58

Columbia County New Building Permit Application

17752

For Office Use Only Application # 64196 Date Received _____ By MG Permit # 49222

Zoning Official _____ Date _____ Flood Zone _____ Land Use _____ Zoning _____

FEMA Map # _____ Elevation _____ MFE _____ River _____ Plans Examiner _____ Date _____

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. 23-0847 OR City Water Fax 386-752-1284

Applicant (Who will sign/pickup the permit) Trent Giebeig Phone 386-397-0545

Address 697 SE Holly Terrace Lake City FL 32025

Owners Name Trent Giebeig Construction Inc Phone 386-397-0545

911 Address 661 SW Chesterfield Circle Lake City FL 32024

Contractors Name Trent Giebeig Construction Inc Phone 386-397-0545

Address 697 SE Holly Terrace, Lake City FL 32025

Contractor Email trentgiebeigconstruction@gmail.com ***Include to get updates on this job.

Fee Simple Owner Name & Address Trent Giebeig Construction Inc 697 SE Holly Terrace Lake City FL

Bonding Co. Name & Address -NA-

Architect/Engineer Name & Address Coastal Engineering & Testing PO Box 860125 St Augustine FL 32085

Mortgage Lenders Name & Address -NA-

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

Property ID Number 24-45-16-03117-158 Estimated Construction Cost 200,000

Subdivision Name Crosswinds Lot 58 Block — Unit — Phase 2

Driving Directions from a Major Road 475 Turn right county Rd 242 turn right on Arrowhead Terrace left on chester ~~field~~ field circle turn right around loop on right

Construction of Concrete floor/wood Frame ____ Commercial OR ✓ Residential

Proposed Use/Occupancy residence Number of Existing Dwellings on Property ____

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 30 Side 18 Side 29.5 Rear 128.2

Number of Stories 1 Heated Floor Area 1624 Total Floor Area 2256 Acreage .52

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

Columbia County Building Permit Application – "Owner and Contractor Signature Page"

CODES: 2020 Florida Building Code 7th Edition and the 2017 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.

Trent Gibbs — **Printed Owners Name**

Owners Signature

****Property owners must sign here before any permit will be 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 CRC 1330693
Columbia County
Competency Card Number _____

Affirmed and subscribed before me the Contractor by means of X **physical presence or** ___ **online notarization, this** 30th **day of** January **20**24**, who was personally known** X **or produced ID** _____

Elaine K Tolar

State of Florida Notary Signature (For the Contractor)

SEAL:

ELAINE K. TOLAR
MY COMMISSION # HH 149907
EXPIRES: October 2, 2025
Bonded Thru Notary Public Underwriters

Lot 58

BOARD OF COUNTY COMMISSIONERS • COLUMBIA COUNTY

Address Assignment and Maintenance Document

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

Date/Time Issued:	**6/22/2020 2:42:15 PM**
Address:	**661 SW CHESTERFIELD CIR**
City:	**LAKE CITY**
State:	**FL**
Zip Code	**32024**
Parcel ID	**24-4S-16-03117-158**

REMARKS: **This is a verified Current address for Building General in Columbia County FL**

Verification ID: 6c323463-a30e-4885-bdbc-43d7de2cc2e6

Address was reassigned from old address: LOT58 SW CHESTERFIELD CIR

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

Issuance of a 9-1-1 address for your property should not be construed by you or anyone else to mean that your property is buildable pursuant to the Columbia County Land Development Regulations. To determine whether your property is eligible for a building permit please contact the Building and Zoning Department.

Address Issued By: GIS Specialist

Columbia County GIS/911 Addressing Coordinator

Columbia County
Department of Information Technology
135 NE Hernando Ave. Lake City, FL 32055
Telephone 386-719-1456

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM (OSTDS)

PERMIT NO. 23-0847
DATE PAID: 12/12/23
FEE PAID: 310.00
RECEIPT #: 2027393

APPLICATION FOR CONSTRUCTION PERMIT

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

APPLICANT: ~~DEALT~~ OMEGA PROPERTIES LLC EMAIL: NFLSEPTICTANK@COMCAST.NET

AGENT: ROBERT FORD III- NORTH FLORIDA SEPTIC TANK INC TELEPHONE: 386-755-6372

MAILING ADDRESS: 741 SE STATE ROAD 100, LAKE CITY FL 32025

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

PROPERTY INFORMATION OSTDS REMEDIATION PLAN? [Y / N]

LOT: 58 BLOCK: PH 2 SUBDIVISION: CROSSWINDS PLATTED: _____

PROPERTY ID #: 24-4S-16-03117-158 ZONING: _____ I/M OR EQUIVALENT: [Y / N]

PROPERTY SIZE: 0.52 ACRES WATER SUPPLY: [x] PRIVATE PUBLIC [ ]<=2000GPD [ ]>2000GPD

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

PROPERTY ADDRESS: 661 SW CHESTERFIELD CIR, LAKE CITY FL

DIRECTIONS TO PROPERTY: _____

BUILDING INFORMATION [x] RESIDENTIAL [ ] COMMERCIAL

Unit No.	Type of Establishment	No. of Bedrooms	Building Area Sqft	Commercial/Institutional System Design Table I, Chapter 62-6, FAC
1	NEW HOME	3	1600	
2				
3				
4				

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

SIGNATURE: Robert Ford III DATE: 12-11-2023

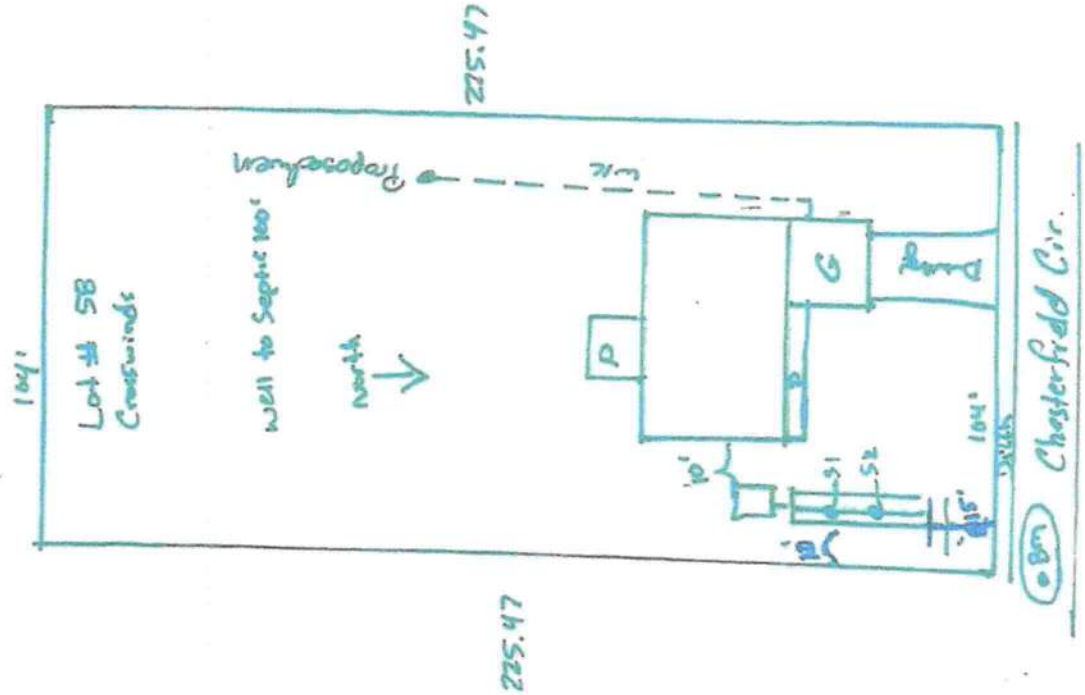
DEP 4015, 06-21-2022 (Obsoletes previous editions which may not be used)
Incorporated 62-6.004, FAC

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
APPLICATION FOR CONSTRUCTION PERMIT

1"=40'

Permit Application Number 23-0847

PART II - SITEPLAN Lot 58



Notes: _____

Site Plan submitted by: Robert Ford III Date: 12-11-2023

Plan Approved ✓ Not Approved _____

By _____ ES2 Columbia County Health Department Date 1/16/24

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT

DEP 4015, 06-21-2022 (Obsoletes previous editions which may not be used)
Incorporated: 62-6.004, F.A.C.

Sunbiz.org DIVISION of CORPORATIONS an official State of Florida website

Detail by Entity Name

Florida Profit Corporation
TRENT GIEBEIG CONSTRUCTION, INC.

Filing Information

Document Number	P03000124288
FEI/EIN Number	55-0851512
Date Filed	10/27/2003
State	FL
Status	ACTIVE
Last Event	CANCEL ADM DISS/REV
Event Date Filed	10/04/2006
Event Effective Date	NONE

Principal Address

697 SE HOLLY TERRACE
LAKE CITY, FL 32025

Changed: 10/04/2006

Mailing Address

697 SE HOLLY TERRACE
LAKE CITY, FL 32025

Changed: 10/04/2006

Registered Agent Name & Address

GIEBEIG, BRIAN TRENT
697 SE HOLLY TERRACE
LAKE CITY, FL 32025

Address Changed: 10/04/2006

Officer/Director Detail

Name & Address

Title D

GIEBEIG, BRIAN TRENT
697 SE HOLLY TERRACE
LAKE CITY, FL 32025

nst. Number: 202312023973 Book: 1505 Page: 16 Page 1 of 3 Date: 12/20/2023 Time: 3:13 PM
ımes M Swisher Jr Clerk of Courts, Columbia County, Florida Doc Deed: 210.00

BSG:lss
8678.01-23-171
12/01/2023

(1)

REC. $27.00
DOC. $210.00
INT. $0
INDEX $0
CONSIDERATION $30,000.00

This instrument prepared by
Bonnie S. Green
Darby Peele & Green, PLLC
Attorney at Law
1241 South Marion Avenue
Lake City, Florida 32025

The preparer of this instrument has not been provided with a survey to show the quantity of lands included, or the location of the boundaries and has prepared this document without the benefit of a survey.

Inst: 202312023973 Date: 12/20/2023 Time: 3:13PM
Page 1 of 3 B: 1505 P: 16, James M Swisher Jr, Clerk of Court
Columbia, County, By: KH
Deputy ClerkDoc Stamp-Deed: 210.00

WARRANTY DEED

THIS WARRANTY DEED made and executed the 19 day of December, 2023, by DELTA OMEGA PROPERTIES, INC., a Florida corporation existing under the laws of Florida, and having its principal place of business at 3454 SW County Road 242, Lake City, Florida 32024, hereinafter called the Grantor, to TRENT GIEBEIG CONSTRUCTION, INC., a Florida corporation, whose mailing address is 697 SE Holly Terrace, Lake City, Florida 32025, hereinafter called the Grantee:

WITNESSETH:

That the Grantor, for and in consideration of the sum of TEN AND NO/100 ($10.00) DOLLARS and other valuable considerations, receipt whereof is hereby acknowledged, by these presents does grant, bargain, sell, alien, remise, release, convey and confirm unto the Grantee, all that certain land situate in Columbia County, Florida, viz:

Lot 58 of CROSSWINDS, PHASE TWO, according to the Plat thereof as recorded in Plat Book 8, Page 83, of the public records of Columbia County, Florida.

Tax Parcel No. 24-4S-16-03117-158

SUBCONTRACTOR VERIFICATION

APPLICATION/PERMIT # _____ JOB NAME _____

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#_____	Print Name Dennis Conklin Signature	Company Name: D & S Lighting & Electric	License #: 13003800 Phone #: 386-623-9055	Need: ☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
MECHANICAL/ A/C ☑ CC#_____	Print Name D.L. Williams Signature	Company Name: D L Williams Heating & Cooling, LLC	License #: CAC 1816913 Phone #: 386-754-1987	Need: ☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
PLUMBING/ GAS ☑ CC#_____	Print Name Ken Roche Signature	Company Name: Ken Roche Plumbing Now	License #: CFC 1426527 Phone #: 386-755-9243	Need: ☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
ROOFING ☑ CC#_____	Print Name Trent Giebeig Signature	Company Name: Trent Giebeig Construction, Inc.	License #: CRC 1330693 Phone #: 386-397-0545	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

A&B Well Drilling, Inc.

5673 NW Lake Jeffery Road
Lake City, FL 32055
Telephone: (386) 758-3409
Cell: (386) 623-3151
Fax: (386) 758-3410
Owner: Bruce Park

January 30, 2024

To: Columbia County Building Department

Description of Well to be installed for Customer _____Trent Giebeig Const_____

Located @ Address: _____661 SW Chesterfield Cir

1 HP 20 GPM submersible pump, 11/4" drop pipe, 85 gallon captive tank, and backflow prevention. With SRWMD permit.

_Bruce Park_____

Sincerely,
Bruce N. Park
President

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM (OSTDS)

PERMIT NO. 23-0847
DATE PAID: 12/12/23
FEE PAID: 310.00
RECEIPT #: 2027393

APPLICATION FOR CONSTRUCTION PERMIT

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

APPLICANT: ~~DEALT~~ OMEGA PROPERTIES LLC EMAIL: NFLSEPTICTANK@COMCAST.NET

AGENT: ROBERT FORD III- NORTH FLORIDA SEPTIC TANK INC TELEPHONE: 386-755-6372

MAILING ADDRESS: 741 SE STATE ROAD 100, LAKE CITY FL 32025

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PROPERTY INFORMATION OSTDS REMEDIATION PLAN? [Y / N]

LOT: 58 BLOCK: PH 2 SUBDIVISION: CROSSWINDS PLATTED: _____

PROPERTY ID #: 24-4S-16-03117-158 ZONING: _____ I/M OR EQUIVALENT: [Y / N]

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

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DIRECTIONS TO PROPERTY: _____

BUILDING INFORMATION [x] RESIDENTIAL [ ] COMMERCIAL

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3				
4				

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

SIGNATURE: Robert Ford III DATE: 12-11-2023

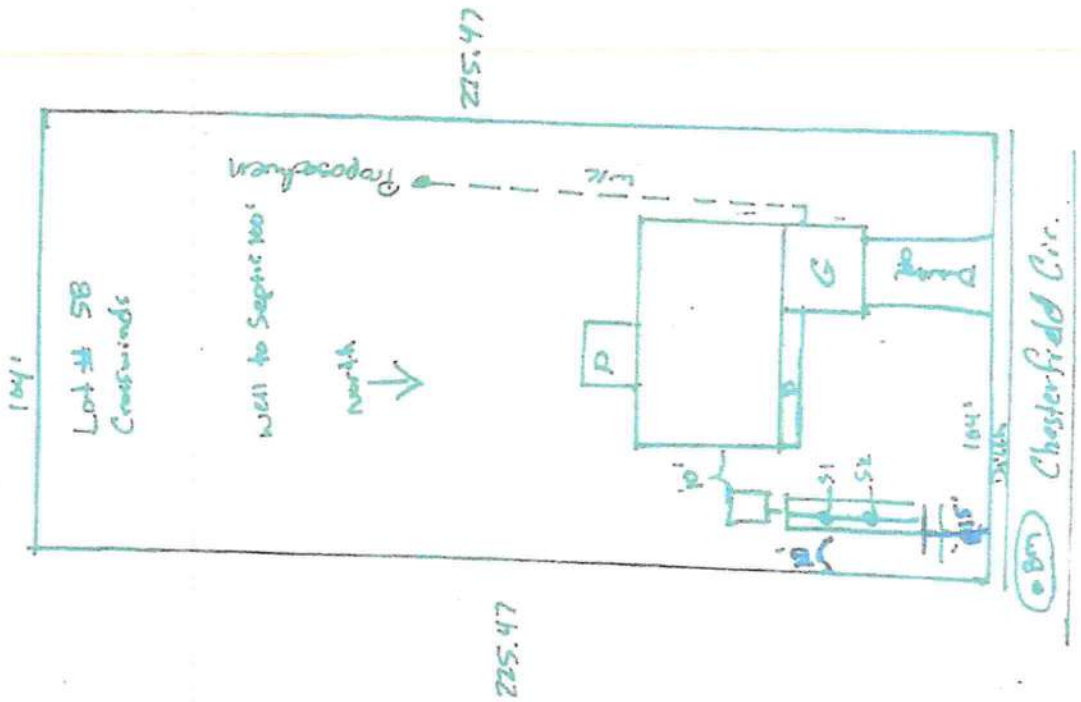
DEP 4015, 06-21-2022 (Obsoletes previous editions which may not be used)
Incorporated 62-6.004, FAC

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
APPLICATION FOR CONSTRUCTION PERMIT

1"=40'

Permit Application Number 23-0847

PART II - SITEPLAN Lot 58



Notes: _____

Site Plan submitted by: Robert Ford FFF Date: 12-11-2023

Plan Approved ✓ Not Approved _____

By _____ Date 1/16/24

ESI Columbia County Health Department

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT

DEP 4015, 06-21-2022 (Obsolates previous editions which may not be used)
Incorporated: 62-6.004,F.A.C.

58

NOTICE OF COMMENCEMENT

Clerk's Office Stamp

Inst: 202412002805 Date: 02/15/2024 Time: 11:05AM
Page 1 of 1 B: 1508 P: 93, James M Swisher Jr, Clerk of Court
Columbia, County, By: KH
Deputy Clerk

Tax Parcel Identification Number:
24-4S-16-03117-158

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

1. Description of property *(legal description)*: Lot 58 Crosswinds S/D Phase 1
   a) Street *(job)* Address: 661 SW Chesterfield Circle Lake City FL 32024
2. General description of improvements: New Residential Construction
3. Owner Information or Lessee information if the Lessee contracted for the improvements:
   a) Name and address: Trent Giebeig Construction Inc 697 SE Holly Terrace Lake City FL 32025
   b) Name and address of fee simple titleholder (if other than owner) _____
   c) Interest in property Fee Simple
4. Contractor Information
   a) Name and address: Trent Giebeig Construction Inc 697 SE Holly Terrace Lake City FL 32025
   b) Telephone No.: 386-397-0545
5. Surety Information (if applicable, a copy of the payment bond is attached):
   a) Name and address: N/A
   b) Amount of Bond: _____
   c) Telephone No.: _____
6. Lender
   a) Name and address: N/A
   b) Phone No. _____
7. Person within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13(1)(a)7., Florida Statutes:
   a) Name and address: N/A
   b) Telephone No.: _____
8. In addition to himself or herself, Owner designates the following person to receive a copy of the Lienor's Notice as provided in Section 713.13(l)(b), Florida Statutes:
   a) Name: N/A OF _____
   b) Telephone No.: _____
9. Expiration date of Notice of Commencement (the expiration date will be 1 year from the date of recording unless a different date is specified): _____

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

STATE OF FLORIDA
COUNTY OF COLUMBIA

10. Trent Giebeig Construction Inc
Signature of Owner or Lessee, or Owner's or Lessee's Authorized Office/Director/Partner/Manager

Trent Giebeig President
Printed Name and Signatory's Title/Office

The foregoing instrument was acknowledged before me, a Florida Notary, this 30th day of January, 2024, by:

Trent Giebeig as Owner for Trent Giebeig
(Name of Person) (Type of Authority) (name of party on behalf of whom instrument was executed)

Personally Known X OR Produced Identification ____ Type _____

Notary Signature Elaine K Tolar

Notary Stamp or Seal

ELAINE K. TOLAR
MY COMMISSION # HH 149907
EXPIRES: October 2, 2025
Bonded Thru Notary Public Underwriters

#58

COLUMBIA COUNTY BUILDING DEPARTMENT
RESIDENTIAL CHECK LIST

MINIMUM PLAN REQUIREMENTS: FLORIDA BUILDING CODE RESIDENTIAL 2023 EFFECTIVE 1 JANUARY 2024 AND THE NATIONAL ELECTRICAL 2020 EFFECTIVE 1 JANUARY 2024

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 1609.1 THRU 1609.6.

FOR DESIGN PURPOSES THE FOLLOWING BASIC WIND SPEEDS ARE PER FLORIDA BUILDING CODE FIGURE 1609.3(1) THROUGH 1609.3(4) ULTIMATE DESIGN WIND SPEEDS FOR RISK CATEGORY AND BUILDINGS AND OTHER STRUCTURES Revised 7/1/20

Submit Online at- 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:	1		
2	All drawings must be clear, concise, drawn to scale, details that are not used shall be marked void	1		
3	**Condition space (Sq. Ft.)** 1624 **Total (Sq. Ft.) under roof** 2256	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 BUILDING 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.	-		

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	-		
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 FBCR 312.2.1 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 _____ 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 overlaid 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**	-		

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	-		

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 2304.10.1 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 2304.3.	-
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	-

FBC :ROOF SYSTEMS:

61	Truss design drawing shall meet section FBC 2303.1 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	-		

FBC 2304.4: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	-		

FBC 2304.8 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	-	/		

FBC Energy Chapter 4

Residential construction shall comply with this code by using the following compliance methods in the FBC Chapter 4, 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	-	/		
76	Exterior wall cavity	-	/		
77	Crawl space	-			/

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**	-	/		
80	Show clothes dryer route and total run of exhaust duct	-			

Plumbing Fixture layout shown

81	All fixtures waste water lines shall be shown on the foundation plan	-		/	
82	Show the location of water heater	-		/	

Private Potable Water

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

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	-	/		
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. **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.	-		
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 Office of 911 Addressing Department online.	-		

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.

Disclosure Statement for Owner Builders:

If you as the Applicant will be acting as your own contractor or owner/builder under section 489.103(7) Florida Statutes, you must submit the required notarized Owner Builder Disclosure Statement form.
**This form can be printed from the Columbia County Website on the Building and Zoning page under Documents. Web address is - http://www.columbiacountyfla.com/BuildingandZoning.asp

Section 105 of the Florida Building Code defines the:

Time limitation of application.

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

Single-family residential dwelling.

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

Permit intent.

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

If work has commenced.

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

New Permit.

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

Work Shall Be:

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

The Fee:

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

Notification:

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

#50 App #64196 661 SW Chesterfield

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	Masonite	any swing steel	FL 22513-R6
A. SWINGING			
B. SLIDING			
C. SECTIONAL/ROLL UP			
D. OTHER			
2. WINDOWS			
A. SINGLE/DOUBLE HUNG	M.I.	3540	FL-17676-R21
B. HORIZONTAL SLIDER			
C. CASEMENT			
D. FIXED			
E. MULLION			
F. SKYLIGHTS			
G. OTHER			
3. PANEL WALL			
A. SIDING	James Hardie	Lap	FL-13192-R6
B. SOFFITS	Kaycan	vinyl + Aluminum soffit	FL-16503
C. STOREFRONTS			
D. GLASS BLOCK			
E. OTHER			
4. ROOFING PRODUCTS			
A. ASPHALT SHINGLES	GAF	Architectural	FL 10124-R24
B. NON-STRUCT METAL			
C. ROOFING TILES			
D. SINGLE PLY ROOF			
E. OTHER	Rhino	Synthetic felt	FL-15216-R12
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: _____

Building and Zoning Department

New Residential Construction Application

Invoice

64196

Applicant Information	Invoice Date	Permit #	Amount Due
TRENT GIEBEIG 697 SW HOLLY TERR LAKE CITY, FL32025	02/15/2024		**$1,462.44**

Job Location
Parcel: 24-4S-16-03117-158
Owner: TRENT GIEBEIG CONSTRUCTION, INC,
Address: 661 SW CHESTERFIELD CIR
LAKE CITY, FL32024

Contractor Information

BRIAN T GIEBEIG
TRENT GIEBEIG CONSTRUCTION,INC.
697 SE HOLLY TERRACE
LAKE CITY, FL 32025

Contact Us

Phone:
(386) 758-1008

Customer Service Hours:
Monday-Friday
From 8:00 A.M. to 4:30 P.M.

Email:
bldginfo@columbiacountyfla.com

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

Address:
Building and Zoning Ste. B-21
135 NE Hernando Ave.
Lake City, FL 32055

Invoice History

Date	Description	Amount
02/14/2024	Payment: Check	($15.00)
02/14/2024	Fee: Application Fee	$15.00
02/15/2024	Fee: Building Permit Fee Based on Total Area (Sqft)	$1082.88
02/15/2024	Fee: Plan Review	$270.72
02/15/2024	Fee: Certificate Fee	$13.54
02/15/2024	Fee: DBPR - Surcharge / Radon	$20.30
02/15/2024	Fee: Flood Zone Certification Fee	$25.00
02/15/2024	Fee: Zoning Certification Fee	$50.00
	Amount Due:	**$1462.44**

Credit card payments can be made online here (fees apply)

Fee balances are not immediately updated using online Credit Card. If you have paid permit fees using the online application site or by another method such as check or cash, please allow time for your payment to be processed.

Inspection Office Hours

Monday - Friday
From 8:00 AM to 10:00 AM
and
From 1:30 PM to 3:00 PM

Regular Inspection Schedules

All areas North of County Road 242
From 10:00 AM to Noon

All areas South of County Road 242
From 3:00 PM to 5:00 PM

Inspection Requests

Online: (Preferred Method)
www.columbiacountyfla.com/InspectionRequest.asp

Voice Mail: 386-719-2023 or Phone: 386-758-1008

All Driveway Inspections: 386-758-1019

Septic Release Inspections: 386-758-1058

IMPORTANT NOTICE:
Any inspection requested after 4:30 pm, no matter the method, will be received the next business day and will be scheduled by the earliest time slot.

