Attention Connie

Columbia County Building Department
Culvert Waiver

Culvert Waiver No.
000001835

DATE: 07/08/2010 BUILDING PERMIT NO. 28713

APPLICANT ADAM PAPKA PHONE 386-623-2383

ADDRESS PO BOX 1921 LAKE CITY FL 32056

OWNER JAMIN HUBER PHONE 758-3380

ADDRESS 412 SW HIGHPOINT GLEN LAKE CITY FL 32024

CONTRACTOR BEN MARTIN PHONE 386-397-4534

LOCATION OF PROPERTY 47 S, L WALTER LITTLE RD, L STONERIDGE DR, R HIGHPOINT GLN,

AT CUL-DE-SAC DRIVE ON LEFT AT END

SUBDIVISION/LOT/BLOCK/PHASE/UNIT ROSECREEK PLANTATION 25 2

PARCEL ID # 12-5S-16-03406-225

I HEREBY CERTIFY THAT I UNDERSTAND AND WILL FULLY COMPLY WITH THE DECISION OF THE COLUMBIA COUNTY PUBLIC WORKS DEPARTMENT IN CONNECTION WITH THE HEREIN PROPOSED APPLICATION.

SIGNATURE:

A SEPARATE CHECK IS REQUIRED
MAKE CHECKS PAYABLE TO BCC

Amount Paid 50.00

PUBLIC WORKS DEPARTMENT USE ONLY

I HEREBY CERTIFY THAT I HAVE EXAMINED THIS APPLICATION AND DETERMINED THAT THE CULVERT WAIVER IS:

_____ APPROVED ✓ NOT APPROVED - NEEDS A CULVERT PERMIT

COMMENTS: There is enough Ditch To Need Culvert.

SIGNED: J.W. Mercer DATE: 13 July 2010

ANY QUESTIONS PLEASE CONTACT THE PUBLIC WORKS DEPARTMENT AT 386-752-5955.

135 NE Hernando Ave., Suite B-21
Lake City, FL 32055
Phone: 386-758-1008 Fax: 386-758-2160

RECEIVED
JUL 12 2010
By

COLUMBIA COUNTY FLORIDA

07/20/2009 17:48 3867582160 BUILDING AND ZONING PAGE 02/04

☑ INSULATION Contractor Existing Well ☑ BEN MARTIN updated in good standing

☑ GLASS "

Columbia County Building Permit Application

For Office Use Only Application # 1006-49 Date Received 6/24 By JV Permit # 1835/28713

Zoning Official BLK Date 08-07-10 Flood Zone X Land Use A-3 Zoning A-3

FEMA Map # N/A Elevation N/A MFE 1' above Rd River N/A Plans Examiner J.C. Date 7-8-10

Comments Special Family Lot

☑ NOC ☐ EH ☑ Deed or PA ☑ Site Plan ☐ State Road Info ☐ Parent Parcel #

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

IMPACT FEES: EMS Fire Corr Road/Code Verified by Jon on phone 9/11 Sheet ☑

School = TOTAL Suspended ☑ VF

Septic Permit No. 10-0305 Fax 754-0348 / 2-420

dropped off by Linda Roder

Name Authorized Person Signing Permit Adam Papka Phone 386-623-2383

Address P.O. Box 1921 Lake City, FL 32056

Owners Name Jamin Huber Phone 758-3380

911 Address 412 S.W. Highpoint Gln Lake City fl 32024

dept John ✱

Contractors Name Ben Martin of Martin Exteriors Phone 386-397-1534

Address P.O. Box 1831 Lake City, FL 32056

Fee Simple Owner Name & Address NA

Bonding Co. Name & Address NA

Architect/Engineer Name & Address Daniel Shaheen / Mark Disosway

Mortgage Lenders Name & Address Florida Citizens Bank 3919 W. Newberry Rd. Gainesville, FL 3260

Circle the correct power company - FL Power & Light - (Clay Elec) - Suwannee Valley Elec. - Progress Energ

Property ID Number 12-55-16-03406-225 Estimated Cost of Construction 325 K

Subdivision Name Rose Creek Plantation Ph 2 Lot 25 Block ___ Unit ___ Phase II

Driving Directions 47 S, L on Walter Little Rd, L on Stoneridge Dr, R on High point GLN, Vacant lot on L of end of Cul de Sac

Number of Existing Dwellings on Property 0

Construction of Single family dwelling Total Acreage 3.33 9C Lot Size 3.3

Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive Total Building Height 22'

Actual Distance of Structure from Property Lines - Front 140' Side 65' Side 125' Rear 255'

Number of Stories 2 Heated Floor Area 3232 Total Floor Area 4989 Roof Pitch 8-12

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

$ [redacted]

Columbia County Building Permit Application

TIME LIMITATIONS OF APPLICATION : An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless 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.

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

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

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

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

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

NOTICE TO OWNER: There are some properties that may have deed restrictions recorded upon them. These restrictions may limit or prohibit the work applied for in your building permit. It may be to your advantage to check and see if your property is encumbered by any restrictions.

(Owners Must Sign All Applications Before Permit Issuance

X _____

Owners Signature ****OWNER BUILDERS MUST PERSONALLY APPEAR AND SIGN THE BUILDING PERMI**

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

_____

Contractor's Signature (Permitee)

Contractor's License Number CBC059077

Columbia County Competency Card Number _____

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 20 **day of** June **20**12

Personally known ✓ **or Produced Identification** _____

_____

State of Florida Notary Signature (For the Contractor)

SEAL:

NOTARY PUBLIC-STATE OF FLORIDA
Linda R. Roder
Commission # DD755608
Expires: MAR. 24, 2012
BONDED THRU ATLANTIC BONDING CO., INC.

NOTICE OF COMMENCEMENT

PERMIT NO.:

TAX FOLIO NO.: R03406-225

The undersigned, after being first duly sworn, states as follows and verifies that the information set forth in this Notice of Commencement is true to the best of the undersigned's knowledge, information and belief:

1. Description of Property (legal and street address):

SEE LENGTHY LEGAL DESCRIPTION ATTACHED.

412 SW HIGH POINT GLEN, LAKE CITY, FL 32024

2. General Description of Property: CONSTRUCT SINGLE FAMILY RESIDENCE
3. Name of Borrower(s): JAMIN A. HUBER
   Address of Borrower(s):
   797 SW HAMLET CIRCLE
   LAKE CITY, FL 32024
4. Borrower(s) interest in Property: PRIMARY HOME
5. Name & Address of Fee simple titleholder (if other than Borrower):
6. Builder's Name: MARTIN EXTERIORS
   Builder's Address: PO BOX 1831, LAKE CITY, FLORIDA 32056
7. Name and address of all lending institutions which provide financing for the improvements:
   FLORIDA CITIZENS BANK
   3919 WEST NEWBERRY RD
   GAINESVILLE FL 32607
8. Name and address of the designee, if any, of the Borrower:

9. Expiration date of this Notice of Commencement is one year from date of recording unless a different date is specified:

Borrower 5/6/10 Date

Borrower Date

Borrower Date

Borrower Date

Borrower Date

STATE OF FLORIDA
COUNTY OF COLUMBIA

The foregoing instrument was subscribed and sworn to before me this 5/6/10 6th day of May, 2010.

DANIEL R. MONTEAL NOTARY PUBLIC, STATE OF FLORIDA COMMISSION NUMBER DD 587446 EXPIRES Aug. 21, 2010 BONDED THRU ATLANTIC BONDING CO., INC.

My Commission Expires:

Exhibit A

A part of Lot 25 of ROSE CREEK PLANTATION, Phase 2 as per plat thereof recorded in Plat Book 7, Page 28 of the Public Records of Columbia County, Florida, being more particularly described as follows:□□Begin at the SW Corner of Lot 25 of Rose Creek Plantation, Phase 2 and run thence N 00 deg. 02'13" W, 482.13 feet; thence N 89 deg. 57'47" E, 246.49 feet; thence N 61 deg. 13'15" E, 177.70 feet to a point on a curve of a curve to the left, having a radius of 60.00 feet, an included angle of 89 deg. 53'11", and a chord bearing and distance of S 73 deg. 43'20" E, 84.77 feet; thence Southeasterly, along the arc of said curve, 94.13 feet; thence S 33 deg. 49'13" W, 654.03 feet; thence S 89 deg. 32'19" W, 118.98 feet to the Point of Beginning.□□LESS AND EXCEPT:□□That part of Lot 25, Rose Creek Plantation Phase II, according to the plat thereof, as recorded in Plat Book 7, Pages 28-29, Public Records of Columbia County, Florida, in Section 12, Township 5 South, Range 16 East of said county, being more particularly described as follows:□□BEGIN at a 4"x4" Concrete Monument located at the Southwest corner of Lot 25, Rose Creek Plantation Phase II, according to the plat thereof, as recorded in Plat Book 7, Pages 28-29, Public Records of Columbia County, Florida, in Section 12, Township 5 South, Range 16 East of said county; thence run North 01°05'43" West, along the East line of said Lot 25, a distance of 196.63 feet; thence departing said East lot line, South 02°05'31" East, a distance of 196.63 feet to the South line of said Lot 25; thence South 88°28'49" West, along said South lot line, a distance of 3.42 feet to the POINT OF BEGINNING.

Parcel Identification Number: R03406-225

J.H. 2.H.

Inst:200513338 Date:06/06/2005 Time:14:07
Doc Stamp-Deed : 0.70
DC,P.DeWitt Cason,Columbia County B:1048 P:511

Prepared by: Barry R. Huber
Post Office Box 1264
Lake City, FL 32056

Return to: Jamin Huber
Post Office Box 361
Lake City, FL 32056

Grantee(s) SS No(s): [redacted]
Property Appraiser's
ID #:03406 - 225

WARRANTY DEED

THIS INDENTURE, Made this 2nd day of June, 2005, Between BARRY HUBER, as custodian for JAMIN HUBER, under Florida Uniform Transfer to Minors Act, whose post office address is P.O. Box 1264, Lake City, Florida 32056, of the County of Columbia, State of Florida, hereinafter called the "Grantor"*, and Jamin Huber, whose post office address is P.O. Box 361, Lake City, Florida 32056, of the County of Columbia, State of Florida, hereinafter called the "Grantee":

WITNESSETH: That said Grantor, for and in consideration of the sum of LOVE & AFFECTION, and other valuable consideration, to said Grantor in hand paid by said Grantee, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said Grantee, and Grantee's heirs and assigns forever, the following described land, situate, lying, and being in Columbia County, Florida, to wit:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF.

SUBJECT TO: Restrictions, easements and outstanding mineral rights of record, if any, and taxes of the current year.

The Grantor, Barry Huber, is the father of the Grantee, Jamin Huber.

and said Grantor does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

*"Grantor" and "grantee" are used for singular or plural, as context requires.

IN WITNESS WHEREOF, the said Grantor has hereunto set the Grantor's hand and seal the day and year first above written.

Heather Buchs
(Signature of First Witness)

Witness Name: Heather Buchs

Grantor
BARRY R. HUBER (SEAL)

(Signature of Second Witness)

Witness Name:

Inst:2005013338 Date:06/06/2005 Time:14:07
Doc Stamp-Deed : 0.70
DC,P.DeWitt Cason,Columbia County B:1048 P:512

STATE OF FLORIDA
COUNTY OF COLUMBIA

The foregoing instrument was acknowledged by me this 3 day of June, 20 05 by: Barry R Huber who is/are personally known by me or who has/have produced: _____ as identification and who did not take an oath.

Notary Public
State of Florida

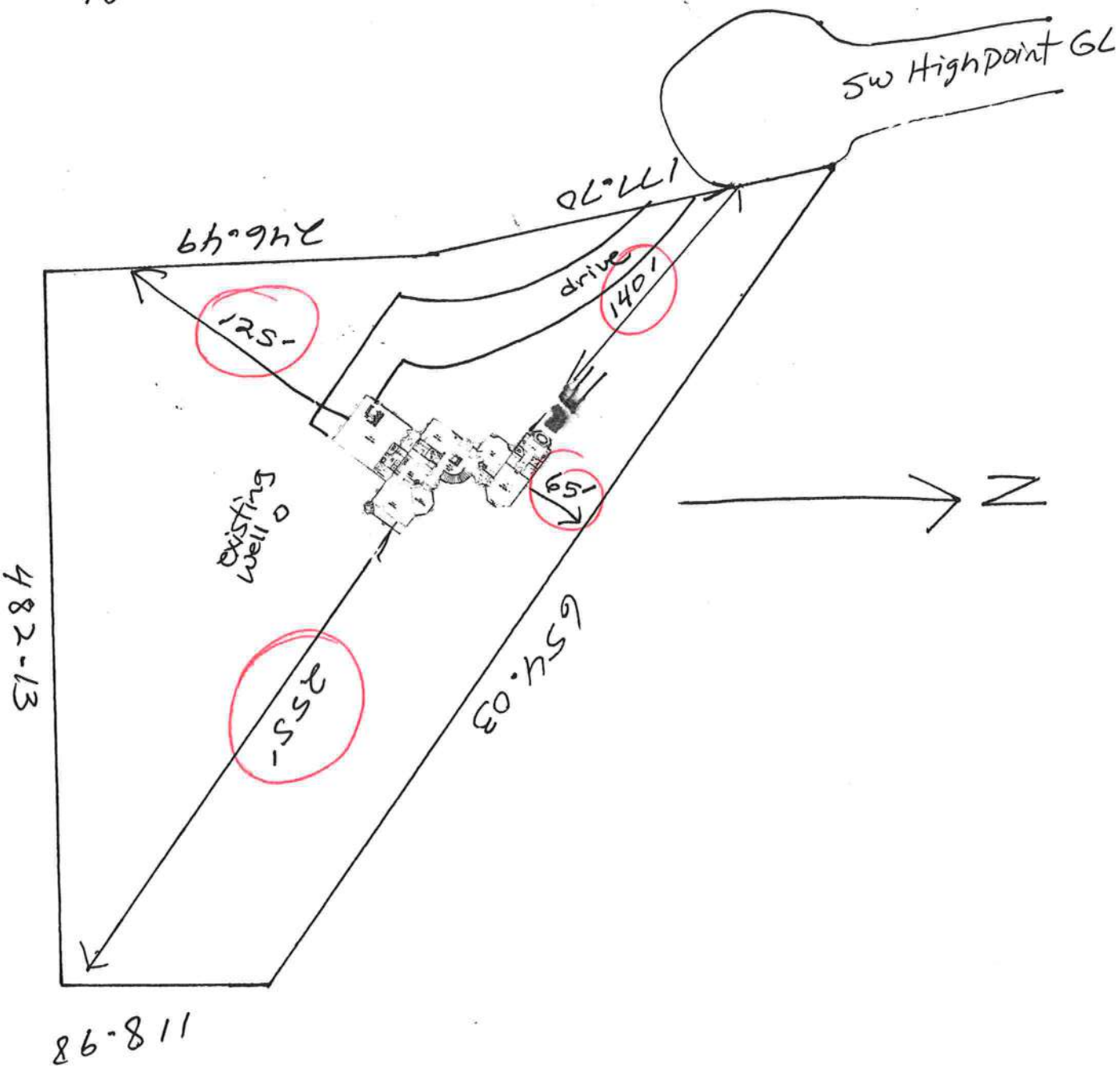
ROBERT S STEWART
MY COMMISSION # DD421779
EXPIRES: Apr. 24, 2009
Florida Notary Service.com

My Commission Expires: Apr 24, 2005

EXHIBIT "A"

A part of Lot 25 of ROSE CREEK PLANTATION, Phase 2 as per plat thereof recorded in Plat Book 7, Page 28 of the Public Records of Columbia County, Florida, being more particularly described as follows: Begin at the SW corner of Lot 25 of Rose Creek Plantation, Phase 2 and run thence N 00 deg. 02'13" W, 482.13 feet; thence N 89 deg. 57'47" E, 246.49 feet; thence N 61 deg., 13'15" E, 177.70 feet to a point on a curve of a curve to the left, having a radius of 60.00 feet, and included angle of 89 deg. 53'11", and a chord bearing and distance of S 73 deg. 43'20" E; 84.77 feet; thence southeasterly, along arc of said curve, 94.13 feet; thence S 33 deg. 49'13" W, 654.03 feet; thence S 89 deg. 32'19" W, 118.98 feet to the Point of the Beginning.

Jamin Huber
Part of Lot 25 Ph2 Rose Creek Plantation
12-5S-16-03406-225



Staff: 7/2
ORIGINAL on file
JW

COLUMBIA COUNTY BUILDING DEPARTMENT

135 NE Hernando Ave, Suite B-21, Lake City, FL 32055
Phone: 386-758-1008 Fax: 386-758-2160

LETTER OF AUTHORIZATION TO SIGN FOR PERMITS

I, Ben Martin (license holder name), licensed qualifier

for Martin Home Builders (company name), do certify that

the below referenced person(s) listed on this form is/are contracted/hired by me, the license holder, or is/are employed by me directly or through an employee leasing arrangement; or, is an officer of the corporation; or, partner as defined in Florida Statutes Chapter 468, and the said person(s) is/are under my direct supervision and control and is/are authorized to purchase permits, call for inspections and sign on my behalf.

Printed Name of Person Authorized	Signature of Authorized Person
1. ADAM PAPKA	1.
2.	2.
3.	3.
4.	4.
5.	5.

I, the license holder, realize that I am responsible for all permits purchased, and all work done under my license and fully responsible for compliance with all Florida Statutes, Codes, and Local Ordinances. I understand that the State and County Licensing Boards have the power and authority to discipline a license holder for violations committed by him/her, his/her agents, officers, or employees and that I have full responsibility for compliance with all statutes, codes and ordinances inherent in the privilege granted by issuance of such permits.

If at any time the person(s) you have authorized is/are no longer agents, employee(s), or officer(s), you must notify this department in writing of the changes and submit a new letter of authorization form, which will supersede all previous lists. Failure to do so may allow unauthorized persons to use your name and/or license number to obtain permits.

Ben Mart — CBC059077 — 6-14-2010
License Holders Signature (Notarized) — License Number — Date

NOTARY INFORMATION:
STATE OF: Florida COUNTY OF: Columbia

The above license holder, whose name is Ben Martin, personally appeared before me and is known by me or has produced identification (type of I.D.) personally known on this 20 day of June, 2010.

Linda Roder
NOTARY'S SIGNATURE (Seal/Stamp)

NOTARY PUBLIC-STATE OF FLORIDA
Linda R. Roder
Commission # DD755608
Expires: MAR. 24, 2012
BONDED THRU ATLANTIC BONDING CO., INC.

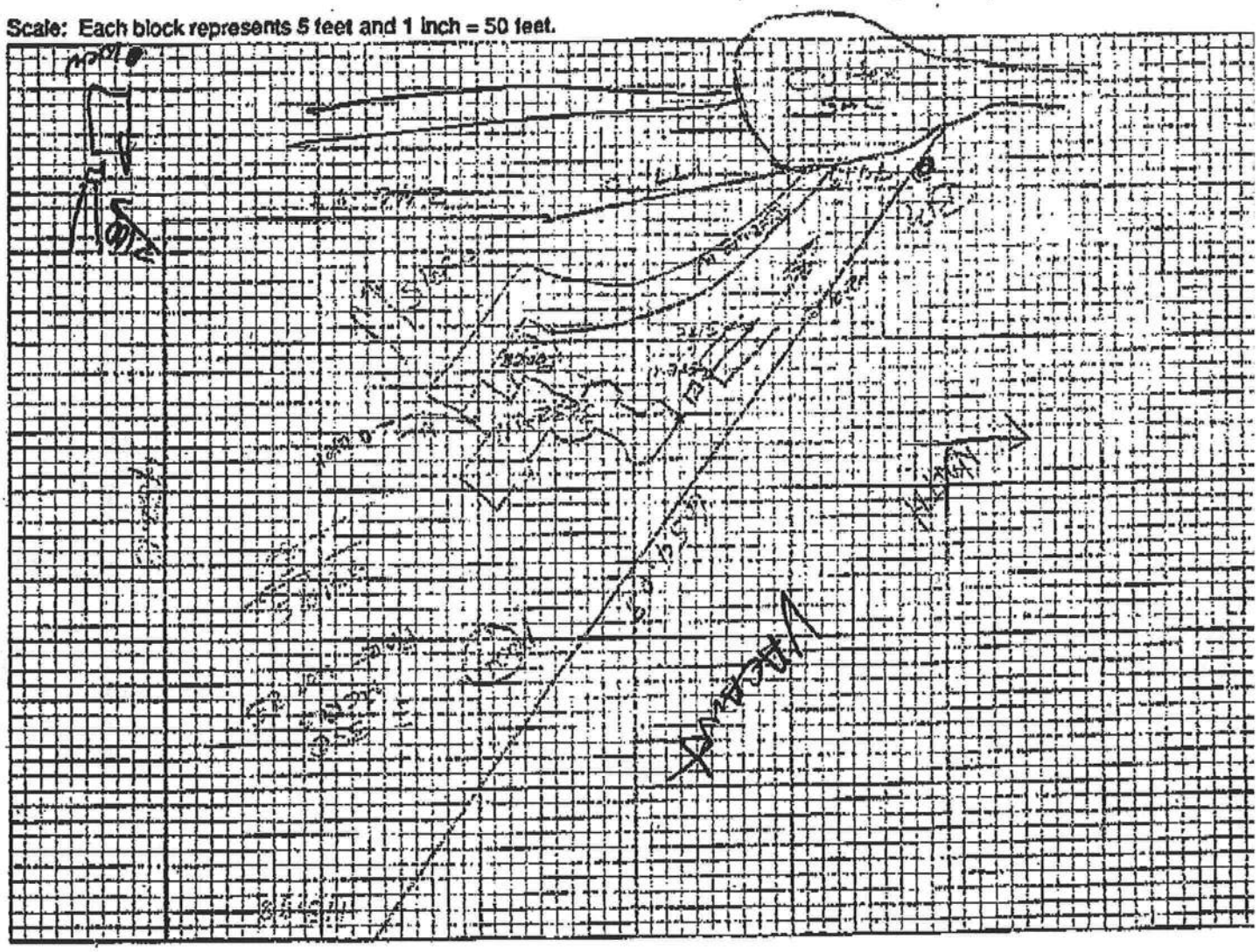
STATE OF FLORIDA
DEPARTMENT OF HEALTH

APPLICATION FOR ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number 10-0305

PART II - SITE PLAN

Scale: Each block represents 5 feet and 1 inch = 50 feet.



