

DATE 12/17/2018

Columbia County Building Permit  
This Permit Must Be Prominently Posted on Premises During Construction

PERMIT  
000037548

APPLICANT WILLIAM KIMBLE PHONE 561-667-3371  
ADDRESS 16789 E PREAKNESS DR LOXAHATCHEE FL 33470  
OWNER WILLIAM & PATRICIA KIMBLE PHONE 561-667-3371  
ADDRESS 319 SW CHIPPEWA GLN FORT WHITE FL 32038  
CONTRACTOR WILLIAM KIMBLE PHONE 561-667-3371  
LOCATION OF PROPERTY 47 S. L HERLONG, L APPALACHEE TR, R CHIPPEWA GLN  
TO END ON LEFT  
TYPE DEVELOPMENT SFD, UTILITY ESTIMATED COST OF CONSTRUCTION 45200.00  
HEATED FLOOR AREA 760.00 TOTAL AREA 904.00 HEIGHT STORIES 1  
FOUNDATION CONCRETE WALLS FRAMED ROOF PITCH 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 03-6S-16-03766-124 SUBDIVISION APPALACHIE TRACE  
LOT 24 BLOCK PHASE UNIT TOTAL ACRES 10.37

OWNER  
Culvert Permit No. Culvert Waiver Contractor's License Number Applicant/Owner/Contractor  
EXISTING 18-0887 LN TC N  
Driveway Connection Septic Tank Number LU & Zoning checked by Approved for Issuance New Resident Time/STUP No.

COMMENTS: FLOOR ONE FOOT ABOVE THE ROAD, OWNER DISCLOSURE STAEMENT REC'D

Check # or Cash 635

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power Foundation Monolithic  
date/app. by date/app. by date/app. by  
Under slab rough-in plumbing Slab Sheathing/Nailing  
date/app. by date/app. by date/app. by  
Framing Insulation  
date/app. by date/app. by  
Rough-in plumbing above slab and below wood floor Electrical rough-in  
date/app. by date/app. by  
Heat & Air Duct Peri. beam (Lintel) Pool  
date/app. by date/app. by date/app. by  
Permanent power C.O. Final Culvert  
date/app. by date/app. by date/app. by  
Pump pole Utility Pole M/H tie downs, blocking, electricity and plumbing  
date/app. by date/app. by date/app. by  
Reconnection RV Re-roof  
date/app. by date/app. by date/app. by

BUILDING PERMIT FEE \$ 230.00 CERTIFICATION FEE \$ 4.52 SURCHARGE FEE \$ 4.52  
MISC. FEES \$ 0.00 ZONING CERT. FEE \$ 50.00 FIRE FEE \$ 0.00 WASTE FEE \$  
PLAN REVIEW FEE \$ 58.00 DP & FLOOD ZONE FEE \$ 25.00 CULVERT FEE \$ TOTAL FEE 372.04

INSPECTORS OFFICE CLERKS OFFICE

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.  
NOTICE: ALL OTHER APPLICABLE STATE OR FEDERAL PERMITS SHALL BE OBTAINED BEFORE COMMENCEMENT OF THIS  
PERMITTED DEVELOPMENT.

"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.

clt# 635 (Monday) \$372.04

Columbia County New Building Permit Application

**For Office Use Only** Application # 1811-77 Date Received 11-27-18 By LA Permit # 37548  
Zoning Official LN Date 12-5-18 Flood Zone X Land Use A Zoning A3  
FEMA Map # \_\_\_\_\_ Elevation \_\_\_\_\_ MFE 1' above road River \_\_\_\_\_ Plans Examiner T.C. Date 12-5-18  
Comments \_\_\_\_\_  
☒ NOC ☒ EH ☒ Deed or PA ☒ Site Plan ☐ State Road Info ☒ Well letter ☒ 911 Sheet ☐ Parent Parcel # \_\_\_\_\_  
☐ Dev Permit # \_\_\_\_\_ ☐ In Floodway ☐ Letter of Auth. from Contractor ☐ F W Comp. letter  
☒ Owner Builder Disclosure Statement ☐ Land Owner Affidavit ☐ Ellisville Water ☒ App Fee Paid ☒ Sub VF Form

Septic Permit No. 18-0887 OR City Water ☐ Fax \_\_\_\_\_

Applicant (Who will sign/pickup the permit) William - Kimble Phone 561 667 3371

Address \_\_\_\_\_

Owners Name William & Patricia Kimble Phone 561 667-3371

911 Address 319 SW Chippewa Gln. Fort White fl 32038

Contractors Name Owner Builder Phone \_\_\_\_\_

Address \_\_\_\_\_

Contractor Email WKimble54 at G-Mail, com \*\*\*Include to get updates on this job.

Fee Simple Owner Name & Address \_\_\_\_\_

Bonding Co. Name & Address \_\_\_\_\_

Architect/Engineer Name & Address \_\_\_\_\_

Mortgage Lenders Name & Address \_\_\_\_\_

Circle the correct power company ☐ FL Power & Light ☒ Clay Elec. ☐ Suwannee Valley Elec. ☐ Duke Energy

Property ID Number 03766-124 Estimated Construction Cost 50,000.00

Subdivision Name Appalachian Trace Lot 24 Block \_\_\_\_\_ Unit \_\_\_\_\_ Phase \_\_\_\_\_

Driving Directions from a Major Road SR 47 To SW Hardens St E To Appalachian Trace N To SW Chippewa Gln. To End of Rd.

Construction of Single Family House Commercial OR ☒ Residential

Proposed Use/Occupancy ☒ Number of Existing Dwellings on Property 0

Is the Building Fire Sprinkled? No If Yes, blueprints included \_\_\_\_\_ Or Explain \_\_\_\_\_

Circle Proposed ☐ Culvert Permit or ☐ Culvert Waiver or ☐ D.O.T. Permit or ☒ Have an Existing Drive

Actual Distance of Structure from Property Lines - Front 317 Side 246 Side 292 Rear 437

Number of Stories 1 Heated Floor Area 760 Total Floor Area 904 Acreage 10.37

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

LA - Left Message 12-7-18  
LA - Spoke to Mr. Kimble 12-7-18

**Columbia County Building Permit Application**

**CODE: Florida Building Code 2017 and the 2014 National Electrical Code.**

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

**TIME LIMITATIONS OF APPLICATION:** An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless pursued in good faith or a permit has been issued.

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

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

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

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

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

**NOTICE TO OWNER:** There are some properties that may have deed restrictions recorded upon them. These restrictions may limit or prohibit the work applied for in your building permit. You must verify if your property is encumbered by any restrictions or face possible litigation and or fines.

William Kinble  
Print Owners Name

William Kinble  
Owners Signature

**\*\*Property owners must sign here before any permit will be issued.**

**\*\*If this is an Owner Builder Permit Application then, ONLY the owner can sign the building permit when it is issued.**

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

Owner Builder  
Contractor's Signature

Contractor's License Number \_\_\_\_\_

Columbia County

Competency Card Number \_\_\_\_\_

Affirmed under penalty of perjury to by the Contractor and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_.

Personally known ☒ or Produced Identification \_\_\_\_\_

SEAL:

State of Florida Notary Signature (For the Contractor)

# NOTICE OF COMMENCEMENT

Tax Parcel Identification Number:

03766-124

Clerk's Office Stamp

Inst: 201812025981 Date: 12/17/2018 Time: 2:29PM  
Page 1 of 1 B: 1374 P: 1420, P. DeWitt Cason, Clerk of Court  
Columbia, County, By: KV  
Deputy Clerk

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): Appalachian Trace lot 24  
a) Street (job) Address: 319 SW Chippewa Glen Fort White FL 32039
2. General description of improvements: Build Single Family House
3. Owner Information or Lessee information if the Lessee contracted for the improvements:  
a) Name and address: William + Patricia Kimble  
b) Name and address of fee simple titleholder (if other than owner) \_\_\_\_\_  
c) Interest in property \_\_\_\_\_
4. Contractor Information  
a) Name and address: OWNER BUILDER  
b) Telephone No.: \_\_\_\_\_
5. Surety Information (if applicable, a copy of the payment bond is attached):  
a) Name and address: None  
b) Amount of Bond: \_\_\_\_\_  
c) Telephone No.: \_\_\_\_\_
6. Lender  
a) Name and address: None  
b) Phone No. \_\_\_\_\_
7. Person within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13(1)(a)7., Florida Statutes:  
a) Name and address: \_\_\_\_\_  
b) Telephone No.: \_\_\_\_\_
8. In addition to himself or herself, Owner designates the following person to receive a copy of the Lienor's Notice as provided in Section 713.13(1)(b), Florida Statutes:  
a) Name: None OF \_\_\_\_\_  
b) Telephone No.: \_\_\_\_\_
9. Expiration date of Notice of Commencement (the expiration date will be 1 year from the date of recording unless a different date is specified): \_\_\_\_\_

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

STATE OF FLORIDA  
COUNTY OF COLUMBIA

10. William Kimble  
Signature of Owner or Lessee, or Owner's or Lessee's Authorized Office/Director/Partner/Manager  
William Kimble  
Printed Name and Signatory's Title/Office

The foregoing instrument was acknowledged before me, a Florida Notary, this 27 day of November, 2018, by:

William Kimble as Owner for self  
(Name of Person) (Type of Authority) (name of party on behalf of whom instrument was executed)

Personally Known \_\_\_\_\_ OR Produced Identification ☒ Type ADL

Notary Signature [Signature]

Notary Stamp or Seal





## **COLUMBIA COUNTY BUILDING DEPARTMENT**

135 NE Hernando Ave., Suite B-21

Lake City, FL 32055

Office: 386-758-1008 Fax: 386-758-2160

### **OWNER BUILDER DISCLOSURE STATEMENT**

I understand that state law requires construction to be done by a licensed contractor and have applied for an owner-builder permit under an exemption from the law. The exemption specifies that I, as the owner of the property listed, may act as my own contractor with certain restrictions even though I do not have a license.

I understand that building permits are not required to be signed by a property owner unless he or she is responsible for the construction and is not hiring a licensed contractor to assume responsibility.

I understand that, as an owner-builder, I am the responsible party of record on a permit. I understand that I may protect myself from potential financial risk by hiring a licensed contractor and having the permit filed in his or her name instead of my own name. I also understand that a contractor is required by law to be licensed and bonded in Florida and to list his or her license numbers on permits and contracts.

I understand that I may build or improve a one-family or two-family residence or farm outbuilding. I may also build or improve a commercial building if the costs do not exceed \$75,000. The building or residence must be for my own use or occupancy. It may not be built or substantially improved for sale or lease. If a building or residence that I have built or substantially improved myself is sold or leased within 1 year after the construction is complete, the law will presume that I built or substantially improved it for sale or lease, which violates the exemption.

I understand that, as the owner-builder, I must provide direct, onsite supervision of the construction.

I understand that I may not hire an unlicensed person to act as my contractor or to supervise persons working on my building or residence. It is my responsibility to ensure that the persons whom I employ have the licenses required by law and by county or municipal ordinance.

I understand that it is frequent practice of unlicensed persons to have the property owner obtain an owner-builder permit that erroneously implies that the property owner is providing his or her own labor and materials. I, as an owner-builder, may be held liable and subjected to serious financial risk for any injuries sustained by an unlicensed person or his or her employees while working on my property. My homeowner's insurance may not provide coverage for those injuries. I am willfully acting as an owner-builder and am aware of the limits of my insurance coverage for injuries to workers on my property.

I understand that I may not delegate the responsibility for supervising work to a licensed contractor who is not licensed to perform the work being done. Any person working on my building who is not licensed must work under my direct supervision and must be employed by me, which means that I must comply with laws requiring the withholding of federal income tax and social security contributions under the Federal Insurance Contributions Act (FICA) and must provide workers' compensation for the employee. I understand that my failure to follow these laws may subject me to serious financial risk.

I agree that, as the party legally and financially responsible for this proposed construction activity, I will abide by all applicable laws and requirements that govern owner-builders as well as employers. I also understand that the construction must comply with all applicable laws, ordinances, building codes, and zoning regulations.

I understand that I may obtain more information regarding my obligations as an employer from the Internal Revenue Service, the United States Small Business Administration, the Florida Department of Financial Services, and the Florida Department of Revenue. I also understand that I may contact the Florida Construction Industry Licensing Board at 850-487-1395 or Internet website address <http://www.myfloridalicense.com/dbpr/> for more information about licensed contractors.

I am aware of, and consent to, an owner-builder building permit applied for in my name and understand that I am the party legally and financially responsible for the proposed construction activity at the following address:

319 SW Chipewee Glen Fort White FL 32038

I agree to notify Columbia County Building Department immediately of any additions, deletions, or changes to any of the information that I have provided on this disclosure. Licensed contractors are regulated by laws designed to protect the public. If you contract with a person who does not have a license, the Construction Industry Licensing Board and Department of Business and Professional Regulation may be unable to assist you with any financial loss that you sustain as a result of a complaint. Your only remedy against an unlicensed contractor may be in civil court. It is also important for you to understand that, if an unlicensed contractor or employee of an individual or firm is injured while working on your property, you may be held liable for damages. If you obtain an owner-builder permit and wish to hire a licensed contractor, you will be responsible for verifying whether the contractor is properly licensed and the status of the contractor's workers' compensation coverage.

I understand that if I hire subcontractors they must be licensed for that type of work in Columbia County, ex: framing, stucco, masonry, and state registered builders. Registered Contractors must have a minimum of \$300,000.00 in General Liability insurance coverage and the proper workers' compensation. Specialty Contractors must have a minimum of \$100,000.00 in General Liability insurance coverage and the proper workers' compensation coverage.

Before a building permit can be issued, this disclosure statement must be completed and signed by the property owner and returned to Columbia County Building Department.

#### TYPE OF CONSTRUCTION

- ☒ Single Family Dwelling      ( ) Two-Family Residence      ( ) Farm Outbuilding  
( ) Addition, Alteration, Modification or other Improvement  
( ) Commercial, Cost of Construction \_\_\_\_\_ for construction of \_\_\_\_\_  
( ) Other \_\_\_\_\_

I William Kimble, have been advised of the above disclosure statement for exemption from contractor licensing as an owner/builder. I agree to comply with all requirements provided for in Florida Statutes allowing this exception for the construction permitted by Columbia County Building Permit.

[Signature] Date 11-27-18  
Owner Builder Signature

#### NOTARY OF OWNER BUILDER SIGNATURE

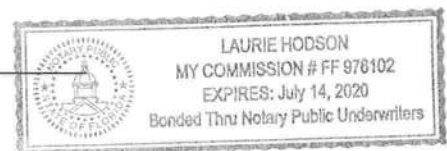
The above signer is personally known to me or produced identification FLDL

Notary Signature [Signature] Date 11-27-18 (Seal)

#### FOR BUILDING DEPARTMENT USE ONLY

I hereby certify that the above listed owner builder has been given notice of the restriction stated above.

Building Official/Representative [Signature]



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



**BOARD OF COUNTY COMMISSIONERS • COLUMBIA COUNTY**

**Address Assignment and Maintenance Document**

To maintain the county wide Addressing Policy you must make application for a 9-1-1 Address at the time you apply for a building permit. The established standards for addressing and posting numbers to all principal buildings, dwellings, businesses and industries are contained in Columbia County Ordinance 2001-9. The addressing system is to enable Emergency Services Agencies to locate you in an emergency, and to assist the United States Postal Service and the public in the timely and efficient provision of services to residents and businesses of Columbia County

Date/Time Issued: **11/2/2018 10:20:13 AM**  
Address: **319 SW CHIPPEWA Gln**  
City: **FORT WHITE**  
State: **FL**  
Zip Code **32038**

Parcel ID **03766-124**

REMARKS: Address Verification.

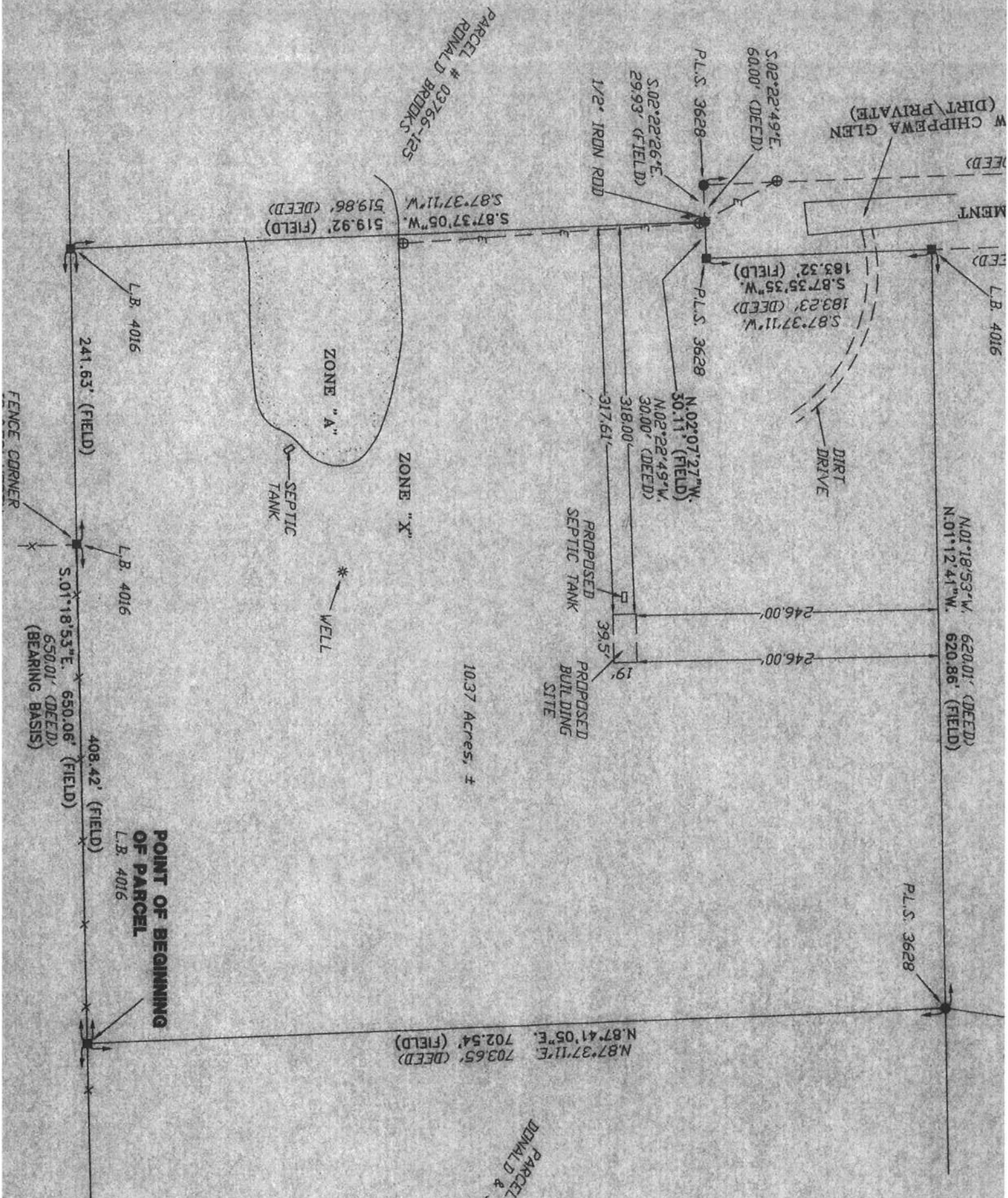
**NOTICE: THIS ADDRESS WAS ISSUED BASED ON LOCATION AND ACCESS INFORMATION RECEIVED FROM THE REQUESTER. SHOULD, AT A LATER DATE, THE LOCATION AND/OR ACCESS INFORMATION BE FOUND TO BE IN ERROR OR CHANGED, THIS ADDRESS IS SUBJECT TO CHANGE.**

Address Issued By: **Signed:/ Matt Crews**

Columbia County GIS/911 Addressing Coordinator

**COLUMBIA COUNTY  
911 ADDRESSING / GIS DEPARTMENT**

263 NW Lake City Ave., Lake City, FL 32055 Telephone: (386) 758-1125  
Email: [gis@columbiacountyfla.com](mailto:gis@columbiacountyfla.com)



Sales Price: \$37,000.00  
Doc Stamps: \$259.00

**This Instrument Prepared by & return to:**

Name: **Trish Lang, an employee of  
NORTH CENTRAL FLORIDA TITLE,  
LLC**  
Address: **343 NW COLE TER  
LAKE CITY, FL. 32055  
File No. 15Y-12039TL**

Inst: 201612000803 Date: 1/15/2016 Time: 4:07 PM  
Doc Stamp-Deed: 259.00

DC, P. DeWitt Cason, Columbia County Page 1 of 2 B:1307 P:2328

Parcel I.D. #: **R03766-124**

SPACE ABOVE THIS LINE FOR PROCESSING DATA

SPACE ABOVE THIS LINE FOR RECORDING DATA

**THIS WARRANTY DEED** Made the **15<sup>th</sup>** day of **January**, A.D. 2016, by **NICHOLAS CRAVERO** and **TERRY E. CRAVERO, HIS WIFE**, hereinafter called the grantors, to **WILLIAM E. KIMBLE** and **PATRICIA S. KIMBLE, HIS WIFE**, whose post office address is **16789 E. PREAKNESS DRIVE, LOXAHATCHEE, FL 33470**, hereinafter called the grantees:

(Wherever used herein the terms "grantors" and "grantees" include all the parties to this instrument, singular and plural, the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations, wherever the context so admits or requires.)

