## FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

•	ddy Coppage Residence	Builder Name	
Street City, State, Zip Ft White, FL,		Permit Office Columbia Permit Number	
Owner		Jurisdiction 221000	
Design Location FL, Jacksonville			
1 New construction or existing	New (From Plans)	9 Wall Types (2000 0 sqft)	Insulation Area
2 Single family or multiple family	Single-family	a Frame - Wood, Exterior b N/A	R=13 0 2000 00 ft <sup>2</sup> R= ft <sup>2</sup>
3 Number of units, if multiple family	1	c N/A	R= ft²
4 Number of Bedrooms	2	d N/A 10 Ceiling Types (2105 0 sqft)	R= ft² Insulation Area
5 Is this a worst case?	No	a Under Attic (Vented)	R=30 0 2047 00 ft <sup>2</sup>
6 Conditioned floor area above grade	(ft²) 2000	b Knee Wall (Vented)	R=19 0 58 00 ft <sup>2</sup>
Conditioned floor area below grade	(ft²) 0	c N/A 11 Ducts	$R=$ $ft^2$ $R  ext{ } ft^2$
7 Windows (214 1 sqft ) Descri a U-Factor Dbl, U=0 SHGC SHGC=0	55 214 10 ft²	a Sup Attic, Ret Attic, AH Attic	6 208
b U-Factor N/A	ft²	12 Cooling systems a Central Unit	kBtu/hr Efficiency 28 0 SEER 13 00
SHGC	512	b Central Unit	12 0 SEER 20 25
c U-Factor N/A SHGC	ft²	13 Heating systems	kBtu/hr Efficiency
d U-Factor N/A	ft²	a Electric Heat Pump	27 0 HSPF 8 00
SHGC	2 11 4 170 5	b Electric Heat Pump	14.4 HSPF 10.00
Area Weighted Average Overhang Area Weighted Average SHGC	Depth 4 453 ft 0 500	14 Hot water systems	
8 Floor Types (2000 0 sqft)	Insulation Area	a Propane Tankless	Cap 1 gallons
a Slab-On-Grade Edge Insulation	R=0 0 2000 00 ft <sup>2</sup>	b Conservation features	EF 0 750
b N/A	R= ft²	None	
c N/A	R= ft²	15 Credits	Pstat
Glass/Floor Area 0 107	Total Proposed Modifi Total Standard Referen		PASS
I hereby certify that the plans an		Review of the plans and	OF THE STATE
this calculation are in compliand	0,	specifications covered by this calculation indicates compliance	
Ryan B	Elis Ryan B. Ellis	with the Florida Energy Code	13/11/201
		Before construction is completed	
DATE		this building will be inspected for	10 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 /
I hereby certify that this building with the Florida Energy Code	,	compliance with Section 553 908 Florida Statutes	COD WE THE
OWNER/AGENT SLONG DATE 8/18/13	s Coppedse	BUILDING OFFICIAL DATE	

- Compliance requires completion of a Florida Air Barrier and Insulation Inspection Checklist NTY BUILD, Received



