COLUMBIA COUNTY BUILDING DEPARTMENT
RESIDENTIAL CHECK LIST

MINIMUM PLAN REQUIREMENTS: FLORIDA BUILDING CODE RESIDENTIAL 2014 EFFECTIVE 1 JULY 2015
AND THE NATIONAL ELECTRICAL 2011 EFFECTIVE 1 JULY 2015

ALL REQUIREMENTS ARE SUBJECT TO CHANGE

ALL BUILDING PLANS MUST INDICATE COMPLIANCE WITH THE CURRENT 2014 FLORIDA BUILDING CODES RESIDENTIAL, EFFECTIVE 1 JULY 2015. NATIONAL ELECTRICAL CODE 2011 EFFECTIVE 1 JULY 2015. ALL PLANS OR DRAWINGS SHALL PROVIDE CALCULATIONS AND DETAILS THAT HAVE THE SEAL AND SIGNATURE OF A CERTIFIED ARCHITECT OR ENGINEER REGISTERED IN THE STATE OF FLORIDA, OR ALTERNATE METHODOLOGIES, APPROVED BY THE STATE OF FLORIDA BUILDING COMMISSION FOR ONE-AND-TWO FAMILY DWELLINGS.

FOR DESIGN PURPOSES THE FOLLOWING BASIC WIND SPEEDS ARE PER FLORIDA BUILDING CODE FIGURE 1609-A THROUGH 1609-C ULTIMATE DESIGN WIND SPEEDS FOR RISK CATEGORY AND BUILDINGS AND OTHER STRUCTURES
Revised 7/1/15

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL			Items to Include- Each Box shall be Circled as Applicable		
				Yes	**No**	**N/A**
1	Two (2) complete sets of plans containing the following:			✓		
2	All drawings must be clear, concise, drawn to scale, details that are not used shall be marked void			✓		
3	**Condition space (Sq. Ft.)**	1,100	**Total (Sq. Ft.) under roof** 2,275*	IIIIIIII	IIIIIIII	IIIII

* includes covered ground floor area and main floor

Designers name and signature shall be on all documents and a licensed architect or engineer, signature and official embossed seal shall be affixed to the plans and documents as per the FLORIDA BUILDING CODES RESIDENTIAL R101.2.1

Site Plan information including:

4	Dimensions of lot or parcel of land	✓		
5	Dimensions of all building set backs	✓		
6	Location of all other structures (include square footage of structures) on parcel, existing or proposed well and septic tank and all utility easements.	✓		
7	Provide a full legal description of property.	✓		

Wind-load Engineering Summary, calculations and any details are required.

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable		
8	**Plans or specifications must show compliance with FBCR Chapter 3**	IIIIII	IIIII	IIIIII
		YES	**NO**	**N/A**
9	Basic wind speed (3-second gust), miles per hour	✓		
10	(Wind exposure – if more than one wind exposure is used, the wind exposure and applicable wind direction shall be indicated)	✓		
11	Wind importance factor and nature of occupancy	✓		
12	The applicable internal pressure coefficient, Components and Cladding	✓		
13	The design wind pressure in terms of psf (kN/m²), to be used for the design of exterior component, cladding materials not specifally designed by the registered design professional.			✓

Elevations Drawing including:

14	All side views of the structure	✓		
15	Roof pitch	✓		
16	Overhang dimensions and detail with attic ventilation No attic ventilation	✓		
17	Location, size and height above roof of chimneys			✓
18	Location and size of skylights with Florida Product Approval			✓
18	Number of stories Two	✓		
20A	Building height from the established grade to the roofs highest peak	✓		

Floor Plan including:

20	Dimensioned area plan showing rooms, attached garage, breeze ways, covered porches, deck, balconies	✓		
21	Raised floor surfaces located more than 30 inches above the floor or grade	✓		
22	All exterior and interior shear walls indicated	✓		
23	Shear wall opening shown (Windows, Doors and Garage doors)			✓
24	Show compliance with Section FBCR 310 Emergency escape and rescue opening shown in each bedroom (net clear opening shown) and Show compliance with Section FBC 1405.13.2 where the opening of an operable window is located more than 72 inches above the finished grade or surface below, the lowest part of the clear opening of the window shall be a minimum of 24 inches above the finished floor of the room in which the window is located. Glazing between the floor and 24 inches shall be fixed or have openings through which a 4-inch-diameter sphere cannot pass.	✓		
25	Safety glazing of glass where needed			✓
26	Fireplaces types (gas appliance) (vented or non-vented) or wood burning with Hearth (see chapter 10 and chapter 24 of FBCR)			✓
27	Show stairs with dimensions (width, tread and riser and total run) details of guardrails, Handrails	✓		
28	Identify accessibility of bathroom (see FBCR SECTION 320) All interior doors 32" leaf	✓		

All materials placed within opening or onto/into exterior walls, soffits or roofs shall have Florida product approval number and mfg. installation information submitted with the plans
(see Florida product approval form)

GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable

FBCR 403: Foundation Plans

		YES	NO	N/A
29	Location of all load-bearing walls footings indicated as standard, monolithic, dimensions, size and type of reinforcing.	✓		
30	All posts and/or column footing including size and reinforcing	✓		
31	Any special support required by soil analysis such as piling.			✓
32	Assumed load-bearing valve of soil 2,500 Pound Per Square Foot See Cal-Tech Report 03/28/14	✓		
33	Location of horizontal and vertical steel, for foundation or walls (include # size and type) For structures with foundation which establish new electrical utility companies service connection a Concrete Encased Electrode will be required within the foundation to serve as an grounding electrode system. Per the National Electrical Code article 250.52.3	✓		

FBCR 506: CONCRETE SLAB ON GRADE

34	Show Vapor retarder (6mil. Polyethylene with joints lapped 6 inches and sealed)	✓		
35	Show control joints, synthetic fiber reinforcement or welded fire fabric reinforcement and Supports	✓		

FBCR 318: PROTECTION AGAINST TERMITES

36	Indicate on the foundation plan if soil treatment is used for subterranean termite prevention or Submit other approved termite protection methods. **Protection shall be provided by registered termiticides** See specification notes	✓		

FBCR 606: Masonry Walls and Stem walls (load bearing & shear Walls)

37	Show all materials making up walls, wall height, and Block size, mortar type			✓
38	Show all Lintel sizes, type, spans and tie-beam sizes and spacing of reinforcement			✓

Metal frame shear wall and roof systems shall be designed, signed and sealed by Florida Prof. Engineer or Architect

Floor Framing System: First and/or second story

39	Floor truss package shall including layout and details, signed and sealed by Florida Registered Professional Engineer required by specification notes	✓		
40	Show conventional floor joist type, size, span, spacing and attachment to load bearing walls, stem walls and/or priers	✓		
41	Girder type, size and spacing to load bearing walls, stem wall and/or priers	✓		
42	Attachment of joist to girder	✓		
43	Wind load requirements where applicable	✓		
44	Show required under-floor crawl space			✓
45	Show required amount of ventilation opening for under-floor spaces			✓
46	Show required covering of ventilation opening			✓
47	Show the required access opening to access to under-floor spaces			✓
48	Show the sub-floor structural panel sheathing type, thickness and fastener schedule on the edges & intermediate of the areas structural panel sheathing	✓		
49	Show Draftstopping, Fire caulking and Fire blocking			✓
50	Show fireproofing requirements for garages attached to living spaces, per FBCR section 302.6			✓
51	Provide live and dead load rating of floor framing systems (psf). See specification notes	✓		

FBCR CHAPTER 6 WOOD WALL FRAMING CONSTRUCTION

GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable		
	YES	NO	N/A

52	Stud type, grade, size, wall height and oc spacing for all load bearing or shear walls	✓		
53	Fastener schedule for structural members per table IRC 602.3 are to be shown	✓		
54	Show Wood structural panel's sheathing attachment to studs, joist, trusses, rafters and structural members, showing fastener schedule attachment on the edges & intermediate of the areas structural panel sheathing	✓		
55	Show all required connectors with a max uplift rating and required number of connectors and oc spacing for continuous connection of structural walls to foundation and roof trusses or rafter systems	✓		
56	Show sizes, type, span lengths and required number of support jack studs, king studs for shear wall opening and girder or header per FBCB 2308.9.5	✓		
57	Indicate where pressure treated wood will be placed	✓		
58	Show all wall structural panel sheathing, grade, thickness and show fastener schedule for structural panel sheathing edges & intermediate areas	✓		
59	A detail showing gable truss bracing, wall balloon framing details or/ and wall hinge bracing detail			✓

FBCR :ROOF SYSTEMS:

60	Truss design drawing shall meet section FBCR 802.1.7.1 Wood trusses	✓		
61	Include a layout and truss details, signed and sealed by Florida Professional Engineer (1)	✓		
62	Show types of connector's assemblies' and resistance uplift rating for all trusses and rafters	✓		
63	Show gable ends with rake beams showing reinforcement or gable truss and wall bracing details			✓
64	Provide dead load rating of trusses			✓

(1) required by specfication notes

FBCR 802:Conventional Roof Framing Layout

65	Rafter and ridge beams sizes, span, species and spacing			✓
66	Connectors to wall assemblies' include assemblies' resistance to uplift rating			✓
67	Valley framing and support details			✓
68	Provide dead load rating of rafter system			✓

FBCR 803 ROOF SHEATHING

69	Include all materials which will make up the roof decking, identification of structural panel sheathing, grade, thickness	✓		
70	Show fastener Size and schedule for structural panel sheathing on the edges & intermediate areas	✓		

ROOF ASSEMBLIES FRC Chapter 9

71	Include all materials which will make up the roof assembles covering	✓		
72	Submit Florida Product Approval numbers for each component of the roof assembles covering (2)	✓		

(2) by general contractor and its trade contractors

FBCR Energy Conservation R.401

Residential construction shall comply with this code by using the following compliance methods in the Residential buildings compliance methods. **Two of the required forms are to be submitted**, *R 402-2014 As an alternative to the computerized Compliance Method A, the Alternate Residential Point System Method hand calculation, Alternate Form R 402-2014, may be used. All requirements specific to this calculation are located in Sub appendix C to Appendix G. Buildings complying by this alternative shall meet all mandatory requirements of this chapter. Computerized versions of the Alternate Residential Point System Method shall not be acceptable for code compliance.*

