Emailed Invoice

Columbia County New Building Permit Application

For Office Use Only Application # 44769 Date Received 3/18 By MG Permit # 39578

Zoning Official LW/LH Date 3-23-20 Flood Zone X Land Use Ag Zoning A-3

FEMA Map # _____ Elevation _____ MFE _____ River _____ Plans Examiner J.C. Date 3-31-20

Comments _____

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

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

☐ Owner Builder Disclosure Statement ☐ Land Owner Affidavit ☐ Ellisville Water ☑ App Fee Paid ☐ ~~Sub~~ VF Form

Septic Permit No. 20-0230 OR City Water ☐ Fax N/A

Applicant (Who will sign/pickup the permit) Kimmy Edgley Phone 386-752-0580

Address 320 SW Elk Hunter Glen, Fort White, Fl 32038

Owners Name Charles L Jr & Susan K Jenkins Phone 727-748-5112

911 Address 5310 SE Country Club Rd, Lake City, Fl 32025

Contractors Name Edgley Construction/Doug Edgley Phone 386-623-6654

Address 306 SW Main Blvd, Lake City, Fl 32025

Contractor Email kimmy@edgleyconstruction.com ***Include to get updates on this job.

Fee Simple Owner Name & Address Charles Lacy Jr. & Susan Kay Jenkins

Bonding Co. Name & Address N/A

Architect/Engineer Name & Address Mark Disosway P.E. 163 SW Midtown Place, Suite 103, Lake City, Fl 32025

Mortgage Lenders Name & Address N/A

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

Property ID Number 27-4S-17-08754-003 Estimated Construction Cost $175,000.00

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

Driving Directions from a Major Road 90 E, TR Old Country Club Rd, lot on right.

Construction of Garage & Porch Addition ____ Commercial OR X Residential

Proposed Use/Occupancy Garage Number of Existing Dwellings on Property Home

Is the Building Fire Sprinkled? ____ If Yes, blueprints included ____ Or Explain ____

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

Actual Distance of Structure from Property Lines - Front 37 Side 106 Side 176 Rear 353

Number of Stories 1 Heated Floor Area 1728 Total Floor Area 2930 Acreage 4.67

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

Columbia County Building Permit Application

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

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

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

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

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

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

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

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

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

Susan Jenkins
Print Owners Name

Susan Jenkins
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.

Contractor's Signature

Contractor's License Number CRC1330689
Columbia County
Competency Card Number 44

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 2 **day of** March **20** 20

Personally known X **or Produced Identification**

SEAL:

State of Florida Notary Signature (For the Contractor)

NOTARY PUBLIC STATE OF FLORIDA
ALICE BURKE PEELER
Commission # GG 122000
Expires September 15, 2021
Bonded Thru Budget Notary Services

SUBCONTRACTOR VERIFICATION

APPLICATION/PERMIT # _____ JOB NAME Charles+Susan Jenkins

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.

ELECTRICAL ☐ CC# 309	Print Name Matthew H. Burns Signature _____ Company Name: Matt Burns Electric Inc. License #: EC13006531 Phone #: 386-935-0444	Need ☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
MECHANICAL/ A/C ☐ CC# 568	Print Name David E. Hall Signature _____ Company Name: David Hall's A/C & Heating Svc. Inc. License #: CAC057424 Phone #: 386-755-9792	Need ☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
PLUMBING/ GAS ☐ CC# 298	Print Name Don Bills Signature _____ Company Name: Hometown Plumbing Services LLC License #: CFC1428890 Phone #: 386-754-6140	Need ☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
ROOFING ☐ CC# 534	Print Name Darin L. Summerlin Signature _____ Company Name: Summerlin Roofing Inc. License #: CCC1326192 Phone #: 386-288-5426	Need ☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
SHEET METAL ☐ CC# _____	Print Name _____ Signature _____ Company Name: _____ License #: _____ Phone #: _____	Need ☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
FIRE SYSTEM/ SPRINKLER ☐ CC# _____	Print Name _____ Signature _____ Company Name: _____ License#: _____ Phone #: _____	Need ☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
SOLAR ☐ CC# _____	Print Name _____ Signature _____ Company Name: _____ License #: _____ Phone #: _____	Need ☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
STATE SPECIALTY ☐ CC# _____	Print Name _____ Signature _____ Company Name: _____ License #: _____ Phone #: _____	Need ☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE

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

This instrument was prepared without opinion of title by, and after recording return to:

Jordan G. Lee, Esq.
SHUTTS & BOWEN LLP
4301 W. Boy Scout Boulevard, Suite 300
Tampa, Florida 33607

Inst:201412014077 Date:9/11/2014 Time:1:38 PM
Doc Stamp-Deed:0.70
DC,P.DeWitt Cason,Columbia County Page 1 of 2 B:1281 P:641

WARRANTY DEED

THIS WARRANTY DEED, made this 4th day of September, 2014, between MARILYN WILLIAMS, an unmarried woman (the "**Grantor**") whose post office address is 5130 SE Country Club Road, Lake City, Florida 32025, and MARILYN WILLIAMS, as life estate grantee, whose post office address is 5130 SE Country Club Road, Lake City, Florida 32025 (the "**Life Estate Grantee**") and CHARLES LACY JENKINS, JR. and SUSAN KAY JENKINS, husband and wife, as tenants by the entirety, as remainder interest grantee, whose post office address is 5707 TPC Boulevard, Lutz, Florida 33558 (collectively, the "**Remaindermen Grantee**").

That the Grantor, for and in consideration of the sum of Ten Dollars ($10.00) and other good and valuable considerations, receipt whereof is hereby acknowledged, by these presents does hereby grant, bargain, sell, and convey to the Life Estate Grantee, for and during the Life Estate Grantee's natural life, and upon the Life Estate Grantee's death, to the Remaindermen Grantee, their heirs, successors and assigns, forever, the following described property, situated in Columbia County, Florida (the "**Property**"):

Section 27, Township 4 South, Range 17 East

Commence at the SE corner of the NW ¼ of SW ¼ of said Section 27 and run thence North 01°16'30" West a distance of 663.83 feet; thence run South 88°59'35" West 40 feet; thence run North 01°16'30" West 800 feet to the POINT OF BEGINNING; thence run South 88°59'35" West 450 feet; thence North 01°16'30" West 200 feet; thence North 88°59'35" East 450 feet; thence South 01°16'30" East 200 feet to the POINT OF BEGINNING. Containing 2.06 acres.

Parcel Number: 27-4S-17-08754-003

SUBJECT TO taxes for the current year, as well as all easements, covenants, reservations, restrictions, mortgages and other encumbrances of record, if any;

NOTE TO RECORDER: This Deed is given for minimal consideration. Accordingly, only minimum documentary stamp taxes are affixed hereto.

TOGETHER with all the tenements, hereditaments and appurtenances thereto;

The Grantor hereby covenants with the Life Estate Grantee and the Remaindermen Grantee that the Grantor is lawfully seized of the Property in fee simple that the Grantor has good right and lawful authority to sell and convey the Property; that the Grantor hereby fully warrants the title to the Property, and will defend the same against the lawful claims of all persons whomsoever.

THIS PROPERTY IS THE HOMESTEAD OF THE GRANTOR.

IN WITNESS WHEREOF, the Grantor has executed and delivered this Warranty Deed on date first set out above.

Signed in the presence of the following witnesses:

H McInnis
Witness
Print name: Heather McInnis

Marilyn Williams
Marilyn Williams

Kathrine E. Harris
Witness
Print name: Kathrine E. Harris

STATE OF FLORIDA

COUNTY OF Columbia

The foregoing instrument was acknowledged before me on September 4, 2014, by MARILYN WILLIAMS, who

____ is personally known to me; or

✓ has produced Florida Drivers License as identification.

[Affix notary seal below]

KATHRINE E. HARRIS
Notary Public - State of Florida
My Comm. Expires Jul 5, 2016
Commission # EE 214325

Kathrine E Harris
Print name: Kathrine E. Harris
Notary Public

TPADOCS 20355271 2

Prepared By:
Charles L Jenkins

After Recording Return To:
5707 TPC BLVD
Tampa, Florida 33558

Inst: 201912020773 Date: 09/06/2019 Time: 3:20PM
Page 1 of 3 B: 1393 P: 2713, P.DeWitt Cason, Clerk of Court
Columbia, County, By: BD
Deputy ClerkDoc Stamp-Deed: 0.70

SPACE ABOVE THIS LINE FOR RECORDER'S USE

QUITCLAIM DEED

WITNESSETH, on September 06, 2019 THE GRANTOR(S),

- Debra ~~Aldrige~~ Aldridge JA, a married person,

for and in consideration of the sum of: One Dollar ($1.00) and/or other good and valuable consideration to the below Grantee(s) in hand paid by the Grantee(s), the receipt whereof is hereby acknowledged:

- Charles L Jenkins, Jr and Susan K Jenkins, a married couple, residing at 5707 TPC BLVD, LUTZ, Hillsborough County, Florida 33558

Grantor does hereby remise, release, and quit-claim unto the Grantee, the Grantee's heirs and assigns forever, all the rights, title, interest, claim of the Grantor in and to the following described land, in an unincorporated area in the County of Columbia, state of FLORIDA to wit:

Legal Description:

Section 27, Township 4 South, Range 17 East Columbia County, Florida Commence at the Southeast Corner of the Northwest ¼ of the Southwest ¼ of Section 27, Township 4 South, Range 17 East, Columbia County, Florida and run N.01°16'30" W. along the East line of said Northwest ¼ of the Southwest 1/4 a distance of 663.83 feet; thence S.88°59'35"W. 40.00 feet to a point on the Westerly Right-of-Way line of SE Country Club Road; thence N.01°16'30"W. along said Westerly Right-of-Way line 999.95 feet to the Northeast corner of a parcel of land described in O.R. Book 1281, Page 641 of the Public Records of Columbia County, Florida,

thence S.89°25'27"W. along the North line of said parcel of land 174.14 feet to the POINT OF BEGINNING; thence continue S.89°25'27"W. still along the North line of said parcel of land described in O.R. Book 1281, Page 641 a distance of 274.80 feet; thence N.01°10'03"W. 255.54 feet; thence S.89°43'10"E. 274.45 feet; thence S.01°15'47"E. 251.44 feet to the POINT OF BEGINNING. Containing 1.60 acres, more or less. Being those same lands described in O.R. Book 959, Page 2145 of the Public Records of Columbia County, Florida.

To have and to hold the same together with all and singular the appurtenances thereunto belonging or in anywise appertaining, and all the estate, right, title, interest, lien, equity, and claim whatsoever for the Grantor, either in law or equity, to the only proper use, benefit and behoof of the Grantee forever.

A transfer among family members where only nominal consideration is given

Tax Parcel Number: 27-4S-17-08754-009

Mail Tax Statements To:
Charles L Jenkins
5707 TPC BLVD
Tampa, Florida 33558

[SIGNATURE PAGE FOLLOWS]

Grantor Signatures:

DATED: 9-6-2019

Debra ~~Aldrige~~ Aldridge
685 SW Steedey Dr
Lake City, Florida, 32024

In Witness Whereof,

Witness

Marsha H. Moore

Witness

James Blakely

STATE OF FLORIDA, COUNTY OF COLUMBIA COUNTY, ss:

The foregoing instrument was acknowledged before me this 6th day of September, 2019, by Debra ~~Aldrige~~ Aldridge, who are personally known to me or who have produced FL DL A426161597940 as identification.

KYLE KEEN
Commission # GG 343961
Expires August 30, 2023
Bonded Thru Troy Fain Insurance 800-385-7019

Signature of person taking acknowledgment

Kyle Keen
Name typed, printed, or stamped

Notary
Title or rank

Serial number (if applicable)

Prepared By:
Charles L Jenkins

After Recording Return To:
5707 TPC BLVD
Tampa, Florida 33558

Inst: 201912022017 Date: 09/19/2019 Time: 3:41PM
Page 1 of 4 B: 1394 P: 2612, P.DeWitt Cason, Clerk of Court
Columbia, County, By: BD
Deputy ClerkDoc Stamp-Deed: 0.70

SPACE ABOVE THIS LINE FOR RECORDER'S USE

QUITCLAIM DEED

WITNESSETH, on September 06, 2019 THE GRANTOR(S),

- Carolyn R Griffin, a married person,

for and in consideration of the sum of: One Dollar ($1.00) and/or other good and valuable consideration to the below Grantee(s) in hand paid by the Grantee(s), the receipt whereof is hereby acknowledged:

- Charles L Jenkins, Jr and Susan K Jenkins, a married couple, residing at 5707 TPC BLVD, LUTZ, Hillsborough County, Florida 33558

Grantor does hereby remise, release, and quit-claim unto the Grantee, the Grantee's heirs and assigns forever, all the rights, title, interest, claim of the Grantor in and to the following described land, in an unincorporated area in the County of Columbia, state of FLORIDA to wit:

Legal Description:

Section 27, Township 4 South, Range 17 East Columbia County, Florida: Commence at the Southeast Corner of the Northwest ¼ of the Southwest ¼ of Section 27, Township 4 South, Range 17 East, Columbia County, Florida and run N.01°16'30" W. along the East line of said Northwest ¼ of the Southwest 1/4 a distance of 663.83 feet; thence S.88°59'35"W. 40.00 feet to a point on the Westerly Right-of-Way line of SE Country Club Road; thence N.01°16'30"W. along said Westerly Right-of-Way line 999.95 feet to the Northeast corner of a parcel of land described in O.R. Book 1281, Page 641 of the Public Records of Columbia County, Florida, and

the POINT OF BEGINNING; thence S.89°25'27"W. along the North line of said parcel of land described in O.R. Book 1281, Page 641 a distance of 174.14 feet; thence N.01°15'47"W. 251.44 feet; thence S.89°43'10"E. 174.14 feet to a point of the Westerly Right-of-Way line of SE Country Club Road; thence S.01°16'30"E. along said Westerly Right-of-Way line 248.84 feet to the POINT OF BEGINNING. Containing 1.00 acres, more or less. Being those same lands described in O.R. Book 839, Page 1240 of the Public Records of Columbia County, Florida.

To have and to hold the same together with all and singular the appurtenances thereunto belonging or in anywise appertaining, and all the estate, right, title, interest, lien, equity, and claim whatsoever for the Grantor, either in law or equity, to the only proper use, benefit and behoof of the Grantee forever.

A transfer among family members where only nominal consideration is given

Tax Parcel Number: 27-4S-17-08754-008

Mail Tax Statements To:
Charles L Jenkins
5707 TPC BLVD
Tampa, Florida 33558

|SIGNATURE PAGE FOLLOWS|

Grantor Signatures:

DATED: 9/11/19

Carolyn R. Griffin

Carolyn R Griffin
212 N Wind Court
Ponte Vedra, Florida, 32082

In Witness Whereof,

X _____ X _____

Witness Witness

Dennis Van Deusen John Musser

STATE OF FLORIDA, COUNTY OF ~~ST. JOHNS~~ Duval, ss:

The foregoing instrument was acknowledged before me this 11 day of September, 2019 by Carolyn R Griffin, who are personally known to me or who have produced FLDL as identification.

X _____
Signature of person taking acknowledgment

Christian Retana
Name typed, printed, or stamped

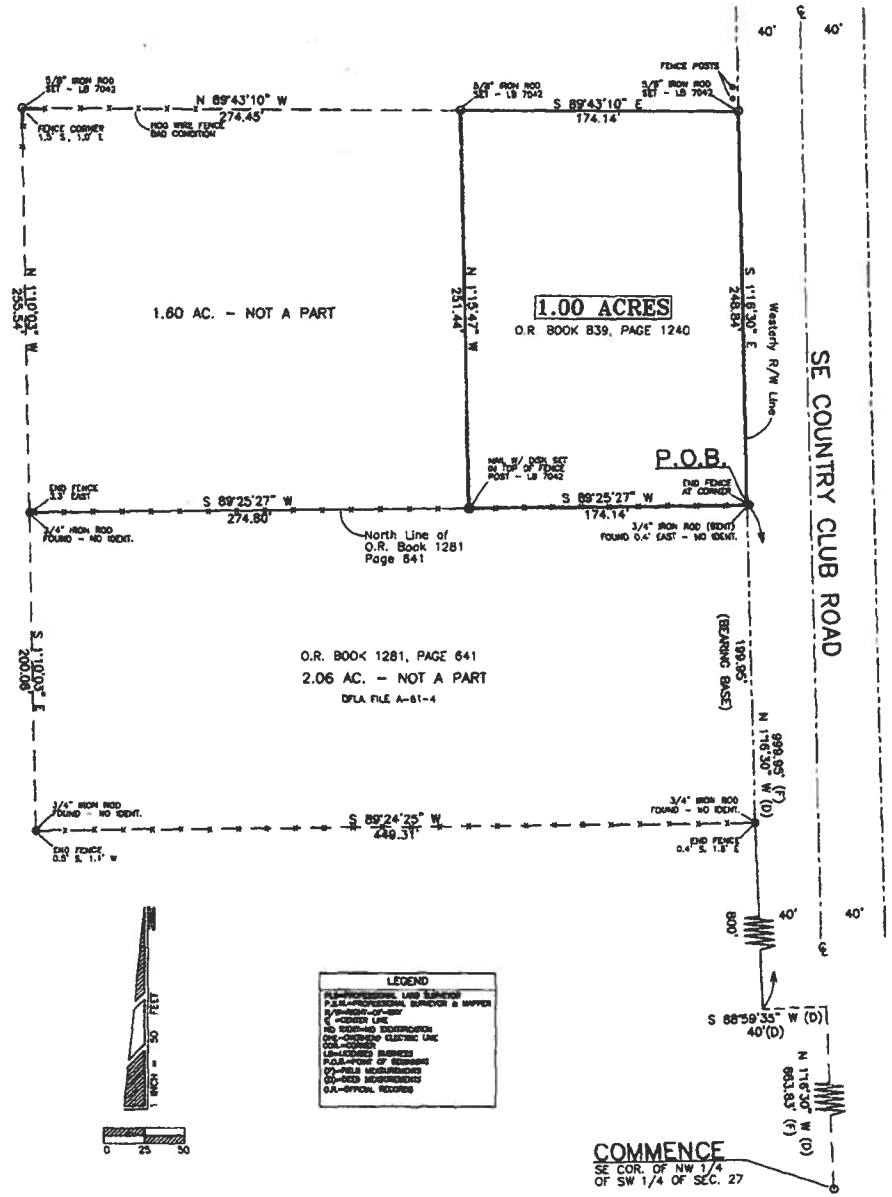
Notary
Title or rank

GG227208
Serial number (if applicable)

CHRISTIAN RETANA
Notary Public - State of Florida
My Comm. Expires 06/11/2022
Commission GG 227208

BOUNDARY SURVEY

IN SECTION 27, TOWNSHIP 4 SOUTH, RANGE 17 EAST
COLUMBIA COUNTY, FLORIDA



DESCRIPTION:

COMMENCE at the Southeast corner of the Northwest 1/4 of the Southwest 1/4 of Section 27, Township 4 South, Range 17 East, Columbia County, Florida and run N.01°16'30"W. along the East line of said Northwest 1/4 of the Southwest 1/4 a distance of 663.83 feet; thence S.88°59'35"W. 40.00 feet to a point on the Westerly Right-of-Way line of SE Country Club Road; thence N.01°16'30"W. along said Westerly Right-of-Way line 999.95 feet to the Northeast corner of a parcel of land described in O.R. Book 1281, Page 641 of the Public Records of Columbia County, Florida and the POINT OF BEGINNING; thence S.89°25'27"W. along the North line of said parcel of land described in O.R. Book 1281, Page 641 a distance of 174.14 feet; thence N.01°15'47"W. 251.44 feet, thence S.89°43'10"E. 174.14 feet to a point on the Westerly Right-of-Way line of SE Country Club Road; thence S.01°16'30"E. along said Westerly Right-of-Way line 248.84 feet to the POINT OF BEGINNING. Containing 1.00 acres, more or less. Being those same lands described in O.R. Book 839, Page 1240 of the Public Records of Columbia County, Florida.

NOTES:

1.) Monumentation is as shown and designated on the face of the plat.

2.) Boundary based on monumentation found in place, description furnished by client, and prior survey by this Company.

3.) Bearings based on East property line, per above referenced prior survey.

4.) Interior improvements were located by field ties.

5.) Underground encroachments, if present, were not located with this survey.

6.) This survey was made without benefit of a title search. There may be additional easements, restrictions, etc. not shown hereon but found in the Public Records. Issues regarding title, land use & zoning, easements & other encumberances are not a part of the scope of a Boundary Survey and can only be revealed with a title search.

7.) Date of field survey completion: 8-21-19

NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA REGISTERED PROFESSIONAL SURVEYOR AND MAPPER

Timothy A. Delbene, P.S.M.
Florida Reg. No. 5594
DATE: __/__/2019

Donald F. Lee and Associates, Inc.
SURVEYORS
140 Northwest Ridgewood Avenue, Lake City, Florida 32055
Phone: (386) 755-6166 FAX: (386) 755-6167
Certificate of Authorization # LB 7042

Date: 8-30-19	CHARLES JENKINS	Scale: 1" = 50'
Drafting: T A D		Field Book: W.O.
Computations: T A D		Work Order: 19-7266
Checked: D F L		File: A-84-22 B

Columbia County Property Appraiser

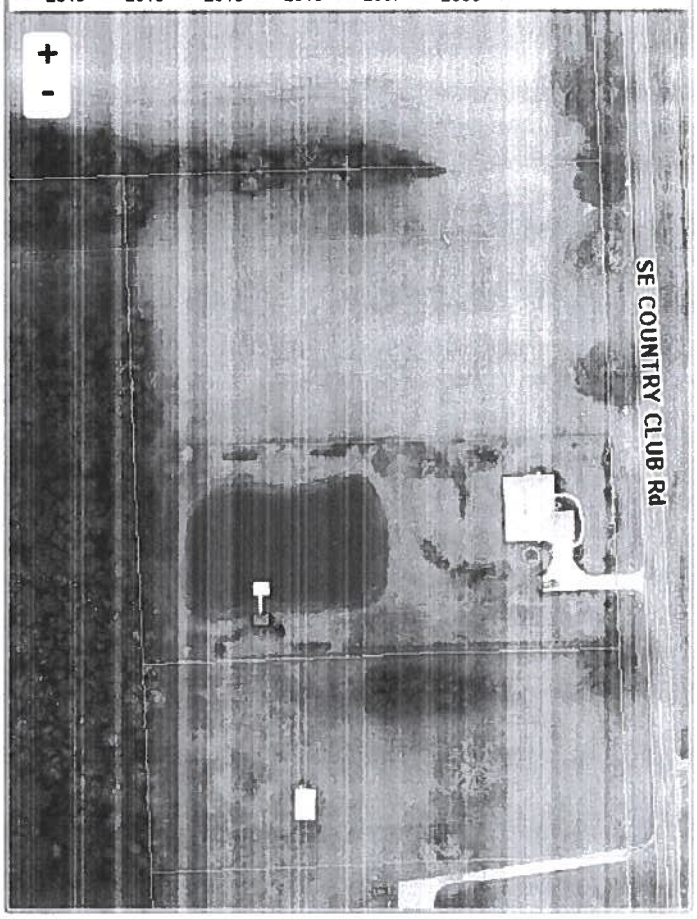
Jeff Hampton

2020 Working Values
updated: 3/9/2020

Parcel: << 27-4S-17-08754-003 >>

Aerial Viewer | Pictometery | Google Maps

2019 | 2016 | 2013 | 2010 | 2007 | 2005 | Sales



Owner & Property Info

Owner	JENKINS CHARLES LACY JR & SUSAN KAY JENKINS 5707 TPC BLVD LUTZ, FL 33558		
Site	5310 COUNTRY CLUB RD, LAKE CITY		
Description*	COMM SE COR OF NW1/4 OF SW1/4, RUN N 663.83 FT, W 40 FT, N 800 FT FOR POB, W 450 FT, N 200 FT, E 450 FT, S 200 FT TO POB. & COMM SE COR OF NW1/4 OF SW1/4, RUN N 663.83 FT, W 40 FT, N 1000 FT, W 174.14 FT FOR POB, CONT W 275.86 FT MOL, N 255.54 FT, E 275.86 ...more>>>		
Area	4.67 AC	S/T/R	27-4S-17
Use Code**	SINGLE FAM (000100)	Tax District	3

*The Description above is not to be used as the Legal Description for this parcel in any legal transaction.
**The Use Code is a FL Dept. of Revenue (DOR) code and is not maintained by the Property Appraiser's office. Please contact your city or county Planning & Zoning office for specific zoning information.

Property & Assessment Values

2019 Certified Values		2020 Working Values	
Mkt Land (4)	$22,473	Mkt Land (7)	$49,403
Ag Land (0)	$0	Ag Land (0)	$0
Building (1)	$187,789	Building (1)	$192,153
XFOB (2)	$5,268	XFOB (2)	$5,268
Just	$215,530	Just	$246,824
Class	$0	Class	$0
Appraised	$215,530	Appraised	$246,824
SOH Cap [?]	$11,614	SOH Cap [?]	$0
Assessed	$203,916	Assessed	$246,824
Exempt	HX H3 OTHER $100,000	Exempt	$0
Total Taxable	county:$103,491 city:$153,491 other:$153,491 school:$178,916	Total Taxable	county:$246,824 city:$246,824 other:$246,824 school:$246,824

Sales History

Sale Date	Sale Price	Book/Page	Deed	V/I	Quality (Codes)	RCode
9/4/2014	$100	1281/0641	WD	I	U	11
1/25/2008	$0	1148/0994	QC	I	U	01

Building Characteristics

Bldg Sketch	Bldg Item	Bldg Desc*	Year Blt	Base SF	Actual SF	Bldg Value
Sketch	2	SINGLE FAM (000100)	2015	1898	2782	$187,789

*Bldg Desc determinations are used by the Property Appraisers office solely for the purpose of determining a property's Just Value for ad valorem tax purposes and should not be used for any other purpose.

Extra Features & Out Buildings (Codes)

Code	Desc	Year Blt	Value	Units	Dims	Condition (% Good)
0166	CONC,PAVMT	2015	$4,468.00	2234.000	0 x 0 x 0	(000.00)
0169	FENCE/WOOD	2017	$800.00	1.000	0 x 0 x 0	(000.00)

Land Breakdown

Land Code	Desc	Units	Adjustments	Eff Rate	Land Value
000100	SFR (MKT)	1.560 AC	1.00/1.00 1.00/1.00	$8,725	$13,611
000000	VAC RES (MKT)	0.500 AC	1.00/1.00 1.00/1.00	$8,725	$4,362
009945	WELL/SEPT (MKT)	1.000 UT - (0.000 AC)	1.00/1.00 1.00/1.00	$3,250	$3,250
009947	SEPTIC (MKT)	1.000 UT - (0.000 AC)	1.00/1.00 1.00/1.00	$1,250	$1,250

Application 44769

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

PERMIT NO. 20-0230
DATE PAID: 3/20/20
FEE PAID: 310.00
RECEIPT #: 1747405

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

APPLICANT: Charles Jenkins

AGENT: ROCKY FORD, A & B CONSTRUCTION TELEPHONE: 386-497-2311

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

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

PROPERTY INFORMATION

LOT: NA BLOCK: NA SUB: NA PLATTED: _____

PROPERTY ID #: 27-4S-1708754-003 ZONING: _____ I/M OR EQUIVALENT: [Y / N]

PROPERTY SIZE: 4.67 ACRES WATER SUPPLY: [X] PRIVATE PUBLIC [ ]<=2000GPD [ ]>2000GPD

IS SEWER AVAILABLE AS PER 381.0065, FS? [Y / (N)] DISTANCE TO SEWER: NA FT

PROPERTY ADDRESS: 5310 Country Club Rd Lake City

DIRECTIONS TO PROPERTY: 441 South Left on 41 South Left on Hillcrest Lane Left on SE Country Club Ln to address 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	Garage	0	1680	
2				
3				

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

SIGNATURE: William O. Bishop II DATE: 3/20/2020

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

STATE OF FLORIDA
DEPARTMENT OF HEALTH
APPLICATION F0R ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number 20-0230

C. Jenkins - - - - - - - - - - - - - - - PART II - SITEPLAN -

Scale: 1 inch = 40 feet.

See attached

Notes: ____

Site Plan submitted by: William A. Bishop II MASTER CONTRACTOR

Plan Approved ✓ Not Approved ______ Date 3/20/20

By ____________ Columbia County Health Department

3/24/20

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT

Application # 44769

PAT LYNCH
LYNCH DRILLING CORP
P O Box 934
Branford, FL 32008
(386)935-1076

DATE 3-18-2020

CUSTOMER CHARLES & SUSAN JENKINS
5310 SE COUNTRY CLUB RD
LAKE CITY FL 32025

LOCATION

WE WILL CONSTRUCT A 4" WATER WELL COMPLETE WITH 4" WATER WELL STEEL CASING, 1 ½ SUBMERSIBLE PUMP WITH 1 1/4" DROP PIPE, AND AN 85 GALLON CAPTIVE AIR TANK (21.9 GALLON DRAWDOWN).

