

Overview of Submittal

The following submittal is being offered as a compromise option that allows renewably-generated electricity to count towards the ERI Compliance path and also increases the envelop and equipment requirements to that of the 5th Edition of the Florida Building Code, Energy Conservation.

Presenting the Submittal as a Code Modification (R406.3 & R406.4)

R406.3 Energy Rating Index. The Energy Rating Index (ERI) shall be a numerical integer value that is based on a linear scale constructed such that the *ERI reference design* has an Index value of 100 and a *residential building* that uses no net purchased energy has an Index value of 0. Each integer value on the scale shall represent a 1-percent change in the total energy use of the rated design relative to the total energy use of the *ERI reference design*. The ERI shall consider all energy used in the *residential building*, and shall include the effect of on-site power production once the envelop and equipment requirements of the 5th Edition of the Florida Building Code, Energy Conservation have been satisfied.

R406.4 ERI-based compliance. Compliance based on an ERI analysis requires that the *rated design* be shown to have an ERI less than or equal to the appropriate value listed in Table R406.4 when compared to the *ERI reference design*. Credit shall be allowed for on-site power production once the envelop and equipment requirements of the 5th Edition of the Florida Building Code, Energy Conservation have been satisfied.

Rationale

Adding solar is not adding efficiency. It is simply paying someone else for the electricity often at a higher rate. Most solar panels are only operating at 25-27% efficiency. Therefore, the envelope and equipment standards for the ERI should be the same as the current code prescriptive measures. Once that standard is achieved the remainder needed to achieve the ERI Score of 58 could be accomplished by renewably-generated electricity.

By increasing the thermal and equipment requirements in the ERI Compliance path we would mitigate the potential that PV could be removed later due to failure, roof replacement or other issues, and prevent the homeowner from being left with a home envelope that was not constructed as well as peer homes built at the same time.

Proponent

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