				PRO	DJECT							
Title Building Type Owner # of Units Builder Name Permit Office Jurisdiction Family Type New/Existing Comment	e User  1 e Columbia 221000 Single-family	uddy Coppage R	Total St Worst C Rotate A Cross V	oned Area ories Case	2 2000 1 No 0			Address T Lot # Block/Subl PlatBook Street. County City, State	Division ( Zip	Street Ad Columbia Ft White		
				CL	IMATE							
	Design Location	TMY Site		IECC Zone	Design 97 5 %	25%		Summer	Heating Degree Da	ys Mois	sture	aily Temp Range
F	L, Jacksonville	FL_JACKSONVIL	LE_INT	2	32	93	70	75	1281	4	9	Medium
				BL	ocks							
Number	Name	Area	Volun	ne								
1	Block1	1600	128									
2	Block2	400	320		14050							
Alexandra e	A1				ACES	·						
Number	Name	Area	Volume	Kitcher	n Occ	upants	Bedrooms	Infil IC			Cooled	Heate
1 2	Main Shop	1600 400	12800 3200	Yes No		2	2 0	1 1	Yes Yes		res res	Yes Yes
	5110p	100	0200		OORS			,	100			100
\/ #	Floor Type	Space	· F		Perimete	R-Value	Area	Joist R-	Value	Tile	Wood	Carpet
1	Slab-On-Grade Edge			170 ft			1600 ft <sup>2</sup>	ддаг	•	0	0	1
2	Slab-On-Grade Edge	insulation S	hop	80 ft	(	)	400 ft <sup>2</sup>		_	0	0	1
				F	ROOF		······					······································
√ #	Туре	Materials	Ro Ar	oof	Gable Area	Roof Color	Solar Absor	SA Tested	Emitt	Emitt Tested	Deck Insul	
1	Hip	Composition shing	gles 216	3 ft²	0 ft²	Medium	0 96	No	0 9	No	0	22 (
				Α	TTIC							
<b>/</b> #	Туре	Vent	lation	Ven	t Ratio (1	n)	Area	RBS	IRCC			
1	Full attic	Vei			300		2000 ft <sup>2</sup>	N	N			

				<del></del>	······································	CEII	LING							1
$\vee$	#	Ceillr	ід Туре		Space	R-Va	alue	Ar	·ea	Framii	ng Frac	Tr	uss Typ	е
	_ 1	Unde	er Attic (Ve	ented)	Main	30		16	47 ft²	0	11		Wood	ı
	_ 2	Knee	Wall (Ver	nted)	Main	19		5	8 ft²	0	11		Wood	1
<b> </b>	_ 3	Unde	er Attic (Ve	ented)	Shop	30		40	00 ft²	0	11		Wood	Ì
				<u> </u>		WA	LLS		·		<u></u>			
\/	# Ornt		icent	І.Туре	Space	Cavity	Widt		Height	A.c.o.	Sheathing		Solar	Below
i	#Ornt 1 W			ı–ı ype .me - Wood	Main	R-Value 13	Ft 57	InE 8	tIn	Area 456 0 ft <sup>2</sup>	R-Value	=raction 0 23	ADSOL. 0 75	Grade% 0
	2 S	Exter		me - Wood	Main	13	28	8		224 0 ft <sup>2</sup>		0 23	0 75	0
	3 E	Exter	or Fra	me - Wood	Main	13	57	8		456 0 ft <sup>2</sup>		0 23	0 75	0
	4 N	Exter	or Fra	me - Wood	Main	13	28	8		224 0 ft <sup>2</sup>		0 23	0 75	0
	5 W	Exter	or Fra	me - Wood	Shop	13	20	8	<b>;</b>	160 0 ft²		0 23	0 75	0
	6 S	Exter	or Fra	me - Wood	Shop	13	20	8	<b>;</b>	160 0 ft²		0 23	0 75	0
	7 E	Exter	or Fra	me - Wood	Shop	13	20	8	<b>;</b>	160 0 ft²		0 23	0 75	0
	8 N	Exter	or Fra	me - Wood	Shop	13	20	8	}	160 0 ft²		0 23	0 75	0
* · · · · · · · · · · · · · · · · · · ·						DO	ORS						<del></del>	
$\vee$	#	0	rnt	Door Type	Space		;	Storms	U-Value	→ \ Ft	Vidth In	Height Ft	i In	Area
	1	\	N	Wood	Main			None	0 46000			67		0 04999
	_ 2		S	Wood	Main			None	0 46000			6 7		375 ft²
	3		S	Wood	Main			None	0 46000			6 7		375 ft²
	- 4		E	Wood	Main			None	0 46000			67	8	375 ft²
i -	5		E	Wood	Main			None	0 46000			67		375 ft²
	 6		E	Wood	Main			None	0 46000		;	67	8	375 ft²
			E	Wood	Main			None	0 46000	0 125	,	67	8	375 ft²
	8		E	Wood	Main			None	0 46000	0 15		67	1	0 04999
	9	,	N	Wood	Shop			None	0 46000	0 128	;	67	8	375 ft²
	_ 10	,	N	Wood	Shop			None	0 46000	00 125	5	67	8	375 ft²
<del></del>						VAZIALI	20140							
				(	Orientation sho		DOWS ntered, P	roposed	orientation	10-10-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1				المسروات والتناس
$\checkmark$	#	W Ornt ![		Panes	NFRC	U-Factor	SHGC		Area	Overh Depth 5	nang Separation	Int Sha	ade	Screening
~	1	W 1		Low-E Double	Yes	0 55	0.5		15 0 ft <sup>2</sup>		1 ft 0 in	Drapes/ł		None
	2	W 1	,	Low-E Double	Yes	0 55	05		15 0 ft <sup>2</sup>		1 ft 0 in	Drapes/l		None
	_ 3	W 1	,	Low-E Double	Yes	0 55	05		10 0 ft <sup>2</sup>	8 ft 0 in	1 ft 0 in	Drapes/		None
	4	W 1	•	Low-E Double	Yes	0 55	05		16 0 ft²		1 ft 0 in	Drapes/l		None
	_ 5	S 2	•	Low-E Double	Yes	0 55	05		16 8 ft²		1 ft 0 in	Drapes/		None
	6	E 3	•	Low-E Double	Yes	0 55	0.5			1 3 ft 0 in		Drapes/i		None
	7	E 3	•	Low-E Double	Yes	0 55	05			1 3 ft 0 in		Drapes/		None
	8	E 3	•	Low-E Double	Yes	0 55	0 5			1 3 ft 0 in		Drapes/		None
	_ 9	N 4	•	Low-E Double	Yes	0 55	05		9 0 ft <sup>2</sup>		1 ft 0 in	Drapes/		None
	10	W 8	•	Low-E Double	Yes	0 55	05			5 3 ft 0 in		Drapes/		None
	11	W 5			Yes	0 55	05			5 3 ft 0 in		Drapes/		None
				= 50000	1.50	0 00	0.0		,001	2010111	0	~ poor		

