

Florida Energy Efficiency Code For Building Construction

**** Software Title and Version to go here ****, Effective Date: March 15, 2012 -- Form 506-2010
Total Building Performance Method for Commercial Buildings

PROJECT SUMMARY

Short Desc: RefProj

Description: New Project

Owner: Enter Owner's name here

Address1: 1234 Any Street

City: Anywhere

Address2: Enter Address here

State: FL

Zip: 12345

Type: Office

Class: New Finished building

Jurisdiction: ALACHUA COUNTY, ALACHUA COUNTY, FL (111000)

Conditioned Area: 10000 SF

Conditioned & UnConditioned Area: 10000 SF

No of Stories: 1

Area entered from Plans 0 SF

Permit No: 0

Max Tonnage 50

If different, write in: _____

Compliance Summary

Component	Design	Criteria	Result
Gross Energy Cost (in \$)	5,005.0	8,885.0	PASSED
LIGHTING CONTROLS			PASSES
EXTERNAL LIGHTING			FAILS
HVAC SYSTEM			FAILS
PLANT			None Entered
WATER HEATING SYSTEMS			FAILS
PIPING SYSTEMS			FAILS
Met all required compliance from Check List?			Yes/No/NA

IMPORTANT MESSAGE

Info 5009 -- -- -- An input report of this design building must be submitted along with this Compliance Report

CERTIFICATIONS

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

Prepared By: John Doe

Building Official: _____

Date: _____

Date: _____

I certify that this building is in compliance with the FLorida Energy Efficiency Code

Owner Agent: _____

Date: _____

If Required by Florida law, I hereby certify (*) that the system design is in compliance with the Florida Energy Efficiency Code

Architect: _____

Reg No: _____

Electrical Designer: _____

Reg No: _____

Lighting Designer: _____

Reg No: _____

Mechanical Designer: _____

Reg No: _____

Plumbing Designer: _____

Reg No: _____

(*) Signature is required where Florida Law requires design to be performed by registered design professionals.

Project: RefProj
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 (WEA File: FL_GAINESVILLE_REGIONAL_AP.tm3)

Building End Uses

	1) Proposed	2) Baseline
Total	347.80	744.30
	\$5,005	\$11,107
ELECTRICITY(MBtu/kWh/\$)	301.00	677.00
	88193	198349
	\$4,771	\$10,770
AREA LIGHTS	15.70	146.30
	4594	42873
	\$249	\$2,328
MISC EQUIPMT	100.00	100.00
	29302	29302
	\$1,585	\$1,591
PUMPS & MISC	0.20	0.20
	45	45
	\$2	\$2
SPACE COOL	131.50	274.50
	38539	80428
	\$2,085	\$4,367
VENT FANS	53.60	156.00
	15713	45701
	\$850	\$2,482
NATURAL-GAS(MBtu/therm/\$)	46.80	67.30
)	468	673
	\$234	\$337
SPACE HEAT	46.80	67.30
	468	673
	\$234	\$337

Passing requires Proposed Building cost to be at most 80% of Baseline cost. This Proposed Building is at 45.1%

PASSES

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External Lighting Compliance

Description	Category	Tradable?	Allowance (W/Unit)	Area or Length or No. of Units (Sqft or ft)	ELPA (W)	CLP (W)
Ext Light 1	Uncovered Parking Areas -- Parking lots and Drives	Yes	0.15	1,000.0	150	40
Ext Light 2	Internally illuminated exit signs	No	5.00	8.0	40	35
Ext Light 3	Uncovered Parking Areas -- Parking lots and Drives	Yes	0.15			

Tradable Surfaces: 40 (W) Allowance for Tradable: 159.5 (W)

FAILS

All External Lighting: 75 (W)

Compliance check includes a 5% excess allowance of 9.50(W)

Ext Light 3 -- Does not meet control requirements of Type: <2><3>

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Lighting Controls Compliance

