CLIMATE ZONES

Effective March 1, 2009

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION					
FORM 1100R-08	Residential Component Prescriptive Method R	ΔΙΙ			

Compliance with Method B of Chapter 11 of the Florida Building Code, Residential, or Subchapter 13-6 of the Florida Building Code, Building, may be demonstrated by the use of Form 1100B for single-and multiple-family residences of three stories or less in height, additions to existing residential buildings, renovations to existing residential buildings, new heating, cooling, and water heating systems in existing buildings, and site-added components of manufactured homes and manufactured buildings. To comply, a building must meet or exceed all of the energy efficiency requirements on Table 11B-1 and all applicable mandatory requirements summarized in Table 11B-2 of this form. If a building does not comply with this method, it may still comply under Method A of Chapter 11 or Subchapter 13-6 of the applicable code.

PROJECT NAME: AND ADDRESS:	BUILDER:
	PERMITTING OFFICE:
OWNER:	PERMIT NO.: JURISDICTION NO.:

- 1. New construction including additions which incorporate any of the following features cannot comply using this method: skylights or other nonvertical roof glass, glass areas
- in excess of 16 percent of conditioned floor area, and electric resistance heat (See Notes to Table 11B-1 on page 2).

 2. Fill in all the applicable spaces of the "To Be Installed" column on "Table 11B-1 with the information requested. All "To Be Installed" values must be equal to or more efficient than the required levels.
- 3. Complete page 1 based on the "To Be Installed" column information.
- 5.

		Prepared By" certification statement at the bottom of page 1. The owner or o	Diana Drint	
			Please Print	
. New	construction	n, addition, or existing building	1	
. Sing	Single-family detached or multiple-family attached		2	
. If mu	ultiple-family-	-No. of units covered by this submission	3	
. Is thi	is a worst ca	se? (yes/no)	4	
. Cond	ditioned floor	r area (sq. ft.)	5	
. Glas	s type and a	rea:		
	a. U-factor		6a	-
	b. SHGC c. Glass area		6b	- sa. ft.
'. Perc		ass to floor area		
			7	%
. F100	a. Slab-on-gra b. Wood, raise c. Wood, com d. Concrete, r		8a. R =	sq.ft. sq.ft. sq.ft.
. Wall	type, area ar	nd insulation:		
a.	Exterior:	 Masonry (Insulation R-value) Wood frame (Insulation R-value) 	9a-1. R= 9a-2. R=	
b.	Adjacent:	 Masonry (Insulation <i>R</i>-value) Wood frame (Insulation <i>R</i>-value) 	9b-1. R= 9b-2. R=	sq.ft.
0. Ceili	ng type, area	and insulation:		
a. Under attic (Insulation <i>R</i>-value)b. Single assembly (Insulation <i>R</i>-value)		10a. R = s 10b. R =		
1. Air d	I. Air distribution system: Duct insulation, location Test report required if duct in unconditioned space		11a. R = 11b.Test report attac	hed? Yes No
2. Cooling system: (Types: central, room unit, package terminal A.C., gas, none)		12a. Type: 12b. SEER/EER: 12c. Capacity:		
3. Heating system: (Types: heat pump, elec. strip, nat. gas, LP-Gas, gas h.p., room or PTAC, none)		13a. Type: 13b. HSPF/COP/AFUI 13c. Capacity:	: !: :	
4. Prog	rammable th	ermostat installed on HVAC systems:	14. Yes No	
5. Hot water system: (Types: elec., nat. gas, LP-gas, solar, heat rec., ded. heat pump, other, none)		15a. Type:		

I hereby certify that the plans and specifications covered by the calculation are in compliance with the Florida Energy Code.	Review of plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed, this building will be inspected for compliance in accordance with Section 553.908, F.S.
PREPARED BY: DATE:	BUILDING OFFICIAL:
I hereby certify that this building is in compliance with the Florida Energy Code: OWNER AGENT: DATE:	DATE:

TABLE 11B-1 MINIMUM REQUIREMENTS (See Note 1) **All Climate Zones**

BUILDING COMPONENT	PERFORMANCE CRITERIA	INSTALLED VALUES:
	U-Factor = 0.65	U-Factor =
Windows (see Note 2):	SHGC = 0.35	SHGC =
	% of CFA < = 16%	% of CFA =
Exterior door type	Wood or insulated	Type:
Walls - Ext. and Adj. (see Note 3):		
Frame	R-13	R-Value =
Mass (see Note 3)		
Interior of wall:	R-6	R-Value =
Exterior of wall:	R-4	R-Value =
Electric resistance heat (See Note 10)	Not allowed	
Ceilings (see Notes 3 & 4)	R=30	R-Value =
Floors: Slab-on-grade	No requirement	R-Value =
Over unconditioned spaces (see Note 3)	R-13	R-value =
Hot water systems (storage type)		
Electric (see Note 5):	40 gal: EF = 0.92	Gallons =
	50 gal: EF = 0.90	EF =
Gas fired (see Note 6):	40 gal: EF = 0.59	Gallons =
	50 gal: EF = 0.58	EF =
Air conditioning systems (see Note 7)	SEER = 13.0	SEER =
Heat pump systems (see Note 8)	SEER = 13.0	SEER =
	HSPF = 7.7	HSPF =
Gas furnaces	AFUE = 78%	AFUE =
Oil furnaces	AFUE = 78%	AFUE =
Programmable thermostat (see Note 10)	Must be installed on all HVAC systems.	Installed? Yes No
Ductwork: (see Note 9)		Location:
Unconditioned space ⁹	R-6, TESTED	Unconditioned space
Conditioned space	NA	R-Value =
Unvented attic assembly per R806.4 with insulation at the roof plane	R-4.2	Test report:
		Conditioned space
		R-Value =
		(No test report required)
Air Handler location:		
Unconditioned attic ⁹ or garage	Requires test report	Location:
Conditioned space or		Test report:
Unvented attic assembly per R806.4 with insulation at the roof plane	No duct test required	