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable YES	NO	N/A
73	Show the insulation R value for the following areas of the structure	✓		
74	Attic space			✓
75	Exterior wall cavity	✓		
76	Crawl space			✓

HVAC information

77	Submit two copies of a Manual J sizing equipment or equivalent computation study (3)	✓		
78	Exhaust fans shown in bathrooms **Mechanical exhaust capacity of 50 cfm intermittent or 20 cfm continuous required**	✓		
79	Show clothes dryer route and total run of exhaust duct	✓		

(3) by mechanical contractor

Plumbing Fixture layout shown

80	All fixtures waste water lines shall be shown on the foundation plan	✓		
81	Show the location of water heater	✓		

Private Potable Water

82	Pump motor horse power	1 HP	✓		
83	Reservoir pressure tank gallon capacity	81 gallons	✓		
84	Rating of cycle stop valve if used				✓

Electrical layout shown including

85	Show Switches, receptacles outlets, lighting fixtures and Ceiling fans	✓		
86	Show all 120-volt, single phase, 15- and 20-ampere branch circuits outlets required to be protected by **Ground-Fault Circuit Interrupter (GFCI) Article 210.8 A**	✓		
87	Show the location of smoke detectors & Carbon monoxide detectors	✓		
88	Show service panel, sub-panel, location(s) and total ampere ratings	✓		
89	On the electrical plans identify the electrical service overcurrent protection device for the main electrical service. This device shall be installed on the exterior of structures to serve as a disconnecting means for the utility company electrical service. Conductors used from the exterior disconnecting means to a panel or sub panel shall have four-wire conductors, of which one conductor shall be used as an equipment ground. Indicate if the utility company service entrance cable will be of the overhead or underground type. **For structures** with foundation which establish new electrical utility companies service connection a Concrete Encased Electrode will be required within the foundation to serve as an Grounding electrode system. Per the National Electrical Code article 250.52.3	✓ ✓		
90	Appliances and HVAC equipment and disconnects	✓		
91	Show all 120-volt, single phase, 15- and 20-ampere branch circuits supplying outlets installed in dwelling unit family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, or similar rooms or areas shall be protected by a listed **Combination arc-fault circuit interrupter,** Protection device. NEC 210.12A	✓		

GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable

THE FOLLOWING ITEMS MUST BE SUBMITTED WITH BUILDING PLANS

		YES	NO	N/A
92	**Building Permit Application** A current Building Permit Application is to be completed, by following the Checklist all supporting documents must be submitted. There is a **$15.00** application fee. The completed application with attached documents and application fee can be mailed.	✓		
93	**Parcel Number** The parcel number (Tax ID number) from the Property Appraisers Office (386) 758-1083 is required. A copy of property deed is also required. www.columbiacountyfla.com	✓		
94	**Environmental Health Permit or Sewer Tap Approval** A copy of a approved Columbia County Environmental Health (386) 758-1058	✓		
95	**City of Lake City** A City Water and/or Sewer letter. Call 386-752-2031			✓
96	**Toilet facilities shall be provided for all construction sites**	✓		
97	**Town of Fort White** (386) 497-2321 If the parcel in the application for building permit is within the Corporate city limits of Fort White, an approval land use development letter issued by the Town of Fort is required to be submitted with the application for a building permit.			✓
98	**Flood Information:** All projects within the Floodway of the Suwannee or Santa Fe Rivers shall require permitting through the Suwannee River Water Management District, before submitting a application to this office. Any project located within a flood zone where the base flood elevation (100 year flood) has been established shall meet the requirements of Section 8.5.2 of the Columbia County Land Development Regulations. Any project located within a flood zone where the base flood elevation has not been established (Zone A) shall meet the requirements of Section 8.5.3 of the Columbia County Land Development Regulations	Not in Floodway requiring permit by SRWMD ✓ Zone AE applicable.		
99	**CERTIFIED FINISHED FLOOR ELEVATIONS** will be required on any project where the approved FIRM Flood Maps show the property is in a AE, Floodway, and AH flood zones. Additionally One Foot Rise letters are required for AE and AH zones. In the Floodway Flood zones a Zero Rise letter is required.	✓		
100	A Flood development permit is also required for AE, Floodway & AH. Development permit cost is **$50.00**	✓		
101	**Driveway Connection:** If the property does not have an existing access to a public road, then an application for a culvert permit **($25.00)** must be made. County Public Works Dept. determines the size and length of every culvert before instillation and completes a final inspection before permanent power is granted. If the applicant feels that a culvert is not needed, they may apply for a culvert waiver **($50.00)** Separate Check when issued. If the project is to be located on an F.D.O.T. maintained road, then an F.D.O.T. access permit is required.			✓
102	**911 Address:** An application for a 911address must be applied for and **received** through the Columbia County Emergency Management Office of 911 Addressing Department (386) 758-1125.	✓		

Disclosure Statement for Owner Builders *If you as the applicant will be acting as an owner/builder under section 489.103(7) of the Florida Statutes, submit the required owner builder disclosure statement form.*

Notice Of Commencement

A notice of commencement form **recorded** in the Columbia County Clerk Office is required to be filed with the building department Before Any Inspections can be preformed.