			***			Orientation s	WIN shown is the e	DOWS	oposed ori	entation						
\	/	# 0	W	all O Frame	Panes	NFRC	U-Factor		opodod dir	Area		hang Separatio	n Inf	Shade	Screer	ning
		12 5		3 Vinyl	Low-E Double		0 55	0 5	***************************************		1 3 ft 0 in			es/blinds	Non	<u>-</u>
		13	= ;	7 Vinyl	Low-E Double	Yes	0 55	0 5		15 0 ft²	1 3 ft 0 in	1 ft 0 in	Drap	es/blinds	Non	e
		14 1	4 6	3 Vinyl	Low-E Double	Yes	0 55	0 5		15 0 ft²	1 3 ft 0 in	1 ft 0 in	Drag	oes/blinds	Non	.e
							INFILT	RATIO	N							
#	5	Scope		Method		SLA	CFM 50	ELA	EqL	_A	ACH	Æ	ACH 50			
1	Wh	olehouse	В	est Guess	C	000500	2623 01	144	270 8	313	38500	9	83630			
							HEATIN	G SYS1	EM							
\		#	Syste	т Туре		Subtype			Efficiency	С	apacity			Block	Duc	ts
		1	Electr	ic Heat Pur	пр	None			HSPF 8	27	kBtu/hr			1	sys#	<i>‡</i> 1
,		2	Electr	ic Heat Pur	np	None			HSPF 10	14 4	4 kBtu/hr			2	Ductle	ess
							COOLIN	G SYS	EM							
\	$\angle$	#	Syste	m Type		Subtype		E	fficiency	Capacit	у А	ir Flow	SHR	Block	Duc	ts
		1	Centra	al Unit		None		S	EER 13	28 kBtu/	hr 84	10 cfm	0 75	1	sys#	<b>#1</b>
		2	Centra	al Unit		None		SE	ER 20 25	12 kBtu/	hr 36	30 cfm	0 75	2	Ducti	ess
							HOT WAT	ER SY	STEM							
\	/	#	Sys	tem Type	SubType	Location	EF	Cap	)	Use	SetPr	nt	C	onservation	1	
		1	Pro	pane	Tankless	Exterior	0 75	1 ga	1 5	50 gal	120 de	g		None		
						SOL	AR HOT V	VATER	SYSTE	M						
١	/	FSEC Cert :		ompany Na	me		System Mo	del#	Coll	lector Mod	el#	Collector Area		orage Ilume	FEF	
		None	N	one						, , , , , , , , , , , , , , , , , , ,		ft²				
							ום	JCTS								
١	/	#	I۸	Supp cation R	oly Value Area	Ret	urn Area	Leakag	e Type	Air Handl	er C⊮MT	CFM 25 OU		N RLF	HVA Heat	
	*	1		Attic	6 208 ft <sup>2</sup>	Attic	50 ft <sup>2</sup>			Attic	ei Cirtari cfm			A [7F].	1	1
_=				ILIIO	0 20011	Aut	00 II	Default	_canaye	Attic	CIII	1 (17819	uit) U		, I	

