Columbia County New Building Permit Application

For Office Use Only Application # 1708-88 Date Received 8/23 By JW Permit # 24973 / 35783

Zoning Official BLS Date 9-14-17 Flood Zone X Land Use A- Zoning A-3

FEMA Map # _____ Elevation _____ MFE 1' above River _____ Plans Examiner T.C Date 9-7-17

Comments _____

☑ NOC ☑ EH ☐ Deed or PA ☐ Site Plan ☐ State Road Info ☐ Well letter ☐ 911 Sheet ☐ Parent Parcel # _____

☐ Dev Permit # _____ ☐ In Floodway ☑ Letter of Auth. from Contractor ☐ F W Comp. letter

☐ Owner Builder Disclosure Statement ☐ Land Owner Affidavit ☐ Ellisville Water ☐ App Fee Paid ☐ Sub VF Form

Septic Permit No. 17-0545 OR City Water ☐ Fax 386-758-8920

Applicant (Who will sign/pickup the permit) SUZANNE STEWART Phone 386-752-8653

Address 465 NW ORANGE STREET, LAKE CITY, FL 32055

Owners Name STEVEN AND MICHELLE GREEN Phone 850-672-0593

911 Address 918 SW MARYNIK DRIVE, HIGH SPRINGS, FL 32643

Contractors Name BRYAN ZECHER Phone 386-752-8653

Address 465 NW ORANGE STREET, LAKE CITY, FL 32055

Contractor Email ZECHEROFFICE@GMAIL.COM ***Include to get updates on this job.

Fee Simple Owner Name & Address N/A

Bonding Co. Name & Address N/A

Architect/Engineer Name & Address ARHomes/Apex Engineering

Mortgage Lenders Name & Address First Federal

Circle the correct power company ☐ FL Power & Light ☑ Clay Elec. ☐ Suwannee Valley Elec. ☐ Duke Energy

Property ID Number 16-7S-17-10006-226 Estimated Construction Cost $290,700.00

Subdivision Name RIVER RISE Lot 26 Block ____ Unit 2 Phase ____

Driving Directions from a Major Road From Hwy 90, go South on Hwy 41 for 21.9 miles turn right on West County Road 778/ Oak Ridge Rd, make a left onto SW Grey Way into River Rise SD. Go to the stop sign and turn right onto Marynik Dr, job site will be on the right.

Construction of NEW HOME ____ Commercial OR X Residential

Proposed Use/Occupancy RESIDENTIAL Number of Existing Dwellings on Property ~~1~~ 0

Is the Building Fire Sprinkled? X If Yes, blueprints included ____ Or Explain _____

Circle Proposed ☑ Culvert Permit or ☐ Culvert Waiver or ☐ D.O.T. Permit or ☐ Have an Existing Drive 7/12

Actual Distance of Structure from Property Lines - Front 100 Side 280' Side 225' Rear 135

Number of Stories 1 Heated Floor Area 2243 Total Floor Area 3505 Acreage 5.020

Zoning Applications applied for (Site & Development Plan, Special Exception, etc.) _____

w/ SEPT EMail 7.14.17

Columbia County Building Permit Application

CODE: Florida Building Code 2014 and the 2011 National Electrical Code.

Application is hereby made to obtain a permit to do work and installations as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work be performed to meet the standards of all laws regulating construction in this jurisdiction.

TIME LIMITATIONS 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 pursued in good faith or a permit has been issued.

TIME LIMITATIONS OF PERMITS: Every permit issued shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time work is commenced. A valid permit receives an approved inspection every 180 days. Work shall be considered not suspended, abandoned or invalid when the permit has received an approved inspection within 180 days of the previous approved inspection.

FLORIDA'S CONSTRUCTION LIEN LAW: Protect Yourself and Your Investment: According to Florida Law, those who work on your property or provide materials, and are not paid-in-full, have a right to enforce their claim for payment against your property. This claim is known as a construction lien. If your contractor fails to pay subcontractors or material suppliers or neglects to make other legally required payments, the people who are owed money may look to your property for payment, even if you have paid your contractor in full. This means if a lien is filed against your property, it could be sold against your will to pay for labor, materials or other services which your contractor may have failed to pay.

NOTICE OF RESPONSIBILITY TO CONTRACTOR AND AGENT: ***YOU ARE HEREBY NOTIFIED*** as the recipient of a building permit from Columbia County, Florida, you will be held responsible to the County for any damage to sidewalks and/or road curbs and gutters, concrete features and structures, together with damage to drainage facilities, removal of sod, major changes to lot grades that result in ponding of water, or other damage to roadway and other public infrastructure facilities caused by you or your contractor, subcontractors, agents or representatives in the construction and/or improvement of the building and lot for which this permit is issued. No certificate of occupancy will be issued until all corrective work to these public infrastructures and facilities has been corrected.

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

OWNERS CERTIFICATION: I CERTIFY THAT ALL THE FOREGOING INFORMATION IS ACCURATE AND THAT ALL WORK WILL BE DONE IN COMPLIANCE WITH ALL APPLICABLE LAWS REGULATING CONSTRUCTION AND ZONING.

NOTICE TO OWNER: There are some properties that may have deed restrictions recorded upon them. These restrictions may limit or prohibit the work applied for in your building permit. You must verify if your property is encumbered by any restrictions or face possible litigation and or fines.

STEVEN GREEN _____ _____

Print Owners Name **Owners Signature**

****Property owners must sign here before any permit will be issued.**

****If this is an Owner Builder Permit Application then, ONLY the owner can sign the building permit when it is issued.**

CONTRACTORS AFFIDAVIT: By my signature I understand and agree that I have informed and provided this written statement to the owner of all the above written responsibilities in Columbia County for obtaining this Building Permit including all application and permit time limitations.

_____ **Contractor's License Number** CBC 054575

Contractor's Signature **Columbia County Competency Card Number** 853

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 23rd **day of** August **20**17.

Personally known _____ **or Produced Identification** _____

Suzanne Stewart

State of Florida Notary Signature (For the Contractor)

SEAL NOTARY PUBLIC STATE OF FLORIDA

SUZANNE STEWART
MY COMMISSION # FF 936523
EXPIRES: November 16, 2019
Bonded Thru Budget Notary Services

SUBCONTRACTOR VERIFICATION

APPLICATION/PERMIT # 1708-88 JOB NAME GREEN

THIS FORM MUST BE SUBMITTED BEFORE A PERMIT WILL BE ISSUED

Columbia County issues combination permits. One permit will cover all trades doing work at the permitted site. It is REQUIRED that we have records of the subcontractors who actually did the trade specific work under the general contractors permit.

NOTE: It shall be the responsibility of the general contractor to make sure that all of the subcontractors are licensed with the Columbia County Building Department.
Use website to confirm licenses: http://www.columbiacountyfla.com/PermitSearch/ContractorSearch.aspx

NOTE: If this should change prior to completion of the project, it is your responsibility to have a corrected form submitted to our office, before that work has begun.

Violations will result in stop work orders and/or fines.

			Need
ELECTRICAL ☑	Print Name Marc Matthews	Signature	☐ Lic
	Company Name: Matthews Electric		☐ Liab
CC# 0076	License #: EC13005459	Phone #: 386-344-2029	☐ W/C ☐ EX ☐ DE
MECHANICAL/ A/C ☑	Print Name Mark Touchstone	Signature	☐ Lic
	Company Name: Touchstone Heating & Air		☐ Liab
CC# 0747	License #: CAC-058099	Phone #: 386-867-0625	☐ W/C ☐ EX ☐ DE
PLUMBING/ GAS ☑	Print Name Cody Borrs	Signature	☐ Lic
	Company Name: Borrs Plumbing		☐ Liab
CC# 000715	License #: CFC1427145	Phone #: 386-623-0509	☐ W/C ☐ EX ☐ DE
ROOFING ☑	Print Name Dave Davis Johnson	Signature	☐ Lic
	Company Name: Mac Johnson Roofing		☐ Liab
CC# 001129	License #: CCC1325497	Phone #: 386-472-6007	☐ W/C ☐ EX ☐ DE
SHEET METAL ☐	Print Name	Signature	☐ Lic
	Company Name:		☐ Liab
CC#	License #:	Phone #:	☐ W/C ☐ EX ☐ DE
FIRE SYSTEM/ SPRINKLER ☐	Print Name	Signature	☐ Lic
	Company Name:		☐ Liab
CC#	License#:	Phone #:	☐ W/C ☐ EX ☐ DE
SOLAR ☐	Print Name	Signature	☐ Lic
	Company Name:		☐ Liab
CC#	License #:	Phone #:	☐ W/C ☐ EX ☐ DE
STATE SPECIALTY ☐	Print Name	Signature	☐ Lic
	Company Name:		☐ Liab
CC#	License #:	Phone #:	☐ W/C ☐ EX ☐ DE

Ref: F.S. 440.103; ORD. 2016-30

Columbia County Property Appraiser

updated: 6/6/2017

2016 Tax Year

Tax Collector | Tax Estimator | Property Card | Parcel List Generator | 2016 TRIM (pdf) | Interactive GIS Map | Print

Parcel: 16-7S-17-10006-226

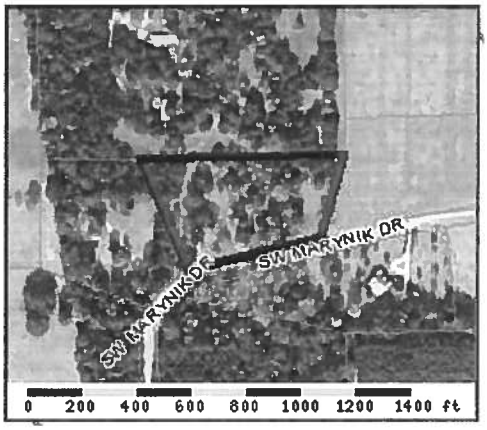
<< Next Lower Parcel | Next Higher Parcel >>

Search Result: 1 of 1

Owner & Property Info

Owner's Name	GREEN STEVEN JAMES &		
Mailing Address	MICHELLE BROWNING GREEN P O BOX 508 FORT WHITE, FL 32038		
Site Address			
Use Desc. (code)	VACANT (000000)		
Tax District	3 (County)	**Neighborhood**	16717
Land Area	5.020 ACRES	**Market Area**	02
Description	NOTE: This description is not to be used as the Legal Description for this parcel in any legal transaction.		

