

## Florida Building Code, Sixth Edition (2017) - Energy Conservation

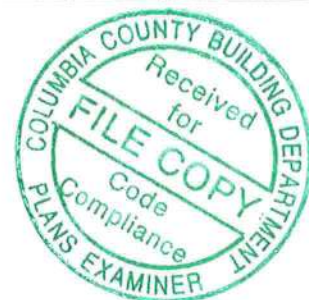
EnergyGauge Summit® Fla/Com-2017, Effective Date: Dec 31, 2017

ASHRAE 90.1-2013 - Energy Cost Budget Option

### Check List

Applications for compliance with the Florida Building Code, Energy Conservation shall include:

- ☐ This Checklist
- ☐ The full compliance report generated by the software that contains the project summary, compliance summary, certifications and detailed component compliance reports.
- ☐ The compliance report must include the full input report generated by the software as contiguous part of the compliance report.
- ☐ Boxes appropriately checked in the Mandatory Section of the compliance report.



EnergyGauge Summit® Fla/Com-2017. TAM 2017-1.0 Compliant Software. Effective Date: Dec 31, 2017

Florida Building Code, Sixth Edition (2017) - Energy Conservation ASHRAE 90.1-2013 - Energy Cost Budget Option

## PROJECT SUMMARY

**Short Desc:** Connect Church

**Owner:** Connect Church

**Address1:** 771 S W Thomas Rd

**Address2:** Enter Address here

**Type:** Religious Building

**Jurisdiction:** LAKE CITY, COLUMBIA COUNTY, FL (221200)

**Conditioned Area:** 2500 SF

**No of Stories:** 1

**Permit No:** 0

**Description:** Connect Church

**City:** Lake City

**State:** FL

**Zip:** 0

**Class:** New Finished building

**Conditioned & UnConditioned Area:** 2500 SF

**Area entered from Plans** 0 SF

**Max Tonnage** 4.7

**If different, write in:** \_\_\_\_\_

<b>Compliance Summary</b>			
<b>Component</b>	<b>Design</b>	<b>Criteria</b>	<b>Result</b>
Gross Energy Cost (in \$)	2,652.0	3,320.0	<b>PASSED</b>
LIGHTING CONTROLS			<b>PASSES</b>
EXTERNAL LIGHTING			<b>No Entry</b>
HVAC SYSTEM			<b>PASSES</b>
PLANT			<b>No Entry</b>
WATER HEATING SYSTEMS			<b>No Entry</b>
PIPING SYSTEMS			<b>No Entry</b>
Met all required compliance from Check List?			<b>Yes/No/NA</b>
<b>IMPORTANT MESSAGE</b> 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: James Bolton *James L. Bolton*

Building Official: \_\_\_\_\_

Date: 3/20/2020

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: *David J. Marrs*

Reg No: CAC1818215

Plumbing Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

(\*) Signature is required where Florida Law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

Project: Connect Church  
 Title: Connect Church  
 Type: Religious Building  
 (WEA File: FL\_JACKSONVILLE\_INTL\_ARPT.tm3)

### Building End Uses

	1) Proposed	2) Baseline
<b>Total</b>	<b>163.60</b>	<b>204.10</b>
	<b>\$2,652</b>	<b>\$3,320</b>
ELECTRICITY(MBtu/kW h/\$)	163.60	204.10
	47958	59814
	<b>\$2,652</b>	<b>\$3,320</b>
<b>AREA LIGHTS</b>	16.30	16.70
	4777	4900
	<b>\$264</b>	<b>\$272</b>
<b>MISC EQUIPMT</b>	12.50	12.50
	3663	3663
	<b>\$203</b>	<b>\$203</b>
<b>PUMPS &amp; MISC</b>	0.20	0.30
	71	77
	<b>\$4</b>	<b>\$4</b>
<b>SPACE COOL</b>	72.70	99.30
	21296	29108
	<b>\$1,178</b>	<b>\$1,615</b>
<b>SPACE HEAT</b>	15.30	19.40
	4484	5688
	<b>\$248</b>	<b>\$316</b>
<b>VENT FANS</b>	46.60	55.90
	13667	16378
	<b>\$756</b>	<b>\$909</b>

Credits Applied: None

Passing Criteria = 3320

Design (including any credits) = 2652

Passing requires Proposed Building cost to be at most 100% of  
 Baseline cost. This Proposed Building is at 79.9%

**PASSES**

External Lighting Compliance						
Description	Category	Tradable?	Allowance (W/Unit)	Area or Length or No. of Units (Sqft or ft)	ELPA (W)	CLP (W)
					None	

**Project: Connect Church**  
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**(WEA File: FL\_JACKSONVILLE\_INTL\_ARPT.tm3)**

