## Florida Energy Efficiency Code For Building Construction

EnergyGauge Summit® Fla/Com-2010, 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

No of Stories: 1

Area entered from Plans 0 SF

Permit No: 0

Max Tonnage 50

If different, write in: \_

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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			<b>FAILS</b>			
PLANT			<b>None Entered</b>			
WATER HEATING SYSTEMS			<b>FAILS</b>			
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

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## **CERTIFICATIONS**

Florida Energy Code	s and specifications covered	by this calculation are in compliance with	the
Prepared By	: John Doe	Building Official:	
Date	:	Date:	
certify that this building is in	compliance with the FLori	a Energy Efficiency Code	
Owner A cont			
Owner Agent	:	Date:	
f Required by Florida law, I I		Date:stem design is in compliance with the Florid	
f Required by Florida law, I I Energy Efficiency Code			da
f Required by Florida law, I I Energy Efficiency Code Architect	nereby certify (*) that the sy	stem design is in compliance with the Florio	da
f Required by Florida law, I I Energy Efficiency Code Architect Electrical Designer	nereby certify (*) that the sy	stem design is in compliance with the Florio	da
f Required by Florida law, I I Energy Efficiency Code Architect Electrical Designer Lighting Designer	nereby certify (*) that the sy	Reg No:	da

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(WEA File: FL\_GAINESVILLE\_REGIONAL\_AP.tm3)

Buil	ding	End	Uses
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	1) Proposed	2) Baseline
al	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
requires Proposed Building cost to be	n at most 800%	PASSES

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External	Lighting	Com	pliance
			9

Description	Category Trac	dable?		Area or Length or No. of Units (Sqft or ft)		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)

Complicance check includes a 5% excess allowance of 9.50(W) Ext Light 3 -- Does not meet control requirements of Type: <2><3>

Project: RefProj Title: New Project Type: Office

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### **Lighting Controls Compliance**

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

PASSES

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## **System Report Compliance**

Pr0Sy2 System 2

Constant Volume Packaged No. of Units System 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
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		Comp liance
								None	

Project: RefProj Title: New Project Type: Office

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# Water Heater Compliance

Description	Туре	Category	Desig Eff	n Min Eff	Design Loss	Comp liance
Water Heater 2	Electric water heater	<= 12 [kW]		0.93		FAILS
Water Heater 3	Electric water heater	<= 12 [kW]		0.93		FAILS

**FAILS** 

Project: RefProj Title: New Project
Type: Office (WEA File: FL\_GAINESVILLE\_REGIONAL\_AP.tm3) **Piping System Compliance** Category Pipe Dia **Operating Ins Cond** Ins Req Ins Compliance Is [Btu-in/hr Thick [in] Thick [in] [inches] Runout? Temp **[F]** .SF.F] Heating System (Steam, Steam 0.25 False 105.00 0.28 0.00 0.50 **FAILS** Condensate, & Hot Water) **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	
Operations Manual	303.3.1, 503.2.9.3, 505.7.4.2	Operations manual provided to owner	
Windows & Doors	502.3.2	Glazed swinging entrance & revolving doors: max. 1.0 cfm/ft²; all other products: 0.3 cfm/ft²	
Joints/Cracks	502.3.3	To be caulked, gasketed, weather-stripped or otherwise sealed	
Dropped Ceiling Cavity	502.3	Vented: seal & insulated ceiling. Unvented seal & insulate roof & side walls	
HVAC Efficiency	503.2.3	Minimum efficiencies: Tables 503.2.3(1)-(8)	
HVAC Controls	503.2.4	Zone controls prevent reheat (exceptions); separate thermostatic control per zone;	
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).	
ADS	503.2.7.5	Duct sizing and Design have been performed	
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.	
Balancing	503.2.9.1	HVAC distribution system(s) tested & balanced. Report in construction documents.	
Piping Insulation	503.2.8	HAC and service hot water. In accordance with Table 503.2.8.	
Water Heaters	504	Performance requirements in accordance with Table 504.2. Heat trap required.	
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.	
Motors	505.7.5	Motor efficiency criteria have been met	
Lighting Controls	505.2, 502.3	Automatic control required for interior lighting in buildings >5,000 s.f.; Space control; Exterior photo sensor; Tandom wiring with 1 or 3 linear fluorescent lamps>30W	

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