Columbia County New Building Permit Application

For Office Use Only Application # 59281 Date Received 3/1 By EKJ Permit # 47053

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. _____ OR City Water Fax _____

Applicant (Who will sign/pickup the permit) Charles Matukaitis Phone 941-525-7883

Address 486 SW Meadow Wood Glen Lake City FL 32024

Owners Name Charles Matukaitis Phone 941-525-7883

911 Address 486 SW Meadow Wood Glen Lake City FL 32024

Contractors Name owner builder Phone 941-525-7883

Address 486 SW MEADOW WOOD Gln Lake City FL 32024

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

Fee Simple Owner Name & Address _____

Bonding Co. Name & Address _____

Architect/Engineer Name & Address _____

Mortgage Lenders Name & Address _____

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

Property ID Number 35-35-15-00276-109 Estimated Construction Cost _____

Subdivision Name _____ Lot ____ Block ____ Unit ____ Phase ____

Driving Directions from a Major Road _____

Construction of mother in law suite ____ Commercial OR ✓ Residential

Proposed Use/Occupancy RESIDENTIAL Number of Existing Dwellings on Property 1

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 _____ Side _____ Side _____ Rear _____

Number of Stories ____ Heated Floor Area _____ Total Floor Area _____ Acreage _____

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.

Charles Matukaitis _____

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 _____

Columbia County Competency Card Number _____

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

_____

State of Florida Notary Signature (For the Contractor)

SEAL:

(Electronic Signatures Are Accepted.)

Prepared by and return to:
Rob Stewart
Lake City Title
426 SW Commerce Drive, Ste 145
Lake City, FL 32025
(386) 758-1880
File No 2020-4072CC

Parcel Identification No 35-3S-15-00276-109

[Space Above This Line For Recording Data]

WARRANTY DEED

(STATUTORY FORM – SECTION 689.02, F.S.)

This indenture made the **3rd day of November, 2020** between **Miguel Angel Herrera, a Single Man**, whose post office address is **5249 Maui Lane, Orlando, FL 32812**, of the County of Orange, State of Florida, Grantor, to **Charles J. Matukaitis and Beth A. Matukaitis, Husband and Wife**, whose post office address is **809 Crestwood Road, Englewood, FL 34223,** of the County of Sarasota, State of Florida, Grantees:

Witnesseth, that said Grantor, for and in consideration of the sum of TEN DOLLARS (U.S.$10.00) and other good and valuable considerations to said Grantor in hand paid by said Grantees, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said Grantees, and Grantees' heirs and assigns forever, the following described land, situate, lying and being in Columbia, Florida, to-wit:

Lot 9, of Meadow Wood, a subdivision as per the plat thereof filed at Plat Book 9, Pages 31 through 34, of the Public Records of Columbia County, Florida.

Said property is not the homestead of the Grantor under the laws and constitution of the State of Florida in that neither Grantor nor any member of the household of Grantor reside thereon.

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

Subject to taxes for 2020 and subsequent years, not yet due and payable; covenants, restrictions, easements, reservations and limitations of record, if any.

TO HAVE AND TO HOLD the same in fee simple forever.

And Grantor hereby covenants with the Grantees that the Grantor is lawfully seized of said land in fee simple, that Grantor has good right and lawful authority to sell and convey said land and that the Grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever.

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

Signed, sealed and delivered in our presence:

WITNESS
PRINT NAME: Regina Simpkins

WITNESS
PRINT NAME: Valarie Benz

Miguel Angel Herrera

STATE OF FLORIDA
COUNTY OF COLUMBIA

The foregoing instrument was acknowledged before me by means of (✓) physical presence or ( ) online notarization this 3rd day of November, 2020, Miguel Angel Herrera, who is/are personally known to me or has/have produced Drivers License as identification.

Signature of Notary Public

VALARIE BENZ
MY COMMISSION # GG 229183
EXPIRES: June 17, 2022
Bonded Thru Notary Public Underwriters

SUBCONTRACTOR VERIFICATION

APPLICATION/PERMIT # 59081 JOB NAME Matukaitis

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 Donald R. Holloway Signature Company Name: Holly Electric Svc. License #: EC13005428 Phone #: 386 755-5944	Need UC Uab W/C EX OE
MECHANICAL/ A/C ☐ CC#	Print Name DAVID HALL Signature Company Name: David Hall's Inc. License #: CAC057424 Phone #: 386-755-9792	Need UC Uab W/C EX OE
PLUMBING/ GAS ☐ CC#	Print Name Cody Barrs Signature Company Name: Barrs Plumbing License #: CFC1427145 Phone #: 386-752-8656	Need UC Uab W/C EX OE
ROOFING ☐ CC#	Print Name Signature Company Name: License #: Phone #:	Need UC Uab W/C EX OE
SHEET METAL ☐ CC#	Print Name Signature Company Name: License #: Phone #:	Need UC Uab W/C EX OE
FIRE SYSTEM/ SPRINKLER ☐ CC#	Print Name Signature Company Name: License#: Phone #:	Need UC Uab W/C EX OE
SOLAR ☐ CC#	Print Name Signature Company Name: License #: Phone #:	Need UC Uab W/C EX OE
STATE SPECIALTY ☐ CC#	Print Name Signature Company Name: License #: Phone #:	Need UC Uab W/C EX OE

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

SUBCONTRACTOR VERIFICATION

APPLICATION/PERMIT # 59281 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.

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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 Donald R. Hollingsworth Signature _____ Company Name: Holly Electric Inc. License #: EC13005429 Phone #: 386-755-5944	Need ☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
MECHANICAL/ A/C ☐ CC#_____	Print Name _____ Signature _____ Company Name: _____ License #: _____ Phone #: _____	Need ☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
PLUMBING/ GAS ☐ CC#_____	Print Name Cody Barrs Signature _____ Company Name: Barrs Plumbing License #: CFC1427145 Phone #: 386-752-8656	Need ☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
ROOFING ☐ CC#_____	Print Name Lewis Walker Signature _____ Company Name: Lewis Walker Roofing Inc License #: CCC1333551 Phone #: 866-959-7663	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

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:	**3/1/2021 4:19:43 PM**
Address:	**486 SW MEADOW WOOD GLN**
City:	**LAKE CITY**
State:	**FL**
Zip Code	**32024**
Parcel ID	**35-3S-15-00276-109**

REMARKS: **This address is a verified address in the county's addressing system.**

Verification ID: ea430ded-d37b-4f0e-9a33-940c8510a07e

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

COLUMBIA COUNTY BUILDING DEPARTMENT
135 NE Hernando Ave., Suite B-21
Lake City, FL 32055
Office: 386-758-1008 Fax: 386-758-2160

OWNER BUILDER DISCLOSURE STATEMENT

Florida Statutes Chapter 489.103:

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

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

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

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

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

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

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

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

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

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

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

486 SW Meadow Wood Gln Lake City FL 32024

(Write in the address of jobsite property)

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

Florida Statutes Chapter 489.503:

State law requires electrical contracting to be done by licensed electrical contractors. You have applied for a permit under an exemption to that law. The exemption allows you, as the owner of your property, to act as your own electrical contractor even though you do not have a license. You may install electrical wiring for a farm outbuilding or a single-family or duplex residence. You may install electrical wiring in a commercial building the aggregate construction costs of which are under $75,000. The home or building must be for your own use and occupancy. It may not be built for sale or lease, unless you are completing the requirements of a building permit where the contractor listed on the permit substantially completed the project. If you sell or lease more than one building you have wired yourself within 1 year after the construction is complete, the law will presume that you built it for sale or lease, which is a violation of this exemption. You may not hire an unlicensed person as your electrical contractor. Your construction shall be done according to building codes and zoning regulations. It is your responsibility to make sure that people employed by you have licenses required by state law and by county or municipal licensing ordinances.

An owner of property completing the requirements of a building permit, where the contractor listed on the permit substantially completed the project as determined by the local permitting agency, for a one-family or two family residence, townhome, accessory structure of a one-family or two-family residence or townhome or individual residential condominium unit or cooperative unit. Prior to the owner qualifying for the exemption, the owner must receive approval from the local permitting agency, and the local permitting agency must determine that the contractor substantially completed the project. An owner who qualifies for the exemption under this paragraph is not required to occupy the dwelling or unit for at least 1 year after the completion of the project.

Before a building permit shall be issued, this notarized disclosure statement must be completed and signed by the property owner and returned to the local permitting agency responsible for issuing the permit.

TYPE OF CONSTRUCTION

(✓) Single Family Dwelling ***( ) Two-Family Residence*** ***( ) Farm Outbuilding***

( ) Addition, Alteration, Modification or other Improvement ***( ) Electrical***

( ) Other Mother In Law Suite

( ) Contractor substantially completed project, of a _____

( ) Commercial, Cost of Construction _____ ***for construction of*** _____

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

Signature: _____ Date: 2-10-23
(Signature of property owner)

NOTARY OF OWNER BUILDER SIGNATURE

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

Notary Signature _____ Date 2/10/23 (Seal)

MELISSA GARBER
Notary Public - State of Florida
Commission # GG 952236
My Comm. Expires 01-28-2024
Bonded Through
Notary Public Underwriters

NOTICE OF COMMENCEMENT

Tax Parcel Identification Number:

35-35-15-00276-109

Clerk's Office Stamp

Inst: 202312003398 Date: 02/27/2023 Time: 2:23PM
Page 1 of 1 B: 1485 P: 1208, James M Swisher Jr, Clerk of Court
Columbia, County, By: VC
Deputy Clerk

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

1. Description of property *(legal description)*: Matukaitis
   a) Street *(job)* Address:
2. General description of improvements: mother in law suite

3. Owner Information or Lessee information if the Lessee contracted for the improvements:
   a) Name and address: Charles Matukaitis 486 sw meadow wood glen Lake City FL 32024
   b) Name and address of fee simple titleholder (if other than owner)
   c) Interest in property owner
4. Contractor Information
   a) Name and address: Charles Matukaitis
   b) Telephone No.: 941-525-7883
5. Surety Information (if applicable, a copy of the payment bond is attached):
   a) Name and address:
   b) Amount of Bond:
   c) Telephone No.:
6. Lender
   a) Name and address:
   b) Phone No.
7. Person within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13(1)(a)7., Florida Statutes:
   a) Name and address:
   b) Telephone No.:

8. In addition to himself or herself, Owner designates the following person to receive a copy of the Lienor's Notice as provided in Section 713.13(l)(b), Florida Statutes:
   a) Name: OF
   b) Telephone No.:

9. Expiration date of Notice of Commencement **(the expiration date will be 1 year from the date of recording unless a different date is specified)**:

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

STATE OF FLORIDA
COUNTY OF COLUMBIA

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

Charles Matukaitis
Printed Name and Signatory's Title/Office

The foregoing instrument was acknowledged before me, a Florida Notary, this 10th day of february, 2023, by:

Charles Matukaitis as self for N/A.
(Name of Person) (Type of Authority) (name of party on behalf of whom instrument was executed)

Personally Known ____ OR Produced Identification ✓ Type FLDL

Notary Signature M Garber

Notary Stamp or Seal:

MELISSA GARBER
Notary Public - State of Florida
Commission # GG 952236
My Comm. Expires 01-28-2024
Bonded Through
Notary Public Underwriters

Columbia County Property Appraiser

Jeff Hampton

2023 Working Values
updated: 2/9/2023

Parcel: << **35-3S-15-00276-109 (43853)** >>

Aerial Viewer Pictometery Google Maps

2022 2019 2016 2013 2010 Sales

Owner & Property Info

Result: 1 of 1

Owner	**MATUKAITIS CHARLES J** **MATUKAITIS BETH A** 486 SW MEADOW WOOD GLN LAKE CITY, FL 32024		
Site	486 SW MEADOW WOOD GLN, LAKE CITY		
Description*	LOTS 8 & 9 MEADOW WOOD S/D. WD 1347-1305, WD 1347-1311, WD 1377-1883, WD 1420-1290, WD 1423-1219,		
Area	10.02 AC	S/T/R	35-3S-15
Use Code**	IMPROVED AG (5000)	Tax District	3

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

Property & Assessment Values

2022 Certified Values			2023 Working Values		
Mkt Land	$33,600		Mkt Land	$33,600	
Ag Land	$1,656		Ag Land	$1,656	
Building	$245,376		Building	$245,376	
XFOB	$0		XFOB	$25,845	
Just	$329,460		Just	$355,305	
Class	$280,632		Class	$306,477	
Appraised	$280,632		Appraised	$306,477	
SOH Cap [?]	$0		SOH Cap [?]	$24,216	
Assessed	$248,996		Assessed	$282,261	
Exempt	HX HB	$50,000	Exempt	HX HB	$50,000
Total Taxable	county:$198,996 city:$0 other:$0 school:$223,996		Total Taxable	county:$232,261 city:$0 other:$0 school:$257,261	

Sales History

Sale Date	Sale Price	Book/Page	Deed	V/I	Qualification (Codes)	RCode
11/3/2020	$55,000	1423/1219	WD	V	Q	01
9/25/2020	$49,000	1420/1290	WD	V	Q	01
1/30/2019	$50,000	1377/1883	WD	V	Q	01
10/31/2017	$45,000	1347/1311	WD	I	Q	01
10/5/2017	$45,000	1347/1305	WD	V	Q	01

Building Characteristics

Bldg Sketch	Description*	Year Blt	Base SF	Actual SF	Bldg Value
Sketch	SINGLE FAM (0100)	2021	1782	2752	$245,376

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

Extra Features & Out Buildings (Codes)

Code	Desc	Year Blt	Value	Units	Dims
0280	POOL R/CON	2022	$15,600.00	260.00	26 x 10
0282	POOL ENCL	2022	$8,820.00	735.00	35 x 21
0166	CONC,PAVMT	2022	$1,425.00	475.00	x

Land Breakdown

Code	Desc	Units	Adjustments	Eff Rate	Land Value
0100	SFR (MKT)	4.000 AC	1.0000/1.0000 1.0000/ /	$8,400 /AC	$33,600
6200	PASTURE 3 (AG)	5.010 AC	1.0000/1.0000 1.0000/ /	$275 /AC	$1,378
6200	PASTURE 3 (AG)	1.010 AC	1.0000/1.0000 1.0000/ /	$275 /AC	$278
9910	MKT.VAL.AG (MKT)	6.010 AC	1.0000/1.0000 1.0000/ /	$8,400 /AC	$50,484

Search Result: 1 of 1

by: GrizzlyLogic.com

59281

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

Category/Subcategory	Manufacturer	Product Description	Approval Number(s)
1. EXTERIOR DOORS			
A. SWINGING	Plastpro	8' inswing & outswing fiberglass	FL-15220-R1
B. SLIDING			
C. SECTIONAL/ROLL UP			
D. OTHER			
2. WINDOWS			
A. SINGLE/DOUBLE HUNG	MI	Vinyl 3540 Single Hung	FL-17676-R17
B. HORIZONTAL SLIDER			
C. CASEMENT			
D. FIXED			
E. MULLION			
F. SKYLIGHTS			
G. OTHER			
3. PANEL WALL			
A. SIDING	JAMES HARDIE	Cement board Lap siding	FL 13192 R2
B. SOFFITS	KAYCAN	Vinyl PVC & Aluminum soffitt	FL-16503
C. STOREFRONTS			
D. GLASS BLOCK			
E. OTHER			
4. ROOFING PRODUCTS			
A. ASPHALT SHINGLES			
B. NON-STRUCT METAL			
C. ROOFING TILES			
D. SINGLE PLY ROOF			
E. OTHER	METAL	Master Rib Roofing	FL 9557 R3
5. STRUCT COMPONENTS			
A. WOOD CONNECTORS		Wood Connectors	FL 9589 R5
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.

