DATE 08/02/2018

Columbia County Building Permit

This Permit Must Be Prominently Posted on Premises During Construction

PERMIT
000037053

APPLICANT RALPH COURSON PHONE 386.623.7063

ADDRESS 4128 NW CR 238 LAKE BUTLER FL 32054

OWNER ALLEN & CHING P. COLEMAN PHONE 386.719.6600

ADDRESS 158 SE FERRET PL LAKE CITY FL 32025

CONTRACTOR RALPH COURSON PHONE 386.623.7063

LOCATION OF PROPERTY 90-E TO COUNTRY CLUB,TR TO HUBBLE,TR TO CHEROKEE,TR AND IT'S THE LAST LOT ON L.

TYPE DEVELOPMENT SFD/UTILITY ESTIMATED COST OF CONSTRUCTION 115200.00

HEATED FLOOR AREA 1583.00 TOTAL AREA 2304.00 HEIGHT STORIES 1

FOUNDATION CONC WALLS FRAMED ROOF PITCH 7/12 FLOOR CONC

LAND USE & ZONING RSF-2 MAX HEIGHT

Minimum Set Back Requirments: STREET-FRONT 25.00 REAR 15.00 SIDE 10.00

NO. EX.D.U. 0 FLOOD ZONE AH DEVELOPMENT PERMIT NO. 18-007

PARCEL ID 16-4S-17-08382-079 SUBDIVISION GLENWOOD

LOT 11 BLOCK PHASE UNIT 2 TOTAL ACRES 0.47

000002655 RG0042897 R.L.C.

Culvert Permit No. Culvert Waiver Contractor's License Number Applicant/Owner/Contractor

PWD 18-0577 LN TC N

Driveway Connection Septic Tank Number LU & Zoning checked by Approved for Issuance New Resident Time/SIUP No.

COMMENTS: MFL @ 105.50. ELEVATION CERTIFICATE REQUIRED BEFORE POWER.

NOC ON FILE.

Check # or Cash 1758

FOR BUILDING & ZONING DEPARTMENT ONLY

Temporary Power date/app. by Foundation date/app. by Monolithic (footer/Slab) date/app. by

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

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

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

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

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

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

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

BUILDING PERMIT FEE $ 580.00 CERTIFICATION FEE $ 11.52 SURCHARGE FEE $ 11.52

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

PLAN REVIEW FEE $ 145.00 DP & FLOOD ZONE FEE $ 75.00 CULVERT FEE $ 25.00 **TOTAL FEE** 898.04 ✓

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.

Columbia County New Building Permit Application

For Office Use Only Application # 1807-63 Date Received 7/19 By JW Permit # 37083 / 4659

Zoning Official KN Date 8-1-18 Flood Zone AH Land Use RLD Zoning RSF2

FEMA Map # 0313D Elevation 104.5 MFE 105.5 River n/a Plans Examiner T.C. Date 8-1-18

Comments Elevation certificate required before power

☑ NOC ☑ EH ☐ Deed or PA ☑ Site Plan ☐ State Road Info ☑ Well letter ☑ 911 Sheet ☐ Parent Parcel #

☑ Dev Permit # 18-007 ☐ 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. 18-0577 OR City Water ☑ Fax

Applicant (Who will sign/pickup the permit) Ralph Courson Phone 386-623-7063

Address 14128 N/W CR 238 Lake Butler Fl. 32054

Owners Name Allen Coleman & Ching P. COLEMAN Phone 386-719-6600

911 Address 158 SE FERRET PL. Lake City Fl. 32025

Contractors Name Ralph Courson Phone 386-496-3873

Address 14128 N/W CR 239 Lake Butler Fl 32054 M 386-623-7063

Contractor ~~Email~~ ***Include to get updates on this job.

Fee Simple Owner Name & Address Allen Coleman 385 SW Arlington Blvd Lake City, Fl. 32055

Bonding Co. Name & Address Owner

Architect/Engineer Name & Address Mark Disosway P.E. 163 SW Midtown Place Suite 103 PH 386-754-5449

Mortgage Lenders Name & Address Allen Coleman Lake City Fl. 32025

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

Property ID Number 16-4S-17-08382-079 Estimated Construction Cost $150,000

Subdivision Name Glenwood Lot 11 Block Unit 2 Phase

Driving Directions from a Major Road ½ Old Country Club to Hubbard Rd. go to SE Cherokee Way turn Right LAST LOT ON L...

Construction of House Commercial OR ☑ Residential

Proposed Use/Occupancy 4 Number of Existing Dwellings on Property 0

Is the Building Fire Sprinkled? If Yes, blueprints included Or Explain N/A 7'12

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 25/50 Side 25 Side 60 Rear /

Number of Stories 1 Heated Floor Area 1583 Total Floor Area 2304 Acreage .47

Zoning Applications applied for (Site & Development Plan, Special Exception, etc.) Site Specific Ralph - 7.19.18

Columbia County Building Permit Application

CODE: Florida Building Code 2014 and the 2011 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.

Allen Coleman
Print Owners Name

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.

R.L.C.
Contractor's Signature

Contractor's License Number RG0042897
Columbia County Competency Card Number 1339

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 3 **day of** July **20**18.

Personally known ____ **or Produced Identification** FL DL

Wendy Coody
State of Florida Notary Signature (For the Contractor)

SEAL

WENDY COODY
Notary Public - State of Florida
Commission # FF 245541
My Comm. Expires Oct 23, 2019

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:	**7/13/2018 11:06:32 AM**
Address:	**158 SE FERRET Pl**
City:	**LAKE CITY**
State:	**FL**
Zip Code	**32025**
Parcel ID	**08382-079**

REMARKS: Address for proposed structure on parcel. This address replaces 118 SE CHEROKEE Way.

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

CITY OF LAKE CITY
Florida's Gateway Est. 1859

July 18, 2018

Courson Enterprises, LLC
14128 NW County Road 239
Lake Butler, FL 32054

RE: Service Availability Letter

To Whom It May Concern,

Thank you for your inquiry regarding the availability of city utilities. The City of Lake City has potable water available to tap into at Parcel 16-4S-17-08382-079.

This availability response does not represent the City of Lake City's commitment for or reservation of capacity. In accordance with the City of Lake City's policies and procedures, commitment to serve is made only upon the City of Lake City's approval of your application for service and receipt of your payment of all applicable fees.

If you have any questions, please feel free to contact me at (386) 719-5786 during our normal business hours of 8:00 am to 4:30 pm, Monday through Friday. I will be happy to assist you.

Sincerely,

Shasta Pelham

Shasta M. Pelham
Utility Service Coordinator

Brian Scott
Director of Distribution and Collections

NOTICE OF COMMENCEMENT

Tax Parcel Identification Number:

Clerk's Office Stamp
Inst: 201812013679 Date: 07/03/2018 Time: 10:53AM
Page 1 of 1 B: 1363 P: 2050, P.DeWitt Cason, Clerk of Court
Columbia, County, By: BS
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)*: Parcel 16-4S-17-08382-079 / Lot 11, Glenwood, Unit II, according to plat thereof recorded in Plat Book 4, page 96, public records of Columbia county Florida
   a) Street *(job)* Address: 118 SE Cherokee way
2. General description of improvements: Lot
3. Owner Information or Lessee information if the Lessee contracted for the improvements:
   a) Name and address: Allen Coleman Ching Coleman Ching Chin Ya
   b) Name and address of fee simple titleholder (if other than owner) Same 385 SW Arlington Blvd
   c) Interest in property owners Lake City FL 32025
4. Contractor Information
   a) Name and address: Ralph Coursen 14128 NW County Road 239
   b) Telephone No.: 386 496 3873 Lake Butler Fl. 32054.
5. Surety Information (if applicable, a copy of the payment bond is attached):
   a) Name and address: NA
   b) Amount of Bond:
   c) Telephone No.:
6. Lender
   a) Name and address: NIA
   b) Phone No.
7. Person within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13(1)(a)7., Florida Statutes:
   a) Name and address:
   b) Telephone No.:
8. In addition to himself or herself, Owner designates the following person to receive a copy of the Lienor's Notice as provided in Section 713.13(l)(b), Florida Statutes:
   a) Name: OF
   b) Telephone No.:
9. Expiration date of Notice of Commencement (**the expiration date will be 1 year from the date of recording unless a different date is specified**):

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

STATE OF FLORIDA
COUNTY OF COLUMBIA

10. Allen D Coleman
Signature of Owner or Lessee/or Owner's or Lessee's Authorized Office/Director/Partner/Manager

Allen D Coleman
Printed Name and Signatory's Title/Office

The foregoing instrument was acknowledged before me, a Florida Notary, this 2nd day of July, 20 18, by:

Allen D Coleman as owner for
(Name of Person) (Type of Authority) (name of party on behalf of whom instrument was executed)

Personally Known ✓ OR Produced Identification ____ Type

Notary Signature Jody M. Goble

Notary Stamp or Seal:
Notary Public State of Florida
Jody M Goble
My Commission GG 042735
Expires 02/18/2021

6.5

10276
WARRANTY DEED
INDIVID. TO INDIVID.

This Warranty Deed *Made the* 13th *day of* September *A. D. 19*99 *by*

Jimmy C. Lyons

hereinafter called the grantor, to

Lan Sheng Yu and Ching Chin Yu

whose postoffice address is 500 ACL RD. Lake City, Fl. 32025
hereinafter called the grantee:

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

Witnesseth: *That the grantor, for and in consideration of the sum of $* 10.00 *and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the grantee, all that certain land situate in* COLUMBIA *County, Florida, viz:* R08382-79

Lot 11, Glenwood, Unit II, according to the plat thereof recorded in Plat Book 4, Page 96, public records of Columbia County Florida.

The above described property is not the homestead property of the grantor herein, Jimmy C. Lyons, who in fact resides at:
Route 16, Box 646, Lake City, FL 32025

Documentary Stamp $49.00
Intangible Tax 0
P. Dewitt Cason
Clerk of Court
By MCK D.C.

99-15761

FILED AND RECORDED IN PUBLIC RECORDS
1999 SEP 13 PM 4:05

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

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

And *the grantor hereby convenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accuring subsequent to December 31, 19* 98

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

Signed, sealed and delivered in our presence:

Sandra M. Moore .... Jimmy C. Lyons .... L.S
Sandra M. Moore JIMMY C. LYONS
Karen Brown .... L.S
KAREN BROWN

STATE OF Florida

COUNTY OF Columbia

RT. 16 BOX 646
Lake City, Fl. 32055

I HEREBY CERTIFY that on this day, before me, an officer duly authorized in the State aforesaid and in the

SUBCONTRACTOR VERIFICATION

APPLICATION/PERMIT # 1807-63 JOB NAME Allen Coleman

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.

			Need
ELECTRICAL ☑ CC# 76	Print Name Marcus Matthews Signature		☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
	Company Name: Matthews Electric		
	License #: EC13005459 Phone #:	386-344-2029	
MECHANICAL/ A/C ☑ CC# 770	Print Name Timothy D. Shatto Signature	Timothy D. Shatto	☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
	Company Name: Shatto Heating & Air, Inc.		
	License #: CAC057875 Phone #:	386-496-8224	
PLUMBING/ GAS ☑ CC# 298	Print Name [illegible] Signature		☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
	Company Name: Don Bell		
	License #: CFC1425890 Phone #:	356 354 6148	
ROOFING ☑ CC# 1339	Print Name Ralph Courson Signature		☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
	Company Name: COURSON ENTERPRISE, LLC		
	License #: Phone #:	386.623.7063	
SHEET METAL ☐ CC#	Print Name Signature		☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
	Company Name:		
	License #: Phone #:		
FIRE SYSTEM/ SPRINKLER ☐ CC#	Print Name Signature		☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
	Company Name:		
	License#: Phone #:		
SOLAR ☐ CC#	Print Name Signature		☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
	Company Name:		
	License #: Phone #:		
STATE SPECIALTY ☐ CC#	Print Name Signature		☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
	Company Name:		
	License #: Phone #:		

Ref: F.S. 440.103; ORD. 2016-30

Columbia County Property Appraiser

updated: 8/1/2018

2017 Tax Year

Tax Collector | Tax Estimator | Property Card | Parcel List Generator

Parcel: 16-4S-17-08382-079

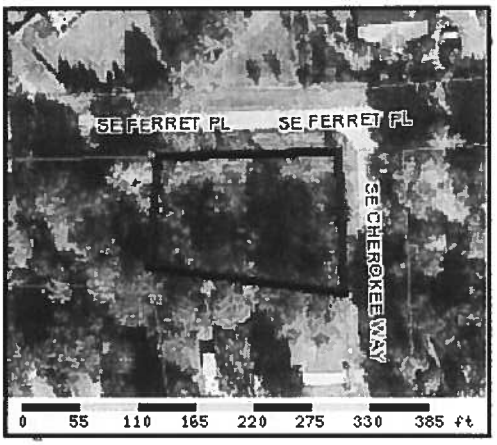
<< Next Lower Parcel | Next Higher Parcel >>

2017 TRIM (pdf) | Interactive GIS Map | Print

Owner & Property Info

Search Result: 1 of 1

Owner's Name	COLEMAN ALLEN D & CHING P		
Mailing Address	385 SW ARLINGTON BLVD LAKE CITY, FL 32025		
Site Address	118 SE CHEROKEE WAY		
Use Desc. (code)	VACANT (000000)		
Tax District	2 (County)	**Neighborhood**	16417
Land Area	0.000 ACRES	**Market Area**	06
Description	NOTE: This description is not to be used as the Legal Description for this parcel in any legal transaction.		
LOT 11 GLENWOOD S/D UNIT II ORB 738-931, 855-1934, 888-262, 976-2324			



Property & Assessment Values

2017 Certified Values		
Mkt Land Value	cnt: (0)	$11,372.00
Ag Land Value	cnt: (1)	$0.00
Building Value	cnt: (0)	$0.00
XFOB Value	cnt: (0)	$0.00
Total Appraised Value		$11,372.00
Just Value		$11,372.00
Class Value		$0.00
Assessed Value		$11,372.00
Exempt Value		$0.00
Total Taxable Value		Cnty: $11,372 Other: $11,372 | Schl: $11,372

2018 Working Values (...Hide Values)		
Mkt Land Value	cnt: (0)	$12,372.00
Ag Land Value	cnt: (1)	$0.00
Building Value	cnt: (0)	$0.00
XFOB Value	cnt: (0)	$0.00
Total Appraised Value		$12,372.00
Just Value		$12,372.00
Class Value		$0.00
Assessed Value		$12,372.00
Exempt Value		$0.00
Total Taxable Value		Cnty: $12,372 Other: $12,372 | Schl: $12,372

NOTE: **2018 Working Values are NOT certified values and therefore are subject to change before being finalized for ad valorem assessment purposes.**

Sales History

Show Similar Sales within 1/2 mile

Sale Date	OR Book/Page	OR Code	Vacant / Improved	Qualified Sale	Sale RCode	Sale Price
1/24/2002	976/2324	QC	V	U	06	$100.00
9/13/1999	888/262	WD	V	Q		$7,000.00
3/25/1998	855/1934	WD	V	U	03	$2,000.00

Building Characteristics

Bldg Item	Bldg Desc	Year Blt	Ext. Walls	Heated S.F.	Actual S.F.	Bldg Value
NONE						

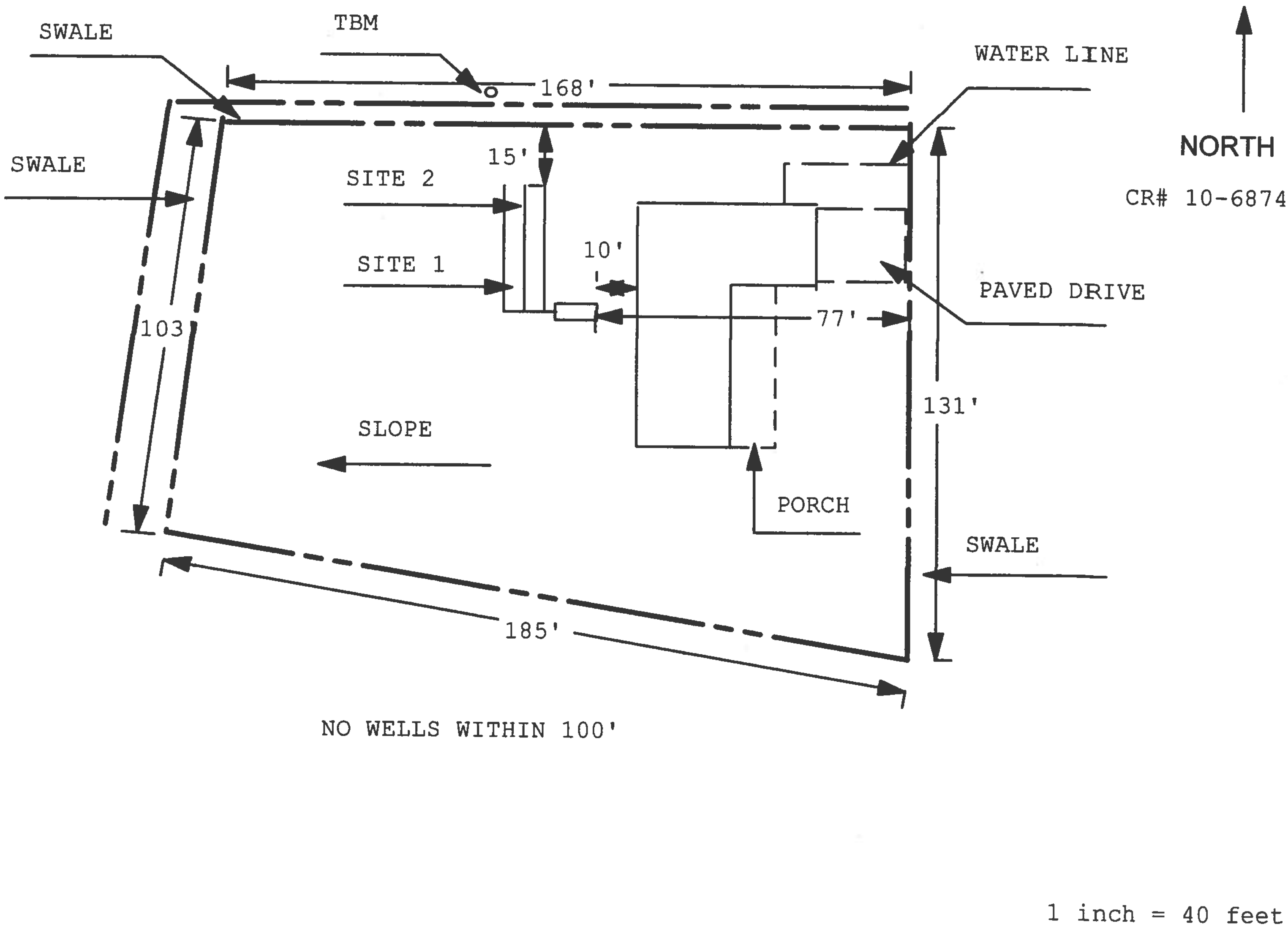
Extra Features & Out Buildings

Code	Desc	Year Blt	Value	Units	Dims	Condition (% Good)
NONE						

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

Permit Application Number: 18-0577

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH UNIT



Site Plan Submitted By Paul Lloyd **Date** 7/12/18

Plan Approved ✓ **Not Approved** ______ **Date** 7/17/18

By Sam Drew EBI Columbia **CPHU**

Notes: ______________________________

CR # 10-6892

PERMIT NO. 18-0547
DATE PAID: 6/28/18
FEE PAID: 310.00
RECEIPT #: 135272

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

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

APPLICANT: ~~RALPH~~ ALLEN COLEMAN & Michiru Coleman

AGENT: ~~RALPH COURSON~~ Paul Lloyd TELEPHONE: (386) 623-7063

MAILING ADDRESS: 385 SW ARLINGTON BLVD. LAKE CITY FL 32025

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

PROPERTY INFORMATION

LOT: 11 BLOCK: N/A SUBDIVISION: GLENWOOD S/D UNIT II PLATTED:

PROPERTY ID #: 16-4S-17-08382-079 ZONING: RES I/M OR EQUIVALENT: [NO]

PROPERTY SIZE: 0.500 ACRES WATER SUPPLY: [X] PRIVATE PUBLIC [ ]<=2000GPD [ ]>2000GPD

IS SEWER AVAILABLE AS PER 381.0065, FS? [NO] DISTANCE TO SEWER: N/A FT

PROPERTY ADDRESS: 118 SE CHEROKEE WAY LAKE CITY

DIRECTIONS TO PROPERTY: 90 WEST TURN RIGHT ON COUNTRY CLUB RD. TURN RIGHT ON HUBBLE ST. TURN RIGHT ON SE CHEROKEE WAY. LAST LOT ON LEFT.

