Columbia County New Building Permit Application

For Office Use Only Application # 43859 Date Received _____ By _____ Permit # 49284

Zoning Official _____ Date _____ Flood Zone _____ Land Use _____ Zoning _____

FEMA Map # _____ Elevation _____ MFE _____ River _____ Plans Examiner _____ Date _____

Comments _____

□ NOC □ EH □ Deed or PA □ Site Plan □ State Road Info □ 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 D □ Sub VF Form

Septic Permit No. 12-SC-2828051 OR City Water ☐ Fax -0-

Applicant (Who will sign/pickup the permit) Gary Thompson Phone 3868675477

Address 3554 256th Street O'Brien FL 32071

Owners Name Byron Ogburn Phone _____

911 Address 5012 SW Pinemount Rd. Lake City FL 3024

Contractors Name Thompson Custom Home builders Phone 386 867 5477

Address 3554 256th Street O'Brien FL 32071

Contact Email Gary Thompsonchb @ outlock.com ***Updates will be sent here

Fee Simple Owner Name & Address N/A

Bonding Co. Name & Address N/A

Architect/Engineer Name & Address RIDGEPOINT DESIGN 566 SW ARLINGTON BLVD STE 101 LAKE CITY, FL 32025

Mortgage Lenders Name & Address N/A

Circle the correct power company – FL Power & Light – Clay Elec. – Suwannee Valley Elec. – (Duke Energy)

Property ID Number 00322-005 Estimated Construction Cost 498,000.00

Subdivision Name -0- Lot ____ Block ____ Unit ____ Phase ____

Construction of New Home ☐ Commercial OR ☑ Residential

Proposed Use/Occupancy _____ Number of Existing Dwellings on Property 1

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

Check Proposed - Culvert Permit ☐ Culvert Waiver ☐ D.O.T. Permit ☐ Have an Existing Drive ☐

Actual Distance of Structure from Property Lines - Front _____ Side _____ Side _____ Rear _____

Number of Stories _____ Heated Floor Area _____ Total Floor Area _____ Acreage _____

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

Columbia County Building Permit Application - "Owner and Contractor Signature Page"

CODES: 2023 Florida Building Code 8th Edition and the 2020 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.

Byron Ogburn
Printed Owners Name

Owners Signature

****Property owners must sign here before any permit will be 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 Signature

Contractor's License Number CRC046869
Columbia County
Competency Card Number

Affirmed and subscribed before me the Contractor by means of ☑ **physical presence or** ☐ **online notarization, this** 11 **day of** January **20**24**, who was personally known** ☐ **or produced ID** ☑ FL

Anna J. Swearengin
State of Florida Notary Signature (For the Contractor)

SEAL:

Notary Public State of Florida
Anna J Swearengin
My Commission HH 415510
Expires 6/27/2027

NOTICE OF COMMENCEMENT

Clerk's Office Stamp

Inst: 202412000812 Date: 01/11/2024 Time: 2:30PM
Page 1 of 1 B: 1506 P: 402, James M Swisher Jr, Clerk of Court
Columbia, County, By: OA
Deputy Clerk

Tax Parcel Identification Number:

S-14 T4S - R15E 00322-005

THE UNDERSIGNED hereby gives notice that improvements will be made to certain real property, and in accordance with Section 713.13 of the Florida Statutes, the following information is provided in this **NOTICE OF COMMENCEMENT.**

1. Description of property *(legal description)*: 34.36 ACRES S-14 T4S-15E-0032-005
   a) Street *(job)* Address: 5012 SW PINEHOUST RD. LAKE CITY FL
2. General description of improvements: S/F DWELLING - NEW CONSTRUCTION
3. Owner Information or Lessee information if the Lessee contracted for the improvements:
   a) Name and address: BYRON OSBORN 5012 SW PINEHOUST RD LAKE CITY, FL
   b) Name and address of fee simple titleholder (if other than owner) N/A
   c) Interest in property FEE SIMPLE
4. Contractor Information
   a) Name and address: GARY W. THOMPSON 3554 256TH ST. O'BRIEN, FL 32071
   b) Telephone No.: (386) 867-5477
5. Surety Information (if applicable, a copy of the payment bond is attached):
   a) Name and address:
   b) Amount of Bond: N/A
   c) Telephone No.:
6. Lender
   a) Name and address: N/A
   b) Phone No.
7. Person 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:
   a) Name and address: —
   b) Telephone No.:
8. In addition to himself or herself, Owner designates the following person to receive a copy of the Lienor's Notice as provided in Section 713.13(l)(b), Florida Statutes:
   a) Name: / OF
   b) Telephone No.:
9. Expiration date of Notice of Commencement (the expiration date will be 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 I, 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 YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK OR RECORDING YOUR NOTICE OF COMMENCEMENT.

STATE OF FLORIDA
COUNTY OF COLUMBIA

10. Gary W Thompson
Signature of Owner or Lessee, or Owner's or Lessee's Authorized Office/Director/Partner/Manager

GARY W. THOMPSON
Printed Name and Signatory's Title/Office

The foregoing instrument was acknowledged before me, a Florida Notary, this 11th day of January 20 24 by:

Gary Anna Swearengin (Name of Person) Notary (Type of Authority) for Gary W. Thompson. (name of party on behalf of whom instrument was executed)

Personally Known ____ OR Produced Identification ✓ Type FL ID

Notary Signature Anna J. Swearengin Notary Stamp or Seal:

Notary Public State of Florida
Anne J Swearengin
My Commission HH 416610
Expires 6/27/2027

Sales Price # 185,000.00
Doc Stamps # 1,295.00

PREPARED BY & RETURN TO:

Name: Jenna Nettles, an employee of Integrity Title Services, LLC
Address: 757 WEST DUVAL STREET
Lake City, FL 32055

File No. 23-01017

Parcel No.: 02-4S-15-00322-005

Inst: 202312002308 Date: 02/10/2023 Time: 9:00AM
Page 1 of 2 B: 1484 P: 1273, James M Swisher Jr, Clerk of Court
Columbia, County, By: VC
Deputy ClerkDoc Stamp-Deed: 1295.00

SPACE ABOVE THIS LINE FOR PROCESSING DATA *SPACE ABOVE THIS LINE FOR RECORDING DATA*

This **WARRANTY DEED**, made the 8th day of February, 2023, by **JAMES W. VINING**, and **GLORIA Q. VINING, INDIVIDUALLY AND AS TRUSTEES OF THE VINING REVOCABLE TRUST AGREEMENT, DATED MAY 5, 2004**, hereinafter called the Grantors, to **BYRON T. OGBURN** and **REBECCA M. OGBURN, HUSBAND AND WIFE**, whose post office address is **10249 SE 161ST AVE, WHITE SPRINGS, FL 32096-2210**, hereinafter called the Grantees:

WITNESSETH: That the Grantors, for and in consideration of the sum of $10.00 and other valuable consideration, receipt whereof is hereby acknowledged, do hereby grant, bargain, sell, alien, remise, release, convey and confirm unto the Grantees all that certain land situate in County of Columbia, State of Florida, viz:

SEE ATTACHED EXHIBIT "A"

TOGETHER WITH all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

SUBJECT TO TAXES FOR THE YEAR 2023 AND SUBSEQUENT YEARS, RESTRICTIONS, RESERVATIONS, COVENANTS AND EASEMENTS OF RECORD, IF ANY.

TO HAVE AND TO HOLD the same in fee simple forever.

And the Grantors hereby covenant with the Grantees that the Grantors are lawfully seized of said land in fee simple, that the Grantors have good right and lawful authority to sell and convey said land and that the Grantors hereby fully warrant the title to said land and will defend the same against the lawful claims of all persons whomsoever. Grantors further warrant that said land is free of all encumbrances, except as noted herein and except taxes accruing subsequent to December 31, 2022.

IN WITNESS WHEREOF, the said Grantors have signed and sealed these presents, the day and year first above written.

Signed, sealed and delivered in the presence of:

Witness Signature
Printed Name: Sonia R Diaz

Witness Signature
Printed Name: Angel M. Pruden

Name: JAMES W. VINING, INDIVIDUALLY AND AS TRUSTEE OF THE VINING REVOCABLE TRUST AGREEMENT, DATED MAY 5, 2004 L.S.
Address: 902 W CIMMERON DRIVE, TAMPA, FL 33603

Name: GLORIA Q. VINING, INDIVIDUALLY AND AS TRUSTEE OF THE VINING REVOCABLE TRUST AGREEMENT, DATED MAY 5, 2004 L.S.
Address: 902 W CIMMERON DRIVE, TAMPA, FL 33603

STATE OF FLORIDA
COUNTY OF Hillsborough

The 7th The foregoing instrument was acknowledged before me by means of ☒ physical presence or ☐ online notarization, this ~~8th~~ day of February, 2023, by JAMES W. VINING and GLORIA Q. VINING, who are personally known to me or who have produced FL Driver License as identification.

ANGEL M. PRUDEN
Notary Public - State of Florida
Commission # HH 056369
My Comm. Expires Feb 5, 2025
Bonded through National Notary Assn.

Signature of Notary
Printed Name: Angel M. Pruden
My commission expires: 02/05/2025

EXHIBIT "A"

PARCEL "A"
A parcel of land lying In the SE 1/4 of the SE 1/4 of Section 2, Township 4 South, Range 15 East, Columbia County, Florida, explicitly described as follows:

Commence at the NE corner of the SE 1/4 of the SE 1/4 of said Section 2 for the POINT OF BEGINNING; thence on the East boundary thereof S 01°06'19" E, a distance of 1275.27 feet to the North Right-of-Way line of SW Pinemount Road; thence on said Right-of-Way line S 88°28'04" W, a distance of 1006.17 feet; thence N 01°06'20" W, a distance of 1276.93 feet to the North boundary of the SE 1/4 of the SE 1/4 of said Section 2; thence on said North boundary N 88°33'46" E, a distance of 1006.17 feet to the POINT OF BEGINNING.

Less and Except lands to the State of Florida in Deed Book 79, page 323.

AND

PARCEL "B"

A parcel of land lying in the SW 1/4 of the SW 1/4 of Section 1, Township 4 South, Range 15 East, Columbia County, Florida, explicitly described as follows:

Commence at the NW corner of the SW 1/4 of the SW 1/4 of said Section 1 for the POINT OF BEGINNING; thence on the North boundary thereof N 88°03'16" E, a distance of 165.12 feet; thence S 01°06'39" E, a distance of 1276.14 feet to the North right-of-way line of SW Pinemount Road; thence on said Right-of-Way line S 88°21'24" W, a distance of 165.24 feet to the West boundary of said Section 1; thence on said West boundary, N 01°06'19" W, a distance of 1275.27 feet to the POINT OF BEGINNING/

Less and Except lands to the State of Florida in Deed Book 79, page 323.

BOARD OF COUNTY COMMISSIONERS • COLUMBIA COUNTY

Address Assignment and Maintenance Document

To maintain compliance with the county's Addressing Policy you must make application for a 9-1-1 Address at the time you apply for a building permit. The standards for addressing and posting numbers to all principal buildings, dwellings, businesses and industries are in accordance with Chapter 102, Article IV of the Columbia County Code of Ordinances. The addressing system better enables Emergency Services and Law Enforcement Agencies to respond in the event of an emergency. This address is also used by the United States Postal Service and delivery services in the timely and efficient provision of services.

Date/Time Issued:	**5/1/2023 2:43:43 PM**
Address:	**5012 SW PINEMOUNT Rd**
City:	**LAKE CITY**
State:	**FL**
Zip Code	**32024**
Parcel ID	**00322-005**

REMARKS: **New address for Habitable structure (family home, business, etc.) on the parcel.**

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.

