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:	- Yes
2	All drawings must be clear, concise, drawn to scale, details that are not used shall be marked void	- Yes
3	Condition space (Sq. Ft.) 2277 Sq. Ft. Total (Sq. Ft.) under roof 3267 Sq. Ft.	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	- Yes
5	Dimensions of all building set backs	- Yes
6	Location of all other structures (include square footage of structures) on parcel, existing or proposed well and septic tank and all utility easements.	- Yes/n/a
7	Provide a full legal description of property.	- Yes

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	- Yes
10	(Wind exposure – if more than one wind exposure is used, the wind exposure and applicable wind direction shall be indicated)	- Yes
11	Wind importance factor and nature of occupancy	- Yes
12	The applicable internal pressure coefficient, Components and Cladding	- Yes
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.	- Yes

Elevations Drawing including:

14	All side views of the structure	- Yes
15	Roof pitch	- Yes
16	Overhang dimensions and detail with attic ventilation	- Yes
17	Location, size and height above roof of chimneys	- Yes
18	Location and size of skylights with Florida Product Approval	- n/a
18	Number of stories	- Yes 1.5
20A	Building height from the established grade to the roofs highest peak	- Yes

Floor Plan including:

20	Dimensioned area plan showing rooms, attached garage, breeze ways, covered porches, deck, balconies	- Yes
21	Raised floor surfaces located more than 30 inches above the floor or grade	- Yes
22	All exterior and interior shear walls indicated	- Yes
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.	- Yes
25	Safety glazing of glass where needed	- n/a
26	Fireplaces types (gas appliance) (vented or non-vented) or wood burning with Hearth (see chapter 10 and chapter 24 of FBCR)	- Yes
27	Show stairs with dimensions (width, tread and riser and total run) details of guardrails, Handrails	- Yes
28	Identify accessibility of bathroom (see FBCR SECTION 320)	- Yes

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.	- Yes
30	All posts and/or column footing including size and reinforcing	- Yes
31	Any special support required by soil analysis such as piling.	- Yes
32	Assumed load-bearing valve of soil_____ 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	- n/a

FBCR 506: CONCRETE SLAB ON GRADE

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

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**	- Yes

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	- Yes
38	Show all Lintel sizes, type, spans and tie-beam sizes and spacing of reinforcement	- Yes

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	- Yes

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

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	- Yes
53	Fastener schedule for structural members per table IRC 602.3 are to be shown	- Yes
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	- Yes
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	- Yes
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)	- Yes
57	Indicate where pressure treated wood will be placed	- Yes
58	Show all wall structural panel sheathing, grade, thickness and show fastener schedule for structural panel sheathing edges & intermediate areas	- Yes
59	A detail showing gable truss bracing, wall balloon framing details or/ and wall hinge bracing detail	- Yes

FBCR :ROOF SYSTEMS:

60	Truss design drawing shall meet section FBCR 802.1.6.1 Wood trusses	- Yes
61	Include a layout and truss details, signed and sealed by Florida Professional Engineer	- Yes
62	Show types of connector's assemblies' and resistance uplift rating for all trusses and rafters	- Yes
63	Show gable ends with rake beams showing reinforcement or gable truss and wall bracing details	- Yes
64	Provide dead load rating of trusses	- Yes

FBCR 802:Conventional Roof Framing Layout

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

FBCR 803 ROOF SHEATHING

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

ROOF ASSEMBLIES FRC Chapter 9

71	Include all materials which will make up the roof assembles covering	- Yes
72	Submit Florida Product Approval numbers for each component of the roof assembles covering	- Yes

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	- Yes
74	Attic space	- Yes
75	Exterior wall cavity	- Yes
76	Crawl space	- N/A

HVAC information

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

Plumbing Fixture layout shown

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

Private Potable Water

82	Pump motor horse power	- N/A
83	Reservoir pressure tank gallon capacity	- N/A
84	Rating of cycle stop valve if used	- N/A

