

District No. 1 - Ronald Williams
District No. 2 - Rusty DePratter
District No. 3 - Bucky Nash
District No. 4 - Everett Phillips
District No. 5 - Tim Murphy

BUILDING AND ZONING DEPARTMENT



BOARD OF COUNTY COMMISSIONERS • COLUMBIA COUNTY

July 20, 2017

James L Hair II
275 NW Stephen Foster Dr.
White Springs, FL 32096

RE: 1611-58 – Expired Application

This permit application has expired and is being returned to the contractor of record on the application. If you wish to continue with the project, you may re-apply at your convenience.

Be aware our permit applications have been updated and you may be required to provide additional documentation. See applications at <http://www.columbiacountyfla.com/BuildingandZoning.asp>.

Contact the Building Department at 386-758-1008 or email: laurie_hodson@columbiacountyfla.com,
For any assistance or questions regarding this returned application or your new submittal.

Sincerely,

Laurie Hodson, Office Manager
Columbia County Building Department
laurie_hodson@columbiacountyfla.com
PH: 386-758-1007
FX: 386-758-2160

BOARD MEETS THE FIRST THURSDAY AT 5:30 P.M.
AND THIRD THURSDAY AT 5:30 P.M.



**COLUMBIA COUNTY BUILDING DEPARTMENT
RESIDENTIAL CHECK LIST**

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

ALL REQUIREMENTS ARE SUBJECT TO CHANGE

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

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

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

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

Site Plan information including:

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

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

GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL		Items to Include- Each Box shall be Circled as Applicable		
		YES	NO	N/A
8	Plans or specifications must show compliance with FBCR Chapter 3	IIII	IIII	IIII
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/m ²), to be used for the design of exterior component, cladding materials not specifi ally designed by the registered design professional.	✓		

Elevations Drawing including:

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

Floor Plan including:

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

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

GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL		Items to Include- Each Box shall be Circled as Applicable		
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FBCR 403: Foundation Plans

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

FBCR 506: CONCRETE SLAB ON GRADE

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

FBCR 318: PROTECTION AGAINST TERMITES

36	Indicate on the foundation plan if soil treatment is used for subterranean termite prevention or Submit other approved termite protection methods. Protection shall be provided by registered termiticides	✓		
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FBCR 606: Masonry Walls and Stem walls (load bearing & shear Walls)

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

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

Floor Framing System: First and/or second story

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

FBCR CHAPTER 6 WOOD WALL FRAMING CONSTRUCTION

GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL		Items to Include- Each Box shall be Circled as Applicable		
		YES	NO	N/A
52	Stud type, grade, size, wall height and oc spacing for all load bearing or shear walls	✓		
53	Fastener schedule for structural members per table IRC 602.3 are to be shown	✓		
54	Show Wood structural panel's sheathing attachment to studs, joist, trusses, rafters and structural members, showing fastener schedule attachment on the edges & intermediate of the areas structural panel sheathing	✓		
55	Show all required connectors with a max uplift rating and required number of connectors and oc spacing for continuous connection of structural walls to foundation and roof trusses or rafter systems	✓		
56	Show sizes, type, span lengths and required number of support jack studs, king studs for shear wall opening and girder or header per FBCB 2308.9.5	✓		
57	Indicate where pressure treated wood will be placed	✓		
58	Show all wall structural panel sheathing, grade, thickness and show fastener schedule for structural panel sheathing edges & intermediate areas	✓		
59	A detail showing gable truss bracing, wall balloon framing details or/ and wall hinge bracing detail	✓		

FBCR :ROOF SYSTEMS:

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

FBCR 802:Conventional Roof Framing Layout

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

FBCR 803 ROOF SHEATHING

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

ROOF ASSEMBLIES FRC Chapter 9

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

FBCR Energy Conservation R.401

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

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

HVAC information

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

Plumbing Fixture layout shown

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

Private Potable Water

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

Electrical layout shown including

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

GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable
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THE FOLLOWING ITEMS MUST BE SUBMITTED WITH BUILDING PLANS

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

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

Notice Of Commencement

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

Section R101.2.1 of the Florida Building Code Residential:

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

Section 105 of the Florida Building Code defines the:

Time limitation of application.

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

Single-family residential dwelling.

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

Permit intent.

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

If work has commenced.

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

New Permit.

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

Work Shall Be:

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

The Fee:

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

Notification:

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

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

Category/Subcategory	Manufacturer	Product Description	Approval Number(s)
1. EXTERIOR DOORS			
A. SWINGING			
B. SLIDING			
C. SECTIONAL/ROLL UP			
D. OTHER			
2. WINDOWS			
A. SINGLE/DOUBLE HUNG			
B. HORIZONTAL SLIDER			
C. CASEMENT			
D. FIXED			
E. MULLION			
F. SKYLIGHTS			
G. OTHER			
3. PANEL WALL			
A. SIDING			
B. SOFFITS			
C. STOREFRONTS			
D. GLASS BLOCK			
E. OTHER			
4. ROOFING PRODUCTS			
A. ASPHALT SHINGLES			
B. NON-STRUCT METAL			
C. ROOFING TILES			
D. SINGLE PLY ROOF			
E. OTHER			
5. STRUCT COMPONENTS			
A. WOOD CONNECTORS			
B. WOOD ANCHORS			
C. TRUSS PLATES			
D. INSULATION FORMS			
E. LINTELS			
F. OTHERS			
6. NEW EXTERIOR ENVELOPE PRODUCTS			

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

Further, I understand these products may have to be removed if approval cannot be demonstrated during inspection.

Contractor OR Agent Signature _____

Date _____

NOTES: _____



Project Summary

Job: 1
Date: Jan 09, 2017
By: DL Williams Heating & C...
Plan: 1

Project Information

For: Suwannee River Campfire Ministries
Columbia County, FL

Notes:



Design Information

Weather: Gainesville Regional AP, FL, US

Winter Design Conditions

Outside db	33 °F
Inside db	68 °F
Design TD	35 °F

Summer Design Conditions

Outside db	92 °F
Inside db	75 °F
Design TD	17 °F
Daily range	M
Relative humidity	50 %
Moisture difference	47 gr/lb

Heating Summary

Structure	20878 Btuh
Ducts	9068 Btuh
Central vent (0 cfm)	0 Btuh
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	29946 Btuh

Sensible Cooling Equipment Load Sizing

Structure	21929 Btuh
Ducts	11345 Btuh
Central vent (0 cfm)	0 Btuh
Blower	0 Btuh
Use manufacturer's data	n
Rate/swing multiplier	0.97
Equipment sensible load	32276 Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

	Heating	Cooling
Area (ft²)	2223	2223
Volume (ft³)	21744	21744
Air changes/hour	0.32	0.16
Equiv. AVF (cfm)	116	58

Latent Cooling Equipment Load Sizing

Structure	2658 Btuh
Ducts	2438 Btuh
Central vent (0 cfm)	0 Btuh
Equipment latent load	5097 Btuh
Equipment total load	37373 Btuh
Req. total capacity at 0.70 SHR	3.8 ton

Heating Equipment Summary

Make	Generic
Trade	
Model	SEER 7.0, HSPF 5.8
AHRI ref	
Efficiency	5.8 HSPF
Heating input	
Heating output	43650 Btuh @ 47°F
Temperature rise	27 °F
Actual air flow	1462 cfm
Air flow factor	0.049 cfm/Btuh
Static pressure	0.50 in H2O
Space thermostat	

Cooling Equipment Summary

Make	Generic
Trade	
Cond	SEER 7.0, HSPF 5.8
Coil	
AHRI ref	
Efficiency	7.9 EER, 7 SEER
Sensible cooling	30708 Btuh
Latent cooling	13160 Btuh
Total cooling	43868 Btuh
Actual air flow	1462 cfm
Air flow factor	0.044 cfm/Btuh
Static pressure	0.50 in H2O
Load sensible heat ratio	0.87

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



Load Short Form

Job: 1
Date: Jan 09, 2017
By: DL Williams Heating & C...
Plan: 1

Project Information

For: Suwannee River Campfire Ministries
Columbia County, FL

Design Information

	Htg	Clg	Infiltration	Simplified
Outside db (°F)	33	92	Method	Average
Inside db (°F)	68	75	Construction quality	
Design TD (°F)	35	17	Fireplaces	
Daily range	-	M		
Inside humidity (%)	30	50		
Moisture difference (gr/lb)	8	47		

0

HEATING EQUIPMENT

Make Generic
Trade
Model SEER 7.0, HSPF 5.8
AHRI ref

Efficiency 5.8 HSPF
Heating input
Heating output 43650 Btuh @ 47°F
Temperature rise 27 °F
Actual air flow 1462 cfm
Air flow factor 0.049 cfm/Btuh
Static pressure 0.50 in H2O
Space thermostat

COOLING EQUIPMENT

Make Generic
Trade
Cond SEER 7.0, HSPF 5.8
Coil

AHRI ref
Efficiency 7.9 EER, 7 SEER
Sensible cooling 30708 Btuh
Latent cooling 13160 Btuh
Total cooling 43868 Btuh
Actual air flow 1462 cfm
Air flow factor 0.044 cfm/Btuh
Static pressure 0.50 in H2O
Load sensible heat ratio 0.87

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
master bed	480	8786	8648	429	380
liv/kit	858	11842	13542	578	595
family loft	624	4749	7841	232	345
loft	240	3112	2378	152	104
stair1	21	1457	866	71	38
Entire House	2223	29946	33275	1462	1462
Other equip loads		0	0		
Equip. @ 0.97 RSM			32276		
Latent cooling			5097		
TOTALS	2223	29946	37373	1462	1462

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Mr and Mrs Hair
Street:
City, State, Zip: Lake City , FL , 32055
Owner:
Design Location: FL, Gainesville

Builder Name:
Permit Office: Columbia
Permit Number:
Jurisdiction:
County: Columbia (Florida Climate Zone 2)

1. New construction or existing	New (From Plans)
2. Single family or multiple family	Single-family
3. Number of units, if multiple family	1
4. Number of Bedrooms	3
5. Is this a worst case?	No
6. Conditioned floor area above grade (ft²)	2108
Conditioned floor area below grade (ft²)	0
7. Windows(167.0 sqft.)	Description Area
a. U-Factor:	Dbl, U=0.40 167.00 ft²
SHGC:	SHGC=0.25
b. U-Factor:	N/A ft²
SHGC:	
c. U-Factor:	N/A ft²
SHGC:	
d. U-Factor:	N/A ft²
SHGC:	
Area Weighted Average Overhang Depth:	1.000 ft.
Area Weighted Average SHGC:	0.250
8. Floor Types (2108.0 sqft.)	Insulation Area
a. Crawlspace	R=19.0 1321.00 ft²
b. Floor Over Other Space	R=0.0 787.00 ft²
c. N/A	R= ft²

9. Wall Types (2446.0 sqft.)	Insulation Area
a. Frame - Wood, Exterior	R=19.0 2446.00 ft²
b. N/A	R= ft²
c. N/A	R= ft²
d. N/A	R= ft²
10. Ceiling Types (1321.0 sqft.)	Insulation Area
a. Under Attic (Vented)	R=30.0 787.00 ft²
b. Cathedral/Single Assembly (Vented)	R=30.0 534.00 ft²
c. N/A	R= ft²
11. Ducts	R ft²
a. Sup: 1st Floor, Ret: 1st Floor, AH: 1st Floor	6 264.2
b. Sup: Loft, Ret: Loft, AH: Loft	6 210.8
12. Cooling systems	kBtu/hr Efficiency
a. Central Unit	13.5 SEER:15.00
b. Central Unit	6.2 SEER:15.00
13. Heating systems	kBtu/hr Efficiency
a. Electric Heat Pump	14.4 HSPF:8.20
b. Electric Heat Pump	6.8 HSPF:8.20
14. Hot water systems	
a. Electric	Cap: 50 gallons
b. Conservation features	EF: 0.920
None	
15. Credits	CF

Glass/Floor Area: 0.079

Total Proposed Modified Loads: 54.52

Total Baseline Loads: 59.78

PASS

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

PREPARED BY: AR7005
DATE: 19 Jan 2017

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

OWNER/AGENT: _____
DATE: _____

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



BUILDING OFFICIAL: _____
DATE: _____

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



PROJECT

Title:	Mr and Mrs Hair	Bedrooms:	3	Address Type:	Street Address
Building Type:	User	Conditioned Area:	2108	Lot #	
Owner:		Total Stories:	2	Block/SubDivision:	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:		Rotate Angle:	0	Street:	
Permit Office:	Columbia	Cross Ventilation:	No	County:	Columbia
Jurisdiction:		Whole House Fan:	No	City, State, Zip:	Lake City , FL , 32055
Family Type:	Single-family				
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

✓	Design Location	TMY Site	IECC Zone	Design Temp 97.5 %	2.5 %	Int Design Temp Winter	Summer	Heating Degree Days	Design Moisture	Daily Temp Range
_____	FL, Gainesville	FL_GAINESVILLE_REGI	2	32	92	70	75	1305.5	51	Medium

BLOCKS

Number	Name	Area	Volume
1	Main	1321	10568
2	2nd Floor	787	6296

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	1st Floor	1321	10568	Yes	4	1	1	Yes	Yes	Yes
2	Loft	787	6296	No	2	2	1	Yes	Yes	Yes

FLOORS

✓	#	Floor Type	Space	Perimeter	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet
_____	1	Crawlspace	1st Floor	182 ft	0	1321 ft²	19	0	0	1
_____	2	Floor Over Other Space	Loft	----	----	787 ft²	0	0	0	1

ROOF

✓	#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
_____	1	Gable or shed	Metal	2200 ft²	880 ft²	Medium	0.96	No	0.9	No	0	53.1

ATTIC

✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full cathedral ceilin	Vented	300	1321 ft²	N	N

CEILING

✓	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
✓	1	Cathedral/Single Assembly (Vented)	Loft	30	Batt	534 ft²	0.11	Wood
✓	2	Under Attic (Vented)	Loft	30	Batt	787 ft²	0.11	Wood

WALLS

✓	#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Area	Sheathing R-Value	Framing Fraction	Solar Absor	Below Grade%
✓	1	N	Exterior	Frame - Wood	1st Floor	19	55	1	8		440.7 ft²		0.23	0.75	0
✓	2	E	Exterior	Frame - Wood	1st Floor	19	15	1	16		241.3 ft²		0.23	0.75	0
✓	3	S	Exterior	Frame - Wood	1st Floor	19	30		8		240.0 ft²		0.23	0.75	0
✓	4	E	Exterior	Frame - Wood	1st Floor	19	15		8		120.0 ft²		0.23	0.75	0
✓	5	S	Exterior	Frame - Wood	1st Floor	19	25	1	16		401.3 ft²		0.23	0.75	0
✓	6	W	Exterior	Frame - Wood	1st Floor	19	30	1	8		240.7 ft²		0.23	0.75	0
✓	7	N	Exterior	Frame - Wood	Loft	19	55	1	8		440.7 ft²		0.23	0.75	0
✓	8	E	Exterior	Frame - Wood	Loft	19	15	1	8		120.7 ft²		0.23	0.75	0
✓	9	S	Exterior	Frame - Wood	Loft	19	25	1	8		200.7 ft²		0.23	0.75	0

DOORS

✓	#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
✓	1	N	Insulated	1st Floor	None	.46	6		6	8	40 ft²
✓	2	N	Insulated	1st Floor	None	.46	6		6	8	40 ft²
✓	3	N	Insulated	1st Floor	None	.46	6		6	8	40 ft²
✓	4	W	Insulated	1st Floor	None	.46	3		6	8	20 ft²

WINDOWS

Orientation shown is the entered, Proposed orientation.