Acronym	Ashrae ID	Description	Area (sq.ft)	Design CP	Min CP	Compli- ance
Pr0Zo1Sp1	14	Classroom/Lecture Hall	10,000	5	4	PASSES

PASSES

Project: RefProj Title: New Project Type: Office (WEA File: FL_GAINESVILLE_REGIONAL_AP.tm3)							
System Report Compliance							
Pr0Sy2	System 2	Constant Volume Packaged System				No. of Units	
							1
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity		15.00	9.30		9.50	FAILS
Heating System	Warm Air Gas Furnace >= 225000 Btu/h		95.00	80.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume		0.50	0.90			PASSES
FAILS							

Plant Compliance								
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Compliance
								None

Project: RefProj Title: New Project Type: Office (WEA File: FL_GAINESVILLE_REGIONAL_AP.tm3)								
Water Heater Compliance								
Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance	
Water Heater 2	Electric water heater	<= 12 [kW]		0.93			FAILS	
Water Heater 3	Electric water heater	<= 12 [kW]		0.93			FAILS	
FAILS								

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Piping System Compliance

Category	Pipe Dia [inches]	Is Runout?	Operating Temp [F]	Ins Cond [Btu-in/hr .SF.F]	Ins Thick [in]	Req Ins Thick [in]	Compliance
Heating System (Steam, Steam Condensate, & Hot Water)	0.25	False	105.00	0.28	0.00	0.50	FAILS

FAILS

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Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
Report	506.4.2	Input Report Print-Out from EnergyGauge FlaCom attached	<input type="checkbox"/>
Operations Manual	303.3.1, 503.2.9.3, 505.7.4.2	Operations manual provided to owner	<input type="checkbox"/>
Windows & Doors	502.3.2	Glazed swinging entrance & revolving doors: max. 1.0 cfm/ft ² ; all other products: 0.3 cfm/ft ²	<input type="checkbox"/>
Joints/Cracks	502.3.3	To be caulked, gasketed, weather-stripped or otherwise sealed	<input type="checkbox"/>
Dropped Ceiling Cavity	502.3	Vented: seal & insulated ceiling. Unvented seal & insulate roof & side walls	<input type="checkbox"/>
HVAC Efficiency	503.2.3	Minimum efficiencies: Tables 503.2.3(1)-(8)	<input type="checkbox"/>
HVAC Controls	503.2.4	Zone controls prevent reheat (exceptions); separate thermostatic control per zone;	<input type="checkbox"/>
Ventilation	503.2.5	Outdoor air supply & exhaust ducts shall have dampers that automatically shut when systems or spaces served are not in use. Exhaust air energy recovery required for cooling systems (Exceptions).	<input type="checkbox"/>
ADS	503.2.7.5	Duct sizing and Design have been performed	<input type="checkbox"/>
HVAC Ducts	503.2.7	Air ducts, fittings, mechanical equipment & plenum chambers shall be mechanically attached, sealed, insulated & installed per Table 503.2.7.2. Fan power limitations.	<input type="checkbox"/>
Balancing	503.2.9.1	HVAC distribution system(s) tested & balanced. Report in construction documents.	<input type="checkbox"/>
Piping Insulation	503.2.8	HAC and service hot water. In accordance with Table 503.2.8.	<input type="checkbox"/>
Water Heaters	504	Performance requirements in accordance with Table 504.2. Heat trap required.	<input type="checkbox"/>
Swimming Pools	504.7	Vapor-retardant or liquid cover or other means proven to reduce heat loss on heated pools; Time switch (exceptions); readily accessible on/off switch.	<input type="checkbox"/>
Motors	505.7.5	Motor efficiency criteria have been met	<input type="checkbox"/>
Lighting Controls	505.2, 502.3	Automatic control required for interior lighting in buildings >5,000 s.f.; Space control; Exterior photo sensor; Tandem wiring with 1 or 3 linear fluorescent lamps>30W	<input type="checkbox"/>

**** Software Title and Version Here ****

Section 506.4 Compliant Software. Effective Date: March 15, 2012