All Inspections require 24 hours notice.
Emergencies will be inspected as soon as possible.

Columbia County, FL. Building and Zoning

Payment Options

1) Cash:
   Payments can be made in cash by visiting the Building and Zoning office at:

   135 NE Hernando St.
   Lake City FL. 32025

2) Checks and Money Orders:
   Please make checks out to "Board of County Commissioners" (be sure and reference the application number on the check) and deliver in person or mail to:

   Building and Zoning
   Post Office Box 1529
   Lake City, FL 32056-1529

3) Online with Credit Card (Visa, Master Card, Discovery, AmEX)
   The card processing company charges an additional 3% for a convenience fee.
   You may receive a separate email receipt from PayGov.US

Payments are not accepted by phone.

Building and Zoning Department

Culvert Application

Invoice

64218

Applicant Information	Invoice Date	Permit #	Amount Due
TRENT GIEBEIG 697 SW HOLLY TERR LAKE CITY, FL32025	02/15/2024		**$25.00**

Job Location
Parcel: 24-4S-16-03117-158
Owner: TRENT GIEBEIG CONSTRUCTION, INC,
Address: 661 SW CHESTERFIELD CIR
LAKE CITY, FL32024

Contractor Information

BRIAN T GIEBEIG
TRENT GIEBEIG CONSTRUCTION,INC.
697 SE HOLLY TERRACE
LAKE CITY, FL 32025

Invoice History

Date	Description	Amount
02/15/2024	Fee: Culvert	$25.00
	Amount Due:	**$25.00**

Credit card payments can be made online here (fees apply)

Fee balances are not immediately updated using online Credit Card. If you have paid permit fees using the online application site or by another method such as check or cash, please allow time for your payment to be processed.

Contact Us

Phone:
(386) 758-1008

Customer Service Hours:
Monday-Friday
From 8:00 A.M. to 4:30 P.M.

Email:
bldginfo@columbiacountyfla.com

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

Address:
Building and Zoning Ste. B-21
135 NE Hernando Ave.
Lake City, FL 32055

Inspection Office Hours

Monday - Friday
From 8:00 AM to 10:00 AM
and
From 1:30 PM to 3:00 PM

Regular Inspection Schedules

All areas North of County Road 242
From 10:00 AM to Noon

All areas South of County Road 242
From 3:00 PM to 5:00 PM

Inspection Requests

Online: (Preferred Method)
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   You may receive a separate email receipt from PayGov.US

Payments are not accepted by phone.

New Residential Construction Application #64196

Wednesday, February 14, 2024 8:02 AM

APPLICANT: TRENT GIEBEIG **PHONE:** 386-397-0545

ADDRESS: 697 SW HOLLY TERR LAKE CITY, FL 32025

OWNER: TRENT GIEBEIG CONSTRUCTION, INC, **PHONE:** 386-397-0545

ADDRESS: 661 SW CHESTERFIELD CIR LAKE CITY, FL 32024

PARCEL ID: 24-4S-16-03117-158 **SUBDIVISION:** CROSSWINDS PHASE 2

LOT: 58 **BLOCK:** **PHASE:** **UNIT:** **ACRES:** 0.53

CONTRACTOR	TYPE	LIC#	BUSINESS NAME
BRIAN T GIEBEIG	General	CRC1330693	TRENT GIEBEIG CONSTRUCTION,INC.

CONSTRUCTION DETAILS

Is this replacing an existing home?	No
This is the construction of a	Single Family Dwelling
If Other, explain the use of the structure.	
Total Estimated Cost	200000
Structure Size	
Heated Area (Sqft)	1624
Total Area (Sqft)	2256
Stories	1
Building Height	
Driveway access to property:	Culvert Permit
Existing homes on property?	0
Fire sprinklers?	No
If yes, blueprints included?	No
Provide actual distance of structure from property lines:	
Site Plan Setbacks Front	30'
Site Plan Setback Side 1	20'
Site Plan Setback Side 2	30'
Site Plan Setbacks Rear	128'
Septic# (00-0000) or (X00-000)	23-0847
Power Company	Clay Elec.
Service Amps	
Zoning Applications applied for:	

Ok
JC
2-14-24

ROOF OPTIONS

Sealed roof decking options. (Must select one option per FBC 2023 8th Edition) — two layers of felt underlayment comply ASTM 0226 Type II or ASTM D4869 Type III or IV, or two layers of a synthetic underlayment meeting the performance requirements specified, lapped and fastened as specified.

Review Notes: NEEDED:
*GIEBEIG UPDATED WORKERS COMP
*OWNER AND CONTRACTOR SIGNATURE PAGE
*UPDATED RESIDENTIAL CHECKLIST-- ONE SUBMITTED IS OUTDATED

PRIOR TO INSPECTIONS
RECORDED NOC

MiTek®

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

RE: 3833091 - GIEBEIG - LOT 58 CW

MiTek, Inc.
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200

Site Information:
Customer Info: GIEBEIG CONST. Project Name: Spec Hse Model: St. Johns Modified
Lot/Block: 58 Subdivision: Crosswinds
Address: TBD, TBD
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: FBC2023/TPI2014 Design Program: MiTek 20/20 8.7
Wind Code: ASCE 7-22 Wind Speed: 130 mph
Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 29 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	No.	Seal#	Truss Name	Date
1	T32687492	CJ1	1/22/24	15	T32687506	T09	1/22/24
2	T32687493	CJ3	1/22/24	16	T32687507	T10	1/22/24
3	T32687494	CJ5	1/22/24	17	T32687508	T11	1/22/24
4	T32687495	EJ5	1/22/24	18	T32687509	T12	1/22/24
5	T32687496	EJ7	1/22/24	19	T32687510	T13	1/22/24
6	T32687497	HJ7	1/22/24	20	T32687511	T14	1/22/24
7	T32687498	HJ9	1/22/24	21	T32687512	T15	1/22/24
8	T32687499	T03	1/22/24	22	T32687513	T16	1/22/24
9	T32687500	T03G	1/22/24	23	T32687514	T17	1/22/24
10	T32687501	T04	1/22/24	24	T32687515	T18	1/22/24
11	T32687502	T05	1/22/24	25	T32687516	T18G	1/22/24
12	T32687503	T06	1/22/24	26	T32687517	T19	1/22/24
13	T32687504	T07	1/22/24	27	T32687518	T19A	1/22/24
14	T32687505	T08	1/22/24	28	T32687519	T20	1/22/24

This item has been digitally signed and sealed by ORegan, Philip, PE on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies

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-Lake City, FL.

Truss Design Engineer's Name: ORegan, Philip
My license renewal date for the state of Florida is February 28, 2025.

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.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 22,2024

MiTek®

RE: 3833091 - GIEBEIG - LOT 58 CW

MiTek, Inc.
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200

Site Information:

Customer Info: GIEBEIG CONST. Project Name: Spec Hse Model: St. Johns Modified
Lot/Block: 58 Subdivision: Crosswinds
Address: TBD, TBD
City: Columbia Cty State: FL

No.	Seal#	Truss Name	Date
29	T32687520	T21	1/22/24

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	
3833091	CJ1	Jack-Open	8	1	Job Reference (optional)	T32687492

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:07:56 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-xOOtyez6PqSze4cN6asyAvdEobZrbmIOPGu?QXztnTn

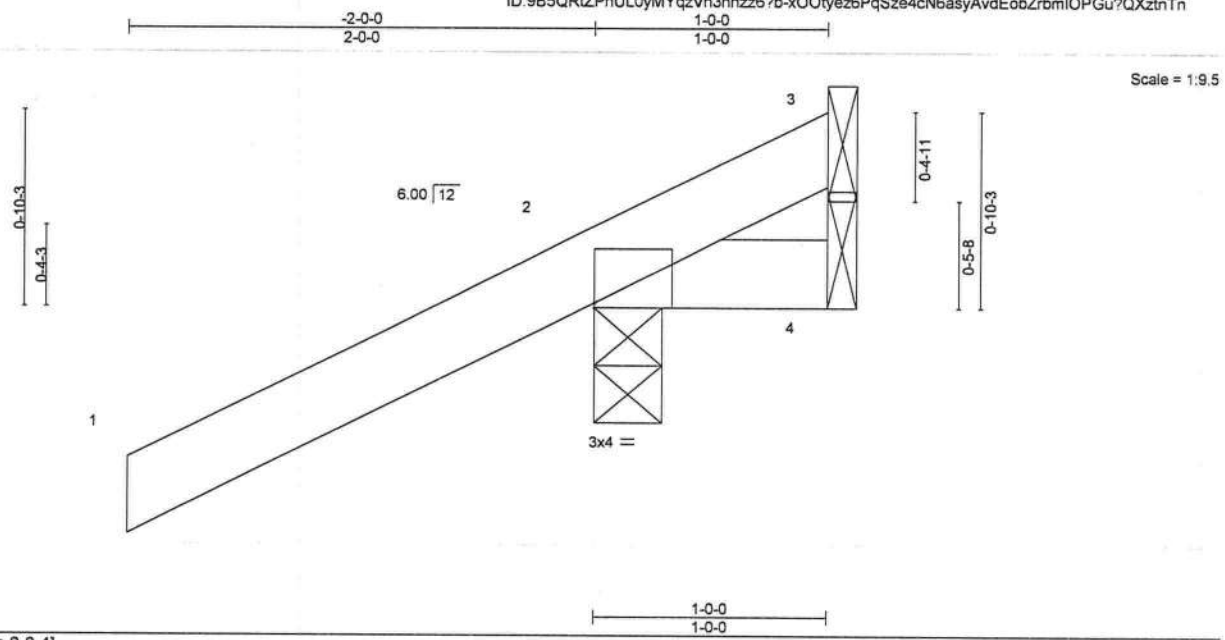

Plate Offsets (X,Y)-- [2:Edge,0-0-4]

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	0.30	Vert(LL)	0.00	7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.06	Vert(CT)	0.00	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2023/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=52(LC 12)
Max Uplift 3=-26(LC 1), 2=-121(LC 12), 4=-47(LC 1)
Max Grav 3=19(LC 16), 2=254(LC 1), 4=34(LC 16)

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

NOTES- (7)
1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=121.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

This item has been digitally signed and sealed by ORegan, Philip, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 22,2024

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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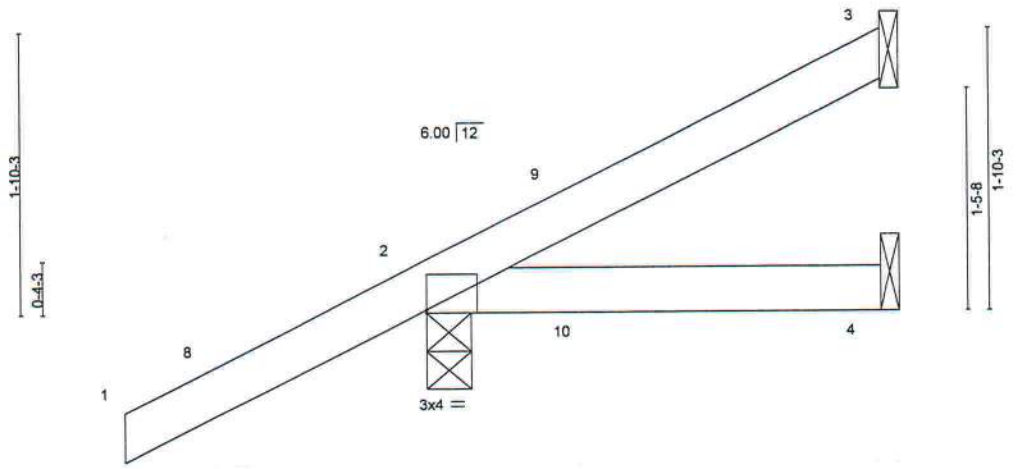
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	T32687493
3833091	CJ3	JACK-OPEN	8	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:07:57 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-QayFA__kA8aqFEBagHNBi69PX?t2KD?XewdYy_ztnTm

-2-0-0 / 2-0-0 | 3-0-0 / 3-0-0

Scale = 1:14.6



3-0-0 / 3-0-0

Plate Offsets (X,Y)— [2:Edge,0-0-4]

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	0.30	Vert(LL)	-0.00	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.06	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 FBC2023/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=0-3-8, 4=Mechanical
Max Horz 2=90(LC 12)
Max Uplift 3=-35(LC 12), 2=-92(LC 12), 4=-16(LC 9)
Max Grav 3=52(LC 1), 2=253(LC 1), 4=47(LC 3)

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

NOTES- (7)
1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 2-11-4 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 22,2024

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314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	T32687494
3833091	CJ5	Jack-Open	4	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:07:58 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-unWeNK_MxSihtOmmD?uQFKiaHPBj3gFhsaN6UQztnTI

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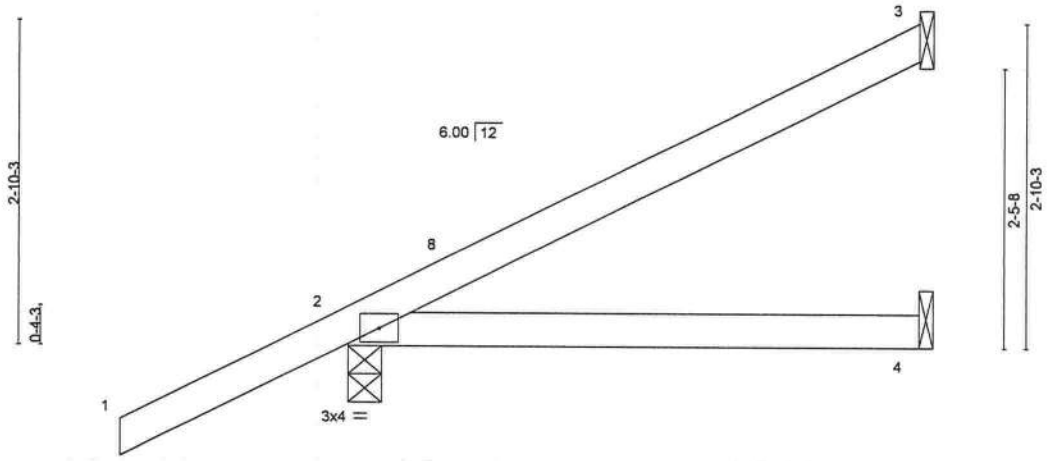
Scale = 1:19.5



5-0-0 / 5-0-0

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	0.30	Vert(LL)	-0.02	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.23	Vert(CT)	-0.05	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 FBC2023/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=128(LC 12)
Max Uplift 3=-74(LC 12), 2=-98(LC 12)
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- (7)
1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 4-11-4 zone; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 22,2024

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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	T32687495
3833091	EJ5	JACK-OPEN	3	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:07:59 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-Mz30ag?_ilqYVYLyniPfnXFl1pXyo6Vq5D6f1sztnTk

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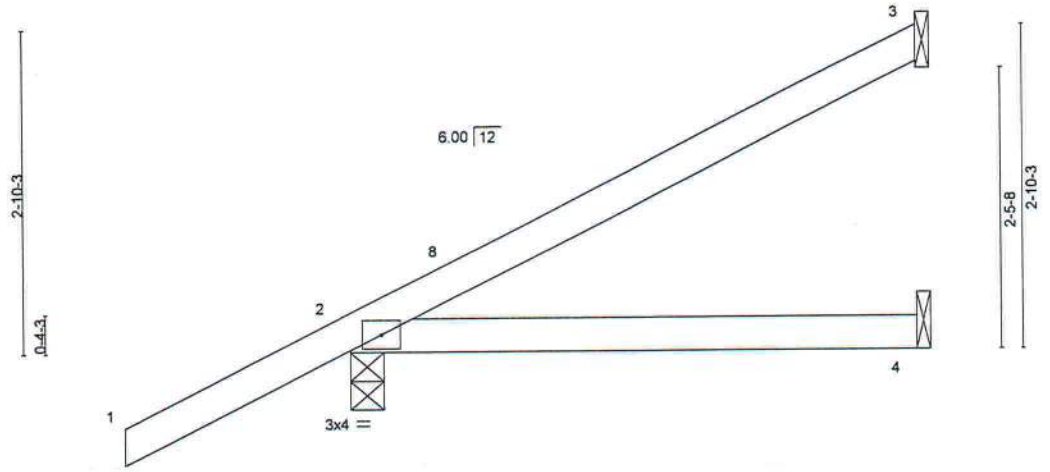

5-0-0 / 5-0-0

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	0.30	Vert(LL)	-0.02	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.23	Vert(CT)	-0.05	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 FBC2023/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=128(LC 12)
Max Uplift 3=-74(LC 12), 2=-98(LC 12)
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- (7)
1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 4-11-4 zone; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 22,2024

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Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	T32687496
3833091	EJ7	JACK	23	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:00 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-q9dOo00cT3yP6hw9LPwuKlnr3DpuXZlzKtsCZlztnTj

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Scale: 1/2"=1'

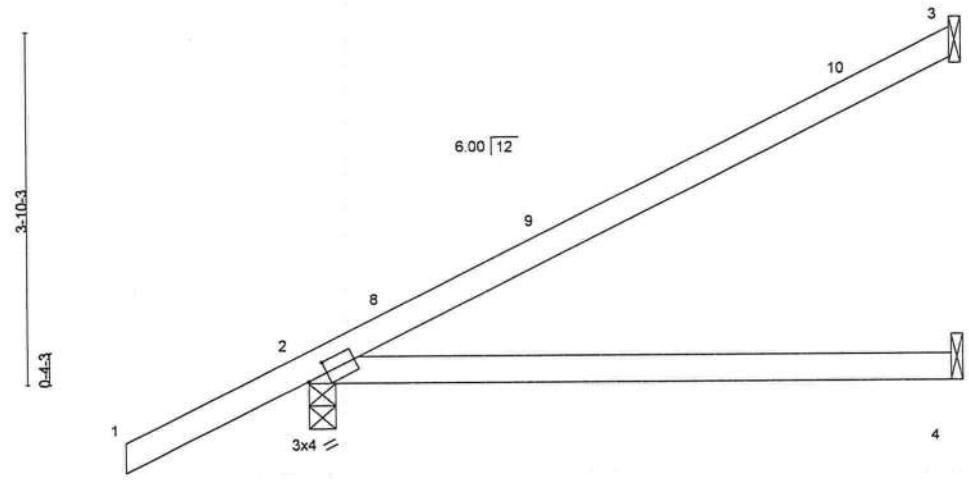

Plate Offsets (X,Y)-- [2:0-2-10,0-1-8]

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	0.60	Vert(LL)	0.10	4-7	>837	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.50	Vert(CT)	-0.21	4-7	>395	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MP							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 6-0-0 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=161(LC 12)
Max Uplift 3=-97(LC 12), 2=-110(LC 12)
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- (7)
1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 6-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 2=110.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	T32687497
3833091	HJ7	Diagonal Hip Girder	2	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:01 2024 Page 1
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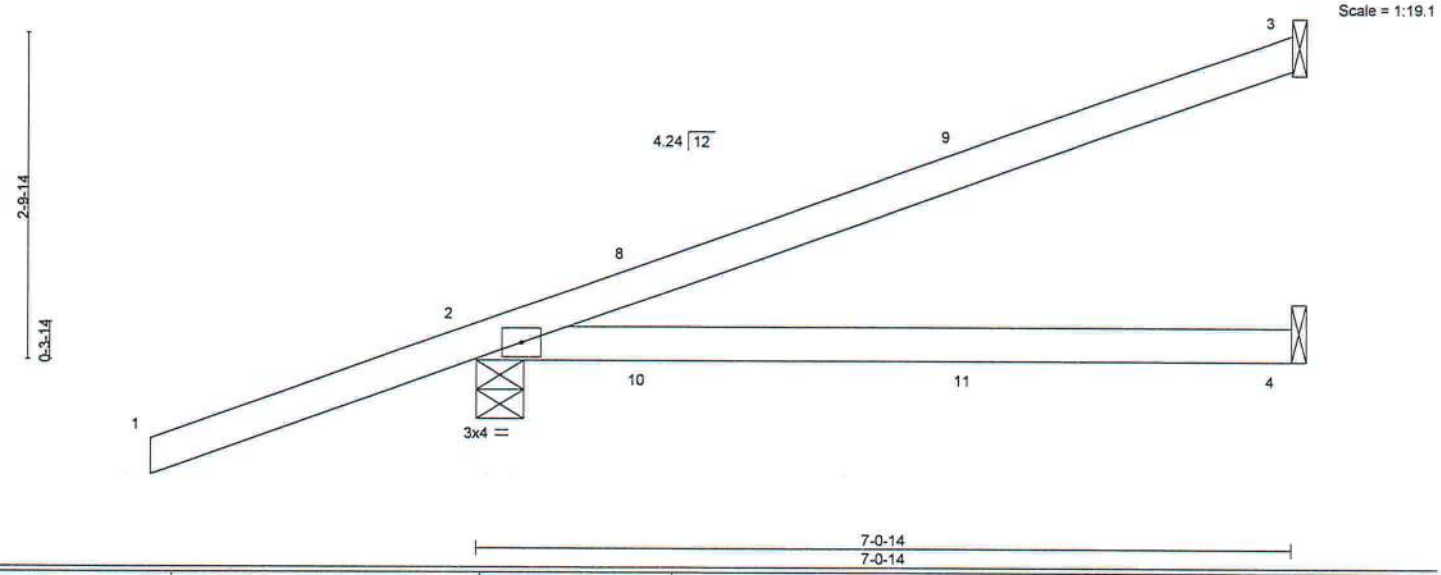
-2-9-15 / 2-9-15 | 7-0-14 / 7-0-14

Scale = 1:19.1



7-0-14 / 7-0-14

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	0.56	Vert(LL)	-0.10	4-7	>836	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.43	Vert(CT)	-0.15	4-7	>565	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code FBC2023/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 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-4-15, 4=Mechanical
Max Horz 2=147(LC 25)
Max Uplift 3=-90(LC 8), 2=-200(LC 4), 4=-41(LC 5)
Max Grav 3=141(LC 1), 2=347(LC 1), 4=110(LC 3)

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

NOTES- (9)
1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=200.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 63 lb down and 103 lb up at 1-5-12, 63 lb down and 103 lb up at 1-5-12, and 21 lb down and 40 lb up at 4-3-11, and 21 lb down and 40 lb up at 4-3-11 on top chord, and 52 lb down and 75 lb up at 1-5-12, 52 lb down and 75 lb up at 1-5-12, and 45 lb down and 23 lb up at 4-3-11, and 45 lb down and 23 lb up at 4-3-11 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).
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-54, 4-5=-20
Concentrated Loads (lb)
Vert: 8=49(F=24, B=24) 10=70(F=35, B=35) 11=4(F=2, B=2)

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 22,2024

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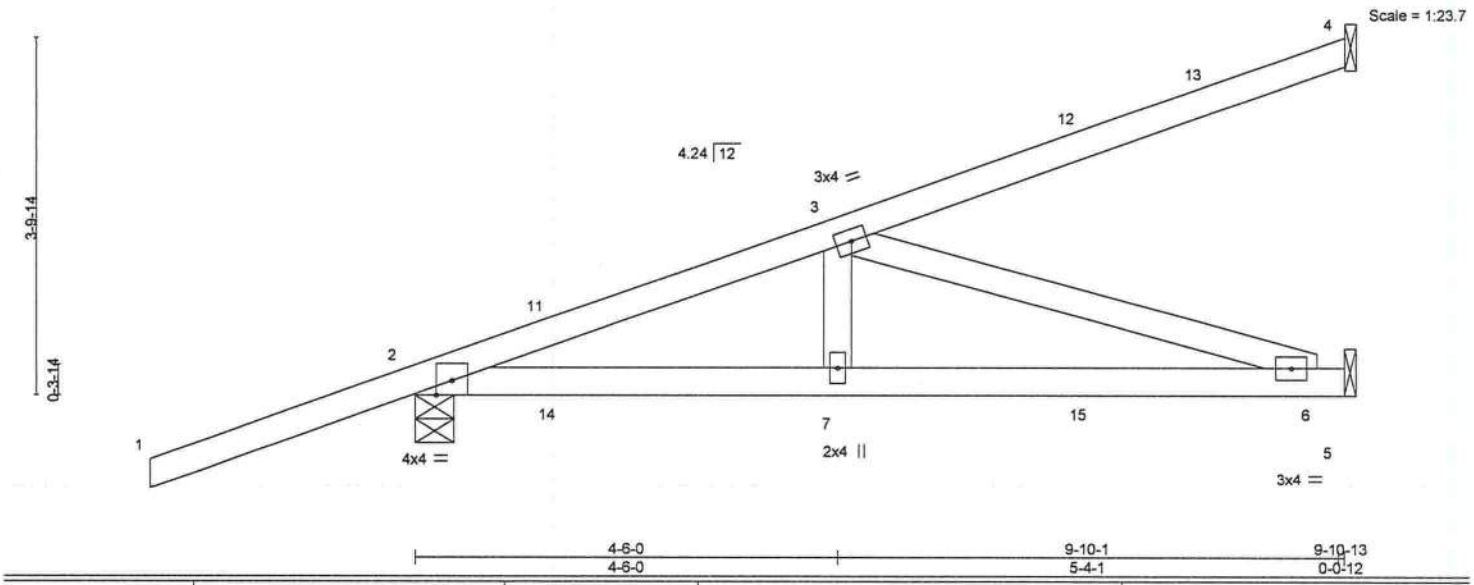
Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	T32687498
3833091	HJ9	Diagonal Hip Girder	2	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:02 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-mYl8Dh2s?gC7M?4XSqzMPAtBl0Tg?OSGnBLJdBztnTh