Lighting Controls Compliance						
Acronym	Ashrae ID	Description	Area (sq.ft)	Design CP	Min CP	Compli- ance
Pr0Zo1Sp1	24,002	Fellowship Hall	1,250	1	1	PASSES
Pr0Zo1Sp1	24,002	Fellowship Hall	1,250	1	1	PASSES
					PASSES	

**Project: Connect Church**  
**Title: Connect Church**  
**Type: Religious Building**  
**(WEA File: FL\_JACKSONVILLE\_INTL\_ARPT.fm3)**

### System Report Compliance

<b>Pr0Sy1</b>	<b>System 1</b>	<b>Constant Volume Air Cooled Split System &lt; 65000 Btu/hr</b>	<b>No. of Units</b> <b>1</b>
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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	56500	14.00	13.00	8.00		PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) Split System < 65000 Btu/h Cooling Capacity	57000	9.00	8.20			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	1883	0.80	0.82			PASSES
Air Distribution System (Sup)	ADS System		6.00	6.00			PASSES
Air Distribution System (Ret)	ADS System (Ret)		6.00	3.50			PASSES

<b>Pr0Sy2</b>	<b>System 2</b>	<b>Constant Volume Air Cooled Split System &lt; 65000 Btu/hr</b>	<b>No. of Units</b> <b>1</b>
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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	56500	14.00	13.00	8.00		PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) Split System < 65000 Btu/h Cooling Capacity	57000	9.00	8.20			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	1883	0.80	0.82			PASSES
Air Distribution System (Sup)	ADS System		6.00	6.00			PASSES
Air Distribution System (Ret)	ADS System (Ret)		6.00	3.50			PASSES

**PASSES**

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

Water Heater Compliance								
Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance	
								None

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
							None



## Mandatory Requirements (as applicable)

Mandatory requirements compiled by US Department of Energy and Pacific Northwest National Laboratory. Adopted with permission