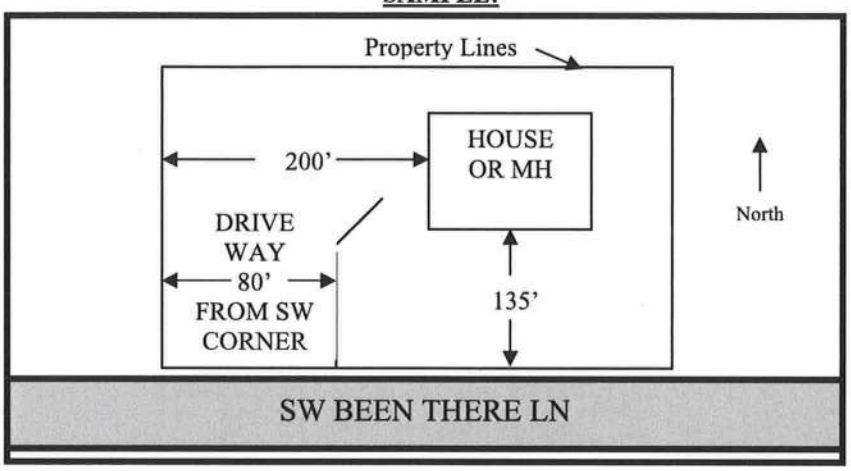
NOTES: _____

59281

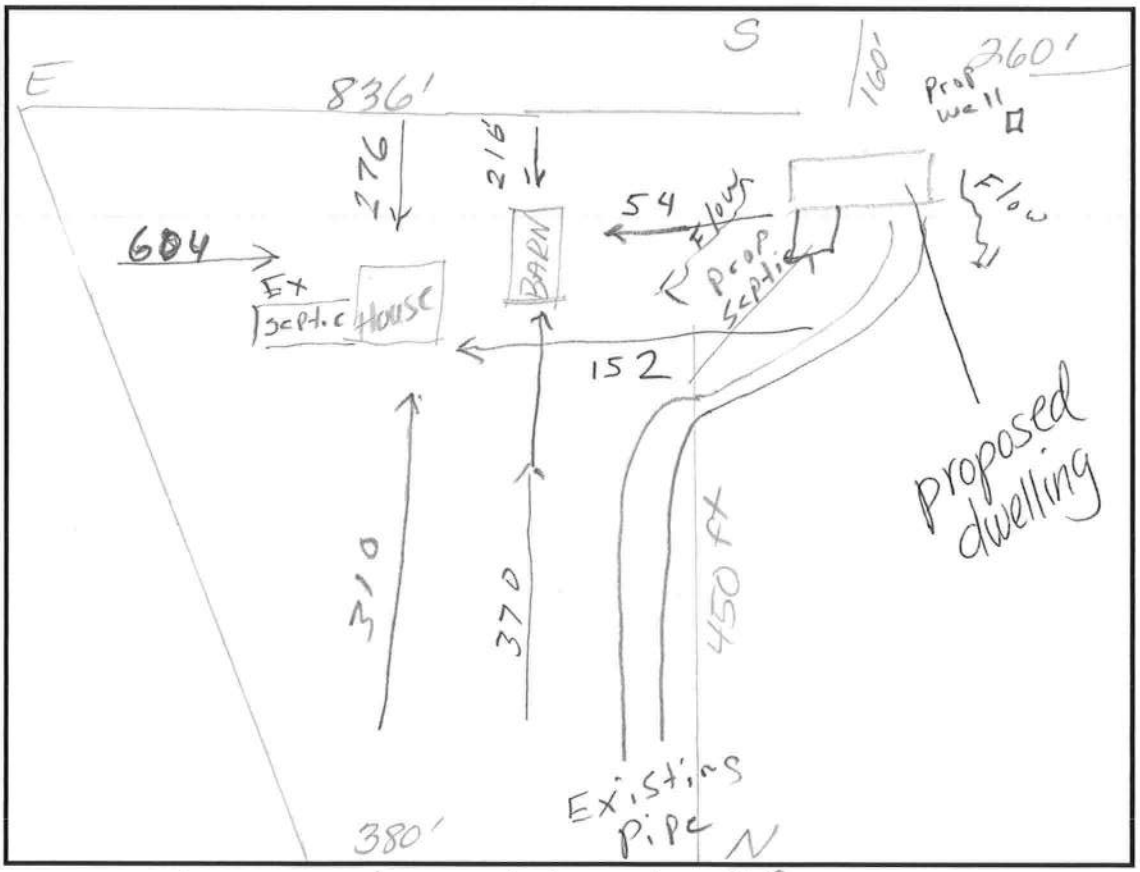
Page 2, Site Plan for 9-1-1 Address Application From

1. A PLAT, PLAN, OR DRAWING SHOWING THE PROPERTY LINES OF THE PARCEL.
2. LOCATION OF PLANNED RESIDENT OR BUSINESS STRUCTURE ON THE PROPERTY WITH DISTANCES FROM AT LEAST TWO OF THE PROPERTY LINES TO THE STRUCTURE (SEE SAMPLE BELOW).
3. LOCATION OF THE ACCESS POINT (DRIVEWAY, ETC.) ON THE ROADWAY FROM WHICH LOCATION IS TO BE ADDRESSED WITH A DISTANCE FROM A PARALLEL PROPERTY LINE AND OR PROPERTY CORNER (SEE SAMPLE BELOW).
4. TRAVEL OF THE DRIVEWAY FROM THE ACCESS POINT TO THE STRUCTURE (SEE SAMPLE BELOW).

SAMPLE:



SITE PLAN BOX:



Meadow Wood Glen

COLUMBIA COUNTY BUILDING DEPARTMENT
RESIDENTIAL CHECK LIST

MINIMUM PLAN REQUIREMENTS: FLORIDA BUILDING CODE RESIDENTIAL 2020 EFFECTIVE 1 JANUARY 2021 AND THE NATIONAL ELECTRICAL 2017 EFFECTIVE 1 JANUARY 2021

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:			0		
2	All drawings must be clear, concise, drawn to scale, details that are not used shall be marked void			0		
3	**Condition space (Sq. Ft.)**	796	**Total (Sq. Ft.) under roof** ~~[illegible]~~ 1754	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	-Yes		
5	Dimensions of all building set backs	-Yes		
6	Location of all other structures (include square footage of structures) on parcel, existing or proposed well and septic tank and all utility easements.	-Yes		
7	Provide a full legal description of property.	-Yes		

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

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable		
8	**Plans or specifications must show compliance with FBCR Chapter 3**	Yes	No	NA
		Select From Drop down		
9	Basic wind speed (3-second gust), miles per hour	~~140~~		
10	(Wind exposure – if more than one wind exposure is used, the wind exposure and applicable wind direction shall be indicated)	-0		
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		- 0		
15	Roof pitch	6 - 12	- 0		
16	Overhang dimensions and detail with attic ventilation		-		
17	Location, size and height above roof of chimneys		- NA		
18	Location and size of skylights with Florida Product Approval		- 0	0	
19	Number of stories		- 1		
20	Building height from the established grade to the roofs highest peak		- 0		

Floor Plan Including:

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

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.	- Y		
31	All posts and/or column footing including size and reinforcing	- Y		
32	Any special support required by soil analysis such as piling.	- N		
33	Assumed load-bearing valve of soil _____ Pound Per Square Foot	- Y		
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	- Y		

FBCR 506: CONCRETE SLAB ON GRADE

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

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**	- Y		

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	- Y		
39	Show all Lintel sizes, type, spans and tie-beam sizes and spacing of reinforcement	- Y		

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	-		NA
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	- Y	NA	
54	Fastener schedule for structural members per table FBC 2304.10.1 are to be shown	- Y		
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	- Y		
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	- Y		
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 2303.1.1.1 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 15

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. There is a **$15.00** application fee. The completed application with attached documents and application fee can be mailed.	-		
94	**Parcel Number** The parcel number (Tax ID number) from the Property Appraisers Office (386) 758-1083 is required. A copy of property deed is also required. www.columbiacountyfla.com	-		
95	**Environmental Health Permit or Sewer Tap Approval** A copy of a approved Columbia County Environmental Health (386) 758-1058	-		
96	**City of Lake City** A City Water and/or Sewer letter. Call 386-752-2031	-		
97	**Toilet facilities shall be provided for all construction sites**	-		
98	**Town of Fort White** (386) 497-2321 If the parcel in the application for building permit is within the Corporate city limits of Fort White, an approval land use development letter issued by the Town of Fort is required to be submitted with the application for a building permit.	-		
99	**Flood Information:** All projects within the Floodway of the Suwannee or Santa Fe Rivers shall require permitting through the Suwannee River Water Management District, before submitting a application to this office. Any project located within a flood zone where the base flood elevation (100 year flood) has been established shall meet the requirements of Section 8.5.2 of the Columbia County Land Development Regulations. Any project located within a flood zone where the base flood elevation has not been established (Zone A) shall meet the requirements of Section 8.5.3 of the Columbia County Land Development Regulations (Municode.com)	-		
100	**CERTIFIED FINISHED FLOOR ELEVATIONS** will be required on any project where the approved FIRM Flood Maps show the property is in a AE, Floodway, and AH flood zones. Additionally One Foot Rise letters are required for AE and AH zones. In the Floodway Flood zones a Zero Rise letter is required.	-		
101	A Flood development permit is also required for AE, Floodway & AH. Development permit cost is **$50.00**	-		
102	**Driveway Connection:** If the property does not have an existing access to a public road, then an application for a culvert permit **($25.00)** must be made. County Public Works Dept. determines the size and length of every culvert before instillation and completes a final inspection before permanent power is granted. If the applicant feels that a culvert is not needed, they may apply for a culvert waiver **($50.00)** Separate Check when issued. If the project is to be located on an F.D.O.T. maintained road, then an F.D.O.T. access permit is required.	-		
103	**911 Address:** An application for a 911address must be applied for and **received** through the Columbia County Emergency Management Office of 911 Addressing Department (386) 758-1125.	-		

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

RESIDENTIAL ENERGY CONSERVATION CODE DOCUMENTATION CHECKLIST

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

Applications for compliance with the 2020 Florida Building Code, Energy Conservation via the Residential Simulated Performance Alternative shall include:

- ☐ *This checklist*
- ☐ *Form R405-2020 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 2020 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 2020 Duct Leakage Test Report - Performance Method (usually one page)*

FORM R405-2020

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name:	220516 Matukaitis ADU	Builder Name:	
Street:	486 SW Meadow Wood Glen	Permit Office:	
City, State, Zip:	Lake City , FL ,	Permit Number:	
Owner:	Charles & Beth Matukaitis	Jurisdiction:	
Design Location:	FL, Gainesville	County:	columbia (Florida Climate Zone 2)

1. New construction or existing		New (From Plans)		
2. Single family or multiple family		Detached		
3. Number of units, if multiple family		1		
4. Number of Bedrooms		1		
5. Is this a worst case?		No		
6. Conditioned floor area above grade (ft²)		796		
Conditioned floor area below grade (ft²)		0		
7. Windows(68.7 sqft.)	Description		Area	
a. U-Factor:	Dbl, U=0.32		68.67	ft²
SHGC:	SHGC=0.22			
b. U-Factor:	N/A			ft²
SHGC:				
c. U-Factor:	N/A			ft²
SHGC:				
Area Weighted Average Overhang Depth:			6.308	ft.
Area Weighted Average SHGC:			0.220	
8. Skylights			Area	
c. U-Factor:(AVG)	N/A			ft²
SHGC(AVG):	N/A			
9. Floor Types (796.0 sqft.)		Insulation	Area	
a. Slab-On-Grade Edge Insulation		R=0.0	796.00	ft²
b. N/A		R=		ft²
c. N/A		R=		ft²

10. Wall Types(1029.3 sqft.)	Insulation	Area	
a. Frame - Wood, Exterior	R=13.0	826.67	ft²
b. Frame - Wood, Adjacent	R=13.0	202.67	ft²
c. N/A	R=		ft²
d. N/A	R=		ft²
11. Ceiling Types (796.0 sqft.)	Insulation	Area	
a. Under Attic (Vented)	R=38.0	796.00	ft²
b. N/A	R=		ft²
c. N/A	R=		ft²
12. Ducts		R	ft²
a. Sup: Attic, Ret: Attic, AH: Main		6	159.2
13. Cooling systems	kBtu/hr	Efficiency	
a. Central Unit	16.0	SEER:15.00	
14. Heating systems	kBtu/hr	Efficiency	
a. Electric Heat Pump	16.0	HSPF:8.80	
15. Hot water systems			
a. Electric		Cap: 40 gallons	
		EF: 0.950	
b. Conservation features			
None			
16. Credits		Pstat	

Glass/Floor Area: 0.086

Total Proposed Modified Loads: 23.90

Total Baseline Loads: 23.78

PASS

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

PREPARED BY: Evan Beamsley

DATE: 2022-10-31

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.

Columbia County Building Department — Reviewed for Code Compliance — File Copy — Plans Examiner

BUILDING OFFICIAL: _____

DATE: _____

- **Compliance requires certification by the air handler unit manufacturer that the air handler enclosure qualifies as certified factory-sealed in accordance with R403.3.2.1.**
- **Compliance requires an Air Barrier and Insulation Inspection Checklist in accordance with R402.4.1.1 and this project requires an envelope leakage test report with envelope leakage no greater than 7.00 ACH50 (R402.4.1.2).**

FORM R405-2020

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:	220516 Matukaitis ADU	Bedrooms:	1	Address Type:	Street Address
Building Type:	User	Conditioned Area:	796	Lot #	
Owner Name:	Charles & Beth Matukaitis	Total Stories:	1	Block/Subdivision:	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:		Rotate Angle:	180	Street:	486 SW Meadow Wood
Permit Office:		Cross Ventilation:		County:	columbia
Jurisdiction:		Whole House Fan:		City, State, Zip:	Lake City , FL ,
Family Type:	Detached				
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

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

BLOCKS

Number	Name	Area	Volume
1	Block1	796	6368

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	796	6368	Yes	1	1	1	Yes	Yes	Yes

FLOORS

√	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulatio	Main	122 ft	0	796 ft²	----	0.3	0.3	0.4

ROOF

√	#	Type	Materials	Roof Area	Gable Area	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
_____	1	Gable or shed	Metal	890 ft²	200 ft²	Medium	N	0.75	No	0.9	No	0	26.57

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	300	796 ft²	N	N

CEILING

√	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	Main	38	Blown	796 ft²	0	Wood

INPUT SUMMARY CHECKLIST REPORT

WALLS

√	#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	Width In	Height Ft	Height In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
____	1	N=>S	Exterior	Frame - Wood	Main	13	18	8	8		149.3 ft²		0.23	0.5	0
____	2	W=>E	Exterior	Frame - Wood	Main	13	3		8		24.0 ft²		0.23	0.5	0
____	3	N=>S	Exterior	Frame - Wood	Main	13	20	4	8	0	162.7 ft²		0.23	0.5	0
____	4	E=>W	Garage	Frame - Wood	Main	13	14	8	8	0	117.3 ft²		0.23	0.01	0
____	5	N=>S	Garage	Frame - Wood	Main	13	3	4	8	0	26.7 ft²		0.23	0.01	0
____	6	E=>W	Garage	Frame - Wood	Main	13	7	4	8	0	58.7 ft²		0.23	0.01	0
____	7	S=>N	Exterior	Frame - Wood	Main	13	42	4	8		338.7 ft²		0.23	0.5	0
____	8	W=>E	Exterior	Frame - Wood	Main	13	19		8		152.0 ft²		0.23	0.5	0

DOORS

√	#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	Width In	Height Ft	Height In	Area
_____	1	N=>S	Insulated	Main	None	.35	2		6	8	13.3 ft²
_____	2	E=>W	Insulated	Main	None	.35	3		6	8	20 ft²
_____	3	E=>W	Insulated	Main	None	.35	5		6	8	33.3 ft²
_____	4	S=>N	Insulated	Main	None	.35	3		6	8	20 ft²

WINDOWS

Orientation shown is the entered orientation (=>) changed to As Built (rotated 180 degrees).

