

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

01/26/2024

COA#0-278

Florida Certificate of Product Approval #FL1999

This item has been digitally signed by Fernando Vinas on the date adjacent to the seal.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Site Information:	Page 1:
Customer: W. B. Howland Company, Inc.	Job Number: 24-0494
Job Description: Lane Addition	
Address: FL	

Job Engineering Criteria:			
Design Code: FBC 8th Ed. 2023 Res. HVHZ		IntelliVIEW Version: 23.02.01A	
		JRef #: 1XWT2150005	
Wind Standard: ASCE 7-22	Wind Speed (mph): 130	Design Loading (psf): 40.00	
Building Type: Closed			

This package contains general notes pages, 10 truss drawing(s) and 2 detail(s).

Item	Drawing Number	Truss
1	026.24.0823.01500	A01
3	026.24.0823.01501	A03
5	026.24.0823.01158	B02
7	026.24.0823.01191	V01
9	026.24.0823.01528	V03
11	VAL180220723	

Item	Drawing Number	Truss
2	026.24.1332.38340	A02
4	026.24.0823.01190	B01
6	026.24.0823.01365	B03
8	026.24.0823.01333	V02
10	026.24.0823.01222	V04
12	VALTN220723	

## **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](http://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.

FRT-PR = ProWood 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 all load cases.

Max TC CSI = Maximum bending and axial Combined Stress Index for Top Chords for all load cases.

Max Web CSI = Maximum bending and axial Combined Stress Index for Webs for 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.

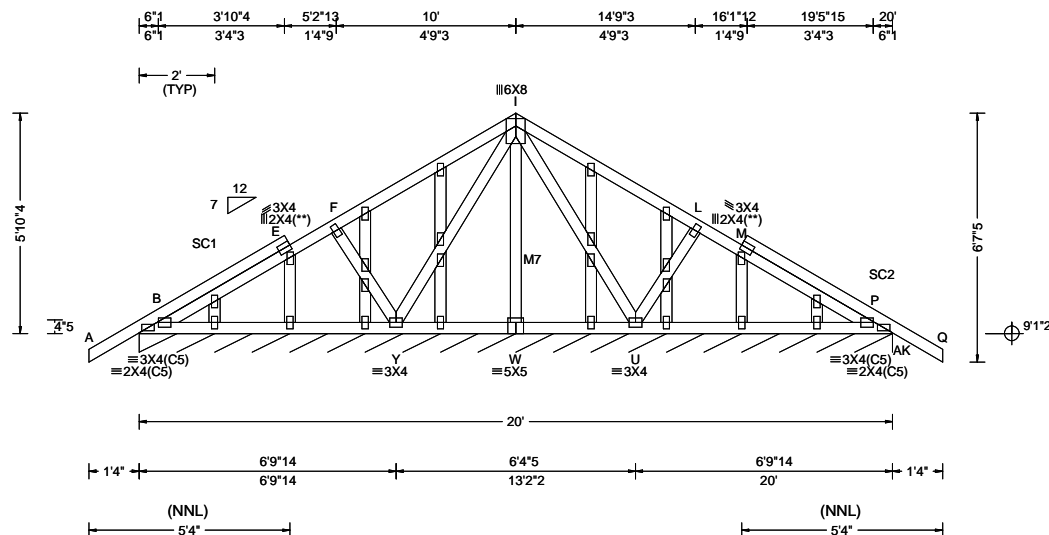
Refer to ASCE-7 for Wind and Seismic abbreviations.

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](http://www.awc.org).
2. ICC: International Code Council; [www.iccsafe.org](http://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](http://www.alpineitw.com).
4. TPI: Truss Plate Institute, 2670 Crain Highway, Suite 203, Waldorf, MD 20601; [www.tpinst.org](http://www.tpinst.org).
5. SBCA: Wood Truss Council of America, 6300 Enterprise Lane, Madison, WI 53719; [www.sbcacomponents.com](http://www.sbcacomponents.com).

SEQN: 744388 / FROM: CDM	GABL Ply: 1 Qty: 1	Job Number: 24-0494 Lane Addition Truss Label: A01	Cust: R 215 JRef: 1XWT2150005 T2 / DrwNo: 026.24.0823.01500 SSB / DF 01/26/2024
-----------------------------	--------------------------	--	---



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs), or *PLF
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 7-22 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 8th Ed. 2023 Res. HVHZ TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/def L/# VERT(LL): 0.001 J 999 240 VERT(CL): 0.001 J 999 180 HORZ(LL): -0.001 H - - HORZ(TL): 0.002 H - - Creep Factor: 2.0 Max TC CSI: 0.246 Max BC CSI: 0.028 Max Web CSI: 0.856 VIEW Ver: 23.02.01A.1204.18	Gravity Loc R+ / R- / Rh / Rw / U / RL Non-Gravity AK*92 /- /- /47 /15 /9 Wind reactions based on MWFRS AK Brg Wid = 240 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; M7 2x4 SP #2;  
Stack Chord: SC1 2x4 SP #2;  
Stack Chord: SC2 2x4 SP #2;

#### Plating Notes

All plates are 2X4 except as noted.

