-7.6 continuous insulation or higher value?
Answer 2:
No – Option #A [Use Assembly U-Factor, under Section C402 Building Envelope Requirements; which requires an assembly with a U-factor equal or less than 0.123 (Climate Zone 2/Group R) for mass walls; specified in Table C402.1.4]

• Install 2” wide reflective bubble insulation strip behind 1-1/2” or 1-5/8” metal framing, spaced 24” o.c. and VR Plus reflective insulation (R-7.0/hi-perm version), as your 8” CMU masonry wall insulation.*
• Use unfaced foam board (minimum R-1) behind 1-5/8” metal framing, spaced 24” o.c. and VR Plus reflective insulation (R-7.0/hi-perm version), as your 8” CMU masonry wall insulation.*

No - Option #B
Use EnergyGauge Summit or ComCheck software to meet Performance-based compliance under Section C407, and you can install Fi-Foil’s AA2 Vapor Shield Hi-Perm or M-Shield reflective insulation over 7/8” metal hat channel enclosed air space to achieve R-4.6 as your masonry wall insulation; as long as you meet the minimum energy performance requirements for the baseline commercial building. Or for a higher R-value install VR Plus Hi-Perm reflective insulation over 1-1/2” or 1-5/8” wood or metal framed enclosed air space to achieve R-7.0.

Question 3:
Can you combine Fi-Foil with other insulation materials to create higher R-value hybrid insulation solutions for masonry walls?
Answer 3:
Yes. For example, if you install a 3/4” non-reflective faced foam board against the masonry block wall, then install 3/4” wood furring strips over the foam board, and staple Fi-Foil’s AA2 Vapor Shield Hi-Perm reflective insulation (= R-4.1) to the face of the furring strip. The total combined insulation R-value for this hybrid insulation system will be R-8.1 (if the R-value of the foam board is R-4.0).

Question 4:
Can Fi-Foil reflective insulation be used to insulate metal framed masonry walls?
Answer 4:
Yes. As long as your whole wall assembly is designed to meet Assembly U-Factor, under Section C402 Building Envelope Requirements/Table C402.1.4, for example: U-value of 0.077 (Climate Zone 2/All Other) or U-value of 0.064 (Climate Zone 2/Group R). If you need assistance in calculating your steel framed wall assembly U-value, then please contact your local Fi-Foil sales representative or call 1-800-448-3401.

Question 5:
Does Fi-Foil have a solution for 2x4, 2x6 or 2x8 wood- or metal- framed walls?
Answer 5:
Yes. Fi-Foil’s HY-Fi reflective insulation can be combined with other insulation materials, such as open or closed cell spray foam, to create high performance solutions for 2x4, 2x6 or 2x8 framed walls. Go to: HY-Fi for more details.

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*IAMPO ER-266, valid through 5/31/2018
IAMPO ER-291, valid through 5/31/2019
IAMPO ER-356, valid through 9/30/2018
IAMPO UEL-5003, valid through 7/3/2018

*Refer to “Calculated U-values for VR+Shield Installed with Metal Framing – II”, by David W. Yarbrough, PhD, PE R&D Services – published 8/17/2016.