



Frequently Asked Questions about the 5th Edition 2014 Energy Conservation Requirements under the New Florida Commercial Building Code?

Question 1:

The Florida Commercial Building Code has two methods - Performance and Prescriptive. What is the difference?

Answer 1:

The Prescriptive Method has pre-assigned minimums for each component of the building; the Performance Method allows customization and assigns points for each selection. Performance Method is outlined in Section C407.

Question 2:

The Florida Prescriptive method now requires an R-7.6ci (Climate Zone 2/Group R) for mass walls; does this mean my only option is to use insulation with an R-7.6ci or higher value?

Answer 2:

No - Option #A

Upgrade to 1-1/2" wood-furred cavity, spaced 24" o.c. and VR Plus Shield Hi-Perm reflective insulation (R-7.0), as your 8" CMU masonry wall insulation. And use U-Factor Alternative, under Prescriptive Method; which requires an assembly with a U-factor equal or less than that specified in Table C402.1.2.

No - Option #B

Use EnergyGauge Summit software to meet Performance Method under Section C407, and you can install Fi-Foil's AA2 Vapor Shield Hi-Perm reflective insulation (R-4.1) over 3/4" wood-furred cavity, as your masonry wall insulation; as long as you meet the minimum energy performance requirements for the baseline commercial building.

Question 3:

Does Fi-Foil have higher R-value solutions for masonry block walls?

Answer 3:

Yes. Fi-Foil manufactures a product called VR Plus Shield Hi-Perm reflective insulation that can be installed on 1-1/2" furring or 1-5/8" metal framing to achieve an R-7.0 (or R-7.1 for Standard version). Fi-Foil can also be combined with other insulation materials to generate even higher insulation system values. For example, if you install a 3/4" foam board against the masonry block wall or use core fill foam injection to hybrid option then install 3/4" furring strips over the foam board, then staple Fi-Foil's AA2 Vapor Shield Hi-Perm (R-4.1) to the face of the furring strip. The total R-value for this hybrid insulation system will be R-4.1 + the foam board or core-fill R-values (refer to the foam board or core-fill insulation manufacturers' specification for R-value).

Question 4:

How can I improve the R-value of the frame wall insulation system?

Answer 4:

A hybrid spray foam / reflective insulation system will provide high R-values and air sealing, all in one system. Fi-Foil's HY-Fi (reflective insulation combined with Open Cell or Closed Cell Spray Foam) is a high performance solution for frame walls. Go to: [HY-Fi](#) for more details and calculate the U-Factor for the assembly, to insure that it is equal to or less than that specified in Table C402.1.2.