FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Air Distribution System Test Report

Project Name	Case Residence	Builder Name:	
Street.		Permit Office	
City, State, Zip	, FL , 32055-	Permit Number:	
Owner:	Case	Jurisdiction.	
Design Location.	FL, Gainesville		

Air Distribution System Leakage Test Results

CFM25 Air Distribution System Leakage Test Values

Line	System	Duct Leakage to Outdoors	Total Duct Leakage *
1	System 1	_____ cfm25(out)	_____ cfm25(tot)
2	System 2	_____ cfm25(out)	_____ cfm25(tot)
3	System 3	_____ cfm25(out)	_____ cfm25(tot)
4	System 4	_____ cfm25(out)	_____ cfm25(tot)
5	**Duct System Leakage**	Sum lines 1-4 _____ Divide by _____ (Total Conditioned Floor Area) = _____ **(Q_n,out)**	Sum lines 1-4 _____ Divide by _____ (Total Conditioned Floor Area) = _____ **(Q_n,tot)**

*Total duct leakage testing is required for prescriptive methods but optional for Performance To qualify as "substantially leak free", for a post construction test, Qn out must be less than or equal to 0.03 and Qn,tot must be less than or equal to 0 09, for a rough in test, Qn tot must be less than or equal to 0.04 if the AH is included in the test, or Qn tot must be less than or equal to 0.02 if the AH is not installed at the time of the test. See FBC, EC Section 403.2.2.1

I hereby certify that the above duct testing performance results demonstrate compliance with the Florida Energy Code requirements in accordance with Section 403 2.2 1.

Signature: _____

Printed Name: _____

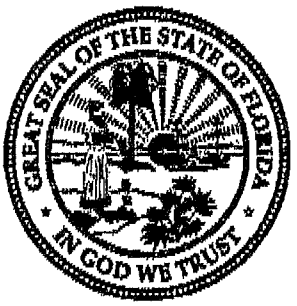
Florida Rater Certification #: _____

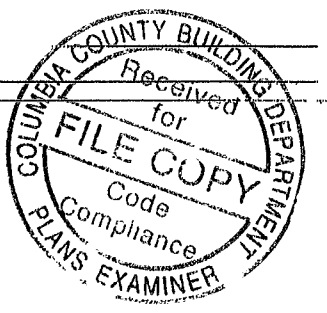
DATE: _____

Florida Building Code requires that testing to confirm duct leakage be performed by a Class 1 Florida Energy Gauge Certified Energy Rater. Certified Florida Class 1 raters can be found at http://energygauge.com/search.htm

BUILDING OFFICIAL: _____

DATE: _____





Residential System Sizing Calculation

Summary

Case

Project Title:
Case Residence

, FL 32055-

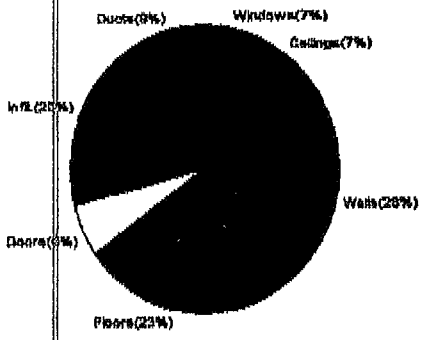
8/7/2014

Location for weather data: Gainesville, FL - Defaults. Latitude(29.7) Altitude(152 ft.) Temp Range(M)					
Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(54gr.)					
Winter design temperature(MJ8 98%)	33	F	Summer design temperature(MJ8 99%)	92	F
Winter setpoint	70	F	Summer setpoint	75	F
Winter temperature difference	37	F	Summer temperature difference	17	F
Total heating load calculation	**16923**	**Btuh**	**Total cooling load calculation**	**16504**	**Btuh**
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh
Total (Electric Heat Pump)	141.8	24000	Sensible (SHR = 0.75)	145.5	18000
Heat Pump + Auxiliary(0.0kW)	141.8	24000	Latent	146.2	6000
			Total (Electric Heat Pump)	145.4	24000

WINTER CALCULATIONS

Winter Heating Load (for 970 sqft)