√	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
_____	1	N=>S	1	Metal	Low-E Double	Yes	0.32	0.22	N	9.0 ft²	13 ft 0 in	0 ft 4 in	None	None
_____	2	N=>S	3	Metal	Low-E Double	Yes	0.32	0.22	N	26.7 ft²	10 ft 0 in	0 ft 4 in	None	None
_____	3	S=>N	7	Metal	Low-E Double	Yes	0.32	0.22	N	18.0 ft²	1 ft 6 in	0 ft 6 in	None	None
_____	4	S=>N	7	Metal	Low-E Double	Yes	0.32	0.22	N	15.0 ft²	1 ft 6 in	0 ft 6 in	None	None

GARAGE

√	#	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
_____	1	640.2 ft²	640.2 ft²	76 ft	8 ft	1

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000356	742.9	40.76	76.52	.1372	7

HEATING SYSTEM

√	#	System Type	Subtype	Speed	Efficiency	Capacity	Block	Ducts
_____	1	Electric Heat Pump/	None	Singl	HSPF:8.8	16 kBtu/hr	1	sys#1

FORM R405-2020

INPUT SUMMARY CHECKLIST REPORT

COOLING SYSTEM

√	#	System Type	Subtype	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
_____	1	Central Unit/	None	Singl	SEER: 15	16 kBtu/hr	480 cfm	0.75	1	sys#1

HOT WATER SYSTEM

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

SOLAR HOT WATER SYSTEM

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

DUCTS

√	#	---- Supply ---- Location	R-Value	Area	---- Return ---- Location	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	HVAC # Cool
_____	1	Attic	6	159.2 ft	Attic	39.8 ft²	Default Leakage	Main	(Default)	(Default)			1	1

TEMPERATURES

Programable Thermostat: Y Ceiling Fans:

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

Thermostat Schedule: HERS 2006 Reference

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

MASS

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

FORM R405-2020

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 101

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

486 SW Meadow Wood Glen, Lake City, FL,

1. New construction or existing		New (From Plans)	
2. Single family or multiple family		Detached	
3. Number of units, if multiple family		1	
4. Number of Bedrooms		1	
5. Is this a worst case?		No	
6. Conditioned floor area (ft²)		796	
7. Windows**	Description		Area
a. U-Factor: SHGC:	Dbl, U=0.32 SHGC=0.22		68.67 ft²
b. U-Factor: SHGC:	N/A		ft²
c. U-Factor: SHGC:	N/A		ft²
d. U-Factor: SHGC:	N/A		ft²
Area Weighted Average Overhang Depth:			6.308 ft.
Area Weighted Average SHGC:			0.220
8. Skylights	Description		Area
a. U-Factor(AVG): SHGC(AVG):	N/A N/A		ft²
9. Floor Types		Insulation	Area
a. Slab-On-Grade Edge Insulation		R=0.0	796.00 ft²
b. N/A		R=	ft²
c. N/A		R=	ft²

10. Wall Type and Insulation	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	826.67 ft²
b. Frame - Wood, Adjacent	R=13.0	202.67 ft²
c. N/A	R=	ft²
d. N/A	R=	ft²
11. Ceiling Type and insulation level	Insulation	Area
a. Under Attic (Vented)	R=38.0	796.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²
12. Ducts, location & insulation level		R ft²
a. Sup: Attic, Ret: Attic, AH: Main		6 159.2
13. Cooling systems	kBtu/hr	Efficiency
a. Central Unit	16.0	SEER:15.00
14. Heating systems	kBtu/hr	Efficiency
a. Electric Heat Pump	16.0	HSPF:8.80
15. Hot water systems		
a. Electric		Cap: 40 gallons EF: 0.95
b. Conservation features None		
Credits (Performance method)		Pstat

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: _____ City/FL Zip: _____

*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.

Florida Building Code, Energy Conservation, 7th Edition (2020)
Mandatory Requirements for Residential Performance, Prescriptive and ERI Methods

ADDRESS:	486 SW Meadow Wood Glen Lake City , FL ,	Permit Number:

MANDATORY REQUIREMENTS - See individual code sections for full details.

SECTION R401 GENERAL

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

SECTION R402 BUILDING THERMAL ENVELOPE

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

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

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

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

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

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

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

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

☐ **R402.4.3 Fenestration air leakage.** Windows, skylights and sliding glass doors shall have an air infiltration rate of no more than 0.3 cfm per square foot (1.5 L/s/m2), and swinging doors no more than 0.5 cfm per square foot (2.6 L/s/m2), when tested according to NFRC 400 or AAMA/ WDMA/CSA 101/I.S.2/A440 by an accredited, independent laboratory and listed and labeled by the manufacturer.

Exception: Site-built windows, skylights and doors.

MANDATORY REQUIREMENTS - (Continued)

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

Exceptions:

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

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

SECTION R403 SYSTEMS

R403.1 Controls.

☐ **R403.1.1 Thermostat provision (Mandatory).** At least one thermostat shall be provided for each separate heating and cooling system.

☐ **R403.1.3 Heat pump supplementary heat (Mandatory).** Heat pumps having supplementary electric-resistance heat shall have controls that, except during defrost, prevent supplemental heat operation when the heat pump compressor can meet the heating load.

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

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

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

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

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

Exceptions:

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

☐ **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.

MANDATORY REQUIREMENTS - (Continued)

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

R403.5.6 Water heater efficiencies (Mandatory).

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

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

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

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

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

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

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

Exception: Where 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.

☐ **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.

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	2.8 cfm/watt	Any
Bathroom, utility room	10	1.4 cfm/watt	<90
Bathroom, utility room	90	2.8 cfm/watt	Any

For SI: 1 cfm = 28.3 L/min.

a. When tested in accordance with HVI Standard 916

MANDATORY REQUIREMENTS - (Continued)

☐ **R403.7.1.1 Cooling equipment capacity.** Cooling only equipment shall be selected so that its total capacity is not less than the calculated total load but not more than 1.15 times greater than the total load calculated according to the procedure selected in Section 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).

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

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

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

Exceptions:

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

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

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

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

☐ **R403.10.5 Heat pump pool heaters.** Heat pump pool heaters shall have a minimum COP of 4.0 when tested in accordance with AHRI 1160, Table 2, Standard Rating Conditions-Low Air Temperature. A test report from an independent laboratory is required to verify procedure compliance. Geothermal swimming pool heat pumps are not required to meet this standard.

☐ **R403.11 Portable spas (Mandatory).** The energy consumption of electric-powered portable spas shall be controlled by the requirements of APSP-14.

☐ **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).** Not less than 90 percent of the lamps in permanently installed luminaires 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.

2020 - AIR BARRIER AND INSULATION INSPECTION COMPONENT CRITERIA

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

				CHECK
Project Name:	220516 Matukaitis ADU	Builder Name:		
Street:	486 SW Meadow Wood Glen	Permit Office:		
City, State, Zip:	Lake City , FL ,	Permit Number:		
Owner:	Charles & Beth Matukaitis	Jurisdiction:		
Design Location:	FL, Gainesville			

COMPONENT	AIR BARRIER CRITERIA	INSULATION INSTALLATION CRITERIA	
General requirements	A continuous air barrier shall be installed in the building envelope. The exterior thermal envelope contains a continuous air barrier. Breaks or joints in the air barrier shall be sealed.	Air-permeable insulation shall not be used as a sealing material.	
Ceiling/attic	The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier shall be sealed. Access openings, drop down stairs or knee wall doors to unconditioned attic spaces shall be sealed.	The insulation in any dropped ceiling/soffit shall be aligned with the air barrier.	
Walls	The junction of the foundation and sill plate shall be sealed. The junction of the top plate and the top of exterior walls shall be sealed. Knee walls shall be sealed.	Cavities within corners and headers of frame walls shall be insulated by completely filling the cavity with a material having a thermal resistance of R-3 per inch minimum. Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier.	
Windows, skylights and doors	The space between window/door jambs and framing, and skylights and framing shall be sealed.		
Rim joists	Rim joists shall include the air barrier.	Rim joists shall be insulated.	
Floors (including above-garage and cantilevered floors)	The air barrier shall be installed at any exposed edge of insulation.	Floor framing cavity insulation shall be installed to maintain permanent contact with the underside of subfloor decking, or floor framing cavity insulation shall be permitted to be in contact with the top side of sheathing, or continuous insulation installed on the underside of floor framing and extends from the bottom to the top of all perimeter floor framing members.	
Crawl space walls	Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.	Where provided instead of floor insulation, insulation shall be permanently attached to the crawlspace 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/phone box on exterior walls	The air barrier shall be installed behind electrical or communication boxes or air-sealed boxes shall be installed.		
HVAC register boots	HVAC supply and return register boots that penetrate building thermal envelope shall be sealed to the sub-floor, wall covering or		
Concealed sprinklers	When required to be sealed, concealed fire sprinklers shall only be sealed in a manner that is recommended by the manufacturer. Caulking or other adhesive sealants shall not be used to fill voids between fire sprinkler cover plates and walls or ceilings.		

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

Envelope Leakage Test Report (Blower Door Test)
Residential Prescriptive, Performance or ERI Method Compliance
2020 Florida Building Code, Energy Conservation, 7th Edition

Jurisdiction:	Permit #:

Job Information

Builder:	Community:	Lot: NA
Address: 486 SW Meadow Wood Glen		
City: Lake City	State: FL	Zip:

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

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

○ **PERFORMANCE or ERI METHOD**-The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding the selected ACH(50) value, as shown on Form R405-2020 (Performance) or R406-2020 (ERI), section labeled as infiltration, sub-section ACH50.

ACH(50) specified on Form R405-2020-Energy Calc (Performance) or R406-2020 (ERI): 7.000

_____ x 60 ÷ 6368 _____ = _____
CFM(50) Building Volume ACH(50)

☐ **PASS**

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

Method for calculating building volume:
○ Retrieved from architectural plans
● Code software calculated
○ Field measured and calculated

R402.4.1.2 Testing. Testing shall be conducted in accordance with ANSI/RESNET/ICC 380 and reported at a pressure of 0.2 inch w.g. (50 Pascals). Testing shall be conducted by either individuals as defined in Section 553.993(5) or (7), *Florida Statues.*or individuals licensed as set forth in Section 489.105(3)(f), (g), or (i) or an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the*code official.* Testing shall be performed at any time after creation of all penetrations of the *building thermal envelope.*

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

Testing Company

Company Name: _____ Phone: _____

I hereby verify that the above Air Leakage results are in accordance with the 2020 7th Edition Florida Building Code Energy Conservation requirements according to the compliance method selected above.

Signature of Tester: _____ Date of Test: _____

Printed Name of Tester: _____

License/Certification #: _____ Issuing Authority: _____

Residential System Sizing Calculation

Summary

Charles & Beth Matukaitis
486 SW Meadow Wood Glen
Lake City, FL

Project Title:
220516 Matukaitis ADU

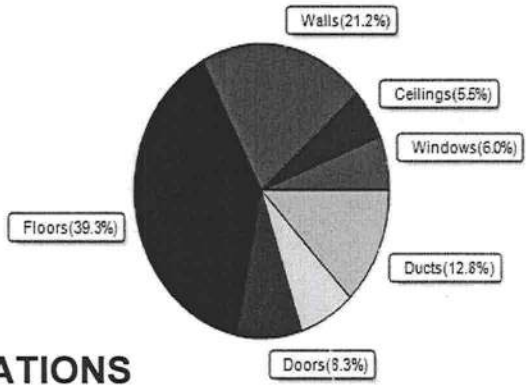
2022-10-31

Location for weather data: Gainesville, FL - Defaults: Latitude(29.7) Altitude(152 ft.) Temp Range(M) Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(51gr.)					
Winter design temperature(TMY3 99%)	30	F	Summer design temperature(TMY3 99%)	94	F
Winter setpoint	70	F	Summer setpoint	75	F
Winter temperature difference	40	F	Summer temperature difference	19	F
Total heating load calculation	**14661**	**Btuh**	**Total cooling load calculation**	**11655**	**Btuh**
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh
Total (Electric Heat Pump)	109.1	16000	Sensible (SHR = 0.75)	115.6	12000
Heat Pump + Auxiliary(0.0kW)	109.1	16000	Latent	312.8	4000
			Total (Electric Heat Pump)	137.3	16000

WINTER CALCULATIONS

Winter Heating Load (for 796 sqft)

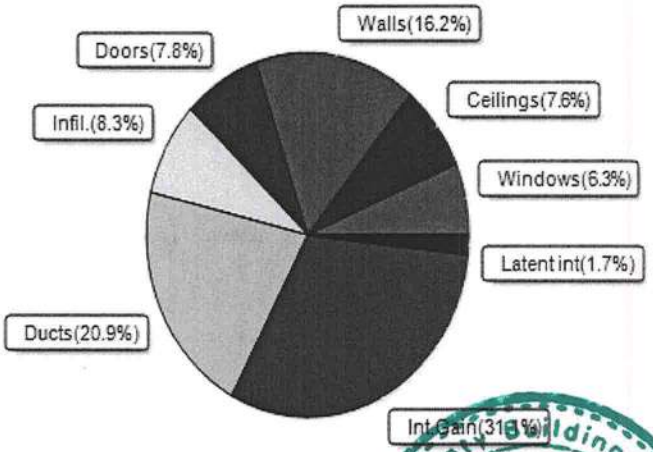
Load component			Load	
Window total	69	sqft	879	Btuh
Wall total	874	sqft	3103	Btuh
Door total	87	sqft	1213	Btuh
Ceiling total	796	sqft	808	Btuh
Floor total	796	sqft	5758	Btuh
Infiltration	23	cfm	1020	Btuh
Duct loss			1879	Btuh
Subtotal			**14661**	**Btuh**
Ventilation	0	cfm	0	Btuh
TOTAL HEAT LOSS			**14661**	**Btuh**



SUMMER CALCULATIONS

Summer Cooling Load (for 796 sqft)

Load component			Load	
Window total	69	sqft	735	Btuh
Wall total	874	sqft	1892	Btuh
Door total	87	sqft	910	Btuh
Ceiling total	796	sqft	889	Btuh
Floor total			0	Btuh
Infiltration	17	cfm	363	Btuh
Internal gain			3630	Btuh
Duct gain			1957	Btuh
Sens. Ventilation	0	cfm	0	Btuh
Blower Load			0	Btuh
Total sensible gain			**10376**	**Btuh**
Latent gain(ducts)			476	Btuh
Latent gain(infiltration)			603	Btuh
Latent gain(ventilation)			0	Btuh
Latent gain(internal/occupants/other)			200	Btuh
Total latent gain			**1279**	**Btuh**
TOTAL HEAT GAIN			**11655**	**Btuh**



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EnergyGauge® System Sizing
PREPARED BY: Evan Beamsley
DATE: 2022-10-31

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Charles & Beth Matukaitis
486 SW Meadow Wood Glen
Lake City, FL

Project Title:
220516 Matukaitis ADU
Building Type: User

2022-10-31

Reference City: Gainesville, FL (Defaults) Winter Temperature Difference: 40.0 F (TMY3 99%)

Component Loads for Whole House

Window	Panes/Type	Frame	U	Orientation	Area(sqft) X	HTM=	Load
1	2, NFRC 0.22	Metal	0.32	N	9.0	12.8	115 Btuh
2	2, NFRC 0.22	Metal	0.32	N	26.7	12.8	341 Btuh
3	2, NFRC 0.22	Metal	0.32	S	18.0	12.8	230 Btuh
4	2, NFRC 0.22	Metal	0.32	S	15.0	12.8	192 Btuh
	Window Total				68.7(sqft)		879 Btuh
Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area X	HTM=	Load
1	Frame - Wood	- Ext	(0.089)	13.0/0.0	140	3.55	498 Btuh
2	Frame - Wood	- Ext	(0.089)	13.0/0.0	24	3.55	85 Btuh
3	Frame - Wood	- Ext	(0.089)	13.0/0.0	123	3.55	436 Btuh
4	Frame - Wood	- Adj	(0.089)	13.0/0.0	97	3.55	346 Btuh
5	Frame - Wood	- Adj	(0.089)	13.0/0.0	27	3.55	95 Btuh
6	Frame - Wood	- Adj	(0.089)	13.0/0.0	25	3.55	90 Btuh
7	Frame - Wood	- Ext	(0.089)	13.0/0.0	286	3.55	1014 Btuh
8	Frame - Wood	- Ext	(0.089)	13.0/0.0	152	3.55	540 Btuh
	Wall Total				874(sqft)		3103 Btuh
Doors	Type	Storm	Ueff.		Area X	HTM=	Load
1	Insulated - Exterior,	n	(0.350)		13	14.0	187 Btuh
2	Insulated - Garage,	n	(0.350)		20	14.0	280 Btuh
3	Insulated - Garage,	n	(0.350)		33	14.0	467 Btuh
4	Insulated - Exterior,	n	(0.350)		20	14.0	280 Btuh
	Door Total				87(sqft)		1213Btuh
Ceilings	Type/Color/Surface		Ueff.	R-Value	Area X	HTM=	Load
1	Vented Attic/L/Metal		(0.025)	38.0/0.0	796	1.0	808 Btuh
	Ceiling Total				796(sqft)		808Btuh
Floors	Type		Ueff.	R-Value	Size X	HTM=	Load
1	Slab On Grade		(1.180)	0.0	122.0 ft(perim.)	47.2	5758 Btuh
	Floor Total				796 sqft		5758 Btuh
					Envelope Subtotal:		11762 Btuh
Infiltration	Type	Wholehouse	ACH	Volume(cuft)	Wall Ratio	CFM=	
	Natural		0.22	6368	1.00	23.3	1020 Btuh
Duct load	Average sealed, R6.0, Supply(Att), Return(Att)					(DLM of 0.147)	1879 Btuh
All Zones				**Sensible Subtotal All Zones**			**14661 Btuh**

Manual J Winter Calculations

Residential Load - Component Details (continued)

Charles & Beth Matukaitis
486 SW Meadow Wood Glen
Lake City, FL

Project Title:
220516 Matukaitis ADU
Building Type: User

2022-10-31

WHOLE HOUSE TOTALS

Totals for Heating	Subtotal Sensible Heat Loss Ventilation Sensible Heat Loss Total Heat Loss	14661 Btuh 0 Btuh 14661 Btuh

EQUIPMENT

1. Electric Heat Pump	#	16000 Btuh

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

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System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Charles & Beth Matukaitis
486 SW Meadow Wood Glen
Lake City, FL

Project Title:
220516 Matukaitis ADU

2022-10-31

Reference City: Gainesville, FL Temperature Difference: 19.0F(TMY3 99%) Humidity difference: 51gr.