Topic	Section	Component	Description	Yes	N/A	Exempt
<b>1. To be checked by Designer or Engineer</b>						
Insulation	5.8.1.2	Envelope	Below-grade wall insulation installed per manufacturer's instructions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	5.8.1.2	Envelope	Slab edge insulation installed per manufacturer's instructions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	5.5.3.5	Envelope	Slab edge insulation depth/length.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	6.4.4.1.5	Envelope	Bottom surface of floor structures incorporating radiant heating insulated to $\geq R-3.5$ .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fenestration	5.5.3.6	Envelope	U-factor of opaque doors associated with the building thermal envelope meets requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.1, 6.5.1.1, 6.5.1.3, 6.5.1.4	Mechanical	Air economizers provided where required (and not exempted), meet the requirements for design capacity, control signal, ventilation controls, high-limit shut-off, integrated economizer control, and provide a means to relieve excess outside air during operation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.1, 6.5.1.2, 6.5.1.3	Mechanical	Water economizers provided where required, meet the requirements for design capacity, maximum pressure drop and integrated economizer control.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.1.5	Mechanical	Economizer operation will not increase heating energy use during normal operation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.2.2.1	Mechanical	Three-pipe hydronic systems using a common return for hot and chilled water are not used.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.2.2.3	Mechanical	Hydronic heat pump systems connected to a common water loop meet heat rejection and heat addition requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.1.6	Mechanical	Water economizer specified on hydronic cooling and humidification systems designed to maintain inside humidity at $>35^{\circ}\text{F}$ dewpoint if an economizer is required.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.3.1.1	Mechanical	HVAC fan systems at design conditions do not exceed allowable fan system motor nameplate hp or fan system bhp.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.3.1.2	Mechanical	HVAC fan motors not larger than the first available motor size greater than the bhp.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.5.6.1	Mechanical	Exhaust air energy recovery on systems meeting Tables 6.5.6.1-1, and 6.5.6.1-2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	7.4.2	Mechanical	Service water heating equipment meets efficiency requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	7.5.2	Mechanical	Service water heating equipment used for space heating complies with the service water heating equipment requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	5.8.1.2	Envelope	Above-grade wall insulation installed per manufacturer's instructions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	5.8.1.2	Envelope	Floor insulation installed per manufacturer's instructions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Controls	10.4.3	Mechanical	Elevators are designed with the proper lighting, ventilation power, and standby mode.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.4.1.1, 6.8.1-7a	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement Table 6.8.1-7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.4.1.1, 6.8.1-7b	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement Table 6.8.1-7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.4.1.1, 6.8.1-7c	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement Table 6.8.1-7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SYSTEM_SPECIFIC	6.4.1.1, 6.8.1-7d	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement Table 6.8.1-7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.5.3	Mechanical	Centrifugal fan open-circuit cooling towers having combined rated capacity $\geq$ 1100 gpm meets minimum efficiency requirement: Table 6.8.1-7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.4.1.1, 6.8.1-7e	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement Table 6.8.1-7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.4.1.1, 6.8.1-7f	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement Table 6.8.1-7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.4.1.1, 6.8.1-7g	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement Table 6.8.1-7.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.4.1.1, 6.8.1-7h	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement Table 6.8.1-7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.4.1.1, 6.8.1-7i	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement Table 6.8.1-7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	7.5.3	Mechanical	Gas-fired water-heating equipment installed in new buildings: where a singular piece of water-heating equipment $\geq$ 1,000 kBtu/h serves the entire building, thermal efficiency must be $\geq$ 90 Et. Where multiple pieces of water-heating equipment serve the building with combined rating is $\geq$ 1,000 kBtu/h, the combined input-capacity-weighted-average thermal efficiency, thermal efficiency must be $\geq$ 90 Et. Exclude input rating of equipment in individual dwelling units and equipment $\leq$ 100 kBtu/h.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2. To be checked by Plan Reviewer</b>						
Plan Review	4.2.2, 5.4.3.1.1, 5.7	Envelope	Plans and/or specifications provide all information with which compliance can be determined for the building envelope and document where exceptions to the standard are claimed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plan Review	4.2.2, 6.4.4.2.1, 6.7.2	Mechanical	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical systems and equipment and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plan Review	4.2.2, 7.7.1, 10.4.2	Mechanical	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the service water heating systems and equipment and document where exceptions to the standard are claimed. Hot water system sized per manufacturer's sizing guide.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plan Review	4.2.2, 8.4.1.1, 8.4.1.2, 8.7	Project	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the electrical systems and equipment and document where exceptions are claimed. Feeder connectors sized in accordance with approved plans and branch circuits sized for maximum drop of 3%.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plan Review	4.2.2, 9.4.3, 9.7	Interior Lighting	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plan Review	9.7	Exterior Lighting	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Insulation	5.8.1.7.3	Envelope	Insulation in contact with the ground has $\leq 0.3\%$ water absorption rate per ASTM C272.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air Leakage	5.4.3.4	Envelope	Vestibules are installed where building entrances separate conditioned space from the exterior, and meet exterior envelope requirements. Doors have self-closing devices, and are $\geq 7$ ft apart ( $\geq 16$ ft apart for adjoining floor area $\geq 40000$ sq.ft.). Vestibule floor area $\leq 750$ sq.ft. or 2 percent of the adjoining conditioned floor area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.4.3.4.4	Mechanical	Ventilation fans $>0.75$ hp have automatic controls to shut off fan when not required.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.4.3.8	Mechanical	Demand control ventilation provided for spaces $>500$ ft <sup>2</sup> and $>25$ people/1000 ft <sup>2</sup> occupant density and served by systems with air side economizer, auto modulating outside air damper control, or design airflow $>3,000$ cfm.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.4.4.1.4	Mechanical	Thermally ineffective panel surfaces of sensible heating panels have insulation $\geq R-3.5$ .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.5.2.3	Mechanical	Dehumidification controls provided to prevent reheating, recooling, mixing of hot and cold airstreams or concurrent heating and cooling of the same airstream.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.3.1.3	Mechanical	Fans have efficiency grade (FEG) $\geq 67$ . The total efficiency of the fan at the design point of operation $\leq 15\%$ of maximum total efficiency of the fan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.3.5	Mechanical	Motors for fans $\geq 1/12$ hp and $< 1$ hp are electronically-commutated motors or have a minimum motor efficiency of 70%. These motors are also speed adjustable for either balancing or remote control.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.4.3.10	Mechanical	DDC system installed and capable of providing control logic including monitoring zone and system demand for fan pressure, pump pressure, heating, and cooling; transferring zone and system demand information from zones to air distribution system controllers and from air distribution systems to heating and cooling plant controllers; automatically detecting and alerting system operator when zones and systems excessively drive the reset logic; allow operator removal of zone(s) from the reset algorithm; AND capable of trending and graphically displaying input and output points.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.3.2.3	Mechanical	Reset static pressure setpoint for DDC controlled VAV boxes reporting to central controller based on the zones requiring the most pressure. Controls provide: zone damper monitoring or indicator of static pressure need; autodetection, alarm, and operator override of zones excessively triggering reset logic.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.3.3	Mechanical	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.3.4	Mechanical	Multiple zone HVAC systems have supply air temperature reset controls.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.4.1	Mechanical	System turndown requirement met through multiple single-input boilers, one or more modulating boilers, or a combination of single-input and modulating boilers. Boiler input between 1.0 MBtu/h and 5 MBtu/h has 3:1 turndown ratio, boiler input between 5.0 MBtu/h and 10 MBtu/h has 4:1 turndown ratio, boiler input $> 10.0$ MBtu/h has 5:1 turndown ratio.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.5.4.2	Mechanical	HVAC pumping systems $>10$ hp designed for variable fluid flow.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.4.3, 6.5.4.3.1, 6.5.4.3.2	Mechanical	Fluid flow shutdown in pumping systems to multiple chillers or boilers when systems are shut down.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SYSTEM_SPECIFIC	6.5.4.4	Mechanical	Temperature reset by representative building loads in pumping systems >10 hp for chiller and boiler systems >300,000 Btu/h.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.4.5.2	Mechanical	Hydronic heat pumps and water-cooled unitary air conditioners with pump systems >5 hp have controls or devices to reduce pump motor demand.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.4.6	Mechanical	Chilled-water and condenser water piping sized according to design flow rate and total annual hours of operation (Table 6.5.4.6).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.5.2.1	Mechanical	Fan systems with motors >=7.5 hp associated with heat rejection equipment to have capability to operate at 2/3 of full-speed and auto speed controls to control the leaving fluid temperature or condensing temp/pressure of heat rejection device.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.5.2.2	Mechanical	Multicell heat rejection equipment with variable-speed fan drives installed that operate the maximum number of fans allowed that comply with manufacturers specs and control all fans to the same fan speed required for the instantaneous cooling duty.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.5.2.3	Mechanical	NA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.5.7.1.1	Mechanical	Kitchen hoods >5,000 cfm have make up air >=50% of exhaust air volume.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.5.7.1.1	Mechanical	Kitchen hoods >5,000 cfm have make up air >=50% of exhaust air volume.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.7.1.2	Mechanical	Conditioned supply air to space with a kitchen hood shall not exceed the greater of a) supply flow required to meet space heating or cooling, or b) hood exhaust flow minus the available air transfer from available spaces.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.7.1.3	Mechanical	Kitchen hoods with a total exhaust airflow rate >5000 cfm meet replacement air, ventilation system, or energy recovery requirements shown in Table 6.5.7.1.3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.7.1.4	Mechanical	Kitchen hoods with a total exhaust airflow rate >5000 cfm meet replacement air, ventilation system, or energy recovery requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.5.7.2	Mechanical	Fume hoods exhaust systems >=5,000 cfm have VAV hood exhaust and supply systems, direct make-up air or heat recovery.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.5.8.1	Mechanical	Unenclosed spaces that are heated use only radiant heat.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	7.5.1	Mechanical	Combined space and water heating system not allowed unless standby loss less than calculated maximum. AHJ has approved or combined connected load <150 kBtu/h.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Controls	8.4.2	Project	At least 50% of all 125 volt 15- and 20-Amp receptacles are controlled by an automatic control device.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Equipment	10.4.1	Mechanical	Electric motors meet requirements where applicable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.4.3.3.2	Mechanical	Setback controls allow automatic restart and temporary operation as required for maintenance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.4.3.3.3	Mechanical	Systems with setback controls and DDC include optimum start controls. Optimum start algorithm considers mass radiant slab floor temperature.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.4.3.3.4	Mechanical	Zone isolation devices and controls.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wattage	9.4.2	Exterior Lighting	Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3. To be checked by Inspector</b>						