**Witnesseth:** That the grantors, for and in consideration of the sum of \$10.00 and other valuable consideration, receipt whereof is hereby acknowledged, do hereby grant, bargain, sell, alien, remise, release, convey and confirm unto the grantees all that certain land situate in **COLUMBIA County, State of Florida**, viz:

**Lot 24, APALACHEE TRACE,**

Commence at the Northeast corner of the Southeast 1/4 of Section 3, Township 6 South, Range 16 East, Columbia County, Florida and run South 01 Degrees 18'53" East along the East line of said Section 3, a distance of 447.28 feet to the point of beginning; thence Continue South 01 Degrees 18'53" East still along the East line of said Section 3 a distance of 650.01 feet; thence South 87 Degrees 37'11" West 519.86 feet to a point on the Easterly end of a private road; thence North 02 Degrees 22'49" West along said Easterly end 30.00 feet to a point on the Northerly line of said private road; thence South 87 Degrees 37'11" West along said Northerly line 183.23 feet; thence North 01 Degrees 18'53" West 620.01 feet; thence North 87 Degrees 37'11" East 703.65 feet to the point of beginning.

Subject to an Easement for Utilities in the Southwest corner thereof being 15 foot in width and being adjacent to and North and East of the Northerly line and the Easterly end of a private road.

Together with an Easement for Ingress and Egress over and across the following described lands:

Begin at the Southeast corner of Section 3, Township 6 South, Range 16 East, Columbia County, Florida and run South 87 Degrees 37'11" West along the South line of said Section 3 a distance of 1738.09 feet to the Point of beginning. Thence continue South 87 Degrees 37'11" West still along said South line 60.01 feet; thence North 01 Degrees 18'41" West 1538.67 feet; thence North 16 Degrees 59'28" West 584.29 feet; thence North 13 Degrees 09'18" East 550.69 feet to a point on the South line of the Northeast 1/4 of said Section 3; thence continue North 13 Degrees 09'18" East 876.90 feet; thence North 20 Degrees 17'38" East 723.23 feet; thence North 77 Degrees 08'31" West 847.33 feet; thence North 12 Degrees 51'29" East 60.00 feet; thence South 77 Degrees 08'31" East 855.16 feet; thence North 20 Degrees 17'38" East 403.70 feet; thence North 01 Degrees 18'53" West 233.58 feet; thence North 88 Degrees 41'07" East 60.00 feet; thence South 01 Degrees 18'53" East 245.03 feet; thence South 20 Degrees 17'38" West 1195.15 feet; thence South 13 Degrees 09'18" West 101.23 feet; thence South 78 Degrees 07'14" East 1153.18 feet; thence South 65 Degrees 42'05" East 67.64 feet; thence South 24 Degrees 17'55" West 60.00 feet; thence North 65 Degrees 42'05" West 61.11 feet; thence North 78 Degrees 07'14" West 1147.98 feet; thence South 13 degrees 09'18" West 695.30 feet to a point on the North line of the Southeast 1/4 of said Section 3, thence continue South 13 Degrees 09'18" West 551.14 feet; thence South 16 Degrees 59'28" East 556.03 feet; thence North 87 Degrees 37'11" East 1223.08 feet; thence South 02 Degrees 22'49" East 60.00; thence South 87 Degrees 37'11" West 1218.70 feet; thence South 01 Degrees 18'41" East 1505.52 feet to the Point of Beginning.

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

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

And the grantors hereby covenant with said grantees that they are lawfully seized of said land in fee simple; that they have good right and lawful authority to sell and convey said land, and hereby fully warrant the title to said land and will defend the same against the lawful claims of all persons whomsoever, and that said land is free of all encumbrances, except taxes accruing subsequent to December 31, 2016.

# SUBCONTRACTOR VERIFICATION

APPLICATION/PERMIT # 1811-77 JOB NAME Kimble

THIS FORM MUST BE SUBMITTED BEFORE A PERMIT WILL BE ISSUED

Columbia County issues combination permits. 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 general contractors permit.

**NOTE:** It shall be the responsibility of the general contractor to make sure that all of the subcontractors are licensed with the Columbia County Building Department.

Use website to confirm licenses: <http://www.columbiacountyfla.com/PermitSearch/ContractorSearch.aspx>

**NOTE:** If this should change prior to completion of the project, it is your responsibility to have a corrected form submitted to our office, before that work has begun.

Violations will result in stop work orders and/or fines.

<b>ELECTRICAL</b> <input type="checkbox"/>	Print Name _____ Signature _____ Company Name: _____ CC# _____ License #: _____ Phone #: _____	<u>Need</u> <input type="checkbox"/> Lic <input type="checkbox"/> Liab <input type="checkbox"/> W/C <input type="checkbox"/> EX <input type="checkbox"/> DE
<b>MECHANICAL/A/C</b> <input type="checkbox"/>	Print Name _____ Signature _____ Company Name: _____ CC# _____ License #: _____ Phone #: _____	<u>Need</u> <input type="checkbox"/> Lic <input type="checkbox"/> Liab <input type="checkbox"/> W/C <input type="checkbox"/> EX <input type="checkbox"/> DE
<b>PLUMBING/GAS</b> <input type="checkbox"/>	Print Name _____ Signature _____ Company Name: _____ CC# _____ License #: _____ Phone #: _____	<u>Need</u> <input type="checkbox"/> Lic <input type="checkbox"/> Liab <input type="checkbox"/> W/C <input type="checkbox"/> EX <input type="checkbox"/> DE
<b>ROOFING</b> <input type="checkbox"/>	Print Name _____ Signature _____ Company Name: _____ CC# _____ License #: _____ Phone #: _____	<u>Need</u> <input type="checkbox"/> Lic <input type="checkbox"/> Liab <input type="checkbox"/> W/C <input type="checkbox"/> EX <input type="checkbox"/> DE
<b>SHEET METAL</b> <input type="checkbox"/>	Print Name _____ Signature _____ Company Name: _____ CC# _____ License #: _____ Phone #: _____	<u>Need</u> <input type="checkbox"/> Lic <input type="checkbox"/> Liab <input type="checkbox"/> W/C <input type="checkbox"/> EX <input type="checkbox"/> DE
<b>FIRE SYSTEM/SPRINKLER</b> <input type="checkbox"/>	Print Name _____ Signature _____ Company Name: _____ CC# _____ License #: _____ Phone #: _____	<u>Need</u> <input type="checkbox"/> Lic <input type="checkbox"/> Liab <input type="checkbox"/> W/C <input type="checkbox"/> EX <input type="checkbox"/> DE
<b>SOLAR</b> <input type="checkbox"/>	Print Name _____ Signature _____ Company Name: _____ CC# _____ License #: _____ Phone #: _____	<u>Need</u> <input type="checkbox"/> Lic <input type="checkbox"/> Liab <input type="checkbox"/> W/C <input type="checkbox"/> EX <input type="checkbox"/> DE
<b>STATE SPECIALTY</b> <input type="checkbox"/>	Print Name _____ Signature _____ Company Name: _____ CC# _____ License #: _____ Phone #: _____	<u>Need</u> <input type="checkbox"/> Lic <input type="checkbox"/> Liab <input type="checkbox"/> W/C <input type="checkbox"/> EX <input type="checkbox"/> DE



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

PERMIT NO. 18-0887  
DATE PAID: 3115718  
FEE PAID: 310.80  
RECEIPT #: 371887

APPLICATION FOR:

☒ New System ☐ Existing System ☐ Holding Tank ☐ Innovative  
☐ Repair ☐ Abandonment ☐ Temporary ☐

APPLICANT: William Kimble

AGENT: ROCKY FORD, A & B CONSTRUCTION

TELEPHONE: 386-497-2311

MAILING ADDRESS: 546 SW Dortch Street, FT. WHITE, FL, 32038

TO BE COMPLETED BY APPLICANT OR APPLICANT'S AUTHORIZED AGENT. SYSTEMS MUST BE CONSTRUCTED BY A PERSON LICENSED PURSUANT TO 489.105(3)(m) OR 489.552, FLORIDA STATUTES. IT IS THE APPLICANT'S RESPONSIBILITY TO PROVIDE DOCUMENTATION OF THE DATE THE LOT WAS CREATED OR PLATTED (MM/DD/YY) IF REQUESTING CONSIDERATION OF STATUTORY GRANDFATHER PROVISIONS.

PROPERTY INFORMATION

LOT: 24 BLOCK: NA SUB: Appalachie Trace PLATTED: Umm

PROPERTY ID #: 03-6S-16-03766-124 ZONING: \_\_\_\_\_ I/M OR EQUIVALENT: ☒ Y ☐ N

PROPERTY SIZE: 10.37 ACRES WATER SUPPLY: ☒ PRIVATE PUBLIC ☐ <=2000GPD ☐ >2000GPD

IS SEWER AVAILABLE AS PER 381.0065, FS? ☒ Y ☐ N DISTANCE TO SEWER: \_\_\_\_\_ FT

PROPERTY ADDRESS: 319 Chippewa Gln Fort White FL

DIRECTIONS TO PROPERTY: 47 S TL on Herlon TL on Applecher M  
TR on Chippewa Gln to last lot on L

BUILDING INFORMATION

☒ RESIDENTIAL ☐ COMMERCIAL

Unit No	Type of Establishment	No. of Bedrooms	Building Area Sqft	Commercial/Institutional System Design Table 1, Chapter 64E-6, FAC
---------	-----------------------	-----------------	--------------------	--

1	SF Residential	1	760	
2				
3				

☐ Floor/Equipment Drains ☐ Other (Specify) \_\_\_\_\_

SIGNATURE: Rocky D. Ford

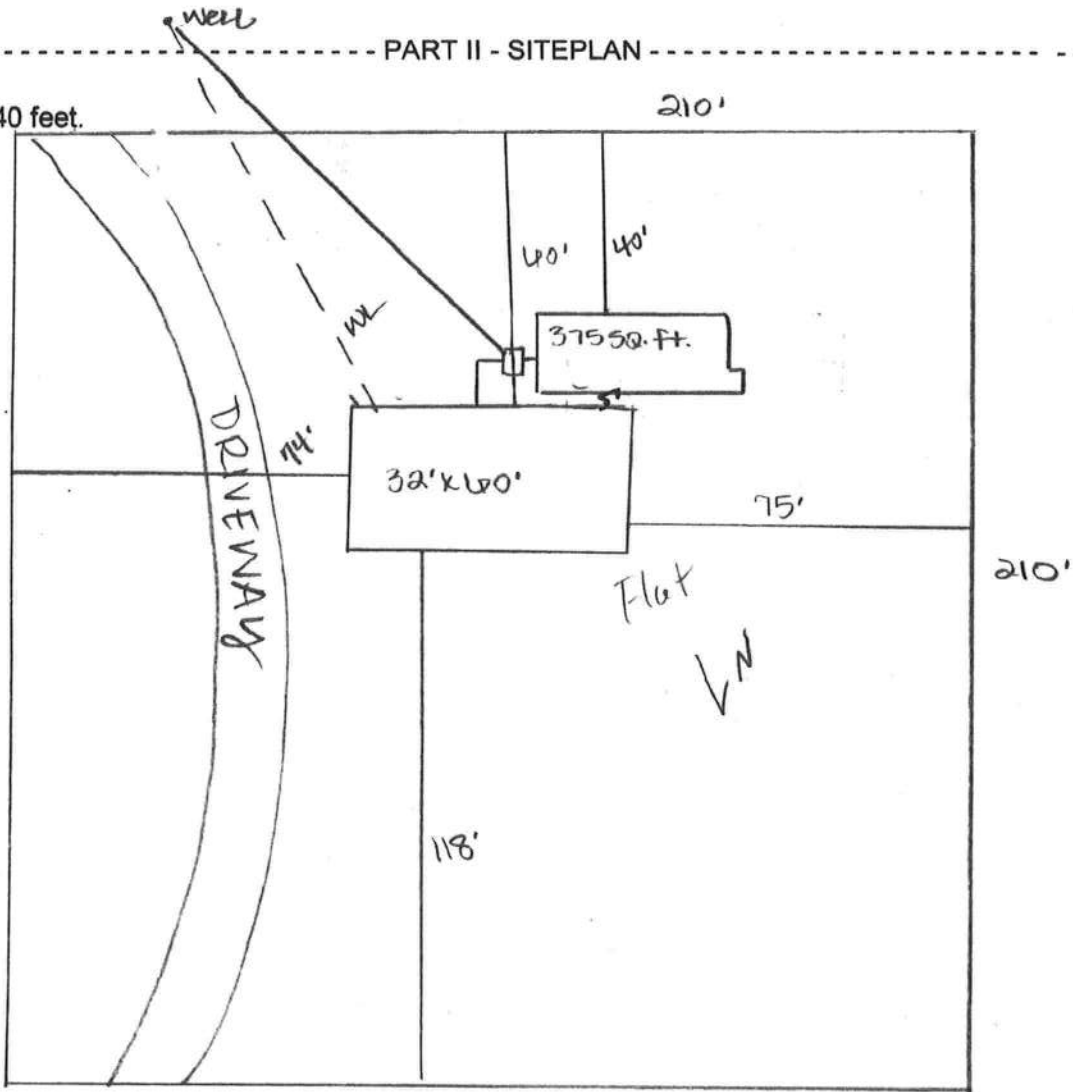
DATE: 10/23/2018

STATE OF FLORIDA  
DEPARTMENT OF HEALTH  
APPLICATION FOR ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number 18-0896

----- PART II - SITEPLAN -----

Scale: 1 inch = 40 feet.



Notes: \_\_\_\_\_

Site Plan submitted by: Rodney D. D.

Plan Approved ✓

Not Approved \_\_\_\_\_

By Sam Brown

ES

Columbia

MASTER CONTRACTOR

Date NOV 05 2018

11/4/18  
County Health Department

**ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT**



# COLUMBIA COUNTY BUILDING DEPARTMENT RESIDENTIAL CHECK LIST

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

## ALL REQUIREMENTS ARE SUBJECT TO CHANGE

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

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

### GENERAL REQUIREMENTS: APPLICANT - PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL

Items to Include-  
Each Box shall be  
Circled as  
Applicable

		Yes	No	N/A
1	Two (2) complete sets of plans containing the following:	<input checked="" type="checkbox"/>		
2	All drawings must be clear, concise, drawn to scale, details that are not used shall be marked void	<input checked="" type="checkbox"/>		
3	Condition space (Sq. Ft.) <u>760</u> Total (Sq. Ft.) under roof <u>904</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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	<input checked="" type="checkbox"/>		
5	Dimensions of all building set backs	<input checked="" type="checkbox"/>		
6	Location of all other structures (include square footage of structures) on parcel, existing or proposed well and septic tank and all utility easements.	<input checked="" type="checkbox"/>		
7	Provide a full legal description of property.	<input checked="" type="checkbox"/>		

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

#### GENERAL REQUIREMENTS: APPLICANT - PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL

Items to Include-  
Each Box shall be  
Circled as  
Applicable

		YES	NO	N/A
8	Plans or specifications must show compliance with FBCR Chapter 3	<input checked="" type="checkbox"/>		
9	Basic wind speed (3-second gust), miles per hour	<input checked="" type="checkbox"/>		
10	(Wind exposure - if more than one wind exposure is used, the wind exposure and applicable wind direction shall be indicated)	<input checked="" type="checkbox"/>		
11	Wind importance factor and nature of occupancy	<input checked="" type="checkbox"/>		
12	The applicable internal pressure coefficient, Components and Cladding	<input checked="" type="checkbox"/>		
13	The design wind pressure in terms of psf (kN/m <sup>2</sup> ), to be used for the design of exterior component, cladding materials not specifically designed by the registered design professional.	<input checked="" type="checkbox"/>		

### Elevations Drawing including:

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

**Floor Plan including:**

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

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

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

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

**FBCR 506: CONCRETE SLAB ON GRADE**

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

**FBCR 318: PROTECTION AGAINST TERMITES**

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

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

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

**Floor Framing System: First and/or second story**

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

**FBCR CHAPTER 6 WOOD WALL FRAMING CONSTRUCTION**

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

**FBCR :ROOF SYSTEMS:**

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

**FBCR 802:Conventional Roof Framing Layout**

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

**FBCR 803 ROOF SHEATHING**

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

## ROOF ASSEMBLIES FRC Chapter 9

71	Include all materials which will make up the roof assemblies covering	<input checked="" type="checkbox"/>		
72	Submit Florida Product Approval numbers for each component of the roof assemblies covering	<input checked="" type="checkbox"/>		

## FBCR Energy Conservation R.401

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

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

## HVAC information

77	Submit two copies of a Manual J sizing equipment or equivalent computation study			
78	Exhaust fans shown in bathrooms <b>Mechanical exhaust capacity of 50 cfm intermittent or 20 cfm continuous required</b>			
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	<input checked="" type="checkbox"/>		
81	Show the location of water heater	<input checked="" type="checkbox"/>		