-2-9-15 / 2-9-15 | 4-6-0 / 4-6-0 | 9-10-13 / 5-4-13



4-6-0 / 4-6-0 | 9-10-1 / 5-4-1 | 9-10-13 / 0-0-12

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)	-0.06	6-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.61	Vert(CT)	-0.12	6-7	>948	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.37	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 45 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 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-4-15, 5=Mechanical
Max Horz 2=180(LC 4)
Max Uplift 4=-90(LC 4), 2=-231(LC 4), 5=-76(LC 8)
Max Grav 4=150(LC 1), 2=466(LC 1), 5=268(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-661/257
BOT CHORD 2-7=-298/608, 6-7=-298/608
WEBS 3-7=-3/251, 3-6=-638/312

NOTES- (9)
1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5 except (jt=lb) 2=231.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 63 lb down and 103 lb up at 1-5-12, 63 lb down and 103 lb up at 1-5-12, 21 lb down and 40 lb up at 4-3-11, 21 lb down and 40 lb up at 4-3-11, and 44 lb down and 83 lb up at 7-1-10, and 44 lb down and 83 lb up at 7-1-10 on top chord, and 26 lb down and 75 lb up at 1-5-12, 26 lb down and 75 lb up at 1-5-12, 19 lb down and 23 lb up at 4-3-11, 19 lb down and 23 lb up at 4-3-11, and 42 lb down at 7-1-10, and 42 lb down at 7-1-10 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).
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-54, 5-8=-20
Concentrated Loads (lb)
Vert: 7=4(F=2, B=2) 11=49(F=24, B=24) 12=-63(F=-31, B=-31) 14=70(F=35, B=35) 15=-49(F=-25, B=-25)

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 22,2024

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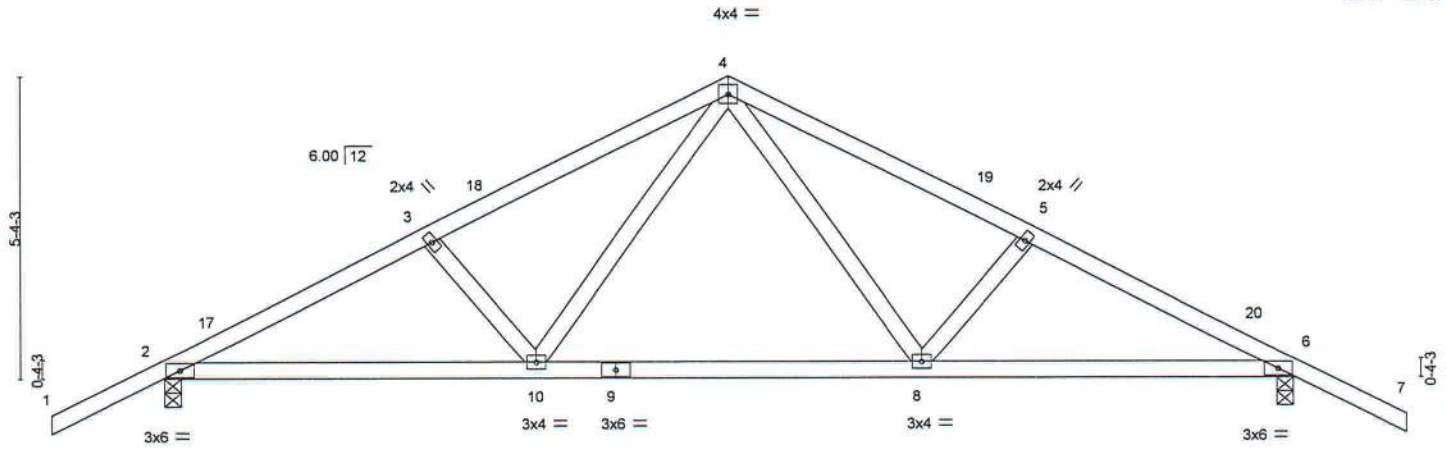
Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	T32687499
3833091	T03	Common	9	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:04 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-ixtveN37XITrbJEwaF?qUbyacq3tTjZFVqQi4ztnTf

-2-0-0	4-9-0	10-0-0	15-3-0	20-0-0	22-0-0
2-0-0	4-9-0	5-3-0	5-3-0	4-9-0	2-0-0

Scale = 1:39.0



6-7-1	13-4-15	20-0-0
6-7-1	6-9-14	6-7-1

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)	-0.17	8-10	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.95	Vert(CT)	-0.34	8-10	>706	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.26	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 96 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 4-2-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 8-9-2 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=100(LC 12)
Max Uplift 2=-308(LC 12), 6=-308(LC 13)
Max Grav 2=1053(LC 1), 6=1053(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1772/482, 3-4=-1621/461, 4-5=-1621/466, 5-6=-1772/482
BOT CHORD 2-10=-442/1541, 8-10=-207/1017, 6-8=-359/1541
WEBS 4-8=-213/676, 4-10=-213/676

NOTES- (8)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 10-0-0, Zone2 10-0-0 to 14-2-15, Zone1 14-2-15 to 22-0-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 100 lb uplift at joint(s) except (jt=lb) 2=308, 6=308.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-54, 4-7=-54, 10-11=-20, 8-10=-80(F=-60), 8-14=-20

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 22,2024

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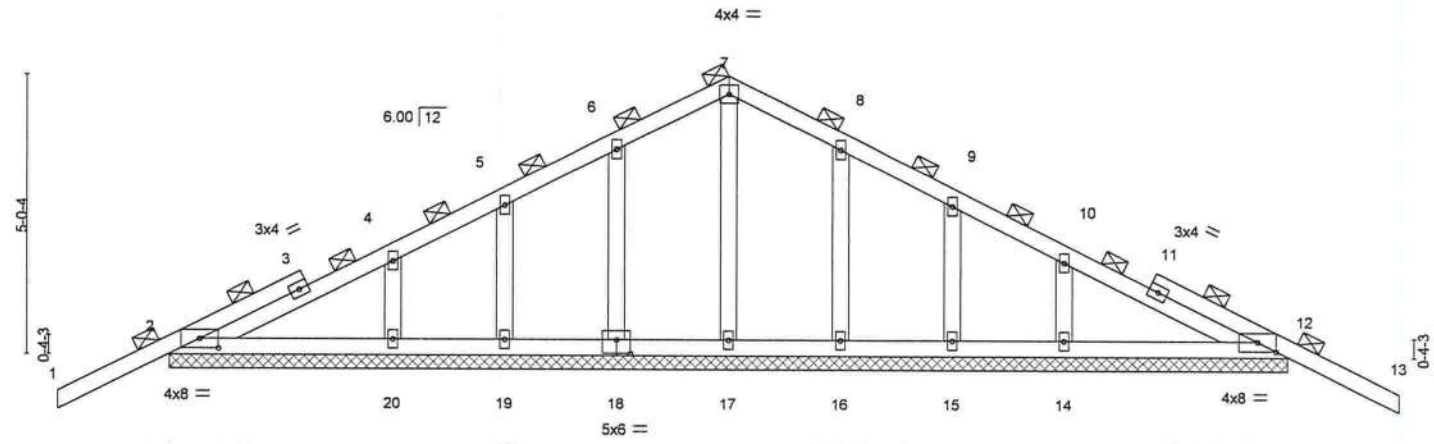
Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	
3833091	T03G	Common Supported Gable	1	1	Job Reference (optional)	T32687500

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:05 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-B7RHrj4lHbbhDTo68zW31oVoLEcKCqEiT9ZzEWztnTe

-2-0-0 2-0-0 | 10-0-0 10-0-0 | 20-0-0 10-0-0 | 22-0-0 2-0-0

Scale = 1:39.7



20-0-0
20-0-0

Plate Offsets (X,Y)-- [2:0-4-0,0-2-1], [12:0-4-0,0-2-1], [18:0-3-0,0-3-0]

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	0.24	Vert(LL)	-0.02	13	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.10	Vert(CT)	-0.02	13	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-S							Weight: 105 lb	FT = 20%

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

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.).
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 20-0-0.
(lb) - Max Horz 2=-95(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 2, 12, 18, 19, 20, 16, 15, 14
Max Grav All reactions 250 lb or less at joint(s) 17, 18, 19, 20, 16, 15, 14 except 2=265(LC 25), 12=265(LC 26)

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

NOTES- (13)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12, 18, 19, 20, 16, 15, 14.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 12.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Date:

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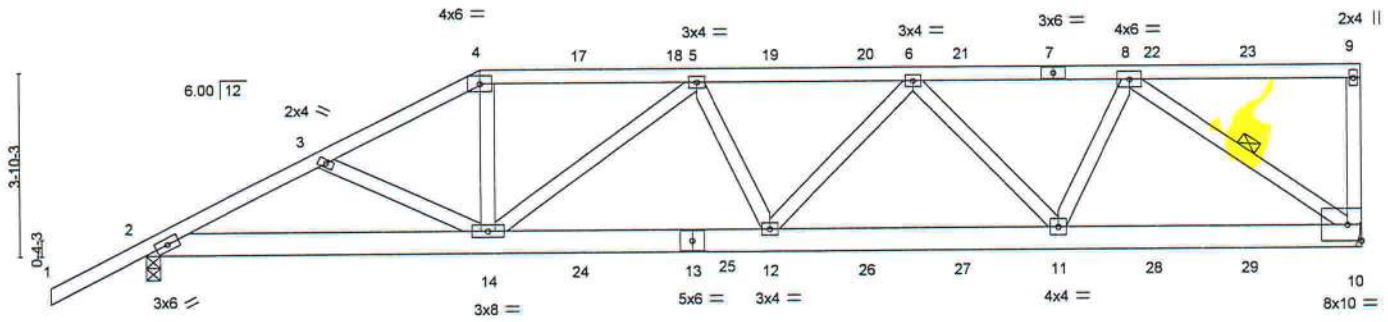
Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	T32687501
3833091	T04	Half Hip Girder	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:07 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-7WY1GP5?pDrPSmyVFNYX6Da2D18ugaI?xT24JOztnTc

-2-0-0	3-9-4	7-0-0	11-6-6	16-0-12	20-7-2	25-5-0
2-0-0	3-9-4	3-2-12	4-6-6	4-6-6	4-6-6	4-9-14

Scale = 1:46.1



7-0-0	13-0-8	19-1-0	25-5-0
7-0-0	6-0-8	6-0-8	6-4-0

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	0.60	Vert(LL)	-0.15	12-14	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.74	Vert(CT)	-0.29	12-14	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.65	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 156 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 2-9-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-10-8 oc bracing.
WEBS 1 Row at midpt 8-10

REACTIONS. (size) 10=Mechanical, 2=0-3-8
Max Horz 2=169(LC 8)
Max Uplift 10=-657(LC 5), 2=-581(LC 8)
Max Grav 10=2087(LC 1), 2=1817(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3475/1092, 3-4=-3300/1027, 4-5=-2971/957, 5-6=-3617/1107, 6-8=-2686/810, 9-10=-291/171
BOT CHORD 2-14=-1064/3084, 12-14=-1167/3618, 11-12=-1079/3356, 10-11=-718/2211
WEBS 4-14=-242/1096, 5-14=-877/341, 6-12=-83/433, 6-11=-1020/427, 8-11=-245/1191, 8-10=-2710/880

NOTES- (11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
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) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=657, 2=581.
9) 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 99 lb up at 17-0-12, 106 lb down and 100 lb up at 19-0-12, 106 lb down and 100 lb up at 21-0-12, and 106 lb down and 100 lb up at 23-0-12, and 127 lb down and 99 lb up at 25-3-4 on top chord, and 296 lb down and 103 lb up at 7-0-0, 85 lb down at 9-0-12, 85 lb down at 11-0-12, 85 lb down at 13-0-12, 85 lb down at 15-0-12, 85 lb down at 17-0-12, 85 lb down at 19-0-12, 85 lb down at 21-0-12, and 85 lb down at 23-0-12, and 100 lb down at 25-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

Continued on page 2

This item has been digitally signed and sealed by ORegan, Philip, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 22,2024

⚠ WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-4=-54, 4-9=-54, 2-10=-20
   Concentrated Loads (lb)
   Vert: 4=-106(B) 7=-106(B) 9=-127(B) 10=-69(B) 14=-287(B) 12=-61(B) 11=-61(B) 17=-106(B) 18=-106(B) 19=-106(B) 20=-106(B) 21=-106(B) 22=-106(B) 23=-106(B) 24=-61(B) 25=-61(B) 26=-61(B) 27=-61(B) 28=-61(B) 29=-61(B)

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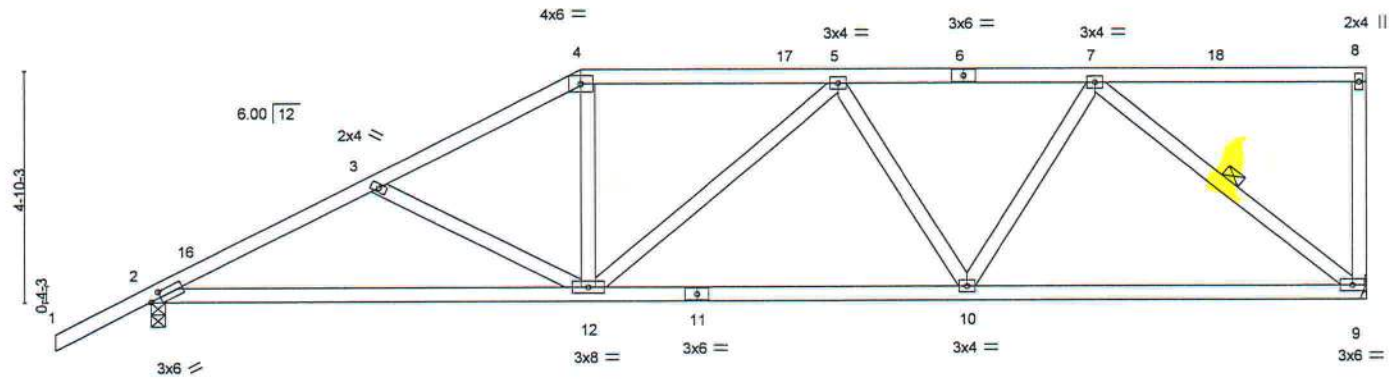
Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	T32687502
3833091	T05	Half Hip	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:08 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-bi6QTl6daWzG4wXhp53mfR6G4RU7P6l997oerrztnTb

-2-0-0	4-9-4	9-0-0	14-4-8	19-9-0	25-5-0
2-0-0	4-9-4	4-2-12	5-4-8	5-4-8	5-8-0

Scale = 1:46.1



9-0-0	17-0-12	25-5-0
9-0-0	8-0-12	8-4-4

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

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	0.41	Vert(LL)	-0.14	12-15	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.74	Vert(CT)	-0.29	12-15	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.05	9	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 136 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 4-4-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-10-14 oc bracing.
WEBS 1 Row at midpt 7-9

REACTIONS. (size) 9=Mechanical, 2=0-3-8
Max Horz 2=207(LC 12)
Max Uplift 9=-291(LC 9), 2=-319(LC 12)
Max Grav 9=931(LC 1), 2=1047(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1668/492, 3-4=-1406/399, 4-5=-1217/392, 5-7=-1143/330
BOT CHORD 2-12=-556/1467, 10-12=-397/1286, 9-10=-293/901
WEBS 3-12=-294/186, 4-12=-45/408, 5-10=-281/187, 7-10=-127/490, 7-9=-1140/376

NOTES- (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 9-0-0, Zone2 9-0-0 to 13-2-15, Zone1 13-2-15 to 25-3-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
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) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=291, 2=319.
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

This item has been digitally signed and sealed by ORegan, Philip, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 22,2024

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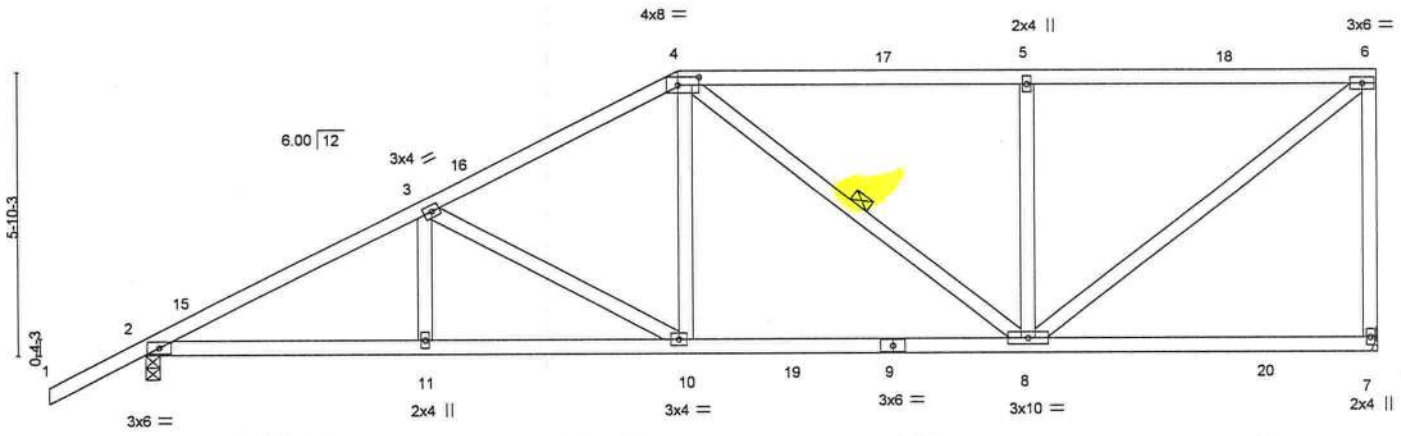
Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	T32687503
3833091	T06	Half Hip	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:10 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-X4EAuQ8u68D_JEh4wW6EksCXtFBdtz5SdRHkvjztnTZ

-2-0-0	5-9-4	11-0-0	18-2-8	25-5-0
2-0-0	5-9-4	5-2-12	7-2-8	7-2-8

Scale = 1:45.9



5-9-4	11-0-0	18-2-8	25-5-0
5-9-4	5-2-12	7-2-8	7-2-8

Plate Offsets (X,Y)-- [4:0-5-4,0-2-0]

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	0.64	Vert(LL)	-0.10	8-10	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.61	Vert(CT)	-0.18	8-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 143 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 4-1-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-10-12 oc bracing.
WEBS 1 Row at midpt 4-8

REACTIONS. (size) 7=Mechanical, 2=0-3-8
Max Horz 2=246(LC 12)
Max Uplift 7=-283(LC 9), 2=-318(LC 12)
Max Grav 7=1042(LC 2), 2=1108(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1827/460, 3-4=-1364/369, 4-5=-1010/276, 5-6=-1010/276, 6-7=-908/300
BOT CHORD 2-11=-557/1594, 10-11=-557/1594, 8-10=-371/1182
WEBS 3-10=-494/214, 4-10=-66/480, 4-8=-251/129, 5-8=-451/254, 6-8=-344/1259

NOTES- (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 11-0-0, Zone2 11-0-0 to 15-2-15, Zone1 15-2-15 to 25-3-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=283, 2=318.
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
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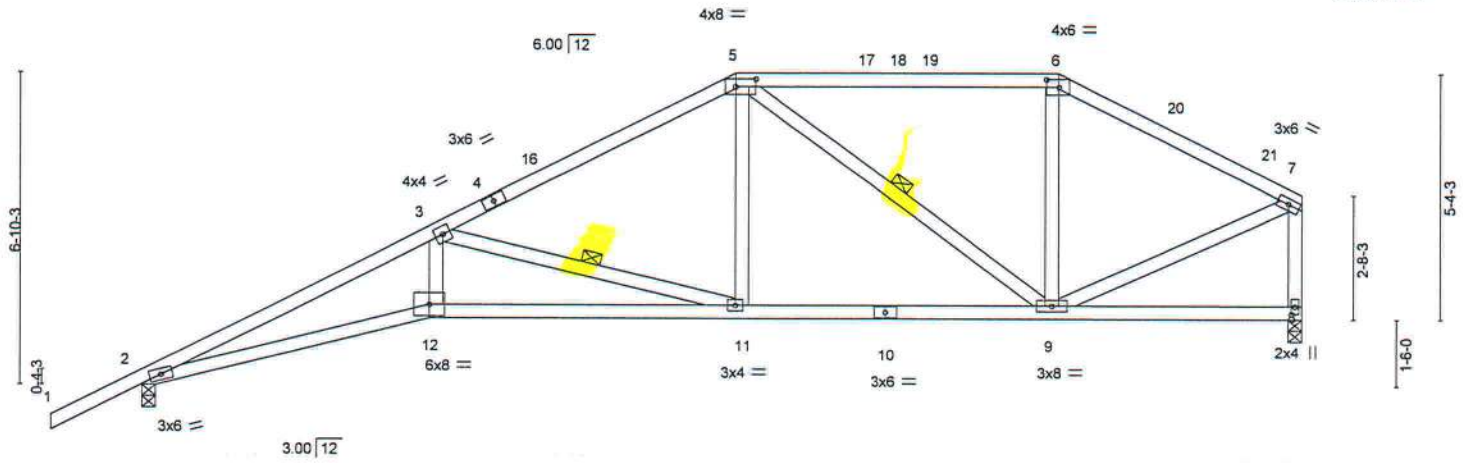
Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	
3833091	T07	Hip	1	1	Job Reference (optional)	T32687504

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:11 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-?HoY6m9WtRLrxOGGUDdUH3kiTeVQcS_bs50ISAztnTY

-2-0-0 | 6-3-8 | 13-0-0 | 20-1-0 | 25-5-0
2-0-0 | 6-3-8 | 6-8-8 | 7-1-0 | 5-4-0

Scale: 1/4"=1'



6-3-8 | 13-0-0 | 20-1-0 | 25-5-0
6-3-8 | 6-8-8 | 7-1-0 | 5-4-0

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

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	0.65	Vert(LL)	-0.18	11-12	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.76	Vert(CT)	-0.36	11-12	>842	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.15	8	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 133 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 3-1-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 5-11-1 oc bracing.
WEBS 1 Row at midpt 3-11, 5-9

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=227(LC 12)
Max Uplift 2=-311(LC 12), 8=-213(LC 13)
Max Grav 2=1047(LC 1), 8=931(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3017/953, 3-5=-1412/406, 5-6=-804/239, 6-7=-955/243, 7-8=-884/224
BOT CHORD 2-12=-1004/2727, 11-12=-954/2577, 9-11=-359/1207
WEBS 3-12=-205/756, 3-11=-1432/619, 5-11=-115/562, 5-9=-541/218, 7-9=-193/848

NOTES- (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 0-9-15, Zone1 0-9-15 to 13-0-0, Zone2 13-0-0 to 17-2-15, Zone1 17-2-15 to 20-1-0, Zone2 20-1-0 to 24-3-15, Zone1 24-3-15 to 25-3-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=311, 8=213.
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Date:

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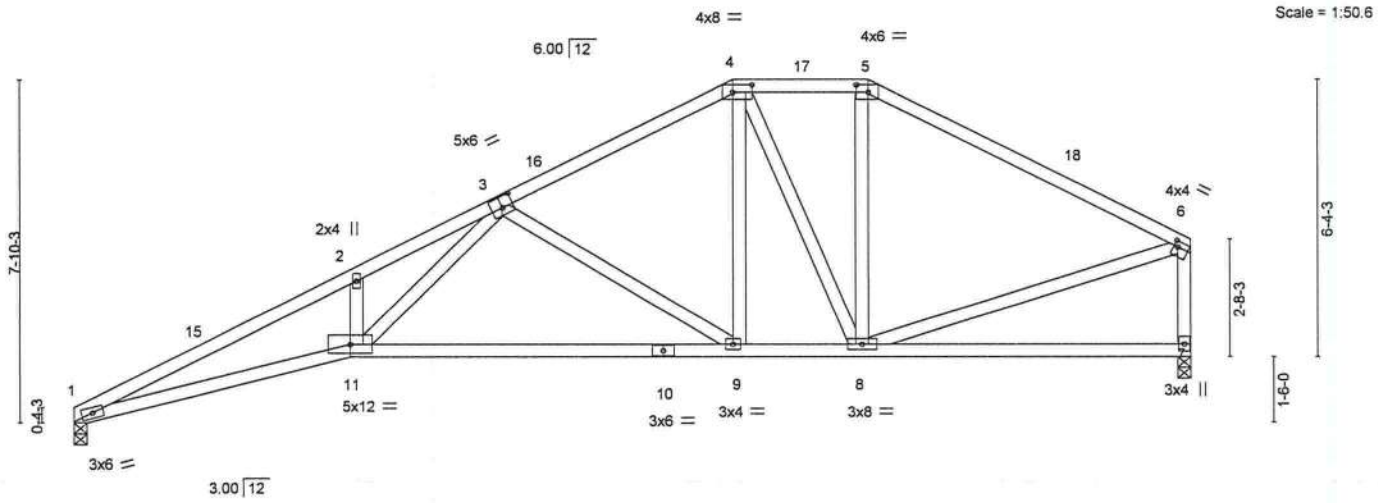
Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	
3833091	T08	Hip	1	1	Job Reference (optional)	T32687505

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:12 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-UTMwJ698elTiYYrS2x8jpHHs52pOLrak4lmr_cztnTX

6-3-8	9-9-0	15-0-0	18-1-0	25-5-0
6-3-8	3-5-8	5-3-0	3-1-0	7-4-0

Scale = 1:50.6



6-3-8	15-0-0	18-1-0	25-5-0
6-3-8	8-8-8	3-1-0	7-4-0

Plate Offsets (X,Y)-- [3:0-3-0,0-3-0], [4:0-5-4,0-2-0], [5:0-3-4,0-2-0], [6:0-1-0,0-1-8]

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	0.72	Vert(LL)	-0.24	9-11	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.84	Vert(CT)	-0.54	9-11	>562	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.13	7	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 139 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 2-8-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 5-9-2 oc bracing.