Address Issued By: SCHOFIELD, LINCOLN C.

Columbia County
Department of Information Technology
135 NE Hernando Ave. Lake City, FL 32055
Telephone 386-719-1456

Columbia County, Florida
Building Department
135 NE Hernando Avenue
Lake City, Florida 32055
Phone: 386-758-1008
www.columbiacountyfla.com

ROOFING UNDERLAYMENT AFFIDAVIT

REQUIRED FOR WALK-IN OR PAPER SUBMITTALS

Job Address: 5012 SW PINEMOUNT RD.

I (Print Name) GARY W. THOMPSON, as a Florida license Roofing Contractor or an Owner Builder, I understand to comply with the 2023 Florida Building Code 8th Edition underlayment requirements, I must select an option for sealing the roof deck.

The options are summarized below...

☑ **a self-adhering polymer-modified bitumen underlayment complying with ASTM D1970 applied over the entire roof.**

☐ **a minimum 4-inch wide strip of selfadhering polymer-modified bitumen complying with ASTM D1970 or a minimum 3 ¾ - inch wide strip of selfadhering flexible flashing tape complying with AAMA 711, applied over all joints in the roof decking. A felt underlayment complying with ASTM D226 Type II, ASTM D4869 Type III or IV, or ASTM D6757, or a synthetic underlayment meeting the performance requirements specified, is required to be applied over the strips/tape over the entire roof.**

☐ **two layers of felt underlayment comply ASTM 0226 Type II or ASTM D4869 Type III or IV, or two layers of a synthetic underlayment meeting the performance requirements specified, lapped and fastened as specified.**

☐ **Other (explain)** _____

Contractor/Owners Signature Gary W. Thompson

FINAL INSPECTION & CERTIFICATE OF COMPLETION:

This completed form and photographs must be uploaded to your permit via online at the Application Submission login (link) Welcome to Columbia County Online (columbiacountyfla.com).

If for a roofing permit, clearly visible in the Photographs must be the permit number or address and must include a ruler or measuring device to confirm nail spacing and overlaps including drip edge and valley flashing. (Not required for additions or New Residential)

Revised 12/2023

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM (OSTDS)

PERMIT NO: 23-0811
DATE PAID: 11-30-23
FEE PAID: 310.00
RECEIPT #: 2024338

APPLICATION FOR CONSTRUCTION PERMIT

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

APPLICANT: BYRON OGBURN EMAIL: NFLSEPTICTANK@COMCAST.NET

AGENT: ROBERT FORD III- NORTH FLORIDA SEPTIC TANK INC TELEPHONE: 386-755-6372

MAILING ADDRESS: 741 SE STATE ROAD 100, LAKE CITY FL 32025

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 OSTDS REMEDIATION PLAN? [Y / N]

LOT: -- BLOCK: --- SUBDIVISION: --- PLATTED: _____

PROPERTY ID #: 02-4S-15-00322-005 ZONING: _____ I/M OR EQUIVALENT: [Y / N]

PROPERTY SIZE: 29.57 ACRES WATER SUPPLY: [X] PRIVATE PUBLIC [ ]<=2000GPD [ ]>2000GPD

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

PROPERTY ADDRESS: 5012 SW PINEMOUNT RD, LAKE CITY FL

DIRECTIONS TO PROPERTY: _____

BUILDING INFORMATION [X] RESIDENTIAL [ ] COMMERCIAL

Unit No.	Type of Establishment	No. of Bedrooms	Building Area Sqft	Commercial/Institutional System Design Table I, Chapter 62-6, FAC
1	HOME	3	2796	
2				
3				
4				

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

SIGNATURE: Robert Ford III DATE: 11-28-2023

DEP 4015, 06-21-2022 (Obsoletes previous editions which may not be used)
Incorporated 62-6.004, FAC

STATE OF FLORIDA
DEPARTMENT OF HEALTH
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM

PERMIT #: 12-SC-2828051
APPLICATION #: AP2024338
DATE PAID: 11.30.23
FEE PAID: 310.00
RECEIPT #:
DOCUMENT #: PR2033995

CONSTRUCTION PERMIT FOR: OSTDS New

APPLICANT: BYRON**23-0811 OGBURN

PROPERTY ADDRESS: 5012 SW PINEMOUNT Lake City, FL 32024

LOT: _____ BLOCK: _____ SUBDIVISION: _____

PROPERTY ID #: 00322-005 [SECTION, TOWNSHIP, RANGE, PARCEL NUMBER] [OR TAX ID NUMBER]

SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH SPECIFICATIONS AND STANDARDS OF SECTION 381.0065, F.S., AND CHAPTER 64E-6, F.A.C. DEPARTMENT APPROVAL OF SYSTEM DOES NOT GUARANTEE SATISFACTORY PERFORMANCE FOR ANY SPECIFIC PERIOD OF TIME. ANY CHANGE IN MATERIAL FACTS, WHICH SERVED AS A BASIS FOR ISSUANCE OF THIS PERMIT, REQUIRE THE APPLICANT TO MODIFY THE PERMIT APPLICATION. SUCH MODIFICATIONS MAY RESULT IN THIS PERMIT BEING MADE NULL AND VOID. ISSUANCE OF THIS PERMIT DOES NOT EXEMPT THE APPLICANT FROM COMPLIANCE WITH OTHER FEDERAL, STATE, OR LOCAL PERMITTING REQUIRED FOR DEVELOPMENT OF THIS PROPERTY.

SYSTEM DESIGN AND SPECIFICATIONS

T [1,050] GALLONS / GPD New Multi-Chambered CAPACITY
A [ ] GALLONS / GPD N/A CAPACITY
N [ ] GALLONS GREASE INTERCEPTOR CAPACITY [MAXIMUM CAPACITY SINGLE TANK:1250 GALLONS]
K [ ] GALLONS DOSING TANK CAPACITY [ ]GALLONS @[ ]DOSES PER 24 HRS #Pumps [ ]

D [500] SQUARE FEET Drainfield SYSTEM
R [ ] SQUARE FEET N/A SYSTEM
A TYPE SYSTEM: [x] STANDARD [ ] FILLED [ ] MOUND [ ] _____
I CONFIGURATION: [x] TRENCH [ ] BED [ ] _____
N
F LOCATION OF BENCHMARK: 4" post west of site
I ELEVATION OF PROPOSED SYSTEM SITE [24.00] [INCHES / FT] [ABOVE / BELOW] BENCHMARK/REFERENCE POINT
E BOTTOM OF DRAINFIELD TO BE [54.00] [INCHES / FT] [ABOVE / BELOW] BENCHMARK/REFERENCE POINT
L
D FILL REQUIRED: [0.00] INCHES EXCAVATION REQUIRED: [ ] INCHES

O T H E R: The system is sized for 3 bedrooms with a maximum occupancy of 6 persons (2 per bedroom), for a total estimated flow of 400 gpd.

SPECIFICATIONS BY: Robert Ford TITLE: Master Contractor

APPROVED BY: Sean P Havens TITLE: Environmental Specialist I Columbia CHD

DATE ISSUED: 12/13/2023 EXPIRATION DATE: 06/13/2025

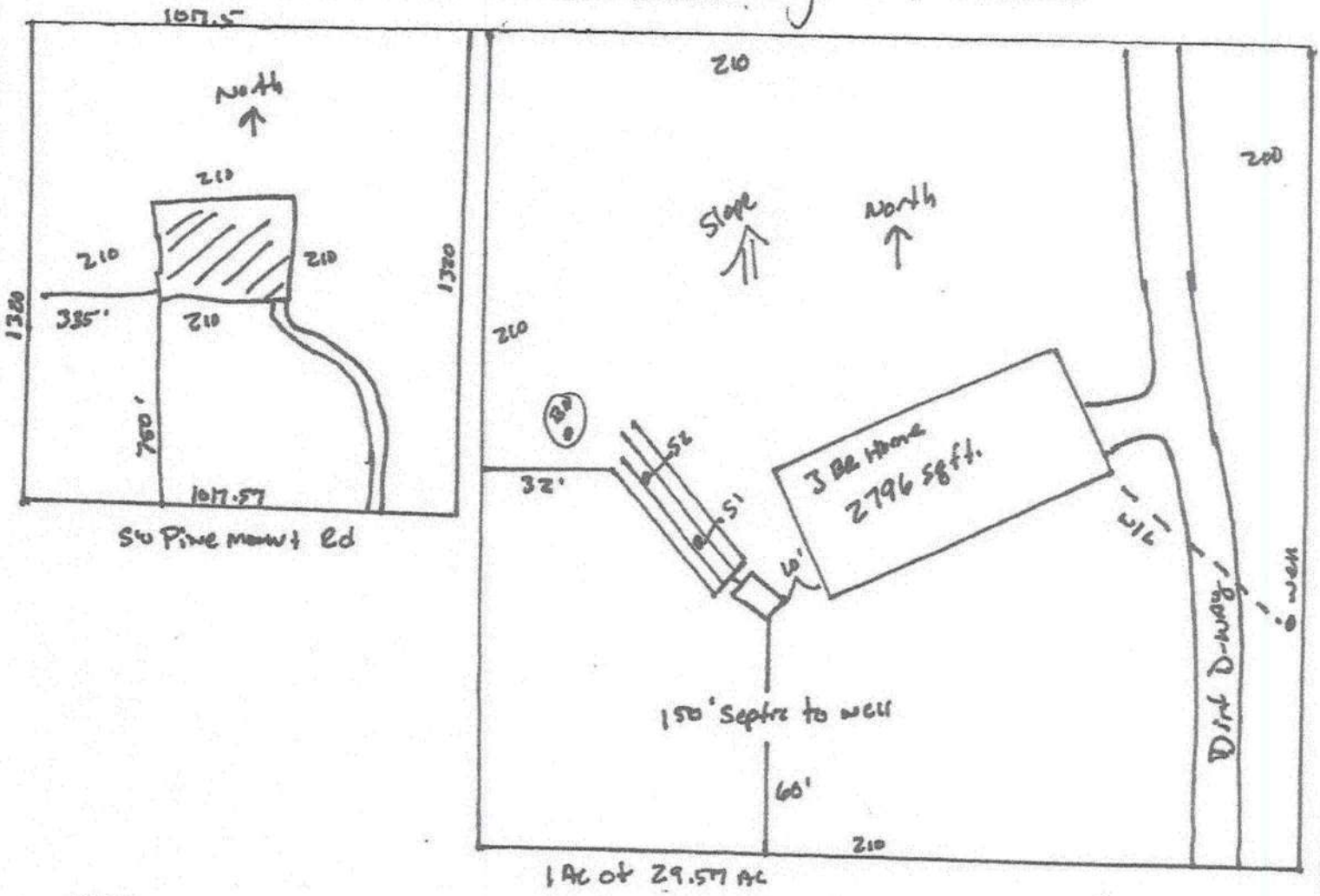
DEP 4015, 06-21-2022 (Obsoletes previous editions which may not be used)
Incorporated 62-6.004, FAC

v 1.1.4 AP2024338 SE1933307

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
APPLICATION FOR CONSTRUCTION PERMIT

1" = 40' Permit Application Number 23-0811

PART II - SITEPLAN Ogburn



Notes: _____

Site Plan submitted by: Robert Ford 999 Date: 11-28-2023

Plan Approved ✓ Not Approved _____ Date 12/01/23

By _____ ES2 Columbia County Health Department

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT

DEP 4015, 06-21-2022 (Obsoletes previous editions which may not be used)
Incorporated: 62-6.004, F.A.C.