Section R101.2.1 of the Florida Building Code Residential:

The provisions of Chapter 1, Florida Building Code shall govern the administration and enforcement of the Florida Building Code, Residential.

Section 105 of the Florida Building Code defines the:

Time limitation of application.
An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and justifiable cause demonstrated.

Single-family residential dwelling.
Section 105.3.4 A building permit for a single-family residential dwelling must be issued within 30 working days of application therefor unless unusual circumstances require a longer time for processing the application or unless the permit application fails to satisfy the Florida Building Code or the enforcing agency's laws or ordinances.

Permit intent.
Section 105.4.1: A permit issued shall be constructed to be a license to proceed with the work and not as authority to violate, cancel, alter or set aside any of the provisions of the technical codes, nor shall issuance of a permit prevent the building official from thereafter requiring a correction of errors in plans, construction or violations of this code. Every permit issued shall become invalid unless the work authorized by such permit is commenced within six months after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of six months after the time the work is commenced.

If work has commenced.
Section 105.4.1.1: If work has commenced and the permit is revoked, becomes null and void, or expires because of lack of progress or abandonment, a new permit covering the proposed construction shall be obtained before proceeding with the work.

New Permit.
Section 105.4.1.2: If a new permit is not obtained within 180 days from the date the initial permit became null and void, the building official is authorized to require that any work which has been commenced or completed be removed from the building site. Alternately, a new permit may be issued on application, providing the work in place and required to complete the structure meets all applicable regulations in effect at the time the initial permit became null and void and any regulations which may have become effective between the date of expiration and the date if issuance of the new permit.

Work Shall Be:
Section 105.4.1.3: Work shall be considered to be in active progress when the permit has received an approved inspection within 180 days. This provision shall not be applicable in case of civil commotion or strike or when the building work is halted due directly to judicial injunction, order or similar process.

The Fee:
Section 105.4.1.4: The fee for renewal reissuance and extension of a permit shall be set forth by the administrative authority.

Notification:
When the application is approved for permitting the applicant will be notified by phone as to the status by the Columbia County Building & Zoning Department.

PRODUCT APPROVAL SPECIFICATION SHEET

As required by Florida Statute 553.842 and Florida Administrative Code 9B-72,please provide the infonnation and approval numbers on the building components listed below. You can find product approval numbers at www . floridabuil ding org. First select "Product Approval". "Find a Product". Then select a category (product), select a manufacturer, and then search. Please include the mfg's installation instructions in your package.

	Manufacturer	Product Description	Approval Number(s)
1.EXTERIOR DOORS			
A. SWINGING	Pella Corporation	Inswing Entry Door	FL-14896.1
	Ceco Door Products	Swinging Hollow Metal Door and Frame Product-Severe Windstorm Resistant Door and Frame	FL-4553-R10
B. SLIDING	Pella Corporation	Designer Series Contemporary Non-Impact Sliding Door	FL-12442.1
C. SECTIONAL			
D. ROLL UP			
E. AUTOMATIC			
F. OTHER			
2.WINDOWS			
A. SINGLE HUNG			
B. HORIZONTAL SLIDER	Pella Corporation	Impervia Sliding Window	FL-12604.7
C. CASEMENT	Pella Corporation	Designer Series Clad Non-Impact Vent Casement Window	FL-11865.3
D. DOUBLE HUNG			
E. FIXED	Pella Corporation	Designer Series Clad Non-Impact Fixed Casement Window	FL-11877.3
F. AWNING	Pella Corporation	Designer Series Clad Non-Impact Awning Window	FL-11893.3
	Pella Corporation	Architect Series Clad Large Awning	FL-14345.4
	Pella Corporation	Proline Series - Clad Awning	FL-11498.1
G. PASS THROUGH			
H. PROJECTED			
I. MULLION			
J. WIND BREAKER			
K. DUAL ACTION			
L. OTHER			
3. ROOFING PRODUCTS			
A. ASPHALT SHINGLES			

	B. UNDERLAYMENTS	W. R. Grace	Grace Ice & Water Shield HT	FL-298.1
	C.NON-STRUCTURAL METAL ROOFING	Gulf Coast Supply & Manufacturing, LLC.	26 Ga. Gulf Lok ✓	FL-11651.15
	D. WOOD SHINGLES & SHAKES			
	E. ROOFING TILES			
	F. ROOFING SLATE			
	K. LIQUIDAPPLIED ROOF SYSTEMS			
	L. ROOF TILE ADHESIVE			
	M. SPRAY APPLIED POLYURETHANE ROOF			
	N. OTHER			
4. SKYLIGHTS				
5.NEW EXTERIOR ENVELOPE PRODUCTS		Gulf Coast Supply & Manufacturing, LLC.	26 Ga Gulf Wave Roof Panel (siding application)	FL-16424.1

The products listed below did not demonstrate product approval at plan review. I understand that at the time of inspection of these products, the following information must be available to the inspector on the jobsite; 1) copy of the product approval,2) the performance characteristics which the product was tested and certified to comply with,3) copy of the applicable manufacturer's installation requirements. Further, I understand these products may have to be removed if approval cannot be demonstrated during inspection.