WELL WILL BE COMPLETE AT THE WELL SITE, WE DO NOT INCLUDE ELECTRICAL NOR PLUMBING CONNECTIONS FROM THE WELL TO THE HOME AND/OR POWER POLE.

ANY VARIATIONS OF THE ABOVE ARE SUBJECT TO APPROVAL FROM THE CUSTOMER AND.OR CONTRACTOR PRIOR TO COMMENSMENT OF THE INDIVIDUAL JOB.

THANK YOU
Pat Lynch

NOT RESPONSIBLE FOR THE QUALITY OF WATER

Jenkins.

COLUMBIA COUNTY BUILDING DEPARTMENT
RESIDENTIAL CHECK LIST

MINIMUM PLAN REQUIREMENTS: FLORIDA BUILDING CODE RESIDENTIAL 2017 EFFECTIVE 1 JANUARY 2018 AND THE NATIONAL ELECTRICAL 2014 EFFECTIVE 1 JANUARY 2018

ALL REQUIREMENTS ARE SUBJECT TO CHANGE

ALL BUILDING PLANS MUST INDICATE COMPLIANCE WITH THE CURRENT FLORIDA BUILDING CODES RESIDENTIAL AND THE NATIONAL ELECTRICAL CODE. 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, FBC 1609.3.1 THRU 1609.3.3.

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

Revised 7/1/18

Website: http://www.columbiacountyfla.com/BuildingandZoning.asp

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

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 107.1.

Site Plan information including:

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

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

GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL		Items to Include- Each Box shall be Circled as Applicable		
8	**Plans or specifications must show compliance with FBCR Chapter 3**	Yes	No	NA

		Select From Drop down		
9	Basic wind speed (3-second gust), miles per hour ~~140 mph~~ 130	- ✓		
10	(Wind exposure – if more than one wind exposure is used, the wind exposure and applicable wind direction shall be indicated)	- ✓		
11	Wind importance factor and nature of occupancy	- ✓		
12	The applicable internal pressure coefficient, Components and Cladding	- ✓		
13	The design wind pressure in terms of psf (kN/m²), to be used for the design of exterior component, cladding materials not specifally designed by the registered design professional.	- ✓		

Elevations Drawing including:

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

Floor Plan Including:

21	Dimensioned area plan showing rooms, attached garage, breeze ways, covered porches, deck, balconies	- ✓		
22	Raised floor surfaces located more than 30 inches above the floor or grade	- ✓		
23	All exterior and interior shear walls indicated	- ✓		
24	Shear wall opening shown (Windows, Doors and Garage doors)	- ✓		
25	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.	✓ -		
26	Safety glazing of glass where needed	- ✓		
27	Fireplaces types (gas appliance) (vented or non-vented) or wood burning with Hearth (see chapter 10 and chapter 24 of FBCR)	- ✓		
28	Show stairs with dimensions (width, tread and riser and total run) details of guardrails, Handrails	-		✓
29	Identify accessibility of bathroom (see FBCR SECTION 320)	- ✓		

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

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

FBCR 403: Foundation Plans

		Select From Drop down		
30	Location of all load-bearing walls footings indicated as standard, monolithic, dimensions, size and type of reinforcing.	- ✓		
31	All posts and/or column footing including size and reinforcing	- ✓		
32	Any special support required by soil analysis such as piling.	-		✓
33	Assumed load-bearing valve of soil 1500 Pound Per Square Foot	- ✓		
34	Location of horizontal and vertical steel, for foundation or walls (include # size and type) For structures with foundation which establish new electrical utility companies service connection a Concrete Encased Electrode will be required within the foundation to serve as an grounding electrode system. Per the National Electrical Code article 250.52.3	- ✓		

FBCR 506: CONCRETE SLAB ON GRADE

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

FBCR 318: PROTECTION AGAINST TERMITES

37	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 (Treat Soil below Slab)	- ✓		

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

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

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

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

FBCR CHAPTER 6 WOOD WALL FRAMING CONSTRUCTION

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable
		Select from Drop down
53	Stud type, grade, size, wall height and oc spacing for all load bearing or shear walls	-
54	Fastener schedule for structural members per table FBC-R602.3.2 are to be shown	-
55	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	-
56	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	-
57	Show sizes, type, span lengths and required number of support jack studs, king studs for shear wall opening and girder or header per FBC-R602.7.	-
58	Indicate where pressure treated wood will be placed	-
59	Show all wall structural panel sheathing, grade, thickness and show fastener schedule for structural panel sheathing edges & intermediate areas	-
60	A detail showing gable truss bracing, wall balloon framing details or/ and wall hinge bracing detail	-

FBCR :ROOF SYSTEMS:

61	Truss design drawing shall meet section FBC-R 802.10. 1 Wood trusses	-		
62	Include a layout and truss details, signed and sealed by Florida Professional Engineer	-		
63	Show types of connector's assemblies' and resistance uplift rating for all trusses and rafters	-		
64	Show gable ends with rake beams showing reinforcement or gable truss and wall bracing details	-		
65	Provide dead load rating of trusses	-		

FBCR 802:Conventional Roof Framing Layout

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

FBCR 803 ROOF SHEATHING

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

ROOF ASSEMBLIES FRC Chapter 9

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

FBCR Chapter 11 Energy Efficiency Code for Residential Building

Residential construction shall comply with this code by using the following compliance methods in the FBCR Chapter 11 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.*

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable		
		Select from Drop Down		
74	Show the insulation R value for the following areas of the structure	- ✓		
75	Attic space R-38	- ✓		
76	Exterior wall cavity R-19	- ✓		
77	Crawl space Concrete floor.	-		✓

HVAC information

78	Submit two copies of a Manual J sizing equipment or equivalent computation study	- ✓		
79	Exhaust fans shown in bathrooms **Mechanical exhaust capacity of 50 cfm intermittent or 20 cfm continuous required** Shown on Elec. plan. P.2	- ✓		
80	Show clothes dryer route and total run of exhaust duct No Washer OR Dryer	-		✓

Plumbing Fixture layout shown

81	All fixtures waste water lines shall be shown on the foundationplan	-		✓
82	Show the location of water heater	- ✓		

Private Potable Water

83	Pump motor horse power 1 1/2 HP.	- ✓		
84	Reservoir pressure tank gallon capacity 86 Gal.	- ✓		
85	Rating of cycle stop valve if used 3 Gal. PV min.	- ✓		

Electrical layout shown including

86	Show Switches, receptacles outlets, lighting fixtures and Ceiling fans	- ✓		
87	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**	- ✓		
88	Show the location of smoke detectors & Carbon monoxide detectors	- ✓		
89	Show service panel, sub-panel, location(s) and total ampere ratings 200 Amp.	- ✓		
90	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. Underground **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	- ✓		
91	Appliances and HVAC equipment and disconnects	- ✓		
92	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.	- ✓		

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 performed.

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

****ITEMS 95, 96, & 98 Are Required After APPROVAL from the ZONING DEPT.****

Select from Drop down

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.	- ✓		
94	**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	- ✓		
95	**Environmental Health Permit or Sewer Tap Approval** A copy of a approved Columbia County Environmental Health (386) 758-1058	- ✓		
96	**City of Lake City** A City Water and/or Sewer letter. Call 386-752-2031	-		✓
97	**Toilet facilities shall be provided for all construction sites**	- ✓		
98	**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.	-		✓
99	**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 (Municode.com)	-		✓
100	**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.	-		✓
101	A Flood development permit is also required for AE, Floodway & AH. Development permit cost is **$50.00**	-		✓
102	**Driveway Connection:** If the property does not have an existing access to a public road, then an application for a culvert permit (**$25.00**) must be made. County Public Works Dept. determines the size and length of every culvert before instillation and completes a final inspection before permanent power is granted. If the applicant feels that a culvert is not needed, they may apply for a culvert waiver (**$50.00**) Separate Check when issued. If the project is to be located on an F.D.O.T. maintained road, then an F.D.O.T. access permit is required.	- ✓		
103	**911 Address:** An application for a 911address must be applied for and **received** through the Columbia County Emergency Management Office of 911 Addressing Department (386) 758-1125.	- ✓		

Ordinance Sec. 90-75. - Construction debris. (e) It shall be unlawful for any person to dispose of or discard solid waste, including construction or demolition debris at any place within the county other than on an authorized disposal site or at the county's solid waste facilities. The temporary storage, not to exceed seven days of solid waste (excluding construction and demolition debris) on the premises where generated or vegetative trash pending disposition as authorized by law or ordinance, shall not be deemed a violation of this section. The temporary storage of construction and demolition debris on the premises where generated or vegetative trash pending disposition as authorized by law or ordinance shall not be deemed in violation of this section; provided, however, such construction and demolition debris must be disposed of in accordance with this article prior to the county's issuance of a certificate of occupancy for the premises. The burning of lumber from a construction or demolition project or vegetative trash when done so with legal and proper permits from the authorized agencies and in accordance with such agencies' rules and regulations, shall not be deemed a violation of this section. No person shall bury, throw, place, or deposit, or cause to be buried, thrown, placed, or deposited, any solid waste, special waste, or debris of any kind into or on any of the public streets, road right-of-way, highways, bridges, alleys, lanes, thoroughfares, waters, canals, or vacant lots or lands within the county. No person shall bury any vegetative trash on any of the public streets, road right-of-way, highways, bridges, lanes, thoroughfares, waters, canals, or lots less than ten acres in size within the county.

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	MASONITE	INSWING & OUTSWING STEEL	FL4904-R5
B. SLIDING			
C. SECTIONAL/ROLL UP			
D. OTHER			
2. WINDOWS			
A. SINGLE/DOUBLE HUNG	MI	VINYL SINGLEHUNG	FL12250-R10
B. HORIZONTAL SLIDER			
C. CASEMENT			
D. FIXED			
E. MULLION			
F. SKYLIGHTS			
G. OTHER			
3. PANEL WALL			
A. SIDING			
B. SOFFITS	KAYCAN	ALUM SOFFIT	FL16503
C. STOREFRONTS			
D. GLASS BLOCK			
E. OTHER			
4. ROOFING PRODUCTS			
A. ASPHALT SHINGLES	CERTAINTEED	ASHPHALT SHINGLES	FL1814-R6
B. NON-STRUCT METAL			
C. ROOFING TILES			
D. SINGLE PLY ROOF			
E. OTHER	WOODLAND	#30 ROOFING FELT	FL1814-R6
5. STRUCT COMPONENTS			
A. WOOD CONNECTORS			
B. WOOD ANCHORS			
C. TRUSS PLATES			
D. INSULATION FORMS			
E. LINTELS			
F. OTHERS			
6. NEW EXTERIOR			
ENVELOPE PRODUCTS			

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

NOTES: _____

RESIDENTIAL ENERGY CONSERVATION CODE DOCUMENTATION CHECKLIST

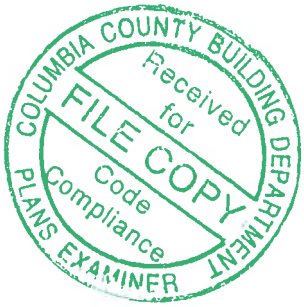
Florida Department of Business and Professional Regulation
Simulated Performance Alternative (Performance) Method

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:	191293 Jenkins Garage - Revised	Builder Name:	
Street:	5310 SE Country Club Road	Permit Office:	
City, State, Zip:	Lake City , FL , 32025	Permit Number:	
Owner:		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	0
5. Is this a worst case?	Yes
6. Conditioned floor area above grade (ft²)	1728
Conditioned floor area below grade (ft²)	0

7. Windows(111.3 sqft.)	Description	Area
a. U-Factor:	Dbl, U=0.30	111.33 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:		31.632 ft.
Area Weighted Average SHGC:		0.200

8. Floor Types (1728.0 sqft.)	Insulation	Area
a. Slab-On-Grade Edge Insulation	R=0.0	1728.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

9. Wall Types (1720.0 sqft.)	Insulation	Area
a. Face Brick - Wood, Exterior	R=19.0	1720.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²
d. N/A	R=	ft²

10. Ceiling Types (1728.0 sqft.)	Insulation	Area
a. Under Attic (Vented)	R=38.0	1728.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

11. Ducts	R	ft²
a. Sup: Attic, Ret: Main, AH: Main	6	280

12. Cooling systems	kBtu/hr	Efficiency
a. Central Unit	29.0	SEER:14.00

13. Heating systems	kBtu/hr	Efficiency
a. Electric Heat Pump	29.0	HSPF:8.50

14. Hot water systems
a. Propane Tankless — Cap: 1 gallons, EF: 0.590
b. Conservation features
None

15. Credits — Pstat

Glass/Floor Area: 0.064

Total Proposed Modified Loads: 41.82

Total Baseline Loads: 43.83

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: 2020-03-11

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:	191293 Jenkins Garage - Rev	Bedrooms:	0	Address Type:	Street Address
Building Type:	User	Conditioned Area:	1728	Lot #	
Owner Name:		Total Stories:	1	Block/Subdivision:	
# of Units:	1	Worst Case:	Yes	PlatBook:	
Builder Name:		Rotate Angle:	90	Street:	5310 SE Country Club
Permit Office:		Cross Ventilation:		County:	Columbia
Jurisdiction:		Whole House Fan:		City, State, Zip:	Lake City , FL , 32025
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	1728	17280

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	1728	17280	Yes	6	0	1	Yes	Yes	Yes

FLOORS

√	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulatio	Main	172 ft	0	1728 ft²	----	0.3	0.3	0.4

ROOF

√	#	Type	Materials	Roof Area	Gable Area	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
_____	1	Hip	Composition shingles	1933 ft²	0 ft²	Dark	N	0.92	No	0.9	No	0	26.6

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	300	1728 ft²	N	N

CEILING

√	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	Main	38	Blown	1728 ft²	0	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=>E	Exterior	Face Brick - Wood	Main	19	54		10		540.0 ft²		0.23	0.75	0
___	2	E=>S	Exterior	Face Brick - Wood	Main	19	32		10		320.0 ft²		0.23	0.75	0
___	3	S=>W	Exterior	Face Brick - Wood	Main	19	54		10		540.0 ft²		0.23	0.75	0
___	4	W=>N	Exterior	Face Brick - Wood	Main	19	32		10		320.0 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=>E	Insulated	Main	None	.4	2		8		16 ft²
_____	2	S=>W	Insulated	Main	None	.4	2		8		16 ft²
_____	3	S=>W	Insulated	Main	None	.4	10		8		80 ft²
_____	4	S=>W	Insulated	Main	None	.4	10		8		80 ft²
_____	5	W=>N	Insulated	Main	None	.4	2		8		16 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=>E	1	Metal	Low-E Double	Yes	0.3	0.2	N	30.0 ft²	1 ft 6 in	1 ft 6 in	None	None
_____	2	N=>E	1	Metal	Low-E Double	Yes	0.3	0.2	N	8.0 ft²	1 ft 6 in	1 ft 6 in	None	None
_____	3	E=>S	2	Metal	Low-E Double	Yes	0.3	0.2	N	12.0 ft²	1 ft 6 in	1 ft 6 in	None	None
_____	4	S=>W	3	Metal	Low-E Double	Yes	0.3	0.2	N	21.3 ft²	9 ft 6 in	1 ft 6 in	None	None
_____	5	S=>W	3	Metal	Low-E Double	Yes	0.3	0.2	N	8.0 ft²	9 ft 6 in	1 ft 6 in	None	None
_____	6	W=>N	4	Metal	Low-E Double	Yes	0.3	0.2	N	32.0 ft²	99 ft 0 in	2 ft 0 in	None	None

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000445	2016	110.68	208.14	.183	7

HEATING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Block	Ducts
_____	1	Electric Heat Pump/	None	HSPF:8.5	29 kBtu/hr	1	sys#1

COOLING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
_____	1	Central Unit/	None	SEER: 14	29 kBtu/hr	870 cfm	0.75	1	sys#1

FORM R405-2017

INPUT SUMMARY CHECKLIST REPORT

HOT WATER SYSTEM

√	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
_____	1	Propane	Tankless	Main	0.59	1 gal	60 gal	120 deg	None

SOLAR HOT WATER SYSTEM

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

DUCTS

√	#	--- Supply --- Location	R-Value	Area	--- Return --- Location	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	HVAC # Cool
_____	1	Attic	6	280 ft²	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

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 95

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. 0
5. Is this a worst case? (yes/no)	5. Yes
6. Conditioned floor area (sq. ft.)	6. 1728
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. 111.3
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. 19.0
2. Masonry (Insulation R-value)	10A2.
B. Adjacent:	
1. Wood frame (Insulation R-value)	10B1.
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	Main
13. Cooling system:	Capacity 29.0
a) Split system	SEER
b) Single package	SEER
c) Ground/water source	SEER/COP
d) Room unit/PTAC	EER
e) Other	14.0
14. Heating system:	Capacity 29.0
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	8.50
15. Water heating system	
a) Electric resistance	EF
b) Gas fired, natural gas	EF
c) Gas fired, LPG	EF 0.59
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: 5310 SE Country Club Road City/FL Zip: Lake City, FL 32025

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

ADDRESS:	5310 SE Country Club Road Lake City , FL , 32025	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 manufacturer's air handler enclosure if installed at the time of the test. All registers shall be taped or otherwise sealed during the test.
2. Postconstruction test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. Registers shall be taped or otherwise sealed during the test.

Exceptions:

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

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

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

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

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

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

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

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

MANDATORY REQUIREMENTS - (Continued)

☐ **R403.5.5 Heat traps (Mandatory).** Storage water heaters not equipped with integral heat traps and having vertical pipe risers shall have heat traps installed on both the inlets and outlets. External heat traps shall consist of either a commercially available heat trap or a downward and upward bend of at least 3 ½ inches (89 mm) in the hot water distribution line and cold water line located as close as possible to the storage tank.

R403.5.6 Water heater efficiencies (Mandatory).

☐ **R403.5.6.1.1 Automatic controls.** Service water-heating systems shall be equipped with automatic temperature controls capable of adjustment from the lowest to the highest acceptable temperature settings for the intended use. The minimum temperature setting range shall be from 100°F to 140°F (38°C to 60°C).

☐ **R403.5.6.1.2 Shut down.** A separate switch or a clearly marked circuit breaker shall be provided to permit the power supplied to electric service systems to be turned off. A separate valve shall be provided to permit the energy supplied to the main burner(s) of combustion types of service water-heating systems to be turned off.

☐ **R403.5.6.2 Water-heating equipment.** Water-heating equipment installed in residential units shall meet the minimum efficiencies of Table C404.2 in Chapter 4 of the Florida Building Code, Energy Conservation, Commercial Provisions, for the type of equipment installed. Equipment used to provide heating functions as part of a combination system shall satisfy all stated requirements for the appropriate water-heating category. Solar water heaters shall meet the criteria of Section R403.5.6.2.1.

☐ **R403.5.6.2.1 Solar water-heating systems.** Solar systems for domestic hot water production are rated by the annual solar energy factor of the system. The solar energy factor of a system shall be determined from the Florida Solar Energy Center Directory of Certified Solar Systems. Solar collectors shall be tested in accordance with ISO Standard 9806, Test Methods for Solar Collectors, and SRCC Standard TM-1, Solar Domestic Hot Water System and Component Test Protocol. Collectors in installed solar water-heating systems should meet the following criteria:

1. Be installed with a tilt angle between 10 degrees and 40 degrees of the horizontal; and
2. Be installed at an orientation within 45 degrees of true south.

☐ **R403.6 Mechanical ventilation (Mandatory).** The building shall be provided with ventilation that meets the requirements of the Florida Building Code, Residential, or Florida Building Code, Mechanical, as applicable, or with other approved means of ventilation including: Natural, Infiltration or Mechanical means. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.

☐ **R403.6.1 Whole-house mechanical ventilation system fan efficacy.** When installed to function as a whole-house mechanical ventilation system, fans shall meet the efficacy requirements of Table R403.6.1.

Exception: Where whole-house mechanical ventilation fans are integral to tested and listed HVAC equipment, they shall be powered by an electronically commutated motor.

☐ **R403.6.2 Ventilation air.** Residential buildings designed to be operated at a positive indoor pressure or for mechanical ventilation shall meet the following criteria:

1. The design air change per hour minimums for residential buildings in ASHRAE 62.2, Ventilation for Acceptable Indoor Air Quality, shall be the maximum rates allowed for residential applications.
2. No ventilation or air-conditioning system make-up air shall be provided to conditioned space from attics, crawlspaces, attached enclosed garages or outdoor spaces adjacent to swimming pools or spas.
3. If ventilation air is drawn from enclosed space(s), then the walls of the space(s) from which air is drawn shall be insulated to a minimum of R-11 and the ceiling shall be insulated to a minimum of R-19, space permitting, or R-10 otherwise.

R403.7 Heating and cooling equipment (Mandatory).

☐ **R403.7.1 Equipment sizing.** Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on the equipment loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies, based on building loads for the directional orientation of the building. The manufacturer and model number of the outdoor and indoor units (if split system) shall be submitted along with the sensible and total cooling capacities at the design conditions described in Section R302.1. This Code does not allow designer safety factors, provisions for future expansion or other factors that affect equipment sizing. System sizing calculations shall not include loads created by local intermittent mechanical ventilation such as standard kitchen and bathroom exhaust systems. New or replacement heating and cooling equipment shall have an efficiency rating equal to or greater than the minimum required by federal law for the geographic location where the equipment is installed.

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

FAN LOCATION	AIRFLOW RATE MINIMUM (CFM)	MINIMUM EFFICACY [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:	191293 Jenkins Garage - Revised	Builder Name:		
Street:	5310 SE Country Club Road	Permit Office:		
City, State, Zip:	Lake City , FL , 32025	Permit Number:		
Owner:		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:	Community:	Lot: NA
Address: 5310 SE Country Club Road		
City: Lake City	State: FL	Zip: 32025

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

_____ x 60 ÷ 17280 = _____
CFM(50) Building Volume ACH(50)

☐ **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

Project Title:
191293 Jenkins Garage - Revised

5310 SE Country Club Road
Lake City, FL 32025

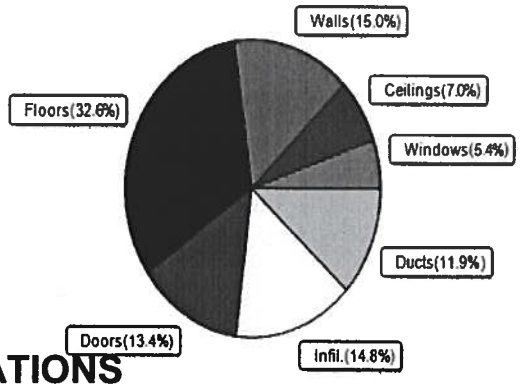
2020-03-11

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	**24918**	**Btuh**	**Total cooling load calculation**	**20499**	**Btuh**
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh
Total (Electric Heat Pump)	116.4	29000	Sensible (SHR = 0.75)	131.6	21750
Heat Pump + Auxiliary(0.0kW)	116.4	29000	Latent	182.8	7250
			Total (Electric Heat Pump)	141.5	29000

WINTER CALCULATIONS

Winter Heating Load (for 1728 sqft)

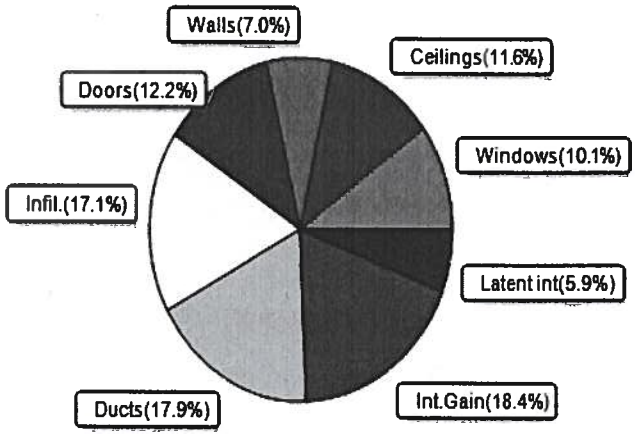
Load component			Load	
Window total	111	sqft	1336	Btuh
Wall total	1401	sqft	3728	Btuh
Door total	208	sqft	3328	Btuh
Ceiling total	1728	sqft	1754	Btuh
Floor total	1728	sqft	8118	Btuh
Infiltration	84	cfm	3692	Btuh
Duct loss			2961	Btuh
Subtotal			**24918**	**Btuh**
Ventilation	0	cfm	0	Btuh
TOTAL HEAT LOSS			**24918**	**Btuh**



SUMMER CALCULATIONS

Summer Cooling Load (for 1728 sqft)

Load component			Load	
Window total	111	sqft	2062	Btuh
Wall total	1401	sqft	1435	Btuh
Door total	208	sqft	2496	Btuh
Ceiling total	1728	sqft	2368	Btuh
Floor total			0	Btuh
Infiltration	63	cfm	1315	Btuh
Internal gain			3780	Btuh
Duct gain			3076	Btuh
Sens. Ventilation	0	cfm	0	Btuh
Blower Load			0	Btuh
Total sensible gain			**16533**	**Btuh**
Latent gain(ducts)			584	Btuh
Latent gain(infiltration)			2182	Btuh
Latent gain(ventilation)			0	Btuh
Latent gain(internal/occupants/other)			1200	Btuh
Total latent gain			**3966**	**Btuh**
TOTAL HEAT GAIN			**20499**	**Btuh**



Prepared by ACCA MANUAL J 8th Edition

EnergyGauge® System Sizing
PREPARED BY: Evan Beamsley
DATE: 2020-03-11

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

5310 SE Country Club Road
Lake City, FL 32025

Project Title:
191293 Jenkins Garage - Revised
Building Type: User

2020-03-11

Reference City: Gainesville, FL (Defaults) Winter Temperature Difference: 40.0 F (TMY3 99%)
This calculation is for Worst Case. The house has been rotated 270 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	W	30.0	12.0	360 Btuh
2	2, NFRC 0.20	Metal	0.30	W	8.0	12.0	96 Btuh
3	2, NFRC 0.20	Metal	0.30	N	12.0	12.0	144 Btuh
4	2, NFRC 0.20	Metal	0.30	E	21.3	12.0	256 Btuh
5	2, NFRC 0.20	Metal	0.30	E	8.0	12.0	96 Btuh
6	2, NFRC 0.20	Metal	0.30	S	32.0	12.0	384 Btuh
	Window Total				111.3(sqft)		1336 Btuh

Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area X	HTM=	Load
1	Face Br - Wood	- Ext	(0.067)	19.0/0.0	486	2.66	1294 Btuh
2	Face Br - Wood	- Ext	(0.067)	19.0/0.0	308	2.66	820 Btuh
3	Face Br - Wood	- Ext	(0.067)	19.0/0.0	335	2.66	891 Btuh
4	Face Br - Wood	- Ext	(0.067)	19.0/0.0	272	2.66	724 Btuh
	Wall Total				1401(sqft)		3728 Btuh

Doors	Type	Storm	Ueff.	Area X	HTM=	Load
1	Insulated - Exterior,	n	(0.400)	16	16.0	256 Btuh
2	Insulated - Exterior,	n	(0.400)	16	16.0	256 Btuh
3	Insulated - Exterior,	n	(0.400)	80	16.0	1280 Btuh
4	Insulated - Exterior,	n	(0.400)	80	16.0	1280 Btuh
5	Insulated - Exterior,	n	(0.400)	16	16.0	256 Btuh
	Door Total			208(sqft)		3328Btuh

Ceilings	Type/Color/Surface	Ueff.	R-Value	Area X	HTM=	Load
1	Vented Attic/D/Shing	(0.025)	38.0/0.0	1728	1.0	1754 Btuh
	Ceiling Total			1728(sqft)		1754Btuh

Floors	Type	Ueff.	R-Value	Size X	HTM=	Load
1	Slab On Grade	(1.180)	0.0	172.0 ft(perim.)	47.2	8118 Btuh
	Floor Total			1728 sqft		8118 Btuh

	Envelope Subtotal:	18265 Btuh

Infiltration	Type	Wholehouse ACH	Volume(cuft)	Wall Ratio	CFM=	
	Natural	0.29	17280	1.00	84.3	3692 Btuh

Duct load	Average sealed, R6.0, Supply(Att), Return(Con) (DLM of 0.135)	2961 Btuh
All Zones	**Sensible Subtotal All Zones**	**24918 Btuh**

Manual J Winter Calculations

Residential Load - Component Details (continued)

5310 SE Country Club Road
Lake City, FL 32025

Project Title:
191293 Jenkins Garage - Revised
Building Type: User

2020-03-11

WHOLE HOUSE TOTALS

Totals for Heating	Subtotal Sensible Heat Loss	24918 Btuh
	Ventilation Sensible Heat Loss	0 Btuh
	Total Heat Loss	24918 Btuh

EQUIPMENT

1. Electric Heat Pump	#	29000 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

Project Title:
191293 Jenkins Garage - Revised

5310 SE Country Club Road
Lake City, FL 32025

2020-03-11

Reference City: Gainesville, FL Temperature Difference: 19.0F(TMY3 99%) Humidity difference: 51gr.
This calculation is for Worst Case. The house has been rotated 270 degrees.