COLUMBIA COUNTY BUILDING DEPARTMENT
RESIDENTIAL CHECK LIST

MINIMUM PLAN REQUIREMENTS: FLORIDA BUILDING CODE RESIDENTIAL 2023 EFFECTIVE 1 JANUARY 2024 AND THE NATIONAL ELECTRICAL 2020 EFFECTIVE 1 JANUARY 2024

ALL REQUIREMENTS ARE SUBJECT TO CHANGE

ALL BUILDING PLANS MUST INDICATE COMPLIANCE WITH THE CURRENT FLORIDA BUILDING CODES RESIDENTIAL AND THE NATIONAL ELECTRICAL CODE. 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, FBC 1609.1 THRU 1609.6.

FOR DESIGN PURPOSES THE FOLLOWING BASIC WIND SPEEDS ARE PER FLORIDA BUILDING CODE FIGURE 1609.3(1) THROUGH 1609.3(4) ULTIMATE DESIGN WIND SPEEDS FOR RISK CATEGORY AND BUILDINGS AND OTHER STRUCTURES Revised 7/1/20

Submit Online at- http://www.columbiacountyfla.com/BuildingandZoning.asp

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL			Items to Include- Each Box shall be Circled as Applicable Select From Drop down		
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.) 2796	Total (Sq. Ft.) under roof 4060		Yes	No	NA

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 BUILDING 107.1.

Site Plan information including:

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

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

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable		
8	**Plans or specifications must show compliance with FBCR Chapter 3**	Yes	No	NA

		Select From Drop down		
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	-		✓
19	Number of stories	- ✓		
20	Building height from the established grade to the roofs highest peak	- ✓		

Floor Plan Including:

21	Dimensioned area plan showing rooms, attached garage, breeze ways, covered porches, deck, balconies	- ✓		
22	Raised floor surfaces located more than 30 inches above the floor or grade	-		✓
23	All exterior and interior shear walls indicated	- ✓		
24	Shear wall opening shown (Windows, Doors and Garage doors)	- ✓		
25	Show compliance with Section FBCR 310 Emergency escape and rescue opening shown in each bedroom (net clear opening shown) and Show compliance with Section FBCR 312.2.1 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.	- ✓		
26	Safety glazing of glass where needed	-		
27	Fireplaces types (gas appliance) (vented or non-vented) or wood burning with Hearth (see chapter 10 and chapter 24 of FBCR)	✓ -		
28	Show stairs with dimensions (width, tread and riser and total run) details of guardrails, Handrails	- ✓		
29	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 Circled as Applicable

FBCR 403: Foundation Plans

Select From Drop down

30	Location of all load-bearing walls footings indicated as standard, monolithic, dimensions, size and type of reinforcing.	- ✓		
31	All posts and/or column footing including size and reinforcing	- ✓		
32	Any special support required by soil analysis such as piling.	-		✓
33	Assumed load-bearing valve of soil 1500 Pound Per Square Foot	-		
34	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

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

FBCR 318: PROTECTION AGAINST TERMITES

37	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)

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

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

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

FBCR CHAPTER 6 WOOD WALL FRAMING CONSTRUCTION

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable		
		Select from Drop down		
53	Stud type, grade, size, wall height and oc spacing for all load bearing or shear walls	- ✓		
54	Fastener schedule for structural members per table FBC 2304.10.1 are to be shown	- ✓		
55	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	- ✓		
56	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	- ✓		
57	Show sizes, type, span lengths and required number of support jack studs, king studs for shear wall opening and girder or header per FBC 2304.3.	- ✓		
58	Indicate where pressure treated wood will be placed	- ✓		
59	Show all wall structural panel sheathing, grade, thickness and show fastener schedule for structural panel sheathing edges & intermediate areas	- ✓		
60	A detail showing gable truss bracing, wall balloon framing details or/and wall hinge bracing detail	- ✓		

FBC :ROOF SYSTEMS:

61	Truss design drawing shall meet section FBC 2303.1 Wood trusses	- ✓		
62	Include a layout and truss details, signed and sealed by Florida Professional Engineer	- ✓		
63	Show types of connector's assemblies' and resistance uplift rating for all trusses and rafters	- ✓		
64	Show gable ends with rake beams showing reinforcement or gable truss and wall bracing details	- ✓		
65	Provide dead load rating of trusses	- ✓		

FBC 2304.4:Conventional Roof Framing Layout

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

FBC 2304.8 ROOF SHEATHING

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

ROOF ASSEMBLIES FRC Chapter 9

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

FBC Energy Chapter 4

Residential construction shall comply with this code by using the following compliance methods in the FBC Chapter 4, 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.*

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable			
		Select from Drop Down			
74	Show the insulation R value for the following areas of the structure	-	✓		
75	Attic space	-	✓		
76	Exterior wall cavity	-	✓		
77	Crawl space	-			✓

HVAC information

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

Plumbing Fixture layout shown

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

Private Potable Water

83	Pump motor horse power	-			
84	Reservoir pressure tank gallon capacity	-			
85	Rating of cycle stop valve if used	-			

Electrical layout shown including

86	Show Switches, receptacles outlets, lighting fixtures and Ceiling fans	-	✓		
87	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**	-	✓		
88	Show the location of smoke detectors & Carbon monoxide detectors	-	✓		
89	Show service panel, sub-panel, location(s) and total ampere ratings	-	✓		
90	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	-	✓		
91	Appliances and HVAC equipment and disconnects	-	✓		
92	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.	-	✓		

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 performed.

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

****ITEMS 95, 96, & 98 Are Required After APPROVAL from the ZONING DEPT.****

Select from Drop down

93	**Building Permit Application** A current Building Permit Application is to be completed, by following the Checklist all supporting documents must be submitted.	- ✓		
94	**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	- ✓		
95	**Environmental Health Permit or Sewer Tap Approval** A copy of a approved Columbia County Environmental Health (386) 758-1058	- ✓		
96	**City of Lake City** A City Water and/or Sewer letter. Call 386-752-2031	-		✓
97	**Toilet facilities shall be provided for all construction sites**	- ✓		
98	**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.	-		✓
99	**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 (Municode.com)	-		✓
100	**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.	-		✓
101	A Flood development permit is also required for AE, Floodway & AH. Development permit cost is **$50.00**	-		
102	**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.	-		✓
103	**911 Address:** An application for a 911address must be applied for and **received** through the Columbia County Office of 911 Addressing Department online.	-		✓

Ordinance Sec. 90-75. - Construction debris. (e) It shall be unlawful for any person to dispose of or discard solid waste, including construction or demolition debris at any place within the county other than on an authorized disposal site or at the county's solid waste facilities. The temporary storage, not to exceed seven days of solid waste (excluding construction and demolition debris) on the premises where generated or vegetative trash pending disposition as authorized by law or ordinance, shall not be deemed a violation of this section. The temporary storage of construction and demolition debris on the premises where generated or vegetative trash pending disposition as authorized by law or ordinance shall not be deemed in violation of this section; provided, however, such construction and demolition debris must be disposed of in accordance with this article prior to the county's issuance of a certificate of occupancy for the premises. The burning of lumber from a construction or demolition project or vegetative trash when done so with legal and proper permits from the authorized agencies and in accordance with such agencies' rules and regulations, shall not be deemed a violation of this section. No person shall bury, throw, place, or deposit, or cause to be buried, thrown, placed, or deposited, any solid waste, special waste, or debris of any kind into or on any of the public streets, road right-of-way, highways, bridges, alleys, lanes, thoroughfares, waters, canals, or vacant lots or lands within the county. No person shall bury any vegetative trash on any of the public streets, road right-of-way, highways, bridges, lanes, thoroughfares, waters, canals, or lots less than ten acres in size within the county.

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	PLAST PRO	FBRGLS 6panel glass insert	FL. 17184. 11
B. SLIDING			
C. SECTIONAL/ROLL UP			
D. OTHER			
2. WINDOWS			
A. SINGLE/DOUBLE HUNG	YKK	STYLEVIEW SH	FL. 8114
B. HORIZONTAL SLIDER			
C. CASEMENT			
D. FIXED			
E. MULLION			
F. SKYLIGHTS			
G. OTHER			
3. PANEL WALL			
A. SIDING	HARDI-PLANK HARDIE	LAP SIDING	FL. 13192.1 FL. 13265.1
B. SOFFITS			
C. STOREFRONTS			
D. GLASS BLOCK			
E. OTHER			
4. ROOFING PRODUCTS			
A. ASPHALT SHINGLES	ATLAS	AR DEMINSIONAL	FL. 9792-R4
B. NON-STRUCT METAL			
C. ROOFING TILES			
D. SINGLE PLY ROOF			
E. OTHER			
5. STRUCT COMPONENTS			
A. WOOD CONNECTORS	SIMPSON	H10A2	10446.5
B. WOOD ANCHORS		H2.5A2	10456.2
C. TRUSS PLATES		SPH6	10456.12
D. INSULATION FORMS			
E. LINTELS			
F. OTHERS			
6. NEW EXTERIOR			
ENVELOPE PRODUCTS	TYVEK	HOUSE WRAP	FL 20876.2-R2

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.

Mary N Thompson
Contractor or Owner Signature

NOTES: _____

RESIDENTIAL ENERGY CONSERVATION CODE DOCUMENTATION CHECKLIST

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

Applications for compliance with the 2023 Florida Building Code, Energy Conservation via the Residential Simulated Performance Alternative shall include:

- ☑ *This checklist*
- ☑ *Form R405-2023 report*
- ☑ *Input summary checklist that can be used for field verification (usually four pages/may be greater)*
- ☑ *Energy Performance Level (EPL) Display Card (one page)*
- ☑ *HVAC system sizing and selection based on ACCA Manual S or per exceptions provided in Section R403.7*
- ☑ *Mandatory Requirements (five pages)*

Required prior to CO:

- ☑ *Air Barrier and Insulation Inspection Component Criteria checklist (Table R402.4.1.1 - one page)*
- ☑ *A completed 2023 Envelope Leakage Test Report (usually one page); exception in R402.4 allows dwelling units of R-2 Occupancies and multiple attached single family dwellings to comply with Section C402.5*
- N/A *If Form R405 duct leakage type indicates anything other than "default leakage", then a completed 2023 Duct Leakage Test Report - Performance Method (usually one page)*

2023 - AIR BARRIER AND INSULATION INSPECTION COMPONENT CRITERIA-TABLE 402.4.1.1[a]

Project Name:	Ogburn Residence	Builder Name:	
Street:	5012 SW Pine Mount Rd	Permit Office:	Columbia County
City, State, Zip:	Lake City, FL, 32024	Permit Number:	
Owner:	Ogburn Residence	Jurisdiction:	221000
Design Location:	FL, Jacksonville	County:	Columbia(Florida Climate Zone 2)

COMPONENT	AIR BARRIER CRITERIA	INSULATION INSTALLATION CRITERIA	CHECK
General requirements	A continuous air barrier shall be installed in the building envelope. The exterior thermal envelope contains a continuous air 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.	The insulation in any dropped ceiling/soffit shall be aligned with the air barrier.	
Walls	The junction of the foundation and sill plate shall be sealed. The junction of the top plate and the top of exterior walls shall be sealed. Knee walls shall be sealed.	Cavities within corners and headers of frame walls shall be insulated by completely filling the cavity with a material having a thermal resistance of R-3 per inch minimum Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier.	
Windows, skylights and doors	The space between window/door jambs and framing, and skylights and framing shall be sealed.		
Rim joists	Rim joists shall include the air barrier.	Rim joists shall be insulated.	
Floors (including above-garage and cantilevered floors)	The air barrier shall be installed at any exposed edge of insulation.	Floor framing cavity insulation shall be installed to maintain permanent contact with the underside of subfloor decking, or floor framing cavity insulation shall be permitted to be in contact with the top side of sheathing, or continuous insulation installed on the underside of floor framing and extends from the bottom to the top of all perimeter floor framing members.	
Crawl space walls	Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.	Where provided instead of floor insulation, insulation shall be permanently attached to the crawlspace walls.	
Shafts, penetrations	Duct shafts, utility penetrations, and flue shafts opening 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 sealed to the finished surface.	Recessed light fixtures installed in the building thermal envelope shall be air tight and IC rated.	
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	The air barrier installed at exterior walls adjacent to showers and tubs shall separate them from the showers and tubs.	Exterior walls adjacent to showers and tubs shall be insulated.	
Electrical, communication, and other equipment boxes, housings, and enclosures	Boxes, housings, and enclosures that penetrate the air barrier shall be caulked, taped, gasketed, or otherwise sealed to the air barrier element being penetrated. All concealed openings into the box, housing, or enclosure shall be sealed. The continuity of the air barrier shall be maintained around boxes, housings, and enclosures that penetrate the air barrier. Alternatively, air-sealed boxes shall be installed in accordance with R402.4.6	Boxes, housings, and enclosures shall be buried in or surrounded by tightly fitted insulation.	
HVAC register boots	HVAC supply and return register boots that penetrate building thermal envelope shall be sealed to the sub-floor, wall covering or ceiling penetrated by the boot.		
Concealed sprinklers	When required to be sealed, concealed fire sprinklers shall only be sealed in a manner that is recommended by the manufacturer. Caulking or other adhesive sealants shall not be used to fill voids voids between fire sprinkler cover plates and walls or ceilings.		

a. In addition, inspection of log walls shall be in accordance with the provisions of ICC-400.