LOT 26 RIVER RISE S/D UNIT 2. WD 1074-571,572, WD 1206-2552, WD 1329-2204,



Property & Assessment Values

2016 Certified Values		
Mkt Land Value	cnt: (0)	$43,451.00
Ag Land Value	cnt: (1)	$0.00
Building Value	cnt: (0)	$0.00
XFOB Value	cnt: (0)	$0.00
Total Appraised Value		$43,451.00
Just Value		$43,451.00
Class Value		$0.00
Assessed Value		$43,451.00
Exempt Value		$0.00
Total Taxable Value		Cnty: $43,451 Other: $43,451 | Schl: $43,451

2017 Working Values (Hide Values)		
Mkt Land Value	cnt: (0)	$46,000.00
Ag Land Value	cnt: (1)	$0.00
Building Value	cnt: (0)	$0.00
XFOB Value	cnt: (0)	$0.00
Total Appraised Value		$46,000.00
Just Value		$46,000.00
Class Value		$0.00
Assessed Value		$46,000.00
Exempt Value		$0.00
Total Taxable Value		Cnty: $46,000 Other: $46,000 | Schl: $46,000

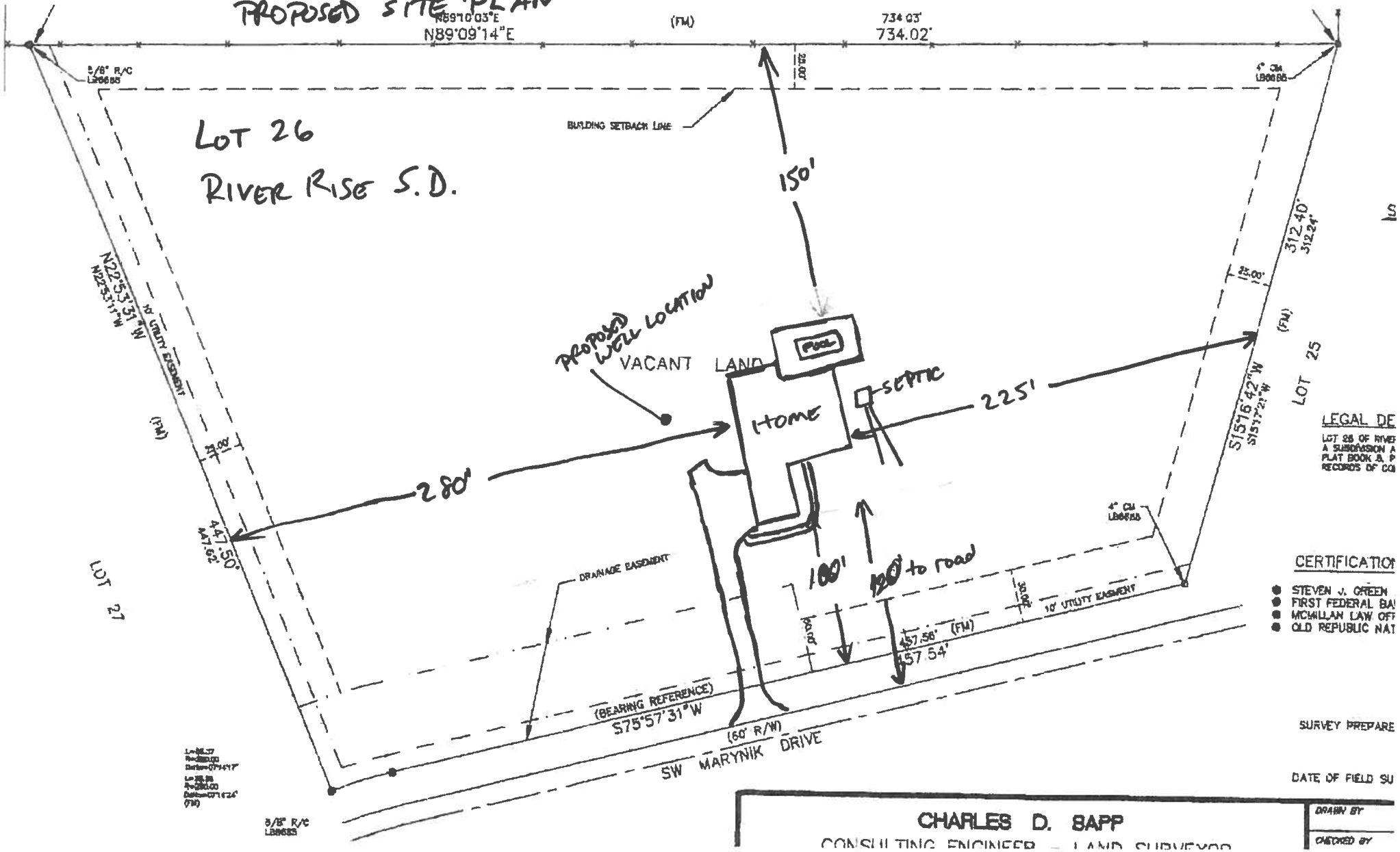
NOTE: 2017 Working Values are NOT certified values and therefore are subject to change before being finalized for ad valorem assessment purposes.

Sales History

Show Similar Sales within 1/2 mile

Sale Date	OR Book/Page	OR Code	Vacant / Improved	Qualified Sale	Sale RCode	Sale Price

"STEVE/MICHELLE GREEN PROPOSED SITE PLAN"



COLUMBIA COUNTY

911 ADDRESSING / GIS DEPARTMENT

263 NW Lake City Ave., Lake City, FL 32055

Telephone: (386) 758-1125 x 1 * Fax: (386) 758-1365 * Email: gis@columbiacountyfla.com

Address Assignment and Maintenance Document

To maintain the county wide Addressing Policy you must make application for a 9-1-1 Address at the time you apply for a building permit. The established standards for addressing and posting numbers to all principal buildings, dwellings, businesses and industries are contained in Columbia County Ordinance 2001-9. The addressing system is to enable Emergency Services Agencies to locate you in an emergency, and to assist the United States Postal Service and the public in the timely and efficient provision of services to residents and businesses of Columbia County

Date/Time Issued:	**8/18/2017 10:41:13 AM**
Address:	**918 SW MARYNIK Dr**
City:	**HIGH SPRINGS**
State:	**FL**
Zip Code	**32643**
Pracel ID	**10006-226**

REMARKS: Address for proposed structure on parcel.

Address Issued By: **Signed:/ Ronal N. Croft**

Columbia County GIS/911 Addressing Department

NOTICE: THIS ADDRESS WAS ISSUED BASED ON LOCATION AND ACCESS INFORMATION RECEIVED FROM THE REQUESTER. SHOULD, AT A LATER DATE, THE LOCATION AND/OR ACCESS INFORMATION BE FOUND TO BE IN ERROR OR CHANGED, THIS ADDRESS IS SUBJECT TO CHANGE.

PAT LYNCH
LYNCH DRILLING CORP
P O Box 934
Branford, FL 32008
(386)935-1076

DATE 8-17-17

CUSTOMER Steven Green.
parcel # 16-75-17-10006-226

LOCATION Lot 26, River Rise SD; Ft White, 32038

WE WILL CONSTRUCT A 4" WATER WELL COMPLETE WITH 4" WATER WELL STEEL CASING, 1 HP SUBMERSIBLE PUMP (20 GPM) WITH 1 1/4" DROP PIPE, AND AN 86 GALLON CAPTIVE AIR TANK (21.9 GALLON DRAWDOWN).

WELL WILL BE COMPLETE AT THE WELL SITE, WE DO NOT INCLUDE ELECTRICAL NOR PLUMBING CONNECTIONS FROM THE WELL TO THE HOME AND/OR POWER POLE.

ANY VARIATIONS OF THE ABOVE ARE SUBJECT TO APPROVAL FROM THE CUSTOMER AND.OR CONTRACTOR PRIOR TO COMMENSMENT OF THE INDIVIDUAL JOB.

THANK YOU

NOT RESPONSIBLE FOR THE QUALITY OF WATER

This Document Prepared By:
First Federal Bank of Florida
4705 US Hwy 90 West
Lake City, FL 32055

Inst: 201712015513 Date: 08/17/2017 Time: 11:33AM
Page 1 of 3 B: 1342 P: 2127, P.DeWitt Cason, Clerk of Court
Columbia, County, By: BD
Deputy Clerk

NOTICE OF COMMENCEMENT

STATE OF FLORIDA
COUNTY OF **COLUMBIA**

The undersigned hereby gives notice that improvement will be made to certain real property, and in accordance with Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement.

1. Description of Property: **See Exhibit A**

2. General Description of improvement: **Construction of Residential Single Family Home**

3. Owner Information:
   Name and Address: **Steven J Green, Michelle B Green**
   P.O. Box 508, Fort White, FL 32038
   Interest in property: [X] Fee Simple
   Name and address of fee simple title holder (if other than Owner): [ ]

4. Contractor (name and address): **Bryan Zecher Construction DBA Bryan Zecher Homes, Inc.**
   465 NW Orange St, Lake City, FL 32055

5. Surety:

6. Lender **First Federal Bank of Florida**
   4705 US Hwy 90 West
   Lake City, FL 32055
   (877) 499-0572

7. Persons within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13 (1) (a) 7., Florida Statutes: [ ]

8. In addition to himself, Owner designates First Federal Bank of Florida, 4705 West Hwy 90/P.O. Box 2029, Lake City Florida 32056 to receive a copy of the Lienor's Notice as provided in Section 713.13 (1) (b), Florida Statues.

9. Expiration date of notice of commencement (the expiration date is 1 year from the date of recording unless a different date is specified).

WARNING TO OWNER: ANY PAYMENTS MADE BY THE OWNER AFTER THE EXPIRATION OF THE NOTICE OF COMMENCEMENT ARE CONSIDERED IMPROPER PAYMENTS UNDER CHAPTER 713, PART 1, SECTION 713.13, FLORIDA STATUTES AND CAN RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY, A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK OF RECORDING YOUR NOTICE OF COMMENCEMENT.