(\*\*) 2 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

#### Wind

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

Wind loading based on both gable and hip roof types.

Gable meets L/120 deflection criteria for wind load applied to face. Calculated deflection ratio is L/132.

Note: The Project Engineer shall provide for endwall stability per the Florida Building Code. The top of the wall below this truss shall be laterally braced as specified by the Project Engineer. This truss will not provide lateral support of the end wall.

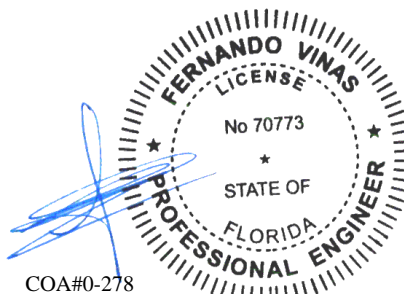
Bottom chord to be laterally braced for out of plane wind loads

#### Additional Notes

Exposed portion of gable face shall be reinforced with sheathing and the wind pressures shall be transferred into lateral diaphragms. Connections and designs for diaphragms is the responsibility of the Building Designer in accordance with ANSI/TPI 1.

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 notched area using 3x4 tie-plates 24" oc. Center plate on stacked/dropped chord interface, plate length perpendicular to chord length. Splice top chord in notched area using 3x6.

The overall height of this truss excluding overhang is 5'-10.4".



COA#0-278

Florida Certificate of Product Approval #FL1999  
01/26/2024

#### \*\*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 continuous lateral restraint (CLR), installed with diagonal bracing installed on the CLR 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. Refer to job's General Notes page for additional information.

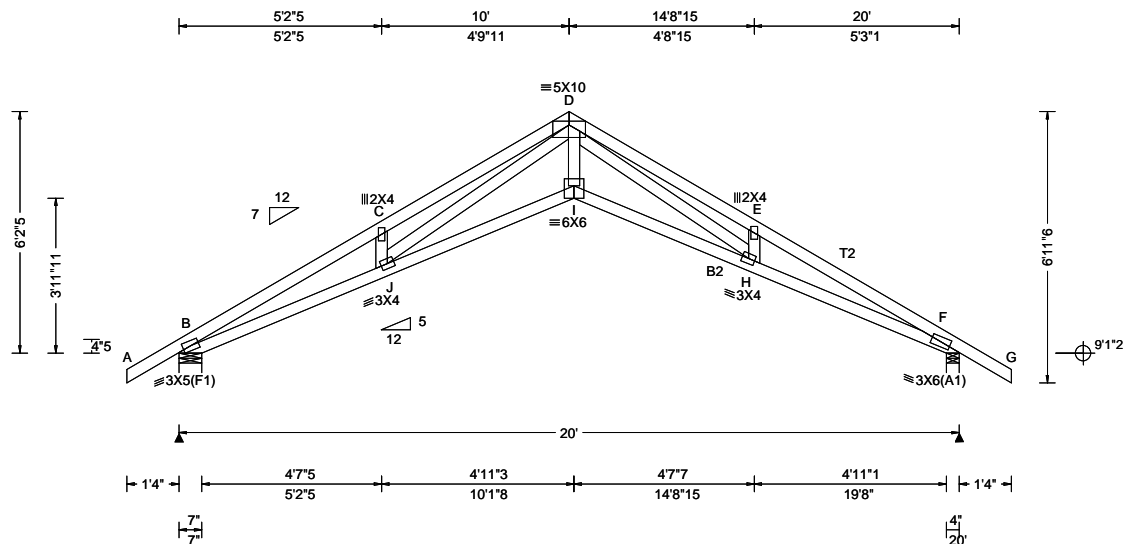
Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, 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 these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBCA: [sbcacomponents.com](http://sbcacomponents.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)



155 Harlem Ave  
North Building, 4th Floor  
Glenview, IL 60025

SEQN: 744807 FROM: CDM	COMN Ply: 1 Qty: 12	Job Number: 24-0494 Lane Addition Truss Label: A02	Cust: R 215 JRef: 1XWT2150005 T1 DrwNo: 026.24.1332.38340 SSB / FV 01/26/2024
---------------------------	---------------------------	--	---