REACTIONS. (size) 1=0-3-8, 7=0-3-8
Max Horz 1=211(LC 12)
Max Uplift 1=-255(LC 12), 7=-212(LC 12)
Max Grav 1=935(LC 1), 7=935(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-3043/945, 2-3=-3018/1050, 3-4=-1142/338, 4-5=-832/281, 5-6=-1015/283, 6-7=-863/232
BOT CHORD 1-11=-1013/2753, 9-11=-600/1651, 8-9=-266/971
WEBS 3-11=-551/1443, 3-9=-817/398, 4-9=-168/579, 4-8=-397/147, 6-8=-196/793

NOTES- (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-0-0 to 3-0-0, Zone1 3-0-0 to 15-0-0, Zone3 15-0-0 to 18-1-0, Zone2 18-1-0 to 22-3-15, Zone1 22-3-15 to 25-3-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=255, 7=212.
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

This item has been digitally signed and sealed by ORegan, Philip, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 22,2024

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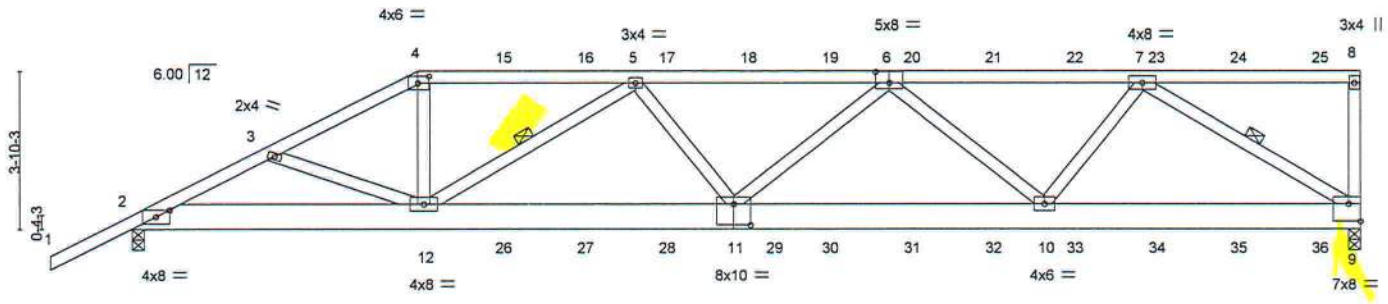
Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	T32687506
3833091	T09	Half Hip Girder	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:14 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-QsThkoBOAMjQor_r9MABuiM9JseXpiG1Y3Fy3UztnTV

-2-0-0	3-6-0	7-0-0	12-4-0	18-6-7	24-9-0	30-1-0
2-0-0	3-6-0	3-6-0	5-4-0	6-2-7	6-2-9	5-4-0

Scale = 1:54.0



7-0-0	14-8-12	22-4-3	30-1-0
7-0-0	7-8-12	7-7-7	7-8-13

Plate Offsets (X,Y)-- [2:0-4-0,0-1-15], [4:0-3-4,0-2-0], [6:0-4-0,0-3-4], [9:Edge,0-5-0], [11:0-5-0,0-6-0]

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	0.93	Vert(LL)	-0.21	11	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.29	Vert(CT)	-0.39	11	>910	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.89	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 200 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1 *Except* 1-4: 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-5-5 oc bracing.
WEBS 1 Row at midpt 5-12, 7-9

REACTIONS. (size) 9=0-3-8, 2=0-3-8
Max Horz 2=168(LC 8)
Max Uplift 9=-828(LC 5), 2=-700(LC 8)
Max Grav 9=2497(LC 1), 2=2194(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4256/1332, 3-4=-4121/1267, 4-5=-3720/1179, 5-6=-5107/1552, 6-7=-3884/1160, 8-9=-377/223
BOT CHORD 2-12=-1276/3763, 11-12=-1609/4983, 10-11=-1579/4872, 9-10=-987/2984
WEBS 4-12=-332/1421, 5-12=-1554/586, 5-11=0/397, 6-11=-12/450, 6-10=-1325/571, 7-10=-311/1560, 7-9=-3513/1159

NOTES- (10)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
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 100 lb uplift at joint(s) except (jt=lb) 9=828, 2=700.
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 96 lb up at 19-0-12, 106 lb down and 100 lb up at 21-0-12, 106 lb down and 100 lb up at 23-0-12, 106 lb down and 100 lb up at 25-0-12, 106 lb down and 100 lb up at 27-0-12, and 109 lb down and 100 lb up at 29-0-12, and 135 lb down and 98 lb up at 29-11-4 on top chord, and 296 lb down and 103 lb up at 7-0-0, 85 lb down at 9-0-12, 85 lb down at 11-0-12, 85 lb down at 13-0-12, 85 lb down at 15-0-12, 85 lb down at 17-0-12, 85 lb down at 19-0-12, 85 lb down at 21-0-12, 85 lb down at 23-0-12, 85 lb down at 25-0-12, and 85 lb down at 27-0-12, and 87 lb down at 29-0-12 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).
10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Continued on page 2

LOAD CASE(S) Standard

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MiTek Inc. DBA MiTek USA FL Cert 6634
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Date:

January 22,2024

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-4=-54, 4-8=-54, 2-9=-20
   Concentrated Loads (lb)
   Vert: 4=-106(F) 8=-135(F) 12=-287(F) 15=-106(F) 16=-106(F) 17=-106(F) 18=-106(F) 19=-106(F) 20=-106(F) 21=-106(F) 22=-106(F) 23=-106(F) 24=-106(F) 25=-109(F) 26=-61(F) 27=-61(F) 28=-61(F) 29=-61(F) 30=-61(F) 31=-61(F) 32=-61(F) 33=-61(F) 34=-61(F) 35=-61(F) 36=-62(F)

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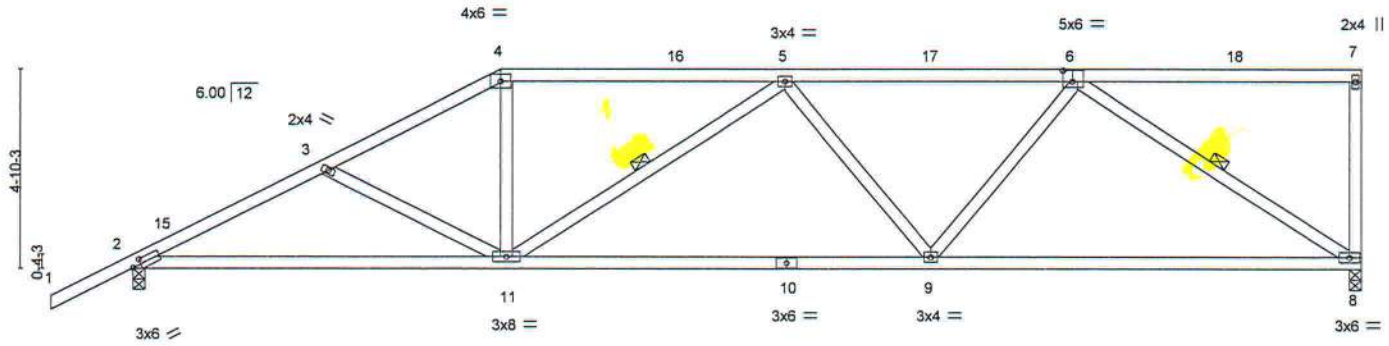
Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	
3833091	T10	MONO HIP	1	1	Job Reference (optional)	T32687507

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:16 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-MEbR9UCei_z8198EHmDfz7Salf9LHgfK?Nk37NztnTT

-2-0-0	4-9-5	9-0-0	15-11-9	23-1-7	30-1-0
2-0-0	4-9-5	4-2-11	6-11-9	7-1-14	6-11-9

Scale = 1:54.0



9-0-0	19-6-7	30-1-0
9-0-0	10-6-7	10-6-8

Plate Offsets (X,Y)-- [2:0-2-9,0-1-8], [6:0-2-12,0-3-4]

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	0.58	Vert(LL)	-0.26	8-9	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.91	Vert(CT)	-0.54	8-9	>670	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.08	8	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 155 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
8-10: 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-3-8 oc bracing.
WEBS 1 Row at midpt 5-11, 6-8

REACTIONS. (size) 8=0-3-8, 2=0-3-8
Max Horz 2=207(LC 12)
Max Uplift 8=-349(LC 9), 2=-370(LC 12)
Max Grav 8=1104(LC 1), 2=1219(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2046/600, 3-4=-1798/511, 4-5=-1575/494, 5-6=-1666/484
BOT CHORD 2-11=-652/1801, 9-11=-585/1840, 8-9=-439/1326
WEBS 3-11=-272/180, 4-11=-75/526, 5-11=-416/211, 5-9=-282/226, 6-9=-136/606, 6-8=-1546/519

NOTES- (8)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 9-0-0, Zone2 9-0-0 to 13-2-15, Zone1 13-2-15 to 29-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
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 100 lb uplift at joint(s) except (jt=lb) 8=349, 2=370.
8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 22,2024

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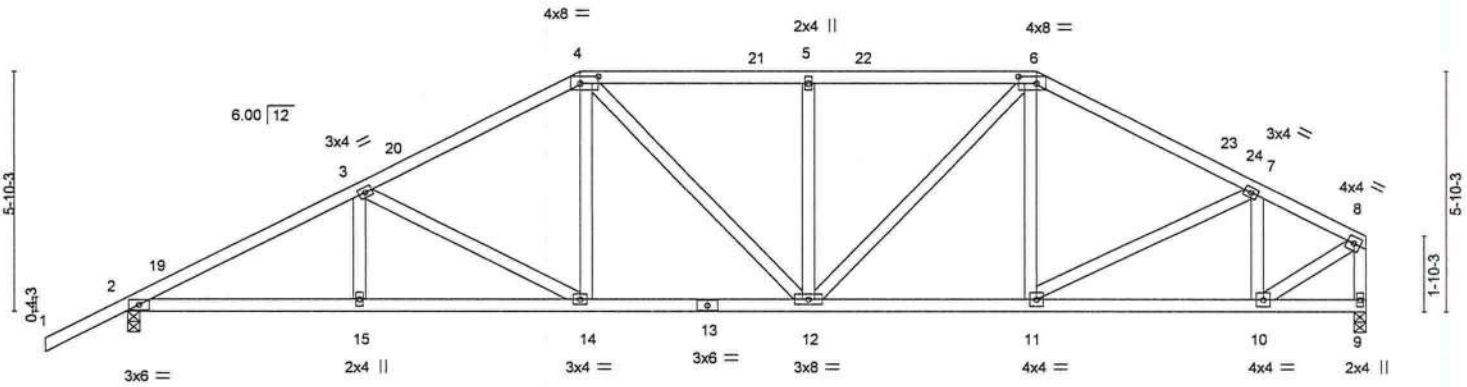
Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	T32687508
3833091	T11	HIP	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:17 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-qR9pMqDHTH5?fJjQrUkuWK_pq3c909RUE1TcfpztnTS

-2-0-0	5-7-11	11-0-0	16-6-8	22-1-0	27-5-5	30-1-0
2-0-0	5-7-11	5-4-5	5-6-8	5-6-8	5-4-5	2-7-11

Scale = 1:54.0



5-7-11	11-0-0	16-6-8	22-1-0	27-5-5	30-1-0
5-7-11	5-4-5	5-6-8	5-6-8	5-4-5	2-7-11

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

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	0.34	Vert(LL)	-0.08	14	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.49	Vert(CT)	-0.16	12-14	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.06	9	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 173 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
8-9: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-11-15 oc bracing.

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=160(LC 12)
Max Uplift 2=-354(LC 12), 9=-278(LC 13)
Max Grav 2=1219(LC 1), 9=1104(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2069/543, 3-4=-1626/449, 4-5=-1503/416, 5-6=-1503/416, 6-7=-1383/363, 7-8=-1052/274, 8-9=-1086/279
BOT CHORD 2-15=-547/1800, 14-15=-547/1800, 12-14=-355/1399, 11-12=-217/1175, 10-11=-231/931
WEBS 3-14=-464/218, 4-14=-69/381, 4-12=-124/267, 5-12=-339/193, 6-12=-176/533, 7-11=-99/341, 7-10=-513/180, 8-10=-275/1097

NOTES- (8)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 11-0-0, Zone2 11-0-0 to 15-2-15, Zone1 15-2-15 to 22-1-0, Zone2 22-1-0 to 26-3-15, Zone1 26-3-15 to 29-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
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 100 lb uplift at joint(s) except (jt=lb) 2=354, 9=278.
8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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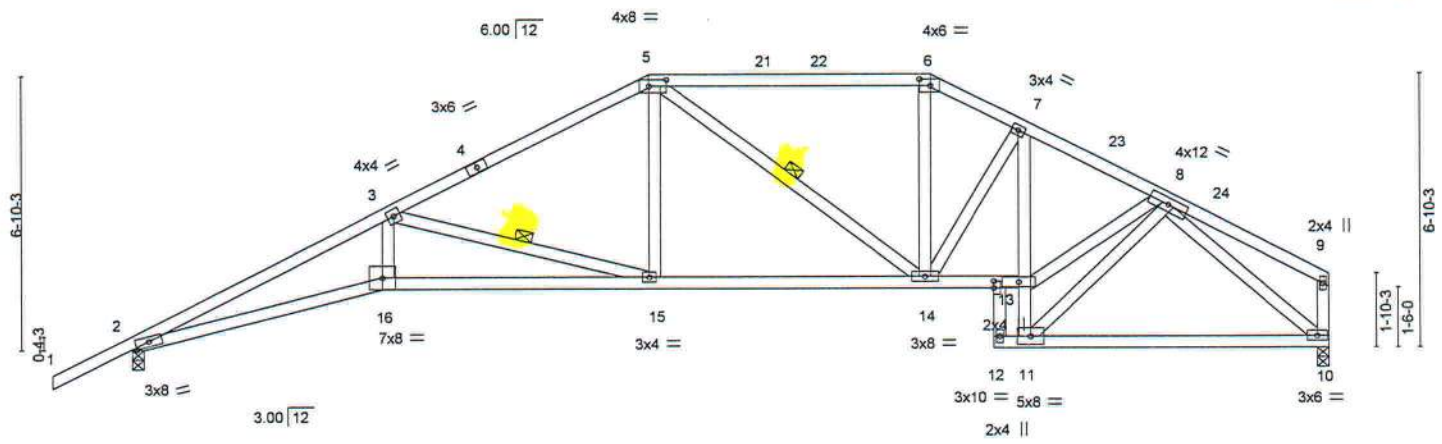
Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	T32687509
3833091	T12	SPECIAL	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:19 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-mpHanVFX_vMiuctoyvmMbl43ntCDU_QmhLyjkiztnTQ

-2-0-0	6-3-8	13-0-0	20-1-0	22-3-8	26-0-10	30-1-0
2-0-0	6-3-8	6-8-8	7-1-0	2-2-8	3-9-2	4-0-5

Scale = 1:55.4



6-3-8	13-0-0	20-1-0	21-8-0	22-3-8	30-1-0
6-3-8	6-8-8	7-1-0	1-7-0	0-7-8	7-9-8

Plate Offsets (X,Y)-- [2:0-4-0,0-1-9], [5:0-5-4,0-2-0], [6:0-3-4,0-2-0], [17:0-2-0,0-0-0]

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	0.76	Vert(LL)	-0.25	15-16	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.90	Vert(CT)	-0.50	15-16	>715	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.29	10	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 175 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2 *Except* 7-11: 2x4 SP No.3
WEBS	2x4 SP No.3 *Except* 9-10: 2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-1-9 oc bracing. Except: 10-0-0 oc bracing: 11-13
WEBS	1 Row at midpt 3-15, 5-14

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=176(LC 12)
Max Uplift 2=-319(LC 12), 10=-236(LC 13)
Max Grav 2=1223(LC 1), 10=1115(LC 1)

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

TOP CHORD	2-3=-3735/938, 3-5=-1918/444, 5-6=-1497/399, 6-7=-1672/422, 7-8=-1806/428
BOT CHORD	2-16=-938/3384, 15-16=-891/3203, 14-15=-310/1661, 13-14=-285/1588, 11-13=-201/995, 10-11=-228/1066
WEBS	3-16=-189/906, 3-15=-1611/604, 5-15=-110/602, 5-14=-313/128, 6-14=-86/484, 8-13=-332/1630, 8-11=-1265/324, 8-10=-1365/298

NOTES- (9)

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 0-9-15, Zone1 0-9-15 to 13-0-0, Zone2 13-0-0 to 17-2-15, Zone1 17-2-15 to 20-1-0, Zone2 20-1-0 to 24-3-15, Zone1 24-3-15 to 29-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=319, 10=236.
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

This item has been digitally signed and sealed by ORegan, Philip, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 22,2024

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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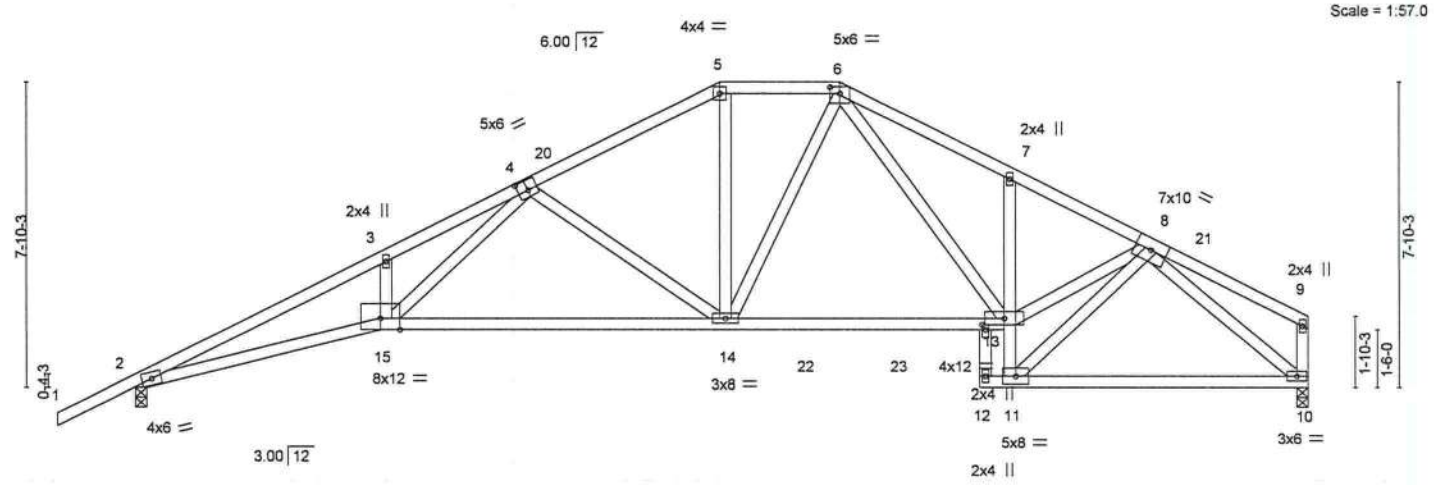
Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	T32687510
3833091	T13	SPECIAL	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:20 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-F0ry?rF9lCUZWmS?WcHb8zcGxHWBDR0ww?iGG8ztnTP

-2-0-0	6-3-8	10-1-8	15-0-0	18-1-0	22-3-8	26-0-10	30-1-0
2-0-0	6-3-8	3-10-0	4-10-8	3-1-0	4-2-8	3-9-2	4-0-5

Scale = 1:57.0



6-3-8	15-0-0	21-8-0	22-3-8	30-1-0
6-3-8	8-8-8	6-8-0	0-7-8	7-9-8

Plate Offsets (X,Y)-- [4:0-3-0,0-3-0], [6:0-3-0,0-2-0], [16:0-1-8,0-1-0]

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	0.60	Vert(LL)	-0.34	14-15	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.98	Vert(CT)	-0.66	14-15	>541	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.29	10	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 178 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
13-15: 2x4 SP No.1, 7-11: 2x4 SP No.3
WEBS 2x4 SP No.3 *Except*
9-10: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-4-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except:
2-2-0 oc bracing: 11-13

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=193(LC 12)
Max Uplift 2=-333(LC 12), 10=-253(LC 13)
Max Grav 2=1294(LC 2), 10=1221(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4014/968, 3-4=-3971/1074, 4-5=-1785/398, 5-6=-1560/391, 6-7=-2087/508, 7-8=-2033/425
BOT CHORD 2-15=-977/3658, 14-15=-566/2242, 13-14=-221/1445, 11-13=-189/1135, 10-11=-225/1146
WEBS 4-15=-542/1794, 4-14=-846/373, 5-14=-93/610, 6-14=-90/347, 6-13=-248/650, 8-13=-341/1862, 8-11=-1371/309, 8-10=-1445/296

NOTES- (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 0-9-15, Zone1 0-9-15 to 15-0-0, Zone3 15-0-0 to 18-1-0, Zone2 18-1-0 to 22-6-1, Zone1 22-6-1 to 29-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=333, 10=253.
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

This item has been digitally signed and sealed by ORegan, Philip, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 22,2024

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Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	T32687511
3833091	T14	SPECIAL	2	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:21 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-jCPKCBGnWWcQ8w1B4KoqgA9Q7gtjyuD39fRqoaztnTO

-2-0-0	6-3-8	10-2-15	16-6-8	22-3-8	26-0-10	30-1-0
2-0-0	6-3-8	3-11-7	6-3-9	5-9-0	3-9-2	4-0-5

Scale = 1:60.0

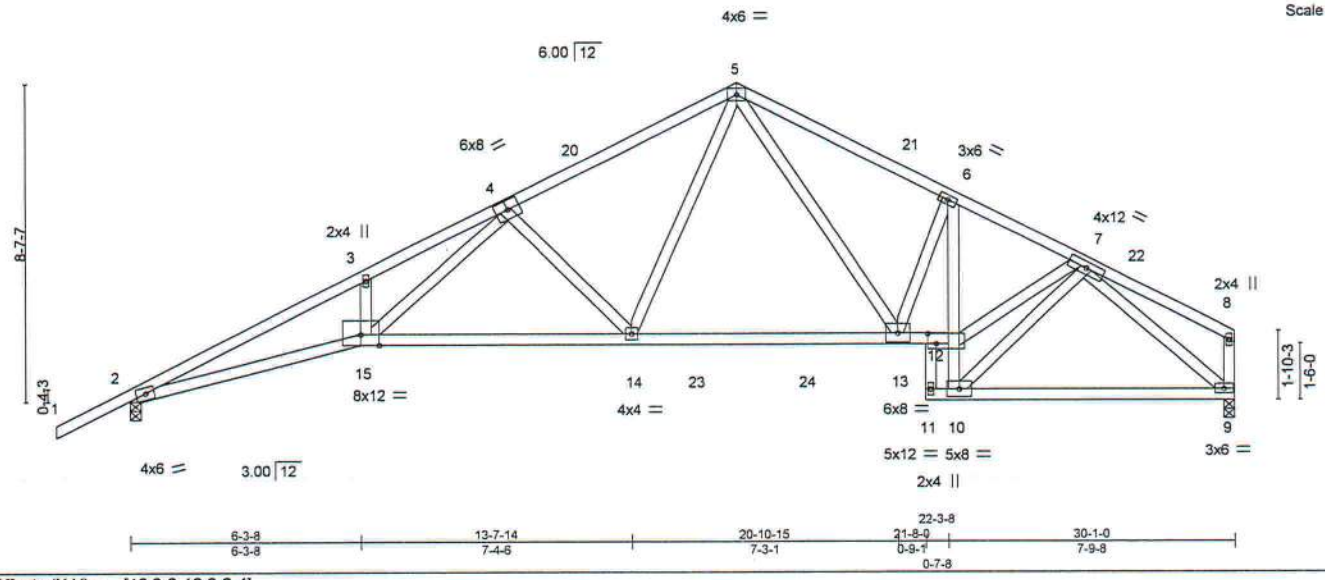

Plate Offsets (X,Y)-- [12:0-2-12,0-3-4]