Notes:

Jamin Huber

Part Lot 25. PH 2 Rose Creek Plantation

12-55-16-08410-225

Site Plan submitted by: Robert W Inc Signature — Agent Title

Plan Approved X Not Approved ____ Date 6/22/10

By Sallie Ford - EH Director - Columbia CHD County Health Department

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT

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

PERMIT #: 12-SC-1148258
APPLICATION #: AP969069
DATE PAID: 6-15-10
FEE PAID: 310.00
RECEIPT #: 1275706
DOCUMENT #: PR814028

CONSTRUCTION PERMIT FOR: OSTDS New

APPLICANT: JAMIN**10-0305 HUBER

PROPERTY ADDRESS: 412 SW HIGH POINT Gln Lake City, FL 32055

LOT: 25 BLOCK: _____ SUBDIVISION: ROSE CREEK PLANTATION

PROPERTY ID #: 03406-225 [SECTION, TOWNSHIP, RANGE, PARCEL NUMBER] [OR TAX ID NUMBER]

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

SYSTEM DESIGN AND SPECIFICATIONS

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

D [500] SQUARE FEET _____ SYSTEM
R [ ] SQUARE FEET N/A SYSTEM
A TYPE SYSTEM: [X] STANDARD [ ] FILLED [ ] MOUND [ ] _____
I CONFIGURATION: [X] TRENCH [ ] BED [ ] _____
N
F LOCATION OF BENCHMARK: electric slab (top)
I ELEVATION OF PROPOSED SYSTEM SITE [8.00] [INCHES / FT] [ABOVE / BELOW] BENCHMARK/REFERENCE POINT
E BOTTOM OF DRAINFIELD TO BE [20.00] [INCHES / FT] [ABOVE / BELOW] BENCHMARK/REFERENCE POINT
L
D FILL REQUIRED: [0.00] INCHES EXCAVATION REQUIRED: [0.00] INCHES

O 1. The bottom of the df shall be no deeper than 28" below natural grade.
T
H
E
R

SPECIFICATIONS BY: Robert Ford TITLE: M Contractor

APPROVED BY: Sallie Ford TITLE: EH Director Columbia CHD

Sallie A Ford

DATE ISSUED: 06/22/2010 EXPIRATION DATE: 12/22/2011

DH 4016, 08/09 (Obsoletes all previous editions which may not be used)
Incorporated: 64E-6.003, FAC

v 1.1.4 AP969069 SE820179

10-0305

STATE OF FLORIDA
DEPARTMENT OF HEALTH
ONSITE SEWAGE DISPOSAL SYSTEM,
APPLICATION FOR CONSTRUCTION PERMIT
Authority: Chapter 381, FS & Chapter 10D-6, FAC

PERMIT # 964069
DATE PAID 6/15/10
FEE PAID $ 150.00
RECEIPT # 1295106

APPLICATION FOR:
[X] New System [ ] Existing System [ ] Holding Tank [ ] Temporary/Experimental
[ ] Repair [ ] Abandonment [ ] Other(Specify)

APPLICANT: Jamin Huber TELEPHONE: 334-755-6378

AGENT: Robert Ford NEST INC

MAILING ADDRESS: 580 NW Guerdon Rd Lake City Fla 32055

TO BE COMPLETED BY APPLICANT OR APPLICANT'S AUTHORIZED AGENT. ATTACH BUILDING PLAN AND TO-SCAI SITE PLAN SHOWING PERTINENT FEATURES REQUIRED BY CHAPTER 10D-6, FLORIDA ADMINISTRATIVE CODE.

PROPERTY INFORMATION [IF LOT IS NOT IN A RECORDED SUBDIVISION, ATTACH LEGAL DESCRIPTION OR DEEI

LOT: SW Cor. 25 BLOCK: SUBDIVISION: Ph 2 Rose Creek Plantation DATE OF SUBDIVISION: 2010

PROPERTY ID #: 12-55-16-03406-225 [Section/Township/Range/Parcel No.] ZONING: Ag.

PROPERTY SIZE: 3.330 ACRES [Sqft/43560] PROPERTY WATER SUPPLY: [X] PRIVATE [ ] PUBLI

PROPERTY STREET ADDRESS: 412 SW High Point Glen

DIRECTIONS TO PROPERTY: Hwy 47 South to Walters Rd TL
Go to Rose Creek Plantation TL follow to High Point Glen
TR at End on left

BUILDING INFORMATION [X] RESIDENTIAL [ ] COMMERCIAL

Unit No	Type of Establishment	No. of Bedrooms	Building Area Sqft	# Persons Served	Business Activity For Commercial Only
1	House S/F	4	3230	4	
2					
3					
4					

[ ] Garbage Grinders/Disposals [ ] Spas/Hot Tubs [ ] Floor/Equipment Drai
[ ] Ultra-low Volume Flush Toilets [ ] Other (Specify)

APPLICANT'S SIGNATURE: Robert W Ford Jr DATE: 10/2/10

STONERIDGE DR
COVEWOOD CT
HIGHPOINT GLN
56
57
57.47
B
C
58.98
58
59
60

1006-49

Jamin Huber

COLUMBIA COUNTY BUILDING DEPARTMENT
RESIDENTIAL CHECK LIST REQUIRMENTS

MINIMUM PLAN REQUIREMENTS FOR THE FLORIDA BUILDING CODE RESIDENTIAL 2007 ONE (1) AND TWO (2) FAMILY DWELLINGS

ALL REQUIREMENTS ARE SUBJECT TO CHANGE

ALL BUILDING PLANS MUST INDICATE COMPLIANCE with the Current 2007 FLORIDA BUILDING CODES RESIDENTIAL. 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 FIGURE R301.2(4) of the FLORIDA BUILDING CODES RESIDENTIAL (Florida Wind speed map) **SHALL BE USED.**

WIND SPEED LINE SHALL BE DEFINED AS FOLLOWS: THE CENTERLINE OF INTERSTATE 75.

ALL BUILDINGS CONSTRUCTED EAST OF SAID LINE SHALL BE -------- 100 MPH
ALL BUILDINGS CONSTRUCTED WEST OF SAID LINE SHALL BE --------110 MPH
NO AREA IN COLUMBIA COUNTY IS IN A WIND BORNE DEBRIS REGION

	GENERAL REQUIREMENTS. APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BELOW FOR SUBMITTAL			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	IIIIIII	IIIIIII	IIIII

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 required

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

Elevations Drawing including:

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

Floor Plan including:

20	Dimensioned area plan showing rooms, attached garage, breeze ways, covered porches, deck, balconies	✓		
21	Raised floor surfaces located more than 30 inches above the floor or grade	✓		
22	All exterior and interior shear walls indicated	✓		
23	Shear wall opening shown (Windows, Doors and Garage doors)	✓		
24	Emergency escape and rescue opening shown in each bedroom (net clear opening shown)	✓		
25	Safety glazing of glass where needed	✓		
26	Fireplaces types (gas appliance) (vented or non-vented) or wood burning with Hearth (see chapter 10 of FBCR)	✓		
27	Stairs with dimensions (width, tread and riser and total run) details of guardrails, Handrails (see FBCR SECTION 311)	✓		
28	Identify accessibility of bathroom (see FBCR SECTION 322)	✓		

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

GENERAL REQUIREMENTS
APPLICANT - PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL

Items to Include
Each Box Shall be
Checked or
Applicable

FBCR 403: Foundation Plans

		YES	NO	N/A
29	Location of all load-bearing walls footings indicated as standard, monolithic, dimensions, size and type of reinforcing.	✓		
30	All posts and/or column footing including size and reinforcing	✓		
31	Any special support required by soil analysis such as piling.	✓		
32	Assumed load-bearing valve of soil _____ Pound Per Square Foot	✓		
33	Location of horizontal and vertical steel, for foundation or walls (include # size and type)			

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 320: PROTECTION AGAINST TERMITES

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

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

37	Show all materials making up walls, wall height, and Block size, mortar type			
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. Enginee 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 priers	✓		
41	Girder type, size and spacing to load bearing walls, stem wall and/or priers	✓		
42	Attachment of joist to girder	✓		
43	Wind load requirements where applicable	✓		
44	Show required under-floor crawl space	✓		
45	Show required amount of ventilation opening for under-floor spaces	✓		
46	Show required covering of ventilation opening	✓		
47	Show the required access opening to access to under-floor spaces	✓		
	Show the sub-floor structural panel sheathing type, thickness and fastener schedule on the edges &	✓		

48	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 309	✓		
51	Provide live and dead load rating of floor framing systems (psf).	✓		

FBCR CHAPTER 6 WOOD WALL FRAMING CONSTRUCTION

	GENERAL REQUIREMENTS: APPLICANT SHALL CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to the right Each box shall be answered if Applicable		
		YES	NO	N/
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 FBCR 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 FBCR Table 502.5 (1)	✓		
57	Indicate where pressure treated wood will be placed	✓		
58	Show all wall structural panel sheathing, grade, thickness and show fastener schedule for structural panel sheathing edges & intermediate areas	✓		
59	A detail showing gable truss bracing, wall balloon framing details or/ and wall hinge bracing detail	✓		

FBCR :ROOF SYSTEMS:

60	Truss design drawing shall meet section FBCR 802.10 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 Table 602,3(2) & 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	✓		

FBCR ROOF ASSEMBLIES FRC Chapter 9

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

FBCR Chapter 11 Energy Efficiency Code for residential building

Residential construction shall comply with this code by using the following compliance methods in the FBCR chapter 11 Residentia buildings compliance methods. *Two of the required forms are to be submitted, showing dimensions condition area equal to the total condition living space area*

	GENERAL REQUIREMENTS APPLICANT – PLEASE CHECK AS APPLICABLE BOX BEFORE SUBMITTAL	Items to include Each Box should be checked 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 locations in bathrooms	✓		
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	existing		
83	Reservoir pressure tank gallon capacity	✓		
84	Rating of cycle stop valve if used	✓		

Electrical layout shown including

85	Switches, outlets/receptacles, lighting and all required GFCI outlets identified	✓		
86	Ceiling fans	✓		
87	Smoke detectors & Carbon dioxide detectors	✓		
88	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.	✓		

		✓		
90	Appliances and HVAC equipment and disconnects	✓		
91	Arc Fault Circuits (AFCI) in bedrooms			

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 th building department Before Any Inspections can be preformed.

GENERAL REQUIREMENTS APPLICANT: PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to include and this shall be checked as Applicable

THE FOLLOWING ITEMS MUST BE SUBMITTED WITH BUILDING PLANS

		YES	NO	N/A
92	**Building Permit Application** A current Building Permit Application form is to be completed and submitted for all residential projects	✓		
93	**Parcel Number** The parcel number (Tax ID number) from the Property Appraiser (386) 758-1084 is required. A copy of property deed is also requested	✓		
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 permit showing an approved waste water sewer tap			
96	**Toilet facilities shall be provided for all construction sites**	✓		
97	**Town of Fort White** (386) 497-2321 If the parcel in the application for building permit is within the Corporate city limits of Fort White an approval land use development letter issued by the Town of Fort is required to be submitted with the application for a building permit.			
98	**Flood Information:** All projects within the Floodway of the Suwannee or Santa Fe Rivers shall require permitting through the Suwannee River Water Management District, before submitting a application to this office. Any project located within a flood zone where the base flood elevation (100 year flood) has been established shall meet the requirements of Section 8.5.2 of the Columbia County Land Development Regulations. Any project located within a flood zone where the base flood elevation has not been established (Zone A) shall meet the requirements of Section 8.5.3 of the Columbia County Land Development Regulations	✓		
99	CERTIFIED FINISHED FLOOR ELEVATIONS will be required on any project where the base flood elevation (100 year flood) has been established	✓		
100	A development permit will also be required. 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. If the applicant feels that a culvert is not needed, they may apply for a culvert waiver (**$50.00**). All culvert waivers are sent to the Columbia County Public Works Department for approval or denial.	✓		
102	**911 Address:** If the project is located in an area where a 911 address has not been issued, then application for a 911address must be applied for and received through the Columbia County Emergency Management Office of 911 Addressing Department (386) 758-1125	✓		

FORM 1100A-08

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs Residential Performance Method A

Project Name:	905288HuberRes	Builder Name:	Ben Martin
Street:		Permit Office:	Columbia County
City, State, Zip:	Lake City , FL ,	Permit Number:	28713
Owner:	Jamin Huber	Jurisdiction:	221500
Design Location:	FL, Gainesville		

1. New construction or existing		New (From Plans)		
2. Single family or multiple family		Single-family		
3. Number of units, if multiple family		1		
4. Number of Bedrooms		4		
5. Is this a worst case?		No		
6. Conditioned floor area (ft²)		3232		
7. Windows	Description		Area	
a. U-Factor: SHGC:	Dbl, U=0.35 SHGC=0.35		989.00	ft²
b. U-Factor: SHGC:	N/A			ft²
c. U-Factor: SHGC:	N/A			ft²
d. U-Factor: SHGC:	N/A			ft²
e. U-Factor: SHGC:	N/A			ft²
8. Floor Types		Insulation	Area	
a. Slab-On-Grade Edge Insulation		R=0.0	2210.00	ft²
b. N/A		R=		ft²
c. N/A		R=		ft²

9. Wall Types	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	3906.10 ft²
b. Frame - Wood, Exterior	R=19.0	772.09 ft²
c. Frame - Wood, Adjacent	R=13.0	197.33 ft²
d. N/A	R=	ft²
10. Ceiling Types	Insulation	Area
a. Under Attic (Vented)	R=30.0	2210.00 ft²
b. Knee Wall (Vented)	R=30.0	415.00 ft²
c. N/A	R=	ft²

11. Ducts (combined)
a. Sup: Attic Ret: Attic AH: Attic Sup. R= 6, 640 ft²

12. Cooling systems (combined)
a. Central Unit — Cap: 75.0 kBtu/hr SEER: 13

13. Heating systems (combined)
a. Electric Heat Pump — Cap: 75.0 kBtu/hr HSPF: 7.7

14. Hot water systems
a. Electric — Cap: 60 gallons EF: 0.92
b. Conservation features
None

15. Credits — Pstat

Glass/Floor Area: 0.306

Total As-Built Modified Loads: 61.71
Total Baseline Loads: 73.33

PASS

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

PREPARED BY:
DATE: EVAN BOAMSLOY 6/18/10

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

OWNER/AGENT:
DATE: 6-20-10

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:

PROJECT

Title:	905288HuberRes	Bedrooms:	4	Adress Type:	Lot Information
Building Type:	FLAsBuilt	Conditioned Area:	3232	Lot #	25
Owner:	Jamin Huber	Total Stories:	2	SubDivision:	Rose Creek Plan
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:		Rotate Angle:	225	Street:	
Permit Office:		Cross Ventilation:		County:	Columbia
Jurisdiction:		Whole House Fan:		City, State, Zip:	Lake City , FL ,
Family Type:	Single-family				
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

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

FLOORS

√	#	Floor Type	Perimeter	R-Value	Area	Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulatio	300 ft	0	2210 ft²	0.4	0.4	0.2

ROOF

√	#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	Tested	Deck Insul.	Pitch
_____	1	Hip	Flat tile/slate	2656 ft²	0 ft²	Dark	0.96	No	0	33.7 deg

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	300	2210 ft²	N	N

CEILING

√	#	Ceiling Type	R-Value	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	30	1188 ft²	0.11	Wood
_____	2	Under Attic (Vented)	30	1022 ft²	0.11	Wood
_____	3	Knee Wall (Vented)	30	415 ft²	0.11	Wood

WALLS

√	#	Ornt	Adjacent To	Wall Type	Cavity R-Value	Area	Sheathing R-Value	Framing Fraction	Solar Absor.
_____	1	N	Exterior	Frame - Wood	19	598 ft²		0.23	0.75
_____	2	NE	Exterior	Frame - Wood	19	174.09 ft²		0.23	0.75
_____	3	E	Exterior	Frame - Wood	13	653.67 ft²		0.23	0.75
_____	4	SE	Exterior	Frame - Wood	13	137.5 ft²		0.23	0.75
_____	5	S	Exterior	Frame - Wood	13	447.92 ft²		0.23	0.75
_____	6	SW	Exterior	Frame - Wood	13	196.06 ft²		0.23	0.75
_____	7	W	Exterior	Frame - Wood	13	824.15 ft²		0.23	0.75

WALLS

√	#	Ornt	Adjacent To	Wall Type	Cavity R-Value	Area	Sheathing R-Value	Framing Fraction	Solar Absor.
	8	NW	Exterior	Frame - Wood	13	484.5 ft²		0.23	0.75
	9	W	Garage	Frame - Wood	13	197.33 ft²		0.23	0.01
	10	E	Exterior	Frame - Wood	13	390.5 ft²		0.23	0.75
	11	NE	Exterior	Frame - Wood	13	62.33 ft²		0.23	0.75
	12	S	Exterior	Frame - Wood	13	392.33 ft²		0.23	0.75
	13	SW	Exterior	Frame - Wood	13	59.58 ft²		0.23	0.75
	14	W	Exterior	Frame - Wood	13	198 ft²		0.23	0.75
	15	SE	Exterior	Frame - Wood	13	59.58 ft²		0.23	0.75

DOORS

√	#	Ornt	Door Type	Storms	U-Value	Area
	1	N	Insulated	None	0.4	12 ft²
	2	W	Insulated	None	0.400000	12 ft²
	3	W	Insulated	None	0.400000	24 ft²
	4	S	Insulated	None	0.4	14.66666
	5	S	Insulated	None	0.4	16 ft²

WINDOWS

Orientation shown is the entered orientation (=>) changed to As Built (rotated 225 degrees).

√	#	Ornt	Frame	Panes	NFRC	U-Factor	SHGC	Storms	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
	1	NW=>S	Metal	Low-E Double	Yes	0.35	0.35	N	24 ft²	4 ft 0 in	2 ft 0 in	HERS 2006	None
	2	NW=>S	Metal	Low-E Double	Yes	0.35	0.35	N	8 ft²	4 ft 0 in	0 ft 0 in	HERS 2006	None
	3	N=>SW	Metal	Low-E Double	Yes	0.35	0.35	N	24 ft²	8 ft 6 in	2 ft 0 in	HERS 2006	None
	4	N=>SW	Metal	Low-E Double	Yes	0.35	0.35	N	8 ft²	8 ft 6 in	0 ft 0 in	HERS 2006	None
	5	NE=>W	Metal	Low-E Double	Yes	0.35	0.35	N	24 ft²	12 ft 6 in	2 ft 0 in	HERS 2006	None
	6	NE=>W	Metal	Low-E Double	Yes	0.35	0.35	N	8 ft²	12 ft 6 in	0 ft 0 in	HERS 2006	None
	7	N=>SW	Metal	Low-E Double	Yes	0.35	0.35	N	28 ft²	12 ft 6 in	11 ft 0 in	HERS 2006	None
	8	NW=>S	Metal	Low-E Double	Yes	0.35	0.35	N	80 ft²	0 ft 0 in	0 ft 0 in	HERS 2006	None
	9	W=>SE	Metal	Low-E Double	Yes	0.35	0.35	N	28 ft²	12 ft 14 in	20 ft 0 in	HERS 2006	None
	10	SW=>E	Metal	Low-E Double	Yes	0.35	0.35	N	24 ft²	99 ft 9 in	10 ft 0 in	HERS 2006	None
	11	SW=>E	Metal	Low-E Double	Yes	0.35	0.35	N	24 ft²	99 ft 9 in	4 ft 0 in	HERS 2006	None
	12	W=>SE	Metal	Low-E Double	Yes	0.35	0.35	N	24 ft²	7 ft 14 in	10 ft 0 in	HERS 2006	None
	13	W=>SE	Metal	Low-E Double	Yes	0.35	0.35	N	24 ft²	7 ft 14 in	4 ft 0 in	HERS 2006	None
	14	NW=>S	Metal	Low-E Double	Yes	0.35	0.35	N	24 ft²	17 ft 0 in	10 ft 0 in	HERS 2006	None
	15	NW=>S	Metal	Low-E Double	Yes	0.35	0.35	N	24 ft²	17 ft 0 in	4 ft 0 in	HERS 2006	None
	16	W=>SE	Metal	Low-E Double	Yes	0.35	0.35	N	24 ft²	11 ft 14 in	10 ft 0 in	HERS 2006	None
	17	W=>SE	Metal	Low-E Double	Yes	0.35	0.35	N	24 ft²	11 ft 14 in	4 ft 0 in	HERS 2006	None
	18	N=>SW	Metal	Low-E Double	Yes	0.35	0.35	N	54 ft²	1 ft 6 in	10 ft 0 in	HERS 2006	None
	19	N=>SW	Metal	Low-E Double	Yes	0.35	0.35	N	54 ft²	1 ft 6 in	4 ft 0 in	HERS 2006	None
	20	E=>NW	Metal	Low-E Double	Yes	0.35	0.35	N	36 ft²	1 ft 6 in	10 ft 0 in	HERS 2006	None

WINDOWS

Orientation shown is the entered orientation (=>) changed to As Built (rotated 225 degrees).