Component Loads for Whole House

Window	Type* Panes	SHGC	U	InSh	IS	Ornt	Overhang Len	Hgt	Window Area(sqft) Gross	Shaded	Unshaded	HTM Shaded	Unshaded	Load
1	2 NFRC	0.22, 0.32		No	No	N	13.0f	0.3ft	9.0	9.0	0.0	11	12	96 Btuh
2	2 NFRC	0.22, 0.32		No	No	N	10.0f	0.3ft	26.7	26.7	0.0	11	12	286 Btuh
3	2 NFRC	0.22, 0.32		No	No	S	1.5ft	0.5ft	18.0	0.0	18.0	11	11	193 Btuh
4	2 NFRC	0.22, 0.32		No	No	S	1.5ft	0.5ft	15.0	0.0	15.0	11	11	161 Btuh
	Window Total								69 (sqft)					735 Btuh

Walls	Type	U-Value	R-Value Cav/Sheath	Area(sqft)	HTM	Load
1	Frame - Wood - Ext	0.09	13.0/0.0	140.3	2.3	318 Btuh
2	Frame - Wood - Ext	0.09	13.0/0.0	24.0	2.3	54 Btuh
3	Frame - Wood - Ext	0.09	13.0/0.0	122.7	2.3	278 Btuh
4	Frame - Wood - Adj	0.09	13.0/0.0	97.3	1.7	164 Btuh
5	Frame - Wood - Adj	0.09	13.0/0.0	26.7	1.7	45 Btuh
6	Frame - Wood - Adj	0.09	13.0/0.0	25.3	1.7	43 Btuh
7	Frame - Wood - Ext	0.09	13.0/0.0	285.7	2.3	647 Btuh
8	Frame - Wood - Ext	0.09	13.0/0.0	152.0	2.3	344 Btuh
	Wall Total			874 (sqft)		1892 Btuh

Doors	Type	Area (sqft)	HTM	Load
1	Insulated - Exterior	13.3	10.5	140 Btuh
2	Insulated - Garage	20.0	10.5	210 Btuh
3	Insulated - Garage	33.3	10.5	350 Btuh
4	Insulated - Exterior	20.0	10.5	210 Btuh
	Door Total	87 (sqft)		910 Btuh

Ceilings	Type/Color/Surface	U-Value	R-Value	Area(sqft)	HTM	Load
1	Vented Attic/Light/Metal	0.025	38.0/0.0	796.0	1.12	889 Btuh
	Ceiling Total			796 (sqft)		889 Btuh

Floors	Type	R-Value	Size	HTM	Load
1	Slab On Grade	0.0	796 (ft-perimeter)	0.0	0 Btuh
	Floor Total		796.0 (sqft)		0 Btuh
			Envelope Subtotal:		4426 Btuh

Infiltration	Type	Average ACH	Volume(cuft)	Wall Ratio	CFM=	Load
	Natural	0.16	6368	1	17.5	363 Btuh
Internal gain		Occupants	Btuh/occupant		Appliance	Load
		1	X 230	+	3400	3630 Btuh
				Sensible Envelope Load:		8420 Btuh
Duct load	Average sealed, Supply(R6.0-Attic), Return(R6.0-Attic)			(DGM of 0.232)		1957 Btuh
				Sensible Load All Zones		**10376 Btuh**

Manual J Summer Calculations

Residential Load - Component Details (continued)

Charles & Beth Matukaitis
486 SW Meadow Wood Glen
Lake City, FL

Project Title: 220516 Matukaitis ADU
Climate:FL_GAINESVILLE_REGIONAL_A

2022-10-31

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	**Sensible Envelope Load All Zones**	**8420 Btuh**
	Sensible Duct Load	1957 Btuh
	Total Sensible Zone Loads	**10376 Btuh**
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	**10376 Btuh**
	Latent infiltration gain (for 51 gr. humidity difference)	603 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	476 Btuh
	Latent occupant gain (1.0 people @ 200 Btuh per person)	200 Btuh
	Latent other gain	0 Btuh
	Latent total gain	**1279 Btuh**
	TOTAL GAIN	**11655 Btuh**

EQUIPMENT

1. Central Unit	#	16000 Btuh

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

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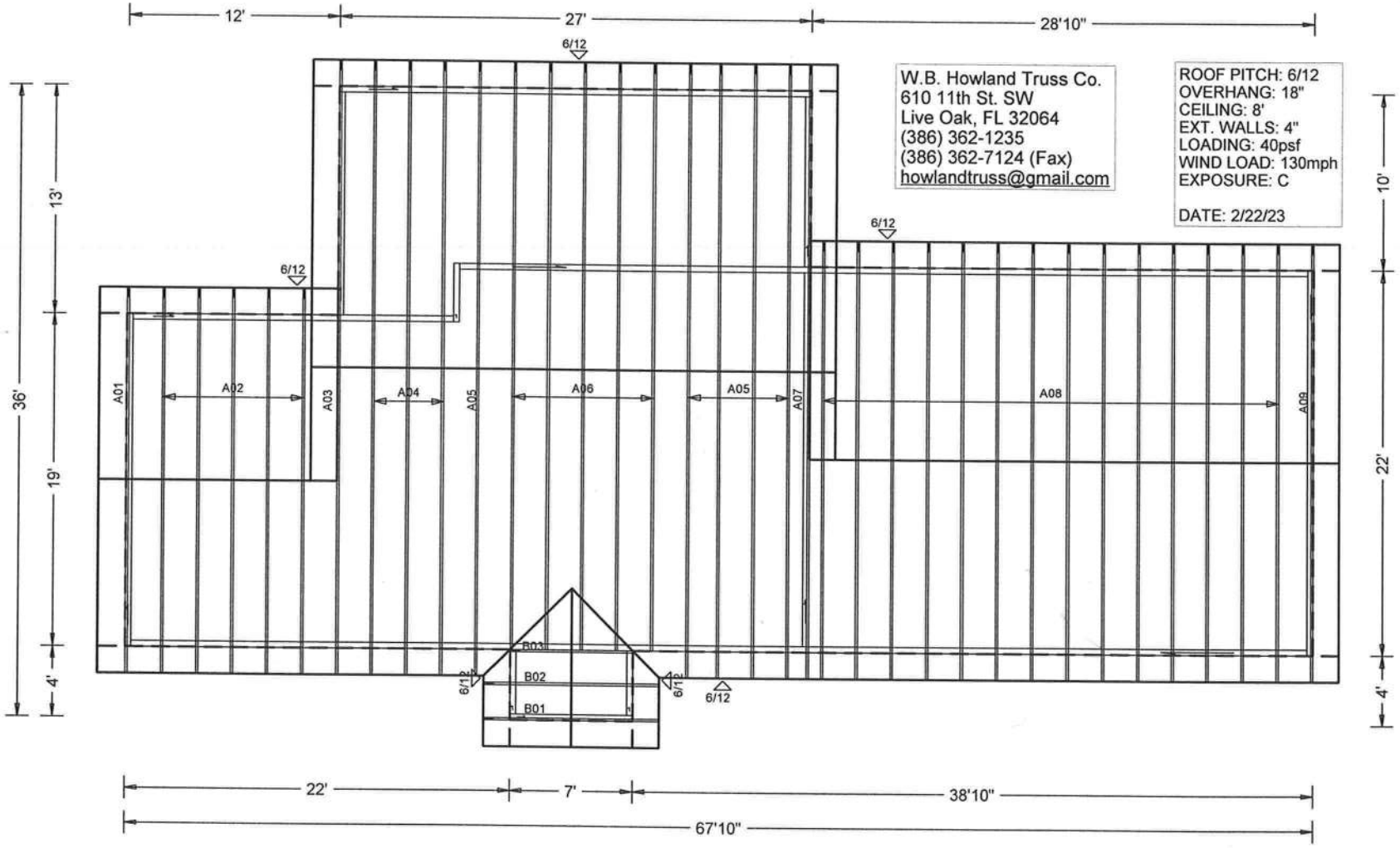


JOB #: 22-8557

Job Name: Matukaitis
Customer: OWNER BUILDER
Designer: Kelly Caudill
ADDRESS:
SALESMAN: HOUSE
: <Not Found>

JOB NO:
22-8557

PAGE NO:
1 OF 1

This document has been electronically signed and sealed using a Digital Signature. Printed copies without an original signature must be verified using the original electronic version.

Alpine, an ITW Company
155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025
Phone: (800)755-6001
www.alpineitw.com

FL REG# 278, Yoonhwak Kim, FL PE #86367
Florida Certificate of Product Approval #FL 1999

02/22/2023

Site Information:	Page 1:
Customer: W. B. Howland Company, Inc.	*Job Number:* 22-8557
Job Description: Matukaitis	
Address: FL	

Job Engineering Criteria:	
Design Code: FBC 7th Ed. 2020 Res.	*IntelliVIEW Version:* 22.02.00 *JRef #:* 1XNf2150007
Wind Standard: ASCE 7-16 *Wind Speed (mph):* 130 *Building Type:* Closed	*Design Loading (psf):* 40.00

This package contains general notes pages, 12 truss drawing(s) and 2 detail(s).

Item	Drawing Number	Truss
1	053.23.1401.55007	A01
3	053.23.1401.57840	A03
5	053.23.1402.06423	A05
7	053.23.1402.08867	A07
9	053.23.1402.19693	A09
11	053.23.1402.21960	B02
13	A14015ENC160118	

Item	Drawing Number	Truss
2	053.23.1401.56203	A02
4	053.23.1402.05200	A04
6	053.23.1402.07540	A06
8	053.23.1402.18203	A08
10	053.23.1402.20817	B01
12	053.23.1402.24037	B03
14	GBLLETIN0118	

General Notes

Truss Design Engineer Scope of Work, Design Assumptions and Design Responsibilities:
The design responsibilities assumed in the preparation of these design drawings are those specified in ANSI/TPI 1, Chapter 2; and the National Design Standard for Metal Plate Connected Wood Truss Construction, by the Truss Plate Institute. The truss component designs conform to the applicable provisions of ANSI/TPI 1 and NDS, the National Design Specification for Wood Construction by AWC. The truss component designs are based on the specified loading and dimension information furnished by others to the Truss Design Engineer. The Truss Design Engineer has no duty to independently verify the accuracy or completeness of the information provided by others and may rely on that information without liability. The responsibility for verification of that information remains with others neither employed nor controlled by the Truss Design Engineer. The Truss Design Engineer's seal and signature on the attached drawings, or cover page listing these drawings, indicates acceptance of professional engineering responsibility solely for the truss component designs and not for the technical information furnished by others which technical information and consequences thereof remain their sole responsibility.

The suitability and use of these drawings for any particular structure is the responsibility of the Building Designer in accordance with ANSI/TPI 1 Chapter 2. The Building Designer is responsible for determining that the dimensions and loads for each truss component match those required by the plans and by the actual use of the individual component, and for ascertaining that the loads shown on the drawings meet or exceed applicable building code requirements and any additional factors required in the particular application. Truss components using metal connector plates with integral teeth shall not be placed in environments that will cause the moisture content of the wood in which plates are embedded to exceed 19% and/or cause corrosion of connector plates and other metal fasteners.

The Truss Design Engineer shall not be responsible for items beyond the specific scope of the agreed contracted work set forth herein, including but not limited to: verifying the dimensions of the truss component, calculation of any of the truss component design loads, inspection of the truss components before or after installation, the design of temporary or permanent bracing and their attachment required in the roof and/or floor systems, the design of diaphragms or shear walls, the design of load transfer connections to and from diaphragms and shear walls, the design of load transfer to the foundation, the design of connections for truss components to their bearing supports, the design of the bearing supports, installation of the truss components, observation of the truss component installation process, review of truss assembly procedures, sequencing of the truss component installation, construction means and methods, site and/or worker safety in the installation of the truss components and/or its connections.

This document may be a high quality facsimile of the original engineering document which is a digitally signed electronic file with third party authentication. A wet or embossed seal copy of this engineering document is available upon request.

Temporary Lateral Restraint and Bracing:
Temporary lateral restraint and diagonal bracing shall be installed according to the provisions of BCSI chapters B1, B2, B7 and/or B10 (Building Component Safety Information, by TPI and SBCA), or as specified by the Building Designer or other Registered Design Professional. The required locations for lateral restraint and/or bracing depicted on these drawings are only for the permanent lateral support of the truss members to reduce buckling lengths, and do not apply to and may not be relied upon for the temporary stability of the truss components during their installation.

Permanent Lateral Restraint and Bracing:
The required locations for lateral restraint or bracing depicted on these drawings are for the permanent lateral support of the truss members to reduce buckling lengths. Permanent lateral support shall be installed according to the provisions of BCSI chapters B3, B7 and/or B10, or as specified by the Building Designer or other Registered Design Professional. These drawings do not depict or specify installation/erection bracing, wind bracing, portal bracing or similar building stability bracing which are parts of the overall building design to be specified, designed and detailed by the Building Designer.

Connector Plate Information:
Alpine connector plates are made of ASTM A653 or ASTM A1063 galvanized steel with the following designations, gauges and grades: W=Wave, 20ga, grade 40; H=High Strength, 20ga, grade 60; S=Super Strength, 18ga, grade 60. Information on model code compliance is contained in the ICC Evaluation Service report ESR-1118, available on-line at www.icc-es.org.

Fire Retardant Treated Lumber:
Fire retardant treated lumber must be properly re-dried and maintained below 19% or less moisture level through all stages of construction and usage. Fire retardant treated lumber may be more brittle than untreated lumber. Special handling care must be taken to prevent breakage during all handling activities.

General Notes (continued)

Key to Terms:
Information provided on drawings reflects a summary of the pertinent information required for the truss design. Detailed information on load cases, reactions, member lengths, forces and members requiring permanent lateral support may be found in calculation sheets available upon written request.

