

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: New Prj

Description: LULU BAPTIST CHURCH

Owner: HUGH DAMPIER

Address1: 118 SE GILLIEN TERRACE

City: LULU

Address2:

State: FL

Zip: 32061

Type: Religious Building

Class: New Finished building

Jurisdiction: COLUMBIA COUNTY, COLUMBIA COUNTY, FL (221000)

Conditioned Area: 6263 SF

Conditioned & UnConditioned Area: 6263 SF

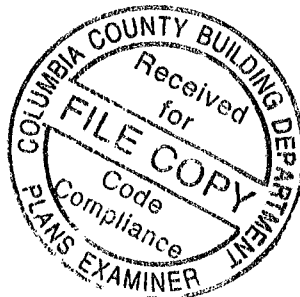
No of Stories: 1

Area entered from Plans 6608 SF

Permit No: 0

Max Tonnage 5

If different, write in: _____



Compliance Summary			
Component	Design	Criteria	<u>Result</u>
Gross Energy Cost (in \$)	8,231.0	8,721.0	PASSED
LIGHTING CONTROLS			PASSES
EXTERNAL LIGHTING			PASSES
HVAC SYSTEM			PASSES
PLANT			No Entry
WATER HEATING SYSTEMS			PASSES
PIPING SYSTEMS			PASSES
Met all required compliance from Check List?			Yes/No/NA
<p>IMPORTANT MESSAGE Info 5009 -- -- -- An input report of this design building must be submitted along with this Compliance Report</p>			

CERTIFICATIONS

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

Prepared By: NICHOLAS GEISLER

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. NICHOLAS GEISLER

Reg No: AR2005

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: New Prj
 Title: LULU BAPTIST CHURCH
 Type: Religious Building
 (WEA File: FL JACKSONVILLE INTL ARPT.tn3)

Building End Uses

	1) Proposed	2) Baseline
Total	510.70	674.10
	\$8,231	\$10,901
ELECTRICITY(MBtu/kWh/\$)	510.70	674.10
	149652	197478
	\$8,231	\$10,901
AREA LIGHTS	57.00	117.20
	16706	34333
	\$919	\$1,895
MISC EQUIPMT	37.40	37.40
	10966	10966
	\$603	\$605
PUMPS & MISC	0.20	0.30
	73	78
	\$4	\$4
SPACE COOL	187.90	306.30
	55067	89733
	\$3,029	\$4,953
SPACE HEAT	36.50	45.30
	10683	13275
	\$588	\$733
VENT FANS	191.70	167.60
	56157	49093
	\$3,089	\$2,710

Credits Applied: None

Passing Criteria = 8721

Design (including any credits) = 8231

Passing requires Proposed Building cost to be at most 80% of
 Baseline cost. This Proposed Building is at 75.5%

PASSES

Project: New Prj Title: LULU BAPTIST CHURCH Type: Religious Building (WEA File: FL JACKSONVILLE INTL ARPT.tm3)						
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	Mam entries	Yes	30 00	24 0	720	104
Tradable Surfaces: 104 (W) Allowance for Tradable: 1470 (W) All External Lighting: 104 (W) Compliance check includes a excess/Base allowance of 750.00(W)					PASSES	

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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	1,221	6	1	PASSES
Pr0Zo1Sp2	24,001	Worship-Pulpit, Chour	3,309	8	2	PASSES
Pr0Zo2Sp1	24,002	Fellowship Hall	822	9	1	PASSES
Pr0Zo2Sp2	24,002	Fellowship Hall	911	1	1	PASSES
						PASSES

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System Report Compliance

Pr0Sy1 System 1 Constant Volume Air Cooled
Split System < 65000 Btu/hr No. of Units
2

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled Split System < 65000 Btu/h Cooling Capacity	60000	14 00	12.23	8 00		PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) Split System < 65000 Btu/h Cooling Capacity	60000	8 20	7 70			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	2000	0 80	0 82			PASSES
Air Handling System - Return	Air Handler (Return) - Constant Volume	2000	0 80	0 82			PASSES
Air Distribution System (Sup)	ADS System (Sup)		6 00				PASSES
Air Distribution System (Ret)	ADS System (Ret)		6.00				PASSES

Pr0Sy2 System 2 Constant Volume Air Cooled
Split System < 65000 Btu/hr No. of Units
1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled Split System < 65000 Btu/h Cooling Capacity	60000	14 00	12 23	8 00		PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) Split System < 65000 Btu/h Cooling Capacity	60000	8 20	7 70			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	2000	0 80	0 82			PASSES
Air Handling System - Return	Air Handler (Return) - Constant Volume	2000	0.80	0.82			PASSES
Air Distribution System (Sup)	ADS System (Sup)		6.00				PASSES
Air Distribution System (Ret)	ADS System (Ret)		6 00				PASSES

PASSES

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

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Water Heater Compliance								
Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance	
Water Heater 1	Electric water heater	<= 12 [kW]	0.92	0.86			PASSES	
								PASSES

Project: New Prj Title: LULU BAPTIST CHURCH Type: Religious Building (WEA File: FL JACKSONVILLE INTL ARPT.tm3)								
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	
Domestic and Service Hot Water Systems	0.75	False	125.00	0.28	0.62	0.50	PASSES	
								PASSES

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(WEA File: FL_JACKSONVILLE_INTL_ARPT.fm3)

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	Jo 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"/>