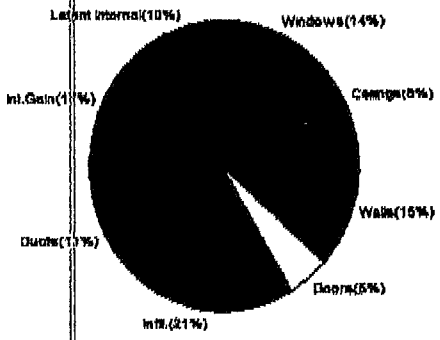
Load component			Load	
Window total	60	sqft	1221	Btuh
Wall total	1680	sqft	4804	Btuh
Door total	60	sqft	1021	Btuh
Ceiling total	970	sqft	1143	Btuh
Floor total	970	sqft	3864	Btuh
Infiltration	84	cfm	3388	Btuh
Duct loss			1482	Btuh
Subtotal			**16923**	**Btuh**
Ventilation	0	cfm	0	Btuh
TOTAL HEAT LOSS			**16923**	**Btuh**



SUMMER CALCULATIONS

Summer Cooling Load (for 970 sqft)

Load component			Load	
Window total	60	sqft	2343	Btuh
Wall total	1680	sqft	2419	Btuh
Door total	60	sqft	773	Btuh
Ceiling total	970	sqft	1297	Btuh
Floor total			0	Btuh
Infiltration	63	cfm	1168	Btuh
Internal gain			2860	Btuh
Duct gain			1511	Btuh
Sens. Ventilation	0	cfm	0	Btuh
Blower Load			0	Btuh
Total sensible gain			**12371**	**Btuh**
Latent gain(ducts)			240	Btuh
Latent gain(infiltration)			2293	Btuh
Latent gain(ventilation)			0	Btuh
Latent gain(internal/occupants/other)			1600	Btuh
Total latent gain			**4133**	**Btuh**
TOTAL HEAT GAIN			**16504**	**Btuh**



8th Edition

EnergyGauge® System Sizing
PREPARED BY: _____
DATE: _____

TABLE 402.4.2

AIR BARRIER AND INSULATION INSPECTION COMPONENT CRITERIA

Project Name.	Case Residence	Builder Name	
Street.		Permit Office	
City, State, Zip	, FL , 32055-	Permit Number	
Owner	Case	Jurisdiction	
Design Location	FL, Gainesville		

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	
Rim 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 Air barrier is installed at any exposed edge of insulation	
Crawl space walls	Insulation is permanently attached to walls. Exposed earth in unvented crawl spaces is covered with Class I vapor retarder with overlapping joints taped	
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 extends behind piping and wiring.	
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.	

FORM 405-10

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name:	Case Residence	Builder Name	
Street		Permit Office:	
City, State, Zip	, FL , 32055-	Permit Number:	
Owner:	Case	Jurisdiction	
Design Location:	FL, Gainesville		

1	New construction or existing	New (From Plans)
2	Single family or multiple family	Single-family
3	Number of units, if multiple family	1
4	Number of Bedrooms	2
5	Is this a worst case?	No
6.	Conditioned floor area above grade (ft²)	970
	Conditioned floor area below grade (ft²)	0

7 Windows(60 0 sqft.)	Description	Area
a. U-Factor:	Dbl, U=0.55	60 00 ft²
SHGC:	SHGC=0 50	
b U-Factor	N/A	ft²
SHGC		
c U-Factor:	N/A	ft²
SHGC		
d. U-Factor:	N/A	ft²
SHGC:		
Area Weighted Average Overhang Depth		2 000 ft
Area Weighted Average SHGC		0 500

8. Floor Types (970 0 sqft.)	Insulation	Area
a Slab-On-Grade Edge Insulation	R=0 0	970 00 ft²
b N/A	R=	ft²
c. N/A	R=	ft²

9 Wall Types (1800 2 sqft.)	Insulation	Area
a. Frame - Wood, Exterior	R=19 0	1240.20 ft²
b Frame - Wood, Adjacent	R=19.0	560.00 ft²
c. N/A	R=	ft²
d N/A	R=	ft²

10 Ceiling Types (970.0 sqft.)	Insulation	Area
a. Under Attic (Vented)	R=30 0	970.00 ft²
b N/A	R=	ft²
c. N/A	R=	ft²

11 Ducts	R	ft²
a Sup Attic, Ret Main, AH: Main	6	194

12. Cooling systems	kBtu/hr	Efficiency
a Central Unit	24 0	SEER:13.00

13 Heating systems	kBtu/hr	Efficiency
a Electric Heat Pump	24 0	HSPF:8.00

14 Hot water systems	
a Electric	Cap 40 gallons
	EF: 0.920
b. Conservation features	
None	
15. Credits	CF

Glass/Floor Area: 0.062

Total Proposed Modified Loads: 21.17
Total Standard Reference Loads 29.17

PASS

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

PREPARED BY: Jack Douchter
DATE: _____

I hereby certify that this building, as designed, is in compliance with the Florida Energy Code.