✓	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Area	Overhang Depth	Separation	Int Shade	Screening
✓	1	N	1	Vinyl	Low-E Double	Yes	0.4	0.25	12.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
✓	2	E	2	Vinyl	Low-E Double	Yes	0.4	0.25	12.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
✓	3	S	3	Vinyl	Low-E Double	Yes	0.4	0.25	30.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
✓	4	E	4	Vinyl	Low-E Double	Yes	0.4	0.25	15.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
✓	5	S	5	Vinyl	Low-E Double	Yes	0.4	0.25	2.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
✓	6	W	6	Vinyl	Low-E Double	Yes	0.4	0.25	20.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
✓	7	N	7	Vinyl	Low-E Double	Yes	0.4	0.25	30.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
✓	8	E	8	Vinyl	Low-E Double	Yes	0.4	0.25	16.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
✓	9	S	9	Vinyl	Low-E Double	Yes	0.4	0.25	30.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None

FORM R405-2014

Thermostat Schedule: HERS 2006 Reference		Hours											
Schedule Type		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

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 91

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

, Lake City, FL, 32055

1. New construction or existing	New (From Plans)		9. Wall Types	Insulation	Area
2. Single family or multiple family	Single-family		a. Frame - Wood, Exterior	R=19.0	2446.00 ft ²
3. Number of units, if multiple family	1		b. N/A	R=	ft ²
4. Number of Bedrooms	3		c. N/A	R=	ft ²
5. Is this a worst case?	No		d. N/A	R=	ft ²
6. Conditioned floor area (ft ²)	2108		10. Ceiling Types	Insulation	Area
7. Windows**	Description	Area	a. Under Attic (Vented)	R=30.0	787.00 ft ²
a. U-Factor:	DbI, U=0.40	167.00 ft ²	b. Cathedral/Single Assembly (Vented)	R=30.0	534.00 ft ²
SHGC:	SHGC=0.25		c. N/A	R=	ft ²
b. U-Factor:	N/A	ft ²	11. Ducts		R ft ²
SHGC:			a. Sup: 1st Floor, Ret: 1st Floor, AH: 1st Floor	6	264.2
c. U-Factor:	N/A	ft ²	b. Sup: Loft, Ret: Loft, AH: Loft	6	210.8
SHGC:			12. Cooling systems	kBtu/hr	Efficiency
d. U-Factor:	N/A	ft ²	a. Central Unit	13.5	SEER:15.00
SHGC:			b. Central Unit	6.2	SEER:15.00
Area Weighted Average Overhang Depth:	1.000 ft.		13. Heating systems	kBtu/hr	Efficiency
Area Weighted Average SHGC:	0.250		a. Electric Heat Pump	14.4	HSPF:8.20
8. Floor Types	Insulation	Area	b. Electric Heat Pump	6.8	HSPF:8.20
a. Crawlspace	R=19.0	1321.00 ft ²	14. Hot water systems		Cap: 50 gallons
b. Floor Over Other Space	R=0.0	787.00 ft ²	a. Electric		EF: 0.92
c. N/A	R=	ft ²	b. Conservation features		
			None		
			15. Credits		CF

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

Builder Signature: _____ Date: _____

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



*Note: This is not a Building Energy Rating. If your Index is below 70, your home may qualify for energy efficient mortgage (EEM) incentives if you obtain a Florida EnergyGauge Rating. Contact the EnergyGauge Hotline at (321) 638-1492 or see the EnergyGauge web site at energygauge.com for information and a list of certified Raters. For information about the Florida Building Code, Energy Conservation, contact the Florida Building Commission's support staff.

**Label required by Section R303.1.3 of the Florida Building Code, Energy Conservation, if not DEFAULT.

Building Input Summary Report

PROJECT									
Title:	Mr and Mrs Hair	Bedrooms:	3	Address Type:	Street Address				
Building Type:	User	Bathrooms:	0	Lot #					
Owner:		Conditioned Area:	2108 sq.ft.	Block/SubDivision:					
# of Units:	1	Total Stories:	2	PlatBook:					
Builder Name:		Worst Case:	No	Street:					
Permit Office:	Columbia	Rotate Angle:	0	County:	Columbia				
Jurisdiction:		Cross Ventilation:	No	City, State, Zip:	Lake City , FL , 32055				
Family Type:	Single-family	Whole House Fan:	No						
New/Existing:	New (From Plans)	Terrain:	Suburban						
Year Construct:	2016	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, Gainesville	FL_GAINESVILLE_REGIONAL_AP	32	92	70	75	1305.5	51	Medium	
UTILITY RATES									
Fuel	Unit	Utility Name	Monthly Fixed Cost				\$/Unit		
Electricity	kWh	Florida Average	0				0.1145		
Natural Gas	Therm	Florida Average	0				1.801		
Fuel Oil	Gallon	Florida Default	0				3.4		
Propane	Gallon	Florida Default	0				4.5		
SURROUNDINGS									
Ornt	Type	Shade Trees Height	Width	Distance	Exist	Adjacent Buildings Height	Width	Distance	
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
BLOCKS									
Number	Name	Area	Volume						
1	Main	1321	10568						
2	2nd Floor	787	6296						
SPACES									
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
1	1st Floor	1321	10568	Yes	4	1	Yes	Yes	Yes
2	Loft	787	6296	No	2	2	Yes	Yes	Yes

Building Input Summary Report

FLOORS											(Total Exposed Area = 1321 sq.ft.)
#	Floor Type	Space	Perimeter	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet		
1	Crawlspace	1st Floor	182 ft	0	1321 ft²	19	0	0	1		
2	Floor Over Other Space	Loft			787 ft²	0	0	0	1		

ROOF										
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt Tested	Deck Insul.	Pitch (deg)
1	Gable or shed	Metal	2200 ft²	880 ft²	Medium	0.96	No	0.9	No	53.1

ATTIC						
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
1	Full cathedral ceiling	Vented	300	1321 ft²	N	N

CEILING								(Total Exposed Area = 1321 sq.ft.)
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type	
1	Cathedral/Single Assembly ()	Loft	30	Batt	534 ft²	0.11	Wood	
2	Under Attic ()	Loft	30	Batt	787 ft²	0.11	Wood	

WALLS													(Total Exposed Area = 2446 sq.ft.)	
Wall orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
1	N	Exterior	Frame - Wood	1st Floor	19	55	1	8		440.7 ft²		0.23	0.75	0
2	E	Exterior	Frame - Wood	1st Floor	19	15	1	16		241.3 ft²		0.23	0.75	0
3	S	Exterior	Frame - Wood	1st Floor	19	30		8		240.0 ft²		0.23	0.75	0
4	E	Exterior	Frame - Wood	1st Floor	19	15		8		120.0 ft²		0.23	0.75	0
5	S	Exterior	Frame - Wood	1st Floor	19	25	1	16		401.3 ft²		0.23	0.75	0
6	W	Exterior	Frame - Wood	1st Floor	19	30	1	8		240.7 ft²		0.23	0.75	0
7	N	Exterior	Frame - Wood	Loft	19	55	1	8		440.7 ft²		0.23	0.75	0
8	E	Exterior	Frame - Wood	Loft	19	15	1	8		120.7 ft²		0.23	0.75	0
9	S	Exterior	Frame - Wood	Loft	19	25	1	8		200.7 ft²		0.23	0.75	0

Total Exposed Gross Wall Area:		2446 sq. ft.	Total Window Area:		167 sq. ft.	Total Door Area:		140 sq. ft.	Net Wall Area:		2139 sq. ft.
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DOORS											(Total Exposed Area = 140 sq.ft.)
#	Ornt	Adjacent to	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
1	N	Exterior	Insulated	1st Floor	None	.46	6		6	8	40 ft²
2	N	Exterior	Insulated	1st Floor	None	.46	6		6	8	40 ft²
3	N	Exterior	Insulated	1st Floor	None	.46	6		6	8	40 ft²
4	W	Exterior	Insulated	1st Floor	None	.46	3		6	8	20 ft²

Building Input Summary Report

WINDOWS												(Total Exposed Area = 167 sq.ft.)	
#	Wall		Frame	Panels	NFRC	U-Factor	SHGC	Storm	Area	Overhang		Interior Shade	Screening
	Ornt	ID								Depth	Separation		
1	N	1	Vinyl	Low-E Double	Yes	0.4	0.25	N	12.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
2	E	2	Vinyl	Low-E Double	Yes	0.4	0.25	N	12.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
3	S	3	Vinyl	Low-E Double	Yes	0.4	0.25	N	30.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
4	E	4	Vinyl	Low-E Double	Yes	0.4	0.25	N	15.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
5	S	5	Vinyl	Low-E Double	Yes	0.4	0.25	N	2.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
6	W	6	Vinyl	Low-E Double	Yes	0.4	0.25	N	20.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
7	N	7	Vinyl	Low-E Double	Yes	0.4	0.25	N	30.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
8	E	8	Vinyl	Low-E Double	Yes	0.4	0.25	N	16.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
9	S	9	Vinyl	Low-E Double	Yes	0.4	0.25	N	30.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None

INFILTRATION											
#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50	Space(s)		
1	Wholehouse	Best Guess	.0003	1658.8	91.07	171.26	.2844	5.9018	All		

MASS											
Mass Type			Area	Thickness	Furniture Fraction			Space			
No Added Mass			0 ft²	0 ft	0.3			1st Floor			
No Added Mass			0 ft²	0 ft	0.3			Loft			

HEATING SYSTEM														
#	System Type		Subtype	Efficiency	Capacity	-----Geothermal HeatPump-----				Ducts	Block			
						Entry	Power	Volt.	Curr					
1	Electric Heat Pump		None	HSPF:8.2	14.36 kBtu/hr					0	0	0	sys#1	1
2	Electric Heat Pump		None	HSPF:8.2	6.83 kBtu/hr					0	0	0	sys#2	2

COOLING SYSTEM											
#	System Type		Subtype	Efficiency	Capacity	Air Flow	SHR	Ducts	Block		
1	Central Unit		None	SEER:15	13.54 kBtu/hr	420 cfm	0.75	sys#1	1		
2	Central Unit		None	SEER:15	6.2 kBtu/hr	180 cfm	0.75	sys#2	2		

HOT WATER SYSTEM											
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length	
1	Electric	None	1st Floor	0.92	50 gal	60 gal	120 deg	Standard	None	40	
Recirculation System		Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits	
No		NA	NA	NA	NA	No	NA	NA	NA	None	

Building Input Summary Report

SOLAR HOT WATER

Collector Type	Collector Tilt	Collector Azimuth	Surface Area	Loss Coef.	Absorp. Prod.	Trans Corr.	Tank Volume	Tank U-Value	Tank Surf Area	Heat Exch Eff	PV Pumped	Pump Energy
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DUCTS

DUCT #	Location	Supply R-Value	Supply Area	Return R-Value	Return Area	Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	HVAC # Cool
1	1st Floor	6	264.2 ft²	1st Floor	6	66.05 ft²	Default Leakage	1st Floor	(Default)	(Default)		1	1
2	Loft	6	210.8 ft²	Loft	6	52.7 ft²	Default Leakage	Loft	(Default)	(Default)		2	2

TEMPERATURES

Programable Thermostat: None

Ceiling Fans: N

Cooling	☒ Jan	☒ Feb	☒ Mar	☒ Apr	☐ May	☒ Jun	☒ Jul	☒ Aug	☒ Sep	☐ Oct	☒ Nov	☒ Dec
Heating	☒ Jan	☒ Feb	☒ Mar	☒ Apr	☐ May	☐ Jun	☐ Jul	☐ Aug	☐ Sep	☒ Oct	☒ Nov	☒ Dec
Venting	☒ Jan	☒ Feb	☒ Mar	☒ Apr	☐ May	☐ Jun	☐ Jul	☐ Aug	☐ Sep	☒ Oct	☒ Nov	☒ Dec

Thermostat Schedule: HERS 2006 Reference

Schedule Type		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

Building Input Summary Report

APPLIANCES & LIGHTING

Appliance Schedule: HERS 2006 Reference

Schedule Type		Hours											
		1	2	3	4	5	6	7	8	9	10	11	12
Ceiling Fans (Summer)	AM	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.33	0.33	0.33	0.33	0.33
% Released: 100	PM	0.33	0.33	0.33	0.33	0.33	1	0.9	0.9	0.9	0.9	0.9	0.65
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Clothes Washer	AM	0.105	0.081	0.046	0.046	0.081	0.128	0.256	0.57	0.849	1	0.977	0.872
% Released: 60	PM	0.779	0.698	0.605	0.57	0.581	0.57	0.57	0.57	0.57	0.488	0.43	0.198
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dishwasher	AM	0.139	0.05	0.028	0.024	0.029	0.09	0.169	0.303	0.541	0.594	0.502	0.443
% Released: 60	PM	0.377	0.396	0.335	0.323	0.344	0.448	0.791	1	0.8	0.597	0.383	0.281
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dryer	AM	0.2	0.1	0.05	0.05	0.05	0.075	0.2	0.375	0.5	0.8	0.95	1
% Released: 10	PM	0.875	0.85	0.8	0.625	0.625	0.6	0.575	0.55	0.625	0.7	0.65	0.375
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Lighting	AM	0.16	0.15	0.16	0.18	0.23	0.45	0.4	0.26	0.19	0.16	0.12	0.11
% Released: 90	PM	0.16	0.17	0.25	0.27	0.34	0.55	0.55	0.88	1	0.86	0.51	0.28
Annual Use: 455 kWh/Yr		Peak Value: 149 Watts											
Miscellaneous	AM	0.48	0.47	0.47	0.47	0.47	0.47	0.64	0.71	0.67	0.61	0.55	0.53
% Released: 90	PM	0.52	0.5	0.5	0.5	0.59	0.73	0.79	0.99	1	0.96	0.77	0.55
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Pool Pump	AM	0	0	0	0	0	0	0	0	0	1	1	1
% Released: 0	PM	1	1	1	1	0	0	0	0	0	0	0	0
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Range	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.4
% Released: 100	PM	0.457	0.343	0.286	0.4	0.571	1	0.857	0.429	0.286	0.229	0.171	0.114
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Refrigeration	AM	0.85	0.78	0.75	0.73	0.73	0.73	0.75	0.75	0.8	0.8	0.8	0.8
% Released: 100	PM	0.88	0.85	0.85	0.83	0.88	0.95	1	0.98	0.95	0.93	0.9	0.85
Annual Use: 775 kWh/Yr		Peak Value: 140 Watts											
Well Pump	AM	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.1	0.1	0.1	0.1
% Released: 0	PM	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											

HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Qualify#	Comp FI	All Other FL	txtBulbtype	Schedule	Watts per bulb
1	Hard-Wir	Default	Exterior	20	2	0	2	Incandes	HERS201	60

MISC ELECTRICAL LOADS

ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby
1	Misc Elec	Simple Default		1		1	Main	HERS2011	1

Building Input Summary Report

APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule: HERS2014

Schedule Type

			Hours											
			1	2	3	4	5	6	7	8	9	10	11	12
Occupancy peak:	400 Btu	AM	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.98	0.46	0.27	0.27	0.27
% Released:	100 %	PM	0.27	0.27	0.27	0.27	0.33	0.61	1	1	0.93	0.93	0.93	0.93
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854
cWash peak:	0 W	AM	0.2	0.1	0.05	0.05	0.05	0.075	0.2	0.375	0.5	0.8	0.95	1
% Released:	30 %	PM	0.875	0.85	0.8	0.625	0.625	0.6	0.575	0.55	0.625	0.7	0.65	0.375
E-cDry peak:	0 W	AM	0.2	0.1	0.05	0.05	0.05	0.075	0.2	0.375	0.5	0.8	0.95	1
% Released:	15 %	PM	0.875	0.85	0.8	0.625	0.625	0.6	0.575	0.55	0.625	0.7	0.65	0.375
dWash peak:	0 W	AM	0.139	0.05	0.028	0.024	0.029	0.09	0.169	0.303	0.541	0.594	0.502	0.443
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1	0.8	0.597	0.383	0.281
E-rOven peak:	0 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.4
% Released:	80 %	PM	0.457	0.343	0.286	0.4	0.571	1	0.857	0.429	0.286	0.229	0.171	0.114
TVs peak:	226 W	AM	0.1	0.05	0.05	0.05	0.1	0.2	0.4	0.45	0.4	0.2	0.1	0.1
% Released:	100 %	PM	0.05	0.05	0.15	0.45	0.85	1	0.95	0.8	0.5	0.25	0.15	0.1
cFan peak:	0 W	AM	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.25	0.25	0.25	0.25	0.25
% Released:	100 %	PM	0.25	0.25	0.25	0.25	0.25	0.25	0.55	0.6	0.6	0.6	0.6	0.6
lgts-in peak:	0 W	AM	0.16	0.15	0.16	0.18	0.23	0.45	0.42	0.26	0.19	0.16	0.12	0.11
% Released:	100 %	PM	0.16	0.17	0.25	0.27	0.34	0.55	0.6	0.88	1	0.88	0.51	0.28
lgts-out peak:	55 W	AM	1	1	1	1	1	0.75	0.75	0	0	0	0	0
% Released:	0 %	PM	0	0	0	0	0	0	0	0.5	0.75	0.75	0.75	1
lgts-gar peak:	0 W	AM	0	0	0	0	0	0.5	0.75	1	0.75	0.5	0	0
% Released:	0 %	PM	0	0	0.5	0.5	0.75	1	0.75	0.5	0	0	0	0
MEL peak:	0 W	AM	0.5	0.5	0.5	0.75	0.75	0.85	1	1	1	1	0.9	0.9
% Released:	90 %	PM	0.9	0.9	1	1	1	1	1	1	1	0.85	0.75	0.75

Manual J Summer Calculations

Residential Load - Component Details (continued)

Project Title: Climate: FL_GAINESVILLE_REGIONAL_A
Mr and Mrs Hair

Lake City, FL 32055

1/19/2017

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	Sensible Envelope Load All Zones	14242 Btuh
	Sensible Duct Load	0 Btuh
	Total Sensible Zone Loads	14242 Btuh
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	14242 Btuh
	Latent infiltration gain (for 47 gr. humidity difference)	3050 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	0 Btuh
	Latent occupant gain (6.0 people @ 200 Btuh per person)	1200 Btuh
	Latent other gain	0 Btuh
	Latent total gain	4250 Btuh
	TOTAL GAIN	18492 Btuh

EQUIPMENT

1. Central Unit	#	13541 Btuh
2. Central Unit	#	6198 Btuh

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



Version 8

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Project Title:
Mr and Mrs Hair

Lake City, FL 32055

1/19/2017

Reference City: Gainesville Reg, FL

Temperature Difference: 17.0F(MJ8 99%)

Humidity difference: 47gr.