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	0.64	Vert(LL)	-0.31	14-15	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.96	Vert(CT)	-0.58	14-15	>621	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.29	9	n/a	n/a		
BCDL	10.0	Code FBC2023/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 *Except*
8-9: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-3-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except:
10-0-0 oc bracing: 10-12

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=206(LC 12)
Max Uplift 2=-342(LC 12), 9=-264(LC 13)
Max Grav 2=1300(LC 2), 9=1225(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4021/1016, 3-4=-3975/1115, 4-5=-1984/494, 5-6=-1974/473, 6-7=-1979/432
BOT CHORD 2-15=-1033/3659, 14-15=-602/2246, 13-14=-244/1342, 12-13=-305/1784, 10-12=-198/1056, 9-10=-235/1152
WEBS 4-15=-558/1773, 4-14=-776/380, 5-14=-250/959, 5-13=-222/699, 6-13=-284/222, 7-12=-343/1717, 7-10=-1247/319, 7-9=-1452/307

NOTES- (8)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 0-9-15, Zone1 0-9-15 to 16-6-8, Zone2 16-6-8 to 20-9-7, Zone1 20-9-7 to 29-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=342, 9=264.
8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 22,2024

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MiTek®
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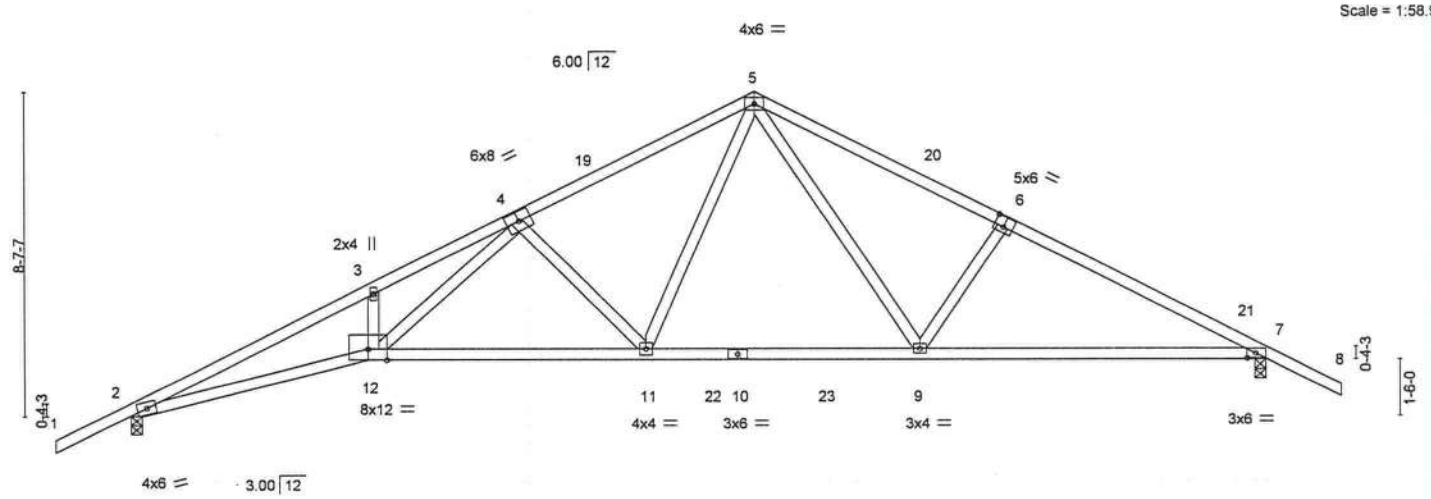
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	
3833091	T15	SPECIAL	4	1	Job Reference (optional)	T32687512

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:23 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-fbW4dtl127s8NEAaBlrlmbEnhUYlQpuMcywwtTztnTM

-2-0-0	6-3-8	10-2-15	16-6-8	23-1-7	30-1-0	32-1-0
2-0-0	6-3-8	3-11-7	6-3-9	6-6-15	6-11-9	2-0-0

Scale = 1:58.9



6-3-8	13-7-14	20-10-15	30-1-0
6-3-8	7-4-6	7-3-1	9-2-1

Plate Offsets (X,Y)-- [6:0-3-0,0-3-4], [7:0-2-12,0-1-8]

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	0.64	Vert(LL)	-0.31	11-12	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.95	Vert(CT)	-0.59	11-12	>616	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.22	7	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 147 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 2-3-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=188(LC 12)
Max Uplift 2=-344(LC 12), 7=-320(LC 13)
Max Grav 2=1296(LC 2), 7=1302(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4006/1007, 3-4=-3960/1107, 4-5=-1968/496, 5-6=-1984/457, 6-7=-2137/463
BOT CHORD 2-12=-1007/3651, 11-12=-583/2232, 9-11=-227/1334, 7-9=-320/1880
WEBS 4-12=-549/1778, 4-11=-778/377, 5-11=-251/941, 5-9=-206/702, 6-9=-376/260

NOTES- (8)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 0-9-15, Zone1 0-9-15 to 16-6-8, Zone2 16-6-8 to 20-9-7, Zone1 20-9-7 to 32-1-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=344, 7=320.
8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Date:

January 22,2024

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MiTek®
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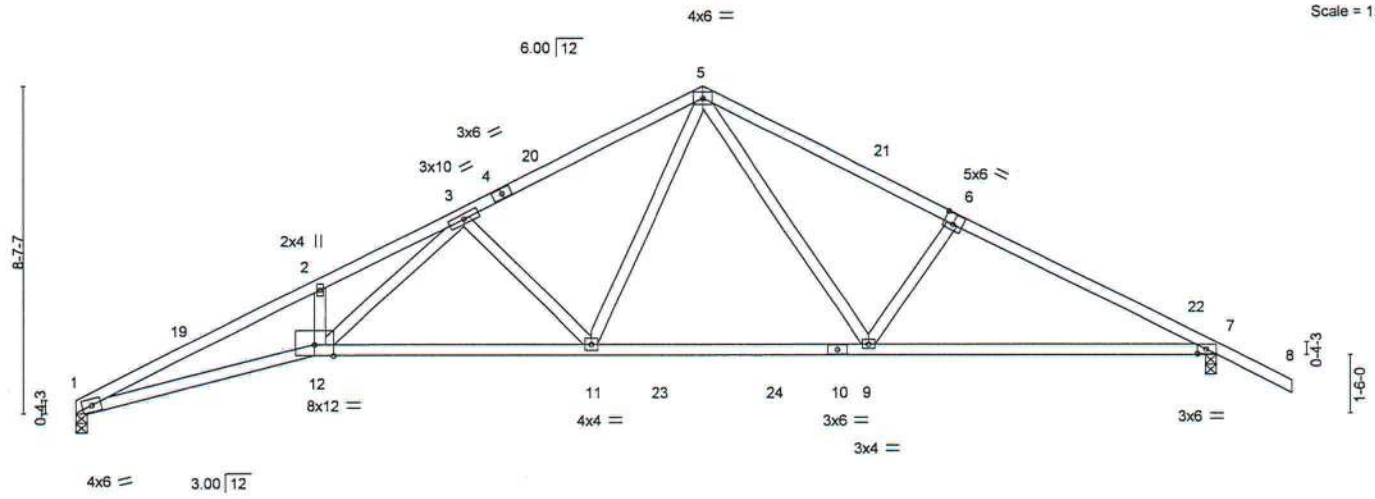
Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	T32687513
3833091	T16	Roof Special	2	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:24 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-7n4TqDJgpR_??OlmlSMXlpnxOuto9GrVrcgUPvztnTL

6-3-8	10-2-15	16-6-8	23-1-7	30-1-0	32-1-0
6-3-8	3-11-7	6-3-9	6-6-15	6-11-9	2-0-0

Scale = 1:58.2



6-3-8	13-7-4	20-10-15	30-1-0
6-3-8	7-3-12	7-3-11	9-2-1

Plate Offsets (X,Y)-- [6:0-3-0,0-3-4], [7:0-2-12,0-1-8]

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	0.70	Vert(LL)	-0.31	11-12	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	1.00	Vert(CT)	-0.58	11-12	>621	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.22	7	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 144 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 1-4-12 oc bracing.

REACTIONS. (size) 1=0-3-8, 7=0-3-8
Max Horz 1=154(LC 12)
Max Uplift 1=-293(LC 12), 7=-320(LC 13)
Max Grav 1=1205(LC 2), 7=1305(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-4059/1045, 2-3=-4020/1150, 3-5=-1986/506, 5-6=-1992/458, 6-7=-2144/464
BOT CHORD 1-12=-1045/3704, 11-12=-593/2247, 9-11=-231/1340, 7-9=-324/1887
WEBS 3-12=-586/1824, 3-11=-785/383, 5-11=-258/953, 5-9=-206/704, 6-9=-376/260

NOTES- (8)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-0-0 to 3-0-2, Zone1 3-0-2 to 16-6-8, Zone2 16-6-8 to 20-9-9, Zone1 20-9-9 to 32-1-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=293, 7=320.
8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

This item has been digitally signed and sealed by ORegan, Philip, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 22,2024

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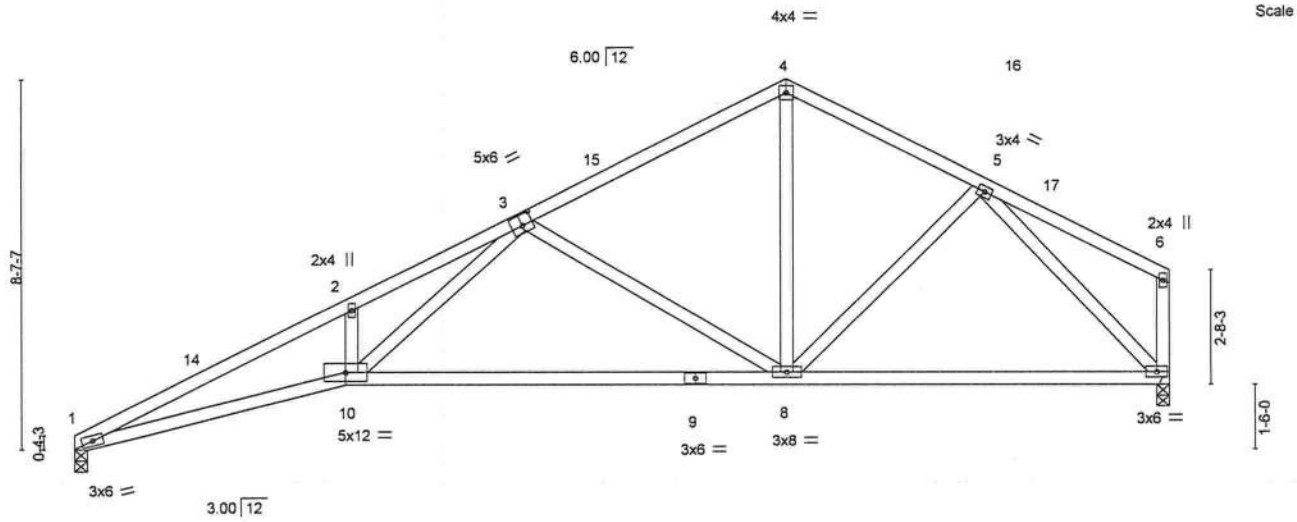
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	T32687514
3833091	T17	Roof Special	3	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:25 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-bzer2ZJIal6scXKyJ9tmr0K66IG_uh?f4GP1xMztnTK

6-3-8	10-6-0	16-6-8	21-0-0	25-5-0
6-3-8	4-2-8	6-0-8	4-5-8	4-5-0

Scale = 1:51.6



6-3-8	15-0-8	16-6-8	25-5-0
6-3-8	8-9-0	1-6-0	8-10-8

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

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	0.58	Vert(LL)	-0.33	8-10	>923	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.81	Vert(CT)	-0.71	8-10	>427	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.14	7	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 132 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
7-9: 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-8-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 5-8-13 oc bracing.

REACTIONS. (size) 1=0-3-8, 7=0-3-8
Max Horz 1=224(LC 12)
Max Uplift 1=-251(LC 12), 7=-216(LC 12)
Max Grav 1=935(LC 1), 7=935(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-3048/938, 2-3=-3026/1047, 3-4=-1006/282, 4-5=-981/311
BOT CHORD 1-10=-1019/2758, 8-10=-570/1546, 7-8=-184/723
WEBS 3-10=-579/1535, 3-8=-838/429, 4-8=-135/565, 5-7=-1020/271

NOTES- (8)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-0-0 to 3-0-0, Zone1 3-0-0 to 16-6-8, Zone2 16-6-8 to 20-9-7, Zone1 20-9-7 to 25-3-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=251, 7=216.
8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Date:

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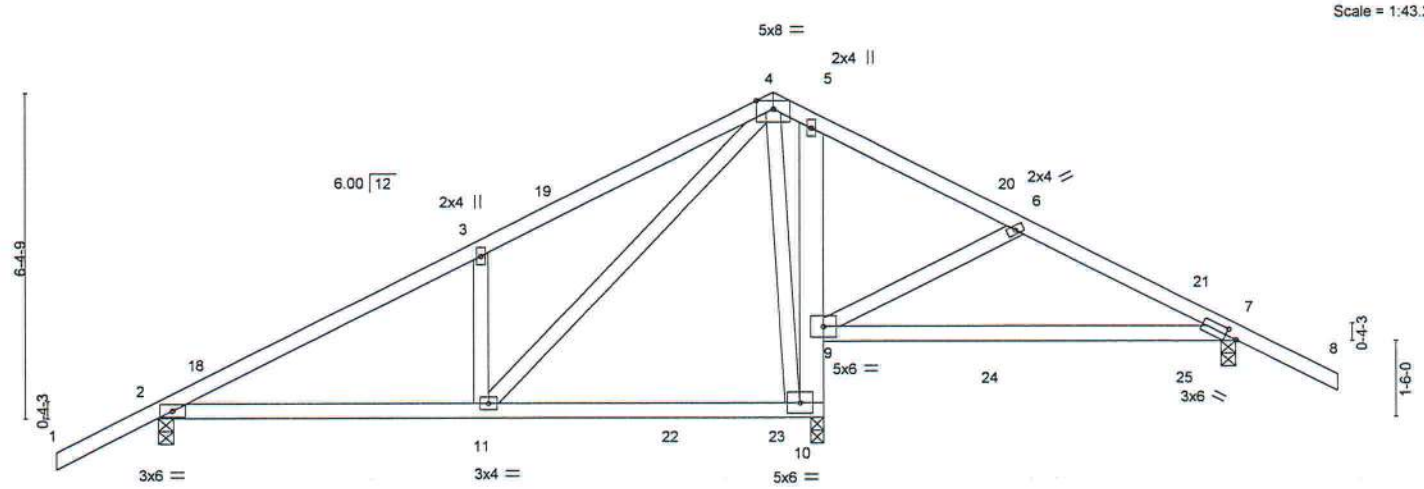
Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	T32687515
3833091	T18	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:26 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-39CDFuKwL2EjEhv9stO?NDsKFhhodE_olw9bUoztnTJ

-2-0-0	6-4-0	12-0-12	13-0-8	16-9-12	21-1-8	23-1-8
2-0-0	6-4-0	5-8-12	0-11-12	3-9-4	4-3-12	2-0-0

Scale = 1:43.2



6-4-0	13-0-8	21-1-8
6-4-0	6-8-8	8-1-0

Plate Offsets (X,Y)-- [7:0-2-9,0-1-8]

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	0.42	Vert(LL)	-0.10	9-17	>983	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.45	Vert(CT)	-0.21	9-17	>493	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 118 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
5-10: 2x6 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 6-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 7=0-3-8, 10=0-3-0
Max Horz 2=150(LC 12)
Max Uplift 2=-186(LC 12), 7=-175(LC 13), 10=-185(LC 12)
Max Grav 2=555(LC 27), 7=376(LC 26), 10=972(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-603/163, 3-4=-622/299
BOT CHORD 2-11=-192/514, 9-10=-401/237
WEBS 3-11=-356/256, 4-11=-310/771, 4-10=-500/151, 6-9=-284/185

NOTES- (7)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 12-0-12, Zone2 12-0-12 to 16-3-11, Zone1 16-3-11 to 23-1-8 zone; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 100 lb uplift at joint(s) except (jt=lb) 2=186, 7=175, 10=185.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 22,2024

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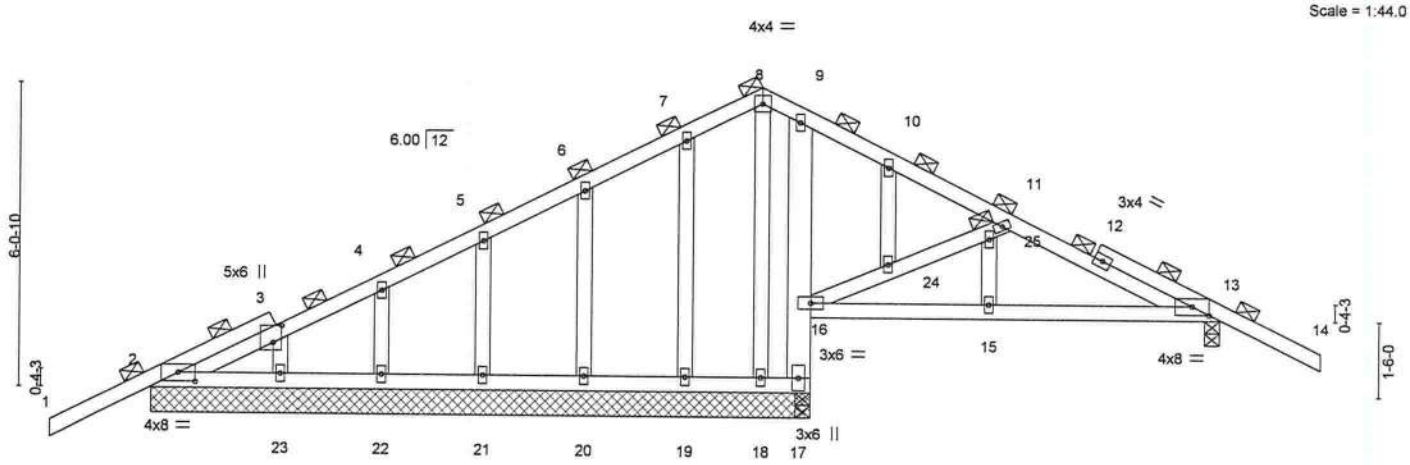
Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	
3833091	T18G	Roof Special Supported Gable	1	1	Job Reference (optional)	T32687516

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:28 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-0YKzgaMAtgURT?3X_IQTTexiyVSh5Bn5mEehYhztnTH

-2-0-0	12-0-12	13-0-8	16-9-12	21-1-8	23-1-8
2-0-0	12-0-12	0-11-12	3-9-4	4-3-12	2-0-0

Scale = 1:44.0



12-0-12	13-0-8	21-1-8
12-0-12	0-11-12	8-1-0

Plate Offsets (X,Y)-- [2:0-4-0,0-2-1], [3:0-4-2,0-2-0], [13:0-4-0,0-2-1]

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	0.28	Vert(LL)	0.02	13-15	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.17	Vert(CT)	-0.03	13-15	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.01	13	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-S							Weight: 132 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
9-17: 2x6 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.).
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
10-0-0 oc bracing: 15-16,13-15.
JOINTS 1 Brace at Jt(s): 8, 25

REACTIONS. All bearings 13-0-8 except (jt=length) 13=0-3-8.
(lb) - Max Horz 2=145(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 2, 19, 20, 21, 22, 23 except 13=-178(LC 13), 17=-124(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 2, 19, 20, 21, 22, 23, 18 except 13=399(LC 1), 17=353(LC 1), 17=353(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 11-13=-342/308
BOT CHORD 16-17=-381/301, 15-16=-199/272, 13-15=-199/272
WEBS 16-24=-355/311, 24-25=-348/305, 11-25=-318/276

NOTES- (11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 zone; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 19, 20, 21, 22, 23 except (jt=lb) 13=178, 17=124.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Date:

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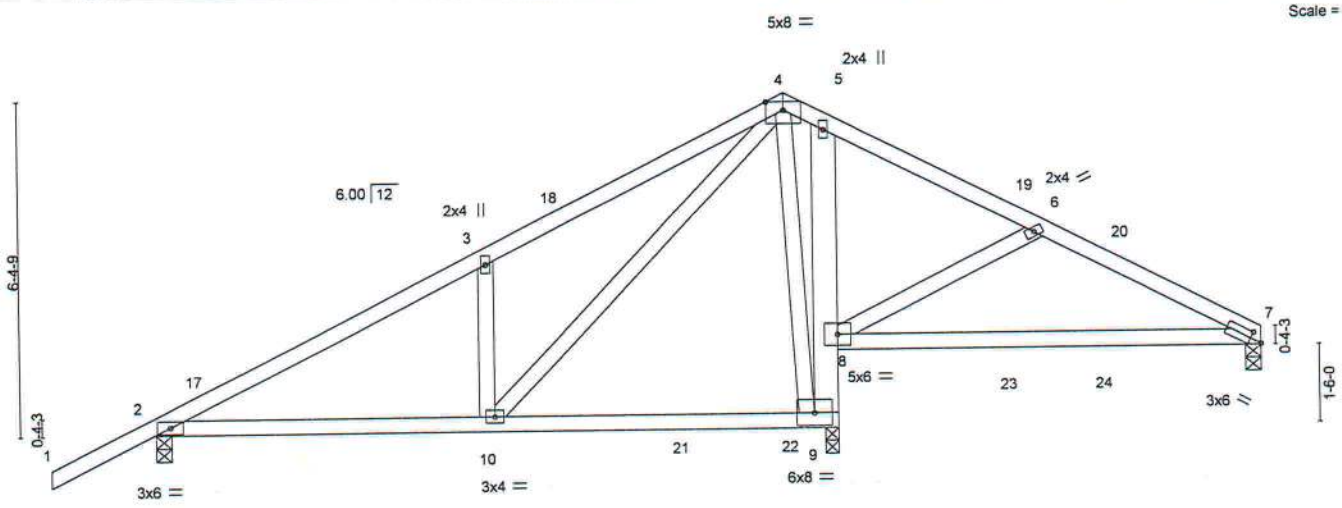
Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	T32687517
3833091	T19	Roof Special	3	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:29 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-UktMtwMoezcl59ejY?yi?sUqxviNqbjF_uNF47ztnTG

-2-0-0 6-4-0 12-0-12 13-0-8 16-9-12 21-1-8
2-0-0 6-4-0 5-8-12 0-11-12 3-9-4 4-3-12

Scale = 1:42.1



6-4-0 13-0-8 21-1-8
6-4-0 6-8-8 8-1-0

Plate Offsets (X,Y)-- [7:0-2-9,0-1-8]

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	0.46	Vert(LL)	0.11	8-13	>948	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.46	Vert(CT)	-0.21	8-13	>479	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 114 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
5-9: 2x6 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 6-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 2=0-3-8, 9=0-3-0
Max Horz 2=167(LC 12)
Max Uplift 7=-108(LC 8), 2=-179(LC 12), 9=-201(LC 12)
Max Grav 7=266(LC 28), 2=554(LC 27), 9=987(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-602/149, 3-4=-620/285
BOT CHORD 2-10=-195/508, 8-9=-407/238
WEBS 3-10=-356/256, 4-10=-310/771, 4-9=-485/166, 6-8=-316/205

NOTES- (7)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 12-0-12, Zone2 12-0-12 to 16-3-11, Zone1 16-3-11 to 21-1-8 zone; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 100 lb uplift at joint(s) except (jt=lb) 7=108, 2=179, 9=201.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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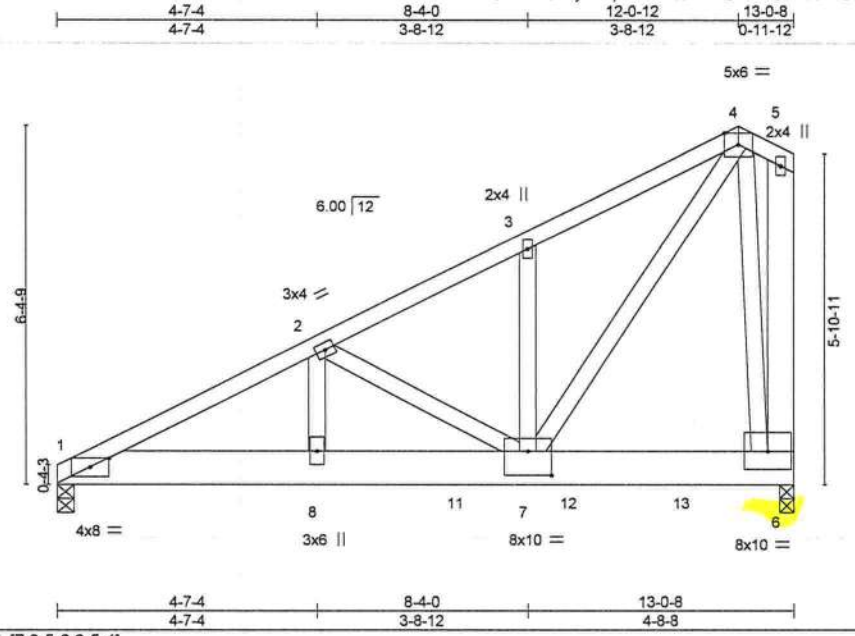
Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	T32687518
3833091	T19A	Common Girder	1	2	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:31 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-Q7?6IcO3Abs?KSo6fQ_A4HZFEiSNIP7XSCsL9?ztnTE