Component Loads for Whole House

	Type*					Overhang		Window Area(sqft)			HTM		Load
Window	Panes	SHGC	U	InSh	IS	Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded	
1	2 NFRC	0.20, 0.30		No	No	W	1.5ft	1.5ft	30.0	0.0	30.0	10	25	749 Btuh
2	2 NFRC	0.20, 0.30		No	No	W	1.5ft	1.5ft	8.0	0.0	8.0	10	25	200 Btuh
3	2 NFRC	0.20, 0.30		No	No	N	1.5ft	1.5ft	12.0	0.0	12.0	10	10	119 Btuh
4	2 NFRC	0.20, 0.30		No	No	E	9.5ft	1.5ft	21.3	17.0	4.3	10	25	276 Btuh
5	2 NFRC	0.20, 0.30		No	No	E	9.5ft	1.5ft	8.0	8.0	0.0	10	25	79 Btuh
6	2 NFRC	0.20, 0.30		No	No	S	99.0f	2.0ft	32.0	32.0	0.0	10	11	317 Btuh
	Excursion													321 Btuh
	Window Total								111 (sqft)					2062 Btuh

Walls	Type	U-Value	R-Value Cav/Sheath	Area(sqft)	HTM	Load
1	Face Brick - Wood - Ext	0.07	19.0/0.0	486.0	1.0	498 Btuh
2	Face Brick - Wood - Ext	0.07	19.0/0.0	308.0	1.0	316 Btuh
3	Face Brick - Wood - Ext	0.07	19.0/0.0	334.7	1.0	343 Btuh
4	Face Brick - Wood - Ext	0.07	19.0/0.0	272.0	1.0	279 Btuh
	Wall Total			1401 (sqft)		1435 Btuh

Doors	Type	Area (sqft)	HTM	Load
1	Insulated - Exterior	16.0	12.0	192 Btuh
2	Insulated - Exterior	16.0	12.0	192 Btuh
3	Insulated - Exterior	80.0	12.0	960 Btuh
4	Insulated - Exterior	80.0	12.0	960 Btuh
5	Insulated - Exterior	16.0	12.0	192 Btuh
	Door Total	208 (sqft)		2496 Btuh

Ceilings	Type/Color/Surface	U-Value	R-Value	Area(sqft)	HTM	Load
1	Vented Attic/DarkShingle	0.025	38.0/0.0	1728.0	1.37	2368 Btuh
	Ceiling Total			1728 (sqft)		2368 Btuh

Floors	Type	R-Value	Size	HTM	Load
1	Slab On Grade	0.0	1728 (ft-perimeter)	0.0	0 Btuh
	Floor Total		1728.0 (sqft)		0 Btuh

	Envelope Subtotal:	8362 Btuh

Infiltration	Type	Average ACH	Volume(cuft)	Wall Ratio	CFM=	Load
	Natural	0.22	17280	1	63.2	1315 Btuh

Internal gain	Occupants	Btuh/occupant		Appliance	Load
	6	X 230	+	2400	3780 Btuh

	Sensible Envelope Load:	13457 Btuh
Duct load	Average sealed, Supply(R6.0-Attic), Return(R6.0-Condi) (DGM of 0.229)	3076 Btuh
	Sensible Load All Zones	**16533 Btuh**

Manual J Summer Calculations

Residential Load - Component Details (continued)

Project Title: Climate:FL_GAINESVILLE_REGIONAL_A

5310 SE Country Club Road
Lake City, FL 32025

191293 Jenkins Garage - Revised

2020-03-11

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	**Sensible Envelope Load All Zones**	**13457 Btuh**
	Sensible Duct Load	3076 Btuh
	Total Sensible Zone Loads	**16533 Btuh**
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	**16533 Btuh**
	Latent infiltration gain (for 51 gr. humidity difference)	2182 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	584 Btuh
	Latent occupant gain (6.0 people @ 200 Btuh per person)	1200 Btuh
	Latent other gain	0 Btuh
	Latent total gain	**3966 Btuh**
	TOTAL GAIN	**20499 Btuh**

EQUIPMENT

1. Central Unit	#	29000 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

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

RE: 2258668 - EDGLEY CONST. - JENKINS GARAGE

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

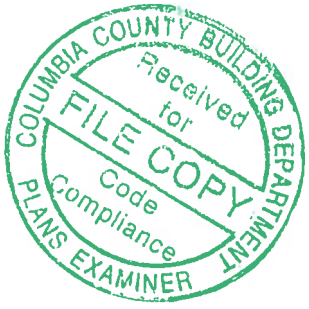
Site Information:
Customer Info: Doug Edgley Const. Project Name: Jenkins Garage Model: Custom
Lot/Block: N/A Subdivision: N/A
Address: 5310 SE Country Club Rd., N/A
City: Columbia Cty State: Fl

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

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):
Design Code: FBC2017/TPI2014 Design Program: MiTek 20/20 8.2
Wind Code: ASCE 7-10 Wind Speed: 130 mph
Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 18 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.

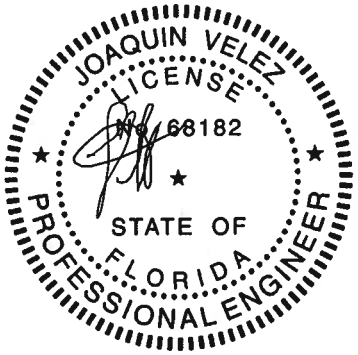
No.	Seal#	Truss Name	Date
1	T19669109	CJ01	3/12/20
2	T19669110	CJ01A	3/12/20
3	T19669111	CJ03	3/12/20
4	T19669112	CJ03A	3/12/20
5	T19669113	CJ05	3/12/20
6	T19669114	CJ05A	3/12/20
7	T19669115	EJ01	3/12/20
8	T19669116	HJ10	3/12/20
9	T19669117	T01	3/12/20
10	T19669118	T02	3/12/20
11	T19669119	T03	3/12/20
12	T19669120	T04	3/12/20
13	T19669121	T04A	3/12/20
14	T19669122	T05	3/12/20
15	T19669123	T06	3/12/20
16	T19669124	T07	3/12/20
17	T19669125	T08	3/12/20
18	T19669126	T09	3/12/20



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

Truss Design Engineer's Name: Velez, Joaquin
My license renewal date for the state of Florida is February 28, 2021.

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 or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
March 12,2020

Job	Truss	Truss Type	Qty	Ply	EDGLEY CONST. - JENKINS GARAGE	T19669109
2258668	CJ01	JACK-OPEN	11	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Feb 7 2020 MiTek Industries, Inc. Thu Mar 12 08:57:19 2020 Page 1
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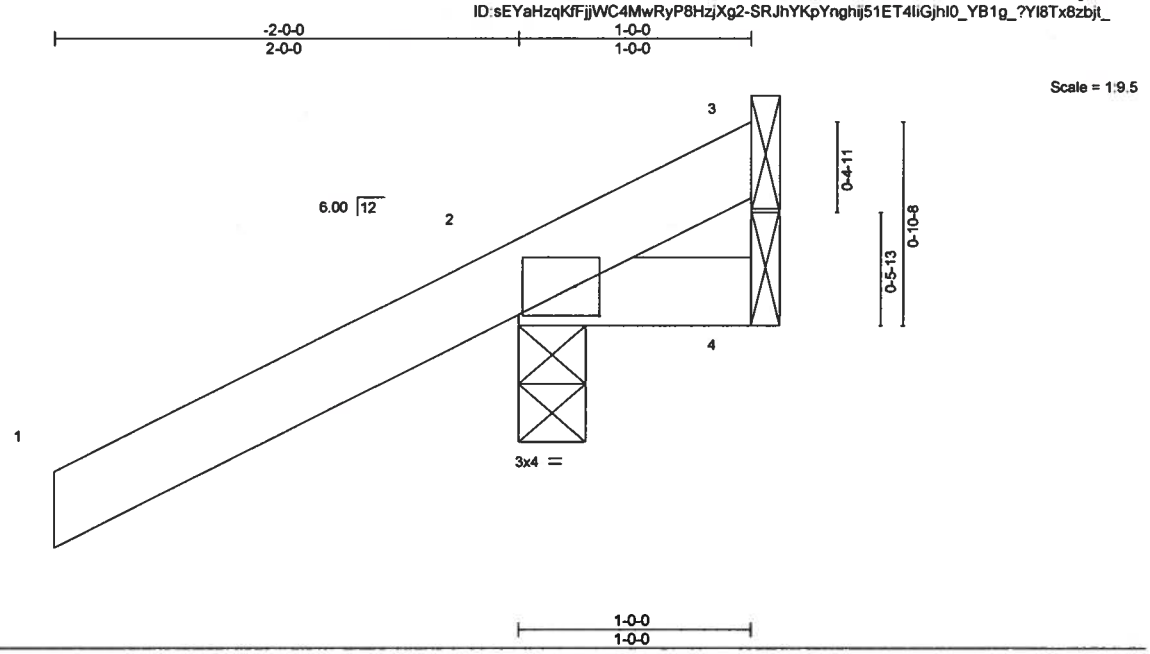


Plate Offsets (X,Y)-- [2:0-1-4,0-1-9]

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)	0.00	7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.07	Vert(CT)	0.00	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MP							Weight: 7 lb	FT = 20%

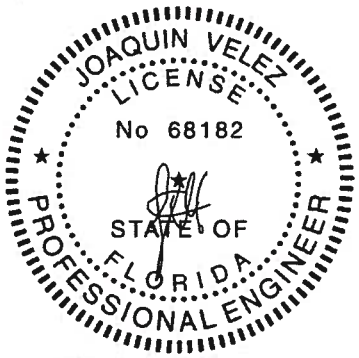
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=66(LC 12)
Max Uplift 3=-27(LC 1), 2=-162(LC 12), 4=-46(LC 1)
Max Grav 3=25(LC 16), 2=254(LC 1), 4=44(LC 16)

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

NOTES-
1) 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 3, 162 lb uplift at joint 2 and 46 lb uplift at joint 4.



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
March 12,2020

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	EDGLEY CONST. - JENKINS GARAGE
2258668	CJ01A	Jack-Open	1	1	T19669110
					Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Feb 7 2020 MiTek Industries, Inc. Thu Mar 12 08:57:23 2020 Page 1
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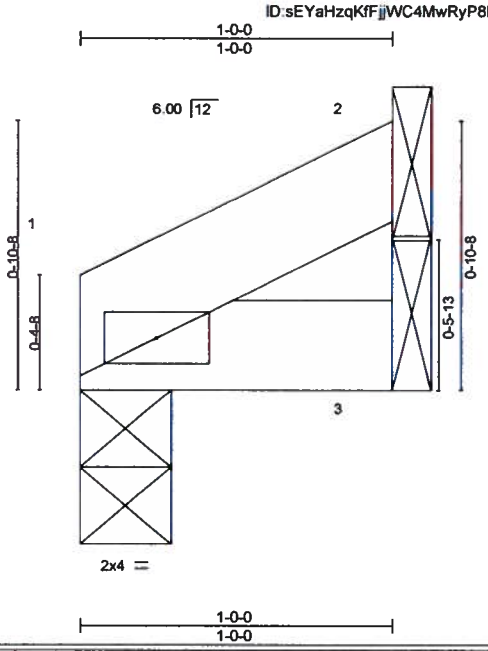


Scale = 1:7.2

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	0.01	Vert(LL)	-0.00	6	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.02	Vert(CT)	-0.00	6	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MP							Weight: 3 lb	FT = 20%

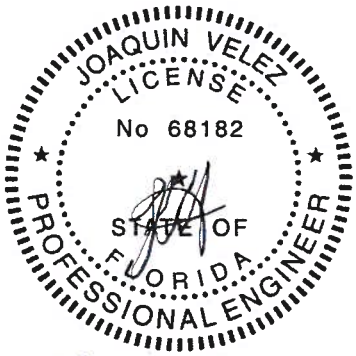
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 1=24(LC 12)
Max Uplift 1=-14(LC 9), 2=-18(LC 12), 3=-11(LC 9)
Max Grav 1=37(LC 1), 2=21(LC 1), 3=17(LC 3)

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

NOTES-
1) 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 1, 18 lb uplift at joint 2 and 11 lb uplift at joint 3.



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Date:
March 12,2020

Job	Truss	Truss Type	Qty	Ply	EDGLEY CONST. - JENKINS GARAGE
2258668	CJ03	JACK-OPEN	11	1	T19669111
					Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Feb 7 2020 MiTek Industries, Inc. Thu Mar 12 08:57:25 2020 Page 1
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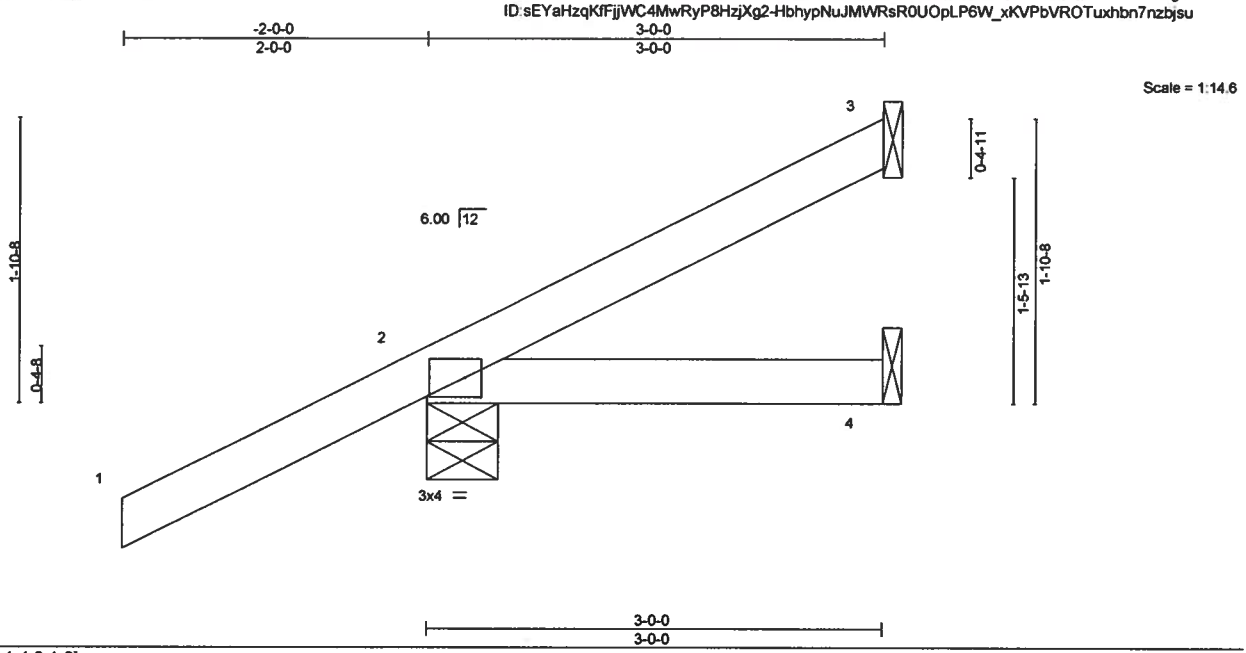


Plate Offsets (X,Y)-- [2:0-1-4,0-1-9]

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)	0.01	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.07	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MP							Weight: 13 lb	FT = 20%

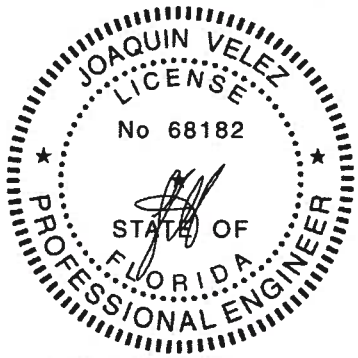
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-5-8, 4=Mechanical
Max Horz 2=113(LC 12)
Max Uplift 3=-48(LC 12), 2=-126(LC 12), 4=-22(LC 9)
Max Grav 3=52(LC 1), 2=253(LC 1), 4=48(LC 3)

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

NOTES-
1) 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 3, 126 lb uplift at joint 2 and 22 lb uplift at joint 4.



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March 12,2020

Job	Truss	Truss Type	Qty	Ply	EDGLEY CONST. - JENKINS GARAGE
2258668	CJ03A	Jack-Open	1	1	T19669112
					Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Feb 7 2020 MiTek Industries, Inc. Thu Mar 12 08:57:27 2020 Page 1
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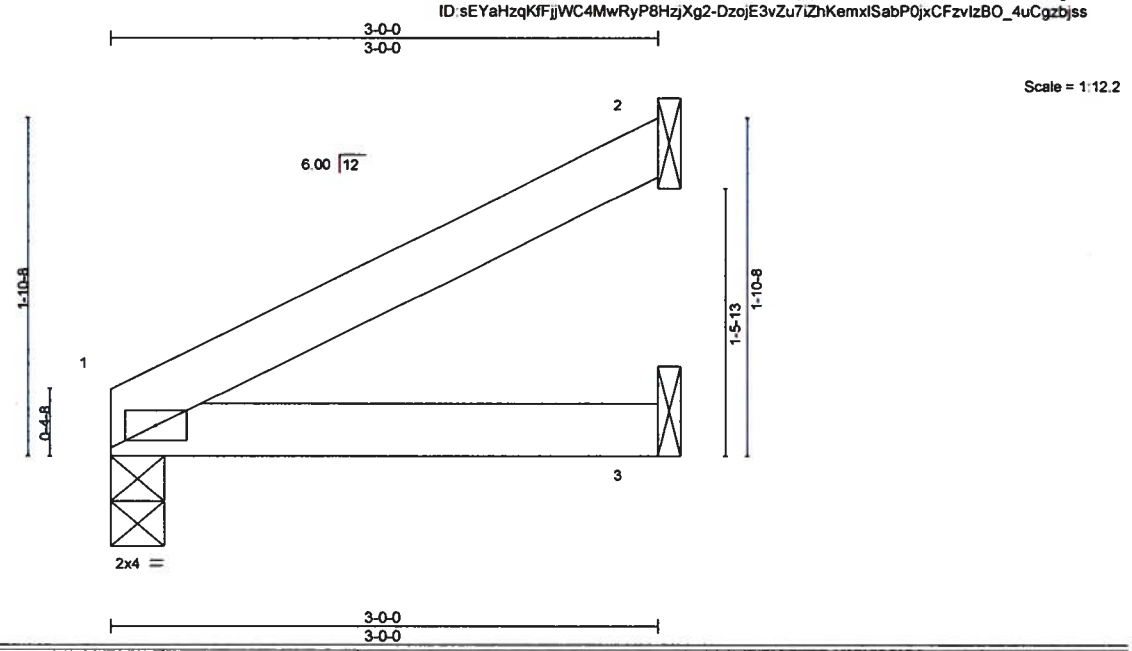


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.13	Vert(LL)	0.01	3-6	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.14	Vert(CT)	-0.01	3-6	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MP							Weight: 10 lb	FT = 20%

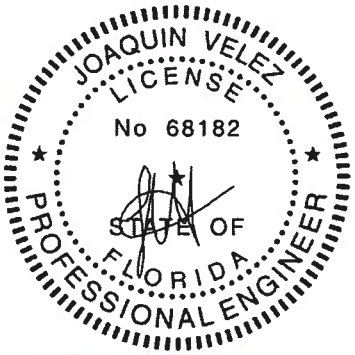
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 1=71(LC 12)
Max Uplift 1=-45(LC 9), 2=-62(LC 12), 3=-30(LC 9)
Max Grav 1=109(LC 1), 2=69(LC 1), 3=53(LC 3)

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

NOTES-
1) 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 1, 62 lb uplift at joint 2 and 30 lb uplift at joint 3.



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Job	Truss	Truss Type	Qty	Ply	EDGLEY CONST. - JENKINS GARAGE	
2258668	CJ05	Jack-Open	11	1	Job Reference (optional)	T19669113

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Feb 7 2020 MiTek Industries, Inc. Thu Mar 12 08:57:28 2020 Page 1
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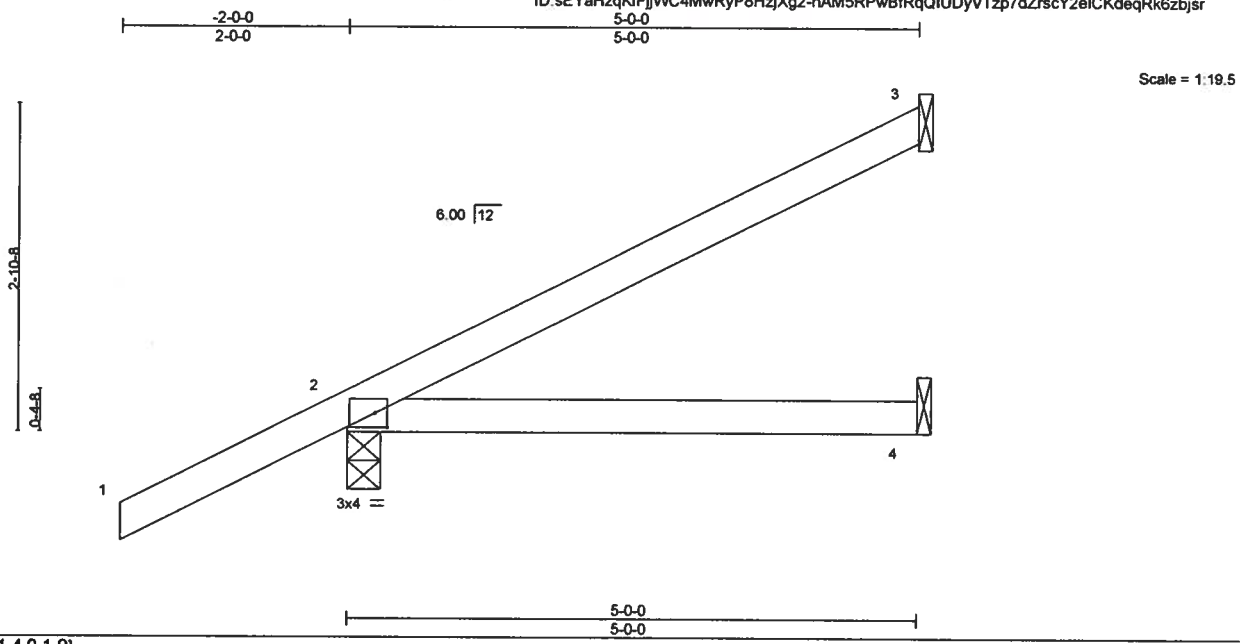


Plate Offsets (X,Y)-- [2:0-1-4,0-1-9]

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	0.38	Vert(LL)	0.08	4-7	>750	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.34	Vert(CT)	0.07	4-7	>856	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MP							Weight: 19 lb	FT = 20%

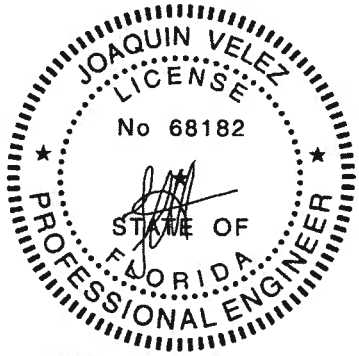
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=162(LC 12)
Max Uplift 3=-98(LC 12), 2=-137(LC 12), 4=-44(LC 9)
Max Grav 3=108(LC 1), 2=313(LC 1), 4=87(LC 3)

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

NOTES-
1) 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 98 lb uplift at joint 3, 137 lb uplift at joint 2 and 44 lb uplift at joint 4.



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Date:
March 12,2020

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Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	EDGLEY CONST. - JENKINS GARAGE
2258668	CJ05A	Jack-Open	1	1	T19669114
					Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Feb 7 2020 MiTek Industries, Inc. Thu Mar 12 08:57:29 2020 Page 1
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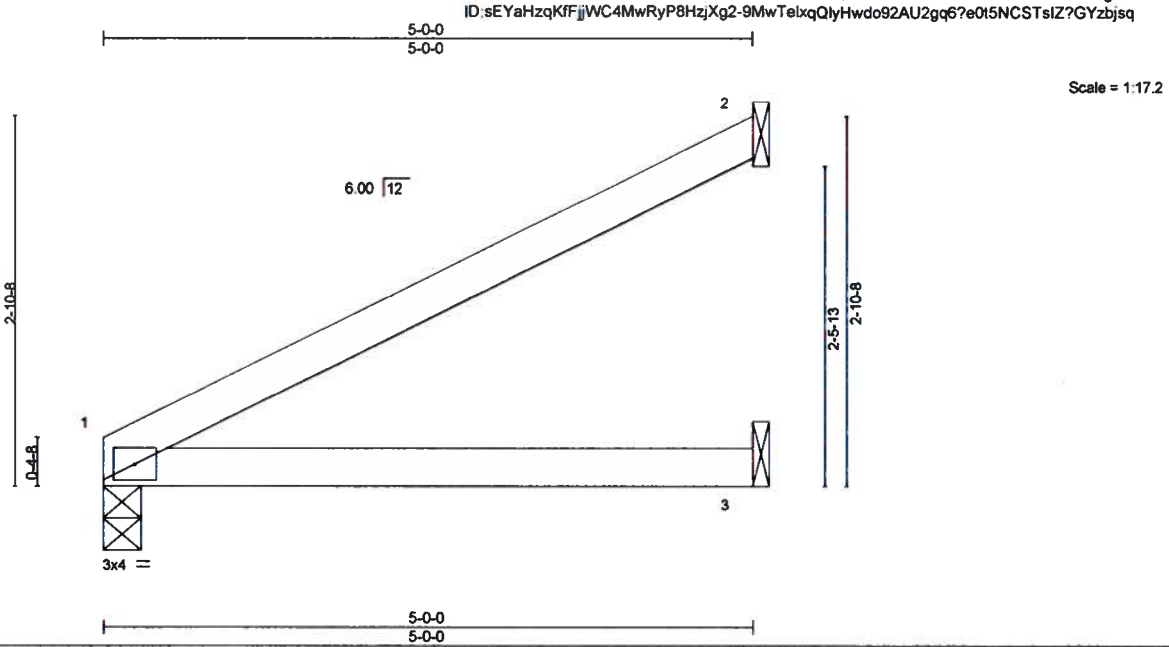


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.44	Vert(LL)	0.10	3-6	>596	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.42	Vert(CT)	0.09	3-6	>683	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MP							Weight: 16 lb	FT = 20%

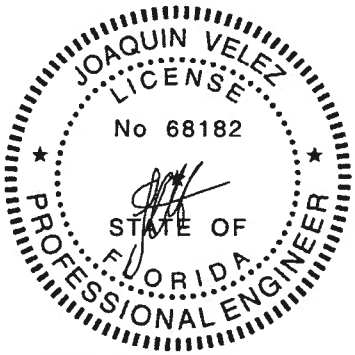
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 1=120(LC 12)
Max Uplift 1=-76(LC 9), 2=-106(LC 12), 3=-48(LC 9)
Max Grav 1=183(LC 1), 2=118(LC 1), 3=90(LC 3)

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

NOTES-
1) 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 76 lb uplift at joint 1, 106 lb uplift at joint 2 and 48 lb uplift at joint 3.



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Date:
March 12,2020

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Job	Truss	Truss Type	Qty	Ply	EDGLEY CONST. - JENKINS GARAGE	
2258668	EJ01	JACK-PARTIAL	28	1	Job Reference (optional)	T19669115

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Feb 7 2020 MiTek Industries, Inc. Thu Mar 12 08:57:30 2020 Page 1
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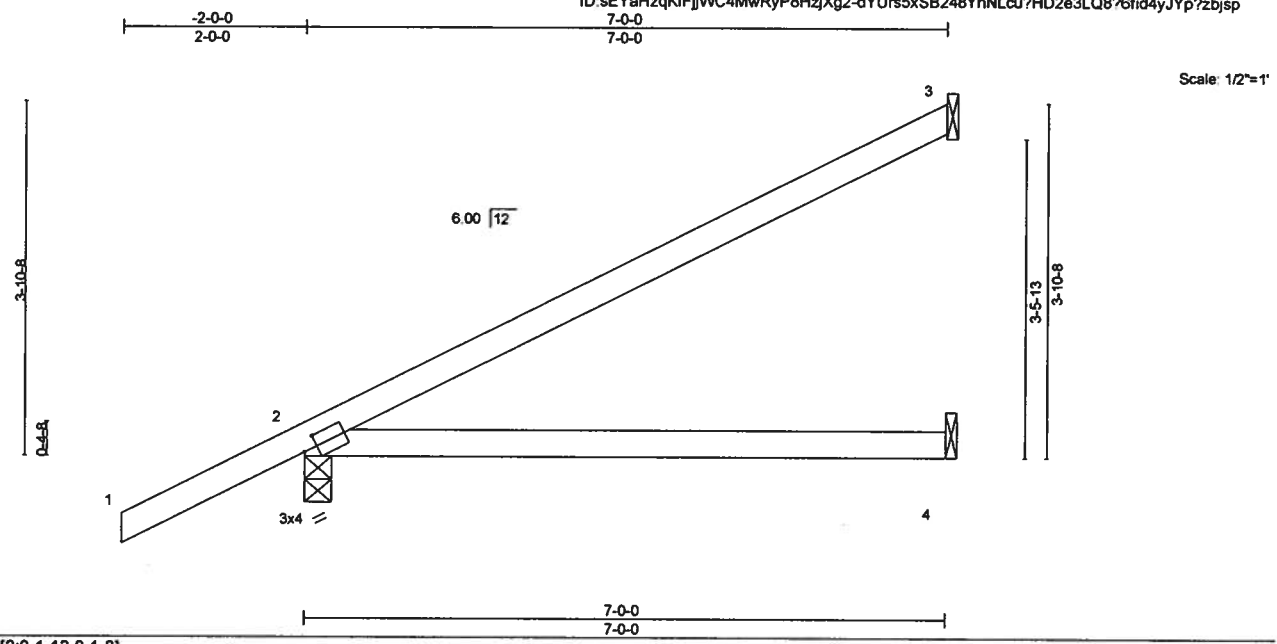


Plate Offsets (X,Y)— [2:0-1-13,0-1-8]

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	0.89	Vert(LL)	0.33	4-7	>250	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.76	Vert(CT)	0.29	4-7	>287	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 26 lb	FT = 20%

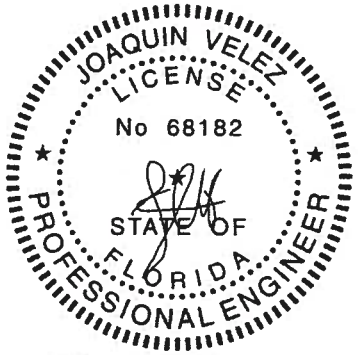
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-10-2 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=144(LC 12)
Max Uplift 3=-94(LC 12), 2=-115(LC 9), 4=-62(LC 9)
Max Grav 3=160(LC 1), 2=380(LC 1), 4=125(LC 3)

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

NOTES-
1) 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) 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 94 lb uplift at joint 3, 115 lb uplift at joint 2 and 62 lb uplift at joint 4.