(Seal)
Borrower - **Steven J Green**

(Seal)
Borrower - **Michelle B Green**

State of Florida

County of Lafayette

The foregoing instrument was acknowledged before me this 15 day of Aug.
20 17,
by Steve Green and Michelle Green

who is personally known to me or who has produced NA as identification.

LEENETTE W. MCMILLAN-FREDRIKSSON
MY COMMISSION EXPIRES
January 8, 2020
#FF 939111
Bonded thru
Notary Public Underwriters
NOTARY PUBLIC, STATE OF FLORIDA

(Signature of person taking acknowledgment)

(Name typed printed or stamped)

(Title or Rank)

(Serial Number if any)
My Commission expires : _____

Verification Pursuant to Section 92.525, Florida Statutes

Under penalties of perjury, I declare that I have read the foregoing and that the facts stated in it are true to the best of my knowledge and belief.

Borrower - **Steven J Green** 8/15/17 Date

Borrower - **Michelle B Green** 8/15/17 Date

LEGAL

GREEN

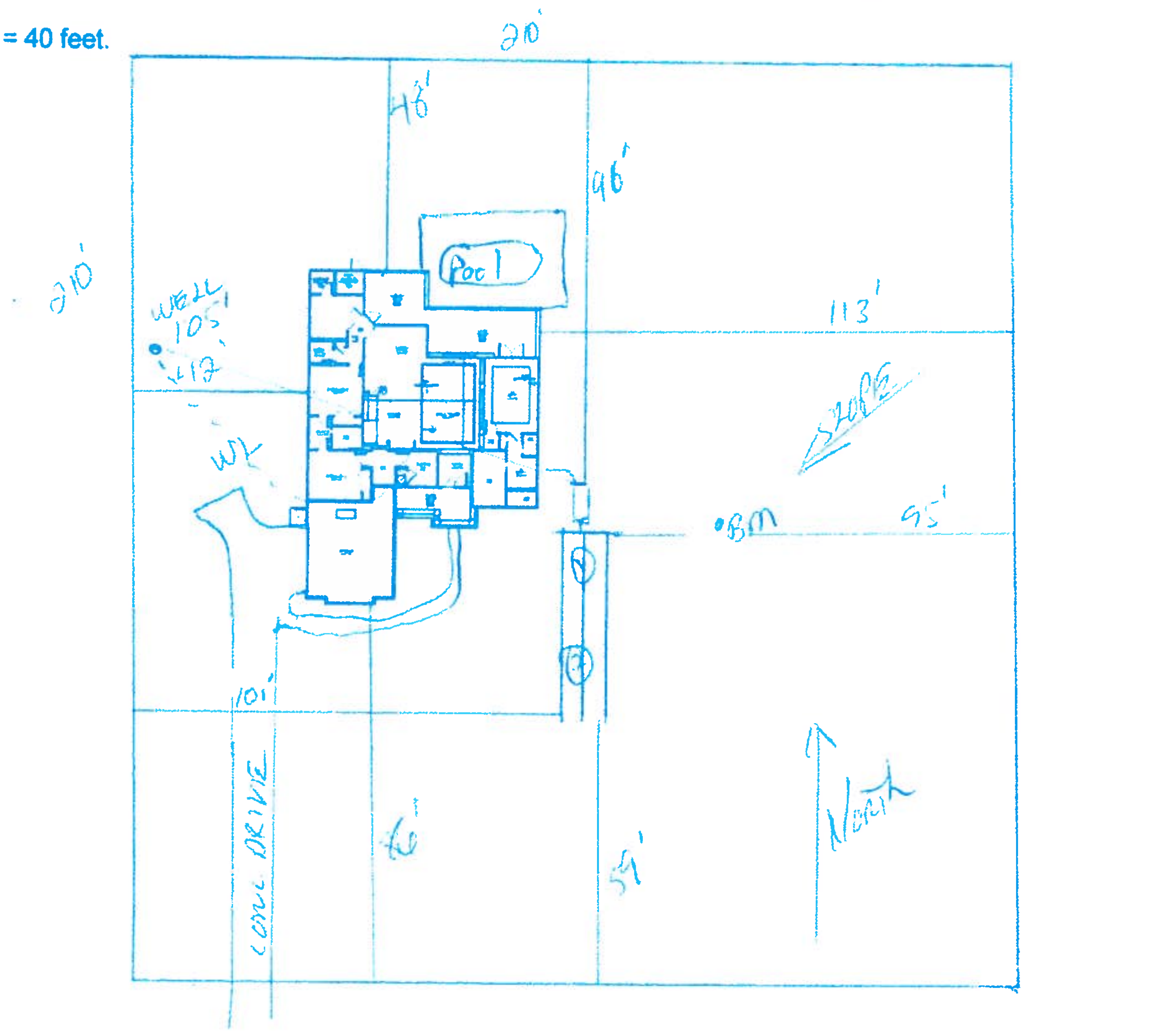
LOT 26, RIVER RISE RESIDENTIAL SUBDIVISION, UNIT 2, ACCORDING TO THE MAP OR PLAT THEREOF RECORDED IN PLAT BOOK 8, PAGE 54 & 55 OF THE PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA. LOCATED IN SECTION 16, TOWNSHIP 7 SOUTH, RANGE 17 EAST, COLUMBIA COUNTY, FLORIDA.

STATE OF FLORIDA
DEPARTMENT OF HEALTH
APPLICATION F0R ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number 17-0545

----- PART II - SITEPLAN -----

Scale: 1 inch = 40 feet.



Notes: ______

Site Plan submitted by: ______ MASTER CONTRACTOR

Plan Approved ______ Not Approved ______ Date 8/21/17

By ______ County Health Department

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT

STATE OF FLORIDA
DEPARTMENT OF HEALTH
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM
APPLICATION FOR CONSTRUCTION PERMIT

PERMIT NO. 17-0545N
DATE PAID: 8/14/17
FEE PAID: 350.00
RECEIPT #: 1333658

APPLICATION FOR:
[X] New System [ ] Existing System [ ] Holding Tank [ ] Innovative
[ ] Repair [ ] Abandonment [ ] Temporary [ ] _____

APPLICANT: Steven Green

AGENT: ROCKY FORD, A & B CONSTRUCTION TELEPHONE: 386-497-2311

MAILING ADDRESS: 546 SW Dortch Street, FT. WHITE, FL, 32038

TO BE COMPLETED BY APPLICANT OR APPLICANT'S AUTHORIZED AGENT. SYSTEMS MUST BE CONSTRUCTED BY A PERSON LICENSED PURSUANT TO 489.105(3)(m) OR 489.552, FLORIDA STATUTES. IT IS THE APPLICANT'S RESPONSIBILITY TO PROVIDE DOCUMENTATION OF THE DATE THE LOT WAS CREATED OR PLATTED (MM/DD/YY) IF REQUESTING CONSIDERATION OF STATUTORY GRANDFATHER PROVISIONS.

PROPERTY INFORMATION

LOT: 26 BLOCK: na SUB: River Rise PLATTED: 2/21/02

PROPERTY ID #: 16-7S-17-10006-226 ZONING: _____ I/M OR EQUIVALENT: [Y (N)

PROPERTY SIZE: 5.02 ACRES WATER SUPPLY: [X] PRIVATE PUBLIC [ ]<=2000GPD [ ]>2000GPD

IS SEWER AVAILABLE AS PER 381.0065, FS? [Y (N) DISTANCE TO SEWER: ____ FT

PROPERTY ADDRESS: SW Marynik Dr, HS, FL, 32643

DIRECTIONS TO PROPERTY: US 441 South, TR CR 778, TL Marynik Dr, 8/10ths miles on RT

BUILDING INFORMATION [X] RESIDENTIAL [ ] COMMERCIAL

Unit No	Type of Establishment	No. of Bedrooms	Building Area Sqft	Commercial/Institutional System Design Table 1, Chapter 64E-6, FAC
1	SF Residential	3	2242	
2				
3				

[N] Floor/Equipment Drains [N] Other (Specify) _____

SIGNATURE: Rocky D Ford DATE: 8/14/2017

DH 4015, 08/09 (Obsoletes previous editions which may not be used)
Incorporated 64E-6.001, FAC

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 16-7S-17-10006-226 Building permit No. 000035783

Use Classification SFD/UTILITY Fire: 146.64

Permit Holder BRYAN ZECHER Waste: 128.72

Owner of Building STEVEN & MICHELLE GREEN Total: 275.36

Location: 918 SW MARYNIK DR.,HIGH SPRINGS, FL 32643

Date: 02/21/2018

Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)

COLUMBIA COUNTY BUILDING DEPARTMENT

RESIDENTIAL CHECK LIST

MINIMUM PLAN REQUIREMENTS: FLORIDA BUILDING CODE RESIDENTIAL 2014 EFFECTIVE 1 JULY 2015 AND THE NATIONAL ELECTRICAL CODE 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 12/2016

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Marked as Applicable
		Select From the Dropbox
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.) 2243 Total (Sq. Ft.) under roof 3505	YES NO N/A

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 Marked as Applicable
8	**Plans or specifications must show compliance with FBCR Chapter 3**	YES NO N/A
		Select From the Dropbox
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	- ✓
17	Location, size and height above roof of chimneys	- ✓
18	Location and size of skylights with Florida Product Approval	- ✓
18	Number of stories	- ✓
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 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 Marked as Applicable

YES / NO / N/A

FBCR 403: Foundation Plans

Select From the Dropbox

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 2000 Pound Per Square Foot	- ✓
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**	- ✓

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	- N/A
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	- N/A

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).	-

YES / NO / N/A

FBCR CHAPTER 6 WOOD WALL FRAMING CONSTRUCTION

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Marked as Applicable
		Select From the Dropbox
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 IRC Table 502.5 (1)	-
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 802.1.6.1 Wood trusses	-
61	Include a layout and truss details, signed and sealed by Florida Professional Engineer	-
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	-

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	-

FBCR Chapter 11 Energy Efficiency Code for residential building

Residential construction shall comply with this code by using the following compliance methods in the FBCR chapter11 Residential buildings compliance methods. **Two of the required forms are to be submitted**, *N1100.1.1.1 As an alternative to the computerized Compliance Method A, the Alternate Residential Point System Method hand calculation, Alternate Form 600A, 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.*

YES / NO / N/A

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Marked as Applicable
		Select From the Dropbox
73	Show the insulation R value for the following areas of the structure	- ✓
74	Attic space	- ✓
75	Exterior wall cavity	- ✓
76	Crawl space	- N/A

HVAC information

77	Submit two copies of a Manual J sizing equipment or equivalent computation study	- ✓
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	- ✓

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	- ✓
83	Reservoir pressure tank gallon capacity	- ✓
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.	- ✓

	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.		NO	
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		NO	
94	**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.		NO	
***	**BELOW ITEMS ONLY NEEDED AFTER ZONING APPROVAL HAS GIVEN.**	****	***	***
95	**Environmental Health Permit or Sewer Tap Approval** A copy of a approved Columbia County Environmental Health (386) 758-1058		NO	
96	**City of Lake City** A City Water and/or Sewer letter. Call 386-752-2031		~~NO~~	
97	**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		~~NO~~	
98	**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.			
99	A Flood development permit is also required for AE, Floodway & AH. Development permit cost is **$50.00**			
100	**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.		~~NO~~	
101	**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.		~~NO~~	

TOILET FACILITIES SHALL BE PROVIDED FOR ALL CONSTRUCTION SITES. NO

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.