Electrical layout shown including

85	Show Switches, receptacles outlets, lighting fixtures and Ceiling fans	- Yes
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**	- Yes
87	Show the location of smoke detectors & Carbon monoxide detectors	- Yes
88	Show service panel, sub-panel, location(s) and total ampere ratings	- Yes
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	- UG
90	Appliances and HVAC equipment and disconnects	- Yes
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.	- Yes

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	yes	
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	yes	
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	yes	
96	**City of Lake City** A City Water and/or Sewer letter. Call 386-752-2031	NO	N/a	
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	n/a	
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.		n/a	
99	A Flood development permit is also required for AE, Floodway & AH. Development permit cost is **$50.00**		N/a	
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	yes	
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	yes	

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.

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 shal 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 permi 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.

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	Masonite	Single hung	FL5965-R9
B. SLIDING			
C. SECTIONAL/ROLL UP	CHI Overhead	Gairige Door	FL12065-R4
D. OTHER	Masonite	Single door w/sidelites	FL17798-R2
2. WINDOWS			
A. SINGLE/DOUBLE HUNG	MI Windows	Single hung	FL17499-R5
B. HORIZONTAL SLIDER			
C. CASEMENT			
D. FIXED			
E. MULLION			
F. SKYLIGHTS			
G. OTHER			
3. PANEL WALL			
A. SIDING	Hardie	plank siding	FL10477 R7
B. SOFFITS			
C. STOREFRONTS			
D. GLASS BLOCK			
E. OTHER			
4. ROOFING PRODUCTS			
A. ASPHALT SHINGLES	Timberline		FL3443-R29
B. NON-STRUCTURAL METAL			
C. ROOFING TILES			
D. SINGLE PLY ROOF			
E. OTHER			
5. STRUCTURAL COMPONENTS			
A. WOOD CONNECTORS	Simpson		FL620-R18
B. WOOD ANCHORS			
C. TRUSS PLATES	Si		
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 10-30-19 Date

NOTES: _____

REVIEWED FOR CODE COMPLIANCE
PROFESSIONAL ENGINEERING SCIENCE, INC.
NOV 20 2019
Larry Hogan SFP 304
EXAMINER – LICENSE NO.

FORM R405-2017

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name:	Lot 43 Rolling Meadows	Builder Name:	Sparks Construction
Street:		Permit Office:	
City, State, Zip:	Lake City , FL ,	Permit Number:	
Owner:		Jurisdiction:	
Design Location:	FL, Gainesville	County:	Columbia (Florida Climate Zone 2)

1. New construction or existing	New (From Plans)	9. Wall Types (2225.0 sqft.)	Insulation	Area
2. Single family or multiple family	Single-family	a. Frame - Wood, Exterior	R=13.0	1850.00 ft²
3. Number of units, if multiple family	1	b. Frame - Wood, Adjacent	R=13.0	375.00 ft²
4. Number of Bedrooms	4	c. N/A	R=	ft²
5. Is this a worst case?	No	d. N/A	R=	ft²
6. Conditioned floor area above grade (ft²)	2277	10. Ceiling Types (2277.0 sqft.)	Insulation	Area
Conditioned floor area below grade (ft²)	0	a. Under Attic (Vented)	R=30.0	2277.00 ft²
7. Windows(243.5 sqft.) Description	Area	b. N/A	R=	ft²
a. U-Factor: Dbl, U=0.33	243.50 ft²	c. N/A	R=	ft²
SHGC: SHGC=0.22		11. Ducts		R ft²
b. U-Factor: N/A	ft²	a. Sup: Attic, Ret: Attic, AH: Garage		6 455.4
SHGC:		12. Cooling systems	kBtu/hr	Efficiency
c. U-Factor: N/A	ft²	a. Central Unit	48.0	SEER:14.00
SHGC:		13. Heating systems	kBtu/hr	Efficiency
d. U-Factor: N/A	ft²	a. Electric Heat Pump	48.0	HSPF:8.50
SHGC:		14. Hot water systems		
Area Weighted Average Overhang Depth:	3.811 ft.	a. Electric		Cap: 40 gallons
Area Weighted Average SHGC:	0.220			EF: 0.920
8. Floor Types (2277.0 sqft.)	Insulation Area	b. Conservation features		
a. Slab-On-Grade Edge Insulation	R=0.0 2277.00 ft²	None		
b. N/A	R= ft²	15. Credits		CF, Pstat
c. N/A	R= ft²			

