BUILDER INFORMATION SHEET
2006 ENERGY CODE "GLITCH FIX" CHANGES

QUESTION: How can I find out the impact of the 12/8/06 energy code changes on the homes I build?

ANSWER: The 12/8/06 "Glitch Fix" energy code changes are significant because the "Baseline" building that establishes the energy budget for your "As-Built" building is changing. By federal law, state baselines must be the same as the federal minimum equipment efficiencies for covered products. This means that instead of comparing the overall energy performance of your building to a heat pump with a SEER 10 and an HSPF of 6.8 as has been the case for the last ten years, the code will compare your building to a unit with a SEER 13 and an HSPF of 7.7. That's quite a jump. In the past, it was easy to simply raise the efficiency of the HVAC unit to bring a building into code compliance. However, upgrading the efficiency of the equipment is not your only option.

Recommendations on how to deal with this increase are as follows:

1. Have the person who does your energy code calculations go online to **www.energygauge.com** and buy the new EnergyGauge Fla/Res software (available 10/21/06; support phone number is (321) 638-1492). Play with the options across the board, including credits. Better yet, have someone on your staff get up to speed on how to do this thing. If you go online at **www.floridabuilding.org** and click on "Publications", you will find an electronic document called the *Residential Instruction Manual*. It will walk you through the process of how to do a residential energy code calculation by hand so you'll know how to do it. Then use the computer program. There is no magic. Anyone on your staff can do it.

2. Have a look at the attached Form 600B-04$_{Revised}$ files for north, central and south Florida shown below. These compliance packages incorporate the increase in code stringency and become effective on 12/8/06 as an alternative to Form 600A-04$_{Revised}$.

3. One easy way to make up the increase in code stringency is to get your HVAC ducts tested. If your A/C guy does a good job of installation on the air distribution system to begin with, there is something called an air-tight duct credit (see section 13-610.1.A.1 of the code) that can give you 15-17% credit for tight ducts. There is a list of certified Class 1 BERS raters online who can test your ducts; go to **www.fsec.ucf.edu** and click on the BERS program on the bottom right of the screen. Better yet, encourage your a/c guy to become certified as a Class 1 rater (info available at (321) 638-1492). Try this option in the computer program and watch your building come into compliance. Just putting the air handler inside conditioned space will get you 7-10% improvement on the air distribution load of the building. Or install a factory-sealed air handler for a 5% improvement in duct efficiency.

4. Another way to make up ground on your overall energy calculation is to install labeled windows. Remember in 2003 when the energy code suddenly got more stringent? It was because the default multipliers for windows changed from those representing typical single/double clear/tint windows to numbers representing the least efficient windows out there. By buying and installing labeled windows, you can make up ground because you can enter the actual U-factor and Solar Heat Gain Coefficient (SHGC) for the windows used (see section 13-104.4.5 of the code). Installing U-0.65/SHGC 0.4 windows instead of default double pane clear windows in central Florida can lower your As-Built points by 9%. Ask your supplier to cost out available lines of more efficient windows and compare the energy impact with that from using other technologies to meet code. For your information, your building will be compared to a window "Baseline" that has a U-factor of 0.75, a SHGC of 0.4, no overhang and has 18% glass to floor area. Florida has no maximum window U-factor or SHGC.

It is hoped that these suggestions help you through the upcoming increase in code stringency. If you need more information, Ann Stanton can be reached at ann.stanton@dca.state.fl.us or by phone at (850) 488-0964.

Form 600B-04$_{\text{Revised}}$

NORTH 1,2,3

Table 6B-1 [Replace the current table and footnotes with the following]

COMPONENT	**PACKAGE A**	**PACKAGE B**	**PACKAGE C**	***TO BE INSTALLED***
Glass	< 18% glass to floor area	< 18% glass to floor area	< 18% glass to floor area	GFA_____ %
Overhang	2' overhang required	2' overhang required	2' overhang required	OH _____ ft.
U-factor	U-factor 0.65	U-factor 0.65	Double pane (Default)	U-factor:_____
Solar Heat Gain Coefficient	SHGC 0.40	SHGC 0.65	Clear (Default)	SHGC:_____
Walls (exterior or adjacent)				Exterior Adjacent
Wood frame	R-value R-13	R-value R-13	R-value R-13	R= _____ ..._____
CBS				
Insulation on interior of wall	R-value R-7	R-value R-7	R-value R-7	R= _____ _____
Doors	Solid wood or insulated	Solid wood or insulated	Solid wood or insulated	
Ceilings				
Under attic/single assembly	R-value R-30	R-value R-38	R-value R-38	R=_____
Floor				
Slab-on-grade	R-value R-0	R-value R-0	R-value R-0	R= _____
Raised floors	Not allowed	Not allowed	Not allowed	Not allowed
Cooling system	SEER 13.0	SEER 13.65	SEER 15.0	SEER:_____
Heating system				
Electric heat pump	HSPF 7.7	HSPF 8.1	HSPF 8.5	HSPF:_____
Gas furnace	AFUE 0.78	Nat. gas AFUE 0.78	Nat. gas AFUE 0.78	AFUE:_____
	(LP gas not allowed)	(LP gas not allowed)	LP gas 0.80	AFUE:_____
Water heater				
Electric water heater	EF 0.94	EF 0.92	EF 0.92	EF= _____
Gas water heater	Nat. gas EF 0.59	Nat. gas EF 0.59	Nat. gas EF 0.59	EF=_____
Other (see below)	(LP gas not allowed)	(LP gas not allowed)	LP gas 0.63	EF=_____
Air distribution system			TESTED (LP gas only)	□ TESTED
Ducts in attic	R-value R-6	R-value R-6	R-value R-6	R = _____
Air handler location	AHU in the garage or inside conditioned space	AHU in the garage or inside conditioned space	AHU in the garage or inside conditioned space	Location:_____