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Job	Truss	Truss Type	Qty	Ply	EDGLEY CONST. - JENKINS GARAGE	
2258668	HJ10	DIAGONAL HIP GIRDER	6	1	Job Reference (optional)	T19669116

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Feb 7 2020 MiTek Industries, Inc. Thu Mar 12 08:57:32 2020 Page 1
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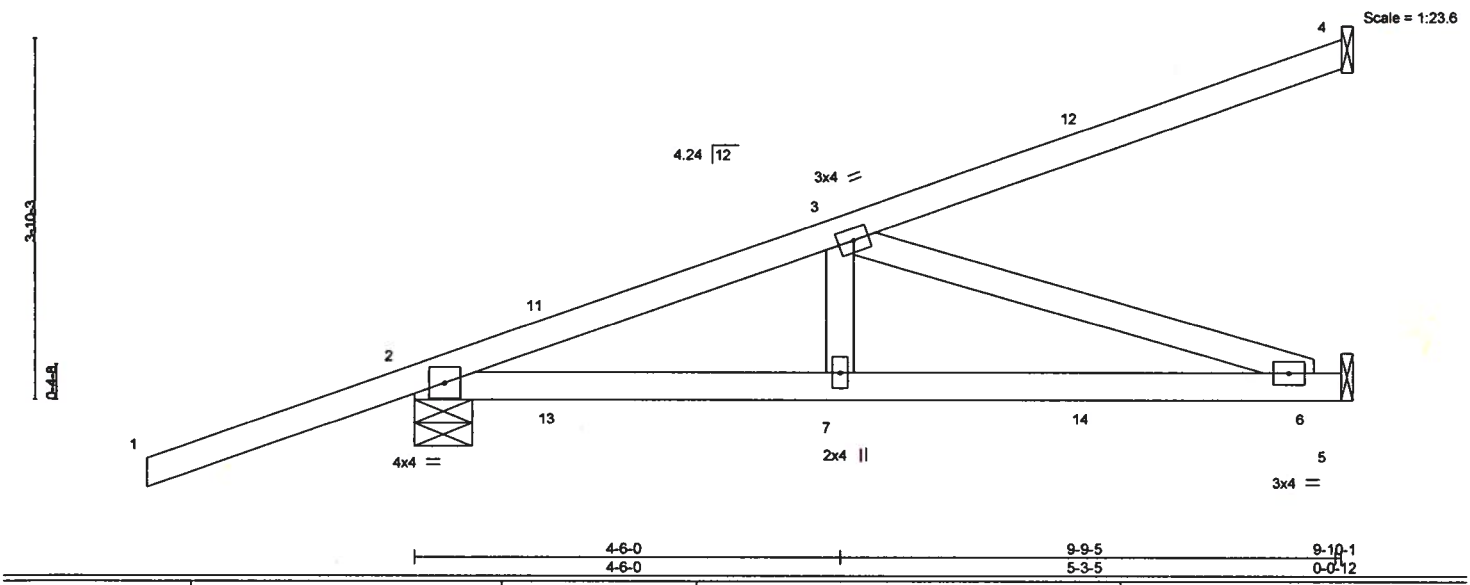


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.59	Vert(LL)	0.12	6-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.61	Vert(CT)	-0.12	6-7	>966	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.35	Horz(CT)	-0.01	5	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 44 lb	FT = 20%

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

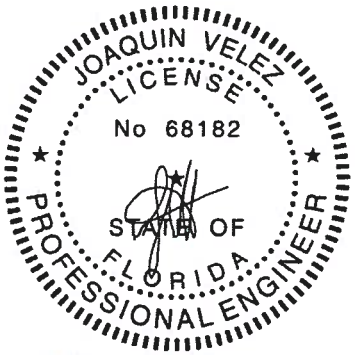
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-7-1 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-7-6, 5=Mechanical
Max Horz 2=233(LC 4)
Max Uplift 4=-143(LC 4), 2=-345(LC 4), 5=-216(LC 5)
Max Grav 4=150(LC 1), 2=463(LC 1), 5=266(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-628/448
BOT CHORD 2-7=-511/573, 6-7=-511/573
WEBS 3-6=-603/538

NOTES-
1) 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; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 143 lb uplift at joint 4, 345 lb uplift at joint 2 and 216 lb uplift at joint 5.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 83 lb down and 103 lb up at 1-6-1, 83 lb down and 103 lb up at 1-6-1, 26 lb down and 38 lb up at 4-4-0, 26 lb down and 38 lb up at 4-4-0, and 50 lb down and 97 lb up at 7-1-15, and 50 lb down and 97 lb up at 7-1-15 on top chord, and 69 lb down and 74 lb up at 1-6-1, 69 lb down and 74 lb up at 1-6-1, 53 lb down and 30 lb up at 4-4-0, 53 lb down and 30 lb up at 4-4-0, and 40 lb down and 59 lb up at 7-1-15, and 40 lb down and 59 lb up at 7-1-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-54, 5-8=-20
Concentrated Loads (lb)
Vert: 7=5(F=2, B=2) 11=50(F=25, B=25) 12=-64(F=-32, B=-32) 13=70(F=35, B=35) 14=-49(F=-24, B=-24)



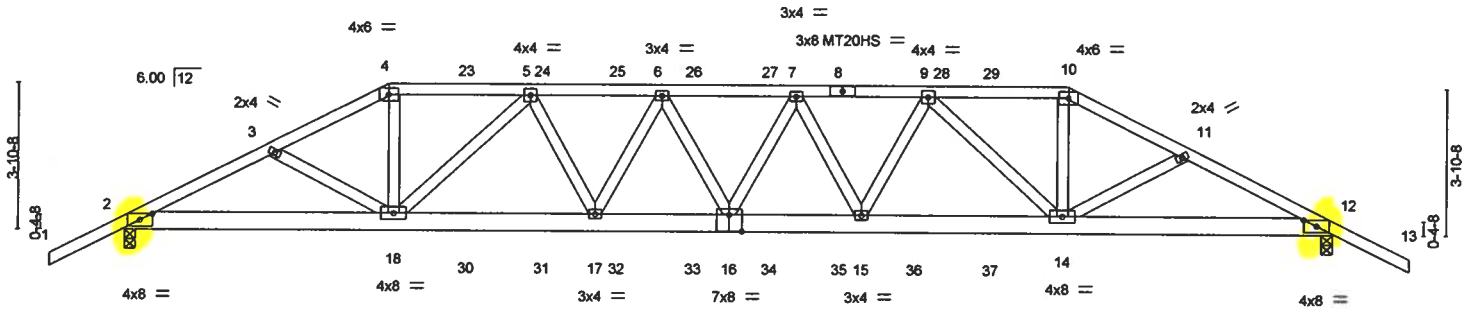
Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
March 12,2020

Job	Truss	Truss Type	Qty	Ply	EDGLEY CONST. - JENKINS GARAGE
2258668	T01	HIP GIRDER	2	1	T19669117
					Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Feb 7 2020 MiTek Industries, Inc. Thu Mar 12 08:57:34 2020 Page 1
ID:sEYaHzqKfFjjWC4MwRyP8HzjXg2-WJjMiS?yFHaa0Ph6rk4DNupmW1b32HQD?aHmymzbjs

-2-0-0	3-11-15	7-0-0	10-8-12	14-2-14	17-9-2	21-3-4	25-0-0	28-0-1	32-0-0	34-0-0
2-0-0	3-11-15	3-0-1	3-8-12	3-6-2	3-6-4	3-6-2	3-8-12	3-0-1	3-11-15	2-0-0

Scale = 1:58.6



7-0-0	12-5-13	16-0-0	19-6-3	25-0-0	32-0-0
7-0-0	5-5-13	3-6-3	3-6-3	5-5-13	7-0-0

Plate Offsets (X,Y)— [2:0-4-0,0-1-15], [12:0-4-0,0-1-15], [16:0-4-0,0-5-4]

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	0.75	Vert(LL)	0.49	16	>791	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.36	Vert(CT)	-0.58	16	>664	180	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.79	Horz(CT)	0.12	12	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 197 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP M 26
WEBS 2x4 SP No.3

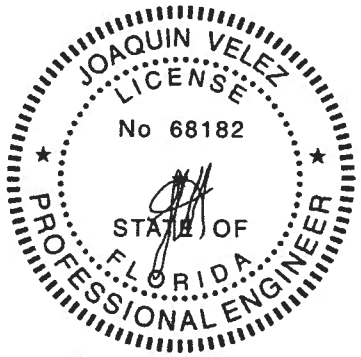
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-1-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-2-10 oc bracing.

REACTIONS. (size) 2=0-3-8, 12=0-3-8
Max Horz 2=61(LC 7)
Max Uplift 2=-1416(LC 5), 12=-1479(LC 4)
Max Grav 2=2366(LC 1), 12=2409(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4645/2925, 3-4=-4478/2904, 4-5=-4048/2659, 5-6=-5530/3594, 6-7=-5800/3767, 7-9=-5568/3641, 9-10=-4132/2780, 10-11=-4574/3042, 11-12=-4741/3063
BOT CHORD 2-18=-2600/4115, 17-18=-3296/5179, 16-17=-3666/5758, 15-16=-3684/5779, 14-15=-3344/5233, 12-14=-2686/4200
WEBS 4-18=-1128/1663, 5-18=-1617/1020, 5-17=-546/808, 6-17=-535/331, 7-15=-488/271, 9-15=-489/766, 9-14=-1567/950, 10-14=-1077/1633

NOTES-
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); porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1416 lb uplift at joint 2 and 1479 lb uplift at joint 12.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 125 lb down and 100 lb up at 7-0-0, 106 lb down and 100 lb up at 9-0-12, 106 lb down and 100 lb up at 11-0-12, 106 lb down and 100 lb up at 13-0-12, 106 lb down and 100 lb up at 15-0-12, 106 lb down and 100 lb up at 17-0-12, 106 lb down and 100 lb up at 18-11-4, 106 lb down and 100 lb up at 20-11-4, and 106 lb down and 100 lb up at 22-11-4, and 227 lb down and 252 lb up at 25-0-0 on top chord, and 294 lb down and 335 lb up at 7-0-0, 85 lb down and 82 lb up at 9-0-12, 85 lb down and 82 lb up at 11-0-12, 85 lb down and 82 lb up at 13-0-12, 85 lb down and 82 lb up at 15-0-12, 85 lb down and 82 lb up at 17-0-12, 85 lb down and 82 lb up at 18-11-4, 85 lb down and 82 lb up at 20-11-4, and 85 lb down and 82 lb up at 22-11-4, and 294 lb down and 335 lb up at 24-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
March 12,2020

Continued on page 2

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-4=-54, 4-10=-54, 10-13=-54, 2-12=-20

Concentrated Loads (lb)

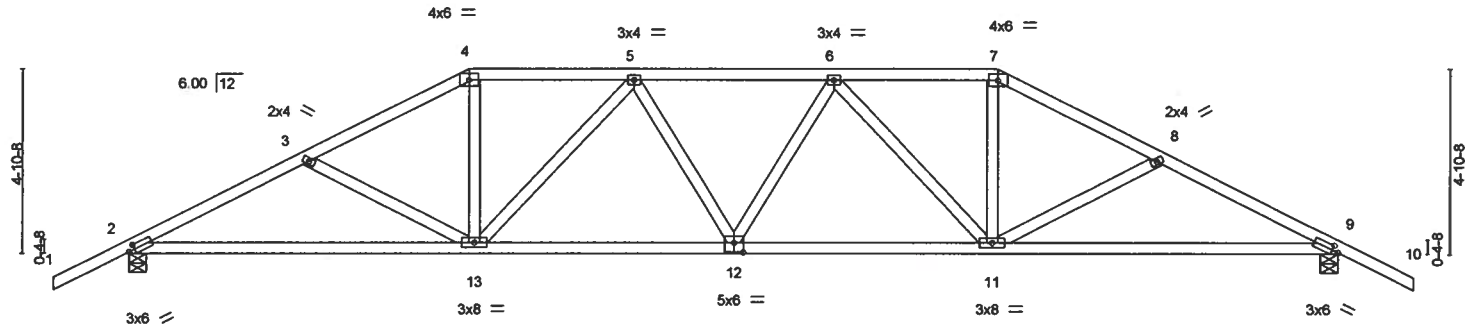
Vert: 4=-106(B) 8=-106(B) 10=-180(B) 18=-284(B) 14=-284(B) 23=-106(B) 24=-106(B) 25=-106(B) 26=-106(B) 27=-106(B) 28=-106(B) 29=-106(B) 30=-61(B) 31=-61(B) 32=-61(B) 33=-61(B) 34=-61(B) 35=-61(B) 36=-61(B) 37=-61(B)

Job	Truss	Truss Type	Qty	Ply	EDGLEY CONST. - JENKINS GARAGE	T19669118
2258668	T02	HIP	2	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Feb 7 2020 MiTek Industries, Inc. Thu Mar 12 08:57:35 2020 Page 1
ID:sEYaHzqKfFjjWC4MwRyP8HzjXg2-_WHkvo?a0biReYFJPRbSw5MzMRqbnqlMEE0JUCzbjsk

-2-0-0	4-9-8	9-0-0	13-4-6	18-7-9	23-0-0	27-2-8	32-0-0	34-0-0
2-0-0	4-9-8	4-2-8	4-4-7	5-3-3	4-4-7	4-2-8	4-9-8	2-0-0

Scale = 1:58.6



9-0-0	16-0-0	23-0-0	32-0-0
9-0-0	7-0-0	7-0-0	9-0-0

Plate Offsets (X,Y)— [2:0-1-15,0-1-8], [9:0-1-15,0-1-8], [12:0-3-0,0-3-0]

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	0.62	Vert(LL)	0.32	11-19	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.79	Vert(CT)	-0.33	11-19	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.10	9	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 165 lb	FT = 20%

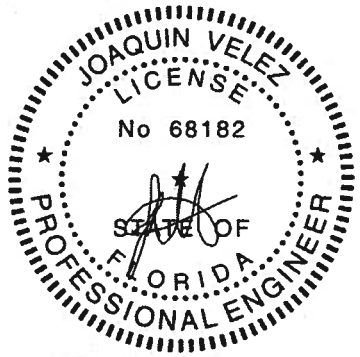
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 3-4-11 oc bracing.

REACTIONS. (size) 2=0-5-8, 9=0-5-8
Max Horz 2=75(LC 11)
Max Uplift 2=-593(LC 9), 9=-593(LC 8)
Max Grav 2=1292(LC 1), 9=1292(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2193/2439, 3-4=-1931/2249, 4-5=-1694/2079, 5-6=-2038/2453, 6-7=-1694/2079, 7-8=-1931/2249, 8-9=-2193/2439
BOT CHORD 2-13=-2048/1921, 12-13=-2090/2003, 11-12=-2094/2003, 9-11=-2078/1921
WEBS 3-13=-281/356, 4-13=-842/629, 5-13=-528/457, 6-11=-528/458, 7-11=-842/629, 8-11=-281/356

NOTES-
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) 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 593 lb uplift at joint 2 and 593 lb uplift at joint 9.



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

March 12,2020

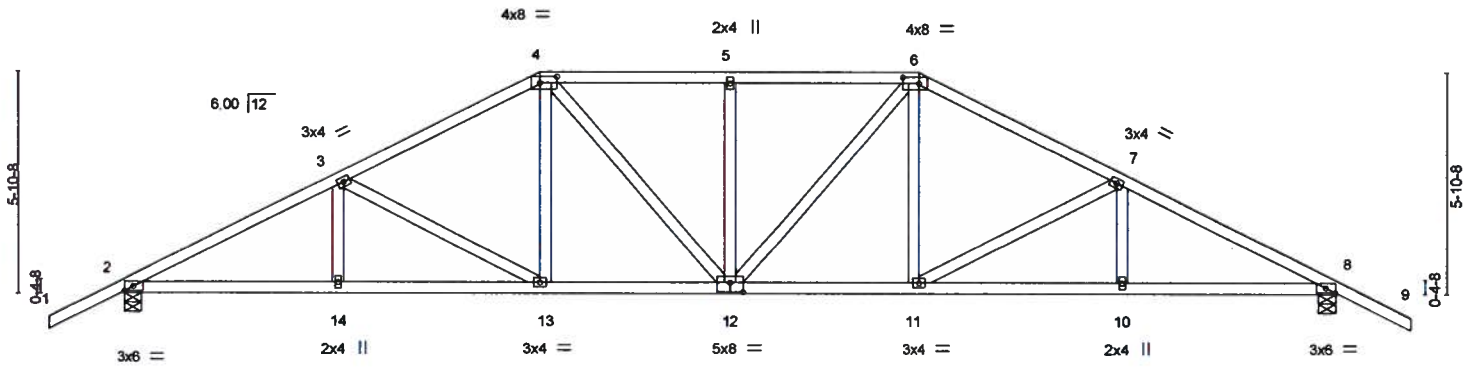
MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	EDGLEY CONST. - JENKINS GARAGE
2258668	T03	HIP	2	1	T19669119
					Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Feb 7 2020 MiTek Industries, Inc. Thu Mar 12 08:57:36 2020 Page 1
ID:sEYaHzqKfFjjWC4MwRyP8HzjXg2-Sir6680DnuqIGiqVz86hSJu85qFTWH3VTums0ezbjsj

-2-0-0	5-7-15	11-0-0	16-0-0	21-0-0	26-4-1	32-0-0	34-0-0
2-0-0	5-7-15	5-4-1	5-0-0	5-0-0	5-4-1	5-7-15	2-0-0

Scale = 1:58.6



5-7-15	11-0-0	16-0-0	21-0-0	26-4-1	32-0-0
5-7-15	5-4-1	5-0-0	5-0-0	5-4-1	5-7-15

Plate Offsets (X,Y)-- [4:0-5-4,0-2-0], [6:0-5-4,0-2-0], [8:0-2-15,Edge], [12:0-4-0,0-3-0]

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 0.62	Vert(LL) 0.21 11-12 >999 240	MT20 244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.50	Vert(CT) -0.22 12-13 >999 180	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.33	Horz(CT) 0.09 8 n/a n/a	
BCDL 10.0	Code FBC2017/TPI2014	Matrix-MS		Weight: 176 lb FT = 20%

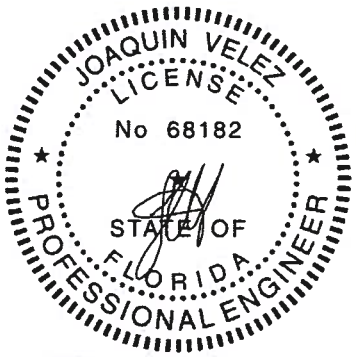
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 3-11-1 oc bracing.

REACTIONS. (size) 2=0-5-8, 8=0-5-8
Max Horz 2=88(LC 11)
Max Uplift 2=-563(LC 9), 8=-563(LC 8)
Max Grav 2=1292(LC 1), 8=1292(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2206/2515, 3-4=-1778/2066, 4-5=-1705/2095, 5-6=-1705/2095, 6-7=-1778/2066, 7-8=-2206/2514
BOT CHORD 2-14=-2087/1920, 13-14=-2087/1920, 12-13=-1569/1534, 11-12=-1573/1534, 10-11=-2117/1920, 8-10=-2117/1920
WEBS 3-13=-449/630, 4-13=-517/369, 4-12=-274/364, 5-12=-302/215, 6-12=-274/364, 6-11=-517/369, 7-11=-449/630

NOTES-
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) 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 563 lb uplift at joint 2 and 563 lb uplift at joint 8.



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
March 12,2020

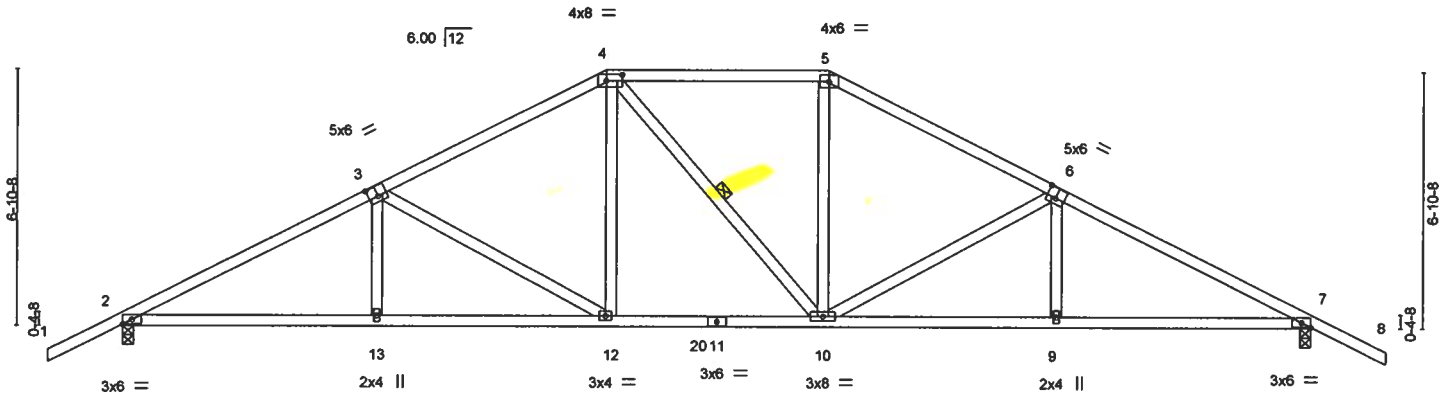
MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	EDGLEY CONST. - JENKINS GARAGE
2258668	T04	HIP	2	1	T19669120
					Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Feb 7 2020 MiTek Industries, Inc. Thu Mar 12 08:57:37 2020 Page 1
ID:sEYaHzqKfFjjWC4MwRyP8HzjXg2-wuPUKU1rYCy9tsPhWsdw?WRHtEZQFhtfhYVQY5zbjsi

-2-0-0	6-10-2	13-0-0	19-0-0	25-1-14	32-0-0	34-0-0
2-0-0	6-10-2	6-1-14	6-0-0	6-1-14	6-10-2	2-0-0

Scale = 1:59.6



6-10-2	13-0-0	19-0-0	25-1-14	32-0-0
6-10-2	6-1-14	6-0-0	6-1-14	6-10-2

Plate Offsets (X,Y)-- [3:0-3-0,0-3-4], [4:0-5-4,0-2-0], [6:0-3-0,0-3-4], [7:0-2-15,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	0.75	Vert(LL)	0.22	12-13	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.58	Vert(CT)	-0.21	12-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.09	7	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 168 lb	FT = 20%

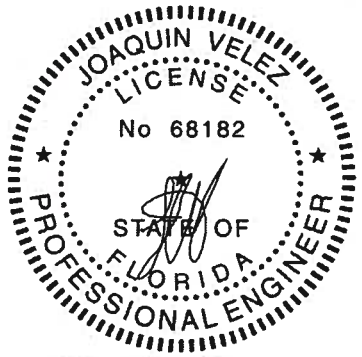
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-7-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 3-9-9 oc bracing.
WEBS 1 Row at midpt 4-10

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=102(LC 11)
Max Uplift 2=-532(LC 9), 7=-532(LC 8)
Max Grav 2=1292(LC 1), 7=1292(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2164/2468, 3-4=-1636/1922, 4-5=-1397/1796, 5-6=-1637/1923, 6-7=-2164/2468
BOT CHORD 2-13=-2039/1873, 12-13=-2042/1875, 10-12=-1397/1397, 9-10=-2065/1874, 7-9=-2062/1873
WEBS 3-13=-291/271, 3-12=-557/776, 4-12=-614/434, 5-10=-612/434, 6-10=-556/775, 6-9=-290/270

NOTES-
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) 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 532 lb uplift at joint 2 and 532 lb uplift at joint 7.



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

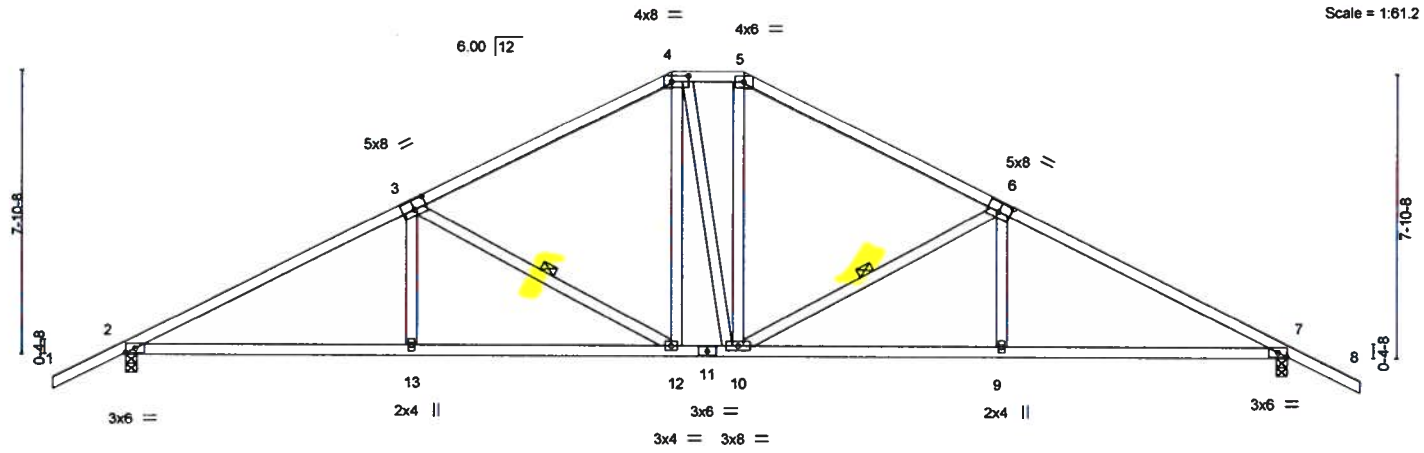
March 12,2020

Job	Truss	Truss Type	Qty	Ply	EDGLEY CONST. - JENKINS GARAGE	
2258668	T04A	HIP	2	1		T19669121
					Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Feb 7 2020 MiTek Industries, Inc. Thu Mar 12 08:57:38 2020 Page 1
ID:sEYaHzqKfFjjWC4MwRyP8HzjXg2-O5ztXq2TJV4?V0_t4Z89Xk_P7etV_67owCFz5Xzbjsh

-2-0-0	7-10-12	15-0-0	17-0-0	24-1-4	32-0-0	34-0-0
2-0-0	7-10-12	7-1-4	2-0-0	7-1-4	7-10-12	2-0-0

Scale = 1:61.2



7-10-12	15-1-12	16-10-4	24-1-4	32-0-0
7-10-12	7-3-0	1-8-8	7-3-0	7-10-12

Plate Offsets (X,Y)-- [3:0-4-0,0-3-0], [4:0-5-8,0-2-0], [6:0-4-0,0-3-0], [7:0-2-15,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 0.91	Vert(LL) 0.26 9-19 >999 240	MT20 244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.72	Vert(CT) -0.23 12-13 >999 180	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.68	Horz(CT) 0.09 7 n/a n/a	
BCDL 10.0	Code FBC2017/TPI2014	Matrix-MS		Weight: 175 lb FT = 20%

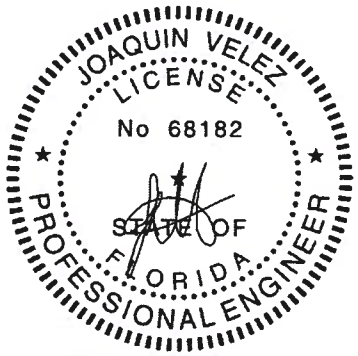
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 3-7-2 oc bracing.
WEBS 1 Row at midpt 3-12, 6-10

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=-115(LC 10)
Max Uplift 2=-498(LC 9), 7=-498(LC 8)
Max Grav 2=1292(LC 1), 7=1292(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2123/2426, 3-4=-1487/1770, 4-5=-1250/1667, 5-6=-1489/1773, 6-7=-2122/2425
BOT CHORD 2-13=-1993/1828, 12-13=-1992/1827, 10-12=-1213/1248, 9-10=-2009/1826, 7-9=-2010/1827
WEBS 3-13=-356/327, 6-9=-353/325, 4-12=-604/400, 5-10=-613/405, 3-12=-676/926, 6-10=-673/921

NOTES-
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) 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 498 lb uplift at joint 2 and 498 lb uplift at joint 7.