Insulation	5.8.1.7	Envelope	Exterior insulation protected against damage, sunlight, moisture, wind, landscaping and equipment maintenance activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.4.3.7	Mechanical	Freeze protection and snow/ice melting system sensors for future connection to controls.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air Leakage	5.4.3.1	Envelope	Continuous air barrier is wrapped, sealed, caulked, gasketed, and/or taped in an approved manner, except in semiheated spaces in climate zones 1-6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air Leakage	5.4.3.2	Envelope	Factory-built and site-assembled fenestration and doors are labeled or certified as meeting air leakage requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fenestration	5.8.2.1, 5.8.2.3, 5.8.2.4, 5.8.2.5	Envelope	Fenestration products rated (U-factor, SHGC, and VT) in accordance with NFRC or energy code defaults are used.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fenestration	5.8.2.2	Envelope	Fenestration and door products are labeled, or a signed and dated certificate listing the U-factor, SHGC, VT, and air leakage rate has been provided by the manufacturer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	7.4.4.1	Mechanical	Temperature controls installed on service water heating systems ( $\leq 120^{\circ}\text{F}$ to maximum temperature for intended use).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	7.4.4.2	Mechanical	Automatic time switches installed to automatically switch off the recirculating hot-water system or heat trace.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	7.4.6	Mechanical	Heat traps installed on non-circulating storage water tanks.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.4.1.4, 6.4.1.5	Mechanical	HVAC equipment efficiency verified. Non-NAECA HVAC equipment labeled as meeting 90.1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.4.1.5.2	Mechanical	PTAC and PTHP with sleeves 16 in. by 42 in. labeled for replacement only.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.4.3.4.1	Mechanical	Stair and elevator shaft vents have motorized dampers that automatically close.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.4.3.4.2, 6.4.3.4.3	Mechanical	Outdoor air and exhaust systems have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Check gravity dampers where allowed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.4.3.4.5	Mechanical	Enclosed parking garage ventilation has automatic contaminant detection and capacity to stage or modulate fans to 50% or less of design capacity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.5.3.2.1	Mechanical	DX cooling systems $\geq 75$ kBtu/h ( $\geq 65$ kBtu/h effective 1/2016) and chilled-water and evaporative cooling fan motor hp $\geq \frac{1}{4}$ designed to vary indoor fan airflow as a function of load and comply with operational requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.4.4.1.1	Mechanical	Insulation exposed to weather protected from damage. Insulation outside of the conditioned space and associated with cooling systems is vapor retardant.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.4.4.1.2	Mechanical	HVAC ducts and plenums insulated. Where ducts or plenums are installed in or under a slab, verification may need to occur during Foundation Inspection.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.4.4.1.3	Mechanical	HVAC piping insulation thickness. Where piping is installed in or under a slab, verification may need to occur during Foundation Inspection.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.4.4.2.1	Mechanical	Ducts and plenums sealed based on static pressure and location.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.4.4.2.2	Mechanical	Ductwork operating $>3$ in. water column requires air leakage testing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.2.1	Mechanical	Zone controls can limit simultaneous heating and cooling and sequence heating and cooling to each zone.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.2.2.2	Mechanical	Two-pipe hydronic systems using a common distribution system have controls to allow a deadband $\geq 15^{\circ}\text{F}$ , allow operation in one mode for at least 4 hrs before changeover, and have reset controls to limit heating and cooling supply temperature to $\leq 30^{\circ}\text{F}$ .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

