DATE 10/18/2010

Columbia County Building Permit

This Permit Must Be Prominently Posted on Premises During Construction

PERMIT
000028942

APPLICANT PAUL WISER PHONE 229-561-5766

ADDRESS PO BOX 90 JENNINGS FL 32053

OWNER KENNETH METZLER PHONE 954-907-8154

ADDRESS 8683 N US 441 LAKE CITY FL 32055

CONTRACTOR PAUL WISER PHONE 229-561-5766

LOCATION OF PROPERTY 441 NORTH OF I-10, AFTER LASSIE BLACK ABOUT 1/4 MILE, SEE PRIVATE DRIVE ON RIGHT, FOLLOW TO REAR

TYPE DEVELOPMENT SFD, UTILITY ESTIMATED COST OF CONSTRUCTION 170000.00

HEATED FLOOR AREA 2272.00 TOTAL AREA 3400.00 HEIGHT 20.00 STORIES 1

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 17-2S-17-04722-019 SUBDIVISION

LOT BLOCK PHASE UNIT TOTAL ACRES 14.80

Culvert Permit No.	Culvert Waiver	Contractor's License Number	Applicant/Owner/Contractor
		CBC059276	X Paul Wiser

Driveway Connection	Septic Tank Number	LU & Zoning checked by	Approved for Issuance	New Resident
EXISTING DOT	10-106-N	BK	TC	Y

COMMENTS: NOC ON FILE

FINAL DOT APPROVAL ATTACHED

Check # or Cash 11924

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 $ 850.00 CERTIFICATION FEE $ 17.00 SURCHARGE FEE $ 17.00

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** 959.00

INSPECTORS OFFICE L. H. 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.

Printed for Lawyers' Title Guaranty Fund, Orlando, Florida

This instrument was prepared by:

TERRY McDAVID
200 North Marion Street
LAKE CITY, FLORIDA 32055

Warranty Deed (STATUTORY FORM—SECTION 689.02 F.S.)

This Indenture, Made this 31st day of October 1983, **Between**

FRANK N. THOMAS and his wife, ELIZABETH H. THOMAS

of the County of Columbia, State of Florida grantor*, and

KENNETH METZLER and his wife, INGRID METZLER

whose post office address is 1101 NW 14th Street, Fort Lauderdale, Florida 33311

of the County of , State of Florida grantee*,

OFFICIAL RECORDS BK 0524 PG 0782

Witnesseth, That said grantor, for and in consideration of the sum of

Ten and no/100---------- Dollars, and other good and valuable considerations 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:

That part of Section 17, Township 2 South, Range 17 East, as described in Schedule "A" attached hereto.

N.B.: No tobacco allotment is included in this conveyance.

N.B.: This property is conveyed to the Grantee subject to the rights of Kerr-McGee Corporation under the terms and conditions of mining lease recorded of record, including, but not limited to, the rights of Kerr-McGee Corporation to mine and remove phosphate from this land. The Grantors, by this deed, assign to the Grantee all lease payments and royalties due and to become due from Kerr-McGee Corporation under said lease, from and after the date hereof, as to only that portion of the land herein described.

83-09386

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, Grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Winnie S. Bass

Myrtle Ann McElroy

Frank N. Thomas (Seal)

(Seal)

Elizabeth H. Thomas (Seal)

(Seal)

FILED AND RECORDED IN PUBLIC RECORDS OF COLUMBIA COUNTY, FL
1983 NOV 15 PM 2 18
MARY B. CHILDS
CLERK OF COURTS
COLUMBIA COUNTY, FLORIDA

STATE OF FLORIDA
COUNTY OF COLUMBIA

I HEREBY CERTIFY that on this day before me, an officer duly qualified to take acknowledgments, personally appeared

FRANK N. THOMAS and his wife, ELIZABETH H. THOMAS

to me known to be the persons described in and who executed the foregoing instrument and acknowledged before me that they executed the same.

WITNESS my hand and official seal in the County and State last aforesaid this 31st day of October 1983

My commission expires: 8/28/86

Winnie S. Bass
Notary Public

DOCUMENTARY STAMP 76.50
INTANGIBLE TAX -0-
MARY B. CHILDS, CLERK OF COURTS, COLUMBIA COUNTY
BY Powell D.C.

Category/Subcategory (cont.)	Manufacturer	Product Description	Approval Number(s)
13. Liquid Applied Roof Sys			
14. Cements-Adhesives – Coatings			
15. Roof Tile Adhesive			
16. Sray Applied Polyurethane Roof			
17. Other			
E. SHUTTERS	N/A		
1. Accordion			
2. Bahama			
3. Storm Panels			
4. Colonial			
5. Roll-up			
6. Equipment			
7. Others			
F. SKYLIGHTS	N/A		
1. Skylight			
2. Other			
G. STRUCTURAL COMPONENTS			
1. Wood connector/anchor	Simpson	Hurr. Ties	FL-2304
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	N-A		N/A
1.			
2.			

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

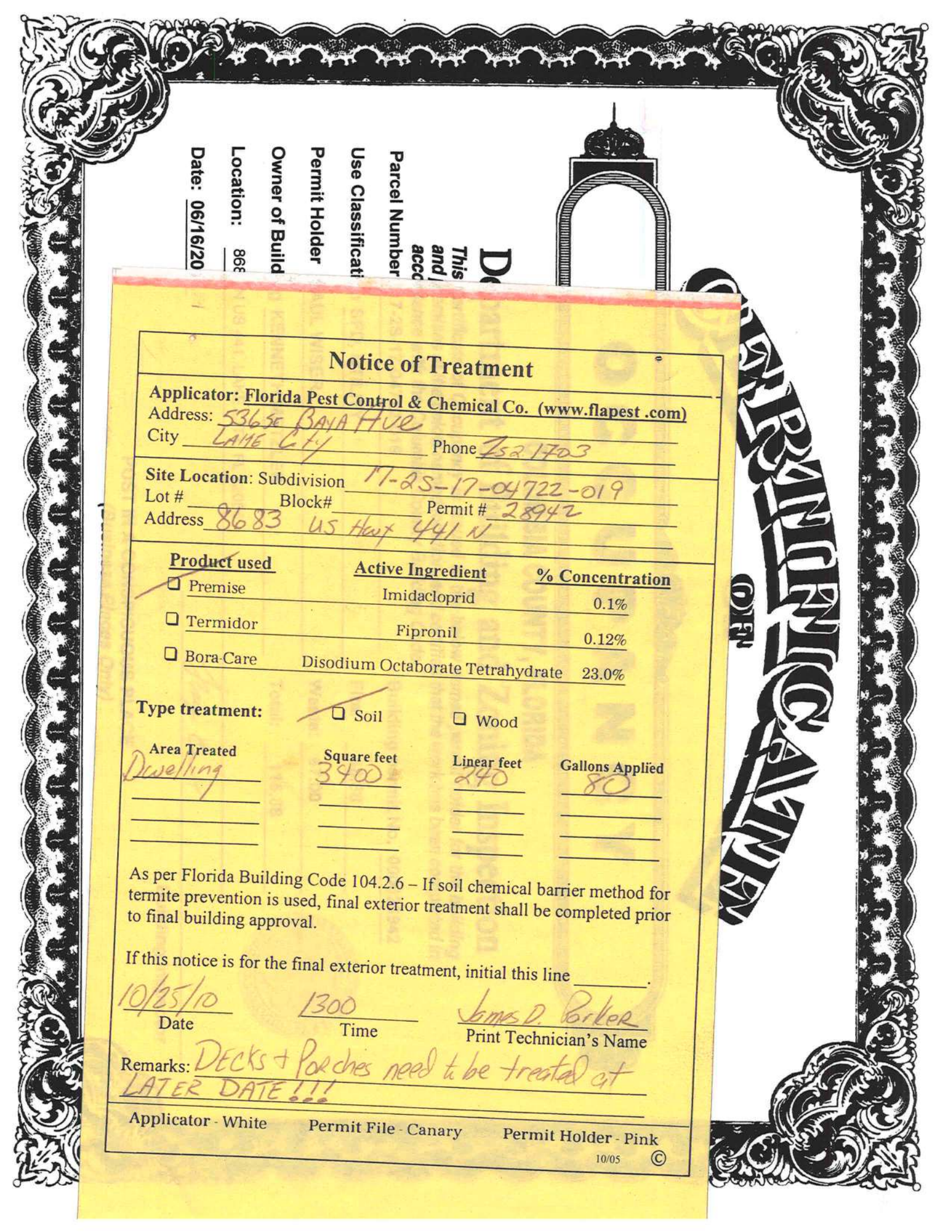
Paul Wiser
Contractor or Contractor's Authorized Agent Signature

Paul Wiser
Print Name

9-28-10
Date

Location

Permit # (FOR STAFF USE ONLY)



Date: 06/16/20
Location: 86
Owner of Build
Permit Holder
Use Classificati
Parcel Number
De
This
and
acc

Notice of Treatment

Applicator: Florida Pest Control & Chemical Co. (www.flapest .com)
Address: 5365E BAYA AVE
City LAKE CITY Phone 752 1703

Site Location: Subdivision 11-2S-17-04722-019
Lot # ____ Block# ____ Permit # 28942
Address 8683 US Hwy 441 N

Product used	Active Ingredient	% Concentration
☐ Premise	Imidacloprid	0.1%
☐ Termidor	Fipronil	0.12%
☐ Bora-Care	Disodium Octaborate Tetrahydrate	23.0%

Type treatment: ☐ Soil ☐ Wood

Area Treated	Square feet	Linear feet	Gallons Applied
Dwelling	3400	240	80

As per Florida Building Code 104.2.6 – If soil chemical barrier method for termite prevention is used, final exterior treatment shall be completed prior to final building approval.

If this notice is for the final exterior treatment, initial this line ____.

10/25/10 Date | 1300 Time | James D. Parker Print Technician's Name

Remarks: DECKS + Porches need to be treated at LATER DATE!!!

Applicator - White Permit File - Canary Permit Holder - Pink

10/05 ©

Ck 11924

Columbia County Building Permit Application

☑ App fee paid

For Office Use Only Application # 1010-04 Date Received 10/5/10 By LH Permit # 28942

Zoning Official BLK Date 10.13.10 Flood Zone X Land Use A-3 Zoning A-3

FEMA Map # N/A Elevation N/A MFE 1' below Rd River N/A Plans Examiner T.C. Date 10-13-10

Comments

☑ NOC ☐ EH ☑ Deed or PA ☑ Site Plan ☑ State Road Info (Final Approval attached) ☐ Parent Parcel #

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

IMPACT FEES: EMS Fire Corr Road/Code

School = TOTAL N/A Suspended ☑ VF form

Septic Permit No. 10-106-N Fax 386-938-1388

Name Authorized Person Signing Permit Paul Wiser Phone 229-561-5766

Address PO Box 90 Jennings, Fl. 32053

Owners Name Kenneth Metzler Phone 954-907-8154

911 Address 8683 N US 441 Lake City, Fl. 32055

Contractors Name Quality Builders of North Fl. Inc. Phone 229-561-5766

Address PO Box 90 Jennings, Fl. 32053

Fee Simple Owner Name & Address Kenneth Metzler 6305 NW 23rd St Margate, Fl. 33063

Bonding Co. Name & Address N/A

Architect/Engineer Name & Address John K. Gentry - Perry, Fl.

Mortgage Lenders Name & Address N/A

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

Property ID Number 17S17W04722-019 Estimated Cost of Construction 200,000

Subdivision Name N/A Lot ___ Block ___ Unit ___ Phase ___

Driving Directions Take Hwy 441 North from Lake City, travel 4 miles north of I-10 - Driveway on right @ Quality Builders sign - house sets toward back of property After Lassie Black at Private Drive on (L) ¼ mile Number of Existing Dwellings on Property (0)

Construction of SFD Total Acreage 14.8 Lot Size

Do you need a - Culvert Permit or Culvert Waiver or (Have an Existing Drive) DOT Total Building Height 20'

Actual Distance of Structure from Property Lines - Front 230' Side 600' Side 150' Rear 400'

Number of Stories 1 Heated Floor Area 2272 Total Floor Area 3400 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.

Spoke to Metzler / Wiser Phone # disconnected to leave Paul call Left a message on Paul's phone

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 other 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.)

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

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.

Joe Paul Ulsm
Contractor's Signature (Permitee)

Contractor's License Number CBC-059276
Columbia County
Competency Card Number

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 5 **day of** October **20**10.

Personally known____ **or Produced Identification** FLDL

Laurie Hodson
State of Florida Notary Signature (For the Contractor)

SEAL:

LAURIE HODSON
MY COMMISSION # DD 805657
EXPIRES: July 14, 2012
Bonded Thru Notary Public Underwriters

SUBCONTRACTOR VERIFICATION FORM

APPLICATION NUMBER 1010-04 CONTRACTOR Quality Builders of N.Fl. PHONE 229-561-5764

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 81	Print Name CHARLTON N. LAW JR Signature Charlton N Law Jr.	License #: ER0013132 Phone #: 938-1205
MECHANICAL/ A/C B	Print Name Arthur Paul King Jr Signature	License #: CAC 1813957 Phone #: 229-559-8232
PLUMBING/ GAS 82	Print Name CHARLTON N. LAW JR Signature Charlton N Law Jr	License #: RF0066460 Phone #: 938-1205
ROOFING 1027	Print Name Paul Wiser (Condo) Signature	License #: CBC-059274 Phone #: 229-561-5764
SHEET METAL	Print Name Signature	License #: Phone #:
FIRE SYSTEM/ SPRINKLER	Print Name Signature	License#: Phone #:
SOLAR	Print Name Signature	License #: Phone #:

Specialty License	License Number	Sub-Contractors Printed Name	Sub-Contractors Signature
MASON			
CONCRETE FINISHER			
FRAMING	CBC-059274	Paul Wiser	Paul Wiser
INSULATION		Next page	
STUCCO	N/A		
DRYWALL		Next page	
PLASTER	N/A		
CABINET INSTALLER	CBC-059274	~~Quality~~ Paul Wiser	Paul Wiser
PAINTING	"	"	"
ACOUSTICAL CEILING	N/A		
GLASS	N/A		
CERAMIC TILE			
FLOOR COVERING			
ALUM/VINYL SIDING	N/A		
GARAGE DOOR	N/A		
METAL BLDG ERECTOR	N/A		

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 _____ CONTRACTOR Quality Builders of N. Fl. PHONE 229-541-574

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 CHARLTON N. LAW JR Signature Charlton N Law Jr. License #: ER0013132 Phone #: 938-1205	
MECHANICAL/ A/C ____	Print Name _____ Signature _____ License #: Phone #:	
PLUMBING/ GAS	Print Name CHARLTON N. LAW JR Signature Charlton N Law Jr License #: RF0066460 Phone #: 938-1205	
ROOFING	Print Name _____ Signature _____ License #: Phone #:	
SHEET METAL	Print Name _____ Signature _____ License #: Phone #:	
FIRE SYSTEM/ SPRINKLER	Print Name _____ Signature _____ License#: Phone #:	
SOLAR	Print Name _____ Signature _____ License #: Phone #:	

Specialty License	License Number	Sub-Contractors Printed Name	Sub-Contractors Signature
MASON			
CONCRETE FINISHER			
FRAMING			
INSULATION	000628	Bobby D Jackson	Bobby D Jackson
STUCCO	N/A		
DRYWALL	000627	Bobby D Jackson	Bobby D Jackson
PLASTER	N/A		
CABINET INSTALLER			
PAINTING			
ACOUSTICAL CEILING	N/A		
GLASS	N/A		
CERAMIC TILE			
FLOOR COVERING			
ALUM/VINYL SIDING	N/A		
GARAGE DOOR	N/A		
METAL BLDG ERECTOR	N/A		

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

Inst:201012016058 Date:10/5/2010 Time:12.27 PM
DC,P.DeWitt Cason,Columbia County Page 1 of 1 B:1202 P:1363

NOTICE OF COMMENCEMENT

County Clerk's Office Stamp or Seal

Tax Parcel Identification Number 28-25-16-01771-129

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

1. Description of property *(legal description)*: LOT 29 BLOCK A COUNTRY LANE ESTATES
   a) Street *(job)* Address: 718 NW FIDDLERS LANE LAKECITY FL 32055
2. General description of improvements: WORKSHOP / GARAGE

3. Owner Information
   a) Name and address: G.D. SHANAHAN 5090 SE 193 RD PL INGLIS FL 34449
   b) Name and address of fee simple titleholder (if other than owner) SAME
   c) Interest in property OWNER
4. Contractor Information
   a) Name and address: G.D SHANAHAN
   b) Telephone No.: 352-228-7978 Fax No. (Opt.)
5. Surety Information
   a) Name and address: NA
   b) Amount of Bond:
   c) Telephone No.: Fax No. (Opt.)
6. Lender
   a) Name and address: NA
   b) Phone No.
7. Identity of person within the State of Florida designated by owner upon whom notices or other documents may be served:
   a) Name and address: G.D SHANAHAN 5090 SE 193RD PL INGLIS FL 34449
   b) Telephone No.: 352-228-7978 Fax No. (Opt.)