BRYAN ZECHER HOMES
LAKE CITY, FLORIDA

As required by Florida Statute 553.842 and Florida Administrative Code 9B-72, please provide the information and approval numbers on the building components listed below if they will be utilized on the construction project for which you are applying for a building permit. We recommend you contact your local product supplier should you not know the product approval number for any of the applicable listed products. Statewide approved products are listed online @ www.floridabuilding.org

Category/Subcategory	Manufacturer	Product Description	Approval Number(s)
1. EXTERIOR DOORS			
A. SWINGING	THERMO-TRU	EXTERIOR HINGED DOORS	FL 5891-R3
B. SLIDING	PGT	SLIDING GLASS DOORS	FL 251-R15
C. SECTIONAL/ROLL UP		GARAGE DOORS	FL 5678-R2
D. OTHER			
2. WINDOWS			
A. SINGLE/DOUBLE HUNG	PGT	WINDOW	FL 239-R19
B. HORIZONTAL SLIDER	PGT	WINDOW	FL 242-R16
C. CASEMENT			
D. FIXED	PGT	WINDOW	FL 243-R14
E. MULLION			
F. SKYLIGHTS			
G. OTHER			
3. PANEL WALL			
A. SIDING	CERTAINTEED	CEMENT FIBERED SIDING	FL 1573-R2
B. SOFFITS	KAYCON	ALUMINIUM SOFFIT/FACIA	FL 12198-R1
C. STOREFRONTS	STO	STUCCO FINISH	FL 15026-R1
D. GLASS BLOCK			
E. OTHER			
4. ROOFING PRODUCTS			
A. ASPHALT SHINGLES	CERTAINTEED	ARCH SHINGLES - 30 YR	FL 5444-R3
B. NON-STRUCTURAL METAL	GAF	TAR PAPER	FL 4911-R3
C. ROOFING TILES	OMG	ROOFING NAILS	FL 699-R3
D. SINGLE PLY ROOF			
E. OTHER			
5. STRUCTURAL COMPONENTS			
A. WOOD CONNECTORS	USPC	ANCHORS	FL 5631-R1
B. WOOD ANCHORS	USPC	ANCHORS	FL 5631-R1
C. TRUSS PLATES			
D. INSULATION FORMS			
E. LINTELS			
F. OTHERS			
6. NEW EXTERIOR ENVELOPE PRODUCTS			

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) performance characteristics which the product was tested and certified to comply with, 3) copy of the applicable manufacturers installation requirements.
Further, I understand these products may have to be removed if approval cannot be demonstrated during inspection.

Contractor OR Agent Signature — Date: 11/30/15

BRYAN ZECHER

NOTES: _____

RESIDENTIAL ENERGY CONSERVATION CODE DOCUMENTATION CHECKLIST

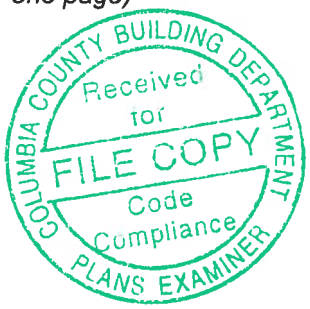
Florida Department of Business and Professional Regulation
Simulated Performance Alternative (Performance) Method

Applications for compliance with the 2014 Florida Building Code, Energy Conservation via the residential Simulated Performance method shall include

- ☐ *This checklist*
- ☐ *A Form R405 report that documents that the Proposed Design complies with Section R405.3 of the Florida Energy Code. This form shall include a summary page indicating home address, e-ratio and the pass or fail status along with summary areas and types of components, whether the home was simulated as a worst-case orientation, name and version of the compliance software tool, name of individual completing the compliance report (1 page) and an input summary checklist that can be used for field verification (usually 4 pages/may be greater).*
- ☐ *Energy Performance Level (EPL) Display Card (one page)*
- ☐ *Mandatory Requirements(three pages)*

Required prior to CO for the Performance Method:

- ☐ *Air Barrier and Insulation Inspection Component Criteria checklist (Table R402.4.1.1 - one page)*
- ☐ *A completed Envelope Leakage Test Report(usually one page)*
- ☐ *If Form R405 duct leakage type indicates anything other than "default leakage", then a completed Form R405 Duct Leakage Test Report (usually one page)*



FORM R405-2014

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name:	170951	Builder Name:	Bryan Zecher Construction
Street:		Permit Office:	
City, State, Zip:	, FL ,	Permit Number:	
Owner:	Green Res	Jurisdiction:	
Design Location:	FL, Gainesville	County::	Columbia (Florida Climate Zone 2)

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	3			
5. Is this a worst case?	Yes			
6. Conditioned floor area above grade (ft²)	2242			
Conditioned floor area below grade (ft²)	0			
7. Windows(326.0 sqft.)	Description		Area	
a. U-Factor:	Dbl, U=0.35		326.00 ft²	
SHGC:	SHGC=0.25			
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:			11.134 ft.	
Area Weighted Average SHGC:			0.250	
8. Floor Types (2242.0 sqft.)		Insulation	Area	
a. Slab-On-Grade Edge Insulation		R=0.0	2242.00 ft²	
b. N/A		R=	ft²	
c. N/A		R=	ft²	

9. Wall Types (2074.5 sqft.)	Insulation	Area	
a. Frame - Wood, Exterior	R=13.0	1843.50 ft²	
b. Frame - Wood, Adjacent	R=13.0	231.00 ft²	
c. N/A	R=	ft²	
d. N/A	R=	ft²	
10. Ceiling Types (2338.0 sqft.)	Insulation	Area	
a. Under Attic (Vented)	R=38.0	2338.00 ft²	
b. N/A	R=	ft²	
c. N/A	R=	ft²	
11. Ducts		R	ft²
a. Sup: Attic, Ret: Attic, AH: Living Area		6	448.4
12. Cooling systems	kBtu/hr	Efficiency	
a. Central Unit	45.0	SEER:15.00	
13. Heating systems	kBtu/hr	Efficiency	
a. Electric Heat Pump	45.0	HSPF:8.90	
14. Hot water systems			
a. Electric		Cap: 50 gallons	
		EF: 0.950	
b. Conservation features			
None			
15. Credits		Pstat	

Glass/Floor Area: 0.145

Total Proposed Modified Loads: 58.36

Total Baseline Loads: 60.35

PASS

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

PREPARED BY: Evan Beamsley

DATE: 2017-08-14

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

OWNER/AGENT:

DATE: 8/22/17

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.

FORM R405-2014

PROJECT

Title:	170951	Bedrooms:	3	Address Type:	Street Address
Building Type:	User	Conditioned Area:	2242	Lot #	
Owner:	Green Res	Total Stories:	1	Block/SubDivision:	
# of Units:	1	Worst Case:	Yes	PlatBook:	
Builder Name:	Bryan Zecher Construction	Rotate Angle:	225	Street:	
Permit Office:		Cross Ventilation:		County:	Columbia
Jurisdiction:		Whole House Fan:		City, State, Zip:	, FL ,
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	2242	20178

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Living Area	2242	20178	Yes	6	3	1	Yes	Yes	Yes

FLOORS

√	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
____	1	Slab-On-Grade Edge Insulatio	Living Area	231 ft	0	2242 ft²	___	0.3	0.3	0.4

ROOF

√	#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
____	1	Hip	Composition shingles	2597 ft²	0 ft²	Dark	0.92	No	0.9	No	0	30.3

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
____	1	Full attic	Vented	300	2242 ft²	N	N

CEILING

√	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
____	1	Under Attic (Vented)	Living Area	38	Blown	2338 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	N=>SW	Exterior	Frame - Wood	Living Area	13	6	4	9		57.0 ft²		0.23	0.75	0
____	2	E=>NW	Exterior	Frame - Wood	Living Area	13	5	10	9		52.5 ft²		0.23	0.75	0
____	3	N=>SW	Exterior	Frame - Wood	Living Area	13	7	4	9		66.0 ft²		0.23	0.75	0
____	4	E=>NW	Exterior	Frame - Wood	Living Area	13	4	3	9		38.3 ft²		0.23	0.75	0
____	5	NE=>W	Exterior	Frame - Wood	Living Area	13	3	10	9		34.5 ft²		0.23	0.75	0
____	6	N=>SW	Exterior	Frame - Wood	Living Area	13	12	11	9		116.3 ft²		0.23	0.75	0
____	7	E=>NW	Exterior	Frame - Wood	Living Area	13	7	4	9		66.0 ft²		0.23	0.75	0
____	8	N=>SW	Exterior	Frame - Wood	Living Area	13	27	4	9		246.0 ft²		0.23	0.75	0
____	9	E=>NW	Exterior	Frame - Wood	Living Area	13	35	8	9		321.0 ft²		0.23	0.75	0
____	10	S=>NE	Exterior	Frame - Wood	Living Area	13	16	6	9		148.5 ft²		0.23	0.75	0
____	11	W=>SE	Exterior	Frame - Wood	Living Area	13	4	8	9		42.0 ft²		0.23	0.75	0
____	12	S=>NE	Exterior	Frame - Wood	Living Area	13	18	2	9		163.5 ft²		0.23	0.75	0
____	13	S=>NE	Garage	Frame - Wood	Living Area	13	6		9		54.0 ft²		0.23	0.75	0
____	14	E=>NW	Garage	Frame - Wood	Living Area	13	3	8	9		33.0 ft²		0.23	0.75	0
____	15	S=>NE	Garage	Frame - Wood	Living Area	13	16		9		144.0 ft²		0.23	0.75	0
____	16	W=>SE	Exterior	Frame - Wood	Living Area	13	54	8	9		492.0 ft²		0.23	0.75	0

DOORS

√	#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	Width In	Height Ft	Height In	Area
_____	1	NE=>W	Insulated	Living Area	None	.4	1		8		8 ft²
_____	2	N=>SW	Insulated	Living Area	None	.4	3		8		24 ft²
_____	3	N=>SW	Insulated	Living Area	None	.4	2		8		16 ft²
_____	4	S=>NE	Insulated	Living Area	None	.4	2		8		16 ft²
_____	5	S=>NE	Insulated	Living Area	None	.4	3		6	8	20 ft²

WINDOWS

Orientation shown is the entered orientation (=>) changed to Worst Case.