HVAC	6.5.2.4.1	Mechanical	Humidifiers with airstream mounted preheating jackets have preheat auto-shutoff value set to activate when humidification is not required.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.5.2.4.2	Mechanical	Humidification system dispersion tube hot surfaces in the airstreams of ducts or air-handling units insulated $\geq R-0.5$ .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.3.2.2	Mechanical	VAV fans have static pressure sensors positioned so setpoint $\leq 1.2$ in. w.c. design pressure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.4.5.1	Mechanical	Two-position automatic valve interlocked to shut off water flow when hydronic heat pump with pumping system $>10$ hp is off.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.6.2	Mechanical	Condenser heat recovery system that can heat water to $85^{\circ}\text{F}$ or provide 60% of peak heat rejection is installed for preheating of service hot water.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.5.7.1.5	Mechanical	Approved field test used to evaluate design air flow rates and demonstrate proper capture and containment of kitchen exhaust systems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.5.9	Mechanical	Hot gas bypass limited to: $\leq 240$ kBtu/h $\Delta t$ 15% $>240$ kBtu/h $\Delta t$ 10%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.4.3.9	Mechanical	Heating for vestibules and air curtains include automatic controls that shut off the heating system when outdoor air temperatures $> 45^{\circ}\text{F}$ . Vestibule heating systems controlled by a thermostat in the vestibule with setpoint $\leq 60^{\circ}\text{F}$ .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Controls	6.5.10	Mechanical	Doors separating conditioned space from the outdoors have controls that disable/reset heating and cooling system when open.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Controls	9.4.1.1	Interior Lighting	Automatic control requirements prescribed in Table 9.6.1, for the appropriate space type, are installed. Mandatory lighting controls (labeled as 'REQ') and optional choice controls (labeled as 'ADD1' and 'ADD2') are implemented.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Controls	9.4.1.1	Interior Lighting	Independent lighting controls installed per approved lighting plans and all manual controls readily accessible and visible to occupants.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Controls	9.4.1.2	Interior Lighting	Parking garage lighting is equipped with required lighting controls and daylight transition zone lighting.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Controls	9.4.1.1f	Interior Lighting	Daylight areas under skylights and roof monitors that have more than 150 W combined input power for general lighting are controlled by photocontrols.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Controls	9.4.1.4	Exterior Lighting	Automatic lighting controls for exterior lighting installed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Controls	9.4.1.3	Interior Lighting	Separate lighting control devices for specific uses installed per approved lighting plans.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wattage	9.6.2	Interior Lighting	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wattage	9.6.4	Interior Lighting	Where space LPD requirements are adjusted based on room cavity ratios, dimensions are consistent with approved plans.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	5.5.3.1	Envelope	Roof R-value. For some ceiling systems, verification may need to occur during Framing Inspection.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	5.8.1.2, 5.8.1.3	Envelope	Roof insulation installed per manufacturer's instructions. Blown or poured loose-fill insulation is installed only where the roof slope is $\leq 3$ in 12.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	5.8.1.1	Envelope	Building envelope insulation is labeled with R-value or insulation certificate has been provided listing R-value and other relevant data.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	5.8.1.9	Envelope	Building envelope insulation extends over the full area of the component at the proposed rated R or U value.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	5.8.1.4	Envelope	Eaves are baffled to deflect air to above the insulation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	5.8.1.5	Envelope	Insulation is installed in substantial contact with the inside surface separating conditioned space from unconditional space.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