Glass/Floor Area: 0.107

Total Proposed Modified Loads: 59.16

Total Baseline Loads: 63.79

PASS

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

PREPARED BY:

DATE: 4-9-19

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

OWNER/AGENT:

DATE: 11-20-19

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 R403.3.2.1.

- Compliance requires an Air Barrier and Insulation Inspection Checklist in accordance with R402.4.1.1 and this project requires an envelope leakage test report with envelope leakage no greater than 5.00 ACH50 (R402.4.1.2).

- Compliance with a proposed duct leakage Qn requires a Duct Leakage Test Report confirming duct leakage to outdoors, tested in accordance with ANSI/RESNET/ICC 380, is not greater than 0.030 Qn for whole house.

REVIEWED FOR CODE COMPLIANCE

NOV 20 2019

Larry Hogan SFP 304

EXAMINER – LICENSE NO.

FORM R405-2017

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:	Lot 43 Rolling Meadows	Bedrooms:	4	Address Type:	Lot Information
Building Type:	User	Conditioned Area:	1746	Lot #	43
Owner Name:		Total Stories:	1	Block/Subdivision:	Rolling Meadows
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:	Sparks Construction	Rotate Angle:	0	Street:	
Permit Office:		Cross Ventilation:		County:	Columbia
Jurisdiction:		Whole House Fan:		City, State, Zip:	Lake City , FL ,
Family Type:	Single-family				
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

√	Design Location	TMY Site	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	32	92	70	75	1305.5	51	Medium

BLOCKS

Number	Name	Area	Volume
1	Block1	2277	20493

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	2277	20493	Yes	6	4	1	Yes	Yes	Yes

FLOORS

√	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulatio	Main	240 ft	0	2277 ft²	----	0.33	0.33	0.34

ROOF

√	#	Type	Materials	Roof Area	Gable Area	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
_____	1	Hip	Composition shingles	2847 ft²	0 ft²	Medium	N	0.85	No	0.9	No	0	36.9

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	300	2277 ft²	N	N

CEILING

√	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	Main	30	Blown	2277 ft²	0.11	Wood

INPUT SUMMARY CHECKLIST REPORT

WALLS

√	#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	Width In	Height Ft	Height In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
____	1	N	Exterior	Frame - Wood	Main	13	25	4	9		228.0 ft²	0.625	0.23	0.75	0
____	2	E	Exterior	Frame - Wood	Main	13	12	8	9		114.0 ft²	0.625	0.23	0.75	0
____	3	N	Exterior	Frame - Wood	Main	13	11		10		110.0 ft²	0.625	0.23	0.75	0
____	4	E	Exterior	Frame - Wood	Main	13	2	8	10		26.7 ft²	0.625	0.23	0.75	0
____	5	N	Exterior	Frame - Wood	Main	13	16	4	10		163.3 ft²	0.625	0.23	0.75	0
____	6	W	Exterior	Frame - Wood	Main	13	8		9		72.0 ft²	0.625	0.23	0.75	0
____	7	N	Exterior	Frame - Wood	Main	13	12	4	9		111.0 ft²	0.625	0.23	0.75	0
____	8	E	Exterior	Frame - Wood	Main	13	37		9		333.0 ft²	0.625	0.23	0.75	0
____	9	S	Exterior	Frame - Wood	Main	13	12	4	9		111.0 ft²	0.625	0.23	0.75	0
____	10	W	Exterior	Frame - Wood	Main	13	3		9		27.0 ft²	0.625	0.23	0.75	0
____	11	S	Exterior	Frame - Wood	Main	13	7		10		70.0 ft²	0.625	0.23	0.75	0
____	12	E	Exterior	Frame - Wood	Main	13	3		10		30.0 ft²	0.625	0.23	0.75	0
____	13	S	Exterior	Frame - Wood	Main	13	11	8	10		116.7 ft²	0.625	0.23	0.75	0
____	14	W	Exterior	Frame - Wood	Main	13	4	4	10		43.3 ft²	0.625	0.23	0.75	0
____	15	S	Exterior	Frame - Wood	Main	13	8	8	9		78.0 ft²	0.625	0.23	0.75	0
____	16	N	Exterior	Frame - Wood	Main	13	24		9		216.0 ft²	0.625	0.23	0.75	0
____	17	S	Garage	Frame - Wood	Main	13	41	8	9		375.0 ft²	0.625	0.23	0.75	0