FORM R405-2023

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 93

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

5012 SW Pine Mount Rd,Lake City,FL,32024

1. New construction or existing		New (From Plans)
2. Single family or multiple family		Detached
3. Number of units, if multiple family		1
4. Number of Bedrooms		3
5. Is this a worst case?		No
6. Conditioned floor area above grade (ft²)		2796
Conditioned floor area below grade (ft²)		0

7. Windows**	Description	Area
a. U-Factor:	Dbl, U=0.35	393.56 ft²
SHGC:	SHGC=0.27	
b. U-Factor:	N/A	ft²
SHGC:		
c. U-Factor:	N/A	ft²
SHGC:		
Area Weighted Average Overhang Depth:		5.588 ft
Area Weighted Average SHGC:		0.270

8. Skylights	Description	Area
U-Factor:(AVG)	N/A	N/A ft²
SHGC(AVG):	N/A	

9. Floor Types	Insulation	Area
a. Slab-On-Grade Edge Insulation	R= 0.0	2472.00 ft²
b. Floor over Garage	R= 19.0	324.00 ft²
c. N/A	R=	ft²

10. Wall Types(3387.1 sqft.)	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	2883.10 ft²
b. Frame - Wood, Adjacent	R=13.0	504.00 ft²
c. N/A		
d. N/A		

11. Ceiling Types(2796.0 sqft.)	Insulation	Area
a. Flat ceiling under att (Vented)	R=30.0	2796.00 ft²
b. N/A		
c. N/A		

12. Roof(Comp. Shingles, Vented)	Deck R=0.0	3640 ft²
13. Ducts, location & insulation level	R	ft²
a. Sup: Attic, Ret: Attic, AH: Bonus Roo	6	559
b.		
c.		

14. Cooling Systems	kBtu/hr	Efficiency
a. Central Unit	56.5	SEER2:16.00

15. Heating Systems	kBtu/hr	Efficiency
a. Electric Heat Pump	56.5	HSPF2:8.10

16. Hot Water Systems	
a. Electric	Cap: 50 gallons
	EF: 0.950
b. Conservation features	None
17. Credits	CF

Columbia County Building Department — Reviewed for — File Copy — Code Compliance — Plans Examiner

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

Builder Signature: _____ Date: _____

Address of New Home: 5012 SW Pine Mount Rd City/FL Zip: Lake City,FL,32024

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

*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 Energy Rating. 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.

Air Ducts Sizing

Total measured length of ducts	20
Total equivalent length of fittings	15
Available static pressure for duct	.34
Friction rate	.05

Use cooling CFM
Flex ducts used

	CFM	No. outlets	Outlet CFM	Duct diam.	Air vel.
Supply trunk / branch					
First section off AHU	400			12.4	476
1st reduction / branch	300			11.1	444
2nd reduction / branch	200			9.5	402
3rd reduction / branch	150			8.6	375
4th reduction / branch	100			7.3	340
5th reduction / branch	50			5.6	287
Return trunk / branch					
First section off AHU	400			12.4	476
1st reduction / branch	300			11.1	444
2nd reduction / branch	200			9.5	402
3rd reduction / branch	150			8.6	375
4th reduction / branch	100			7.3	340
5th reduction / branch	50			5.6	287
Room runs					
Bonus Room	400	4	100	7.3	340

Room by Room

Total Heat Loss	4148	System CFM (cooling)	400
Total Heat Gain	4824	System CFM (heating)	400

Room name	Bonus Room
Gross wall	530.64
North windows	
NE/NW windows	
South windows	
SE/SW windows	15
East windows	
West windows	
Skylight	
Doors	
Net walls	516
Ceiling	324
Floor-crawl	
Floor-open	324
Floor-slab	
Infiltration	15
People	
Appliances	1200
Heat loss	4148
Sensible Heat Gain	4824
Cooling CFM	400
Heating CFM	400

9. Load Calculation

Elements of Load	Insulation / R-value	Area/lin.ft.	U-value	Heat Loss	Heat Gain
Gross Wall		530.64	Glass solar gain		840
Glass 1	Trpl or low-E	15	0.42	227	
Glass 2	-- Select --			0	
Skylight	-- Select --	0		0	
Doors	-- Select --			0	0
Net walls	R-13	516	0.077	1429	873
Ceilings	R-30	324	0.033	385	481
Floors	-- Select --			0	0
Open floors	R-19	324	0.055	642	392
Slab floors	-- Select --			0	0
Volume of your building or zone (cu. Ft.)		2592		1198	366
		People			0
		Appliances			1000
		Sub Total		3880	3953
		Duct Loss/Gain		268	639
		Sensible Load		4148	4592
		Latent Load			617
		TOTAL BTUH		4148	5208

Summary		
	BTUH	Tons
Total heating load	4148	
Total cooling load	5208	0.4

7. Solar gain through glass

Facing	Total area - Sq.Ft.	Type of glass	HTM	Linear ft.	Unshaded	Shaded	BTUH
N/Shaded		-- Select --		Below OH		0	
NE/NW		-- Select --			0		0
South		-- Select --			0	0	0
SE/SW	15	Trpl or low-E	56		15	0	840
East		-- Select --	0.0		0	0	0
West		-- Select --	0.0		0	0	0
Skylight		-- Select --					0
Total North and Shaded						0	0
Total Solar Gain							840
Adjust for tinted or reflective window coating?				No	1		840

8. Ducts/Pipes

Location:	Radial or spider in attic				
Attic Temp.	Insulation		Leakage		Area
130	R-6	1	sealed	1	324

Duct gain:	0.162	Duct loss:	0.069

EMS Heat Loss/Heat Gain Calculation

Company:	Green Engineering Solutions, Inc.
Preparer:	Misty Miller CER #1493
Phone:	904-400-0624

Customer:	Ogburn Residence Bonus Room
Address:	5012 SW Pine Mount Rd Lake City, FL 32024
Phone:	
Date:	12/28/2023

This HVAC load calculation has been performed using sound engineering principles as prescribed by Manual J seventh and eighth abridged editions and ASHRAE Fundamentals. Duct sizing has been performed as prescribed by Manual D.

1. Design Conditions

Total conditioned area (sq.ft.)	324

	Indoor	**Outdoor**	**Temp. Diff.**
Winter	70	34	36
Summer	73	95	22

Front of home is facing:
South East

2. How would you describe the summer humidity in your area? Very Humid 60 Grains difference

3. How tight is the house? Average-over 1500 Sq. Ft.
Winter air change / hr: 0.7 Summer air change / hr: 0.35

4. Fireplace evaluation : Number: None Tightness: No fireplace 0

5. Number of occupants:

6. Overhang characteristics (optional)

	East	**West**	**S/SE/SW**
Distance of overhang from top of window (Ft.)			
Length of overhang			

Equipment selection as per Manual S

	BTUH	Nom.Tons
Total heat loss	45047	
Total heat gain	53103	4.4
Sensible heat gain	45389	
Latent heat gain	7714	
Sensible/total ratio	0.85	
Target cooling TD	17	

Design temp.	Outdoor	Indoor
Winter	34	70
Summer	95	73
ID design RH	50%, 63F WB	
Altitude		

Predominantly Cool climate

Manufacturer's Equipment Specification

Equipment	Manufacturer	Model No.	BTUH output	Clg. capacity @ OD design temp.		
Furnace						
Boiler				Total	Sensible	Latent
Heat pump / AC	Carrier	25TPA760A		56500	45200	11300
Evaporator						
Air handler	Carrier	FV4CNB006L				
TOTAL CAPACITY with altitude correction			0	56500	45200	11300
Selected equipment size			OK	OK	OK	OK

AHRI # 207863630
SEER2: 16 / HSPF2: 8.1

Heating CFM	Cooling CFM (rec.)	Ext. static pressure of blower
1600	2417	.5

Available static pressure for duct

Blower ext. static press.	.5
coil pressure drop	
filter pressure drop	.1
register pressure drop	.03
grille pressure drop	.03
other	
Available SP for duct	0.34

Supplemental heat needed for heat pump

HP capacity @ 47F	58000
HP capacity @ 17F	36800
HP capacity @ ODDT	48813
BTUH supplemental heat	-3766
KW supplemental heat	-1

Air Ducts Sizing

Total measured length of ducts	65	Use cooling CFM	
Total equivalent length of fittings	36	Flex ducts used	
Available static pressure for duct	.34		
Friction rate	.05		

	CFM	No. outlets	Outlet CFM	Duct diam.	Air vel.
Supply trunk / branch					
First section off AHU	1600			21	667
1st reduction / branch	1200			18.8	622
2nd reduction / branch	900			16.9	580
3rd reduction / branch	600			14.5	526
4th reduction / branch	300			11.1	444
5th reduction / branch	100			7.3	340
Return trunk / branch					
First section off AHU	1600			21	667
1st reduction / branch	1200			18.8	622
2nd reduction / branch	900			16.9	580
3rd reduction / branch	600			14.5	526
4th reduction / branch	300			11.1	444
5th reduction / branch	100			7.3	340
Room runs					
Foyer	103	1	103	7.4	342.5
Dining Room	123	1	123	7.9	357.6
Pantry	44	1	44	5.4	278.5
Kitchen	111	1	111	7.6	348.7
Stairwell	17	1	17	3.8	221
Hall/Laundry	110	1	110	7.6	348
Master Closet	21	1	21	4.1	232.7
Master Bath	133	1	133	8.2	364.4
Master Bedroom	245	2	122.5	7.9	357.2
Living Room	322	3	107.3	7.5	345.9
Bedroom 2	122	1	122	7.9	356.8
Bathroom 2	58	1	58	6	297.9
Bathroom 3	22	1	22	4.1	235.3
Bedroom 3	170	1	170	9	386.8

Net walls	208	202	47	243
Ceiling	309	72	101	203
Floor-crawl				
Floor-open				
Floor-slab	25.08	24.17	5.67	31
Infiltration	18	16	4	36
People	1			1
Appliances	500			500
Heat loss	2852	2356	683	3998
Sensible Heat Gain	3460	1630	610	4804
Cooling CFM	122	58	22	170
Heating CFM	105	87	25	148