BUILDING INFORMATION [X] RESIDENTIAL [ ] COMMERCIAL

Unit No.	Type of Establishment	No. of Bedrooms	Building Area Sqft	Commercial/Institutional System Design Table 1, Chapter 64E-6, FAC
1	HOUSE	3	1,580	
2				
3				
4				

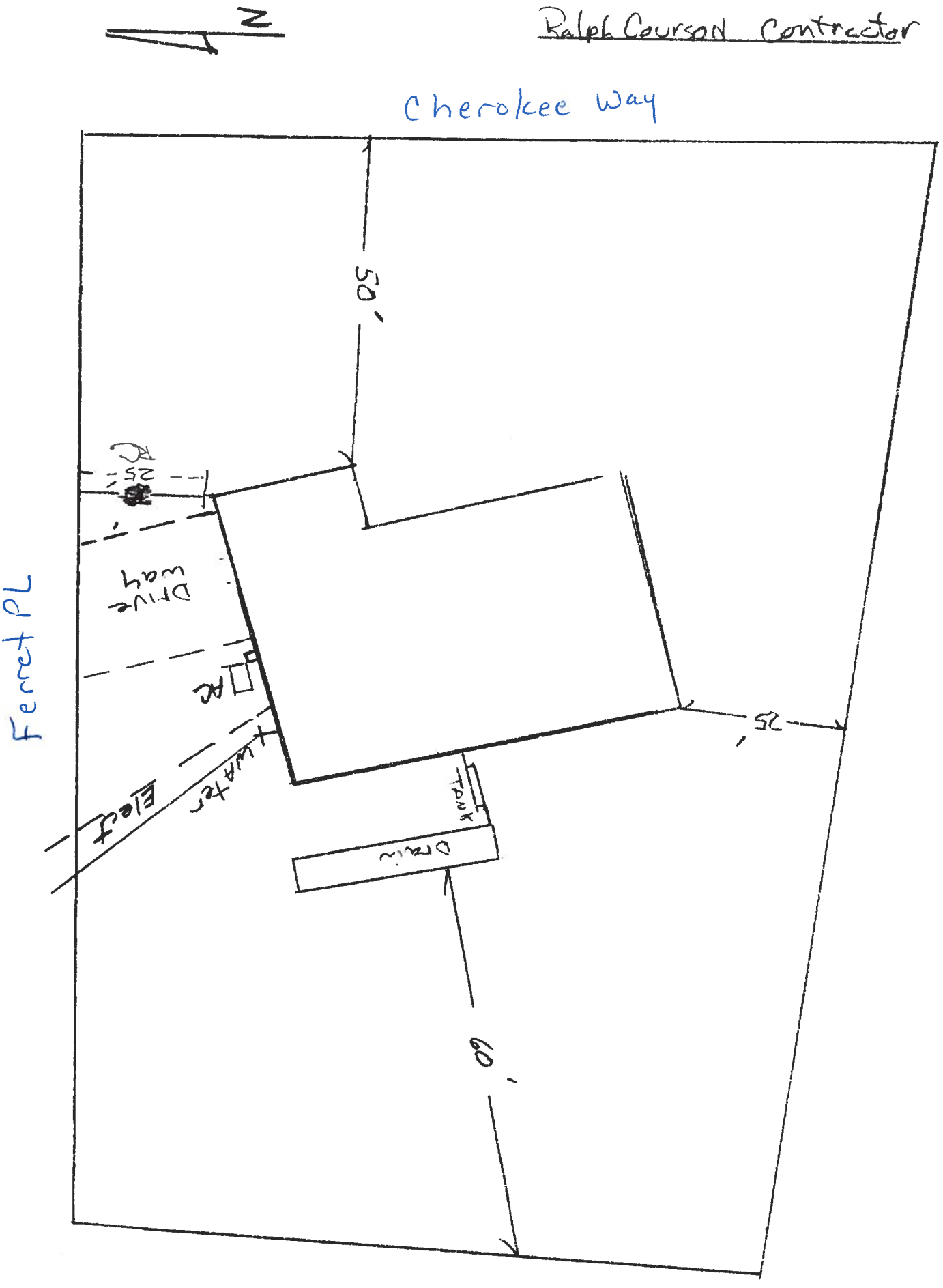
[ ] Floor/Equipment Drains [ ] Other (Specify)

SIGNATURE: Paul Lloyd DATE: 7/12/18

DH 4015, 08/09 (Obsoletes previous editions which may not be used)
Incorporated 64E-6.001, FAC

Allen Coleman Job

Ralph Courson Contractor



Columbia County Building Department
Flood Development Permit

Development Permit
F 023- 18-007

DATE 08/02/2018 BUILDING PERMIT NUMBER 000037053

APPLICANT RALPH COURSON PHONE 386.623.7063

ADDRESS 4128 NW CR 238 LAKE BUTLER FL 32054

OWNER ALLEN & CHING P. COLEMAN PHONE 386.719.6600

ADDRESS 158 SE FERRET PL LAKE CITY FL 32025

CONTRACTOR RALPH COURSON PHONE 386.623.7063

ADDRESS 14128 NW CR 238 LAKE BUTLER FL 32054

SUBDIVISION GLENWOOD Lot 11 Block ____ Unit 2 Phase ____

TYPE OF DEVELOPMENT SFD/UTILITY PARCEL ID NO. 16-4S-17-08382-079

FLOOD ZONE AH BY LN 2-4-2009 FIRM COMMUNITY # 120070 - PANEL # 0313D

FIRM 100 YEAR ELEVATION 104.5' PLAN INCLUDED YES or (NO)

REQUIRED LOWEST HABITABLE FLOOR ELEVATION 105.5'

IN THE REGULATORY FLOODWAY YES or (NO) RIVER N/A

SURVEYOR / ENGINEER NAME L. Scott Britt, PSM LICENSE NUMBER 5757

_____ ONE FOOT RISE CERTIFICATION INCLUDED

_____ ZERO RISE CERTIFICATION INCLUDED

_____ SRWMD PERMIT NUMBER _____
(INCLUDING THE ONE FOOT RISE CERTIFICATION)

DATE THE FINISHED FLOOR ELEVATION CERTIFICATE WAS PROVIDED _____

INSPECTED DATE _____ BY _____

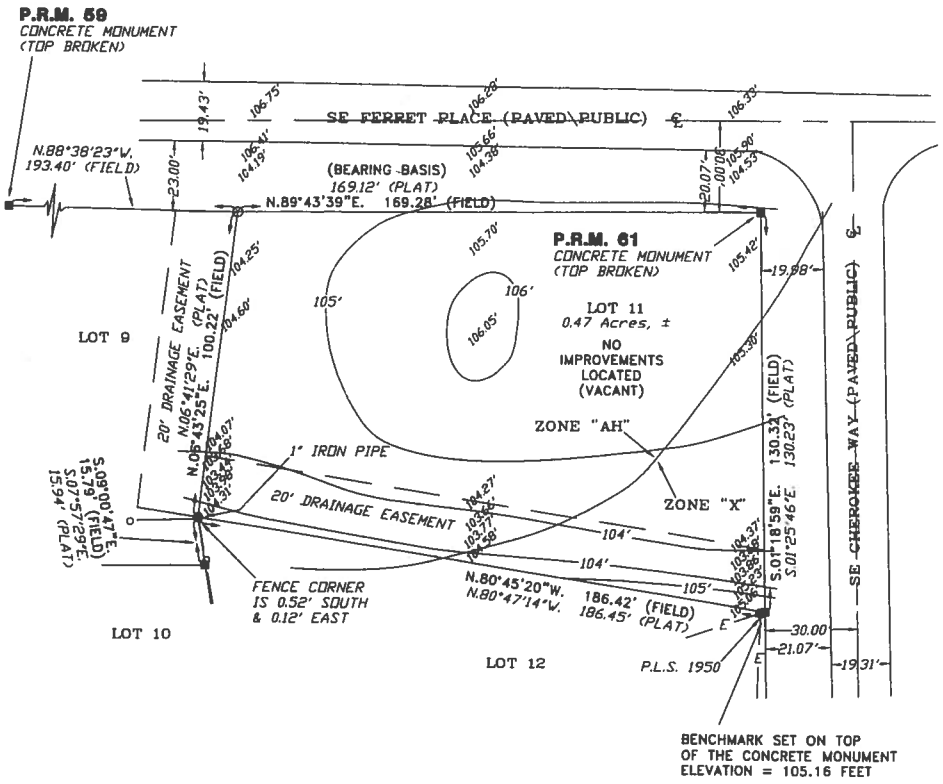
COMMENTS _____

_____

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

PERMIT EXPIRES ONE YEAR FROM THE DATE OF ISSUANCE

BOUNDARY SURVEY IN SECTION 16 , TOWNSHIP 4 SOUTH, RANGE 17 EAST, COLUMBIA COUNTY, FLORIDA.



N

SCALE: 1" = 40'

0 10 20 40 80

GRAPHIC SCALE

SYMBOL LEGEND:

■	4"X4" CONCRETE MONUMENT FOUND
□	4"X4" CONCRETE MONUMENT SET
●	IRON PIPE FOUND
○	IRON PIN AND CAP SET
×	"X" CUT IN PAVEMENT
+	CALCULATED PROPERTY CORNER
⊙	NAIL & DISK
⊕	POWER POLE
+	SIGN POST
▲	WATER METER
⊙	UTILITY BOX
✱	WELL
Ⓐ	SANITARY MANHOLE
℄	CENTERLINE
—·—	SECTION LINE
—E—	ELECTRIC LINES
—x—	WIRE FENCE
—o—	CHAIN LINK FENCE
—□—	WOODEN FENCE
(PLAT)	AS PER A PLAT OF RECORD
(DEED)	AS PER A DEED OF RECORD
(CALC.)	AS PER CALCULATIONS
(FIELD)	AS PER FIELD MEASUREMENTS
P.R.M.	PERMANENT REFERENCE MARKER
P.C.P.	PERMANENT CONTROL POINT

DESCRIPTION:
LOT 11, GLENWOOD, UNIT II, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 4, PAGE 96, AND ALSO IN OFFICIAL RECORDS BOOK 888, PAGE 262, ALL OF THE CURRENT PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA.

SURVEYOR'S NOTES:

1. BOUNDARY BASED ON MONUMENTATION FOUND IN ACCORDANCE WITH THE RETRACEMENT OF THE ORIGINAL SURVEY FOR SAID PLAT OF RECORD.
2. BEARINGS ARE BASED ON SAID PLAT OF RECORD AND THE BEARING BASIS SHOWN HEREON.
3. IT IS APPARENT THAT A PORTION OF THIS PARCEL IS IN ZONE "X" AND IS DETERMINED TO BE OUTSIDE THE 500 YEAR FLOOD PLAIN. A PORTION OF THIS PARCEL IS IN ZONE "AH" AND IS SUBJECT TO AREAS WITH A 1% ANNUAL CHANCE OF FLOODING AND A 26% CHANCE OF FLOODING OVER THE LIFE OF A 30-YEAR MORTGAGE. USUALLY AREAS OF PONDING WITH DEPTHS OF 1 TO 3 FEET. BASE FLOOD ELEVATIONS ARE DETERMINED. AS PER FLOOD INSURANCE RATE MAP, DATED 4 FEBRUARY, 2009 FIRM PANEL NO. 12023C0313C. HOWEVER, THE FLOOD INSURANCE RATE MAPS ARE SUBJECT TO CHANGE. THE 1% FLOOD ELEVATION IS DETERMINED TO BE 104.5 FEET NAVD 1988 DATUM.
4. THE IMPROVEMENTS, IF ANY, INDICATED ON THIS SURVEY DRAWING ARE AS LOCATED ON DATE OF FIELD SURVEY AS SHOWN HEREON.
5. IF THEY EXIST, NO UNDERGROUND ENCROACHMENTS AND/OR UTILITIES WERE LOCATED FOR THIS SURVEY EXCEPT AS SHOWN HEREON.
6. THIS SURVEY WAS COMPLETED WITHOUT THE BENEFIT OF A TITLE COMMITMENT OR A TITLE POLICY.
7. DIMENSIONS SHOWN HEREON ARE IN FEET AND DECIMAL PARTS THEREOF.
8. THIS SURVEY DOES NOT REFLECT OR DETERMINE OWNERSHIP.
9. THE ADJACENT OWNERSHIP INFORMATION AS SHOWN HEREON IS BASED ON THE COUNTY PROPERTY APPRAISERS GIS SYSTEM, UNLESS OTHERWISE DENOTED.

CERTIFIED TO:

RALPH COURSON

FIELD BOOK: SEE PAGE(S): FILE

SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT THIS SURVEY WAS MADE UNDER MY RESPONSIBLE CHARGE AND MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

06/19/18 — FIELD SURVEY DATE

06/25/18 — DRAWING DATE

L. SCOTT BRITT, P.S.M. CERTIFICATION # 5757

NOTE: UNLESS IT BEARS THE ORIGINAL SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER THIS DRAWING, SKETCH, PLAT OR MAP IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT VALID.

BRITT SURVEYING & MAPPING, LLC

LAND SURVEYORS AND MAPPERS, L.B. # 8016

2086 SW MAIN BLVD. SUITE. 112, LAKE CITY, FLORIDA 32025

(386)752-7163 FAX (386)752-5573

www.brittsurvey.com

WORK ORDER # L-25269

COLUMBIA COUNTY BUILDING DEPARTMENT
RESIDENTIAL CHECK LIST

MINIMUM PLAN REQUIREMENTS. FLORIDA BUILDING CODE RESIDENTIAL 2014 EFFECTIVE 1 JULY 2015 AND THE NATIONAL ELECTRICAL CODE 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 12/2016

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL			**Items to Include- Each Box shall be Marked as Applicable**		
				Select From the Dropbox		
1	Two (2) complete sets of plans containing the following:			-		
2	All drawings must be clear, concise, drawn to scale, details that are not used shall be marked void			-		
3	Condition space (Sq. Ft.) 1583	Total (Sq. Ft.) under roof 2304		**YES**	**NO**	**N/A**

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 N 169.28 E 130.32 S 186.42 W 100.22	[redacted]	
5	Dimensions of all building set backs N 40 E60 S25 W 70	-	
6	Location of all other structures (include square footage of structures) on parcel, existing or proposed well and septic tank and all utility easements.	-	
7	Provide a full legal description of property. Lot 11 Glenwood Unit II according to Plat there of recorded in Plat Book 4 Page 96 public records of Columbia Co Fl	-	

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 Marked as Applicable**		
		YES	**NO**	**N/A**
8	**Plans or specifications must show compliance with FBCR Chapter 3**			

		Select From the Dropbox
9	Basic wind speed (3-second gust), miles per hour	-
10	(Wind exposure – if more than one wind exposure is used, the wind exposure and applicable wind direction shall be indicated)	-
11	Wind importance factor and nature of occupancy	-
12	The applicable internal pressure coefficient, Components and Cladding	-
13	The design wind pressure in terms of psf (kN/m²), to be used for the design of exterior component, cladding materials not specifically designed by the registered design professional.	-

Elevations Drawing including:

14	All side views of the structure	-	
15	Roof pitch 7/12	-	7/12
16	Overhang dimensions and detail with attic ventilation 2' 16"	-	2' 16"
17	Location, size and height above roof of chimneys N/A	-	N/A
18	Location and size of skylights with Florida Product Approval N/A	-	N/A
18	Number of stories 1	-	1
20.6	Building height from the established grade to the roofs highest peak 21	-	21

Floor Plan including:

20	Dimensioned area plan showing rooms, attached garage, breeze ways, covered porches, deck, balconies See Plans	
21	Raised floor surfaces located more than 30 inches above the floor or grade	N/A
22	All exterior and interior shear walls indicated	
23	Shear wall opening shown (Windows, Doors and Garage doors) See Plans	EXT only
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.	See Plans
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)	N/A
27	Show stairs with dimensions (width, tread and riser and total run) details of guardrails, Handrails	N/A
28	Identify accessibility of bathroom (see FBCR SECTION 320) See Plans	

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

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

FBCR 403: Foundation Plans YES / NO / N/A

		Select From the Dropbox
29	Location of all load-bearing walls footings indicated as standard, monolithic, dimensions, size and type of reinforcing. See Plans	
30	All posts and/or column footing including size and reinforcing See Plans	
31	Any special support required by soil analysis such as piling.	N/A
32	Assumed load-bearing value of soil _____ Pound Per Square Foot	2500
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	YES

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**	✓

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 8x16 Typ. S	
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	Yes

See Plans

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

FBCR CHAPTER 6 WOOD WALL FRAMING CONSTRUCTION

YES / NO N/A

GENERAL REQUIREMENTS: APPLICANT - PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL		Items to Include- Each Box shall be Marked as Applicable
	See Plans	Select From the Dropbox
52	Stud type, grade, size, wall height and oc spacing for all load bearing or shear walls 8'	N/A
53	Fastener schedule for structural members per table IRC 602.3 are to be shown	N/A
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	N/A
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	N/A
56	Show sizes, type, span lengths and required number of support jack studs, king studs for shear wall opening and girder or header per IRC Table 502.5 (1)	N/A
57	Indicate where pressure treated wood will be placed	N/A
58	Show all wall structural panel sheathing, grade, thickness and show fastener schedule for structural panel sheathing edges & intermediate areas	N/A
59	A detail showing gable truss bracing, wall balloon framing details or and wall hinge bracing detail	N/A

FBCR :ROOF SYSTEMS: See truss Engineering

60	Truss design drawing shall meet section FBCR 802.1.6.1 Wood trusses	N/A
61	Include a layout and truss details, signed and sealed by Florida Professional Engineer	N/A
62	Show types of connectors assemblies' and resistance uplift rating for all trusses and rafters	N/A
63	Show gable ends with rake beams showing reinforcement or gable truss and wall bracing details	N/A
64	Provide dead load rating of trusses	N/A

FBCR 802:Conventional Roof Framing Layout See plans

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

FBCR 803 ROOF SHEATHING 1/2" OSB as per plans

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

ROOF ASSEMBLIES FRC Chapter 9 See Plans

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

FBCR Chapter 11 Energy Efficiency Code for residential building

Residential construction shall comply with this code by using the following compliance methods in the FBCR chapter11 Residential buildings compliance methods. **Two of the required forms are to be submitted**, *N1100.1.1.1 As an alternative to the computerized Compliance Method A, the Alternate Residential Point System Method hand calculation, Alternate Form 600A may be used. All requirements specific to this calculation are located in Sub appendix C to Appendix G. Buildings complying by this alternative shall meet all mandatory requirements of this chapter. Computerized versions of the Alternate Residential Point System Method shall not be acceptable for code compliance.*

YES / NO / N/A

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Including Each Box shall be Marked as Applicable
		Select From the Dropbox
73	Show the insulation R value for the following areas of the structure	-
74	Attic space	yes
75	Exterior wall cavity	yes
76	Crawl space	yes

HVAC information

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

Plumbing Fixture layout shown — See plans

80	All fixtures waste water lines shall be shown on the foundation plan	yes n/a
81	Show the location of water heater	yes n/a

Private Potable Water — city water

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

Electrical layout shown including — See electrical Plans

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

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

TOILET FACILITIES SHALL BE PROVIDED FOR ALL CONSTRUCTION SITES.

