

Frequently Asked Questions about the 6th Edition Draft of 2017 Energy Conservation Requirements under the Florida Commercial Building Code?

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 3/4" 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 framed walls?

Answer 5:

Yes. Fi-Foil's HY-Fi reflective insulation can be combined with spray foam (Open Cell or Closed Cell) to create high performance solutions for 2x4, 2x6 or 2x8 wood framed walls. Go to: [HY-Fi](#) for more details.

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*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.