Component Loads for Whole House

Window	Type*						Overhang		Window Area(sqft)			HTM		Load	
	Panes	SHGC	U	InSh	IS	Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded		
1	2 NFRC	0.25, 0.40	B-L	No	N		1.0ft	1.0ft	12.0	0.0	12.0	9	9	111	Btuh
2	2 NFRC	0.25, 0.40	B-L	No	E		1.0ft	1.0ft	12.0	0.0	12.0	9	23	270	Btuh
3	2 NFRC	0.25, 0.40	B-L	No	S		1.0ft	1.0ft	30.0	26.4	3.6	9	11	284	Btuh
4	2 NFRC	0.25, 0.40	B-L	No	E		1.0ft	1.0ft	15.0	0.0	15.0	9	23	338	Btuh
5	2 NFRC	0.25, 0.40	B-L	No	S		1.0ft	1.0ft	2.0	2.0	0.0	9	11	19	Btuh
6	2 NFRC	0.25, 0.40	No	No	W		1.0ft	1.0ft	20.0	0.0	20.0	12	31	618	Btuh
7	2 NFRC	0.25, 0.40	B-L	No	N		1.0ft	1.0ft	30.0	0.0	30.0	9	9	278	Btuh
8	2 NFRC	0.25, 0.40	B-L	No	E		1.0ft	1.0ft	16.0	0.0	16.0	9	23	360	Btuh
9	2 NFRC	0.25, 0.40	B-L	No	S		1.0ft	1.0ft	30.0	26.4	3.6	9	11	284	Btuh
Window Total									167 (sqft)					2562 Btuh	
Walls	Type	U-Value		R-Value		Area(sqft)		HTM		Load					
1	Frame - Wood - Ext	0.08	19.0/0.0			308.7		1.5		463	Btuh				
2	Frame - Wood - Ext	0.08	19.0/0.0			229.3		1.5		344	Btuh				
3	Frame - Wood - Ext	0.08	19.0/0.0			210.0		1.5		315	Btuh				
4	Frame - Wood - Ext	0.08	19.0/0.0			105.0		1.5		157	Btuh				
5	Frame - Wood - Ext	0.08	19.0/0.0			399.3		1.5		599	Btuh				
6	Frame - Wood - Ext	0.08	19.0/0.0			200.7		1.5		301	Btuh				
7	Frame - Wood - Ext	0.08	19.0/0.0			410.7		1.5		616	Btuh				
8	Frame - Wood - Ext	0.08	19.0/0.0			104.7		1.5		157	Btuh				
9	Frame - Wood - Ext	0.08	19.0/0.0			170.7		1.5		256	Btuh				
Wall Total						2139 (sqft)				3207 Btuh					
Doors	Type	U-Value		R-Value		Area (sqft)		HTM		Load					
1	Insulated - Exterior					40.0		12.9		515	Btuh				
2	Insulated - Exterior					40.0		12.9		515	Btuh				
3	Insulated - Exterior					40.0		12.9		515	Btuh				
4	Insulated - Exterior					20.0		12.9		258	Btuh				
Door Total						140 (sqft)				1803 Btuh					
Ceilings	Type/Color/Surface	U-Value		R-Value		Area(sqft)		HTM		Load					
1	Cath/Sngl Assem/Light/Metal	0.032	30.0/0.0			534.0		0.72		384	Btuh				
2	Vented Attic/Light/Metal	0.032	30.0/0.0			787.0		1.34		1053	Btuh				
Ceiling Total						1321 (sqft)				1436 Btuh					
Floors	Type	U-Value		R-Value		Size		HTM		Load					
1	Stem/Crawlsp(Carpet)(v)			19.0		1321 (sqft)		0.7		869	Btuh				
2	Interior			0.0		787 (sqft)		0.0		0	Btuh				
Floor Total						2108.0 (sqft)				869 Btuh					
Envelope Subtotal:														9877 Btuh	

Manual J Summer Calculations

Residential Load - Component Details (continued)

Project Title: Mr and Mrs Hair
 Climate: FL_GAINESVILLE_REGIONAL_A

Lake City, FL 32055

1/19/2017

Infiltration	Type Natural	Average ACH 0.34	Volume(cuft) 16864	Wall Ratio 1	CFM= 95.9	Load 1785 Btuh
Internal gain		Occupants 6	Btuh/occupant X 230	Appliance +	1200	Load 2580 Btuh
					Sensible Envelope Load:	14242 Btuh
Duct load	Average sealed, Supply(R6.0-Condi), Return(R6.0-Condi)				(DGM of 0.000)	0 Btuh
					Sensible Load All Zones	14242 Btuh

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Lake City, FL 32055

Project Title:
Mr and Mrs Hair
Building Type: User

1/19/2017

Reference City: Gainesville Reg, FL (Defaults) Winter Temperature Difference: 37.0 F (MJ8 99%)

Component Loads for Whole House

Window	Panes/Type	Frame	U	Orientation	Area(sqft)	X	HTM=	Load
1	2, NFRC 0.25	Vinyl	0.40	N	12.0		14.8	178 Btuh
2	2, NFRC 0.25	Vinyl	0.40	E	12.0		14.8	178 Btuh
3	2, NFRC 0.25	Vinyl	0.40	S	30.0		14.8	444 Btuh
4	2, NFRC 0.25	Vinyl	0.40	E	15.0		14.8	222 Btuh
5	2, NFRC 0.25	Vinyl	0.40	S	2.0		14.8	30 Btuh
6	2, NFRC 0.25	Vinyl	0.40	W	20.0		14.8	296 Btuh
7	2, NFRC 0.25	Vinyl	0.40	N	30.0		14.8	444 Btuh
8	2, NFRC 0.25	Vinyl	0.40	E	16.0		14.8	237 Btuh
9	2, NFRC 0.25	Vinyl	0.40	S	30.0		14.8	444 Btuh
Window Total					167.0(sqft)			2472 Btuh
Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area	X	HTM=	Load
1	Frame - Wood	- Ext	(0.077)	19.0/0.0	309		2.86	883 Btuh
2	Frame - Wood	- Ext	(0.077)	19.0/0.0	229		2.86	656 Btuh
3	Frame - Wood	- Ext	(0.077)	19.0/0.0	210		2.86	600 Btuh
4	Frame - Wood	- Ext	(0.077)	19.0/0.0	105		2.86	300 Btuh
5	Frame - Wood	- Ext	(0.077)	19.0/0.0	399		2.86	1142 Btuh
6	Frame - Wood	- Ext	(0.077)	19.0/0.0	201		2.86	574 Btuh
7	Frame - Wood	- Ext	(0.077)	19.0/0.0	411		2.86	1174 Btuh
8	Frame - Wood	- Ext	(0.077)	19.0/0.0	105		2.86	299 Btuh
9	Frame - Wood	- Ext	(0.077)	19.0/0.0	171		2.86	488 Btuh
Wall Total					2139(sqft)			6116 Btuh
Doors	Type	Storm	Ueff.		Area	X	HTM=	Load
1	Insulated - Exterior, n		(0.460)		40		17.0	681 Btuh
2	Insulated - Exterior, n		(0.460)		40		17.0	681 Btuh
3	Insulated - Exterior, n		(0.460)		40		17.0	681 Btuh
4	Insulated - Exterior, n		(0.460)		20		17.0	340 Btuh
Door Total					140(sqft)			2383 Btuh
Ceilings	Type/Color/Surface		Ueff.	R-Value	Area	X	HTM=	Load
1	Cathedral/L/Metal		(0.032)	30.0/0.0	534		1.2	639 Btuh
2	Vented Attic/L/Metal		(0.032)	30.0/0.0	787		1.2	927 Btuh
Ceiling Total					1321(sqft)			1567 Btuh
Floors	Type		Ueff.	R-Value	Size	X	HTM=	Load
1	Stem/Crawlsp(Carpet)(v)		(0.049)	19.0/0.0	1321.0 sqft		1.4	1881 Btuh
2	Interior		(0.049)	0.0	787.0 sqft		0.0	0 Btuh
Floor Total					2108 sqft			1881 Btuh
Envelope Subtotal:								14418 Btuh
Infiltration	Type	Wholehouse	ACH	Volume(cuft)	Wall Ratio	CFM=		
	Natural		0.46	16864	1.00	127.9		5179 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Lake City, FL 32055

Project Title:
Mr and Mrs Hair
Building Type: User

1/19/2017

Duct load	(DLM of 0.000)	0 Btuh
All Zones	Sensible Subtotal All Zones	19597 Btuh

WHOLE HOUSE TOTALS

Totals for Heating	Subtotal Sensible Heat Loss Ventilation Sensible Heat Loss Total Heat Loss	19597 Btuh 0 Btuh 19597 Btuh
--------------------	--	------------------------------------

EQUIPMENT

1. Electric Heat Pump	#	14360 Btuh
2. Electric Heat Pump	#	6826 Btuh

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

U - (Window U-Factor)

HTM - (ManualJ Heat Transfer Multiplier)



Version 8

Residential System Sizing Calculation

Summary

Project Title:
Mr and Mrs Hair

Lake City, FL 32055

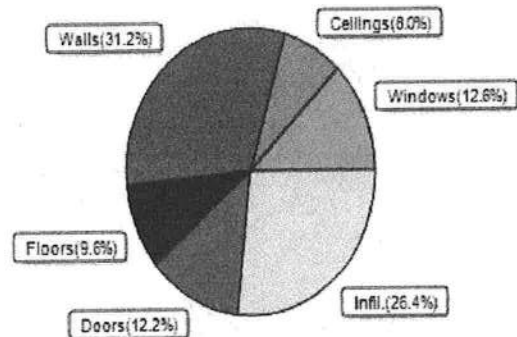
1/19/2017

Location for weather data: Gainesville Reg, FL - Defaults: Latitude(30) Altitude(164 ft.) Temp Range(M)			
Humidity data: Interior RH (50%) Outdoor wet bulb (76F) Humidity difference(47gr.)			
Winter design temperature(MJ8 99%)	33 F	Summer design temperature(MJ8 99%)	92 F
Winter setpoint	70 F	Summer setpoint	75 F
Winter temperature difference	37 F	Summer temperature difference	17 F
Total heating load calculation	19597 Btuh	Total cooling load calculation	18492 Btuh
Submitted heating capacity	% of calc Btuh	Submitted cooling capacity	% of calc Btuh
Total (Electric Heat Pump)	108.1 21187	Sensible (SHR = 0.75)	103.9 14804
Heat Pump + Auxiliary(0.0kW)	108.1 21187	Latent	116.1 4935
		Total (Electric Heat Pump)	106.7 19739

WINTER CALCULATIONS

Winter Heating Load (for 2108 sqft)

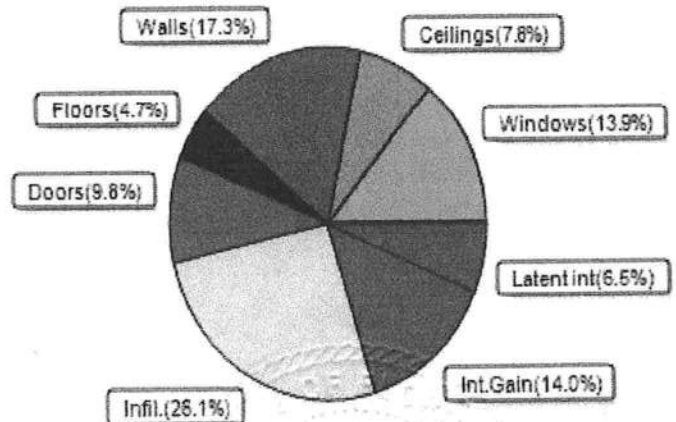
Load component		Load	
Window total	167 sqft	2472	Btuh
Wall total	2139 sqft	6116	Btuh
Door total	140 sqft	2383	Btuh
Ceiling total	1321 sqft	1567	Btuh
Floor total	See detail report	1881	Btuh
Infiltration	128 cfm	5179	Btuh
Duct loss		0	Btuh
Subtotal		19597	Btuh
Ventilation	0 cfm	0	Btuh
TOTAL HEAT LOSS		19597	Btuh



SUMMER CALCULATIONS

Summer Cooling Load (for 2108 sqft)

Load component		Load	
Window total	167 sqft	2562	Btuh
Wall total	2139 sqft	3207	Btuh
Door total	140 sqft	1803	Btuh
Ceiling total	1321 sqft	1436	Btuh
Floor total		869	Btuh
Infiltration	96 cfm	1785	Btuh
Internal gain		2580	Btuh
Duct gain		0	Btuh
Sens. Ventilation	0 cfm	0	Btuh
Blower Load		0	Btuh
Total sensible gain		14242	Btuh
Latent gain(ducts)		0	Btuh
Latent gain(infiltration)		3050	Btuh
Latent gain(ventilation)		0	Btuh
Latent gain(internal/occupants/other)		1200	Btuh
Total latent gain		4250	Btuh
TOTAL HEAT GAIN		18492	Btuh



8th Edition

EnergyGauge® System Sizing

PREPARED BY: *[Signature]*

DATE: *19 Jan 2017*

AR 7005

MANDATORY REQUIREMENTS - (Continued)

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

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

Exceptions:

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

☐ **R403.6.1.2 Heating equipment capacity**

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

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

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

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

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

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

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

- **R403.9.1.1 Gas and oil-fired pool and spa heaters.** All gas- and oil-fired pool and space heaters shall have a minimum thermal efficiency of 82 percent for heaters manufactured on or after April 16, 2013 when tested in accordance with ANSI Z 21.56. Pool heaters fired by natural gas or LP gas shall not have continuously burning pilot lights.

- **R403.9.1.2 Heat pump pool heaters.** Heat pump pool heaters shall have a minimum COP of 4.0 when tested in accordance with AHRI 1160, Table 2, Standard Rating Conditions-Low Air Temperature. A test report from an independent laboratory is required to verify procedure compliance. Geothermal swimming pool heat pumps are not required to meet this standard.

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

Exceptions:

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

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

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

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

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

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

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

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

MANDATORY REQUIREMENTS - (Continued)

- ☐ **R403.2.3 Building Cavities (Mandatory).** Building framing cavities shall not be used as ducts or plenums.
- ☐ **R403.3 Mechanical system piping insulation (Mandatory).** Mechanical system piping capable of carrying fluids above 105°F (41°C) or below 55°F (13°C) shall be insulated to a minimum of R-3.
- R403.3.1 Protection of piping insulation.**
- ☐ **R403.4.1 Circulating hot water systems (Mandatory).** Circulating hot water systems shall be provided with an automatic or readily accessible manual switch that can turn off the hot-water circulating pump when the system is not in use.
- ☐ **R403.4.3 Heat traps (Mandatory).** Storage water heaters not equipped with integral heat traps and having vertical pipe risers shall have heat traps installed on both the inlets and outlets. External heat traps shall consist of either a commercially available heat trap or a downward and upward bend of at least 3 ½ inches (89 mm) in the hot water distribution line and cold water line located as close as possible to the storage tank.
- ☐ **R403.4.4 Water heater efficiencies (Mandatory).**
- ☐ **R403.4.4.1 Storage water heater temperature controls**
 - **R403.4.4.1.1 Automatic controls.** Service water heating systems shall be equipped with automatic temperature controls capable of adjustment from the lowest to the highest acceptable temperature settings for the intended use. The minimum temperature setting range shall be from 100°F to 140°F (38°C to 60°C).
 - **R403.4.4.1.2 Shut down.** A separate switch or a clearly marked circuit breaker shall be provided to permit the power supplied to electric service systems to be turned off. A separate valve shall be provided to permit the energy supplied to the main burner(s) of combustion types of service water heating systems to be turned off.
 - ☐ **R403.4.4.2 Water heating equipment.** Water heating equipment installed in residential units shall meet the minimum efficiencies of Table C404.2 in Chapter 4 of the Florida Building Code, Energy Conservation, Commercial Provisions, for the type of equipment installed. Equipment used to provide heating functions as part of a combination system shall satisfy all stated requirements for the appropriate water heating category. Solar water heaters shall meet the criteria Section R403.4.4.2.1.
 - **R403.4.4.2.1 Solar water heating systems.** Solar systems for domestic hot water production are rated by the annual solar energy factor of the system. The solar energy factor of a system shall be determined from the Florida Solar Energy Center Directory of Certified Solar Systems. Solar collectors shall be tested in accordance with ISO Standard 9806, Test Methods for Solar Collectors, and SRCC Standard TM-1, Solar Domestic Hot Water System and Component Test Protocol. Collectors in installed solar water heating systems should meet the following criteria:
 1. Be installed with a tilt angle between 10 degrees and 40 degrees of the horizontal; and
 2. Be installed at an orientation within 45 degrees of true south.
- ☐ **R403.5 Mechanical ventilation (Mandatory).** The building shall be provided with ventilation that meets the requirements of the Florida Building Code, Residential or Florida Building Code, Mechanical, as applicable, or with other approved means of ventilation. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.
- ☐ **R403.6 Heating and cooling equipment (Mandatory).** The following sections are mandatory for cooling and heating equipment.
- ☐ **R403.6.1 Equipment sizing.** Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on the equipment loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies, based on building loads for the directional orientation of the building. The manufacturer and model number of the outdoor and indoor units (if split system) shall be submitted along with the sensible and total cooling capacities at the design conditions described in Section R302.1. This code does not allow designer safety factors, provisions for future expansion or other factors which affect equipment sizing. System sizing calculations shall not include loads created by local intermittent mechanical ventilation such as standard kitchen and bathroom exhaust systems.
 - **R403.6.1.1 Cooling equipment capacity.** Cooling only equipment shall be selected so that its total capacity is not less than the calculated total load, but not more than 1.15 times greater than the total load calculated according to the procedure selected in Section 403.6, or the closest available size provided by the manufacturer's product lines. The corresponding latent capacity of the equipment shall not be less than the calculated latent load.

