

Compliance with Method B Chapter 6 of the Florida Energy Efficiency Code may be demonstrated by the use of Form 600B for single and multifamily residences of 3 stories or less in height, and additions to existing residential buildings. To comply, a building must meet or exceed all of the energy efficiency prescriptives in any one of the prescriptive component packages and comply with the prescriptive measures listed in Table 6B-1 of this form. An alternative method is provided for additions of 600 square feet or less by use of Form 600C. If a building does not comply with this method, it may still comply under other sections in Chapter 6 of the Code.

PROJECT NAME: <u>WIDERGREN RESIDENCE</u>	BUILDER: <u>owner</u>
AND ADDRESS: <u>WOODBOROUGH SUBD.</u>	PERMITTING OFFICE: <u>COLUMBIA</u>
<u>LAKE CITY, FL</u>	CLIMATE ZONE: 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/>
OWNER: <u>TODD & SHEILA WIDERGREN</u>	PERMIT NO.: <u>24256</u>
	JURISDICTION NO.: <u>221000</u>

GENERAL DIRECTIONS

1. New construction including additions which incorporates any of the following features cannot comply using this method: steel stud walls, single assembly roof/ceiling construction, or skylights or other non-vertical roof glass.
2. Choose one of the component packages "A" through "E" from Table 6B-1 by which you intend to comply with the Code. Circle the column of the package you have chosen.
3. Fill in all the applicable spaces of the "To Be Installed" column on Table 6B-1 with the information requested. All "To Be Installed" values must be equal to or more efficient than the required levels.
4. Complete page 1 based on the "To Be Installed" column information.
5. Read "Minimum Requirements for All Packages", Table 6B-2 and check each box to indicate your intent to comply with all applicable items.
6. Read, sign and date the "Prepared By" certification statement at the bottom of page 1. The owner or owner's agent must also sign and date the form.

Please Print

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1. Compliance package chosen (A-F)
2. New construction or addition
3. Single family detached or Multifamily attached
4. If Multifamily—No. of units covered by this submission
5. Is this a worst case? (yes / no)
6. Conditioned floor area (sq. ft.)
7. Predominant eave overhang (ft.)
8. Glass type and area :
 - a. Clear glass
 - b. Tint, film or solar screen
9. Percentage of glass to floor area
10. Floor type, area or perimeter, and insulation:
 - a. Slab on grade (R-value)
 - b. Wood, raised (R-value)
 - c. Wood, common (R-value)
 - d. Concrete, raised (R-value)
 - e. Concrete, common (R-value)
11. Wall type, area and insulation:
 - a. Exterior: 1. Masonry (Insulation R-value)
2. Wood frame (Insulation R-value)
 - b. Adjacent: 1. Masonry (Insulation R-value)
2. Wood frame (Insulation R-value)
12. Ceiling type, area and insulation:
 - a. Under attic (Insulation R-value)
 - b. Single assembly (Insulation R-value)
13. Air Distribution System: Duct insulation, location
Test report (attach if required)
14. Cooling system
(Types: central, room unit, package terminal A.C., gas, none)
15. Heating system:
(Types: heat pump, elec. strip, nat. gas, L.P. gas, gas h.p., room or PTAC, none)
16. Hot water system:
(Types: elec., nat. gas, L.P. gas, solar, heat rec., ded. heat pump, other, none)