DOORS

√	#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	Width In	Height Ft	Height In	Area
_____	1	N	Insulated	Main	None	.46	6		8		48 ft²
_____	2	S	Insulated	Main	None	.46	5		8		40 ft²
_____	3	S	Insulated	Main	None	.46	3		6	8	20 ft²

WINDOWS

Orientation shown is the entered, Proposed orientation.

√	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
_____	1	N	1	Vinyl	Low-E Double	Yes	0.33	0.22	N	15.0 ft²	1 ft 6 in	1 ft 4 in	None	None
_____	2	N	1	Vinyl	Low-E Double	Yes	0.33	0.22	N	36.0 ft²	1 ft 6 in	1 ft 4 in	None	None
_____	3	E	2	Vinyl	Low-E Double	Yes	0.33	0.22	N	18.0 ft²	1 ft 6 in	1 ft 4 in	None	None
_____	4	N	3	Vinyl	Low-E Double	Yes	0.33	0.22	N	20.0 ft²	6 ft 10 in	1 ft 4 in	None	None
_____	5	N	5	Vinyl	Low-E Double	Yes	0.33	0.22	N	30.0 ft²	9 ft 6 in	1 ft 4 in	None	None
_____	6	N	7	Vinyl	Low-E Double	Yes	0.33	0.22	N	15.0 ft²	1 ft 6 in	1 ft 4 in	None	None
_____	7	E	8	Vinyl	Low-E Double	Yes	0.33	0.22	N	8.0 ft²	1 ft 6 in	1 ft 4 in	None	None
_____	8	S	9	Vinyl	Low-E Double	Yes	0.33	0.22	N	15.0 ft²	1 ft 6 in	1 ft 4 in	None	None
_____	9	S	13	Vinyl	Low-E Double	Yes	0.33	0.22	N	36.0 ft²	7 ft 6 in	1 ft 4 in	None	None
_____	10	S	15	Vinyl	Low-E Double	Yes	0.33	0.22	N	18.0 ft²	1 ft 6 in	1 ft 4 in	None	None
_____	11	N	16	Vinyl	Low-E Double	Yes	0.33	0.22	N	4.5 ft²	1 ft 6 in	1 ft 4 in	None	None
_____	12	N	16	Vinyl	Low-E Double	Yes	0.33	0.22	N	8.0 ft²	1 ft 6 in	1 ft 4 in	None	None
_____	13	N	16	Vinyl	Low-E Double	Yes	0.33	0.22	N	20.0 ft²	1 ft 6 in	1 ft 4 in	None	None

FORM R405-2017

INPUT SUMMARY CHECKLIST REPORT

GARAGE

√	#	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
_____	1	641.811556 ft²	641.811556 ft²	67 ft	9 ft	1

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000286	1707.8	93.75	176.32	.1128	5

HEATING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Block	Ducts
_____	1	Electric Heat Pump/	None	HSPF:8.5	48 kBtu/hr	1	sys#1

COOLING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
_____	1	Central Unit/	None	SEER: 14	48 kBtu/hr	1440 cfm	0.85	1	sys#1

HOT WATER SYSTEM

√	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
_____	1	Electric	None	Garage	0.92	40 gal	70 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	455.4 ft	Attic	113.85	Prop. Leak Free	Garage	--- cfm	68.3 cfm	0.03	0.50	1	1