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

Notice Of Commencement

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

Section R101.2.1 of the Florida Building Code Residential:

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

Section 105 of the Florida Building Code defines the:

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

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

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

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

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

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

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

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

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

Category/Subcategory	Manufacturer	Product Description	Approval Number(s)
1. EXTERIOR DOORS			
A. SWINGING		5/0 3⁰ 2⁸	3
B. SLIDING			NA
C. SECTIONAL/ROLL UP		16' Garage	
D. OTHER			
2. WINDOWS			Single hung
A. SINGLE/DOUBLE HUNG			
B. HORIZONTAL SLIDER			
C. CASEMENT			
D. FIXED			
E. MULLION			
F. SKYLIGHTS			
G. OTHER			
3. PANEL WALL			
A. SIDING	Hardee or equivalent		
B. SOFFITS	Vinyl		
C. STOREFRONTS	NA		
D. GLASS BLOCK	NA		
E. OTHER	NA		
4. ROOFING PRODUCTS			
A. ASPHALT SHINGLES			yes
B. NON-STRUCTURAL METAL			
C. ROOFING TILES			
D. SINGLE PLY ROOF			
E. OTHER			
5. STRUCTURAL COMPONENTS	See plans		
A. WOOD CONNECTORS			
B. WOOD ANCHORS			
C. TRUSS PLATES			
D. INSULATION FORMS			
E. LINTELS			
F. OTHERS			
6. NEW EXTERIOR ENVELOPE PRODUCTS			

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

R.J.C. 7/6/18

Contractor OR Agent Signature Date

NOTES: _____

FLORIDA PRODUCT APPROVALS
10-16-15

Rogue Valley Wood FL-13137

Item:	Manufacturer	Product Description	Approval Number:
Exterior Doors:	Masonite	Inswing & Outswing Fiberglass	FL-8228-R7
	Masonite	Inswing & Outswing Steel	FL-~~4904-R7~~ 22513.6 NAKS 22521.1
	Plastpro	8'0" Inswing & Outswing Fiberglass	FL-15220-R1
	Plastpro	Inswing & Outswing Steel	FL-15962-R2
	Plastpro	6'8" Inswing & Outswing Fiberglass	FL-15215-R3 flush glazed
		6'8' fib- glazed door	FL-17347
Windows:	MI	Aluiminum 185 Single Hung	FL-17499
		Aluiminum 185 Picture Window	FL-15349
	* 53"x50"	3580 Hz slider	FL-13349.2
Finless or w/ flange & finless per Jason		Vinyl 3540 Single Hung	FL-17676-~~R1~~ R6
		Vinyl 3500 Picture Window	FL-18644
	Atrium	150/160	FL-11834
	Magnolia	Vinyl 400 Single Hung	FL-16475-R3
		Vinyl 400 Picture Window	FL-16474-R2
5-16	63" X 44"	400 Hz slider	FL 16476.1
Soffit:	Kaycan	Vinyl/PVC & Aluminum Soffit	FL-16503
		Vinyl Siding	FL-15867-R1
	LCIHW (House Wrap)	International Bldg Code	ESR3774
Underlayment:	Woodland	30# Felt	FL-17206-R3
	Interwrap	Rhino	FL-15216
Roofing:	Certainteed	Asphalt Shingles	FL-5444
	GAF	Asphalt Shingles	FL-10124-~~R16~~ R20
	Tamko	Asphalt Shingles	FL-18355
Aquatass A.P FL-1654 R20	Certainteed	Flintlastic SBS & APP	FL-16709.1
Siding:	Allura of Plycem	Cement board lap siding	FL-17482-R2
	James Hardie	Cement board lap siding	FL-13192-R4
Simpson		LSTA – MSTA, SPH4	FL-13872-R2
	GAF	Tiger Paw Underlayment	FL-15487-R5
Metal Roofing		5V Roofing Master Rib Roofing	FL-9555-R3 FL-9557-R3

Hardie Union CemPlank 13192.1

Margin notes: 5-1 per SFL 17347 SG w/ insert; 11-17; 1-7-16; 11-17; 11-17

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

RE: 1448850 - COURSON - COLEMAN RES.

MiTek USA, Inc.
6904 Parke East Blvd.
Tampa, FL 33610-4115

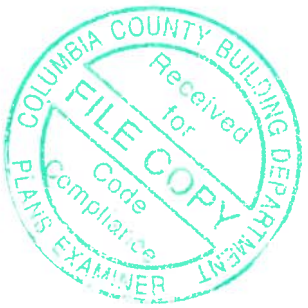
Site Information:
Customer Info: Courson Const. Project Name: 1448850 Model: Coleman Res.
Lot/Block: Subdivision:
Address: TBD Old Country Club Rd.
City: Columbia Cty State: FL

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 8.1
Wind Code: ASCE 7-10 Wind Speed: 130 mph
Roof Load: 37.0 psf Floor Load: N/A psf

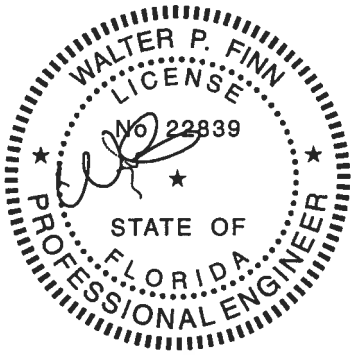
This package includes 15 individual, Truss Design Drawings and 0 Additional Drawings.
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date
1	T14263945	T01	6/11/18
2	T14263946	T01G	6/11/18
3	T14263947	T02	6/11/18
4	T14263948	T03	6/11/18
5	T14263949	T03G	6/11/18
6	T14263950	T04	6/11/18
7	T14263951	T05	6/11/18
8	T14263952	T06	6/11/18
9	T14263953	T06G	6/11/18
10	T14263954	T07	6/11/18
11	T14263955	T08	6/11/18
12	T14263956	T09	6/11/18
13	T14263957	T10	6/11/18
14	T14263958	T10G	6/11/18
15	T14263959	V01	6/11/18



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: Finn, Walter
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.

Walter P. Finn PE No.22839
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 11,2018

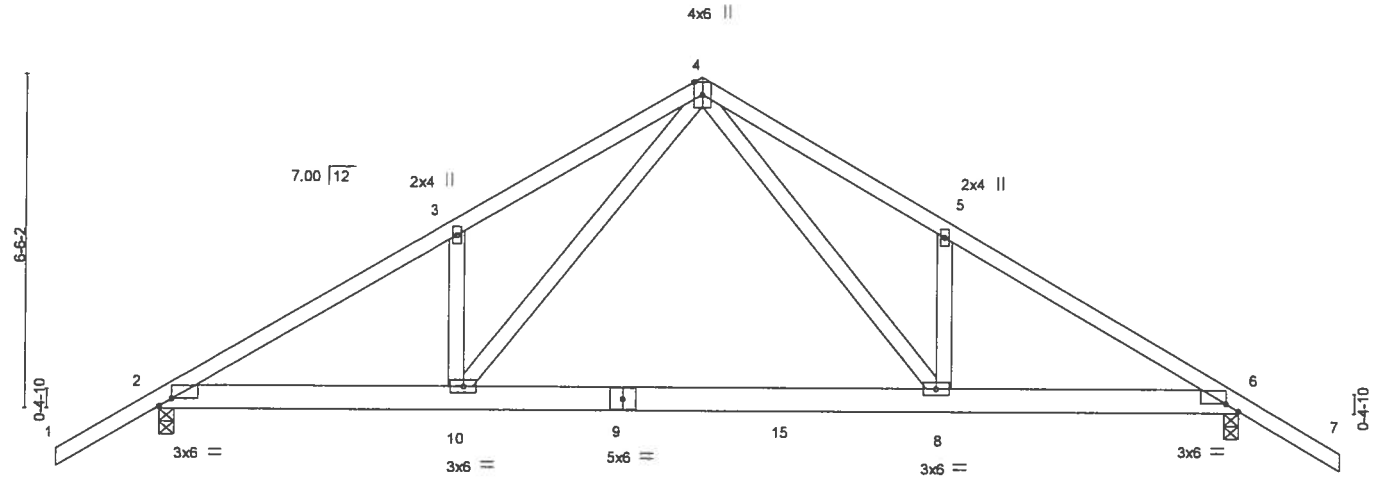
Job	Truss	Truss Type	Qty	Ply	COURSON - COLEMAN RES.
1448850	T01	Common	5	1	T14263945
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055

8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Jun 11 08:24:06 2018 Page 1
ID:W63RZL0eulaDM0Si8SgjN7z8J1O-nBCTssJOWvNzwt6ZtwHjlwu7w9BKpbUT0enKDez7Pk7

-2-0-0	5-9-2	10-6-0	15-2-14	21-0-0	23-0-0
2-0-0	5-9-2	4-8-14	4-8-14	5-9-2	2-0-0

Scale = 1:43.2



5-9-2	15-2-14	21-0-0
5-9-2	9-5-12	5-9-2

Plate Offsets (X,Y)— [2:0-3-0,Edge], [6:0-3-0,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	0.31	Vert(LL)	0.18	8-10	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.80	Vert(CT)	-0.34	8-10	>743	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.59	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS							Weight: 123 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

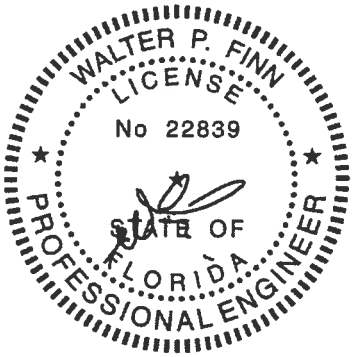
BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (lb/size) 2=1169/0-3-8, 6=1169/0-3-8
Max Horz 2=-227(LC 10)
Max Uplift 2=-487(LC 12), 6=-487(LC 13)
Max Grav 2=1177(LC 19), 6=1178(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1933/771, 3-4=-1995/925, 4-5=-1995/925, 5-6=-1933/772
BOT CHORD 2-10=-613/1753, 8-10=-290/1048, 6-8=-525/1611
WEBS 4-8=-528/1152, 5-8=-320/290, 4-10=-528/1151, 3-10=-320/290

NOTES- (8)
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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * 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, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=487, 6=487.
6) 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.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
8) 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.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-54, 4-7=-54, 2-10=-20, 8-10=-80(F=-60), 6-8=-20



Walter P. Finn PE No.22839
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

June 11,2018

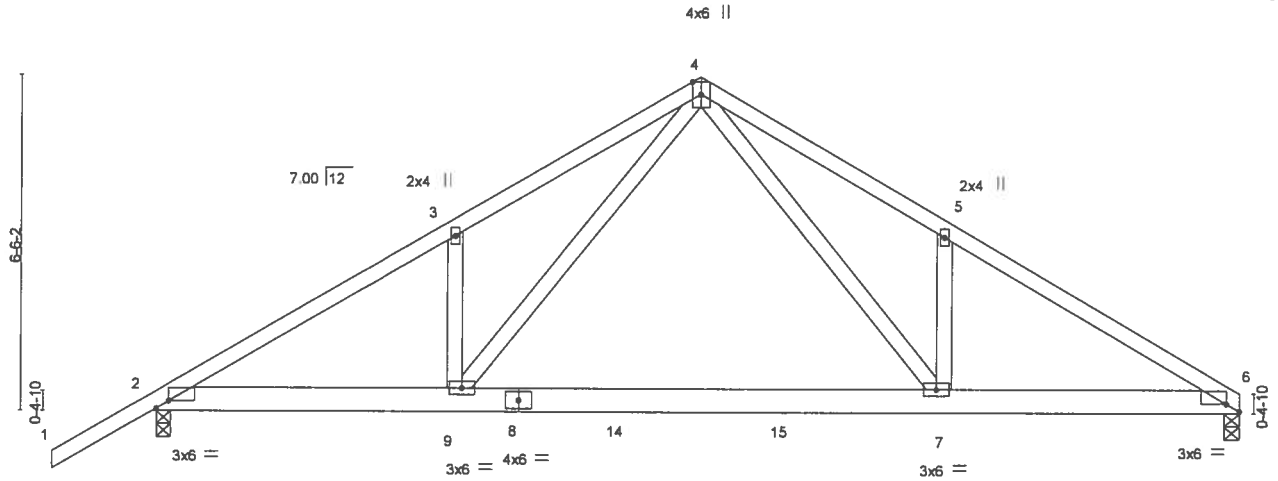
Job	Truss	Truss Type	Qty	Ply	COURSON - COLEMAN RES.
1448850	T02	Common	4	1	T14263947
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055

8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Jun 11 08:24:08 2018 Page 1
ID:W63RZL0eulaDM0Si8SgjN7z8J1O-jZKDGYLe1XdhAAFx_LKBqLzTKztqHVSITyGRIXz7Pk5

-2-0-0	5-9-2	10-6-0	15-2-14	21-0-0
2-0-0	5-9-2	4-8-14	4-8-14	5-9-2

Scale = 1:43.0



5-9-2	15-2-14	21-0-0
5-9-2	9-5-12	5-9-2

Plate Offsets (X,Y)-- [2:0-3-0,Edge], [6:0-3-0,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	0.32	Vert(LL)	0.18	7-9	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.80	Vert(CT)	-0.34	7-9	>744	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.62	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS							Weight: 120 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

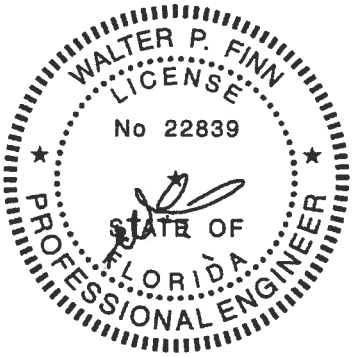
BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (lb/size) 6=1056/0-3-8, 2=1175/0-3-8
Max Horz 2=215(LC 9)
Max Uplift 6=-416(LC 13), 2=-488(LC 12)
Max Grav 6=1070(LC 20), 2=1181(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1940/785, 3-4=-2003/939, 4-5=-2007/960, 5-6=-1968/804
BOT CHORD 2-9=-640/1741, 7-9=-317/1035, 6-7=-601/1625
WEBS 4-7=-557/1187, 5-7=-318/296, 4-9=-527/1152, 3-9=-321/291

NOTES- (8)
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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * 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, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=416, 2=488.
6) 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.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
8) 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.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-54, 4-6=-54, 2-9=-20, 7-9=-80(F=-60), 6-7=-20



Walter P. Finn PE No.22839
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

June 11,2018

Job	Truss	Truss Type	Qty	Ply	COURSON - COLEMAN RES.
1448850	T03G	GABLE	1	1	T14263949
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055

8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Jun 11 08:24:10 2018 Page 1
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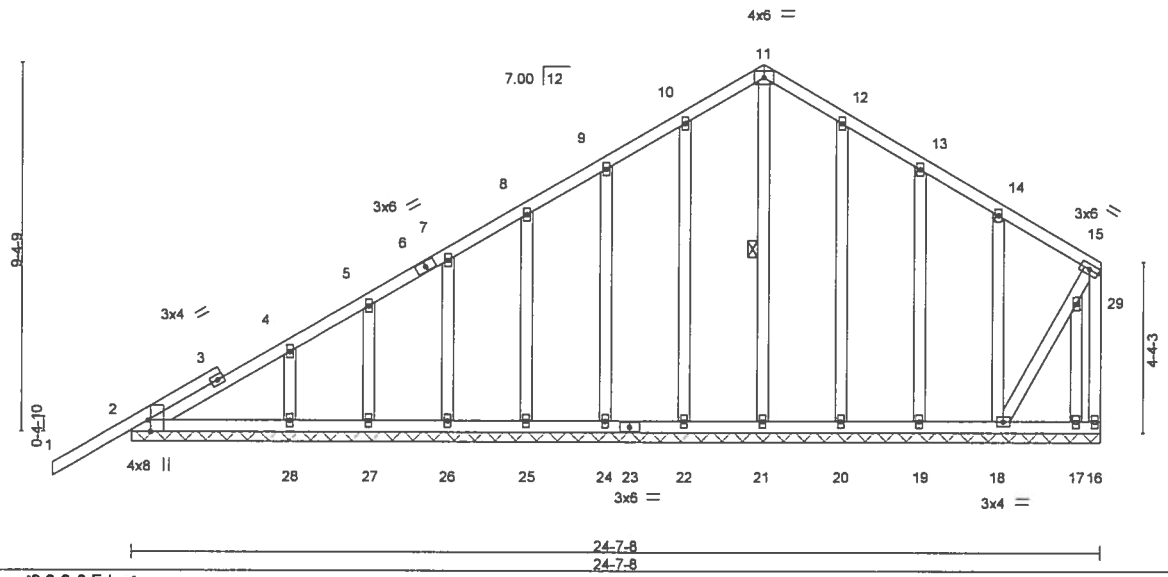
-2-0-0 | 16-0-0 | 24-7-8
2-0-0 | 16-0-0 | 8-7-8

Scale = 1:56.5



24-7-8
24-7-8

Plate Offsets (X,Y)-- [2:0-3-8,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	0.27	Vert(LL)	0.00	1	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.10	Vert(CT)	-0.01	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.00	18	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-S							Weight: 188 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 or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 17-18,16-17.
WEBS 1 Row at midpt 11-21

REACTIONS. All bearings 24-7-8.
(lb) - Max Horz 2=350(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 16, 2, 27, 19, 17 except 22=-102(LC 12), 24=-104(LC 12), 25=-101(LC 12), 26=-102(LC 12), 28=-117(LC 12), 20=-100(LC 13), 18=-248(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 16, 21, 22, 24, 25, 26, 27, 20, 19, 17 except 2=268(LC 1), 28=251(LC 19), 18=258(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-296/211

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) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * 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.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 2, 27, 19, 17 except (jt=lb) 22=102, 24=104, 25=101, 26=102, 28=117, 20=100, 18=248.
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.