Signature of Applicant

Date

FORM R405-2014

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name:	Gilchrist River House(2)	Builder Name:	Premier Building
Street:	302 SW Riverside Ave	Permit Office:	
City, State, Zip:	Fort White , FL , 32038	Permit Number:	
Owner:	David Gilchrist	Jurisdiction:	Columbia County
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	1
5. Is this a worst case?	No
6. Conditioned floor area above grade (ft²)	1100
Conditioned floor area below grade (ft²)	0

7. Windows (333.1 sqft.)	Description	Area
a. U-Factor:	Dbl, U=0.28	112.00 ft²
SHGC:	SHGC=0.19	
b. U-Factor:	Dbl, U=0.28	95.50 ft²
SHGC:	SHGC=0.17	
c. U-Factor:	Dbl, U=0.29	64.00 ft²
SHGC:	SHGC=0.19	
d. U-Factor:	other (see details)	61.60 ft²
SHGC:	other (see details)	
Area Weighted Average Overhang Depth:		1.500 ft.
Area Weighted Average SHGC:		0.185

8. Floor Types (1100.0 sqft.)	Insulation	Area
a. Raised Floor	R=38.0	1100.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

9. Wall Types (1529.0 sqft.)	Insulation	Area
a. Frame - Wood, Exterior	R=21.0	1529.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²
d. N/A	R=	ft²

10. Ceiling Types (1134.0 sqft.)	Insulation	Area
a. Cathedral/Single Assembly (Unvented)	R=38.0	1134.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

11. Ducts	R	ft²
a. Sup: Main, Ret: Main, AH: Main	6	220

12. Cooling systems	kBtu/hr	Efficiency
a. Central Unit	18.8	SEER:15.00

13. Heating systems	kBtu/hr	Efficiency
a. Electric Heat Pump	17.1	HSPF:8.40

14. Hot water systems	
a. Electric Tankless	Cap: 1 gallons
	EF: 0.920
b. Conservation features	
None	
15. Credits	Pstat

Glass/Floor Area: 0.303

Total Proposed Modified Loads: 39.02

Total Baseline Loads: 43.70

PASS

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

PREPARED BY: _____

DATE: 2/26/2016

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 certification by the air handler unit manufacturer that the air handler enclosure qualifies as certified factory-sealed in accordance with R403.2.2.1.**
- **Compliance requires an Air Barrier and Insulation Inspection Checklist in accordance with R402.4.1.1 and an envelope leakage test report in accordance with R402.4.1.2.**

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

FORM R405-2014

PROJECT

Title:	Gilchrist River House(2)	Bedrooms:	1	Address Type:	Street Address
Building Type:	User	Conditioned Area:	1100	Lot #	
Owner:	David Gilchrist	Total Stories:	1	Block/SubDivision:	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:	Premier Building	Rotate Angle:	0	Street:	302 SW Riverside Ave
Permit Office:		Cross Ventilation:		County:	Columbia
Jurisdiction:	Columbia County	Whole House Fan:		City, State, Zip:	Fort White , FL , 32038
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	1100	13750

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	1100	13750	Yes	2	1	1	Yes	Yes	Yes

FLOORS

√	#	Floor Type	Space	R-Value	Area		Tile	Wood	Carpet
_____	1	Raised Floor	Main	----	----	1100 ft²	38	0	1	0

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	1134 ft²	138 ft²	Light	0.6	No	0.9	No	0	14

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	No attic	Unvented	0	1100 ft²	N	N

CEILING

√	#	Ceiling Type	Space	R-Value	Area	Framing Frac	Truss Type
_____	1	Cathedral/SingleAssembly(Unvented)	Main	38	1134 ft²	0.11	Wood

FORM R405-2014

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	SE	Exterior	Frame - Wood	Main	21	25.5		10		255.0 ft²	0.45	0.23	0.75	0
____	2	NE	Exterior	Frame - Wood	Main	21	50.1		10		501.0 ft²	0.45	0.23	0.75	0
____	3	SW	Exterior	Frame - Wood	Main	21	39.7		10		397.0 ft²	0.45	0.23	0.75	0
____	4	NW	Exterior	Frame - Wood	Main	21	37.6		10		376.0 ft²	0.45	0.23	0.75	0