OWNER/AGENT: _____
DATE: _____

Review of the plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed this building will be inspected for compliance with Section 553 908 Florida Statutes.

BUILDING OFFICIAL: _____
DATE: _____

- **Compliance requires completion of a Florida Air Barrier and Insulation Inspection Checklist**
- **Compliance requires an air distribution system test report, by a Florida Class 1 Rater, confirming system leakage to outdoors tested at 25 pascals pressure difference in accordance with 403.2.2.1. is not greater than (29 cfm:Duct#1)**

COLUMBIA COUNTY BUILDING DEPARTMENT
Received for
FILE COPY
Code
Compliance
PLANS EXAMINER

PROJECT

Title	Case Residence	Bedrooms	2	Address Type.	Street Address
Building Type	User	Conditioned Area:	970	Lot #	
Owner	Case	Total Stories:	1	Block/SubDivision	
# of Units.	1	Worst Case	No	PlatBook:	
Builder Name		Rotate Angle	0	Street	
Permit Office		Cross Ventilation		County.	Columbia
Jurisdiction:		Whole House Fan		City, State, Zip	, FL , 32055-
Family Type	Single-family				
New/Existing	New (From Plans)				
Comment					

CLIMATE

✓	Design Location	TMY Site	IECC Zone	Design Temp 97 5 %	Design Temp 2 5 %	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily Temp Range
	FL, Gainesville	FL_GAINESVILLE_REGI	2	32	92	70	75	1305 5	51	Medium

BLOCKS

Number	Name	Area	Volume
1	Block1	970	13580

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	970	13580	Yes	2	2	1	Yes	Yes	Yes

FLOORS

✓	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
	1	Slab-On-Grade Edge Insulatio	Main	88 5 ft	0	970 ft²	----	0.25	0	0.75

ROOF

✓	#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor	SA Tested	Emitt	Emitt Tested	Deck Insul	Pitch (deg)
	1	Gable or shed	Metal	1085 ft²	242 ft²	Medium	0 96	No	0 9	No	0	26.6

ATTIC

✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
	1	Full attic	Vented	300	970 ft²	N	N

CEILING

✓	#	Ceiling Type	Space	R-Value	Area	Framing Frac	Truss Type
	1	Under Attic (Vented)	Main	30	970 ft²	0 11	Wood

WALLS

√	#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	Width In	Height Ft	Height In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
	1	N	Exterior	Frame - Wood	Main	19	24	3 5	14	0	340.1 ft²		0 23	0 75	0
	2	E	Exterior	Frame - Wood	Main	19	40	0	14		560 0 ft²		0.23	0 75	0
	3	S	Exterior	Frame - Wood	Main	19	24	3 5	14		340.1 ft²		0.23	0.75	0
	4	W	Garage	Frame - Wood	Main	19	40		14		560.0 ft²		0 23	0.75	0

DOORS

√	#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	Width In	Height Ft	Height In	Area
	1	S	Insulated	Main	None	.46	6		6	8	40 ft²
	2	W	Insulated	Main	None	46	3		6	8	20 ft²

WINDOWS

Orientation shown is the entered, Proposed orientation

√	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
	1	N	1	Metal	Double (Tinted)	Yes	0 55	0 5	15.0 ft²	2 ft 0 in	7 ft 0 in	Drapes/blinds	Interior 5
	2	E	2	Metal	Double (Tinted)	Yes	0.55	0 5	45 0 ft²	2 ft 0 in	7 ft 0 in	Drapes/blinds	Interior 5

GARAGE

√	#	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg Wall Height	Exposed Wall Insulation
	1	1430 ft²	1430 ft²	11.5 ft	14 ft	19

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Best Guess	0003	763 3	41 9	78.61	.231	3.3724

HEATING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Block	Ducts
	1	Electric Heat Pump	None	HSPF 8	24 kBtu/hr	1	sys#1

COOLING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
	1	Central Unit	Split	SEER: 13	24 kBtu/hr	720 cfm	0.75	1	sys#1