Scale = 1:39.4

Plate Offsets (X,Y)-- [1:0-4-0,0-1-15], [7:0-5-0,0-5-4]

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	0.15	Vert(LL)	-0.04	7-8	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.23	Vert(CT)	-0.08	7-8	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.79	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 212 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except*
5-6: 2x6 SP No.2

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

REACTIONS. (size) 1=0-3-8, 6=0-3-0
Max Horz 1=222(LC 8)
Max Uplift 1=-531(LC 8), 6=-1012(LC 8)
Max Grav 1=1802(LC 1), 6=3024(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-3792/1126, 2-3=-2886/856, 3-4=-2888/940
BOT CHORD 1-8=-1171/3352, 7-8=-1171/3352, 6-7=-118/336
WEBS 2-8=-195/693, 2-7=-939/360, 4-7=-1392/4134, 4-6=-2166/768

NOTES- (10)
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-5-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=531, 6=1012.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2067 lb down and 677 lb up at 7-0-12, and 911 lb down and 311 lb up at 9-0-12, and 1022 lb down and 303 lb up at 11-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

This item has been digitally signed and sealed by ORegan, Philip, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 22,2024

Continued on page 2

⚠ WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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314.434.1200 / MiTek-US.com

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-4=-54, 4-5=-54, 1-6=-20
   Concentrated Loads (lb)
   Vert: 11=-2067(F) 12=-911(F) 13=-911(F)

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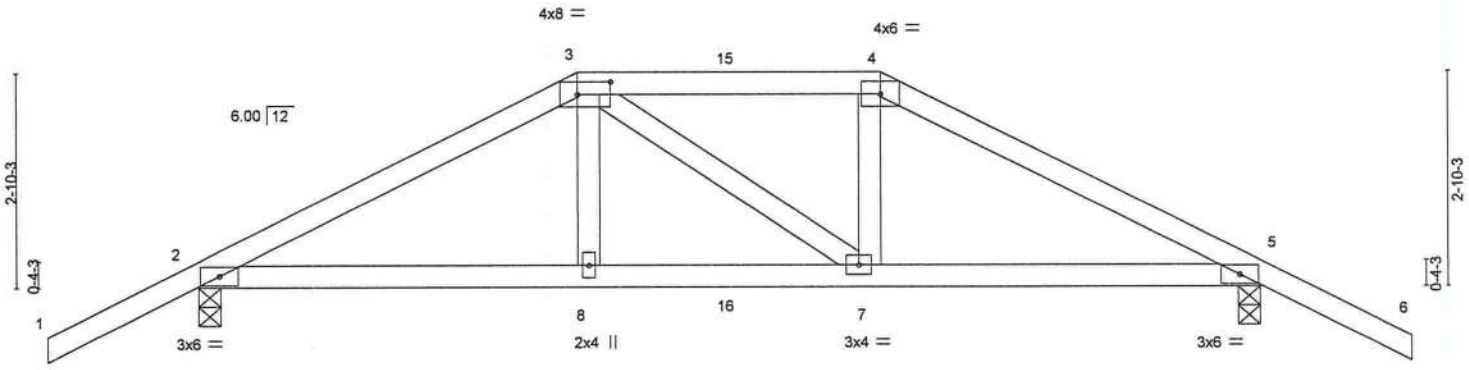
Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	T32687519
3833091	T20	HIP GIRDER	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:32 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-uJZUWyPhwu_sycMID8VPdU6N66mZ11uhhscvhSztnTD

-2-0-0	5-0-0	9-0-0	14-0-0	16-0-0
2-0-0	5-0-0	4-0-0	5-0-0	2-0-0

Scale = 1:29.3



5-0-0	9-0-0	14-0-0
5-0-0	4-0-0	5-0-0

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

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	0.34	Vert(LL)	0.04	7-14	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.36	Vert(CT)	-0.05	8-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.11	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 63 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 5-0-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 8-6-5 oc bracing.

REACTIONS. (size) 2=0-3-8, 5=0-3-8
Max Horz 2=59(LC 33)
Max Uplift 2=-337(LC 5), 5=-350(LC 4)
Max Grav 2=811(LC 1), 5=829(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1179/563, 3-4=-1049/552, 4-5=-1220/592
BOT CHORD 2-8=-471/1005, 7-8=-475/1015, 5-7=-478/1041
WEBS 3-8=-72/302, 4-7=-49/290

NOTES- (10)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
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 100 lb uplift at joint(s) except (jt=lb) 2=337, 5=350.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 72 lb down and 77 lb up at 5-0-0, and 54 lb down and 68 lb up at 7-0-0, and 165 lb down and 171 lb up at 9-0-0 on top chord, and 153 lb down and 54 lb up at 5-0-0, and 63 lb down at 7-0-0, and 153 lb down and 54 lb up at 8-10-15 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).
10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-54, 3-4=-54, 4-6=-54, 9-12=-20

This item has been digitally signed and sealed by ORegan, Philip, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 22,2024

Continued on page 2

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LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 3=-54(B) 4=-119(B) 8=-64(B) 7=-64(B) 15=-54(B) 16=-33(B)

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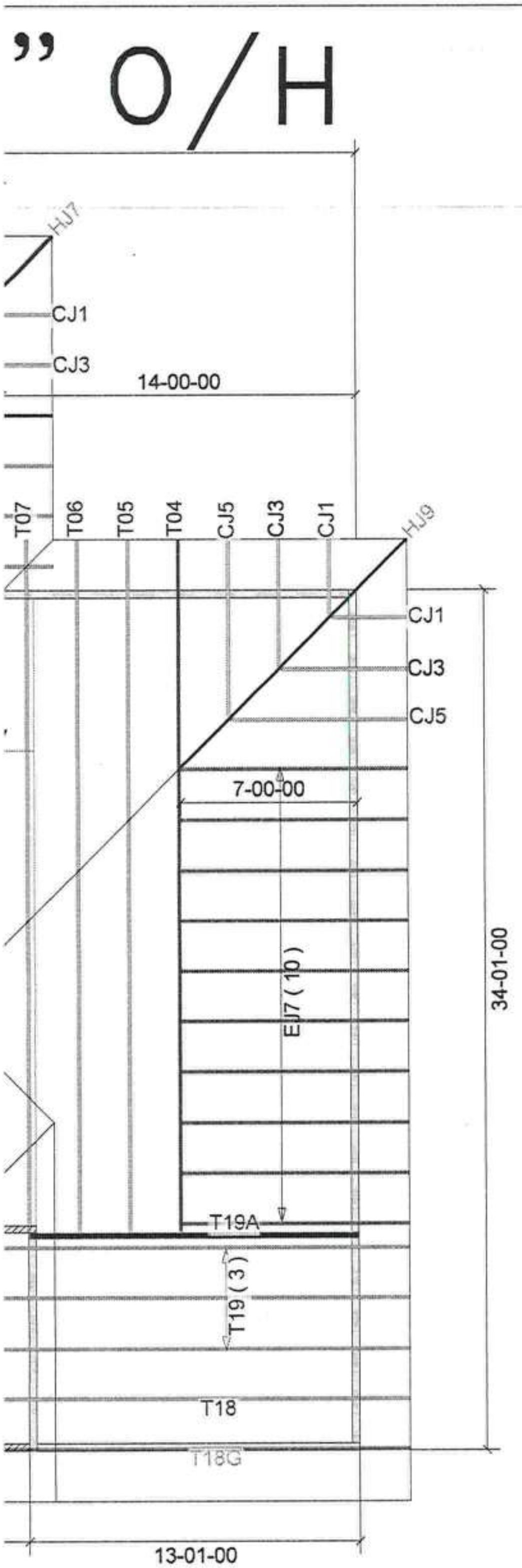
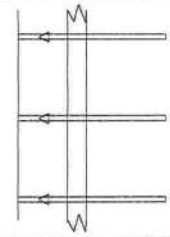


Legend
8' 1-1/8"
9' 7-1/8"

TS FL1392–R2

THE ARROW HEAD AT THE END OF THE TRUSS ON THE TRUSS PLACEMENT PLAN (LAYOUT) CORRESPONDS WITH THE LEFT SIDE OF THE INDIVIDUAL TRUSS DRAWING. USE THIS AS AN ORIENTATION GUIDE WHEN SETTING THE TRUSSES ON THE STRUCTURE.



General Notes:

- Per ANSI/TPI 1-2002 all " Truss to Wall" connections are the responsibility of the Building Designer, not the Truss Manufacturer.
- Use Manufacturer's specifications for all hanger connections unless noted otherwise.
- Trusses are to be 24" o.c. U.N.O.
- All hangers are to be Simpson or equivalent U.N.O.- Use 10d x 1 1/2" Nails in hanger connections to single ply girder trusses.
- Trusses are not designed to support brick U.N.O.
- Dimensions are Feet-Inches- Sixteenths

Notes:

No back charges will be accepted by Builders FirstSource unless approved in writing first. 850-835-4541

ACQ lumber is corrisive to truss plates. Any ACQ lumber that comes in contact with truss plates (i.e. scabbed on tails) must have an approved barrier applied first.

Refer to BCSI-B1 Summary Sheet-Guide for handling, Installing and Bracing of Metal Plate Connected Wood Truss prior to and during truss installation.

It is the responsibility of the Contractor to ensure of the proper orientation of the truss placement plans as to the construction documents and field conditions of the structure orientation. If a reversed or flipped layout is required, it will be supplied at no extra cost by Builders FirstSource.

It is the responsibility of the Contractor to make sure the placement of trusses are adjusted for plumbing drops, can lights, ect..., so the trusses do not interfere with these type of items.

All common framed roof or floor systems must be designed as to NOT impose any loads on the floor trusses below. The floor trusses have not been designed to carry any additional loads from above.

This truss placement plan was not created by an engineer, but rather by the Builders FirstSource staff and is solely to be used as an installation guide and does not require a seal. Complete truss engineering and analysis can be found on the truss design drawings which may be sealed by the truss design engineer.

Gable end trusses require continuous bottom chord bearing. Refer to local codes for wall framing requirements.

Although all attempts have been made to do so, trusses may not be designed symmetrically. Please refer to the individual truss drawings and truss placement plans for proper orientation and placement.

Builders FirstSource

Lake City
PHONE: 386-755-6894
FAX: 386-755-7973

Jacksonville
PHONE: 904-772-6100
FAX: 904-772-1973

Tallahassee
PHONE: 850-576-5177

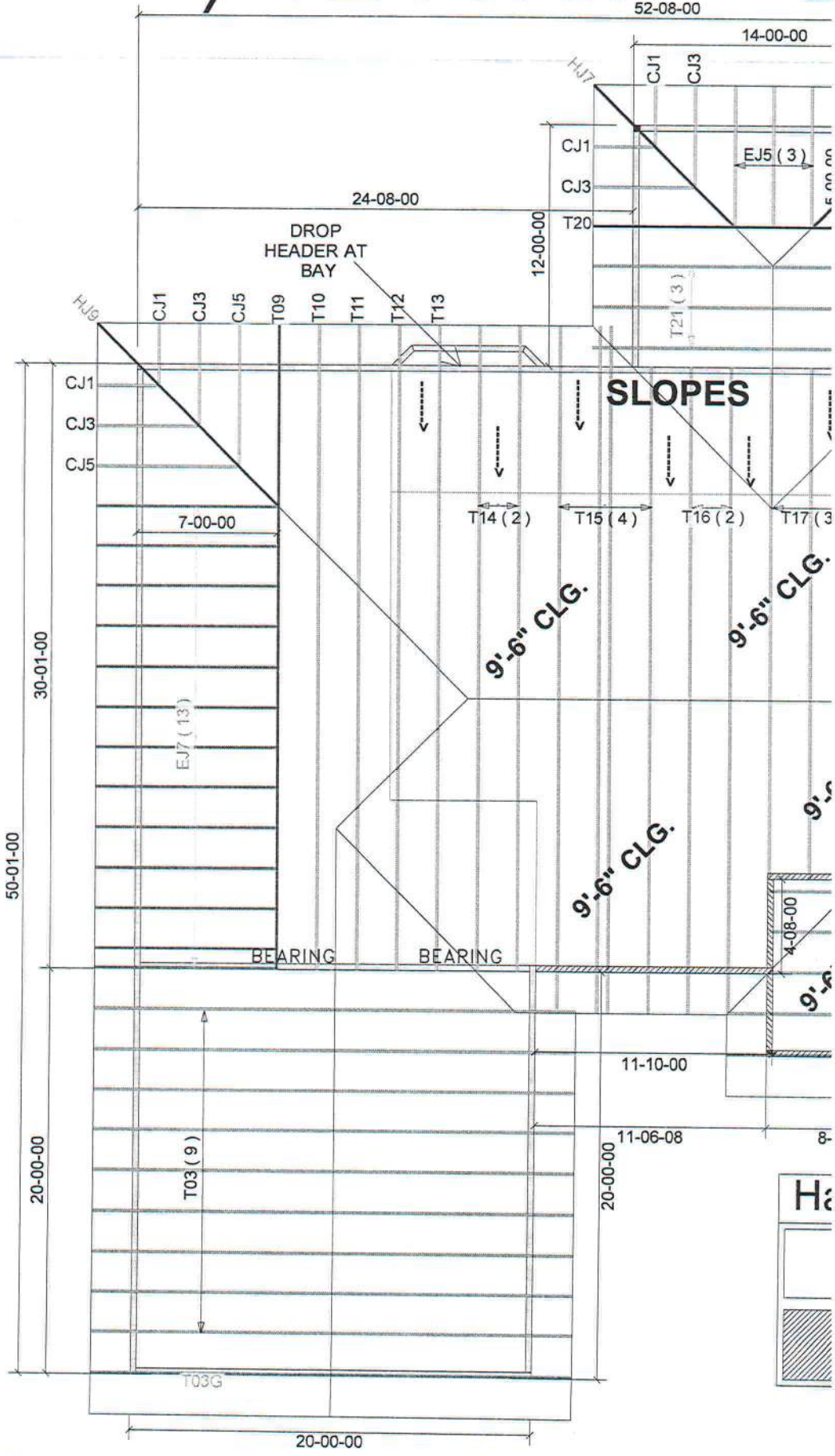
Builder: GIEBEIG HOMES

Legal Address: Lot 58 Crosswinds

Model: ST. Johns Modified

Date:	Drawn By:	Original Ref #:
1-19-24	KLH	3833091
Floor 1 Job#	Floor 2 Job#:	Roof Job #:
N/A	N/A	3833091

6/12 PITCH – 2



MITEK PLATE APPROVAL #'S 2197.2–2197.4, BOISE EWP PRODUCT #'S LVL FL1644–R2, BCI

Duct Leakage Test Report

Residential Prescriptive, Performance or ERI Method Compliance
2023 Florida Building Code, Energy Conservation, 8th Edition

Jurisdiction:	Columbia County	Permit #:	
Job Information			
Builder:	Trent Siegelg	Community:	Lot: 58
Address:	Anyplace		
City:	Lake City	State: FL	Zip: 32055

Duct Leakage Test Results

System 1	_____ cfm25
System 2	_____ cfm25
System 3	_____ cfm25
Sum of others	_____ cfm25
Total of all	_____ cfm25

Total of all systems _____ + Total Conditioned Square Footage 1975 = _____ Qn

☐ PASS ☐ FAIL

○ **Prescriptive Method** cfm25 (Total)

To qualify as "substantially leak free" Qn Total must be less than or equal to 0.04 if air handler unit is installed, if air handler unit is not installed, Qn Total must be less than or equal to 0.03. This testing method meets the requirements in accordance with Section R403.3.3.

Is the air handler unit installed during testing? ☐ YES (☐ NO)

● **Performance/ERI Method** cfm25 (Qn or Total)

To qualify using this method Qn must not be greater than the proposed duct leakage Qn specified on Form R405-2023 or R406-2023

Leakage Type selected on Form _____ Qn specified on Form R405-2023 R406-2023 (EnergyCalc) or R405-2023 (EnergyCalc) or R406-2023

Proposed Qn | 0.040

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)(j), (s) or (t), Florida Statutes.

Testing Company

Company Name: _____ Phone: _____

I hereby verify that the above duct leakage testing results are in accordance with the Florida Building Code requirements with the selected compliance path as stated above, either the Prescriptive Method or Performance Method.

Signature of Tester: _____ Date of Test: _____

Printed Name of Tester: _____

License/Certification #: _____ Issuing Authority: _____

Duct Leakage Test Report

Residential Prescriptive, Performance or ERI Method Compliance
2023 Florida Building Code, Energy Conservation, 8th Edition

Jurisdiction: Columbia County	Permit #:

Job Information

Builder: Trent Giegeig	Community:	Lot: 58
Address: Anyplace		
City: Lake City	State: FL	Zip: 32055

Duct Leakage Test Results

System 1	_____	cfm25
System 2	_____	cfm25
System 3	_____	cfm25
Sum of others	_____	cfm25
Total of all	_____	cfm25

_____ (Total of all systems) ÷ 1675 (Total Conditioned Square Footage) = _____ Qn

☐ **PASS** ☐ **FAIL**

○ **Prescriptive Method** cfm25 (Total)

To qualify as "substantially leak free" Qn Total must be less than or equal to 0.04 if air handler unit is installed. If air handler unit is not installed, Qn Total must be less than or equal to 0.03. This testing method meets the requirements in accordance with Section R403.3.3.

Is the air handler unit installed during testing? ☐ YES ($^{=.04}_{Qn}$) ☐ NO ($^{=.03}_{Qn}$)

● **Performance/ERI Method** cfm25 (Out or Total)

To qualify using this method, Qn must not be greater than the proposed duct leakage Qn specified on Form R405-2023 or R406-2023.

Leakage Type selected on Form R405-2023 (EnergyCalc) or R406-2023	*Qn specified on Form R405-2023 (EnergyCalc) or R406-2023*
Proposed Qn	0.040

Duct tightness shall be verified by testing in accordance with ANSI/RESNET/ICC380 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.

Testing Company

Company Name: _____ Phone: _____

I hereby verify that the above duct leakage testing results are in accordance with the Florida Building Code requirements with the selected compliance path as stated above, either the Prescriptive Method or Performance Method.

Signature of Tester: _____ Date of Test: _____

Printed Name of Tester: _____

License/Certification #: _____ Issuing Authority: _____

Envelope Leakage Test Report (Blower Door Test)
Residential Prescriptive, Performance or ERI Method Compliance
2023 Florida Building Code, Energy Conservation, 8th Edition

Envelope Leakage Test Report (Blower Door Test)
Residential Prescriptive, Performance or ERI Method Compliance
2023 Florida Building Code, Energy Conservation, 8th Edition

Jurisdiction: Columbia County	Permit #:

Job Information

Builder: Trent Giegeig Community: Lot: 58

Address: Anyplace

City: Lake City State: FL Zip: 32055

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 R405-2023 (Performance) or R406-2023 (ERI), section labeled as infiltration, sub-section ACH50.

ACH(50) specified on Form R405-2023-Energy Calc (Performance) or R406-2023 (ERI): 7.000

_____ x 60 ÷ 13400 = _____
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. 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. Dwelling units with an air leakage rate less than three air changes per hour shall be provided with whole-house mechanical ventilation in accordance with Section R403.6.1 of this code and Section M1507.3 if the *Florida Building Code, Residential.* 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.
7. If an attic is both sealed and insulated at the roof deck, interior access doors and hatches between the conditioned space volume and the attic shall be opened during the test and the volume of the attic shall be added to the conditioned space volume for purposes of reporting the infiltration volume and calculating the air leakage of the home.

Testing Company

Company Name: _____ Phone: _____

I hereby verify that the above Air Leakage results are in accordance with the 2023 8th 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: _____

2023 - AIR BARRIER AND INSULATION INSPECTION COMPONENT CRITERIA-TABLE 402.4.1.1[a]

Project Name:	Trent Geibeig Lot 58 Crosswinds Sub	Builder Name:	Trent Giegeig
Street:	Anyplace	Permit Office:	Columbia County
City, State, Zip:	Lake City, FL, 32055	Permit Number:	
Owner:	TBD	Jurisdiction:	Columbia County
Design Location:	FL, Gainesville	County:	Columbia(Florida Climate Zone 2)

COMPONENT	AIR BARRIER CRITERIA	INSULATION INSTALLATION CRITERIA	CHECK
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 walls.	
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 finished surface.	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, communication, and other equipment boxes, housings, and enclosures	Boxes, housings, and enclosures that penetrate the air barrier shall be caulked, taped, gasketed, or otherwise sealed to the air barrier element being penetrated. All concealed openings into the box, housing, or enclosure shall be sealed. The continuity of the air barrier shall be maintained around boxes, housings, and enclosures that penetrate the air barrier. Alternatively, air-sealed boxes shall be installed in accordance with R402.4.6	Boxes, housings, and enclosures shall be buried in or surrounded by tightly fitted insulation.	
HVAC register boots	HVAC supply and return register boots that penetrate building thermal envelope shall be sealed to the sub-floor, wall covering or ceiling penetrated by the boot.		
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 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.

SECTION R405
SIMULATED PERFORMANCE ALTERNATIVE
(PERFORMANCE)

☐ R405.2 **Mandatory requirements.** Compliance with this section requires that the mandatory provisions identified in Section R401.2 be met. Additionally, the proposed design shall be shown to comply with the building thermal envelope insulation to a minimum of R-5.

☐ **R405.2.1 Ceiling insulation.** Ceilings shall have an insulation level of at least R-49, spray coating. For the purpose of this code, types of ceiling construction that are considered to have met the requirement include single assembly ceilings of the exposed deck and beam type and concrete deck roofs. Single assembly ceilings shall be insulated to at least a level of R-10.

☐ **R405.2.2 Building air leakage testing.** Building air leakage testing shall be in accordance with Section R402.4 through R402.4.1.2. If an air leakage rate below seven air changes per hour at a pressure of 0.2 inch w.g. (50 Pascals) is specified for the proposed design, testing shall verify the air leakage rate does not exceed the allowance. For the proposed design, instead of seven air changes per hour

☐ **R405.2.3 Duct air leakage testing.** In cases where duct air leakage is lower than the default On to value of 0.092 Volume On = duct to leakage to the outside in cfm per 100 square feet of conditioned floor area tested at 25 Pascals is specified for the proposed design, testing in accordance with Section R402.3.2 and all verify duct air leakage rate meeting the leakage rate of the proposed design. Otherwise, in accordance with Section R405.2.3, duct testing shall mandatory for buildings one story by Section R405.

SECTION R406
ENERGY RATING INDEX
COMPLIANCE ALTERNATIVE

☐ **R406.2 Mandatory requirements.** Compliance with this section requires that the provisions identified in Section R401 through R404 labeled as mandatory and Section R401.3 of the 2015 International Energy Conservation Code be met. For buildings that do not utilize on-site renewable power production for compliance with this section, the building thermal envelope shall be greater than or equal to levels of efficiency and Solar Heat Gain Coefficient in Table 402.1.2 of the 2009 International Energy Conservation Code. For buildings that utilize on-site renewable power production for compliance with this section, the building thermal envelope shall be greater than or equal to levels of efficiency and Solar Heat Gain Coefficient in Table R402.1.2 of the 2015 International Energy Conservation Code.

Exception: Supply air and return duct systems located entirely inside the building thermal envelope shall be insulated to a minimum of R-5.

☐ **R406.2.1 Sealed supply ducts.** Supply air ducts shall be sealed to comply with the building thermal envelope shall be insulated to a minimum of R-5.

SECTION R405
SIMULATED PERFORMANCE ALTERNATIVE
(PERFORMANCE)

☐ **R405.2 Mandatory requirements.** Compliance with this section requires that the mandatory provisions identified in Section R401.2 be met. All supply and return ducts not completely inside the building thermal envelope shall be insulated to a minimum of R-6, except site-wrapped supply ducts not completely inside the building thermal envelope shall be insulated to a minimum of R-8.

☐ **R405.2.1 Ceiling insulation.** Ceilings shall have an insulation level of at least R-19, space permitting. For the purposes of this code, types of ceiling construction that are considered to have inadequate space to install R-19 include single assembly ceilings of the exposed deck and beam type and concrete deck roofs. Such ceiling assemblies shall be insulated to at least a level of R-10.

☐ **R405.2.2 Building air leakage testing.** Building or dwelling air leakage testing shall be in accordance with Sections R402.4 through R402.4.1.2. If an air leakage rate below seven air changes per hour at a pressure of 0.2 inch w.g. (50 pascals) is specified for the proposed design, testing shall verify the air leakage rate does not exceed the air leakage rate of the proposed design instead of seven air changes per hour.