√	#	Ornt	Frame	Panes	NFRC	U-Factor	SHGC	Storms	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
_____	21	E=>NW	Metal	Low-E Double	Yes	0.35	0.35	N	36 ft²	1 ft 6 in	4 ft 0 in	HERS 2006	None
_____	22	E=>NW	Metal	Low-E Double	Yes	0.35	0.35	N	15 ft²	1 ft 6 in	3 ft 0 in	HERS 2006	None
_____	23	S=>NE	Metal	Low-E Double	Yes	0.35	0.35	N	60 ft²	20 ft 6 in	3 ft 0 in	HERS 2006	None
_____	24	S=>NE	Metal	Low-E Double	Yes	0.35	0.35	N	29.33333	3 ft 6 in	9 ft 0 in	HERS 2006	None
_____	25	S=>NE	Metal	Low-E Double	Yes	0.35	0.35	N	9 ft²	9 ft 0 in	1 ft 0 in	HERS 2006	None
_____	26	SE=>N	Metal	Low-E Double	Yes	0.35	0.35	N	12 ft²	1 ft 6 in	3 ft 0 in	HERS 2006	None
_____	27	S=>NE	Metal	Low-E Double	Yes	0.35	0.35	N	24 ft²	1 ft 6 in	3 ft 0 in	HERS 2006	None
_____	28	SW=>E	Metal	Low-E Double	Yes	0.35	0.35	N	12 ft²	1 ft 6 in	3 ft 0 in	HERS 2006	None
_____	29	E=>NW	Metal	Low-E Double	Yes	0.35	0.35	N	9.999999	1 ft 6 in	2 ft 0 in	HERS 2006	None
_____	30	SE=>N	Metal	Low-E Double	Yes	0.35	0.35	N	4.5 ft²	1 ft 6 in	3 ft 0 in	HERS 2006	None
_____	31	S=>NE	Metal	Low-E Double	Yes	0.35	0.35	N	4.5 ft²	1 ft 6 in	3 ft 0 in	HERS 2006	None
_____	32	SW=>E	Metal	Low-E Double	Yes	0.35	0.35	N	4.5 ft²	1 ft 6 in	3 ft 0 in	HERS 2006	None
_____	33	W=>SE	Metal	Low-E Double	Yes	0.35	0.35	N	9.999999	1 ft 6 in	2 ft 0 in	HERS 2006	None
_____	34	W=>SE	Metal	Low-E Double	Yes	0.35	0.35	N	8.333333	1 ft 6 in	2 ft 0 in	HERS 2006	None
_____	35	E=>NW	Metal	Low-E Double	Yes	0.35	0.35	N	3.333333	1 ft 6 in	2 ft 0 in	HERS 2006	None
_____	36	E=>NW	Metal	Low-E Double	Yes	0.35	0.35	N	8 ft²	1 ft 6 in	2 ft 0 in	HERS 2006	None
_____	37	E=>NW	Metal	Low-E Double	Yes	0.35	0.35	N	15 ft²	1 ft 6 in	4 ft 0 in	HERS 2006	None
_____	38	E=>NW	Metal	Low-E Double	Yes	0.35	0.35	N	5 ft²	1 ft 6 in	1 ft 0 in	HERS 2006	None
_____	39	SE=>N	Metal	Low-E Double	Yes	0.35	0.35	N	15 ft²	1 ft 6 in	4 ft 0 in	HERS 2006	None
_____	40	SE=>N	Metal	Low-E Double	Yes	0.35	0.35	N	4.5 ft²	1 ft 6 in	1 ft 0 in	HERS 2006	None
_____	41	S=>NE	Metal	Low-E Double	Yes	0.35	0.35	N	15 ft²	1 ft 6 in	4 ft 0 in	HERS 2006	None
_____	42	S=>NE	Metal	Low-E Double	Yes	0.35	0.35	N	4.5 ft²	1 ft 6 in	1 ft 0 in	HERS 2006	None
_____	43	SW=>E	Metal	Low-E Double	Yes	0.35	0.35	N	15 ft²	1 ft 6 in	4 ft 0 in	HERS 2006	None
_____	44	SW=>E	Metal	Low-E Double	Yes	0.35	0.35	N	4.5 ft²	1 ft 6 in	1 ft 0 in	HERS 2006	None
_____	45	S=>NE	Metal	Low-E Double	Yes	0.35	0.35	N	32 ft²	1 ft 6 in	1 ft 0 in	HERS 2006	None
_____	46	S=>NE	Metal	Low-E Double	Yes	0.35	0.35	N	30 ft²	1 ft 6 in	2 ft 0 in	HERS 2006	None
_____	47	W=>SE	Metal	Low-E Double	Yes	0.35	0.35	N	30 ft²	12 ft 6 in	3 ft 0 in	HERS 2006	None

INFILTRATION & VENTING

√	Method	SLA	CFM 50	ACH 50	ELA	EqLA	---- Forced Ventilation ---- Supply CFM	Exhaust CFM	Run Time Fraction	Fan Watts
_____	Default	0.00036	3052	5.15	167.5	315.1	0 cfm	0 cfm	0	0

GARAGE

√	#	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
_____	1	695.25 ft²	695.25 ft²	81 ft	10 ft	(invalid)

COOLING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Ducts
_____	1	Central Unit	None	SEER: 13	55 kBtu/hr	1650 cfm	0.75	sys#2
_____	2	Central Unit	None	SEER: 13	20 kBtu/hr	600 cfm	0.75	sys#1

HEATING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Ducts
_____	1	Electric Heat Pump	None	HSPF: 7.7	55 kBtu/hr	sys#2
_____	2	Electric Heat Pump	None	HSPF: 7.7	20 kBtu/hr	sys#1

HOT WATER SYSTEM

√	#	System Type	EF	Cap	Use	SetPnt	Conservation
_____	1	Electric	0.92	60 gal	70 gal	120 deg	None

SOLAR HOT WATER SYSTEM

√	FSEC Cert #	Company Name	System Model #	Collector Model #	Collector Area	Storage Volume	FEF
_____	None	None			ft²		

DUCTS

√	#	---- Supply ---- Location	R-Value	Area	---- Return ---- Location	Area	Leakage Type	Air Handler	CFM 25	Percent Leakage	QN	RLF
_____	1	Attic	6	160 ft²	Attic	40 ft²	Default Leakage	Attic	(Default)	(Default) %		
_____	2	Attic	6	480 ft²	Attic	120 ft²	Default Leakage	Attic	(Default)	(Default) %		

TEMPERATURES

Programable Thermostat: Y

Ceiling Fans:

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

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	80	80	80	80
	PM	80	80	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	66	66	66	66	66	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	66	66
Heating (WEH)	AM	66	66	66	66	66	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	66	66

DATE 07/08/2010

Columbia County Building Permit

This Permit Must Be Prominently Posted on Premises During Construction

PERMIT
000028713

SCANNED

APPLICANT ADAM PAPKA PHONE 386-623-2383

ADDRESS PO BOX 1921 LAKE CITY FL 32056

OWNER JAMIN HUBER PHONE 758-3380

ADDRESS 412 SW HIGHPOINT GLEN LAKE CITY FL 32024

CONTRACTOR BEN MARTIN PHONE 386-397-4534

LOCATION OF PROPERTY 47 S, L WALTER LITTLE RD, L STONERIDGE DR, R HIGHPOINT GLN, AT CUL-DE-SAC DRIVE ON LEFT AT END

TYPE DEVELOPMENT SFD, UTILITY ESTIMATED COST OF CONSTRUCTION 249450.00

HEATED FLOOR AREA 3232.00 TOTAL AREA 4989.00 HEIGHT 22.00 STORIES 2

FOUNDATION CONCRETE WALLS FRAMED ROOF PITCH 8/12 FLOOR SLAB

LAND USE & ZONING AG-3 MAX. HEIGHT 35

Minimum Set Back Requirments: STREET-FRONT 30.00 REAR 25.00 SIDE 25.00

NO. EX.D.U. 0 FLOOD ZONE X DEVELOPMENT PERMIT NO.

PARCEL ID 12-5S-16-03406-225 SUBDIVISION ROSECREEK PLANTATION

LOT 25 BLOCK PHASE 2 UNIT TOTAL ACRES 3.33

000001835		CBC059077	X	
Culvert Permit No.	Culvert Waiver	Contractor's License Number		Applicant/Owner/Contractor
WAIVER	10-0305	BK	TC	N
Driveway Connection	Septic Tank Number	LU & Zoning checked by	Approved for Issuance	New Resident

COMMENTS: FLOOR ONE FOOT ABOVE THE ROAD, NOC ON FILE, AFFIDAVIT ON FILE

SPECIAL FAMILY LOT

Check # or Cash 4522

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power ____ date/app. by Foundation ____ date/app. by Monolithic ____ date/app. by

Under slab rough-in plumbing ____ date/app. by Slab ____ date/app. by Sheathing/Nailing ____ date/app. by

Framing ____ date/app. by Insulation ____ date/app. by

Rough-in plumbing above slab and below wood floor ____ date/app. by Electrical rough-in ____ date/app. by

Heat & Air Duct ____ date/app. by Peri. beam (Lintel) ____ date/app. by Pool ____ date/app. by

Permanent power ____ date/app. by C.O. Final ____ date/app. by Culvert ____ date/app. by

Pump pole ____ date/app. by Utility Pole ____ date/app. by M/H tie downs, blocking, electricity and plumbing ____ date/app. by

Reconnection ____ date/app. by RV ____ date/app. by Re-roof ____ date/app. by

BUILDING PERMIT FEE $ 1250.00 CERTIFICATION FEE $ 24.95 SURCHARGE FEE $ 24.95

MISC. FEES $ 0.00 ZONING CERT. FEE $ 50.00 FIRE FEE $ 0.00 WASTE FEE $

FLOOD DEVELOPMENT FEE $ FLOOD ZONE FEE $ 25.00 CULVERT FEE $ **TOTAL FEE** 1374.90

INSPECTORS OFFICE L. Jodon CLERKS OFFICE CH

NOTICE: IN ADDITION TO THE REQUIREMENTS OF THIS PERMIT, THERE MAY BE ADDITIONAL RESTRICTIONS APPLICABLE TO THIS PROPERTY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY. AND THERE MAY BE ADDITIONAL PERMITS REQUIRED FROM OTHER GOVERNMENTAL ENTITIES SUCH AS WATER MANAGEMENT DISTRICTS, STATE AGENCIES, OR FEDERAL AGENCIES.

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT."

EVERY PERMIT ISSUED SHALL BECOME INVALID UNLESS THE WORK AUTHORIZED BY SUCH PERMIT IS COMMENCED WITHIN 180 DAYS AFTER ITS ISSUANCE, OR IF THE WORK AUTHORIZED BY SUCH PERMIT IS SUSPENDED OR ABANDONED FOR A PERIOD OF 180 DAYS AFTER THE TIME THE WORK IS COMMENCED. A VALID PERMIT RECIEVES AN APPROVED INSPECTION EVERY 180 DAYS. WORK SHALL BE CONSIDERED NOT SUSPENDED, ABANDONED OR INVALID WHEN THE PERMIT HAS RECIEVED AN APPROVED INSPECTION WITHIN 180 DAYS OT THE PREVIOUS INSPECTION.

The Issuance of this Permit Does Not Waive Compliance by Permittee with Deed Restrictions.

FORM 1100A-08

Code Compliance Cheklist

Residential Whole Building Performance Method A - Details

ADDRESS:	PERMIT #:
Lake City, FL,	

INFILTRATION REDUCTION COMPLIANCE CHECKLIST

COMPONENTS	SECTION	REQUIREMENTS FOR EACH PRACTICE	CHECK
Exterior Windows & Doors	N1106.AB.1.1	Maximum: .3 cfm/sq.ft. window area; .5 cfm/sq.ft. door area.	
Exterior & Adjacent Walls	N1106.AB.1.2.1	Caulk, gasket, weatherstrip or seal between: windows/doors & frames, surrounding wall; foundation & wall sole or sill plate; joints between exterior wall panels at corners; utility penetrations; between wall panels & top/bottom plates; between walls and floor. EXCEPTION: Frame walls where a continuous infiltration barrier is installed that extends from, and is sealed to, the foundation to the top plate.	
Floors	N1106.AB.1.2.2	Penetrations/openings > 1/8" sealed unless backed by truss or joint members. EXCEPTION: Frame floors where a continuous infiltration barrier is installed that is sealed to the perimeter, penetrations and seams.	
Ceilings	N1106.AB.1.2.3	Between walls & ceilings; penetrations of ceiling plane to top floor; around shafts, chases, soffits, chimneys, cabinets sealed to continuous air barrier; gaps in gyp board & top plate; attic access. EXCEPTION: Frame ceilings where a continuous infiltration barrier is installed that is sealed at the perimeter, at penetrations and seams.	
Recessed Lighting Fixtures	N1106.AB.1.2.4	Type IC rated with no penetrations, sealed; or Type IC or non-IC rated, installed inside a sealed box with 1/2" clearance & 3" from insulation; or Type IC with < 2.0 cfm from conditioned space, tested.	
Multi-story Houses	N1106.AB.1.2.5	Air barrier on perimeter of floor cavity between floors.	
Additional Infiltration reqts	N1106.AB.1.3	Exhaust fans vented to outdoors, dampers; combustion space heaters comply with NFPA, have combustion air.	

OTHER PRESCRIPTIVE MEASURES (must be met or exceeded by all residences.)

COMPONENTS	SECTION	REQUIREMENTS	CHECK
Water Heaters	N1112.AB.3	Comply with efficiency requirements in Table N112.ABC.3. Switch or clearly marked circuit breaker (electric) or cutoff (gas) must be provided. External or built-in heat trap required.	
Swimming Pools & Spas	N1112.AB.2.3	Spas & heated pools must have covers (except solar heated). Non-commercial pools must have a pump timer. Gas spa & pool heaters must have a minimum thermal efficiency of 78%. Heat pump pool heaters shall have a minimum COP of 4.0.	
Shower heads	N1112.AB.2.4	Water flow must be restricted to no more than 2.5 gallons per minute at 80 PSIG.	
Air Distribution Systems	N1110.AB	All ducts, fittings, mechanical equipment and plenum chambers shall be mechanically attached, sealed, insulated and installed in accordance with the criteria of Section N1110.AB. Ducts in unconditioned attics: R-6 min. insulation.	
HVAC Controls	N1107.AB.2	Separate readily accessible manual or automatic thermostat for each system.	
Insulation	N1104.AB.1 N1102.B.1.1	Ceilings-Min. R-19. Common walls-frame R-11 or CBS R-3 both sides. Common ceiling & floors R-11.	

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 84

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

, Lake City, FL,

1. New construction or existing		New (From Plans)
2. Single family or multiple family		Single-family
3. Number of units, if multiple family		1
4. Number of Bedrooms		4
5. Is this a worst case?		No
6. Conditioned floor area (ft²)		3232
7. Windows**	Description	Area
a. U-Factor: SHGC:	Dbl, U=0.35 SHGC=0.35	989.00 ft²
b. U-Factor: SHGC:	N/A	ft²
c. U-Factor: SHGC:	N/A	ft²
d. U-Factor: SHGC:	N/A	ft²
e. U-Factor: SHGC:	N/A	ft²

8. Floor Types	Insulation	Area
a. Slab-On-Grade Edge Insulation	R=0.0	2210.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

9. Wall Types	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	3906.10 ft²
b. Frame - Wood, Exterior	R=19.0	772.09 ft²
c. Frame - Wood, Adjacent	R=13.0	197.33 ft²
d. N/A	R=	ft²

10. Ceiling Types	Insulation	Area
a. Under Attic (Vented)	R=30.0	2210.00 ft²
b. Knee Wall (Vented)	R=30.0	415.00 ft²
c. N/A	R=	ft²

11. Ducts (combined)
    a. Sup: Attic Ret: Attic AH: Attic Sup. R= 6, 640 ft²

12. Cooling systems (combined)
    a. Central Unit — Cap: 75.0 kBtu/hr SEER: 13

13. Heating systems (combined)
    a. Electric Heat Pump — Cap: 75.0 kBtu/hr HSPF: 7.7

14. Hot water systems
    a. Electric — Cap: 60 gallons EF: 0.92
    b. Conservation features None

15. Credits — Pstat

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

Builder Signature: _____ Date: _____

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

*Note: The home's estimated Energy Performance Index is only available through the EnergyGauge USA - FlaRes2008 computer program. This is not a Building Energy Rating. If your Index is below 100, your home may qualify for incentives if you obtain a Florida Energy Gauge Rating. Contact the Energy Gauge Hotline at (321) 638-1492 or see the Energy Gauge web site at energygauge.com for information and a list of certified Raters. For information about Florida's Energy Efficiency Code for Building Construction, contact the Department of Community Affairs at (850) 487-1824.

**Label required by Section 13-104.4.5 of the Florida Building Code, Building, or Section B2.1.1 of Appendix G of the Florida Building Code, Residential, if not DEFAULT.

SUBCONTRACTOR VERIFICATION FORM

386

APPLICATION NUMBER 1006-49 CONTRACTOR Ben Martin PHONE 697-474

THIS FORM MUST BE SUBMITTED PRIOR TO THE ISSUANCE OF A PERMIT

In Columbia County one permit will cover all trades doing work at the permitted site. It is **REQUIRED** that we have records of the subcontractors who actually did the trade specific work under the permit. Per Florida Statute 440 and Ordinance 89-6, a contractor shall require all subcontractors to provide evidence of workers' compensation or exemption, general liability insurance and a valid Certificate of Competency license in Columbia County.

Any changes, the permitted contractor is responsible for the corrected form being submitted to this office prior to the start of that subcontractor beginning any work. Violations will result in stop work orders and/or fines.

ELECTRICAL Good	Print Name Donald Davis License #: EC0002306	Signature Phone #: 386-623-0499
MECHANICAL/ A/C OK	Print Name DAVID HALL'S INC. License #: CAC057424	Signature Phone #: 386-755-9792
PLUMBING/ GAS OK	Print Name Mark B Balls License #: CFC057219	Signature Phone #: 752-8656
ROOFING OK	Print Name Daybreak Inc. dba Hube & Asso License #: CCC050488	Signature Phone #: 386-497-1040
SHEET METAL	Print Name License #: NA	Signature Phone #:
FIRE SYSTEM/ SPRINKLER	Print Name License#: NA	Signature Phone #:
SOLAR	Print Name License #: NA	Signature Phone #:

Specialty License	License Number	Sub-Contractors Printed Name	Sub-Contractors Signature
MASON OK	000157	FRANK CROFT	Frank Croft
CONCRETE FINISHER OK	CBC1253409	Adam's Framing & Construction	
FRAMING OK	CBC1253409	Adam's Framing & Construction	
INSULATION STUCCO	000812	CHUCK BERGER PLASTERING	Chad Berger
~~STUCCO~~ INSULATION	000741 JOHN MAYES	[redacted]	John Mayes
DRYWALL OK	000838	Jerry Ruzika	
PLASTER OK	000838	Jerry Ruzika	
CABINET INSTALLER OK	CBC1253409	Adam's Framing & Construction	
PAINTING OK	CBC1253409	Adam's Framing & Construction	
~~ACOUSTICAL CEILING~~		NA	
GLASS			
CERAMIC TILE OK	000307	Cody Blank	
FLOOR COVERING OK	000118	Martin Interiors JAMIN MARTIN	Jamin Martin
ALUM/VINYL SIDING OK	CBC1253409	Adam's Framing & Construction	
GARAGE DOOR OK	CBC1253409	ADAM'S FRAMING & CONSTRUCTION	
~~METAL BLDG ERECTOR~~	NA		

F. S. 440.103 Building permits; identification of minimum premium policy.—Every employer shall, as a condition to applying for and receiving a building permit, show proof and certify to the permit issuer that it has secured compensation for its employees under this chapter as provided in ss. 440.10 and 440.38, and shall be presented each time the employer applies for a building permit.

SUBCONTRACTOR VERIFICATION FORM

APPLICATION NUMBER 2PPL#1006-49 CONTRACTOR Ben Martin PHONE 386 397 45

THIS FORM MUST BE SUBMITTED PRIOR TO THE ISSUANCE OF A PERMIT

In Columbia County one permit will cover all trades doing work at the permitted site. It is REQUIRED that we have records of the subcontractors who actually did the trade specific work under the permit. Per Florida Statute 440 and Ordinance 89-6, a contractor shall require all subcontractors to provide evidence of workers' compensation or exemption, general liability insurance and a valid Certificate of Competency license in Columbia County.

Any changes, the permitted contractor is responsible for the corrected form being submitted to this office prior to the start of that subcontractor beginning any work. Violations will result in stop work orders and/or fines.

ELECTRICAL	Print Name License #:	Signature Phone #:
MECHANICAL/ A/C _____	Print Name License #:	Signature Phone #:
PLUMBING/ GAS	Print Name License #:	Signature Phone #:
ROOFING	Print Name License #:	Signature Phone #:
SHEET METAL	Print Name License #:	Signature Phone #:
FIRE SYSTEM/ SPRINKLER	Print Name License#:	Signature Phone #:
SOLAR	Print Name License #:	Signature Phone #:

Specialty License	License Number	Sub-Contractors Printed Name	Sub-Contractors Signature
MASON			
CONCRETE FINISHER			
FRAMING			
X INSULATION			
STUCCO			
DRYWALL			
PLASTER			
CABINET INSTALLER			
PAINTING			
ACOUSTICAL CEILING			
X GLASS			
CERAMIC TILE ✓ good	000307	Cody B. Black	
FLOOR COVERING			
ALUM/VINYL SIDING			
GARAGE DOOR			
METAL BLDG ERECTOR			

F. S. 440.103 Building permits; identification of minimum premium policy.--Every employer shall, as a condition to applying for and receiving a building permit, show proof and certify to the permit issuer that it has secured compensation for its employees under this chapter as provided in ss. 440.10 and 440.38, and shall be presented each time the employer applies for a building permit.

EXISTING SPECIAL FAMILY LOT PERMIT AFFIDAVIT

STATE OF FLORIDA
COUNTY OF COLUMBIA

Inst 201012010870 Date 7/8/2010 Time 3:56 PM
DC,P DeWitt Cason Columbia County Page 1 of 2 B 1197 P 1315

BEFORE ME the undersigned Notary Public personally appeared, Barry Huber, the Parent Parcel Owner (Owner) which has been subdivided for Jamin Huber, the Immediate Family Member of the Owner, which is intended for the Immediate Family Members primary residence use. The Immediate Family Member is related to the Owner as Son. Both individuals being first duly sworn according to law, depose and say:

1. Affiant acknowledges Immediate Family Member is defined as parent, grandparent, step-parent, adopted parent, sibling, child, step-child, adopted child or grandchild.

2. Both the Owner and the Immediate Family Member have personal knowledge of all matters set forth in this Affidavit.

3. The Owner holds fee simple title to certain real property situated in Columbia County, and more particularly described by reference with the Columbia County Property Appraiser Parent Tract Tax Parcel No. 12-5S-16-03406-125.

4. The Owner has divided the parent parcel for use of an Immediate Family Member on June 6, 2005 (date), intended for their primary residence and the family lot and the remaining parent parcel are at least one-half (1/2) acre in size.

5. The Immediate Family Member holds fee simple title to certain real property divided from the Owners' parent parcel situated in Columbia County and more particularly described by reference to the Columbia County Property Appraiser Tax Parcel No. 12-5S-16-03406-225, and **shall obtain homestead exemption on said parcel once dwelling is placed on parcel**.

6. Except persons residing with the Immediate Family Member, no person or entity other than the Owner and Immediate Family Member to whom permit is being issued claims or is presently entitled to the right of possession or is in possession of the family lot, and there are no tenancies, leases or other occupancies that affect the property.

7. The issuance of the Special Family Lot Permit shall comply with the Columbia County Land Development Regulations, as amended. The site location of the dwelling on the property shall be in compliance with all other conditions not conflicting with this section for permitting as set forth in the Columbia County Land Development Regulations.

8. This Affidavit is made for the specific purpose of inducing Columbia County to recognize a family division for an Immediate Family Member on the parcel divided in accordance with Section 14.9 of the Columbia County Land Development Regulations.

Lot Existing Prior to 16 July 2009

9. This Affidavit and Agreement is made and given by Affiants with full knowledge that the facts contained herein are accurate and complete, and with full knowledge that the penalties under Florida law for perjury include conviction of a felony of the third degree.

We Hereby Certify that the facts represented by us in this Affidavit are true and correct and we accept the terms of the Agreement and agree to comply with it.

Owner

JAMIN HUBER
Typed or Printed Name

Immediate Family Member

BARRY HUBER
Typed or Printed Name

Subscribed and sworn to (or affirmed) before me this 8th day of July, 2010, by JAMIN HUBER (Owner) who is personally known to me or has produced _____ as identification.

Notary Public

RONALD N. BARKER
NOTARY PUBLIC
STATE OF FLORIDA
Comm# DD966561
Expires 3/1/2014

Subscribed and sworn to (or affirmed) before me this 8th day of July, 2010, by Alisha Huber (Family Member) who is personally known to me or has produced _____ as identification.