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

ADDRESS:

Lake City, FL, 32055

Permit Number:

MANDATORY REQUIREMENTS See individual code sections for full details.

- ☐ **401.3 Energy Performance Level (EPL) display card (Mandatory).** The building official shall require that an energy performance level (EPL) display card be completed and certified by the builder to be accurate and correct before final approval of the building for occupancy. Florida law [Section 553.9085, Florida 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 compliance for the building. A copy of the EPL display card can be found in Appendix C.
- ☐ **R402.4 Air leakage (Mandatory).** The building thermal envelope shall be constructed to limit air leakage in accordance with the requirements of Sections R402.1 through R402.4.4.
- ☐ **R402.4.1 Building thermal envelope.** The building thermal envelope shall comply with Sections R402.4.1.1 and R402.4.1.2. The sealing methods between dissimilar materials shall allow for differential expansion and contraction.
- **R402.4.1.1 Installation.** The components of the building thermal envelope as listed in Table R402.4.1.1 shall be installed in accordance with the manufacturer's instructions and the criteria listed in Table 402.4.1.1, as applicable to the method of construction. Where required by the code official, an approved third party shall inspect all components and verify compliance.
 - **R402.4.1.2 Testing.** The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding 5 air changes per hour in Climate Zones 1 and 2, and 3 air changes per hour in Climate Zones 3 through 8. Testing shall be conducted with a blower door at a pressure of 0.2 inches w.g. (50 Pascals). Where required by the code official, testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.
- During testing:
1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures;
 2. Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures;
 3. Interior doors, if installed at the time of the test, shall be open;
 4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed;
 5. Heating and cooling systems, if installed at the time of the test, shall be turned off; and
 6. Supply and return registers, if installed at the time of the test, shall be fully open.
- ☐ **R402.4.2 Fireplaces.** New wood-burning fireplaces shall have tight-fitting flue dampers and outdoor combustion air.
- ☐ **R402.4.3 Fenestration air leakage.** Windows, skylights and sliding glass doors shall have an air infiltration rate of no more than 0.3 cfm per square foot (1.5 L/s/m²), and swinging doors no more than 0.5 cfm per square foot (2.6 L/s/m²), when tested according to NFRC 400 or AAMA/WDMA/CSA 101/I.S.2/A440 by an accredited, independent laboratory and listed and labeled by the manufacturer.
- Exception:** Site-built windows, skylights and doors.
- ☐ **R402.4.4 Recessed lighting.** Recessed luminaires installed in the building thermal envelope shall be sealed to limit air leakage between conditioned and unconditioned spaces. All recessed luminaires shall be IC-rated and labeled as having an air leakage rate not more than 2.0 cfm (0.944 L/s) when tested in accordance with ASTM E 283 at a 1.57 psf (75 Pa) pressure differential. All recessed luminaires shall be sealed with a gasket or caulk between the housing and the interior wall or ceiling covering.
- ☐ **R403.1.1 Thermostat provision (Mandatory).** At least one thermostat shall be provided for each separate heating and cooling system.
- ☐ **R403.1.3 Heat pump supplementary heat (Mandatory).** Heat pumps having supplementary electric-resistance heat shall have controls that, except during defrost, prevent supplemental heat operation when the heat pump compressor can meet the heating load.
- ☐ **R403.2.2 Sealing (Mandatory)** All ducts, air handlers, and filter boxes and building cavities that form the primary air containment passageways for air distribution systems shall be considered ducts and plenum chambers, shall be constructed and sealed in accordance with Section C403.2.7.2 of the Commercial Provisions of this code and shall be shown to meet duct tightness criteria by post-construction or rough-in testing below.
- Duct tightness shall be verified by testing to Section 803 of the RESNET Standards by either an energy rater certified in accordance with Section 553.99, Florida Statutes, or as authorized by Florida Statutes, to be "substantially leak free" by either of the following:
1. **Post-construction test:** Total leakage shall be less than or equal to 4 cfm (113 L/min) per 100 square feet (9.29 m²) of conditioned floor area when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. All register boots shall be taped or otherwise sealed during the test.
 2. **Rough-in test:** Total leakage shall be less than or equal to 4 cfm (113 L/min) per 100 square feet (9.29 m²) of conditioned floor area when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the system, including the manufacturer's air handler enclosure. All registers shall be taped or otherwise sealed during the test. If the air handler is not installed at the time of the test, total leakage shall be less than or equal to 3 cfm (85 L/min) per 100 square feet (9.29 m²) of conditioned floor area.
- Exceptions:**
1. The total leakage test is not required for ducts and air handlers located entirely within the building envelope.
 2. Duct testing is not mandatory for buildings complying by Section R405 of this code.

RESIDENTIAL ENERGY CONSERVATION CODE DOCUMENTATION CHECKLIST

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

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

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

Required prior to CO for the Performance Method:

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

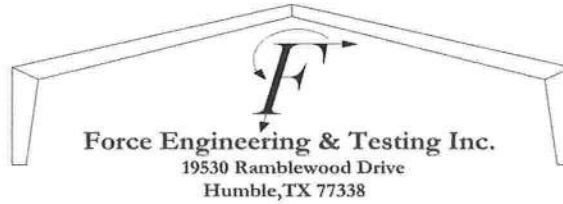
TABLE 402.4.1.1

AIR BARRIER AND INSULATION INSPECTION COMPONENT CRITERIA

Project Name: Mr and Mrs Hair Street: City, State, Zip: Lake City , FL , 32055 Owner: Design Location: FL, Gainesville		Builder Name: Permit Office: Columbia Permit Number: Jurisdiction:
COMPONENT	CRITERIA	CHECK
Air barrier and thermal barrier	A continuous air barrier shall be installed in the building envelope. Exterior thermal envelope contains a continuous barrier. Breaks or joints in the air barrier shall be sealed. Air-permeable insulation shall not be used as a sealing material.	
Ceiling/attic	The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier shall be sealed. Access openings, drop down stairs or knee wall doors to unconditioned attic spaces shall be sealed.	
Walls	Corners and headers shall be insulated and the junction of the foundation and sill plate shall be sealed. The junction of the top plate and the top or exterior walls shall be sealed. Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier. Knee walls shall be sealed.	
Windows, skylights and doors	The space between window/door jambs and framing and skylights and framing shall be sealed.	
Rim joists	Rim joists are insulated and include an air barrier.	
Floors (including above-garage and cantilevered floors)	Insulation shall be installed to maintain permanent contact with underside of subfloor decking. The air barrier shall be installed at any exposed edge of insulation.	
Crawl space walls	Where provided in lieu of floor insulation, insulation shall be permanently attached to the crawlspace walls. Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.	
Shafts, penetrations	Duct shafts, utility penetrations, and flue shaft openings to exterior or unconditioned space shall be sealed.	
Narrow cavities	Batts in narrow cavities shall be cut to fit, or narrow cavities shall be filled by insulation that on installation readily conforms to the available cavity spaces.	
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.	
Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be air tight, IC rated, and sealed to the drywall.	
Plumbing and wiring	Batt insulation shall be cut neatly to fit around wiring and plumbing in exterior walls, or insulation that on installation readily conforms to available space shall extend behind piping and wiring.	
Shower/tub on exterior wall	Exterior walls adjacent to showers and tubs shall be insulated and the air barrier installed separating them from the showers and tubs.	
Electrical/phone box on	The air barrier shall be installed behind electrical or communication boxes or air sealed boxes shall be installed.	
HVAC register boots	HVAC register boots that penetrate building thermal envelope shall be sealed to the sub-floor or drywall.	
Fireplace	An air barrier shall be installed on fireplace walls. Fireplaces shall have gasketed doors	

FLORIDA PRODUCT APPROVALS
10-16-15

Item:	Manufacturer	Product Description:	Approval Number:
Exterior Doors:	Masonite	Inswing & Outswing Fiberglass	FL-8228-R7
	Masonite	Inswing & Outswing Steel	FL-4904-R7
	Plastpro	8'0" Inswing & Outswing Fiberglass	FL-15220-R1
	Plastpro	Inswing & Outswing Steel	FL-15962-R2
	Plastpro	6'8" Inswing & Outswing Fiberglass	FL-15215-R3
Windows:	MI	Aluiminum 185 Single Hung	FL-17499
		Aluiminum 185 Picture Window	FL-15349
		Vinyl 3540 Single Hung	FL-17676-R1
		Vinyl 3500 Picture Window	FL-18644
	Magnolia	Vinyl 400 Single Hung	FL-16475-R3
		Vinyl 400 Picture Window	FL-16474-R2
Soffit:	Kaycan	Vinyl/PVC & Aluminum Soffit	FL-16503
		Vinyl Siding	FL-15867-R1
Underlayment:	Woodland	30# Felt	FL-17206-R3
Roofing:	Certainteed	Asphalt Shingles	FL-5444
	GAF	Asphalt Shingles	FL-10124-R16
	Tamko	Asphalt Shingles	FL-18355
Siding:	Allura of Plycem	Cement board lap siding	FL-17482-R2
	James Hardie	Cement board lap siding	FL-13192-R4
Simpson		LSTA – MSTA, SPH4	FL-13872-R2
	GAF	Tiger Paw Underlayment	FL-15487-R5
Metal Roofing		5V Roofing Master Rib Roofing	FL-9555-R3 FL-9557-R3



Product Evaluation Report
TRI COUNTY METALS

29 Ga. Ultra-Rib Roof Panel over 1x4 Wood Purlins over 15/32" Plywood

Florida Product Approval # 4595.9 R3

Florida Building Code 2014
Per Rule 61G20-3
Method: 1 -D

Category: Roofing
Subcategory: Metal Roofing
Compliance Method: 61G20-3.005(1)(d)
NON HVHZ

Product Manufacturer:

Tri County Metals
301 SE 16th Street
Trenton, Florida 32693

Engineer Evaluator:

Terrence E. Wolfe, P.E. # 44923
Florida Evaluation ANE ID: 1920

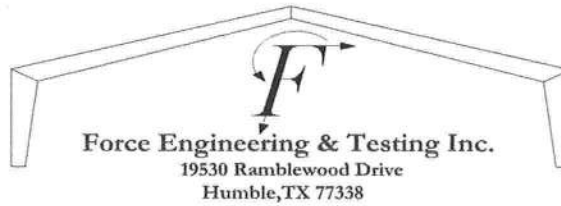
Validator:

Locke Bowden, P.E., FL #49704
9450 Alysburry Place
Montgomery, AL 36117

Contents:

Evaluation Report Pages 1 - 4





Compliance Statement: The product as described in this report has demonstrated compliance with the Florida Building Code 2014, Sections 1504.3.2, 1504.7.

Product Description: Ultra-Rib Roof Panel, Min. 29 Ga. Steel, 36" Wide, through fastened roof panel over 1x4 wood purlins over 15/32" APA Plywood decking. Non-structural Application.

Panel Material/Standards: Material: Min. 29 Ga. Steel conforming to Florida Building Code 2014 Section 1507.4.3.
Yield Strength: Min. 80.0 ksi
Corrosion Resistance: Panel Material shall comply with Florida Building Code 2014, Section 1507.4.3.

Panel Dimension(s): Thickness: 0.014" min.
Width: 36" maximum coverage
Rib Height: 3/4" major rib at 9" O.C.

Panel Fastener: #9-15 x 1-1/2" HWH Woodgrip with sealing washing or approved equal
1/4" minimum penetration through plywood
Corrosion Resistance: Per Florida Building Code 2014, Section 1506.6, 1507.4.4

Substrate Description: Min. 1x4 No. 2 SYP wood purlins over min. 15/32" thick, APA Rated plywood over supports at maximum 24" O.C. The 1x4 wood purlins shall be fastened through the plywood into the wood rafters with minimum (2) 8x3" Deck screw at a maximum of 24" O.C. Design of 1x4 wood purlins, plywood and plywood supports are outside the scope of this evaluation. Substrate must be designed in accordance w/ Florida Building Code 2014.

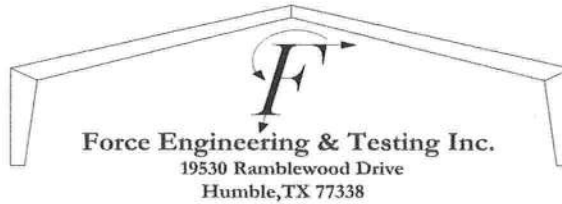
Design Uplift Pressures:

Table "A"

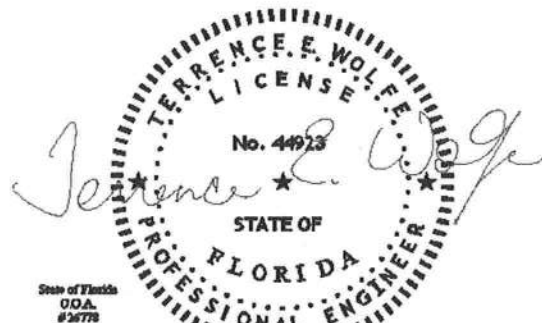
Maximum Total Uplift Design Pressure:	93.5 psf	138.5 psf
Fastener Pattern:	9"-9"-9"-9"	6"-3"-6"-3"-6"-3"-6"
Fastener Spacing:	24" O.C.	24" O.C.

*Design Pressure includes a Safety Factor = 2.0.





Code Compliance:	The product described herein has demonstrated compliance with The Florida Building Code 2014, Section 1504.3.2, 1504.7.
Evaluation Report Scope:	The product evaluation is limited to compliance with the structural wind load requirements of the Florida Building Code 2014, as relates to Rule 61G20-3.
Performance Standards:	The product described herein has demonstrated compliance with: ▪ UL 580-06 - Test for Uplift Resistance of Roof Assemblies ▪ UL 1897-04 - Uplift Test for Roof Covering Systems ▪ FM 4471-92 - Foot Traffic Resistance Test
Reference Data:	1. UL 580-94 / 1897-98 Uplift Test Force Engineering & Testing, Inc. (FBC Organization # TST-5328) Report No. 136-0408T-09A, B, Dated 11/18/2009 2. FM 4471-10, Section 4.4 Foot Traffic Resistance Test Force Engineering & Testing, Inc. (FBC Organization # TST-5328) Report No. 136-0027T-12C, Dated 02/16/2012 3. Certificate of Independence By Terrence E. Wolfe, P.E. (No. 44923) @ Force Engineering & Testing, Inc. (FBC Organization # ANE ID: 1920)
Test Standard Equivalency:	1. The UL 580-94 test standard is equivalent to the UL 580-06 test standard. 2. The UL 1897-98 test standard is equivalent to the UL 1897-04 test standard. 3. The FM 4471-10, Foot Traffic Resistance test standard is equivalent to the FM 4471-92, Foot Traffic Resistance test standard
Quality Assurance Entity:	The manufacturer has established compliance of roof panel products in accordance with the Florida Building Code and Rule 61G20-3.005 (3) for manufacturing under a quality assurance program audited by an approved quality assurance entity.
Minimum Slope Range:	Minimum Slope shall comply with Florida Building Code 2014, including Section 1507.4.2 and in accordance with Manufacturers recommendations. For slopes less than 3:12, lap sealant must be used in the panel side laps.
Installation:	Install per manufacturer's recommended details.
Underlayment:	Per Manufacturer's installation guidelines per Florida Building Code 2014.





Roof Panel Fire Classification:

Fire classification is not part of this acceptance.

Shear Diaphragm:

Shear diaphragm values are outside the scope of this report.