Form 600B-04$_{\text{Revised}}$

CENTRAL 4,5,6

Table 6B1 [Replace the current table and footnotes with the following]

COMPONENT	PACKAGE A	PACKAGE B	PACKAGE C
Glass	< 18% glass to floor area	<18% glass to floor area	< 18% glass to floor area
Overhang	2' overhang required	2' overhang	2' overhang required
U-factor	U-factor 0.65	U-factor 0.98	Double pane (Default)
Solar Heat Gain Coefficient	SHGC 0.40	SHGC 0.45	Clear (Default)
Walls (exterior or adjacent)			
Wood frame	R-value R-11	R-value R-13	R-value R-11
CBS			
Insulation on interior of wall	R-value R-4.1	R-value R-7	R-value R-4.1
Doors	Solid wood or insulated	Solid wood or insulated	Solid wood or insulated
Ceilings			
Under attic/single assembly	R-value R-30	R-value R-30	R-value R-30
Floor			
Slab-on-grade	R-value R-0	SOG R-0	SOG R-0
Raised floors	Not allowed	Not allowed	Not allowed
Cooling system	SEER 13.0	SEER 13.65	SEER 15.0
Heating system			
Electric heat pump	HSPF 7.7	HSPF 8.1	HSPF 8.5
Gas furnace	Nat. gas AFUE 0.78	Nat. gas AFUE 0.78	Nat. gas AFUE 0.78
	LP gas 0.80	LP gas 0.80	LP gas 0.80
Water heater			
Electric water heater	EF 0.92	EF 0.92	EF 0.94
Gas water heater			
Natural gas	EF 0.59	EF 0.59	EF 0.59
LP gas	EF 0.59	EF 0.63	EF 0.63
Other (see below)			
Air distribution system			
Ducts in attic	R-value R-6	R-value R-6	R-value R-6
Air handler location	AHU in the garage or inside conditioned space	AHU in the garage or inside conditioned space	AHU in the garage or inside conditioned space

Form 600B-04$_{Revised}$

SOUTH 7,8,9

Table 6B1 [Replace the current table and footnotes with the following]

COMPONENT	PACKAGE A	PACKAGE B	PACKAGE C
Glass	<18% glass to floor area	<18% glass to floor area	<18% glass to floor area
Overhang	2' overhang required	2' Overhang required	2' Overhang required
U-factor	U-factor 0.75	U-factor 0.75	U-factor 0.98
Solar Heat Gain Coefficient	SHGC 0.25	SHGC 0.45	SHGC 0.55
Walls (exterior or adjacent)			
Wood frame	R-value R-11	R-value R-13	R-value R-11
CBS			
Insulation on interior of wall	R-value R-4.1	R-value R-7	R-value R-4.1
Doors	Solid wood or insulated	Solid wood or insulated	Solid wood or insulated
Ceilings			
Under attic or single assembly	R-value R-30	R-value R-30	R-value R-30
Floors			
Slab-on-grade only	R-value R-0	R-value R-0	R-value R-0
Raised floors	Not allowed	Not allowed	Not allowed
Cooling system	SEER 13.0	SEER 13.65	SEER R-15
Heating system			
Electric	Electric resistance	Electric resistance	Electric resistance
Gas furnace	AFUE 0.78	AFUE 0.78	AFUE 0.78
Water heater			
Electric water heater	EF 0.92	EF 0.92	EF 0.94
Gas water heater	EF 0.59	EF 0.59	EF 0.59
Other (see below)			
Air distribution system			
Ducts in attic	R-value R-6	R-value R-6	R-value R-6
Air handler location	AHU in the garage or inside conditioned space	AHU in the garage or inside conditioned space	AHU in the garage or inside conditioned space