INPUT SUMMARY CHECKLIST REPORT

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

MASS

Mass Type	Area	Thickness	Furniture Fraction	Space
Default(8 lbs/sq.ft.	0 ft²	0 ft	0.3	Main

Residential System Sizing Calculation

Summary

Project Title:
Lot 43 Rolling Meadows

Lake City, FL

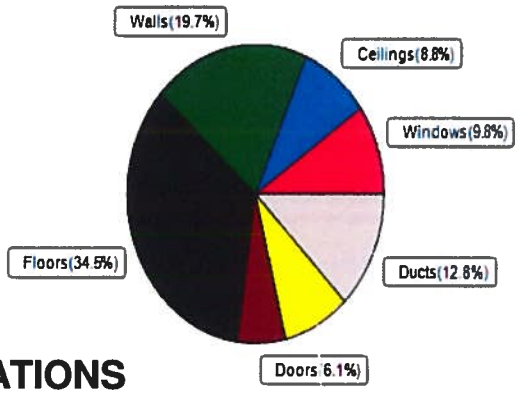
4/9/2019

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	**32787**	**Btuh**		**Total cooling load calculation**	**23116**	**Btuh**	
Submitted heating capacity	% of calc	Btuh		Submitted cooling capacity	% of calc	Btuh	
Total (Electric Heat Pump)	146.4	48000		Sensible (SHR = 0.85)	206.6	40800	
Heat Pump + Auxiliary(0.0kW)	146.4	48000		Latent	213.8	7200	
				Total (Electric Heat Pump)	207.6	48000	

WINTER CALCULATIONS

Winter Heating Load (for 2277 sqft)

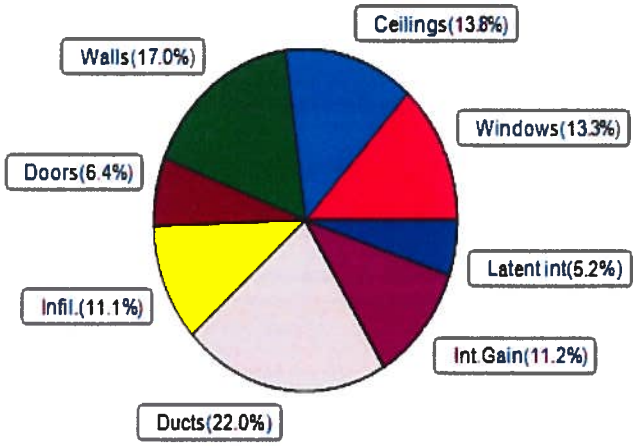
Load component			Load	
Window total	244	sqft	3214	Btuh
Wall total	1873	sqft	6461	Btuh
Door total	108	sqft	1987	Btuh
Ceiling total	2277	sqft	2901	Btuh
Floor total	2277	sqft	11328	Btuh
Infiltration	62	cfm	2699	Btuh
Duct loss			4198	Btuh
Subtotal			**32787**	**Btuh**
Ventilation	0	cfm	0	Btuh
TOTAL HEAT LOSS			**32787**	**Btuh**



SUMMER CALCULATIONS

Summer Cooling Load (for 2277 sqft)

Load component			Load	
Window total	244	sqft	3085	Btuh
Wall total	1873	sqft	3920	Btuh
Door total	108	sqft	1490	Btuh
Ceiling total	2277	sqft	3191	Btuh
Floor total			0	Btuh
Infiltration	46	cfm	961	Btuh
Internal gain			2580	Btuh
Duct gain			4521	Btuh
Sens. Ventilation	0	cfm	0	Btuh
Blower Load			0	Btuh
Total sensible gain			**19748**	**Btuh**
Latent gain(ducts)			573	Btuh
Latent gain(infiltration)			1595	Btuh
Latent gain(ventilation)			0	Btuh
Latent gain(internal/occupants/other)			1200	Btuh
Total latent gain			**3368**	**Btuh**
TOTAL HEAT GAIN			**23116**	**Btuh**



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EnergyGauge® System Sizing
PREPARED BY: _____
DATE: 11-25-19

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Project Title:
Lot 43 Rolling Meadows

Lake City, FL

11/25/2019

Reference City: Gainesville, FL Temperature Difference: 19.0F(TMY3 99%) Humidity difference: 51gr.