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

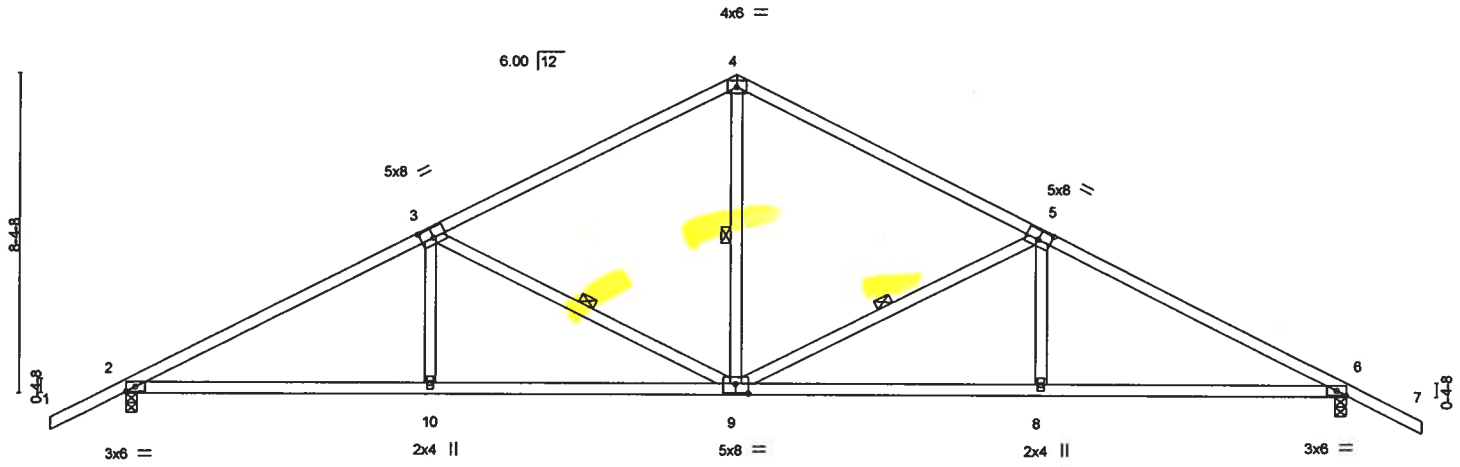
March 12,2020

Job	Truss	Truss Type	Qty	Ply	EDGLEY CONST. - JENKINS GARAGE
2258668	T05	MOD. QUEEN	7	1	T19669122
					Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Feb 7 2020 MiTek Industries, Inc. Thu Mar 12 08:57:39 2020 Page 1
ID:sEYaHzqKfFjjWC4MwRyP8HzjXg2-sHXFIA253pCs7AZ4eHfO4xWa72CWjdSy9s_Xdzzbjsg

-2-0-0 | 8-0-0 | 16-0-0 | 24-0-0 | 32-0-0 | 34-0-0
2-0-0 | 8-0-0 | 8-0-0 | 8-0-0 | 8-0-0 | 2-0-0

Scale = 1:58.0



8-0-0 | 16-0-0 | 24-0-0 | 32-0-0
8-0-0 | 8-0-0 | 8-0-0 | 8-0-0

Plate Offsets (X,Y)-- [3:0-4-0,0-3-0], [5:0-4-0,0-3-0], [6:0-2-15,Edge], [9:0-4-0,0-3-0]

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	0.95	Vert(LL)	0.27	8-16	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.73	Vert(CT)	-0.24	9-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.09	6	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 156 lb	FT = 20%

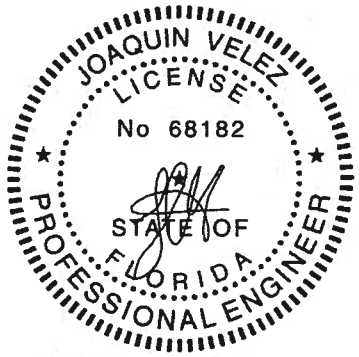
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 3-7-0 oc bracing.
WEBS 1 Row at midpt 4-9, 5-9, 3-9

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=122(LC 11)
Max Uplift 2=-480(LC 9), 6=-480(LC 8)
Max Grav 2=1292(LC 1), 6=1292(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2123/2432, 3-4=-1439/1721, 4-5=-1439/1721, 5-6=-2123/2432
BOT CHORD 2-10=-2000/1829, 9-10=-1999/1828, 8-9=-2016/1828, 6-8=-2018/1828
WEBS 4-9=-1203/804, 5-9=-730/976, 5-8=-359/332, 3-9=-730/977, 3-10=-359/332

NOTES-
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) 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 480 lb uplift at joint 2 and 480 lb uplift at joint 6.



Joaquin Velez PE No.68182
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Date:

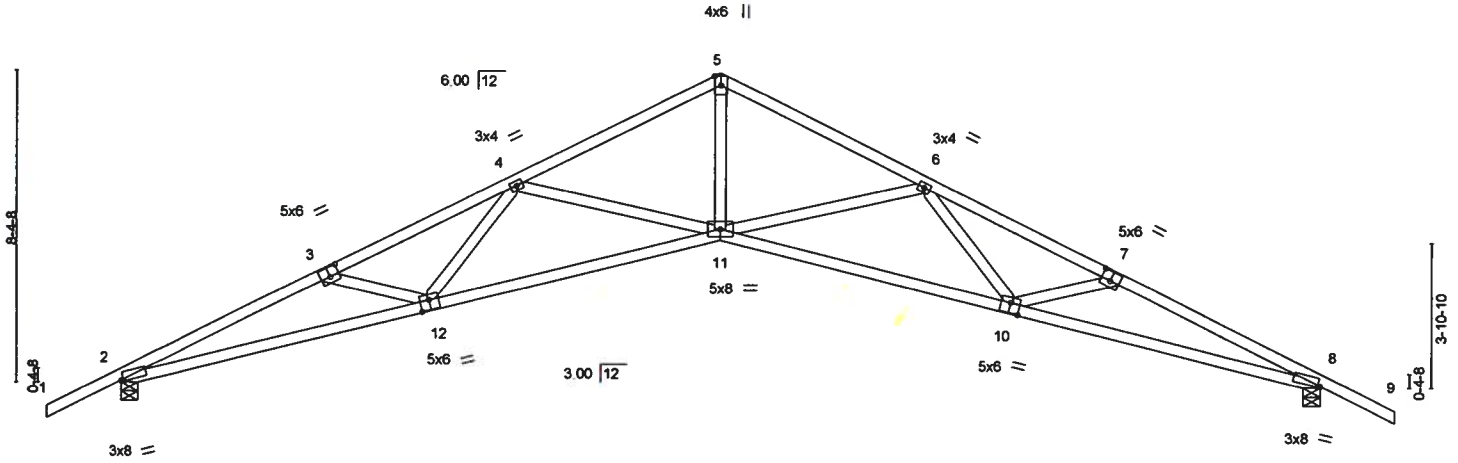
March 12,2020

Job	Truss	Truss Type	Qty	Ply	EDGLEY CONST. - JENKINS GARAGE	
2258668	T06	SCISSORS	14	1	Job Reference (optional)	T19669123

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Feb 7 2020 MiTek Industries, Inc. Thu Mar 12 08:57:40 2020 Page 1
ID:sEYaHzqKfFjjWC4MwRyP8HzjXg2-LT5dyV3jq7KjkK8GC_Bdd93pmSVxS?E5NWk49Qzbjsf

-2-0-0	5-7-1	10-6-13	16-0-0	21-5-3	26-4-15	32-0-0	34-0-0
2-0-0	5-7-1	4-11-12	5-5-3	5-5-3	4-11-12	5-7-1	2-0-0

Scale = 1:59.2



8-2-1	16-0-0	23-9-15	32-0-0
8-2-1	7-9-15	7-9-15	8-2-1

Plate Offsets (X,Y)-- [2:0-0-13,0-0-8], [3:0-3-0,0-3-0], [7:0-3-0,0-3-0], [8:0-0-13,0-0-8], [10:0-3-0,0-3-4], [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	0.70	Vert(LL)	-0.41	10-11	>940	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.91	Vert(CT)	-0.82	10-11	>471	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.50	8	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 151 lb	FT = 20%

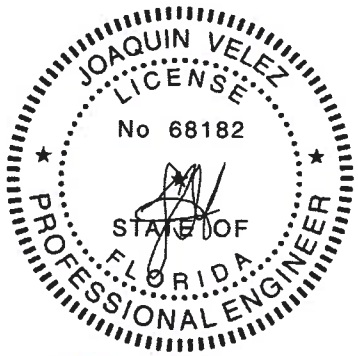
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 2-12,8-10: 2x4 SP M 31
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS. (size) 2=0-5-8, 8=0-5-8
Max Horz 2=122(LC 11)
Max Uplift 2=-286(LC 12), 8=-286(LC 13)
Max Grav 2=1292(LC 1), 8=1292(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3853/1911, 3-4=-3562/1721, 4-5=-2617/1236, 5-6=-2617/1236, 6-7=-3562/1751, 7-8=-3853/1948
BOT CHORD 2-12=-1597/3483, 11-12=-1262/3067, 10-11=-1274/3067, 8-10=-1641/3483
WEBS 5-11=-873/2009, 3-12=-245/305, 4-12=-136/480, 4-11=-731/561, 6-11=-731/560, 6-10=-134/480, 7-10=-245/303

NOTES-
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) 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 286 lb uplift at joint 2 and 286 lb uplift at joint 8.



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
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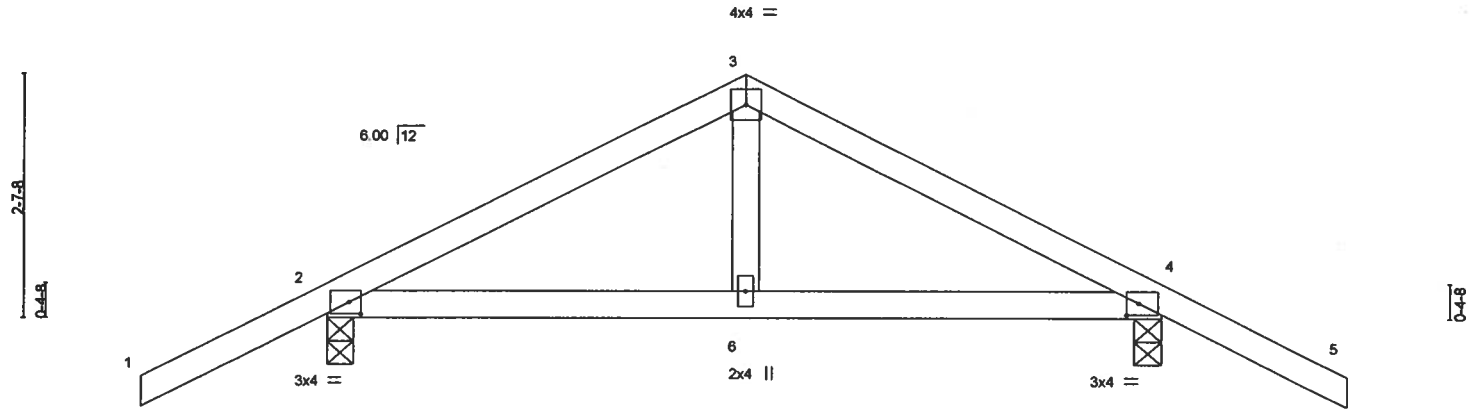
Date:
March 12,2020

Job	Truss	Truss Type	Qty	Ply	EDGLEY CONST. - JENKINS GARAGE	
2258668	T07	COMMON	18	1	Job Reference (optional)	T19669124

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Feb 7 2020 MiTek Industries, Inc. Thu Mar 12 08:57:41 2020 Page 1
ID:sEYaHzqKfFjjWC4MwRyP8HzjXg2-pge?Ar4LbQSaMTjSliis9Mb3Tr0FBcHEcATdhszbjse

-2-0-0 2-0-0 | 4-6-0 4-6-0 | 9-0-0 4-6-0 | 11-0-0 2-0-0

Scale: 1/2"=1'



4-6-0 4-6-0 | 9-0-0 4-6-0

Plate Offsets (X,Y)-- [2:0-1-8,0-1-9], [4:0-1-8,0-1-9]

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)	0.03	6-12	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.20	Vert(CT)	-0.02	6-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 38 lb	FT = 20%

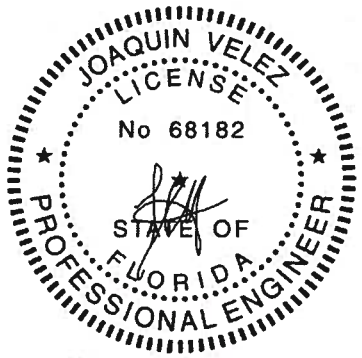
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-2-11 oc bracing.

REACTIONS. (size) 2=0-3-8, 4=0-3-8
Max Horz 2=-44(LC 10)
Max Uplift 2=-148(LC 8), 4=-148(LC 9)
Max Grav 2=441(LC 1), 4=441(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-401/592, 3-4=-401/592
BOT CHORD 2-6=-384/314, 4-6=-384/314
WEBS 3-6=-290/192

NOTES-
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) 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 148 lb uplift at joint 2 and 148 lb uplift at joint 4.



Joaquin Velez PE No.68182
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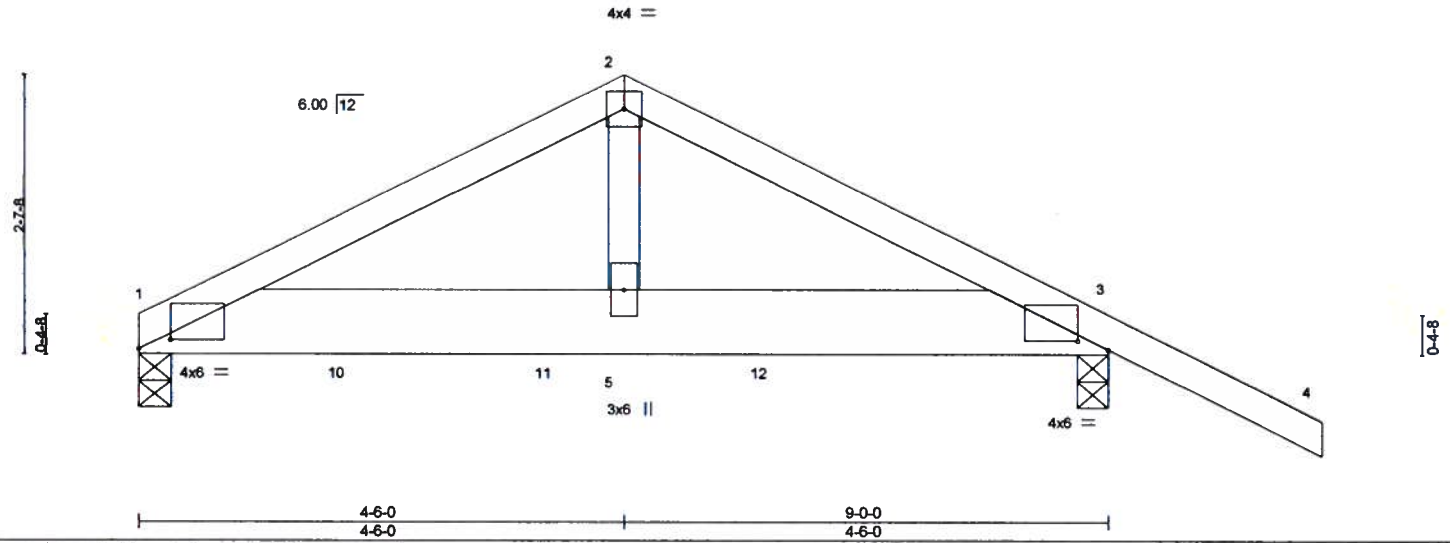
6904 Parke East Blvd. Tampa FL 33610
Date:
March 12,2020

Job	Truss	Truss Type	Qty	Ply	EDGLEY CONST. - JENKINS GARAGE	
2258658	T08	COMMON	1	1	Job Reference (optional)	T19669125

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Feb 7 2020 MiTek Industries, Inc. Thu Mar 12 08:57:42 2020 Page 1
ID:sEYaHzqKfFjjWC4MwRyP8HzjXg2-HsCNNB5zMkbR_dfJPD5ja8FMFNJw1NOrqDBElzbjsd

4-6-0 | 9-0-0 | 11-0-0
4-6-0 | 4-6-0 | 2-0-0

Scale = 1:20.7



4-6-0 | 9-0-0
4-6-0 | 4-6-0

Plate Offsets (X,Y)— [1:0-3-7,0-1-0], [3:0-3-7,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.31	Vert(LL)	-0.01	5-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.15	Vert(CT)	-0.02	5-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.21	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 49 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3

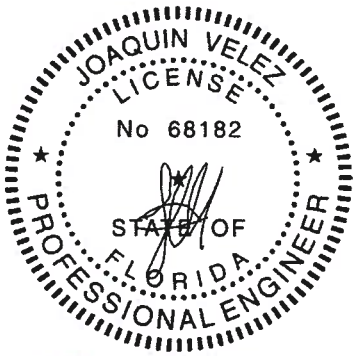
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 3=0-3-8
Max Horz 1=-56(LC 32)
Max Uplift 1=-241(LC 5), 3=-222(LC 9)
Max Grav 1=721(LC 1), 3=679(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-862/297, 2-3=-866/293
BOT CHORD 1-5=-212/736, 3-5=-212/736
WEBS 2-5=-223/556

NOTES-
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); porch left and right exposed; 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 241 lb uplift at joint 1 and 222 lb uplift at joint 3.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 360 lb down and 135 lb up at 1-11-4, 163 lb down and 96 lb up at 3-10-3, and 89 lb down and 65 lb up at 5-10-3, and 29 lb down and 22 lb up at 7-10-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-2=-54, 2-4=-54, 1-3=-20
Concentrated Loads (lb)
Vert: 9=-29 10=-360 11=-163 12=-89



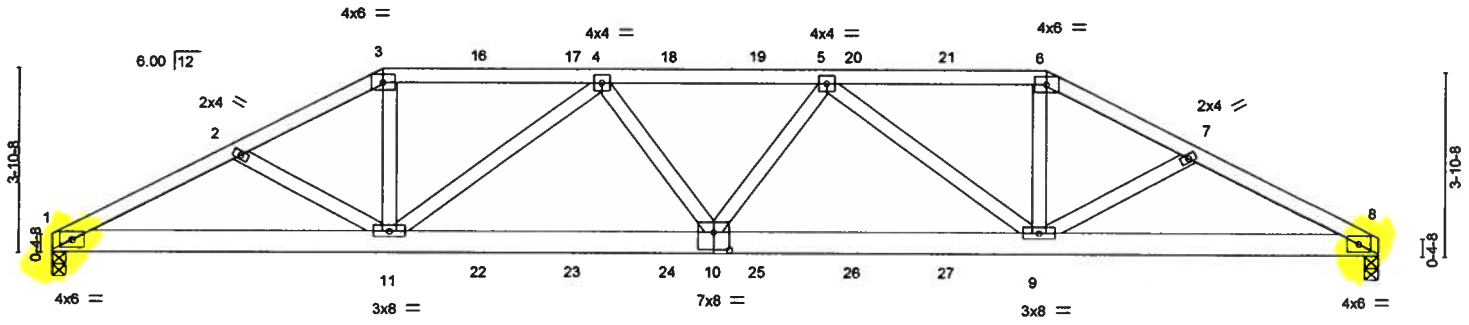
Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
March 12,2020

Job	Truss	Truss Type	Qty	Ply	EDGLEY CONST. - JENKINS GARAGE	
2258668	T09	Hip Girder	1	1	Job Reference (optional)	T19669126

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Feb 7 2020 MiTek Industries, Inc. Thu Mar 12 08:57:44 2020 Page 1
ID:sEYaHzqKfFjjWC4MwRyP8HzjXg2-DFK8ot6EuLr9DxR1RqFZn_DUN3tfOo6hI8illBzbjsb

3-11-15	7-0-0	11-7-10	16-4-6	21-0-0	24-0-1	28-0-0
3-11-15	3-0-1	4-7-10	4-8-13	4-7-10	3-0-1	3-11-15

Scale = 1:46.7



7-0-0	14-0-0	21-0-0	28-0-0
7-0-0	7-0-0	7-0-0	7-0-0

Plate Offsets (X,Y)— [10:0-4-0,0-4-8]

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	0.73	Vert(LL)	0.37	9-10	>918	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.92	Vert(CT)	-0.43	9-10	>779	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.77	Horz(CT)	0.12	8	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 157 lb	FT = 20%

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

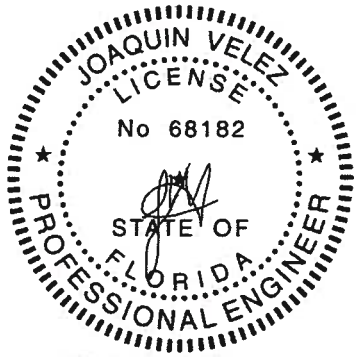
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-4-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 4-3-5 oc bracing.

REACTIONS. (size) 1=0-3-8, 8=0-3-8
Max Horz 1=-48(LC 4)
Max Uplift 1=-1204(LC 5), 8=-1258(LC 4)
Max Grav 1=1946(LC 1), 8=1983(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-4012/2518, 2-3=-3846/2496, 3-4=-3471/2287, 4-5=-4538/2975, 5-6=-3543/2392, 6-7=-3928/2616, 7-8=-4093/2638
BOT CHORD 1-11=-2265/3560, 10-11=-2829/4403, 9-10=-2852/4428, 8-9=-2325/3633
WEBS 3-11=-923/1342, 4-11=-1237/777, 4-10=-222/367, 5-10=-151/347, 5-9=-1167/682, 6-9=-864/1305

NOTES-
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); porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1204 lb uplift at joint 1 and 1258 lb uplift at joint 8.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 125 lb down and 100 lb up at 7-0-0, 106 lb down and 100 lb up at 9-0-12, 106 lb down and 100 lb up at 11-0-12, 106 lb down and 100 lb up at 13-0-12, 106 lb down and 100 lb up at 14-11-4, 106 lb down and 100 lb up at 16-11-4, and 106 lb down and 100 lb up at 18-11-4, and 227 lb down and 252 lb up at 21-0-0 on top chord, and 294 lb down and 335 lb up at 7-0-0, 85 lb down and 82 lb up at 9-0-12, 85 lb down and 82 lb up at 11-0-12, 85 lb down and 82 lb up at 13-0-12, 85 lb down and 82 lb up at 14-11-4, 85 lb down and 82 lb up at 16-11-4, and 85 lb down and 82 lb up at 18-11-4, and 294 lb down and 335 lb up at 20-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-54, 3-6=-54, 6-8=-54, 1-8=-20



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March 12,2020

Continued on page 2

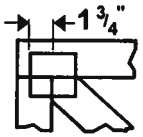
LOAD CASE(S) Standard

Concentrated Loads (lb)

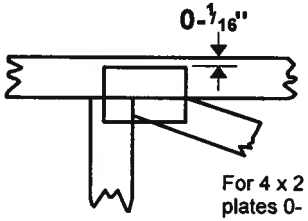
Vert: 3=-106(F) 6=-180(F) 11=-284(F) 9=-284(F) 16=-106(F) 17=-106(F) 18=-106(F) 19=-106(F) 20=-106(F) 21=-106(F) 22=-61(F) 23=-61(F) 24=-61(F) 25=-61(F) 26=-61(F) 27=-61(F)

Symbols

PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

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

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

PLATE SIZE

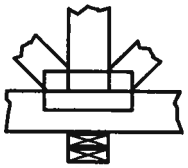
4 x 4

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

LATERAL BRACING LOCATION

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

BEARING

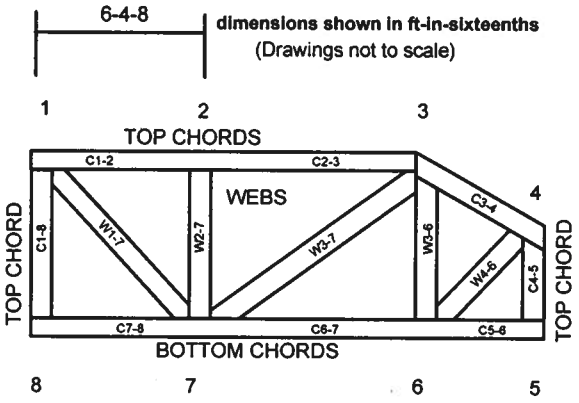


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

MiTek®

MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

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

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

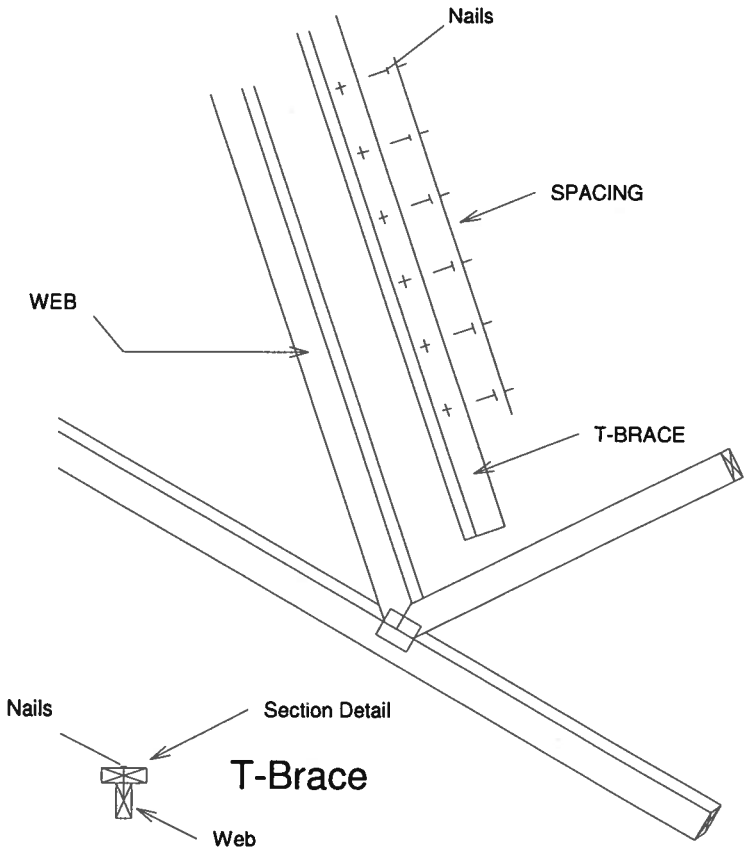
Note: This detail NOT to be used to convert T-Brace / I-Brace webs to continuous lateral braced webs.

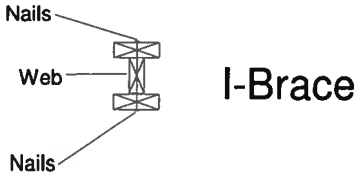
Nailing Pattern		
T-Brace size	Nail Size	Nail Spacing
2x4 or 2x6 or 2x8	10d (0.131" X 3")	6" o.c.
Note: Nail along entire length of T-Brace / I-Brace (On Two-Ply's Nail to Both Plies)		

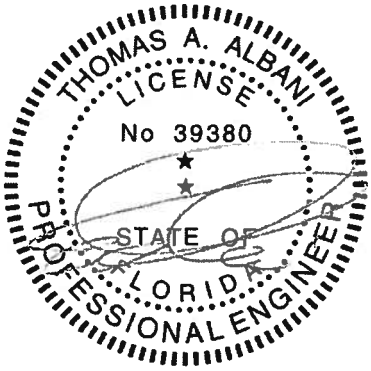
	Brace Size for One-Ply Truss	
	Specified Continuous Rows of Lateral Bracing	
Web Size	1	2
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace
2x6	2x6 T-Brace	2x6 I-Brace
2x8	2x8 T-Brace	2x8 I-Brace

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

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







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February 12, 2018

AUGUST 1, 2016	SCAB-BRACE DETAIL	MII-SCAB-BRACE

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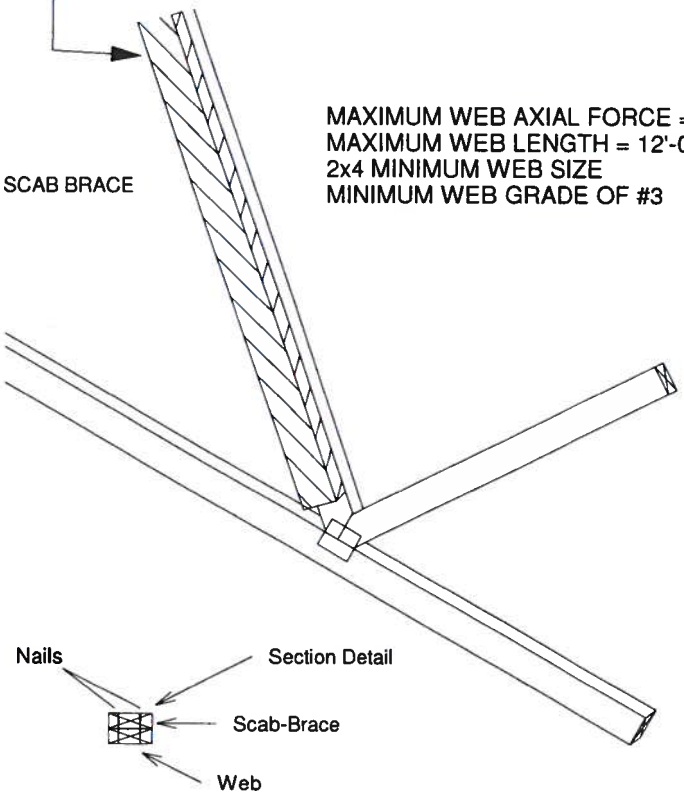
Note: Scab-Bracing to be used when continuous lateral bracing at midpoint (or T-Brace) is impractical.
Scab must cover full length of web +/- 6".