Walter P. Finn PE No.22839
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

June 11,2018

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	COURSON - COLEMAN RES.
1448850	T05	Scissor	4	1	T14263951
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Jun 11 08:24:13 2018 Page 1
ID:W63RZL0eulaDM0Si8SgjN7z8J1O-4X76KFPns3GzGx8vnuvNXOgGS_YYyi2VdEzCzkz7Pk0

-2-0-0	5-9-5	11-3-4	16-0-0	20-8-12	26-2-11	32-0-0	34-0-0
2-0-0	5-9-5	5-5-15	4-8-12	4-8-12	5-5-15	5-9-5	2-0-0

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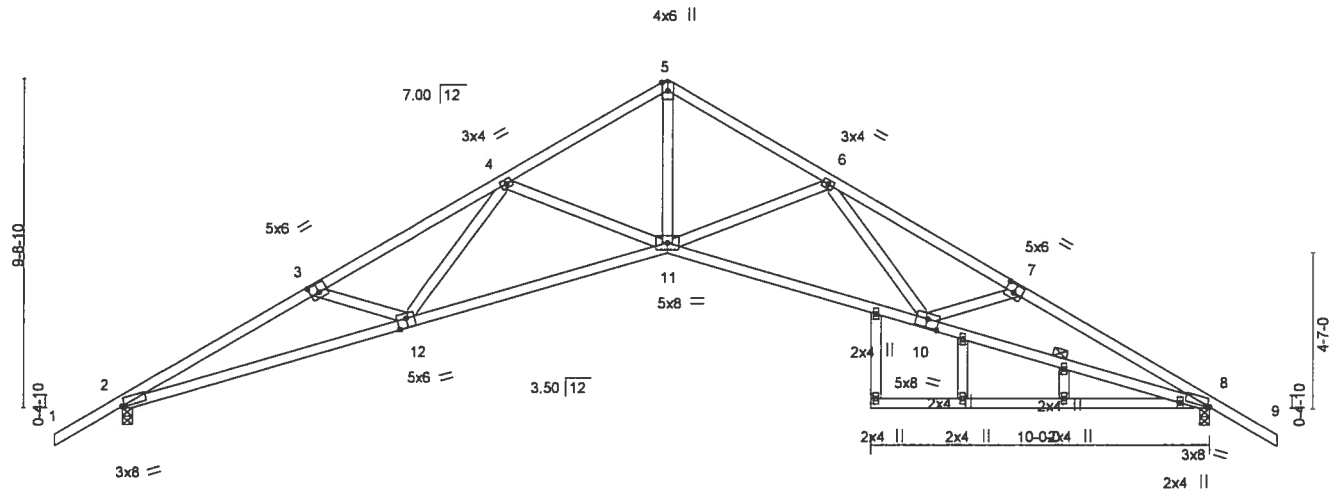


8-4-6	16-0-0	22-0-0	23-7-10	32-0-0
8-4-6	7-7-10	6-0-0	1-7-10	8-4-6

Plate Offsets (X,Y)-- [2:0-0-14,0-0-5], [3:0-3-0,0-3-0], [7:0-3-0,0-3-0], [8:0-0-14,0-0-5], [10:0-4-0,0-3-0], [12:0-3-0,0-3-4]

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	0.49	Vert(LL)	-0.35	11-12	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.96	Vert(CT)	-0.70	11-12	>552	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.51	8	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS							Weight: 179 lb	FT = 20%

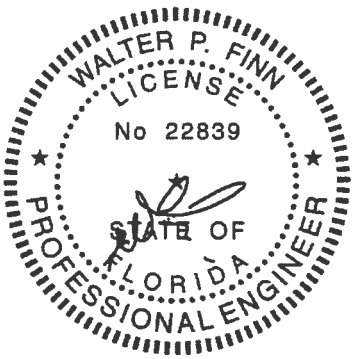
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
8-13: 2x4 SP No.3
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied. Except:
2-2-0 oc bracing: 8-10

REACTIONS. (lb/size) 2=1292/0-3-8, 8=1292/0-3-8
Max Horz 2=-327(LC 10)
Max Uplift 2=-503(LC 12), 8=-503(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3544/1377, 3-4=-3233/1232, 4-5=-2357/862, 5-6=-2357/862, 6-7=-3233/1256, 7-8=-3544/1410
BOT CHORD 2-12=-1307/3295, 11-12=-887/2713, 10-11=-738/2625, 8-10=-1120/3125
WEBS 5-11=-703/2076, 6-11=-692/460, 6-10=-222/573, 7-10=-361/318, 4-11=-694/456, 4-12=-209/577, 3-12=-363/310

NOTES- (8)
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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * 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.
5) 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=503, 8=503.
7) 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.
8) 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.



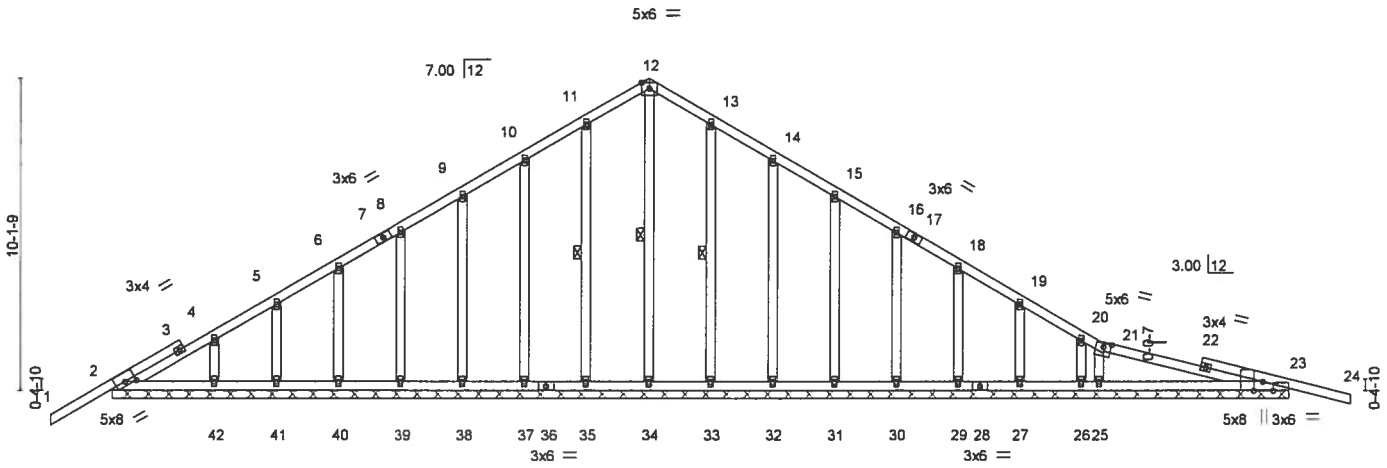
Walter P. Finn PE No.22839
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 11,2018

Job	Truss	Truss Type	Qty	Ply	COURSON - COLEMAN RES. T14263953
1448850	T06G	GABLE	1	1	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Jun 11 08:24:16 2018 Page 1
ID:W63RZL0eulaDM0Si8SgjN7z8J1O-U6oFyHRg9_eY7PtUS1T491IpYBkW9DwxJCCsZ3z7Pjz

-2-0-0 | 17-3-7 | 32-0-0 | 38-0-0 | 40-0-0
2-0-0 | 17-3-7 | 14-8-9 | 6-0-0 | 2-0-0

Scale = 1.71.9



32-0-0 | 38-0-0
32-0-0 | 6-0-0

Plate Offsets (X,Y)— [2:0-4-1,0-1-12], [21:0-3-0,0-1-9], [23:0-3-8,Edge], [23:0-4-0,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	0.37	Vert(LL)	0.01	24	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.30	Vert(CT)	0.02	24	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.01	23	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-S							Weight: 252 lb	FT = 20%

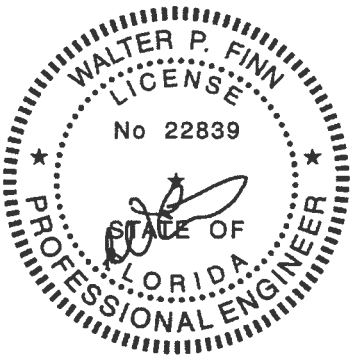
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 12-34, 11-35, 13-33

REACTIONS. All bearings 38-0-0.
(lb) - Max Horz 2=-332(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 35, 42, 33 except 23=-239(LC 9), 37=-105(LC 12), 38=-101(LC 12), 39=-102(LC 12), 40=-100(LC 12), 41=-108(LC 12), 32=-107(LC 13), 31=-101(LC 13), 30=-102(LC 13), 29=-101(LC 13), 27=-107(LC 13), 26=-260(LC 3), 25=-162(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 2, 34, 35, 37, 38, 39, 40, 41, 42, 33, 32, 31, 30, 29, 27, 26 except 23=323(LC 1), 25=516(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-273/244, 10-11=-180/258, 11-12=-229/302, 12-13=-229/302
WEBS 21-25=-258/202

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) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * 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.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 35, 42, 33 except (jt=lb) 23=239, 37=105, 38=101, 39=102, 40=100, 41=108, 32=107, 31=101, 30=102, 29=101, 27=107, 26=260, 25=162.
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.



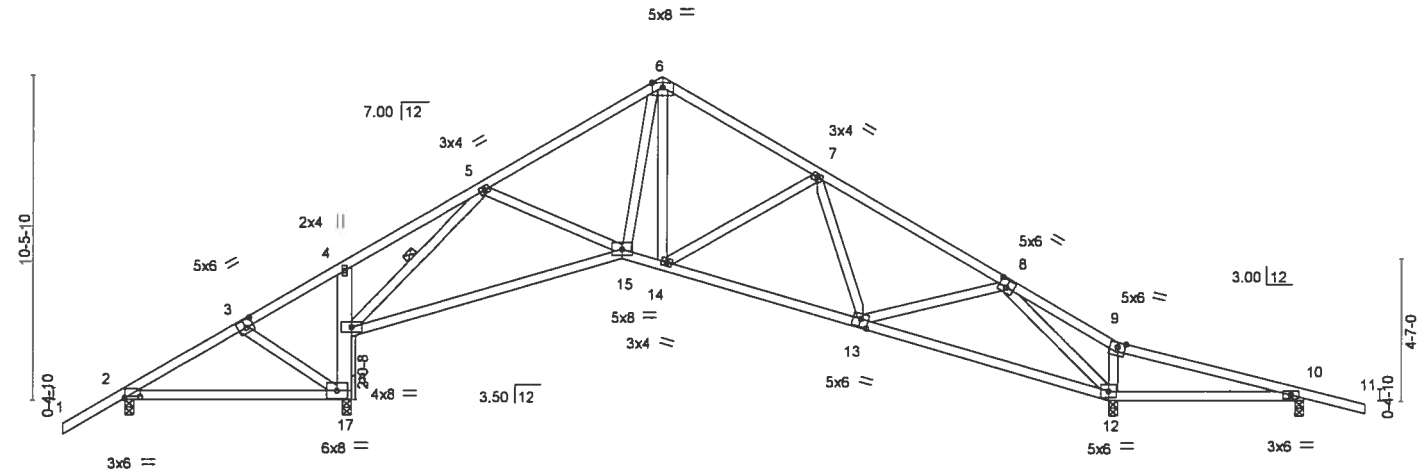
Walter P. Finn PE No.22839
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 11,2018

Job	Truss	Truss Type	Qty	Ply	COURSON - COLEMAN RES.
1448850	T08	Roof Special	5	1	T14263955
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Jun 11 08:24:18 2018 Page 1
ID:W63RZL0eulaDM0Si8SgjN7z8J1O-QVw?NySwhbuGMj0saSVYESN9k?JWdz0EnWhzdyz7Pjx

-2-0-0	3-10-0	7-3-8	11-6-11	17-3-7	22-3-2	28-3-7	32-0-0	38-0-0	40-0-0
2-0-0	3-10-0	3-5-8	4-3-3	5-8-12	4-11-11	6-0-5	3-8-9	6-0-0	2-0-0

Scale = 1:71.8



7-1-12	7-3-8	16-0-0	17-3-7	23-8-15	31-8-8	31-10-4	38-0-0
7-1-12	0-1-12	8-8-8	1-3-7	6-5-8	7-11-9	0-1-12	6-1-12

Plate Offsets (X,Y)-- [2:0-6-0,0-0-7], [3:0-3-0,0-3-0], [8:0-3-0,0-3-0], [13:0-3-0,0-3-0]

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	0.32	Vert(LL)	0.09	12-23	>828	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.65	Vert(CT)	-0.34	15-16	>864	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.09	12	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS							Weight: 209 lb	FT = 20%

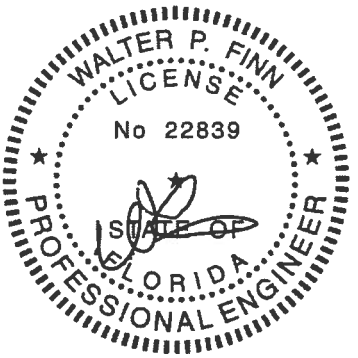
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
4-17: 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-16

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 2=-344(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) except 2=-217(LC 8), 10=-334(LC 9), 17=-497(LC 12), 12=-505(LC 13)
Max Grav All reactions 250 lb or less at joint(s) except 2=342(LC 23), 10=258(LC 24), 17=1205(LC 19), 12=1262(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-173/350, 3-4=-110/377, 4-5=-98/320, 5-6=-1205/502, 6-7=-1055/494, 7-8=-1314/582, 8-9=-68/480, 9-10=-91/407
BOT CHORD 16-17=-1085/421, 15-16=-272/938, 14-15=-66/910, 13-14=-240/1142, 12-13=-285/776, 10-12=-342/116
WEBS 3-17=-258/215, 5-16=-1368/445, 6-15=-125/589, 6-14=-258/337, 7-14=-392/342, 8-13=-1/393, 8-12=-1578/575

NOTES- (7)
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; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * 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.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 217 lb uplift at joint 2, 334 lb uplift at joint 10, 497 lb uplift at joint 17 and 505 lb uplift at joint 12.
6) 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.
7) 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.



Walter P. Finn PE No.22839
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 11,2018

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

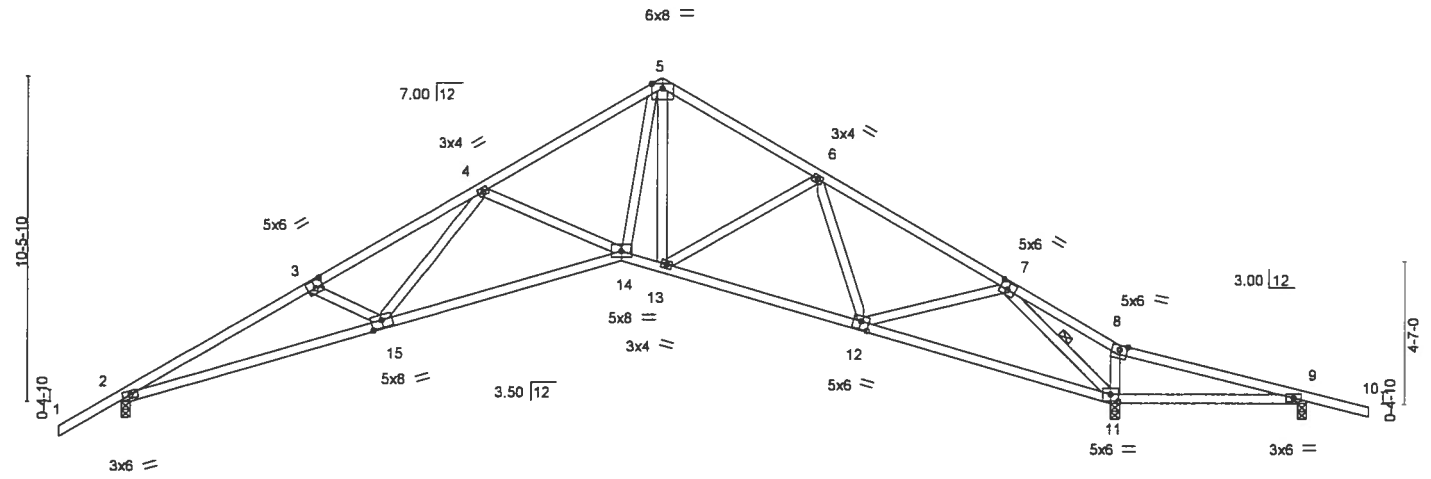
MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	COURSON - COLEMAN RES.
1448850	T10	Roof Special	2	1	T14263957
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Jun 11 08:24:21 2018 Page 1
ID:W63RZL0eulaDM0Si8SgjN7z8J1O-r3c8?_VozWGrEAlRFa3Fs4?eDCJzqOngTUvdEGz7Pju

-2-0-0	6-1-13	11-6-11	17-3-7	22-3-2	28-3-7	32-0-0	38-0-0	40-0-0
2-0-0	6-1-13	5-4-14	5-8-12	4-11-11	6-0-4	3-8-9	6-0-0	2-0-0

Scale = 1:71.4



8-3-8	16-0-0	17-3-7	23-8-15	31-8-8	31-10-4	38-0-0
8-3-8	7-8-8	1-3-7	6-5-9	7-11-9	0-1-12	6-1-12

Plate Offsets (X,Y)— [3:0-3-0,0-3-0], [7:0-3-0,0-3-0], [11:0-3-0,0-2-12], [12:0-3-0,0-3-0], [15:0-4-0,0-3-0]

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	0.50	Vert(LL)	0.26	14-15	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.79	Vert(CT)	-0.52	14-15	>734	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.33	11	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS							Weight: 197 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.
WEBS 1 Row at midpt 7-11

REACTIONS. (lb/size) 9=11/0-3-8, 11=1801/0-3-8, 2=1216/0-3-8
Max Horz 2=-344(LC 10)
Max Uplift 9=-316(LC 9), 11=-587(LC 13), 2=-485(LC 12)
Max Grav 9=118(LC 24), 11=1801(LC 1), 2=1216(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3252/1310, 3-4=-2981/1191, 4-5=-2041/777, 5-6=-1659/685, 6-7=-1621/669, 7-8=-433/1351, 8-9=-436/1227
BOT CHORD 2-15=-1279/3084, 14-15=-871/2480, 13-14=-294/1478, 12-13=-346/1497, 11-12=-211/648, 9-11=-1139/451
WEBS 3-15=-339/286, 4-15=-251/651, 4-14=-718/478, 5-14=-517/1521, 6-13=-214/311, 6-12=-346/170, 7-12=-178/841, 7-11=-2500/901

NOTES- (8)
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; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * 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.
5) 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 316 lb uplift at joint 9, 587 lb uplift at joint 11 and 485 lb uplift at joint 2.
7) 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.
8) 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.

Walter P. Finn PE No.22839
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 11,2018

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

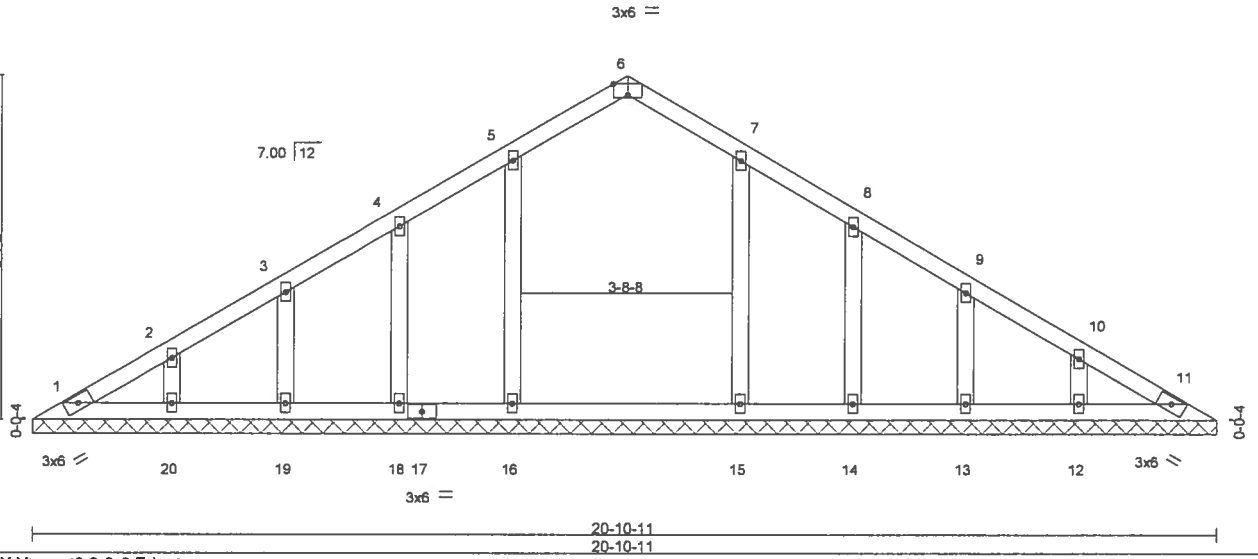
MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	COURSON - COLEMAN RES.
1448850	V01	GABLE	1	1	T14263959
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Mon Jun 11 08:24:23 2018 Page 1
ID:W63RZL0eulaDM0Si8SgjN7z8J1O-nSkuQgW3V8WYTUvqM?5jxV55h09flQyzwoOkJ9z7Pjs

10-5-6 / 10-5-6 — 20-10-11 / 10-5-6

Scale = 1:39.3



20-10-11 / 20-10-11

Plate Offsets (X,Y)— [6:0-3-0,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	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-S							Weight: 96 lb	FT = 20%

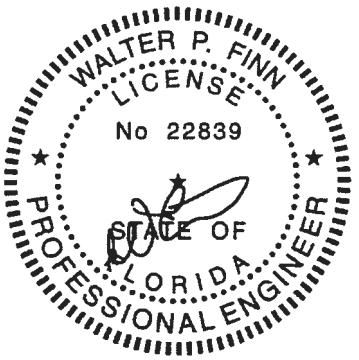
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 20-10-11.
(lb) - Max Horz 1=180(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 16, 19, 15, 13 except 18=-111(LC 12), 20=-112(LC 12), 14=-115(LC 13), 12=-112(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 11, 18, 19, 20, 14, 13, 12 except 16=296(LC 19), 15=286(LC 20)

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

NOTES- (8)
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) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
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, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11, 16, 19, 15, 13 except (jt=lb) 18=111, 20=112, 14=115, 12=112.
8) 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.