Notary Public

RONALD N. BARKER
NOTARY PUBLIC
STATE OF FLORIDA
Comm# DD966561
Expires 3/1/2014

APPROVED: COLUMBIA COUNTY, FLORIDA

By: _____

Name: Brian L. Kepner

Title: Land Development Regulation Administrator

Lot Existing Prior to 16 July 2009

Residential System Sizing Calculation

Summary

Jamin Huber

Project Title:
905288HuberRes

Lake City, FL

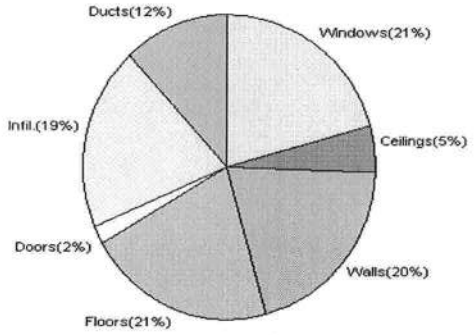
6/18/2010

Location for weather data: Gainesville, FL - Defaults: Latitude(29.7) Altitude(152 ft.) Temp Range(M) Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(54gr.)						
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	**61733**	**Btuh**		**Total cooling load calculation**	**63859**	**Btuh**
Submitted heating capacity	% of calc	Btuh		Submitted cooling capacity	% of calc	Btuh
Total (Electric Heat Pump)	121.5	75000		Sensible (SHR = 0.75)	109.7	56250
Heat Pump + Auxiliary(0.0kW)	121.5	75000		Latent	149.0	18750
				Total (Electric Heat Pump)	117.4	75000

WINTER CALCULATIONS

Winter Heating Load (for 3232 sqft)

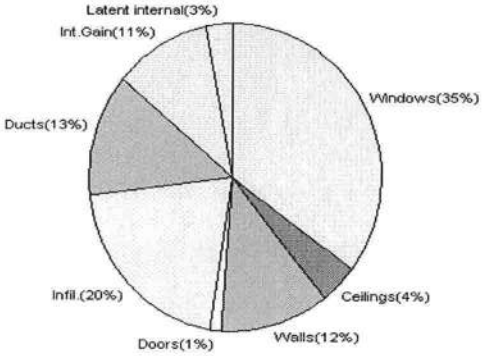
Load component			Load	
Window total	989	sqft	12808	Btuh
Wall total	3808	sqft	12267	Btuh
Door total	79	sqft	1164	Btuh
Ceiling total	2625	sqft	3093	Btuh
Floor total	2210	sqft	13098	Btuh
Infiltration	296	cfm	12001	Btuh
Duct loss			7302	Btuh
Subtotal			**61733**	**Btuh**
Ventilation	0	cfm	0	Btuh
TOTAL HEAT LOSS			**61733**	**Btuh**



SUMMER CALCULATIONS

Summer Cooling Load (for 3232 sqft)

Load component			Load	
Window total	989	sqft	22476	Btuh
Wall total	3808	sqft	7514	Btuh
Door total	79	sqft	881	Btuh
Ceiling total	2625	sqft	2675	Btuh
Floor total			0	Btuh
Infiltration	237	cfm	4411	Btuh
Internal gain			6900	Btuh
Duct gain			6417	Btuh
Sens. Ventilation	0	cfm	0	Btuh
Blower Load			0	Btuh
Total sensible gain			**51274**	**Btuh**
Latent gain(ducts)			1923	Btuh
Latent gain(infiltration)			8662	Btuh
Latent gain(ventilation)			0	Btuh
Latent gain(internal/occupants/other)			2000	Btuh
Total latent gain			**12585**	**Btuh**
TOTAL HEAT GAIN			**63859**	**Btuh**



8th Edition

EnergyGauge® System Sizing
PREPARED BY:
DATE: Elliott Bramsley 6/18/10

Residential Window Diversity

MidSummer

Jamin Huber

Lake City, FL

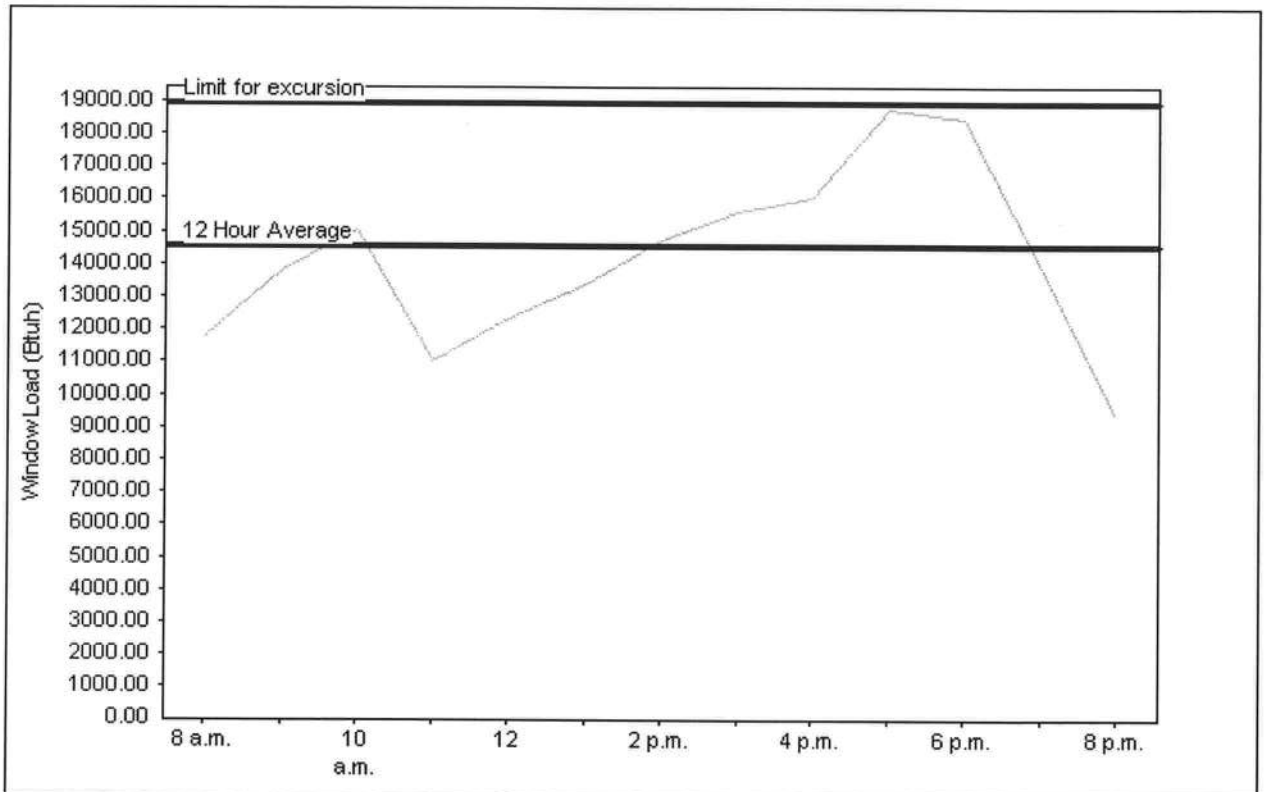
Project Title:
905288HuberRes

6/18/2010

Weather data for: Gainesville - Defaults

Summer design temperature	92 F	Average window load for July	14561 Btu
Cooling setpoint	75 F	Peak window load for July	18747 Btu
Summer temperature difference	17 F	Excusion limit(130% of Ave.)	18930 Btu
Latitude	29.7 North	Window excursion (July)	None

WINDOW Average and Peak Loads



Total July Window Load(Radiation and conduction)

The midsummer window load for this house does not exceed the window load excursion limit.
This house has adequate midsummer window diversity.

EnergyGauge® System Sizing for Florida residences only
PREPARED BY: _____
DATE: 6/18/10

Residential Window Diversity

October

Jamin Huber

Lake City, FL

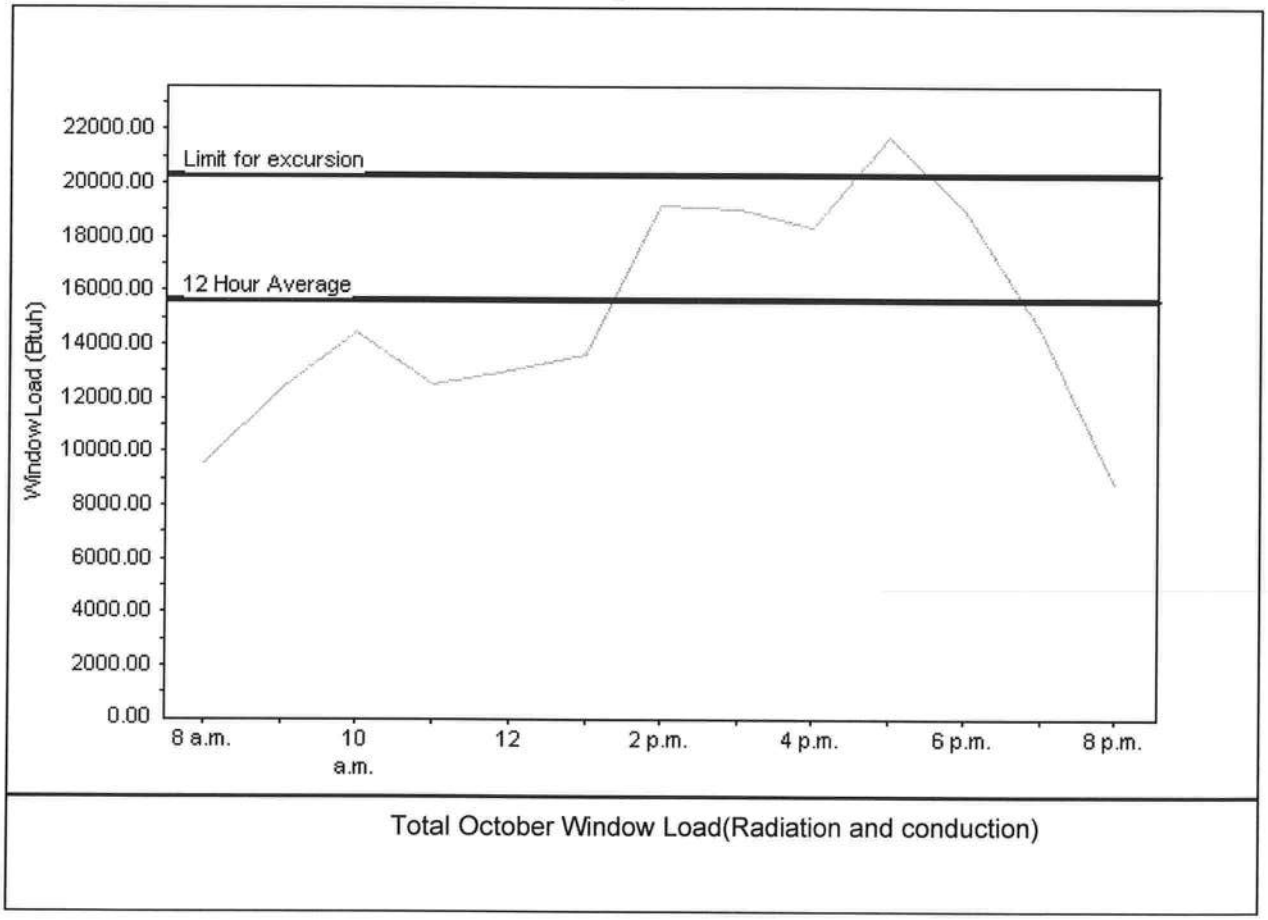
Project Title:
905288HuberRes

6/18/2010

Weather data for: Gainesville - Defaults

Summer design temperature	92 F	Average window load for October	15610 Btu
Cooling setpoint	75 F	Peak window load for October	21691 Btu
Summer temperature difference	17 F	Excusion limit(130% of Ave.)	20293 Btu
Latitude	29.7 North	Window excursion (October)	2796 Btuh

WINDOW Average and Peak Loads



Total October Window Load(Radiation and conduction)

Warning: This application has glass areas that produce relatively large heat gains for part of the day. Variable air volume devices may be required to overcome spikes in solar gain for one or more rooms. A zoned system may be required or some rooms may require zone control.

EnergyGauge® System Sizing for Florida residences only
PREPARED BY: _____
DATE: 6/18/10

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Jamin Huber

Lake City, FL

Project Title:
905288HuberRes
Building Type: User

6/18/2010

Reference City: Gainesville, FL (Defaults) Winter Temperature Difference: 37.0 F (MJ8 99%)
This calculation is for Worst Case. The house has been rotated 135 degrees.

Manual J Winter Calculations

Residential Load - Component Details (continued)

Jamin Huber

Lake City, FL

Project Title:
905288HuberRes
Building Type: User

6/18/2010

Component Loads for Whole House

Window	Panes/Type	Frame	U	Orientation	Area(sqft) X	HTM=	Load
1	2, NFRC 0.35	Metal	0.35	S	24.0	12.9	311 Btuh
2	2, NFRC 0.35	Metal	0.35	S	8.0	12.9	104 Btuh
3	2, NFRC 0.35	Metal	0.35	SW	24.0	12.9	311 Btuh
4	2, NFRC 0.35	Metal	0.35	SW	8.0	12.9	104 Btuh
5	2, NFRC 0.35	Metal	0.35	W	24.0	12.9	311 Btuh
6	2, NFRC 0.35	Metal	0.35	W	8.0	12.9	104 Btuh
7	2, NFRC 0.35	Metal	0.35	SW	28.0	12.9	363 Btuh
8	2, NFRC 0.35	Metal	0.35	S	80.0	12.9	1036 Btuh
9	2, NFRC 0.35	Metal	0.35	SE	28.0	12.9	363 Btuh
10	2, NFRC 0.35	Metal	0.35	E	24.0	12.9	311 Btuh
11	2, NFRC 0.35	Metal	0.35	E	24.0	12.9	311 Btuh
12	2, NFRC 0.35	Metal	0.35	SE	24.0	12.9	311 Btuh
13	2, NFRC 0.35	Metal	0.35	SE	24.0	12.9	311 Btuh
14	2, NFRC 0.35	Metal	0.35	S	24.0	12.9	311 Btuh
15	2, NFRC 0.35	Metal	0.35	S	24.0	12.9	311 Btuh
16	2, NFRC 0.35	Metal	0.35	SE	24.0	12.9	311 Btuh
17	2, NFRC 0.35	Metal	0.35	SE	24.0	12.9	311 Btuh
18	2, NFRC 0.35	Metal	0.35	SW	54.0	12.9	699 Btuh
19	2, NFRC 0.35	Metal	0.35	SW	54.0	12.9	699 Btuh
20	2, NFRC 0.35	Metal	0.35	NW	36.0	12.9	466 Btuh
21	2, NFRC 0.35	Metal	0.35	NW	36.0	12.9	466 Btuh
22	2, NFRC 0.35	Metal	0.35	NW	15.0	12.9	194 Btuh
23	2, NFRC 0.35	Metal	0.35	NE	60.0	12.9	777 Btuh
24	2, NFRC 0.35	Metal	0.35	NE	29.3	12.9	380 Btuh
25	2, NFRC 0.35	Metal	0.35	NE	9.0	12.9	117 Btuh
26	2, NFRC 0.35	Metal	0.35	N	12.0	12.9	155 Btuh
27	2, NFRC 0.35	Metal	0.35	NE	24.0	12.9	311 Btuh
28	2, NFRC 0.35	Metal	0.35	E	12.0	12.9	155 Btuh
29	2, NFRC 0.35	Metal	0.35	NW	10.0	12.9	130 Btuh
30	2, NFRC 0.35	Metal	0.35	N	4.5	12.9	58 Btuh
31	2, NFRC 0.35	Metal	0.35	NE	4.5	12.9	58 Btuh
32	2, NFRC 0.35	Metal	0.35	E	4.5	12.9	58 Btuh
33	2, NFRC 0.35	Metal	0.35	SE	10.0	12.9	130 Btuh
34	2, NFRC 0.35	Metal	0.35	SE	8.3	12.9	108 Btuh
35	2, NFRC 0.35	Metal	0.35	NW	3.3	12.9	43 Btuh
36	2, NFRC 0.35	Metal	0.35	NW	8.0	12.9	104 Btuh
37	2, NFRC 0.35	Metal	0.35	NW	15.0	12.9	194 Btuh
38	2, NFRC 0.35	Metal	0.35	NW	5.0	12.9	65 Btuh
39	2, NFRC 0.35	Metal	0.35	N	15.0	12.9	194 Btuh
40	2, NFRC 0.35	Metal	0.35	N	4.5	12.9	58 Btuh
41	2, NFRC 0.35	Metal	0.35	NE	15.0	12.9	194 Btuh
42	2, NFRC 0.35	Metal	0.35	NE	4.5	12.9	58 Btuh
43	2, NFRC 0.35	Metal	0.35	E	15.0	12.9	194 Btuh
44	2, NFRC 0.35	Metal	0.35	E	4.5	12.9	58 Btuh
45	2, NFRC 0.35	Metal	0.35	NE	32.0	12.9	414 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Jamin Huber

Lake City, FL

Project Title:
905288HuberRes
Building Type: User

6/18/2010

Window	Panes/SHGC/Frame/U			Orientation	Area X	HTM=	Load
46	2, NFRC 0.35	Metal	0.35	NE	30.0	12.9	388 Btuh
47	2, NFRC 0.35	Metal	0.35	SE	30.0	12.9	388 Btuh
	Window Total				989.0(sqft)		12808 Btuh
Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area X	HTM=	Load
1	Frame - Wood	- Ext	(0.077)	19.0/0.0	418	2.86	1195 Btuh
2	Frame - Wood	- Ext	(0.077)	19.0/0.0	142	2.86	406 Btuh
3	Frame - Wood	- Ext	(0.089)	13.0/0.0	557	3.28	1828 Btuh
4	Frame - Wood	- Ext	(0.089)	13.0/0.0	121	3.28	397 Btuh
5	Frame - Wood	- Ext	(0.089)	13.0/0.0	290	3.28	954 Btuh
6	Frame - Wood	- Ext	(0.089)	13.0/0.0	132	3.28	432 Btuh
7	Frame - Wood	- Ext	(0.089)	13.0/0.0	670	3.28	2200 Btuh
8	Frame - Wood	- Ext	(0.089)	13.0/0.0	325	3.28	1066 Btuh
9	Frame - Wood	- Adj	(0.089)	13.0/0.0	173	3.28	569 Btuh
10	Frame - Wood	- Ext	(0.089)	13.0/0.0	359	3.28	1180 Btuh
11	Frame - Wood	- Ext	(0.089)	13.0/0.0	62	3.28	205 Btuh
12	Frame - Wood	- Ext	(0.089)	13.0/0.0	311	3.28	1021 Btuh
13	Frame - Wood	- Ext	(0.089)	13.0/0.0	40	3.28	132 Btuh
14	Frame - Wood	- Ext	(0.089)	13.0/0.0	168	3.28	552 Btuh
15	Frame - Wood	- Ext	(0.089)	13.0/0.0	40	3.28	132 Btuh
	Wall Total				3808(sqft)		12267 Btuh
Doors	Type	Storm	Ueff.		Area X	HTM=	Load
1	Insulated - Exterior,	n	(0.400)		12	14.8	178 Btuh
2	Insulated - Exterior,	n	(0.400)		12	14.8	178 Btuh
3	Insulated - Garage,	n	(0.400)		24	14.8	355 Btuh
4	Insulated - Exterior,	n	(0.400)		15	14.8	217 Btuh
5	Insulated - Exterior,	n	(0.400)		16	14.8	237 Btuh
	Door Total				79(sqft)		1164Btuh
Ceilings	Type/Color/Surface		Ueff.	R-Value	Area X	HTM=	Load
1	Vented Attic/D/Tile		(0.032)	30.0/0.0	1188	1.2	1400 Btuh
2	Vented Attic/D/Tile		(0.032)	30.0/0.0	1022	1.2	1204 Btuh
3	Knee Wall/D/Tile		(0.032)	30.0/0.0	415	1.2	489 Btuh
	Ceiling Total				2625(sqft)		3093Btuh
Floors	Type			Ueff.	R-Value	Size X	HTM=	Load
1	Slab On Grade			(1.180)	0.0	300.0 ft(perim.)	43.7	13098 Btuh
	Floor Total					2210 sqft		13098 Btuh
						Envelope Subtotal:		42430 Btuh
Infiltration	Type			ACH	Volume(cuft)	Wall Ratio	CFM=	
	Natural			0.50	35552	1.00	296.3	12001 Btuh
Duct load						(DLM of Mixed ducts)		7302 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Jamin Huber

Lake City, FL

Project Title:
905288HuberRes
Building Type: User

6/18/2010

All Zones	**Sensible Subtotal All Zones**	**61733 Btuh**

WHOLE HOUSE TOTALS

Totals for Heating	Subtotal Sensible Heat Loss Ventilation Sensible Heat Loss Total Heat Loss	61733 Btuh 0 Btuh 61733 Btuh

EQUIPMENT

1. Electric Heat Pump 2. Electric Heat Pump	# #	55000 Btuh 20000 Btuh

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

Version 8

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Jamin Huber

Project Title:
905288HuberRes

Lake City, FL

6/18/2010

Reference City: Gainesville, FL Temperature Difference: 17.0F(MJ8 99%) Humidity difference: 54gr.

This calculation is for Worst Case. The house has been rotated 135 degrees.