## Private Potable Water

82	Pump motor horse power			<input checked="" type="checkbox"/>
83	Reservoir pressure tank gallon capacity			<input checked="" type="checkbox"/>
84	Rating of cycle stop valve if used			<input checked="" type="checkbox"/>

## Electrical layout shown including

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

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

**THE FOLLOWING ITEMS MUST BE SUBMITTED WITH BUILDING PLANS**

		YES	NO	N/A
92	<b>Building Permit Application</b> A current Building Permit Application is to be completed, by following the Checklist all supporting documents must be submitted. There is a <b>\$15.00</b> application fee. The completed application with attached documents and application fee can be mailed.	✓		
93	<b>Parcel Number</b> The parcel number (Tax ID number) from the Property Appraisers Office (386) 758-1083 is required. A copy of property deed is also required. <a href="http://www.columbiacountyfla.com">www.columbiacountyfla.com</a>	✓		
94	<b>Environmental Health Permit or Sewer Tap Approval</b> A copy of a approved Columbia County Environmental Health (386) 758-1058	✓		
95	<b>City of Lake City</b> A City Water and/or Sewer letter. Call 386-752-2031			✓
96	<b>Toilet facilities shall be provided for all construction sites</b>	✓		
97	<b>Town of Fort White</b> (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	<b>Flood Information:</b> 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	<b>CERTIFIED FINISHED FLOOR ELEVATIONS</b> will be required on any project where the approved FIRM Flood Maps show the property is in a AE, Floodway, and AH flood zones. Additionally One Foot Rise letters are required for AE and AH zones. In the Floodway Flood zones a Zero Rise letter is required.			✓
100	A Flood development permit is also required for AE, Floodway & AH. Development permit cost is <b>\$50.00</b>			✓
101	<b>Driveway Connection:</b> If the property does not have an existing access to a public road, then an application for a culvert permit ( <b>\$25.00</b> ) must be made. County Public Works Dept. determines the size and length of every culvert before instillation and completes a final inspection before permanent power is granted. If the applicant feels that a culvert is not needed, they may apply for a culvert waiver ( <b>\$50.00</b> ) Separate Check when issued. If the project is to be located on an F.D.O.T. maintained road, then an F.D.O.T. access permit is required.			✓
102	<b>911 Address:</b> An application for a 911 address must be applied for and received through the Columbia County Emergency Management Office of 911 Addressing Department (386) 758-1125.	✓		

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

**Notice Of Commencement**

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

**Section R101.2.1 of the Florida Building Code Residential:**

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

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

Category/Subcategory	Manufacturer	Product Description	Approval Number(s)
<b>1. EXTERIOR DOORS</b>			
A. SWINGING	JELD-WEN	6 Panel Door	FL16468-R12
B. SLIDING	Pella	SSD	FL2646-R10
C. SECTIONAL/ROLL UP			
D. OTHER			
<b>2. WINDOWS</b>			
A. SINGLE/DOUBLE HUNG			
B. HORIZONTAL SLIDER	Pella	Sliding Windows	FL11161R6
C. CASEMENT			
D. FIXED			
E. MULLION			
F. SKYLIGHTS			
G. OTHER			
<b>3. PANEL WALL</b>			
A. SIDING			
B. SOFFITS			
C. STOREFRONTS			
D. GLASS BLOCK			
E. OTHER			
<b>4. ROOFING PRODUCTS</b>			
A. ASPHALT SHINGLES	GAF	Timberline	
B. NON-STRUCT METAL			
C. ROOFING TILES			
D. SINGLE PLY ROOF			
E. OTHER			
<b>5. STRUCT COMPONENTS</b>			
A. WOOD CONNECTORS			
B. WOOD ANCHORS			
C. TRUSS PLATES			
D. INSULATION FORMS			
E. LINTELS			
F. OTHERS			
<b>6. NEW EXTERIOR</b>			
<b>ENVELOPE PRODUCTS</b>			

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

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

Contractor OR Agent Signature \_\_\_\_\_

Date \_\_\_\_\_

NOTES: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



Lumber design values are in accordance with ANSI/TPI 1 section 6.3  
These truss designs rely on lumber values established by others.

RE: 1491248 - BILL KIMBLE - O/B

**MiTek USA, Inc.**

6904 Parke East Blvd.  
Tampa, FL 33610-4115

**Site Information:**

Customer Info: Bill Kimble Project Name: 1491248 Model: Custom  
Lot/Block: Subdivision:  
Address: 319 SW Chippewa Glen  
City: Columbia Cty State: FL

**Name Address and License # of Structural Engineer of Record, If there is one, for the building.**

Name: Unknown at time of seals License #: Unknown at time of seals  
Address: Unknown at time of seals  
City: Unknown at time of seals State: Unknown at time of seals

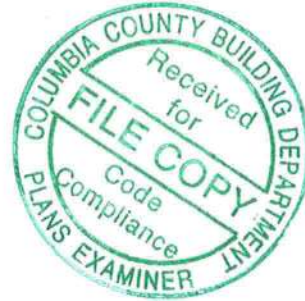
**General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):**

Design Code: FBC2017/TPI2014 Design Program: MiTek 20/20 8.2  
Wind Code: ASCE 7-10 Wind Speed: 130 mph  
Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 5 individual, Truss Design Drawings and 0 Additional Drawings.

With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date
1	T15137751	T01	9/20/18
2	T15137752	T01G	9/20/18
3	T15137753	T02G	9/20/18
4	T15137754	T03	9/20/18
5	T15137755	T03G	9/20/18



The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource-Jacksonville.

Truss Design Engineer's Name: Velez, Joaquin

My license renewal date for the state of Florida is February 28, 2019.

**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek. Any project specific information included is for MiTek's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.



Joaquin Velez PE No. 68182  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

September 20, 2018

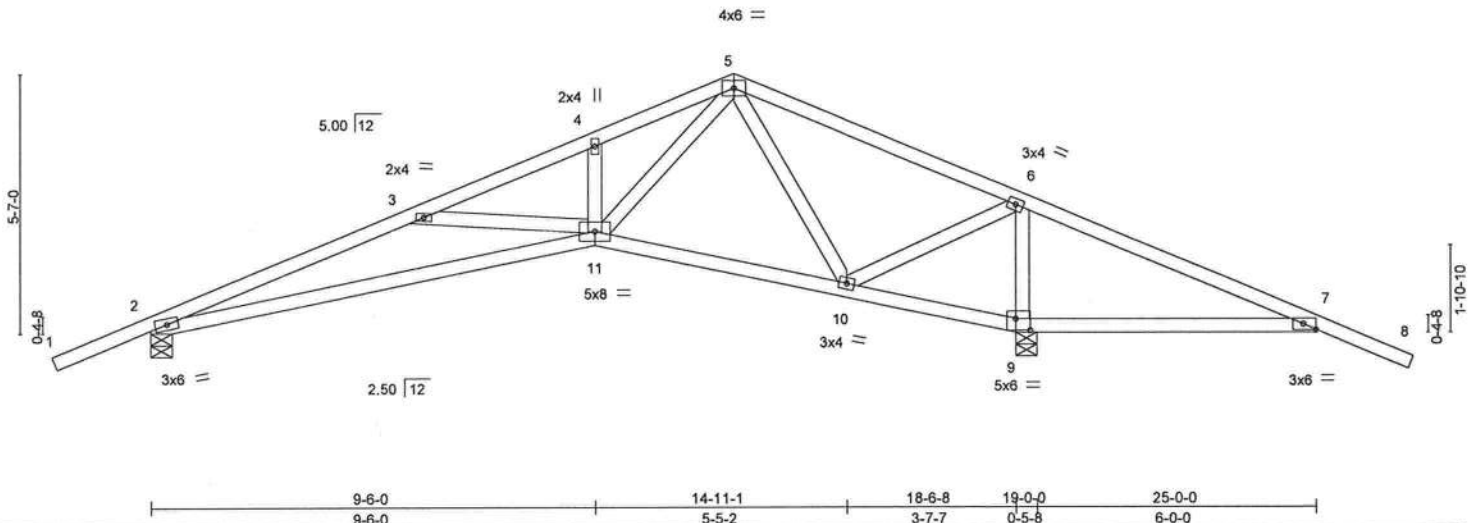
Velez, Joaquin

1 of 1

Job 1491248	Truss T01	Truss Type ROOF TRUSS	Qty 11	Ply 1	BILL KIMBLE - O/B	T15137751
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Builders FirstSource, Lake City, FL 32055

8.220 s May 24 2018 MiTek Industries, Inc. Thu Sep 20 11:30:24 2018 Page 1  
ID:kiz5vR5IHgumbj\_OhOCVvzXi\_L-flb7g?VMINxzvi\_K3qXwG?L8mJE2lgupeVGofUyblRT



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.55	Vert(LL)	-0.18 11-14	MT20		244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.74	Vert(CT)	-0.38 11-14				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.08 9				
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS							
								Weight: 117 lb		FT = 20%	

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (lb/size) 2=675/0-5-8, 9=1397/0-5-8  
Max Horz 2=127(LC 12)  
Max Uplift 2=-328(LC 12), 9=-631(LC 9)  
Max Grav 2=714(LC 23), 9=1397(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1736/804, 3-4=-1245/501, 4-5=-1234/578, 5-6=-435/244, 6-7=-1097/873  
BOT CHORD 2-11=-779/1606, 10-11=-96/450, 9-10=-823/1219, 7-9=-736/1136  
WEBS 3-11=-472/466, 5-11=-461/1058, 5-10=-644/550, 6-10=-558/889, 6-9=-1105/856

#### NOTES- (8)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=328, 9=631.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



Joaquin Velez PE No.68182  
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Date:

September 20,2018

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



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Builders FirstSource, Lake City, FL 32055  
 8.220 s May 24 2018 MiTek Industries, Inc. Thu Sep 20 11:30:25 2018 Page 1  
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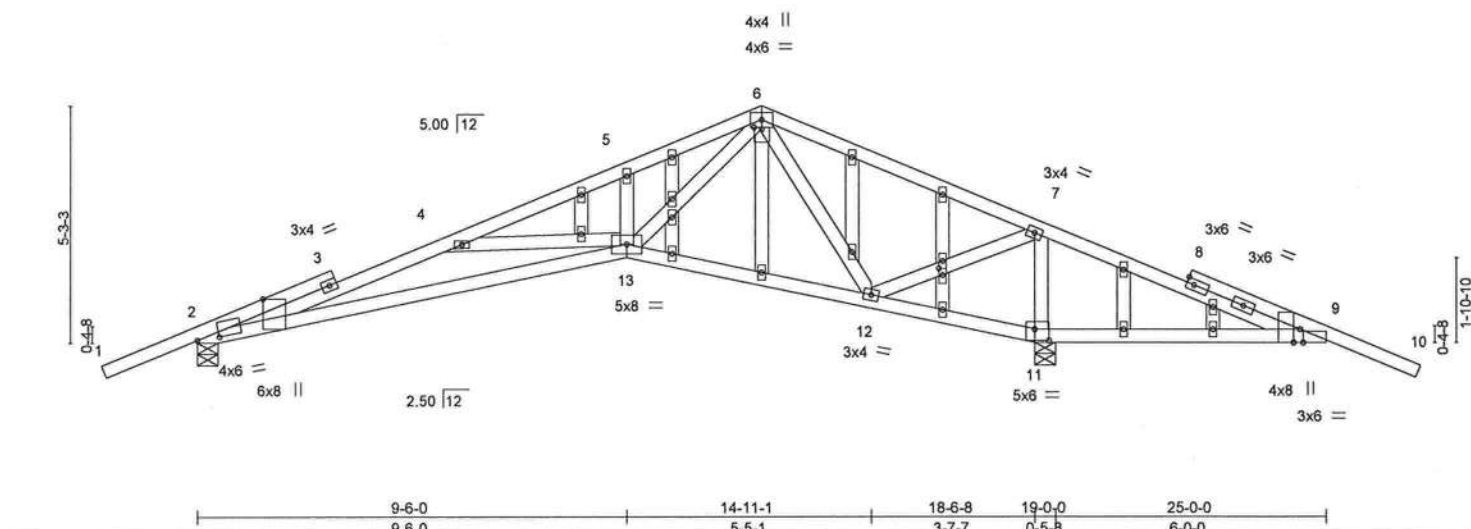


Plate Offsets (X,Y)--- [2:0-5-14.0-0-5], [2:0-11-1-Edge], [6:0-0-7-0-2-0], [9:0-3-8-Edge], [9:0-0-12-Edge], [11:0-3-12-0-3-0], [24:0-1-12-0-1-0]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.69	Vert(LL)	0.17	13-31	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.68	Vert(CT)	-0.32	13-31	>685	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.14	11	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS							Weight: 142 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

BRACING-	
TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.

**REACTIONS.** (lb/size) 2=679/0-5-8, 11=1388/0-5-8  
Max Horz 2=122(LC 16)  
Max Uplift 2=-334(LC 12), 11=-630(LC 9)  
Max Grav 2=718(LC 23), 11=1388(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	2-4=-2035/937, 4-5=-1382/557, 5-6=-1387/640, 6-7=-507/270, 7-9=-1245/987
BOT CHORD	2-13=-919/1559, 12-13=-1074/458, 11-12=-950/1379, 9-11=-855/1289
WEBS	4-13=-667/512, 6-13=-514/1177, 6-12=-654/953, 12-12=-662/987, 7-11=-1087/845

NOTES- (11)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=334, 11=630.
- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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Date:

September 20.2018

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**WARNING - verify design parameters and READ NOTES ON THIS AND INCLUDED MEMBER REFERENCE DOCUMENTS FOR ALL INFORMATION REGARDING THE USE.** Design valid for use only with MiTEK connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



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Job	Truss	Truss Type	Qty	Ply	BILL KIMBLE - O/B	T15137753
1491248	T02G	GABLE	1	1	Job Reference (optional)	

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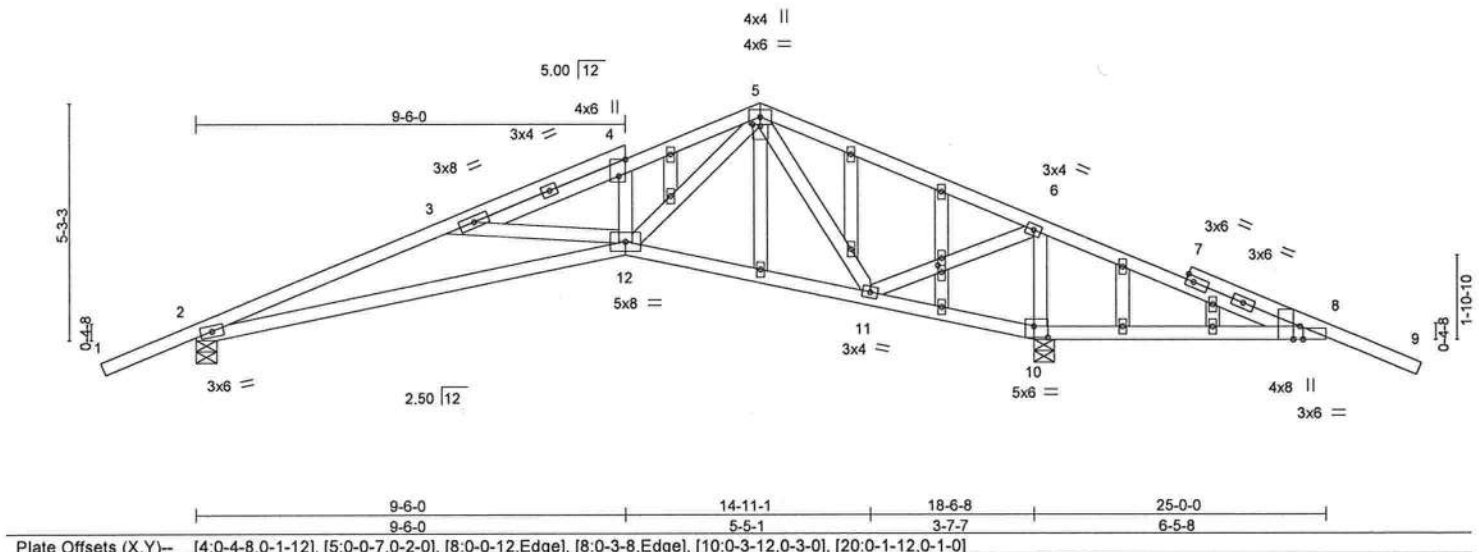


Plate Offsets (X,Y)--		[4:0-4-8,0-1-12], [5:0-0-7,0-2-0], [8:0-0-12,Edge], [8:0-3-8,Edge], [10:0-3-12,0-3-0], [20:0-1-12,0-1-0]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.25	TC 0.57
TCDL 7.0	Lumber DOL	1.25	BC 0.74
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.40
BCDL 10.0	Code	FBC2017/TPI2014	Matrix-AS
			DEFL. in (loc) l/defl L/d
			Vert(LL) -0.18 12-31 >999 240
			Vert(CT) -0.37 12-31 >602 180
			Horz(CT) 0.08 10 n/a n/a
			PLATES GRIP
			MT20 244/190
			Weight: 141 lb FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (lb/size) 2=675/0-5-8, 10=1397/0-5-8  
Max Horz 2=-121(LC 17)  
Max Uplift 2=-330(LC 12), 10=-632(LC 9)  
Max Grav 2=714(LC 23), 10=1397(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1731/797, 3-4=-1304/522, 4-5=-1286/585, 5-6=-502/268, 6-8=-1246/986  
BOT CHORD 2-12=-765/1600, 11-12=-116/473, 10-11=-951/1379, 8-10=-855/1289  
WEBS 3-12=-414/484, 5-12=-445/1061, 5-11=-674/598, 6-11=-667/995, 6-10=-1092/849

#### NOTES- (11)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=330, 10=632.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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MiTek USA, Inc. FL Cert 6634  
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Date:

September 20,2018

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



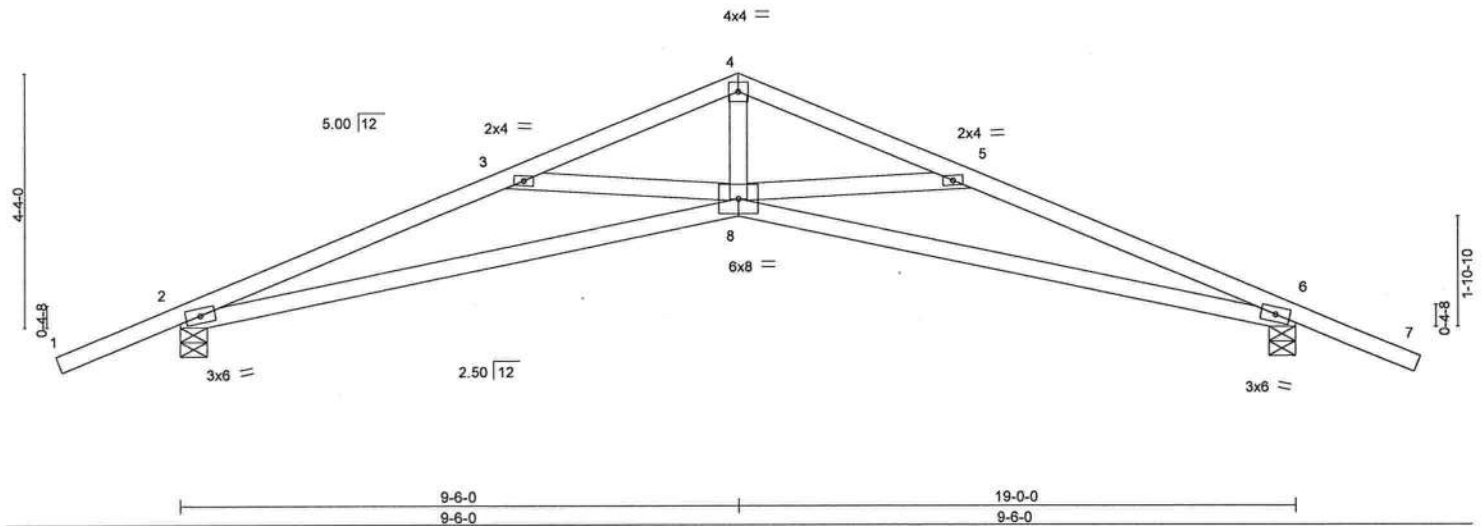
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Job 1491248	Truss T03	Truss Type SCISSORS	Qty 7	Ply 1	BILL KIMBLE - O/B	T15137754
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Scale = 1:37.8