HOT WATER SYSTEM

√	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
	1	Electric	None	Main	0 92	40 gal	50 gal	120 deg	None

SOLAR HOT WATER SYSTEM

√	FSEC Cert #	Company Name	System Model #	Collector Model #	Collector Area	Storage Volume	FEF
____	None	None			ft²		

DUCTS

√	#	Supply Location	Supply R-Value	Supply Area	Return Location	Return Area	Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	HVAC # Cool
____	1	Attic	6	194 ft²	Main	48.5 ft²	Prop Leak Free	Main	--- cfm	29.1 cfm	0.03	0.60	1	1

TEMPERATURES

Programable Thermostat: None

Ceiling Fans

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Cooling	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]	[X]	[X]	[ ]	[ ]	[ ]
Heating	[X]	[X]	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]
Venting	[ ]	[ ]	[X]	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]	[ ]

Thermostat Schedule: HERS 2006 Reference

Schedule Type		Hours 1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68

FORM 405-10

Florida Code Compliance Checklist

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

ADDRESS. , FL, 32055-	PERMIT #:

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	
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.	
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.	
	403.3.3	Building framing cavities shall not be used as supply ducts.	
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.	
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	
Ceilings/knee walls	405.2.1	R-19 space permitting.	

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 73

The lower the EnergyPerformance Index, the more efficient the home

, , FL, 32055-

1	New construction or existing	New (From Plans)
2.	Single family or multiple family	Single-family
3.	Number of units, if multiple family	1
4.	Number of Bedrooms	2
5	Is this a worst case?	No
6	Conditioned floor area (ft²)	970

7	Windows**	Description		Area
	a. U-Factor:	Dbl, U=0.55		60.00 ft²
	SHGC	SHGC=0.50		
	b. U-Factor:	N/A		ft²
	SHGC:			
	c. U-Factor:	N/A		ft²
	SHGC			
	d. U-Factor:	N/A		ft²
	SHGC:			
	Area Weighted Average Overhang Depth			2.000 ft
	Area Weighted Average SHGC			0.500

8	Floor Types	Insulation	Area
	a. Slab-On-Grade Edge Insulation	R=0.0	970.00 ft²
	b. N/A	R=	ft²
	c. N/A	R=	ft²

9	Wall Types	Insulation	Area
	a. Frame - Wood, Exterior	R=19.0	1240.20 ft²
	b. Frame - Wood, Adjacent	R=19.0	560.00 ft²
	c. N/A	R=	ft²
	d. N/A	R=	ft²
10	Ceiling Types	Insulation	Area
	a. Under Attic (Vented)	R=30.0	970.00 ft²
	b. N/A	R=	ft²
	c. N/A	R=	ft²
11	Ducts	R	ft²
	a. Sup: Attic, Ret: Main, AH: Main	6	194

12	Cooling systems	kBtu/hr	Efficiency
	a. Central Unit	24.0	SEER:13.00
13	Heating systems	kBtu/hr	Efficiency
	a. Electric Heat Pump	24.0	HSPF:8.00
14	Hot water systems		
	a. Electric		Cap: 40 gallons
			EF: 0.92
	b. Conservation features		
	None		
15	Credits		CF

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 EPL Display Card will be completed based on installed Code compliant features

Builder Signature: _____ Date: _____

Address of New Home: _____ City/FL Zip: _____

*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.

FORM 405-10

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name:	Case Residence	Builder Name	
Street		Permit Office	
City, State, Zip	, FL , 32055-	Permit Number	
Owner	Case	Jurisdiction	
Design Location	FL, Gainesville		

1 New construction or existing		New (From Plans)
2. Single family or multiple family		Single-family
3. Number of units, if multiple family		1
4 Number of Bedrooms		2
5 Is this a worst case?		No
6. Conditioned floor area above grade (ft²)		970
Conditioned floor area below grade (ft²)		0

7 Windows(60.0 sqft.)	Description	Area
a. U-Factor:	Dbl, U=0.55	60 00 ft²
SHGC:	SHGC=0.50	
b U-Factor	N/A	ft²
SHGC		
c U-Factor:	N/A	ft²
SHGC		
d. U-Factor:	N/A	ft²
SHGC:		
Area Weighted Average Overhang Depth:		2 000 ft.
Area Weighted Average SHGC		0 500