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	0.22, 0.33		No	No	N	1.5ft	1.3ft	15.0	0.0	15.0	11	11	163 Btuh
2	2 NFRC	0.22, 0.33		No	No	N	1.5ft	1.3ft	36.0	0.0	36.0	11	11	392 Btuh
3	2 NFRC	0.22, 0.33		No	No	E	1.5ft	1.3ft	18.0	0.0	18.0	11	27	495 Btuh
4	2 NFRC	0.22, 0.33		No	No	N	6.8ft	1.3ft	20.0	0.0	20.0	11	11	218 Btuh
5	2 NFRC	0.22, 0.33		No	No	N	9.5ft	1.3ft	30.0	0.0	30.0	11	11	327 Btuh
6	2 NFRC	0.22, 0.33		No	No	N	1.5ft	1.3ft	15.0	0.0	15.0	11	11	163 Btuh
7	2 NFRC	0.22, 0.33		No	No	E	1.5ft	1.3ft	8.0	0.0	8.0	11	27	220 Btuh
8	2 NFRC	0.22, 0.33		No	No	S	1.5ft	1.3ft	15.0	15.0	0.0	11	13	163 Btuh
9	2 NFRC	0.22, 0.33		No	No	S	7.5ft	1.3ft	36.0	36.0	0.0	11	13	392 Btuh
10	2 NFRC	0.22, 0.33		No	No	S	1.5ft	1.3ft	18.0	18.0	0.0	11	13	196 Btuh
11	2 NFRC	0.22, 0.33		No	No	N	1.5ft	1.3ft	4.5	0.0	4.5	11	11	49 Btuh
12	2 NFRC	0.22, 0.33		No	No	N	1.5ft	1.3ft	8.0	0.0	8.0	11	11	87 Btuh
13	2 NFRC	0.22, 0.33		No	No	N	1.5ft	1.3ft	20.0	0.0	20.0	11	11	218 Btuh
	Window Total								244 (sqft)					3085 Btuh

Walls	Type	U-Value	R-Value Cav/Sheath	Area(sqft)	HTM	Load
1	Frame - Wood - Ext	0.09	13.0/0.6	177.0	2.2	389 Btuh
2	Frame - Wood - Ext	0.09	13.0/0.6	96.0	2.2	211 Btuh
3	Frame - Wood - Ext	0.09	13.0/0.6	90.0	2.2	198 Btuh
4	Frame - Wood - Ext	0.09	13.0/0.6	26.7	2.2	59 Btuh
5	Frame - Wood - Ext	0.09	13.0/0.6	85.3	2.2	188 Btuh
6	Frame - Wood - Ext	0.09	13.0/0.6	72.0	2.2	158 Btuh
7	Frame - Wood - Ext	0.09	13.0/0.6	96.0	2.2	211 Btuh
8	Frame - Wood - Ext	0.09	13.0/0.6	325.0	2.2	714 Btuh
9	Frame - Wood - Ext	0.09	13.0/0.6	96.0	2.2	211 Btuh
10	Frame - Wood - Ext	0.09	13.0/0.6	27.0	2.2	59 Btuh
11	Frame - Wood - Ext	0.09	13.0/0.6	30.0	2.2	66 Btuh
12	Frame - Wood - Ext	0.09	13.0/0.6	30.0	2.2	66 Btuh
13	Frame - Wood - Ext	0.09	13.0/0.6	80.7	2.2	177 Btuh
14	Frame - Wood - Ext	0.09	13.0/0.6	43.3	2.2	95 Btuh
15	Frame - Wood - Ext	0.09	13.0/0.6	60.0	2.2	132 Btuh
16	Frame - Wood - Ext	0.09	13.0/0.6	183.5	2.2	403 Btuh
17	Frame - Wood - Adj	0.09	13.0/0.6	355.0	1.6	581 Btuh
	Wall Total			1873 (sqft)		3920 Btuh