√	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
_____	1	NE=>W	5	Metal	Low-E Double	Yes	0.35	0.25	16.0 ft²	19 ft 0 in	0 ft 0 in	None	None
_____	2	N=>SW	6	Metal	Low-E Double	Yes	0.35	0.25	54.0 ft²	13 ft 16 in	0 ft 6 in	None	None
_____	3	E=>NW	7	Metal	Low-E Double	Yes	0.35	0.25	30.0 ft²	28 ft 10 in	0 ft 6 in	None	None
_____	4	N=>SW	8	Metal	Low-E Double	Yes	0.35	0.25	56.0 ft²	12 ft 14 in	0 ft 0 in	None	None
_____	5	N=>SW	8	Metal	Low-E Double	Yes	0.35	0.25	32.0 ft²	12 ft 14 in	0 ft 0 in	None	None
_____	6	E=>NW	9	Metal	Low-E Double	Yes	0.35	0.25	15.0 ft²	1 ft 6 in	1 ft 0 in	None	None
_____	7	E=>NW	9	Metal	Low-E Double	Yes	0.35	0.25	6.0 ft²	1 ft 6 in	1 ft 0 in	None	None
_____	8	S=>NE	10	Metal	Low-E Double	Yes	0.35	0.25	4.0 ft²	1 ft 6 in	1 ft 0 in	None	None
_____	9	S=>NE	10	Metal	Low-E Double	Yes	0.35	0.25	15.0 ft²	1 ft 6 in	1 ft 0 in	None	None
_____	10	S=>NE	12	Metal	Low-E Double	Yes	0.35	0.25	32.0 ft²	8 ft 4 in	0 ft 0 in	None	None
_____	11	S=>NE	12	Metal	Low-E Double	Yes	0.35	0.25	15.0 ft²	8 ft 4 in	6 ft 0 in	None	None
_____	12	W=>SE	16	Metal	Low-E Double	Yes	0.35	0.25	45.0 ft²	1 ft 6 in	1 ft 0 in	None	None
_____	13	W=>SE	16	Metal	Low-E Double	Yes	0.35	0.25	6.0 ft²	1 ft 6 in	1 ft 0 in	None	None

FORM R405-2014

GARAGE

√	#	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
_____	1	544.148 ft²	384 ft²	75 ft	9 ft	1

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.0004	2354.1	129.24	243.05	.3082	7

HEATING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Block	Ducts
_____	1	Electric Heat Pump	None	HSPF:8.9	45 kBtu/hr	1	sys#1

COOLING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
_____	1	Central Unit	None	SEER: 15	45 kBtu/hr	1350 cfm	0.75	1	sys#1

HOT WATER SYSTEM

√	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
_____	1	Electric	None	Garage	0.95	50 gal	60 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	HVAC # Cool
_____	1	Attic	6	448.4 ft	Attic	112.1 ft	Default Leakage	Living Area	(Default)	(Default)			1	1

FORM R405-2014

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

FORM R405-2014

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 97

The lower the EnergyPerformance Index, the more efficient the home.

, , FL,

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		3
5. Is this a worst case?		Yes
6. Conditioned floor area (ft²)		2242
7. Windows**	Description	Area
a. U-Factor: SHGC:	Dbl, U=0.35 SHGC=0.25	326.00 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:		11.134 ft.
Area Weighted Average SHGC:		0.250

8. Floor Types	Insulation	Area
a. Slab-On-Grade Edge Insulation	R=0.0	2242.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

9. Wall Types	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	1843.50 ft²
b. Frame - Wood, Adjacent	R=13.0	231.00 ft²
c. N/A	R=	ft²
d. N/A	R=	ft²

10. Ceiling Types	Insulation	Area
a. Under Attic (Vented)	R=38.0	2338.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

11. Ducts	R	ft²
a. Sup: Attic, Ret: Attic, AH: Living Area	6	448.4

12. Cooling systems	kBtu/hr	Efficiency
a. Central Unit	45.0	SEER:15.00

13. Heating systems	kBtu/hr	Efficiency
a. Electric Heat Pump	45.0	HSPF:8.90

14. Hot water systems	
a. Electric	Cap: 50 gallons EF: 0.95
b. Conservation features None	
15. Credits	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 EPL Display Card will be completed based on installed Code compliant features.

Builder Signature: Date: 8/22/17

Address of New Home: 198 SW Morgan D City/FL Zip: High Springs FL 32643

*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 R303.1.3 of the Florida Building Code, Energy Conservation, if not DEFAULT.

FORM R405-2014

Florida Department of Business and Professional Regulations
Residential Whole Building Performance and Prescriptive Methods

ADDRESS:	Permit Number:
, FL ,	

MANDATORY REQUIREMENTS See individual code sections for full details.

☐ **401.3 Energy Performance Level (EPL) display card (Mandatory).** The building official shall require that an energy performance level (EPL) display card be completed and certified by the builder to be accurate and correct before final approval of the building for occupancy. Florida law [Section 553.9085, Florida Statues] requires the EPL display card to be included as an addendum to each sales contract for both presold and nonpresold residential buildings. The EPL display card contains information indicating the energy performance level and efficiencies of components installed in a dwelling unit. The building official shall verify that the EPL display card completed and signed by the builder accurately reflects the plans and specifications submitted to demonstrate compliance for the building. A copy of the EPL display card can be found in Appendix C.

☐ **R402.4 Air leakage (Mandatory).** The building thermal envelope shall be constructed to limit air leakage in accordance with the requirements of Sections R402.1 through R402.4.4.

- ○ **R402.4.1 Building thermal envelope.** The building thermal envelope shall comply with Sections R402.4.1.1 and R402.4.1.2. The sealing methods between dissimilar materials shall allow for differential expansion and contraction.
  - ▪ **R402.4.1.1 Installation.** The components of the building thermal envelope as listed in Table R402.4.1.1 shall be installed in accordance with the manufacturer's instructions and the criteria listed in Table 402.4.1.1, as applicable to the method of construction. Where required by the code official, an approved third party shall inspect all components and verify compliance.
  - ▪ **R402.4.1.2 Testing.** The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding 5 air changes per hour in Climate Zones 1 and 2, and 3 air changes per hour in Climate Zones 3 through 8. Testing shall be conducted with a blower door at a pressure of 0.2 inches w.g. (50 Pascals). Where required by the code official, testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

    During testing:
    1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures;
    2. Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures;
    3. Interior doors, if installed at the time of the test, shall be open;
    4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed;
    5. Heating and cooling systems, if installed at the time of the test, shall be turned off; and
    6. Supply and return registers, if installed at the time of the test, shall be fully open.
- ○ **R402.4.2 Fireplaces.** New wood-burning fireplaces shall have tight-fitting flue dampers and outdoor combustion air.
- ○ **R402.4.3 Fenestration air leakage** Windows, skylights and sliding glass doors shall have an air infiltration rate of no more than 0.3 cfm per square foot (1.5 L/s/m2), and swinging doors no more than 0.5 cfm per square foot (2.6 L/s/m2), when tested according to NFRC 400 or AAMA/WDMA/CSA 101/I.S.2/A440 by an accredited, independent laboratory and listed and labeled by the manufacturer.

  Exception: Site-built windows, skylights and doors.
- ○ **R402.4.4 Recessed lighting.** Recessed luminaires installed in the building thermal envelope shall be sealed to limit air leakage between conditioned and unconditioned spaces. All recessed luminaires shall be IC-rated and labeled as having an air leakage rate not more than 2.0 cfm (0.944 L/s) when tested in accordance with ASTM E 283 at a 1.57 psf (75 Pa) pressure differential. All recessed luminaires shall be sealed with a gasket or caulk between the housing and the interior wall or ceiling covering.

☐ **R403.1.1 Thermostat provision (Mandatory).** At least one thermostat shall be provided for each separate heating and cooling system.

☐ **R403.1.3 Heat pump supplementary heat (Mandatory).** Heat pumps having supplementary electric-resistance heat shall have controls that, except during defrost, prevent supplemental heat operation when the heat pump compressor can meet the heating load.

☐ **R403.2.2 Sealing (Mandatory).** All ducts, air handlers, and filter boxes and building cavities that form the primary air containment passageways for air distribution systems shall be considered ducts and plenum chambers, shall be constructed and sealed in accordance with Section C403.2.7.2 of the Commercial Provisions of this code and shall be shown to meet duct tightness criteria by post-construction or rough-in testing below.

Duct tightness shall be verified by testing to Section 803 of the RESNET Standards by either an energy rater certified in accordance with Section 553.99, Florida Statutes, or as authorized by Florida Statutes, to be "substantially leak free" by either of the following:

1. Post-construction test: Total leakage shall be less than or equal to 4 cfm (113 L/min) per 100 square feet (9.29 m2) of conditioned floor area when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. All register boots shall be taped or otherwise sealed during the test.
2. Rough-in test: Total leakage shall be less than or equal to 4 cfm (113 L/min) per 100 square feet (9.29 m2) of conditioned floor area when tested at a pressure differential of 0.1 inches w.g. (25Pa) across the system, including the manufacturer's air handler enclosure. All registers shall be taped or otherwise sealed during the test. If the air handler is not installed at the time of the test, total leakage shall be less than or equal to 3 cfm (85 L/min) per 100 square feet (9.29 m2) of conditioned floor area.