Walter P. Finn PE No.22839
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

June 11,2018

AUGUST 1, 2016	T-BRACE / I-BRACE DETAIL WITH 2X BRACE ONLY	MII-T-BRACE 2

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.

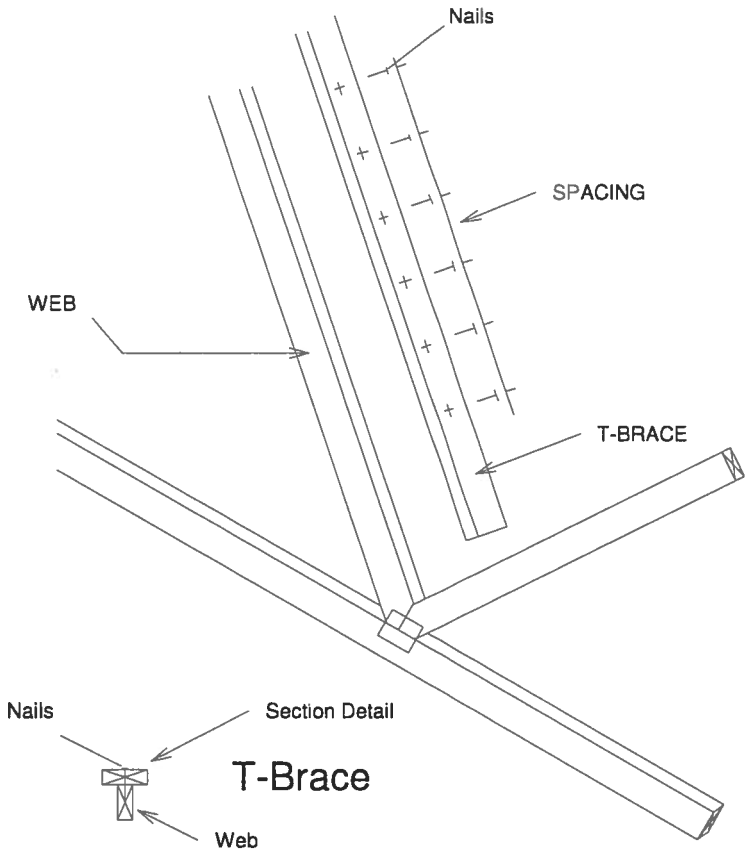
Note: This detail NOT to be used to convert T-Brace / I-Brace webs to continuous lateral braced webs.

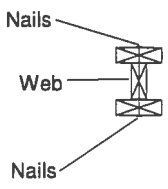
Nailing Pattern		
T-Brace size	Nail Size	Nail Spacing
2x4 or 2x6 or 2x8	10d (0.131" X 3")	6" o.c.
Note: Nail along entire length of T-Brace / I-Brace (On Two-Ply's Nail to Both Plies)		

	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

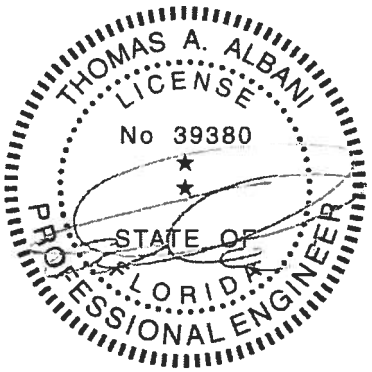
	Brace Size for Two-Ply Truss	
	Specified Continuous Rows of Lateral Bracing	
Web Size	1	2
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace
2x6	2x6 T-Brace	2x6 I-Brace
2x8	2x8 T-Brace	2x8 I-Brace

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





I-Brace

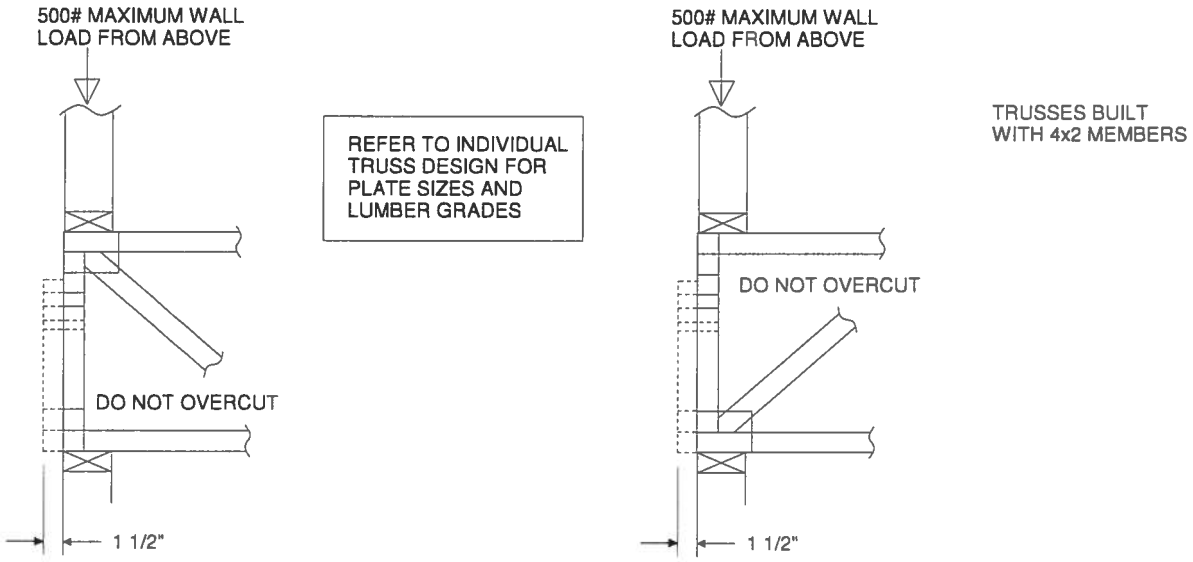


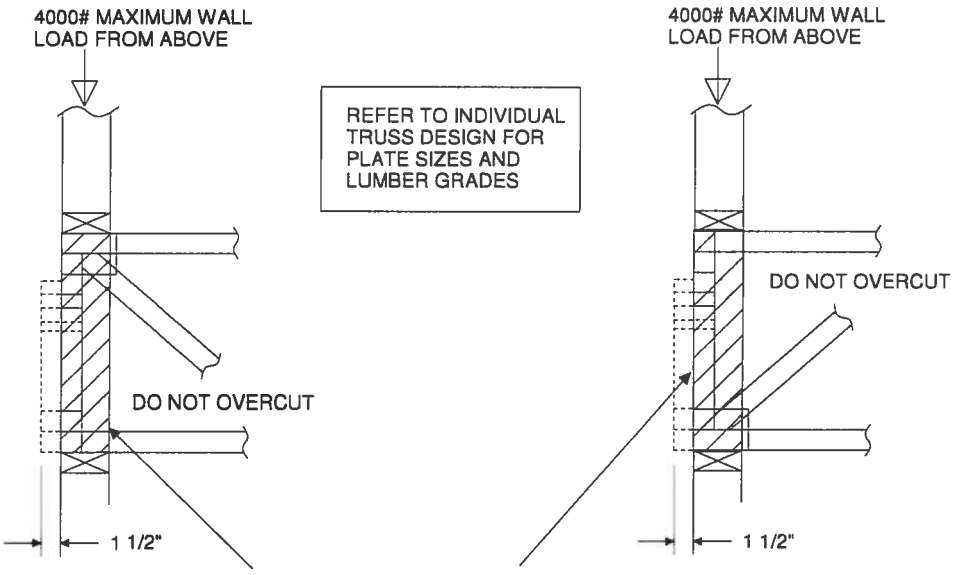
Thomas A. Albani PE No.39380
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
February 12, 2018

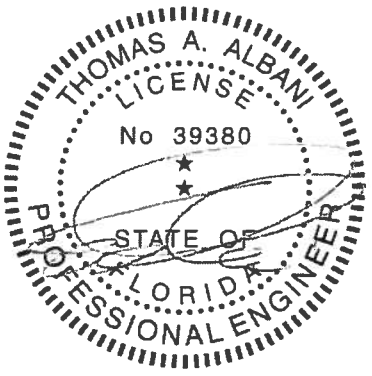
AUGUST 1, 2016	STANDARD REPAIR TO REMOVE END VERTICAL (RIBBON NOTCH VERTICAL)	MII-REP05

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

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.







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February 12, 2018

AUGUST 1, 2016	Standard Gable End Detail	MII-GE130-SP

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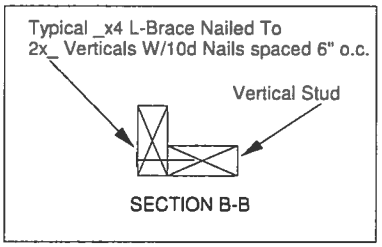
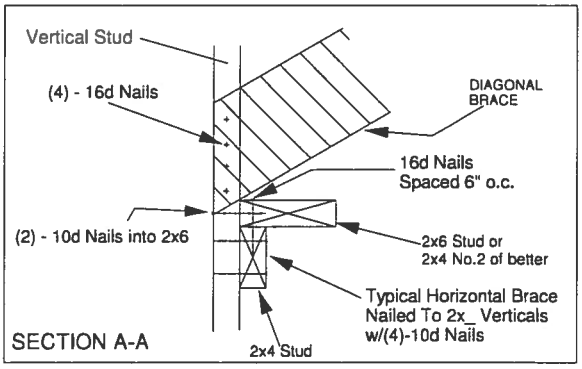
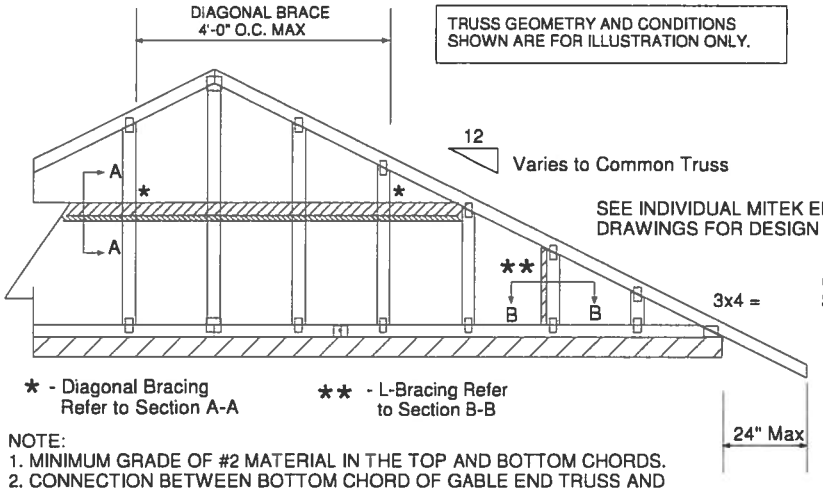






TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY.

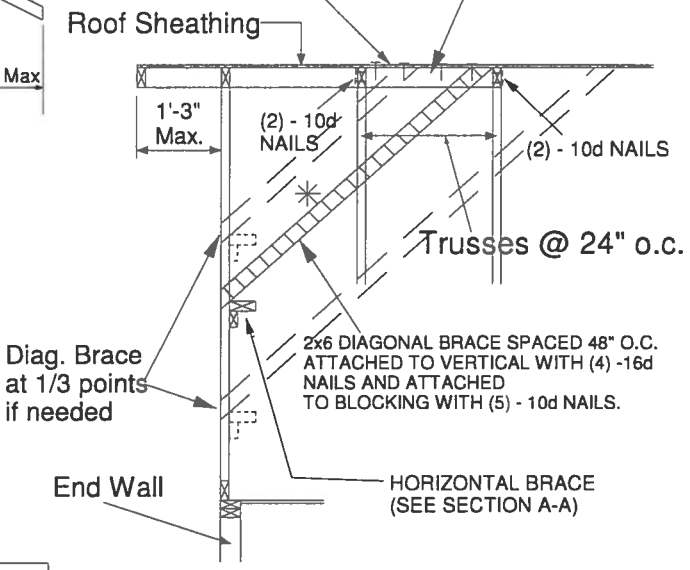
SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA

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" X2.5") NAILS MINIMUM, PLYWOOD SHEATHING TO 2x4 STD SPF BLOCK

* - Diagonal Bracing Refer to Section A-A

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



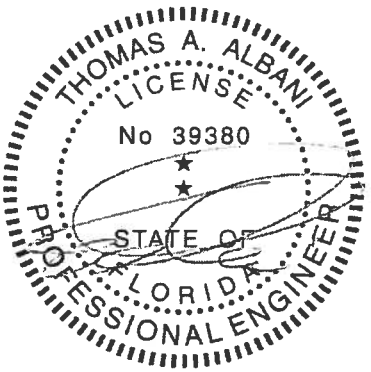
NOTE:
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF 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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AUGUST 1, 2016	Standard Gable End Detail	MII-GE170-D-SP

MiTek USA, Inc.

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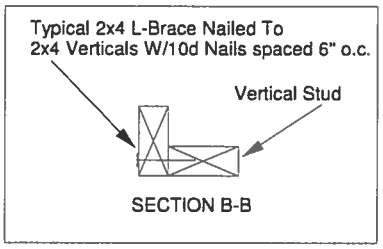
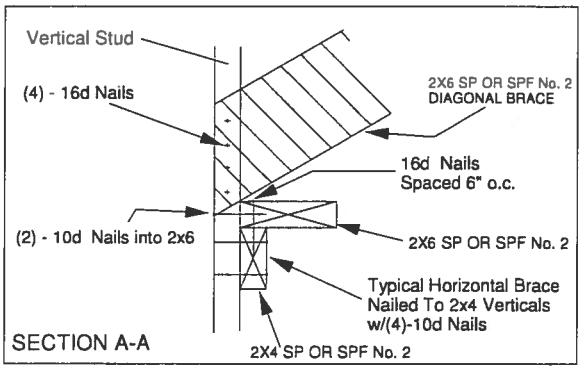
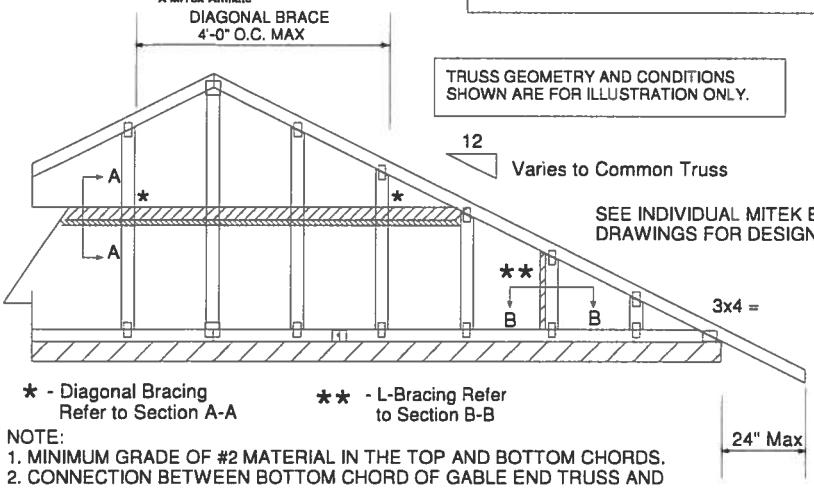




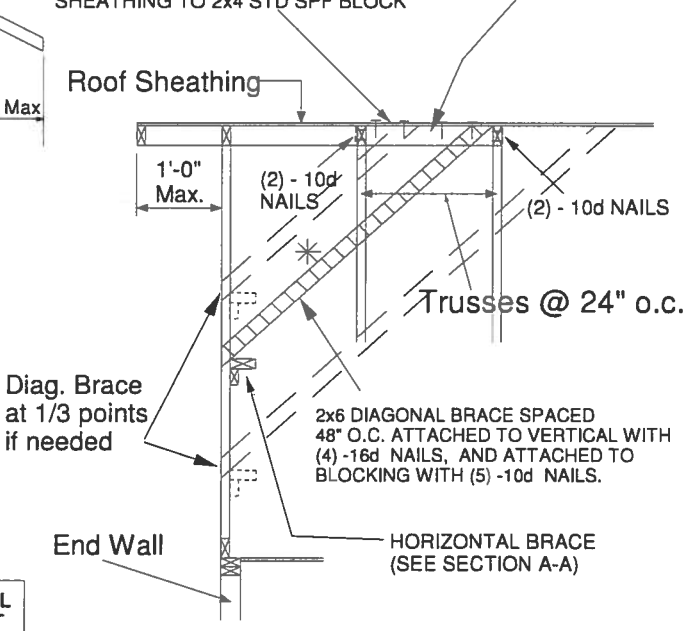


* - Diagonal Bracing Refer to Section A-A

** - 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")

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.

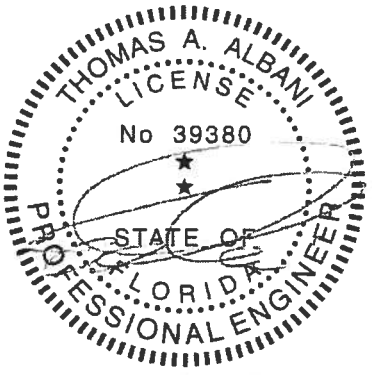


Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
		Maximum Stud Length			
2x4 SP No. 3 / Stud	12" O.C.	3-9-7	5-8-8	6-11-1	11-4-4
2x4 SP No. 3 / Stud	16" O.C.	3-4-12	4-11-15	6-9-8	10-2-3
2x4 SP No. 3 / Stud	24" O.C.	2-9-4	4-0-7	5-6-8	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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AUGUST 1, 2016	STANDARD PIGGYBACK TRUSS CONNECTION DETAIL	MII-PIGGY-7-10

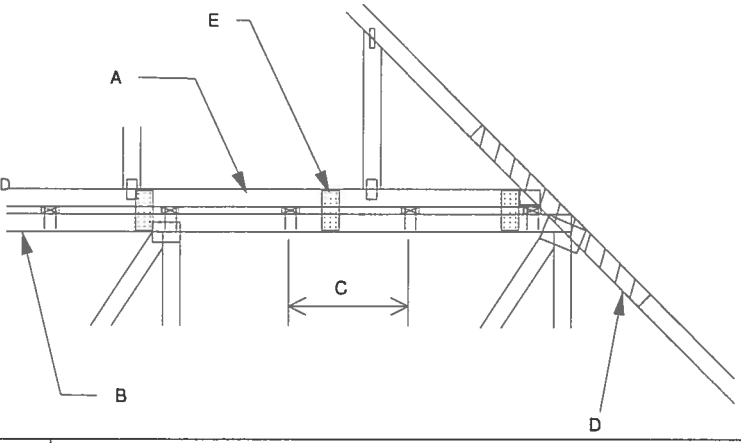
MiTek USA, Inc.

ENGINEERED BY TRENCO
A MiTek Affiliate

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 TRANSFERING DRAG LOADS (SHEAR TRUSSES). ADDITIONAL CONSIDERATIONS BY BUILDING ENGINEER/DESIGNER ARE REQUIRED.

A - PIGGBACK 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___ 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.