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.44	Vert(LL)	-0.18	8-14	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.77	Vert(CT)	-0.39	8-14	>592	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.41	Horz(CT)	0.17	6	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-AS							
									Weight: 80 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (lb/size) 2=814/0-5-8, 6=814/0-5-8  
Max Horz 2=-101(LC 17)  
Max Uplift 2=-337(LC 12), 6=-337(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-2175/1063, 3-4=-1735/766, 4-5=-1735/768, 5-6=-2175/1093  
BOT CHORD 2-8=-868/2013, 6-8=-906/2013  
WEBS 4-8=-387/1071, 5-8=-441/388, 3-8=-441/392

#### NOTES- (8)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 2, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=337, 6=337.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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Date:

September 20,2018

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8.220 s May 24 2018 MITek Industries, Inc. Thu Sep 20 11:30:29 2018 Page 1  
ID:klz5vfr5IHgumbj\_OhOCVvzXi\_L-?iO0jiZV7wZG?VtHsN75z23xoKxGQxXYnn\_ZKiyblRO

-2-0-0	5-10-2	9-6-0	13-1-14	19-0-0	21-0-0
2-0-0	5-10-2	3-7-14	3-7-14	5-10-2	2-0-0

Scale = 1:39.1

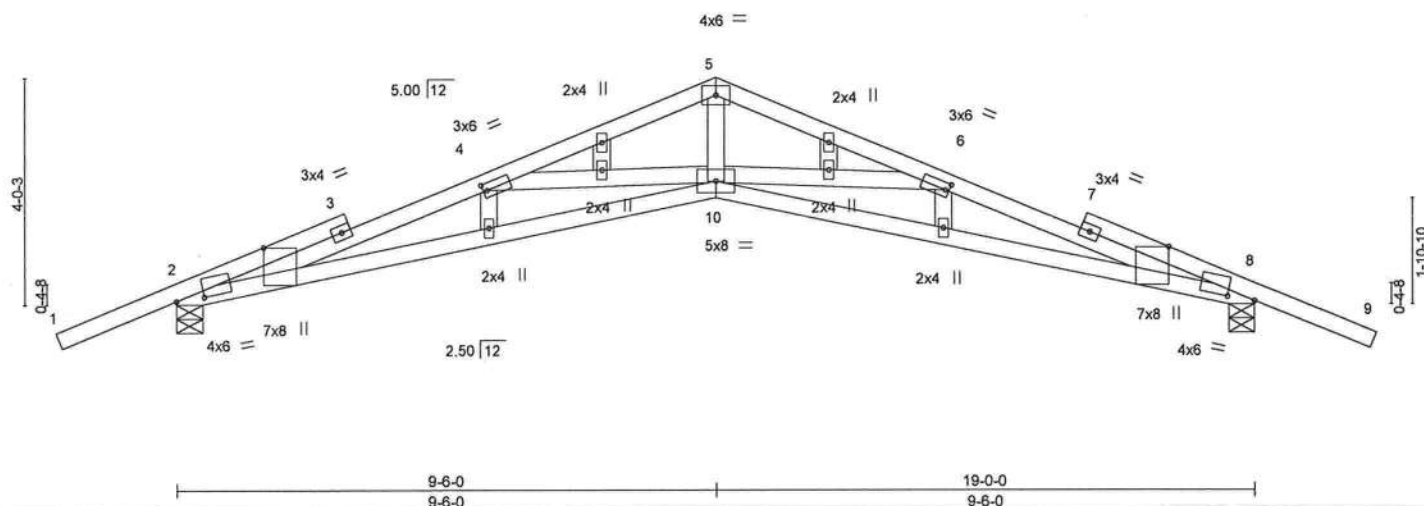


Plate Offsets (X,Y)--- [2:0-5-14,0-0-5], [2:0-11-7,Edge], [4:0-0-12,0-1-8], [6:0-0-12,0-1-8], [8:0-5-14,0-0-5], [8:0-11-7,Edge]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)		L/defl L/d		PLATES GRIP	
TCLL 20.0		Plate Grip DOL 1.25		TC 0.79		Vert(LL) -0.30 10		>749		MT20	244/190
TCDL 7.0		Lumber DOL 1.25		BC 0.74		Vert(CT) -0.54 10-19		>414			
BCLL 0.0 *		Rep Stress Incr YES		WB 0.44		Horz(CT) 0.28 8		n/a			
BCDL 10.0		Code FBC2017/TPI2014		Matrix-AS						Weight: 91 lb	FT = 20%

<b>LUMBER-</b>	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-	
TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.

**REACTIONS.** (lb/size) 2=809/0-5-8, 8=809/0-5-8  
Max Horz 2=95(LC 12)  
Max Uplift 2=-340(LC 12), 8=-340(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	2-4=-2511/1209, 4-5=-1891/824, 5-6=-1891/826, 6-8=-2511/1248
BOT CHORD	2-10=-1015/2409, 8-10=-1081/2409
WEBS	5-10=-403/1159, 6-10=-650/479, 4-10=-650/482

NOTES- (10)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpI=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Gable studs spaced at 2-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Bearing at joint(s) 2, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=340, 8=340.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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Date:

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**▲ WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

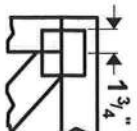
**WARNING - verify design parameters and READ NOTES on this RING INCREASE WITH RING NUMBER.** Design valid for use only with MiTEK® connectors. This design is based only on parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



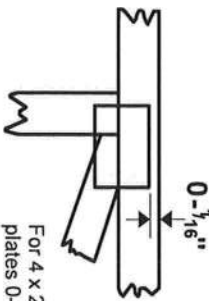
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# Symbols

## PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/8" from outside edge of truss.



This symbol indicates the required direction of slots in connector plates.

\* Plate location details available in **MITek 20/20** software or upon request.

## PLATE SIZE

4 X 4

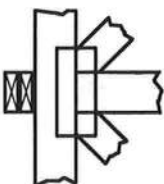
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

## BEARING



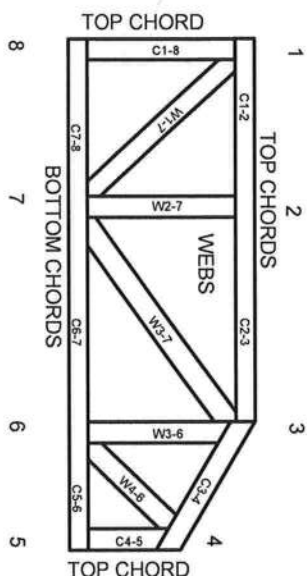
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)



JOINTS ARE GENERALLY NUMBERED/CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

## PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988  
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TP1 section 6.3 These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet, MII-7473 rev. 10/03/2015



# General Safety Notes

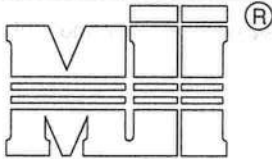
Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.

AUGUST 1, 2016

# T-BRACE / I-BRACE DETAIL WITH 2X BRACE ONLY

MII-T-BRACE 2



MiTek USA, Inc. Page 1 of 1

MiTek USA, Inc.  
ENGINEERED BY  
**TRENCO**  
A MiTek Affiliate

Note: T-Bracing / I-Bracing to be used when continuous lateral bracing is impractical. T-Brace / I-Brace must cover 90% of web length.

Note: This detail NOT to be used to convert T-Brace / I-Brace webs to continuous lateral braced webs.

## Nailing Pattern

T-Brace size	Nail Size	Nail Spacing
2x4 or 2x6 or 2x8	10d (0.131" X 3")	6" o.c.

Note: Nail along entire length of T-Brace / I-Brace  
(On Two-Ply's Nail to Both Plies)

## Brace Size for One-Ply Truss

### Specified Continuous Rows of Lateral Bracing

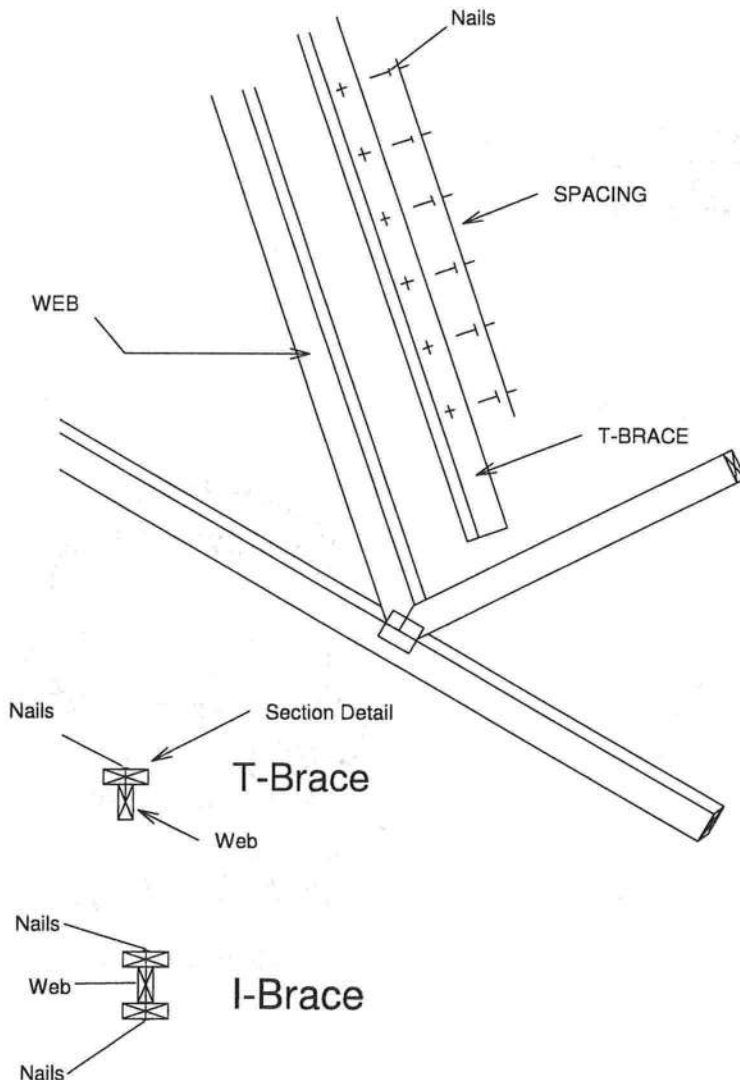
Web Size	1	2
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace
2x6	2x6 T-Brace	2x6 I-Brace
2x8	2x8 T-Brace	2x8 I-Brace

## Brace Size for Two-Ply Truss

### Specified Continuous Rows of Lateral Bracing

Web Size	1	2
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace
2x6	2x6 T-Brace	2x6 I-Brace
2x8	2x8 T-Brace	2x8 I-Brace

T-Brace / I-Brace must be same species and grade (or better) as web member.

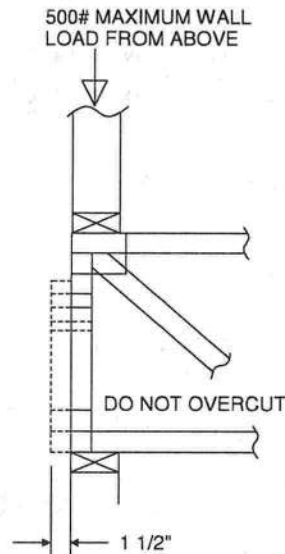


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Date:

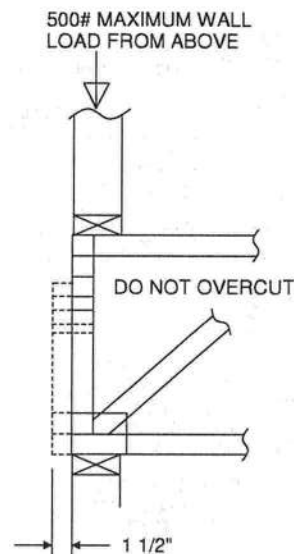
February 12, 2018



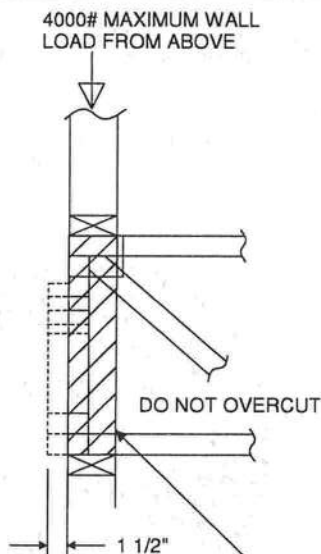
1. THIS IS A SPECIFIC REPAIR DETAIL TO BE USED ONLY FOR ITS ORIGINAL INTENTION. THIS REPAIR DOES NOT IMPLY THAT THE REMAINING PORTION OF THE TRUSS IS UNDAMAGED. THE ENTIRE TRUSS SHALL BE INSPECTED TO VERIFY THAT NO FURTHER REPAIRS ARE REQUIRED. WHEN THE REQUIRED REPAIRS ARE PROPERLY APPLIED, THE TRUSS WILL BE CAPABLE OF SUPPORTING THE LOADS INDICATED.
2. ALL MEMBERS MUST BE RETURNED TO THEIR ORIGINAL POSITIONS BEFORE APPLYING REPAIR AND HELD IN PLACE DURING APPLICATION OF REPAIR.
3. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID SPLITTING OF THE WOOD.
4. LUMBER MUST BE CUT CLEANLY AND ACCURATELY AND THE REMAINING WOOD MUST BE UNDAMAGED.
5. THIS REPAIR IS TO BE USED FOR SINGLE PLY TRUSSES IN THE 4X ORIENTATION ONLY.
6. CONNECTOR PLATES MUST BE FULLY IMBEDDED AND UNDISTURBED.



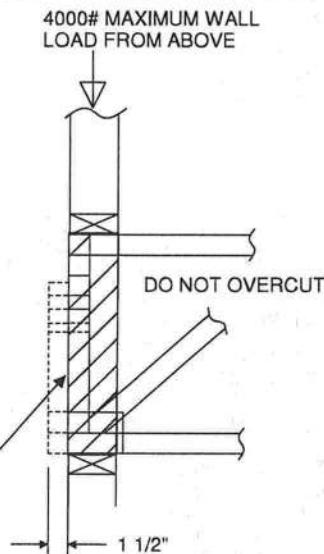
REFER TO INDIVIDUAL  
TRUSS DESIGN FOR  
PLATE SIZES AND  
LUMBER GRADES



TRUSSES BUILT  
WITH 4x2 MEMBERS



REFER TO INDIVIDUAL  
TRUSS DESIGN FOR  
PLATE SIZES AND  
LUMBER GRADES



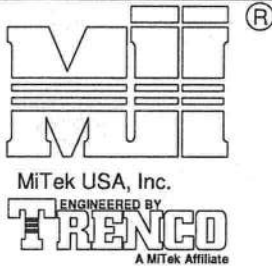
TRUSSES BUILT  
WITH 4x2 MEMBERS

ATTACH 2x4 SQUASH BLOCK (CUT TO FIT TIGHTLY)  
TO BOTH SIDES OF THE TRUSS AS SHOWN WITH  
10d (0.131" X 3") NAILS SPACED 3" O.C.

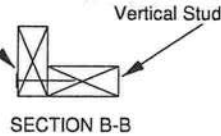


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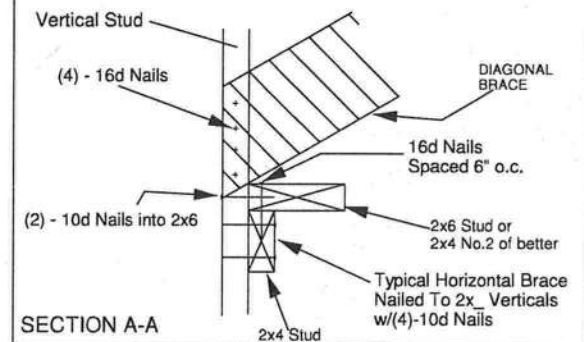
February 12, 2018



Typical  $\frac{1}{4}$  L-Brace Nailed To  
2x Verticals W/10d Nails spaced 6" o.c.



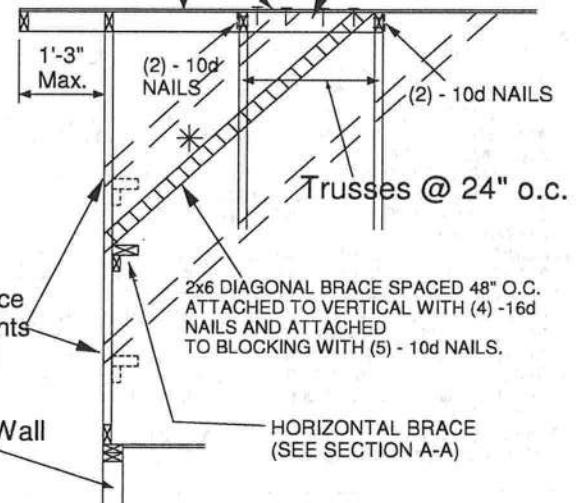
TRUSS GEOMETRY AND CONDITIONS  
SHOWN ARE FOR ILLUSTRATION ONLY.



PROVIDE 2x4 BLOCKING BETWEEN THE FIRST  
TWO TRUSSES AS NOTED. TOENAIL BLOCKING  
TO TRUSSES WITH (2) - 10d NAILS AT EACH END.  
ATTACH DIAGONAL BRACE TO BLOCKING WITH  
(5) - 10d NAILS.