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	SE	1	Vinyl	Low-E Double	Yes	0.3	0.19	20.1 ft²	1.5 ft 0 in	2 ft 0 in	None	None
_____	2	NE	2	Vinyl	Low-E Double	Yes	0.29	0.2	12.0 ft²	1.5 ft 0 in	1.25 ft 0 i	None	None
_____	3	NE	2	Vinyl	Low-E Double	Yes	0.28	0.17	9.0 ft²	1.5 ft 0 in	2 ft 0 in	None	None
_____	4	NE	2	Vinyl	Low-E Double	Yes	0.29	0.2	12.0 ft²	1.5 ft 0 in	2.5 ft 0 in	None	None
_____	5	SE	1	Vinyl	Low-E Double	Yes	0.28	0.17	22.5 ft²	1.5 ft 0 in	1.25 ft 0 i	None	None
_____	6	SE	1	Vinyl	Low-E Double	Yes	0.28	0.17	7.0 ft²	1.5 ft 0 in	2.5 ft 0 in	None	None
_____	7	SE	1	Vinyl	Low-E Double	Yes	0.29	0.2	7.0 ft²	1.5 ft 0 in	2.5 ft 0 in	None	None
_____	8	SW	3	Vinyl	Low-E Single	Yes	0.28	0.17	10.5 ft²	1.5 ft 0 in	2 ft 0 in	None	None
_____	9	SW	3	Vinyl	Low-E Double	Yes	0.28	0.17	21.0 ft²	1.5 ft 0 in	8 ft 0 in	None	None
_____	10	NW	4	Vinyl	Low-E Double	Yes	0.28	0.19	56.0 ft²	1.5 ft 0 in	8 ft 0 in	None	None
_____	11	NW	4	Vinyl	Low-E Double	Yes	0.29	0.19	32.0 ft²	1.5 ft 0 in	2 ft 0 in	None	None
_____	12	SW	3	Vinyl	Low-E Double	Yes	0.28	0.19	56.0 ft²	1.5 ft 0 in	8 ft 0 in	None	None
_____	13	SW	3	Vinyl	Low-E Double	Yes	0.29	0.19	32.0 ft²	1.5 ft 0 in	2 ft 0 in	None	None
_____	14	NW	4	Vinyl	Low-E Double	Yes	0.28	0.17	36.0 ft²	1.5 ft 0 in	8 ft 0 in	None	None

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000397	1145.8	62.9	118.3	.3058	5

HEATING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Block	Ducts
_____	1	Electric Heat Pump	Split	HSPF:8.4	17.1 kBtu/hr	1	sys#1

COOLING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
_____	1	Central Unit	Split	SEER: 15	18.8 kBtu/hr	564 cfm	0.75	1	sys#1

FORM R405-2014

HOT WATER SYSTEM

√	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
_____	1	Electric	Tankless	Main	0.92	1 gal	40 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	R-Value	Area	---- Return ---- Location	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	Cool
_____	1	Main	6	220 ft²	Main	55 ft²	Default Leakage	Main	(Default) c	(Default) c			1	1

TEMPERATURES

Programable Thermostat: Y 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	80	80	80	80
	PM	80	80	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	66	66	66	66	66	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	66	66
Heating (WEH)	AM	66	66	66	66	66	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	66	66

MECHANICAL VENTILATION

Type	Supply CFM	Exhaust CFM	Fan Watts	HRV	Heating System	Run Time	Cooling System
Runtime Vent	21.1	0		0	-1 -)	%	1 - Central Unit

Residential System Sizing Calculation

Summary

David Gilchrist
302 SW Riverside Ave
Fort White, FL 32038

Project Title:
Gilchrist River House(2)

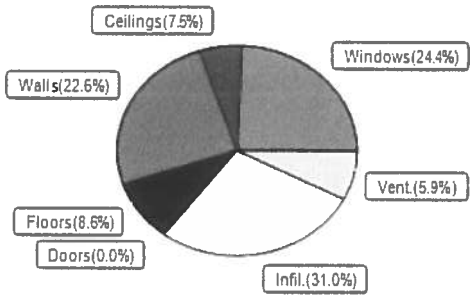
2/26/2016

Location for weather data: Gainesville Reg, FL - Defaults: Latitude(30) Altitude(164 ft.) Temp Range(M) Humidity data: Interior RH (50%) Outdoor wet bulb (76F) Humidity difference(47gr.)					
Winter design temperature(MJ8 99%)	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	**14369**	**Btuh**	**Total cooling load calculation**	**17659**	**Btuh**
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh
Total (Electric Heat Pump)	119.0	17100	Sensible (SHR = 0.75)	100.7	14100
Heat Pump + Auxiliary(0.0kW)	119.0	17100	Latent	128.4	4700
			Total (Electric Heat Pump)	106.5	18800

WINTER CALCULATIONS

Winter Heating Load (for 1100 sqft)

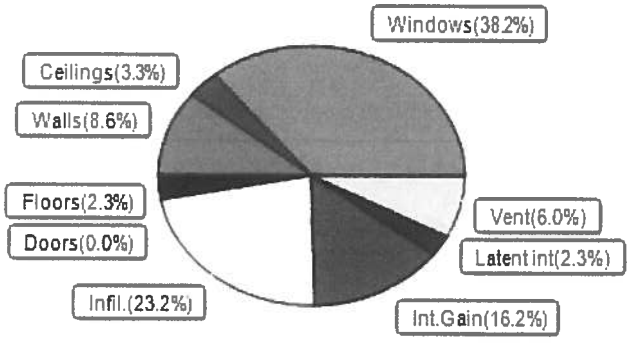
Load component			Load	
Window total	333	sqft	3501	Btuh
Wall total	1196	sqft	3240	Btuh
Door total	0	sqft	1	Btuh
Ceiling total	1134	sqft	1079	Btuh
Floor total	1100	sqft	1235	Btuh
Infiltration	110	cfm	4459	Btuh
Duct loss			0	Btuh
Subtotal			**13515**	**Btuh**
Ventilation	21	cfm	854	Btuh
TOTAL HEAT LOSS			**14369**	**Btuh**



SUMMER CALCULATIONS

Summer Cooling Load (for 1100 sqft)