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
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 7-22 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 8th Ed. 2023 Res. HVHZ 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): 0.282 I 837 240 VERT(CL): 0.585 I 404 180 HORZ(LL): 0.274 F - - HORZ(TL): 0.567 F - - Creep Factor: 2.0 Max TC CSI: 0.601 Max BC CSI: 0.966 Max Web CSI: 0.801 VIEW Ver: 23.02.01A.1204.18	Gravity Loc R+ / R- / Rh / Rw / U / RL Non-Gravity B 939 - / - / - / 558 / 157 / 190 F 939 - / - / - / 564 / 155 / - Wind reactions based on MWFRS B Brg Wid = 7.0 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 748 - 2987 D - E 916 - 3207 C - D 831 - 2868 E - F 839 - 3306

#### Lumber

Top chord: 2x4 SP M-31; T2 2x4 SP #2;  
Bot chord: 2x4 SP M-31; B2 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

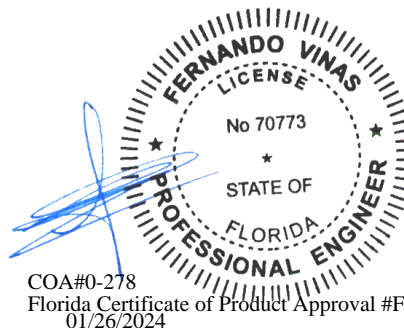
The overall height of this truss excluding overhang is 6-2-5.

#### Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens. Comp.
B - J	2656 - 552	I - H	2574 - 206
J - I	2426 - 199	H - F	2994 - 641

#### Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. Comp.
J - D	339 - 414	D - H	577 - 457
D - I	2102 - 133		



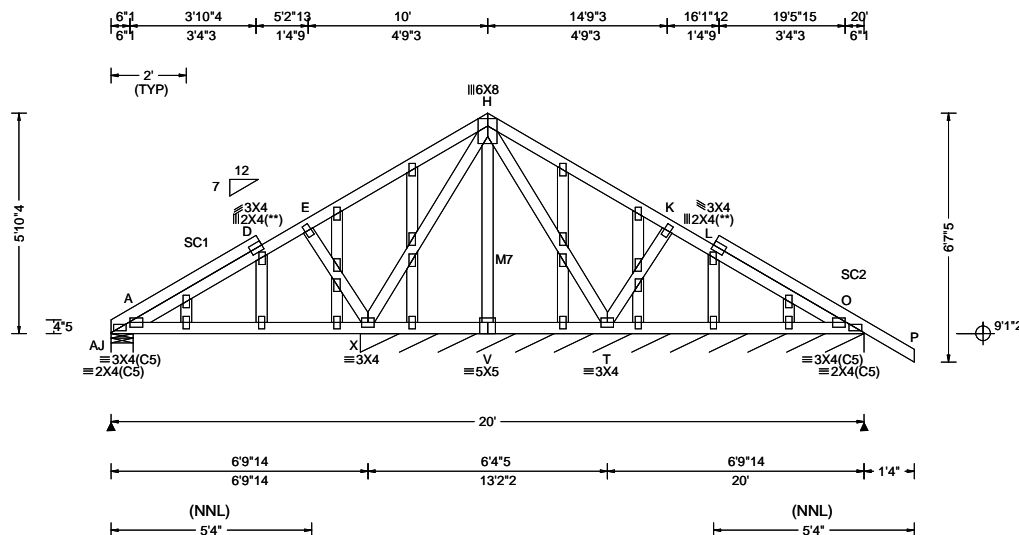
COA#0-278

Florida Certificate of Product Approval #FL1999  
01/26/2024

**\*\*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 continuous lateral restraint (CLR), installed with diagonal bracing installed on the CLR 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. Refer to job's General Notes page for additional information.  
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 and 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 these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBCA: [sbcacomponents.com](http://sbcacomponents.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)



SEQN: 744419 / FROM: CDM	GABL Ply: 1 Qty: 1	Job Number: 24-0494 Lane Addition Truss Label: A03	Cust: R 215 JRef: 1XWT2150005 T3 / DrwNo: 026.24.0823.01501 SSB / DF 01/26/2024
-----------------------------	--------------------------	--	---