Manual J Summer Calculations

Residential Load - Component Details (continued)

Jamin Huber

Lake City, FL

Project Title: 905288HuberRes

Climate:FL_GAINESVILLE_REGIONAL_A

6/18/2010

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	0.35,	0.35	No	No	S	4.0ft	2.0ft	24.0	24.0	0.0	13	16	319 Btuh
2	2 NFRC	0.35,	0.35	No	No	S	4.0ft	0.0ft	8.0	8.0	0.0	13	16	106 Btuh
3	2 NFRC	0.35,	0.35	No	No	SW	8.5ft	2.0ft	24.0	24.0	0.0	13	31	319 Btuh
4	2 NFRC	0.35,	0.35	No	No	SW	8.5ft	0.0ft	8.0	8.0	0.0	13	31	106 Btuh
5	2 NFRC	0.35,	0.35	No	No	W	12.5f	2.0ft	24.0	24.0	0.0	13	40	319 Btuh
6	2 NFRC	0.35,	0.35	No	No	W	12.5f	0.0ft	8.0	8.0	0.0	13	40	106 Btuh
7	2 NFRC	0.35,	0.35	No	No	SW	12.5f	11.0f	28.0	28.0	0.0	13	31	373 Btuh
8	2 NFRC	0.35,	0.35	No	No	S	0.0ft	0.0ft	80.0	0.0	80.0	13	16	1284 Btuh
9	2 NFRC	0.35,	0.35	No	No	SE	13.2f	20.0f	28.0	5.8	22.2	13	31	765 Btuh
10	2 NFRC	0.35,	0.35	No	No	E	99.8f	10.0f	24.0	24.0	0.0	13	40	319 Btuh
11	2 NFRC	0.35,	0.35	No	No	E	99.8f	4.0ft	24.0	24.0	0.0	13	40	319 Btuh
12	2 NFRC	0.35,	0.35	No	No	SE	8.2ft	10.0f	24.0	13.8	10.2	13	31	501 Btuh
13	2 NFRC	0.35,	0.35	No	No	SE	8.2ft	4.0ft	24.0	24.0	0.0	13	31	319 Btuh
14	2 NFRC	0.35,	0.35	No	No	S	17.0f	10.0f	24.0	24.0	0.0	13	16	319 Btuh
15	2 NFRC	0.35,	0.35	No	No	S	17.0f	4.0ft	24.0	24.0	0.0	13	16	319 Btuh
16	2 NFRC	0.35,	0.35	No	No	SE	12.2f	10.0f	24.0	24.0	0.0	13	31	319 Btuh
17	2 NFRC	0.35,	0.35	No	No	SE	12.2f	4.0ft	24.0	24.0	0.0	13	31	319 Btuh
18	2 NFRC	0.35,	0.35	No	No	SW	1.5ft	10.0f	54.0	0.0	54.0	13	31	1676 Btuh
19	2 NFRC	0.35,	0.35	No	No	SW	1.5ft	4.0ft	54.0	0.0	54.0	13	31	1676 Btuh
20	2 NFRC	0.35,	0.35	No	No	NW	1.5ft	10.0f	36.0	0.0	36.0	13	29	1061 Btuh
21	2 NFRC	0.35,	0.35	No	No	NW	1.5ft	4.0ft	36.0	0.0	36.0	13	29	1061 Btuh
22	2 NFRC	0.35,	0.35	No	No	NW	1.5ft	3.0ft	15.0	0.0	15.0	13	29	442 Btuh
23	2 NFRC	0.35,	0.35	No	No	NE	20.5f	3.0ft	60.0	0.0	60.0	13	29	1768 Btuh
24	2 NFRC	0.35,	0.35	No	No	NE	3.5ft	9.0ft	29.3	0.0	29.3	13	29	864 Btuh
25	2 NFRC	0.35,	0.35	No	No	NE	9.0ft	1.0ft	9.0	0.0	9.0	13	29	265 Btuh
26	2 NFRC	0.35,	0.35	No	No	N	1.5ft	3.0ft	12.0	0.0	12.0	13	13	160 Btuh
27	2 NFRC	0.35,	0.35	No	No	NE	1.5ft	3.0ft	24.0	0.0	24.0	13	29	707 Btuh
28	2 NFRC	0.35,	0.35	No	No	E	1.5ft	3.0ft	12.0	0.0	12.0	13	40	476 Btuh
29	2 NFRC	0.35,	0.35	No	No	NW	1.5ft	2.0ft	10.0	0.0	10.0	13	29	295 Btuh
30	2 NFRC	0.35,	0.35	No	No	N	1.5ft	3.0ft	4.5	0.0	4.5	13	13	60 Btuh
31	2 NFRC	0.35,	0.35	No	No	NE	1.5ft	3.0ft	4.5	0.0	4.5	13	29	133 Btuh
32	2 NFRC	0.35,	0.35	No	No	E	1.5ft	3.0ft	4.5	0.0	4.5	13	40	179 Btuh
33	2 NFRC	0.35,	0.35	No	No	SE	1.5ft	2.0ft	10.0	2.8	7.2	13	31	261 Btuh
34	2 NFRC	0.35,	0.35	No	No	SE	1.5ft	2.0ft	8.3	2.3	6.0	13	31	217 Btuh
35	2 NFRC	0.35,	0.35	No	No	NW	1.5ft	2.0ft	3.3	0.0	3.3	13	29	98 Btuh
36	2 NFRC	0.35,	0.35	No	No	NW	1.5ft	2.0ft	8.0	0.0	8.0	13	29	236 Btuh
37	2 NFRC	0.35,	0.35	No	No	NW	1.5ft	4.0ft	15.0	0.0	15.0	13	29	442 Btuh
38	2 NFRC	0.35,	0.35	No	No	NW	1.5ft	1.0ft	5.0	0.0	5.0	13	29	147 Btuh
39	2 NFRC	0.35,	0.35	No	No	N	1.5ft	4.0ft	15.0	0.0	15.0	13	13	200 Btuh
40	2 NFRC	0.35,	0.35	No	No	N	1.5ft	1.0ft	4.5	0.0	4.5	13	13	60 Btuh
41	2 NFRC	0.35,	0.35	No	No	NE	1.5ft	4.0ft	15.0	0.0	15.0	13	29	442 Btuh
42	2 NFRC	0.35,	0.35	No	No	NE	1.5ft	1.0ft	4.5	0.0	4.5	13	29	133 Btuh
43	2 NFRC	0.35,	0.35	No	No	E	1.5ft	4.0ft	15.0	0.0	15.0	13	40	595 Btuh
44	2 NFRC	0.35,	0.35	No	No	E	1.5ft	1.0ft	4.5	0.7	3.8	13	40	159 Btuh
45	2 NFRC	0.35,	0.35	No	No	NE	1.5ft	1.0ft	32.0	0.0	32.0	13	29	943 Btuh
46	2 NFRC	0.35,	0.35	No	No	NE	1.5ft	2.0ft	30.0	0.0	30.0	13	29	884 Btuh
47	2 NFRC	0.35,	0.35	No	No	SE	12.5f	3.0ft	30.0	30.0	0.0	13	31	399 Btuh
	Window Total								989 (sqft)					22476 Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued)

Jamin Huber

Project Title: 905288HuberRes

Climate:FL_GAINESVILLE_REGIONAL_A

Lake City, FL

6/18/2010

Walls	Type	U-Value	R-Value Cav/Sheath	Area(sqft)	HTM	Load
1	Frame - Wood - Ext	0.08	19.0/0.0	418.0	1.5	627 Btuh
2	Frame - Wood - Ext	0.08	19.0/0.0	142.1	1.5	213 Btuh
3	Frame - Wood - Ext	0.09	13.0/0.0	556.7	2.1	1161 Btuh
4	Frame - Wood - Ext	0.09	13.0/0.0	121.0	2.1	252 Btuh
5	Frame - Wood - Ext	0.09	13.0/0.0	290.4	2.1	606 Btuh
6	Frame - Wood - Ext	0.09	13.0/0.0	131.6	2.1	274 Btuh
7	Frame - Wood - Ext	0.09	13.0/0.0	669.8	2.1	1397 Btuh
8	Frame - Wood - Ext	0.09	13.0/0.0	324.5	2.1	677 Btuh
9	Frame - Wood - Adj	0.09	13.0/0.0	173.3	1.5	262 Btuh
10	Frame - Wood - Ext	0.09	13.0/0.0	359.2	2.1	749 Btuh
11	Frame - Wood - Ext	0.09	13.0/0.0	62.3	2.1	130 Btuh
12	Frame - Wood - Ext	0.09	13.0/0.0	310.8	2.1	648 Btuh
13	Frame - Wood - Ext	0.09	13.0/0.0	40.1	2.1	84 Btuh
14	Frame - Wood - Ext	0.09	13.0/0.0	168.0	2.1	350 Btuh
15	Frame - Wood - Ext	0.09	13.0/0.0	40.1	2.1	84 Btuh
	Wall Total			3808 (sqft)		7514 Btuh

Doors	Type	Area (sqft)	HTM	Load
1	Insulated - Exterior	12.0	11.2	134 Btuh
2	Insulated - Exterior	12.0	11.2	134 Btuh
3	Insulated - Garage	24.0	11.2	269 Btuh
4	Insulated - Exterior	14.7	11.2	164 Btuh
5	Insulated - Exterior	16.0	11.2	179 Btuh
	Door Total	79 (sqft)		881 Btuh

Ceilings	Type/Color/Surface	U-Value	R-Value	Area(sqft)	HTM	Load
1	Vented Attic/DarkTile	0.032	30.0/0.0	1188.0	1.02	1211 Btuh
2	Vented Attic/DarkTile	0.032	30.0/0.0	1022.0	1.02	1042 Btuh
3	Knee Wall/DarkTile	0.032	30.0/0.0	415.0	1.02	423 Btuh
	Ceiling Total			2625 (sqft)		2675 Btuh

Floors	Type	R-Value	Size	HTM	Load
1	Slab On Grade	0.0	2210 (ft-perimeter)	0.0	0 Btuh
	Floor Total		2210.0 (sqft)		0 Btuh

	Envelope Subtotal:	33546 Btuh

Infiltration	Type	ACH	Volume(cuft)	Wall Ratio	CFM=	Load
	SensibleNatural	0.40	35552	3808	296.3	4411 Btuh

Internal gain		Occupants		Btuh/occupant		Appliance	Load
		5	X	230	+	4600	5750 Btuh

	Sensible Envelope Load:	43707 Btuh
Duct load	(DGMs vary for Mixed ducts)	6417 Btuh
	Sensible Load All Zones	**50124 Btuh**

Manual J Summer Calculations

Residential Load - Component Details (continued)

Jamin Huber

Project Title: 905288HuberRes

Climate:FL_GAINESVILLE_REGIONAL_A

Lake City, FL

6/18/2010

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	**Sensible Envelope Load All Zones**	**44857 Btuh**
	Sensible Duct Load	6417 Btuh
	Total Sensible Zone Loads	**51274 Btuh**
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	**51274 Btuh**
	Latent infiltration gain (for 54 gr. humidity difference)	8662 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	1923 Btuh
	Latent occupant gain (10 people @ 200 Btuh per person)	2000 Btuh
	Latent other gain	0 Btuh
	Latent total gain	**12585 Btuh**
	TOTAL GAIN	**63859 Btuh**

EQUIPMENT

1. Central Unit	#	55000 Btuh
2. Central Unit	#	20000 Btuh

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

Version 8

System Sizing Calculations - Winter

Residential Load - Room by Room Component Details

Jamin Huber

Lake City, FL

Project Title:
905288HuberRes
Building Type: User

6/18/2010

Reference City: Gainesville, FL (Defaults) Winter Temperature Difference: 37.0 F (MJ8 99%)
This calculation is for Worst Case. The house has been rotated 135 degrees.

Component Loads for Room/Zone #1: 1st Floor

Window	Panes/Type	Frame	U	Orientation	Area(sqft) X	HTM=	Load
1	2, NFRC 0.35	Metal	0.35	S	24.0	12.9	311 Btuh
2	2, NFRC 0.35	Metal	0.35	S	8.0	12.9	104 Btuh
3	2, NFRC 0.35	Metal	0.35	SW	24.0	12.9	311 Btuh
4	2, NFRC 0.35	Metal	0.35	SW	8.0	12.9	104 Btuh
5	2, NFRC 0.35	Metal	0.35	W	24.0	12.9	311 Btuh
6	2, NFRC 0.35	Metal	0.35	W	8.0	12.9	104 Btuh
7	2, NFRC 0.35	Metal	0.35	SW	28.0	12.9	363 Btuh
8	2, NFRC 0.35	Metal	0.35	S	80.0	12.9	1036 Btuh
9	2, NFRC 0.35	Metal	0.35	SE	28.0	12.9	363 Btuh
10	2, NFRC 0.35	Metal	0.35	E	24.0	12.9	311 Btuh
11	2, NFRC 0.35	Metal	0.35	E	24.0	12.9	311 Btuh
12	2, NFRC 0.35	Metal	0.35	SE	24.0	12.9	311 Btuh
13	2, NFRC 0.35	Metal	0.35	SE	24.0	12.9	311 Btuh
14	2, NFRC 0.35	Metal	0.35	S	24.0	12.9	311 Btuh
15	2, NFRC 0.35	Metal	0.35	S	24.0	12.9	311 Btuh
16	2, NFRC 0.35	Metal	0.35	SE	24.0	12.9	311 Btuh
17	2, NFRC 0.35	Metal	0.35	SE	24.0	12.9	311 Btuh
18	2, NFRC 0.35	Metal	0.35	SW	54.0	12.9	699 Btuh
19	2, NFRC 0.35	Metal	0.35	SW	54.0	12.9	699 Btuh
20	2, NFRC 0.35	Metal	0.35	NW	36.0	12.9	466 Btuh
21	2, NFRC 0.35	Metal	0.35	NW	36.0	12.9	466 Btuh
22	2, NFRC 0.35	Metal	0.35	NW	15.0	12.9	194 Btuh
23	2, NFRC 0.35	Metal	0.35	NE	60.0	12.9	777 Btuh
24	2, NFRC 0.35	Metal	0.35	NE	29.3	12.9	380 Btuh
25	2, NFRC 0.35	Metal	0.35	NE	9.0	12.9	117 Btuh
26	2, NFRC 0.35	Metal	0.35	N	12.0	12.9	155 Btuh
27	2, NFRC 0.35	Metal	0.35	NE	24.0	12.9	311 Btuh
28	2, NFRC 0.35	Metal	0.35	E	12.0	12.9	155 Btuh
29	2, NFRC 0.35	Metal	0.35	NW	10.0	12.9	130 Btuh
30	2, NFRC 0.35	Metal	0.35	N	4.5	12.9	58 Btuh
31	2, NFRC 0.35	Metal	0.35	NE	4.5	12.9	58 Btuh
32	2, NFRC 0.35	Metal	0.35	E	4.5	12.9	58 Btuh
33	2, NFRC 0.35	Metal	0.35	SE	10.0	12.9	130 Btuh
34	2, NFRC 0.35	Metal	0.35	SE	8.3	12.9	108 Btuh
39	2, NFRC 0.35	Metal	0.35	N	15.0	12.9	194 Btuh
40	2, NFRC 0.35	Metal	0.35	N	4.5	12.9	58 Btuh
	Window Total				826.7(sqft)		10705 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Jamin Huber

Lake City, FL

Project Title:
905288HuberRes
Building Type: User

6/18/2010

Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area X	HTM=	Load
1	Frame - Wood	- Ext	(0.077)	19.0/0.0	418	2.86	1195 Btuh
2	Frame - Wood	- Ext	(0.077)	19.0/0.0	142	2.86	406 Btuh
3	Frame - Wood	- Ext	(0.089)	13.0/0.0	557	3.28	1828 Btuh
4	Frame - Wood	- Ext	(0.089)	13.0/0.0	121	3.28	397 Btuh
5	Frame - Wood	- Ext	(0.089)	13.0/0.0	290	3.28	954 Btuh
6	Frame - Wood	- Ext	(0.089)	13.0/0.0	132	3.28	432 Btuh
7	Frame - Wood	- Ext	(0.089)	13.0/0.0	670	3.28	2200 Btuh
8	Frame - Wood	- Ext	(0.089)	13.0/0.0	325	3.28	1066 Btuh
9	Frame - Wood	- Adj	(0.089)	13.0/0.0	173	3.28	569 Btuh
15	Frame - Wood	- Ext	(0.089)	13.0/0.0	40	3.28	132 Btuh
	Wall Total				2867(sqft)		9179 Btuh

Doors	Type	Storm	Ueff.	Area X	HTM=	Load
1	Insulated - Exterior,	n	(0.400)	12	14.8	178 Btuh
2	Insulated - Exterior,	n	(0.400)	12	14.8	178 Btuh
3	Insulated - Garage,	n	(0.400)	24	14.8	355 Btuh
4	Insulated - Exterior,	n	(0.400)	15	14.8	217 Btuh
5	Insulated - Exterior,	n	(0.400)	16	14.8	237 Btuh
	Door Total			79(sqft)		1164Btuh

Ceilings	Type/Color/Surface	Ueff.	R-Value	Area X	HTM=	Load
1	Vented Attic/D/Tile	(0.032)	30.0/0.0	1188	1.2	1400 Btuh
	Ceiling Total			1188(sqft)		1400Btuh

Floors	Type	Ueff.	R-Value	Size X	HTM=	Load
1	Slab On Grade	(1.180)	0.0	300.0 ft(perim.)	43.7	13098 Btuh
	Floor Total			2210 sqft		13098 Btuh

	Zone Envelope Subtotal:	35546 Btuh

Infiltration	Type	ACH	Zone Volume	Wall Ratio	CFM=	
	Natural	0.50	24310	0.75	223.1	9037 Btuh

Duct load	Average sealed, Supply(R6.0-Attic), Return(R6.0-Attic) (DLM of 0.124)	5511 Btuh
Zone #1	**Sensible Zone Subtotal**	**50095 Btuh**

Manual J Winter Calculations

Residential Load - Component Details (continued)

Jamin Huber

Lake City, FL

Project Title:
905288HuberRes
Building Type: User

6/18/2010

Component Loads for Room/Zone #2: 2nd Floor

Window	Panes/Type	Frame	U	Orientation	Area(sqft) X	HTM=	Load
35	2, NFRC 0.35	Metal	0.35	NW	3.3	12.9	43 Btuh
36	2, NFRC 0.35	Metal	0.35	NW	8.0	12.9	104 Btuh
37	2, NFRC 0.35	Metal	0.35	NW	15.0	12.9	194 Btuh
38	2, NFRC 0.35	Metal	0.35	NW	5.0	12.9	65 Btuh
41	2, NFRC 0.35	Metal	0.35	NE	15.0	12.9	194 Btuh
42	2, NFRC 0.35	Metal	0.35	NE	4.5	12.9	58 Btuh
43	2, NFRC 0.35	Metal	0.35	E	15.0	12.9	194 Btuh
44	2, NFRC 0.35	Metal	0.35	E	4.5	12.9	58 Btuh
45	2, NFRC 0.35	Metal	0.35	NE	32.0	12.9	414 Btuh
46	2, NFRC 0.35	Metal	0.35	NE	30.0	12.9	388 Btuh
47	2, NFRC 0.35	Metal	0.35	SE	30.0	12.9	388 Btuh
	Window Total				162.3(sqft)		2102 Btuh

Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area X	HTM=	Load
10	Frame - Wood	- Ext	(0.089)	13.0/0.0	359	3.28	1180 Btuh
11	Frame - Wood	- Ext	(0.089)	13.0/0.0	62	3.28	205 Btuh
12	Frame - Wood	- Ext	(0.089)	13.0/0.0	311	3.28	1021 Btuh
13	Frame - Wood	- Ext	(0.089)	13.0/0.0	40	3.28	132 Btuh
14	Frame - Wood	- Ext	(0.089)	13.0/0.0	168	3.28	552 Btuh
	Wall Total				940(sqft)		3088 Btuh

Ceilings	Type/Color/Surface	Ueff.	R-Value	Area X	HTM=	Load
2	Vented Attic/D/Tile	(0.032)	30.0/0.0	1022	1.2	1204 Btuh
3	Knee Wall/D/Tile	(0.032)	30.0/0.0	415	1.2	489 Btuh
	Ceiling Total			1437(sqft)		1693Btuh

	Zone Envelope Subtotal:	6884 Btuh

Infiltration	Type	ACH	Zone Volume	Wall Ratio	CFM=	
	Natural	0.50	10220	0.25	73.2	2964 Btuh

Duct load	Average sealed, Supply(R6.0-Attic), Return(R6.0-Attic) (DLM of 0.182)	1791 Btuh
Zone #2	**Sensible Zone Subtotal**	**11639 Btuh**

Manual J Winter Calculations

Residential Load - Component Details (continued)

Jamin Huber

Lake City, FL

Project Title:
905288HuberRes
Building Type: User

6/18/2010

SYSTEM GROUPS (BLOCK LOADS)

Heating Loads For System(s):1 Serving Zones: 1	Block load	50095 Btuh

Heating Loads For System(s):2 Serving Zones: 2	Block load	11639 Btuh

WHOLE HOUSE TOTALS

Totals for Heating	Subtotal Sensible Heat Loss Ventilation Sensible Heat Loss Total Heat Loss	61733 Btuh 0 Btuh 61733 Btuh

EQUIPMENT

1. Electric Heat Pump 2. Electric Heat Pump	# #	55000 Btuh 20000 Btuh

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

Version 8

System Sizing Calculations - Summer

Residential Load - Room by Room Component Details

Jamin Huber

Project Title:
905288HuberRes

Lake City, FL

6/18/2010

Reference City: Gainesville, FL Temperature Difference: 17.0F(MJ8 99%) Humidity difference: 54gr.

This calculation is for Worst Case. The house has been rotated 135 degrees.