Load component			Load	
Window total	333	sqft	6739	Btuh
Wall total	1196	sqft	1515	Btuh
Door total	0	sqft	1	Btuh
Ceiling total	1134	sqft	577	Btuh
Floor total			401	Btuh
Infiltration	81	cfm	1514	Btuh
Internal gain			2860	Btuh
Duct gain			0	Btuh
Sens. Ventilation	21	cfm	393	Btuh
Blower Load			0	Btuh
Total sensible gain			**13999**	**Btuh**
Latent gain(ducts)			0	Btuh
Latent gain(infiltration)			2588	Btuh
Latent gain(ventilation)			671	Btuh
Latent gain(internal/occupants/other)			400	Btuh
Total latent gain			**3659**	**Btuh**
TOTAL HEAT GAIN			**17659**	**Btuh**



Powered by ACCA MANUAL J 8th Edition

EnergyGauge® System Sizing
PREPARED BY: Joel Becker
DATE: 2/26/2016

33873

GEO-TECH, INC.

April 21, 2016
Project No. 16-1376.54G

Mr. Bobby Powell
Alcon Construction Company, Inc.
P.O. Box 5145
Gainesville, FL 32627

Reference: Prop. Column Pad, Three Rivers Estates, 302 SW Riverside Ave., Fort White, FL
Site Observation

Dear Mr. Powell:

As requested, Geo-Technologies, Inc. (Geo-Tech) visited the project site and observed the underlying soils of the proposed column pad located at the above referenced site. Representative samples were obtained from the borings and returned to our laboratory for visual and laboratory classification.

The foundation system may utilize a monolithic thickened edge slab and finish site grades should be selected so that the bottom of the foundation is at least two (2) feet above the underlying unsuitable clayey soils or until competent limestone is encountered. Excavate the clayey soils to create the minimum buffer between the foundation and floor slabs and the top of the clayey soils. Excavation should extend a minimum of two (2) feet beyond each side of the footing.

The depth of excavation should be controlled so that a "bathtub effect" that will trap water is not created. The bottom of the undercut should be graded to drain to a positive gravity outfall. If it is not feasible to have a positive gravity outfall, an underdrain should be placed in the bottom of the excavation to drain stormwater that may accumulate in the excavation.

We wish to emphasize that the excavation and replacement of the underlying clay soils from beneath the building is not a guarantee that the deeper clays will not cause foundation movements. However, the risk is reduced significantly.

Geo-Tech appreciates the opportunity to provide our services for this project. Should you have any questions regarding the contents of this report or if we may be of further assistance, please do not hesitate to contact the undersigned.

Sincerely,

Craig A. Hampy, E.I.
Staff Engineer

CAH/DAC

DAVID ANTHONY CAPPA LICENSE 58334 STATE OF FLORIDA PROFESSIONAL ENGINEER

David A. Cappa, P.E.
Florida Registration No. 58334

33873

PREMIER BUILDING

CBC-1258773

Transmittal

RECEIVED
APR 14 2016
By

Date: 04/14/16

To: Troy Crews

Job Name: Gilchrist River House – Permit # - 33873

Subject: Gilchrist River House – 2 Architect's plan page Revisions – Page A105 and A106

Troy:

I have attached the copies of 2 pages of the plans sent to us by the Architect.

Let me know I will need to do to have you approve these, and get updated with the permit set at the job site.

Thanks.

Rich Nickelson
Project Manager

Isaac Nickelson
Owner/President
Premier Building

496 SW Ring Ct. Suite A-9,
Lake City, FL 32025
Phone: (386) 628-0823

Premier Building, LLC
Email: Info@PremierBuildingFL.com

4720 Salisbury Road Suite 213,
Jacksonville, FL 32256
Phone: (904) 222-6170

#33873

Lake City • (386) 755-3633
Fax • (386) 752-5456

Jacksonville • (904) 381-8901
Fax • (904) 381-8902

Cal-Tech Testing, Inc. — FOUNDATIONS • ASPHALT • SOILS • CONCRETE — ENGINEERING • GEOTECHNICAL • ENVIRONMENTAL

CAL-TECH TESTING, INC.

ENGINEERING & TESTING LABORATORY

P.O. Box 1625, Lake City, FL 32056-1625
450 SR. 13 N.• Suite 206-308 • Jacksonville, FL 32259

JOB NO.:
DATE TESTED:

REPORT OF IN-PLACE DENSITY TEST

ASTM METHOD: _____(D-2922) Nuclear _____(D-2937) Drive Cylinder _____Other

PROJECT: _____

CLIENT: _____

GENERAL CONTRACTOR: _____ EARTHWORK CONTRACTOR: _____

SOIL USE (SEE NOTE): _____ SPECIFICATION REQUIREMENTS: _____

TECHNICIAN: _____

MODIFIED (ASTM D-1557): _____ STANDARD (ASTM D-698): _____

TEST NO.	TEST LOCATION	TEST: ___DEPTH ___ELEV. ___LIFT	PROCTOR NO.	WET DENS. LBS.CU.FT.	DRY DENS. LBS.CU.FT.	MOIST PERCENT	% MAX. DENS.

REMARKS: _____

PROCTOR NO.	SOIL DESCRIPTION	PROCTOR VALUE	OPT. MOIST.