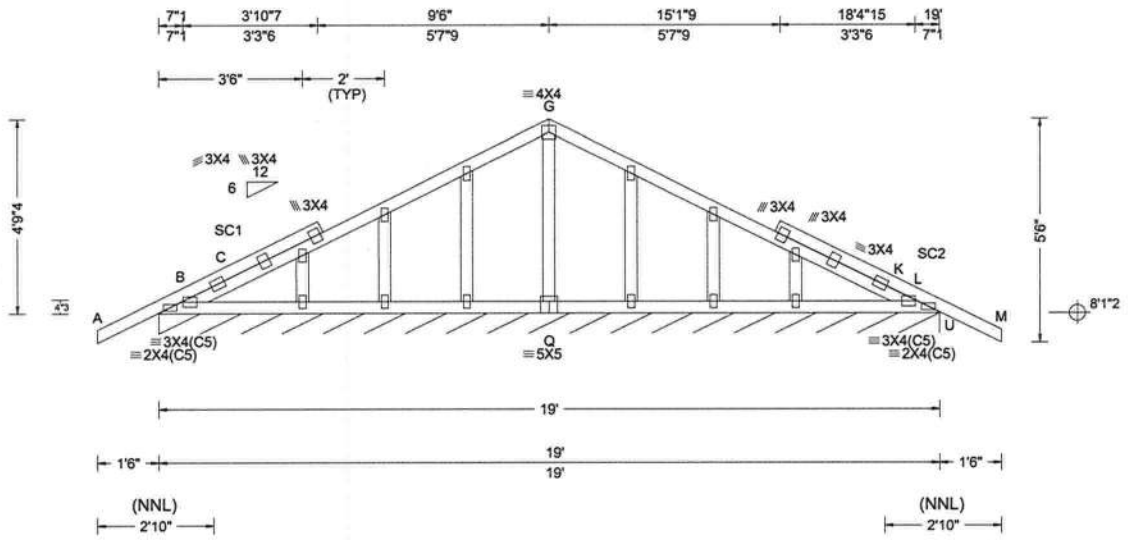
BCDL = Bottom Chord standard design Dead Load in pounds per square foot.
BCLL = Bottom Chord standard design Live Load in pounds per square foot.
CL = Certified lumber.
Des Ld = total of TCLL, TCDL, BCLL and BCDL Design Load in pounds per square foot.
FRT = Fire Retardant Treated lumber.
FRT-DB = D-Blaze Fire Retardant Treated lumber.
FRT-DC = Dricon Fire Retardant Treated lumber.
FRT-FP = FirePRO Fire Retardant Treated lumber.
FRT-FL = FlamePRO Fire Retardant Treated lumber.
FRT-FT = FlameTech Fire Retardant Treated lumber.
FRT-PG = PYRO-GUARD Fire Retardant Treated lumber.
g = green lumber.
HORZ(LL) = maximum Horizontal panel point deflection due to Live Load, in inches.
HORZ(TL) = maximum Horizontal panel point long term deflection in inches, due to Total Load, including creep adjustment.
HPL = additional Horizontal Load added to a truss Piece in pounds per linear foot or pounds.
Ic = Incised lumber.
FJ = Finger Jointed lumber.
L/# = user specified divisor for limiting span/deflection ratio for evaluation of actual L/defl value.
L/defl = ratio of Length between bearings, in inches, divided by the vertical Deflection due to creep, in inches, at the referenced panel point. Reported as 999 if greater than or equal to 999.
Loc = Location, starting location of left end of bearing or panel point (joint) location of deflection.
Max BC CSI = Maximum bending and axial Combined Stress Index for Bottom Chords for of all load cases.
Max TC CSI = Maximum bending and axial Combined Stress Index for Top Chords for of all load cases.
Max Web CSI= Maximum bending and axial Combined Stress Index for Webs for of all load cases.
NCBCLL = Non-Concurrent Bottom Chord design Live Load in pounds per square foot.
PL = additional Load applied at a user specified angle on a truss Piece in pounds per linear foot or pounds.
PLB = additional vertical load added to a Bottom chord Piece of a truss in pounds per linear foot or pounds
PLT = additional vertical load added to a Top chord Piece of a truss in pounds per linear foot or pounds.
PP = Panel Point.
R = maximum downward design Reaction, in pounds, from all specified gravity load cases, at the indicated location (Loc).
-R = maximum upward design Reaction, in pounds, from all specified gravity load cases, at the identified location (Loc).
Rh = maximum horizontal design Reaction in either direction, in pounds, from all specified gravity load cases, at the indicated location (Loc).
RL = maximum horizontal design Reaction in either direction, in pounds, from all specified non-gravity (wind or seismic) load cases, at the indicated location (Loc).
Rw = maximum downward design Reaction, in pounds, from all specified non-gravity (wind or seismic) load cases, at the identified location (Loc).
TCDL = Top Chord standard design Dead Load in pounds per square foot.
TCLL = Top Chord standard design Live Load in pounds per square foot.
U = maximum Upward design reaction, in pounds, from all specified non-gravity (wind or seismic) load cases, at the indicated location (Loc).
VERT(CL) = maximum Vertical panel point deflection in inches due to Live Load and Creep Component of Dead Load in inches.
VERT(CTL) = maximum Vertical panel point deflection ratios due to Live Load and Creep Component of Dead Load, and maximum long term Vertical panel point deflection in inches due to Total load, including creep adjustment.
VERT(LL) = maximum Vertical panel point deflection in inches due to Live Load.
VERT(TL) = maximum Vertical panel point long term deflection in inches due to Total load, including creep adjustment.
W = Width of non-hanger bearing, in inches.

Refer to ASCE-7 for Wind and Seismic abbreviations.
Uppercase Acronyms not explained above are as defined in TPI 1.

References:

1. AWC: American Wood Council; 222 Catoctin Circle SE, Suite 201; Leesburg, VA 20175; www.awc.org.
2. ICC: International Code Council; www.iccsafe.org.
3. Alpine, a division of ITW Building Components Group Inc.: 155 Harlem Ave, North Building, 4th Floor, Glenview, IL 60025; www.alpineitw.com.
4. TPI: Truss Plate Institute, 2670 Crain Highway, Suite 203, Waldorf, MD 20601; www.tpinst.org.
5. SBCA: Wood Truss Council of America, 6300 Enterprise Lane, Madison, WI 53719; www. sbcacomponents.com.

SEQN: 693468 GABL FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 22-8557 Matukaitis **Truss Label:** A01		Cust: R 215 JRef: 1XNf2150007 T2 DrwNo: 053.23.1401.55007 SSB / YK 02/22/2023



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.002 C 999 240 VERT(CL): 0.003 K 999 180 HORZ(LL): 0.001 H - - HORZ(TL): 0.002 H - - Creep Factor: 2.0 Max TC CSI: 0.176 Max BC CSI: 0.058 Max Web CSI: 0.049 VIEW Ver: 22.02.00.0914.12

▲ Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
U*	93	/-	/-	/47	/7	/7

Wind reactions based on MWFRS
U Brg Wid = 228 Min Req = -
Bearing B is a rigid surface.
Members not listed have forces less than 375#

Lumber

Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;
Stack Chord: SC1 2x4 SP #2;
Stack Chord: SC2 2x4 SP #2;

Plating Notes

All plates are 2X4 except as noted.

Wind

Wind loads based on MWFRS with additional C&C member design.

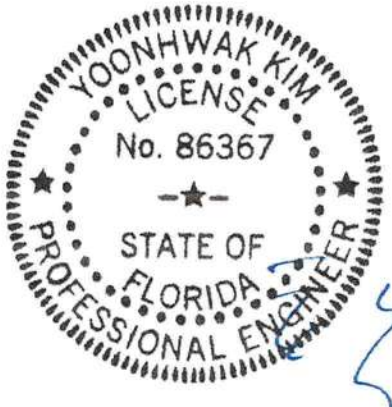
Wind loading based on both gable and hip roof types.

Additional Notes

See DWGS A14015ENC160118 & GBLLETIN0118 for gable wind bracing and other requirements.

Stacked top chord must NOT be notched or cut in area (NNL). Dropped top chord braced at 24" oc intervals. Attach stacked top chord (SC) to dropped top chord in notchable area using 3x4 tie-plates 24" oc. Center plate on stacked/dropped chord interface, plate length perpendicular to chord length. Splice top chord in notchable area using 3x6.

The overall height of this truss excluding overhang is 4-9-4.



FL REG# 278, Yoonhwak Kim, FL PE #86367
Florida Certificate of Product Approval #FL 1999
02/22/2023

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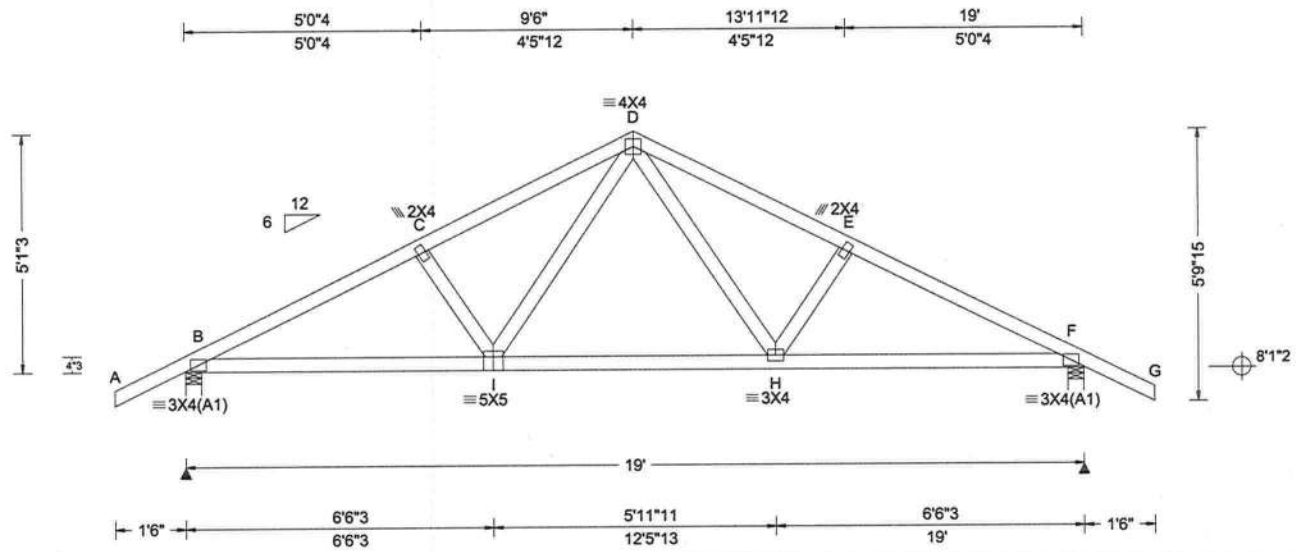
For more information see these web sites: Alpine: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

SEQN: 693471 COMN FROM: CDM	Ply: 1 Qty: 5	**Job Number:** 22-8557 Matukaitis **Truss Label:** A02		Cust: R 215 JRef: 1XNf2150007 T1 DrwNo: 053.23.1401.56203 SSB / YK 02/22/2023



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00
Load Duration:	1.25
Spacing:	24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Building Code:
FBC 7th Ed. 2020 Res.
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL):	0.037 H	999	240
VERT(CL):	0.074 H	999	180
HORZ(LL):	0.014 F	-	-
HORZ(TL):	0.029 F	-	-

Creep Factor: 2.0
Max TC CSI: 0.212
Max BC CSI: 0.419
Max Web CSI: 0.151

VIEW Ver: 22.02.00.0914.12

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	883	/-	/-	/537	/159	/160
F	883	/-	/-	/537	/159	/-

Wind reactions based on MWFRS
B Brg Wid = 4.0 Min Req = 1.5 (Truss)
F Brg Wid = 4.0 Min Req = 1.5 (Truss)
Bearings B & F are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	603	-1279	D - E	602	-1132
C - D	602	-1131	E - F	603	-1280

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - I	1088	-432	H - F	1089	-415
I - H	746	-197			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
I - D	395	-186	D - H	397	-185

Lumber

Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;

Wind

Wind loads based on MWFRS with additional C&C member design.

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 5-1-3.

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FL REG# 278, Yoonhwak Kim, FL PE #86367
Florida Certificate of Product Approval #FL 1999

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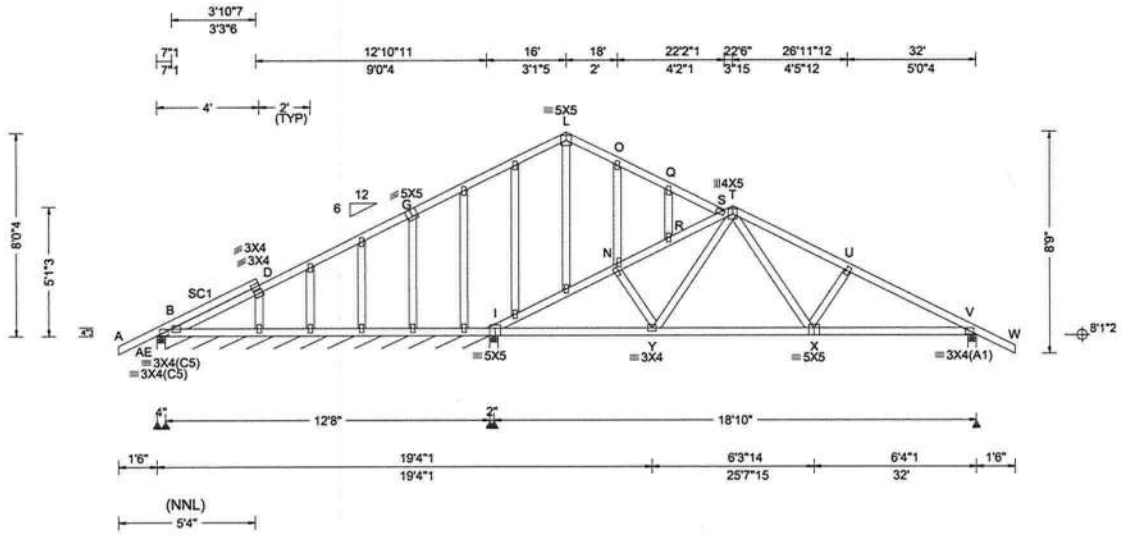
For more information see these web sites: Alpine: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE AN ITW COMPANY
155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

SEQN: 693489 GABL FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 22-8557 Matukaitis **Truss Label:** A03	Cust: R 215 JRef: 1XNf2150007 T3 DrwNo: 053.23.1401.57840 SSB / YK 02/22/2023



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.20 ft
Loc. from endwall: not in 4.50 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Building Code:
FBC 7th Ed. 2020 Res.
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.041	Q	999	240
VERT(CL): 0.083	Q	999	180
HORZ(LL): 0.014	V	-	-
HORZ(TL): 0.029	V	-	-

Creep Factor: 2.0
Max TC CSI: 0.270
Max BC CSI: 0.413
Max Web CSI: 0.161

VIEW Ver: 22.02.00.0914.12

▲ Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
AE	304	/-	/-	/190	/4	/245
B*	63	/-	/-	/44	/20	/-
I	861	/-	/-	/571	/121	/-
V	880	/-	/-	/567	/133	/-

Wind reactions based on MWFRS
AE Brg Wid = 4.0 Min Req = 1.5 (Truss)
B Brg Wid = 152 Min Req = -
I Brg Wid = 4.0 Min Req = 1.5
V Brg Wid = 4.0 Min Req = 1.5 (Truss)
Bearings AE, B, I, & V are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
I - N	437	-1315	S - T	288	-1036
N - R	350	-1112	T - U	290	-1143
R - S	324	-1069	U - V	274	-1278

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
I - Y	1094	-116	X - V	1088	-160
Y - X	735	-28			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
Y - T	422	-51	T - X	417	-96

Lumber

Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;
Stack Chord: SC1 2x4 SP #2;

Plating Notes

All plates are 2X4 except as noted.

Loading

Gable end supports 8" max rake overhang. Top chord must not be cut or notched.

Wind

Wind loads based on MWFRS with additional C&C member design.

Wind loading based on both gable and hip roof types.

Additional Notes

See DWGS A14015ENC160118 & GBLLETIN0118 for gable wind bracing and other requirements.

Stacked top chord must NOT be notched or cut in area (NNL). Dropped top chord braced at 24" oc intervals. Attach stacked top chord (SC) to dropped top chord in notchable area using 3x4 tie-plates 24" oc. Center plate on stacked/dropped chord interface, plate length perpendicular to chord length. Splice top chord in notchable area using 3x6.

The overall height of this truss excluding overhang is 8-0-4.

Laterally brace top chord below filler and bottom chord above filler at 24" o.c., including a lateral brace at chord ends (If no rigid diaphragm exists at that point).

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FL REG# 278, Yoonhwak Kim, FL PE #86367
Florida Certificate of Product Approval #FL 1999

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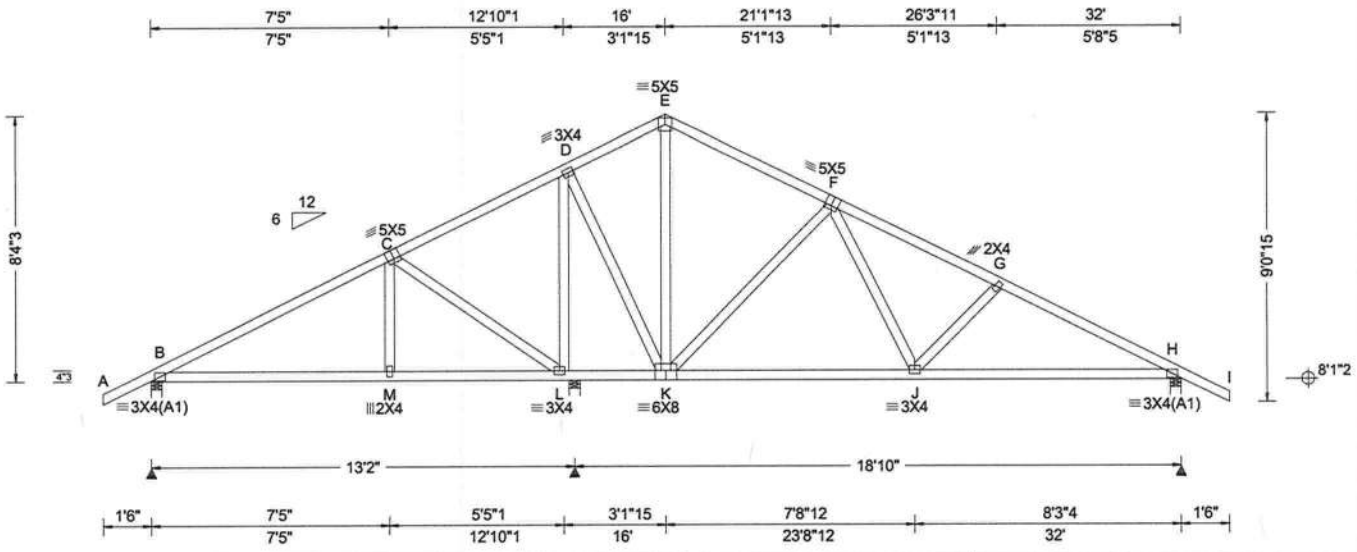
ALPINE AN ITW COMPANY
155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

SEQN: 693480 COMN FROM: CDM	Ply: 1 Qty: 3	**Job Number:** 22-8557 Matukaitis **Truss Label:** A04	Cust: R 215 JRef: 1XNf2150007 T15 DrwNo: 053.23.1402.05200 SSB / YK 02/22/2023	



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h/2 to h
C&C Dist a: 3.20 ft
Loc. from endwall: not in 4.50 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Building Code:
FBC 7th Ed. 2020 Res.
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.047	J	999	240
VERT(CL): 0.088	J	999	180
HORZ(LL): 0.018	H	-	-
HORZ(TL): 0.035	H	-	-

Creep Factor: 2.0
Max TC CSI: 0.534
Max BC CSI: 0.828
Max Web CSI: 0.704

VIEW Ver: 22.02.00.0914.12

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	684	/-	/-	/441	/120	/245
L	1294	/-	/-	/691	/223	/-
H	940	/-	/-	/603	/160	/-

Wind reactions based on MWFRS
B Brg Wid = 4.0 Min Req = 1.5 (Truss)
L Brg Wid = 4.0 Min Req = 1.5 (Truss)
H Brg Wid = 4.0 Min Req = 1.5 (Truss)
Bearings B, L, & H are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	153	-768	F - G	261	-1149
D - E	217	-380	G - H	279	-1377
E - F	202	-416			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - M	606	-139	K - J	752	-28
M - L	601	-140	J - H	1169	-154
L - K	399	-196			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - L	192	-650	K - F	222	-650
L - D	172	-768	F - J	507	-41
D - K	520	-39			

Lumber
Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;

Loading
Truss passed check for 20 psf additional bottom chord live load in areas with 42"-high x 24"-wide clearance.