8. In addition to himself, owner designates the following person to receive a copy of the Lienor's Notice as provided in Section 713.13(1)(b). Florida Statutes:
   a) Name and address: NA
   b) Telephone No.: Fax No. (Opt.)

9. Expiration date of Notice of Commencement **(the expiration date is one year from the date of recording unless a different date is specified):**

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

STATE OF FLORIDA
COUNTY OF COLUMBIA

10. _____
Signature of Owner or Owner's Authorized Office/Director/Partner/Manager

G.D SHANAHAN
Print Name

The foregoing instrument was acknowledged before me , a Florida Notary, this 5 day of October, 20 10, by:

Guy Shannon as _____ **(type of authority, e.g. officer, trustee, attorney fact) for** _____ **(name of party on behalf of whom instrument was executed).**

Personally Known ____ OR Produced Identification X Type Drivers License

Notary Signature Lisa Huchingson Notary Stamp or Seal:

LISA HUCHINGSON
MY COMMISSION # EE 003532
EXPIRES: October 23, 2014
Bonded Thru Notary Public Underwriters

---AND---

11. Verification pursuant to Section 92.525, Florida Statutes. Under penalties of perjury, I declare that I have read the foregoing and that the facts stated in it are true to the best of my knowledge and belief.

_____
Signature of Natural Person Signing (in line #10 above.)

STATE OF FLORIDA PERMIT APPLICATION TO CONSTRUCT, REPAIR, MODIFY, OR ABANDON A WELL

☐ Southwest
☐ Northwest
☐ St. Johns River
☐ South Florida
☒ Suwannee River

CHECK BOX FOR APPROPRIATE DISTRICT. ADDRESS ON BACK OF PERMIT FORM.

THIS FORM MUST BE FILLED OUT COMPLETELY.

The water well contractor is responsible for completing this form and forwarding the permit to the appropriate delegated county where applicable.

Permit No. ______
Florida Unique I.D. 97195
Permit Stipulations Required (See attached)
62-524 well ☐
CUP/WUP Application No. ______

Fold at this line in order that address is visible through envelope window

1. KENNETH METZLER 6305 NW 23 ST. MARGATE FL. 33063
Owner, Legal Name of Entity if Corporation — Address — City — Zip — Telephone Number

2. US 441 N. 5 MI. N OF I-10 R/S
Well Location — Address, Road Name or Number, City

3. DONALD D. HALL 1503 752-1854 04722-007
Well Drilling Contractor — License No. — Telephone No.
904 NW MAIN BLVD.
Address
LAKE CITY, FLA. 32055
City — State — Zip

4. NE (smallest) 1/4 of SE (biggest) 1/4 of Section 17 (Indicate Well on Chart)

5. Township 2S Range 17E

NW		NE
		X
SW		SE

6. COLUMBIA
County — Subdivision Name — Lot — Block — Unit

7. Number of proposed wells 1 Check the use of well: (See back of permit for additional choices) ✓ Domestic Monitor (type) ______
______ Irrigation (type) (See Back) Public Water Supply (type) ______ (See Back) List Other ______
Distance from septic system 75+ ft. Description of facility HOUSE Estimated start of construction date ASAP

Date Stamp
RECEIVED
DEC 19 2007

8. Application for: ✓ New Construction ______ Repair/Modify ______ Abandonment ______ (Reason for Abandonment)

9. Estimated: Well Depth 160' Casing Depth 130' Screen Interval from NA to ______
Casing Material: Blk-Steel / Gal / PVC Casing Diameter 4" Seal Material ______

10. If applicable: Proposed Grouting Interval
From NA to ______ Seal Material ______
From ______ to ______ Seal Material ______
From ______ to ______ Seal Material ______

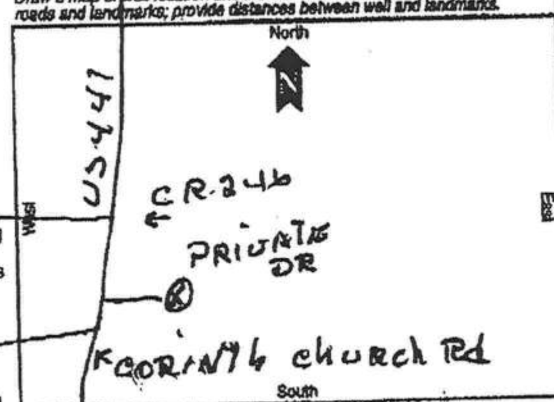
11. Telescope Casing NA or Liner ______ (check one) Diameter ______
Blk-Steel / Galvanized / PVC Other (specify: ______

12. Method of Construction: ✓ Rotary ______ Cable Tool ✓ Combination
______ Auger ______ Other (specify:) ______)

13. Indicate total No. of wells on site 0 List number of unused wells on site 0

14. Is this well or any other well or water withdrawal on the owner's contiguous property covered under a Consumptive/Water Use Permit (CUP/WUP) or CUP/WUP Application? ___No ___Yes
(If yes, complete the following) CUP/WUP No. ______
District well I.D. No. ______
Latitude ______ Longitude ______
Data obtained from GPS ____ or map ____ or survey ____ (map datum NAD 27 ____ NAD 83 ____)

Draw a map of well location and indicate well site with an "X". Identify known roads and landmarks; provide distances between well and landmarks.



15. I hereby certify that I will comply with the applicable rules of Title 40, Florida Administrative Code, and that a water use permit or artificial recharge permit, if needed, has been or will be obtained prior to commencement of well construction. I further certify that all information provided on this application is accurate and that I will obtain necessary approval from other federal, state, or local governments, if applicable. I agree to provide a well completion report to the District within 30 days after drilling or the permit expiration, whichever occurs first.

Donald D. Hall 1503
Signature of Contractor — License No.

I certify that I am the owner of the property, that the information provided is accurate, and that I am aware of my responsibilities under Chapter 373, Florida Statutes, to maintain or properly abandon this well; or, I certify that I am the agent for the owner, that the information provided is accurate, and that I have informed the owner of his responsibilities as stated above. Owner consents to personnel of the WMD or a representative access to the well site.

______ 12-14-07
Owner's or Agent's Signature — Date

DO NOT WRITE BELOW THIS LINE — FOR OFFICIAL USE ONLY

Approval Granted By: Dana Harrington Issue Date: 12/19/07 Hydrologist Approval ______ Initials
Owner Number: ______ Fee Received: $ 40 Receipt No.: 2683456 Check No.: ______

THIS PERMIT NOT VALID UNTIL PROPERLY SIGNED BY AN AUTHORIZED OFFICER OR REPRESENTATIVE OF THE WMD. IT SHALL BE AVAILABLE AT THE WELL SITE DURING ALL DRILLING OPERATIONS. ***This permit is valid for 90 days from date of issue.***

WHITE: ORIGINAL FILE
YELLOW: DRILLING CONTRACTOR
PINK: OWNER

SRWMD FORM 40B-3-1 REV. 12/95

12/18/2007 21:48 3867557022 HALLS PAGE 02

WELL COMPLETION REPORT (Please complete in black ink or type.)

PERMIT # 97195 CUP/WUP # _____ DID # _____

If permit is for multiple wells indicate the number of wells drilled _____.

Indicate remaining wells to be cancelled _____.

WATER WELL CONTRACTOR'S SIGNATURE Norman L. Hall License # 1503

I certify that the information provided in this report is accurate and true.

Grout	No. of Bags	From (Ft.)	To (Ft.)
Neat Cement:			
Bentonite:			

WELL LOCATION: County Columbia

NE 1/4 of SE 1/4 of Section 12 Twp: 2S Rge: 17E

Latitude N 30° 18' 78 Longitude 82° 37' 63

DATE STAMP

Official Use Only

Sketch of well location on property

N

Woods

Farm

Give distances from septic tank and house or other reference points

CHEMICAL ANALYSIS WHEN REQUIRED

Iron: ____ ppm Sulfate: ____ ppm

Chloride: ____ ppm

[ ] Lab Test [ ] Field Test Kit

Pump Type

[ ] Centrifugal [ ] Jet [✓] Submersible [ ] Turbine

Horsepower 1 Capacity 16 G.P.M. 16

Pump Depth 147 Ft. Intake Depth 147 Ft.

OWNER'S NAME Ken Metzes

COMPLETION DATE 1-9 Florida Unique I.D. ✓

WELL USE: DEP/Public ____ Irrigation ____ Domestic ✓ Monitor ____

HRS Limited ____ 62-524 ____ Other _____

DRILL METHOD [✓] Rotary [ ] Cable Tool [✓] Combination

[ ] Jet [ ] Auger Other _____

Measured Static Water Level 130 Measured Pumping Water Level ____

After ____ Hours at ____ G.P.M. Measuring Pt. (Describe): _____

Which is ✓ Ft. [✓] Above [ ] Below Land Surface

Casing: [✓] Black Steel [ ] Galv. [ ] PVC Other _____

[✓] Open Hole [ ] Screen / Casing Diameter & Depth (Ft.)	Depth (Ft.) From	To	DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes. Note cavities, depth to producing zones. Color | Grain Size | Type of Material
Diameter 4" From 0 To 160	0'	40'	Brwn Med Sand
	40'	120'	Tan Clay
	120'	190'	Wht Shell - Lime
Diameter ____ From ____ To ____			
Liner [ ] or Casing [ ] Diameter ____ From ____ To ____			

Driller's Name: (print or type) Norman Green JR

Hall's Pump & Well Service, Inc

904 NW Main Blvd
Lake City, FL 32055

386-752-1854

Invoice

Date
2/4/2008

PAID

Invoice #
9432

Bill To
Kenneth Metzler 6305 NW 23rd Street Margate, FL. 33063

Item	Description	Amount
Well	4" Well with a 1HP Submersible Pump and a 81 gallon diaphragm type tank to 100 ft	2,750.00
Permit	Well Permit	40.00
Drilling	90 extra feet of drilling	900.00

Full Payment Due Upon Receipt of Invoice -FINANCE CHARGES APPLY FROM DATE OF DEBT.

Total $3,690.00

Inst:201012015056 Date:9/20/2010 Time:8:41 AM
DC,P.DeWitt Cason,Columbia County Page 1 of 1 B:1201 P:1520

NOTICE OF COMMENCMENT

State of: FLORIDA County of: ~~MADISON~~ Columbia City of: ~~MADISON~~ Lake City

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

DESCRIPTION OF PROPERTY:

Street Address: 8683 Hwy 441 North, Lake City, Fl. 32055

Section: 17 Township: 2S Range: 17

Lot: _____ Block: _____

Tax Parcel #: 17-2S-17-04722-019 Subdivision: _____

GENERAL DESCRIPTION OF IMPROVEMENT

To Construct: Single Family Dwelling

OWNER INFORMATION

Owner(s) Name: Kenneth Metzler

Address: 6305 NW 23rd st

City: Margate State: Fl Zip: 33063 Phone: _____

CONTRACTOR INFORMATION

Contractor Name: Paul Wiser

Business Name Equality Builders of North Florida Inc.

Address: PO Box 90

City: Jennings State: Fl. Zip: 32053 Phone: 386-938-1388

LENDER INFORMATION

Lender Name: N/A Contact: _____

Address: _____

City: _____ State: _____ Zip: _____ Phone: _____

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

Address: _____

In addition to himself, Owner designates, _____ of _____ to receive a copy of the Lienor's Notice as provided in Section 713.13 (1)(b), Florida Statutes.

Expiration is one (1) year from date of recording unless otherwise specified.

Signature of Owner: _____ Print Name: McLean, Kenneth S.

Sworn to and subscribed before me this 19 day of Aug, 2010

Notary Public: Stephanie Verdura My Commission Expires: Sept. 24, 2010

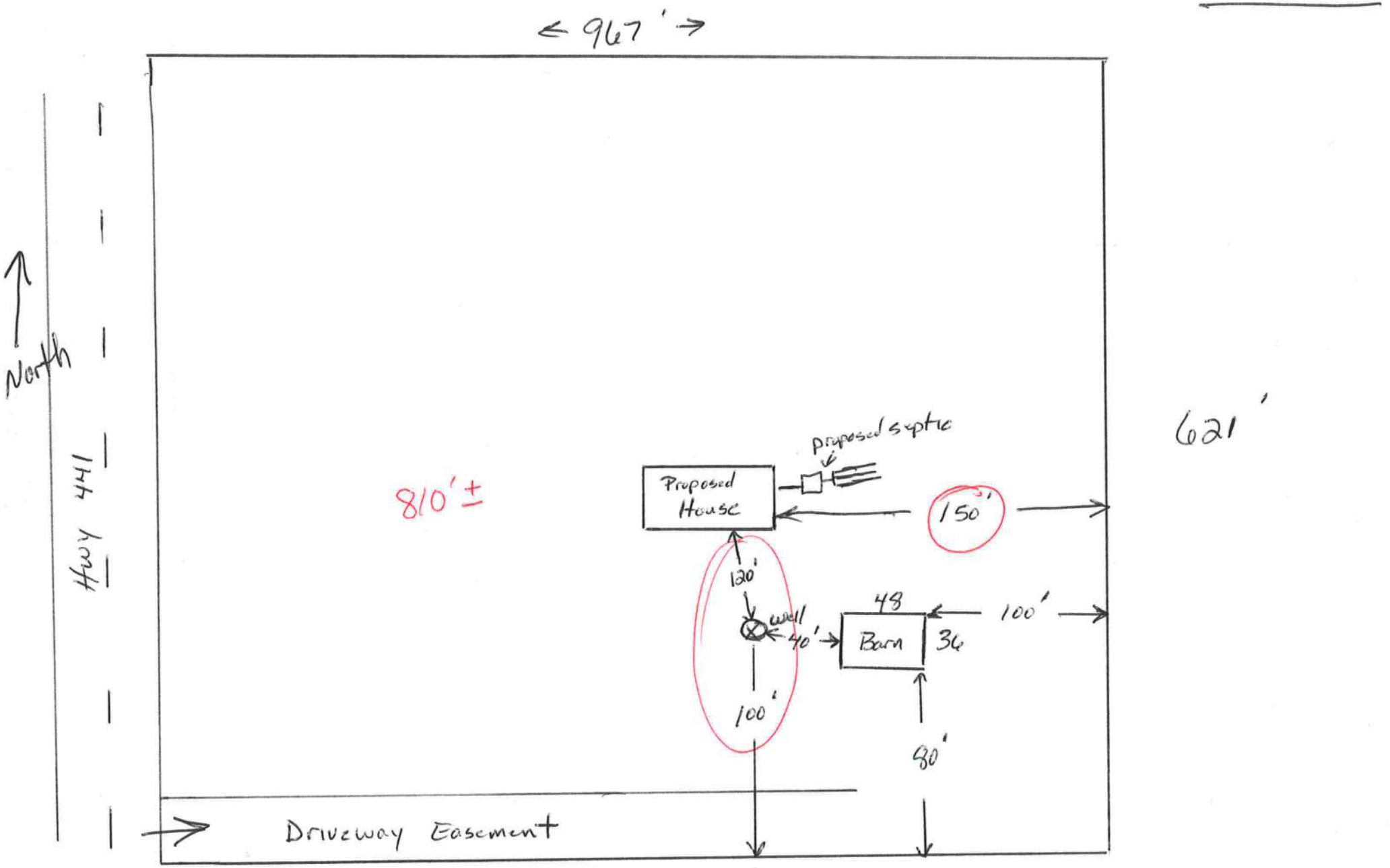
Signature

STEPHANIE VERDURA
Notary Public, State of Florida
Commission# DD597990
My comm. expires Sept. 24, 2010

Kenneth Metzler - owner

Site PLAN

14.79 Acres



FAX MEMORANDUM

MEMORANDUM

FLORIDA DEPARTMENT OF TRANSPORTATION

To: Mr. Randy Jones, Dept. Director Columbia Co. Building & Zoning Dept. **Fax No: 386-758-2160**	**From:** Dale L. Cray, FDOT Permits Insp. **Date: 9-23-2010** Fax **No. 386-961-7183** **Attention: Col Co. Building Zoning Dept.**

( ) Sign and return. ( ) For your files. ( ) Please call me. **(XX)** FYI ( ) For Review

REF: Existing Driveway
PROJECT: Kenneth Metzler
PARCEL ID No: Permit No : N/A Sec No : 29070
MILE POST: N/A

Mr. Jones

Please accept this as our legal notice of final passing inspection for (Kenneth Metzler) for an existing residential driveway. The project 911 address is, 8683 Hwy 441 Lake City, Fl 32055.