*** THIS DETAIL IS NOT APLICABLE WHEN BRACING IS *** REQUIRED AT 1/3 POINTS OR I-BRACE IS SPECIFIED.

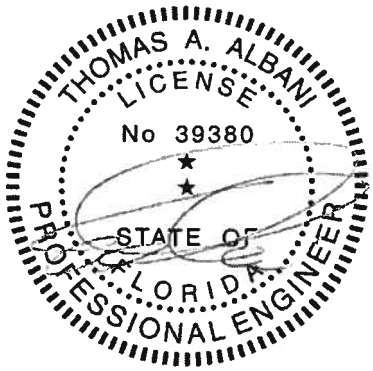
APPLY 2x___ SCAB TO ONE FACE OF WEB WITH
2 ROWS OF 10d (0.131" X 3") NAILS SPACED 6" O.C.
SCAB MUST BE THE SAME GRADE, SIZE AND
SPECIES (OR BETTER) AS THE WEB.

SCAB BRACE

MAXIMUM WEB AXIAL FORCE = 2500 lbs
MAXIMUM WEB LENGTH = 12'-0"
2x4 MINIMUM WEB SIZE
MINIMUM WEB GRADE OF #3



Scab-Brace must be same species grade (or better) as web member.



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

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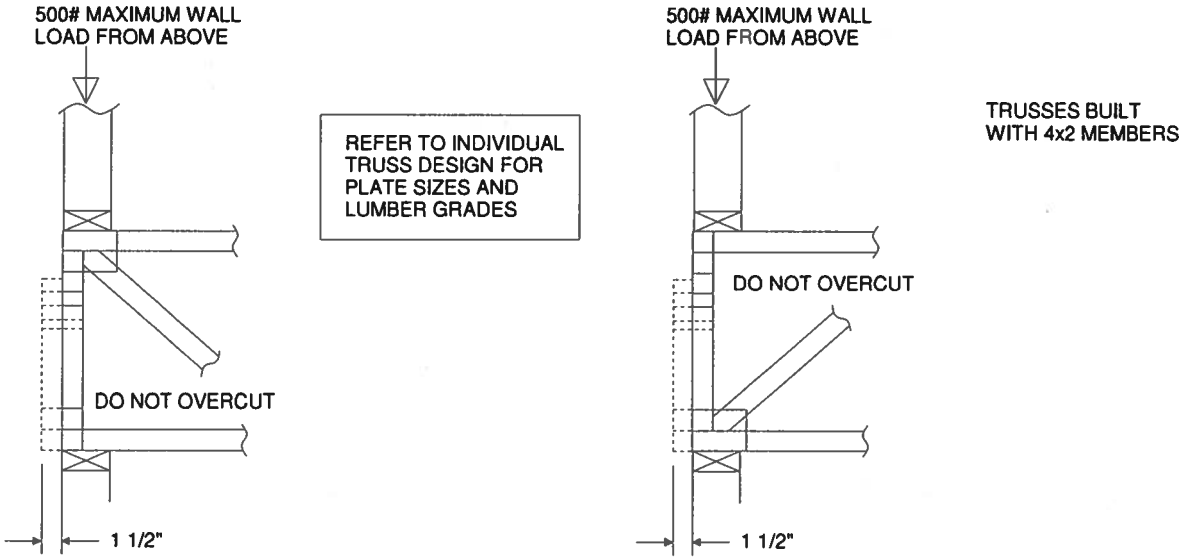
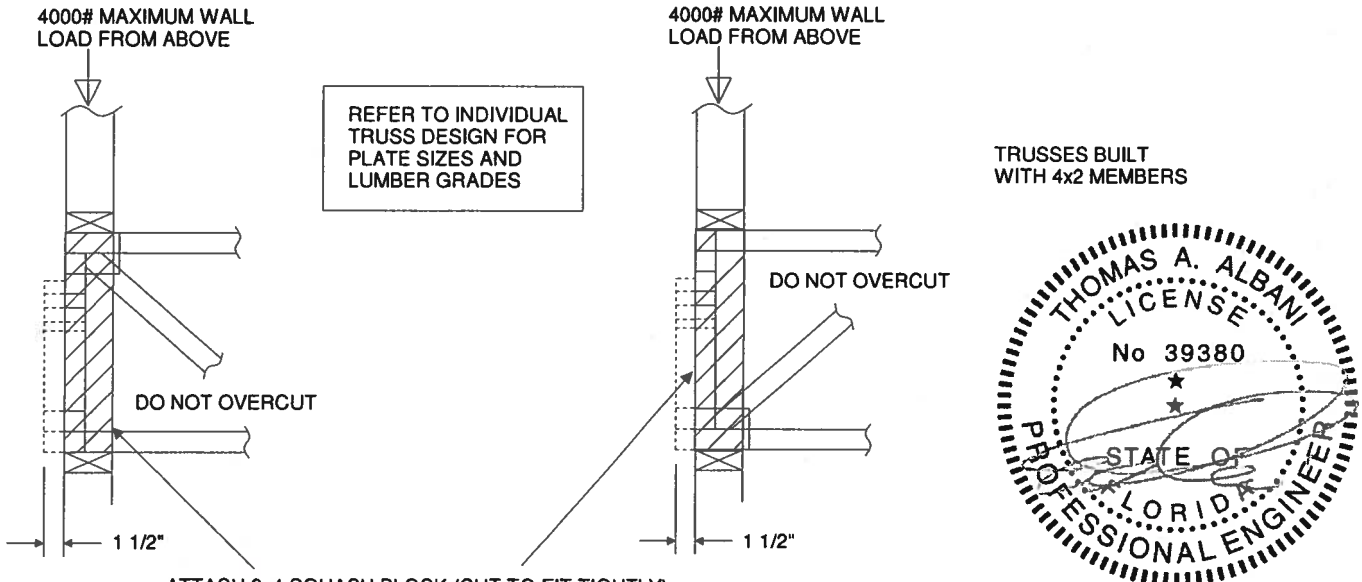
1. THIS IS A SPECIFIC REPAIR DETAIL TO BE USED ONLY FOR ITS ORIGINAL INTENTION. THIS REPAIR DOES NOT IMPLY THAT THE REMAINING PORTION OF THE TRUSS IS UNDAMAGED. THE ENTIRE TRUSS SHALL BE INSPECTED TO VERIFY THAT NO FURTHER REPAIRS ARE REQUIRED. WHEN THE REQUIRED REPAIRS ARE PROPERLY APPLIED, THE TRUSS 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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AUGUST 1, 2016	Standard Gable End Detail	MII-GE130-D-SP

MiTek USA, Inc. Page 1 of 2

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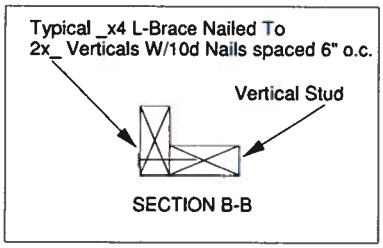
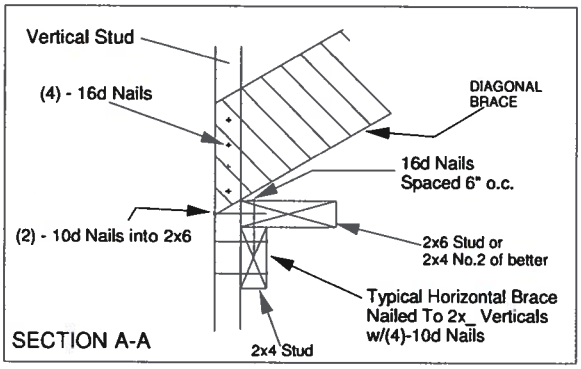
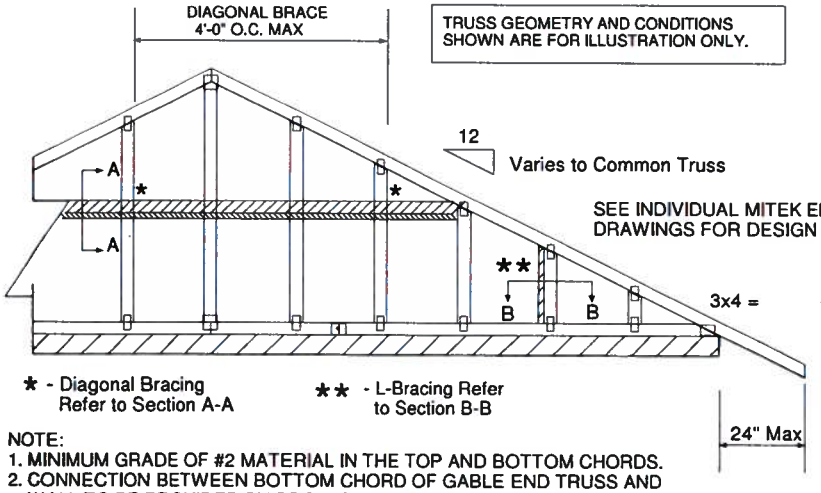






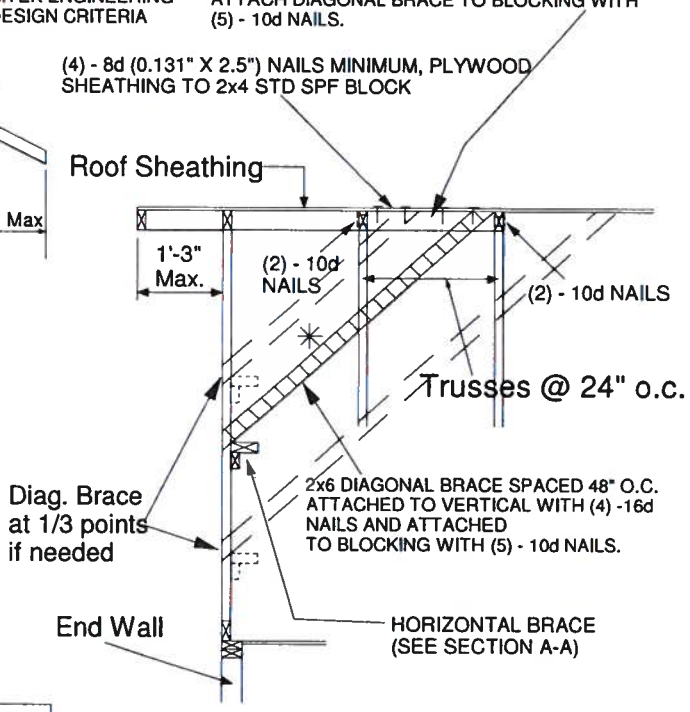
TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY.

SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA

* - Diagonal Bracing Refer to Section A-A

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

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.



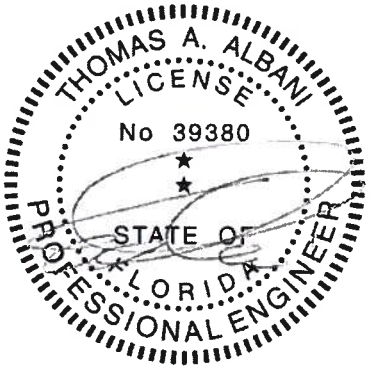
NOTE:
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF 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.	3-9-13	4-1-1	5-9-6	7-1-3	11-5-7
2x4 SP No. 3 / Stud	16" O.C.	3-5-4	3-6-8	5-0-2	6-10-8	10-3-13
2x4 SP No. 3 / Stud	24" O.C.	2-9-11	2-10-11	4-1-1	5-7-6	8-5-1

✳ 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 D
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-GE130-SP

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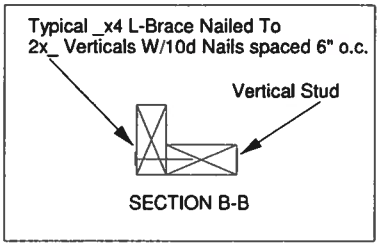
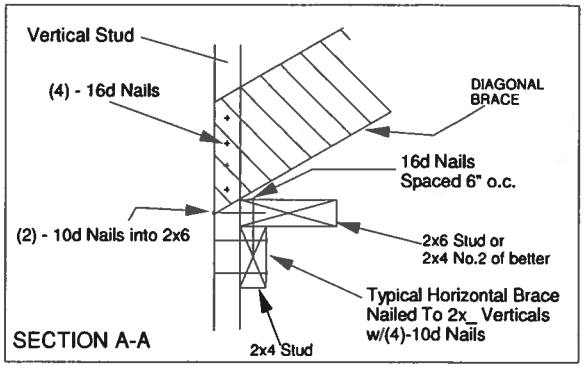
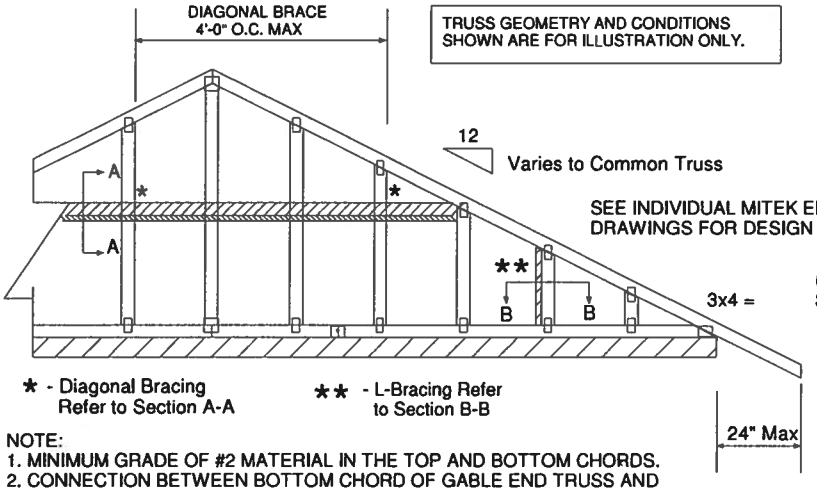
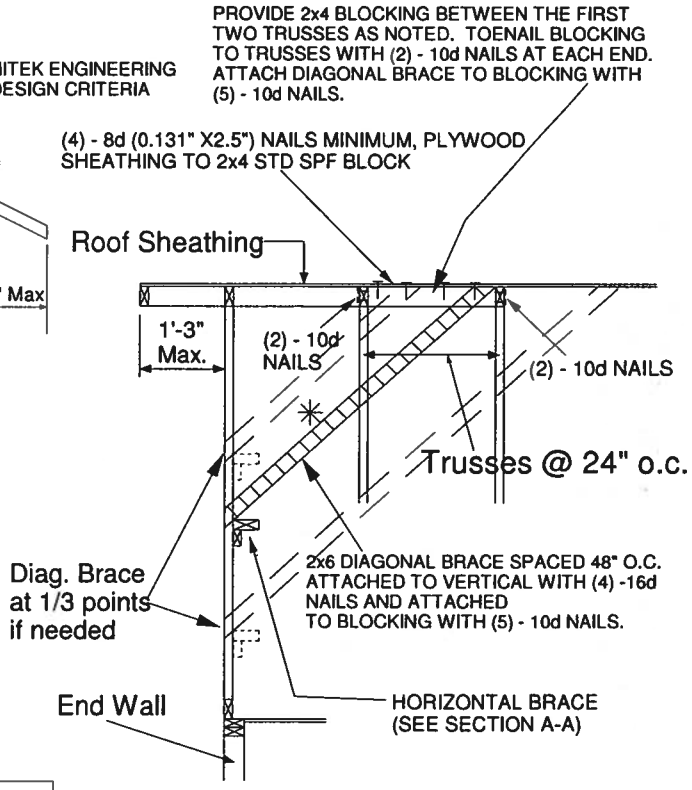






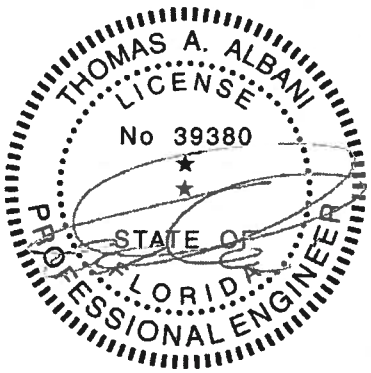


NOTE:
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF 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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Date:
February 12, 2018

JANUARY 6, 2017	Standard Gable End Detail	MII-GE140-001

MiTek USA, Inc. Page 1 of 2

MiTek USA, Inc.
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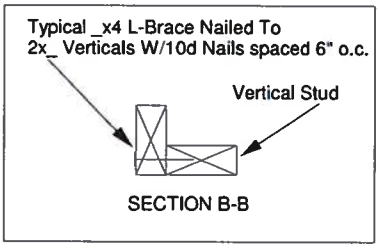
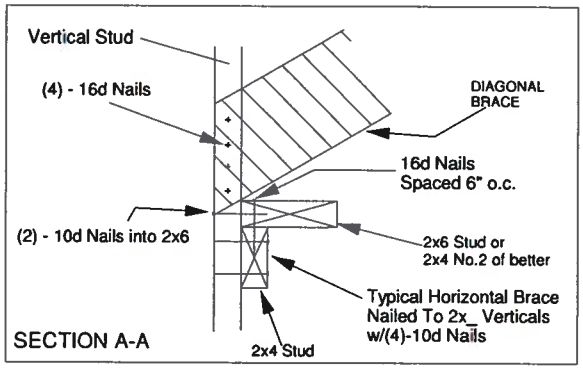
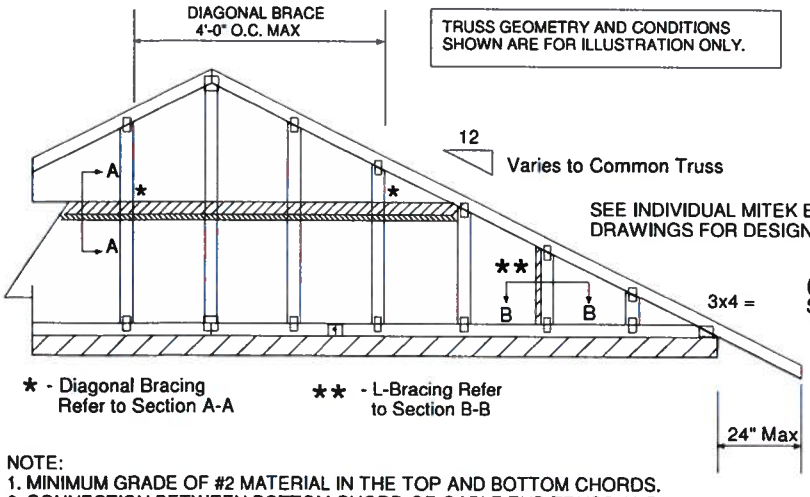
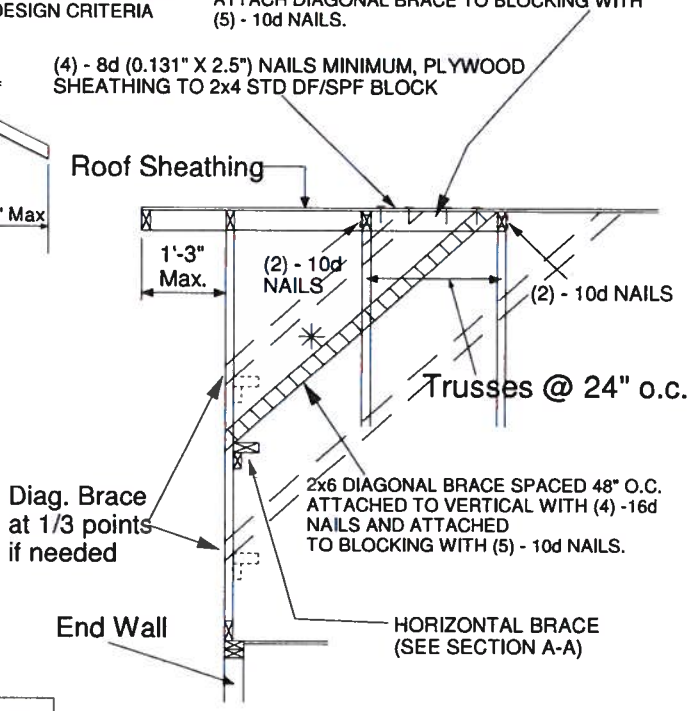






PROVIDE 2x4 BLOCKING BETWEEN THE FIRST TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. ATTACH DIAGONAL BRACE TO BLOCKING WITH (5) - 10d NAILS.



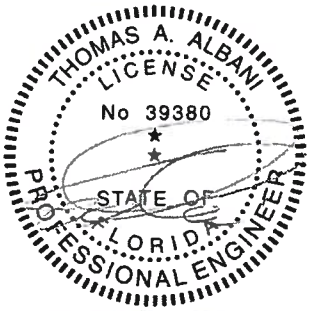
NOTE:
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF 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. 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 DF/SPF Std/Stud	12" O.C.	3-10-1	3-11-7	5-7-2	7-8-2	11-6-4
2x4 DF/SPF Std/Stud	16" O.C.	3-3-14	3-5-1	4-10-2	6-7-13	9-11-11
2x4 DF/SPF Std/Stud	24" O.C.	2-8-9	2-9-8	3-11-7	5-5-2	8-1-12

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

MAXIMUM WIND SPEED = 140 MPH
MAX MEAN ROOF HEIGHT = 30 FEET
CATEGORY II BUILDING
EXPOSURE B or C
ASCE 7-98, ASCE 7-02, ASCE 7-05
DURATION OF LOAD INCREASE : 1.60

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



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	Standard Gable End Detail	MII-GE170-D-SP

MiTek USA, Inc.

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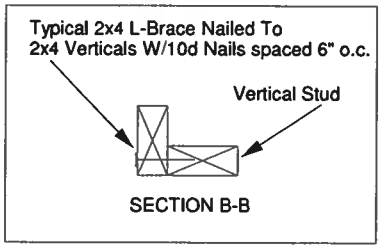
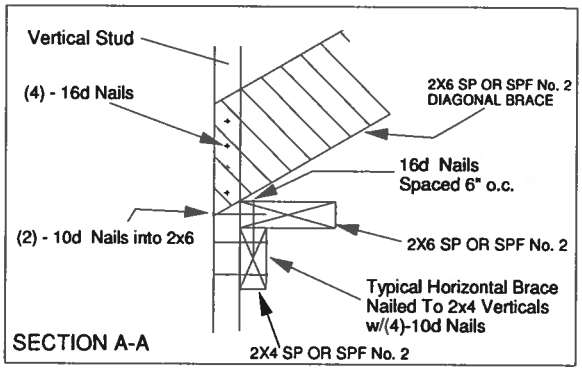
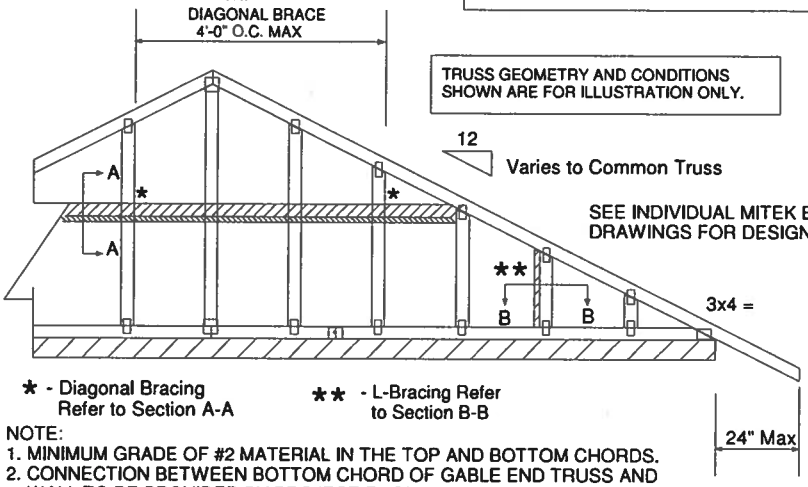






TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY.

SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA

* - Diagonal Bracing Refer to Section A-A

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

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

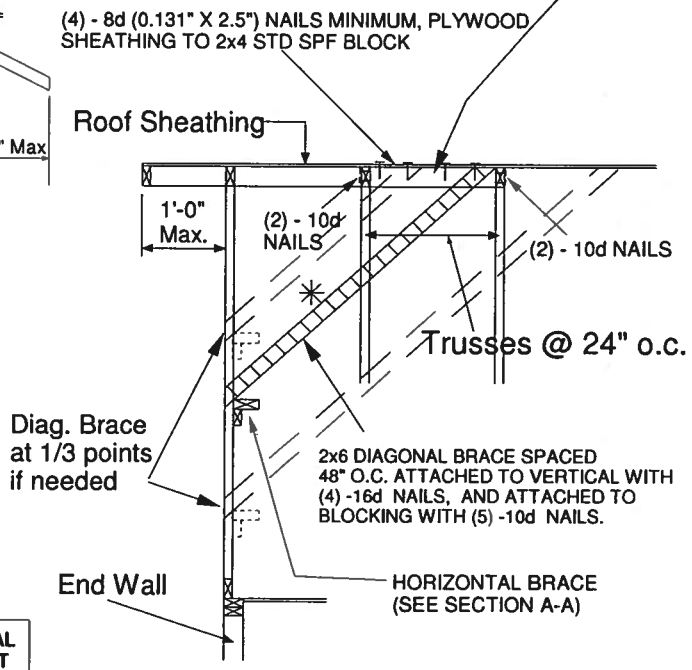
Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
		Maximum Stud Length			
2x4 SP No. 3 / Stud	12" O.C.	3-9-7	5-8-8	6-11-1	11-4-4
2x4 SP No. 3 / Stud	16" O.C.	3-4-12	4-11-15	6-9-8	10-2-3
2x4 SP No. 3 / Stud	24" O.C.	2-9-4	4-0-7	5-6-8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

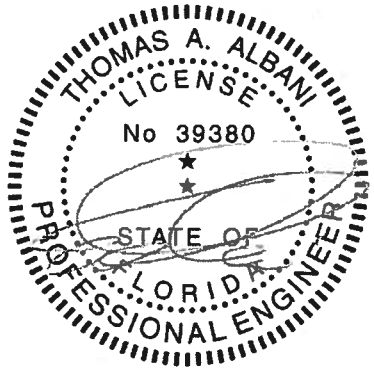
✳ Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of diagonal brace with 10d nails 6" o.c., with 3" minimum end distance. Brace must cover 90% of diagonal length. T or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

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

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

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.





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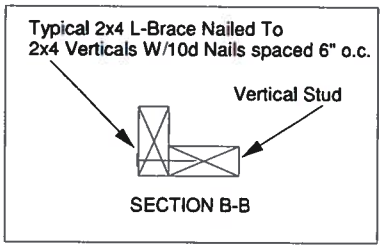
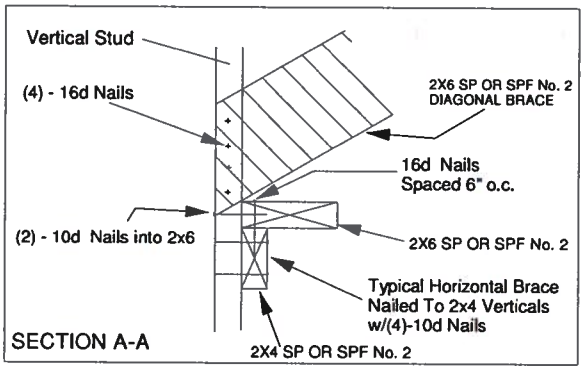
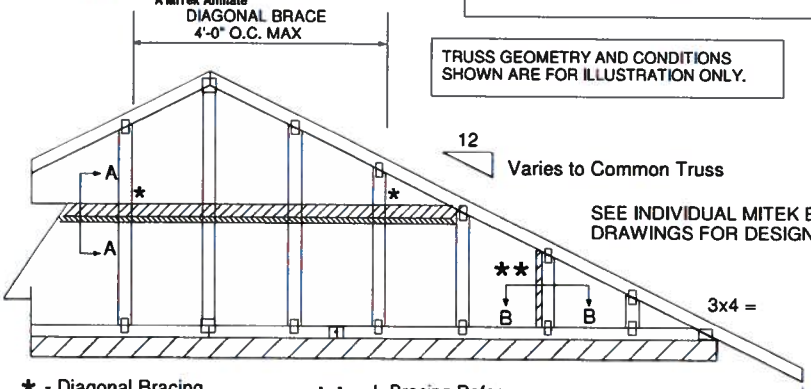
Date:
February 12, 2018

AUGUST 1, 2016	Standard Gable End Detail	MII-GE180-D-SP

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate







TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY.

SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA

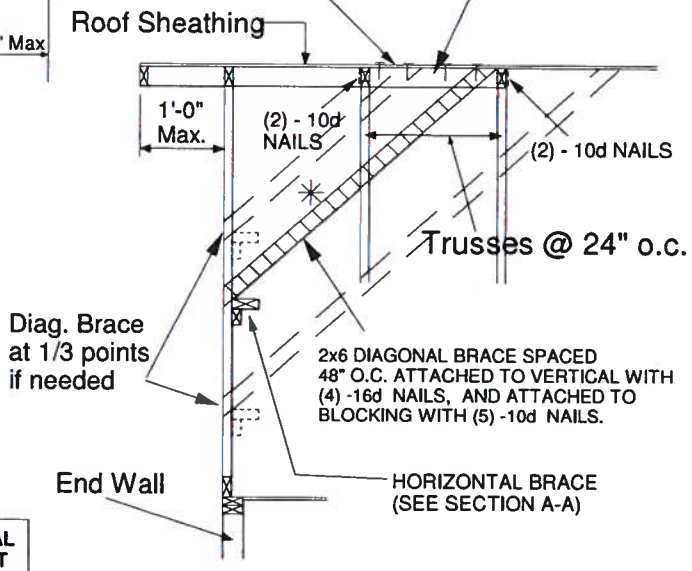
PROVIDE 2x4 BLOCKING BETWEEN THE FIRST TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. ATTACH DIAGONAL BRACE TO BLOCKING WITH (5) - 10d NAILS.

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

* - Diagonal Bracing Refer to Section A-A

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

24" Max



NOTE:
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2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
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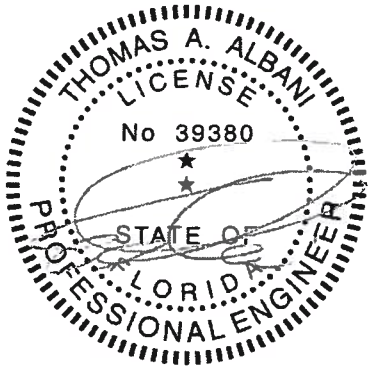
5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C.
6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 AND A 2x4 AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST GABLE STUD. ATTACH TO VERTICAL GABLE STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
7. GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.
8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
9. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
10. SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE 06-01-13 BY SPIB/ALSC.
11. NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

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

✳ 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 6in o.c., with 3in 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 7-10 180 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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6904 Parke East Blvd. Tampa FL 33610
Date:
February 12, 2018

AUGUST 1, 2016	STANDARD PIGGYBACK TRUSS CONNECTION DETAIL	MII-PIGGY-7-10

MiTek USA, Inc. Page 1 of 1

MiTek USA, Inc.

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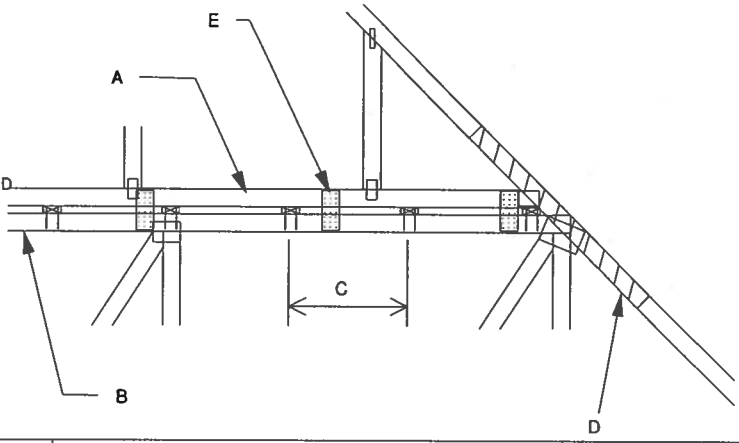
MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E
MAX MEAN ROOF HEIGHT = 30 FEET
MAX TRUSS SPACING = 24 " O.C.
CATEGORY II BUILDING
EXPOSURE B or C
ASCE 7-10
DURATION OF LOAD INCREASE : 1.60

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

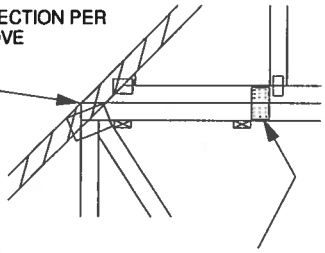
A - PIGGBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) (0.131" X 3.5") TOE-NAILED.
B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING. CONNECT 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)



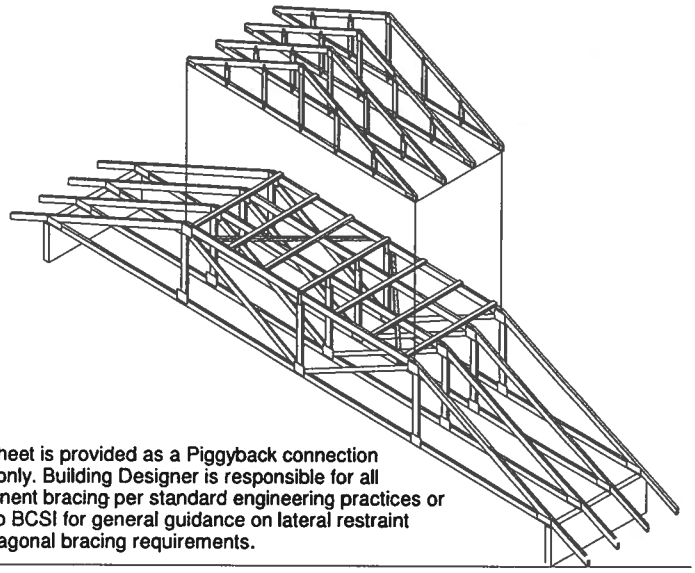
WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

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

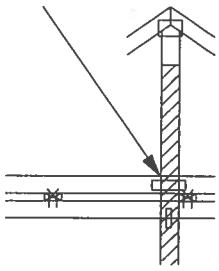


FOR ALL WIND SPEEDS, ATTACH MITEK 3X6 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 48" O.C. W/ (4) (0.131" X 1.5") PER MEMBER. STAGGER NAILS FROM OPPOSING FACES ENSURE 0.5" EDGE DISTANCE.



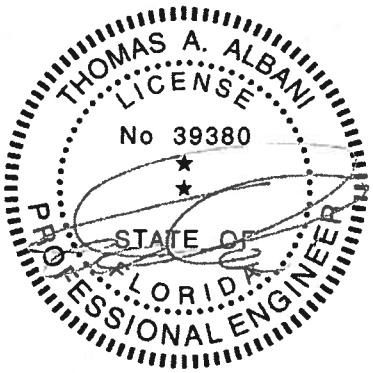
This sheet is provided as a Piggyback connection detail only. Building Designer is responsible for all permanent bracing per standard engineering practices or refer to BCSI for general guidance on lateral restraint and diagonal bracing requirements.

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

AUGUST 1, 2016	STANDARD PIGGYBACK TRUSS CONNECTION DETAIL	MII-PIGGY-ALT 7-10

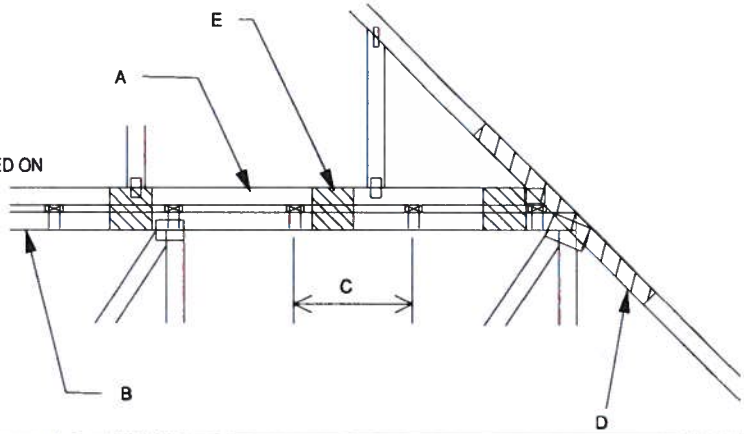
MiTek USA, Inc. Page 1 of 1

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(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.

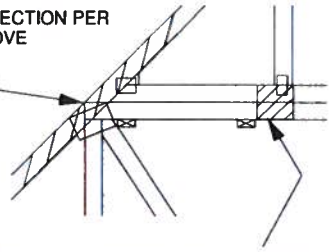
E - FOR WIND SPEED IN THE RANGE 126 MPH - 160 MPH ADD 9" x 9" x 1/2" PLYWOOD (or 7/16" OSB) GUSSET EACH SIDE AT 48" O.C. OR LESS. ATTACH WITH 3 - 6d (0.113" X 2") NAILS INTO EACH CHORD FROM EACH SIDE (TOTAL - 12 NAILS)



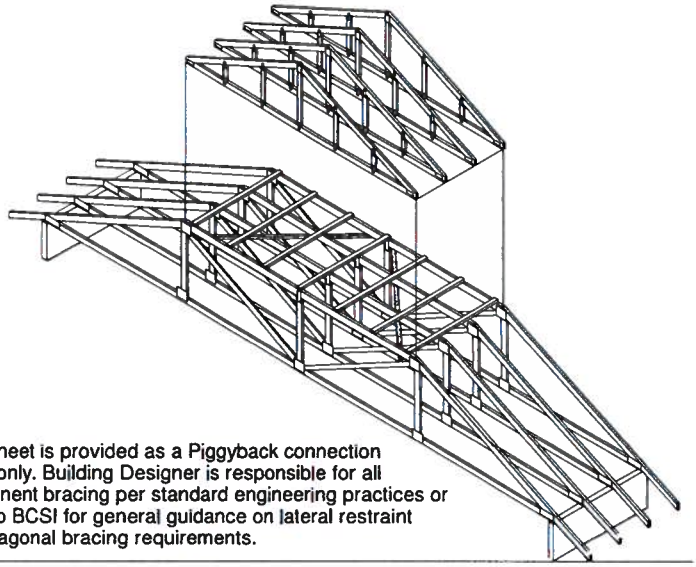
WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

REPLACE TOE NAILING OF PIGGYBACK TRUSS TO PURLINS WITH PLYWOOD GUSSETS 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

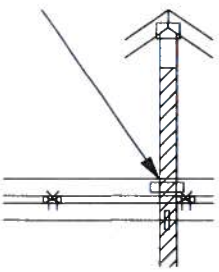


7" x 7" x 1/2" PLYWOOD (or 7/16" OSB) GUSSET EACH SIDE AT 24" O.C. ATTACH WITH 3 - 6d (0.113" X 2") NAILS INTO EACH CHORD FROM EACH SIDE (TOTAL - 12 NAILS)



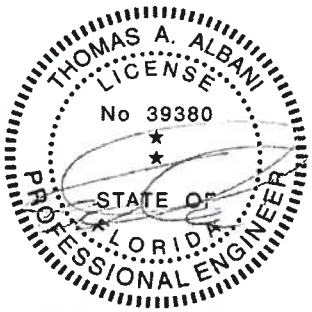
This sheet is provided as a Piggyback connection detail only. Building Designer is responsible for all permanent bracing per standard engineering practices or refer to BCSI for general guidance on lateral restraint and diagonal bracing requirements.

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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Date:

January 19, 2018

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

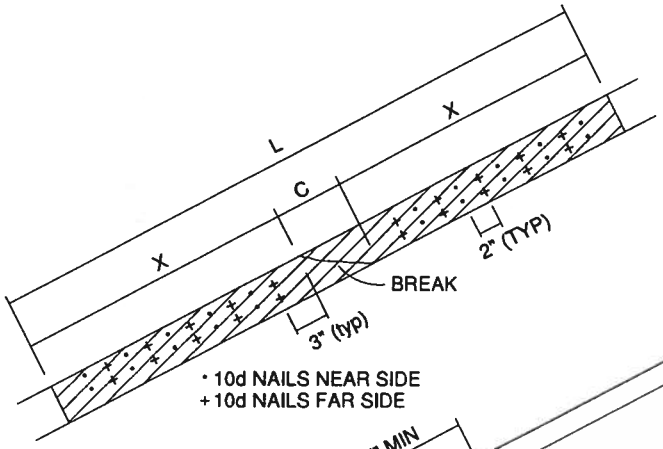
MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

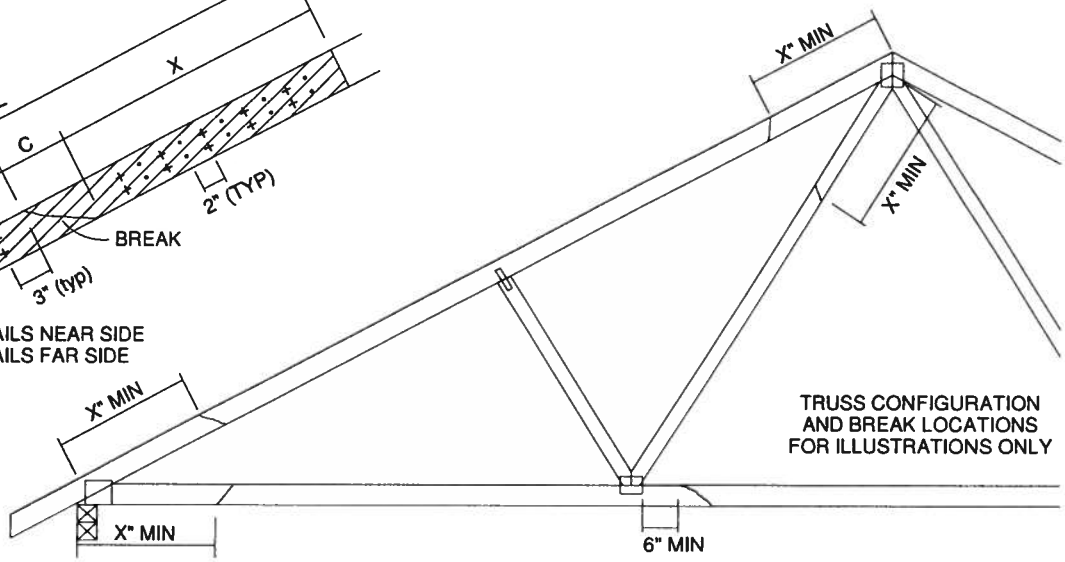
TOTAL NUMBER OF NAILS EACH SIDE OF BREAK *		X INCHES	MAXIMUM FORCE (lbs) 15% LOAD DURATION							
			SP		DF		SPF		HF	
2x4	2x6		2x4	2x6	2x4	2x6	2x4	2x6	2x4	2x6
20	30	24"	1706	2559	1561	2342	1320	1980	1352	2028
26	39	30"	2194	3291	2007	3011	1697	2546	1738	2608
32	48	36"	2681	4022	2454	3681	2074	3111	2125	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

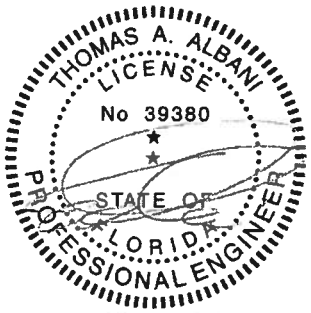




THE LOCATION OF THE BREAK MUST BE GREATER THAN OR EQUAL TO THE REQUIRED X DIMENSION FROM ANY PERIMETER BREAK OR HEEL JOINT AND A MINIMUM OF 6" FROM ANY INTERIOR JOINT (SEE SKETCH ABOVE)

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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AUGUST 1, 2016	LATERAL TOE-NAIL DETAIL	MII-TOENAIL_SP

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

NOTES:
1. TOE-NAILS SHALL BE DRIVEN AT AN ANGLE OF 45 DEGREES WITH THE MEMBER AND MUST HAVE FULL WOOD SUPPORT. (NAIL MUST BE DRIVEN THROUGH AND EXIT AT THE BACK CORNER OF THE MEMBER END AS SHOWN.
2. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.
3. ALLOWABLE VALUE SHALL BE THE LESSER VALUE OF THE TWO SPECIES FOR MEMBERS OF DIFFERENT SPECIES.

THIS DETAIL APPLICABLE TO THE THREE END DETAILS SHOWN BELOW

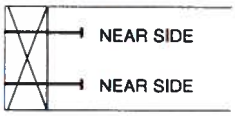
VIEWS SHOWN ARE FOR ILLUSTRATION PURPOSES ONLY

TOE-NAIL SINGLE SHEAR VALUES PER NDS 2001 (lb/nail)

	DIAM.	SP	DF	HF	SPF	SPF-S
3.5" LONG	.131	88.0	80.6	69.9	68.4	59.7
	.135	93.5	85.6	74.2	72.6	63.4
	.162	108.8	99.6	86.4	84.5	73.8
3.25" LONG	.128	74.2	67.9	58.9	57.6	50.3
	.131	75.9	69.5	60.3	59.0	51.1
	.148	81.4	74.5	64.6	63.2	52.5

VALUES SHOWN ARE CAPACITY PER TOE-NAIL.
APPLICABLE DURATION OF LOAD INCREASES MAY BE APPLIED.

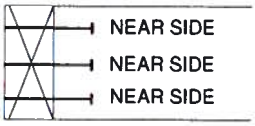
SIDE VIEW
(2x3)
2 NAILS



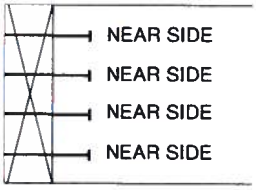
EXAMPLE:
(3) - 16d (0.162" X 3.5") NAILS WITH SPF SPECIES BOTTOM CHORD

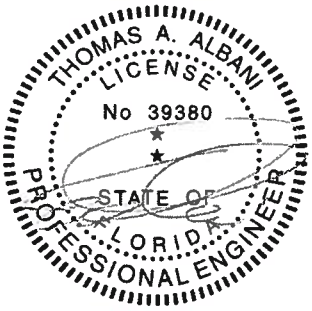
For load duration increase of 1.15:
3 (nails) X 84.5 (lb/nail) X 1.15 (DOL) = 291.5 lb Maximum Capacity

SIDE VIEW
(2x4)
3 NAILS



SIDE VIEW
(2x6)
4 NAILS





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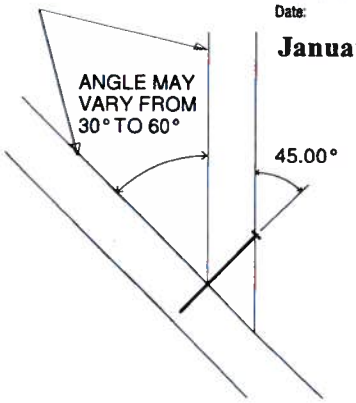
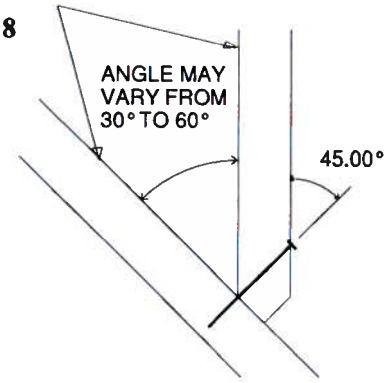
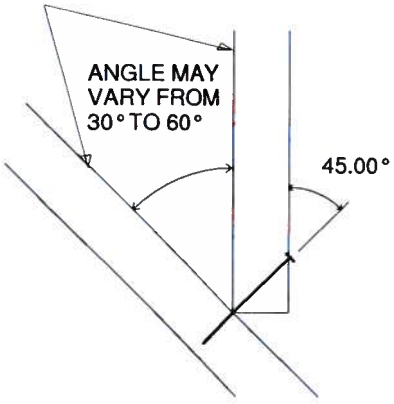




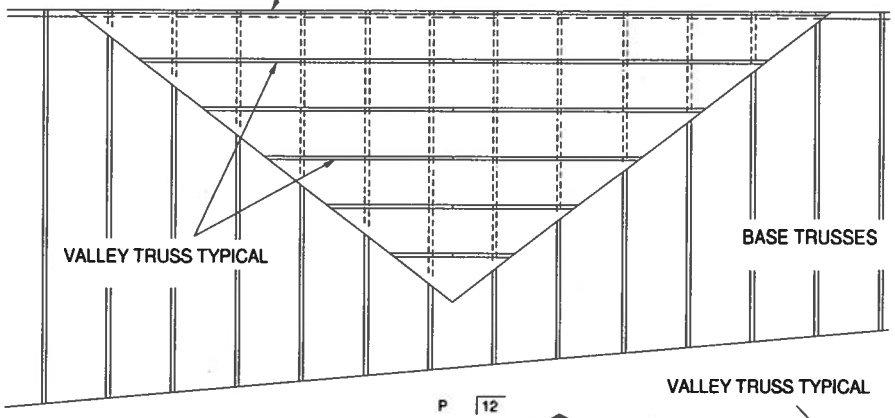


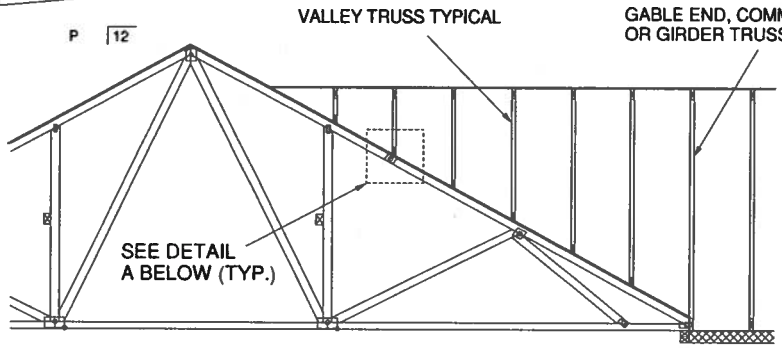
AUGUST 1, 2016	TRUSSED VALLEY SET DETAIL	MII-VALLEY HIGH WIND1

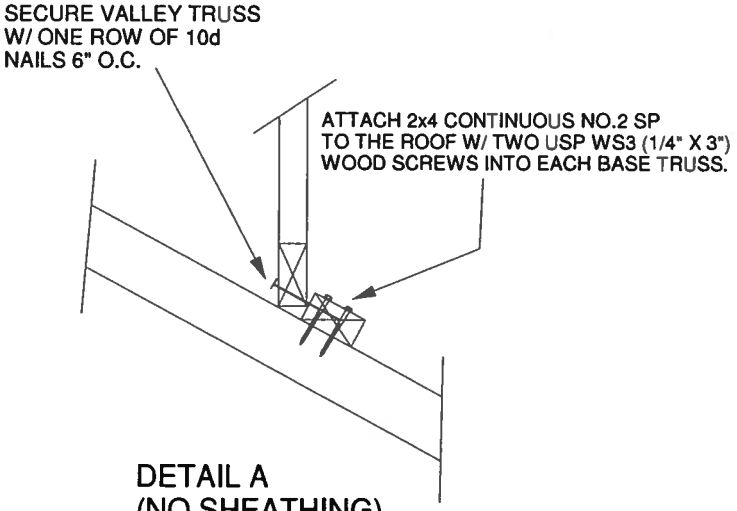
MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

GENERAL SPECIFICATIONS

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

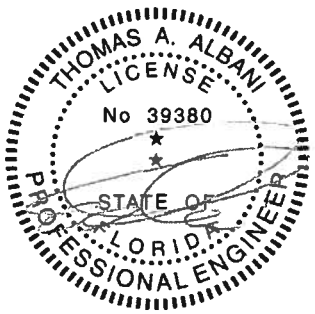






DETAIL A
(NO SHEATHING)
N.T.S.

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



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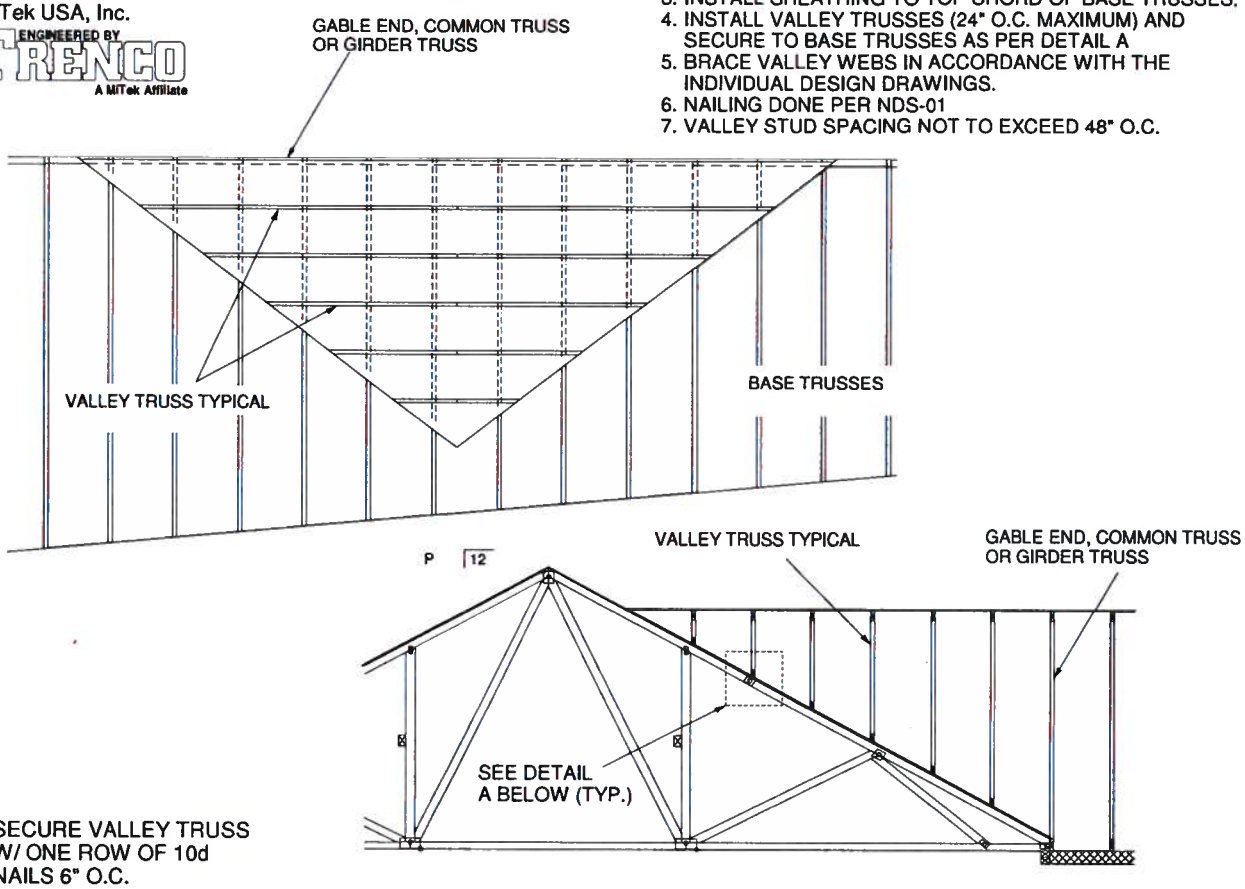
Date:
January 19, 2018

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

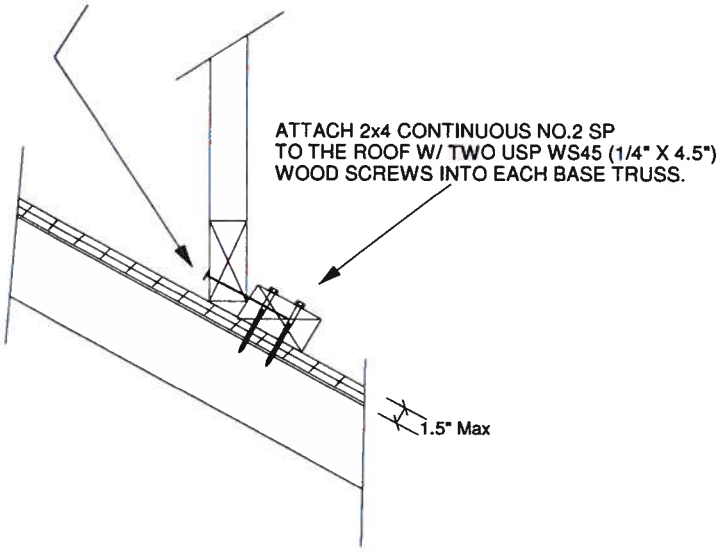
MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