Wind
Wind loads based on MWFRS with additional C&C member design.
Wind loading based on both gable and hip roof types.

Additional Notes
The overall height of this truss excluding overhang is 8-4-3.

YOONHWAK KIM LICENSE No. 86367 STATE OF FLORIDA PROFESSIONAL ENGINEER

FL REG# 278, Yoonhwak Kim, FL PE #86367
Florida Certificate of Product Approval #FL 1999

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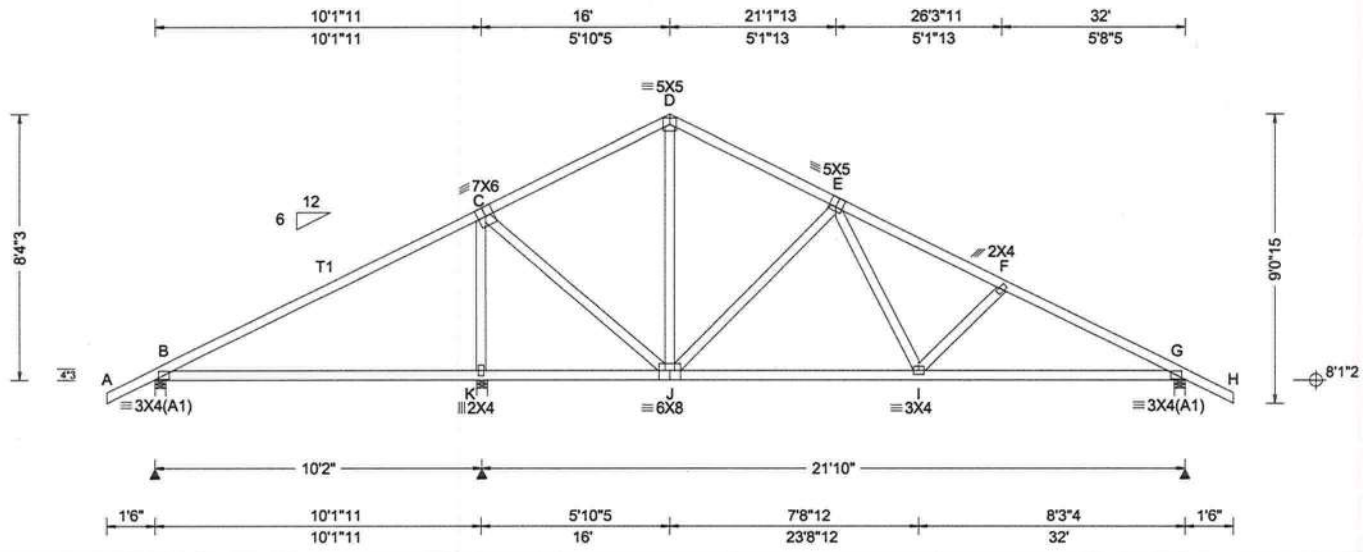
For more information see these web sites: Alpine: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE AN ITW COMPANY
155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

SEQN: 693477 COMN FROM: CDM	Ply: 1 Qty: 5	**Job Number:** 22-8557 Matukaitis **Truss Label:** A05	Cust: R 215 JRef: 1XNf2150007 T5 DrwNo: 053.23.1402.06423 SSB / YK 02/22/2023	



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h/2 to h
C&C Dist a: 3.20 ft
Loc. from endwall: not in 9.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Building Code:
FBC 7th Ed. 2020 Res.
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.047	I	999	240
VERT(CL): 0.090	B	999	180
HORZ(LL): 0.029	B	-	-
HORZ(TL): 0.056	B	-	-

Creep Factor: 2.0
Max TC CSI: 0.910
Max BC CSI: 0.768
Max Web CSI: 0.702

VIEW Ver: 22.02.00.0914.12

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	585	/-	/-	/346	/120	/245
K	1476	/-	/-	/734	/193	/-
G	1033	/-	/-	/641	/191	/-

Wind reactions based on MWFRS
B Brg Wid = 4.0 Min Req = 1.5 (Truss)
K Brg Wid = 4.0 Min Req = 1.5 (Truss)
G Brg Wid = 4.0 Min Req = 1.5 (Truss)
Bearings B, K, & G are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
C - D	282	-655	E - F	332	-1348
D - E	277	-622	F - G	350	-1574

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
J - I	934	-91	I - G	1345	-214

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
K - C	316	-1157	J - E	220	-648
C - J	705	-20	E - I	500	-38

Lumber

Top chord: 2x4 SP #2; T1 2x4 SP M-31;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;

Loading

Truss passed check for 20 psf additional bottom chord live load in areas with 42"-high x 24"-wide clearance.

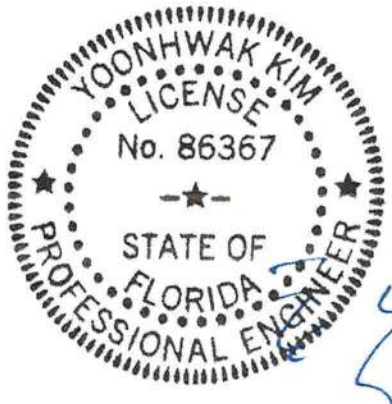
Wind

Wind loads based on MWFRS with additional C&C member design.

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 8-4-3.



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Florida Certificate of Product Approval #FL 1999

02/22/2023

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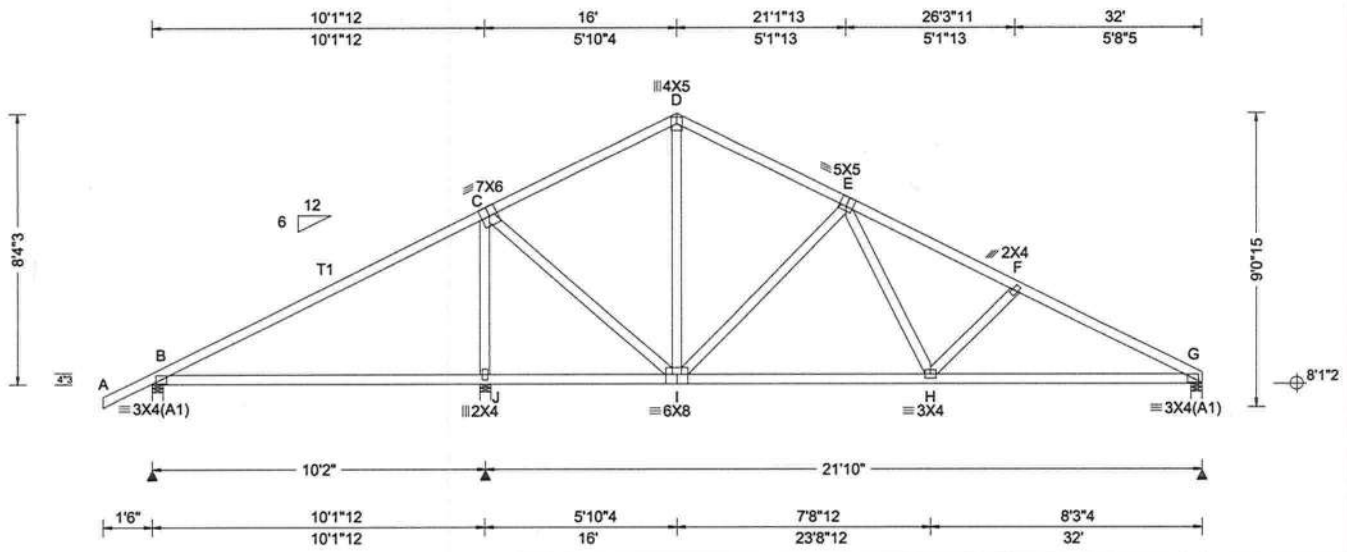
For more information see these web sites: Alpine: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

SEQN: 693474 COMN FROM: CDM	Ply: 1 Qty: 5	**Job Number:** 22-8557 Matukaitis **Truss Label:** A06	Cust: R 215 JRef: 1XNf2150007 T6 DrwNo: 053.23.1402.07540 SSB / YK 02/22/2023	



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 3.20 ft
Loc. from endwall: not in 9.00 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Building Code:
FBC 7th Ed. 2020 Res.
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.046	H	999	240
VERT(CL): 0.090	B	999	180
HORZ(LL): 0.029	B	-	-
HORZ(TL): 0.056	B	-	-

Creep Factor: 2.0
Max TC CSI: 0.910
Max BC CSI: 0.770
Max Web CSI: 0.712

VIEW Ver: 22.02.00.0914.12

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	587	/-	/-	/350	/44	/230
J	1474	/-	/-	/728	/4	/-
G	930	/-	/-	/554	/29	/-

Wind reactions based on MWFRS
B Brg Wid = 4.0 Min Req = 1.5 (Truss)
J Brg Wid = 4.0 Min Req = 1.5 (Truss)
G Brg Wid = 4.0 Min Req = 1.5 (Truss)
Bearings B, J, & G are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
C - D	278	-661	E - F	342	-1372
D - E	270	-629	F - G	366	-1602

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
I - H	946	-124	H - G	1375	-260

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
J - C	330	-1155	I - E	224	-657
C - I	704	-25	E - H	519	-58

Lumber

Top chord: 2x4 SP #2; T1 2x4 SP M-31;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;

Loading

Truss passed check for 20 psf additional bottom chord live load in areas with 42"-high x 24"-wide clearance.

Wind

Wind loads based on MWFRS with additional C&C member design.

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 8-4-3.

FL REG# 278, Yoonhwak Kim, FL PE #86367
Florida Certificate of Product Approval #FL 1999

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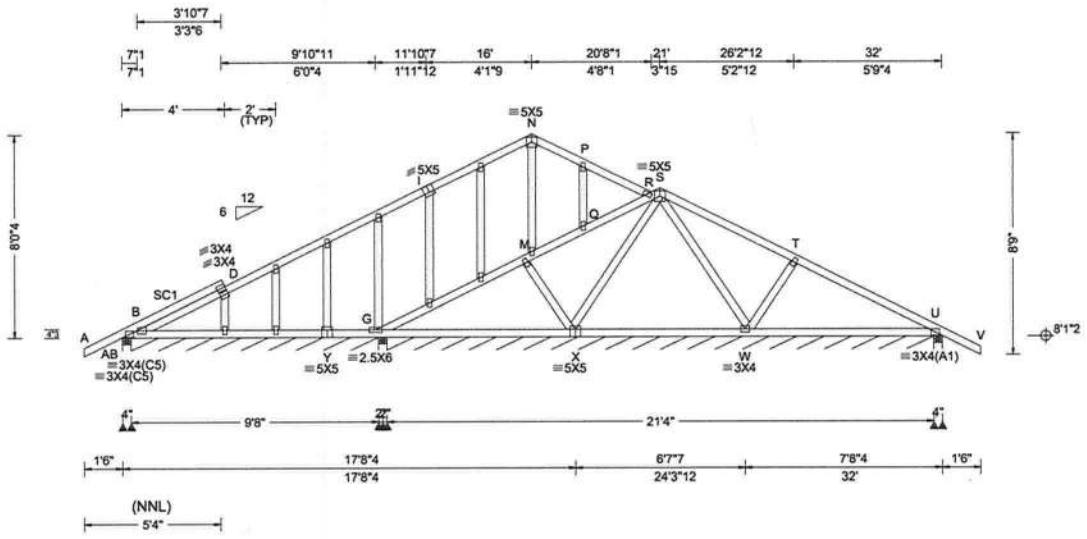
ALPINE
AN ITW COMPANY
155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

SEQN: 693492 GABL FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 22-8557 Matukaitis **Truss Label:** A07	Cust: R 215 JRef: 1XNf2150007 T11 DrwNo: 053.23.1402.08867 SSB / YK 02/22/2023



Loading Criteria (psf)	**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.023 P 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.046 P 999 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.010 I - -
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.021 I - -
NCBCLL: 10.00	Mean Height: 15.00 ft	Building Code:	Creep Factor: 2.0
Soffit: 2.00	TCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.397
Load Duration: 1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.412
Spacing: 24.0 "	MWFRS Parallel Dist: h/2 to h	Rep Fac: Yes	Max Web CSI: 0.198
	C&C Dist a: 3.20 ft	FT/RT:20(0)/10(0)	
	Loc. from endwall: not in 9.00 ft	Plate Type(s):	
	GCpi: 0.18	WAVE	VIEW Ver: 22.02.00.0914.12
	Wind Duration: 1.60		

▲ Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
AB	292	/-	/-	/175	/12	/245
B*	67	/-	/-	/37	/40	/-
G	542	/-	/-	/272	/-	/-
G*	57	/-	/-	/32	/8	/-
U	408	/-	/-	/299	/70	/-

Wind reactions based on MWFRS
AB Brg Wid = 4.0 Min Req = 1.5 (Truss)
B Brg Wid = 115 Min Req = -
G Brg Wid = 4.0 Min Req = 1.5 (Truss)
G Brg Wid = 255 Min Req = -
U Brg Wid = 4.0 Min Req = 1.5 (Truss)
Bearings AB, B, G, G, & U are a rigid surface.

Members not listed have forces less than 375#

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.
M - X	147	-388

Lumber

Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;
Stack Chord: SC1 2x4 SP #2;

Plating Notes

All plates are 2X4 except as noted.

Loading

Gable end supports 8" max rake overhang. Top chord must not be cut or notched.

Wind

Wind loads based on MWFRS with additional C&C member design.

Wind loading based on both gable and hip roof types.

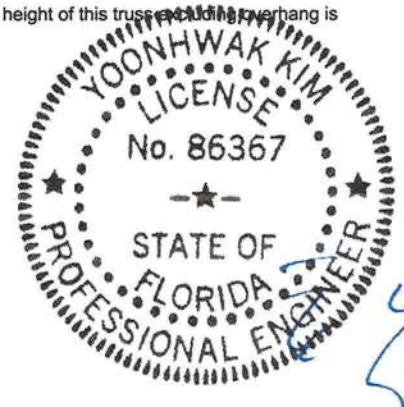
Laterally brace top chord below filler and bottom chord above filler at 24" o.c., including a lateral brace at chord ends (If no rigid diaphragm exists at that point).

Additional Notes

See DWGS A14015ENC160118 & GBLLETIN0118 for gable wind bracing and other requirements.

Stacked top chord must NOT be notched or cut in area (NNL). Dropped top chord braced at 24" oc intervals. Attach stacked top chord (SC) to dropped top chord in notchable area using 3x4 tie-plates 24" oc. Center plate on stacked/dropped chord interface, plate length perpendicular to chord length. Splice top chord in notchable area using 3x6.

The overall height of this truss excluding overhang is 8-0-4.