☐ **R405.2.3 Duct air leakage testing.** In cases where duct air leakage lower than the default Qn to outside of 0.080 (where Qn = duct leakage to the outside in cfm per 100 square feet of conditioned floor area tested at 25 Pascals) is specified for the proposed design, testing in accordance with Section R403.3.2 shall verify a duct air leakage rate not exceeding the leakage rate of the proposed design. Otherwise, in accordance with Section R403.3.3, duct testing is not mandatory for buildings complying by Section R405.

SECTION R406
ENERGY RATING INDEX
COMPLIANCE ALTERNATIVE

☐ **R406.2 Mandatory requirements.** Compliance with this section requires that the provisions identified in Sections R401 through R404 labeled as "mandatory" and Section R403.5.3 of the 2015 International Energy Conservation Code be met. For buildings that do not utilize on-site renewable power production for compliance with this section, the building thermal envelope shall be greater than or equal to levels of efficiency and Solar Heat Gain Coefficient in Table 402.1.1 or 402.1.3 of the 2009 International Energy Conservation Code. For buildings that utilize on-site renewable power production for compliance with this section, the building thermal envelope shall be greater than or equal to levels of efficiency and Solar Heat Gain Coefficient in Table R402.1.2 or Table R402.1.4 of the 2015 International Energy Conservation Code.

Exception: Supply and return ducts not completely inside the building thermal envelope shall be insulated to a minimum of R-6.

☐ **R406.2.1 Site-wrapped supply ducts.** Site-wrapped supply ducts not completely inside the building thermal envelope shall be insulated to a minimum of R-8.

☐ **R303.1.3.3 Covers.** Outdoor heated swimming pools and outdoor permanent spas shall be equipped with a vapor-retardant cover or other approved device or method 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 or from a heat pump or solar energy source, covers are not required.

☐ **R403.10.3 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 after April 16, 2013, when tested in accordance with ANSI Z21.56. Pool heaters fired by natural or LP gas shall not have continuously burning pilot lights.

☐ **R403.10.4 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 Conditions Low Air Temperature Mode, Test Point 3. When located in the Southern climate zone, as defined in Chapter 3, heat pump pool heaters shall be required to meet this standard.

☐ **R403.11 Portable spas (Mandatory).** The energy consumption of electric-powered portable spas shall be controlled by one of the following:

1. The combination of insulation and covering of the spa shall have a heat loss rate of not greater than 3 Btu/h·ft² (9.5 W/m²) based on a 40°F (22°C) temperature difference between the spa water and the ambient air.
2. The spa shall be heated by a source that is installed in accordance with Section R403.5 and is equipped with a readily accessible on/off switch that allows the user to set the water temperature.
3. Any demand-type water heater that is dedicated to the spa shall be installed in accordance with Section R403.5.
4. Cover shall be resistant to weather in accordance with Section M1417.3 of the Florida Building Code, Residential.

☐ **R403.12.1 Ducted delivery multiplex.** Ducted delivery systems shall, in addition to complying to the requirements of Section R403.7.3, comply to the following requirements:

1. Each ducted delivery zone is configured with at least one supply duct connected only to that zone's air handler.
2. If a duct is returned for use configured with only its supply duct connected only to that zone's air handler, the return duct shall be installed in the same manner as the supply duct between the air handler and the zone.
3. A ducted delivery system shall be installed in the building such that no portion of the system can be converted to any other use.
4. Dampers shall not be installed in the ducted to or from a central ducted cooling system. The return duct is designed to operate with the central cooling system.
5. Dampers are prohibited within a duct that is connected to a conditioned space shall be rated for a minimum of 6.0

SECTION R404
ELECTRICAL POWER AND LIGHTING SYSTEMS

☐ **R404.1 Lighting equipment (Mandatory).** A minimum of [illegible] shall be high-efficacy, excluding those in which [illegible] shall have an [illegible] of not less than [illegible].

R404.1.1 Lighting equipment (Mandatory). [illegible] shall be [illegible] and [illegible] by [illegible] plot plans.

☐ **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

☐ **R403.13 Dehumidifiers (Mandatory).** If installed, a dehumidifier shall conform to the following requirements:

1. The minimum rated efficiency of the dehumidifier shall be greater than 1.7 liters/ kWh if the total dehumidifier capacity for the house is less than 75 pints/day and greater than 2.38 liters/kWh if the total dehumidifier capacity for the house is greater than or equal to 75 pints/day.
2. The dehumidifier shall be controlled by a sensor that is installed in a location where it is exposed to mixed house air.
3. Any dehumidifier unit located in unconditioned space that treats air from conditioned space shall be insulated to a minimum of R-2.
4. Condensate disposal shall be in accordance with Section M1411.3.1 of the Florida Building Code, Residential.

☐ **R403.13.1 Ducted dehumidifiers.** Ducted dehumidifiers shall, in addition to conforming to the requirements of Section R403.13, conform to the following requirements:

1. If a ducted dehumidifier is configured with return and supply ducts both connected into the supply side of the cooling system, a backdraft damper shall be installed in the supply air duct between the dehumidifier inlet and outlet duct.
2. If a ducted dehumidifier is configured with only its supply duct connected into the supply side of the central heating and cooling system, a backdraft damper shall be installed in the dehumidifier supply duct between the dehumidifier and central supply duct.
3. A ducted dehumidifier shall not be ducted to or from a central ducted cooling system on the return duct side upstream from the central cooling evaporator coil.
4. Ductwork associated with a dehumidifier located in unconditioned space shall be insulated to a minimum of R-6.

SECTION R404
ELECTRICAL POWER AND LIGHTING SYSTEMS

☐ **R404.1 Lighting equipment (Mandatory).** All permanently installed luminaires, excluding those in kitchen appliances, shall have an efficacy of at least 45 lumens-per-watt or shall utilize lamps with an efficacy of not less than 65 lumens-per-watt.

R404.1.1 Lighting equipment (Mandatory). Fuel gas lighting systems shall not have continuously burning pilot lights.

Florida Building Code, Energy Conservation, Mandatory Requirements (2023 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 R403.7, 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 Florida Building Code, Energy Conservation—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).

☐ **403.10 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.

R403.6 Mechanical ventilation system efficacy. Mechanical ventilation system fans, as tested in accordance with HVI 916 or AMCA 210, shall meet the efficacy requirements of Table R403.6.1.

Exception: Where whole-house mechanical ventilation fans are integrated with space heating or cooling equipment, they are not required to meet the minimum efficacy requirements of Table R403.6.1.

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

FAN LOCATION	AIRFLOW RATE MINIMUM (cfm)	MINIMUM EFFICACY (CFM/WATT)	AIRFLOW RATE MAXIMUM (cfm)
HRV or ERV	Any	1.2 cfm/watt	Any
Range hood	Any	2.8 cfm/watt	Any
In-line fan	Any	3.8 cfm/watt	Any
Bathroom, utility room	10	2.8 cfm/watt	90
Bathroom, utility room	Any	3.8 cfm/watt	Any

R403.6.1 Ventilation air distribution. Each space shall be directly ventilated by a ventilation device complying with Section R303.4 or ventilated in accordance with the International Mechanical Code.

1. Ventilation air shall not be supplied directly into clothes dryer exhaust ducts.
2. Ventilation systems shall be designed to have the capability to supply the whole-house ventilation airflow rate required in Section R403.6 under conditions where all air handlers that supply conditioned air to, or remove air from, the dwelling unit are operating.
3. Ventilation air shall not be supplied directly into, or exhausted directly from, space heating or cooling equipment, except where such equipment is designed to supply ventilation air.
4. Ventilation air shall not be exhausted directly into an enclosed space.
5. Ventilation air shall not be exhausted through an attic, soffit or ridge vent.
6. Ventilation air shall not be exhausted through a private garage.
7. Ventilation air shall not be exhausted through a fireplace, fireplace flue or combustion air flue.
8. Ventilation air shall not be exhausted through a combustion appliance flue.
9. Ventilation air shall not be exhausted through a kitchen range hood or downdraft exhaust duct.
10. Ventilation air shall not be exhausted through a clothes dryer exhaust duct.
11. Ventilation air shall not be exhausted through an occupancy sensor controlled fan.
12. Ventilation air shall not be exhausted through a humidistat controlled fan.
13. Ventilation air shall not be exhausted through a motion sensor controlled fan.
14. Ventilation air shall not be exhausted through a time clock controlled fan.
15. Ventilation air shall not be exhausted through a wall or ceiling switch controlled fan.
16. Ventilation air shall not be exhausted through a fan that is controlled by a dimmer switch.

R403.6.2 Ventilation air ducts. Ventilation air ducts shall be insulated to a minimum of R-8. Ventilation air ducts in unconditioned spaces shall be insulated to a minimum of R-15.

Exception: Ventilation air ducts shall not be insulated where they pass through conditioned spaces.

R403.6.3 Ventilation air duct construction. Ventilation air ducts shall be constructed of materials complying with Section R403.2.1 and the ceiling shall be in accordance with Section R403.2.2.

R403.6.4 Mechanical ventilation system control. Mechanical ventilation systems shall be capable of being operated by the occupant through a single manual control device, a programmable time-clock control device or a dwelling unit energy management system control device. Mechanical ventilation systems shall be capable of operating independently of all heating and cooling equipment except where such equipment is designed to supply ventilation air. Mechanical ventilation systems shall be capable of being operated by occupancy sensors, motion sensors, humidistats, and fan timers. Mechanical ventilation systems shall be capable of operating intermittently and shall be capable of operating in conjunction with heating and cooling equipment. Mechanical ventilation systems shall be capable of operating in conjunction with energy recovery ventilation systems. Mechanical ventilation systems shall be capable of operating in conjunction with energy recovery ventilation systems. Mechanical ventilation systems shall be capable of operating in conjunction with energy recovery ventilation systems.

☐ **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 an air handler that is integral to tested and listed HVAC equipment is used to provide whole-house mechanical ventilation, the air handler shall be powered by an electronically commutated motor.

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)
HRV or ERV	Any	1.2 cfm/watt	Any
Range hoods	Any	2.8 cfm/watt	Any
In-line fan	Any	3.8 cfm/watt	Any
Bathroom, utility room	10	2.8 cfm/watt	<90
Bathroom, utility room	90	3.5 cfm/watt	Any

For SI: 1 cfm = 28.3 L/min.

a. When tested in accordance with HVI Standard 916

☐ **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.

☐ **R403.7.1 Equipment sizing (Mandatory).** 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.

Florida Building Code, Energy Conservation, Mandatory Requirements

Florida Building Code, Energy Conservation, Mandatory Requirements (2023 Continued)

☐ **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).** If heated water circulation systems are installed, they 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.

☐ **R403.5.2 Demand recirculation water systems (Mandatory).** Where installed, demand recirculation water systems shall have controls that comply with both of the following:

1. The control shall start the pump upon receiving a signal from the action of a user of a fixture or appliance, sensing the presence of a user of a fixture or sensing the flow of hot or tempered water to a fixture fitting or appliance.
2. The control shall limit the temperature of the water entering the cold water piping to 104°F (40°C).

☐ **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.

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☐ **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.

☐ **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.

☐ **R402.4.6 Air-sealed electrical and communication boxes.** Air-sealed electrical and communication boxes that penetrate the air barrier of the building thermal envelope shall be caulked, taped, gasketed, or otherwise sealed to the air barrier element being penetrated. Air-sealed boxes shall be buried in or surrounded by insulation. Air-sealed boxes shall be marked in accordance with NEMA OS 4. Air-sealed boxes shall be installed in accordance with the manufacturer's instructions.

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 with supplementary electric-resistance heaters shall have controls that limit supplemental heat operation to only those times when one of the following applies:

1. The vapor compression cycle cannot provide the necessary heating energy to satisfy the thermostat setting.
2. The heat pump is operating in defrost mode.
3. The vapor compression cycle malfunctions.
4. The thermostat malfunctions

☐ **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. Duct leakage testing is required for Section R405 compliance where credit is taken for leakage, and a duct air leakage Qn to the outside of less than 0.080 (where Qn = duct leakage to the outside in cfm per 100 square feet of conditioned floor area tested at 25 Pascals) is indicated in the compliance report for the proposed design.

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

Florida Building Code, Energy Conservation, 8th Edition (2023)
Mandatory Requirements for Residential Performance, Prescriptive and ERI Methods

ADDRESS:	Permit Number:
Apple City, FL 32935	

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 Energy Gauge® Florida Statutes mandate the EPL display card to be included as an addendum to each sales contract for both presale and completed residential buildings. The EPL display card provides information regarding the energy performance level and key features of components installed in a dwelling unit. The building official shall verify that a 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 C.

SECTION R402 BUILDING THERMAL ENVELOPE

☐ R402.2.10.1 **Slab-on-grade floor insulation installation (Mandatory).** Where installed, the insulation shall extend downward from the top of the slab on the outside or inside of the foundation wall. Insulation located outside the building shall be extended the distance provided in Table R402.1.2, or the distance of the proposed design as applicable by any combination of vertical insulation, insulating under the slab or insulation extending out from the building. Insulation extending away from the building shall be protected by paving or a layer of not less than 10 inches (254 mm) of soil. The top edge of the insulation installed between the exterior wall and the edge of the interior slab shall be permitted to be at a 45-degree (0.79 rad) angle away from the exterior wall.

☐ R402.2.11.1 **Crawl space wall insulation installation (Mandatory).** Where insulation is installed, it shall be permanently fixed to the wall and extend downward from the floor to the footing or the basement wall and then vertically and/or horizontally for the total distance of 24 inches (610 mm). Exposed earth in unvented crawl space foundations shall be covered with a continuous Class I vapor retarder in accordance with the Florida Building Code, Building or Florida Building Code, Residential, as applicable. All joints of a vapor retarder shall overlap by 6 inches (153 mm) and be sealed or taped. The edges of the vapor retarder shall extend not less than 6 inches (150 mm) up the stem wall and shall be attached to the wall.

☐ 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 Section R402.4.1.1 and R402.4.1.2 the sealing methods between dissimilar materials allowing for thermal and moisture expansion and contraction.

☐ R402.5.1 **Insulation.** 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. Dwelling units with an air leakage rate less than three air changes per hour shall be tested with Make-Up Air in accordance with Section R402.4.1.1 of this code and Section M1601.4.3 of the Florida Building Code, Residential. 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 an individual as defined in Section 553.993(5) or (7), Florida Statutes, or individuals as authorized by the state energy office. Section 468.10(3)(f), (g), or (j) as supported by Section 468.10(4), that require all of the work be signed by a party undertaking the test and provided to the building official. Testing may be done 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 or new construction that does not include the building thermal envelope.

During testing:

1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed.
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 shall be open.
4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed.
5. Heating and cooling systems shall be turned off.
6. Supply and return registers shall not be sealed.
7. Blower door fans shall be sealed at the point of the largest opening in the building envelope that is to be closed during the test, with all other openings in the building envelope closed. Fans shall be used to pressurize the building to a pressure of 50 Pascals (0.2 inch w.g.) relative to the outdoors. Where a blower door is used to measure the air leakage rate of a building or dwelling unit, the test shall be conducted in accordance with ANSI/RESNET/ICC 380. Where a multifamily building is tested in accordance with ANSI/RESNET/ICC 380, the measured air leakage rate of the building or dwelling unit shall be permitted to be converted to an equivalent air leakage rate at 50 Pascals (0.2 inch w.g.) using the following equation:

$$Q_{50} = \frac{Q_{test}}{(P_{test}/50)^{0.65}}$$

where:

Q_{50} = Air leakage rate at 50 Pascals (0.2 inch w.g.)

Q_{test} = Air leakage rate at the test pressure

P_{test} = Test pressure

Florida Building Code, Energy Conservation, 8th Edition (2023)
Mandatory Requirements for Residential Performance, Prescriptive and ERI Methods

ADDRESS:	Anyplace Lake City, FL 32055	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.

SECTION R402 BUILDING THERMAL ENVELOPE

☐ **R402.2.10.1 Slab-on-grade floor insulation installation (Mandatory).** Where installed, the insulation shall extend downward from the top of the slab on the outside or inside of the foundation wall. Insulation located below grade shall be extended the distance provided in Table R402.1.2, or the distance of the proposed design as applicable, by any combination of vertical insulation, insulation extending under the slab or insulation extending out from the building. Insulation extending away from the building shall be protected by pavement or by not less than 10 inches (254 mm) of soil. The top edge of the insulation installed between the exterior wall and the edge of the interior slab shall be permitted to be cut at a 45-degree (0.79 rad) angle away from the exterior wall.

☐ **R402.2.11.1 Crawl space walls insulation installation (Mandatory).** Where crawl space wall insulation is installed, it shall be permanently fastened to the wall and extend downward from the floor to the finished grade level and then vertically and/or horizontally for at least an additional 24 inches (610 mm). Exposed earth in unvented crawl space foundations shall be covered with a continuous Class I vapor retarder in accordance with the Florida Building Code, Building, or Florida Building Code, Residential, as applicable. All joints of the vapor retarder shall overlap by 6 inches (153 mm) and be sealed or taped. The edges of the vapor retarder shall extend not less than 6 inches (153 mm) up the stem wall and shall be attached to the stem wall.

☐ **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. Dwelling units with an air leakage rate less than three air changes per hour shall be provided with whole-house mechanical ventilation in accordance with Section R403.6.1 of this code and Section M1507.3 of the Florida Building Code, Residential. 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.
7. If an attic is both air sealed and insulated at the roof deck, interior access doors and hatches between the conditioned space volume and the attic shall be opened during the test and the volume of the attic shall be added to the conditioned space volume for purposes of reporting an infiltration volume and calculating the air leakage of the home.

FORM R405-2023

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 91

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

Anyplace,Lake City,FL,32055

1. New construction or existing		New (From Plans)
2. Single Family or Multiple Family		Attached
3. Number of units, if multiple family		1
4. Number of Bedrooms		3
5. Is this a worst case?		No
6. Conditioned floor area above grade (ft²)		1615
Conditioned floor area below grade (ft²)		0
7. Windows*	Description	Area
a. U-Factor:	Dbl, U=0.40	113.00 ft²
SHGC:	SHGC=0.25	
b. U-Factor:	N/A	ft²
SHGC:		
c. U-Factor:	N/A	ft²
SHGC:		
Area Weighted Average Overhang Depth:		1.235 ft
Area Weighted Average SHGC:		0.250
8. Skylights	Description	Area
a. U-Factor:(AVG):	N/A	N/A ft²
SHGC(AVG):	N/A	
9. Floor Types	Insulation	Area
a. Slab-On-Grade Edge Insulation	R= 12.0	1615.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

10. Wall Types(1529.8 sqft.)	Insulation	Area
a. Face Brick - Wood, Exterior	R=13.0	1302.20 ft²
b. Frame - Wood, Adjacent	R=13.0	166.00 ft²
c. Face Brick - Wood, Adjacent	R=13.0	42.80 ft²
d. N/A		
11. Ceiling Types(1875.0 sqft.)	Insulation	Area
a. Flat ceiling under att (Vented)	R=30.0	1875.00 ft²
b. N/A		
c. N/A		
12. Roof(Comp, Shingles, Vented, Dark, R=0.0		2475.0 ft²
13. Ducts, Inside & Insulation Level		R	ft²
a. Sup: Attic, Ret: Main, Att: Main		8	450
b.			
c.			
14. Cooling Systems		kBtu/hr	Efficiency
a. Central Unit		72.0	SEER2:15.00
15. Heating Systems		kBtu/hr	Efficiency
a. Electric Heat Pump		47.0	HSPF2:7.70
16. Hot Water Systems			
a. Electric			Cap: 50 gallons
			EF: 0.920
b. Conservation features			
			None
17. Credits			Ot

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

Builder Signature: _____ Date: _____

Address of New Home: Anyplace City/FL Zip: Lake City,FL,32055

*Note: This is not a Building Energy Rating. If your Index is below 70, your home may qualify for energy efficient mortgage (EEM) incentives if you obtain a Florida Energy Rating. For information about the Florida Building Code, Energy Conservation, contact the Florida Building Commission's support staff.

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

FORM R405-2023

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 91

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

Anyplace,Lake City,FL,32055

1. New construction or existing		New (From Plans)
2. Single family or multiple family		Attached
3. Number of units, if multiple family		1
4. Number of Bedrooms		3
5. Is this a worst case?		No
6. Conditioned floor area above grade (ft²)		1675
Conditioned floor area below grade (ft²)		0
7. Windows**	Description	Area
a. U-Factor:	Dbl, U=0.40	113.00 ft²
SHGC:	SHGC=0.25	
b. U-Factor:	N/A	ft²
SHGC:		
c. U-Factor:	N/A	ft²
SHGC:		
Area Weighted Average Overhang Depth:		1.235 ft
Area Weighted Average SHGC:		0.250
8. Skylights	Description	Area
U-Factor:(AVG)	N/A	N/A ft²
SHGC(AVG):	N/A	

9. Floor Types	Insulation	Area
a. Slab-On-Grade Edge Insulation	R= 13.0	1675.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

10. Wall Types(1505.8 sqft.)	Insulation	Area
a. Face Brick - Wood, Exterior	R=13.0	1302.20 ft²
b. Frame - Wood, Adjacent	R=13.0	160.00 ft²
c. Face Brick - Wood, Adjacent	R=13.0	43.56 ft²
d. N/A		

11. Ceiling Types(1675.0 sqft.)	Insulation	Area
a. Flat ceiling under att (Vented)	R=30.0	1675.00 ft²
b. N/A		
c. N/A		

12. Roof(Comp. Shingles, Vented)	Deck R=0.0	1873 ft²

13. Ducts, location & insulation level	R	ft²
a. Sup: Attic, Ret: Main, AH: Main	8	400
b.		
c.		

14. Cooling Systems	kBtu/hr	Efficiency
a. Central Unit	13.8	SEER2:15.00

15. Heating Systems	kBtu/hr	Efficiency
a. Electric Heat Pump	17.0	HSPF2:7.70

16. Hot Water Systems	
a. Electric	Cap: 50 gallons
	EF: 0.920
b. Conservation features	
	None
17. Credits	CF

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

Builder Signature: _____ Date: _____

Address of New Home: Anyplace City/FL Zip: Lake City,FL,32055

*Note: This is not a Building Energy Rating. If your Index is below 70, your home may qualify for energy efficient mortgage (EEM) incentives if you obtain a Florida Energy Rating. For information about the Florida Building Code, Energy Conservation, contact the Florida Building Commission's support staff.

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

FORM R405-2023

INPUT SUMMARY CHECKLIST REPORT

HEATING SYSTEM

✓	#	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	----Geothermal HeatPump---- Entry	Power	Volt	Current	Ducts	Block
___	1	Electric Heat Pump	None/Single		HSPF2: 7.70	17.0		0.00	0.00	0.00	sys#1	1

COOLING SYSTEM

✓	#	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block
___	1	Central Unit	Split/Single		SEER2:15.0	13.8	420	0.75	sys#1	1

HOT WATER SYSTEM

✓	#	System Type	Subtype	Location	EF(UEF)	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length
___	1	Electric	None	Garage	0.92 (0.92)	50.00 gal	60 gal	120 deg	Standard	=>R-3	99

		Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits
___	1	No		NA	NA	NA	No	NA	NA	NA	None

DUCTS

✓	Duct #	Supply Location	Supply R-Value	Supply Area	Return Location	Return R-Value	Return Area	Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat	HVAC # Cool
___	1	Attic	8.0	400 ft²	Main	6.0	100 ft²	Proposed Qn	Main	---	---	0.040	0.50	1	1

TEMPERATURES

Programable Thermostat: N Ceiling Fans: N

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

✓	Thermostat Schedule: FloridaCode 2014 Schedule Type		Hours 1	2	3	4	5	6	7	8	9	10	11	12
___	Cooling (WD)	AM	75	75	75	75	75	75	75	75	75	75	75	75
		PM	75	75	75	75	75	75	75	75	75	75	75	75
___	Cooling (WEH)	AM	75	75	75	75	75	75	75	75	75	75	75	75
		PM	75	75	75	75	75	75	75	75	75	75	75	75
___	Heating (WD)	AM	72	72	72	72	72	72	72	72	72	72	72	72
		PM	72	72	72	72	72	72	72	72	72	72	72	72
___	Heating (WEH)	AM	72	72	72	72	72	72	72	72	72	72	72	72
		PM	72	72	72	72	72	72	72	72	72	72	72	72

INPUT SUMMARY CHECKLIST REPORT

FORM R405-2023

INPUT SUMMARY CHECKLIST REPORT

WALLS (Total Exposed Area = 1506 sq.ft.)