(4) - 8d (0.131" X 2.5") NAILS MINIMUM, PLYWOOD  
SHEATHING TO 2x4 STD SPF BLOCK

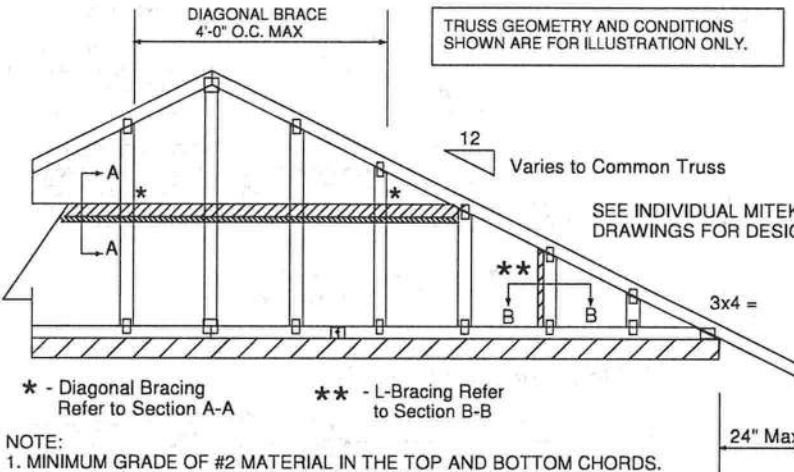
Roof Sheathing



Diag. Brace  
at 1/3 points  
if needed

End Wall

HORIZONTAL BRACE  
(SEE SECTION A-A)



\* - Diagonal Bracing  
Refer to Section A-A

\*\* - L-Bracing Refer  
to Section B-B

#### NOTE:

1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH. GRADES: 1x4 SRB OR 2x4 STUD OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.
5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C.
6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 STUD AND A 2x4 STUD AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST STUD. ATTACH TO VERTICAL STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
7. GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.
8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
9. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
10. SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE 06-01-13 BY SPIB/ALSC.
11. NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	1x4 L-Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
Maximum Stud Length						
2x4 SP No. 3 / Stud	12" O.C.	4-0-7	4-5-6	6-3-8	8-0-15	12-1-6
2x4 SP No. 3 / Stud	16" O.C.	3-8-0	3-10-4	5-5-6	7-4-1	11-0-1
2x4 SP No. 3 / Stud	24" O.C.	3-0-10	3-1-12	4-5-6	6-1-5	9-1-15

- \* Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of diagonal brace with 10d nails 8" o.c., with 3" minimum end distance. Brace must cover 90% of diagonal length.

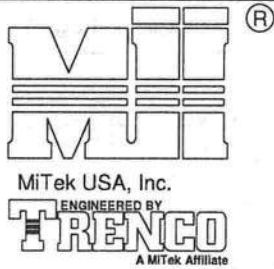
MAX MEAN ROOF HEIGHT = 30 FEET  
CATEGORY II BUILDING  
EXPOSURE B or C  
ASCE 7-98, ASCE 7-02, ASCE 7-05 130 MPH  
ASCE 7-10 160 MPH  
DURATION OF LOAD INCREASE : 1.60

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.  
CONNECTION OF BRACING IS BASED ON MWFRS.

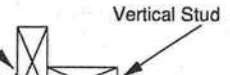


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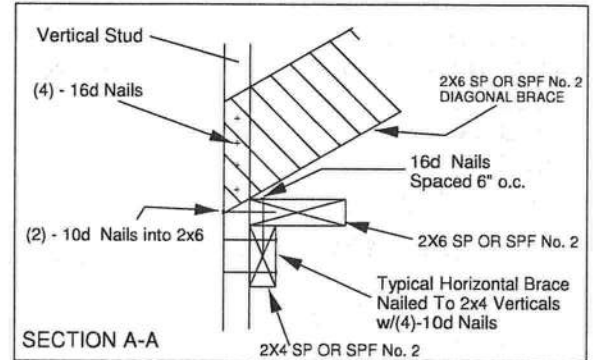


Typical 2x4 L-Brace Nailed To  
2x4 Verticals W/10d Nails spaced 6" o.c.



SECTION B-B

TRUSS GEOMETRY AND CONDITIONS  
SHOWN ARE FOR ILLUSTRATION ONLY.

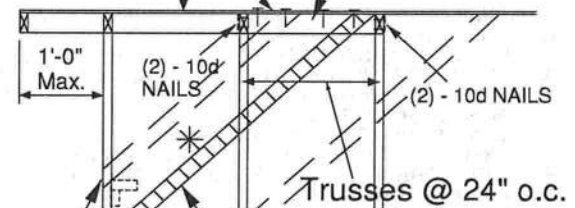


SECTION A-A

PROVIDE 2x4 BLOCKING BETWEEN THE FIRST TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. ATTACH DIAGONAL BRACE TO BLOCKING WITH (5) - 10d NAILS.

(4) - 8d (0.131" X 2.5") NAILS MINIMUM, PLYWOOD SHEATHING TO 2x4 STD SPF BLOCK

Roof Sheathing



Diag. Brace at 1/3 points if needed

2x6 DIAGONAL BRACE SPACED 48" O.C. ATTACHED TO VERTICAL WITH (4) - 16d NAILS, AND ATTACHED TO BLOCKING WITH (5) - 10d NAILS.

End Wall

HORIZONTAL BRACE  
(SEE SECTION A-A)

\* - Diagonal Bracing  
Refer to Section A-A

\*\* - L-Bracing Refer  
to Section B-B

## NOTE:

1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH, SPF or SP No.3 OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.
5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C.
6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 AND A 2x4 AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST GABLE STUD. ATTACH TO VERTICAL GABLE STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
7. GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.
8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
9. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
10. SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE 06-01-13 BY SPIB/ALSC.
11. NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
		Maximum Stud Length			
2x4 SP No. 3 / Stud	12" O.C.	3-9-7	5-8-8	6-11-1	11-4-4
2x4 SP No. 3 / Stud	16" O.C.	3-4-12	4-11-15	6-9-8	10-2-3
2x4 SP No. 3 / Stud	24" O.C.	2-9-4	4-0-7	5-6-8	8-3-13
2x4 SP No. 2	12" O.C.	3-11-13	5-8-8	6-11-1	11-11-7
2x4 SP No. 2	16" O.C.	3-7-7	4-11-5	6-11-1	10-10-5
2x4 SP No. 2	24" O.C.	3-1-15	4-0-7	6-3-14	9-5-14

- \* Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of diagonal brace with 10d nails 6" o.c., with 3" minimum end distance. Brace must cover 90% of diagonal length. T or I braces must be 2x4 SPF No. 2 or SP No. 2.

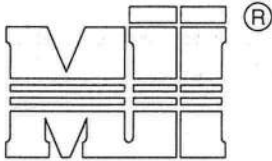
MAX MEAN ROOF HEIGHT = 30 FEET  
EXPOSURE D  
ASCE 7-10 170 MPH  
DURATION OF LOAD INCREASE : 1.60

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.  
CONNECTION OF BRACING IS BASED ON MWFRS.



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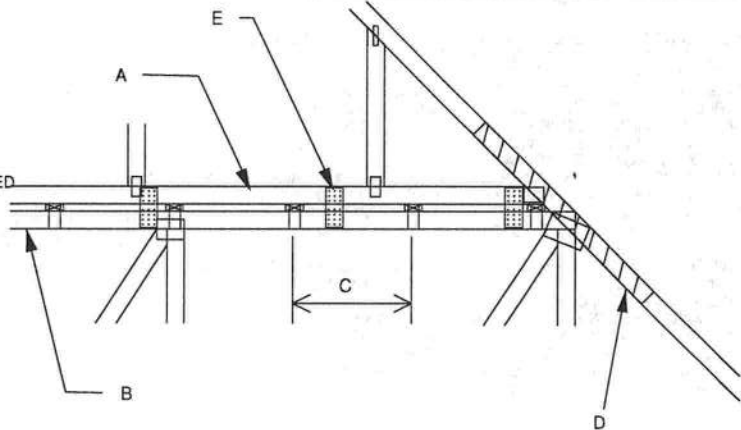
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**TRENCO**  
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MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E  
 MAX MEAN ROOF HEIGHT = 30 FEET  
 MAX TRUSS SPACING = 24" O.C.  
 CATEGORY II BUILDING  
 EXPOSURE B or C  
 ASCE 7-10  
 DURATION OF LOAD INCREASE : 1.60

DETAIL IS NOT APPLICABLE FOR TRUSSES  
 TRANSFERRING DRAG LOADS (SHEAR TRUSSES).  
 ADDITIONAL CONSIDERATIONS BY BUILDING  
 ENGINEER/DESIGNER ARE REQUIRED.

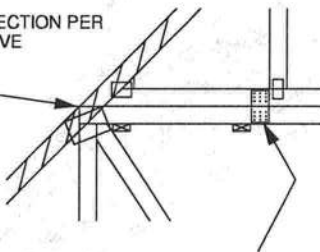
- A - PIGGYBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) (0.131" X 3.5") TOE-NAILED.
- B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
- C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING. CONNECT TO BASE TRUSS WITH (2) (0.131" X 3.5") NAILS EACH.
- D - 2 X  $\frac{1}{2}$ " X 4'-0" SCAB, SIZE TO MATCH TOP CHORD OF PIGGYBACK TRUSS, MIN GRADE #2, ATTACHED TO ONE FACE, CENTERED ON INTERSECTION, WITH (2) ROWS OF (0.131" X 3") NAILS @ 4" O.C. SCAB MAY BE OMITTED PROVIDED THE TOP CHORD SHEATHING IS CONTINUOUS OVER INTERSECTION AT LEAST 1 FT. IN BOTH DIRECTIONS AND:
1. WIND SPEED OF 115 MPH OR LESS FOR ANY PIGGYBACK SPAN, OR
  2. WIND SPEED OF 116 MPH TO 160 MPH WITH A MAXIMUM PIGGYBACK SPAN OF 12 ft.
- E - FOR WIND SPEEDS BETWEEN 126 AND 160 MPH, ATTACH MITEK 3X8 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 72" O.C. W/ (4) (0.131" X 1.5") NAILS PER MEMBER. STAGGER NAILS FROM OPPOSING FACES. ENSURE 0.5" EDGE DISTANCE. (MIN. 2 PAIRS OF PLATES REQ. REGARDLESS OF SPAN)



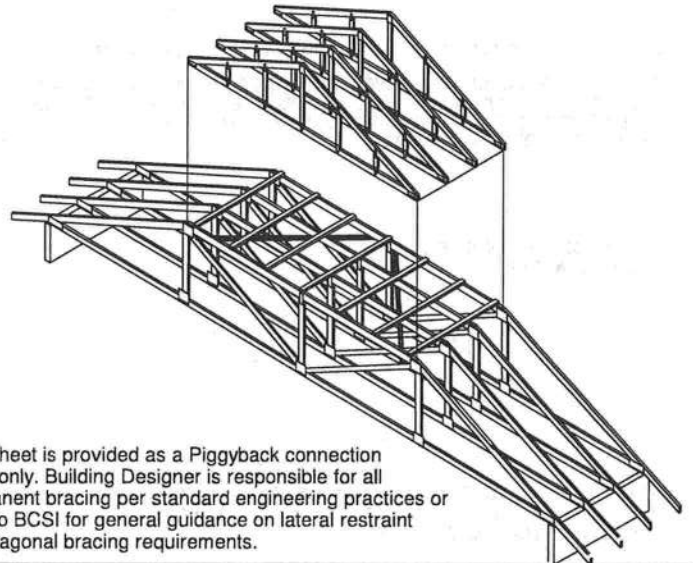
WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

REPLACE TOE NAILING OF PIGGYBACK TRUSS TO PURLINS WITH Nail-On PLATES AS SHOWN, AND INSTALL PURLINS TO BOTTOM EDGE OF BASE TRUSS TOP CHORD AT SPECIFIED SPACING SHOWN ON BASE TRUSS MITEK DESIGN DRAWING.

SCAB CONNECTION PER  
 NOTE D ABOVE

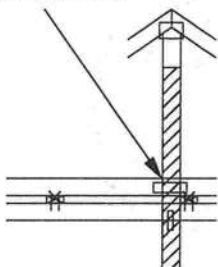


FOR ALL WIND SPEEDS, ATTACH MITEK 3X8 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 48" O.C. W/ (4) (0.131" X 1.5") PER MEMBER. STAGGER NAILS FROM OPPOSING FACES ENSURE 0.5" EDGE DISTANCE.



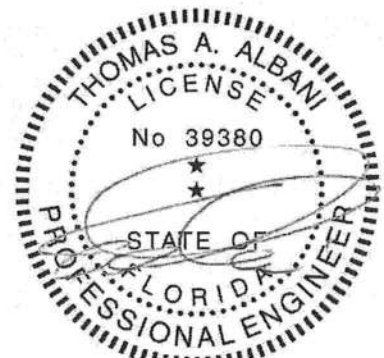
This sheet is provided as a Piggyback connection detail only. Building Designer is responsible for all permanent bracing per standard engineering practices or refer to BCSI for general guidance on lateral restraint and diagonal bracing requirements.

VERTICAL WEB TO  
 EXTEND THROUGH  
 BOTTOM CHORD  
 OF PIGGYBACK



FOR LARGE CONCENTRATED LOADS APPLIED  
 TO CAP TRUSS REQUIRING A VERTICAL WEB:

- 1) VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS MUST MATCH IN SIZE, GRADE, AND MUST LINE UP AS SHOWN IN DETAIL.
- 2) ATTACH 2 x  $\frac{1}{2}$ " x 4'-0" SCAB TO EACH FACE OF TRUSS ASSEMBLY WITH 2 ROWS OF 10d (0.131" X 3") NAILS SPACED 4" O.C. FROM EACH FACE. (SIZE AND GRADE TO MATCH VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS.) (MINIMUM 2X4)
- 3) THIS CONNECTION IS ONLY VALID FOR A MAXIMUM CONCENTRATED LOAD OF 4000 LBS (@1.15). REVIEW BY A QUALIFIED ENGINEER IS REQUIRED FOR LOADS GREATER THAN 4000 LBS.
- 4) FOR PIGGYBACK TRUSSES CARRYING GIRDER LOADS, NUMBER OF PLYS OF PIGGYBACK TRUSS TO MATCH BASE TRUSS.
- 5) CONCENTRATED LOAD MUST BE APPLIED TO BOTH THE PIGGYBACK AND THE BASE TRUSS DESIGN.



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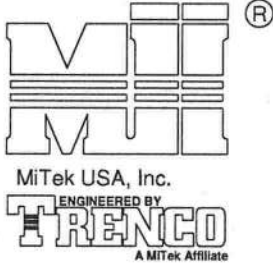
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AUGUST 1, 2016

STANDARD REPAIR DETAIL FOR BROKEN CHORDS, WEBS  
AND DAMAGED OR MISSING CHORD SPLICE PLATES

MII-REP01A1

MiTek USA, Inc. Page 1 of 1

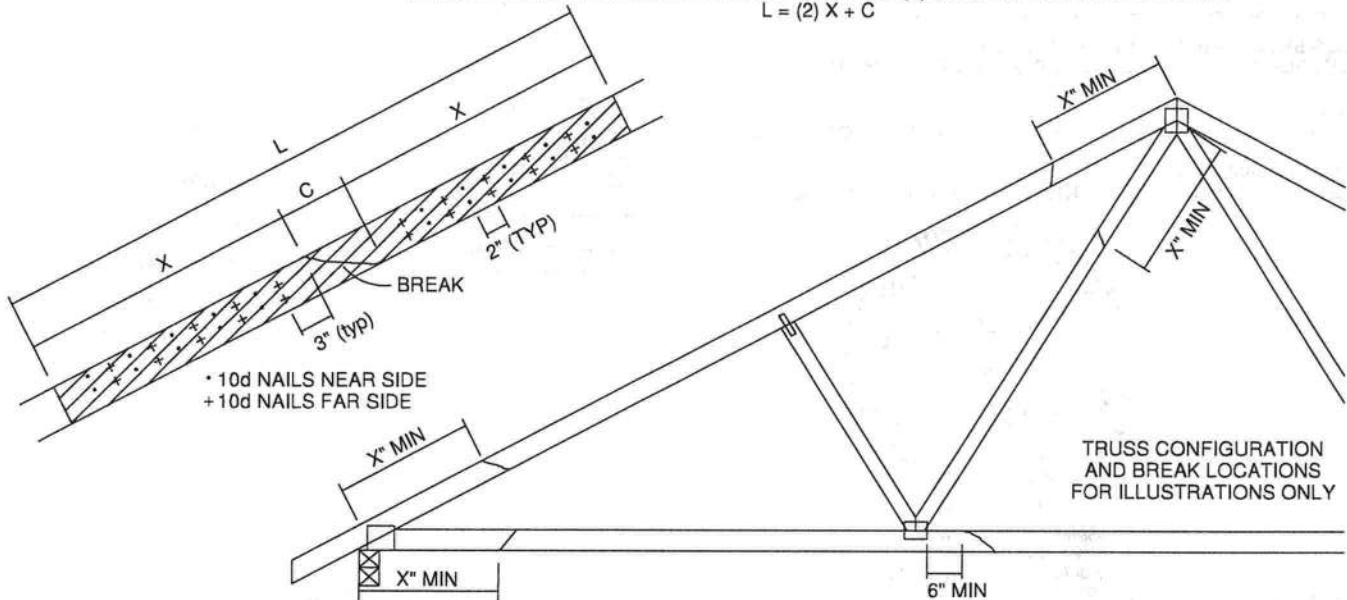


TOTAL NUMBER OF NAILS EACH SIDE OF BREAK *		X INCHES	MAXIMUM FORCE (lbs) 15% LOAD DURATION							
			SP		DF		SPF		HF	
2x4	2x6		2x4	2x6	2x4	2x6	2x4	2x6	2x4	2x6
20	30	24"	1706	2559	1561	2342	1320	1980	1352	2028
26	39	30"	2194	3291	2007	3011	1697	2546	1738	2608
32	48	36"	2681	4022	2454	3681	2074	3111	2125	3187
38	57	42"	3169	4754	2900	4350	2451	3677	2511	3767
44	66	48"	3657	5485	3346	5019	2829	4243	2898	4347

\* DIVIDE EQUALLY FRONT AND BACK

ATTACH 2x SCAB OF THE SAME SIZE AND GRADE AS THE BROKEN MEMBER TO EACH FACE OF THE TRUSS (CENTER ON BREAK OR SPLICE) WITH 10d (0.131" X 3") NAILS (TWO ROWS FOR 2x4, THREE ROWS FOR 2x6) SPACED 4" O.C. AS SHOWN. STAGGER NAIL SPACING FROM FRONT FACE AND BACK FACE FOR A NET 0-2-0 O.C. SPACING IN THE MAIN MEMBER. USE A MIN. 0-3-0 MEMBER END DISTANCE.