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Florida Certificate of Product Approval #FL 1999
05/22/2023

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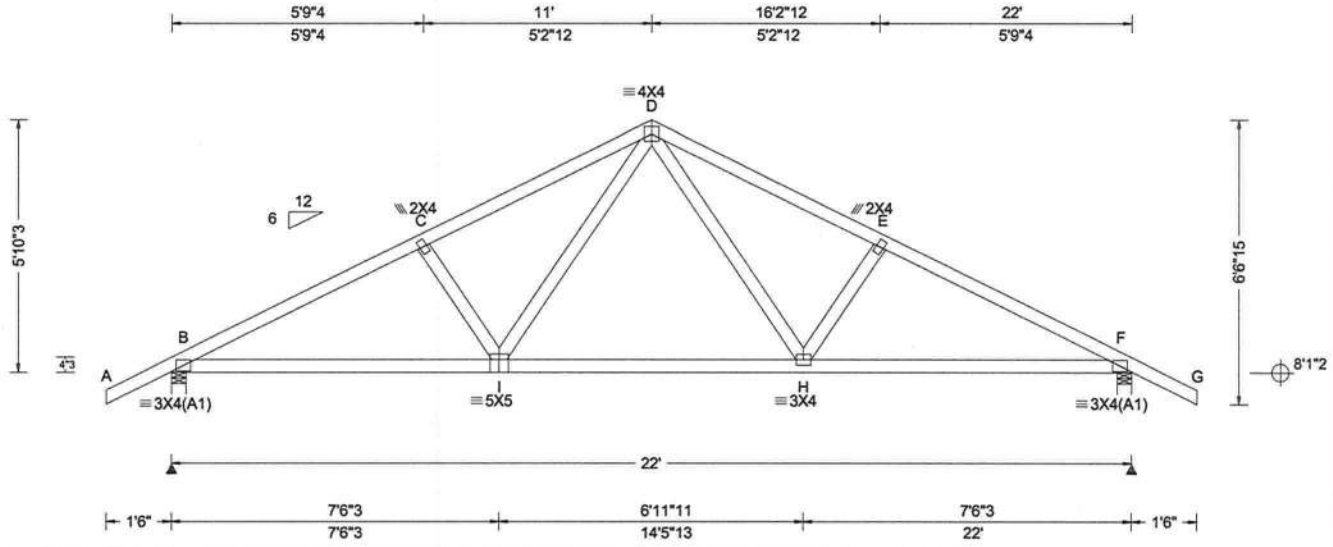
ALPINE
AN ITW COMPANY
155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

SEQN: 693483 COMN FROM: CDM	Ply: 1 Qty: 14	**Job Number:** 22-8557 Matukaitis **Truss Label:** A08	Cust: R 215 JRef: 1XNf2150007 T7 DrwNo: 053.23.1402.18203 SSB / YK 02/22/2023



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Building Code:
FBC 7th Ed. 2020 Res.
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.049	H	999	240
VERT(CL): 0.100	H	999	180
HORZ(LL): 0.020	F	-	-
HORZ(TL): 0.039	F	-	-

Creep Factor: 2.0
Max TC CSI: 0.288
Max BC CSI: 0.554
Max Web CSI: 0.181

VIEW Ver: 22.02.00.0914.12

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1006	/-	/-	/607	/180	/180
F	1006	/-	/-	/607	/180	/-

Wind reactions based on MWFRS
B Brg Wid = 4.0 Min Req = 1.5 (Truss)
F Brg Wid = 4.0 Min Req = 1.5 (Truss)
Bearings B & F are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	646	-1510	D - E	648	-1336
C - D	649	-1335	E - F	646	-1511

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - I	1288	-474	H - F	1289	-450
I - H	874	-221			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
I - D	474	-196	D - H	475	-195

Lumber

Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;

Wind

Wind loads based on MWFRS with additional C&C member design.

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 5-10-3.

YOONHWAK KIM
LICENSE
No. 86367
STATE OF FLORIDA
PROFESSIONAL ENGINEER

FL REG# 278, Yoonhwak Kim, FL PE #86367
Florida Certificate of Product Approval #FL 1999
02/22/2023

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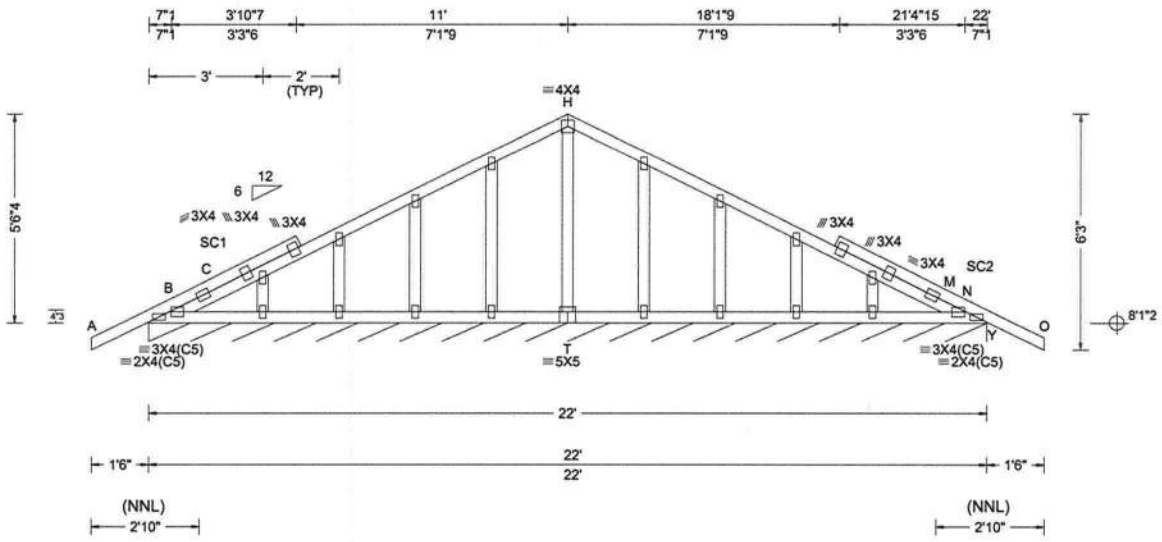
ALPINE
AN ITW COMPANY
155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

SEQN: 693486 GABL FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 22-8557 Matukaitis **Truss Label:** A09		Cust: R 215 JRef: 1XNf2150007 T8 DrwNo: 053.23.1402.19693 SSB / YK 02/22/2023



Loading Criteria (psf)		Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs), or *=PLF
TCLL:	20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#	Gravity / Non-Gravity
TCDL:	10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.001 C 999 240	Loc R+ / R- / Rh / Rw / U / RL
BCLL:	0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.003 C 999 180	Y* 91 /- /- /46 /8 /7
BCDL:	10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.001 I - -	Wind reactions based on MWFRS
Des Ld:	40.00	EXP: C Kzt: NA		HORZ(TL): 0.002 I - -	Y Brg Wid = 264 Min Req = -
NCBCLL:	10.00	Mean Height: 15.00 ft	Building Code:	Creep Factor: 2.0	Bearing B is a rigid surface.
Soffit:	2.00	TCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.176	Members not listed have forces less than 375#
Load Duration:	1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.040	
Spacing:	24.0 "	MWFRS Parallel Dist: 0 to h/2	Rep Fac: Yes	Max Web CSI: 0.058	
		C&C Dist a: 3.00 ft	FT/RT:20(0)/10(0)		
		Loc. from endwall: Any	Plate Type(s):	VIEW Ver: 22.02.00.0914.12	
		GCpi: 0.18	WAVE		
		Wind Duration: 1.60			

Lumber

Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;
Stack Chord: SC1 2x4 SP #2;
Stack Chord: SC2 2x4 SP #2;

Plating Notes

All plates are 2X4 except as noted.

Wind

Wind loads based on MWFRS with additional C&C member design.

Wind loading based on both gable and hip roof types.

Additional Notes

See DWGS A14015ENC160118 & GBLLETIN0118 for gable wind bracing and other requirements.

Stacked top chord must NOT be notched or cut in area (NNL). Dropped top chord braced at 24" oc intervals. Attach stacked top chord (SC) to dropped top chord in notchable area using 3x4 tie-plates 24" oc. Center plate on stacked/dropped chord interface, plate length perpendicular to chord length. Splice top chord in notchable area using 3x6.

The overall height of this truss excluding overhang is 5-6-4.

FL REG# 278, Yoonhwak Kim, FL PE #86367
Florida Certificate of Product Approval #FL 1999
02/22/2023

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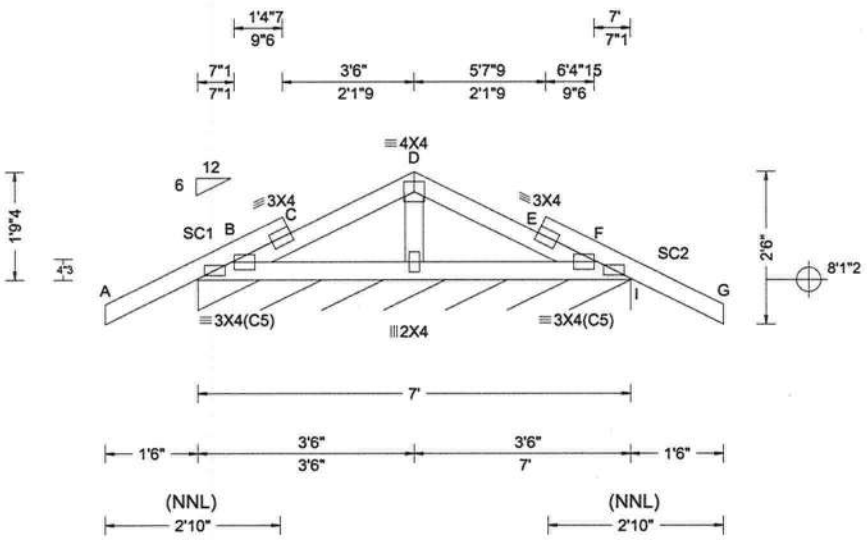
ALPINE
AN ITW COMPANY
155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

SEQN: 693461 GABL FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 22-8557 Matukaitis **Truss Label:** B01		Cust: R 215 JRef: 1XNf2150007 T4 DrwNo: 053.23.1402.20817 SSB / YK 02/22/2023



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.002 C 999 240 VERT(CL): 0.004 C 999 180 HORZ(LL): 0.001 C - - HORZ(TL): 0.002 C - - Creep Factor: 2.0 Max TC CSI: 0.253 Max BC CSI: 0.080 Max Web CSI: 0.039 VIEW Ver: 22.02.00.0914.12

▲ Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
I*	111	/-	/-	/54	/19	/11

Wind reactions based on MWFRS
I Brg Wid = 84.0 Min Req = -
Bearing B is a rigid surface.
Members not listed have forces less than 375#

Lumber

Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;
Stack Chord: SC1 2x4 SP #2;
Stack Chord: SC2 2x4 SP #2;

Plating Notes

All plates are 2X4(C5) except as noted.

Wind

Wind loads based on MWFRS with additional C&C member design.

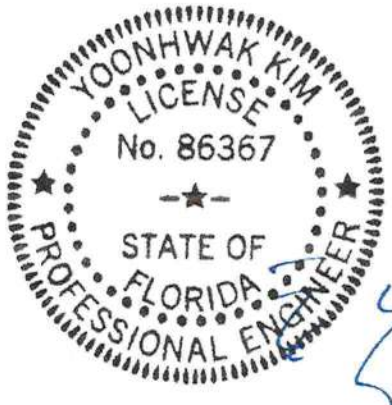
Wind loading based on both gable and hip roof types.

Additional Notes

See DWGS A14015ENC160118 & GBLLETIN0118 for gable wind bracing and other requirements.

Stacked top chord must NOT be notched or cut in area (NNL). Dropped top chord braced at 24" oc intervals. Attach stacked top chord (SC) to dropped top chord in notchable area using 3x4 tie-plates 24" oc. Center plate on stacked/dropped chord interface, plate length perpendicular to chord length. Splice top chord in notchable area using 3x6.

The overall height of this truss excluding overhang is 1-9-4.



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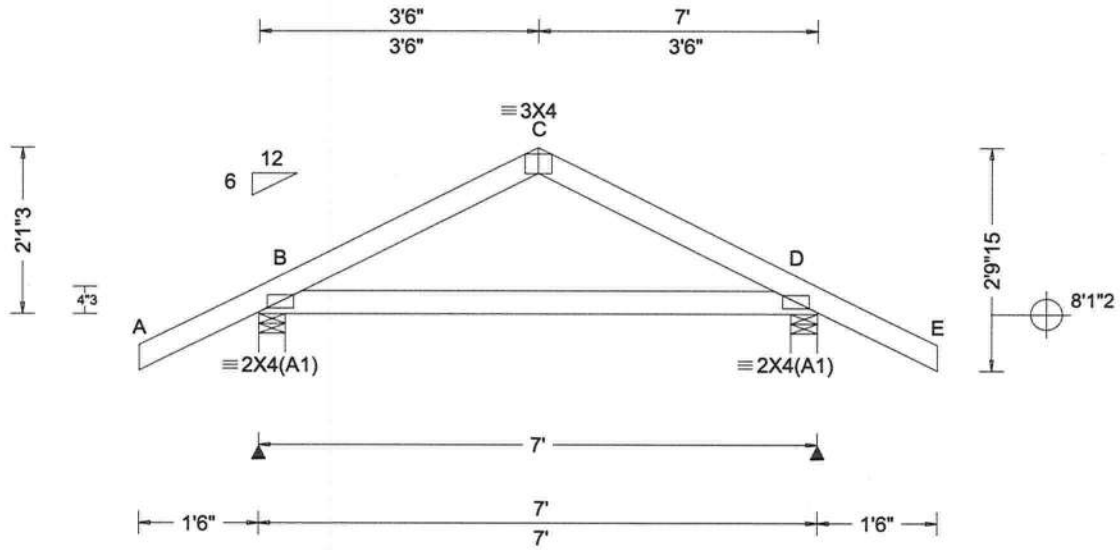
ALPINE
AN ITW COMPANY
155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

SEQN: 693463 COMN FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 22-8557 Matukaitis **Truss Label:** B02		Cust: R 215 JRef: 1XNf2150007 T9 DrwNo: 053.23.1402.21960 SSB / YK 02/22/2023



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA CAT: NA
Pf: NA Ce: NA
Lu: NA Cs: NA
Snow Duration: NA

Building Code:
FBC 7th Ed. 2020 Res.
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.003	B	999	240
VERT(CL): 0.011	B	999	180
HORZ(LL): -0.002	D	-	-
HORZ(TL): 0.006	D	-	-

Creep Factor: 2.0
Max TC CSI: 0.239
Max BC CSI: 0.295
Max Web CSI: 0.000

VIEW Ver: 22.02.00.0914.12

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	389	/-	/-	/259	/74	/83
D	389	/-	/-	/259	/74	/-

Wind reactions based on MWFRS
B Brg Wid = 4.0 Min Req = 1.5 (Truss)
D Brg Wid = 4.0 Min Req = 1.5 (Truss)
Bearings B & D are a rigid surface.
Members not listed have forces less than 375#

Lumber

Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;

Wind

Wind loads based on MWFRS with additional C&C member design.

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 2-1-3.

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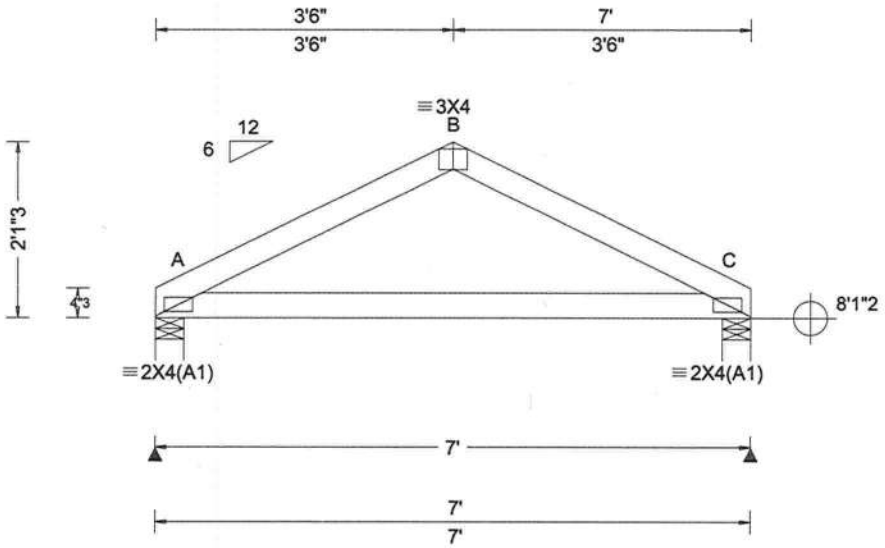
ALPINE
AN ITW COMPANY
155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

SEQN: 693465 COMN FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 22-8557 Matukaitis **Truss Label:** B03	Cust: R 215 JRef: 1XNf2150007 T10 DrwNo: 053.23.1402.24037 SSB / YK 02/22/2023	



Loading Criteria (psf)	**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.005 A 999 240 VERT(CL): 0.013 A 999 180 HORZ(LL): 0.003 A - - HORZ(TL): 0.007 C - - Creep Factor: 2.0 Max TC CSI: 0.179 Max BC CSI: 0.315 Max Web CSI: 0.000 VIEW Ver: 22.02.00.0914.12

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	288	/-	/-	/166	/47	/44
C	288	/-	/-	/166	/47	/-

Wind reactions based on MWFRS
A Brg Wid = 4.0 Min Req = 1.5 (Truss)
C Brg Wid = 4.0 Min Req = 1.5 (Truss)
Bearings A & C are a rigid surface.
Members not listed have forces less than 375#

Lumber

Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;

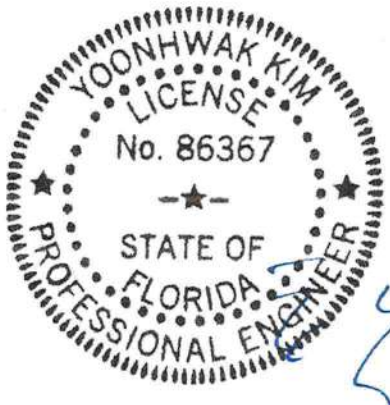
Wind

Wind loads based on MWFRS with additional C&C member design.