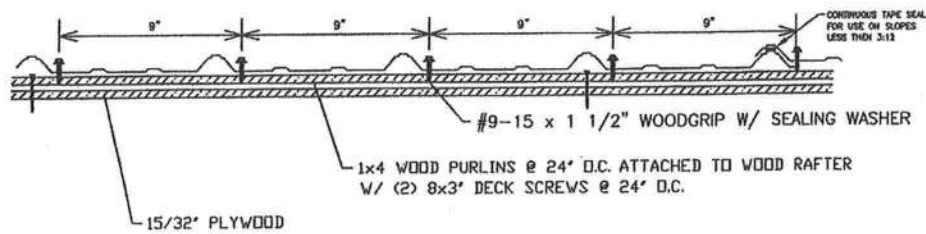
Design Procedure:

Based on the dimensions of the structure, appropriate wind loads are determined using Chapter 16 of the Florida Building Code 2014 for roof cladding wind loads. These component wind loads for roof cladding are compared to the allowable pressure listed above. The design professional shall select the appropriate erection details to reference in his drawings for proper fastener attachment to his structure and analyze the panel fasteners for pullout and pullover. Support framing must be in compliance with Florida Building Code 2014 Chapter 22 for steel, Chapter 23 for wood and Chapter 16 for structural loading.

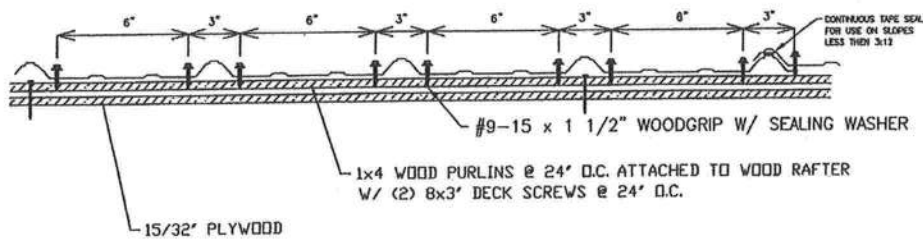


MIN. 29 GA. ULTRA-RIB PANEL OVER 1X4 WOOD PURLINS

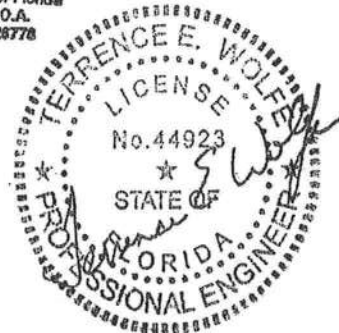
TYPE 1 FASTENER PATTERN AT 24" O.C.



TYPE 2 FASTENER PATTERN AT 24" O.C.



State of Florida
C.O.A.
28778



APR 09 2015

FLORIDA DEPARTMENT OF
Business & Professional Regulation

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Product Approval
USER: Public User

[Product Approval Menu](#) > **Application Detail**

OFFICE OF THE
SECRETARY

FL #	FL7347-R5												
Application Type	Revision												
Code Version	2014												
Application Status	Approved												
Comments													
Archived													
Product Manufacturer	Therma-Tru Corporation												
Address/Phone/Email	118 Industrial Drive Edgerton, OH 43517 (419) 298-1740 rickw@rwbdgconsultants.com												
Authorized Signature	Rick Wright rickw@rwbdgconsultants.com												
Technical Representative													
Address/Phone/Email													
Quality Assurance Representative													
Address/Phone/Email													
Category	Exterior Doors												
Subcategory	Swinging Exterior Door Assemblies												
Compliance Method	Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer ✓ Evaluation Report - Hardcopy Received												
Florida Engineer or Architect Name who developed the Evaluation Report	Lyndon F. Schmidt, P.E.												
Florida License	PE-43409												
Quality Assurance Entity	National Accreditation and Management Institute												
Quality Assurance Contract Expiration Date	12/31/2018												
Validated By	Ryan J. King, P.E. ✓ Validation Checklist - Hardcopy Received												
Certificate of Independence	FL7347 R5 COI Certificate Of Independence.pdf												
Referenced Standard and Year (of Standard)	<table border="0"> <thead> <tr> <th><u>Standard</u></th> <th><u>Year</u></th> </tr> </thead> <tbody> <tr> <td>ANSI/AAMA/NWWDA 101/I.S.2/A440</td> <td>2005</td> </tr> <tr> <td>ASTM E1886</td> <td>2002</td> </tr> <tr> <td>ASTM E1996</td> <td>2002</td> </tr> <tr> <td>ASTM E330</td> <td>2002</td> </tr> <tr> <td>TAS 201, 202, 203</td> <td>1994</td> </tr> </tbody> </table>	<u>Standard</u>	<u>Year</u>	ANSI/AAMA/NWWDA 101/I.S.2/A440	2005	ASTM E1886	2002	ASTM E1996	2002	ASTM E330	2002	TAS 201, 202, 203	1994
<u>Standard</u>	<u>Year</u>												
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ASTM E1886	2002												
ASTM E1996	2002												
ASTM E330	2002												
TAS 201, 202, 203	1994												
Equivalence of Product Standards Certified By													
Sections from the Code													

Product Approval Method

Method 1 Option D

Date Submitted

01/31/2015

Date Validated

02/02/2015

Date Pending FBC Approval

02/06/2015

Date Approved

04/15/2015

Summary of Products

FL #	Model, Number or Name	Description
7347.1	a. "FiberClassic", "SmoothStar", "ClassicCraft" or "ClassicCraft Rustic"	3'0 x 6'8 "Impact" Glazed Fiberglass Single Door (X) - Inswing or Outswing
Limits of Use Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: Yes Design Pressure: N/A Other: See INST 7347.1 for Design Pressure Ratings by specific Model and for any other additional use limitations and installation instructions.		Installation Instructions FL7347 R5 II Inst 7347.1.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes Evaluation Reports FL7347 R5 AE EVAL 7347.1.pdf Created by Independent Third Party: Yes
7347.2	b. "FiberClassic", "SmoothStar", "ClassicCraft" or "ClassicCraft Rustic"	3'0 x 6'8 "Impact" Glazed Fiberglass Single Door with Sidelite (OX or XO) - Inswing or Outswing
Limits of Use Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: Yes Design Pressure: N/A Other: See INST 7347.2 for Design Pressure Ratings by specific Model and for any other additional use limitations and installation instructions.		Installation Instructions FL7347 R5 II Inst 7347.2.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes Evaluation Reports FL7347 R5 AE EVAL 7347.2.pdf Created by Independent Third Party: Yes
7347.3	c. "FiberClassic", "SmoothStar", "ClassicCraft" or "ClassicCraft Rustic"	3'0 x 6'8 "Impact" Glazed Fiberglass Single Door with Sidelites (OXO) - Inswing or Outswing
Limits of Use Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: Yes Design Pressure: N/A Other: See INST 7347.3 for Design Pressure Ratings by specific Model and for any other additional use limitations and installation instructions.		Installation Instructions FL7347 R5 II Inst 7347.3.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes Evaluation Reports FL7347 R5 AE EVAL 7347.3.pdf Created by Independent Third Party: Yes
7347.4	d. "FiberClassic", "SmoothStar", "ClassicCraft" or "ClassicCraft Rustic"	6'0 x 6'8 "Impact" Glazed Fiberglass Double Door (XX) - Inswing or Outswing
Limits of Use Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: Yes Design Pressure: N/A Other: See INST 7347.4 for Design Pressure Ratings by specific Model and for any other additional use limitations and installation instructions.		Installation Instructions FL7347 R5 II Inst 7347.4.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes Evaluation Reports FL7347 R5 AE EVAL 7347.4.pdf Created by Independent Third Party: Yes
7347.5	e. "FiberClassic", "SmoothStar", "ClassicCraft" or "ClassicCraft Rustic"	6'0 x 6'8 "Impact" Glazed Fiberglass Double Door with Sidelites (OXXO) - Inswing or Outswing
Limits of Use Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: Yes Design Pressure: N/A Other: See INST 7347.5 for Design Pressure Ratings by specific Model and for any other additional use limitations and installation instructions.		Installation Instructions FL7347 R5 II Inst 7347.5.pdf Verified By: Lyndon F. Schmidt, P.E. 43409 Created by Independent Third Party: Yes Evaluation Reports FL7347 R5 AE EVAL 7347.5.pdf Created by Independent Third Party: Yes

[Contact Us](#) :: [2601 Blair Stone Road, Tallahassee FL 32399](#) Phone: 850-487-1824

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Under Florida law, email addresses are public records. If you do not want your e-mail address released in response to a public-records request, do not send electronic mail to this entity. Instead, contact the office by phone or by traditional mail. If you have any questions, please contact 850.487.1395. *Pursuant to Section 455.275(1), Florida Statutes, effective October 1, 2012, licensees licensed under Chapter 455, F.S. must provide the Department with an email address if they have one. The emails provided may be used for official communication with the licensee. However email addresses are public record. If you do not wish to supply a personal address, please provide the Department with an email address which can be made available to the public. To determine if you are a licensee under Chapter 455, F.S., please click [here](#).

Product Approval Accepts:



Credit Card
Safe

securityMETRICS

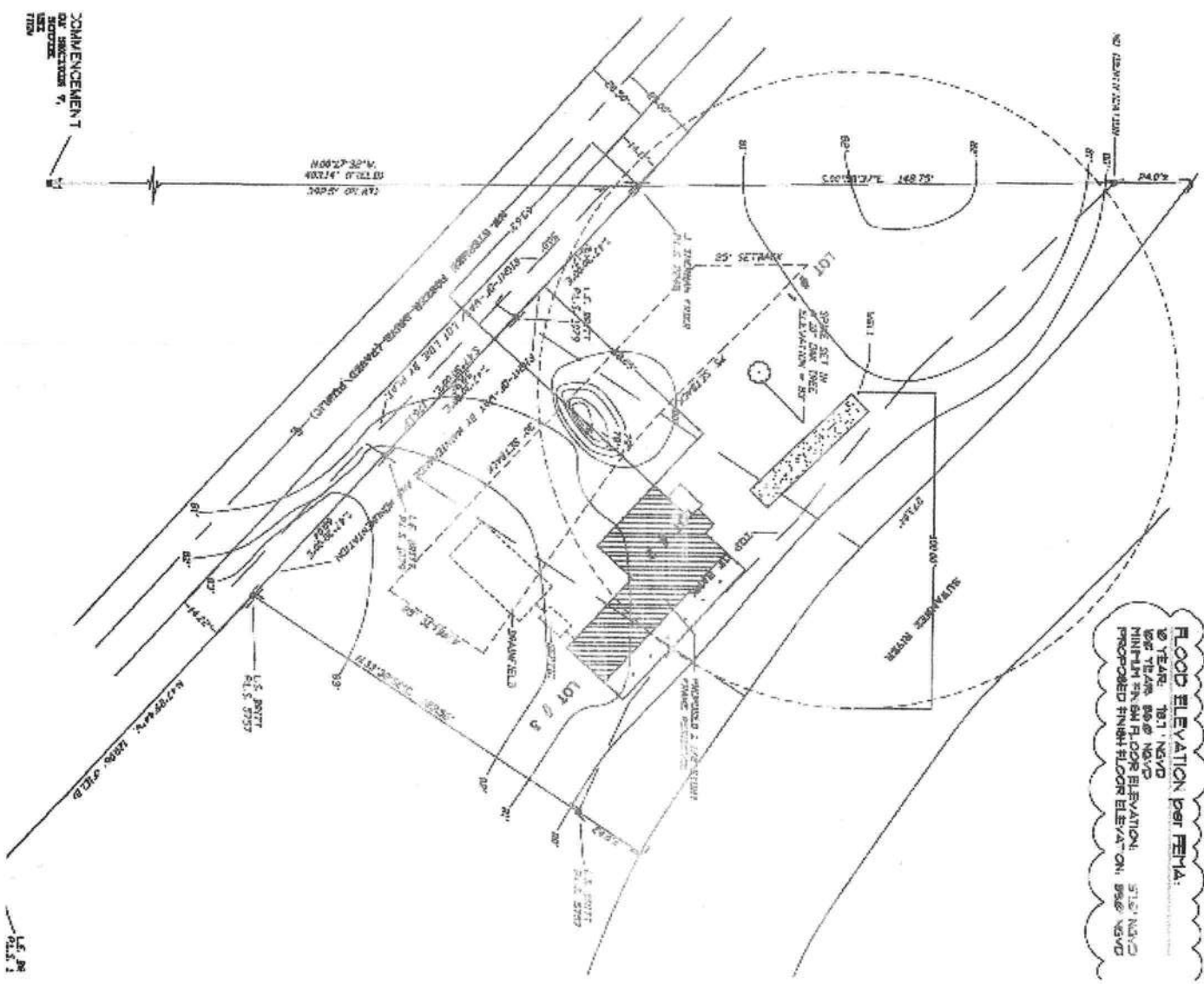


5' FLOOD ELEVATION
4' FLOOD ELEVATION
3' FLOOD ELEVATION
2' FLOOD ELEVATION

DESCRIPTION:
LOT 1 & 2 OF A SUBDIVISION OF PART OF THE 1/4 OF 7
TOWNSHIP 2 SOUTH RANGE 14 EAST OF LANDA COUNTY, ILLINOIS
TOWNSHIP 2 SOUTH RANGE 14 EAST OF LANDA COUNTY, ILLINOIS
OF THE 1/4 OF 7 OF LANDA COUNTY, ILLINOIS

FLOOD ELEVATION PER FEMA:

10 YEAR: 78.1' NAVD
50 YEAR: 80.0' NAVD
100 YEAR: 81.5' NAVD
PROPOSED FINISH FLOOR ELEVATION: 81.5' NAVD



Site plan

A. James L. Hair II white
springs, Columbia County
B.
C.

FLOOD ELEVATION per

10 YEAR:	78.1' NGVD
100 YEAR:	86.0' NGVD
MINIMUM FINISH FLOOR ELEVATION	
PROPOSED FINISH FLOOR ELEVATION	

Site Plan Details:

- Lot #2:** Contains a proposed 1 1/2 story frame residence, a parking area, a well, and a septic tank. The residence is situated on a slope with a "TOP OF BANK" indicated. A "WOODED AREA" is adjacent to the lot.
- Lot #3:** Contains a drainfield and a "WOODED AREA".
- Lot #4:** A private lot, partially shown.
- Setbacks and Easements:** Various setbacks are marked, including a 30' setback for the residence and a 25' setback for the parking area. A "RIGHT-OF-WAY BY MAINTENANCE AND ADJUTANTION" is shown along the bottom boundary.
- Property Lines and Measurements:** Numerous measurements are provided for the boundaries and internal features, such as "S 47° 30' 00" E 142.92'", "N 32° 30' 32" E 122.86'", and "S 47° 30' 00" E 142.92'".
- Other Features:** A "SHADE TREE" is located near the well. A "PROPOSED 1 1/2 STORY FRAME RESIDENCE" is shown with a footprint of approximately 20' x 30'. A "SEPTIC TANK" is located near the residence.

RETURN TO
JAMES L. HAIR, II
275 NW Stephen Forest Drive
White Springs, Florida 32096

Inst: 201612009538 Date: 06/08/2016 Time: 1:09PM
Page 1 of 1 B: 1316 P: 1046, P.DeWitt Cason, Clerk of Court
Columbia, County, By: BD
Deputy ClerkDoc Stamp-Deed: 0.70

General Warranty Deed

Made this FEBRUARY 13, 2014 A.D.

BY JUDY L. HAIR, , whose address is: 16387 188th Street, O'Brien, Florida 32071, hereinafter called the grantor,
AS sole Trustee of the Judy L. Hair Living Trust dated April 16th 2008
TO JAMES L. HAIR, II AND CRYSTAL N. HAIR, husband and wife, whose post office address is: 275 NW Stephen Forest Drive,
White Springs, Florida 32096 , hereinafter called the grantee:

(Whenever used herein the term "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations)

Witnesseth, that the grantor, for and in consideration of the sum of Ten Dollars, (\$10.00) and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the grantee, all that certain land situate in Suwannee County, Florida, viz:

All of the Grantor's undivided 1/2 Interest in the following described property:

LOT 1, 2 and 3 of GOVT, LOT 9, unrecorded subdiv. in Section 7, Township 2 South, Range 16 East,
as per that certain map or plat recorded in Official Record Book 241 page 102 of the public records of
COLUMBIA COUNTY, FLORIDA.

NB: Being the same lands as shown in Official Record Book 1194 page 2029

Parcel ID Number: 01574-0003, 001573-000

Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

To Have and to Hold, the same in fee simple forever.

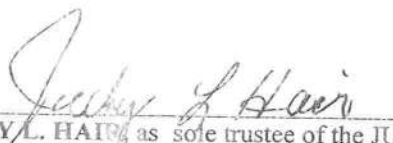
And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances except taxes accruing subsequent to December 31, 2013.

In Witness Whereof, the said grantor has signed and sealed these presents the day and year first above written.