1.	<u>C</u>	
2.	<u>NEW</u>	
3.	<u>SINGLE FAMILY</u>	
4.	<u>N/A</u>	
5.	<u>YES</u>	
6.	<u>2713</u>	
7.	<u>1</u>	
	Single Pane	Double Pane
8a.	<u>N/A</u> sq. ft.	<u>N/A</u> sq. ft.
8b.	<u>N/A</u> sq. ft.	<u>449.7</u> sq. ft.
9.	<u>16.6</u> %	
10a.	R= <u>0</u>	<u>348</u> lin. ft.
10b.	R= <u>—</u>	<u>—</u> sq. ft.
10c.	R= <u>—</u>	<u>—</u> sq. ft.
10d.	R= <u>—</u>	<u>—</u> sq. ft.
10e.	R= <u>—</u>	<u>—</u> sq. ft.
11a-1	R= <u>—</u>	<u>—</u> sq. ft.
11a-2	R= <u>15</u>	<u>2241</u> sq. ft.
11b-1	R= <u>—</u>	<u>—</u> sq. ft.
11b-2	R= <u>15</u>	<u>387</u> sq. ft.
12a.	R= <u>30</u>	<u>2713</u> sq. ft.
12b.	R= <u>—</u>	<u>—</u> sq. ft.
13.	R= <u>6</u>	
14a.	Type: <u>CENTRAL</u>	
14b.	SEER/EER: <u>13.0</u>	
14c.	Capacity: <u>5 TONS</u>	
15a.	Type: <u>HEAT PUMP</u>	
15b.	HSPF/COP/AFUE: <u>7.4</u>	
15c.	Capacity: <u>5 TONS</u>	
16a.	Type: <u>ELECTRIC</u>	
16b.	EF: <u>0.91</u>	

I hereby certify that the plans and specifications covered by the calculation are in compliance with the Florida Energy Code.

PREPARED BY: [Signature] DATE: 1/13/06

I hereby certify that this building, as designed, is in compliance with the Florida Energy Code.

OWNER AGENT: [Signature] DATE: 3-1-06

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.

BUILDING OFFICIAL: _____

DATE: _____

TABLE 6B-1

MINIMUM REQUIREMENTS

Climate Zones 1 2 3

COMPONENTS		PACKAGES FOR NEW CONSTRUCTION				
		A	B	C	D	E
GLASS	Max. % of glass to Floor Area	15%	15%	20%	20%	25%
	Type	Double Clear (DC)	Double Clear (DC)	Double Clear (DC)	Double Clear (DC)	Double Tint (DT)
	Overhang	1'4"	2'	2'	2'	2'
WALLS	Masonry	EXTERIOR AND ADJACENT MASONRY WALLS R-5 COMMON MASONRY WALLS R-3 EACH SIDE.				
	Wood Frame	EXTERIOR, ADJACENT, AND COMMON WOOD FRAME WALLS R-11				
CEILING		R-30	R-30	R-30	R-30	R-30
		(NO SINGLE ASSEMBLY CEILING ALLOWED)				
FLOORS	Slab-On-Grade	R-0				
	Raised Wood	R-19 (ONLY STEM WALL CONSTRUCTION ALLOWED EXCEPT PACKAGE C)				
	Raised Concrete	R-7				
DUCTS		R-6	R-6	R-6, TESTED	R-6	R-6, TESTED
SPACE COOLING (SEER)		12.0	10.5	12.0	11.0	12.0
HEAT	Elect. (HSPF)	7.9	7.1	7.4	7.4	7.4
	Gas/Oil (AFUE)	MINIMUM OF .73 (Direct heating) or .78 (Central)				
HOT WATER SYSTEM	Electric Resistance**	EF .88	NOT ALLOWED (SEE BELOW)	EF .91	NOT ALLOWED (SEE BELOW)	EF .91
	Gas & Oil **	MINIMUM EF OF .54				NATURAL GAS ONLY (SEE BELOW)
	Other	Any of the following are allowed: dedicated heat pump, heat recovery unit or solar system.				

TO BE INSTALLED	
C	
16.6 %	
DC: <input type="checkbox"/>	DT: <input checked="" type="checkbox"/>
1 FEET	
EXT: R =	—
ADJ: R =	—
COM: R =	—
EXT: R =	15
ADJ: R =	15
COM: R =	—
UNDER ATTIC: R =	30
COMMON: R =	—
R =	0
R =	—
R =	—
R =	6 COND. <input type="checkbox"/>
SEER =	13.0
COP =	7.4
AFUE =	—
EF =	0.91
EF =	—
DHP: <input type="checkbox"/>	EF =
HRU: <input type="checkbox"/>	EF =
SOLAR: <input type="checkbox"/>	EF =

* Single package units minimum SEER=9.7, HSPF = 6.6.