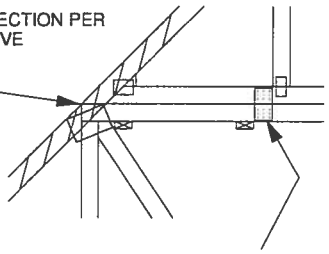
E - FOR WIND SPEEDS BETWEEN 126 AND 160 MPH, ATTACH MITEK 3X8 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 72" O.C. W/ (4) (0.131" X 1.5") NAILS PER MEMBER. STAGGER NAILS FROM OPPOSING FACES. ENSURE 0.5" EDGE DISTANCE. (MIN. 2 PAIRS OF PLATES REQ. REGARDLESS OF SPAN)



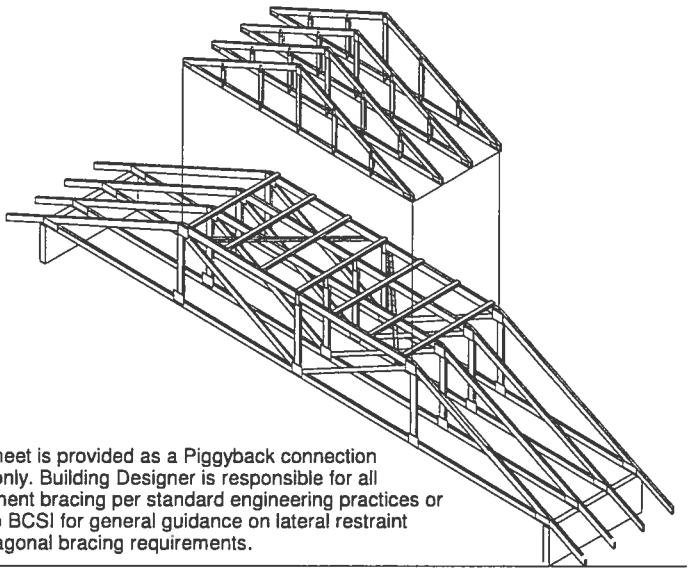
WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

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

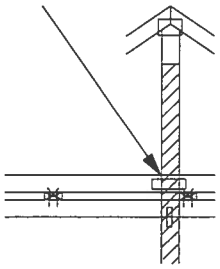


FOR ALL WIND SPEEDS, ATTACH MITEK 3X6 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 48" O.C. W/ (4) (0.131" X 1.5") PER MEMBER. STAGGER NAILS FROM OPPOSING FACES ENSURE 0.5" EDGE DISTANCE.



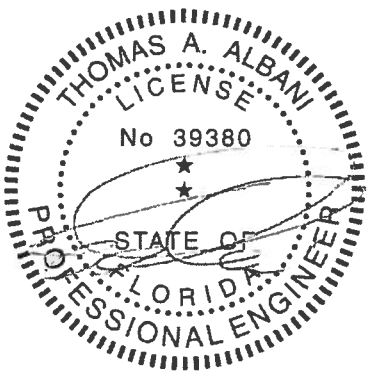
This sheet is provided as a Piggyback connection detail only. Building Designer is responsible for all permanent bracing per standard engineering practices or refer to BCSI for general guidance on lateral restraint and diagonal bracing requirements.

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 ___ 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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February 12, 2018

AUGUST 1, 2016	STANDARD REPAIR DETAIL FOR BROKEN CHORDS, WEBS AND DAMAGED OR MISSING CHORD SPLICE PLATES	MII-REP01A1

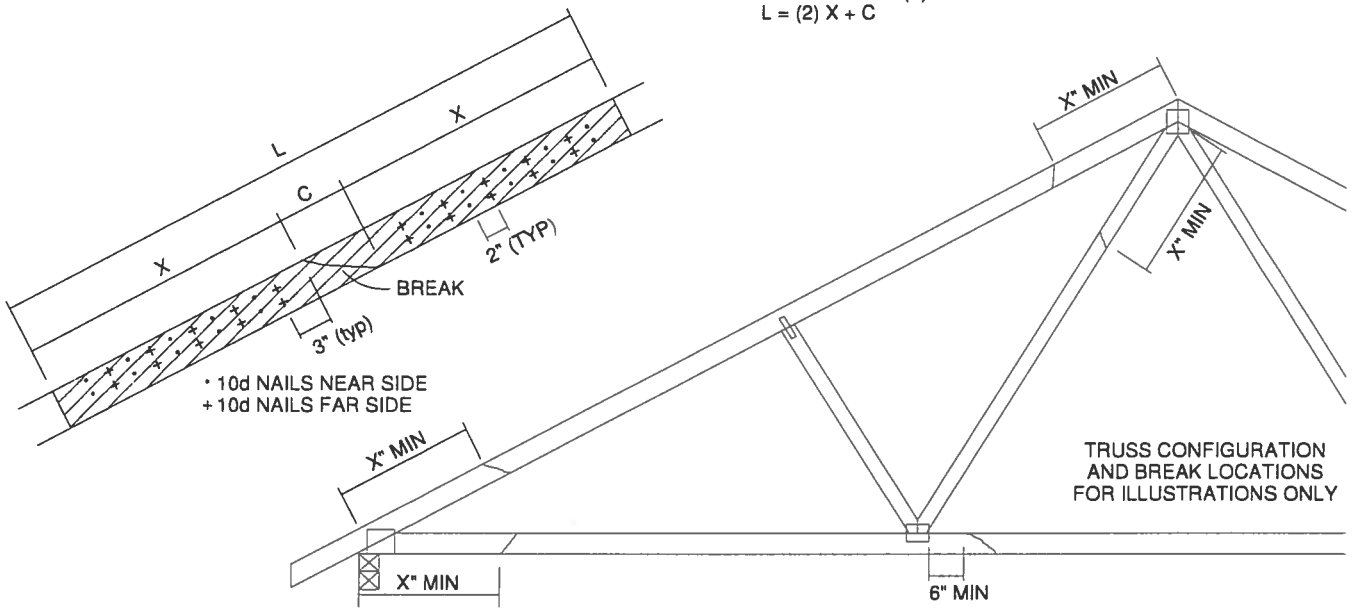
MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

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.

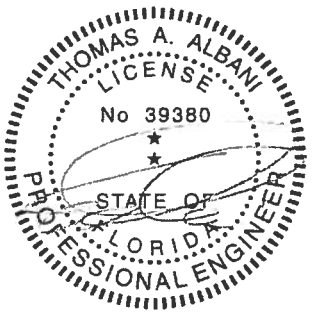
THE LENGTH OF THE BREAK (C) SHALL NOT EXCEED 12". (C=PLATE LENGTH FOR SPLICE REPAIRS)
THE MINIMUM OVERALL SCAB LENGTH REQUIRED (L) IS CALCULATED AS FOLLOWS:
L = (2) X + C



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 APPLING 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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January 19, 2018

OCTOBER 5, 2016	REPLACE BROKEN OVERHANG	MII-REP13B

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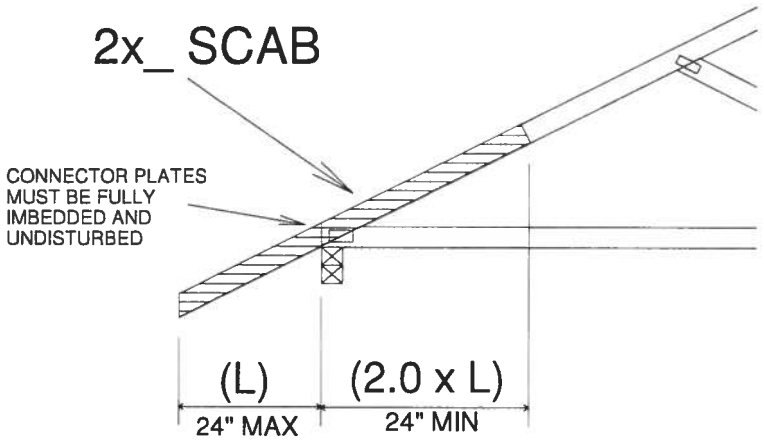
ENGINEERED BY TRENCO
A MiTek Affiliate

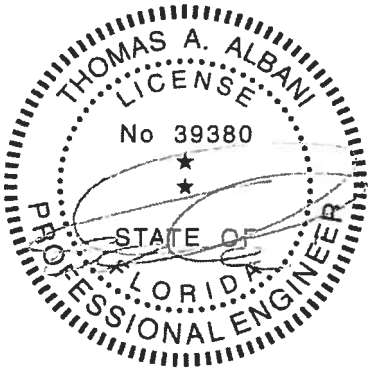
TRUSS CRITERIA:
LOADING: 40-10-0-10
DURATION FACTOR: 1.15
SPACING: 24" O.C.
TOP CHORD: 2x4 OR 2x6
PITCH: 4/12 - 12/12
HEEL HEIGHT: STANDARD HEEL UP TO 12" ENERGY HEEL
END BEARING CONDITION

NOTES:
1. ATTACH 2x_ SCAB (MINIMUM NO.2 GRADE SPF, HF, SP, DF) TO ONE FACE OF TRUSS WITH TWO ROWS OF 10d (0.131" X 3") SPACED 6" O.C.
2. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.
3. WHEN NAILING THE SCABS, THE USE OF A BACKUP WEIGHT IS RECOMMENDED TO AVOID LOOSENING OF THE CONNECTOR PLATES AT THE JOINTS OR SPLICES.



IMPORTANT
This detail to be used only with trusses (spans less than 40') spaced 24" o.c. maximum and having pitches between 4/12 and 12/12 and total top chord loads not exceeding 50 psf.
Trusses not fitting these criteria should be examined individually.

REFER TO INDIVIDUAL TRUSS DESIGN FOR PLATE SIZES AND LUMBER GRADES



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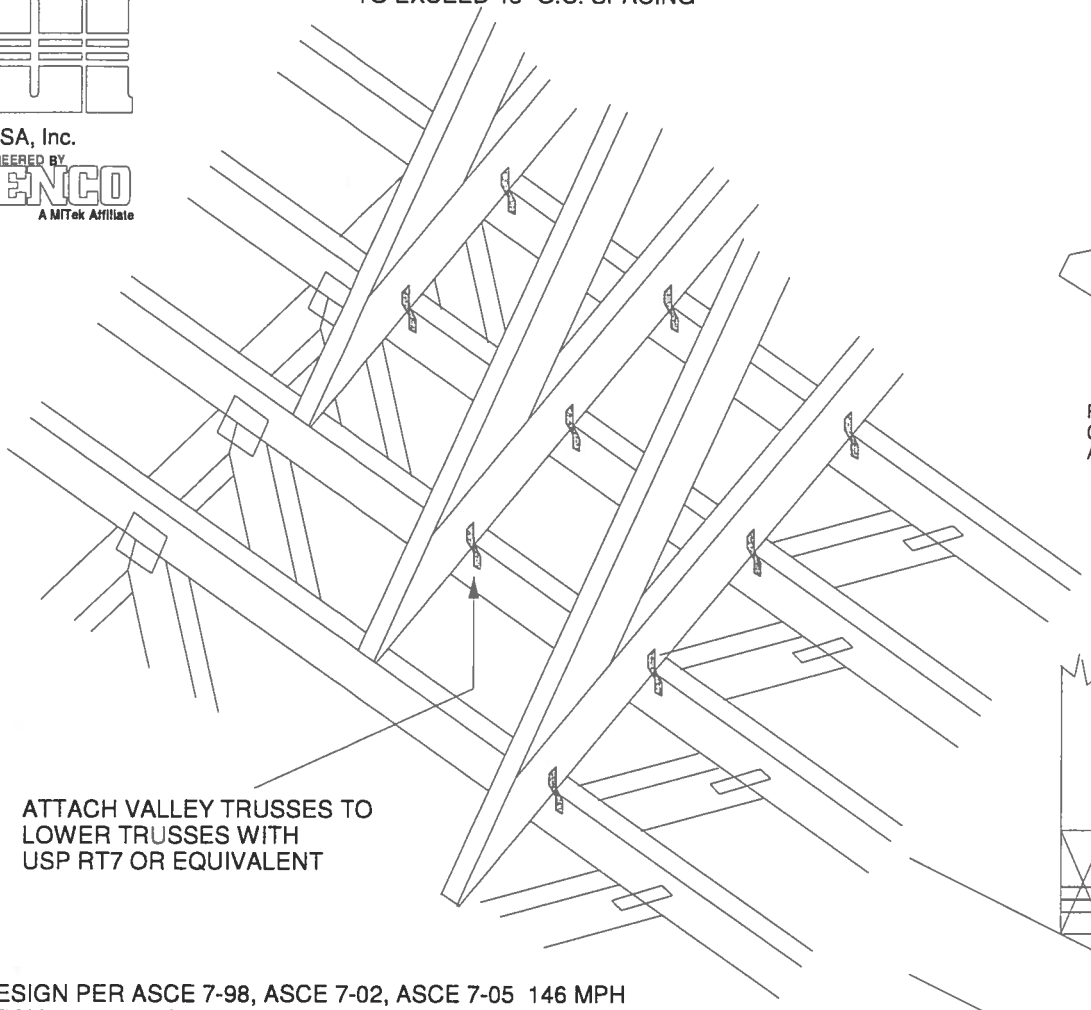
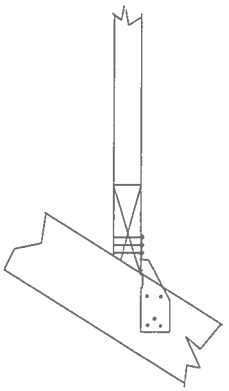
February 12, 2018

AUGUST 1, 2016	TRUSSED VALLEY SET DETAIL (HIGH WIND VELOCITY)	MII-VALLEY

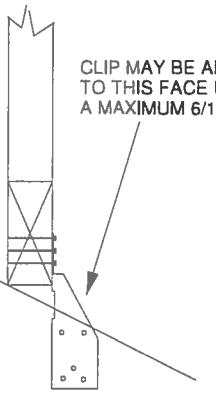
MiTek USA, Inc.

NOTE: VALLEY STUD SPACING NOT TO EXCEED 48" O.C. SPACING





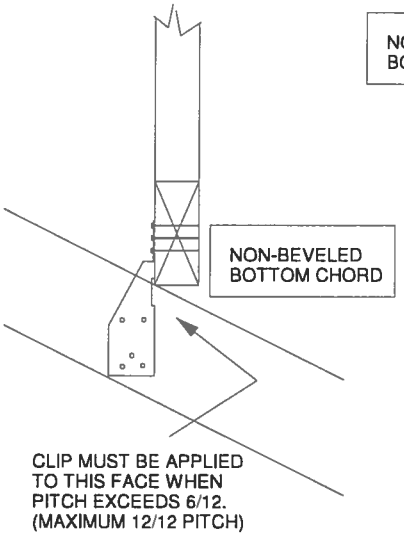
FOR BEVELED BOTTOM CHORD, CLIP MAY BE APPLIED TO EITHER FACE

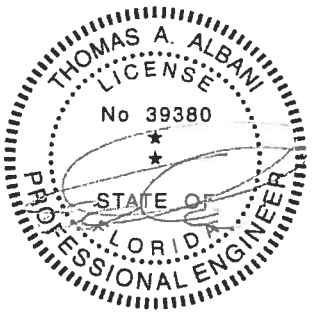


WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 146 MPH
WIND DESIGN PER ASCE 7-10 160 MPH
MAX MEAN ROOF HEIGHT = 30 FEET
CATEGORY II BUILDING
EXPOSURE B or C
WIND DURATION OF LOAD INCREASE : 1.6
MAX TOP CHORD TOTAL LOAD = 50 PSF
MAX SPACING = 24" O.C. (BASE AND VALLEY)

SUPPORTING TRUSSES DIRECTLY UNDER VALLEY TRUSSES MUST BE DESIGNED WITH A MAXIMUM UNBRACED LENGTH OF 2'-10" ON AFFECTED TOP CHORDS.

NOTES:
- SHEATHING APPLIED AFTER INSTALLATION OF VALLEY TRUSSES
- THIS DETAIL IS NOT APPLICABLE FOR SPF-S SPECIES LUMBER.





Thomas A. Albani PE No.39380
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
January 19, 2018

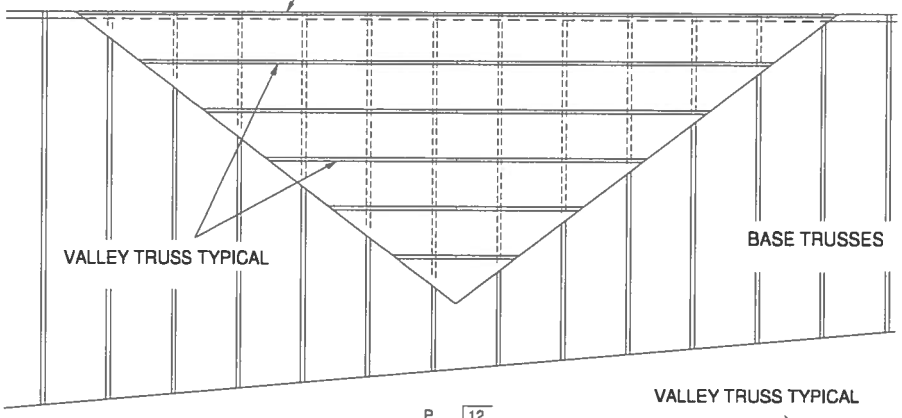
AUGUST 1, 2016	TRUSSED VALLEY SET DETAIL	MII-VALLEY HIGH WIND2

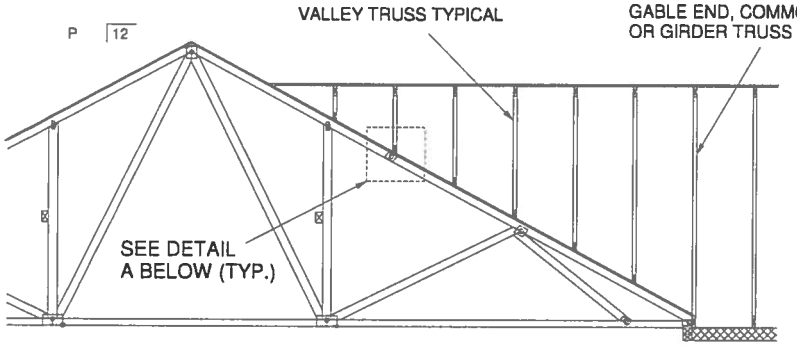
MiTek USA, Inc. Page 1 of 1

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

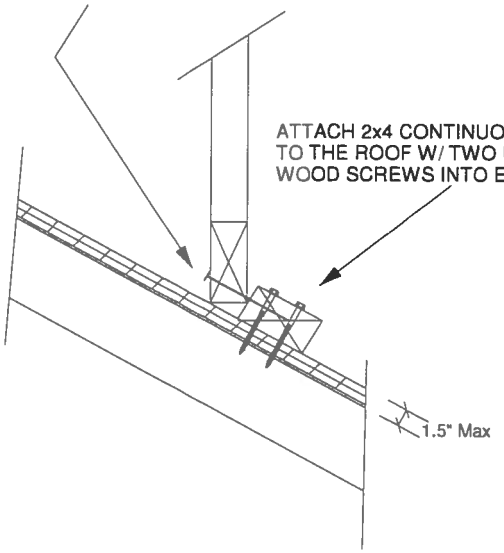
GENERAL SPECIFICATIONS

1. NAIL SIZE 10d (0.131" X 3")
2. WOOD SCREW = 4.5" WS45 USP OR EQUILIVANT
3. INSTALL SHEATHING TO TOP CHORD OF BASE TRUSSES.
4. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE TO BASE TRUSSES AS PER DETAIL A
5. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
6. NAILING DONE PER NDS-01
7. VALLEY STUD SPACING NOT TO EXCEED 48" O.C.

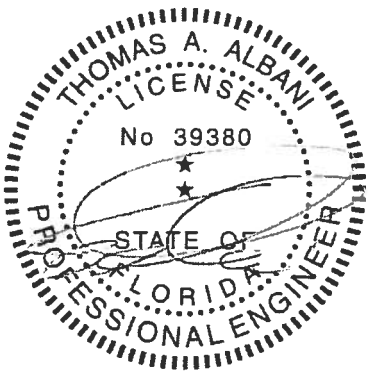




SECURE VALLEY TRUSS W/ ONE ROW OF 10d NAILS 6" O.C.