Signed, sealed and delivered in our presence:


Witness Printed Name Patrick Tyler Rogers


Witness Printed Name MATTHEW J. ELLINGTON

 2-13-14 (Seal)
JUDY L. HAIR as sole trustee of the JUDY L. HAIR/LIVING
TRUST, dated April 16, 2008

_____(Seal)

State of FLORIDA
County of COLUMBIA

The foregoing instrument was acknowledged before me this February 13, 2014, by Judy L. Hair as sole Trustee of the Judy L. Hair Living Trust dated April 16, 2008, who is personally known to me or who has produced

(Whenever used herein the term "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations)

Witnesseth, that the grantor, for and in consideration of the sum of Ten Dollars, (\$10.00) and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the grantee, all that certain land situate in Suwannee County, Florida, viz:

All of the Grantor's undivided 1/2 Interest in the following described property:

LOT 1, 2 and 3 of GOVT. LOT 9, unrecorded subdivision in Section 7, Township 2 South, Range 16 East, as per that certain map or plat recorded in Official Record Book 241 page 102 of the public records of **COLUMBIA COUNTY, FLORIDA**.

NB: Being the same lands as shown in Official Record Book 1194 page 2029

Parcel ID Number: 01574-000 & 001573-000

Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

To Have and to Hold, the same in fee simple forever.

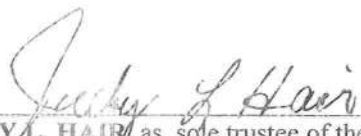
And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances except taxes accruing subsequent to December 31, 2013.

In Witness Whereof, the said grantor has signed and sealed these presents the day and year first above written.

Signed, sealed and delivered in our presence:


Witness Printed Name Patrick Tyler Rogers

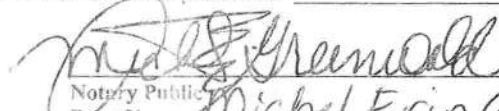

Witness Printed Name MATTHEW J. ELLINGTON

 2-13-14 (Seal)
JUDY L. HAIR, as sole trustee of the JUDY L. HAIR/LIVING TRUST, dated April 16, 2008

_____(Seal)

State of FLORIDA
County of COLUMBIA

The foregoing instrument was acknowledged before me this February 13, 2014, by Judy L. Hair as sole Trustee of the Judy L. Hair Living Trust dated April 16, 2008., who is/are personally known to me or who has produced _____ as identification.


Notary Public
Print Name: Michel Erin Greenwald
My Commission Expires: June 15, 2017



SUWANNEE RIVER WATER MANAGEMENT DISTRICT

IN RE:

James Hair,

Petitioner,

ORDER No. 13-0005

v.

**SUWANNEE RIVER WATER
MANAGEMENT DISTRICT,**

Respondent.

FINAL ORDER GRANTING VARIANCE

The Suwannee River Water Management District ("District") received a petition on September 27, 2013, from James Hair ("Petitioner"), seeking a variance from Florida Administrative Code ("Fla. Admin. Code") rule 40B-4.3030(13). Petitioner seeks this variance within a Work of the District in Township 2 South, Range 16 East, Section 07, Columbia County. Parcel Number 07-2S-16-01574-000 and 07-2S-16-01573-000.

PROCEDURE AND ALLEGATIONS

1. Pursuant to Fla. Stat. § 120.542, Petitioner seeks a variance from Fla. Admin. Code rule 40B-4.3030(13) for file number ERP06-0497M. A true copy of the original Petition for Variance is attached to this Order as Exhibit "A".
2. The District caused a notice to be published in the Florida Administrative Register ("FAR") on October 9, 2013, informing the public that the District had received a Petition for Variance which provided an opportunity for comment or objection within fourteen

days of the date of publication in the FAR. A true copy of the notice is attached to this Order as Exhibit "B". The District received no comments or objections to the petition.

3. Petitioner's address is 275 NW Stephen Foster Drive, White Springs, FL 32096, and the property affected by this order is described as follows: 275 NW Stephen Foster Drive, White Springs Florida 32096; Lot 1, 2 and 3 of a subdivision of part of the SW $\frac{1}{4}$ of the SW $\frac{1}{4}$ of section 7, township 2 south, range 16 east, Columbia county, Florida, as per plat thereof recorded in official record book 222, page 128 and book 24L, page 102 of the public records of Columbia county, Florida, tax parcel identification number 07-2S-16-01574-000 and 07-2S-16-01573-000.

As to Location Requirements

4. Petitioner seeks to obtain a variance to Fla. Admin. Code 40B-4.3030(13) for construction within the 75 foot setback from the top of the river bank. Petitioner alleges the variance will permit them to build in the only location available to allow them to comply with all the other agency's requirements for protecting the river.

APPLICABLE LAW

5. The variance is requested pursuant to Fla. Stat. § 120.542, which provides that:

Variations and waivers shall be granted when the person subject to the rule demonstrates that the purpose of the underlying statute will be or has been achieved by other means by the person and when application of a rule would create a substantial hardship or would violate principles of fairness. For purposes of this section, "substantial hardship" means a demonstrated economic, technological, legal, or other type of hardship to the person requesting the variance or waiver.

6. Petitioner is required to demonstrate that (1) the application of Fla. Admin. Code rule 40B-4.3030(13) would create a substantial hardship or would violate the principles of fairness.

7. The purpose of Chapter 373 of the Florida Statutes is to prevent harm to the water resources of the state. To achieve this purpose, District is authorized to require permits for the construction of structures within a Work of the District. To obtain a permit under Chapter 373, an applicant must provide reasonable assurance that the construction will not obstruct the free flow of waters of rivers and streams within the District. *See*, Fla. Stat. § 373.086 (Providing for works of the district).

8. Florida Admin. Code rule 40B-4.3030 became effective as District rule on September 25, 1985, and the most recent amendment became effective on October 1, 2013.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

9. Petitioner demonstrated a substantial economic hardship would be created by requiring Petitioner to comply with Fla. Admin. Code 40B-4.3030(13) because the lots are not large enough to allow for construction outside the 75 feet setback within the property; therefore, Petitioner has met the requirements for a variance to Fla. Admin. Code 40B-4.3030(13) under Fla. Stat. § 120.542. Petitioner has demonstrated that the underlying statute could not be achieved by other means.

10. District concludes that the request for variance from Fla. Admin. Code 40B-4.3030(13) should be granted.

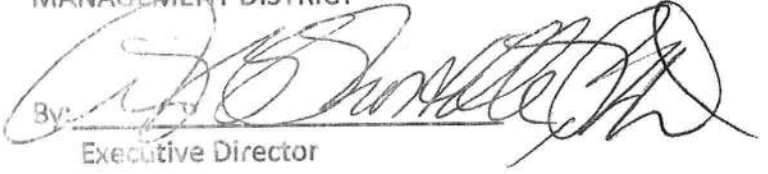
IT IS HEREBY ORDERED:

1. The Petition for Variance from Fla. Admin. Code 40B-4.3030(13) is GRANTED with a permanent duration.

2. A copy of this order shall be recorded in the public records of Columbia County.

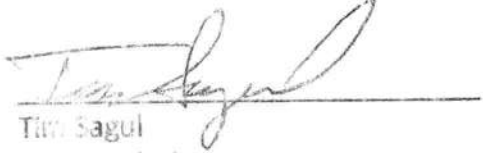
DONE AND ORDERED this 10th day of December 2013.

SUWANNEE RIVER WATER
MANAGEMENT DISTRICT

By: 

Executive Director

RENDERED on this 10th day of December 2013.


Tim Sagul

District Clerk

Copies furnished to:

ERP06-0497M
Lindsey Lander
James Hair
Suzanne Printy, JAPC

October 1, 2013

Suwannee River
Water Management District
9225 CR 49
Live Oak, FL 32060

(a) Petition for variance from Ch 40B-4 and 40B-400, Florida Administrative Code

Subject: James Hair WOD Project, ERP06-0497M, Columbia County

(b) Petitioner: James L. Hair II
275 NW Stephen Foster Dr.
White Springs, FL 32096

(c) Agent: Not Applicable.

(d) The applicable portion of the rule:

The portion of the rule in which the variance is requested is Ch.40B-4.3030(12)(b).

(e) The citation to the statute the rule is implementing:

The citation of the statute the rule is implementing is rule Ch. 40B-4.3030(12)(b) (No construction, additions or reconstruction shall occur in the front 75 feet of an area immediately adjacent to and including the normally recognized bank of a water).

RECEIVED
SRWMD

SEP 27 2013

ORIGINAL TO FILE ERP06-0497M
COPIES TO _____

Exhibit A

(f) Type of variance requested:

The type of action requested is for a variance from rule Ch. 40B-4.3030(12)(b).

This would allow us to have the area needed to build our home on the property for our living needs, store our RV and allow us to use the existing slab of concrete (that was located on the property when we purchased it) as a porch. No land clearing is required to use the slab of concrete. The house will be constructed above the 100 year flood plain as required by the Suwannee River Water Management District.

(g) Facts that demonstrate hardship:

The lots we have are 110 ft to 122 ft from top of the bank to the right of way on Stephen Foster Drive. The required setback of Columbia County from the road right of way is 30 ft and the required setback of the Suwannee River Water Management District is 75 ft from the top of the bank. This leaves a small area of a maximum of 17 ft and a minimum of 5 ft to build a home. The septic system and the well must be 75 ft apart. The septic system is on the far right of the property and the well is on the far left of the property. The only location to place our home is in the center, which will leave us enough room for parking on the left side. This variance will permit us to build our home in the only location available to allow us to comply with all the other agency's requirements for protecting our river.

RECEIVED
SPWMD

SEP 27 2013

ORIGINAL TO FILE *ERP06-0497m*
COPIES TO

(h) The reason the variance or waiver requested would serve the purpose of the underlying statute:

Building a home in this property within the 75' top of bank set-back is not possible due to the size of the lot, the location of the septic system, the location of the well and Columbia County building set-backs. However, granting the variance or waiver requested would serve the purpose of the underlying statute by not obstructing flows to the river. Also, by building above the 100 year flood plain the requirements of Columbia County Building Department and Suwannee River Water Management District will be satisfied. The house will also be designed and constructed to meet all current building codes. Due to the restraints the property faces, we cannot completely comply with Florida Administrative Code, however with the variance request approved, we can and will meet as much of the rule as possible.

(i) Permanent waiver/variance requested

It is our wish that a permanent waiver or variance be granted for the following:

- 1.) Ch. 40B-4.3030(12)(b) (No construction, additions or reconstruction shall occur in the front 75 feet of an area immediately adjacent to and including the normally recognized bank of a water). Thus, a permanent variance is requested to build a home within the 75 ft setback area, above the 100 year flood plain.

RECEIVED
SRWMD

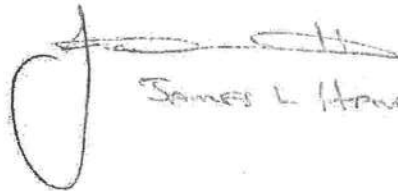
SEP 27 2013

ORIGINAL TO FILE ERP06-0497m
COPIES TO _____

Please take into consideration the above request for variance. Approval of the request would allow for the construction of our future home, build to current building codes and prevent future negative impacts on the flow of the Suwannee River during flood stage.

Thank you for your consideration.

Sincerely,



James L. Howe II

RECEIVED
SRWMD

SEP 27 2013

ORIGINAL TO FILE
COPIES TO
ERP 66-0497m

~~recreational harvest and possession of red grouper, black grouper, yellowfin grouper, yellowmouth grouper, rock hind, red hind or scamp shall be from February 1 through March 31, each year.~~

(1)(2)(a) through (b) No change.

(2)(3) In all state waters of the Atlantic Ocean, including all waters of Monroe County, the closed season for the recreational harvest and possession of gag grouper, black grouper, red grouper, yellowfin grouper, yellowmouth grouper, rock hind, red hind, scamp, coney, graysby, and tiger grouper shall be from January 1 through April 30 each year.

Rulemaking Authority Art. IV, Sec. 9, Fla. Const. Law Implemented Art. IV, Sec. 9, Fla. Const. History—New 1-6-09, Amended 8-27-09, 1-19-10, 6-17-11, 3-23-12, 5-9-13, _____.

Section III

Notice of Changes, Corrections and Withdrawals

DEPARTMENT OF FINANCIAL SERVICES

Division of Consumer Services

RULE NOS.: RULE TITLES:

69J-8.001	Purpose
69J-8.002	Definitions
69J-8.003	Neutral Evaluator Coarse Approval
69J-8.004	Qualification and Certification of Neutral Evaluators
69J-8.005	Maintenance of a List of Neutral Evaluators
69J-8.006	Notice of Program
69J-8.007	Request for Evaluation
69J-8.008	Selection of Neutral Evaluator
69J-8.009	Evaluation Process
69J-8.010	Appointment of Department Employee for Consultation for Policyholder Not Represented by an Attorney
69J-8.011	Neutral Evaluator's Report

NOTICE OF CORRECTION

Notice is hereby given that the following correction has been made to the proposed rule in Vol. 39, No. 174, September 6, 2013 issue of the Florida Administrative Register.

This notice is to correct the following date that was incorrectly printed in the notice. The proposed rule should have read as follows:

DATE NOTICE OF PROPOSED RULE DEVELOPMENT PUBLISHED IN FAR: March 20, 2013

Section IV Emergency Rules

NONE

Section V

Petitions and Dispositions Regarding Rule Variance or Waiver

WATER MANAGEMENT DISTRICTS

Suwannee River Water Management District

RULE NO.: RULE TITLE:

40B-4.3030 Conditions for Issuance of Works of the District Permits

NOTICE IS HEREBY GIVEN that on September 27, 2013, the Suwannee River Water Management District, received a petition for variance from James L. Hair, II, 275 NW Stephen Foster Dr., White Springs, FL 32096, pursuant to Section 120.542, F.S. Petitioner is seeking a variance from paragraph 40B-4.3030(12)(b), F.A.C., as to no construction, additions or reconstruction shall occur in the front 75-feet of an area immediately adjacent to and including the normally recognized bank of a water. Petitioner proposes to construct a residence within the 75-foot set-back due to the size of lot, in Columbia County, in Township 2 South, Range 16 East, Section 07. These rules are intended to set forth criteria for development activities within a Works of the District. The petition has been assigned ERP Number 06-0497M, James Hair District Floodway Project Modification.

A copy of the Petition for Variance or Waiver may be obtained by contacting: Tilda Musgrove, Business Resource Specialist, Suwannee River Water Management District, 9225 CR 49, Live Oak, FL 32060, (386)362-1001 or 1(800)226-1066 in Florida only.

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

Division of Hotels and Restaurants

RULE NO.: RULE TITLE:

61C-5.001 Safety Standards

The Department of Business and Professional Regulation, Division of Hotels and Restaurants, Bureau of Elevator Safety hereby gives notice: on October 7, 2013, the Division issued an order. The Final Order was in response to a Petition for an emergency Variance from Universal Studios-Project 722, filed September 10, 2013, and advertised on September 16, 2013 in Vol. 39, No. 180, of the Florida Administrative Register. No comments were received in response to the petition. The Final Order on the Petition for Variance grants the Petitioner a variance from Rule 2.20.4, 2.18.5.1, 8.11.2.1(cc)(1)&(3) ASME A17.1b, 2009 edition, as 2.20.4, 2.18.5.1 and 8.11.2.1.3(cc)(1) & (3) as adopted by paragraph 61C-5.001(i)(a), Florida Administrative Code that requires steel ropes of a minimum diameter of 9.5 mm which poses a



GTC DESIGN GROUP

GTC Design Group, LLC
P.O. Box 187
Live Oak, FL 32064
(Phone) 386.362.3678
(Fax) 386.362.6133
ggill@gtcdesigngroup.com

September 11, 2006

Zero Base Certification

Client / Owner: James L. Hair II

Property Description: Lot 2 of unrecorded S/D in the SW 1/2 of the SW 1/2 of Section 7, Township 2 South, Range 16 East Columbia County, FL

Structure in Floodway: Single Family Dwelling

River Mile: 169.5

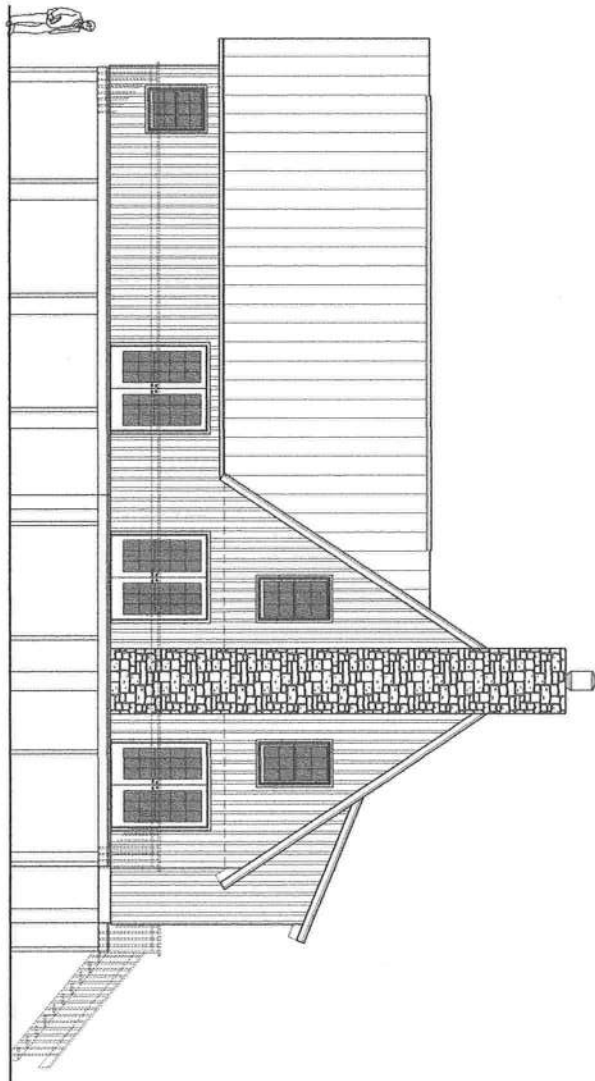
Elevation of 100 yr flood: 87

Community Panel: 120070 0105 B

I hereby certify that construction of the proposed residence will not increase flood elevations of the Upper Suwannee River.