Component Loads for Room/Zone #1: 1st Floor

Window	Type*					Overhang		Window Area(sqft)			HTM		Load
	Panes	SHGC	U	InSh	IS	Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded	
1	2 NFRC	0.35,	0.35	No	No	S	4.0ft	2.0ft	24.0	24.0	0.0	13	16	319 Btuh
2	2 NFRC	0.35,	0.35	No	No	S	4.0ft	0.0ft	8.0	8.0	0.0	13	16	106 Btuh
3	2 NFRC	0.35,	0.35	No	No	SW	8.5ft	2.0ft	24.0	24.0	0.0	13	31	319 Btuh
4	2 NFRC	0.35,	0.35	No	No	SW	8.5ft	0.0ft	8.0	8.0	0.0	13	31	106 Btuh
5	2 NFRC	0.35,	0.35	No	No	W	12.5f	2.0ft	24.0	24.0	0.0	13	40	319 Btuh
6	2 NFRC	0.35,	0.35	No	No	W	12.5f	0.0ft	8.0	8.0	0.0	13	40	106 Btuh
7	2 NFRC	0.35,	0.35	No	No	SW	12.5f	11.0f	28.0	28.0	0.0	13	31	373 Btuh
8	2 NFRC	0.35,	0.35	No	No	S	0.0ft	0.0ft	80.0	0.0	80.0	13	16	1284 Btuh
9	2 NFRC	0.35,	0.35	No	No	SE	13.2f	20.0f	28.0	5.8	22.2	13	31	765 Btuh
10	2 NFRC	0.35,	0.35	No	No	E	99.8f	10.0f	24.0	24.0	0.0	13	40	319 Btuh
11	2 NFRC	0.35,	0.35	No	No	E	99.8f	4.0ft	24.0	24.0	0.0	13	40	319 Btuh
12	2 NFRC	0.35,	0.35	No	No	SE	8.2ft	10.0f	24.0	13.8	10.2	13	31	501 Btuh
13	2 NFRC	0.35,	0.35	No	No	SE	8.2ft	4.0ft	24.0	24.0	0.0	13	31	319 Btuh
14	2 NFRC	0.35,	0.35	No	No	S	17.0f	10.0f	24.0	24.0	0.0	13	16	319 Btuh
15	2 NFRC	0.35,	0.35	No	No	S	17.0f	4.0ft	24.0	24.0	0.0	13	16	319 Btuh
16	2 NFRC	0.35,	0.35	No	No	SE	12.2f	10.0f	24.0	24.0	0.0	13	31	319 Btuh
17	2 NFRC	0.35,	0.35	No	No	SE	12.2f	4.0ft	24.0	24.0	0.0	13	31	319 Btuh
18	2 NFRC	0.35,	0.35	No	No	SW	1.5ft	10.0f	54.0	0.0	54.0	13	31	1676 Btuh
19	2 NFRC	0.35,	0.35	No	No	SW	1.5ft	4.0ft	54.0	0.0	54.0	13	31	1676 Btuh
20	2 NFRC	0.35,	0.35	No	No	NW	1.5ft	10.0f	36.0	0.0	36.0	13	29	1061 Btuh
21	2 NFRC	0.35,	0.35	No	No	NW	1.5ft	4.0ft	36.0	0.0	36.0	13	29	1061 Btuh
22	2 NFRC	0.35,	0.35	No	No	NW	1.5ft	3.0ft	15.0	0.0	15.0	13	29	442 Btuh
23	2 NFRC	0.35,	0.35	No	No	NE	20.5f	3.0ft	60.0	0.0	60.0	13	29	1768 Btuh
24	2 NFRC	0.35,	0.35	No	No	NE	3.5ft	9.0ft	29.3	0.0	29.3	13	29	864 Btuh
25	2 NFRC	0.35,	0.35	No	No	NE	9.0ft	1.0ft	9.0	0.0	9.0	13	29	265 Btuh
26	2 NFRC	0.35,	0.35	No	No	N	1.5ft	3.0ft	12.0	0.0	12.0	13	13	160 Btuh
27	2 NFRC	0.35,	0.35	No	No	NE	1.5ft	3.0ft	24.0	0.0	24.0	13	29	707 Btuh
28	2 NFRC	0.35,	0.35	No	No	E	1.5ft	3.0ft	12.0	0.0	12.0	13	40	476 Btuh
29	2 NFRC	0.35,	0.35	No	No	NW	1.5ft	2.0ft	10.0	0.0	10.0	13	29	295 Btuh
30	2 NFRC	0.35,	0.35	No	No	N	1.5ft	3.0ft	4.5	0.0	4.5	13	13	60 Btuh
31	2 NFRC	0.35,	0.35	No	No	NE	1.5ft	3.0ft	4.5	0.0	4.5	13	29	133 Btuh
32	2 NFRC	0.35,	0.35	No	No	E	1.5ft	3.0ft	4.5	0.0	4.5	13	40	179 Btuh
33	2 NFRC	0.35,	0.35	No	No	SE	1.5ft	2.0ft	10.0	2.8	7.2	13	31	261 Btuh
34	2 NFRC	0.35,	0.35	No	No	SE	1.5ft	2.0ft	8.3	2.3	6.0	13	31	217 Btuh
39	2 NFRC	0.35,	0.35	No	No	N	1.5ft	4.0ft	15.0	0.0	15.0	13	13	200 Btuh
40	2 NFRC	0.35,	0.35	No	No	N	1.5ft	1.0ft	4.5	0.0	4.5	13	13	60 Btuh
	Window Total								827 (sqft)					17996 Btuh

Walls	Type	U-Value	R-Value Cav/Sheath	Area(sqft)	HTM	Load
1	Frame - Wood - Ext	0.08	19.0/0.0	418.0	1.5	627 Btuh
2	Frame - Wood - Ext	0.08	19.0/0.0	142.1	1.5	213 Btuh
3	Frame - Wood - Ext	0.09	13.0/0.0	556.7	2.1	1161 Btuh
4	Frame - Wood - Ext	0.09	13.0/0.0	121.0	2.1	252 Btuh
5	Frame - Wood - Ext	0.09	13.0/0.0	290.4	2.1	606 Btuh
6	Frame - Wood - Ext	0.09	13.0/0.0	131.6	2.1	274 Btuh
7	Frame - Wood - Ext	0.09	13.0/0.0	669.8	2.1	1397 Btuh
8	Frame - Wood - Ext	0.09	13.0/0.0	324.5	2.1	677 Btuh
9	Frame - Wood - Adj	0.09	13.0/0.0	173.3	1.5	262 Btuh
15	Frame - Wood - Ext	0.09	13.0/0.0	40.1	2.1	84 Btuh
	Wall Total			2867 (sqft)		5552 Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued)

Jamin Huber

Project Title: 905288HuberRes

Climate:FL_GAINESVILLE_REGIONAL_A

Lake City, FL

6/18/2010

Doors	Type			Area (sqft)	HTM	Load
1	Insulated - Exterior			12.0	11.2	134 Btuh
2	Insulated - Exterior			12.0	11.2	134 Btuh
3	Insulated - Garage			24.0	11.2	269 Btuh
4	Insulated - Exterior			14.7	11.2	164 Btuh
5	Insulated - Exterior			16.0	11.2	179 Btuh
	Door Total			79 (sqft)		881 Btuh
Ceilings	Type/Color/Surface	U-Value	R-Value	Area(sqft)	HTM	Load
1	Vented Attic/DarkTile	0.032	30.0/0.0	1188.0	1.02	1211 Btuh
	Ceiling Total			1188 (sqft)		1211 Btuh
Floors	Type		R-Value	Size	HTM	Load
1	Slab On Grade		0.0	2210 (ft-perimeter)	0.0	0 Btuh
	Floor Total			2210.0 (sqft)		0 Btuh
					Zone Envelope Subtotal:	25641 Btuh
Infiltration	Type		ACH	Volume(cuft) Wall Ratio	CFM=	Load
	SensibleNatural		0.40	24310 0.75	178.5	3322 Btuh
Internal gain			Occupants	Btuh/occupant	Appliance	Load
			4	X 230 +	3400	4320 Btuh
					Sensible Envelope Load:	33282 Btuh
Duct load	Average sealed, Supply(R6.0-Attic), Return(R6.0-Attic)				(DGM of 0.145)	4815 Btuh
					Sensible Zone Load	**38098 Btuh**

Component Loads for Room/Zone #2: 2nd Floor

	Type*					Overhang		Window Area(sqft)			HTM		Load
Window	Panes	SHGC	U	InSh	IS	Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded	
35	2 NFRC	0.35,	0.35	No	No	NW	1.5ft	2.0ft	3.3	0.0	3.3	13	29	98 Btuh
36	2 NFRC	0.35,	0.35	No	No	NW	1.5ft	2.0ft	8.0	0.0	8.0	13	29	236 Btuh
37	2 NFRC	0.35,	0.35	No	No	NW	1.5ft	4.0ft	15.0	0.0	15.0	13	29	442 Btuh
38	2 NFRC	0.35,	0.35	No	No	NW	1.5ft	1.0ft	5.0	0.0	5.0	13	29	147 Btuh
41	2 NFRC	0.35,	0.35	No	No	NE	1.5ft	4.0ft	15.0	0.0	15.0	13	29	442 Btuh
42	2 NFRC	0.35,	0.35	No	No	NE	1.5ft	1.0ft	4.5	0.0	4.5	13	29	133 Btuh
43	2 NFRC	0.35,	0.35	No	No	E	1.5ft	4.0ft	15.0	0.0	15.0	13	40	595 Btuh
44	2 NFRC	0.35,	0.35	No	No	E	1.5ft	1.0ft	4.5	0.7	3.8	13	40	159 Btuh
45	2 NFRC	0.35,	0.35	No	No	NE	1.5ft	1.0ft	32.0	0.0	32.0	13	29	943 Btuh
46	2 NFRC	0.35,	0.35	No	No	NE	1.5ft	2.0ft	30.0	0.0	30.0	13	29	884 Btuh
47	2 NFRC	0.35,	0.35	No	No	SE	12.5f	3.0ft	30.0	30.0	0.0	13	31	399 Btuh
	Window Total								162 (sqft)					4479 Btuh

Walls	Type	U-Value	R-Value Cav/Sheath	Area(sqft)	HTM	Load
10	Frame - Wood - Ext	0.09	13.0/0.0	359.2	2.1	749 Btuh
11	Frame - Wood - Ext	0.09	13.0/0.0	62.3	2.1	130 Btuh
12	Frame - Wood - Ext	0.09	13.0/0.0	310.8	2.1	648 Btuh
13	Frame - Wood - Ext	0.09	13.0/0.0	40.1	2.1	84 Btuh
14	Frame - Wood - Ext	0.09	13.0/0.0	168.0	2.1	350 Btuh
	Wall Total			940 (sqft)		1962 Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued)

Jamin Huber

Project Title: 905288HuberRes

Climate:FL_GAINESVILLE_REGIONAL_A

Lake City, FL

6/18/2010

Ceilings	Type/Color/Surface	U-Value	R-Value	Area(sqft)	HTM	Load
2	Vented Attic/DarkTile	0.032	30.0/0.0	1022.0	1.02	1042 Btuh
3	Knee Wall/DarkTile	0.032	30.0/0.0	415.0	1.02	423 Btuh
	Ceiling Total			1437 (sqft)		1464 Btuh
					Zone Envelope Subtotal:	7905 Btuh
Infiltration	Type	ACH	Volume(cuft)	Wall Ratio	CFM=	Load
	SensibleNatural	0.40	10220	0.25	58.5	1089 Btuh
Internal gain		Occupants	Btuh/occupant		Appliance	Load
		6	X 230	+	1200	2580 Btuh
					Sensible Envelope Load:	11575 Btuh
Duct load	Average sealed, Supply(R6.0-Attic), Return(R6.0-Attic)				(DGM of 0.138)	1602 Btuh
					Sensible Zone Load	**13176 Btuh**

Manual J Summer Calculations

Residential Load - Component Details (continued)

Jamin Huber

Project Title: 905288HuberRes

Climate:FL_GAINESVILLE_REGIONAL_A

Lake City, FL

6/18/2010

SYSTEM GROUPS (BLOCK LOADS)

	Sensible Envelope Load	**33282 Btuh**
	Window Excursion	0 Btuh
Cooling Loads	Sensible Duct Load (duct gain multiplier of 0.145)	4815 Btuh
	Sensible ventilation	0 Btuh
For System(s):	**Zone Sensible gain**	**38098 Btuh**
1	Latent infiltration/ventilation gain	6523 Btuh
Serving Zones:	Latent duct gain	1448 Btuh
1	Latent occupant gain	800 Btuh
	Latent other gain	0 Btuh
	Total block load	**46868 Btuh**

	Sensible Envelope Load	**11575 Btuh**
	Window Excursion	0 Btuh
Cooling Loads	Sensible Duct Load (duct gain multiplier of 0.138)	1602 Btuh
	Sensible ventilation	0 Btuh
For System(s):	**Zone Sensible gain**	**13176 Btuh**
2	Latent infiltration/ventilation gain	2139 Btuh
Serving Zones:	Latent duct gain	475 Btuh
2	Latent occupant gain	1200 Btuh
	Latent other gain	0 Btuh
	Total block load	**16991 Btuh**

Manual J Summer Calculations

Residential Load - Component Details (continued)

Jamin Huber

Project Title: 905288HuberRes

Climate:FL_GAINESVILLE_REGIONAL_A

Lake City, FL

6/18/2010

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	**Sensible Envelope Load All Zones**	**44857 Btuh**
	Sensible Duct Load	6417 Btuh
	Total Sensible Zone Loads	**51274 Btuh**
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	**51274 Btuh**
	Latent infiltration gain (for 54 gr. humidity difference)	8662 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	1923 Btuh
	Latent occupant gain (10 people @ 200 Btuh per person)	2000 Btuh
	Latent other gain	0 Btuh
	Latent total gain	**12585 Btuh**
	TOTAL GAIN	**63859 Btuh**

EQUIPMENT

1. Central Unit	#	55000 Btuh
2. Central Unit	#	20000 Btuh

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

Version 8

Jamin Huber See attached product approval sheets

PRODUCT APPROVAL SPECIFICATION SHEET

Location: **Project Name:**

As required by Florida Statute 553.842 and Florida Administrative Code 9B-72, please provide the information and product approval number(s) on the building components listed below if they will be utilized on the construction proj which you are applying for a building permit on or after April 1, 2004. We recommend you contact your local prod supplier should you not know the product approval number for any of the applicable listed products. More informa about statewide product approval can be obtained at www.floridabuilding.org

Category/Subcategory	Manufacturer	Product Description	Approval Num
A. EXTERIOR DOORS			
1. Swinging	Therma Tru	See attached	
2. Sliding			
3. Sectional			
4. Roll up	general american	garage door	FL 286
5. Automatic			
6. Other			
B. WINDOWS			
1. Single hung	Simonton	See attached	
2. Horizontal Slider			
3. Casement			
4. Double Hung			
5. Fixed			
6. Awning			
7. Pass -through			
8. Projected			
9. Mullion			
10. Wind Breaker			
11 Dual Action			
12. Other			
C. PANEL WALL			
1. Siding			
2. Soffits	Ashley	Aluminum	
3. EIFS			
4. Storefronts			
5. Curtain walls			
6. Wall louver			
7. Glass block			
8. Membrane			
9. Greenhouse			
10. Other			
D. ROOFING PRODUCTS			
1. Asphalt Shingles			
2. Underlayments			
3. Roofing Fasteners			
4. Non-structural Metal Rf			
5. Built-Up Roofing			
6. Modified Bitumen			
7. Single Ply Roofing Sys			
8. Roofing Tiles	Ludowici	See attached	
9. Roofing Insulation			
10. Waterproofing			
11. Wood shingles /shakes			
12. Roofing Slate			

gory/Subcategory (cont.)	Manufacturer	Product Description	Approval Number(s
13. Liquid Applied Roof Sys			
14. Cements-Adhesives – Coatings			
15. Roof Tile Adhesive			
16. Spray Applied Polyurethane Roof			
17. Other			
E. SHUTTERS			
1. Accordion			
2. Bahama			
3. Storm Panels			
4. Colonial			
5. Roll-up			
6. Equipment			
7. Others			
F. SKYLIGHTS			
1. Skylight			
2. Other			
G. STRUCTURAL COMPONENTS			
1. Wood connector/anchor			
2. Truss plates			
3. Engineered lumber			
4. Railing			
5. Coolers-freezers			
6. Concrete Admixtures			
7. Material			
8. Insulation Forms			
9. Plastics			
10. Deck-Roof			
11. Wall			
12. Sheds			
13. Other			
H. NEW EXTERIOR ENVELOPE PRODUCTS			
1.			
2.			

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

I understand these products may have to be removed if approval cannot be demonstrated during inspe

Linda Rooter

Contractor or Contractor's Authorized Agent Signature

Print Name

Date

Jamin Huber

Location

Lot 25 Rose creek plantation

Permit # (FOR STAFF USE ONLY)

Ludowici Tile

MIAMI-DADE COUNTY

BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

NOTICE OF ACCEPTANCE (NOA)

Hanson Roof Tile
1340 SW 34 Ave
Deerfield Beach, FL. 33442

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Hanson Flat Tile

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This revises NOA #08-0804.12 and consists of pages 1 through 4.
The submitted documentation was reviewed by Alex Tigera.

MIAMI-DADE COUNTY APPROVED

NOA No.: 09-0928.04
Expiration Date: 04/10/13
Approval Date: 12/02/09

ROOFING ASSEMBLY APPROVAL

Category: Roofing

Sub-Category: Flat Profile Roofing Tiles

Material: Concrete

1. SCOPE

This is a new system using Hanson Flat Tile, as manufactured by Hanson Roof Tile Inc. in Deerfield Beach, Florida and described in Section 2 of this Notice of Acceptance. For locations where the pressure requirements, as determined by applicable Building Code does not exceed the design pressure values obtained by calculations in compliance with RAS 127 using the values listed in section 4 herein. The attachment calculations shall be done as a moment based system.

2. PRODUCT DESCRIPTION

Manufactured by Applicant	Dimensions	Test Specifications	Product Description
Hanson Flat Tile	l = 17.25" w = 13"	TAS 112	Flat, interlocking, concrete tile equipped with two nail holes. For direct deck or battened nail-on, mortar or adhesive set applications.
Trim Pieces	l = varies w = varies varying thickness	TAS 112	Accessory trim, concrete roof pieces for use at hips, rakes, ridges and valley terminations. Manufactured for each tile profile.

2.1 SUBMITTED EVIDENCE:

Test Agency	Test Identifier	Test Name/Report	Date
IBA Consultants, Inc.	2381-265	TAS 112	Feb. 2008
American Test Lab of South Florida	RT0922.01-09	TAS 102	09/22/09
American Test Lab of South Florida	RT1008.01-09	TAS 101	10/19/09
PRI Construction Materials	HRT-053-02-02	TAS 101	09/21/09

3. LIMITATIONS

3.1 Fire classification is not part of this acceptance.

3.2 For mortar or adhesive set tile applications, a static field uplift test shall be performed in accordance with RAS 106.

3.3 Applicant shall retain the services of a Miami-Dade County Certified Laboratory to perform quarterly test in accordance with TAS 112, appendix 'A'. Such testing shall be submitted to the Building Code Compliance Office for review.

3.4 Minimum underlayment shall be in compliance with the applicable Roofing Applications Standards listed section 4.1 herein.

3.5 30/90 hot mopped underlayment applications may be installed perpendicular to the roof slope unless stated otherwise by the underlayment material manufacturers published literature.

3.6 This acceptance is for wood deck applications. Minimum deck requirements shall be in compliance with applicable building code.

4. INSTALLATION

4.1 Hanson Flat Tile and its components shall be installed in strict compliance with Roofing Application Standard RAS 118, RAS 119, and RAS 120.

4.2 Data For Attachment Calculations

Table 1: Average Weight (W) and Dimensions (l x w)

Tile Profile	Weight-W (lbf)	Length-l (ft)	Width-w (ft)
Hanson Flat Tile	11.6	1.4375	1.08

Table 2: Aerodynamic Multipliers - □ (ft^3)

Tile Profile	□ (ft^3) Batten Application	□ (ft^3) Direct Deck Application
Hanson Flat Tile	N/A	0.330

Table 3: Restoring Moments due to Gravity - M_g (ft-lbf)

Tile Profile	2":12"	3":12"	4":12"	5":12"	6":12"	7":12" or greater
Hanson Flat Tile	Direct Deck 8.58	Direct Deck 8.42	Direct Deck 8.37	Direct Deck 8.20	Direct Deck 8.0	Direct Deck 7.78

Table 4: Attachment Resistance Expressed as a Moment - M_f (ft-lbf) For Nail-On Systems

Tile Profile	Fastener Type	Direct Deck (min 15/32" plywood)	Direct Deck (min. 19/32" plywood)	Battens
Hanson Flat Tile	Two (2). # 8 x 3" Screws	31.51	31.51	N/A

Table 5: Attachment Resistance Expressed as a Moment - M_f (ft-lbf) For Two Patty Adhesive Set Systems

Tile Profile	Tile Application	Minimum Attachment Resistance
Hanson Flat Tile	Tile Bond	38.7[1]

1 Dow Chemical Tile Bond™. Two patty's of 6g were installed as per Tile Bond NOA.

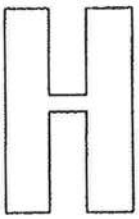
Table 6: Attachment Resistance Expressed as a Moment - M_f (ft-lbf) For Single Patty Adhesive Set Systems

Tile Profile	Tile Application	Minimum Attachment Resistance
Hanson Flat Tile	Polyfoam PolyPro™	38.67[2]

2 Medium paddy placement of 47grams of PolyPro™ AH-160.

5. LABELING

All tiles shall bear the imprint or identifiable marking of the manufacturer's name or logo **(See Detail Below)**, or following statement: "Miami-Dade County Product Control Approved".



HANSON FLAT TILE LABEL
(LOCATED ON UNDERSIDE OF TILE)

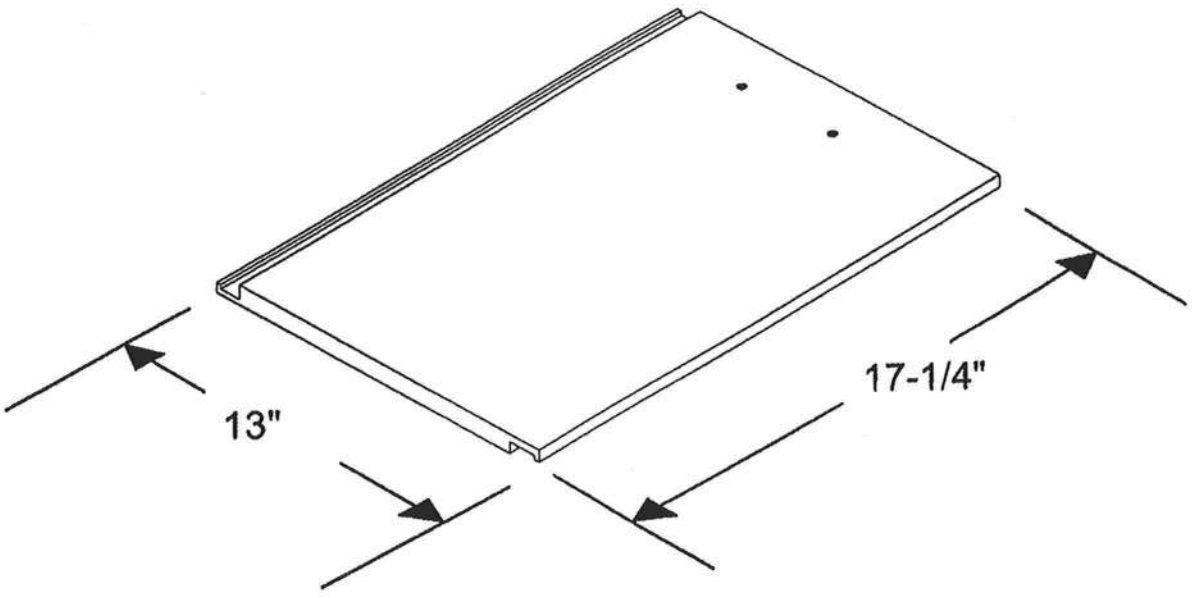
6. BUILDING PERMIT REQUIREMENTS

6.1 Application for building permit shall be accompanied by copies of the following:

6.1.1 This Notice of Acceptance.

6.1.2 Any other documents required by the Building Official or applicable building code in order to properly evaluate the installation of this system.

PROFILE DRAWINGS



HANSON FLAT TILE

END OF THIS ACCEPTANCE

Ludowici Tile

ICC EVALUATION SERVICE

Most Widely Accepted and Trusted

ICC-ES Evaluation Report

ESR-1646

Reissued June 1, 2009

This report is subject to re-examination in two years.

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DIVISION: 07—THERMAL AND MOISTURE PROTECTION
Section: 07320—Roof Tiles

REPORT HOLDER:

LUDOWICI ROOF TILE, INC.
4757 TILE PLANT ROAD
NEW LEXINGTON, OHIO 43764
www.ludowici.com

EVALUATION SUBJECT:

LUDOWICI AND CELADON CLAY ROOFING TILES

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2006 *International Building Code®* (IBC)
- 2006 *International Residential Code®* (IRC)
- 1997 *Uniform Building Code™* (UBC)

Properties evaluated:

- Roof covering
- Fire classification
- Wind resistance

2.0 USES

The Ludowici and Celadon clay roofing tiles, when installed in accordance with this report, are recognized as a Class A roof covering under the IBC and the IRC and as noncombustible roof covering under the UBC.

3.0 DESCRIPTION

3.1 General:

The roofing tiles comply with ASTM C 1167 and are manufactured from southeastern Ohio shale and fire clay, ground and screened to particle size suitable for the extrusion process. The clay is mixed with water and extruded in dies or pressed in molds to form various shapes. A surface treatment of glazing is applied before drying and firing. Accessory tiles such as ridge, rake and hip tiles are produced in the same manner as the roofing tiles, using the same materials.