						TEM	PERATU	RES						
Programa	ble Thermo	stat. Y			C	Ceiling Fans								
Cooling Heating Venting	[ ] Jan [X] Jan [ ] Jan	[ ] Feb [X] Feb [ ] Feb	[ ] Mar [X] Mar [X] Mar	Ap (X) Ap	r er er	[ ] May [ ] May [ ] May	[X] Jun [ ] Jun [ ] Jun	[X] Jul     Jul     Jul	[X] Aug [ ] Aug [ ] Aug	[X] S     S     S	ep ep ep	Oct Oct X Oct	[ ] Nov [X] Nov [X] Nov	Dec (X) Dec Dec
Thermostat Schedule T		HERS 2006	Reference 1	2	3	4	5	Hoi 6	urs 7	8	9	10	11	12
Cooling (Wi	D)	AM PM	78 80	78 80	78 78	78 78	78 78	78 78	78 78	78 78	80 78	80 78	80 78	80 78
Cooling (W	EH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Heating (W	D)	AM PM	66 68	66 68	66 68	66 68	66 68	68 68	68 68	68 68	68 68	68 68	68 66	68 66
Heating (W	EH)	AM PM	66 68	66 68	66 68	66 68	66 68	68 68	68 68	68 68	68 68	68 68	68 66	68 66

Florida Code Compliance Checklist
Florida Department of Business and Professional Regulations Residential Whole Building Performance Method