Chadwick Williams, PE

September 11, 2006



Custom River House Design for:
Mr. & Mrs. S. Hair
 Columbia County, Florida

Drawing Index

COVER SHEET, DRAWING INDEX	
CS1	COVER SHEET, DRAWING INDEX
A1	GENERAL NOTES & DETAILS
A2	BUILDING ELEVATIONS
A3	FLOOR PLAN
A4	FOUNDATION FLOOR PLAN
A5	INTERIOR ARCHITECTURAL DETAILS
A6	EXTERIOR ARCHITECTURAL DETAILS

STRUCTURAL INFORMATION	
A1	FOUNDATION INFORMATION
A2	FOUNDATION PLAN
A3	FLOOR FRAMING PLAN
A4	ROOF FRAMING PLAN
A5	WALL SECTIONS AND STRUCTURAL DETAILS



CS1
 1 of 1

DATE
 27 JUL 2014
 DRAWN
 24443

N. S. HAIR
 ARCHITECT
 1728 2ND BLVD. N.E.
 SUITE 200
 ATLANTA, GA 30316
 404.525.1100
 FAX 404.525.1101

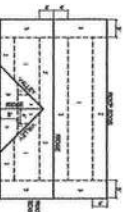
Celebrating
 43 Years of Service
 1972 - 2014
 N. S. HAIR ARCHITECT
 1728 2ND BLVD. N.E.
 SUITE 200
 ATLANTA, GA 30316
 404.525.1100
 FAX 404.525.1101

CUSTOM RESIDENTIAL DESIGN for:
MR. & MRS. S. HAIR
 COLUMBIA COUNTY, FLORIDA
COVER SHEET

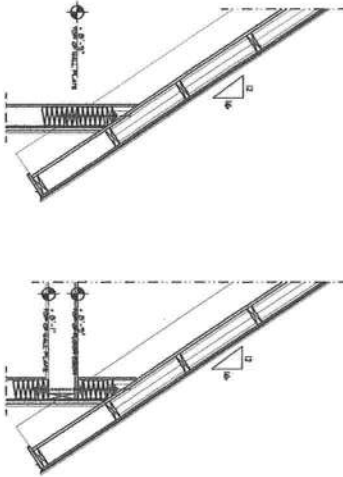
DRAWN
 1728

DATE
 27 JUL 2014

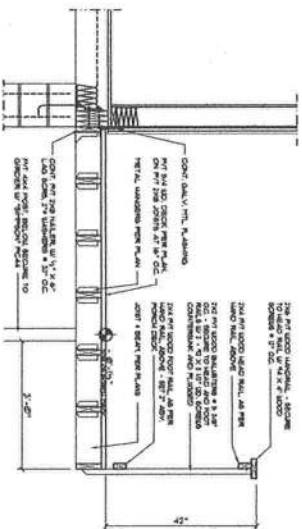
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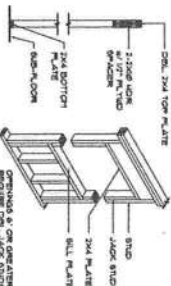
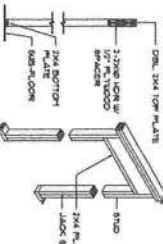
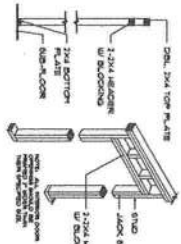
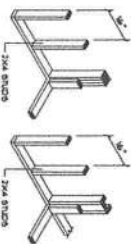
SCALE: 3/4" = 1'-0"



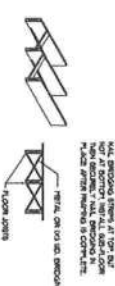
HEADER SPANS FOR EXTERIOR BEARING WALLS			
HEADERS SPACING SPACING	BUILDING JOINT (FT)		
	16'	20'	36'
WOOD CEILING	1/2"x4"	6"x4" * JACOBI * JACOBI	8"x4" * JACOBI
	1/2"x6"	5"x6"	4"x6"
	1/2"x8"	6"x8"	5"x8"
	1/2"x10"	8"x10"	2
	1/2"x12"	8"x12"	2
	1/2"x14"	8"x14"	2
CONCRETE CEILING	1/2"x4"	6"x4"	8"x4"
	1/2"x6"	5"x6"	4"x6"
	1/2"x8"	6"x8"	5"x8"
	1/2"x10"	8"x10"	2
	1/2"x12"	8"x12"	2
	1/2"x14"	8"x14"	2



→



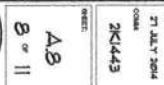
NOTE: A THICKENING AGENT MAY BE REQUIRED FOR FLOOR JOINT MATERIAL PLACED PERPENDICULAR TO JOINT.

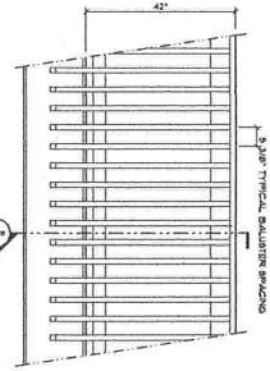


THE UNIVERSITY OF CHICAGO PRESS

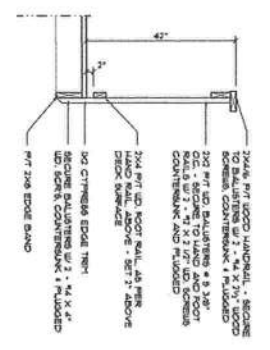


DATE 27 JULY 2014 DRAWN 2K443 10 0 11	ARCHITECT NS NICHOLAS PAUL GIESLER ARCHITECT 1728 NW Brown Rd. Lake City, FL 32065 407-548-6677 351-368-4323	Celebrating 41 Years of Service  1972-2014 N.P. Giesler, Architect 407-548-6677	CUSTOM RESIDENTIAL DESIGN for: MR & MRS. S. HAIR COLUMBIA COUNTY, FLORIDA ROOF PLAN	OWNER 178 178	REVISIONS 25 JULY 2014
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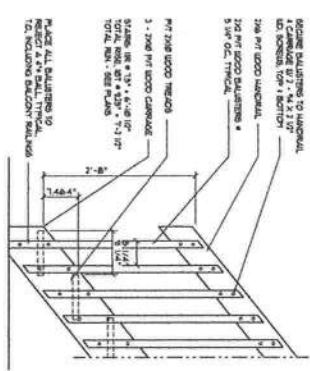


Balcony Railing Elev. G
SCALE: 3/4" = 1'-0"

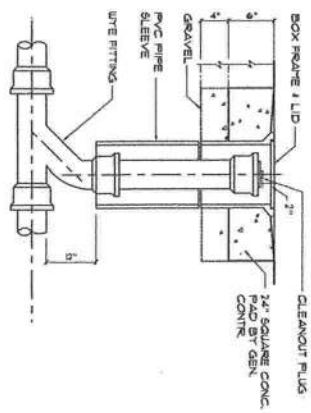


Balcony Railing Sec. H
SCALE: 3/4" = 1'-0"

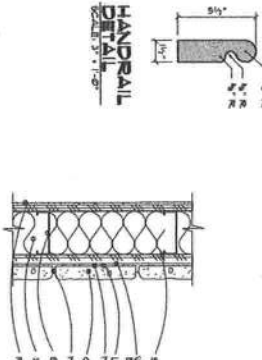
- GENERAL NOTES:**
1. ALL UTILITY SHALL BE PROTECTED BY 2" MIN. THICK POLYETHYLENE SHEETING.
 2. FLOORING SHALL BE 1/2" MIN. THICK G.O.C. - SECURE TO WOOD AND ROOF JOISTS BY 2" MIN. DIA. STEEL ANCHORS.
 3. ALL ROOF SHALL BE PROOF SAVED READY FOR APPLIED FINISH AS DIRECTED BY THE OWNER.
 4. ALL JOIST SHALL BE PROOF SAVED AND READY FOR APPLIED FINISH AS DIRECTED BY THE OWNER.
 5. FLOORING SHALL BE SET BACK 1/4" FROM EDGE OF ROOF.
 6. ALL JOIST SHALL BE PROOF SAVED AND READY FOR APPLIED FINISH AS DIRECTED BY THE OWNER.
 7. JOIST COATING AS INDICATED SHALL BE PROOF SAVED AND READY FOR APPLIED FINISH AS DIRECTED BY THE OWNER.
 8. ALL JOIST SHALL BE PROOF SAVED AND READY FOR APPLIED FINISH AS DIRECTED BY THE OWNER.
 9. ALL JOIST SHALL BE PROOF SAVED AND READY FOR APPLIED FINISH AS DIRECTED BY THE OWNER.
 10. ALL JOIST SHALL BE PROOF SAVED AND READY FOR APPLIED FINISH AS DIRECTED BY THE OWNER.



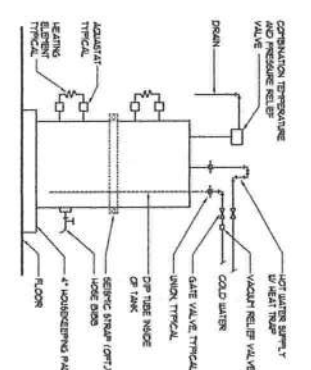
Porch Stair Detail E
SCALE: 1" = 1'-0"



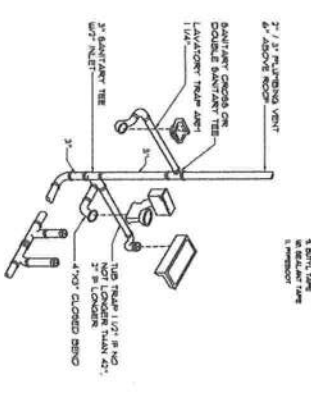
Outdoor Cleanup Detail A
SCALE: 1" = 1'-0"



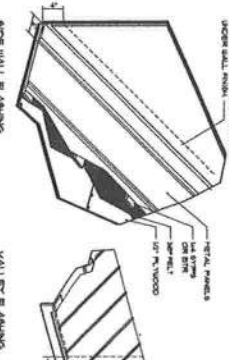
Cultured Stone Detail F
SCALE: NONE



Electric Water Heater Detail B
SCALE: NONE



Typ. One Bath Plumbing Det. C
SCALE: 1/4" = 1'-0"

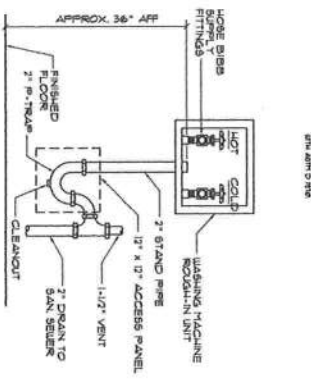


Metal Roofing Details

WIND RESISTANCE

ALL METAL ROOFING SHALL BE INSTALLED TO MEET THE FOLLOWING WIND RESISTANCE REQUIREMENTS:

WIND SPEED (MPH)	WIND UPLIFT (PSF)	WIND DOWN (PSF)
15	15	15
20	20	20
25	25	25
30	30	30
35	35	35
40	40	40
45	45	45
50	50	50
55	55	55
60	60	60
65	65	65
70	70	70
75	75	75
80	80	80
85	85	85
90	90	90
95	95	95
100	100	100



Washing Machine Hook-up Det. D
SCALE: 1/4" = 1'-0"

CUSTOM RESIDENTIAL DESIGN FOR:
MR. & MRS. S. HAIR
COLUMBIA COUNTY, FLORIDA
EXTERIOR ARCHITECTURAL DETAILS



DATE: 21 MAY 2014
SCALE: 1/4" = 1'-0"
PROJECT: 2K443
REVISION: A6
BY: 6-11



DATE: 21 MAY 2014
SCALE: 1/4" = 1'-0"
PROJECT: 2K443
REVISION: A6
BY: 6-11

ADMINISTRATIVE, SHELTERS, AND THE LATE SHOW ON THIS NIGHT SHALL BE CONDUCTED IN ACCORDANCE WITH THE STANDARDS OF QUALITY AS OUTLINED IN THE NOTES ATTACHED TO THE GENERAL INQUIRY, AND SHALL INCLUDE SUCH MATTERS AS MARSHALS AND PRISONS ARE DIRECTED BY THE QUARTER. THE LATE SHOWS SHALL BE FOR GENERAL LOCATION AND EXTENT OF THE WORK. UNLESS DETAILED INFORMATION IS FURNISHED WITH THE PLANS, SCALES, AND ALL OTHER PHYSICAL CHARACTERISTICS SHALL BE AS DIRECTED BY THE QUARTER.

NOTE!
PROVIDE THE BACKING AT ALL OVERHEAD CABINET LOCATIONS, PUSH WITH FACE OF FRAMING - TOP OF BACKING TO BE T-9" APX.

THESE COUNTER DETAILS ARE GENERAL IN NATURE AND PROVIDE A BASIS FOR ACTUAL CABINET CONSTRUCTION.

[illegible]

Typical Cabinet Details

Technical drawings of a window assembly. The left drawing is a cross-section showing dimensions: 4", 2'-0", 1'-0", 1'-4", 2'-0", and 2'-1". Labels include: "DRAWER GLASS", "GLASS LAMINATE 1 EDGE OF BALLOON DETAIL", "3/4\" x 1/2\" x 1/2\" TYP. PASTE", "3/4\" THICK ACU BEARING ON BALF BRACKETS", and "PAST LAMINATE 2". The right drawing is an elevation view showing a window with a "PAST LAMINATE 2" label and a dimension of 2'-0\".

SPECIFICATIONS								
Model and Weight	Height		Front Waist		Back Waist		Drape	Pockets Opening Size
	Actual	Fronting	Actual	Fronting	Actual	Fronting		
10-134	81	80.50	81.20	41.30	81.50	29.10	30.10	50 x 33

(Measurements are only. The measured (measured) length of the garment.)

[illegible]

"Heat 'n' Glo"
"EXCLAIM 50" DETAIL
SCALE: 3/8" = 1'-0"

6'-10"

22"

4" CROWN MOULD
PICKER & 2 COATS
ALCOAT BRANFEL

DOOR / LINCOLN
BRANDON - REFINE
TO MATCH THE WINDOW
w/ 1/8" CROWN MOULD

3" CHINE MOULD
PICKER & 2 COATS
ALCOAT BRANFEL

4" BASE MOULD
LINCOLN OR HOLD w/
DOOR OR HOLD

SCALE: 1/2" = 1'-0"

Wall/Ceiling Trim PROFILES

[illegible]

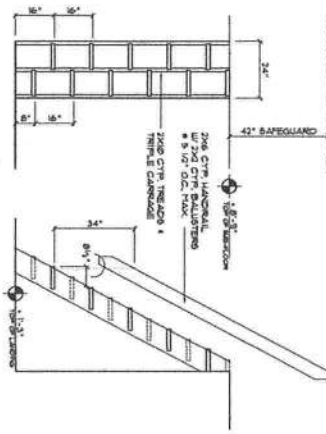
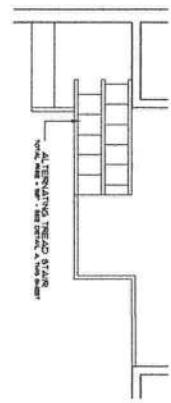
Deco Rail Detail
SCALE: 3/4" X 1'-0"

Typical Stair Detail

TRIMMED WOOD STAIR

GENERAL INTERIOR FINISH SCHEDULE

DIVIDENDS	None declared.
BALANCE SHEET	As reported on the balance sheet as of December 31, 1987, the company has \$16 million in cash and equivalents, \$1.6 million in accounts receivable, \$1.6 million in prepaid expenses, \$1.6 million in inventory, \$1.6 million in other assets, and \$1.6 million in liabilities.
INCOME STATEMENT	For the year ended December 31, 1987, the company had sales of \$1.6 million, cost of goods sold of \$1.6 million, gross profit of \$0.0 million, operating expenses of \$1.6 million, and net income of \$0.0 million.
CAPITALIZATION	The company has no common stock outstanding. The company's capitalization consists of \$1.6 million in preferred stock, which is non-voting and non-convertible.
RISK FACTORS	The company is subject to the same risks as other companies in the industry. These risks include changes in market conditions, competition, and technological advances.
GOVERNANCE	The company is governed by its board of directors, which consists of three members. The board of directors meets quarterly to discuss the company's operations and financial performance.