THE LENGTH OF THE BREAK (C) SHALL NOT EXCEED 12". (C=PLATE LENGTH FOR SPLICE REPAIRS)  
THE MINIMUM OVERALL SCAB LENGTH REQUIRED (L) IS CALCULATED AS FOLLOWS:  
 $L = (2) X + C$



THE LOCATION OF THE BREAK MUST BE GREATER THAN OR EQUAL TO THE REQUIRED X DIMENSION FROM ANY PERIMETER BREAK OR HEEL JOINT AND A MINIMUM OF 6" FROM ANY INTERIOR JOINT (SEE SKETCH ABOVE)

DO NOT USE REPAIR FOR JOINT SPLICES

## NOTES:

1. THIS REPAIR DETAIL IS TO BE USED ONLY FOR THE APPLICATION SHOWN. THIS REPAIR DOES NOT IMPLY THAT THE REMAINING PORTION OF THE TRUSS IS UNDAMAGED. THE ENTIRE TRUSS SHALL BE INSPECTED TO VERIFY THAT NO FURTHER REPAIRS ARE REQUIRED. WHEN THE REQUIRED REPAIRS ARE PROPERLY APPLIED, THE TRUSS WILL BE CAPABLE OF SUPPORTING THE LOADS INDICATED.
2. ALL MEMBERS MUST BE RETURNED TO THEIR ORIGINAL POSITIONS BEFORE APPLYING REPAIR AND HELD IN PLACE DURING APPLICATION OF REPAIR.
3. THE END DISTANCE, EDGE DISTANCE AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.
4. WHEN NAILING THE SCABS, THE USE OF A BACKUP WEIGHT IS RECOMMENDED TO AVOID LOOSENING OF THE CONNECTOR PLATES AT THE JOINTS OR SPLICES.
5. THIS REPAIR IS TO BE USED FOR SINGLE PLY TRUSSES IN THE 2x ORIENTATION ONLY.
6. THIS REPAIR IS LIMITED TO TRUSSES WITH NO MORE THAN THREE BROKEN MEMBERS.



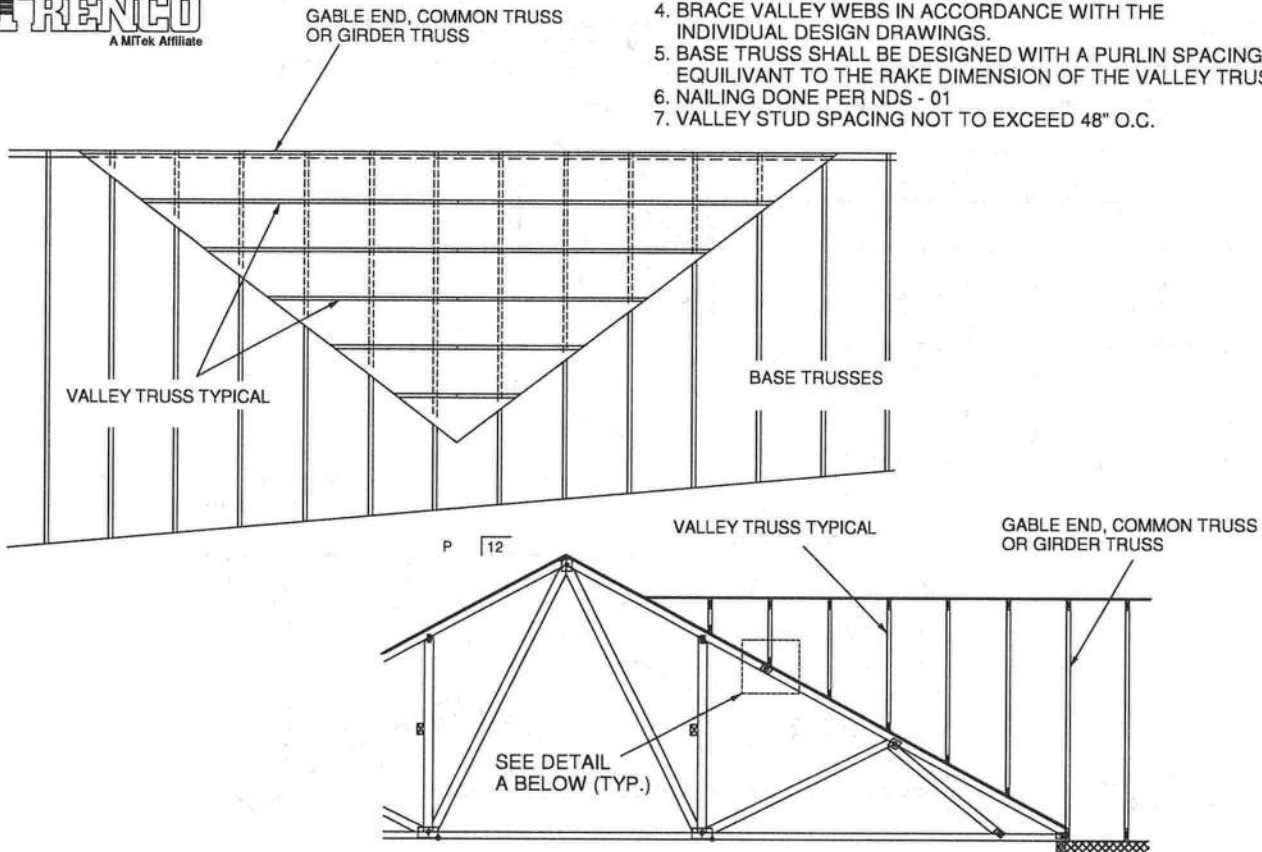
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6904 Parke East Blvd. Tampa FL 33610  
Date:

January 19, 2018

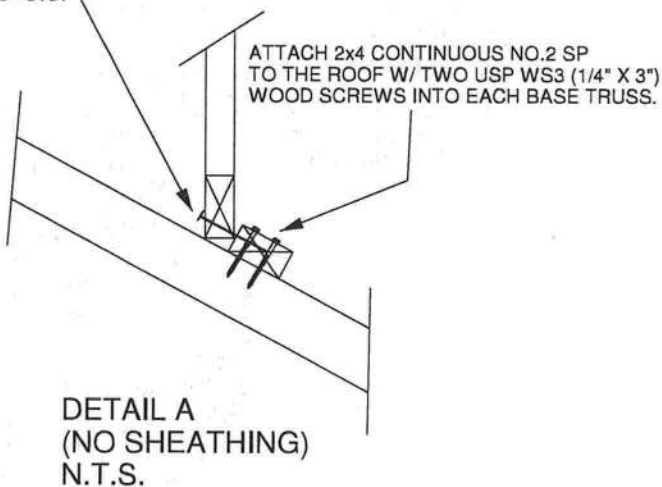


## GENERAL SPECIFICATIONS

1. NAIL SIZE 10d (0.131" X 3")
2. WOOD SCREW = 3" WS3 USP OR EQUIVALENT  
DO NOT USE DRYWALL OR DECKING TYPE SCREW
3. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE PER DETAIL A
4. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
5. BASE TRUSS SHALL BE DESIGNED WITH A PURLIN SPACING EQUIVANT TO THE RAKE DIMENSION OF THE VALLEY TRUSS SPACING.
6. NAILING DONE PER NDS - 01
7. VALLEY STUD SPACING NOT TO EXCEED 48" O.C.



SECURE VALLEY TRUSS  
W/ ONE ROW OF 10d  
NAILS 6" O.C.



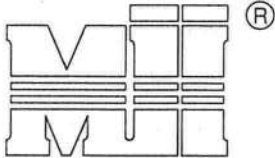
DETAIL A  
(NO SHEATHING)  
N.T.S.

WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 146 MPH  
WIND DESIGN PER ASCE 7-10 160 MPH  
MAX MEAN ROOF HEIGHT = 30 FEET  
ROOF PITCH = MINIMUM 3/12 MAXIMUM 6/12  
CATEGORY II BUILDING  
EXPOSURE C  
WIND DURATION OF LOAD INCREASE : 1.60  
MAX TOP CHORD TOTAL LOAD = 50 PSF  
MAX SPACING = 24" O.C. (BASE AND VALLEY)  
MINIMUM REDUCED DEAD LOAD OF 6 PSF  
ON THE TRUSSES



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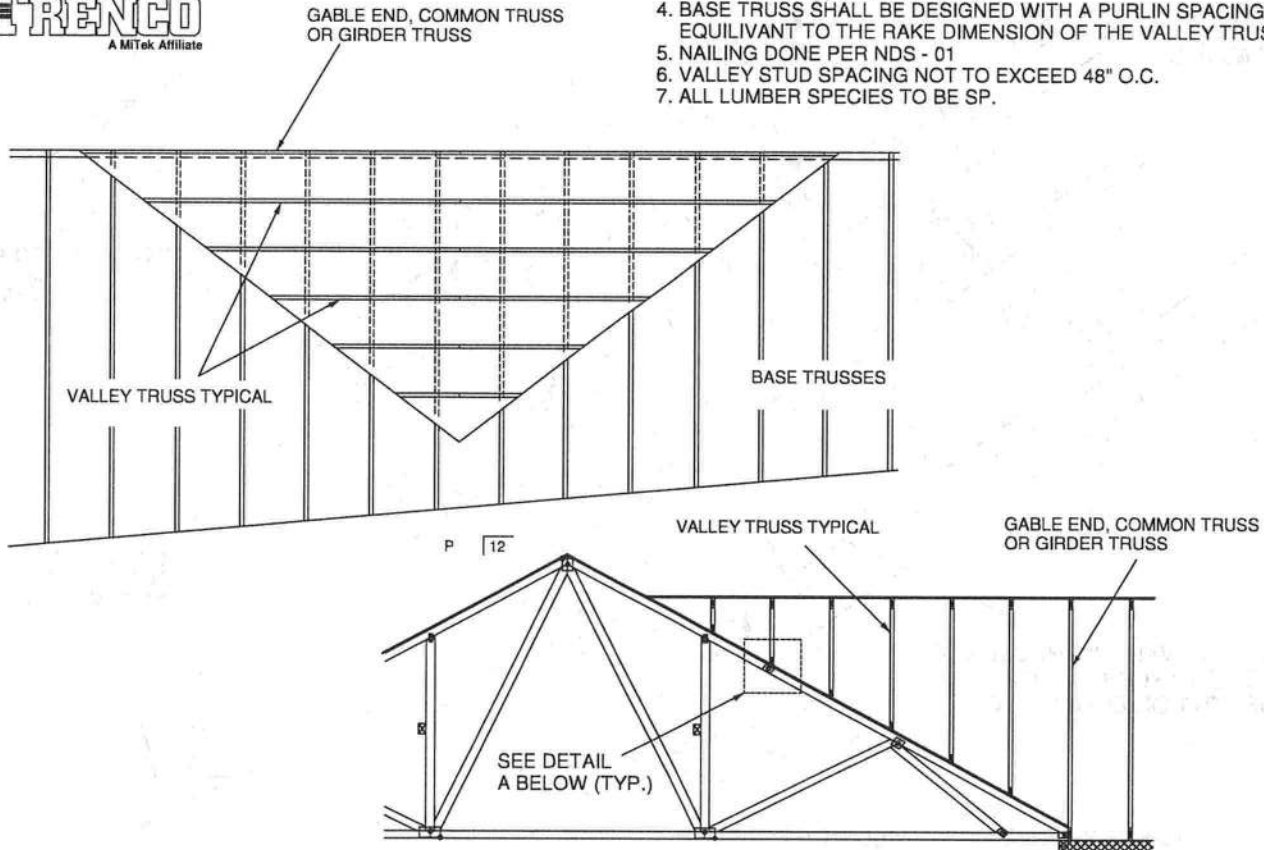


MiTek USA, Inc.

ENGINEERED BY  
**TRENCO**  
A MiTek Affiliate

## GENERAL SPECIFICATIONS

1. NAIL SIZE 16d (0.131" X 3.5")
2. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE PER DETAIL A
3. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
4. BASE TRUSS SHALL BE DESIGNED WITH A PURLIN SPACING EQUIVALENT TO THE RAKE DIMENSION OF THE VALLEY TRUSS SPACING.
5. NAILING DONE PER NDS - 01
6. VALLEY STUD SPACING NOT TO EXCEED 48" O.C.
7. ALL LUMBER SPECIES TO BE SP.

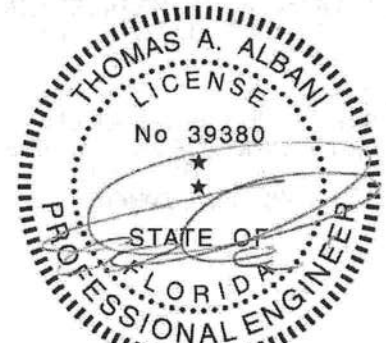


SECURE VALLEY TRUSS  
W/ ONE ROW OF 16d  
NAILS 6" O.C.

ATTACH 2x4 CONTINUOUS NO.2 SP  
TO THE ROOF W/ TWO 16d NAILS  
INTO EACH BASE TRUSS.

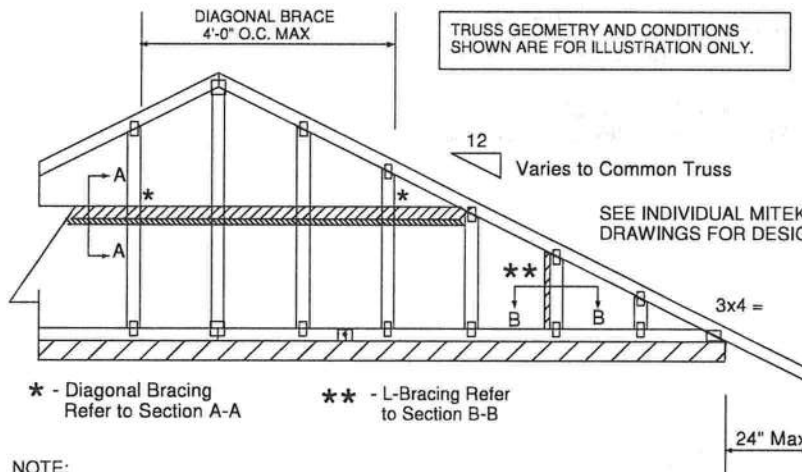
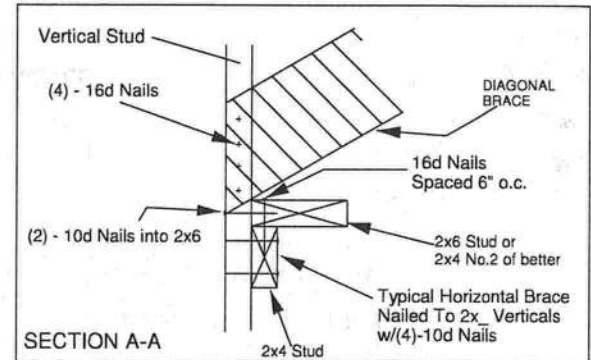
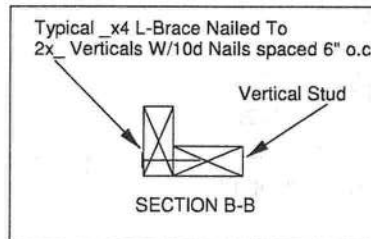
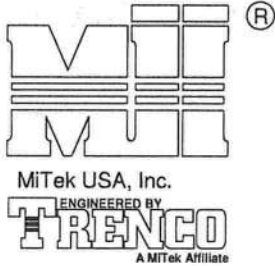
DETAIL A  
(MAXIMUM 1" SHEATHING)  
N.T.S.

WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 120 MPH  
WIND DESIGN PER ASCE 7-10 150 MPH  
MAX MEAN ROOF HEIGHT = 30 FEET  
ROOF PITCH = MINIMUM 3/12 MAXIMUM 10/12  
CATEGORY II BUILDING  
EXPOSURE C OR B  
WIND DURATION OF LOAD INCREASE : 1.60  
MAX TOP CHORD TOTAL LOAD = 60 PSF  
MAX SPACING = 24" O.C. (BASE AND VALLEY)  
MINIMUM REDUCED DEAD LOAD OF 4.2 PSF  
ON THE TRUSSES



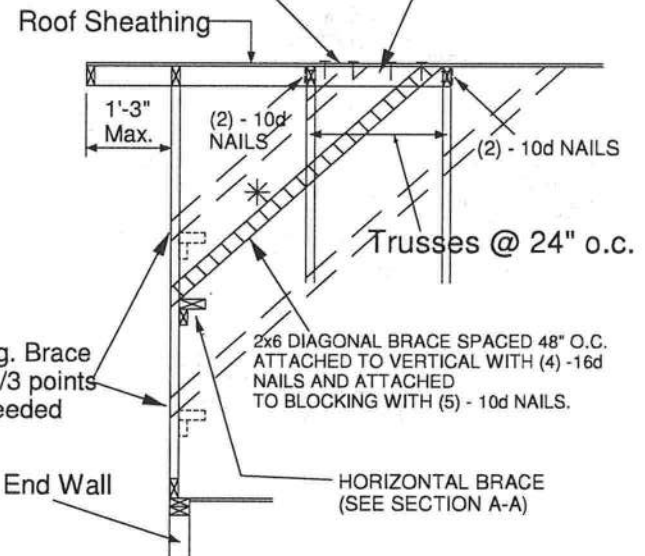
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February 12, 2018



PROVIDE 2x4 BLOCKING BETWEEN THE FIRST TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. ATTACH DIAGONAL BRACE TO BLOCKING WITH (5) - 10d NAILS.

(4) - 8d (0.131" X 2.5") NAILS MINIMUM, PLYWOOD SHEATHING TO 2x4 STD SP BLOCK



## NOTE:

1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH. GRADES:  
2x4 No 3/STUD SP OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.
5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C.
6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 STUD AND A 2x4 STUD AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST STUD. ATTACH TO VERTICAL STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
7. GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.
8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
9. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
10. NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
		Maximum Stud Length			
2x4 SP No 3/Stud	12" O.C.	3-11-3	6-8-0	7-2-14	11-9-10
2x4 SP No 3/Stud	16" O.C.	3-6-14	5-9-5	7-1-13	10-8-11
2x4 SP No 3/Stud	24" O.C.	3-1-8	4-8-9	6-2-15	9-4-7

- \* Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of web with 10d nails 8" o.c., with 3" minimum end distance. Brace must cover 90% of diagonal length.

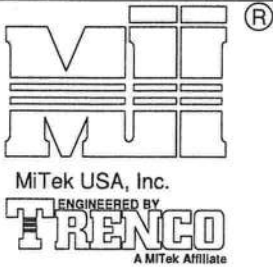
MAXIMUM WIND SPEED = 146 MPH  
MAX MEAN ROOF HEIGHT = 30 FEET  
CATEGORY II BUILDING  
EXPOSURE B or C  
ASCE 7-98, ASCE 7-02, ASCE 7-05  
DURATION OF LOAD INCREASE : 1.60

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.  
CONNECTION OF BRACING IS BASED ON MWFRS.