Room by Room

Total Heat Loss	43261	System CFM (cooling)	1600
Total Heat Gain	45311	System CFM (heating)	1600

Room name	Foyer	Dining Room	Pantry	Kitchen	Stairwell	Hall/Laundry	Master Closet	Master Bath	Master Bedroom	Living Room
Gross wall	167.11	170	153	236.7	198.39	169.47	190.53	259.47	295.47	208.3
North windows										
NE/NW windows				16				43	24	96
South windows										
SE/SW windows	24	36	10			20			36	
East windows										
West windows										
Skylight										
Doors	48					20				
Net walls	95	134	143	221	198	129	191	216	235	112
Ceiling	108	143	70	244	43	187	112	188	269	423
Floor-crawl										
Floor-open										
Floor-slab	9.83	17	17	23.67	11.67	18.83	21.17	28.83	32.83	20.83
Infiltration	72	36	10	16	0	40	0	43	60	96
People									2	
Appliances	0			900		500			500	1200
Heat loss	3888	3127	1634	2651	1050	3111	1424	4209	5436	6843
Sensible Heat Gain	2927	3474	1243	3131	496	3103	606	3767	6937	9124
Cooling CFM	103	123	44	111	17	110	21	133	245	322
Heating CFM	144	116	60	98	39	115	53	156	201	253

Room name	Bedroom 2	Bathroom 2	Bathroom 3	Bedroom 3
Gross wall	225.72	217.53	51.03	279
North windows				
NE/NW windows		15.56		
South windows				
SE/SW windows	18		4	36
East windows				
West windows				
Skylight				
Doors				

9. Load Calculation

Elements of Load	Insulation / R-value	Area/lin.ft.	U-value	Heat Loss	Heat Gain
Gross Wall		2821.8	Glass solar gain		19254
Glass 1	Trpl or low-E	379	0.42	5724	
Glass 2	-- Select --			0	
Skylight	-- Select --	0		0	
Doors	-- Select --			0	0
Net walls	R-13	2443	0.077	6773	4139
Ceilings	R-30	2472	0.033	2937	3671
Floors	-- Select --			0	0
Open floors	-- Select --			0	0
Slab floors	No Insulation	287.58	0.8	8282	0
Volume of your building or zone (cu. Ft.)		25958		12785	3664
		People			1200
		Appliances			1000
		Sub Total		36500	32928
		Duct Loss/Gain		4399	7870
		Sensible Load		40899	40797
		Latent Load			7098
		TOTAL BTUH		40899	47895

Summary		
	BTUH	Tons
Total heating load	40899	
Total cooling load	47895	4

7. Solar gain through glass

Facing	Total area - Sq.Ft.	Type of glass	HTM	Linear ft.	Unshaded	Shaded	BTUH
N/Shaded		-- Select --		Below OH		0	
NE/NW	194.56	Trpl or low-E	46		195		8950
South		-- Select --			0	0	0
SE/SW	184	Trpl or low-E	56		184	0	10304
East		-- Select --	0.0		0	0	0
West		-- Select --	0.0		0	0	0
Skylight		-- Select --					0
Total North and Shaded						0	0
Total Solar Gain							19254
Adjust for tinted or reflective window coating?				No	1		19254

8. Ducts/Pipes

Location:	Radial or spider in attic				
Attic Temp.	Insulation		Leakage		Area
130	R-6	1	sealed	1	2472

Duct gain:	0.239	Duct loss:	0.121

EMS Heat Loss/Heat Gain Calculation

Company:	Green Engineering Solutions, Inc.
Preparer:	Misty Miller CER #1493
Phone:	904-400-0624

Customer:	Ogburn Residence
Address:	5012 SW Pine Mount Rd Lake City, FL 32024
Phone:	
Date:	12/28/2023

This HVAC load calculation has been performed using sound engineering principles as prescribed by Manual J seventh and eighth abridged editions and ASHRAE Fundamentals. Duct sizing has been performed as prescribed by Manual D.

1. Design Conditions

Total conditioned area (sq.ft.)	2472		
	Indoor	**Outdoor**	**Temp. Diff.**
Winter	70	34	36
Summer	73	95	22

Front of home is facing:
South East

2. How would you describe the summer humidity in your area? Very Humid 60 Grains difference

3. How tight is the house? Average-over 1500 Sq. Ft.
Winter air change / hr: 0.7 Summer air change / hr: 0.35

4. Fireplace evaluation : Number: 1 Tightness: Average 20

5. Number of occupants: 4

6. Overhang characteristics (optional)

	East	**West**	**S/SE/SW**
Distance of overhang from top of window (Ft.)			
Length of overhang			

Florida Building Code, Energy Conservation, 8th Edition (2023)
Mandatory Requirements for Residential Performance, Prescriptive and ERI Methods

ADDRESS:	5012 SW Pine Mount Rd Lake City, FL 32024	Permit Number:

MANDATORY REQUIREMENTS - See individual code sections for full details.

SECTION R401 GENERAL

☑ **R401.3 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 Statutes) 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 code compliance for the building. A copy of the EPL display card can be found in Appendix RD.

SECTION R402 BUILDING THERMAL ENVELOPE

☑ **R402.2.10.1 Slab-on-grade floor insulation installation (Mandatory).** Where installed, the insulation shall extend downward from the top of the slab on the outside or inside of the foundation wall. Insulation located below grade shall be extended the distance provided in Table R402.1.2, or the distance of the proposed design as applicable, by any combination of vertical insulation, insulation extending under the slab or insulation extending out from the building. Insulation extending away from the building shall be protected by pavement or by not less than 10 inches (254 mm) of soil. The top edge of the insulation installed between the exterior wall and the edge of the interior slab shall be permitted to be cut at a 45-degree (0.79 rad) angle away from the exterior wall.

☑ **R402.2.11.1 Crawl space walls insulation installation (Mandatory).** Where crawl space wall insulation is installed, it shall be permanently fastened to the wall and extend downward from the floor to the finished grade level and then vertically and/or horizontally for at least an additional 24 inches (610 mm). Exposed earth in unvented crawl space foundations shall be covered with a continuous Class I vapor retarder in accordance with the Florida Building Code, Building, or Florida Building Code, Residential, as applicable. All joints of the vapor retarder shall overlap by 6 inches (153 mm) and be sealed or taped. The edges of the vapor retarder shall extend not less than 6 inches (153 mm) up the stem wall and shall be attached to the stem wall.

☑ **R402.4 Air leakage (Mandatory).** The building thermal envelope shall be constructed to limit air leakage in accordance with the requirements of Sections R402.4.1 through R402.4.5.

> **Exception:** Dwelling units of R-2 Occupancies and multiple attached single family dwellings shall be permitted to comply with Section C402.5.

☐ **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 R402.4.1.1, 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 not exceeding seven air changes per hour in Climate Zones 1 and 2, and three air changes per hour in Climate Zones 3 through 8. Dwelling units with an air leakage rate less than three air changes per hour shall be provided with whole-house mechanical ventilation in accordance with Section R403.6.1 of this code and Section M1507.3 of the Florida Building Code, Residential. Testing shall be conducted in accordance with ANSI/RESNET/ICC 380 and reported at a pressure of 0.2 inch w.g. (50 pascals). Testing shall be conducted by either individuals as defined in Section 553.993(5) or (7), Florida Statutes, or individuals licensed as set forth in Section 489.105(3)(f), (g) or (i) or 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.

> **Exception:** Testing is not required for additions, alterations, renovations, or repairs, of the building thermal envelope of existing buildings in which the new construction is less than 85 percent 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.
6. Supply and return registers, if installed at the time of the test, shall be fully open.
7. If an attic is both air sealed and insulated at the roof deck, interior access doors and hatches between the conditioned space volume and the attic shall be opened during the test and the volume of the attic shall be added to the conditioned space volume for purposes of reporting an infiltration volume and calculating the air leakage of the home.

Florida Building Code, Energy Conservation, Mandatory Requirements (2023 Continued)

☐ **R402.4.2 Fireplaces.** New wood-burning fireplaces shall have tight-fitting flue dampers or doors, and outdoor combustion air. Where using tight-fitting doors on factory-built fireplaces listed and labeled in accordance with UL 127, the doors shall be tested and listed for the fireplace. Where using tight-fitting doors on masonry fireplaces, the doors shall be listed and labeled in accordance with UL 907.

☐ **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 Rooms containing fuel - burning appliances.** In Climate Zones 3 through 8, where open combustion air ducts provide combustion air to open combustion fuel burning appliances, the appliances and combustion air opening shall be located outside the building thermal envelope or enclosed in a room, isolated from inside the thermal envelope. Such rooms shall be sealed and insulated in accordance with the envelope requirements of Table R402.1.2, where the walls, floors and ceilings shall meet not less than the basement wall R-value requirement. The door into the room shall be fully gasketed and any water lines and ducts in the room insulated in accordance with Section R403. The combustion air duct shall be insulated where it passes through conditioned space to a minimum of R-8.

Exceptions:

1. Direct vent appliances with both intake and exhaust pipes installed continuous to the outside.
2. Fireplaces and stoves complying with Section R402.4.2 and Section R1006 of the Florida Building Code, Residential.

☐ **R402.4.5 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 E283 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.

☐ **R402.4.6 Air-sealed electrical and communication boxes.** Air-sealed electrical and communication boxes that penetrate the air barrier of the building thermal envelope shall be caulked, taped, gasketed, or otherwise sealed to the air barrier element being penetrated. Air-sealed boxes shall be buried in or surrounded by insulation. Air-sealed boxes shall be marked in accordance with NEMA OS 4. Air-sealed boxes shall be installed in accordance with the manufacturer's instructions.

SECTION R403 SYSTEMS

R403.1 Controls

☑ **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 with supplementary electric-resistance heaters shall have controls that limit supplemental heat operation to only those times when one of the following applies:

1. The vapor compression cycle cannot provide the necessary heating energy to satisfy the thermostat setting.
2. The heat pump is operating in defrost mode.
3. The vapor compression cycle malfunctions.
4. The thermostat malfunctions

☑ **R403.3.2 Sealing (Mandatory).** All ducts, air handlers, filter boxes and building cavities that form the primary air containment passageways for air distribution systems shall be considered ducts or plenum chambers, shall be constructed and sealed in accordance with Section C403.2.9.2 of the Commercial Provisions of this code and shall be shown to meet duct tightness criteria below.

Duct tightness shall be verified by testing in accordance with ANSI/RESNET/ICC 380 by either individuals as defined in Section 553.993(5) or (7), Florida Statutes, or individuals licensed as set forth in Section 489.105(3)(f), (g) or (i), Florida Statutes, to be "substantially leak free" in accordance with Section R403.3.3.

☐ **R403.3.2.1 Sealed air handler.** Air handlers shall have a manufacturer's designation for an air leakage of no more than 2 percent of the design airflow rate when tested in accordance with ASHRAE 193.

☑ **R403.3.3 Duct testing (Mandatory).** Ducts shall be pressure tested to determine air leakage by one of the following methods:

1. Rough-in test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the system, including the manufacturer's air handler enclosure if installed at the time of the test. All registers shall be taped or otherwise sealed during the test.

2 Postconstruction test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. Registers shall be taped or otherwise sealed during the test.

Exceptions;

1. A duct air leakage test shall not be required where the ducts and air handlers are located entirely within the building thermal envelope.
2. Duct testing is not mandatory for buildings complying by Section 405 of this code. Duct leakage testing is required for Section R405 compliance where credit is taken for leakage, and a duct air leakage Qn to the outside of less than 0.080 (where Qn = duct leakage to the outside in cfm per 100 square feet of conditioned floor area tested at 25 Pascals) is indicated in the compliance report for the proposed design.