Alternating Tread Stair Detail

A

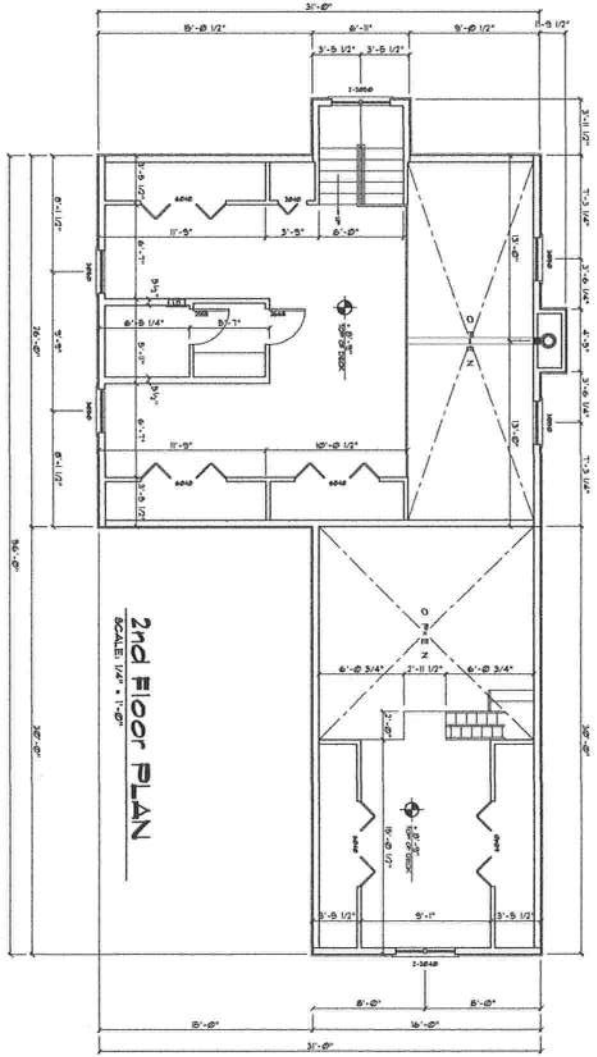
NOTE:
1. ALL DIMENSIONS ARE IN INCHES.
2. ALL DIMENSIONS ARE TO FACE UNLESS NOTED OTHERWISE.
3. ALL DIMENSIONS ARE TO FACE UNLESS NOTED OTHERWISE.

TEMPERED GLASS NOTES:

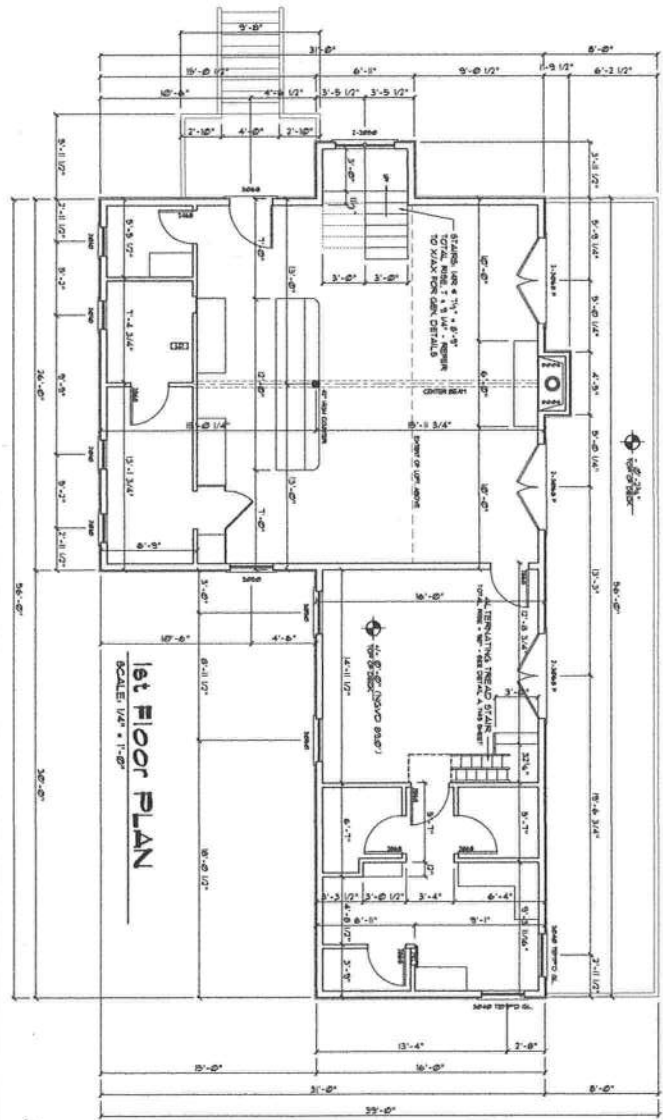
1. THE FOLLOWING SHALL BE CONSIDERED BEFORE GLASS LOCATIONS:
a. TYPE OF GLASS
b. LOCATION OF GLASS
c. LOCATION OF GLASS
d. LOCATION OF GLASS
2. GLASS IS LOCATED IN ROOMS AND SHALL BE CONSIDERED FOR THE FOLLOWING:
a. GLASS IS LOCATED IN ROOMS AND SHALL BE CONSIDERED FOR THE FOLLOWING:
b. GLASS IS LOCATED IN ROOMS AND SHALL BE CONSIDERED FOR THE FOLLOWING:
c. GLASS IS LOCATED IN ROOMS AND SHALL BE CONSIDERED FOR THE FOLLOWING:
d. GLASS IS LOCATED IN ROOMS AND SHALL BE CONSIDERED FOR THE FOLLOWING:
3. GLASS IS AN ALTERNATING TREAD STAIR, LOCATED IN A ROOM OR ON A BALCONY, AND SHALL BE CONSIDERED FOR THE FOLLOWING:
a. GLASS IS AN ALTERNATING TREAD STAIR, LOCATED IN A ROOM OR ON A BALCONY, AND SHALL BE CONSIDERED FOR THE FOLLOWING:
b. GLASS IS AN ALTERNATING TREAD STAIR, LOCATED IN A ROOM OR ON A BALCONY, AND SHALL BE CONSIDERED FOR THE FOLLOWING:
c. GLASS IS AN ALTERNATING TREAD STAIR, LOCATED IN A ROOM OR ON A BALCONY, AND SHALL BE CONSIDERED FOR THE FOLLOWING:
d. GLASS IS AN ALTERNATING TREAD STAIR, LOCATED IN A ROOM OR ON A BALCONY, AND SHALL BE CONSIDERED FOR THE FOLLOWING:
4. GLASS IS AN ALTERNATING TREAD STAIR, LOCATED IN A ROOM OR ON A BALCONY, AND SHALL BE CONSIDERED FOR THE FOLLOWING:
a. GLASS IS AN ALTERNATING TREAD STAIR, LOCATED IN A ROOM OR ON A BALCONY, AND SHALL BE CONSIDERED FOR THE FOLLOWING:
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d. GLASS IS AN ALTERNATING TREAD STAIR, LOCATED IN A ROOM OR ON A BALCONY, AND SHALL BE CONSIDERED FOR THE FOLLOWING:
5. GLASS IS AN ALTERNATING TREAD STAIR, LOCATED IN A ROOM OR ON A BALCONY, AND SHALL BE CONSIDERED FOR THE FOLLOWING:
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b. GLASS IS AN ALTERNATING TREAD STAIR, LOCATED IN A ROOM OR ON A BALCONY, AND SHALL BE CONSIDERED FOR THE FOLLOWING:
c. GLASS IS AN ALTERNATING TREAD STAIR, LOCATED IN A ROOM OR ON A BALCONY, AND SHALL BE CONSIDERED FOR THE FOLLOWING:
d. GLASS IS AN ALTERNATING TREAD STAIR, LOCATED IN A ROOM OR ON A BALCONY, AND SHALL BE CONSIDERED FOR THE FOLLOWING:

AREA CALCULATION

GROSS 1st FLOOR AREA:	1311.3 SF
GROSS 2nd FLOOR AREA:	933.4 SF
OPEN DECK AREA:	440.0 SF
TOTAL AREA:	2684.7 SF



2nd Floor Plan



1st Floor Plan



DATE: 21 JULY 2014
DRAWN: NCG
SCALE: 1/8" = 1'-0"

4 A
11

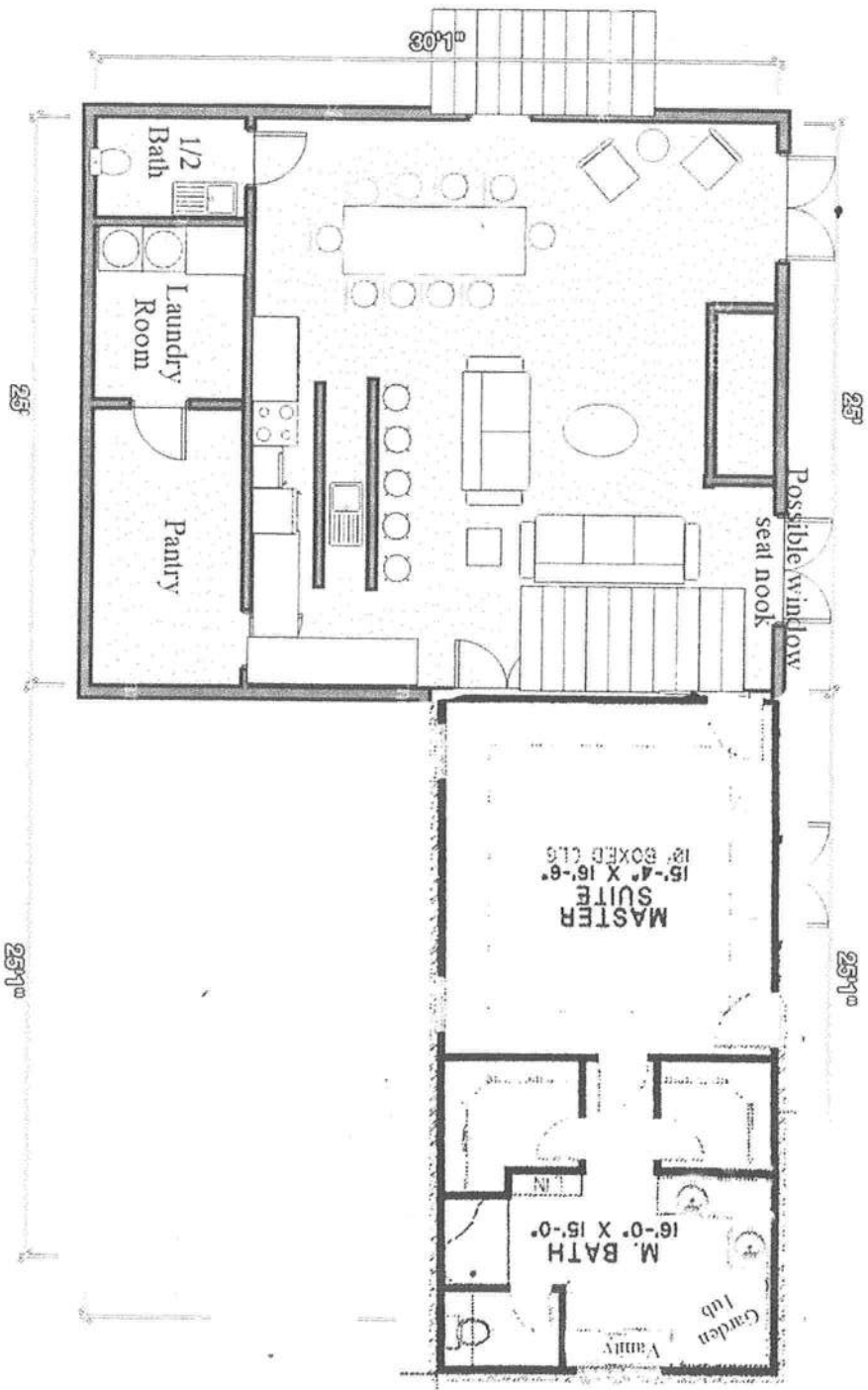
NICHOLAS GEBLER ARCHITECT

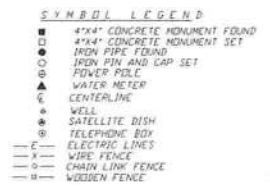
42 Years of Experience
1972-2014
NICHOLAS GEBLER ARCHITECT

CUSTOM RESIDENTIAL DESIGN FOR:
MR. & MRS. S. HAIR
COLLIER COUNTY, FLORIDA
DIMENSION PLANS

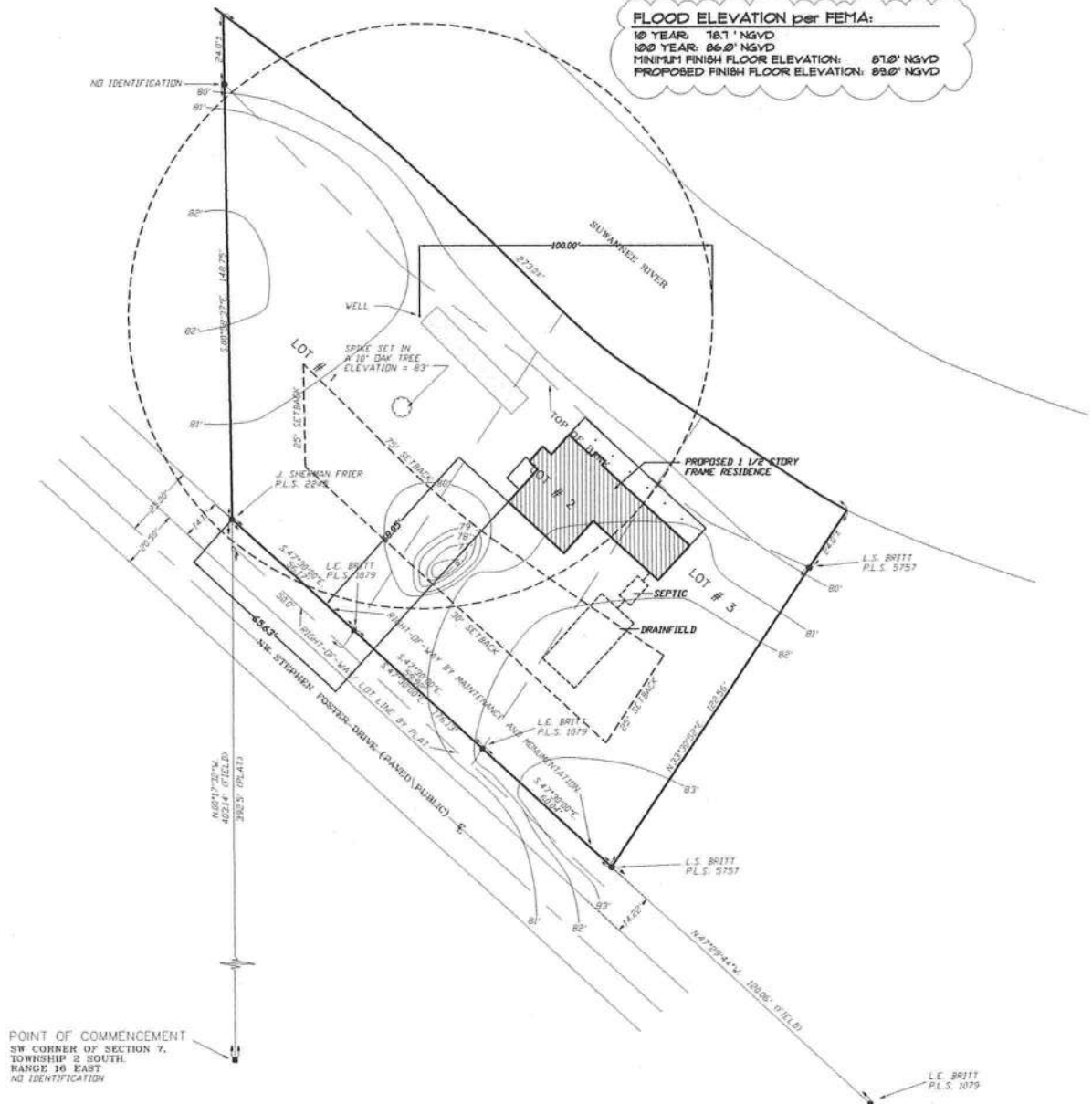
DATE: 21 JULY 2014
DRAWN: NCG
SCALE: 1/8" = 1'-0"







FLOOD ELEVATION per FEMA:
 10 YEAR: 18.7' NGVD
 100 YEAR: 86.0' NGVD
 MINIMUM FINISH FLOOR ELEVATION: 87.0' NGVD
 PROPOSED FINISH FLOOR ELEVATION: 89.0' NGVD



SCALE: 1" = 30.00'