** Minimum efficiencies for gas and electric hot water systems apply to 40 gallon water heaters. Refer to Table 6-12 for minimum Code efficiencies for oil water heaters and other sizes.

DESCRIPTION OF BUILDING COMPONENTS LISTED

Percent of Glass to Floor Area: This percentage is calculated by dividing the total of all glass areas by the total conditioned floor area.

Overhang: The overhang is the distance the roof or soffit projects out horizontally from the face of the glass. All glass areas shall be under an overhang of at least the prescribed length with the following exceptions:

1) glass on the gabled ends of a house and 2) the glass in the lower stories of a multi-story house.

Wall, Ceiling and Floor Insulation Values: The R-values indicated represent the minimum acceptable insulation level added to the structural components of the wall, ceiling or floor. The R-value of the structural building materials shall not be included in this calculation. "Common" components are those separating conditioned tenancies in a multifamily building. "Adjacent" components separate conditioned space from unconditioned but enclosed space.

"Exterior" components separate conditioned space from unconditioned and unenclosed space.

Floor: Slab-on-grade floors without edge insulation are acceptable. Raised wood floors shall have continuous stem walls with insulation placed on the stem wall or under the floor except Package C.

Ducts: "TESTED" shall mean the ducts have less than 5% leakage based on a certified test report by a State-approved tester.

Space Cooling System: Cooling systems shall have a Seasonal Energy Efficiency Ratio (SEER) for central units or Energy Efficiency Ratio (EER) for room units or PTAC's equal to or greater than the prescribed value.

Electric Space Heating Option: Heat pump systems shall be rated with a Heating Seasonal Performance Factor (HSPF) equal to or greater than the prescribed HSPF. Heat pump systems may contain electric strip backups meeting the criteria of section 608.1 ABC 3.2.1.2. No electric resistance space heat is allowed for these packages.

Electric Resistance Hot Water Option: For packages designated "Not Allowed", an electric resistance hot water system may be installed only in conjunction with one of the "Other Hot Water System Options". See below.

Other Hot Water System Options: Any dedicated heat pump, heat recovery unit, or solar hot water system may be installed. Solar systems must have an EF of 1.5 or higher. Electric resistance systems having an EF of .88 or greater, or natural gas systems with EF .54 or greater may be used in conjunction with these systems.

TABLE 6B-2 MINIMUM REQUIREMENTS FOR ALL PACKAGES			
COMPONENTS	SECTION	REQUIREMENTS	CHECK
Exterior Joints & Cracks	606.1	To be caulked, gasketed, weather-stripped or otherwise sealed.	✓
Exterior Windows & Doors	606.1	Max .3 cfm/sq.ft. window area; .5 cfm/sq.ft. door area.	✓
Sole & Top Plates	606.1	Sole plates and penetrations through top plates of exterior walls must be sealed.	✓
Recessed Lighting	606.1	Type IC rated with no penetrations (two alternatives allowed).	✓
Multi-story Houses	606.1	Air barrier on perimeter of floor cavity between floors.	N/A
Exhaust Fans	606.1	Exhaust fans vented to unconditioned space shall have dampers, except for combustion devices with integral exhaust ductwork.	✓
Water Heaters	612.1	Comply with efficiency requirements in Table 6-12. 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	612.1	Spas & heated pools must have covers (except solar heated). Non-commercial pools must have a pump timer. Gas spa & pool heaters must have minimum thermal efficiency of 78%.	✓
Hot Water Pipes	612.1	Insulation is required for hot water circulating systems (including heat recovery units).	✓
Shower Heads	612.1	Water flow must be restricted to no more than 2.5 gallons per minute at 80 PSIG.	✓
HVAC Duct Construction, Insulation & Installation	610.1	All ducts, fittings, mechanical equipment and plenum chambers shall be mechanically attached, sealed, insulated and installed in accordance with the criteria of Section 610.1. Ducts in attics must be insulated to a minimum of R-6.	✓
HVAC Controls	607.1	Separate readily accessible manual or automatic thermostat for each system.	✓