

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Residential Energy Rating Index Method Compliance Alternative

Permit Office:
Jurisdiction:
Worst Case orientation: No

Permit Number:
County: Orange

Florida Climate Zone: 2
Simulation Location:
FL_ORLANDO_INTL_ARPT

Property

Owner: FSEC
Address: 111 Anywhere Lane
Orlando, FL,

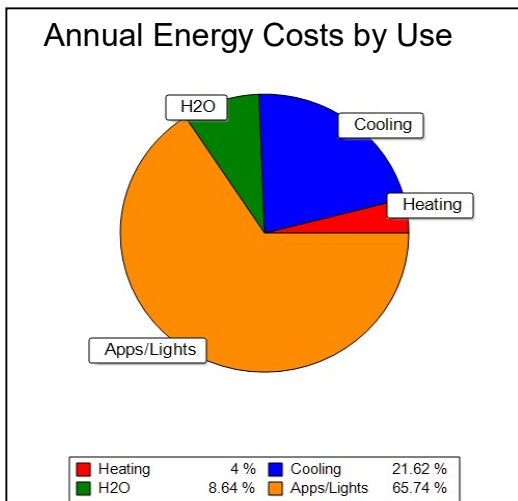
R406 Specific Requirements

On-site Renewable Power? No
Envelope Levels Meet or Exceed: IECC-2009
R403.5.3 HW Pipe Insulation? Yes

Builder

ERI Method Test

ERI for this House	52	PASS
Maximum Allowed ERI	58	
ERI of this House if Built to 2006 Code	100	



Estimated Annual Energy Use Breakdown*

Source	Use	Price**	Cost
Electricity	7350 kWh	\$ 0.119	\$ 874
Natural Gas	0.0 Therms	\$ 1.801	\$ 0
Oil	0.0 Gallons	NA	\$ 0
On-site power production	0.0	NA	\$ 0
Total			874

*Based on standard operating conditions
**Energy prices are 2016 state wide averages published by USDOE EIA
**Assumes net metering

Third Party Verifier:

This home is projected to meet the Energy Rating Index requirement of Section R406 of the Florida Building Code, Energy Conservation, 6th Edition (2017). Other mandatory measures must also be met.

Name: FSEC
Address: 123 Main Cocoa Florida 32922
Phone: (321)633-1155

SIGNATURE: _____

DATE: _____

Review of the plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is complete this building will be inspected for compliance with Section 553.908 Florida Statutes.



BUILDING OFFICIAL: _____

DATE: _____

- Compliance requires the air handler enclosure qualifies as certified factory-sealed in accordance with R404.4.2.1
- Compliance requires air tightness test demonstrating an ACH50 <= 8.1 ACH50 conducted according to R402.4.1.2
- ANSI/RESNET/ICC 380 compliance requires a duct leakage test report confirming a leakage rate to outdoors of <= 0.00 cfm/100ft²
- ANSI/RESNET/ICC 301 compliance requires a tested roof absorptance of 0.90 and a tested roof emittance of 0.90.

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2009 IECC
TABLE 402.1.1
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT^a

CLIMATE ZONE	FENESTRATION U-FACTOR ^{b,j}	SKYLIGHT ^b U-FACTOR	GLAZED FENESTRATION SHGC ^{b,e}	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE ⁱ	FLOOR R-VALUE	BASEMENT ^c WALL R-VALUE	SLAB ^d R-VALUE & DEPTH	CRAWL SPACE ^c WALL R-VALUE
1	1.2	0.75	0.30	30	13	3/4	13	0	0	0
2	0.65	0.75	0.30	30	13	4/6	13	0	0	0

For SI: 1 foot = 304.8 mm.

a. R-values are minimums. U-factors and SHGC are maximums. R-19 batts compressed into a nominal 2x6 framing cavity such that the R-value is reduced by R-1 or more shall be marked with the compressed batt R-value in addition to the full thickness R-value.

b. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.

c. "15/19" means R-15 continuous insulation sheathing on the interior or exterior of the home or R-19 cavity insulation at the interior of the basement wall. "15/19" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulated sheathing on the interior or exterior of the home. "10/13" means R-10 continuous insulated sheathing on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall.

d. R-5 shall be added to the required slab edge R-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet, whichever is less in Climate Zones 1 through 3 for heated slabs.

e. There are no SHGC requirements in the Marine Zone.

f. Basement wall insulation is not required in warm-humid locations as defined by Figure 301.1 and Table 301.1.

g. Or insulation sufficient to fill the framing cavity, R-19 minimum.

h. "13+5" means R-13 cavity insulation plus R-5 insulated sheathing. If structural sheathing covers 25 percent or less of the exterior, insulating sheathing is not required where structural sheathing is used. If structural sheathing covers more than 25 percent of exterior, structural sheathing shall be supplemented with insulation sheathing of at least R-2.

i. The second R-value applies when more than half the insulation is on the interior of the mass wall.

j. For impact rated fenestration complying with Section R301.2.1.2 of the International Residential Code or Section 1609.1.2 of the International Building Code, the maximum U-factor shall be 0.75 in Zone 2 and 0.65 in Zone 3.

2009 IECC
TABLE 402.1.3
EQUIVALENT U-FACTORS^a

CLIMATE ZONE	FENESTRATION U-FACTOR	SKYLIGHT U-FACTOR	CEILING U-FACTOR	FRAME WALL U-FACTOR	MASS WALL U-FACTOR	FLOOR U-FACTOR	BASEMENT WALL U-FACTOR	CRAWL SPACE WALL U-FACTOR
1	1.20	0.75	0.035	0.082	0.197	0.064	0.360	0.477
2	0.65	0.75	0.035	0.082	0.165	0.064	0.360	0.477

a. Nonfenestration U-factors shall be obtained from measurement, calculation or an approved source.

b. When more than half the insulation is on the interior, the mass wall U-factors shall be a maximum of 0.17 in Zone 1, 0.14 in Zone 2, 0.12 in Zone 3, 0.10 in Zone 4 except Marine, and the same as the frame wall U-factor in Marine Zone 4 and Zones 5 through 8.

c. Basement wall U-factor of 0.360 in warm-humid locations as defined by Figure 301.1 and Table 301.1.