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs), or *PLF
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 7-22 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: not in 4.50 ft 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 8th Ed. 2023 Res. HVHZ 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): 0.014 Z 999 240 VERT(CL): 0.028 AA 999 180 HORZ(LL): 0.007 C - - HORZ(TL): 0.013 C - - Creep Factor: 2.0 Max TC CSI: 0.253 Max BC CSI: 0.130 Max Web CSI: 0.859 VIEW Ver: 23.02.01A.1204.18	Gravity Loc R+ / R- / Rh / Rw / U / RL Non-Gravity AJ 254 /- /- /133 /33 /172 O* 112 /- /- /60 /19 /- Wind reactions based on MWFRS AJ Brg Wid = 7.0 Min Req = 1.5 (Truss) O Brg Wid = 160 Min Req = - Bearings AJ & X are 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; M7 2x4 SP #2;  
Stack Chord: SC1 2x4 SP #2;  
Stack Chord: SC2 2x4 SP #2;

#### Plating Notes

All plates are 2X4 except as noted.

(\*\*) 2 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

#### 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.

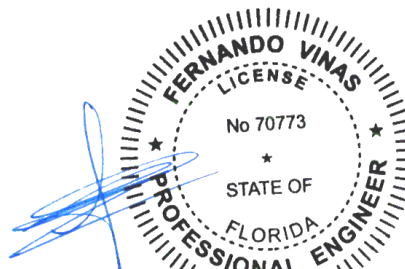
Gable meets L/120 deflection criteria for wind load applied to face. Calculated deflection ratio is L/132.

#### Additional Notes

Exposed portion of gable face shall be reinforced with sheathing and the wind pressures shall be transferred into lateral diaphragms. Connections and designs for diaphragms is the responsibility of the Building Designer in accordance with ANSI/TPI 1.

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 notched area using 3x4 tie-plates 24" oc. Center plate on stacked/dropped chord interface, plate length perpendicular to chord length. Splice top chord in notched area using 3x6.

The overall height of this truss excluding overhang is 5-10-4.



COA#0-278

Florida Certificate of Product Approval #FL1999  
01/26/2024

#### \*\*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 continuous lateral restraint (CLR), installed with diagonal bracing installed on the CLR 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. Refer to job's General Notes page for additional information.

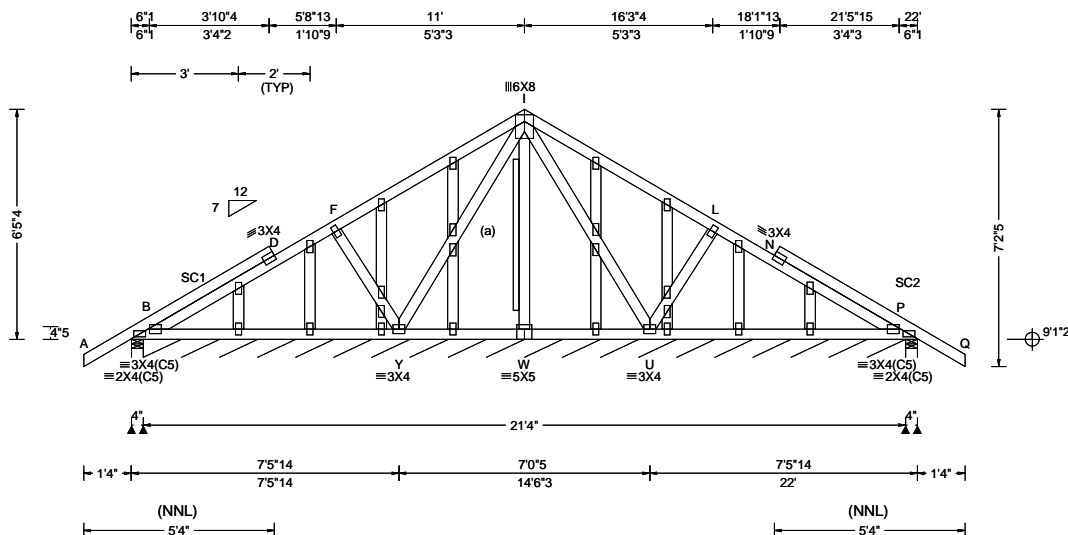
Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, 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 these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBCA: [sbcacomponents.com](http://sbcacomponents.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)



155 Harlem Ave  
North Building, 4th Floor  
Glenview, IL 60025

SEQN: 744396 / FROM: CDM	GABL Ply: 1 Qty: 1	Job Number: 24-0494 Lane Addition Truss Label: B01	Cust: R 215 JRRef: 1XWT2150005 T5 / DrwNo: 026.24.0823.01190 SSB / DF 01/26/2024
-----------------------------	--------------------------	--	--



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs), or *=PLF
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 7-22 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 8th Ed. 2023 Res. HVHZ 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): 0.003 D 999 240 VERT(CL): 0.005 D 999 180 HORZ(LL): 0.004 N - - HORZ(TL): 0.004 N - - Creep Factor: 2.0 Max TC CSI: 0.246 Max BC CSI: 0.045 Max Web CSI: 0.823 VIEW Ver: 23.02.01A.1204.18	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 266 - / - / - /147 /42 /202 B* 69 - / - / - /38 /12 /- P 276 - / - / - /190 /43 /- Wind reactions based on MWFRS B Brg Wid = 4.0 Min Req = 1.5 (Truss) B Brg Wid = 255 Min Req = - P Brg Wid = 4.0 Min Req = 1.5 (Truss) Bearings B, B, & P are 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.