The existing residential Access has been inspected and (Approved) and, meets FDOT Standard Requirements for a commercial driveway.

If further information is required on this project please do not hesitate to contact this office for additional access permitting information details. My office number is 961-7193 or 961-7146.

Sincerely,

Dale L. Cray
Access Permits Inspector

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

PERMIT #: 12-SC-1123394
APPLICATION #: AP954556
DATE PAID: 3-11-10
FEE PAID: 310.00
RECEIPT #: 1240740
DOCUMENT #: PR801570

CONSTRUCTION PERMIT FOR: OSTDS New

APPLICANT: KENNETH**10-0106 METZLER

PROPERTY ADDRESS: 6663 N US 441 Lake City, FL 32055

LOT: _____ BLOCK: _____ SUBDIVISION: _____

PROPERTY ID #: 04722-019 [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 [900] 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 [375] SQUARE FEET _____ SYSTEM
R [ ] SQUARE FEET N/A SYSTEM
A TYPE SYSTEM: [ ] STANDARD [ ] FILLED [X] MOUND [ ] _____
I CONFIGURATION: [X] TRENCH [ ] BED [ ] _____
N
F LOCATION OF BENCHMARK: nail in 6" oak north of system siteq
I ELEVATION OF PROPOSED SYSTEM SITE [24.00] [INCHES / FT] [ABOVE / BELOW] BENCHMARK/REFERENCE POINT
E BOTTOM OF DRAINFIELD TO BE [12.00] [INCHES / FT] [ABOVE / BELOW] BENCHMARK/REFERENCE POINT
L
D FILL REQUIRED: [30.00] INCHES EXCAVATION REQUIRED: [0.00] INCHES

O The licensed contractor installing the system is responsible for installing the minimum category of tank in accordance with s. 64E-6.013(3)(f), FAC.
T
H
E
R

SPECIFICATIONS BY: Paul Lloyd* TITLE: Has this one Soil Scientist

APPROVED BY: Sallie Ford Sallie A Ford TITLE: EH Director Columbia CHD

DATE ISSUED: 03/08/2010 EXPIRATION DATE: 03/08/2011

DH 4016, 10/97 (Previous Editions May Be Used) Page 1 of 3

v 1.1.4 AP954556 sn809942

10-0106

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

PERMIT # 954536
DATE PAID 3/11/10
FEE PAID $ 316.40
RECEIPT # 1870240
CR # 09-4816

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

APPLICANT: KENNETH & INGRID METZLER TELEPHONE: 954-907-8154

AGENT: PAUL LLOYD

MAILING ADDRESS: 6305 NW 23RD ST CITY: MARGATE STATE: FL ZIP: 33063

TO BE COMPLETED BY APPLICANT OR APPLICANT'S AUTHORIZED AGENT. ATTACH BUILDING PLAN AND TO-SCALE 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 DEED]

LOT: _____ BLOCK: _____ SUBDIVISION: MEETS & BOUNDS DATESUBD: _____

PROPERTY ID #: 17-2S-17-04722-019 [Section/Township/Range/Parcel] ZONING: AG

PROPERTY SIZE: 14.78 ACRES [Sqft/43560] PROPERTY WATER SUPPLY: [X] PRIVATE [ ] PUBLIC

PROPERTY STREET ADDRESS: 8683 N US 441

DIRECTIONS TO PROPERTY: 441 NORTH GO 5 MILES PAST I-10 TURN RIGHT ONTO EASMENT TO PROPERTY 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	3	2180	2	
2					
3					
4					

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

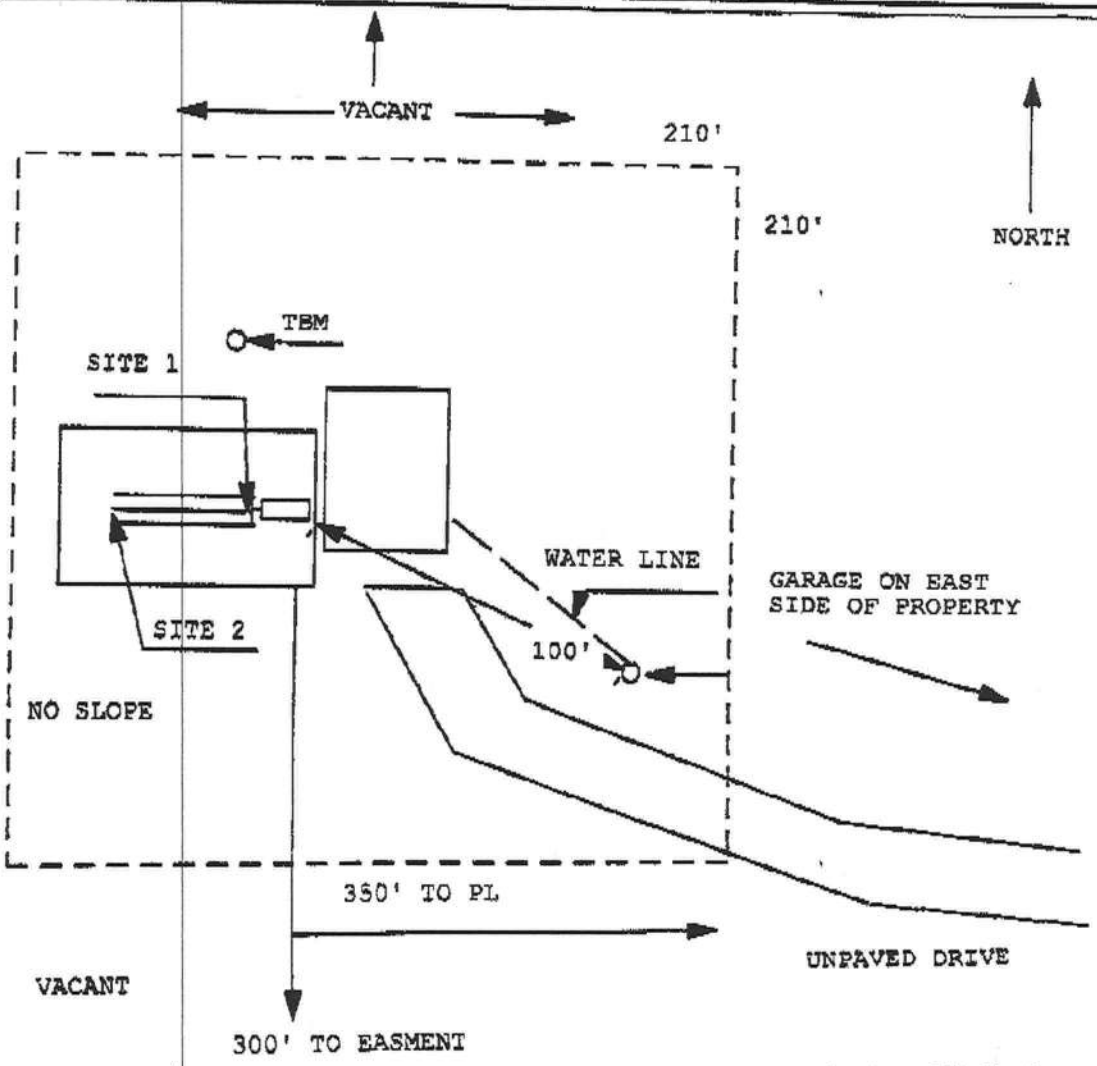
APPLICANT'S SIGNATURE: Paul Lloyd DATE: 3/1/10

Application for Onsite Sewage Disposal System Construction Permit. Part II Site Plan

Permit Application Number: 10-106-N

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH UNIT

CR# 09-4815



Site Plan Submitted By Paul Kilgo Date 3/11/10

Plan Approved ✓ Not Approved ___ Date 3/18/10

By Sellers Ford EH Columbia CHD CPHU

Notes: See attached for full property dimensions.

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 BEFORE SUBMITTAL			**Items to Include- Each Box shall be Circled as Applicable**		
				Yes	**No**	**N/A**
1	Two (2) complete sets of plans containing the following:			✓		
2	All drawings must be clear, concise, drawn to scale, details that are not used shall be marked void			✓		
3	Condition space (Sq. Ft.) 2,272		Total (Sq. Ft.) under roof 3,072	IIIIIIII	IIIIIIII	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 REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable		
8	Plans or specifications must show compliance with FBCR Chapter 3	IIIIII YES	IIIII NO	IIIIII 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 have Florida product approval number and mfg. installation information submitted with the plan (see Florida product approval form)

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

FBCR 403: Foundation Plans

		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. Engineer or Architect

Floor Framing System: First and/or second story

39	Floor truss package shall including layout and details, signed and sealed by Florida Registered Professional Engineer			✓
40	Show conventional floor joist type, size, span, spacing and attachment to load bearing walls, stem walls and/or 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 – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable		
		YES	NO	N/A
52	Stud type, grade, size, wall height and oc spacing for all load bearing or shear walls	✓		
53	Fastener schedule for structural members per table 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 chapter11 Residential 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 ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable		
		YES	NO	N/A
73	Show the insulation R value for the following areas of the structure			
74	Attic space	✓		
75	Exterior wall cavity	✓		
76	Crawl space	✓		

HVAC information

77	Submit two copies of a Manual J sizing equipment or equivalent computation study	✓		
78	Exhaust fans 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	✓		
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 the building department Before Any Inspections can be preformed.

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

THE FOLLOWING ITEMS MUST BE SUBMITTED WITH BUILDING PLANS

		YES	NO	N/A
92	**Building Permit Application** A current Building Permit Application 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	✓		

Section R101.2.1 of the Florida Building Code Residential:

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

Section 105 of the Florida Building Code defines the:

Time limitation of application.

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

Single-family residential dwelling.

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

Permit intent.

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

If work has commenced.

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

New Permit.

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

Work Shall Be:

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

The Fee:

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

When the submitted application is approved for permitting the applican will be notified by phone as to the date and time a building permit will b prepared and issued by the Columbia County Building & Zoning Department

ITW Building Components Group, Inc.

1950 Marley Drive Haines City, FL 33844
Florida Engineering Certificate of Authorization Number: 0 278
Florida Certificate of Product Approval # FL1999
 Document ID:1U5G437-Z0123100026

Truss Fabricator:	**Bray Truss**
Job Identification:	**QB-287--- Columbia Co., FL**
Truss Count:	**6**
Model Code:	**Florida Building Code 2007 and 2009 Supplement**
Truss Criteria:	**FBC2007Res/TPI-2002(STD)**
Engineering Software:	**Alpine Software,Version 9.04.**
Structural Engineer of Record:	**The identity of the structural EOR did not exist as of**
Address:	**the seal date per section 61G15-31.003(5a) of the FAC**
Minimum Design Loads:	**Roof - 37.0 PSF @ 1.25 Duration**
	Floor - N/A
	Wind - 110 MPH ASCE 7-05 -Closed

Notes:

1. **Determination as to the suitability of these truss components for the structure is the responsibility of the building designer/engineer of record, as defined in ANSI/TPI 1**
2. **The drawing date shown on this index sheet must match the date shown on the individual truss component drawing.**
3. **As shown on attached drawings; the drawing number is preceded by: HCUSR437**

Seal Date: 09/23/2010

-Truss Design Engineer-
Doug Fleming
Florida License Number: 66648
1950 Marley Drive
Haines City, FL 33844

Details: A1101505-GBLLETIN-BRCLBSUB-

#	Ref	Description	Drawing#	Date
1	46607	--T-1 44'	10266001	09/23/10
2	46608	--GE1 44'	10266002	09/23/10
3	46609	--T-3 24'	10266003	09/23/10
4	46610	--T-2 24'	10266004	09/23/10
5	46611	--STRGBL1 24'	10266005	09/23/10
6	46612	--STRGBL2 24'	10266006	09/23/10

(QB-287--- Columbia Co., FL - T-1 44')

THIS DWG PREPARED FROM COMPUTER INPUT (LOADS & DIMENSIONS) SUBMITTED BY TRUSS MFR.

Top chord 2x4 SP #2 N
Bot chord 2x4 SP #2 N
Webs 2x4 SP #3

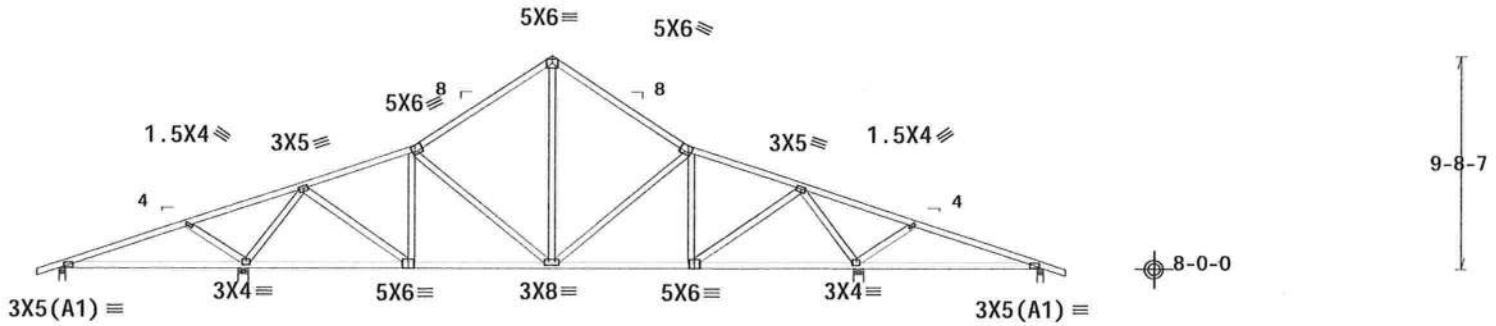
Roof overhang supports 2.00 psf soffit load.

Bottom chord checked for 10.00 psf non-concurrent live load.

110 mph wind, 15.00 ft mean hgt, ASCE 7-05, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=3.5 psf, wind BC DL=5.0 psf. Iw=1.00 GCpi(+/-)=0.18

Wind reactions based on MWFRS pressures.

Deflection meets L/240 live and L/180 total load.



Design Crit: FBC2007Res/TPI-2002(STD)

PLT TYP. Wave FT/RT=20%(0%)/10(0) 9.04.01.1021.19 QTY:20 FL/-/1/-/-/R/- Scale =.125"/Ft.

ALPINE
ITW Building Components Group Inc.
Haines City, FL 33844
FL COA #0 278

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (WOOD TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LANE, MADISON, WI 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

IMPORTANT FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN; ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI; OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES. DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF NDS (NATIONAL DESIGN SPEC. BY AF&PA) AND TPI. ITW BCG CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W, K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (!) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. A SEAL ON THIS DRAWING INDICATES ACCEPTANCE OF PROFESSIONAL ENGINEERING RESPONSIBILITY SOLELY FOR THE TRUSS COMPONENT DESIGN SHOWN. THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER PER ANSI/TPI 1 SEC. 2.

DOUGLAS FLEMING LICENSE No. 66848 STATE OF FLORIDA PROFESSIONAL ENGINEER
23 '10

TC LL	20.0 PSF	REF	R437-- 46607
TC DL	7.0 PSF	DATE	09/23/10
BC DL	10.0 PSF	DRW	HCUSR437 10266001
BC LL	0.0 PSF	HC-ENG	TCE/DF
TOT.LD.	37.0 PSF	SEQN-	62827
DUR.FAC.	1.25		
SPACING	24.0"	JREF-	1U5G437_Z01

(QB-287--- Columbia Co., FL - GE1 44')

Top chord 2x4 SP #2 N
Bot chord 2x4 SP #2 N
Webs 2x4 SP #3

Roof overhang supports 2.00 psf soffit load.