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 2-1-3.



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ALPINE
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155 Harlem Ave
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Glenview, IL 60025

Gable Stud Reinforcement Detail

ASCE 7-16: 140 mph Wind Speed, 15' Mean Height, Enclosed, Exposure C, Kzt = 1.00

Or: 120 mph Wind Speed, 15' Mean Height, Partially Enclosed, Exposure C, Kzt = 1.00
Or: 120 mph Wind Speed, 15' Mean Height, Enclosed, Exposure D, Kzt = 1.00
Or: 100 mph Wind Speed, 15' Mean Height, Partially Enclosed, Exposure D, Kzt = 1.00

Max Gable Vertical Length

2x4 Gable Vertical Spacing	Species	Brace Grade	No Braces	(1) 1x4 'L' Brace * Group A	(1) 1x4 'L' Brace * Group B	(1) 2x4 'L' Brace * Group A	(1) 2x4 'L' Brace * Group B	(2) 2x4 'L' Brace ** Group A	(2) 2x4 'L' Brace ** Group B	(1) 2x6 'L' Brace * Group A	(1) 2x6 'L' Brace * Group B	(2) 2x6 'L' Brace ** Group A	(2) 2x6 'L' Brace ** Group B
24" o.c.	SPF HF	#1 / #2	4' 3"	7' 3"	7' 7"	8' 7"	8' 11"	10' 3"	10' 8"	13' 6"	14' 0"	14' 0"	14' 0"
		#3	4' 1"	6' 7"	7' 1"	8' 6"	8' 10"	10' 1"	10' 6"	13' 4"	13' 10"	14' 0"	14' 0"
		Stud	4' 1"	6' 7"	7' 0"	8' 6"	8' 10"	10' 1"	10' 6"	13' 4"	13' 10"	14' 0"	14' 0"
		Standard	4' 1"	5' 8"	6' 0"	7' 7"	8' 1"	10' 1"	10' 6"	11' 10"	12' 8"	14' 0"	14' 0"
	SP DFL	#1	4' 6"	7' 4"	7' 8"	8' 8"	9' 0"	10' 4"	10' 9"	13' 8"	14' 0"	14' 0"	14' 0"
		#2	4' 3"	7' 3"	7' 7"	8' 7"	8' 11"	10' 3"	10' 8"	13' 6"	14' 0"	14' 0"	14' 0"
		#3	4' 2"	6' 0"	6' 4"	7' 11"	8' 6"	10' 2"	10' 7"	12' 5"	13' 4"	14' 0"	14' 0"
		Stud	4' 2"	6' 0"	6' 4"	7' 11"	8' 6"	10' 2"	10' 7"	12' 5"	13' 4"	14' 0"	14' 0"
		Standard	4' 0"	5' 3"	5' 7"	7' 0"	7' 6"	9' 6"	10' 2"	11' 0"	11' 10"	14' 0"	14' 0"
16" o.c.	SPF HF	#1 / #2	4' 11"	8' 4"	8' 8"	9' 10"	10' 3"	11' 8"	12' 2"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	4' 8"	8' 1"	8' 8"	9' 8"	10' 1"	11' 7"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
		Stud	4' 8"	8' 1"	8' 6"	9' 8"	10' 1"	11' 7"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
		Standard	4' 8"	6' 11"	7' 5"	9' 3"	9' 11"	11' 7"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
	SP DFL	#1	5' 1"	8' 5"	8' 9"	9' 11"	10' 4"	11' 10"	12' 4"	14' 0"	14' 0"	14' 0"	14' 0"
		#2	4' 11"	8' 4"	8' 8"	9' 10"	10' 3"	11' 8"	12' 2"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	4' 9"	7' 4"	7' 9"	9' 9"	10' 2"	11' 8"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
		Stud	4' 9"	7' 4"	7' 9"	9' 9"	10' 2"	11' 8"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
		Standard	4' 8"	6' 5"	6' 10"	8' 7"	9' 2"	11' 7"	12' 1"	13' 6"	14' 0"	14' 0"	14' 0"
12" o.c.	SPF HF	#1 / #2	5' 5"	9' 2"	9' 6"	10' 10"	11' 3"	11' 8"	13' 5"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	5' 1"	9' 0"	9' 4"	10' 8"	11' 1"	12' 9"	13' 3"	14' 0"	14' 0"	14' 0"	14' 0"
		Stud	5' 1"	9' 0"	9' 4"	10' 8"	11' 1"	12' 9"	13' 3"	14' 0"	14' 0"	14' 0"	14' 0"
		Standard	5' 1"	8' 0"	8' 6"	10' 8"	11' 1"	12' 9"	13' 3"	14' 0"	14' 0"	14' 0"	14' 0"
	SP DFL	#1	5' 8"	9' 3"	9' 8"	10' 11"	11' 4"	13' 0"	13' 6"	14' 0"	14' 0"	14' 0"	14' 0"
		#2	5' 5"	9' 2"	9' 6"	10' 10"	11' 3"	12' 11"	13' 5"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	5' 3"	8' 5"	9' 0"	10' 9"	11' 2"	12' 10"	13' 4"	14' 0"	14' 0"	14' 0"	14' 0"
		Stud	5' 3"	8' 5"	9' 0"	10' 9"	11' 2"	12' 10"	13' 4"	14' 0"	14' 0"	14' 0"	14' 0"
		Standard	5' 1"	7' 5"	7' 11"	9' 11"	10' 7"	12' 9"	13' 3"	14' 0"	14' 0"	14' 0"	14' 0"

Bracing Group Species and Grades:

Group A:

Spruce-Pine-Fir	
#1 / #2	Standard
#3	Stud

Hem-Fir	
#2	Stud
#3	Standard

Douglas Fir-Larch
#3
Stud
Standard

Southern Pine***
#3
Stud
Standard

Group B:

Hem-Fir
#1 & Btr
#1

Douglas Fir-Larch
#1
#2

Southern Pine***
#1
#2

1x4 Braces shall be SRB (Stress-Rated Board).

***For 1x4 So. Pine use only Industrial 55 or Industrial 45 Stress-Rated Boards. Group B values may be used with these grades.

Gable Truss Detail Notes:

Wind Load deflection criterion is L/240.

Provide uplift connections for 55 plf over continuous bearing (5 psf TC Dead Load).

Gable end supports load from 4' 0" outlookers with 2' 0" overhang, or 12" plywood overhang.

Attach 'L' braces with 10d (0.128"x3.0" min) nails.

* For (1) 'L' braces: space nails at 2" o.c. in 18" end zones and 4" o.c. between zones.

** For (2) 'L' braces: space nails at 3" o.c. in 18" end zones and 6" o.c. between zones.

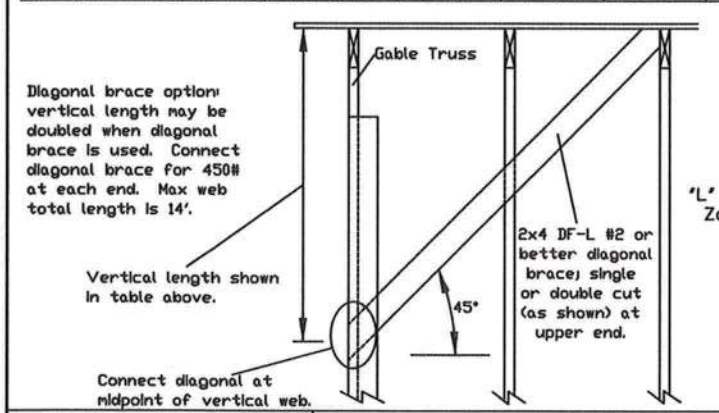
'L' bracing must be a minimum of 80% of web member length.

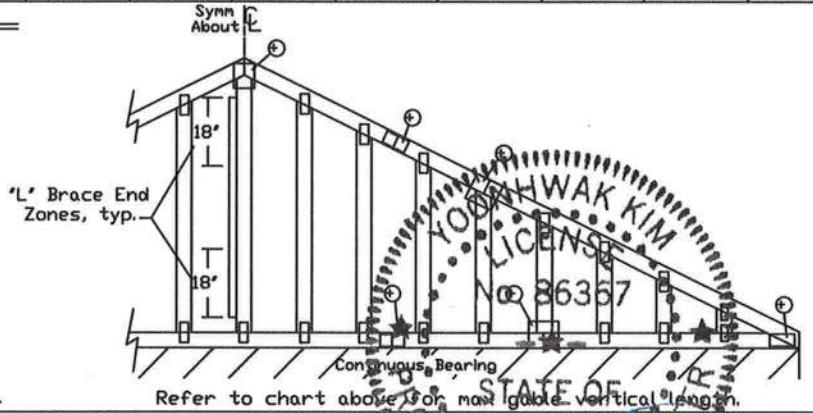
Gable Vertical Plate Sizes

Vertical Length	No Splice
Less than 4' 0"	1X4 or 2X3
Greater than 4' 0"	3X4

+ Refer to common truss design for peak, splice, and heel plates.

Refer to the Building Designer for conditions not addressed by this detail.





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For more information see this job's general notes page and these web sites:
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ALPINE
AN ITW COMPANY
155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

STATE OF FLORIDA
PROFESSIONAL ENGINEER
YOONHWAK KIM
LICENSE
No. 86367

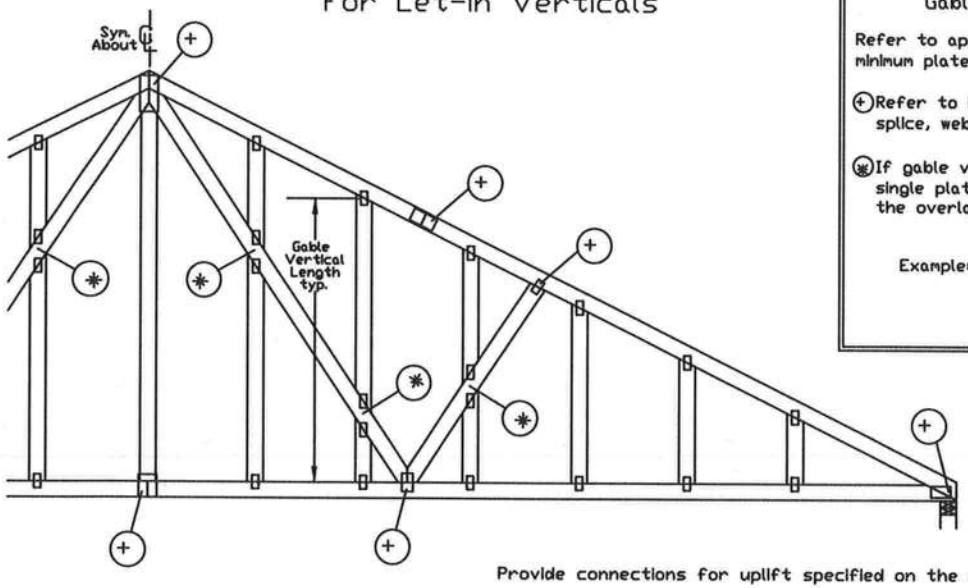
MAX. TOT. LD. 60 PSF

MAX. SPACING 24.0"

REF	ASCE7-16-GAB14015
DATE	01/26/2018
DRWG	A14015ENC160118

07/12/2022
PE REG# 278, Yoonhwak Kim, FL PE #86367

Gable Detail
For Let-in Verticals



Gable Truss Plate Sizes

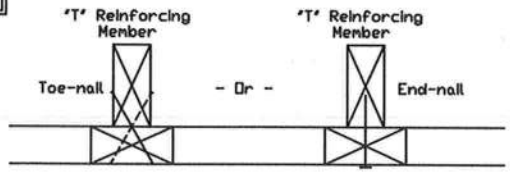
Refer to appropriate Alpine gable detail for minimum plate sizes for vertical studs.

⊕ Refer to Engineered truss design for peak, splice, web, and heel plates.

⊛ If gable vertical plates overlap, use a single plate that covers the total area of the overlapped plates to span the web.

Example: 2X4 / 2X4 — 2X8

'T' Reinforcement Attachment Detail



Provide connections for uplift specified on the engineered truss design.

Attach each 'T' reinforcing member with

End Driven Nails:
10d Common (0.148"x 3",min) Nails at 4" o.c. plus
(4) nails in the top and bottom chords.

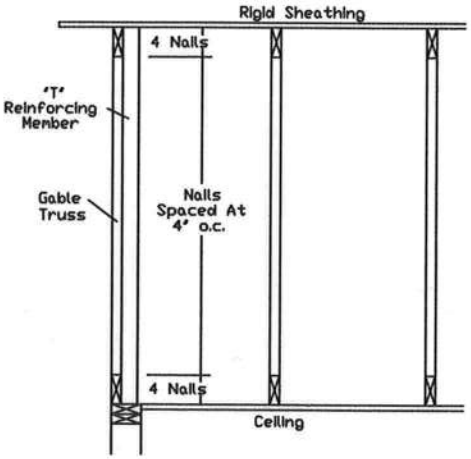
Toenailed Nails:
10d Common (0.148"x3",min) Toenails at 4" o.c. plus
(4) toenails in the top and bottom chords.

This detail to be used with the appropriate Alpine gable detail for ASCE wind load.

ASCE 7-05 Gable Detail Drawings
A13015051014, A12015051014, A11015051014, A10015051014, A14015051014, A13030051014, A12030051014, A11030051014, A10030051014, A14030051014

ASCE 7-10 & ASCE 7-16 Gable Detail Drawings
A11515ENC100118, A12015ENC100118, A14015ENC100118, A13015ENC100118, A18015ENC100118, A20015ENC100118, A20015END100118, A20015PED100118, A11530ENC100118, A12030ENC100118, A14030ENC100118, A13030ENC100118, A18030ENC100118, A20030ENC100118, A20030END100118, A20030PED100118, S11515ENC100118, S12015ENC100118, S14015ENC100118, S13015ENC100118, S18015ENC100118, S20015ENC100118, S20015END100118, S20015PED100118, S11530ENC100118, S12030ENC100118, S14030ENC100118, S13030ENC100118, S18030ENC100118, S20030ENC100118, S20030END100118, S20030PED100118

See appropriate Alpine gable detail for maximum unreinforced gable vertical length.



To convert from 'L' to 'T' reinforcing members, multiply 'T' increase by length (based on appropriate Alpine gable detail).

Maximum allowable 'T' reinforced gable vertical length is 14' from top to bottom chord.

'T' reinforcing member material must match size, specie, and grade of the 'L' reinforcing member.

Web Length Increase w/ "T" Brace

'T' Reinf. Mbr. Size	'T' Increase
2x4	30 %
2x6	20 %

Example:
ASCE 7-10 Wind Speed = 120 mph
Mean Roof Height = 30 ft, Kzt = 1.00
Gable Vertical = 24"o.c. SP #3
'T' Reinforcing Member Size = 2x4
'T' Brace Increase (From Above) = 30% = 1.30
(1) 2x4 'L' Brace Length = 8' 7"
Maximum 'T' Reinforced Gable Vertical Length
1.30 x 8' 7" = 11' 2"

YOONHWAK KIM — No. 86367 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

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WARNING READ AND FOLLOW ALL NOTES ON THIS DRAWING!
IMPORTANT FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS.

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7 or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions.

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation & bracing of trusses.

A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.

For more information see this job's general notes page and these web sites: ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcacomponents.com; ICC: www.iccsafe.org

02/22/2023
FL Cert. #278, Yoonhwak Kim, FL PE #86367

MAX. TOT. LD. 60 PSF
DUR. FAC. ANY
MAX. SPACING 24.0"

REF	LET-IN VERT
DATE	01/02/2018
DRWG	GBLLETIN0118