Exceptions:

1. The total leakage test is not required for ducts and air handlers located entirely within the building envelope.
2. Duct testing is not mandatory for buildings complying by Section R405 of this code.

MANDATORY REQUIREMENTS - (Continued)

☐ **R403.2.3 Building Cavities (Mandatory).** Building framing cavities shall not be used as ducts or plenums.

☐ **R403.3 Mechanical system piping insulation (Mandatory).** Mechanical system piping capable of carrying fluids above 105°F (41°C) or below 55°F (13°C) shall be insulated to a minimum of R-3.,

R403.3.1 Protection of piping insulation.

☐ **R403.4.1 Circulating hot water systems (Mandatory).** Circulating hot water systems shall be provided with an automatic or readily accessible manual switch that can turn off the hot-water circulating pump when the system is not in use.

☐ **R403.4.3 Heat traps (Mandatory).** Storage water heaters not equipped with integral heat traps and having vertical pipe risers shall have heat traps installed on both the inlets and outlets. External heat traps shall consist of either a commercially available heat trap or a downward and upward bend of at least 3 ½ inches (89 mm) in the hot water distribution line and cold water line located as close as possible to the storage tank.

☐ **R403.4.4 Water heater efficiencies (Mandatory).**

- **R403.4.4.1 Storage water heater temperature controls**
  - **R403.4.4.1.1 Automatic controls.** Service water heating systems shall be equipped with automatic temperature controls capable of adjustment from the lowest to the highest acceptable temperature settings for the intended use. The minimum temperature setting range shall be from 100°F to 140°F (38°C to 60°C).
  - **R403.4.4.1.2 Shut down.** A separate switch or a clearly marked circuit breaker shall be provided to permit the power supplied to electric service systems to be turned off. A separate valve shall be provided to permit the energy supplied to the main burner(s) of combustion types of service water heating systems to be turned off.
- **R403.4.4.2 Water heating equipment.** Water heating equipment installed in residential units shall meet the minimum efficiencies of Table C404.2 in Chapter 4 of the Florida Building Code, Energy Conservation, Commercial Provisions, for the type of equipment installed. Equipment used to provide heating functions as part of a combination system shall satisfy all stated requirements for the appropriate water heating category. Solar water heaters shall met the criteria Section R403.4.4.2.1.
  - **R403.4.4.2.1 Solar water heating systems.** Solar systems for domestic hot water production are rated by the annual solar energy factor of the system. The solar energy factor of a system shall be determined from the Florida Solar Energy Center Directory of Certified Solar Systems. Solar collectors shall be tested in accordance with ISO Standard 9806, Test Methods for Solar Collectors, and SRCC Standard TM-1, Solar Domestic Hot Water System and Component Test Protocol, Collectors in installed solar water heating systems should meet the following criteria:
    1. Be installed with a tilt angle between 10 degrees and 40 degrees of the horizontal; and
    2. Be installed at an orientation within 45 degrees of true south.

☐ **R403.5 Mechanical ventilation (Mandatory).** The building shall be provided with ventilation that meets the requirements of the Florida Building Code, Residential or Florida Building Code, Mechanical, as applicable, or with other approved means of ventilation. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.

☐ **R403.6 Heating and cooling equipment (Mandatory).** The following sections are mandatory for cooling and heating equipment.

- **R403.6.1 Equipment sizing.** Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on the equipment loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies, based on building loads for the directional orientation of the building. The manufacturer and model number of the outdoor and indoor units (if split system) shall be submitted along with the sensible and total cooling capacities at the design conditions described in Section R302.1. This code does not allow designer safety factors, provisions for future expansion or other factors which affect equipment sizing. System sizing calculations shall not include loads created by local intermittent mechanical ventilation such as standard kitchen and bathroom exhaust systems.
  - **R403.6.1.1 Cooling equipment capacity.** Cooling only equipment shall be selected so that its total capacity is not less than the calculated total load, but not more than 1.15 times greater than the total load calculated according to the procedure selected in Section 403.6, or the closest available size provided by the manufacturer's product lines. The corresponding latent capacity of the equipment shall not be less than the calculated latent load.

MANDATORY REQUIREMENTS - (Continued)

O **R403.6.1.1 Cooling equipment capacity. (continued)** The published value for AHRI total capacity is a nominal, rating-test value and shall not be used for equipment sizing. Manufacture's expanded performance data shall be used to select cooling-only equipment. This selection shall be used to select cooling-only equipment. This selection shall be based on the outdoor design dry bulb temperature for the load calculation (or entering water temperature for water-source equipment), the blower cfm provided by the expanded performance data, the design value for entering wet bulb temperature and the design value for entering dry bulb temperature.

Design values for entering wet bulb and dry bulb temperature shall be for the indoor dry bulb and relative humidity used for the load calculation and shall be adjusted for return side gains if the return duct(s) is installed in an unconditioned space.

Exceptions:

1. Attached single- and multi-family residential equipment sizing may be selected so that its cooling capacity is less than the calculated total sensible load but not less than 80 percent of that load.
2. When signed and sealed by a Florida-registered engineer, in attached single- and multi-family units, the capacity of equipment may be sized in accordance with good design practice.

O **R403.6.1.2 Heating equipment capacity**

- **R403.6.1.2.1 Heat pumps.** Heat pumps sizing shall be based on the cooling requirements as calculated according to Section R403.6.1.1 and the heat pump total cooling capacity shall not be more than 1.15 times greater than the design cooling load.
- **R403.6.1.2.2 Electric resistance furnaces.** Electric resistance furnaces shall be sized within 4 kW of the design requirements calculated according to the procedure selected in Section R403.6.1.
- **R403.6.1.2.3 Fossil fuel heating equipment.** The capacity of fossil fuel heating equipment with natural draft atmospheric burners shall not be less than the design load calculated in accordance with Section R403.6.1.

O **R403.6.1.3 Extra capacity required for special occasions.** Residences requiring excess cooling or heating equipment capacity on an intermittent basis, such as anticipated additional loads caused by major entertainment events, shall have equipment sized or controlled to prevent continuous space cooling or heating within that space by one or more of the following options:

1. A separate cooling or heating system is utilized to provide cooling or heating to the major entertainment areas.
2. A variable capacity system sized for optimum performance during base load periods is utilized.

☐ **R403.7 Systems serving multiple dwelling units (Mandatory).** Systems serving multiple dwelling units shall comply with Sections C403 and C404 of the Commercial Provisions in lieu of Section R403.

☐ **R403.8 Snow melt system controls (Mandatory).** Snow and ice-melting systems, supplied through energy service to the building, shall include automatic controls capable of shutting off the system when the pavement temperature is above 55°F, and no precipitation is falling and an automatic or manual control that will allow shutoff when the outdoor temperature is above 40°F.

☐ **R403.9 Swimming pools, inground spas and portable spas (Mandatory).** The energy requirements for residential pools and inground spas shall be as specified in Sections R403.9.1 through R403.9.3 and in accordance with ANSI/APSP-15. The energy requirements for portable spas shall be in accordance with ANSI/APSP-14.

O **R403.9.1 Pool and spa heaters.** All pool heaters shall be equipped with a readily accessible on-off switch that is mounted outside the heater to allow shutting off the heater without adjusting the thermostat setting.

- **R403.9.1.1 Gas and oil-fired pool and spa heaters.** All gas- and oil-fired pool and space heaters shall have a minimum thermal efficiency of 82 percent for heaters manufactured on or after April 16, 2013 when tested in accordance with ANSI Z 21.56. Pool heaters fired by natural gas or LP gas shall not have continuously burning pilot lights.
- **R403.9.1.2 Heat pump pool heaters.** Heat pump pool heaters shall have a minimum COP of 4.0 when tested in accordance with AHRI 1160, Table 2, Standard Rating Conditions-Low Air Temperature. A test report from an independent laboratory is required to verify procedure compliance. Geothermal swimming pool heat pumps are not required to meet this standard.

O **R403.9.2 Time switches.** Time switches or other control method that can automatically turn off and on heaters and pumps according to a preset schedule shall be installed on all heaters and pumps. Heaters, pumps and motors that have built in timers shall be deemed in compliance with this equipment.

Exceptions:

1. Where public health standards require 24-hour pump operations.
2. Where pumps are required to operate solar- and waste-heat-recovery pool heating systems.
3. Where pumps are powered exclusively from on-site renewable generation.

O **R403.9.3 Covers.** Heated swimming pools and inground permanently installed spas shall be equipped with a vapor-retardant cover on or at the water surface or a liquid cover or other means proven to reduce heat loss.

- **Exception:** Outdoor pools deriving over 70 percent of the energy for heating from site-recovered energy, such as a heat pump or solar energy source computed over an operating season.

☐ **RR404.1 Lighting equipment (Mandatory).** A minimum of 75 percent of the lamps in permanently installed lighting fixtures shall be high-efficacy lamps or a minimum of 75 percent of permanently installed lighting fixtures shall contain only high efficacy lamps.

Exception: Low-voltage lighting shall not be required to utilize high-efficacy lamps.

O **R404.1.1 Lighting equipment (Mandatory).** Fuel gas lighting systems shall not have continuously burning pilot lights

☐ **R405.2 Performance ONLY.** All ducts not entirely inside the building thermal envelope shall be insulated to a minimum of R-6.

O **R405.2.1 Performance ONLY.** Ceilings shall have minimum insulation of R-19. Where single assemby of the exposed deck and beam type or concrete deck roofs do not have sufficent space, R-10 is allowed.