EnergyGauge Summit® Fla/Com-2017. TAM 2017-1.0 Compliant Software. Effective Date: Dec 31, 2017

Florida Building Code, Sixth Edition (2017) - Energy Conservation ASHRAE 90.1-2013 - Energy Cost Budget Option



Insulation	5.8.1.6	Envelope	Recessed equipment installed in building envelope assemblies does not compress the adjacent insulation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	5.8.1.7.1	Envelope	Attics and mechanical rooms have insulation protected where adjacent to attic or equipment access.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	5.8.1.7.2	Envelope	Foundation vents do not interfere with insulation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	5.8.1.8	Envelope	Insulation intended to meet the roof insulation requirements cannot be installed on top of a suspended ceiling. Mark this requirement compliant if insulation is installed accordingly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.4.3.1.1	Mechanical	Heating and cooling to each zone is controlled by a thermostat control.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.4.3.1.2	Mechanical	Thermostatic controls have a 5 Å°F deadband.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.4.3.2	Mechanical	Temperature controls have setpoint overlap restrictions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.4.3.3.1	Mechanical	HVAC systems equipped with at least one automatic shutdown control.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	6.4.3.5	Mechanical	Heat pump controls prevent supplemental electric resistance heat from coming on when not needed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.4.3.6	Mechanical	When humidification and dehumidification are provided to a zone, simultaneous operation is prohibited. Humidity control prohibits the use of fossil fuel or electricity to produce RH > 30% in the warmest zone humidified and RH < 60% in the coldest zone dehumidified.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.4.3.6	Mechanical	When humidification and dehumidification are provided to a zone, simultaneous operation is prohibited. Humidity control prohibits the use of fossil fuel or electricity to produce RH > 30% in the warmest zone humidified and RH < 60% in the coldest zone dehumidified.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	7.4.4.3	Mechanical	Public lavatory faucet water temperature ≤ 110Å°F.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	7.4.4.4	Mechanical	Controls are installed that limit the operation of a recirculation pump installed to maintain temperature of a storage tank.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	7.4.5.1	Mechanical	Pool heaters are equipped with on/off switch and no continuously burning pilot light.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	7.4.5.2	Mechanical	Pool covers are provided for heated pools and pools heated to >90Å°F have a cover ≥R-12.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	7.4.5.3	Mechanical	Time switches are installed on all pool heaters and pumps.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wattage	9.2.2.3	Interior Lighting	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	7.4.3	Mechanical	All piping in circulating system insulated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	7.4.3	Mechanical	First 8 ft of outlet piping is insulated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	7.4.3	Mechanical	All heat traced or externally heated piping insulated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4. To be checked by Inspector at Project Completion and Prior to Issuance of Certificate of Occupancy</b>						
Plan Review	6.7.2.4	Mechanical	Detailed instructions for HVAC systems commissioning included on the plans or specifications for projects ≥50,000 ft2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plan Review	6.7.2.4	Mechanical	Detailed instructions for HVAC systems commissioning included on the plans or specifications for projects ≥50,000 ft2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post Construction	6.7.2.1	Mechanical	Furnished HVAC as-built drawings submitted within 90 days of system acceptance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Post Construction	6.7.2.2	Mechanical	Furnished O&M manuals for HVAC systems within 90 days of system acceptance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post Construction	6.7.2.3	Mechanical	An air and/or hydronic system balancing report is provided for HVAC systems serving zones >5,000 ft2 of conditioned area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	6.7.2.4	Mechanical	HVAC control systems have been tested to ensure proper operation, calibration and adjustment of controls.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post Construction	8.7.1	Interior Lighting	Furnished as-built drawings for electric power systems within 30 days of system acceptance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post Construction	8.7.2	Interior Lighting	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# Input Data Report

## Project Information

**Project Name:** Connect Church      **Project Title:** Connect Church  
**Address:** 771 S W Thomas Rd      **State:** FL      **Zip:** 0  
**Owner:** Connect Church  
**Building Type:** Religious Building      **Building Classification:** New Finished building  
**No. of Stories:** 1      **GrossArea (SF):** 2,500  
**Bldg. Rotation:** None

### Zones

No	Acronym	Description	Type	Area [sf]	Multi	Total Area [sf]	
1	Left	Zone 1	CONDITIONED	1250.0	1	1250.0	<input type="checkbox"/>
2	Right	Zone 2	CONDITIONED	1250.0	1	1250.0	<input type="checkbox"/>

### Spaces

No	Acronym	Description	Type	Depth [ft]	Width [ft]	Height [ft]	Mult	Total Area [sf]	Total Vol[cf]	
<b>In Zone: Left</b>										
1	Pr0Zo1Sp1	Zo0Sp1	Fellowship Hall	25.00	50.00	9.00	1	1250.0	11250.0	<input type="checkbox"/>
<b>In Zone: Right</b>										
1	Pr0Zo1Sp1	Zo0Sp1	Fellowship Hall	25.00	50.00	9.00	1	1250.0	11250.0	<input type="checkbox"/>