A written report of the results of the test shall be signed by the party conducting the test and provided to the code official

Florida Building Code, Energy Conservation, Mandatory Requirements (2023 Continued)

☑ **R403.3.5 Building cavities (Mandatory).** Building framing cavities shall not be used as ducts or plenums

☑ **R403.4 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.

☐ **R403.4.1 Protection of piping insulation.** Piping insulation exposed to weather shall be protected from damage, including that caused by sunlight, moisture, equipment maintenance and wind, and shall provide shielding from solar radiation that can cause degradation of the material. Adhesive tape shall not be permitted.

☑ **R403.5.1 Heated water circulation and temperature maintenance systems (Mandatory).** If heated water circulation systems are installed, they shall be in accordance with Section R403.5.1.1. Heat trace temperature maintenance systems shall be in accordance with Section R403.5.1.2. Automatic controls, temperature sensors and pumps shall be accessible. Manual controls shall be readily accessible.

☐ **R403.5.1.1 Circulation systems.** Heated water circulation systems shall be provided with a circulation pump. The system return pipe shall be a dedicated return pipe or a cold water supply pipe. Gravity and thermosiphon circulation systems shall be prohibited. Controls for circulating hot water system pumps shall start the pump based on the identification of a demand for hot water within the occupancy. The controls shall automatically turn off the pump when the water in the circulation loop is at the desired temperature and when there is no demand for hot water.

☐ **R403.5.1.2 Heat trace systems.** Electric heat trace systems shall comply with IEEE 515.1 or UL 515. Controls for such systems shall automatically adjust the energy input to the heat tracing to maintain the desired water temperature in the piping in accordance with the times when heated water is used in the occupancy.

☑ **R403.5.2 Demand recirculation water systems (Mandatory).** Where installed, demand recirculation water systems shall have controls that comply with both of the following:

1. The control shall start the pump upon receiving a signal from the action of a user of a fixture or appliance, sensing the presence of a user of a fixture or sensing the flow of hot or tempered water to a fixture fitting or appliance.
2. The control shall limit the temperature of the water entering the cold water piping to 104°F (40°C).

☑ **R403.5.5 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.

☑ **R403.5.6 Water heater efficiencies (Mandatory).**

R403.5.6.1.1 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).

☐ **R403.5.6.1.2 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.

☐ **R403.5.6.2 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 meet the criteria of Section R403.5.6.2.1.

☐ **R403.5.6.2.1 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.

☑ **R403.6 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 including: Natural, Infiltration or Mechanical means. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.

Florida Building Code, Energy Conservation, Mandatory Requirements (2023 Continued)

☐ **R403.6.1 Whole-house mechanical ventilation system fan efficacy.** When installed to function as a whole-house mechanical ventilation system, fans shall meet the efficacy requirements of Table R403.6.1.

Exception: Where an air handler that is integral to tested and listed HVAC equipment is used to provide whole-house mechanical ventilation, the air handler shall be powered by an electronically commutated motor.

TABLE R403.6.1
WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM FAN EFFICACY

FAN LOCATION	AIRFLOW RATE MINIMUM (CFM)	MINIMUM EFFICACY[a] (CFM/WATT)	AIRFLOW RATE MAXIMUM (CFM)
HRV or ERV	Any	1.2 cfm/watt	Any
Range hoods	Any	2.8 cfm/watt	Any
In-line fan	Any	3.8 cfm/watt	Any
Bathroom, utility room	10	2.8 cfm/watt	<90
Bathroom, utility room	90	3.5 cfm/watt	Any

For SI: 1 cfm = 28.3 L/min. a. When tested in accordance with HVI Standard 916

☐ **R403.6.2 Ventilation Air.** Residential buildings designed to be operated at a positive indoor pressure or for mechanical ventilation shall meet the following criteria:

1. The design air change per hour minimums for residential buildings in ASHRAE 62.2, Ventilation for Acceptable Indoor Air Quality, shall be the maximum rates allowed for residential applications.

2. No ventilation or air-conditioning system make-up air shall be provided to conditioned space from attics, crawlspaces, attached enclosed garages or outdoor spaces adjacent to swimming pools or spas.

3. If ventilation air is drawn from enclosed space(s), then the walls of the space(s) from which air is drawn shall be insulated to a minimum of R-11 and the ceiling shall be insulated to a minimum of R-19, space permitting, or R-10 otherwise.

R403.7 Heating and cooling equipment.

☑ **R403.7.1 Equipment sizing (Mandatory).** 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 that affect equipment sizing. System sizing calculations shall not include loads created by local intermittent mechanical ventilation such as standard kitchen and bathroom exhaust systems. New or replacement heating and cooling equipment shall have an efficiency rating equal to or greater than the minimum required by federal law for the geographic location where the equipment is installed.

Florida Building Code, Energy Conservation, Mandatory Requirements (2023 Continued)

☐ **R403.7.1.1 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 R403.7, 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.
The published value for AHRI total capacity is a nominal, rating-test value and shall not be used for equipment sizing. Manufacturer's expanded performance data 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 temperatures 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 multiple-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 multiple-family units, the capacity of equipment may be sized in accordance with good design practice.

R403.7.1.2 Heating equipment capacity.

☐ **R403.7.1.2.1 Heat pumps.** Heat pump sizing shall be based on the cooling requirements as calculated according to Section R403.7.1.1, and the heat pump total cooling capacity shall not be more than 1.15 times greater than the design cooling load even if the design heating load is 1.15 times greater than the design cooling load.

☐ **R403.7.1.2.2 Electric resistance furnaces.** Electric resistance furnaces shall be sized within 4 kW of the design requirements calculated according to the procedure selected in Section R403.7.1.

☐ **R403.7.1.2.3 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 R403.7.1.

☐ **R403.7.1.3 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.

☐ **R403.8 Systems serving multiple dwelling units (Mandatory).** Systems serving multiple dwelling units shall comply with Sections C403 and C404 of the Florida Building Code, Energy Conservation—Commercial Provisions in lieu of Section R403.

☐ **R403.9 Snow melt and ice 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 50°F (10°C), and no precipitation is falling and an automatic or manual control that will allow shutoff when the outdoor temperature is above 40°F (4.8°C).

☐ **403.10 Pools and permanent spa energy consumption (Mandatory).** The energy consumption of pools and permanent spas shall be in accordance with Sections R403.10.1 through R403.10.5.

☐ **R403.10.1 Heaters.** The electric power to heaters shall be controlled by a readily accessible on-off switch that is an integral part of the heater mounted on the exterior of the heater, or external to and within 3 feet (914 mm) of the heater. Operation of such switch shall not change the setting of the heater thermostat. Such switches shall be in addition to a circuit breaker for the power to the heater.
Gas-fired heaters shall not be equipped with continuously burning ignition pilots.

☐ **R403.10.2 Time switches.** Time switches or other control methods that can automatically turn off and on according to a preset schedule shall be installed for heaters and pump motors. Heaters and pump motors that have built-in time switches shall be in compliance with this section.

Exceptions:

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

Florida Building Code, Energy Conservation, Mandatory Requirements (2023 Continued)

☐ **R403.10.3 Covers.** Outdoor heated swimming pools and outdoor permanent 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: Where more than 70 percent of the energy for heating, computed over an operation season, is from site-recovered energy, such as from a heat pump or solar energy source, covers or other vapor-retardant means shall not be required

☐ **R403.10.4 Gas- and oil-fired pool and spa heaters.** All gas- and oil-fired pool and spa 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 or LP gas shall not have continuously burning pilot lights.

☐ **R403.10.5 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.

☐ **R403.11 Portable spas (Mandatory).** The energy consumption of electric-powered portable spas shall be controlled by the requirements of APSP-14

☑ **R403.13 Dehumidifiers (Mandatory).** If installed, a dehumidifier shall conform to the following requirements:

1. The minimum rated efficiency of the dehumidifier shall be greater than 1.7 liters/ kWh if the total dehumidifier capacity for the house is less than 75 pints/day and greater than 2.38 liters/kWh if the total dehumidifier capacity for the house is greater than or equal to 75 pints/day.
2. The dehumidifier shall be controlled by a sensor that is installed in a location where it is exposed to mixed house air.
3. Any dehumidifier unit located in unconditioned space that treats air from conditioned space shall be insulated to a minimum of R-2.
4. Condensate disposal shall be in accordance with Section M1411.3.1 of the Florida Building Code, Residential.

☐ **R403.13.1 Ducted dehumidifiers.** Ducted dehumidifiers shall, in addition to conforming to the requirements of Section R403.13, conform to the following requirements:

1. If a ducted dehumidifier is configured with return and supply ducts both connected into the supply side of the cooling system, a backdraft damper shall be installed in the supply air duct between the dehumidifier inlet and outlet duct.
2. If a ducted dehumidifier is configured with only its supply duct connected into the supply side of the central heating and cooling system, a backdraft damper shall be installed in the dehumidifier supply duct between the dehumidifier and central supply duct.
3. A ducted dehumidifier shall not be ducted to or from a central ducted cooling system on the return duct side upstream from the central cooling evaporator coil.
4. Ductwork associated with a dehumidifier located in unconditioned space shall be insulated to a minimum of R-6.

SECTION R404
ELECTRICAL POWER AND LIGHTING SYSTEMS

☑ **R404.1 Lighting equipment (Mandatory).** All permanently installed luminaires, excluding those in kitchen appliances, shall have an efficacy of at least 45 lumens-per-watt or shall utilize lamps with an efficacy of not less than 65 lumens-per-watt.

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

SECTION R405
SIMULATED PERFORMANCE ALTERNATIVE
(PERFORMANCE)

☐ **R405.2 Mandatory requirements.** Compliance with this section requires that the mandatory provisions identified in Section R401.2 be met. All supply and return ducts not completely inside the building thermal envelope shall be insulated to a minimum of R-6, except site-wrapped supply ducts not completely inside the building thermal envelope shall be insulated to a minimum of R-8.

☐ **R405.2.1 Ceiling insulation.** Ceilings shall have an insulation level of at least R-19, space permitting. For the purposes of this code, types of ceiling construction that are considered to have inadequate space to install R-19 include single assembly ceilings of the exposed deck and beam type and concrete deck roofs. Such ceiling assemblies shall be insulated to at least a level of R-10.

☐ **R405.2.2 Building air leakage testing.** Building or dwelling air leakage testing shall be in accordance with Sections R402.4 through R402.4.1.2. If an air leakage rate below seven air changes per hour at a pressure of 0.2 inch w.g. (50 pascals) is specified for the proposed design, testing shall verify the air leakage rate does not exceed the air leakage rate of the proposed design instead of seven air changes per hour.

☐ **R405.2.3 Duct air leakage testing.** In cases where duct air leakage lower than the default Qn to outside of 0.080 (where Qn = duct leakage to the outside in cfm per 100 square feet of conditioned floor area tested at 25 Pascals) is specified for the proposed design, testing in accordance with Section R403.3.2 shall verify a duct air leakage rate not exceeding the leakage rate of the proposed design. Otherwise, in accordance with Section R403.3.3, duct testing is not mandatory for buildings complying by Section R405.