ADDRESS	PERMIT#
7,001,1200	
Ft. White, FL,	
·	

#### MANDATORY REQUIREMENTS SUMMARY - See individual code sections for full details.

COMPONENT	SECTION	SUMMARY OF REQUIREMENT(S)	CHECK
Air leakage	402 4	To be caulked, gasketed, weatherstripped or otherwise sealed Recessed lighting IC-rated as meeting ASTM E 283 Windows and doors = 0 30 cfm/sq ft Testing or visual inspection required Fireplaces gasketed doors & outdoor combustion air Must complete envelope leakage report or visually verify Table 402 4 2	X
Thermostat & controls	403 1	At least one thermostat shall be provided for each separate heating and cooling system. Where forced-air furnace is primary system, programmable thermostat is required. Heat pumps with supplemental electric heat must prevent supplemental heat when compressor can meet the load.	x
Ducts	403 2 2	All ducts, air handlers, filter boxes and building cavities which form the primary air containment passageways for air distribution systems shall be considered ducts or plenum chambers, shall be constructed and sealed in accordance with Section 503 2 7 2 of this code	x
	403 3 3	Building framing cavities shall not be used as supply ducts	and the same of th
Water heaters	403 4	Heat trap required for vertical pipe risers. Comply with efficiencies in Table 403 4 3 2. Provide switch or clearly marked circuit breaker (electric) or shutoff (gas). Circulating system pipes insulated to = R-2 + accessible manual OFF switch.	x
Mechanical ventilation	403 5	Homes designed to operate at positive pressure or with mechanical ventilation systems shall not exceed the minimum ASHRAE 62 level No make-up air from attics, crawlspaces, garages or outdoors adjacent to pools or spas	
Swimming Pools & Spas	403 9	Pool pumps and pool pump motors with a total horsepower (HP) of = 1 HP shall have the capability of operating at two or more speeds. Spas and heated pools must have vapor-retardant covers or a liquid cover or other means proven to reduce heat loss except if 70% of heat from site-recovered energy. Off/timer switch required. Gas heaters minimum thermal efficiency=78% (82% after 4/16/13). Heat pump pool heaters minimum. COP= 4.0	
Cooling/heating equipment	403 6	Sizing calculation performed & attached Minimum efficiencies per Tables 503 2 3 Equipment efficiency verification required Special occasion cooling or heating capacity requires separate system or variable capacity system Electric heat >10kW must be divided into two or more stages	x
Ceilings/knee walls	405 2 1	R-19 space permitting	X

## **ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD**

#### ESTIMATED ENERGY PERFORMANCE INDEX\* = 72

The lower the EnergyPerformance Index, the more efficient the home

#### , Ft White, FL,

1	New construction or existing	New (J	From Plans)	9 Wa	II Types	Insulation	
2	Single family or multiple family	Single	-family	a F b N	rame - Wood, Exterior	R=13 0 R=	2000 00 ft <sup>2</sup> ft <sup>2</sup>
3	Number of units, if multiple famil	y 1		c N		R=	ft²
4	Number of Bedrooms	2		d N		R=	ft²
5	Is this a worst case?	No			illing Types Inder Attic (Vented)	Insulation R=30 0	Area 2047 00 ft²
6	Conditioned floor area (ft²)	2000			(nee Wall (Vented)	R=19 0	58 00 ft <sup>2</sup>
7	SHGC SHGC	ription J≈0 55 C=0 50	Area 214 10 ft <sup>2</sup>	c N 11 Du a S		R=	ft² R ft² 6 208
	b U-Factor N/A SHGC c U-Factor N/A SHGC		ft²	a C	ooling systems Central Unit Central Unit	kBtu/hr 28 0 12 0	Efficiency SEER 13 00 SEER 20 25
	d U-Factor N/A SHGC Area Weighted Average Overhal Area Weighted Average SHGC	ng Depth	ft² 4 453 ft 0 500	аЕ	ating systems Electric Heat Pump Electric Heat Pump	kBtu/hr 27 ( 14 4	Efficiency HSPF 8 00 HSPF 10 00
8	Floor Types a Slab-On-Grade Edge Insulation b N/A c N/A	Insulation on R=0 0 R= R=	Area 2000 00 ft² ft² ft²	a F	ot water systems Propane  Conservation features  None	(	Cap 1 gallons EF 0.75
				15 Cr	edits		Pstat

I certify that this home has complied with the Florida Energy Efficiency Code for Building Construction through the above energy saving features which will be installed (or exceeded) in this home before final inspection. Otherwise, a new EPP Display Card will be completed based on installed Code compliant features

Address of New Home  $25^{\circ}$ 

Myshic Upy City/FL Zip Fort w)

\*Note This is not a Building Energy Rating If your Index is below 70, your home may qualify for energy efficient mortgage (EEM) incentives if you obtain a Florida EnergyGauge Rating Contact the EnergyGauge Hotline at (321) 638-1492 or see the EnergyGauge web site at energygauge com for information and a list of certified Raters For information about the Florida Building Code, Energy Conservation, contact the Florida Building Commission's support staff

\*\*Label required by Section 303 1 3 of the Florida Building Code, Energy Conservation, if not DEFAULT

#### **TABLE 402.4.2**

## AIR BARRIER AND INSULATION INSPECTION COMPONENT CRITERIA

Project Name Street.

