

FSEC Tampa Standard Reference Energy Model Used

5th Edition 2014 Envelope Component Baseline R Value Shown In Blue

Envelope Component / System	Energy Points
Raised Floor R-13 to R-19 Insulation	-1
Raised Floor R-19 to R-30 Insulation	-1
Block Wall R-4 to R-5 Insulation	-1
Block Wall R-5 to R-6 Insulation	-2
Frame Wall R-11 to R-13 Insulation	-1
Frame Wall R-13 to R-15 Insulation	-1
Frame Wall R-15 to R-19 Insulation	-1
Hot Vented Attic R-30 to R-38 Insulation	-1
Single Assemb. R-19 To R-30 Insulation Med. / Dark Shingle to Tested White	-3 -1
16% Glass to Floor Area using .4,.25	0
18% Glass to Floor Area using .4,.25	2
20% Glass to Floor Area using .4,.25	3
25% Glass to Floor Area using .4,.25	7
30% Glass to Floor Area using .4,.25	10
Prev. Code Glass NFRC (.65,.5) to NFRC .4,.25	-12
Ducts Mount In Bldg. Envelope to Attic	4
Ductwork Leak Tested and Verified	-1
Air Handler Mounts In Bldg. Envelope	0
Air Handler Mounted in Attic	1
Air Handler Mounted in Garage	0.5
Programmable Thermostat	-0.5
Ceiling Fan Credit	-2
Electric Storage WH .92 EFF to .945 Eff	-1
Electric to Gas Storage WH .66 EFF	-4
Gas Storage to Gas Instant WH .86 EFF	-5
14/8.2 Heat Pump to 15/8.5 SEER	-5
14/8.2 Heat Pump to 16/9 SEER	-9
14/8.2 Heat Pump to 17/9.2 SEER	-12
14/8.2 Heat Pump to 18/9.5 SEER	-15
14/8.2 Heat Pump to 19/9.7 SEER	-18
14/8.2 Heat Pump to 20/10 SEER	-21

the **lower** the energy score, the **more efficient** the home

your proposed home is compared to a geometric twin of equal dimension but with only 16% glass to floor area
Tampa standard reference home scores **98** of 100 points

standard reference geometry / envelope components

2000 square feet conditioned space 43.26'x43.26'x8'
4 occupants - 3 bedroom 2 baths with 22'x17.4' garage
n,s,e,w 43.26'x8' block R-6 Exterior walls, w 13'x8' frame
R-13 garage partition wall, slab floor, R-38 hot vented
attic with tested white shingles, 16% glass to floor area

10'x8' 2 pane low e Vinyl .4 u value, .25 solar heat gain
coefficient window / glass doors with no overhang,
40 sq. ft. of insulated .4 u value door

standard reference equipment / systems

3000sbth + 442lbtuh appliances - semi tight construction
practice with 5ach natural ventilation (15 cfm per person)
hvac equip. and ducts mount inside the bldg envelope
14 / 8.2 seer/hspf heat pump equip. - duct leak test

50 gallon electric storage wh .945 eff mounted in garage

the best area to pick up energy points is the windows
and glass door components - there are not too many
points associated with opaque envelope components
energy code reference model uses a high quality
2 pane low e vinyl frame (only 16% GFA)
equally distributed on all four exterior exposures
if your looking for many points --> systems, glass , GFA

a well balanced distribution of energy efficient glass
envelope components will have the largest impact
on your total energy performance index score

in nearly every Florida home, the hvac equipment and
ducts are located outside the building (hot vented attic)
- so the penalty points associate with the attic mounted
ducts can be traded in hvac, water heating systems,
or any additional credits (duct test, white roof, etc.)
so your as built home scores 100 points or less