3.2 Materials:

3.2.1 XL Interlocking Tiles: The XL Interlocking Tiles are flat, with interlocking edges. See Table 1 for dimensions and installed weights of the six different types of XL Interlocking Tiles. Two nail holes are provided at the top of each tile. See Figure 1 for additional details. The tiles are installed with a 3-inch (76 mm) headlap, on roofs having a minimum slope of 3:12 (25%).

3.2.2 Interlocking Tiles: The Interlocking Tiles are flat with interlocking edges. See Table 1 for dimensions and installed weights of the five different types of Interlocking Tiles. Two nail holes are provided at the top of each tile. See Figures 2 and 3 for additional details. The tiles are installed with a 3-inch (76 mm) headlap on roofs with a minimum slope of 3:12 (25%).

3.2.3 Shingle Tiles: The Shingle Tiles are flat, shingle-type tiles. See Table 1 for dimensions and installed weights of the eight different types of shingle tile. Two nail holes are provided at the top of each tile. The tiles are installed with headlaps as shown in Figure 4 on roofs with a minimum slope of 5:12 (42%).

3.2.4 Medium Profile Tiles: The Medium Profile Tiles have locks on all four edges reflecting French architectural features. See Table 1 for dimensions and installed weight of the tiles. One nail hole is provided at the top of each tile. See Figure 5 for additional details. The tiles are installed with a 3-inch (76 mm) headlap on roofs with a minimum slope of 3:12 (25%).

3.2.5 One-Piece, High Profile Barrel Tiles: The One-Piece, High Profile Barrel Tiles are S-shaped and have two nail holes at the top of each tile. Table 1 shows dimensions and installed weights. See Figure 6 for additional details. The tiles are installed with a 3-inch (76 mm) headlap, on roofs with a minimum roof slope of 4:12 (33%).

3.2.6 Two-Piece, High Profile Barrel Tiles: The Two-Piece, High Profile Barrel Tiles consist of pan and cover units having one nail hole at the top. Table 1 shows dimensions and installed weights. See Figures 7, 8 and 9 for additional details. The tiles are installed with a 3-inch (76 mm) headlap on roofs with a minimum slope of 5:12 (42%).

4.0 INSTALLATION

4.1 Field Tile:

Unless otherwise noted in this report, the tiles must be applied to solid-sheathed decks in accordance with IBC Table 1507.3.7, IRC Section R905.3 or UBC Tables 15-D-1 or 15-D-2, as applicable. The deck surfaces must be clean and dry prior to installation of underlayment. Foreign particles must be cleaned from all interlocking areas, to ensure proper seating and to prevent water damming. Cracked or broken tile must be replaced. See Figure 10 for additional details.

The decking must be minimum $^3/_4$-inch-thick (19.1 mm) plywood, nominally 1-by lumber, or other solid decking complying with the applicable code. The decking must be structurally adequate to support the loads involved.

Underlayment must comply with IBC Section 1507.3.3, IRC Section R905.3.3 or UBC Section 1507.7 and Tables 15-D-1 and 15-D-2, as applicable. The underlayment must be installed over the sheathing. Two layers of underlayment must be applied on rough surfaces, hips, valleys and ridges. Underlayment must be lapped $2^1/_2$ inches (63.5 mm) horizontally and 6 inches (152 mm) vertically, and extended 6 inches (152 mm) up vertical surfaces behind flashings.

For all roof slopes, each tile must be fastened in accordance with IBC Section 1507.3.6, IRC Section R905.3.3 or UBC Tables 15-D-1 and 15-D-2 to the plywood or wood deck with No. 11 gage corrosion-resistant nails having head diameters of $^5/_{16}$ inch (8 mm) or larger. Ring shank nails must be used for plywood decks, and smooth shank nails for lumber decks. The nails must have sufficient length to penetrate the deck a minimum of $^3/_4$ inch (19.1 mm) or through the underside of the deck, whichever is less. On roof slopes greater than 7:12 (58%) but less than 21:12 (175%), approved wind locks or hurricane clips, as shown in Figure 11, must be attached to each tile, in addition to the nails described above.

When installed with battens, nominally 1-by-2 wood battens must be spaced parallel to the eave to achieve the required minimum 3-inch (76 mm) headlap set forth in Section 3.2 between successive tile courses. End joints of batten boards must be separated by 1 inch (25.4 mm) every 4 feet (1219 mm) for drainage. Battens must be nailed to the deck with 8d corrosion-resistant box nails at 24 inches (610 mm) on center.

All valleys must have a minimum 16-ounce per-square-foot (4882 g/m^2), 0.0216-inch-thick (0.549 mm) copper flashing extending a minimum of 11 inches (279 mm) from the valley centerline each way, with a splash diverter rib not less than 1 inch high (25.4 mm) at the flow line formed as part of the flashing. Sections of flashing must have a minimum end lap of 4 inches (102 mm). Directly under the flashing, a minimum 36-inch-wide (914 mm), coated base sheet underlayment, complying with ASTM D 2626, and having a minimum sheet weight of 43 pounds per 100 square feet (2.1 kg/m^2), must be provided in addition to regular underlayment required in Section 4.1.

4.2 Hip, Ridge and Rake Tiles:

Hip and ridge tiles must be installed with ridge boards as shown in Figure 10. One layer of underlayment must be applied over the ridge board prior to installation of the hip and ridge tiles. Each ridge and hip tile must be nailed with one No. 11 gage corrosion-resistant nail driven into the ridge board. A bead of plastic cement must be spread across the nail head so that the butt end of each succeeding tile is securely fixed. Gable rake tiles must be fastened with two copper nails. Plastic cement for gable rakes, hip rolls, ridges, stringers and other conditions must be nonrunning, heavy-body flashing cement composed of mineral ingredients meeting the requirements of ASTM D 4586. Sealant, when used in lieu of plastic cement, must be silicone, and must be applied in accordance with the silicone manufacturer's published recommendations.

4.3 Roof Slope Limitations:

Minimum roof slopes must be as specified for the specific tiles in the applicable subsections of Section 3.2. Tiles installed on roof slopes less than those set forth in this report must be considered as decorative only, and must be installed over an approved roof covering complying with the applicable code.

4.4 Ice Dam Protection (IBC and IRC):

In areas where the average daily temperature in January is 25°F (-4°C) or less, or where there is a possibility of ice forming along the eaves and causing a backup of water, a membrane that consists of at least two layers of underlayment, complying with ASTM D 226, cemented together with an approved cementing material, or of a self-adhering polymer modified bitumen sheet complying with ASTM D 1970 or the ICC-ES Acceptance Criteria for Roof Underlayment for Use in Severe Climate Areas (AC48), must be used in lieu of normal underlayment. The underlayment must extend from the eave's edge to a point at least 24 inches (610 mm) inside the exterior wall line of the building and under all metal valley flashing.

4.5 Severe Climate Areas (UBC):

In areas subject to wind-driven snow, ice buildup, or wind-driven dust or sand, or in other areas designated by the code official, underlayment must include, in addition to the underlayment required by Section 4.2 of this report for the field of the roof, an extra layer of felt extending from the eave to a point 24 inches (610 mm) inside the exterior wall line of the building. Underlayment must be applied and cemented together as required in UBC Table 15-D-1 or 15-D-2. Metal valley flashing underlayment must be solid, cemented to the roofing underlayment required by Section 4.2 for slopes less than 7:12 (58.3%).

4.6 Roof Classification:

The Ludowici and Celadon clay roof tile installed in accordance with this report is a Class A roof covering in accordance with IBC Section 1505.2 and IRC Section R902.1, and a noncombustible roof covering in accordance with UBC Section 1504.2.

4.7 Reroofing Application:

The existing roof covering must be removed and the new roof installed in accordance with IBC Section 1510, IRC Section R907, UBC Appendix Chapter 15, and this report.

4.8 Wind Resistance:

4.8.1 IBC and IRC: When installed in accordance with this report, the Ludowici and Celadon clay roof tiles must be limited to areas subject to a maximum basic wind speed (3-second gust) of 100 mph (161 km/h) on structures having a mean roof height of 40 feet (12.2 m) or less (IRC) or 60 feet (18.3 m) or less (IBC).

4.8.2 UBC: When installed in accordance with this report, the Ludowici and Celadon clay roof tiles are limited to areas subject to a maximum basic wind speed (fastest mile) of 80 mph (129 km/h) on structures having a mean roof height of 40 feet (12.2 m) of less.

5.0 CONDITIONS OF USE

The Ludowici and Celadon clay roofing tiles described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 Tiles must be manufactured, identified and installed in accordance with this report and the manufacturer's published installation instructions. If there is a conflict between this report and the manufacturer's published installation instructions, this report governs.

5.2 The tiles are limited to use in those areas described in Section 4.8 of this report.

5.3 Maximum allowable roof slope is 60 degrees from the horizontal.

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Clay and Concrete Roof Tiles (AC180), dated August 2007.

7.0 IDENTIFICATION

Affixed to each shipping pallet is a tag bearing the company name and address (Ludowici Roof Tile, Inc., or Celadon Company), product name, the installed weight, tile quantity, product code number and the evaluation report number (ICC-ES ESR-1646). Additionally, the name "Ludowici" is embossed on each tile, with the exception that the name "Celadon" is embossed on the Celadon Ceramic Slate tiles.

TABLE 1—PRODUCT DESCRIPTIONS

TILE PROFILE CATEGORY	PRODUCT NAME	LENGTH (inches)	WIDTH (inches)	THICKNESS (inch)	INSTALLED WEIGHT (lbs/sq.ft.)	PIECES/ SQUARE
XL Interlocking	Celadon Ceramic Slate	16	$10^{3}/_{4}$	$^{3}/_{4}$	6	109
	Americana XL	16	$10^{3}/_{4}$	$^{3}/_{4}$	6.3	109
	Classic XL	16	$10^{3}/_{4}$	$^{3}/_{4}$	7.2	109
	Williamsburg XL	16	$10^{3}/_{4}$	$^{3}/_{4}$	7.2	109
	Lanai XL	16	$10^{3}/_{4}$	$^{3}/_{4}$	7.3	109
	Imperial Slate	16	10	1	8.75	116
Interlocking	Americana	14	9	$^{3}/_{4}$	8	158
	Classic	14	9	$^{3}/_{4}$	8	158
	Williamsburg	14	9	$^{3}/_{4}$	8	158
	Lanai	14	9	$^{3}/_{4}$	8	158
	Imperial	15	10	$^{3}/_{4}$	8.3	129
Shingle Tile	Crude	12	7	$^{5}/_{8}$	17.4	480
	Norman	15	7	$^{1}/_{2}$	16	317
	Calais	15	7	$^{1}/_{2}$	16	317
	Provincial	15	7	$^{1}/_{2}$	12.8	317
	Brittany	12	7	$^{5}/_{8}$	18.6	412
	Antique	12	7	$^{5}/_{8}$	14.8	412
	Colonial	$14^{5}/_{8}$	$7^{3}/_{8}$	$^{5}/_{8}$	17.1	310
	Georgian	15	8	$^{5}/_{8}$	13	276
Medium Profile	French	$16^{1}/_{4}$	9	$^{3}/_{8}$	9.5	133
One Piece, High Profile, Barrel	$13^{1}/_{4}$ Spanish	$13^{1}/_{4}$	$9^{3}/_{4}$	$^{1}/_{2}$	9.0	171
	$18^{3}/_{8}$ Spanish	$18^{3}/_{8}$	$9^{3}/_{4}$	$^{1}/_{2}$	8.0	114
Two Piece, High Profile Barrel	Straight Barrel Mission ($18^{3}/_{8}$ inch)	$18^{3}/_{8}$	8	$^{1}/_{2}$	10.7	163
	Straight Barrel Mission (16 inches)	16	8	$^{1}/_{2}$	11.9	192
	Straight Barrel Mission ($14^{1}/_{4}$ inches)	$14^{1}/_{4}$	8	$^{1}/_{2}$	12.5	225
	Palm Beach Tapered Mission	$18^{3}/_{8}$	8	$^{1}/_{2}$	9.6	163
	Cubana	18	8	$^{1}/_{2}$	11.7	166

For **SI:** 1 inch = 25.4 mm, 1 psf = 4.88 kg/m^2.

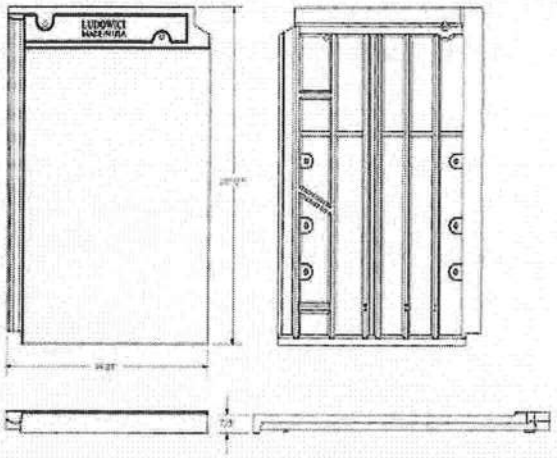


FIGURE 1—XL INTERLOCKING TILES: XL AMERICANA, XL CLASSIC, XL LANAI, XL WILLIAMSBURG, XL IMPERIAL SLATE

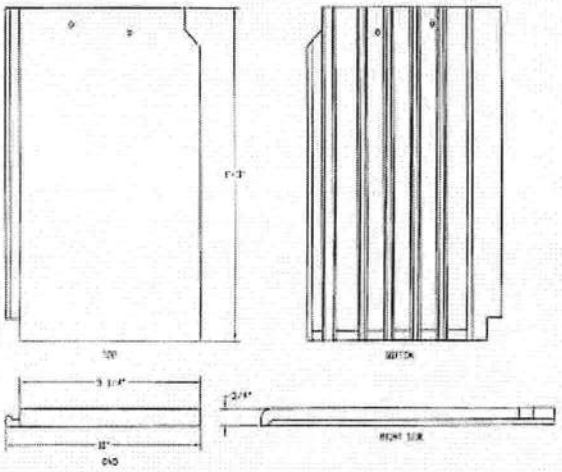


FIGURE 2—IMPERIAL XL INTERLOCKING TILE

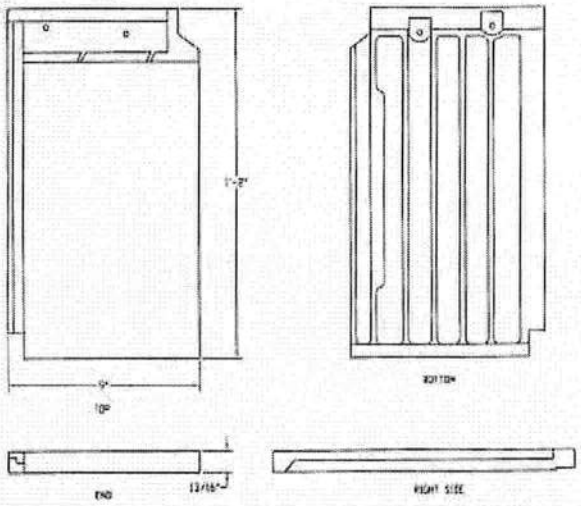
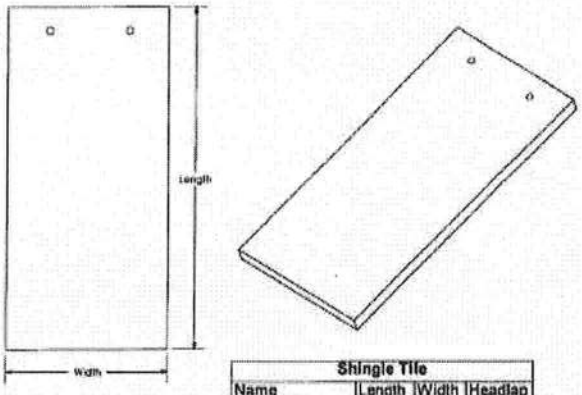


FIGURE 3—INTERLOCKING TILES: AMERICANA, CLASSIC, LANAI, WILLIAMSBURG



Shingle Tile			
Name	Length	Width	Headlap
Antique	12.00in	7.00in	7.00in
Brittany	12.00in	7.00in	7.00in
Calais	15.00in	7.00in	8.50in
Colonial	14.63in	7.38in	8.31in
Crude	12.00in	7.00in	7.00in
Georgian	15.00in	8.00in	8.50in
Norman	15.00in	7.00in	8.50in
Provincial	15.00in	7.00in	8.50in

For **SI:** 1 inch = 25.4 mm.

FIGURE 4—SHINGLE TILE

For **SI:** 1 inch = 25.4 mm.

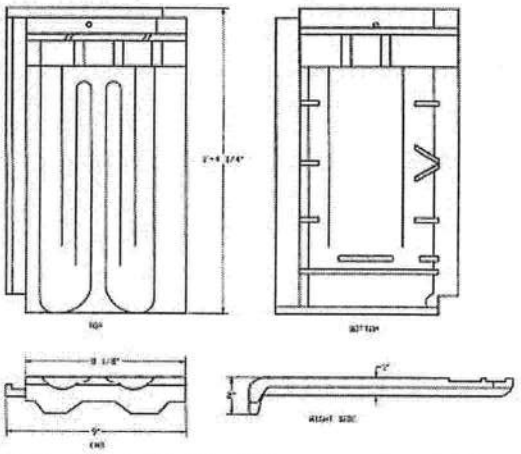


FIGURE 5—MEDIUM PROFILE TILE

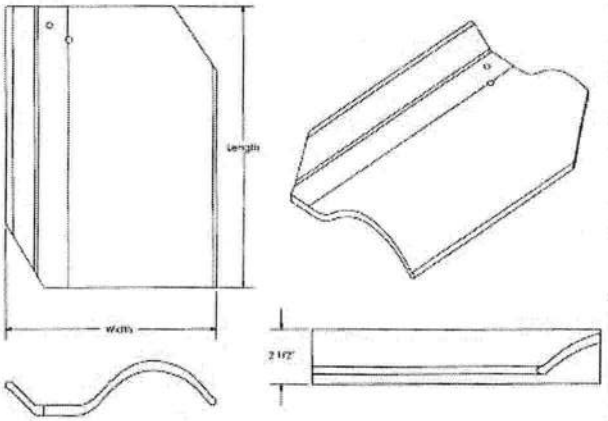


FIGURE 6—ONE-PIECE, HIGH-PROFILE BARREL TILE

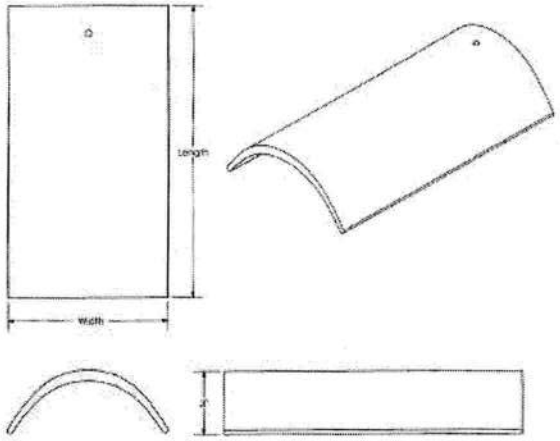


FIGURE 7—TWO-PIECE, HIGH PROFILE BARREL TILE

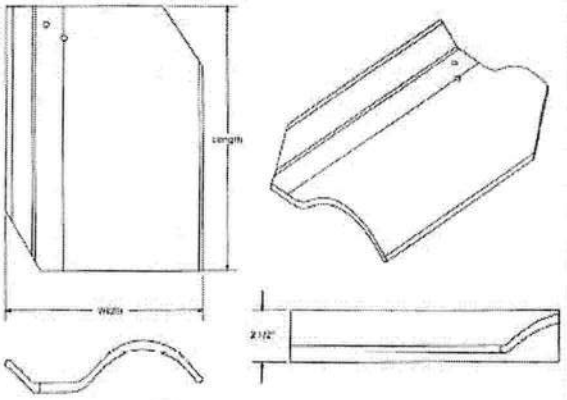
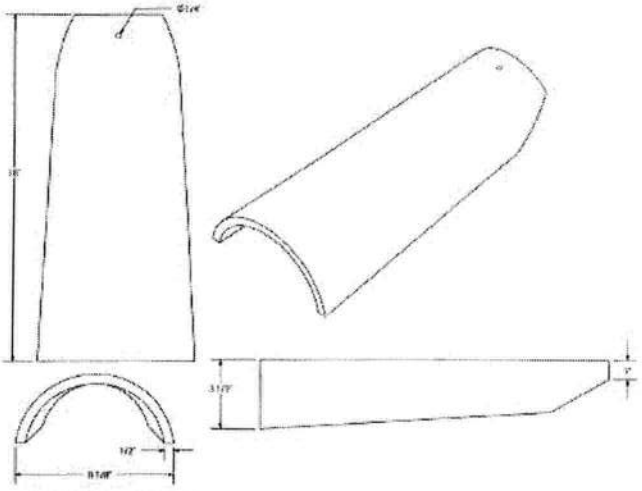
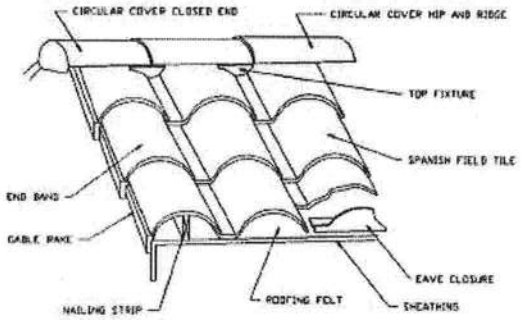


FIGURE 8—TWO-PIECE, HIGH PROFILE BARREL TILE

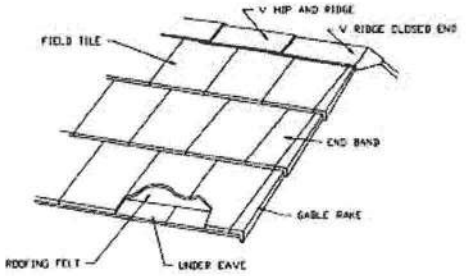


For **SI:** 1 inch = 25.4 mm.