GENERAL SPECIFICATIONS

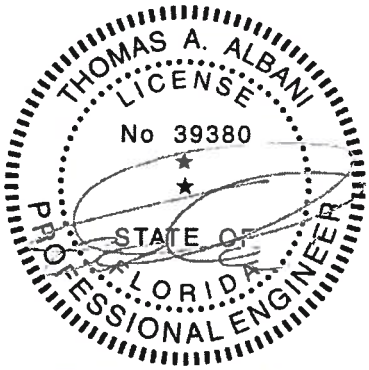
1. NAIL SIZE 10d (0.131" X 3")
2. WOOD SCREW = 4.5" WS45 USP OR EQUILIVANT
3. INSTALL SHEATHING TO TOP CHORD OF BASE TRUSSES.
4. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE TO BASE TRUSSES AS PER DETAIL A
5. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
6. NAILING DONE 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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February 12, 2018

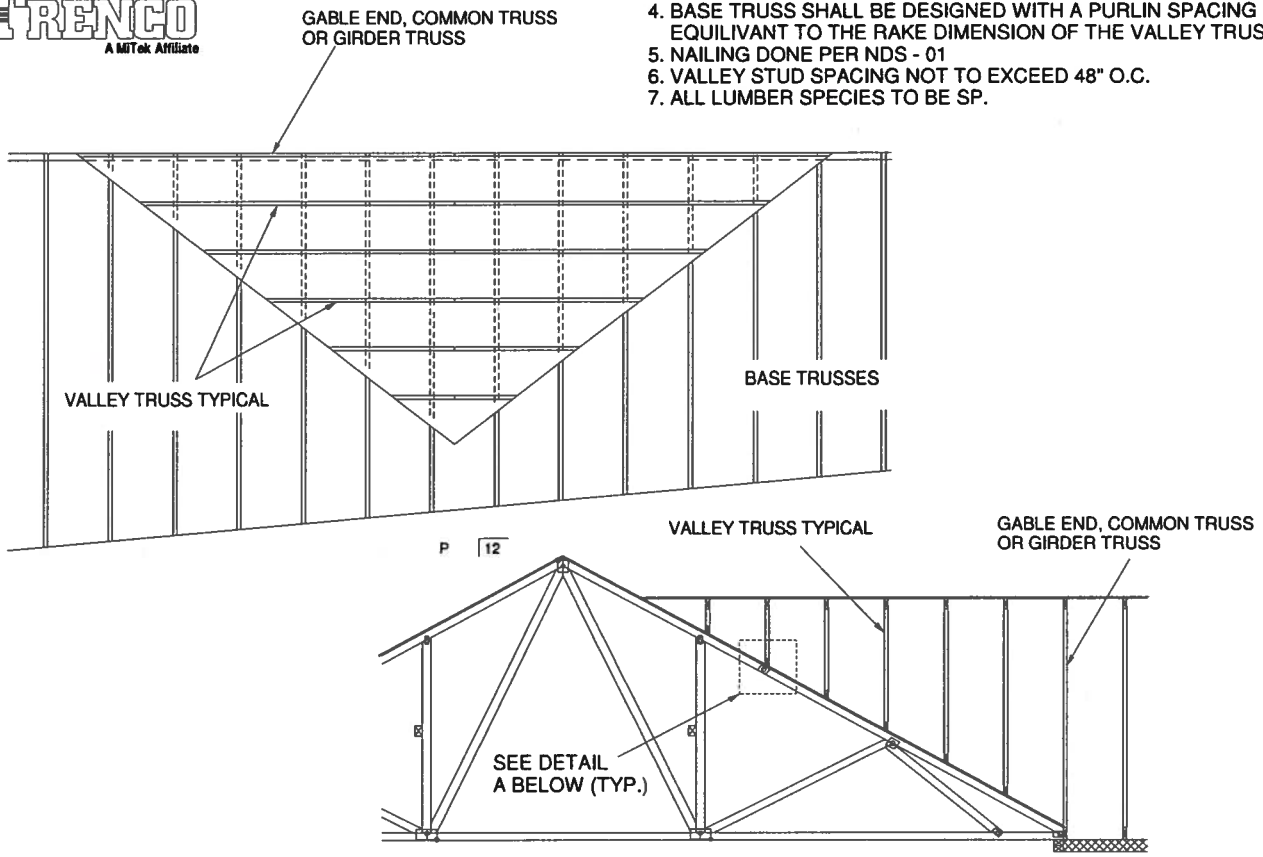
AUGUST 1, 2016	TRUSSED VALLEY SET DETAIL	MII-VALLEY SP

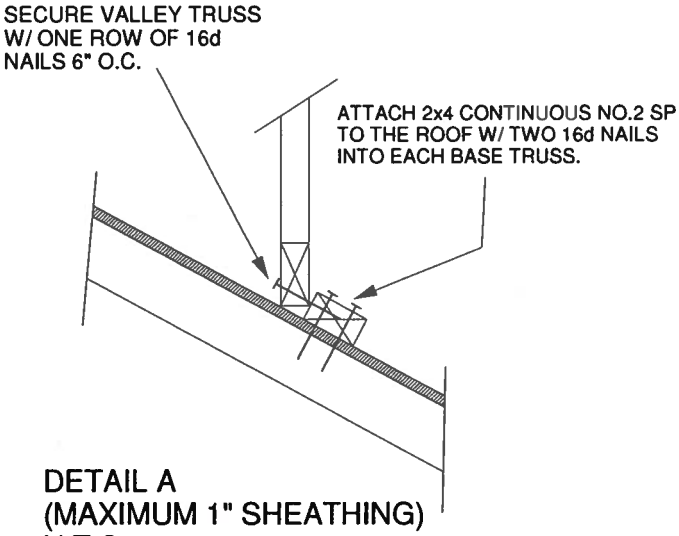
MiTek USA, Inc.

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

GENERAL SPECIFICATIONS

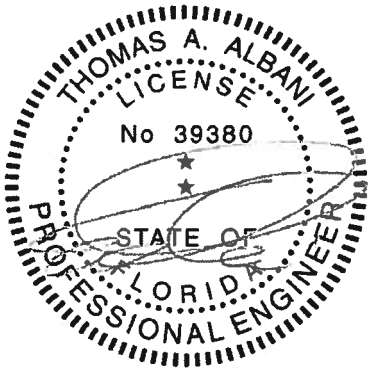
1. NAIL SIZE 16d (0.131" X 3.5")
2. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE PER DETAIL A
3. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
4. BASE TRUSS SHALL BE DESIGNED WITH A PURLIN SPACING EQUILIVANT TO THE RAKE DIMENSION OF THE VALLEY TRUSS SPACING.
5. NAILING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





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

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



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February 12, 2018

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

MiTek USA, Inc.

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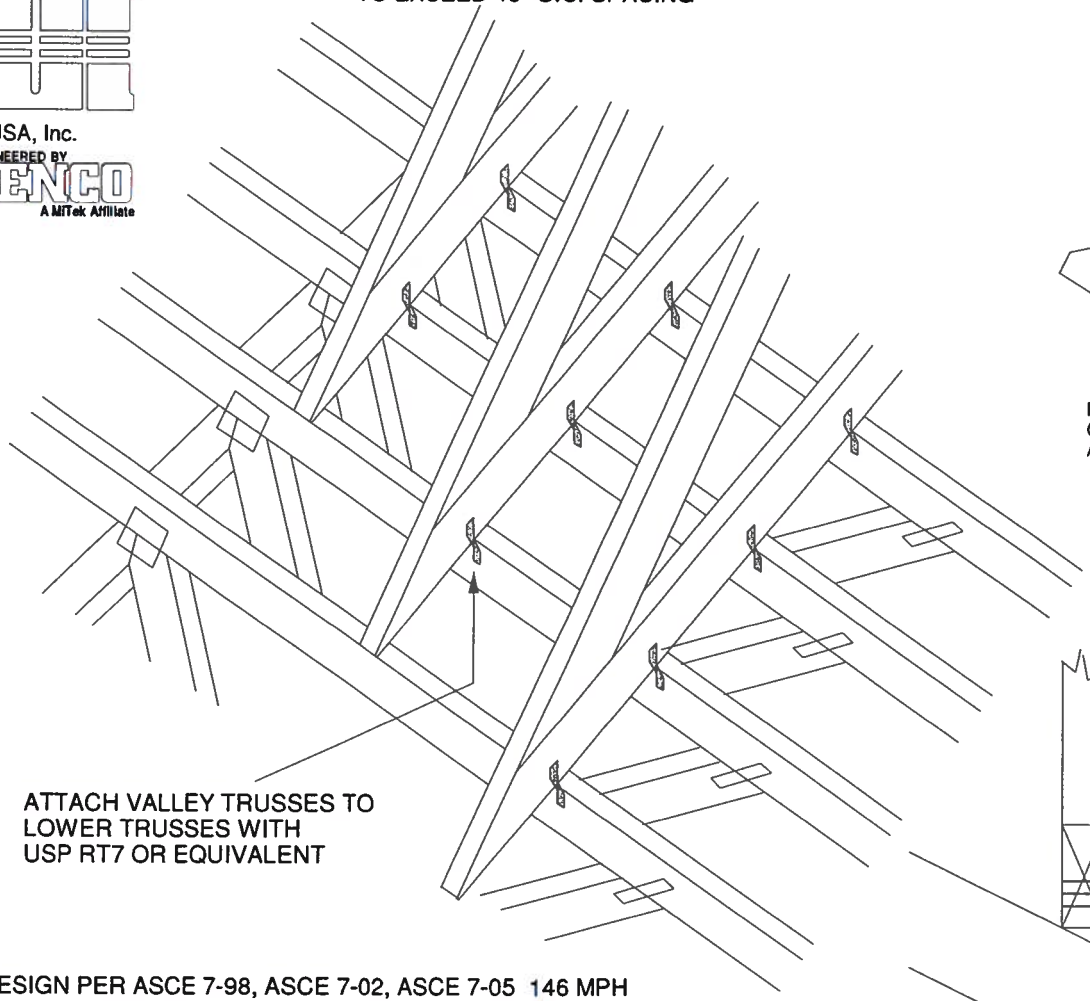
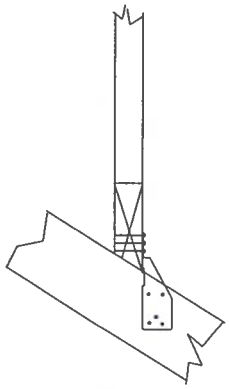
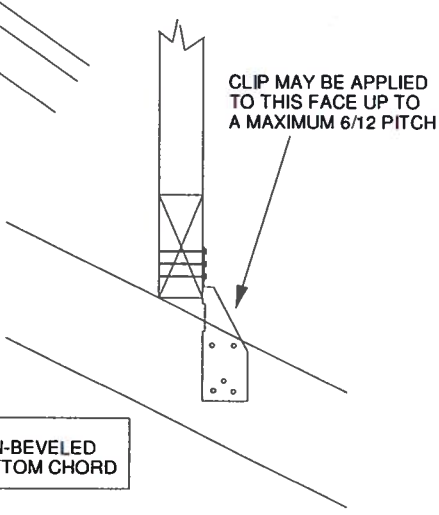
NOTE: VALLEY STUD SPACING NOT TO EXCEED 48" O.C. SPACING



ATTACH VALLEY TRUSSES TO LOWER TRUSSES WITH USP RT7 OR EQUIVALENT



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



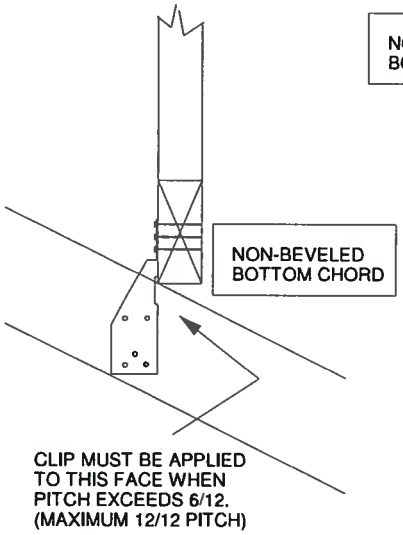
CLIP MAY BE APPLIED TO THIS FACE UP TO A MAXIMUM 6/12 PITCH

NON-BEVELED BOTTOM CHORD

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)

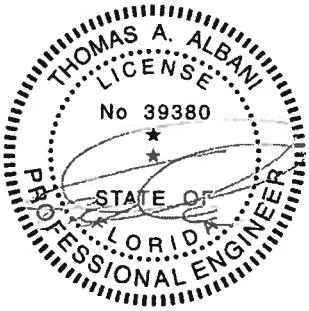
SUPPORTING TRUSSES DIRECTLY UNDER VALLEY TRUSSES MUST BE DESIGNED WITH A MAXIMUM UNBRACED LENGTH OF 2'-10" ON AFFECTED TOP CHORDS.

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



NON-BEVELED BOTTOM CHORD

CLIP MUST BE APPLIED TO THIS FACE WHEN PITCH EXCEEDS 6/12. (MAXIMUM 12/12 PITCH)



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January 19, 2018

AUGUST 1, 2016	Standard Gable End Detail	MII-GE146-001

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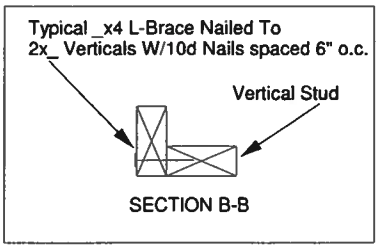
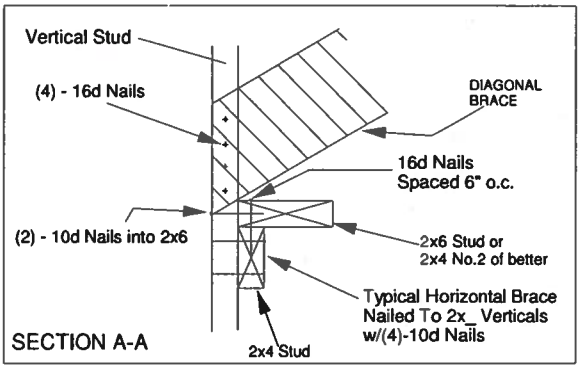
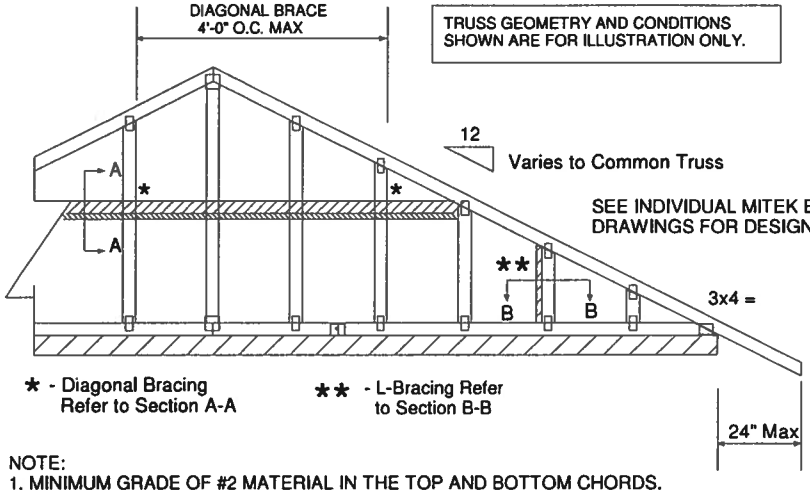






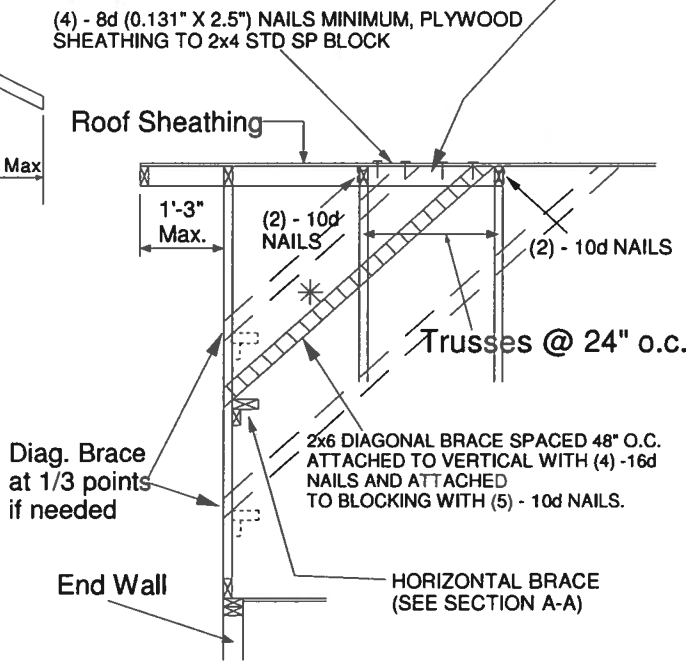
TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY.

SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA

* - Diagonal Bracing Refer to Section A-A

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

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.



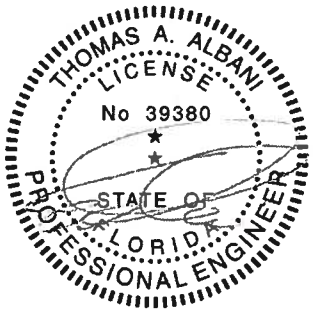
NOTE:
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF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

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

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

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

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



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

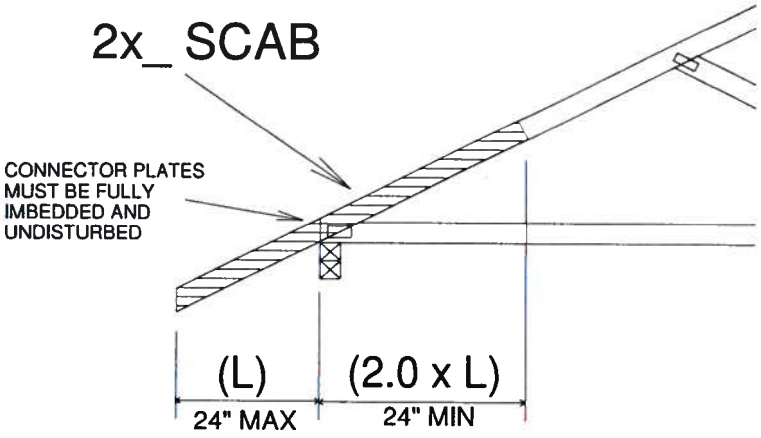
January 19, 2018

OCTOBER 5, 2016	REPLACE BROKEN OVERHANG	MII-REP13B

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

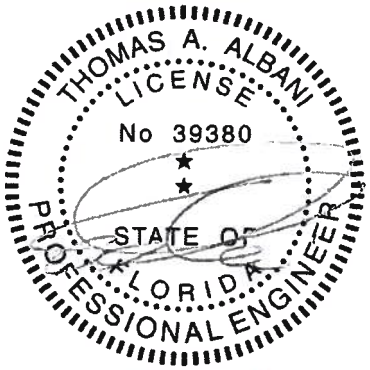
TRUSS CRITERIA:
LOADING: 40-10-0-10
DURATION FACTOR: 1.15
SPACING: 24" O.C.
TOP CHORD: 2x4 OR 2x6
PITCH: 4/12 - 12/12
HEEL HEIGHT: STANDARD HEEL UP TO 12" ENERGY HEEL
END BEARING CONDITION

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	LATERAL BRACING RECOMMENDATIONS	MII-STRGBCK

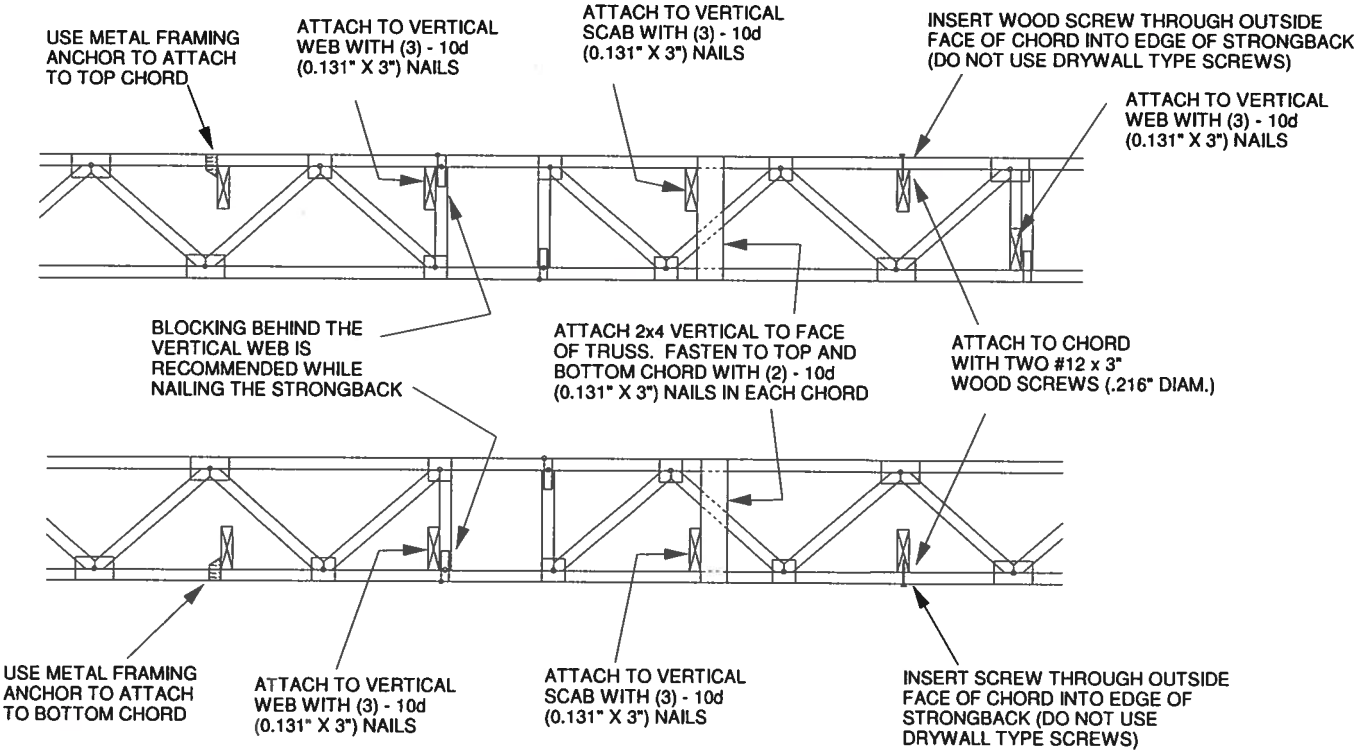
MiTek USA, Inc.

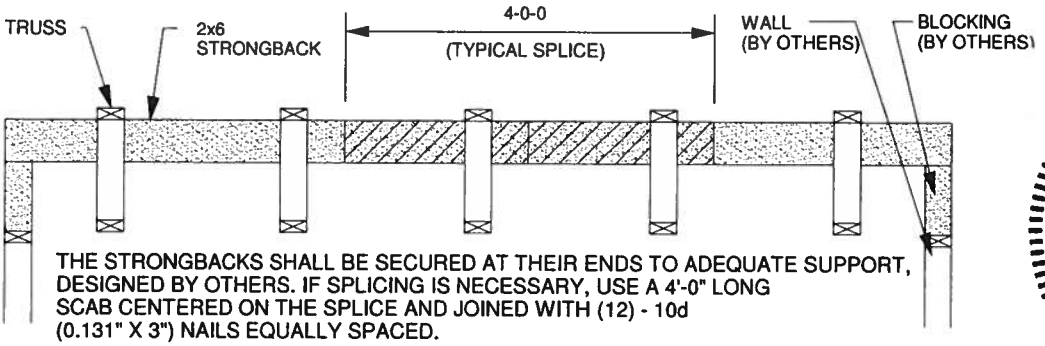
ENGINEERED BY TRENCO
A MiTek Affiliate

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.

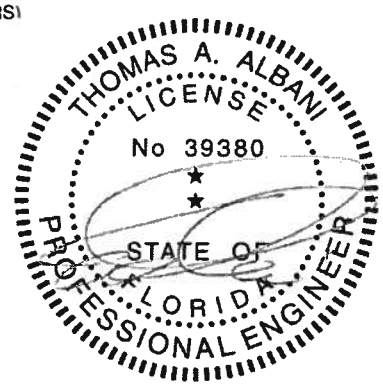
NOTE 2: STRONGBACK BRACING ALSO SATISFIES THE LATERAL BRACING REQUIREMENTS FOR THE BOTTOM CHORD OF THE TRUSS WHEN IT IS PLACED ON TOP OF THE BOTTOM CHORD, IS CONTINUOUS FROM END TO END, CONNECTED WITH A METHOD OTHER THAN METAL FRAMING ANCHOR, AND PROPERLY CONNECTED, BY OTHERS, AT THE ENDS.





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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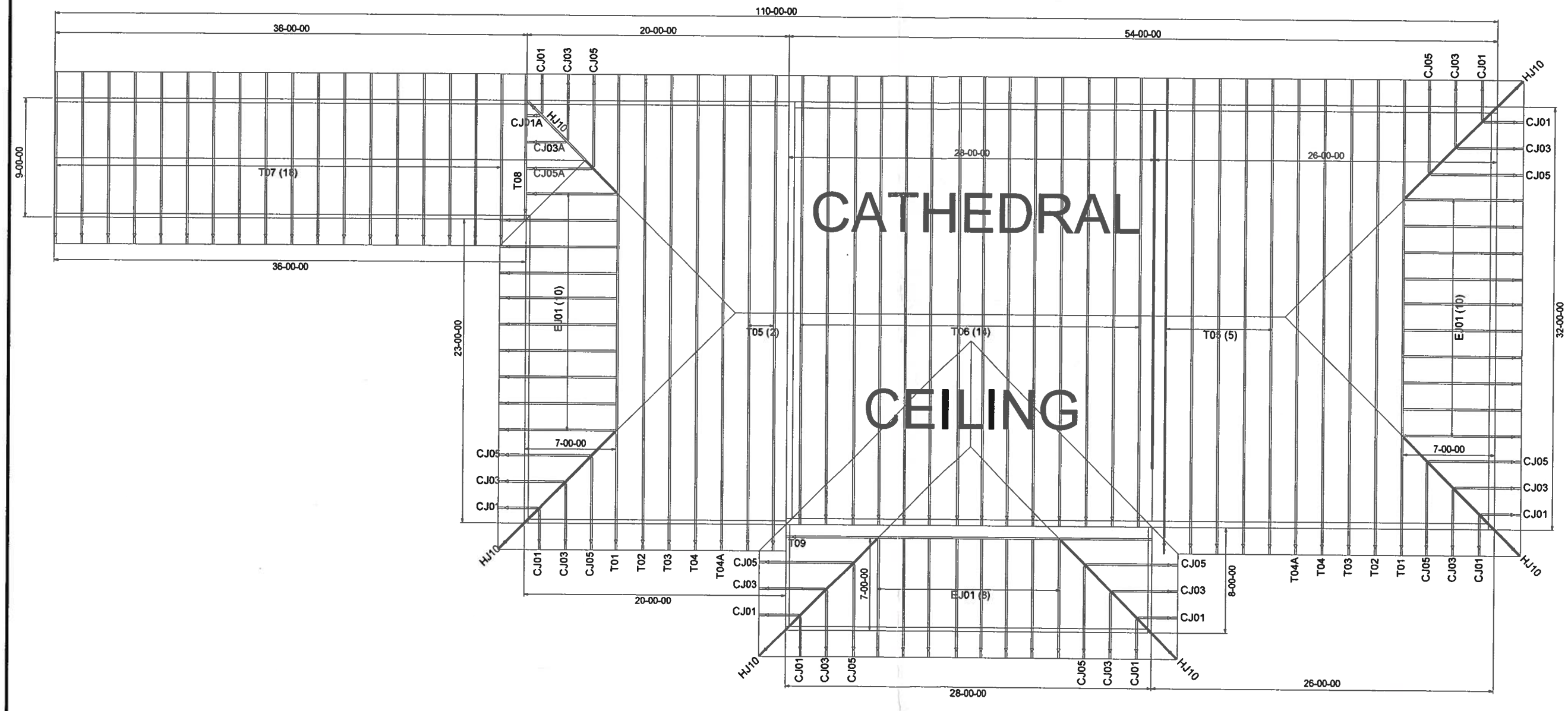
February 12, 2018

6/11 PITCH - 24" O/H



BEARING HEIGHT SCHEDULE

	10' 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 DECKED OR REFER TO DETAIL V105 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) SYA2 TRUSSES MUST BE INSTALLED WITH THE TOP BEING UP.
7) BEAM/HEADER/LINTEL (HDR) TO BE FURNISHED BY BUILDER.

Builders FirstSource

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Lake City
PHONE: 386-755-6894 FAX: 386-755-7473

BUILDER: DOUG EDGLEY CONST.

LEGAL ADDRESS: JENKINS GARAGE

MODEL:		Revision: Rev. By:
DATE: 3-11-20	DRAWN BY: KLH	Original Tolerance / 2258668
1st Level Job #:	2nd Level Job #:	Roof Job #: 2258668

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