Doors	Type	Area (sqft)	HTM	Load
1	Insulated - Exterior	48.0	13.8	662 Btuh
2	Insulated - Exterior	40.0	13.8	552 Btuh
3	Insulated - Garage	20.0	13.8	276 Btuh
	Door Total	108 (sqft)		1490 Btuh

Ceilings	Type/Color/Surface	U-Value	R-Value	Area(sqft)	HTM	Load
1	Vented Attic/Light/Shingle	0.032	30.0/0.0	2277.0	1.40	3191 Btuh
	Ceiling Total			2277 (sqft)		3191 Btuh

Floors	Type	R-Value	Size	HTM	Load
1	Slab On Grade	0.0	2277 (ft-perimeter)	0.0	0 Btuh
	Floor Total		2277.0 (sqft)		0 Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued)

Project Title: Climate:FL_GAINESVILLE_REGIONAL_A
Lot 43 Rolling Meadows

Lake City, FL

11/25/2019

				Envelope Subtotal:			11686 Btuh
Infiltration	Type	Average ACH	Volume(cuft)	Wall Ratio		CFM=	Load
	Natural	0.14	20493	1		46.2	961 Btuh
Internal gain		Occupants	Btuh/occupant			Appliance	Load
		6	X 230	+		1200	2580 Btuh
				Sensible Envelope Load:			15227 Btuh
Duct load	Extremely sealed, Supply(R6.0-Attic), Return(R6.0-Attic)			(DGM of 0.297)			4521 Btuh
				Sensible Load All Zones			**19748 Btuh**

Manual J Summer Calculations

Residential Load - Component Details (continued)

Project Title: Climate:FL_GAINESVILLE_REGIONAL_A
Lot 43 Rolling Meadows

Lake City, FL

11/25/2019

WHOLE HOUSE TOTALS

	Sensible Envelope Load All Zones	**15227 Btuh**
	Sensible Duct Load	4521 Btuh
	Total Sensible Zone Loads	**19748 Btuh**
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
Whole House	**Total sensible gain**	**19748 Btuh**
Totals for Cooling	Latent infiltration gain (for 51 gr. humidity difference)	1595 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	573 Btuh
	Latent occupant gain (6.0 people @ 200 Btuh per person)	1200 Btuh
	Latent other gain	0 Btuh
	Latent total gain	**3368 Btuh**
	TOTAL GAIN	**23116 Btuh**

EQUIPMENT

1. Central Unit	#	48000 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

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Project Title:
Lot 43 Rolling Meadows
Building Type: User

Lake City, FL

11/25/2019

Reference City: Gainesville, FL (Defaults) Winter Temperature Difference: 40.0 F (TMY3 99%)

Component Loads for Whole House

Window	Panes/Type	Frame	U	Orientation	Area(sqft) X	HTM=	Load
1	2, NFRC 0.22	Vinyl	0.33	N	15.0	13.2	198 Btuh
2	2, NFRC 0.22	Vinyl	0.33	N	36.0	13.2	475 Btuh
3	2, NFRC 0.22	Vinyl	0.33	E	18.0	13.2	238 Btuh
4	2, NFRC 0.22	Vinyl	0.33	N	20.0	13.2	264 Btuh
5	2, NFRC 0.22	Vinyl	0.33	N	30.0	13.2	396 Btuh
6	2, NFRC 0.22	Vinyl	0.33	N	15.0	13.2	198 Btuh
7	2, NFRC 0.22	Vinyl	0.33	E	8.0	13.2	106 Btuh
8	2, NFRC 0.22	Vinyl	0.33	S	15.0	13.2	198 Btuh
9	2, NFRC 0.22	Vinyl	0.33	S	36.0	13.2	475 Btuh
10	2, NFRC 0.22	Vinyl	0.33	S	18.0	13.2	238 Btuh
11	2, NFRC 0.22	Vinyl	0.33	N	4.5	13.2	59 Btuh
12	2, NFRC 0.22	Vinyl	0.33	N	8.0	13.2	106 Btuh
13	2, NFRC 0.22	Vinyl	0.33	N	20.0	13.2	264 Btuh
	Window Total				243.5(sqft)		3214 Btuh

Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area X	HTM=	Load
1	Frame - Wood	- Ext	(0.086)	13.0/0.6	177	3.45	610 Btuh
2	Frame - Wood	- Ext	(0.086)	13.0/0.6	96	3.45	331 Btuh
3	Frame - Wood	- Ext	(0.086)	13.0/0.6	90	3.45	310 Btuh
4	Frame - Wood	- Ext	(0.086)	13.0/0.6	27	3.45	92 Btuh
5	Frame - Wood	- Ext	(0.086)	13.0/0.6	85	3.45	294 Btuh
6	Frame - Wood	- Ext	(0.086)	13.0/0.6	72	3.45	248 Btuh
7	Frame - Wood	- Ext	(0.086)	13.0/0.6	96	3.45	331 Btuh
8	Frame - Wood	- Ext	(0.086)	13.0/0.6	325	3.45	1121 Btuh
9	Frame - Wood	- Ext	(0.086)	13.0/0.6	96	3.45	331 Btuh
10	Frame - Wood	- Ext	(0.086)	13.0/0.6	27	3.45	93 Btuh
11	Frame - Wood	- Ext	(0.086)	13.0/0.6	30	3.45	103 Btuh
12	Frame - Wood	- Ext	(0.086)	13.0/0.6	30	3.45	103 Btuh
13	Frame - Wood	- Ext	(0.086)	13.0/0.6	81	3.45	278 Btuh
14	Frame - Wood	- Ext	(0.086)	13.0/0.6	43	3.45	149 Btuh
15	Frame - Wood	- Ext	(0.086)	13.0/0.6	60	3.45	207 Btuh
16	Frame - Wood	- Ext	(0.086)	13.0/0.6	184	3.45	633 Btuh
17	Frame - Wood	- Adj	(0.086)	13.0/0.6	355	3.45	1224 Btuh
	Wall Total				1874(sqft)		6461 Btuh

Doors	Type	Storm	Ueff.	Area X	HTM=	Load
1	Insulated - Exterior,	n	(0.460)	48	18.4	883 Btuh
2	Insulated - Exterior,	n	(0.460)	40	18.4	736 Btuh
3	Insulated - Garage,	n	(0.460)	20	18.4	368 Btuh
	Door Total			108(sqft)		1987Btuh

Ceilings	Type/Color/Surface	Ueff.	R-Value	Area X	HTM=	Load
1	Vented Attic/L/Shing	(0.032)	30.0/0.0	2277	1.3	2901 Btuh
	Ceiling Total			2277(sqft)		2901Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Project Title:
Lot 43 Rolling Meadows
Building Type: User

Lake City, FL

11/25/2019

Floors	Type	Ueff.	R-Value	Size X	HTM=	Load
1	Slab On Grade	(1.180)	0.0	240.0 ft(perim.)	47.2	11328 Btuh
	Floor Total			2277 sqft		11328 Btuh
				Envelope Subtotal:		25891 Btuh
Infiltration	Type	Wholehouse ACH	Volume(cuft)	Wall Ratio	CFM=	
	Natural	0.18	20493	1.00	61.6	2699 Btuh
Duct load	Extremely sealed, R6.0, Supply(Att), Return(Att)				(DLM of 0.147)	4198 Btuh
All Zones			**Sensible Subtotal All Zones**			**32787 Btuh**

WHOLE HOUSE TOTALS

Totals for Heating	Subtotal Sensible Heat Loss	32787 Btuh
	Ventilation Sensible Heat Loss	0 Btuh
	Total Heat Loss	32787 Btuh

EQUIPMENT

1. Electric Heat Pump	#	48000 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