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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Date:
February 12, 2018

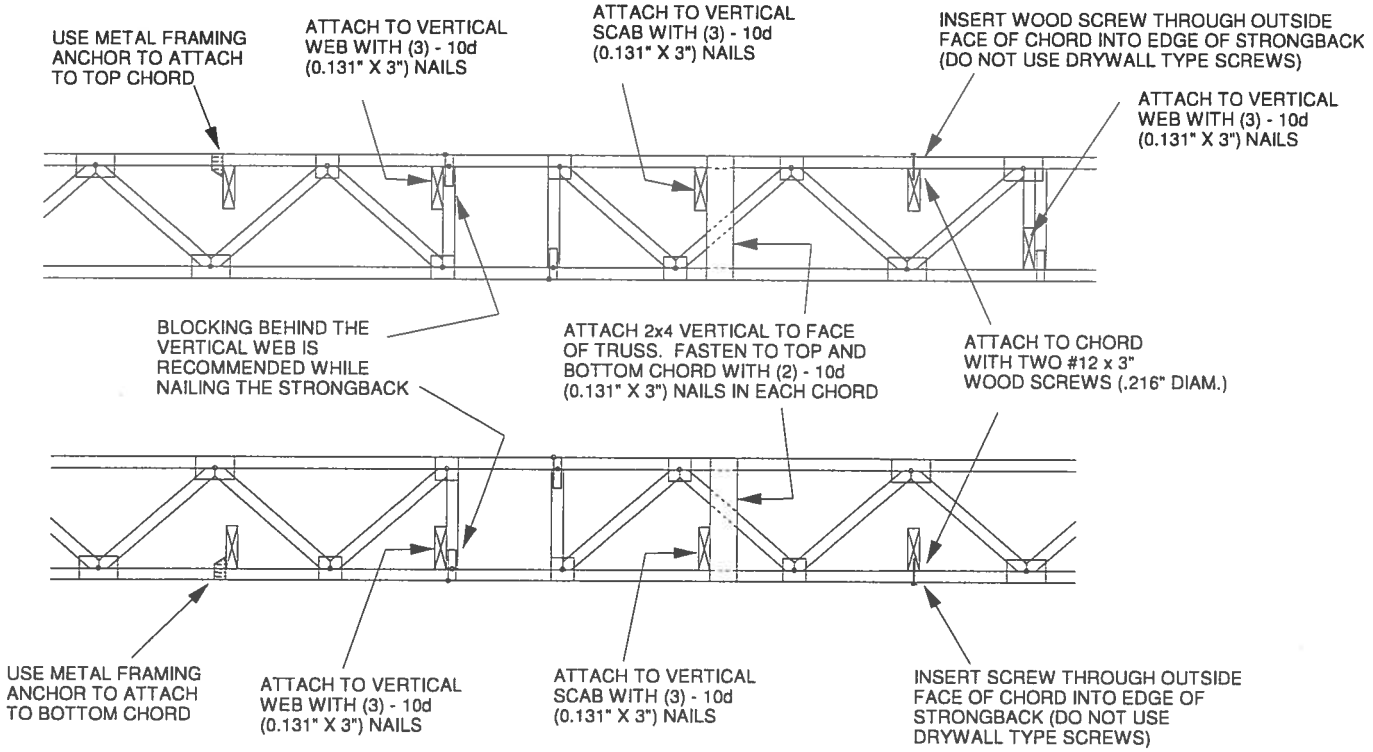
AUGUST 1, 2016	LATERAL BRACING RECOMMENDATIONS	MII-STRGBCK

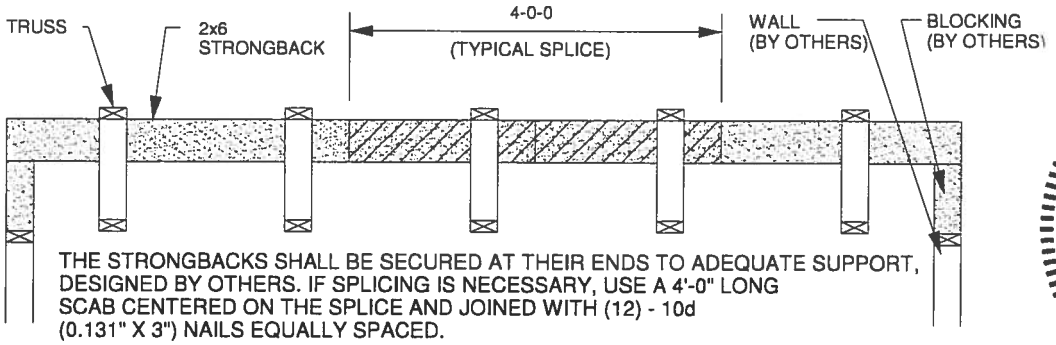
MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

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.

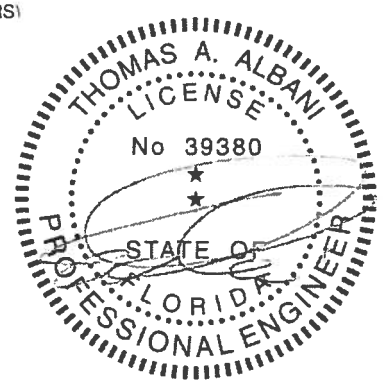
NOTE 2: STRONGBACK BRACING ALSO SATISFIES THE LATERAL BRACING REQUIREMENTS FOR THE BOTTOM CHORD OF THE TRUSS WHEN IT IS PLACED ON TOP OF THE BOTTOM CHORD, IS CONTINUOUS FROM END TO END, CONNECTED WITH A METHOD OTHER THAN METAL FRAMING ANCHOR, AND PROPERLY CONNECTED, BY OTHERS, AT THE ENDS.





THE STRONGBACKS SHALL BE SECURED AT THEIR ENDS TO ADEQUATE SUPPORT, DESIGNED BY OTHERS. IF SPLICING IS NECESSARY, USE A 4'-0" LONG SCAB CENTERED ON THE SPLICE AND JOINED WITH (12) - 10d (0.131" X 3") NAILS EQUALLY SPACED.

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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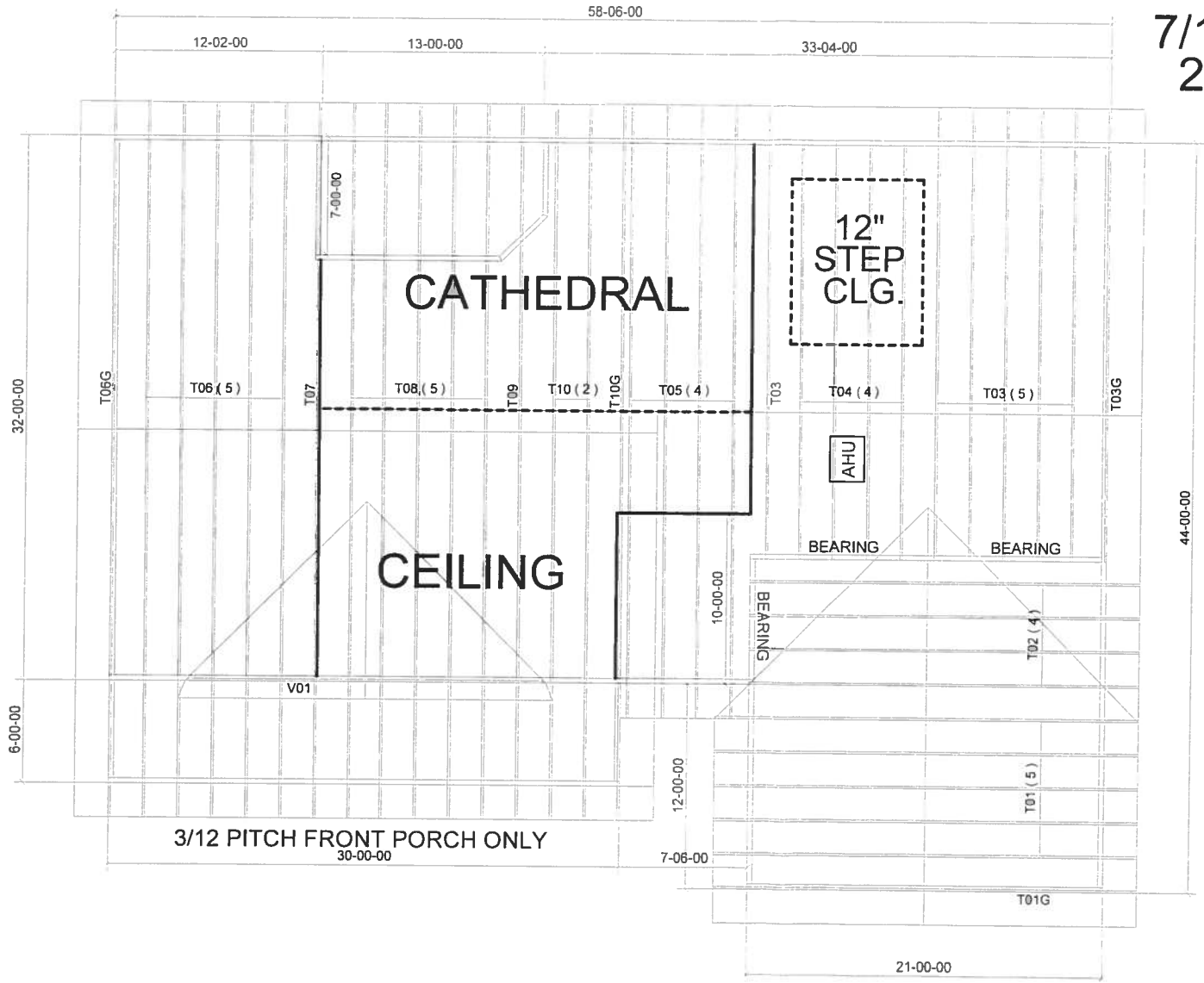
6904 Parke East Blvd. Tampa FL 33610
Date:
February 12, 2018

7/12 PITCH
24" O/H



BEARING HEIGHT SCHEDULE

	8' 1-1/8"

NOTES:

1) REFER TO HIB-91 (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 DESIGNED 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.c. MAXIMUM SPACING UNLESS OTHERWISE NOTED

5) ALL WALLS SHOWN ON PLACEMENT PLAN ARE CONSIDERED TO BE LOAD BEARING UNLESS OTHERWISE NOTED

6) ST42 TRUSSES MUST BE INSTALLED WITH THE TOP BEING UP

7) BEAM HEADER, LINTEL (HDR) TO BE FURNISHED BY BUILDER

Builders FirstSource

Jacksonville
PHONE 904 772 6100 FAX 904-772-1975

Tampa
PHONE 813-621-9831 FAX 813-628-8956

Freeport
PHONE 850-835-454 FAX 850 835-6835

RALPH COURSON	
COLEMAN RES.	
6-8-18	KLH
	1448850
	1448850

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

FORM R405-2017

RESIDENTIAL ENERGY CONSERVATION CODE DOCUMENTATION CHECKLIST

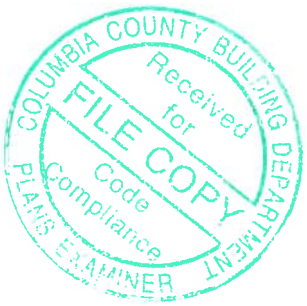
Florida Department of Business and Professional Regulation
Simulated Performance Alternative (Performance) Method

Applications for compliance with the 2017 Florida Building Code, Energy Conservation via the residential Simulated Performance Method shall include:

- ☐ *This checklist*
- ☐ *A Form R405 report that documents that the Proposed Design complies with Section R405.3 of the Florida Energy Code. This form shall include a summary page indicating home address, e-ratio and the pass or fail status along with summary areas and types of components, whether the home was simulated as a worst-case orientation, name and version of the compliance software tool, name of individual completing the compliance report (one page) and an input summary checklist that can be used for field verification (usually four pages/may be greater).*
- ☐ *Energy Performance Level (EPL) Display Card (one page)*
- ☐ *HVAC system sizing and selection based on ACCA Manual S or per exceptions provided in Section R403.7*
- ☐ *Mandatory Requirements (five pages)*

Required prior to CO for the Performance Method:

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



FORM R405-2017

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name:	180613 Coleman	Builder Name:	Ralph Corson Constructuion
Street:		Permit Office:	
City, State, Zip:	, FL ,	Permit Number:	
Owner:	Coleman Res	Jurisdiction:	
Design Location:	FL, Gainesville	County:	Columbia (Florida Climate Zone 2)

1. New construction or existing	New (From Plans)			
2. Single family or multiple family	Single-family			
3. Number of units, if multiple family	1			
4. Number of Bedrooms	3			
5. Is this a worst case?	Yes			
6. Conditioned floor area above grade (ft²)	1583			
Conditioned floor area below grade (ft²)	0			
7. Windows(155.0 sqft.)	Description		Area	
a. U-Factor:	Dbl, U=0.30		155.00 ft²	
SHGC:	SHGC=0.20			
b. U-Factor:	N/A		ft²	
SHGC:				
c. U-Factor:	N/A		ft²	
SHGC:				
d. U-Factor:	N/A		ft²	
SHGC:				
Area Weighted Average Overhang Depth:			3.565 ft.	
Area Weighted Average SHGC:			0.200	
8. Floor Types (1583.0 sqft.)		Insulation	Area	
a. Slab-On-Grade Edge Insulation		R=0.0	1583.00 ft²	
b. N/A		R=	ft²	
c. N/A		R=	ft²	

9. Wall Types (1547.3 sqft.)	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	1258.70 ft²
b. Frame - Wood, Adjacent	R=13.0	288.67 ft²
c. N/A	R=	ft²
d. N/A	R=	ft²
10. Ceiling Types (1673.0 sqft.)	Insulation	Area
a. Under Attic (Vented)	R=38.0	1673.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²
11. Ducts	R	ft²
a. Sup: Attic, Ret: Main, AH: Main	6	316.6
12. Cooling systems	kBtu/hr	Efficiency
a. Central Unit	30.0	SEER:15.00
13. Heating systems	kBtu/hr	Efficiency
a. Electric Heat Pump	30.0	HSPF:8.80
14. Hot water systems		
a. Electric		Cap: 40 gallons
		EF: 0.950
b. Conservation features		
None		
15. Credits		Pstat

Glass/Floor Area: 0.098

Total Proposed Modified Loads: 41.00

Total Baseline Loads: 43.59

PASS

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

PREPARED BY: Evan Beamsley

DATE: 2018-07-20

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 7.00 ACH50 (R402.4.1.2).

FORM R405-2017

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:	180613 Coleman	Bedrooms:	3	Address Type:	Street Address
Building Type:	User	Conditioned Area:	1583	Lot #	
Owner Name:	Coleman Res	Total Stories:	1	Block/Subdivision:	
# of Units:	1	Worst Case:	Yes	PlatBook:	
Builder Name:	Ralph Corson Constructuion	Rotate Angle:	135	Street:	
Permit Office:		Cross Ventilation:		County:	Columbia
Jurisdiction:		Whole House Fan:		City, State, Zip:	, FL ,
Family Type:	Single-family				
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

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

BLOCKS

Number	Name	Area	Volume
1	Block1	1583	12664

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	1583	12664	Yes	6	3	1	Yes	Yes	Yes

FLOORS

√	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulatio	Main	195 ft	0	1583 ft²	___	0.3	0.3	0.4

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	1833 ft²	462 ft²	Dark	0.92	No	0.9	No	0	30.3

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	300	1583 ft²	N	N

CEILING

√	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	Main	38	Blown	1673 ft²	0.11	Wood

FORM R405-2017

INPUT SUMMARY CHECKLIST REPORT

WALLS

√	#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	Width In	Height Ft	Height In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
____	1	N=>SE	Exterior	Frame - Wood	Main	13	12	2	8		97.3 ft²		0.23	0.75	0
____	2	E=>SW	Exterior	Frame - Wood	Main	13	7		8		56.0 ft²		0.23	0.75	0
____	3	N=>SE	Exterior	Frame - Wood	Main	13	10	6	8		84.0 ft²		0.23	0.75	0
____	4	NW=>E	Exterior	Frame - Wood	Main	13	3	6	8		28.0 ft²		0.23	0.75	0
____	5	W=>NE	Exterior	Frame - Wood	Main	13	4	6	8		36.0 ft²		0.23	0.75	0
____	6	N=>SE	Exterior	Frame - Wood	Main	13	33	4	8		266.7 ft²		0.23	0.75	0
____	7	E=>SW	Exterior	Frame - Wood	Main	13	24	4	8		194.7 ft²		0.23	0.75	0
____	8	S=>NW	Garage	Frame - Wood	Main	13	20	8	8		165.3 ft²		0.23	0.75	0
____	9	E=>SW	Garage	Frame - Wood	Main	13	2	4	8		18.7 ft²		0.23	0.75	0
____	10	S=>NW	Garage	Frame - Wood	Main	13	7	9	8		62.0 ft²		0.23	0.75	0
____	11	E=>SW	Garage	Frame - Wood	Main	13	5	4	8		42.7 ft²		0.23	0.75	0
____	12	S=>NW	Exterior	Frame - Wood	Main	13	30		8		240.0 ft²		0.23	0.75	0
____	13	W=>NE	Exterior	Frame - Wood	Main	13	32		8		256.0 ft²		0.23	0.75	0

DOORS

√	#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	Width In	Height Ft	Height In	Area
_____	1	N=>SE	Insulated	Main	None	.4	2		6	8	13.3 ft²
_____	2	S=>NW	Insulated	Main	None	.4	2	8	6	8	17.8 ft²
_____	3	S=>NW	Insulated	Main	None	.4	3		6	8	20 ft²

WINDOWS

Orientation shown is the entered orientation (=>) changed to Worst Case.

√	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
_____	1	N=>SE	1	Metal	Low-E Double	Yes	0.3	0.2	N	15.0 ft²	1 ft 6 in	0 ft 6 in	None	None
_____	2	N=>SE	3	Metal	Low-E Double	Yes	0.3	0.2	N	20.0 ft²	8 ft 6 in	0 ft 0 in	None	None
_____	3	N=>SE	6	Metal	Low-E Double	Yes	0.3	0.2	N	45.0 ft²	1 ft 6 in	0 ft 6 in	None	None
_____	4	E=>SW	7	Metal	Low-E Double	Yes	0.3	0.2	N	15.0 ft²	1 ft 6 in	5 ft 0 in	None	None
_____	5	S=>NW	12	Metal	Low-E Double	Yes	0.3	0.2	N	30.0 ft²	7 ft 6 in	0 ft 0 in	None	None
_____	6	W=>NE	13	Metal	Low-E Double	Yes	0.3	0.2	N	30.0 ft²	1 ft 6 in	4 ft 0 in	None	None

GARAGE

√	#	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
_____	1	452.97 ft²	452.97 ft²	52 ft	8 ft	1

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000356	1477.5	81.11	152.54	.2719	7

FORM R405-2017

INPUT SUMMARY CHECKLIST REPORT

HEATING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Block	Ducts
_____	1	Electric Heat Pump/	None	HSPF:8.8	30 kBtu/hr	1	sys#1

COOLING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
_____	1	Central Unit/	None	SEER: 15	30 kBtu/hr	900 cfm	0.75	1	sys#1

HOT WATER SYSTEM

√	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
_____	1	Electric	None	Main	0.95	40 gal	60 gal	120 deg	None

SOLAR HOT WATER SYSTEM

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

DUCTS

√	#	Supply Location	Supply R-Value	Supply Area	Return Location	Return Area	Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	HVAC # Cool
_____	1	Attic	6	316.6 ft	Main	1 ft²	Default Leakage	Main	(Default)	(Default)			1	1

TEMPERATURES

Programable Thermostat: Y

Ceiling Fans:

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

Thermostat Schedule: HERS 2006 Reference

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

MASS

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

Name: no

Signature: _____

Rating Compant: no

Date: _____

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 94

The lower the Energy Performance Index, the more efficient the home.

