



FAQs

2020 Florida Building Code, Energy Conservation 7th Edition Residential [RE]

Question 1:

The 2020 Florida Building Code, Energy Conservation – Chapter 4 Residential Energy Efficiency has two compliance methods – Performance-based and Prescriptive. What is the difference?

Answer 1:

The Prescriptive requirements have pre-assigned minimums for each component of the building; the Performance-based allows customization and assigns values for each component. [The Prescriptive requirements are outlined under Section R402 and the Performance-based requirements are outlined under Section R405]

Question 2:

The 2020 Florida Building Code, Energy Conservation – Chapter 4 Residential Energy Efficiency Residential Prescriptive requirement is R-6 for mass walls, in Climate Zone 2 (if more than 50% of the insulation is on the interior side of the wall); does this mean my only option is to use insulation with an R-6 or higher value?

Answer 2:

No. By using EnergyGauge USA or other approved software to meet Performance-based compliance, you can insert Fi-Foil's [AA2 Vapor Shield](#) perforated version reflective insulation (R-4.1), as your masonry wall insulation. If your overall Home

Efficiency Performance Index (EPI) rating does not pass the minimum rating for code compliance, then you simply have to make up the difference in another area of the envelope. For example, adding a radiant barrier, increasing your ceiling insulation or changing the size of your air conditioning unit.

Question 3:

Will the use of the Performance-based compliance be “New” to the builders and architects?

Answer 3:

No, in fact the Prescriptive requirements have been used in less than 15% of the total buildings in Florida. Performance-based has always been the preferred option.

Question 4:

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

Answer 4:

Yes. Fi-Foil manufactures a product called [VR Plus Shield](#) perforated version reflective insulation that can be installed on 1-1/2” wood furring or 1-5/8” metal framing to achieve an R-7.0 (or R-7.1 for Solid version). Fi-Foil reflective insulation can also be combined with other insulation materials to generate even higher insulation system values. For example, if you adhere Fi-Foil’s [Flex Foam](#) flexible foam insulation to the masonry block wall and install 3/4” furring strips over the flexible foam insulation, then staple Fi-Foil’s AA2 Vapor Shield perforated version reflective insulation (R-4.1) to the face of the furring strip. The total R-value for this hybrid insulation system will be R-5.7 (if the R-value of the Flex Foam is R-1.6).

Question 5:

What other Fi-Foil product options will help us meet the energy performance levels needed in our homes?

Answer 5:

Fi-Foil's [Silver Shield Radiant Barrier](#) installed as an attic radiant barrier or Fi-Foil's [SkyFlex](#) or [SkyFlex VT](#) installed as an air barrier. And the insulation contractor currently installing your Fi-Foil products can install this product for you. An Energy Rater can provide the updated EPI and or Blower Door Test results with either or both of these additions.

Question 6:

What do you have to address frame wall applications?

Answer 6:

Fi-Foil's [HY-Fi](#) perforated version reflective insulation combined with Open Cell or Closed Cell Spray Foam to create a high-performance solution for frame walls.

Question 7:

Does Fi-Foil offer an Air Barrier that works in bonus room and knee wall applications?

Answer 7:

Fi-Foil's SkyFlex or SkyFlex VT is used as a primary air enclosure boundary between conditioned and unconditioned air in the building envelope. SkyFlex's or SkyFlex VT's air permeance levels fall below $0.02L(sxm2)@75 Pa$, making it a very effective air barrier material. An air barrier permeance equal to or less than $0.02L(sxm2)@75 Pa$, as tested in accordance with ASTM 2178, qualifies as an air barrier material. An Energy Rater can provide a Blower Door Test results with either product.