- (1) Each component present in the As-Built home must meet or exceed each of the applicable performance criteria in order to comply with this code using this method; otherwise Method A compliance must be used.
- (2) Windows and doors qualifying as glazed fenestration areas must comply with both the maximum U-Factor and the maximum SHGC (Solar Heat Gain Coefficient) criteria and have a maximum total window area equal to or less than 16% of the conditioned floor area (CFA), otherwise Method A must be used for compliance. Exceptions: 1. Additions of 600 square feet (56 m²) or less may have maximum glass to CFA of 50 percent. 2. Renovations with new windows under ≥ 2 foot overhang whose lower edge does not extend further than 8 feet from the overhang may have tinted glazing or double-pane clear glazing. Replacement skylights installed in renovations shall be double paned or single paned with a diffuser.
- (3) R-Values are for insulation material only as applied in accordance with manufacturers' installation instructions. For mass walls, the "interior of wall" requirement (R-6) must be met except if at least 50% of the R-4 insulation value required for the "exterior of wall" is installed exterior of, or integral to, the wall.
- (4) Attic knee walls shall be insulated to same level as ceilings and shall have a positive means of maintaining insulation in place. Such means may include rigid insulation board or air barrier sheet materials adequately fastened to the attic sides of knee wall framing materials.
- (5) For other electric storage volumes, minimum EF = 0.97 (0.00132 * volume).
 (6) For other natural gas storage volumes, minimum EF = 0.67 (0.0019 * volume).

- (6) For other natural gas storage volumes, minimum EF = 0.67 (0.0019 * volume).

 (7) For all conventional units with capacities greater than 30,000 Btu/hr. For Small-Duct, High-Velocity units, Space Constrained units, and units with capacities less than 30,000 Btu/hr see Table 13-607.AB.3.2A of the *Florida Building Code, Building*, or Table N1107.AB.3.2A of the *Florida Building Code, Residential.*(8) For all conventional units with capacities greater than 30,000 Btu/hr. For Small-Duct, High-Velocity units, Space Constrained units, and units with capacities less than 30,000 Btu/hr see Table 13-607.AB.3.2B of the *Florida Building Code, Building*, or Table N1107.AB.3.2B of the *Florida Building Code, Residential.*(9) All ducts and air handlers shall be either located in conditioned space or tested by a Class 1 BERS rater to be "substantially" leak free. "Substantially leak free" shall mean distribution system air leakage to outdoors no greater than 3 cfm per 100 square feet of conditioned floor area at a pressure differential of 25 Pascal (0.10 in. wc.) across the partie air distribution system air leakage to outdoors no greater than 3 cfm per 100 square feet of conditioned floor area at a pressure differential of 25 Pascal (0.10 in. wc.) across the entire air distribution system, including the manufacturer's air handler enclosure. Exception: New or replacement ducts installed onto an existing air distribution system as part of an addition or renovation. Such ducts shall either be insulated to R-6 or be installed in conditioned space.
- 10) The prohibition on electric resistance heat and the requirement for programmable thermostats do not apply to additions, renovations, and new heating systems installed in existing buildings.

TABLE 11B-2 MINIMUM REQUIREMENTS FOR ALL PACKAGES				
COMPONENTS	SECTION	REQUIREMENTS	CHECK	
Exterior Joints & Cracks	N1106.AB.1.2	To be caulked, gasketed, weather-stripped or otherwise sealed.		
Exterior Windows & Doors	N1106.AB.1.1	Max .3 cfm/sq.ft. window area; .5 cfm/sq.ft. door area.		
Sole & Top Plates	N1106.AB.1.2.1	Sole plates and penetrations through top plates of exterior walls must be sealed.		
Recessed Lighting	N1106.AB.1.2.4	Type IC rated with no penetrations (two alternatives allowed).		
Multistory Houses	N1106.AB.1.2.5	Air barrier on perimeter of floor cavity between floors.		
Exhaust Fans	N1106.AB.1.3	Exhaust fans vented to unconditioned space shall have dampers, except for combustion devices with integral exhaust ductwork.		
Water Heaters	N1112.AB.3	Comply with efficiency requirements in Table N1112.AB.3. Switch or clearly marked circuit breaker electric or cutoff (gas) must be provided. External or built-in heat trap required for vertical pipe risers.		
Swimming Pools & Spas	N1112.AB.2.3.4	Spas & heated pools must have covers (except solar heated). Noncommercial pools must have a pump timer. Gas spa & pool heaters must have minimum thermal efficiency of 78%. Heat pump pool heaters shall have a minimum COP of 4.0.		
Hot Water Pipes	N1112.AB.5	Insulation is required for hot water circulating systems (including heat recovery units).		
Shower Heads	N1112.AB.2.4	Water flow must be restricted to no more than 2.5 gallons per minute at 80 psig.		
HVAC Duct Construction, Insulation & Installation	N1110.AB	All ducts, fittings, mechanical equipment and plenum chambers shall be mechanically attached, sealed, insulated and installed in accordance with the criteria of Section N1110.AB. Ducts in attics must be insulated to a minimum of R-6.		
HVAC Controls	N1107.AB.2	Separate readily accessible manual or automatic thermostat for each system.		