## Lighting

No	Type	Category	No. of Luminaires	Watts per Luminaire	Power [W]	Control Type	No. of Ctrl pts	
<b>In Zone: Left</b>								
<b>In Space: Pr0Zo1Sp1</b>								
1	Compact Fluorescent	General Lighting	26	30	780	Manual On/Off	1	<input type="checkbox"/>
<b>In Zone: Right</b>								
<b>In Space: Pr0Zo1Sp1</b>								
1	Compact Fluorescent	General Lighting	26	30	780	Manual On/Off	1	<input type="checkbox"/>

## Walls (Walls will be rotated clockwise by building rotation value)

No	Description	Type	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Orient ation	Cond- uctance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]	
<b>In Zone: Left</b>												
1	Pr0Zo1Wa1	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	25.00	9.00	1	225.0	North	0.1118	1.183	14.94	8.9	<input type="checkbox"/>
2	Pr0Zo1Wa2	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	50.00	9.00	1	450.0	East	0.1118	1.183	14.94	8.9	<input type="checkbox"/>
3	Pr0Zo1Wa1	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	25.00	9.00	1	225.0	South	0.1118	1.183	14.94	8.9	<input type="checkbox"/>
<b>In Zone: Right</b>												
1	Pr0Zo1Wa1	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	25.00	9.00	1	225.0	North	0.1118	1.183	14.94	8.9	<input type="checkbox"/>
2	Pr0Zo1Wa2	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	50.00	9.00	1	450.0	West	0.1118	1.183	14.94	8.9	<input type="checkbox"/>
3	Pr0Zo1Wa1	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	25.00	9.00	1	225.0	South	0.1118	1.183	14.94	8.9	<input type="checkbox"/>

### Windows (Windows will be rotated clockwise by building rotation value)

No	Description	Orientation	Shaded	U [Btu/hr sf F]	SHGC	Vis.Tra	W [ft]	H (Effec) [ft]	Multi plier	Total Area [sf]
<div style="display: flex; justify-content: space-between;"> <div> <b>In Zone:</b>  <b>In Wall:</b> </div> <div style="border: 1px solid black; width: 20px; height: 20px; margin-left: auto;"></div> </div>										

### Doors

No	Description	Type	Shade?	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Cond. [Btu/h.s.f.F]	Dens. [lb/cf]	Ht Cap. [Btu/sf. F]	R [h.s.f.F/ Btu]
<b>In Zone: Left</b> <div style="display: flex; justify-content: space-between;"> <div> <b>In Wall: North</b>  1 Pr0Zo1WalDr1 Solid core flush (2.25) No 3.00 6.70 1 20.1 0.3504 0.00 0.00 2.85 </div> <div style="border: 1px solid black; width: 20px; height: 20px; margin-left: auto;"></div> </div>											
<div style="display: flex; justify-content: space-between;"> <div> <b>In Wall: South</b>  1 Pr0Zo1WalDr1 Solid core flush (2.25) No 3.00 6.70 1 20.1 0.3504 0.00 0.00 2.85 </div> <div style="border: 1px solid black; width: 20px; height: 20px; margin-left: auto;"></div> </div>											
<b>In Zone: Right</b> <div style="display: flex; justify-content: space-between;"> <div> <b>In Wall: North</b>  1 Pr0Zo1WalDr1 Solid core flush (2.25) No 3.00 6.70 1 20.1 0.3504 0.00 0.00 2.85 </div> <div style="border: 1px solid black; width: 20px; height: 20px; margin-left: auto;"></div> </div>											

### Roofs

No	Description	Type	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Tilt [deg]	Cond. [Btu/h.Sf. F]	Heat Cap [Btu/sf. F]	Dens. [lb/cf]	R-Value [h.s.f.F/Btu]
<b>In Zone: Left</b> 1 Pr0Zo1Rf1 Shngl/1/2"WD Deck/WD Truss/9" Batt/Gyp Brd 25.00 50.00 1 1250.0 0.00 0.0320 1.50 8.22 31.2											
<b>In Zone: Right</b> 1 Pr0Zo1Rf1 Shngl/1/2"WD Deck/WD Truss/9" Batt/Gyp Brd 25.00 50.00 1 1250.0 0.00 0.0320 1.50 8.22 31.2											

### Skylights

No	Description	Type	U [Btu/hr sf F]	SHGC	Vis.Trans	W [ft]	H (Effec) [ft]	Multi- plier	Area [Sf]	Total Area [Sf]
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div> <b>In Zone:</b>  <b>In Roof:</b> </div> <div style="border: 1px solid black; width: 20px; height: 20px; margin-top: 10px;"></div> </div>										