Truss spaced at 24.0" OC designed to support 2-0-0 top chord outlookers. Cladding load shall not exceed 5.00 PSF. Top chord must not be cut or notched.

Bottom chord checked for 10.00 psf non-concurrent live load.

The Building Designer is responsible for the design of the roof and ceiling diaphragms, gable end shear walls, and supporting shear walls. Shear walls must provide continuous lateral restraint to the gable end. All connections to be designed by the Building Designer.

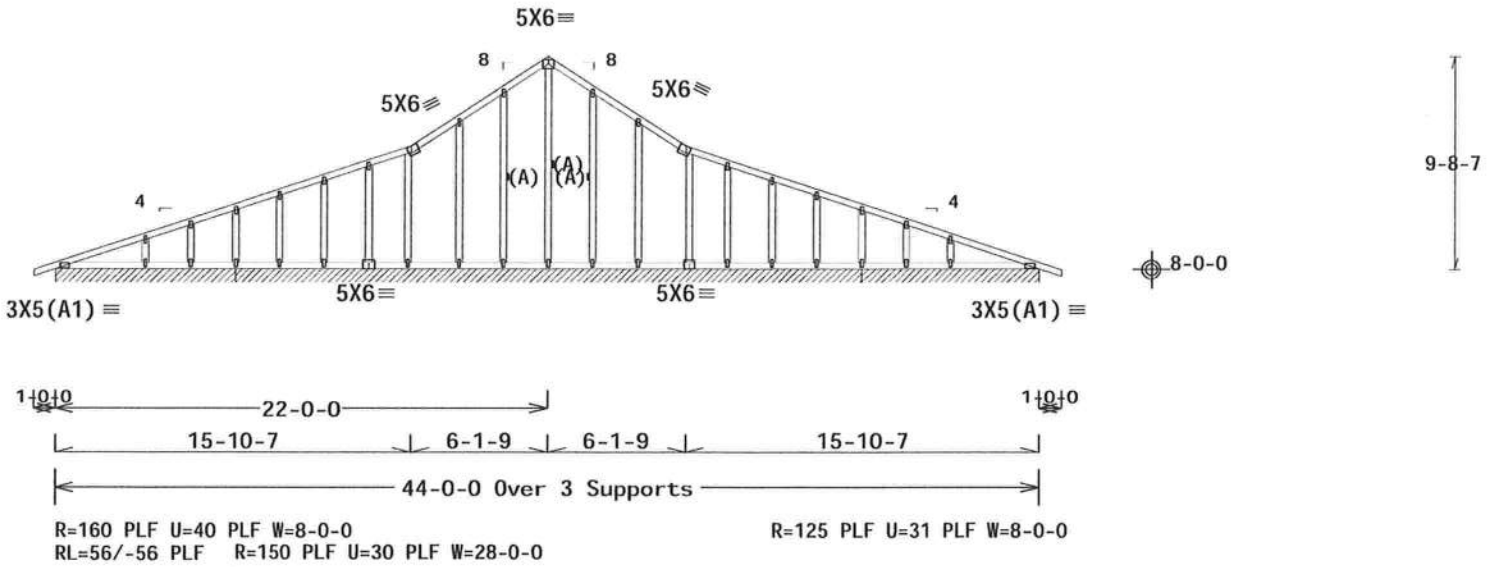
110 mph wind, 15.00 ft mean hgt, ASCE 7-05, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=3.5 psf, wind BC DL=5.0 psf. Iw=1.00 GCpi(+/-)=0.18

Wind reactions based on MWFRS pressures.

See DWGS A11015050109 & GBLLETIN0109 for more requirements.

(A) Continuous lateral bracing equally spaced on member.

Deflection meets L/240 live and L/180 total load.



Note: All Plates Are 1.5X4 Except As Shown.

Design Crit: FBC2007Res/TPI-2002(STD)

PLT TYP. Wave FT/RT=20%(0%)/10(0) 9.04.01.1021.19 QTY:2 FL/-/1/-/-/R/- Scale =.125"/Ft.

ALPINE
ITW Building Components Group Inc.
Haines City, FL 33844
FL COA #0 278

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DOUGLAS FLEMING LICENSE No. 66648 STATE OF FLORIDA PROFESSIONAL ENGINEER
3 '10

TC LL	20.0 PSF	REF	R437-- 46608
TC DL	7.0 PSF	DATE	09/23/10
BC DL	10.0 PSF	DRW	HCUSR437 10266002
BC LL	0.0 PSF	HC-ENG	TCE/DF
TOT.LD.	37.0 PSF	SEQN-	62824
DUR.FAC.	1.25		
SPACING	24.0"	JREF-	1U5G437_Z01

(QB-287--- Columbia Co., FL - T-3 24')

THIS DWG PREPARED FROM COMPUTER INPUT (LOADS & DIMENSIONS) SUBMITTED BY TRUSS MFR.

Top chord 2x4 SP #2 N
Bot chord 2x4 SP #2 N
Webs 2x4 SP #3

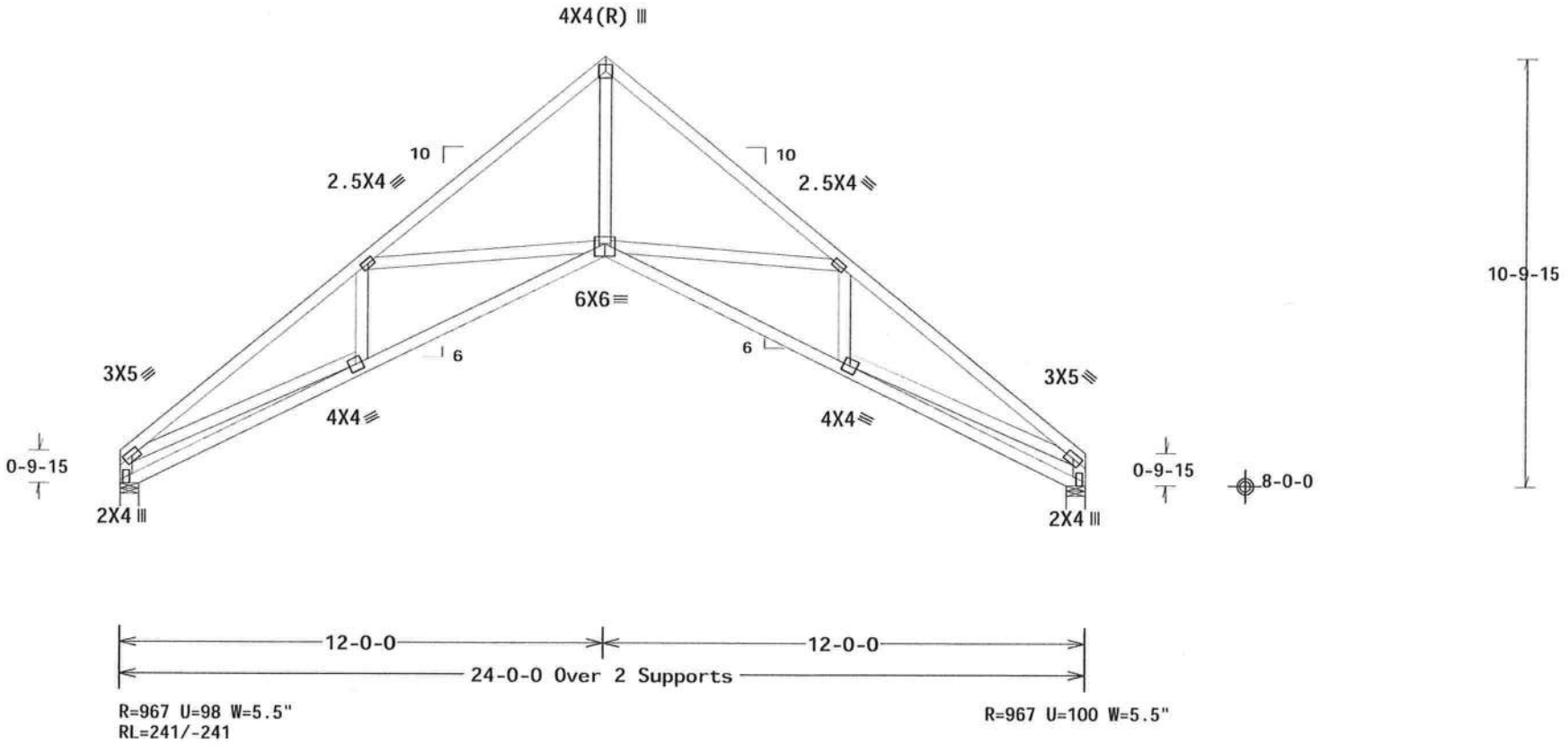
Wind reactions based on MWFRS pressures.

Bottom chord checked for 10.00 psf non-concurrent live load.

110 mph wind, 15.00 ft mean hgt, ASCE 7-05, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=3.5 psf, wind BC DL=5.0 psf. Iw=1.00 GCpi(+/-)=0.18

Calculated horizontal deflection is 0.15" due to live load and 0.16" due to dead load.

Deflection meets L/240 live and L/180 total load.



Design Crit: FBC2007Res/TPI-2002(STD)

PLT TYP. Wave | FT/RT=20%(0%)/10(0) | 9.04.01.1021.19 | QTY:22 FL/-/1/-/-/R/- | Scale =.25"/Ft.

ALPINE
ITW Building Components Group Inc.
Haines City, FL 33844
FL COA #0 278

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DOUGLAS FLEMING LICENSE No. 66648 STATE OF FLORIDA PROFESSIONAL ENGINEER
23 '10

TC LL	20.0 PSF	REF	R437-- 46609
TC DL	7.0 PSF	DATE	09/23/10
BC DL	10.0 PSF	DRW	HCUSR437 10266003
BC LL	0.0 PSF	HC-ENG	TCE/DF
TOT.LD.	37.0 PSF	SEQN-	62830
DUR.FAC.	1.25		
SPACING	24.0"	JREF-	1U5G437_Z01

(QB-287--- Columbia Co., FL - T-2 24')

Top chord 2x4 SP #2 N
Bot chord 2x4 SP #2 N
Webs 2x4 SP #3

Roof overhang supports 2.00 psf soffit load.

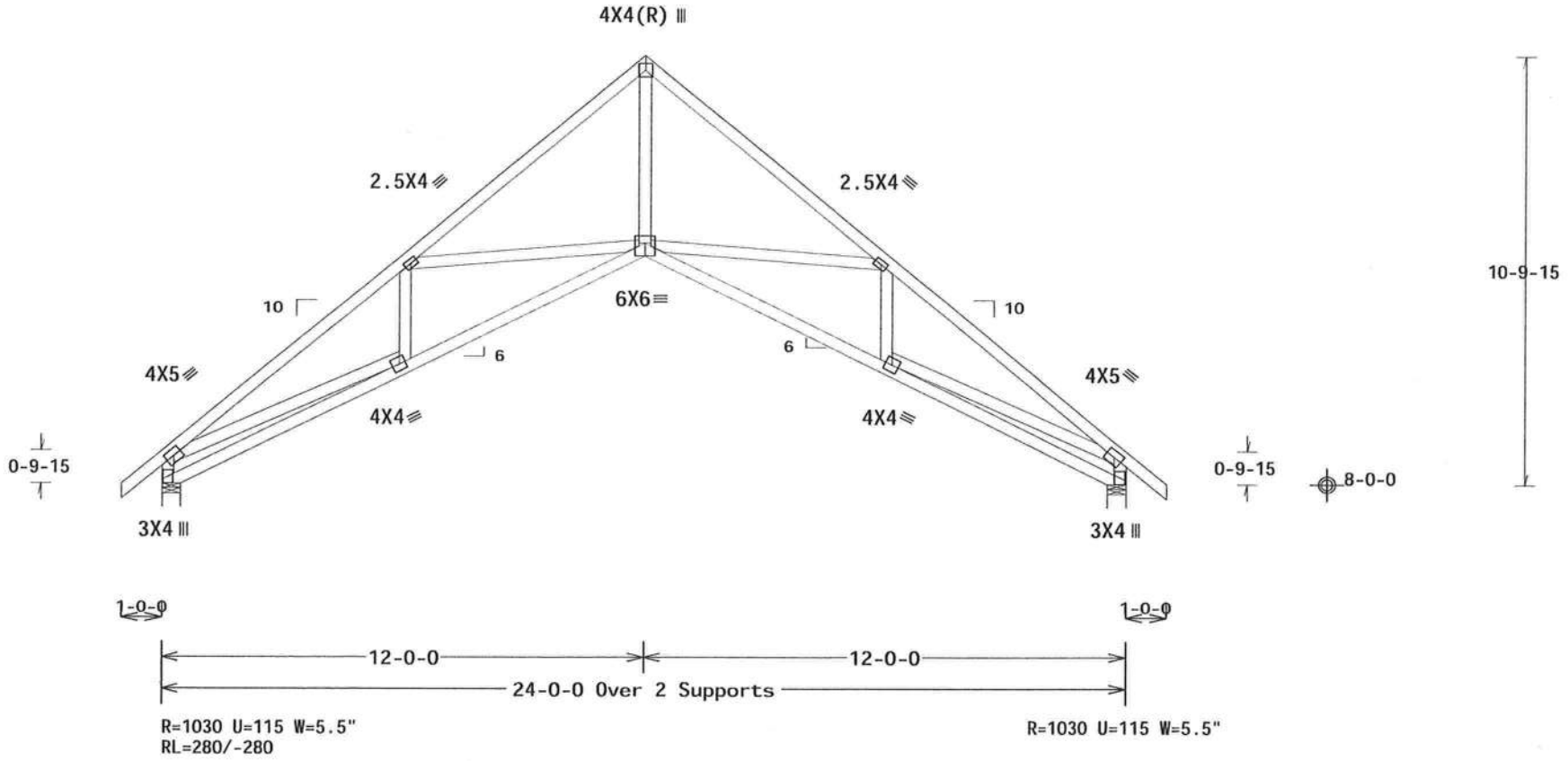
Calculated horizontal deflection is 0.16" due to live load and 0.15" due to dead load.

110 mph wind, 15.00 ft mean hgt, ASCE 7-05, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=3.5 psf, wind BC DL=5.0 psf. Iw=1.00 GCpi(+/-)=0.18

Wind reactions based on MWFRS pressures.

Bottom chord checked for 10.00 psf non-concurrent live load.

Deflection meets L/240 live and L/180 total load.



Design Crit: FBC2007Res/TPI-2002(STD)

PLT TYP. Wave | FT/RT=20%(0%)/10(0) | 9.04.01.1021.19 | QTY:1 | FL/-/1/-/-/R/- | Scale =.25"/Ft.

ALPINE
ITW Building Components Group Inc.
Haines City, FL 33844
FL COA #0 278

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DOUGLAS FLEMING LICENSE No.61648 STATE OF FLORIDA PROFESSIONAL ENGINEER
23 '10

TC LL	20.0 PSF	REF	R437-- 46610
TC DL	7.0 PSF	DATE	09/23/10
BC DL	10.0 PSF	DRW	HCUSR437 10266004
BC LL	0.0 PSF	HC-ENG	TCE/DF
TOT.LD.	37.0 PSF	SEQN-	62833
DUR.FAC.	1.25		
SPACING	24.0"	JREF-	1U5G437_Z01

Top chord 2x4 SP #2 N
Bot chord 2x4 SP #2 N
Webs 2x4 SP #3 :W2, W8 2x4 SP #2 N:

Roof overhang supports 2.00 psf soffit load.

Truss spaced at 24.0" OC designed to support 2-0-0 top chord outlookers. Cladding load shall not exceed 5.00 PSF. Top chord must not be cut or notched.

The Building Designer is responsible for the design of the roof and ceiling diaphragms, gable end shear walls, and supporting shear walls. Shear walls must provide continuous lateral restraint to the gable end. All connections to be designed by the Building Designer.