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Date:

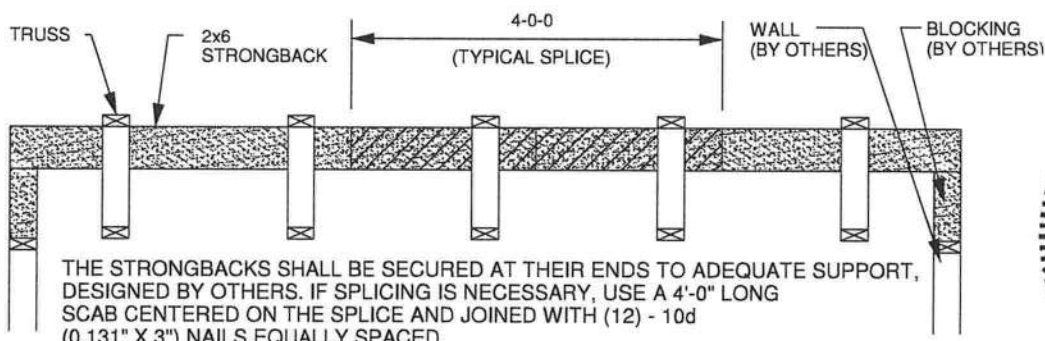
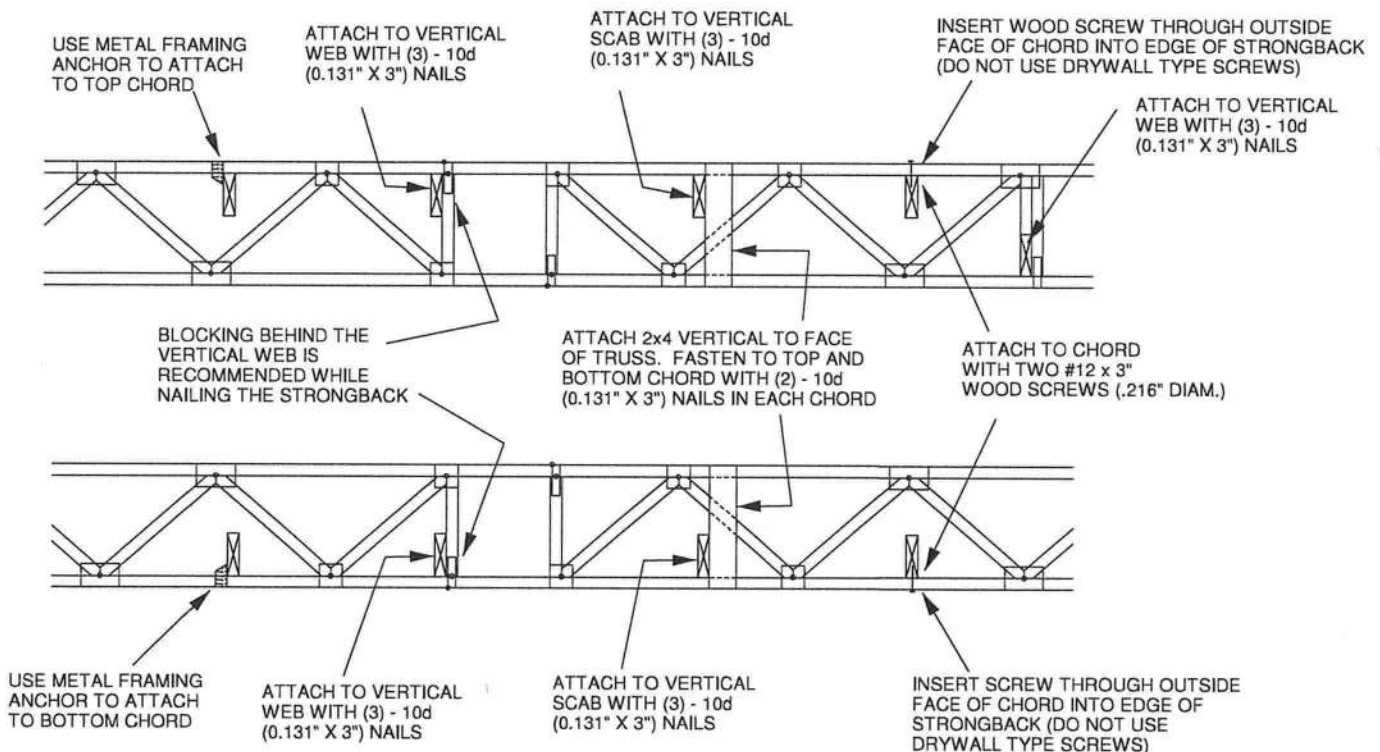
January 19, 2018



TO MINIMIZE VIBRATION COMMON TO ALL SHALLOW FRAMING SYSTEMS, 2x6 "STRONGBACK" IS RECOMMENDED, LOCATED EVERY 8 TO 10 FEET ALONG A FLOOR TRUSS.

NOTE 1: 2X6 STRONGBACK ORIENTED VERTICALLY MAY BE POSITIONED DIRECTLY UNDER THE TOP CHORD OR DIRECTLY ABOVE THE BOTTOM CHORD. SECURELY FASTENED TO THE TRUSS USING ANY OF THE METHODS ILLUSTRATED BELOW.

NOTE 2: STRONGBACK BRACING ALSO SATISFIES THE LATERAL BRACING REQUIREMENTS FOR THE BOTTOM CHORD OF THE TRUSS WHEN IT IS PLACED ON TOP OF THE BOTTOM CHORD, IS CONTINUOUS FROM END TO END, CONNECTED WITH A METHOD OTHER THAN METAL FRAMING ANCHOR, AND PROPERLY CONNECTED, BY OTHERS, AT THE ENDS.



ALTERNATE METHOD OF SPLICING:  
OVERLAP STRONGBACK MEMBERS A MINIMUM OF 4'-0" AND FASTEN WITH (12) - 10d (0.131" X 3") NAILS STAGGERED AND EQUALLY SPACED.  
(TO BE USED ONLY WHEN STRONGBACK IS NOT ALIGNED WITH A VERTICAL)



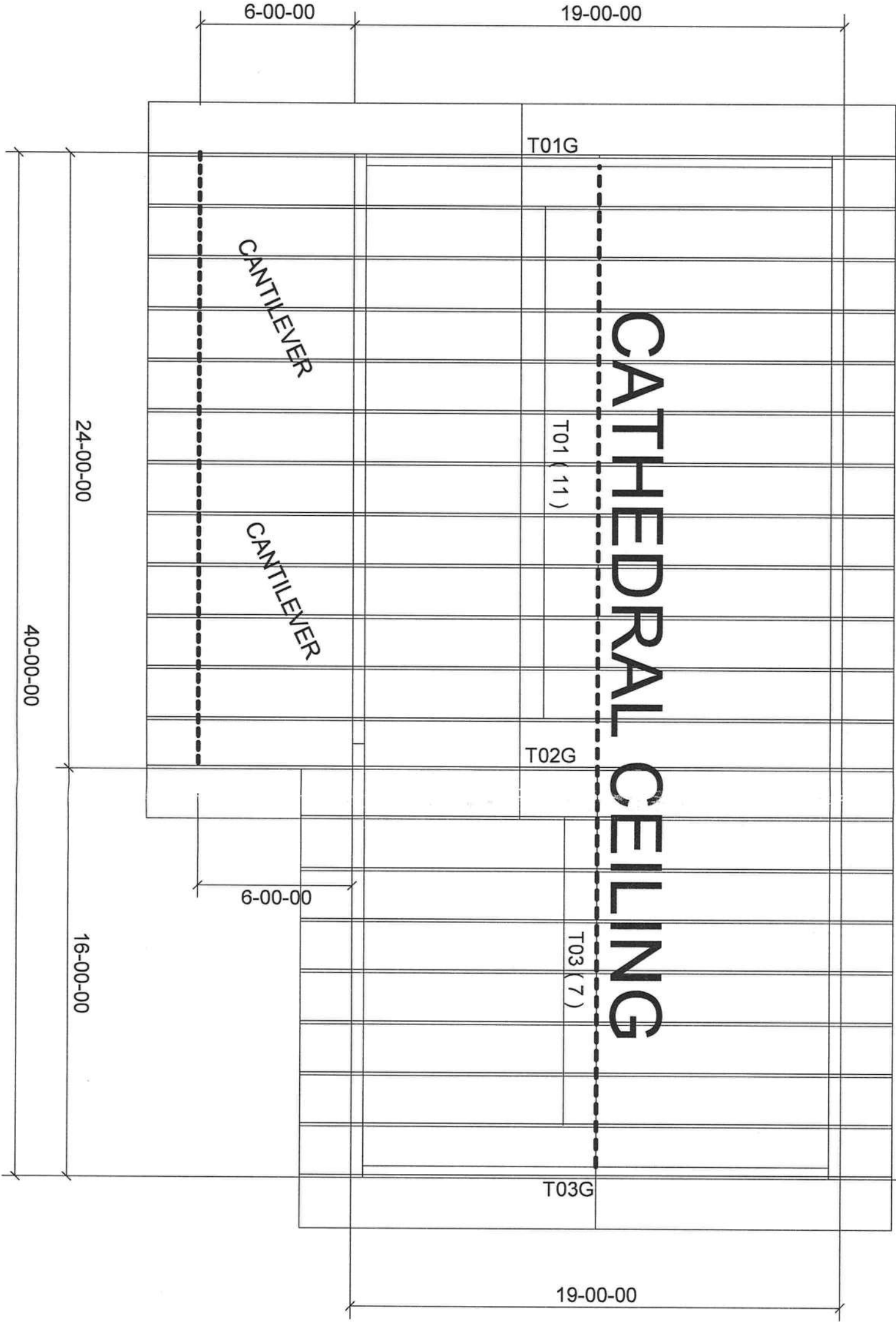
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Date:

February 12, 2018

5/12 PITCH - 24" O/H

40-00-00

BALLOON FRAME GABLE END WALLS TO UNDERSIDE OF SCISSOR TRUSS



BEARING HEIGHT SCHEDULE

10' 1-1/8"

NOTES:

- 1) REFER TO HD 9 (RECOMMENDATIONS FOR HANDLING INSTALLATION AND TEMPORARY BRACING) REFER TO ENGINEERED DRAWINGS FOR PERMANENT BRACING REQUIRED.
- 2) ALL TRUSSES (INCLUDING TRUSSES UNDER VALLEY FRAMING) MUST BE COMPLETELY DECKED OR REFER TO DETAIL V05 FOR ALTERNATE BRACING REQUIREMENTS.
- 3) ALL VALLEYS ARE TO BE CONVENTIONALLY FRAMED BY BUILDER.
- 4) ALL TRUSSES ARE DESIGNED FOR 2 o.e. MAXIMUM SPACING, UNLESS OTHERWISE NOTED.
- 5) ALL WALLS SHOWN ON PLACEMENT PLAN ARE CONSIDERED TO BE LOAD BEARING, UNLESS OTHERWISE NOTED.
- 6) SY42 TRUSSES MUST BE INSTALLED WITH THE TOP BEING UP.
- 7) BEAM/HEAD/JANTEL (DOR) TO BE FURNISHED BY BUILDER.



Jacksonville  
Tampa  
Freeport  
PHONE: 850-621-4541 FAX: 850-835-6835

BUILDER  
BILL & PAT KIMBLE

REAL WORKERS  
FT. WHITE, FL

DATE: 9-20-18

DATE: 9-20-18  
BY: KLH  
ORIGINAL CONTRACT: 1491248

FL Approval Codes - Mitek Plates #'s 2197.2 - 2197.4. Versa-Lam #1644-R4 & BCI Joists #1392-R4



# Load Short Form Entire House

Job: ACE House  
Date: Oct 23, 2018  
By: DJM

## Project Information

For: House

## Design Information

	Htg	Clg	Infiltration	
Outside db (°F)	33	93	Method	Simplified
Inside db (°F)	70	75	Construction quality	Average
Design TD (°F)	37	18	Fireplaces	
Daily range	-	M		
Inside humidity (%)	30	50		
Moisture difference (gr/lb)	11	50		

0

### HEATING EQUIPMENT

Make Trane  
Trade TRANE  
Model 4TWR4024E1  
AHRI ref 8318379

Efficiency 8.2 HSPF  
Heating input  
Heating output 22800 Btuh @ 47°F  
Temperature rise 26 °F  
Actual air flow 787 cfm  
Air flow factor 0.036 cfm/Btuh  
Static pressure 0.53 in H2O  
Space thermostat  
Capacity balance point = 32 °F

Backup:  
Input = 7 kW, Output = 23175 Btuh, 100 AFUE

### COOLING EQUIPMENT

Make Trane  
Trade TRANE  
Model 4TWR4024E1  
AHRI ref 8318379

Efficiency 12.0 EER, 14.5 SEER  
Sensible cooling 16520 Btuh  
Latent cooling 7080 Btuh  
Total cooling 23600 Btuh  
Actual air flow 787 cfm  
Air flow factor 0.037 cfm/Btuh  
Static pressure 0.53 in H2O  
Load sensible heat ratio 0.89

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Area	1154	18644	19418	680	723
Bath	96	2932	1733	107	64
Entire House	1250	21576	21151	787	787
Other equip loads		0	0		
Equip. @ 0.98 RSM			20728		
Latent cooling			2523		
TOTALS	1250	21576	23251	787	787

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



Right-Suite® Universal 2018 18.0.31 RSU11033

2018-Oct-23 08:02:12

... Design\Incoming\1250 House- ACE\1250 House.rup Calc = MJ8 Front Door faces: E

Page 1

**FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION**

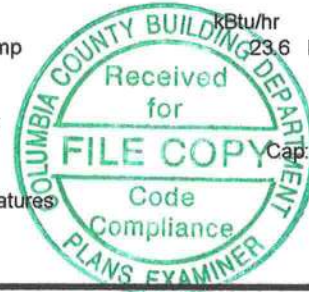
Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: 1250 House  
 Street:  
 City, State, Zip: , FL ,  
 Owner: House  
 Design Location: FL, Jacksonville

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

1. New construction or existing	New (From Plans)	
2. Single family or multiple family	Single-family	
3. Number of units, if multiple family	1	
4. Number of Bedrooms	1	
5. Is this a worst case?	No	
6. Conditioned floor area above grade (ft <sup>2</sup> )	1250	
Conditioned floor area below grade (ft <sup>2</sup> )	0	
7. Windows (142.0 sqft.)	Description	Area
a. U-Factor:	DbI, U=0.35	142.00 ft <sup>2</sup>
SHGC:	SHGC=0.25	
b. U-Factor:	N/A	ft <sup>2</sup>
SHGC:		
c. U-Factor:	N/A	ft <sup>2</sup>
SHGC:		
d. U-Factor:	N/A	ft <sup>2</sup>
SHGC:		
Area Weighted Average Overhang Depth:		1.000 ft
Area Weighted Average SHGC:		0.250
8. Floor Types (760.0 sqft.)	Insulation	Area
a. Slab-On-Grade Edge Insulation	R=0.0	1250.00 ft <sup>2</sup>
b. N/A	R=	ft <sup>2</sup>
c. N/A	R=	ft <sup>2</sup>

9. Wall Types (1180.0 sqft.)	Insulation	Area
a. Frame - Wood, Exterior	R=19.0	1180.00 ft <sup>2</sup>
b. N/A	R=	ft <sup>2</sup>
c. N/A	R=	ft <sup>2</sup>
d. N/A	R=	ft <sup>2</sup>
10. Ceiling Types (760.0 sqft.)	Insulation	Area
a. Under Attic (Vented)	R=19.0	760.00 ft <sup>2</sup>
b. N/A	R=	ft <sup>2</sup>
c. N/A	R=	ft <sup>2</sup>
11. Ducts		R ft <sup>2</sup>
a. Sup: Attic, Ret: Attic, AH: Main		6 200
12. Cooling systems	kBtu/hr	Efficiency
a. Central Unit	23.6	SEER: 14.50
13. Heating systems	kBtu/hr	Efficiency
a. Electric Heat Pump	23.6	HSPF: 8.20
14. Hot water systems		
a. Electric		Cap: 40 gallons
b. Conservation features		EF: 0.950
None		
15. Credits		Pstat



Glass/Floor Area: 0.187

Total Proposed Modified Loads: 29.35

Total Baseline Loads: 29.25

**PASS**

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

PREPARED BY: David Marrs  
 DATE: 10/23/18

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

OWNER/AGENT: \_\_\_\_\_  
 DATE: \_\_\_\_\_

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



BUILDING OFFICIAL: \_\_\_\_\_  
 DATE: \_\_\_\_\_

- Compliance requires certification by the air handler unit manufacturer that the air handler enclosure qualifies as certified factory-sealed in accordance with R403.3.2.1.
- Compliance requires an Air Barrier and Insulation Inspection Checklist in accordance with R402.4.1.1 and this project requires an envelope leakage test report with envelope leakage no greater than 5.00 ACH50 (R402.4.1.2).
- Compliance with a proposed duct leakage Qn requires a Duct Leakage Test Report confirming duct leakage to outdoors, tested in accordance with ANSI/RESNET/ICC 380, is not greater than 0.030 Qn for whole house.

## INPUT SUMMARY CHECKLIST REPORT

## PROJECT

Title:	1250 House	Bedrooms:	1	Address Type:	Street Address
Building Type:	User	Conditioned Area:	760	Lot #	
Owner Name:	House	Total Stories:	1	Block/Subdivision:	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:		Rotate Angle:	0	Street:	
Permit Office:	Columbia	Cross Ventilation:	No	County:	Columbia
Jurisdiction:		Whole House Fan:	No	City, State, Zip:	FL,
Family Type:	Single-family				
New/Existing:	New (From Plans)				
Comment:					

## CLIMATE

✓	Design Location	TMY Site	Design Temp 97.5 %	2.5 %	Int Design Temp Winter	Summer	Heating Degree Days	Design Moisture	Daily Temp Range
_____	FL, Jacksonville	FL_JACKSONVILLE_INT	32	93	70	75	1281	49	Medium

## BLOCKS

Number	Name	Area	Volume
1	Block1	760	7600

## SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	1250	1250	Yes	1	1	1	Yes	Yes	Yes

## FLOORS

✓	#	Floor Type	Space	Perimeter	R-Value	Area	Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulatio	Main	118 ft	0	760 ft²	0	0	1

## ROOF

✓	#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
_____	1	Gable or shed	Composition shingles	850 ft²	190 ft²	Medium	0.9	N	0.9	No	0	26.6

## ATTIC

✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	150	760 ft²	N	N

## CEILING

✓	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	Main	19	Blown	1250 ft²	0.1	Wood

## INPUT SUMMARY CHECKLIST REPORT

## WALLS

✓ #	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
1	N	Exterior	Frame - Wood	Main	19	19	0	10	0	190.0 ft²	0	0.25	0.8	0
2	E	Exterior	Frame - Wood	Main	19	40	0	10	0	400.0 ft²	0	0.25	0.8	0
3	S	Exterior	Frame - Wood	Main	19	19	0	10	0	190.0 ft²	0	0.25	0.8	0
4	W	Exterior	Frame - Wood	Main	19	40	0	10	0	400.0 ft²	0	0.25	0.8	0

## DOORS

✓ #	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
1	N	Wood	Main	None	.39	3		7		21 ft²
2	E	Wood	Main	None	.39	3		7		21 ft²
3	S	Wood	Main	None	.39	3		7		21 ft²

## WINDOWS

Orientation shown is the entered, Proposed orientation.