NOTE: 1. Building Fill 2. Trench Backfill 3. Base Course 4. Subbase/Stabilized Subgrade 5. Embankment 6. Subgrade/Natural Soil 7. Other

The test results presented in this report are specific only to the samples tested at the time of testing. The tests were performed in accordance with generally accepted methods and standards. Since material conditions can vary between test location and change with time, sound judgement should be exercised with regard to the use and interpretation of the data.

GEO-TECH, INC.

Engineering Consultants in Geotechnical • Environmental • Construction Materials Testing

#33873

FIELD DENSITY WORKSHEET

CLIENT Alcon

DATE 5-9-16

PROJECT NAME Res 302 SW Riverside Ave

PROJECT NO.

EARTH CONTRACTOR Ft. White

PERMIT NO.

TESTED BY S.L

COMPACTION REQUIREMENT (%) 95

☐ Standard Proctor
☑ Modified Proctor

TOTAL ON-SITE TIME

FIELD CONTACT

MILES FROM OFFICE

☐ Limerock ☐ Subgrade ☐ Pipe Backfill ☐ Building Pad ☑ Building Footing ☐ Other

TEST LOCATION	LAB PROCTOR DENS.	LAB PROCTOR OMC	TEST DEPTH	PROBE DEPTH	% MOIST.	WET DENSITY (PCF)	DRY DENSITY (PCF)	% COMP.
	110.6	11.6	F/G	12"				
South Column Footing					6.5	115.3	108.3	97.9

REMARKS

* Density failed to meet minimum project requirement

** Retest indicates minimum density requirement was obtained.

( ) Client is aware of unsatisfactory test results.

1016 S.E. 3RD AVENUE • OCALA, FLORIDA 34471 • (352) 694-7711

New Construction Subterranean Termite Service Record

#33873

OMB Approval No. 2502-0525
(exp. 04/30/2015)

This form is completed by the licensed Pest Control Company

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. This information iis required to obtain benefits. HUD may not collect this information, and you are not required to complete this form, unless it displays a currently valid OMB control number.

Section 24 CFR 200.926d(b)(3) requires that the sites for HUD insured structures must be free of termite hazards. This information collection requires the builder to certify that an authorized Pest Control company performed all required treatment for termites, and that the builder guarantees the treated area against infestation for one year. Builders, pest control companies, mortgage lenders, homebuyers, and HUD as a record of treatment for specific homes will use the information collected. The information is not considered confidential, therefore, no assurance of confidentiality is provided.

This report is submitted for informational purposes to the builder on proposed (new) construction cases when treatment for prevention of subterranean termite infestation is specified by the builder, architect, or required by the lender, architect, FHA, or VA.

All contracts for services are between the Pest Control company and builder, unless stated otherwise.

Section 1: General Information (Pest Control Company Information)

Company Name: Aspen Pest Control

Company Address P.O. Box 1795 City Lake City State Florida Zip 32056

Company Business License No. JB182948 Company Phone No. (386) 755-3611

FHA/VA Case No. (if any) _____

Section 2: Builder Information

Company Name _____ Phone No. _____

Section 3: Property Information

Location of Structure (s) Treated (Street Address or Legal Description, City, State and Zip) _____

Section 4: Service Information

Date(s) of Service(s) _____

Type of Construction (More than one box may be checked) ☐ Slab ☐ Basement ☐ Crawl ☐ Other _____

Check all that apply:

☐ A. Soil Applied Liquid Termiticide

Brand Name of Termiticide: _____ EPA Registration No. _____

Approx. Dilution (%): _____ Approx. Total Gallons Mix Applied: _____ Treatment completed on exterior: ☐ Yes ☐ No

☐ B. Wood Applied Liquid Termiticide

Brand Name of Termiticide: _____ EPA Registration No. _____

Approx. Dilution (%): _____ Approx. Total Gallons Mix Applied: _____

☐ C. Bait system Installed

Name of System _____ EPA Registration No. _____ Number of Stations installed _____

☐ D. Physical Barrier System Installed

Name of System _____ Attach installation information (required)

Service Agreement Available? ☐ Yes ☐ No

Note: Some state laws require service agreements to be issued. This form does not preempt state law.

Attachments (List) _____

Comments _____

Name of Applicator(s) _____ Certification No. (if required by State law) JF104376

The applicator has used a product in accordance with the product label and state requirements. All materials and methods used comply with state and federal regulations.

Authorized Signature _____ Date _____

Warning: HUD will prosecute false claims and statements. Conviction may result in criminal and/or civil penalties. (18 U.S.C. 1001, 1010. 1012; 31 U.S.C. 3729, 3802)

CERTIFICATE OF OCCUPANCY

COLUMBIA COUNTY, FLORIDA

Department of Building and Zoning Inspection

This Certificate of Occupancy is issued to the below named permit holder for the building and premises at the below named location, and certifies that the work has been completed in accordance with the Columbia County Building Code.

Parcel Number 23-6S-15-00533-009 **Building permit No.** 000033873

Use Classification SFD, UTILITY **Fire:** 137.52

Permit Holder ISAAC NICKELSON **Waste:** 144.81

Owner of Building DAVID & HILDA GILCHRIST **Total:** 282.33

Location: 302 SW RIVERSIDE AVE, FORT WHITE, FL 32038

Date: 01/12/2017

Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)