110 mph wind, 15.00 ft mean hgt, ASCE 7-05, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=3.5 psf, wind BC DL=5.0 psf. Iw=1.00 GCpi(+/-)=0.18

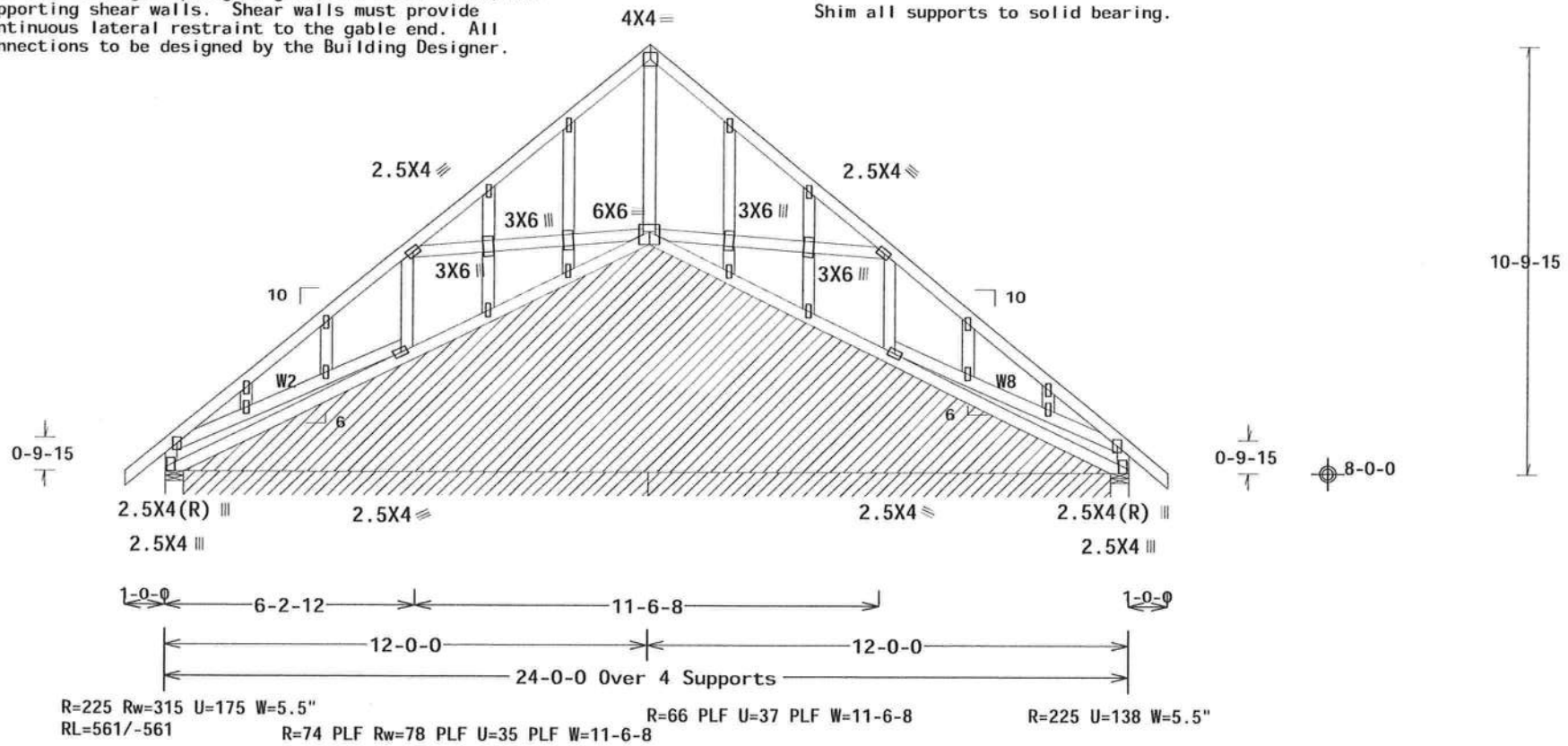
Wind reactions based on MWFRS pressures.

See DWGS A11015050109 & GBLLETIN0109 for more requirements.

Bottom chord checked for 10.00 psf non-concurrent live load.

Deflection meets L/240 live and L/180 total load.

Shim all supports to solid bearing.



Note: All Plates Are 1.5X4 Except As Shown.

Design Crit: FBC2007Res/TPI-2002(STD)

PLT TYP. Wave FT/RT=20%(0%)/10(0) 9.04.01.1021.19 QTY:1 FL/-/1/-/-/R/- Scale =.25"/Ft.

ALPINE
ITW Building Components Group Inc.
Haines City, FL 33844
FL COA #0 278

DOUGLAS FLEMING LICENSE No. 66018 STATE OF FLORIDA PROFESSIONAL ENGINEER
3 '10

TC LL	20.0 PSF	REF	R437-- 46611
TC DL	7.0 PSF	DATE	09/23/10
BC DL	10.0 PSF	DRW	HCUSR437 10266005
BC LL	0.0 PSF	HC-ENG	TCE/DF
TOT.LD.	37.0 PSF	SEQN-	62837
DUR.FAC.	1.25		
SPACING	24.0"	JREF-	1U5G437_Z01

(QB-287--- Columbia Co., FL - STRGBL2 24')

THIS DWG PREPARED FROM COMPUTER INPUT (LOADS & DIMENSIONS) SUBMITTED BY TRUSS MFR.

Top chord 2x4 SP #2 N
Bot chord 2x4 SP #2 N
Webs 2x4 SP #3

Truss spaced at 24.0" OC designed to support 2-0-0 top chord outlookers. Cladding load shall not exceed 5.00 PSF. Top chord must not be cut or notched.

Bottom chord checked for 10.00 psf non-concurrent live load.

The Building Designer is responsible for the design of the roof and ceiling diaphragms, gable end shear walls, and supporting shear walls. Shear walls must provide continuous lateral restraint to the gable end. All connections to be designed by the Building Designer.

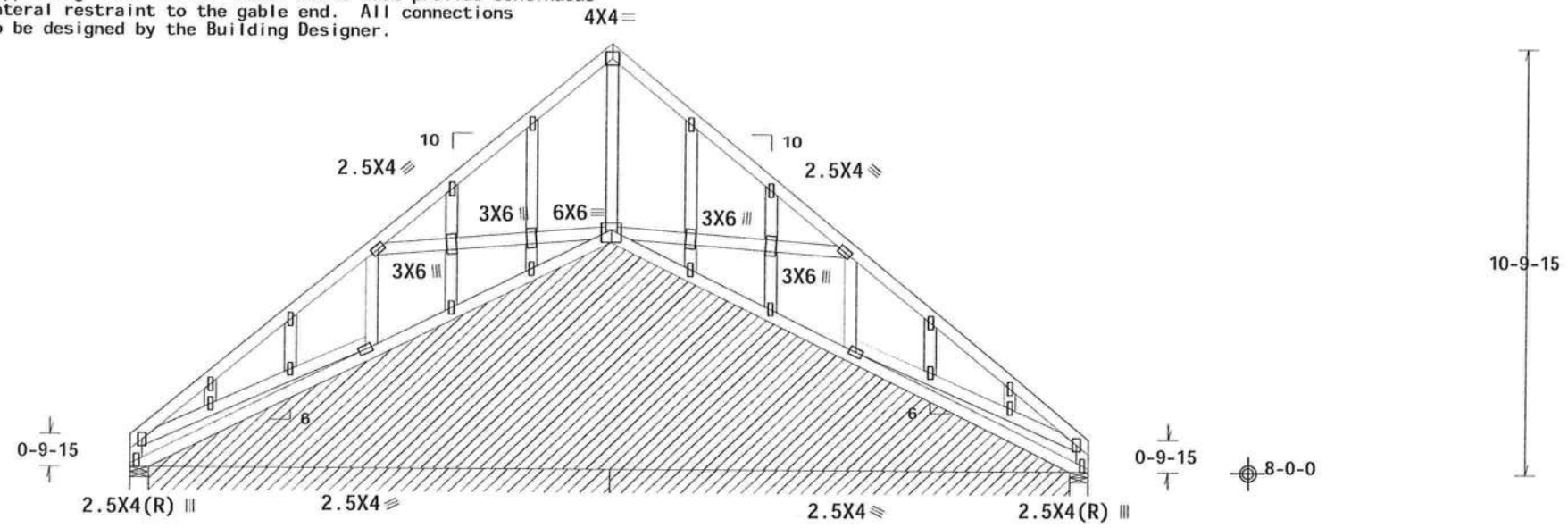
110 mph wind, 15.00 ft mean hgt, ASCE 7-05, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=3.5 psf, wind BC DL=5.0 psf. lw=1.00 GCpi(+/-)=0.18

Wind reactions based on MWFRS pressures.

See DWGS A11015050109 & GBLLETIN0109 for more requirements.

Deflection meets L/240 live and L/180 total load.

Shim all supports to solid bearing.



Note: All Plates Are 1.5X4 Except As Shown.

Design Crit: FBC2007Res/TPI-2002(STD)

PLT TYP. Wave FT/RT=20%(0%)/10(0) 9.04.01.1021.19 QTY:1 FL/-/1/-/-/R/- Scale =.25"/Ft.

ALPINE
ITW Building Components Group Inc.
Haines City, FL 33844
FL COA #0 278

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DOUGLAS FLEMING LICENSE No. 66648 STATE OF FLORIDA PROFESSIONAL ENGINEER
23 '10

TC LL	20.0 PSF
TC DL	7.0 PSF
BC DL	10.0 PSF
BC LL	0.0 PSF
TOT.LD.	37.0 PSF
DUR.FAC.	1.25
SPACING	24.0"

REF	R437-- 46612
DATE	09/23/10
DRW	HCUSR437 10266006
HC-ENG	TCE/DF
SEQN-	62843
JREF-	1U5G437_Z01

paul's heating & air
158 paden place statenville, ga 31648
Phone: 559-8232 Fax: 5597533 E-mail: paden@surfsouth.com

PROPOSAL FOR:

wiser-metzler
2272sq ft
,

10/1/2010

paul's heating & air

158 paden place statenville, ga 31648
Phone: 559-8232 Fax: 5597533 E-mail: paden@surfsouth.com

Heat Load Summary Report for wiser-metzler

Room Name	Square Ft.	Heating Loss BTUH	Hydronic Heat Linear Ft.	Latent / Sensible Gain BTUH	Cooling Gain BTUH	Cooling Tons	Cooling CFM
wic	77	1279	2.13	78 / 877	954	0.08	32
mbath	143	2001	3.33	144 / 2108	2252	0.19	75
mbed	340	8332	13.89	1012 / 5097	6110	0.51	204
break	276	18773	31.29	1711 / 21456	23166	1.93	772
din-kit	322	2794	4.66	432 / 2023	2455	0.2	82
great	460	15920	26.53	1958 / 12817	14775	1.23	492
util	77	856	1.43	78 / 690	767	0.06	26
bath	70	1243	2.07	70 / 1620	1691	0.14	56
bed1	154	3104	5.17	155 / 3135	3290	0.27	110
bed3	154	6756	11.26	825 / 4528	5353	0.45	178
TOTALS	**2073**	**61058**	**101.76**	**6463 / 54351**	**60813**	**5.07**	**2027**

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Heat Load Detail Report for wiser-metzler

Room 1 of 10

Room Specifications: wic

Room Length (Ft.) :	11	Sq. Ft windows facing NE & NW:	--	Watts Incandescent Light:	44
Room Width (Ft.) :	7	Sq. Ft windows facing South:	--	Watts Flourescent Light:	--
Room Height (Ft.) :	9	Sq. Ft windows facing SE & SW:	--	Duct Length from A/H to room:	33
Exposed Wall Length (Ft.) :	18	Number of Exterior Doors:	--	Number of Large Electric Motors:	--
Wall against unconditioned room (Ft.) :	--	Sq. Ft. Exterior Doors:	--	Average Electric Motor Horsepower:	--
Sq. Ft windows facing North:	--	Number of People in Room:	--	BTUH Appliance Sensible Heat:	--
Sq. Ft windows facing E & W:	--			BTUH Appliance Latent Heat:	--

Indoor/Outdoor Design Temperatures (degrees Farenheit)

Summer:		**Winter:**	
Inside (Thermostat setting) :	74	Inside (Thermostat setting) :	72
Outside (Above ground):	97	Outside (Above ground :	20
Outside (Below ground):	65	Outside (Below ground) :	60
Unconditioned Space :	97	Unconditioned Space :	65
Above Ceiling (Attic/Crawl Space) :	130	Above Ceiling (Attic/Crawl Space) :	45
Concrete Slab (Ground temperature) :	80	Concrete Slab (Ground temperature) :	55
Unconditioned Basement :	60	Unconditioned Basement :	55
Below Floor Crawl Space :	85	Below Floor Crawl Space :	50

Applicable Temperatures: Above Ceiling: Attic or Crawl Space Below Floor: Concrete Slab Exposed Walls: Above Ground

Design Conditions

Occupant Sensible Load (BTUH per person) :	250
Occupant Latent Load (BTUH per person) :	200
Duct Insulation Factor :	1
Duct Temperature Difference (Summer) :	20
Duct Temperature Difference (Winter) :	45
Humidity Difference Inside/Outside % (Summer) :	20
Humidity Difference Inside/Outside %(Winter) :	15
Fresh Air Per Person (CFM) :	2
Air Change Factor (Air change per hour) :	.5
Space Shading Factor :	.4
Air Handler Design Cooling (CFM per ton) :	400
Hydronic Heat (BTUH per linear ft :	600

Insulation Values (U-Factors)

Exposed Walls (Above Ground) :	.080
Exposed Walls (Below Ground) :	.5
Partitions :	.075
Roof/Ceiling :	.055
Floor (Above basement) :	.083
Floor (Concrete slab) :	.001
Floor (Between conditioned spaces) :	.287
Doors :	.500
Windows :	.900

Calculated Room Results - Summer Heat Gains

Wall Heat Gain (BTUH) :	298	Appliance/Elec Motor Latent Heat Gain (BTUH) :	0
Ceiling or Roof Heat Gain (BTUH) :	237	Appliance/Elec Motor Sensible Heat Gain (BTUH) :	150
Floor Heat Gain (BTUH) :	0	Ventilation Latent Heat Gain (BTUH) :	78
Glass Heat Gain (BTUH) :	0	Ventilation Sensible Gain (BTUH) :	144
Exterior Door & North Window Heat Gain (BTUH) :	0	Summer Total Latent Heat Gain:	78
Solar Heat Gain (BTUH) :	0	Summer Total Sensible Heat Gain (BTUH) :	877
Total Transmission Heat Gain (BTUH) :	536	**TOTAL SUMMER COOLING LOAD (BTUH) :**	**954**

Calculated Room Results - Winter Heat Losses

Transmission Heat Losses (BTUH) :	896	Latent Ventilation Heat Losses (BTUH) :	58
Sensible Ventilation Heat Losses (BTUH) :	325	Hydronic Heat(Linear Ft.) :	2
		TOTAL WINTER HEATING LOAD (BTUH) :	**1279**

Calculated Totals for Entire Structure

Size of Structure (Sq. Ft.):	2073	Total Sensible Heat Gain (BTUH):	54351
Total Heat Loss (BTUH):	61058	Total Cooling Gain (BTUH):	60813
Total Hydronic Heat (Linear Ft.):	101.76	Total Cooling Requirement (Tons):	5.07
Total Latent Heat Gain (BTUH):	6463	Total Cooling CFM:	2027

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Heat Load Detail Report for wiser-metzler

Room 2 of 10

Room Specifications: mbath

Room Length (Ft.) :	13	Sq. Ft windows facing NE & NW:	--	Watts Incandescent Light:	44
Room Width (Ft.) :	11	Sq. Ft windows facing South:	--	Watts Flourescent Light:	--
Room Height (Ft.) :	9	Sq. Ft windows facing SE & SW:	--	Duct Length from A/H to room:	33
Exposed Wall Length (Ft.) :	14	Number of Exterior Doors:	--	Number of Large Electric Motors:	--
Wall against unconditioned room (Ft.) :	--	Sq. Ft. Exterior Doors:	--	Average Electric Motor Horsepower:	--
Sq. Ft windows facing North:	--	Number of People in Room:	--	BTUH Appliance Sensible Heat:	--
Sq. Ft windows facing E & W:	9			BTUH Appliance Latent Heat:	--

Indoor/Outdoor Design Temperatures (degrees Farenheit)