SECTION R406
ENERGY RATING INDEX
COMPLIANCE ALTERNATIVE

☐ **R406.2 Mandatory requirements.** Compliance with this section requires that the provisions identified in Sections R401 through R404 labeled as "mandatory" and Section R403.5.3 of the 2015 International Energy Conservation Code be met. For buildings that do not utilize on-site renewable power production for compliance with this section, the building thermal envelope shall be greater than or equal to levels of efficiency and Solar Heat Gain Coefficient in Table 402.1.1 or 402.1.3 of the 2009 International Energy Conservation Code. For buildings that utilize on-site renewable power production for compliance with this section, the building thermal envelope shall be greater than or equal to levels of efficiency and Solar Heat Gain Coefficient in Table R402.1.2 or Table R402.1.4 of the 2015 International Energy Conservation Code.

Exception: Supply and return ducts not completely inside the building thermal envelope shall be insulated to a minimum of R-6.

☐ **R406.2.1 Site-wrapped supply ducts.** Site-wrapped supply ducts not completely inside the building thermal envelope shall be insulated to a minimum of R-8.

FORM R405-2023

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name:	Ogburn Residence	Builder Name:	
Street:	5012 SW Pine Mount Rd	Permit Office:	Columbia County
City, State, Zip:	Lake City, FL, 32024	Permit Number:	
Owner:	Ogburn Residence	Jurisdiction:	221000
Design Location:	FL, Jacksonville	County:	Columbia(Florida Climate Zone 2)

1. New construction or existing	New (From Plans)
2. Single family or multiple family	Detached
3. Number of units, if multiple family	1
4. Number of Bedrooms	3
5. Is this a worst case?	No
6. Conditioned floor area above grade (ft²)	2796
Conditioned floor area below grade (ft²)	0

7. Windows(393.6 sqft.)	Description	Area
a. U-Factor:	Dbl, U=0.35	393.56 ft²
SHGC:	SHGC=0.27	
b. U-Factor:	N/A	ft²
SHGC:		
c. U-Factor:	N/A	ft²
SHGC:		
Area Weighted Average Overhang Depth:		5.588 ft
Area Weighted Average SHGC:		0.270

8. Skylights	Description	Area
U-Factor:(AVG)	N/A	N/A ft²
SHGC(AVG):	N/A	

9. Floor Types	Insulation	Area
a. Slab-On-Grade Edge Insulation	R= 0.0	2472.00 ft²
b. Floor over Garage	R= 19.0	324.00 ft²
c. N/A	R=	ft²

10. Wall Types(3387.1 sqft.)	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	2883.10 ft²
b. Frame - Wood, Adjacent	R=13.0	504.00 ft²
c. N/A		
d. N/A		

11. Ceiling Types(2796.0 sqft.)	Insulation	Area
a. Flat ceiling under att (Vented)	R=30.0	2796.00 ft²
b. N/A		
c. N/A		

12. Roof(Comp. Shingles, Vented)	Deck R=0.0	3640 ft²

13. Ducts, location & insulation level	R	ft²
a. Sup: Attic, Ret: Attic, AH: Bonus Roo	6	559
b.		
c.		

14. Cooling Systems	kBtu/hr	Efficiency
a. Central Unit	56.5	SEER2:16.00

15. Heating Systems	kBtu/hr	Efficiency
a. Electric Heat Pump	56.5	HSPF2:8.10

16. Hot Water Systems	
a. Electric	Cap: 50 gallons
	EF: 0.950
b. Conservation features	
	None
17. Credits	CF

Glass/Floor Area: 0.141

Total Proposed Modified Loads: 74.38

Total Baseline Loads: 80.25

PASS

NOTE: Proposed residence must have annual total normalized Modified Loads that are less than or equal to 95 percent of the annual total loads of the standard reference design in order to comply.

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

Misty Miller

PREPARED BY: Misty Miller

DATE: 12/28/2023

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

OWNER/AGENT: _____

DATE: _____

Review of the plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed this building will be inspected for compliance with Section 553.908 Florida Statutes.

BUILDING OFFICIAL: _____

DATE: _____

GREAT SEAL OF THE STATE OF FLORIDA IN GOD WE TRUST

Columbia County Building Department Reviewed for Code Compliance File Copy

- 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.

- 1 of the 1 duct systems requires a Duct Leakage Test Report. Systems with Default duct leakage do not require this report.

- Compliance requires an Air Barrier and Insulation Inspection Checklist in accordance with R402.4.1.1 and this project requires a PERFORMANCE envelope leakage test report with envelope leakage no greater than 4.51 ACH50 (R402.4.1.2).

Misty Miller

Certified Energy Rater #1493

FORM R405-2023

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:	Ogburn Residence			Address type:	Street Address
Building Type:	User	Bedrooms:	3	Lot #:	---
Owner:	Ogburn Residence	Conditioned Area:	2796	Block/SubDivision:	---
Builder Home ID:		Total Stories:	2	PlatBook:	---
Builder Name:		Worst Case:	No	Street:	5012 SW Pine Mount Rd
Permit Office:	Columbia County	Rotate Angle:	0	County:	Columbia
Jurisdiction:	221000	Cross Ventilation:		City, State, Zip:	Lake City, FL, 32024
Family Type:	Detached	Whole House Fan:			
New/Existing:	New (From Plans)	Terrain:	Suburban		
Year Construct:	2023	Shielding:	Suburban		
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, Jacksonville	FL_JACKSONVILLE_INTL_A	32	93	70	75	1281	49	Medium

BLOCKS

✓	Number	Name	Area	Volume
___	1	Block1	2796	28550 cu ft

SPACES

✓	Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
___	1	Foyer	108	1836	No	0		Yes	Yes	Yes
___	2	Dining Room	143	1430	No	0	0	Yes	Yes	Yes
___	3	Pantry	70	630	No	0	0	Yes	Yes	Yes
___	4	Kitchen	244	2440	Yes	0	0	Yes	Yes	Yes
___	5	Stairwell	43	731	No	0	0	Yes	Yes	Yes
___	6	Hall and Laundry	187	1683	No	0	0	Yes	Yes	Yes
___	7	Master Closet	112	1008	No	0	0	Yes	Yes	Yes
___	8	Master Bathroom	188	1692	No	0	0	Yes	Yes	Yes
___	9	Master Bedroom	269	2421	No	2	1	Yes	Yes	Yes
___	10	Living Room	423	5922	No	0	0	Yes	Yes	Yes
___	11	Bedroom 2	309	2781	No	1	1	Yes	Yes	Yes
___	12	Bathroom 2	72	648	No	0	0	Yes	Yes	Yes
___	13	Bathroom 3	101	909	No	0	0	Yes	Yes	Yes
___	14	Bedroom 3	203	1827	No	1	1	Yes	Yes	Yes
___	15	Bonus Room	324	2592	No	0	0	Yes	Yes	Yes

FLOORS (Total Exposed Area = 2796 sq.ft.)

✓	#	Floor Type	Space	Exposed Perim(ft)	Area	R-Value Perim.	R-Value Joist	U-Factor	Slab Insul. Vert/Horiz	Tile	Wood	Carpet
___	1	Slab-On-Grade Edge Ins	Foyer	9.83	108 sqft	0	---	0.473	2 (ft)/0 (ft)	0.00	1.00	0.00
___	2	Slab-On-Grade Edge Ins	Dining Room	17	143 sqft	0	---	0.473	2 (ft)/0 (ft)	0.00	1.00	0.00
___	3	Slab-On-Grade Edge Ins	Pantry	17	70 sqft	0	---	0.473	2 (ft)/0 (ft)	0.00	1.00	0.00
___	4	Slab-On-Grade Edge Ins	Kitchen	23.67	244 sqft	0	---	0.473	2 (ft)/0 (ft)	0.00	1.00	0.00
___	5	Slab-On-Grade Edge Ins	Stairwell	11.67	43 sqft	0	---	0.304	2 (ft)/0 (ft)	0.00	0.00	1.00
___	6	Slab-On-Grade Edge Ins	Hall and Laundry	18.83	187 sqft	0	---	0.473	2 (ft)/0 (ft)	0.00	1.00	0.00
___	7	Slab-On-Grade Edge Ins	Master Closet	21.17	112 sqft	0	---	0.304	2 (ft)/0 (ft)	0.00	0.00	1.00
___	8	Slab-On-Grade Edge Ins	Master Bathroom	28.83	188 sqft	0	---	0.710	2 (ft)/0 (ft)	1.00	0.00	0.00
___	9	Slab-On-Grade Edge Ins	Master Bedroom	32.83	269 sqft	0	---	0.304	2 (ft)/0 (ft)	0.00	0.00	1.00
___	10	Slab-On-Grade Edge Ins	Living Room	20.83	423 sqft	0	---	0.304	2 (ft)/0 (ft)	0.00	0.00	1.00

FORM R405-2023

INPUT SUMMARY CHECKLIST REPORT

FLOORS(Continued)

√ #	Floor Type	Space	Exposed Perim(ft)	Area	R-Value Perim.	R-Value Joist	U-Factor	Slab Insul. Vert/Horiz	Tile	Wood	Carpet
___ 11	Slab-On-Grade Edge Ins	Bedroom 2	25.08	309 sqft	0	---	0.304	2 (ft)/0 (ft)	0.00	0.00	1.00
___ 12	Slab-On-Grade Edge Ins	Bathroom 2	24.17	72 sqft	0	---	0.710	2 (ft)/0 (ft)	1.00	0.00	0.00
___ 13	Slab-On-Grade Edge Ins	Bathroom 3	5.67	101 sqft	0	---	0.710	2 (ft)/0 (ft)	1.00	0.00	0.00
___ 14	Slab-On-Grade Edge Ins	Bedroom 3	31	203 sqft	0	---	0.304	2 (ft)/0 (ft)	0.00	0.00	1.00
___ 15	Floor over Garage	Bonus Room	---	324 sqft	---	19	0.046	-------	0.00	0.00	1.00

ROOF

√ #	Type	Materials	Roof Area	Gable Area	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
___ 1	Gable or shed	Composition shingles	3640 ft²	1166 ft²	Medium	N	0.96	No	0.9	No	0	39.81

ATTIC

√ #	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
___ 1	Full attic	Vented	300	2796 ft²	N	N

CEILING (Total Exposed Area = 2796 sq.ft.)

√ #	Ceiling Type	Space	R-Value	Ins. Type	Area	U-Factor	Framing Frac.	Truss Type
___ 1	Flat ceiling under attic(Vented)	Foyer	30.0	Blown	108.0ft²	0.030	0.11	Wood
___ 2	Flat ceiling under attic(Vented)	Dining Room	30.0	Blown	143.0ft²	0.030	0.11	Wood
___ 3	Flat ceiling under attic(Vented)	Pantry	30.0	Blown	70.0ft²	0.030	0.11	Wood
___ 4	Flat ceiling under attic(Vented)	Kitchen	30.0	Blown	244.0ft²	0.030	0.11	Wood
___ 5	Flat ceiling under attic(Vented)	Stairwell	30.0	Blown	43.0ft²	0.030	0.11	Wood
___ 6	Flat ceiling under attic(Vented)	Hall and Laundry	30.0	Blown	187.0ft²	0.030	0.11	Wood
___ 7	Flat ceiling under attic(Vented)	Master Closet	30.0	Blown	112.0ft²	0.030	0.11	Wood
___ 8	Flat ceiling under attic(Vented)	Master Bathroom	30.0	Blown	188.0ft²	0.030	0.11	Wood
___ 9	Flat ceiling under attic(Vented)	Master Bedroom	30.0	Blown	269.0ft²	0.030	0.11	Wood
___ 10	Flat ceiling under attic(Vented)	Living Room	30.0	Blown	423.0ft²	0.030	0.11	Wood
___ 11	Flat ceiling under attic(Vented)	Bedroom 2	30.0	Blown	309.0ft²	0.030	0.11	Wood
___ 12	Flat ceiling under attic(Vented)	Bathroom 2	30.0	Blown	72.0ft²	0.030	0.11	Wood
___ 13	Flat ceiling under attic(Vented)	Bathroom 3	30.0	Blown	101.0ft²	0.030	0.11	Wood
___ 14	Flat ceiling under attic(Vented)	Bedroom 3	30.0	Blown	203.0ft²	0.030	0.11	Wood
___ 15	Flat ceiling under attic(Vented)	Bonus Room	30.0	Blown	324.0ft²	0.030	0.11	Wood

WALLS (Total Exposed Area = 3387 sq.ft.)