FORM R405-2014

TABLE 402.4.1.1

AIR BARRIER AND INSULATION INSPECTION COMPONENT CRITERIA

Project Name: 170951	Builder Name: Bryan Zecher Construction
Street:	Permit Office:
City, State, Zip: , FL ,	Permit Number:
Owner: Green Res	Jurisdiction:
Design Location: FL, Gainesville	

COMPONENT	CRITERIA	CHECK
Air barrier and thermal barrier	A continuous air barrier shall be installed in the building envelope. Exterior thermal envelope contains a continuous barrier. Breaks or joints in the air barrier shall be sealed. Air-permeable insulation shall not be used as a sealing material.	
Ceiling/attic	The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier shall be sealed. Access openings, drop down stairs or knee wall doors to unconditioned attic spaces shall be sealed.	
Walls	Corners and headers shall be insulated and the junction of the foundation and sill plate shall be sealed. The junction of the top plate and the top or exterior walls shall be sealed. Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier. Knee walls shall be sealed.	
Windows, skylights and doors	The space between window/door jambs and framing and skylights and framing shall be sealed.	
Rim joists	Rim joists are insulated and include an air barrier.	
Floors (including above-garage and cantilevered floors)	Insulation shall be installed to maintain permanent contact with underside of subfloor decking. The air barrier shall be installed at any exposed edge of insulation.	
Crawl space walls	Where provided in lieu of floor insulation, insulation shall be permanently attached to the crawlspace walls. Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.	
Shafts, penetrations	Duct shafts, utility penetrations, and flue shaft openings to exterior or unconditioned space shall be sealed.	
Narrow cavities	Batts in narrow cavities shall be cut to fit, or narrow cavities shall be filled by insulation that on installation readily conforms to the available cavity spaces.	
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.	
Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be air tight, IC rated, and sealed to the drywall.	
Plumbing and wiring	Batt insulation shall be cut neatly to fit around wiring and plumbing in exterior walls, or insulation that on installation readily conforms to available space shall extend behind piping and wiring.	
Shower/tub on exterior wall	Exterior walls adjacent to showers and tubs shall be insulated and the air barrier installed separating them from the showers and tubs.	
Electrical/phone box on	The air barrier shall be installed behind electrical or communication boxes or air sealed boxes shall be installed.	
HVAC register boots	HVAC register boots that penetrate building thermal envelope shall be sealed to the sub-floor or drywall.	
Fireplace	An air barrier shall be installed on fireplace walls. Fireplaces shall have gasketed doors	

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Envelope Leakage Test Report
Prescriptive and Performance Method

Project Name:	170951	Builder Name:	Bryan Zecher Construction
Street:		Permit Office:	
City, State, Zip:	, FL ,	Permit Number:	
Design Location:	FL, Gainesville	Jurisdiction:	
Cond. Floor Area::	2242 sq.ft.	Cond. Volume:	20178 cu ft.

Envelope Leakage Test Results

Regression Data:

C: _____ n: _____ R: _____

Single or Multi Point Test Data

	HOUSE PRESSURE	FLOW:
1	Pa	cfm
2	Pa	cfm
3	Pa	cfm
4	Pa	cfm
5	Pa	cfm
6	Pa	cfm

Leakage Characteristics

CFM(50): _____

ELA: _____

EqLA: _____

ACH: _____

ACH(50): _____

SLA: _____

R402.4.1.2 Testing. The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding 5 air changes per hour in Climate Zones 1 and 2, 3 air changes per hour in Climate Zones 3 through 8. Testing shall be conducted with a blower door at a pressure of 0.2 inches w.g. (50 Pascals). Where required by the code official, testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

During testing:

1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures;
2. Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures;
3. Interior doors, if installed at the time of the test, shall be open;
4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed;
5. Heating and cooling systems, if installed at the time of the test, shall be turned off; and
6. Supply and return registers, if installed at the time of the test, shall be fully open.

I hereby certify that the above envelope leakage performance results demonstrate compliance with Florida Energy Code requirements in accordance with Section R402.4.1.2.

SIGNATURE: _____

PRINTED NAME: _____

DATE: 8/22/17

Where required by the code official, testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the third party conducting the test and provided to the code official.

GREAT SEAL OF THE STATE OF FLORIDA
IN GOD WE TRUST

BUILDING OFFICIAL: _____

DATE: _____

Residential System Sizing Calculation

Summary

Green Res

, FL

Project Title:
170951

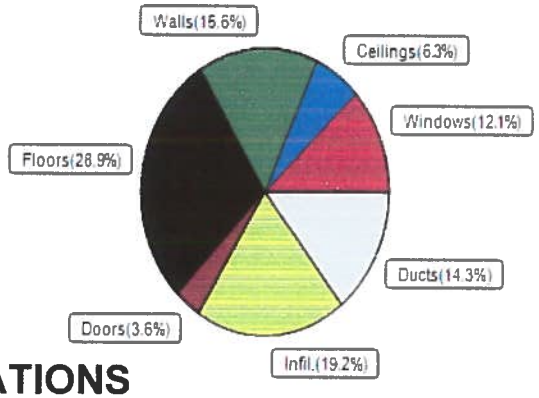
8/14/2017

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(51gr.)					
Winter design temperature(TMY3 99%)	30	F	Summer design temperature(TMY3 99%)	94	F
Winter setpoint	70	F	Summer setpoint	75	F
Winter temperature difference	40	F	Summer temperature difference	19	F
Total heating load calculation	**37776**	**Btuh**	**Total cooling load calculation**	**34771**	**Btuh**
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh
Total (Electric Heat Pump)	119.1	45000	Sensible (SHR = 0.75)	120.7	33750
Heat Pump + Auxiliary(0.0kW)	119.1	45000	Latent	165.5	11250
			Total (Electric Heat Pump)	129.4	45000

WINTER CALCULATIONS

Winter Heating Load (for 2242 sqft)

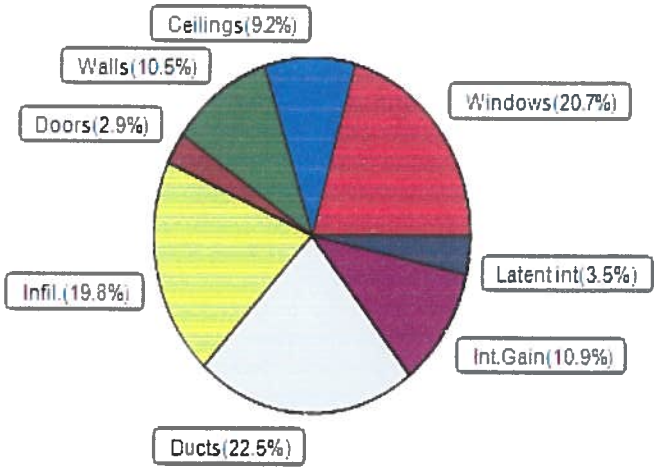
Load component			Load	
Window total	326	sqft	4564	Btuh
Wall total	1665	sqft	5910	Btuh
Door total	84	sqft	1344	Btuh
Ceiling total	2338	sqft	2374	Btuh
Floor total	2242	sqft	10903	Btuh
Infiltration	166	cfm	7263	Btuh
Duct loss			5419	Btuh
Subtotal			**37776**	**Btuh**
Ventilation	0	cfm	0	Btuh
TOTAL HEAT LOSS			**37776**	**Btuh**



SUMMER CALCULATIONS

Summer Cooling Load (for 2242 sqft)

Load component			Load	
Window total	326	sqft	7213	Btuh
Wall total	1665	sqft	3646	Btuh
Door total	84	sqft	1008	Btuh
Ceiling total	2338	sqft	3204	Btuh
Floor total			0	Btuh
Infiltration	124	cfm	2587	Btuh
Internal gain			3780	Btuh
Duct gain			6534	Btuh
Sens. Ventilation	0	cfm	0	Btuh
Blower Load			0	Btuh
Total sensible gain			**27972**	**Btuh**
Latent gain(ducts)			1305	Btuh
Latent gain(infiltration)			4293	Btuh
Latent gain(ventilation)			0	Btuh
Latent gain(internal/occupants/other)			1200	Btuh
Total latent gain			**6798**	**Btuh**
TOTAL HEAT GAIN			**34771**	**Btuh**



Powered by ACCA MANUAL J 8th Edition

EnergyGauge® System Sizing
PREPARED BY: Evan Beamsley
DATE: 2017-08-14

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Green Res
, FL

Project Title:
170951
Building Type: User

8/14/2017

Reference City: Gainesville, FL (Defaults) Winter Temperature Difference: 40.0 F (TMY3 99%)
This calculation is for Worst Case. The house has been rotated 315 degrees.

Component Loads for Whole House

Window	Panes/Type	Frame	U	Orientation	Area(sqft) X	HTM=	Load
1	2, NFRC 0.25	Metal	0.35	N	16.0	14.0	224 Btuh
2	2, NFRC 0.25	Metal	0.35	NW	54.0	14.0	756 Btuh
3	2, NFRC 0.25	Metal	0.35	NE	30.0	14.0	420 Btuh
4	2, NFRC 0.25	Metal	0.35	NW	56.0	14.0	784 Btuh
5	2, NFRC 0.25	Metal	0.35	NW	32.0	14.0	448 Btuh
6	2, NFRC 0.25	Metal	0.35	NE	15.0	14.0	210 Btuh
7	2, NFRC 0.25	Metal	0.35	NE	6.0	14.0	84 Btuh
8	2, NFRC 0.25	Metal	0.35	SE	4.0	14.0	56 Btuh
9	2, NFRC 0.25	Metal	0.35	SE	15.0	14.0	210 Btuh
10	2, NFRC 0.25	Metal	0.35	SE	32.0	14.0	448 Btuh
11	2, NFRC 0.25	Metal	0.35	SE	15.0	14.0	210 Btuh
12	2, NFRC 0.25	Metal	0.35	SW	45.0	14.0	630 Btuh
13	2, NFRC 0.25	Metal	0.35	SW	6.0	14.0	84 Btuh
	Window Total				326.0(sqft)		4564 Btuh

Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area X	HTM=	Load
1	Frame - Wood	- Ext	(0.089)	13.0/0.0	57	3.55	202 Btuh
2	Frame - Wood	- Ext	(0.089)	13.0/0.0	53	3.55	186 Btuh
3	Frame - Wood	- Ext	(0.089)	13.0/0.0	66	3.55	234 Btuh
4	Frame - Wood	- Ext	(0.089)	13.0/0.0	38	3.55	136 Btuh
5	Frame - Wood	- Ext	(0.089)	13.0/0.0	11	3.55	37 Btuh
6	Frame - Wood	- Ext	(0.089)	13.0/0.0	62	3.55	221 Btuh
7	Frame - Wood	- Ext	(0.089)	13.0/0.0	36	3.55	128 Btuh
8	Frame - Wood	- Ext	(0.089)	13.0/0.0	118	3.55	419 Btuh
9	Frame - Wood	- Ext	(0.089)	13.0/0.0	300	3.55	1065 Btuh
10	Frame - Wood	- Ext	(0.089)	13.0/0.0	130	3.55	460 Btuh
11	Frame - Wood	- Ext	(0.089)	13.0/0.0	42	3.55	149 Btuh
12	Frame - Wood	- Ext	(0.089)	13.0/0.0	101	3.55	357 Btuh
13	Frame - Wood	- Adj	(0.089)	13.0/0.0	34	3.55	121 Btuh
14	Frame - Wood	- Adj	(0.089)	13.0/0.0	33	3.55	117 Btuh
15	Frame - Wood	- Adj	(0.089)	13.0/0.0	144	3.55	511 Btuh
16	Frame - Wood	- Ext	(0.089)	13.0/0.0	441	3.55	1566 Btuh
	Wall Total				1665(sqft)		5910 Btuh

Doors	Type	Storm	Ueff.	Area X	HTM=	Load
1	Insulated - Exterior,	n	(0.400)	8	16.0	128 Btuh
2	Insulated - Exterior,	n	(0.400)	24	16.0	384 Btuh
3	Insulated - Exterior,	n	(0.400)	16	16.0	256 Btuh
4	Insulated - Exterior,	n	(0.400)	16	16.0	256 Btuh
5	Insulated - Garage,	n	(0.400)	20	16.0	320 Btuh
	Door Total			84(sqft)		1344Btuh

Ceilings	Type/Color/Surface	Ueff.	R-Value	Area X	HTM=	Load
1	Vented Attic/D/Shing	(0.025)	38.0/0.0	2338	1.0	2374 Btuh
	Ceiling Total			2338(sqft)		2374Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Green Res
, FL

Project Title:
170951
Building Type: User

8/14/2017

Floors	Type	Ueff.	R-Value	Size X	HTM=	Load
1	Slab On Grade	(1.180)	0.0	231.0 ft(perim.)	47.2	10903 Btuh
	Floor Total			2242 sqft		10903 Btuh
				Envelope Subtotal:		25094 Btuh
Infiltration	Type	Wholehouse ACH	Volume(cuft)	Wall Ratio	CFM=	
	Natural	0.49	20178	1.00	165.9	7263 Btuh
Duct load	Average sealed, R6.0, Supply(Att), Return(Att)			(DLM of 0.167)		5419 Btuh
All Zones			**Sensible Subtotal All Zones**			**37776 Btuh**

WHOLE HOUSE TOTALS

Totals for Heating	Subtotal Sensible Heat Loss	37776 Btuh
	Ventilation Sensible Heat Loss	0 Btuh
	Total Heat Loss	37776 Btuh

EQUIPMENT

1. Electric Heat Pump	#	45000 Btuh

Key: Window types - NFRC (Requires U-Factor and Shading coefficient(SHGC) of glass as numerical values)
or - Glass as 'Clear' or 'Tint' (Uses U-Factor and SHGC defaults)
U - (Window U-Factor)
HTM - (ManualJ Heat Transfer Multiplier)

Version 8

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Green Res

Project Title:
170951

, FL

8/14/2017

Reference City: Gainesville, FL Temperature Difference: 19.0F(TMY3 99%) Humidity difference: 51gr.
This calculation is for Worst Case. The house has been rotated 315 degrees.

Component Loads for Whole House

Window	Type*					Overhang		Window Area(sqft)			HTM		Load
	Panes	SHGC	U	InSh	IS	Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded	
1	2 NFRC	0.25,	0.35	No	No	N	19.0f	0.0ft.	16.0	0.0	16.0	12	12	191 Btuh
2	2 NFRC	0.25,	0.35	No	No	NW	14.3f	0.5ft.	54.0	0.0	54.0	12	23	1266 Btuh
3	2 NFRC	0.25,	0.35	No	No	NE	28.8f	0.5ft.	30.0	0.0	30.0	12	23	703 Btuh
4	2 NFRC	0.25,	0.35	No	No	NW	13.2f	0.0ft.	56.0	0.0	56.0	12	23	1313 Btuh
5	2 NFRC	0.25,	0.35	No	No	NW	13.2f	0.0ft.	32.0	0.0	32.0	12	23	750 Btuh
6	2 NFRC	0.25,	0.35	No	No	NE	1.5ft.	1.0ft.	15.0	0.0	15.0	12	23	352 Btuh
7	2 NFRC	0.25,	0.35	No	No	NE	1.5ft.	1.0ft.	6.0	0.0	6.0	12	23	141 Btuh
8	2 NFRC	0.25,	0.35	No	No	SE	1.5ft.	1.0ft.	4.0	2.9	1.1	12	25	61 Btuh
9	2 NFRC	0.25,	0.35	No	No	SE	1.5ft.	1.0ft.	15.0	3.7	11.3	12	25	322 Btuh
10	2 NFRC	0.25,	0.35	No	No	SE	8.3ft.	0.0ft.	32.0	32.0	0.0	12	25	381 Btuh
11	2 NFRC	0.25,	0.35	No	No	SE	8.3ft.	6.0ft.	15.0	15.0	0.0	12	25	179 Btuh
12	2 NFRC	0.25,	0.35	No	No	SW	1.5ft.	1.0ft.	45.0	13.2	31.8	12	25	938 Btuh
13	2 NFRC	0.25,	0.35	No	No	SW	1.5ft.	1.0ft.	6.0	2.9	3.1	12	25	110 Btuh
	Excursion													506 Btuh
	Window Total								326 (sqft)					7213 Btuh

Walls	Type	U-Value	R-Value Cav/Sheath	Area(sqft)	HTM	Load
1	Frame - Wood - Ext	0.09	13.0/0.0	57.0	2.3	129 Btuh
2	Frame - Wood - Ext	0.09	13.0/0.0	52.5	2.3	119 Btuh
3	Frame - Wood - Ext	0.09	13.0/0.0	66.0	2.3	149 Btuh
4	Frame - Wood - Ext	0.09	13.0/0.0	38.3	2.3	87 Btuh
5	Frame - Wood - Ext	0.09	13.0/0.0	10.5	2.3	24 Btuh
6	Frame - Wood - Ext	0.09	13.0/0.0	62.3	2.3	141 Btuh
7	Frame - Wood - Ext	0.09	13.0/0.0	36.0	2.3	81 Btuh
8	Frame - Wood - Ext	0.09	13.0/0.0	118.0	2.3	267 Btuh
9	Frame - Wood - Ext	0.09	13.0/0.0	300.0	2.3	679 Btuh
10	Frame - Wood - Ext	0.09	13.0/0.0	129.5	2.3	293 Btuh
11	Frame - Wood - Ext	0.09	13.0/0.0	42.0	2.3	95 Btuh
12	Frame - Wood - Ext	0.09	13.0/0.0	100.5	2.3	227 Btuh
13	Frame - Wood - Adj	0.09	13.0/0.0	34.0	1.7	57 Btuh
14	Frame - Wood - Adj	0.09	13.0/0.0	33.0	1.7	56 Btuh
15	Frame - Wood - Adj	0.09	13.0/0.0	144.0	1.7	243 Btuh
16	Frame - Wood - Ext	0.09	13.0/0.0	441.0	2.3	998 Btuh
	Wall Total			1665 (sqft)		3646 Btuh

Doors	Type	Area (sqft)	HTM	Load
1	Insulated - Exterior	8.0	12.0	96 Btuh
2	Insulated - Exterior	24.0	12.0	288 Btuh
3	Insulated - Exterior	16.0	12.0	192 Btuh
4	Insulated - Exterior	16.0	12.0	192 Btuh
5	Insulated - Garage	20.0	12.0	240 Btuh
	Door Total	84 (sqft)		1008 Btuh

Ceilings	Type/Color/Surface	U-Value	R-Value	Area(sqft)	HTM	Load
1	Vented Attic/DarkShingle	0.025	38.0/0.0	2338.0	1.37	3204 Btuh
	Ceiling Total			2338 (sqft)		3204 Btuh

Floors	Type	R-Value	Size	HTM	Load
1	Slab On Grade	0.0	2242 (ft-perimeter)	0.0	0 Btuh
	Floor Total		2242.0 (sqft)		0 Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued)

Green Res

, FL

Project Title: 170951

Climate:FL_GAINESVILLE_REGIONAL_A

8/14/2017

				Envelope Subtotal:			15071 Btuh
Infiltration	Type Natural	Average ACH 0.37	Volume(cuft) 20178	Wall Ratio 1	CFM= 124.4	Load 2587	Btuh
Internal gain		Occupants 6	Btuh/occupant X 230	+	Appliance 2400	Load 3780	Btuh
				Sensible Envelope Load:		21438	Btuh
Duct load	Average sealed, Supply(R6.0-Attic), Return(R6.0-Attic)			(DGM of 0.305)		6534	Btuh
				Sensible Load All Zones		**27972**	**Btuh**

Manual J Summer Calculations

Residential Load - Component Details (continued)

Green Res

Project Title: 170951

Climate:FL_GAINESVILLE_REGIONAL_A

, FL

8/14/2017

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	**Sensible Envelope Load All Zones**	**21438 Btuh**
	Sensible Duct Load	6534 Btuh
	Total Sensible Zone Loads	**27972 Btuh**
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	**27972 Btuh**
	Latent infiltration gain (for 51 gr. humidity difference)	4293 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	1305 Btuh
	Latent occupant gain (6.0 people @ 200 Btuh per person)	1200 Btuh
	Latent other gain	0 Btuh
	Latent total gain	**6798 Btuh**
	TOTAL GAIN	**34771 Btuh**

EQUIPMENT

1. Central Unit	#	45000 Btuh

*Key: Window types (Panes - Number and type of panes of glass)
(SHGC - Shading coefficient of glass as SHGC numerical value)
(U - Window U-Factor)
(InSh - Interior shading device: none(No), Blinds(B), Draperies(D) or Roller Shades(R))
- For Blinds: Assume medium color, half closed
For Draperies: Assume medium weave, half closed
For Roller shades: Assume translucent, half closed
(IS - Insect screen: none(N), Full(F) or Half(½))
(Ornt - compass orientation)

Version 8