1. New home or, addition	1. New (From Plans)
2. Single-family or multiple-family	2. Single-family
3. No. of units (if multiple-family)	3. 1
4. Number of bedrooms	4. 3
5. Is this a worst case? (yes/no)	5. Yes
6. Conditioned floor area (sq. ft.)	6. 1583
7. Windows, type and area	
a) U-factor:(weighted average)	7a. 0.300
b) Solar Heat Gain Coefficient (SHGC)	7b. 0.200
c) Area	7c. 155.0
8. Skylights	
a) U-factor:(weighted average)	8a. NA
b) Solar Heat Gain Coefficient (SHGC)	8b. NA
9. Floor type, insulation level:	
a) Slab-on-grade (R-value)	9a. 0.0
b) Wood, raised (R-value)	9b.
c) Concrete, raised (R-value)	9c.
10. Wall type and insulation:	
A. Exterior:	
1. Wood frame (Insulation R-value)	10A1. 13.0
2. Masonry (Insulation R-value)	10A2.
B. Adjacent:	
1. Wood frame (Insulation R-value)	10B1. 13.0
2. Masonry (Insulation R-value)	10B2.
11. Ceiling type and insulation level	
a) Under attic	11a. 38.0
b) Single assembly	11b.
c) Knee walls/skylight walls	11c.
d) Radiant barrier installed	11d. No

12. Ducts, location & insulation level	
a) Supply ducts	R 6.0
b) Return ducts	R 6.0
c) AHU location	Attic/Main
13. Cooling system:	Capacity 30.0
a) Split system	SEER
b) Single package	SEER
c) Ground/water source	SEER/COP
d) Room unit/PTAC	EER
e) Other	15.0
14. Heating system:	Capacity 30.0
a) Split system heat pump	HSPF
b) Single package heat pump	HSPF
c) Electric resistance	COP
d) Gas furnace, natural gas	AFUE
e) Gas furnace, LPG	AFUE
f) Other	8.80
15. Water heating system	
a) Electric resistance	EF 0.95
b) Gas fired, natural gas	EF
c) Gas fired, LPG	EF
d) Solar system with tank	EF
e) Dedicated heat pump with tank	EF
f) Heat recovery unit	HeatRec%
g) Other	
16. HVAC credits claimed (Performance Method)	
a) Ceiling fans	
b) Cross ventilation	No
c) Whole house fan	No
d) Multizone cooling credit	
e) Multizone heating credit	
f) Programmable thermostat	Yes

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

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

Builder Signature:_____ Date:_____

Address of New Home: _____ City/FL Zip: __, FL_____

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/m2), and swinging doors no more than 0.5 cfm per square foot (2.6 L/s/m2), when tested according to NFRC 400 or AAMA/ WDMA/CSA 101/I.S.2/A440 by an accredited, independent laboratory and listed and labeled by the manufacturer.

Exception: Site-built windows, skylights and doors.

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 ma 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 [a] (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

				CHECK
Project Name:	180613 Coleman	Builder Name:	Ralph Corson Constructuion	
Street:		Permit Office:		
City, State, Zip:	, FL ,	Permit Number:		
Owner:	Coleman Res	Jurisdiction:		
Design Location:	FL, Gainesville			

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.

Envelope Leakage Test Report (Blower Door Test)

Residential Prescriptive, Performance or ERI Method Compliance
2017 Florida Building Code, Energy Conservation, 6th Edition

Jurisdiction:	Permit #:

Job Information

Builder: Ralph Corson Constructuion Community: Lot: NA

Address:

City: State: FL Zip:

Air Leakage Test Results *Passing results must meet either the Performance, Prescriptive, or ERI Method*

○ **PRESCRIPTIVE METHOD-**The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding 7 air changes per hour at a pressure of 0.2 inch w.g. (50 Pascals) in Climate Zones 1 and 2.

○ **PERFORMANCE or ERI METHOD-**The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding the selected ACH(50) value, as shown on Form R405-2017 (Performance) or R406-2017 (ERI), section labeled as infiltration, sub-section ACH50.

ACH(50) specified on Form R405-2017-Energy Calc (Performance) or R406-2017 (ERI): 7.000

CFM(50)	x 60 ÷	Building Volume	=	ACH(50)
		12664		

☐ **PASS**

☐ When ACH(50) is less than 3, Mechanical Ventilation installation must be verified by building department.

Method for calculating building volume:

○ Retrieved from architectural plans

● Code software calculated

○ Field measured and calculated

R402.4.1.2 Testing. 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 Statues.*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.*

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, back draft 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.

Testing Company

Company Name: _____ Phone: _____

I hereby verify that the above Air Leakage results are in accordance with the 2017 6th Edition Florida Building Code Energy Conservation requirements according to the compliance method selected above.

Signature of Tester: _____ Date of Test: _____

Printed Name of Tester: _____

License/Certification #: _____ Issuing Authority: _____

Residential System Sizing Calculation

Summary

Coleman Res

, FL

Project Title:
180613 Coleman

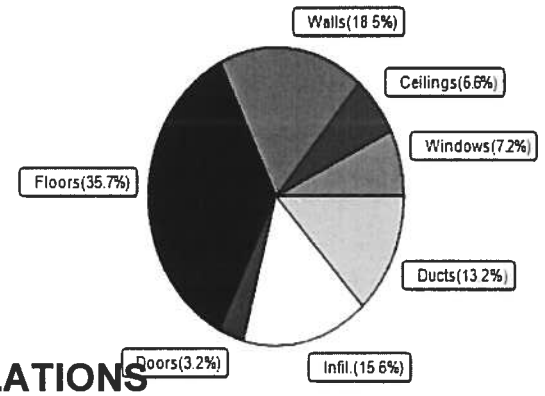
2018-07-20

Location for weather data: Gainesville, FL - Defaults: Latitude(29.7) Altitude(152 ft.) Temp Range(M) Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(51gr.)					
Winter design temperature(TMY3 99%)	30	F	Summer design temperature(TMY3 99%)	94	F
Winter setpoint	70	F	Summer setpoint	75	F
Winter temperature difference	40	F	Summer temperature difference	19	F
Total heating load calculation	**25765**	**Btuh**	**Total cooling load calculation**	**21547**	**Btuh**
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh
Total (Electric Heat Pump)	116.4	30000	Sensible (SHR = 0.75)	129.8	22500
Heat Pump + Auxiliary(0.0kW)	116.4	30000	Latent	177.9	7500
			Total (Electric Heat Pump)	139.2	30000

WINTER CALCULATIONS

Winter Heating Load (for 1583 sqft)

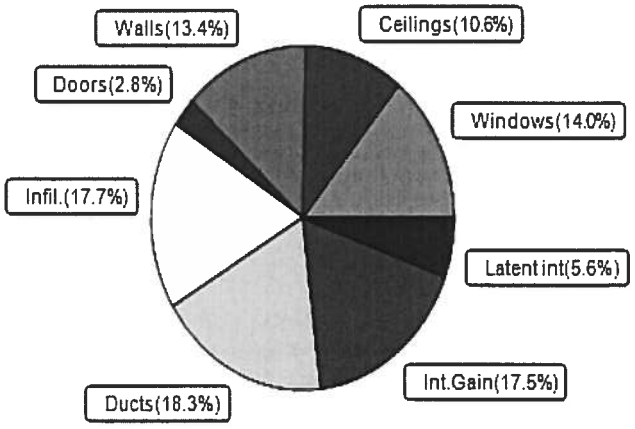
Load component			Load	
Window total	155	sqft	1860	Btuh
Wall total	1341	sqft	4762	Btuh
Door total	51	sqft	818	Btuh
Ceiling total	1673	sqft	1698	Btuh
Floor total	1583	sqft	9204	Btuh
Infiltration	92	cfm	4022	Btuh
Duct loss			3402	Btuh
Subtotal			**25765**	**Btuh**
Ventilation	0	cfm	0	Btuh
TOTAL HEAT LOSS			**25765**	**Btuh**



SUMMER CALCULATIONS

Summer Cooling Load (for 1583 sqft)

Load component			Load	
Window total	155	sqft	3027	Btuh
Wall total	1341	sqft	2879	Btuh
Door total	51	sqft	613	Btuh
Ceiling total	1673	sqft	2293	Btuh
Floor total			0	Btuh
Infiltration	69	cfm	1433	Btuh
Internal gain			3780	Btuh
Duct gain			3307	Btuh
Sens. Ventilation	0	cfm	0	Btuh
Blower Load			0	Btuh
Total sensible gain			**17332**	**Btuh**
Latent gain(ducts)			638	Btuh
Latent gain(infiltration)			2377	Btuh
Latent gain(ventilation)			0	Btuh
Latent gain(internal/occupants/other)			1200	Btuh
Total latent gain			**4215**	**Btuh**
TOTAL HEAT GAIN			**21547**	**Btuh**



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EnergyGauge® System Sizing
PREPARED BY: Evan Beamsley
DATE: 2018-07-20

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Coleman Res
, FL

Project Title:
180613 Coleman
Building Type: User

2018-07-20

Reference City: Gainesville, FL (Defaults) Winter Temperature Difference: 40.0 F (TMY3 99%)
This calculation is for Worst Case. The house has been rotated 315 degrees.

Component Loads for Whole House

Window	Panes/Type	Frame	U	Orientation	Area(sqft) X	HTM=	Load
1	2, NFRC 0.20	Metal	0.30	NW	15.0	12.0	180 Btuh
2	2, NFRC 0.20	Metal	0.30	NW	20.0	12.0	240 Btuh
3	2, NFRC 0.20	Metal	0.30	NW	45.0	12.0	540 Btuh
4	2, NFRC 0.20	Metal	0.30	NE	15.0	12.0	180 Btuh
5	2, NFRC 0.20	Metal	0.30	SE	30.0	12.0	360 Btuh
6	2, NFRC 0.20	Metal	0.30	SW	30.0	12.0	360 Btuh
	Window Total				155.0(sqft)		1860 Btuh

Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area X	HTM=	Load
1	Frame - Wood	- Ext	(0.089)	13.0/0.0	82	3.55	292 Btuh
2	Frame - Wood	- Ext	(0.089)	13.0/0.0	56	3.55	199 Btuh
3	Frame - Wood	- Ext	(0.089)	13.0/0.0	51	3.55	180 Btuh
4	Frame - Wood	- Ext	(0.089)	13.0/0.0	28	3.55	99 Btuh
5	Frame - Wood	- Ext	(0.089)	13.0/0.0	36	3.55	128 Btuh
6	Frame - Wood	- Ext	(0.089)	13.0/0.0	222	3.55	787 Btuh
7	Frame - Wood	- Ext	(0.089)	13.0/0.0	180	3.55	638 Btuh
8	Frame - Wood	- Adj	(0.089)	13.0/0.0	148	3.55	524 Btuh
9	Frame - Wood	- Adj	(0.089)	13.0/0.0	19	3.55	66 Btuh
10	Frame - Wood	- Adj	(0.089)	13.0/0.0	62	3.55	220 Btuh
11	Frame - Wood	- Adj	(0.089)	13.0/0.0	43	3.55	151 Btuh
12	Frame - Wood	- Ext	(0.089)	13.0/0.0	190	3.55	675 Btuh
13	Frame - Wood	- Ext	(0.089)	13.0/0.0	226	3.55	802 Btuh
	Wall Total				1341(sqft)		4762 Btuh

Doors	Type	Storm	Ueff.	Area X	HTM=	Load
1	Insulated - Exterior,	n	(0.400)	13	16.0	213 Btuh
2	Insulated - Garage,	n	(0.400)	18	16.0	284 Btuh
3	Insulated - Exterior,	n	(0.400)	20	16.0	320 Btuh
	Door Total			51(sqft)		818Btuh

Ceilings	Type/Color/Surface	Ueff.	R-Value	Area X	HTM=	Load
1	Vented Attic/D/Shing	(0.025)	38.0/0.0	1673	1.0	1698 Btuh
	Ceiling Total			1673(sqft)		1698Btuh

Floors	Type	Ueff.	R-Value	Size X	HTM=	Load
1	Slab On Grade	(1.180)	0.0	195.0 ft(perim.)	47.2	9204 Btuh
	Floor Total			1583 sqft		9204 Btuh

	Envelope Subtotal:	18342 Btuh

Infiltration	Type	Wholehouse ACH	Volume(cuft)	Wall Ratio	CFM=	
	Natural	0.44	12664	1.00	91.8	4022 Btuh

Duct load	Average sealed, R6.0, Supply(Att), Return(Con)	(DLM of 0.152)	3402 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Coleman Res
, FL

Project Title:
180613 Coleman
Building Type: User

2018-07-20

All Zones	**Sensible Subtotal All Zones**	**25765 Btuh**

WHOLE HOUSE TOTALS

Totals for Heating	Subtotal Sensible Heat Loss Ventilation Sensible Heat Loss Total Heat Loss	25765 Btuh 0 Btuh 25765 Btuh

EQUIPMENT

1. Electric Heat Pump	#	30000 Btuh

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

Version 8

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Coleman Res

Project Title:
180613 Coleman

, FL

2018-07-20

Reference City: Gainesville, FL Temperature Difference: 19.0F(TMY3 99%) Humidity difference: 51gr.
This calculation is for Worst Case. The house has been rotated 315 degrees.

Component Loads for Whole House

Window	Type* Panes	SHGC	U	InSh	IS	Ornt	Overhang Len	Hgt	Window Area(sqft) Gross	Shaded	Unshaded	HTM Shaded	Unshaded	Load
1	2 NFRC	0.20	0.30	No	No	NW	1.5ft.	0.5ft.	15.0	0.0	15.0	10	19	287 Btuh
2	2 NFRC	0.20	0.30	No	No	NW	8.5ft.	0.0ft.	20.0	0.0	20.0	10	19	383 Btuh
3	2 NFRC	0.20	0.30	No	No	NW	1.5ft.	0.5ft.	45.0	0.0	45.0	10	19	861 Btuh
4	2 NFRC	0.20	0.30	No	No	NE	1.5ft.	5.0ft.	15.0	0.0	15.0	10	19	287 Btuh
5	2 NFRC	0.20	0.30	No	No	SE	7.5ft.	0.0ft.	30.0	30.0	0.0	10	20	297 Btuh
6	2 NFRC	0.20	0.30	No	No	SW	1.5ft.	4.0ft.	30.0	0.0	30.0	10	20	601 Btuh
	Excursion													311 Btuh
	Window Total								155 (sqft)					3027 Btuh

Walls	Type	U-Value	R-Value Cav/Sheath	Area(sqft)	HTM	Load
1	Frame - Wood - Ext	0.09	13.0/0.0	82.3	2.3	186 Btuh
2	Frame - Wood - Ext	0.09	13.0/0.0	56.0	2.3	127 Btuh
3	Frame - Wood - Ext	0.09	13.0/0.0	50.7	2.3	115 Btuh
4	Frame - Wood - Ext	0.09	13.0/0.0	28.0	2.3	63 Btuh
5	Frame - Wood - Ext	0.09	13.0/0.0	36.0	2.3	81 Btuh
6	Frame - Wood - Ext	0.09	13.0/0.0	221.7	2.3	502 Btuh
7	Frame - Wood - Ext	0.09	13.0/0.0	179.7	2.3	407 Btuh
8	Frame - Wood - Adj	0.09	13.0/0.0	147.6	1.7	249 Btuh
9	Frame - Wood - Adj	0.09	13.0/0.0	18.7	1.7	31 Btuh
10	Frame - Wood - Adj	0.09	13.0/0.0	62.0	1.7	105 Btuh
11	Frame - Wood - Adj	0.09	13.0/0.0	42.7	1.7	72 Btuh
12	Frame - Wood - Ext	0.09	13.0/0.0	190.0	2.3	430 Btuh
13	Frame - Wood - Ext	0.09	13.0/0.0	226.0	2.3	512 Btuh
	Wall Total			1341 (sqft)		2879 Btuh

Doors	Type	Area (sqft)	HTM	Load
1	Insulated - Exterior	13.3	12.0	160 Btuh
2	Insulated - Garage	17.8	12.0	213 Btuh
3	Insulated - Exterior	20.0	12.0	240 Btuh
	Door Total	51 (sqft)		613 Btuh

Ceilings	Type/Color/Surface	U-Value	R-Value	Area(sqft)	HTM	Load
1	Vented Attic/DarkShingle	0.025	38.0/0.0	1673.0	1.37	2293 Btuh
	Ceiling Total			1673 (sqft)		2293 Btuh

Floors	Type	R-Value	Size	HTM	Load
1	Slab On Grade	0.0	1583 (ft-perimeter)	0.0	0 Btuh
	Floor Total		1583.0 (sqft)		0 Btuh

		Load
	Envelope Subtotal:	8813 Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued)

Coleman Res

Project Title: 180613 Coleman

Climate:FL_GAINESVILLE_REGIONAL_A

, FL

2018-07-20

Infiltration	Type Natural	Average ACH 0.33	Volume(cuft) 12664	Wall Ratio 1		CFM= 68.9	Load 1433	Btuh
Internal gain		Occupants 6	Btuh/occupant X 230		+	Appliance 2400	Load 3780	Btuh
					Sensible Envelope Load:		14025	Btuh
Duct load	Average sealed, Supply(R6.0-Attic), Return(R6.0-Condi)				(DGM of 0.236)		3307	Btuh
					Sensible Load All Zones		**17332**	**Btuh**

Manual J Summer Calculations

Residential Load - Component Details (continued)

Coleman Res
, FL

Project Title: 180613 Coleman
Climate:FL_GAINESVILLE_REGIONAL_A

2018-07-20

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	**Sensible Envelope Load All Zones**	**14025 Btuh**
	Sensible Duct Load	3307 Btuh
	Total Sensible Zone Loads	**17332 Btuh**
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	**17332 Btuh**
	Latent infiltration gain (for 51 gr. humidity difference)	2377 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	638 Btuh
	Latent occupant gain (6.0 people @ 200 Btuh per person)	1200 Btuh
	Latent other gain	0 Btuh
	Latent total gain	**4215 Btuh**
	TOTAL GAIN	**21547 Btuh**

EQUIPMENT

1. Central Unit	#	30000 Btuh

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

Version 8

Load Short Form
Entire House
SHATTO HEATING & AIR, INC.

Job: COLEMAN RESIDENCE
Date: JUNE 28, 2018
By: KIM SHATTO

595 W. MAIN ST. LAKE BUTLER, FL 32054 Phone: 386-496-8224 Fax: 386-496-9065 Email: SERVICE@SHATTOAIR.COM Web: WWW.SHATTOAIR.COM License: CAC057875

Project Information

For: COURSON ENTERPRISES
14128 NW CR 239, LAKE BUTLER, FL., FL 32054
Phone: 386-623-7063

Design Information

	Htg	Clg
Outside db (°F)	33	92
Inside db (°F)	70	75
Design TD (°F)	37	17
Daily range	-	M
Inside humidity (%)	50	50
Moisture difference (gr/lb)	33	52

Infiltration	
Method	Simplified
Construction quality	Average
Fireplaces	0

HEATING EQUIPMENT

Make	THE TRANE COMPANY
Trade	XR 14
Model	4TWR4036G1000A
AHRI ref	

Efficiency	8.5 HSPF	
Heating input		
Heating output	34200	Btuh @ 47°F
Temperature rise	23	°F
Actual air flow	1368	cfm
Air flow factor	0.057	cfm/Btuh
Static pressure	0	in H2O
Space thermostat		

COOLING EQUIPMENT

Make	THE TRANE COMPANY
Trade	XR 14
Cond	4TWR4036G1000A
Coil	TEM4A0C36S41SA
AHRI ref	

Efficiency	11.5 EER, 14 SEER	
Sensible cooling	25620	Btuh
Latent cooling	10980	Btuh
Total cooling	36600	Btuh
Actual air flow	1368	cfm
Air flow factor	0.049	cfm/Btuh
Static pressure	0	in H2O
Load sensible heat ratio	0.83	

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
UTILITY ROOM	120	2543	2242	145	110
WALK-IN	60	1051	604	60	30
MASTER BATH	102	378	344	22	17
MASTER BEDROOM	210	4477	7314	256	358
BEDROOM 3	168	3590	4304	205	210
HALL	27	100	91	6	4
BATH	81	978	602	56	29
BEDROOM	120	3616	5020	207	246
LVG/DNG/KIT	698	7204	7449	412	364

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

Entire House	1586	23938	27970	1368	1368
Other equip loads		0	0		
Equip. @ 0.97 RSM			27131		
Latent cooling			5678		
TOTALS	1586	23938	32809	1368	1368