Summer:		Winter:	
Inside (Thermostat setting) :	74	Inside (Thermostat setting) :	72
Outside (Above ground):	97	Outside (Above ground :	20
Outside (Below ground):	65	Outside (Below ground) :	60
Unconditioned Space :	97	Unconditioned Space :	65
Above Ceiling (Attic/Crawl Space) :	130	Above Ceiling (Attic/Crawl Space) :	45
Concrete Slab (Ground temperature) :	80	Concrete Slab (Ground temperature) :	55
Unconditioned Basement :	60	Unconditioned Basement :	55
Below Floor Crawl Space :	85	Below Floor Crawl Space :	50

Applicable Temperatures: Above Ceiling: Attic or Crawl Space Below Floor: Concrete Slab Exposed Walls: Above Ground

Design Conditions

Occupant Sensible Load (BTUH per person) :	250
Occupant Latent Load (BTUH per person) :	200
Duct Insulation Factor :	1
Duct Temperature Difference (Summer) :	20
Duct Temperature Difference (Winter) :	45
Humidity Difference Inside/Outside % (Summer) :	20
Humidity Difference Inside/Outside %(Winter) :	15
Fresh Air Per Person (CFM) :	2
Air Change Factor (Air change per hour) :	.5
Space Shading Factor :	.4
Air Handler Design Cooling (CFM per ton) :	400
Hydronic Heat (BTUH per linear ft :	600

Insulation Values (U-Factors)

Exposed Walls (Above Ground) :	.080
Exposed Walls (Below Ground) :	.5
Partitions :	.075
Roof/Ceiling :	.055
Floor (Above basement) :	.083
Floor (Concrete slab) :	.001
Floor (Between conditioned spaces) :	.287
Doors :	.500
Windows :	.900

Calculated Room Results - Summer Heat Gains

Wall Heat Gain (BTUH) :	232	Appliance/Elec Motor Latent Heat Gain (BTUH) :	0
Ceiling or Roof Heat Gain (BTUH) :	440	Appliance/Elec Motor Sensible Heat Gain (BTUH) :	150
Floor Heat Gain (BTUH) :	1	Ventilation Latent Heat Gain (BTUH) :	144
Glass Heat Gain (BTUH) :	170	Ventilation Sensible Gain (BTUH) :	267
Exterior Door & North Window Heat Gain (BTUH) :	0	Summer Total Latent Heat Gain:	144
Solar Heat Gain (BTUH) :	774	Summer Total Sensible Heat Gain (BTUH) :	2108
Total Transmission Heat Gain (BTUH) :	1617	**TOTAL SUMMER COOLING LOAD (BTUH) :**	**2252**

Calculated Room Results - Winter Heat Losses

Transmission Heat Losses (BTUH) :	1289	Latent Ventilation Heat Losses (BTUH) :	108
Sensible Ventilation Heat Losses (BTUH) :	604	Hydronic Heat(Linear Ft.) :	3
		TOTAL WINTER HEATING LOAD (BTUH) :	**2001**

Calculated Totals for Entire Structure

Size of Structure (Sq. Ft.):	2073	Total Sensible Heat Gain (BTUH):	54351
Total Heat Loss (BTUH):	61058	Total Cooling Gain (BTUH):	60813
Total Hydronic Heat (Linear Ft.):	101.76	Total Cooling Requirement (Tons):	5.07
Total Latent Heat Gain (BTUH):	6463	Total Cooling CFM:	2027

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Heat Load Detail Report for wiser-metzler

Room 3 of 10

Room Specifications: mbed

Room Length (Ft.) :	17	Sq. Ft windows facing NE & NW:	--	Watts Incandescent Light:	44
Room Width (Ft.) :	20	Sq. Ft windows facing South:	--	Watts Flourescent Light:	--
Room Height (Ft.) :	9	Sq. Ft windows facing SE & SW:	--	Duct Length from A/H to room:	33
Exposed Wall Length (Ft.) :	36	Number of Exterior Doors:	1	Number of Large Electric Motors:	--
Wall against unconditioned room (Ft.) :	--	Sq. Ft. Exterior Doors:	28	Average Electric Motor Horsepower:	--
Sq. Ft windows facing North:	9	Number of People in Room:	--	BTUH Appliance Sensible Heat:	--
Sq. Ft windows facing E & W:	9			BTUH Appliance Latent Heat:	--

Indoor/Outdoor Design Temperatures (degrees Farenheit)

Summer:		Winter:	
Inside (Thermostat setting) :	74	Inside (Thermostat setting) :	72
Outside (Above ground):	97	Outside (Above ground :	20
Outside (Below ground):	65	Outside (Below ground) :	60
Unconditioned Space :	97	Unconditioned Space :	65
Above Ceiling (Attic/Crawl Space) :	130	Above Ceiling (Attic/Crawl Space) :	45
Concrete Slab (Ground temperature) :	80	Concrete Slab (Ground temperature) :	55
Unconditioned Basement :	60	Unconditioned Basement :	55
Below Floor Crawl Space :	85	Below Floor Crawl Space :	50

Applicable Temperatures: Above Ceiling: Attic or Crawl Space Below Floor: Concrete Slab Exposed Walls: Above Ground

Design Conditions

Occupant Sensible Load (BTUH per person) :	250
Occupant Latent Load (BTUH per person) :	200
Duct Insulation Factor :	1
Duct Temperature Difference (Summer) :	20
Duct Temperature Difference (Winter) :	45
Humidity Difference Inside/Outside % (Summer) :	20
Humidity Difference Inside/Outside %(Winter) :	15
Fresh Air Per Person (CFM) :	2
Air Change Factor (Air change per hour) :	.5
Space Shading Factor :	.4
Air Handler Design Cooling (CFM per ton) :	400
Hydronic Heat (BTUH per linear ft :	600

Insulation Values (U-Factors)

Exposed Walls (Above Ground) :	.080
Exposed Walls (Below Ground) :	.5
Partitions :	.075
Roof/Ceiling :	.055
Floor (Above basement) :	.083
Floor (Concrete slab) :	.001
Floor (Between conditioned spaces) :	.287
Doors :	.500
Windows :	.900

Calculated Room Results - Summer Heat Gains

Wall Heat Gain (BTUH) :	596	Appliance/Elec Motor Latent Heat Gain (BTUH) :	0
Ceiling or Roof Heat Gain (BTUH) :	1047	Appliance/Elec Motor Sensible Heat Gain (BTUH) :	150
Floor Heat Gain (BTUH) :	2	Ventilation Latent Heat Gain (BTUH) :	1012
Glass Heat Gain (BTUH) :	170	Ventilation Sensible Gain (BTUH) :	1877
Exterior Door & North Window Heat Gain (BTUH) :	357	Summer Total Latent Heat Gain:	1012
Solar Heat Gain (BTUH) :	774	Summer Total Sensible Heat Gain (BTUH) :	5097
Total Transmission Heat Gain (BTUH) :	2947	**TOTAL SUMMER COOLING LOAD (BTUH) :**	**6110**

Calculated Room Results - Winter Heat Losses

Transmission Heat Losses (BTUH) :	3329	Latent Ventilation Heat Losses (BTUH) :	759
Sensible Ventilation Heat Losses (BTUH) :	4243	Hydronic Heat(Linear Ft.) :	14
		TOTAL WINTER HEATING LOAD (BTUH) :	**8332**

Calculated Totals for Entire Structure

Size of Structure (Sq. Ft.):	2073	Total Sensible Heat Gain (BTUH):	54351
Total Heat Loss (BTUH):	61058	Total Cooling Gain (BTUH):	60813
Total Hydronic Heat (Linear Ft.):	101.76	Total Cooling Requirement (Tons):	5.07
Total Latent Heat Gain (BTUH):	6463	Total Cooling CFM:	2027

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Heat Load Detail Report for wiser-metzler

Room 4 of 10

Room Specifications: break

Room Length (Ft.) :	12	Sq. Ft windows facing NE & NW:	--	Watts Incandescent Light:	44
Room Width (Ft.) :	23	Sq. Ft windows facing South:	--	Watts Flourescent Light:	--
Room Height (Ft.) :	12	Sq. Ft windows facing SE & SW:	--	Duct Length from A/H to room:	33
Exposed Wall Length (Ft.) :	47	Number of Exterior Doors:	2	Number of Large Electric Motors:	--
Wall against unconditioned room (Ft.) :	--	Sq. Ft. Exterior Doors:	28	Average Electric Motor Horsepower:	--
Sq. Ft windows facing North:	--	Number of People in Room:	--	BTUH Appliance Sensible Heat:	--
Sq. Ft windows facing E & W:	150			BTUH Appliance Latent Heat:	--

Indoor/Outdoor Design Temperatures (degrees Farenheit)

Summer:		Winter:	
Inside (Thermostat setting) :	74	Inside (Thermostat setting) :	72
Outside (Above ground):	97	Outside (Above ground :	20
Outside (Below ground):	65	Outside (Below ground) :	60
Unconditioned Space :	97	Unconditioned Space :	65
Above Ceiling (Attic/Crawl Space) :	130	Above Ceiling (Attic/Crawl Space) :	45
Concrete Slab (Ground temperature) :	80	Concrete Slab (Ground temperature) :	55
Unconditioned Basement :	60	Unconditioned Basement :	55
Below Floor Crawl Space :	85	Below Floor Crawl Space :	50

Applicable Temperatures: Above Ceiling: Attic or Crawl Space Below Floor: Concrete Slab Exposed Walls: Above Ground

Design Conditions

Occupant Sensible Load (BTUH per person) :	250
Occupant Latent Load (BTUH per person) :	200
Duct Insulation Factor :	1
Duct Temperature Difference (Summer) :	20
Duct Temperature Difference (Winter) :	45
Humidity Difference Inside/Outside % (Summer) :	20
Humidity Difference Inside/Outside %(Winter) :	15
Fresh Air Per Person (CFM) :	2
Air Change Factor (Air change per hour) :	.5
Space Shading Factor :	.4
Air Handler Design Cooling (CFM per ton) :	400
Hydronic Heat (BTUH per linear ft :	600

Insulation Values (U-Factors)

Exposed Walls (Above Ground) :	.080
Exposed Walls (Below Ground) :	.5
Partitions :	.075
Roof/Ceiling :	.055
Floor (Above basement) :	.083
Floor (Concrete slab) :	.001
Floor (Between conditioned spaces) :	.287
Doors :	.500
Windows :	.900

Calculated Room Results - Summer Heat Gains

Wall Heat Gain (BTUH) :	1038	Appliance/Elec Motor Latent Heat Gain (BTUH) :	0
Ceiling or Roof Heat Gain (BTUH) :	850	Appliance/Elec Motor Sensible Heat Gain (BTUH) :	150
Floor Heat Gain (BTUH) :	2	Ventilation Latent Heat Gain (BTUH) :	1711
Glass Heat Gain (BTUH) :	2829	Ventilation Sensible Gain (BTUH) :	3171
Exterior Door & North Window Heat Gain (BTUH) :	270	Summer Total Latent Heat Gain:	1711
Solar Heat Gain (BTUH) :	12900	Summer Total Sensible Heat Gain (BTUH) :	21456
Total Transmission Heat Gain (BTUH) :	17889	**TOTAL SUMMER COOLING LOAD (BTUH) :**	**23166**

Calculated Room Results - Winter Heat Losses

Transmission Heat Losses (BTUH) :	10321	Latent Ventilation Heat Losses (BTUH) :	1283
Sensible Ventilation Heat Losses (BTUH) :	7169	Hydronic Heat(Linear Ft.) :	31
		TOTAL WINTER HEATING LOAD (BTUH) :	**18773**

Calculated Totals for Entire Structure

Size of Structure (Sq. Ft.):	2073	Total Sensible Heat Gain (BTUH):	54351
Total Heat Loss (BTUH):	61058	Total Cooling Gain (BTUH):	60813
Total Hydronic Heat (Linear Ft.):	101.76	Total Cooling Requirement (Tons):	5.07
Total Latent Heat Gain (BTUH):	6463	Total Cooling CFM:	2027

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Heat Load Detail Report for wiser-metzler

Room 5 of 10

Room Specifications: din-kit

Room Length (Ft.) :	14	Sq. Ft windows facing NE & NW:	--	Watts Incandescent Light:	44
Room Width (Ft.) :	23	Sq. Ft windows facing South:	--	Watts Flourescent Light:	--
Room Height (Ft.) :	12	Sq. Ft windows facing SE & SW:	--	Duct Length from A/H to room:	33
Exposed Wall Length (Ft.) :	--	Number of Exterior Doors:	--	Number of Large Electric Motors:	--
Wall against unconditioned room (Ft.) :	--	Sq. Ft. Exterior Doors:	--	Average Electric Motor Horsepower:	--
Sq. Ft windows facing North:	--	Number of People in Room:	--	BTUH Appliance Sensible Heat:	--
Sq. Ft windows facing E & W:	--			BTUH Appliance Latent Heat:	--

Indoor/Outdoor Design Temperatures (degrees Farenheit)

Summer:		Winter:	
Inside (Thermostat setting) :	74	Inside (Thermostat setting) :	72
Outside (Above ground):	97	Outside (Above ground :	20
Outside (Below ground):	65	Outside (Below ground) :	60
Unconditioned Space :	97	Unconditioned Space :	65
Above Ceiling (Attic/Crawl Space) :	130	Above Ceiling (Attic/Crawl Space) :	45
Concrete Slab (Ground temperature) :	80	Concrete Slab (Ground temperature) :	55
Unconditioned Basement :	60	Unconditioned Basement :	55
Below Floor Crawl Space :	85	Below Floor Crawl Space :	50

Applicable Temperatures: Above Ceiling: Attic or Crawl Space Below Floor: Concrete Slab Exposed Walls: Above Ground

Design Conditions

Occupant Sensible Load (BTUH per person) :	250
Occupant Latent Load (BTUH per person) :	200
Duct Insulation Factor :	1
Duct Temperature Difference (Summer) :	20
Duct Temperature Difference (Winter) :	45
Humidity Difference Inside/Outside % (Summer) :	20
Humidity Difference Inside/Outside %(Winter) :	15
Fresh Air Per Person (CFM) :	2
Air Change Factor (Air change per hour) :	.5
Space Shading Factor :	.4
Air Handler Design Cooling (CFM per ton) :	400
Hydronic Heat (BTUH per linear ft :	600

Insulation Values (U-Factors)

Exposed Walls (Above Ground) :	.080
Exposed Walls (Below Ground) :	.5
Partitions :	.075
Roof/Ceiling :	.055
Floor (Above basement) :	.083
Floor (Concrete slab) :	.001
Floor (Between conditioned spaces) :	.287
Doors :	.500
Windows :	.900

Calculated Room Results - Summer Heat Gains

Wall Heat Gain (BTUH) :	0	Appliance/Elec Motor Latent Heat Gain (BTUH) :	0
Ceiling or Roof Heat Gain (BTUH) :	992	Appliance/Elec Motor Sensible Heat Gain (BTUH) :	150
Floor Heat Gain (BTUH) :	2	Ventilation Latent Heat Gain (BTUH) :	432
Glass Heat Gain (BTUH) :	0	Ventilation Sensible Gain (BTUH) :	801
Exterior Door & North Window Heat Gain (BTUH) :	0	Summer Total Latent Heat Gain:	432
Solar Heat Gain (BTUH) :	0	Summer Total Sensible Heat Gain (BTUH) :	2023
Total Transmission Heat Gain (BTUH) :	994	**TOTAL SUMMER COOLING LOAD (BTUH) :**	**2455**

Calculated Room Results - Winter Heat Losses

Transmission Heat Losses (BTUH) :	658	Latent Ventilation Heat Losses (BTUH) :	324
Sensible Ventilation Heat Losses (BTUH) :	1812	Hydronic Heat(Linear Ft.) :	5
		TOTAL WINTER HEATING LOAD (BTUH) :	**2794**

Calculated Totals for Entire Structure

Size of Structure (Sq. Ft.):	2073	Total Sensible Heat Gain (BTUH):	54351
Total Heat Loss (BTUH):	61058	Total Cooling Gain (BTUH):	60813
Total Hydronic Heat (Linear Ft.):	101.76	Total Cooling Requirement (Tons):	5.07
Total Latent Heat Gain (BTUH):	6463	Total Cooling CFM:	2027

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Heat Load Detail Report for wiser-metzler