√ #	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	Width In	Height Ft	Height In	Area sq.ft.	U-Factor	Sheath R-Value	Frm. Frac.	Solar Absor.	Below Grade
1	N	Exterior	Face Brick - Wood	Main	13.0	24.0	8	8.0	0	197.3	0.086		0.23	0.75	0 %
2	N	Exterior	Face Brick - Wood	Main	13.0	14.0	0	8.0	0	112.0	0.086		0.23	0.75	0 %
3	N	Exterior	Face Brick - Wood	Main	13.0	14.0	0	8.0	0	112.0	0.086		0.23	0.75	0 %
4	E	Exterior	Face Brick - Wood	Main	13.0	34.0	1	8.0	0	272.7	0.086		0.23	0.75	0 %
5	S	Exterior	Face Brick - Wood	Main	13.0	13.0	1	8.0	0	104.7	0.086		0.23	0.75	0 %
6	W	Exterior	Face Brick - Wood	Main	13.0	8.0	8	9.0	4	80.9	0.086		0.23	0.75	0 %
7	S	Exterior	Face Brick - Wood	Main	13.0	8.0	0	9.0	4	74.7	0.086		0.23	0.75	0 %
8	E	Garage	Face Brick - Wood	Main	13.0	4.0	8	9.0	4	43.6	0.086		0.23	0.75	0 %
9	S	Exterior	Face Brick - Wood	Main	13.0	11.0	6	9.0	4	107.3	0.086		0.23	0.75	0 %
10	S	Garage	Frame - Wood	Main	13.0	20.0	0	8.0	0	160.0	0.084		0.23	0.75	0 %
11	W	Exterior	Face Brick - Wood	Main	13.0	30.0	1	8.0	0	240.7	0.086		0.23	0.75	0 %

DOORS (Total Exposed Area = 78 sq.ft.)

√ #	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	Width In	Height Ft	Height In	Area
1	N		Insulated	Main	None	0.40	6.00	0	6.00	8	40.0ft²
2	S		Wood	Main	None	0.46	3.00	0	6.00	8	20.0ft²
3	S		Wood	Main	None	0.46	2.00	8	6.00	8	17.8ft²

WINDOWS (Total Exposed Area = 113 sq.ft.)

√ #	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Storm	Total Area (ft²)	Same Units	Width (ft)	Height (ft)	–Overhang– Depth (ft)	Sep. (ft)	Interior Shade	Screen
1	N	1	Vinyl	Low-E Double	Y	0.40	0.25	N	N	30.0	1	6.00	5.00	1.0	1.0	IECC 2012	None
2	N	1	Vinyl	Low-E Double	Y	0.40	0.25	N	N	15.0	1	3.00	5.00	0.5	1.0	Drapes/blinds	None
3	N	3	Vinyl	Low-E Double	Y	0.40	0.25	N	N	15.0	1	3.00	5.00	1.5	1.0	Drapes/blinds	None
4	S	5	Vinyl	Low-E Double	Y	0.40	0.25	N	N	15.0	1	3.00	5.00	1.5	1.0	Drapes/blinds	None
5	S	9	Vinyl	Low-E Double	Y	0.40	0.25	N	N	30.0	1	5.00	6.00	1.5	1.0	Drapes/blinds	None
6	W	11	Vinyl	Low-E Double	Y	0.40	0.25	N	N	8.0	1	2.00	4.00	1.5	1.0	Drapes/blinds	None

INFILTRATION

√ #	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)	Infiltration Test Volume
1	Wholehouse	Proposed ACH(50)	0.00036	1563	85.77	161.02	0.1372	7.0	All	13400 cu ft

GARAGE

√ #	Floor Area	Roof Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
1	400 ft²	400 ft²	60 ft	9 ft	13

MASS

√ #	Mass Type	Area	Thickness	Furniture Fraction	Space
1	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	Main

INPUT SUMMARY CHECKLIST REPORT

PROJECT

CLIMATE

BLOCKS

SPACES

FLOORS

ROOF

ATTIC

CEILING

FORM R405-2023

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:	Trent Geibeig Lot 58 Crosswinds Sub			Address type:	Lot
Building Type:	User	Bedrooms:	3	Lot #:	58
Owner:	TBD	Conditioned Area:	1675	Block/SubDivision:	Crosswinds
Builder Home ID:		Total Stories:	1	PlatBook:	
Builder Name:	Trent Giegeig	Worst Case:	No	Street:	Anyplace
Permit Office:	Columbia County	Rotate Angle:	0	County:	Columbia
Jurisdiction:	Columbia County	Cross Ventilation:	No	City, State, Zip:	Lake City, FL, 32055
Family Type:	Attached	Whole House Fan:	No		
New/Existing:	New (From Plans)	Terrain:	Suburban		
Year Construct:	2023	Shielding:	Suburban		
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_REGIONA	32	92	70	75	1305.5	51	Medium

BLOCKS

√	Number	Name	Area	Volume
___	1	Block1	1675	13400 cu ft

SPACES

√	Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
___	1	Main	1675	13400	Yes	3	3	Yes	Yes	Yes

FLOORS (Total Exposed Area = 1675 sq.ft.)

√	#	Floor Type	Space	Exposed Perim(ft)	Area	R-Value Perim.	R-Value Joist	U-Factor	Slab Insul. Vert/Horiz	Tile	Wood	Carpet
___	1	Slab-On-Grade Edge Ins	Main	190	1675 sqft	13	---	0.068	2 (ft)/0 (ft)	0.25	0.50	0.25

ROOF

√	#	Type	Materials	Roof Area	Gable Area	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
___	1	Hip	Compositionshingles	1873 ft²	0 ft²	Medium	N	0.75	Yes	0.9	Yes	0	26.57

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
___	1	Full attic	Vented	300	1675 ft²	N	N

CEILING (Total Exposed Area = 1675 sq.ft.)

√	#	Ceiling Type	Space	R-Value	Ins. Type	Area	U-Factor	Framing Frac.	Truss Type
___	1	Flat ceiling under attic(Vented)	Main	30.0	Blown	1675.0ft²	0.030	0.11	Wood

FORM R405-2023

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name:	Tran Gerlong Lot 38 Crosswinds Sub	Builder Name:	Tran Clagely
Street:	Anyplace	Permit Office:	Columbia County
City, State, Zip:	Lake City, FL, 32055	Permit Number:	
Owner:	TBD	Jurisdiction:	Columbia County
Design Location:	FL, Gainesville	County:	Columbia(Florida Climate Zone 2)

1. New construction or existing — New (From Plans)
2. Single family or multiple family — Attached
3. Number of units, if multiple family — 1
4. Number of Bedrooms — 3
5. Is this a worst case? — No
6. Conditioned floor area above grade (ft²) — 1675
   Conditioned floor area below grade (ft²) — 0

7. Windows(113.0 sqft.)	Description	Area
a. U-Factor:	Dbl, U=0.40	113.00 ft²
SHGC:	SHGC=0.25	
b. U-Factor:	N/A	ft²
SHGC:		
c. U-Factor:	N/A	ft²
SHGC:		
Area Weighted Average Overhang Depth:		1.235 ft
Area Weighted Average SHGC:		0.250

8. Skylights	Description	Area
U-Factor:(AVG)	N/A	N/A ft²
SHGC(AVG):	N/A	

9. Floor Types	Insulation	Area
a. Slab-On-Grade Edge Insulation	R=0.0	1675.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

10. Wall Types(1603.8 sqft.)	Insulation	Area
a. Face Brick - Wood, Exterior	R=13.0	1502.20 ft²
b. Frame - Wood, Adjacent	R=13.0	180.00 ft²
c. Face Brick - Wood, Adjacent	R=13.0	43.56 ft²
d. N/A		

11. Ceiling Types(1675.0 sqft.)	Insulation	Area
a. Flat ceiling Under att (Vented)	R=30.0	1675.00 ft²
b. N/A		
c. N/A		

12. Roof(Comp. Shingles, Vented) Deck R=0.0 — 1873 ft²

13. Ducts, location & insulation level	R	ft²
a. Sup. Attic, Ret: Main, AH: Main	8	400
b.		
c.		

14. Cooling Systems	kBtu/hr	Efficiency
a. Central Unit	17.8	SEER2:15.00

15. Heating Systems	kBtu/hr	Efficiency
a. Electric Heat Pump	17.0	HSPF2:7.70

16. Hot Water Systems
   a. Electric — Cap: 50 gallons, EF: 0.920
   b. Conservation features — None
17. Credits — CF

Glass/Floor Area: 0.067 — Total Proposed Modified Loads: 38.45 — Total Baseline Loads: 43.41 — **PASS**

NOTE: [illegible]

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

PREPARED BY: ______________________________

DATE: ______________________________

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 with a proposed duct leakage Qn requires a PERFORMANCE Duct Leakage Test Report confirming duct leakage to outdoors, tested in accordance with ANSI/RESNET/ICC 380, is not greater than 0.040 Qn for whole house.
- Compliance requires a roof absorptance test and a roof emittance test in accordance with R405.7.2
- Compliance requires an Air Barrier and Insulation Inspection Checklist in accordance with R402.4.1.1 and this project requires a PERFORMANCE envelope leakage test report with envelope leakage no greater than 7.00 ACH50 (R402.4.1.2).

FORM R405-2023

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name:	Trent Geibeig Lot 58 Crosswinds Sub	Builder Name:	Trent Giegeig
Street:	Anyplace	Permit Office:	Columbia County
City, State, Zip:	Lake City, FL, 32055	Permit Number:	
Owner:	TBD	Jurisdiction:	Columbia County
Design Location:	FL, Gainesville	County:	Columbia(Florida Climate Zone 2)

1. New construction or existing	New (From Plans)
2. Single family or multiple family	Attached
3. Number of units, if multiple family	1
4. Number of Bedrooms	3
5. Is this a worst case?	No
6. Conditioned floor area above grade (ft²)	1675
Conditioned floor area below grade (ft²)	0

7. Windows(113.0 sqft.)	Description	Area
a. U-Factor:	Dbl, U=0.40	113.00 ft²
SHGC:	SHGC=0.25	
b. U-Factor:	N/A	ft²
SHGC:		
c. U-Factor:	N/A	ft²
SHGC:		
Area Weighted Average Overhang Depth:		1.235 ft
Area Weighted Average SHGC:		0.250

8. Skylights	Description	Area
U-Factor:(AVG)	N/A	N/A ft²
SHGC(AVG):	N/A	

9. Floor Types	Insulation	Area
a. Slab-On-Grade Edge Insulation	R= 13.0	1675.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

10. Wall Types(1505.8 sqft.)	Insulation	Area
a. Face Brick - Wood, Exterior	R=13.0	1302.20 ft²
b. Frame - Wood, Adjacent	R=13.0	160.00 ft²
c. Face Brick - Wood, Adjacent	R=13.0	43.56 ft²
d. N/A		

11. Ceiling Types(1675.0 sqft.)	Insulation	Area
a. Flat ceiling under att (Vented)	R=30.0	1675.00 ft²
b. N/A		
c. N/A		

12. Roof(Comp. Shingles, Vented)	Deck R=0.0	1873 ft²

13. Ducts, location & insulation level	R	ft²
a. Sup: Attic, Ret: Main, AH: Main	8	400
b.		
c.		

14. Cooling Systems	kBtu/hr	Efficiency
a. Central Unit	13.8	SEER2:15.00

15. Heating Systems	kBtu/hr	Efficiency
a. Electric Heat Pump	17.0	HSPF2:7.70

16. Hot Water Systems	
a. Electric	Cap: 50 gallons
	EF: 0.920
b. Conservation features	None
17. Credits	CF

Glass/Floor Area: 0.067

Total Proposed Modified Loads: 39.45

Total Baseline Loads: 43.41

PASS

NOTE: Proposed residence must have annual total normalized Modified Loads that are less than or equal to 95 percent of the annual total loads of the standard reference design in order to comply.

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

PREPARED BY: _____

DATE: _____

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 with a proposed duct leakage Qn requires a PERFORMANCE Duct Leakage Test Report confirming duct leakage to outdoors, tested in accordance with ANSI/RESNET/ICC 380, is not greater than 0.040 Qn for whole house.

- Compliance requires a roof absorptance test and a roof emittance test in accordance with R405.7.2

- Compliance requires an Air Barrier and Insulation Inspection Checklist in accordance with R402.4.1.1 and this project requires a PERFORMANCE envelope leakage test report with envelope leakage no greater than 7.00 ACH50 (R402.4.1.2).

RESIDENTIAL ENERGY CONSERVATION CODE DOCUMENTATION CHECKLIST

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

Applications for compliance with the 2023 **Florida** Building Code, Energy Conservation via the **Residential Simulated Performance Alternative** shall include:

- ☐ This checklist
- ☐ Form R405-2023 report
- ☐ 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:

- ☐ Air Barrier and Insulation Inspection Component Criteria checklist (Table R402.4.1.1 - one page)
- ☐ A completed 2023 Envelope Leakage Test Report (usually one page); exception in R402.4 allows dwelling units of R-2 Occupancies and multiple attached single family dwellings to comply with Section C402.5
- ☐ If Form R405 duct leakage type indicates anything other than "Default leakage", then a completed 2023 Duct Leakage Test Report - Performance Method (usually one page)

RESIDENTIAL ENERGY CONSERVATION CODE DOCUMENTATION CHECKLIST

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

Applications for compliance with the 2023 Florida Building Code, Energy Conservation via the Residential Simulated Performance Alternative shall include:

- ☐ *This checklist*
- ☐ *Form R405-2023 report*
- ☐ *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:

- ☐ *Air Barrier and Insulation Inspection Component Criteria checklist (Table R402.4.1.1 - one page)*
- ☐ *A completed 2023 Envelope Leakage Test Report (usually one page); exception in R402.4 allows dwelling units of R-2 Occupancies and multiple attached single family dwellings to comply with Section C402.5*
- ☐ *If Form R405 duct leakage type indicates anything other than "default leakage", then a completed 2023 Duct Leakage Test Report - Performance Method (usually one page)*

Residential System Sizing Calculation

Summary

Project Title:
Anyplace
Lake City, FL 32055

Location for weather data: Gainesville, FL - Defaults. Latitude(29.7) Altitude(154 ft.) Temp Range(M)
Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(50gr.)

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	**17036**	**Btuh**	**Total cooling load calculation**	**13672**	**Btuh**
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh
Total (Electric Heat Pump)	100.0	17036	Sensible (SHR = 0.75)	90.0	10952
Heat Pump + Auxiliary(0.0kW)	100.0	17036	Latent	140.0	3481
			Total (Electric Heat Pump)	100.0	13803

WINTER CALCULATIONS

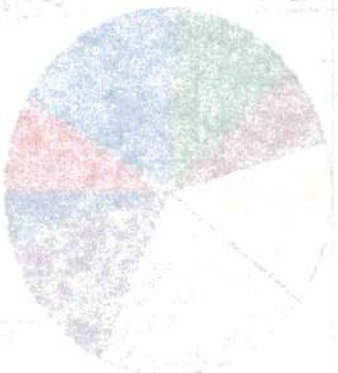
Winter Heating Load (for 1278 sqft)

Load component			Load
Window total	115	sqft	3608 Btuh
Wall total	1315	sqft	4246 Btuh
Door total	78	sqft	1375 Btuh
Ceiling total	1275	sqft	2134 Btuh
Floor total	1575	sqft	2424 Btuh
Infiltration	49	cfm	2745 Btuh
Duct load			2047 Btuh
Ventilation	Ex:0 cfm, Sup:0 cfm		17036 Btuh
TOTAL HEAT LOSS			17036 Btuh

SUMMER CALCULATIONS

Summer Cooling Load (for 1275 sqft)

Load component			Load
Window total	115	sqft	7211 Btuh
Wall total	1315	sqft	1747 Btuh
Door total	78	sqft	1001 Btuh
Ceiling total	1575	sqft	2347 Btuh
Floor total			0 Btuh
Infiltration	37	cfm	764 Btuh
Internal gain			1890 Btuh
Duct gain			2340 Btuh
Sens. Ventilation	Ex:0 cfm, Sup:0 cfm		0 Btuh
Blower Load			0 Btuh
Total sensible gain			**11501 Btuh**
Latent gain(ducts)			**494 Btuh**
Latent gain(infiltration)			1258 Btuh
Latent gain(ventilation)			0 Btuh
Latent gain(internal/occupants/other)			600 Btuh
Total latent gain			**2202 Btuh**
TOTAL HEAT GAIN			13703 Btuh



EnergyGauge® USRP/2B v8.0.0e

Residential System Sizing Calculation

Summary

TBD
Anyplace
Lake City, FL 32055

Project Title:
Trent Geibeig Lot 58 Crosswinds Sub

1/11/2024

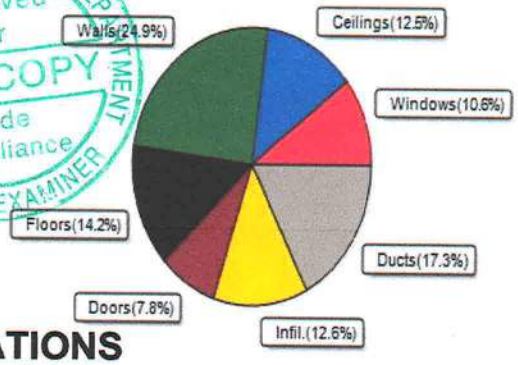
Location for weather data: Gainesville, FL - Defaults: Latitude(29.7) Altitude(164 ft.) Temp Range(M) Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(51gr.)					
Winter design temperature(TMY3 99%)	30	F	Summer design temperature(TMY3 99%)	94	F
Winter setpoint	70	F	Summer setpoint	75	F
Winter temperature difference	40	F	Summer temperature difference	19	F
Total heating load calculation	**17036**	**Btuh**	**Total cooling load calculation**	**13803**	**Btuh**
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh
Total (Electric Heat Pump)	100.0	17036	Sensible (SHR = 0.75)	90.0	10352
Heat Pump + Auxiliary(0.0kW)	100.0	17036	Latent	149.9	3451
			Total (Electric Heat Pump)	100.0	13803

WINTER CALCULATIONS

Winter Heating Load (for 1675 sqft)

Load component			Load	
Window total	113	sqft	1808	Btuh
Wall total	1315	sqft	4246	Btuh
Door total	78	sqft	1335	Btuh
Ceiling total	1675	sqft	2134	Btuh
Floor total	1675	sqft	2424	Btuh
Infiltration	49	cfm	2145	Btuh
Duct loss			2944	Btuh
Subtotal			**17036**	**Btuh**
Ventilation	Ex:0 cfm; Sup:0 cfm		0	Btuh
TOTAL HEAT LOSS			**17036**	**Btuh**

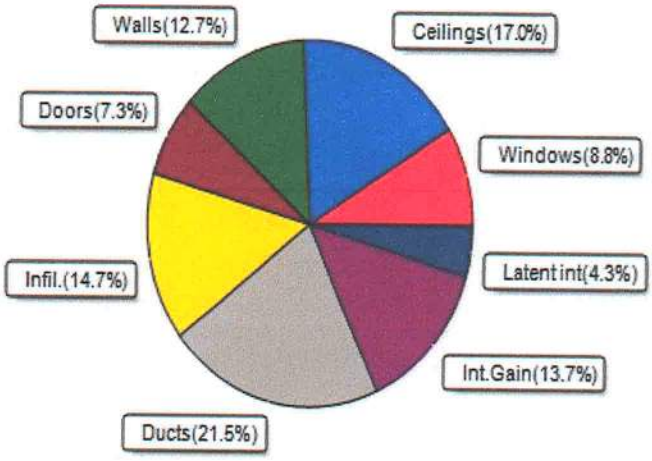
COLUMBIA COUNTY BUILDING DEPARTMENT
Received for
FILE COPY
Code Compliance
PLANS EXAMINER



SUMMER CALCULATIONS

Summer Cooling Load (for 1675 sqft)

Load component			Load	
Window total	113	sqft	1211	Btuh
Wall total	1315	sqft	1747	Btuh
Door total	78	sqft	1001	Btuh
Ceiling total	1675	sqft	2347	Btuh
Floor total			0	Btuh
Infiltration	37	cfm	764	Btuh
Internal gain			1890	Btuh
Duct gain			2540	Btuh
Sens.Ventilation	Ex:0 cfm; Sup:0 cfm		0	Btuh
Blower Load			0	Btuh
Total sensible gain			**11501**	**Btuh**
Latent gain(ducts)			434	Btuh
Latent gain(infiltration)			1268	Btuh
Latent gain(ventilation)			0	Btuh
Latent gain(internal/occupants/other)			600	Btuh
Total latent gain			**2302**	**Btuh**
TOTAL HEAT GAIN			**13803**	**Btuh**

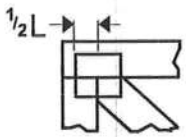


Powered by ACCA MANUAL J 8th Edition

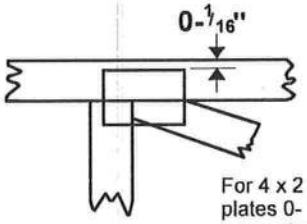
EnergyGauge® System Sizing
PREPARED BY: _____
DATE: _____

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 software or upon request.

PLATE SIZE

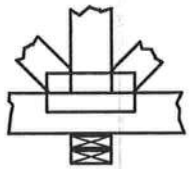
4 x 4

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

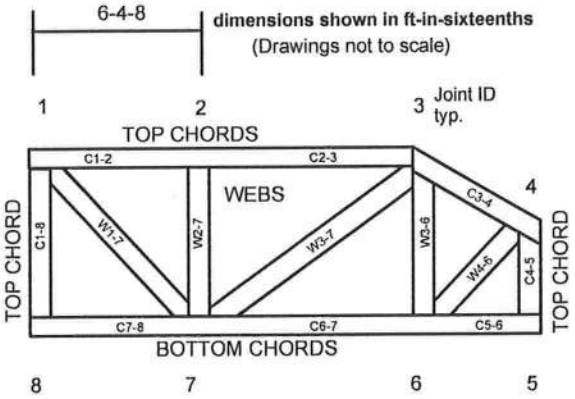


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & 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-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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.

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MiTek®

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

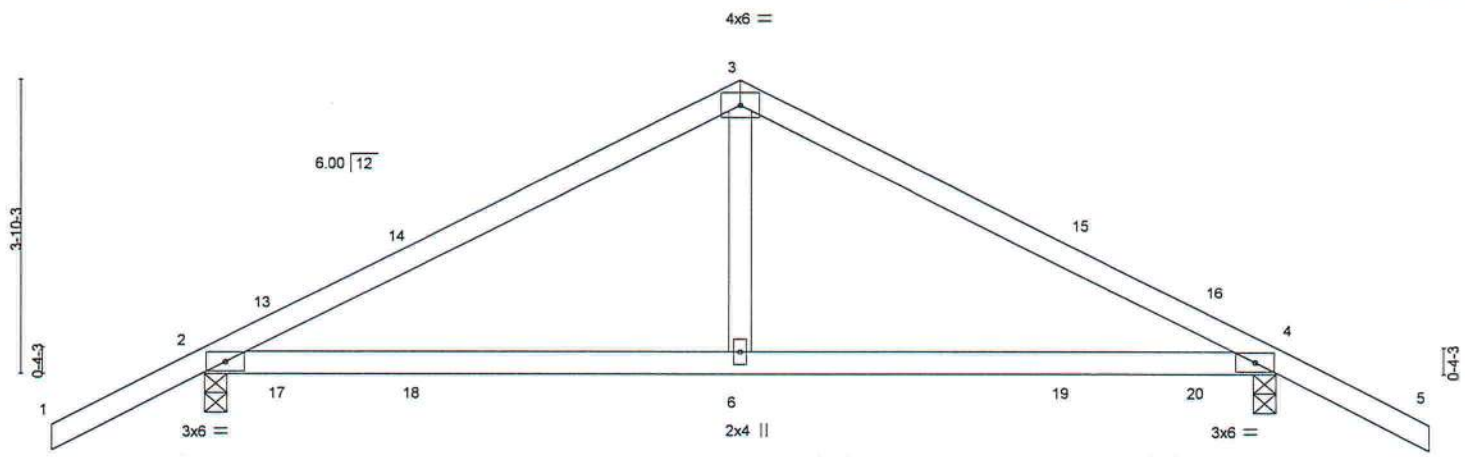
1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed 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.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 58 CW	T32687520
3833091	T21	COMMON	3	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jan 4 2024 MiTek Industries, Inc. Fri Jan 19 13:08:33 2024 Page 1
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-MW7sjIQJhC6jamxVnr0eAifW9W4fmU1qvWLSEuztnTC

-2-0-0 2-0-0 | 7-0-0 7-0-0 | 14-0-0 7-0-0 | 16-0-0 2-0-0

Scale = 1:28.9



7-0-0 7-0-0 | 14-0-0 7-0-0

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	0.51	Vert(LL)	0.09	6-9	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.50	Vert(CT)	-0.12	6-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 56 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 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 4=0-3-8
Max Horz 2=75(LC 12)
Max Uplift 2=-185(LC 12), 4=-185(LC 13)
Max Grav 2=626(LC 1), 4=626(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-705/413, 3-4=-705/413
BOT CHORD 2-6=-248/562, 4-6=-248/562
WEBS 3-6=-158/320

NOTES- (7)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 7-0-0, Zone2 7-0-0 to 11-2-15, Zone1 11-2-15 to 16-0-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 100 lb uplift at joint(s) except (jt=lb) 2=185, 4=185.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

This item has been digitally signed and sealed by ORegan, Philip, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 22,2024

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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