City, State, Zip

Tommy and Truddy Coppage Residence

Ft White, FL,

Owner:

Design Location FL, Jacksonville

Builder Name

Permit Office Columbia

Permit Number

Jurisdiction 221000

COMPONENT	CRITERIA	CHECK
Air barrier and thermal barrier	Exterior thermal envelope insulation for framed walls is installed in substantial contact and continuous alignment with building envelope air barrier  Breaks or joints in the air barrier are filled or repaired  Air-permeable insulation is not used as a sealing material  Air-permeable insulation is inside of an air barrier	
Ceiling/attic	Air barrier in any dropped ceiling/soffit is substantially aligned with insulation and any gaps are sealed Attic access (except unvented attic), knee wall door, or drop down stair is sealed	
Walls	Corners and headers are insulated Junction of foundation and sill plate is sealed	
Windows and doors	Space between window/door jambs and framing is sealed	
Rım joists	Rim joists are insulated and include an air barrier	
Floors (including above-garage and cantilevered floors)	Insulation is installed to maintain permanent contact with underside of subfloor decking	
Crawl space walls	Insulation is permanently attached to walls Exposed earth in unvented crawl spaces is covered with Class I	
Shafts, penetrations	Duct shafts, utility penetrations, knee walls and flue shafts opening to exterior or unconditioned space are sealed	
Narrow cavities	Batts in narrow cavities are cut to fit, or narrow cavities are filled by sprayed/blown insulation	
Garage separation	Air sealing is provided between the garage and conditioned spaces	
Recessed lighting	Recessed light fixtures are air tight, IC rated, and sealed to drywall Exception—fixtures in conditioned space	
Plumbing and wiring	Insulation is placed between outside and pipes. Batt insulation is cut to fit around wiring and plumbing, or sprayed/blown insulation.	
Shower/tub on exterior wall	Showers and tubs on exterior walls have insulation and an air barrier separating them from the exterior wall	
Electrical/phone box on	Air barrier extends behind boxes or air sealed-type boxes are installed	
Common wall	Air barrier is installed in common wall between dwelling units	
HVAC register boots	HVAC register boots that penetrate building envelope are sealed to subfloor or drywall	
Fireplace	Fireplace walls include an air barrier	

# Project Summary Zone Main House

**Energy Design Systems, Inc.** 

Job: Date: 7/30/13 By: M. Eilis

12132 Weatherwood Estates Dr W Jacksonville FL 32223 Phone 904-268-3670 Fax: 904-268-3670 Email eds.jax@gmail com

#### **Project Information**

For

Coppage Residence Ft White, FL

Notes

Front of house faces West

### Design Information

Weather Jacksonville Intl AP, FL, US

#### Winter Design Conditions

#### **Summer Design Conditions**

Outside db Inside db	32 72	°F °F	Outside db Inside db	93 72	°F °F
Design TD	40	°F	Design TD Daily range	21 M	°F
			Relative humidity	50	%
			Moisture difference	58	gr/lb

#### **Heating Summary**

#### Sensible Cooling Equipment Load Sizing

Structure	22356	Btuh	Structure	17186 Btuh
Ducts	4866	Btuh	Ducts	5971 Btuh
Central vent (0 cfm)	Õ	Btuh	Central vent (0 cfm)	0 Btuh
Humidification	0	Btuh	Blower	0 Btuh
Piping	0	Btuh		
Equipment load	27222	Btuh	Use manufacturer's data	n
			Rate/swing multiplier	0 98
lr	nfiltration		Equipment sensible load	22602 Btuh