✓ #	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Area	Overhang Depth	Separation	Int Shade	Screening
1	n	1	Metal	Low-E Double	Yes	0.35	0.25	N	12.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
2	e	2	Metal	Low-E Double	Yes	0.35	0.25	N	6.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
3	e	2	Metal	Low-E Double	Yes	0.35	0.25	N	40.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None
4	W	4	Metal	Low-E Double	Yes	0.35	0.25	N	84.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	None

## INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000318	633.3	34.77	65.39	.2596	5

## HEATING SYSTEM

✓ #	System Type	Subtype	Efficiency	Capacity	Block	Ducts
1	Electric Heat Pump/	Split	HSPF:8.2	23.6 kBtu/hr	1	sys#1

## COOLING SYSTEM

✓ #	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
1	Central Unit/	Split	SEER: 14.5	23.6 kBtu/hr	cfm	0.7	1	sys#1

## HOT WATER SYSTEM

✓ #	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
1	Electric	None	Main	0.95	40 gal	40 gal	120 deg	None

## INPUT SUMMARY CHECKLIST REPORT

## SOLAR HOT WATER SYSTEM

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

## DUCTS

✓	#	--- Supply --- Location	R-Value	Area	--- Return --- Location	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	Cool
_____	1	Attic	6	200 ft²	Attic	100 ft²	Prop. Leak Free	Main	--- cfm	22.8 cfm	0.03	0.50	1	1

## TEMPERATURES

Programable Thermostat: Y				Ceiling Fans:																				
Cooling	<input checked="" type="checkbox"/>	Jan	<input type="checkbox"/>	Feb	<input type="checkbox"/>	Mar	<input type="checkbox"/>	Apr	<input type="checkbox"/>	May	<input checked="" type="checkbox"/>	Jun	<input checked="" type="checkbox"/>	Jul	<input checked="" type="checkbox"/>	Aug	<input checked="" type="checkbox"/>	Sep	<input type="checkbox"/>	Oct	<input type="checkbox"/>	Nov	<input type="checkbox"/>	Dec
Heating	<input checked="" type="checkbox"/>	Jan	<input checked="" type="checkbox"/>	Feb	<input checked="" type="checkbox"/>	Mar	<input checked="" type="checkbox"/>	Apr	<input type="checkbox"/>	May	<input type="checkbox"/>	Jun	<input type="checkbox"/>	Jul	<input type="checkbox"/>	Aug	<input type="checkbox"/>	Sep	<input type="checkbox"/>	Oct	<input checked="" type="checkbox"/>	Nov	<input checked="" type="checkbox"/>	Dec
Venting	<input type="checkbox"/>	Jan	<input type="checkbox"/>	Feb	<input type="checkbox"/>	Mar	<input type="checkbox"/>	Apr	<input type="checkbox"/>	May	<input type="checkbox"/>	Jun	<input type="checkbox"/>	Jul	<input type="checkbox"/>	Aug	<input type="checkbox"/>	Sep	<input type="checkbox"/>	Oct	<input type="checkbox"/>	Nov	<input type="checkbox"/>	Dec
Thermostat Schedule:		HERS 2006 Reference																						
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12											
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	80	80	80											
	PM	80	80	78	78	78	78	78	78	78	78	78	78											
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78											
	PM	78	78	78	78	78	78	78	78	78	78	78	78											
Heating (WD)	AM	66	66	66	66	66	68	68	68	68	68	68	68											
	PM	68	68	68	68	68	68	68	68	68	68	66	66											
Heating (WEH)	AM	66	66	66	66	66	68	68	68	68	68	68	68											
	PM	68	68	68	68	68	68	68	68	68	68	66	66											

## MASS

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

Name: David Marrs

Signature: David Marrs

Rating Compant: David Marrs

Date: 10/23/18

**Florida Building Code, Energy Conservation, 6th Edition (2017)**  
**Mandatory Requirements for Residential Performance, Prescriptive and ERI Methods**

ADDRESS:

, FL ,

Permit Number:

**MANDATORY REQUIREMENTS** See individual code sections for full details.



**SECTION R401 GENERAL**



**R401.3 Energy Performance Level (EPL) display card (Mandatory).** The building official shall require that an energy performance level (EPL) display card be completed and certified by the builder to be accurate and correct before final approval of the building for occupancy. Florida law (Section 553.9085, Florida Statutes) requires the EPL display card to be included as an addendum to each sales contract for both presold and nonpresold residential buildings. The EPL display card contains information indicating the energy performance level and efficiencies of components installed in a dwelling unit. The building official shall verify that the EPL display card completed and signed by the builder accurately reflects the plans and specifications submitted to demonstrate code compliance for the building. A copy of the EPL display card can be found in Appendix RD.



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

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



**R402.4.1 Building thermal envelope.** The building thermal envelope shall comply with Sections R402.4.1.1 and R402.4.1.2. The sealing methods between dissimilar materials shall allow for differential expansion and contraction.



**R402.4.1.1 Installation.** The components of the building thermal envelope as listed in Table R402.4.1.1 shall be installed in accordance with the manufacturer's instructions and the criteria listed in Table R402.4.1.1, as applicable to the method of construction. Where required by the code official, an approved third party shall inspect all components and verify compliance.



**R402.4.1.2 Testing.** The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding seven air changes per hour in Climate Zones 1 and 2, and three air changes per hour in Climate Zones 3 through 8. Testing shall be conducted in accordance with ANSI/RESNET/ICC 380 and reported at a pressure of 0.2 inch w.g. (50 pascals). Testing shall be conducted by either individuals as defined in Section 553.993(5) or (7), Florida Statutes, or individuals licensed as set forth in Section 489.105(3)(f), (g) or (i) or an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

**Exception:** Testing is not required for additions, alterations, renovations, or repairs, of the building thermal envelope of existing buildings in which the new construction is less than 85 percent of the building thermal envelope.

During testing:

1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures.
2. Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.
3. Interior doors, if installed at the time of the test, shall be open.
4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed.
5. Heating and cooling systems, if installed at the time of the test, shall be turned off.
6. Supply and return registers, if installed at the time of the test, shall be fully open.



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



**R402.4.3 Fenestration air leakage.** Windows, skylights and sliding glass doors shall have an air infiltration rate of no more than 0.3 cfm per square foot (1.5 L/s/m<sup>2</sup>), and swinging doors no more than 0.5 cfm per square foot (2.6 L/s/m<sup>2</sup>), when tested according to NFRC 400 or AAMA/WDMA/CSA 101/I.S.2/A440 by an accredited, independent laboratory and listed and labeled by the manufacturer.

**Exception:** Site-built windows, skylights and doors.

## MANDATORY REQUIREMENTS - (Continued)

- ☐ **R402.4.4 Rooms containing fuel-burning appliances.** In Climate Zones 3 through 8, where open combustion air ducts provide combustion air to open combustion fuel burning appliances, the appliances and combustion air opening shall be located outside the building thermal envelope or enclosed in a room, isolated from inside the thermal envelope. Such rooms shall be sealed and insulated in accordance with the envelope requirements of Table R402.1.2, where the walls, floors and ceilings shall meet not less than the basement wall R-value requirement. The door into the room shall be fully gasketed and any water lines and ducts in the room insulated in accordance with Section R403. The combustion air duct shall be insulated where it passes through conditioned space to a minimum of R-8.

### Exceptions:

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

- ☐ **R402.4.5 Recessed lighting.** Recessed luminaires installed in the building thermal envelope shall be sealed to limit air leakage between conditioned and unconditioned spaces. All recessed luminaires shall be IC-rated and labeled as having an air leakage rate not more than 2.0 cfm (0.944 L/s) when tested in accordance with ASTM E283 at a 1.57 psf (75 Pa) pressure differential. All recessed luminaires shall be sealed with a gasket or caulk between the housing and the interior wall or ceiling covering.

## SECTION R403 SYSTEMS

### R403.1 Controls.

- ☐ **R403.1.1 Thermostat provision (Mandatory).** At least one thermostat shall be provided for each separate heating and cooling system.
- ☐ **R403.1.3 Heat pump supplementary heat (Mandatory).** Heat pumps having supplementary electric-resistance heat shall have controls that, except during defrost, prevent supplemental heat operation when the heat pump compressor can meet the heating load.

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

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

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

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

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

### Exceptions:

1. A duct air leakage test shall not be required where the ducts and air handlers are located entirely within the building thermal envelope.
2. Duct testing is not mandatory for buildings complying by Section 405 of this code.

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

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

- ☐ **R403.4 Mechanical system piping insulation (Mandatory).** Mechanical system piping capable of carrying fluids above 105°F (41°C) or below 55°F (13°C) shall be insulated to a minimum of R-3.

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

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

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

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

## MANDATORY REQUIREMENTS - (Continued)

- ☐ **R403.5.5 Heat traps (Mandatory).** Storage water heaters not equipped with integral heat traps and having vertical pipe risers shall have heat traps installed on both the inlets and outlets. External heat traps shall consist of either a commercially available heat trap or a downward and upward bend of at least 3 ½ inches (89 mm) in the hot water distribution line and cold water line located as close as possible to the storage tank.
- R403.5.6 Water heater efficiencies (Mandatory).**
- ☐ **R403.5.6.1.1 Automatic controls.** Service water-heating systems shall be equipped with automatic temperature controls capable of adjustment from the lowest to the highest acceptable temperature settings for the intended use. The minimum temperature setting range shall be from 100°F to 140°F (38°C to 60°C).
- ☐ **R403.5.6.1.2 Shut down.** A separate switch or a clearly marked circuit breaker shall be provided to permit the power supplied to electric service systems to be turned off. A separate valve shall be provided to permit the energy supplied to the main burner(s) of combustion types of service water-heating systems to be turned off.
- ☐ **R403.5.6.2 Water-heating equipment.** Water-heating equipment installed in residential units shall meet the minimum efficiencies of Table C404.2 in Chapter 4 of the Florida Building Code, Energy Conservation, Commercial Provisions, for the type of equipment installed. Equipment used to provide heating functions as part of a combination system shall satisfy all stated requirements for the appropriate water-heating category. Solar water heaters shall meet the criteria of Section R403.5.6.2.1.
- ☐ **R403.5.6.2.1 Solar water-heating systems.** Solar systems for domestic hot water production are rated by the annual solar energy factor of the system. The solar energy factor of a system shall be determined from the Florida Solar Energy Center Directory of Certified Solar Systems. Solar collectors shall be tested in accordance with ISO Standard 9806, Test Methods for Solar Collectors, and SRCC Standard TM-1, Solar Domestic Hot Water System and Component Test Protocol. Collectors in installed solar water-heating systems should meet the following criteria:
1. Be installed with a tilt angle between 10 degrees and 40 degrees of the horizontal; and
  2. Be installed at an orientation within 45 degrees of true south.
- ☐ **R403.6 Mechanical ventilation (Mandatory).** The building shall be provided with ventilation that meets the requirements of the Florida Building Code, Residential, or Florida Building Code, Mechanical, as applicable, or with other approved means of ventilation including: Natural, Infiltration or Mechanical means. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.
- ☐ **R403.6.1 Whole-house mechanical ventilation system fan efficacy.** When installed to function as a whole-house mechanical ventilation system, fans shall meet the efficacy requirements of Table R403.6.1.
- Exception:** Where whole-house mechanical ventilation fans are integral to tested and listed HVAC equipment, they shall be powered by an electronically commutated motor.
- ☐ **R403.6.2 Ventilation air.** Residential buildings designed to be operated at a positive indoor pressure or for mechanical ventilation shall meet the following criteria:
1. The design air change per hour minimums for residential buildings in ASHRAE 62.2, Ventilation for Acceptable Indoor Air Quality, shall be the maximum rates allowed for residential applications.
  2. No ventilation or air-conditioning system make-up air shall be provided to conditioned space from attics, crawlspaces, attached enclosed garages or outdoor spaces adjacent to swimming pools or spas.
  3. If ventilation air is drawn from enclosed space(s), then the walls of the space(s) from which air is drawn shall be insulated to a minimum of R-11 and the ceiling shall be insulated to a minimum of R-19, space permitting, or R-10 otherwise.
- R403.7 Heating and cooling equipment (Mandatory).**
- ☐ **R403.7.1 Equipment sizing.** Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on the equipment loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies, based on building loads for the directional orientation of the building. The manufacturer and model number of the outdoor and indoor units (if split system) shall be submitted along with the sensible and total cooling capacities at the design conditions described in Section R302.1. This Code does not allow designer safety factors, provisions for future expansion or other factors that affect equipment sizing. System sizing calculations shall not include loads created by local intermittent mechanical ventilation such as standard kitchen and bathroom exhaust systems. New or replacement heating and cooling equipment shall have an efficiency rating equal to or greater than the minimum required by federal law for the geographic location where the equipment is installed.

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

FAN LOCATION	AIRFLOW RATE MINIMUM (CFM)	MINIMUM EFFICACY * (CFM/WATT)	AIRFLOW RATE MAXIMUM (CFM)
Range hoods	Any	2.8 cfm/watt	Any
In-line fan	Any	2.8 cfm/watt	Any
Bathroom, utility room	10	1.4 cfm/watt	<90
Bathroom, utility room	90	2.8 cfm/watt	Any

For SI: 1 cfm = 28.3 L/min.

a. When tested in accordance with HVI Standard 916

## MANDATORY REQUIREMENTS - (Continued)

- ☐ **R403.7.1.1 Cooling equipment capacity.** Cooling only equipment shall be selected so that its total capacity is not less than the calculated total load but not more than 1.15 times greater than the total load calculated according to the procedure selected in Section 403.7, or the closest available size provided by the manufacturer's product lines. The corresponding latent capacity of the equipment shall not be less than the calculated latent load.

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

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

Exceptions:

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

### R403.7.1.2 Heating equipment capacity.

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

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

- ☐ **R403.7.1.2.3 Fossil fuel heating equipment.** The capacity of fossil fuel heating equipment with natural draft atmospheric burners shall not be less than the design load calculated in accordance with Section R403.7.1.

- ☐ **R403.7.1.3 Extra capacity required for special occasions.** Residences requiring excess cooling or heating equipment capacity on an intermittent basis, such as anticipated additional loads caused by major entertainment events, shall have equipment sized or controlled to prevent continuous space cooling or heating within that space by one or more of the following options:

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

- ☐ **R403.8 Systems serving multiple dwelling units (Mandatory).** Systems serving multiple dwelling units shall comply with Sections C403 and C404 of the IECC—Commercial Provisions in lieu of Section R403.

- ☐ **R403.9 Snow melt and ice system controls (Mandatory)** Snow- and ice-melting systems, supplied through energy service to the building, shall include automatic controls capable of shutting off the system when the pavement temperature is above 50°F (10°C), and no precipitation is falling and an automatic or manual control that will allow shutoff when the outdoor temperature is above 40°F (4.8°C).

- ☐ **R403.10 Pools and permanent spa energy consumption (Mandatory).** The energy consumption of pools and permanent spas shall be in accordance with Sections R403.10.1 through R403.10.5.

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

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

Exceptions:

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

- ☐ **R403.10.3 Covers.** Outdoor heated swimming pools and outdoor permanent spas shall be equipped with a vapor-retardant cover on or at the water surface or a liquid cover or other means proven to reduce heat loss.

**Exception:** Where more than 70 percent of the energy for heating, computed over an operation season, is from site-recovered energy, such as from a heat pump or solar energy source, covers or other vapor-retardant means shall not be required.

- ☐ **R403.10.4 Gas- and oil-fired pool and spa heaters.** All gas- and oil-fired pool and spa heaters shall have a minimum thermal efficiency of 82 percent for heaters manufactured on or after April 16, 2013, when tested in accordance with ANSI Z 21.56. Pool heaters fired by natural or LP gas shall not have continuously burning pilot lights.

- ☐ **R403.10.5 Heat pump pool heaters.** Heat pump pool heaters shall have a minimum COP of 4.0 when tested in accordance with AHRI 1160, Table 2, Standard Rating Conditions-Low Air Temperature. A test report from an independent laboratory is required to verify procedure compliance. Geothermal swimming pool heat pumps are not required to meet this standard.
- ☐ **R403.11 Portable spas (Mandatory)** The energy consumption of electric-powered portable spas shall be controlled by the requirements of APSP-14.

## SECTION R404

### ELECTRICAL POWER AND LIGHTING SYSTEMS

- ☐ **R404.1 Lighting equipment (Mandatory).** Not less than 75 percent of the lamps in permanently installed lighting fixtures shall be high-efficacy lamps or not less than 75 percent of the permanently installed lighting fixtures shall contain only high-efficacy lamps.
- Exception:** Low-voltage lighting.
- R404.1.1 Lighting equipment (Mandatory)** Fuel gas lighting systems shall not have continuously burning pilot lights.

# 2017 - AIR BARRIER AND INSULATION INSPECTION COMPONENT CRITERIA

**TABLE 402.4.1.1**  
**AIR BARRIER AND INSULATION INSPECTION COMPONENT CRITERIA**

<div> <div>Project Name: 1250 House</div> <div>Street:</div> <div>City, State, Zip: , FL ,</div> <div>Owner: House</div> <div>Design Location: FL, Jacksonville</div> </div> <div> <div>Builder Name:</div> <div>Permit Office: Columbia</div> <div>Permit Number:</div> <div>Jurisdiction:</div> </div>			CHECK
COMPONENT	AIR BARRIER CRITERIA	INSULATION INSTALLATION CRITERIA	
General requirements	A continuous air barrier shall be installed in the building envelope. The exterior thermal envelope contains a continuous air barrier. Breaks or joints in the air barrier shall be sealed.	Air-permeable insulation shall not be used as a sealing material.	
Ceiling/attic	The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier shall be sealed. Access openings, drop down stairs or knee wall doors to unconditioned attic spaces shall be sealed.	The insulation in any dropped ceiling/soffit shall be aligned with the air barrier.	
Walls	The junction of the foundation and sill plate shall be sealed. The junction of the top plate and the top of exterior walls shall be sealed. Knee walls shall be sealed.	Cavities within corners and headers of frame walls shall be insulated by completely filling the cavity with a material having a thermal resistance of R-3 per inch minimum. Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier.	
Windows, skylights and doors	The space between window/door jambs and framing, and skylights and framing shall be sealed.		
Rim joists	Rim joists shall include the air barrier.	Rim joists shall be insulated.	
Floors (including above-garage and cantilevered floors)	The air barrier shall be installed at any exposed edge of insulation.	Floor framing cavity insulation shall be installed to maintain permanent contact with the underside of subfloor decking, or floor framing cavity insulation shall be permitted to be in contact with the top side of sheathing, or continuous insulation installed on the underside of floor framing and extends from the bottom to the top of all perimeter floor framing members.	
Crawl space walls	Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.	Where provided instead of floor insulation, insulation shall be permanently attached to the crawlspace	
Shafts, penetrations	Duct shafts, utility penetrations, and flue shafts opening to exterior or unconditioned space shall be sealed.		
Narrow cavities		Batts in narrow cavities shall be cut to fit, or narrow cavities shall be filled by insulation that on installation readily conforms to the available cavity spaces.	
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.		
Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be sealed to the drywall.	Recessed light fixtures installed in the building thermal envelope shall be air tight and IC rated.	
Plumbing and wiring		Batt insulation shall be cut neatly to fit around wiring and plumbing in exterior walls, or insulation that on installation readily conforms to available space shall extend behind piping and wiring.	
Shower/tub on exterior wall	The air barrier installed at exterior walls adjacent to showers and tubs shall separate them from the showers and tubs.	Exterior walls adjacent to showers and tubs shall be insulated.	
Electrical/phone box on exterior walls	The air barrier shall be installed behind electrical or communication boxes or air-sealed boxes shall be installed.		
HVAC register boots	HVAC register boots that penetrate building thermal envelope shall be sealed to the sub-floor or drywall.		
Concealed sprinklers	When required to be sealed, concealed fire sprinklers shall only be sealed in a manner that is recommended by the manufacturer. Caulking or other adhesive sealants shall not be used to fill voids between fire sprinkler cover plates and walls or ceilings.		

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