### Floors

No	Description	Type	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Cond. [Btu/h.sf.F]	Heat Cap. [Btu/sf. F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div> <b>In Zone: Left</b>            1 Pr0Zo1F11         </div> <div>           1 ft. soil, concrete floor, carpet and rubber pad         </div> <div>           25.00    50.00    1    1250.0    0.2681    34.00    113.33    3.73         </div> <div style="border: 1px solid black; width: 20px; height: 20px; margin-top: 10px;"></div> </div>										
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div> <b>In Zone: Right</b>            1 Pr0Zo1F11         </div> <div>           1 ft. soil, concrete floor, carpet and rubber pad         </div> <div>           25.00    50.00    1    1250.0    0.2681    34.00    113.33    3.73         </div> <div style="border: 1px solid black; width: 20px; height: 20px; margin-top: 10px;"></div> </div>										

## Systems

Pr0Sy1	System 1	Constant Volume Air Cooled Split System < 65000 Btu/hr			No. Of Units 1
Component	Category	Capacity	Efficiency	IPLV	
1	Cooling System	56500.00	14.00	8.00	<input type="checkbox"/>
2	Heating System	57000.00	9.00		<input type="checkbox"/>
3	Air Handling System -Supply	1883.00	0.80		<input type="checkbox"/>
4	Air Distribution System (Sup)		6.00		<input type="checkbox"/>
5	Air Distribution System (Ret)		6.00		<input type="checkbox"/>

Pr0Sy2	System 2	Constant Volume Air Cooled Split System < 65000 Btu/hr			No. Of Units 1
Component	Category	Capacity	Efficiency	IPLV	
1	Cooling System	56500.00	14.00	8.00	<input type="checkbox"/>
2	Heating System	57000.00	9.00		<input type="checkbox"/>
3	Air Handling System -Supply	1883.00	0.80		<input type="checkbox"/>
4	Air Distribution System (Sup)		6.00		<input type="checkbox"/>
5	Air Distribution System (Ret)		6.00		<input type="checkbox"/>

## Plant

Equipment	Category	Size	Inst.NoEff.	IPLV

## Water Heaters

W-Heater Description	Capacity	Cap.Unit	I/P Rt.	Efficiency	Loss

☐

### Ext-Lighting

Description	Category	No. of Lumin- aires	Watts per Lumin- aire	Area/Len/No [sf/ft/No]	Control Type	Wattage [W]



### Piping

No	Type	Operating Temp [F]	Insulation Conductivity [ Btu-in/h.sf.F]	Nomonal pipe Diameter [in]	Insulation Thickness [in]	Is Runout?



### Fenestration Used

Name	Glass Type	No. of Panels	Glass Conductance [Btu/h.sf.F]	SHGC	VLT

## Materials Used

Mat No	Acronym	Description	Only R-Value Used	RValue [h.s.f.F/Btu]	Thick [ft]	Cond- uctivity [Btu/h.ft.F]	Density [lb/cf]	Sp. Heat [Btu/lb.F]	
187	Matl187	GYP OR PLAS BOARD, 1/2IN	No	0.4533	0.0417	0.0920	50.00	0.2000	<input type="checkbox"/>
178	Matl178	CARPET W/RUBBER PAD	Yes	1.2300					<input type="checkbox"/>
265	Matl265	Soil, 1 ft	No	2.0000	1.0000	0.5000	100.00	0.2000	<input type="checkbox"/>
48	Matl48	6 in. Heavyweight concrete	No	0.5000	0.5000	1.0000	140.00	0.2000	<input type="checkbox"/>
267	Matl267	0.75" stucco	No	0.1563	0.0625	0.4000	16.00	0.2000	<input type="checkbox"/>
266	Matl266	2x4@16" oc + R11 Batt	No	8.3343	0.2917	0.0350	9.70	0.2000	<input type="checkbox"/>
12	Matl12	3 in. Insulation	No	10.0000	0.2500	0.0250	2.00	0.2000	<input type="checkbox"/>
23	Matl23	6 in. Insulation	No	20.0000	0.5000	0.0250	5.70	0.2000	<input type="checkbox"/>
279	Matl279	Solid core flush (2.25")	Yes	2.8537					<input type="checkbox"/>
81	Matl81	ASPHALT-ROOFING, ROLL	Yes	0.1500					<input type="checkbox"/>
244	Matl244	PLYWOOD, 1/2IN	No	0.6318	0.0417	0.0660	34.00	0.2900	<input type="checkbox"/>

## Constructs Used

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Cap [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]																																		
1009	0.75 in. stucco, 2x4x16" oc, R11 Batt, 0.5 in. gyp	No	No	0.11	1.18	14.94	8.9	<input type="checkbox"/>																																	
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1038	Shngl/1/2"WD Deck/WD Truss/9" Batt/Gyp Brd	No	No	0.03	1.50	8.22	31.2	<input type="checkbox"/>																																	
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1057	1 ft. soil, concrete floor, carpet and rubber pad	No	No	0.27	34.00	113.33	3.7	<input type="checkbox"/>																																	
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