#### Infiltration

Latent Cooling	<b>Equipment Load</b>	Sizing
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Method Construction quality		Sımplified Average	Latent Cooling Equipment Load Sizir				
Fireplaces		0	Structure	2005	Btuh		
			Ducts	1299	Btuh		
	Heating	Cooling	Central vent (0 cfm)	0	Btuh		
Area (ft²) Volume (ft³)	1600 12800	1600 12800	Equipment latent load	3304	Btuh		
Air changes/hour	0 27	0 14	Equipment total load	25906			
Equiv AVF (cfm)	58	31	Req total capacity at 0 80 SHR	2 4	ton		

#### **Heating Equipment Summary**

#### **Cooling Equipment Summary**

Make Trade Model AHRI ref	Goodman Mfg GOODMAN, JANITROL, AMANA DISTI GSZ130301A* 5358271		Make Trade Cond Coil AHRI ref	Goodman GOODMAI GSZ13030 ARUF30B 5358271	N, JANITROL, AMAN. 01A*	A DISTI	
Efficiency Heating inpu Heating outp Temperature Actual air flo Air flow facto Static presso	out e rise w or ure	27000 26 933 0 034	HSPF Btuh @ 47°F °F cfm cfm/Btuh in H2O	Efficiency Sensible cor Latent coolin Total coolin Actual air flo Air flow fact Static press Load sensib	oling ng J ow or ure	11 0 EER, 13 SEER 19600 8400 28000 933 0 040 0 0 88	Btuh Btuh cfm cfm/Btuh

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed

## **Project Summary** Zone Workshop

**Energy Design Systems, Inc.** 

12132 Weatherwood Estates Dr W Jacksonville, FL 32223 Phone 904-268-3670 Fax: 904-268-3670 Email eds.jax@gmail com

**Project Information** 

For:

Coppage Residence Ft White, FL

Notes

Front of house faces West

#### Design Information

Weather<sup>a</sup> Jacksonville Intl AP, FL, US

#### Winter Design Conditions

#### **Summer Design Conditions**

Job:

By:

Date: 7/30/13

M. Ellis

Outside db Inside db	32 °F 72 °F	Outside db Inside db	93 °F 72 °F
Design TD	40 °F	Design TD Daily range	21 °F M
		Relative humidity Moisture difference	50 % 58 gr/lb

#### **Heating Summary**

#### Sensible Cooling Equipment Load Sizing

Structure	12002 Btuh	Structure	9452 Btuh
Ducts	0 Btuh	Ducts	0 Btuh
Central vent (0 cfm)	0 Btuh	Central vent (0 cfm)	0 Btuh
Humidification	0 Btuh	Blower	0 Btuh
Piping	0 Btuh		
Equipment load	12002 Btuh	Use manufacturer's data	n
• •		Rate/swing multiplier	0 98
Infiltr	ation	Eguipment sensible load	9225 Btuh

Simplified

Average

Cooling 400

3200

#### infiltration

Heating

400 3200

0 81

Latent Cooling Equipment	Load	Sizing
Structure Ducts Central vent (0 cfm) Equipment latent load	0	Btuh Btuh Btuh Btuh
Equipment total load	10511	Btuh

Reg total capacity at 0 80 SHR

## Air changes/hour Equiv AVF (cfm) **Heating Equipment Summary**

#### **Cooling Equipment Summary**

Make Trade Model AHRI ref	Mitsubishi Electric and Electronics USA, Inc Mr Slim MUZ-GE12NA 3576362		Make Trade Cond Coll	Mr Slim MUZ-GE1 MSZ-GE1	s USA, Inc			
Efficiency Heating inpu Heating out Temperatur Actual air flo Air flow fact Static press Space them	out e rise ow or ure	14400 30 431 0 036	HSPF  Btuh @ 47°F  °F  cfm  cfm/Btuh  in H2O	AHRI ref Efficiency Sensible co Latent cooling Total cooling Actual air flo Air flow fact Static press Load sensib	oling ng g ow :or :ure	14 7 EER, 20 3 o	8400 3600 12000 431 0 046	Btuh Btuh Btuh cfm cfm/Btuh in H2O

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed



Method

Fireplaces

Area (ft²) Volume (ft³)

Construction quality

2013-Jul-30 15 38 46