8. Floor Types (970 0 sqft)	Insulation	Area
a Slab-On-Grade Edge Insulation	R=0.0	970 00 ft²
b N/A	R=	ft²
c. N/A	R=	ft²

9 Wall Types (1800.2 sqft)	Insulation	Area
a. Frame - Wood, Exterior	R=19 0	1240.20 ft²
b Frame - Wood, Adjacent	R=19.0	560.00 ft²
c. N/A	R=	ft²
d N/A	R=	ft²

10 Ceiling Types (970.0 sqft.)	Insulation	Area
a Under Attic (Vented)	R=30 0	970.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

11 Ducts	R	ft²
a Sup, Attic, Ret Main, AH, Main	6	194

12. Cooling systems	kBtu/hr	Efficiency
a. Central Unit	24 0	SEER:13.00

13 Heating systems	kBtu/hr	Efficiency
a. Electric Heat Pump	24.0	HSPF:8.00

14 Hot water systems	
a Electric	Cap 40 gallons EF: 0.920
b. Conservation features	
None	
15. Credits	CF

Glass/Floor Area: 0.062

Total Proposed Modified Loads: 21.17
Total Standard Reference Loads 29.17

PASS

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

PREPARED BY: Jack Donaldson
DATE: _____

I hereby certify that this building, as designed, is in compliance with the Florida Energy Code.

OWNER/AGENT: _____
DATE: _____

Review of the plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed this building will be inspected for compliance with Section 553 908 Florida Statutes.

BUILDING OFFICIAL: _____
DATE: _____

GREAT SEAL OF THE STATE OF FLORIDA * IN GOD WE TRUST *

COLUMBIA CO. BUILDING DEPARTMENT Received for FILE COPY Code Compliance PLANS EXAMINER

- **Compliance requires completion of a Florida Air Barrier and Insulation Inspection Checklist.**
- **Compliance requires an air distribution system test report, by a Florida Class 1 Rater, confirming system leakage to outdoors tested at 25 pascals pressure difference in accordance with 403.2.2.1 is not greater than (29 cfm:Duct#1)**

PROJECT

Title	Case Residence	Bedrooms:	2	Address Type:	Street Address
Building Type:	User	Conditioned Area:	970	Lot #	
Owner	Case	Total Stories:	1	Block/SubDivision	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name		Rotate Angle:	0	Street:	
Permit Office		Cross Ventilation		County:	Columbia
Jurisdiction:		Whole House Fan:		City, State, Zip	, FL , 32055-
Family Type	Single-family				
New/Existing	New (From Plans)				
Comment					

CLIMATE

√	Design Location	TMY Site	IECC Zone	Design Temp 97 5 %	Design Temp 2 5 %	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily Temp Range
	FL, Gainesville	FL_GAINESVILLE_REGI	2	32	92	70	75	1305 5	51	Medium

BLOCKS

Number	Name	Area	Volume
1	Block1	970	13580

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	970	13580	Yes	2	2	1	Yes	Yes	Yes

FLOORS

√	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
	1	Slab-On-Grade Edge Insulatio	Main	88 5 ft	0	970 ft²	----	0 25	0	0.75

ROOF

√	#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor	SA Tested	Emitt	Emitt Tested	Deck Insul	Pitch (deg)
	1	Gable or shed	Metal	1085 ft²	242 ft²	Medium	0 96	No	0 9	No	0	26 6

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
	1	Full attic	Vented	300	970 ft²	N	N

CEILING

√	#	Ceiling Type	Space	R-Value	Area	Framing Frac	Truss Type
	1	Under Attic (Vented)	Main	30	970 ft²	0 11	Wood

WALLS

√	#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	Width In	Height Ft	Height In	Area	Sheathing R-Value	Framing Fraction	Solar Absor	Below Grade%
	1	N	Exterior	Frame - Wood	Main	19	24	3 5	14	0	340 1 ft²		0 23	0.75	0
	2	E	Exterior	Frame - Wood	Main	19	40	0	14		560 0 ft²		0.23	0.75	0
	3	S	Exterior	Frame - Wood	Main	19	24	3 5	14		340 1 ft²		0.23	0 75	0
	4	W	Garage	Frame - Wood	Main	19	40		14		560.0 ft²		0.23	0.75	0