Room 6 of 10

Room Specifications: great

Room Length (Ft.) :	23	Sq. Ft windows facing NE & NW:	--	Watts Incandescent Light:	44
Room Width (Ft.) :	20	Sq. Ft windows facing South:	--	Watts Flourescent Light:	--
Room Height (Ft.) :	12	Sq. Ft windows facing SE & SW:	--	Duct Length from A/H to room:	33
Exposed Wall Length (Ft.) :	39	Number of Exterior Doors:	2	Number of Large Electric Motors:	--
Wall against unconditioned room (Ft.) :	--	Sq. Ft. Exterior Doors:	28	Average Electric Motor Horsepower:	--
Sq. Ft windows facing North:	--	Number of People in Room:	--	BTUH Appliance Sensible Heat:	--
Sq. Ft windows facing E & W:	60			BTUH Appliance Latent Heat:	--

Indoor/Outdoor Design Temperatures (degrees Farenheit)

Summer:		Winter:	
Inside (Thermostat setting) :	74	Inside (Thermostat setting) :	72
Outside (Above ground):	97	Outside (Above ground :	20
Outside (Below ground):	65	Outside (Below ground) :	60
Unconditioned Space :	97	Unconditioned Space :	65
Above Ceiling (Attic/Crawl Space) :	130	Above Ceiling (Attic/Crawl Space) :	45
Concrete Slab (Ground temperature) :	80	Concrete Slab (Ground temperature) :	55
Unconditioned Basement :	60	Unconditioned Basement :	55
Below Floor Crawl Space :	85	Below Floor Crawl Space :	50

Applicable Temperatures: Above Ceiling: Attic or Crawl Space Below Floor: Concrete Slab Exposed Walls: Above Ground

Design Conditions

Occupant Sensible Load (BTUH per person) :	250
Occupant Latent Load (BTUH per person) :	200
Duct Insulation Factor :	1
Duct Temperature Difference (Summer) :	20
Duct Temperature Difference (Winter) :	45
Humidity Difference Inside/Outside % (Summer) :	20
Humidity Difference Inside/Outside %(Winter) :	15
Fresh Air Per Person (CFM) :	2
Air Change Factor (Air change per hour) :	.5
Space Shading Factor :	.4
Air Handler Design Cooling (CFM per ton) :	400
Hydronic Heat (BTUH per linear ft :	600

Insulation Values (U-Factors)

Exposed Walls (Above Ground) :	.080
Exposed Walls (Below Ground) :	.5
Partitions :	.075
Roof/Ceiling :	.055
Floor (Above basement) :	.083
Floor (Concrete slab) :	.001
Floor (Between conditioned spaces) :	.287
Doors :	.500
Windows :	.900

Calculated Room Results - Summer Heat Gains

Wall Heat Gain (BTUH) :	861	Appliance/Elec Motor Latent Heat Gain (BTUH) :	0
Ceiling or Roof Heat Gain (BTUH) :	1417	Appliance/Elec Motor Sensible Heat Gain (BTUH) :	150
Floor Heat Gain (BTUH) :	3	Ventilation Latent Heat Gain (BTUH) :	1958
Glass Heat Gain (BTUH) :	1132	Ventilation Sensible Gain (BTUH) :	3629
Exterior Door & North Window Heat Gain (BTUH) :	270	Summer Total Latent Heat Gain:	1958
Solar Heat Gain (BTUH) :	5160	Summer Total Sensible Heat Gain (BTUH) :	12817
Total Transmission Heat Gain (BTUH) :	8843	**TOTAL SUMMER COOLING LOAD (BTUH) :**	**14775**

Calculated Room Results - Winter Heat Losses

Transmission Heat Losses (BTUH) :	6247	Latent Ventilation Heat Losses (BTUH) :	1468
Sensible Ventilation Heat Losses (BTUH) :	8205	Hydronic Heat(Linear Ft.) :	27
		TOTAL WINTER HEATING LOAD (BTUH) :	**15920**

Calculated Totals for Entire Structure

Size of Structure (Sq. Ft.):	2073	Total Sensible Heat Gain (BTUH):	54351
Total Heat Loss (BTUH):	61058	Total Cooling Gain (BTUH):	60813
Total Hydronic Heat (Linear Ft.):	101.76	Total Cooling Requirement (Tons):	5.07
Total Latent Heat Gain (BTUH):	6463	Total Cooling CFM:	2027

Prepared 10/1/2010 using O'Brien Quick Loads Pro - Version 1.01 - SN: QP-070101-42778

paul's heating & air

158 paden place statenville, ga 31648
Phone: 559-8232 Fax: 5597533 E-mail: paden@surfsouth.com

Heat Load Detail Report for wiser-metzler

Room 7 of 10

Room Specifications: util

Room Length (Ft.) :	7	Sq. Ft windows facing NE & NW:	--	Watts Incandescent Light:	44
Room Width (Ft.) :	11	Sq. Ft windows facing South:	--	Watts Flourescent Light:	--
Room Height (Ft.) :	9	Sq. Ft windows facing SE & SW:	--	Duct Length from A/H to room:	33
Exposed Wall Length (Ft.) :	7	Number of Exterior Doors:	--	Number of Large Electric Motors:	--
Wall against unconditioned room (Ft.) :	--	Sq. Ft. Exterior Doors:	--	Average Electric Motor Horsepower:	--
Sq. Ft windows facing North:	--	Number of People in Room:	--	BTUH Appliance Sensible Heat:	--
Sq. Ft windows facing E & W:	--			BTUH Appliance Latent Heat:	--

Indoor/Outdoor Design Temperatures (degrees Farenheit)

Summer:		Winter:	
Inside (Thermostat setting) :	74	Inside (Thermostat setting) :	72
Outside (Above ground):	97	Outside (Above ground :	20
Outside (Below ground):	65	Outside (Below ground) :	60
Unconditioned Space :	97	Unconditioned Space :	65
Above Ceiling (Attic/Crawl Space) :	130	Above Ceiling (Attic/Crawl Space) :	45
Concrete Slab (Ground temperature) :	80	Concrete Slab (Ground temperature) :	55
Unconditioned Basement :	60	Unconditioned Basement :	55
Below Floor Crawl Space :	85	Below Floor Crawl Space :	50

Applicable Temperatures: Above Ceiling: Attic or Crawl Space Below Floor: Concrete Slab Exposed Walls: Above Ground

Design Conditions

Occupant Sensible Load (BTUH per person) :	250
Occupant Latent Load (BTUH per person) :	200
Duct Insulation Factor :	1
Duct Temperature Difference (Summer) :	20
Duct Temperature Difference (Winter) :	45
Humidity Difference Inside/Outside % (Summer) :	20
Humidity Difference Inside/Outside %(Winter) :	15
Fresh Air Per Person (CFM) :	2
Air Change Factor (Air change per hour) :	.5
Space Shading Factor :	.4
Air Handler Design Cooling (CFM per ton) :	400
Hydronic Heat (BTUH per linear ft :	600

Insulation Values (U-Factors)

Exposed Walls (Above Ground) :	.080
Exposed Walls (Below Ground) :	.5
Partitions :	.075
Roof/Ceiling :	.055
Floor (Above basement) :	.083
Floor (Concrete slab) :	.001
Floor (Between conditioned spaces) :	.287
Doors :	.500
Windows :	.900

Calculated Room Results - Summer Heat Gains

Wall Heat Gain (BTUH) :	116	Appliance/Elec Motor Latent Heat Gain (BTUH) :	0
Ceiling or Roof Heat Gain (BTUH) :	237	Appliance/Elec Motor Sensible Heat Gain (BTUH) :	150
Floor Heat Gain (BTUH) :	0	Ventilation Latent Heat Gain (BTUH) :	78
Glass Heat Gain (BTUH) :	0	Ventilation Sensible Gain (BTUH) :	144
Exterior Door & North Window Heat Gain (BTUH) :	0	Summer Total Latent Heat Gain:	78
Solar Heat Gain (BTUH) :	0	Summer Total Sensible Heat Gain (BTUH) :	690
Total Transmission Heat Gain (BTUH) :	354	**TOTAL SUMMER COOLING LOAD (BTUH) :**	**767**

Calculated Room Results - Winter Heat Losses

Transmission Heat Losses (BTUH) :	473	Latent Ventilation Heat Losses (BTUH) :	58
Sensible Ventilation Heat Losses (BTUH) :	325	Hydronic Heat(Linear Ft.) :	1
		TOTAL WINTER HEATING LOAD (BTUH) :	**856**

Calculated Totals for Entire Structure

Size of Structure (Sq. Ft.):	2073	Total Sensible Heat Gain (BTUH):	54351
Total Heat Loss (BTUH):	61058	Total Cooling Gain (BTUH):	60813
Total Hydronic Heat (Linear Ft.):	101.76	Total Cooling Requirement (Tons):	5.07
Total Latent Heat Gain (BTUH):	6463	Total Cooling CFM:	2027

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Heat Load Detail Report for wiser-metzler

Room 8 of 10

Room Specifications: bath

Room Length (Ft.) :	10	Sq. Ft windows facing NE & NW:	--	Watts Incandescent Light:	44
Room Width (Ft.) :	7	Sq. Ft windows facing South:	--	Watts Flourescent Light:	--
Room Height (Ft.) :	9	Sq. Ft windows facing SE & SW:	--	Duct Length from A/H to room:	33
Exposed Wall Length (Ft.) :	7	Number of Exterior Doors:	--	Number of Large Electric Motors:	--
Wall against unconditioned room (Ft.) :	--	Sq. Ft. Exterior Doors:	--	Average Electric Motor Horsepower:	--
Sq. Ft windows facing North:	--	Number of People in Room:	--	BTUH Appliance Sensible Heat:	--
Sq. Ft windows facing E & W:	9			BTUH Appliance Latent Heat:	--

Indoor/Outdoor Design Temperatures (degrees Farenheit)

Summer:		Winter:	
Inside (Thermostat setting) :	74	Inside (Thermostat setting) :	72
Outside (Above ground):	97	Outside (Above ground :	20
Outside (Below ground):	65	Outside (Below ground) :	60
Unconditioned Space :	97	Unconditioned Space :	65
Above Ceiling (Attic/Crawl Space) :	130	Above Ceiling (Attic/Crawl Space) :	45
Concrete Slab (Ground temperature) :	80	Concrete Slab (Ground temperature) :	55
Unconditioned Basement :	60	Unconditioned Basement :	55
Below Floor Crawl Space :	85	Below Floor Crawl Space :	50

Applicable Temperatures: Above Ceiling: Attic or Crawl Space Below Floor: Concrete Slab Exposed Walls: Above Ground

Design Conditions

Occupant Sensible Load (BTUH per person) :	250
Occupant Latent Load (BTUH per person) :	200
Duct Insulation Factor :	1
Duct Temperature Difference (Summer) :	20
Duct Temperature Difference (Winter) :	45
Humidity Difference Inside/Outside % (Summer) :	20
Humidity Difference Inside/Outside %(Winter) :	15
Fresh Air Per Person (CFM) :	2
Air Change Factor (Air change per hour) :	.5
Space Shading Factor :	.4
Air Handler Design Cooling (CFM per ton) :	400
Hydronic Heat (BTUH per linear ft :	600

Insulation Values (U-Factors)

Exposed Walls (Above Ground) :	.080
Exposed Walls (Below Ground) :	.5
Partitions :	.075
Roof/Ceiling :	.055
Floor (Above basement) :	.083
Floor (Concrete slab) :	.001
Floor (Between conditioned spaces) :	.287
Doors :	.500
Windows :	.900

Calculated Room Results - Summer Heat Gains

Wall Heat Gain (BTUH) :	116	Appliance/Elec Motor Latent Heat Gain (BTUH) :	0
Ceiling or Roof Heat Gain (BTUH) :	216	Appliance/Elec Motor Sensible Heat Gain (BTUH) :	150
Floor Heat Gain (BTUH) :	0	Ventilation Latent Heat Gain (BTUH) :	70
Glass Heat Gain (BTUH) :	170	Ventilation Sensible Gain (BTUH) :	131
Exterior Door & North Window Heat Gain (BTUH) :	0	Summer Total Latent Heat Gain:	70
Solar Heat Gain (BTUH) :	774	Summer Total Sensible Heat Gain (BTUH) :	1620
Total Transmission Heat Gain (BTUH) :	1276	**TOTAL SUMMER COOLING LOAD (BTUH) :**	**1691**

Calculated Room Results - Winter Heat Losses

Transmission Heat Losses (BTUH) :	895	Latent Ventilation Heat Losses (BTUH) :	53
Sensible Ventilation Heat Losses (BTUH) :	295	Hydronic Heat(Linear Ft.) :	2
		TOTAL WINTER HEATING LOAD (BTUH) :	**1243**

Calculated Totals for Entire Structure

Size of Structure (Sq. Ft.):	2073	Total Sensible Heat Gain (BTUH):	54351
Total Heat Loss (BTUH):	61058	Total Cooling Gain (BTUH):	60813
Total Hydronic Heat (Linear Ft.):	101.76	Total Cooling Requirement (Tons):	5.07
Total Latent Heat Gain (BTUH):	6463	Total Cooling CFM:	2027

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Heat Load Detail Report for wiser-metzler

Room 9 of 10

Room Specifications: bed1

Room Length (Ft.) :	11	Sq. Ft windows facing NE & NW:	--	Watts Incandescent Light:	44
Room Width (Ft.) :	14	Sq. Ft windows facing South:	--	Watts Flourescent Light:	--
Room Height (Ft.) :	9	Sq. Ft windows facing SE & SW:	--	Duct Length from A/H to room:	33
Exposed Wall Length (Ft.) :	25	Number of Exterior Doors:	--	Number of Large Electric Motors:	--
Wall against unconditioned room (Ft.) :	--	Sq. Ft. Exterior Doors:	--	Average Electric Motor Horsepower:	--
Sq. Ft windows facing North:	15	Number of People in Room:	--	BTUH Appliance Sensible Heat:	--
Sq. Ft windows facing E & W:	15			BTUH Appliance Latent Heat:	--

Indoor/Outdoor Design Temperatures (degrees Farenheit)

Summer:		Winter:	
Inside (Thermostat setting) :	74	Inside (Thermostat setting) :	72
Outside (Above ground):	97	Outside (Above ground :	20
Outside (Below ground):	65	Outside (Below ground) :	60
Unconditioned Space :	97	Unconditioned Space :	65
Above Ceiling (Attic/Crawl Space) :	130	Above Ceiling (Attic/Crawl Space) :	45
Concrete Slab (Ground temperature) :	80	Concrete Slab (Ground temperature) :	55
Unconditioned Basement :	60	Unconditioned Basement :	55
Below Floor Crawl Space :	85	Below Floor Crawl Space :	50

Applicable Temperatures: Above Ceiling: Attic or Crawl Space Below Floor: Concrete Slab Exposed Walls: Above Ground

Design Conditions

Occupant Sensible Load (BTUH per person) :	250
Occupant Latent Load (BTUH per person) :	200
Duct Insulation Factor :	1
Duct Temperature Difference (Summer) :	20
Duct Temperature Difference (Winter) :	45
Humidity Difference Inside/Outside % (Summer) :	20
Humidity Difference Inside/Outside %(Winter) :	15
Fresh Air Per Person (CFM) :	2
Air Change Factor (Air change per hour) :	.5
Space Shading Factor :	.4
Air Handler Design Cooling (CFM per ton) :	400
Hydronic Heat (BTUH per linear ft :	600

Insulation Values (U-Factors)

Exposed Walls (Above Ground) :	.080
Exposed Walls (Below Ground) :	.5
Partitions :	.075
Roof/Ceiling :	.055
Floor (Above basement) :	.083
Floor (Concrete slab) :	.001
Floor (Between conditioned spaces) :	.287
Doors :	.500
Windows :	.900

Calculated Room Results - Summer Heat Gains

Wall Heat Gain (BTUH) :	414	Appliance/Elec Motor Latent Heat Gain (BTUH) :	0
Ceiling or Roof Heat Gain (BTUH) :	474	Appliance/Elec Motor Sensible Heat Gain (BTUH) :	150
Floor Heat Gain (BTUH) :	1	Ventilation Latent Heat Gain (BTUH) :	155
Glass Heat Gain (BTUH) :	283	Ventilation Sensible Gain (BTUH) :	287
Exterior Door & North Window Heat Gain (BTUH) :	145	Summer Total Latent Heat Gain:	155
Solar Heat Gain (BTUH) :	1290	Summer Total Sensible Heat Gain (BTUH) :	3135
Total Transmission Heat Gain (BTUH) :	2607	**TOTAL SUMMER COOLING LOAD (BTUH) :**	**3290**