√ #	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	Width In	Height Ft	Height In	Area sq.ft.	U-Factor	Sheath R-Value	Frm. Frac.	Solar Absor.	Below Grade
___ 1	SE	Exterior	Frame - Wood	Foyer	13.0	9.0	10	17.0	0	167.2	0.084		0.23	0.75	0 %
___ 2	SE	Exterior	Frame - Wood	Dining Room	13.0	13.0	0	10.0	0	130.0	0.084		0.23	0.75	0 %
___ 3	NE	Exterior	Frame - Wood	Dining Room	13.0	4.0	0	10.0	0	40.0	0.084		0.23	0.75	0 %
___ 4	SE	Exterior	Frame - Wood	Pantry	13.0	10.0	0	9.0	0	90.0	0.084		0.23	0.75	0 %
___ 5	NE	Garage	Frame - Wood	Pantry	13.0	7.0	0	9.0	0	63.0	0.084		0.23	0.75	0 %
___ 6	NE	Garage	Frame - Wood	Kitchen	13.0	11.0	8	10.0	0	116.7	0.084		0.23	0.75	0 %
___ 7	NW	Exterior	Frame - Wood	Kitchen	13.0	12.0	0	10.0	0	120.0	0.084		0.23	0.75	0 %
___ 8	SE	Garage	Frame - Wood	Stairwell	13.0	11.0	8	17.0	0	198.3	0.084		0.23	0.75	0 %
___ 9	SE	Garage	Frame - Wood	Hall and Laundry	13.0	4.0	0	9.0	0	36.0	0.084		0.23	0.75	0 %
___ 10	SW	Exterior	Frame - Wood	Hall and Laundry	13.0	14.0	10	9.0	0	133.5	0.084		0.23	0.75	0 %
___ 11	SE	Garage	Frame - Wood	Master Closet	13.0	10.0	0	9.0	0	90.0	0.084		0.23	0.75	0 %
___ 12	NE	Exterior	Frame - Wood	Master Closet	13.0	11.0	2	9.0	0	100.5	0.084		0.23	0.75	0 %

FORM R405-2023

INPUT SUMMARY CHECKLIST REPORT

WALLS(Continued)

	#	Ornt													
___	13	NE	Exterior	Frame - Wood	Master Bathroom	13.0	18.0	10	9.0	0	169.5	0.084	0.23	0.75	0 %
___	14	NW	Exterior	Frame - Wood	Master Bathroom	13.0	10.0	0	9.0	0	90.0	0.084	0.23	0.75	0 %
___	15	NW	Exterior	Frame - Wood	Master Bedroom	13.0	16.0	0	9.0	0	144.0	0.084	0.23	0.75	0 %
___	16	SW	Exterior	Frame - Wood	Master Bedroom	13.0	16.0	10	9.0	0	151.5	0.084	0.23	0.75	0 %
___	17	NW	Exterior	Frame - Wood	Living Room	13.0	20.0	10	10.0	0	208.3	0.084	0.23	0.75	0 %
___	18	NE	Exterior	Frame - Wood	Bedroom 2	13.0	6.0	1	9.0	0	54.8	0.084	0.23	0.75	0 %
___	19	SW	Exterior	Frame - Wood	Bedroom 2	13.0	19.0	0	9.0	0	171.0	0.084	0.23	0.75	0 %
___	20	SW	Exterior	Frame - Wood	Bathroom 2	13.0	5.0	6	9.0	0	49.5	0.084	0.23	0.75	0 %
___	21	NW	Exterior	Frame - Wood	Bathroom 2	13.0	13.0	2	9.0	0	118.5	0.084	0.23	0.75	0 %
___	22	NE	Exterior	Frame - Wood	Bathroom 2	13.0	5.0	6	9.0	0	49.5	0.084	0.23	0.75	0 %
___	23	SW	Exterior	Frame - Wood	Bathroom 3	13.0	5.0	8	9.0	0	51.0	0.084	0.23	0.75	0 %
___	24	SW	Exterior	Frame - Wood	Bedroom 3	13.0	12.0	10	9.0	0	115.5	0.084	0.23	0.75	0 %
___	25	SE	Exterior	Frame - Wood	Bedroom 3	13.0	18.0	2	9.0	0	163.5	0.084	0.23	0.75	0 %
___	26	SW	Exterior	Frame - Wood	Bonus Room	13.0	25.0	8	8.0	0	205.3	0.084	0.23	0.75	0 %
___	27	SE	Exterior	Frame - Wood	Bonus Room	13.0	14.0	8	8.0	0	117.3	0.084	0.23	0.75	0 %
___	28	NE	Exterior	Frame - Wood	Bonus Room	13.0	26.0	0	8.0	0	208.0	0.084	0.23	0.75	0 %
___	29	NW	Exterior	Frame - Wood	Bonus Room	13.0	4.0	4	8.0	0	34.7	0.084	0.23	0.75	0 %

DOORS (Total Exposed Area = 68 sq.ft.)

√	#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	Width In	Height Ft	Height In	Area
___	1	SE	Exterior	Insulated	Foyer	None	0.46	3.00	0	8.00	0	24.0ft²
___	2	SE	Exterior	Insulated	Foyer	None	0.46	3.00	0	8.00	0	24.0ft²
___	3	SE	Garage	Insulated	Hall and Laundry	None	0.46	3.00	0	6.00	8	20.0ft²

WINDOWS (Total Exposed Area = 394 sq.ft.)

√	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Storm	Total Area (ft²)	Same Units	Width (ft)	Height (ft)	--Overhang-- Depth (ft)	Sep. (ft)	Interior Shade	Screen
___	1	SE	1	Vinyl	Low-E Double	Y	0.35	0.27	N	N	24.0	2	3.00	4.00	8.0	1.0	Drapes/blinds	None
___	2	SE	2	Vinyl	Low-E Double	Y	0.35	0.27	N	N	36.0	2	3.00	6.00	8.0	1.0	Drapes/blinds	None
___	3	SE	4	Vinyl	Low-E Double	Y	0.35	0.27	N	N	10.0	1	2.00	5.00	0.0	0.0	Drapes/blinds	None
___	4	NW	7	Vinyl	Low-E Double	Y	0.35	0.27	N	N	16.0	2	2.00	4.00	10.0	1.0	Drapes/blinds	None
___	5	SW	10	Vinyl	Low-E Double	Y	0.35	0.27	N	N	20.0	1	3.00	6.67	0.0	0.0	Drapes/blinds	None
___	6	NE	13	Vinyl	Low-E Double	Y	0.35	0.27	N	N	3.0	1	3.00	1.00	0.0	0.0	Drapes/blinds	None
___	7	NE	13	Vinyl	Low-E Double	Y	0.35	0.27	N	N	20.0	2	2.00	5.00	0.0	0.0	Drapes/blinds	None
___	8	NE	13	Vinyl	Low-E Double	Y	0.35	0.27	N	N	8.0	1	2.00	4.00	0.0	0.0	Drapes/blinds	None
___	9	NW	14	Vinyl	Low-E Double	Y	0.35	0.27	N	N	12.0	1	2.00	6.00	0.0	0.0	Drapes/blinds	None
___	10	NW	15	Vinyl	Low-E Double	Y	0.35	0.27	N	N	24.0	2	2.00	6.00	0.0	0.0	Drapes/blinds	None
___	11	SW	16	Vinyl	Low-E Double	Y	0.35	0.27	N	N	36.0	2	3.00	6.00	0.0	0.0	Drapes/blinds	None
___	12	NW	17	Vinyl	Low-E Double	Y	0.35	0.27	N	N	96.0	1	12.00	8.00	10.0	1.0	Drapes/blinds	None
___	13	SW	19	Vinyl	Low-E Double	Y	0.35	0.27	N	N	18.0	1	3.00	6.00	0.0	0.0	Drapes/blinds	None
___	14	NE	22	Vinyl	Low-E Double	Y	0.35	0.27	N	N	15.6	1	2.33	6.67	20.0	1.0	Drapes/blinds	None
___	15	SW	23	Vinyl	Low-E Double	Y	0.35	0.27	N	N	4.0	1	3.00	1.33	0.0	0.0	Drapes/blinds	None
___	16	SE	25	Vinyl	Low-E Double	Y	0.35	0.27	N	N	36.0	2	3.00	6.00	8.0	1.0	Drapes/blinds	None
___	17	SE	27	Vinyl	Low-E Double	Y	0.35	0.27	N	N	15.0	1	3.00	5.00	0.0	0.0	Drapes/blinds	None

INFILTRATION

√	#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)	Infiltration Test Volume
___	1	Wholehouse	Proposed ACH(50)	0.00029	2148	117.84	221.23	0.1287	4.5	All	28550 cu ft

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INPUT SUMMARY CHECKLIST REPORT

GARAGE

√ #	Floor Area	Roof Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
___ 1	728 ft²	728 ft²	63 ft	9 ft	1

MASS

√ #	Mass Type	Area	Thickness	Furniture Fraction	Space
___ 1	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	Foyer
___ 2	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	Dining Room
___ 3	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	Pantry
___ 4	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	Kitchen
___ 5	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	Stairwell
___ 6	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	Hall and Laundry
___ 7	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	Master Closet
___ 8	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	Master Bathroom
___ 9	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	Master Bedroom
___ 10	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	Living Room
___ 11	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	Bedroom 2
___ 12	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	Bathroom 2
___ 13	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	Bathroom 3
___ 14	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	Bedroom 3
___ 15	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	Bonus Room

HEATING SYSTEM

√ #	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	----Geothermal HeatPump---- Entry	Power	Volt	Current	Ducts	Block
___ 1	Electric Heat Pump	Split/Single	207863630	HSPF2: 8.10	56.5		0.00	0.00	0.00	sys#1	1

COOLING SYSTEM

√ #	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block
___ 1	Central Unit	Split/Single	207863630	SEER2:16.0	56.5	2000	0.75	sys#1	1

HOT WATER SYSTEM

√ #	System Type	Subtype	Location	EF(UEF)	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length
___ 1	Electric	None	Garage	0.95 (0.93)	50.00 gal	60 gal	120 deg	Standard	None	99

	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits
___ 1	No		NA	NA	NA	No	NA	NA	NA	None

DUCTS

√ Duct #	Supply Location	Supply R-Value	Supply Area	Return Location	Return R-Value	Return Area	Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN OUT	RLF	HVAC # Heat	HVAC # Cool
___ 1	Attic	6.0	559 ft²	Attic	6.0	140 ft²	Default Leakage	Bonus Room (Default)	(Default)				1	1

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INPUT SUMMARY CHECKLIST REPORT

TEMPERATURES

Programable Thermostat: N Ceiling Fans: N

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

√	Thermostat Schedule: HERS 2006 Reference Schedule Type		Hours 1	2	3	4	5	6	7	8	9	10	11	12
___	Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78
		PM	78	78	78	78	78	78	78	78	78	78	78	78
___	Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
		PM	78	78	78	78	78	78	78	78	78	78	78	78
___	Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68
		PM	68	68	68	68	68	68	68	68	68	68	68	68
___	Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68
		PM	68	68	68	68	68	68	68	68	68	68	68	68