DOORS

√	#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	Width In	Height Ft	Height In	Area
	1	S	Insulated	Main	None	.46	6		6	8	40 ft²
	2	W	Insulated	Main	None	.46	3		6	8	20 ft²

WINDOWS

Orientation shown is the entered, Proposed orientation

√	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Overhang Area	Overhang Depth	Overhang Separation	Int Shade	Screening
	1	N	1	Metal	Double (Tinted)	Yes	0 55	0 5	5.0 ft²	2 ft 0 in	7 ft 0 in	Drapes/blinds	Interior 5
	2	E	2	Metal	Double (Tinted)	Yes	0.55	0.5	5.0 ft²	2 ft 0 in	7 ft 0 in	Drapes/blinds	Interior 5

GARAGE

√	#	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg Wall Height	Exposed Wall Insulation
	1	1430 ft²	1430 ft²	11.5 ft	14 ft	19

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Best Guess	0003	783.3	41.9	78.81	.231	3.3724

HEATING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Block	Ducts
	1	Electric Heat Pump	None	HSPF: 8	24 kBtu/hr	1	sys#1

COOLING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
	1	Central Unit	Split	SEER: 13	24 kBtu/hr	720 cfm	0.75	1	sys#1

HOT WATER SYSTEM

√	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
	1	Electric	None	Main	0 92	40 gal	50 gal	120 deg	None

SOLAR HOT WATER SYSTEM

√	FSEC Cert #	Company Name	System Model #	Collector Model #	Collector Area	Storage Volume	FEF
____	None	None			ft²		

DUCTS

√	#	Supply Location	Supply R-Value	Supply Area	Return Location	Return Area	Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	HVAC # Cool
____	1	Attic	6	194 ft²	Main	46 5 ft²	Prop Leak Free	Main	--- cfm	29.1 cfm	0.03	0 60	1	1

TEMPERATURES

Programable Thermostat: None

Ceiling Fans

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Cooling	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]	[X]	[X]	[ ]	[ ]	[ ]
Heating	[X]	[X]	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]
Venting	[ ]	[ ]	[X]	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]	[ ]

Thermostat Schedule: HERS 2006 Reference

Schedule Type		Hours 1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68

FORM 405-10

Florida Code Compliance Checklist

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

ADDRESS: , FL, 32055-	PERMIT #:

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	
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.	
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.	
	403.3.3	Building framing cavities shall not be used as supply ducts.	
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.	
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	
Ceilings/knee walls	405.2.1	R-19 space permitting.	

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 73

The lower the EnergyPerformance Index, the more efficient the home

, , FL, 32055-

1	New construction or existing	New (From Plans)
2.	Single family or multiple family	Single-family
3.	Number of units, if multiple family	1
4.	Number of Bedrooms	2
5.	Is this a worst case?	No
6	Conditioned floor area (ft²)	970

7 Windows**	Description	Area
a U-Factor: SHGC	Dbl, U=0 55 SHGC=0.50	60 00 ft²
b. U-Factor: SHGC:	N/A	ft²
c U-Factor: SHGC	N/A	ft²
d U-Factor: SHGC:	N/A	ft²
Area Weighted Average Overhang Depth		2 000 ft.
Area Weighted Average SHGC.		0.500

8 Floor Types	Insulation	Area
a. Slab-On-Grade Edge Insulation	R=0 0	970.00 ft²
b N/A	R=	ft²
c. N/A	R=	ft²

9 Wall Types	Insulation	Area
a. Frame - Wood, Exterior	R=19 0	1240 20 ft²
b. Frame - Wood, Adjacent	R=19.0	560.00 ft²
c. N/A	R=	ft²
d N/A	R=	ft²

10. Ceiling Types	Insulation	Area
a. Under Attic (Vented)	R=30.0	970.00 ft²
b N/A	R=	ft²
c. N/A	R=	ft²

11 Ducts	R	ft²
a Sup. Attic, Ret: Main, AH: Main	6	194

12 Cooling systems	kBtu/hr	Efficiency
a. Central Unit	24.0	SEER:13.00

13 Heating systems	kBtu/hr	Efficiency
a. Electric Heat Pump	24 0	HSPF:8 00

14. Hot water systems	
a. Electric	Cap: 40 gallons EF 0.92
b. Conservation features None	
15. Credits	CF

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 EPL Display Card will be completed based on installed Code compliant features.

Builder Signature: _____ Date: _____

Address of New Home: _____ City/FL Zip: _____

*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.