Calculated Room Results - Winter Heat Losses

Transmission Heat Losses (BTUH) :	2337	Latent Ventilation Heat Losses (BTUH) :	116
Sensible Ventilation Heat Losses (BTUH) :	650	Hydronic Heat(Linear Ft.) :	5
		TOTAL WINTER HEATING LOAD (BTUH) :	**3104**

Calculated Totals for Entire Structure

Size of Structure (Sq. Ft.):	2073	Total Sensible Heat Gain (BTUH):	54351
Total Heat Loss (BTUH):	61058	Total Cooling Gain (BTUH):	60813
Total Hydronic Heat (Linear Ft.):	101.76	Total Cooling Requirement (Tons):	5.07
Total Latent Heat Gain (BTUH):	6463	Total Cooling CFM:	2027

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Heat Load Detail Report for wiser-metzler

Room 10 of 10

Room Specifications: bed3

Room Length (Ft.) :	14	Sq. Ft windows facing NE & NW:	--	Watts Incandescent Light:	44
Room Width (Ft.) :	11	Sq. Ft windows facing South:	--	Watts Flourescent Light:	--
Room Height (Ft.) :	9	Sq. Ft windows facing SE & SW:	--	Duct Length from A/H to room:	33
Exposed Wall Length (Ft.) :	25	Number of Exterior Doors:	1	Number of Large Electric Motors:	--
Wall against unconditioned room (Ft.) :	--	Sq. Ft. Exterior Doors:	28	Average Electric Motor Horsepower:	--
Sq. Ft windows facing North:	--	Number of People in Room:	--	BTUH Appliance Sensible Heat:	--
Sq. Ft windows facing E & W:	15			BTUH Appliance Latent Heat:	--

Indoor/Outdoor Design Temperatures (degrees Farenheit)

Summer:		Winter:	
Inside (Thermostat setting) :	74	Inside (Thermostat setting) :	72
Outside (Above ground):	97	Outside (Above ground :	20
Outside (Below ground):	65	Outside (Below ground) :	60
Unconditioned Space :	97	Unconditioned Space :	65
Above Ceiling (Attic/Crawl Space) :	130	Above Ceiling (Attic/Crawl Space) :	45
Concrete Slab (Ground temperature) :	80	Concrete Slab (Ground temperature) :	55
Unconditioned Basement :	60	Unconditioned Basement :	55
Below Floor Crawl Space :	85	Below Floor Crawl Space :	50

Applicable Temperatures: Above Ceiling: Attic or Crawl Space Below Floor: Concrete Slab Exposed Walls: Above Ground

Design Conditions

Occupant Sensible Load (BTUH per person) :	250
Occupant Latent Load (BTUH per person) :	200
Duct Insulation Factor :	1
Duct Temperature Difference (Summer) :	20
Duct Temperature Difference (Winter) :	45
Humidity Difference Inside/Outside % (Summer) :	20
Humidity Difference Inside/Outside %(Winter) :	15
Fresh Air Per Person (CFM) :	2
Air Change Factor (Air change per hour) :	.5
Space Shading Factor :	.4
Air Handler Design Cooling (CFM per ton) :	400
Hydronic Heat (BTUH per linear ft :	600

Insulation Values (U-Factors)

Exposed Walls (Above Ground) :	.080
Exposed Walls (Below Ground) :	.5
Partitions :	.075
Roof/Ceiling :	.055
Floor (Above basement) :	.083
Floor (Concrete slab) :	.001
Floor (Between conditioned spaces) :	.287
Doors :	.500
Windows :	.900

Calculated Room Results - Summer Heat Gains

Wall Heat Gain (BTUH) :	414	Appliance/Elec Motor Latent Heat Gain (BTUH) :	0
Ceiling or Roof Heat Gain (BTUH) :	474	Appliance/Elec Motor Sensible Heat Gain (BTUH) :	150
Floor Heat Gain (BTUH) :	1	Ventilation Latent Heat Gain (BTUH) :	825
Glass Heat Gain (BTUH) :	283	Ventilation Sensible Gain (BTUH) :	1529
Exterior Door & North Window Heat Gain (BTUH) :	270	Summer Total Latent Heat Gain:	825
Solar Heat Gain (BTUH) :	1290	Summer Total Sensible Heat Gain (BTUH) :	4528
Total Transmission Heat Gain (BTUH) :	2733	**TOTAL SUMMER COOLING LOAD (BTUH) :**	**5353**

Calculated Room Results - Winter Heat Losses

Transmission Heat Losses (BTUH) :	2679	Latent Ventilation Heat Losses (BTUH) :	619
Sensible Ventilation Heat Losses (BTUH) :	3458	Hydronic Heat(Linear Ft.) :	11
		TOTAL WINTER HEATING LOAD (BTUH) :	**6756**

Calculated Totals for Entire Structure

Size of Structure (Sq. Ft.):	2073	Total Sensible Heat Gain (BTUH):	54351
Total Heat Loss (BTUH):	61058	Total Cooling Gain (BTUH):	60813
Total Hydronic Heat (Linear Ft.):	101.76	Total Cooling Requirement (Tons):	5.07
Total Latent Heat Gain (BTUH):	6463	Total Cooling CFM:	2027

Prepared 10/1/2010 using O'Brien Quick Loads Pro - Version 1.01 - SN: QP-070101-42778

Florida Energy Code

Completed with Energy Gauge

By:

Paul's Heating & Air, Inc.

PROJECT

Title:	New Project	Bedrooms:	3	Adress Type:	Street Address
Building Type:	FLAsBuilt	Conditioned Area:	2272	Lot #	
Owner:	mr. mezler	Total Stories:	1	Block/SubDivision:	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:	wiser	Rotate Angle:	0	Street:	
Permit Office:		Cross Ventilation:		County:	columbia
Jurisdiction:		Whole House Fan:		City, State, Zip:	lake city , fl ,
Family Type:	Single-family				
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

√	Design Location	TMY Site	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	223 ft	0	2272 ft²	0.2	0	0.8

ROOF

√	#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	Tested	Deck Insul.	Pitch
_____	1	Hip	Composition shingles	2461 ft²	0 ft²	Medium	0.96	No	0	22.6 deg

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	300	2272 ft²	N	N

CEILING

√	#	Ceiling Type	R-Value	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	30	2272 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	13	1083 ft²		0.23	0.75

DOORS

√	#	Ornt	Door Type	Storms	U-Value	Area
_____	1	N	Wood	None	0.460000	28 ft²
_____	2	N	Wood	None	0.460000	28 ft²
_____	3	N	Wood	None	0.460000	28 ft²

WINDOWS

Orientation shown is the entered, asBuilt orientation.

√	#	Ornt	Frame	Panes	NFRC	U-Factor	SHGC	Storms	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
____	1	N	Metal	Double (Tinted)	Yes	0.55	0.6	N	36 ft²	2 ft 0 in	0 ft 0 in	HERS 2006	None
____	2	N	Metal	Double (Tinted)	Yes	0.55	0.6	N	255 ft²	2 ft 0 in	0 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	2145	7.08	117.8	221.5	0 cfm	0 cfm	0	0

COOLING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Ducts
____	1	Central Unit	Split	SEER: 13	58 kBtu/hr	1740 cfm	0.75	sys#1

HEATING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Ducts
____	1	Electric Heat Pump	None	HSPF: 8.5	57.9 kBtu/hr	sys#1

HOT WATER SYSTEM

√	#	System Type	EF	Cap	Use	SetPnt	Conservation
____	1	Electric	0.92	40 gal	60 gal	120 deg	None

SOLAR HOT WATER SYSTEM

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

DUCTS

√	#	---- Supply ---- Location	R-Value	Area	---- Return ---- Location	Area	Leakage Type	Air Handler	CFM 25	Percent Leakage	QN	RLF
____	1	Attic	6	454.4 ft	Interior	0 ft²	Default Leakage	Interior	(Default)	(Default) %		

FORM 1100A-08

Code Compliance Checklist

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	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	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	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	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	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 N1112.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.	

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

Schedule Type		Hours 1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	80	80	80	80
	PM	80	80	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	66	66	66	66	66	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	66	66
Heating (WEH)	AM	66	66	66	66	66	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	66	66

Building Input Summary Report

APPLIANCES & LIGHTING

Appliance Schedule: HERS 2006 Reference Schedule Type		Hours 1	2	3	4	5	6	7	8	9	10	11	12
Ceiling Fans (Summer)	AM	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.33	0.33	0.33	0.33	0.33
% Released: 100	PM	0.33	0.33	0.33	0.33	0.33	1	0.9	0.9	0.9	0.9	0.9	0.65
Annual Use: 652 kWh/Yr				Peak Value: 128 Watts									
Clothes Washer	AM	0.105	0.081	0.047	0.047	0.081	0.128	0.256	0.57	0.849	1	0.977	0.872
% Released: 60	PM	0.779	0.698	0.605	0.57	0.581	0.57	0.57	0.57	0.57	0.488	0.43	0.198
Annual Use: 105 kWh/Yr				Peak Value: 25 Watts									
Dishwasher	AM	0.139	0.05	0.028	0.024	0.029	0.09	0.169	0.303	0.541	0.594	0.502	0.443
% Released: 60	PM	0.377	0.396	0.335	0.323	0.344	0.448	0.791	1	0.8	0.597	0.383	0.281
Annual Use: 171 kWh/Yr				Peak Value: 52 Watts									
Dryer	AM	0.2	0.1	0.05	0.05	0.05	0.075	0.2	0.375	0.5	0.8	0.95	1
% Released: 10	PM	0.875	0.85	0.8	0.625	0.625	0.6	0.575	0.55	0.625	0.7	0.65	0.375
Annual Use: 0 kWh/Yr				Peak Value: 0 Watts									
Lighting	AM	0.16	0.15	0.16	0.18	0.23	0.45	0.4	0.26	0.19	0.16	0.12	0.11
% Released: 90	PM	0.16	0.17	0.25	0.27	0.34	0.55	0.55	0.88	1	0.86	0.51	0.28
Annual Use: 2273 kWh/Yr				Peak Value: 742 Watts									
Miscellaneous	AM	0.48	0.47	0.47	0.47	0.47	0.47	0.64	0.71	0.67	0.61	0.55	0.53
% Released: 90	PM	0.52	0.5	0.5	0.5	0.59	0.73	0.79	0.99	1	0.96	0.77	0.55
Annual Use: 3795 kWh/Yr				Peak Value: 696 Watts									
Pool Pump	AM	0	0	0	0	0	0	0	0	0	1	1	1
% Released: 0	PM	1	1	1	1	0	0	0	0	0	0	0	0
Annual Use: 0 kWh/Yr				Peak Value: 0 Watts									
Range	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.4
% Released: 100	PM	0.457	0.343	0.286	0.4	0.571	1	0.857	0.429	0.286	0.229	0.171	0.114
Annual Use: 0 kWh/Yr				Peak Value: 0 Watts									
Refrigeration	AM	0.85	0.78	0.75	0.73	0.73	0.73	0.75	0.75	0.8	0.8	0.8	0.8
% Released: 100	PM	0.88	0.85	0.85	0.83	0.88	0.95	1	0.98	0.95	0.93	0.9	0.85
Annual Use: 1550 kWh/Yr				Peak Value: 211 Watts									
Well Pump	AM	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.1	0.1	0.1	0.1
% Released: 0	PM	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Annual Use: 0 kWh/Yr				Peak Value: 0 Watts									

Building Input Summary Report

SOLAR HOT WATER

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

DUCTS

#	Location	---- Supply ---- R-Value	Area	Location	---- Return ---- Area	Number	Leakage Type	Air Handler	CFM 25	Percent Leakage	QN	RLF
1	Attic	6	454.4 ft²	Interior	0 ft²	(invalid)	Default Leakage	Interior	(Default)	(Default)		

TEMPERATURES

Programable Thermostat: Y Ceiling Fans: Y

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

Thermostat Schedule: HERS 2006 Reference

Schedule Type		Hours 1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	80.5	80.5	80.5	80.5
	PM	80.5	80.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5
Cooling (WEH)	AM	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5
	PM	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5
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

Building Input Summary Report

PROJECT

Title:	New Project	Bedrooms:	3	Adress Type:	Street Address
Building Type:	User	Bathrooms:	2	Lot #	
Owner:	mr. mezler	Conditioned Area:	2272	Block/SubDivision:	
# of Units:	1	Total Stories:	1	PlatBook:	
Builder Name:	wiser	Worst Case:	No	Street:	
Permit Office:		Rotate Angle:	0	County:	columbia
Jurisdiction:		Cross Ventilation:		City, State, Zip:	lake city ,
Family Type:	Single-family	Whole House Fan:			fl ,
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

Design Location	Tmy Site	Design Temp 97.5 %	Design Temp 2.5 %	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily Temp Range
FL, Gainesville	FL_GAINESVILLE_REGIONAL_AP	32	92	70	75	1305.5	51	Medium

UTILITY RATES

Fuel	Unit	Utility Name	Monthly Fixed Cost	$/Unit
Electricity	kWh	EnergyGauge Default	0	0.1126
Natural Gas	Therm	EnergyGauge Default	0	1.72
Fuel Oil	Gallon	EnergyGauge Default	0	1.1
Propane	Gallon	EnergyGauge Default	0	1.4

SURROUNDINGS

Ornt	Type	Shade Trees Height	Shade Trees Width	Shade Trees Distance	Exist	Adjacent Buildings Height	Adjacent Buildings Width	Adjacent Buildings Distance
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft
NE	Light Shade Tree	12 ft	40 ft	30 ft		0 ft	0 ft	0 ft
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft
W	Light Shade Tree	12 ft	40 ft	30 ft		0 ft	0 ft	0 ft
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft

FLOORS

#	Floor Type	Perimeter	R-Value	Area	Tile	Wood	Carpet
1	Slab-On-Grade Edge Insulatio	223 ft	0	2272 ft²	0.2	0	0.8

ROOF

#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	Tested	Deck Insul.	Pitch
1	Hip	Composition shingles	2461 ft²	0 ft²	Medium	0.96	No	0	22.6 deg

ATTIC

#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
1	Full attic	Vented	300	2272 ft²	N	N

Building Input Summary Report

CEILING

#	Ceiling Type	R-Value	Area	Framing Fraction	Truss Type
1	Under Attic (Vented)	30	2272 ft²	0.11	Wood

WALLS

Wall orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.

#	Ornt	Adjacent To	Wall Type	Cavity R-Value	Width Ft	Width In	Height Ft	Height In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.
1	N	Exterior	Frame - Wood	13	120	4	9		1083 ft²		0.23	0.75

DOORS

#	Ornt	Door Type	Storms	U-Value	Width Ft	Width In	Height Ft	Height In	Area
1	N	Wood	None	0.46	4		7		28 ft²
2	N	Wood	None	0.46	4		7		28 ft²
3	N	Wood	None	0.46	4		7		28 ft²

WINDOWS

#	Ornt	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	Overhang Depth	Overhang Separation	Interior Shade	Screening
1	N	Metal	Double (Tinted)	Yes	0.55	0.6	N	36 ft²	2 ft 0 in	0 ft 0 in	Drapes/blinds	None
2	N	Metal	Double (Tinted)	Yes	0.55	0.6	N	255 ft²	2 ft 0 in	0 ft 0 in	Drapes/blinds	None

INFILTRATION & VENTING

Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50	---- Forced Ventilation ---- Supply	Exhaust	Run Time	Terrain/Wind Shielding
Best Guess	0.00050	2980	163.6	307.6	0.385	9.84	0	0	0	Suburban / Suburban

MASS

Mass Type	Area	Thickness	Furniture Fraction
No Added Mass	0 ft²	0 ft	0.3

COOLING SYSTEM

#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Ductless
1	Central Unit	Split	SEER: 13	58 kBtu/hr	1740 cfm	0.75	False

HEATING SYSTEM

#	System Type	Subtype	Efficiency	Capacity	Ductless
1	Electric Heat Pump	None	HSPF: 8.5	57.9 kBtu/hr	False

HOT WATER SYSTEM

#	System Type	EF	Cap	Use	SetPnt	Credits
1	Electric	0.92	40 gal	60 gal	120 deg	None