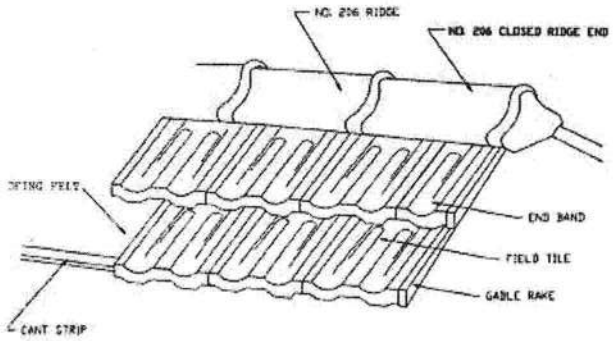
FIGURE 9—TWO-PIECE, HIGH-PROFILE BARREL TILE—CABANA



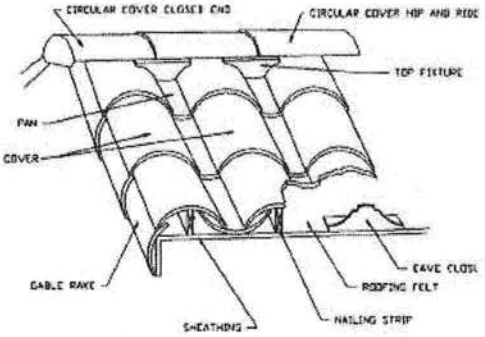
ONE PIECE, HIGH PROFILE BARREL TILES



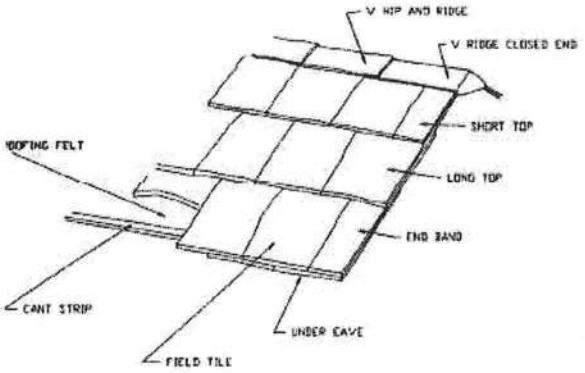
INTERLOCKING AND XL INTERLOCKING TILES



MEDIUM PROFILE TILES—FRENCH



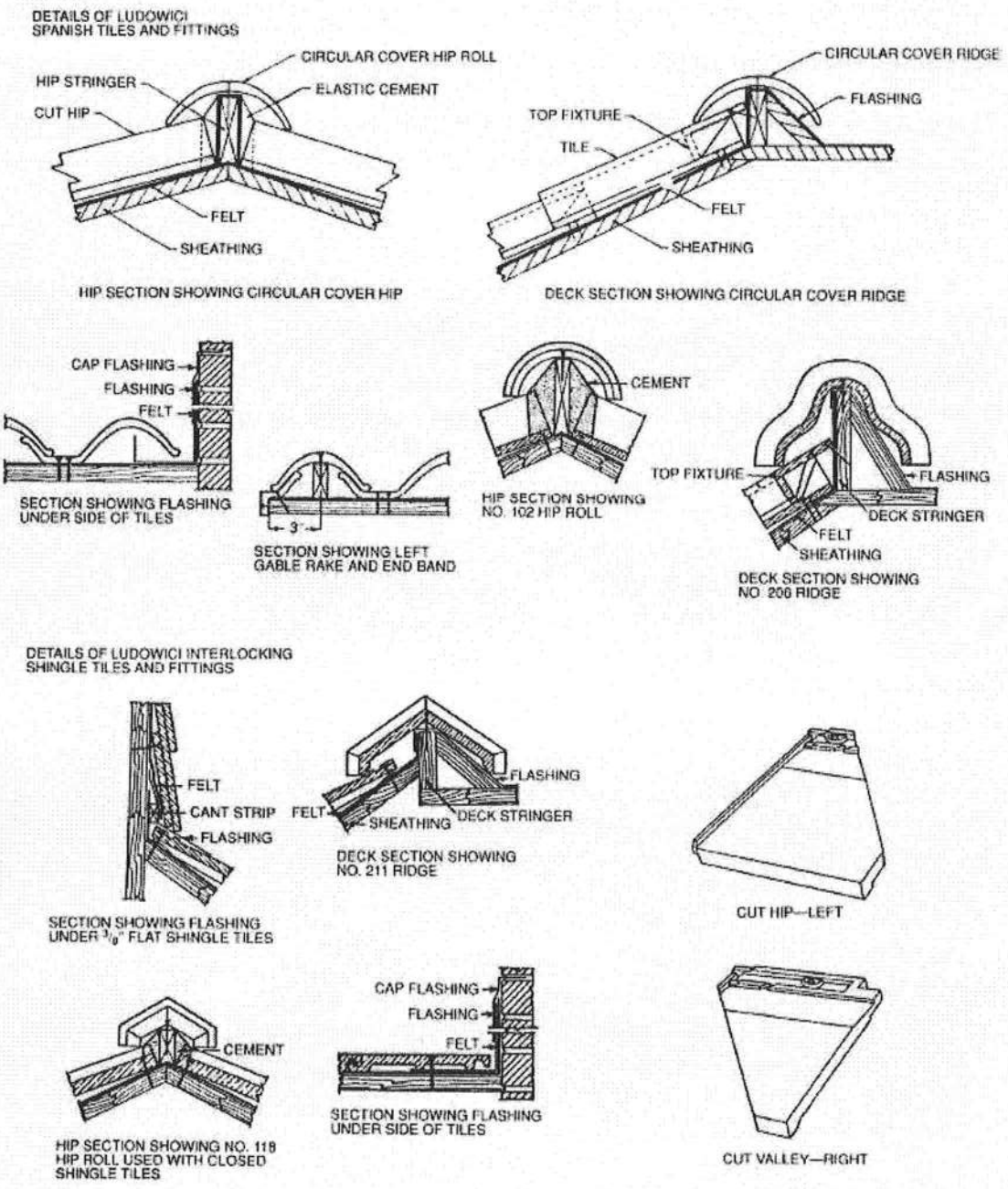
TWO-PIECE, HIGH PROFILE BARREL TILES



SHINGLE TILES

For **SI:** 1 inch = 25.4 mm.

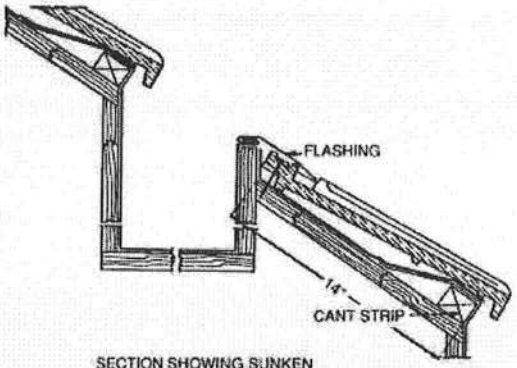
FIGURE 10—INSTALLATION DETAILS



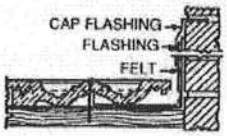
For **SI:** 1 inch = 25.4 mm.

FIGURE 10—INSTALLATION DETAILS (Continued)

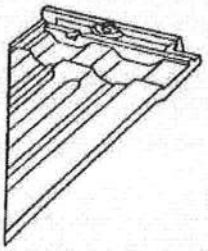
DETAILS OF LUDOWICI
FRENCH TILES AND FITTINGS



SECTION SHOWING SUNKEN
GUTTER TREATMENT

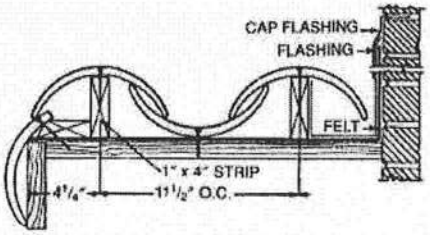


SECTION SHOWING FLASHING
UNDER SIDE OF TILES



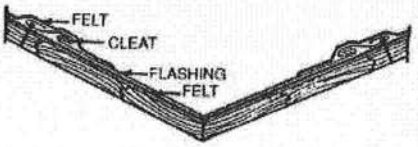
CUT VALLEY—RIGHT

DETAILS OF LUDOWICI
STRAIGHT BARREL MISSION TILES AND FITTINGS



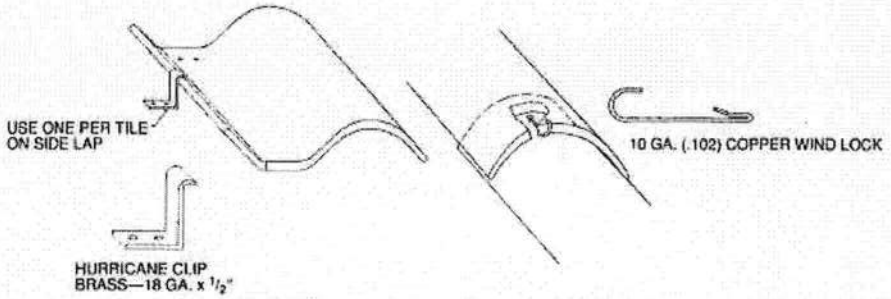
SECTION SHOWING SPLIT COVER GABLE RAKE,
ALSO FLASHING UNDER SIDE OF TILES.

VALLEY FLASHING OVER WOOD DECK



CROSS SECTION SHOWING VALLEY FLASHING
ON WOOD ROOF BASE. SEE SPECIFICATIONS.

FIGURE 10—INSTALLATION DETAILS (Continued)



For **SI:** 1 inch = 25.4 mm.

FIGURE 11—HURRICANE CLIPS

Product Approval
USER: Public User

Product Approval Menu > Product or Application Search > **Application List**

Search Criteria Refine Search

Code Version	2007	FL#	ALL
Application Type	ALL	Product Manufacturer	Therma-Tru Corporation
Category	ALL	Subcategory	ALL
Application Status	ALL	Compliance Method	ALL
Quality Assurance Entity	ALL	Quality Assurance Entity Contract Expired	ALL
Product Model, Number or Name	ALL	Product Description	ALL
Approved for use in HVHZ	ALL	Approved for use outside HVHZ	ALL
Impact Resistant	ALL	Design Pressure	ALL
Other	ALL		

Search Results - Applications

Go to Page GO! Page 1 / 3

FL#	Type	Manufacturer	Validated By	Status
FL5262-R2 History	Revision	Therma-Tru Corporation **Category:** Exterior Doors **Subcategory:** Swinging Exterior Door Assemblies	Ryan J. King, P.E. (813) 787-8283	Approved
FL5265-R4 History	Revision	Therma-Tru Corporation **Category:** Exterior Doors **Subcategory:** Sliding Exterior Door Assemblies	Ryan J. King, P.E. (813) 787-8283	Approved
FL5891-R1 History	Revision	Therma-Tru Corporation **Category:** Exterior Doors **Subcategory:** Swinging Exterior Door Assemblies	L.F. Schmidt, P.E. (813) 926-6537	Approved
FL6993-R1 History	Revision	Therma-Tru Corporation **Category:** Exterior Doors **Subcategory:** Swinging Exterior Door Assemblies	L.F. Schmidt, P.E. (813) 926-6537	Approved
FL7186-R1 History	Revision	Therma-Tru Corporation **Category:** Exterior Doors **Subcategory:** Swinging Exterior Door Assemblies	L.F. Schmidt, P.E. (813) 926-6537	Approved
FL7347-R1 History	Revision	Therma-Tru Corporation **Category:** Exterior Doors **Subcategory:** Swinging Exterior Door Assemblies	L.F. Schmidt, P.E. (813) 926-6537	Approved
FL7586-R1 History	Revision	Therma-Tru Corporation **Category:** Exterior Doors **Subcategory:** Swinging Exterior Door Assemblies	L.F. Schmidt, P.E. (813) 926-6537	Approved

FL7627-R1 History	Revision	Therma-Tru Corporation **Category:** Exterior Doors **Subcategory:** Swinging Exterior Door Assemblies	L.F. Schmidt, P.E. (813) 926-6537	Approved
FL7630-R2 History	Revision	Therma-Tru Corporation **Category:** Exterior Doors **Subcategory:** Swinging Exterior Door Assemblies	Ryan J. King, P.E. (813) 787-8283	Approved
FL7640-R2 History	Revision	Therma-Tru Corporation **Category:** Exterior Doors **Subcategory:** Swinging Exterior Door Assemblies	Ryan J. King, P.E. (813) 787-8283	Approved
FL7728-R1 History	Revision	Therma-Tru Corporation **Category:** Exterior Doors **Subcategory:** Swinging Exterior Door Assemblies	L.F. Schmidt, P.E. (813) 926-6537	Approved
FL7730-R2 History	Revision	Therma-Tru Corporation **Category:** Exterior Doors **Subcategory:** Swinging Exterior Door Assemblies	Ryan J. King, P.E. (813) 787-8283	Approved
FL7731-R1 History	Revision	Therma-Tru Corporation **Category:** Exterior Doors **Subcategory:** Swinging Exterior Door Assemblies	L.F. Schmidt, P.E. (813) 926-6537	Approved

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Department of Community Affairs
Florida Building Code Online
Codes and Standards
2555 Shumard Oak Boulevard
Tallahassee, Florida 32399-2100
(850) 487-1824, Fax (850) 414-8436

Product Approval Accepts:

Simonton Windows

FLORIDA DEPARTMENT OF Community Affairs

Product Approval
USER: Public User

Search Criteria Refine Search

Code Version	2007	FL#	ALL
Application Type	ALL	Product Manufacturer	Simonton Windows
Category	ALL	Subcategory	ALL
Application Status	ALL	Compliance Method	ALL
Quality Assurance Entity	ALL	Quality Assurance Entity Contract Expired	ALL
Product Model, Number or Name	ALL	Product Description	ALL
Approved for use in HVHZ	ALL	Approved for use outside HVHZ	ALL
Impact Resistant	ALL	Design Pressure	ALL
Other	ALL		

Search Results - Applications

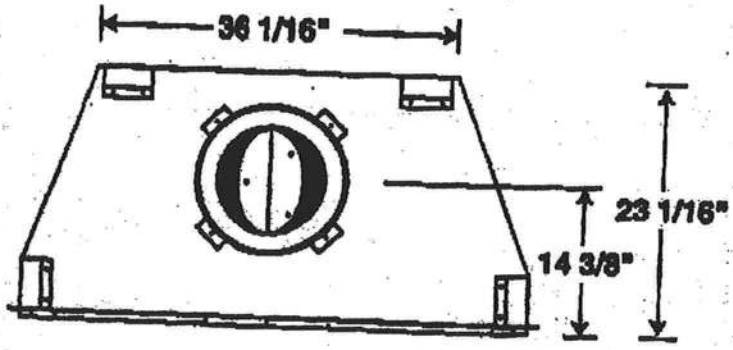
Go to Page GO! Page 1 / 3

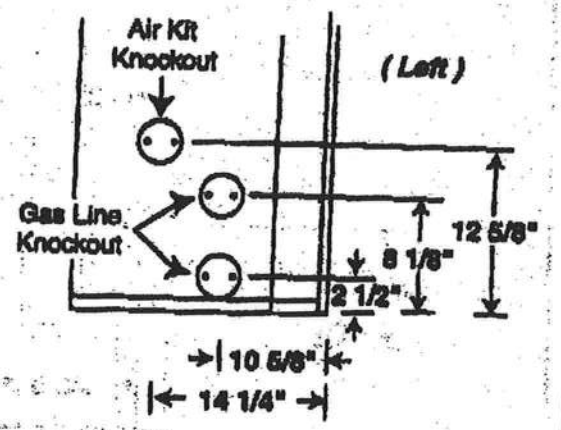
FL#	Type	Manufacturer	Validated By	Status
FL57-R3 History	Revision	Simonton Windows **Category:** Windows **Subcategory:** Awning	American Architectural Manufacturers Association (847) 303-5859	Approved
FL107-R5 History	Revision	Simonton Windows **Category:** Windows **Subcategory:** Casement	American Architectural Manufacturers Association (847) 303-5859	Approved
FL224-R3 History	Revision	Simonton Windows **Category:** Windows **Subcategory:** Casement	American Architectural Manufacturers Association (847) 303-5859	Approved
FL228-R6 History	Revision	Simonton Windows **Category:** Windows **Subcategory:** Fixed	American Architectural Manufacturers Association (847) 303-5859	Approved
FL229-R4 History	Revision	Simonton Windows **Category:** Exterior Doors **Subcategory:** Swinging Exterior Door Assemblies	American Architectural Manufacturers Association (847) 303-5859	Approved
FL229-R5	Revision	Simonton Windows **Category:** Exterior Doors **Subcategory:** Swinging Exterior Door Assemblies	American Architectural Manufacturers Association (847) 303-5859	Applied For
FL5167-R5 History	Revision	Simonton Windows **Category:** Windows **Subcategory:** Double Hung	American Architectural Manufacturers Association (847) 303-5859	Approved

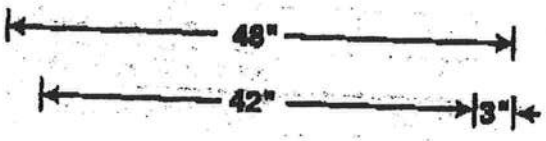
Craftsman

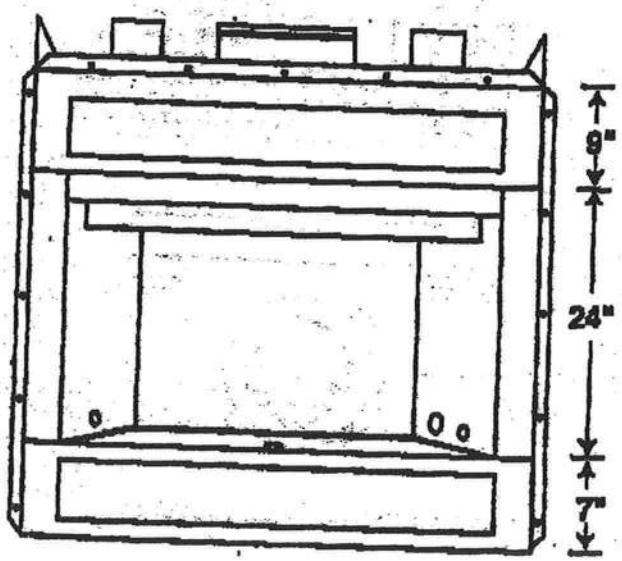
42" Woodburning Fireplace

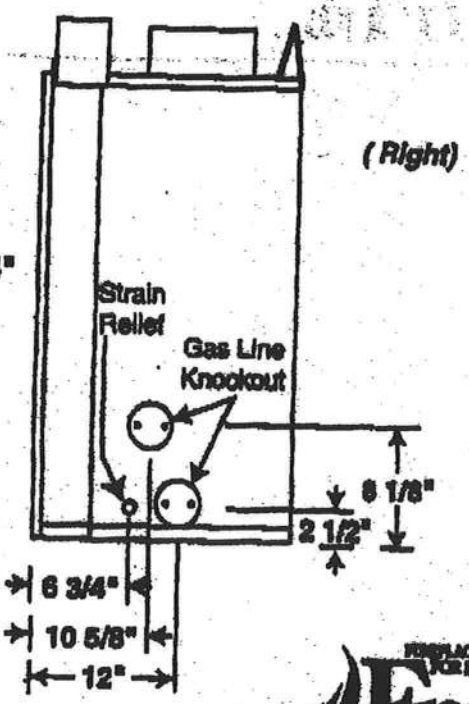
Vent Pipe Size	10"
Min. Pipe Clearance	1"
Min. System Height	14' 6"
- w/ Single Offset	14' 6"
- w/ Two Offsets	22' 0"
Max. Dist. Between Elbows	6' 0"
Max. System Height	50' 0"









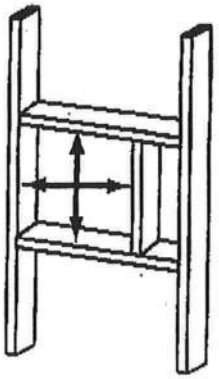


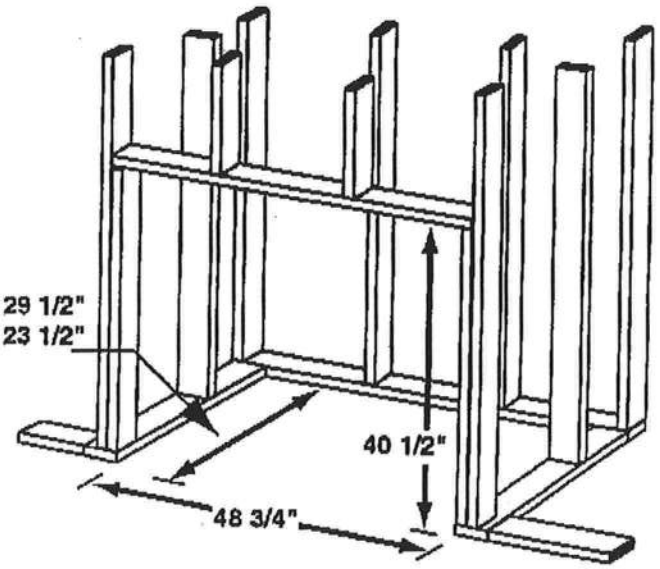
Fmi

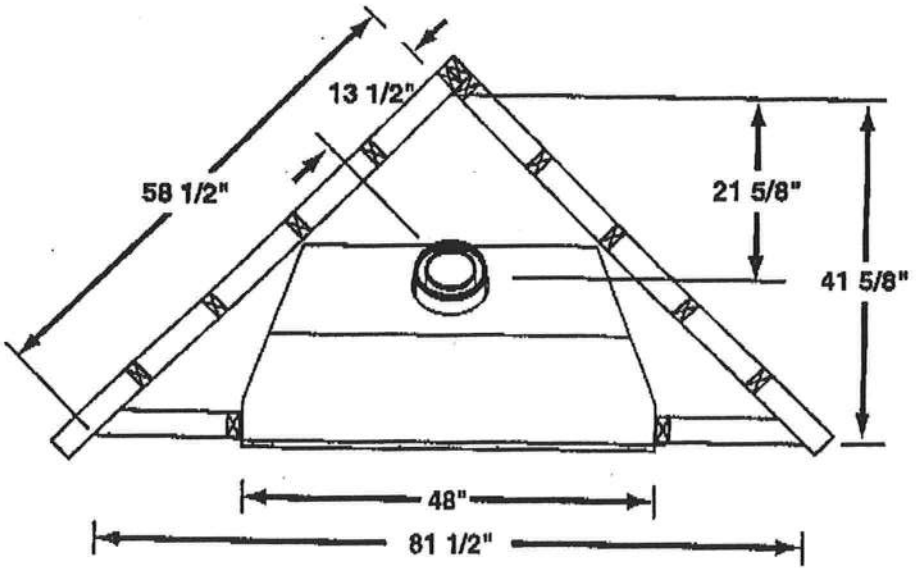
Victorian
42" Direct Vent Fireplace

Framing Dimensions

Vent Opening - 10 3/4" Square (I.D.)







NOTE:
Built-in Features Such as Mantels, Bookshelfs, etc. Made of Combustible Materials Must Maintain Minimum Clearances from the Fireplace. See Installation Instructions for Complete Information

FIREPLACES FOR BUILDER. Fmi

CERTIFICATE OF OCCUPANCY

COLUMBIA COUNTY, FLORIDA

Department of Building and Zoning Inspection

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

Parcel Number 12-5S-16-03406-225 **Building permit No.** 000028713

Use Classification SFD, UTILITY **Fire:** 6.42

Permit Holder BEN MARTIN **Waste:** 16.75

Owner of Building JAMIN HUBER **Total:** 23.17

Location: 412 SW HIGHPOINT GLEN, LAKE CITY, FL 32024

Date: 09/30/2011

Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)