#### 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.

Gable meets L/120 deflection criteria for wind load applied to face. Calculated deflection ratio is L/716.

#### Gable Reinforcement

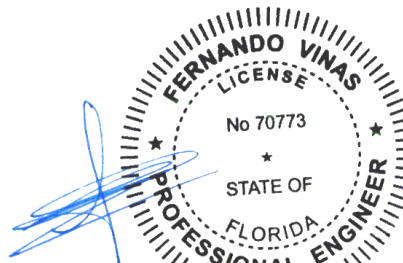
(a) 2x4 "L" reinforcement. Any species and grade. 80% length of web member. Attach with 10d (0.131"x3", min.) nails @ 2" oc at each end for the first 18" and then 4" oc for the remainder.

#### Additional Notes

Exposed portion of gable face shall be reinforced with sheathing and the wind pressures shall be transferred into lateral diaphragms. Connections and designs for diaphragms is the responsibility of the Building Designer in accordance with ANSI/TPI 1.

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 notched area using 3x4 tie-plates 24" oc. Center plate on stacked/dropped chord interface, plate length perpendicular to chord length. Splice top chord in notched area using 3x6.

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



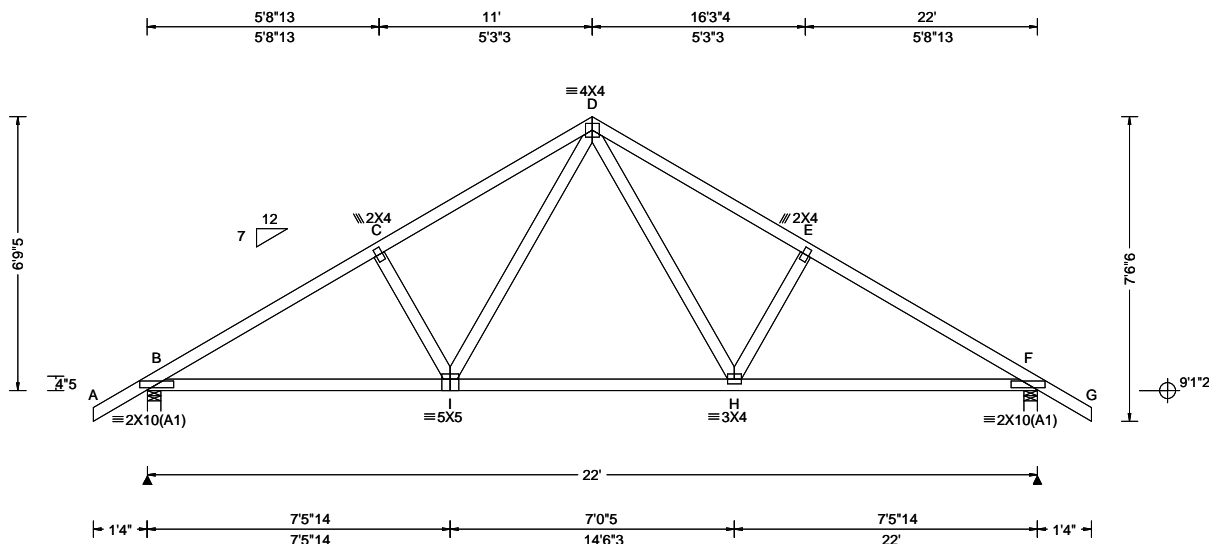
COA#0-278  
Florida Certificate of Product Approval #FL1999  
01/26/2024

**\*\*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 continuous lateral restraint (CLR), installed with diagonal bracing installed on the CLR 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. Refer to job's General Notes page for additional information.  
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 and 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 these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBCA: [sbcacomponents.com](http://sbcacomponents.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)

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



SEQN: 744399 / FROM: CDM	COMN Ply: 1 Qty: 14	Job Number: 24-0494 Lane Addition Truss Label: B02	Cust: R 215 JRRef: 1XWT2150005 T4 / DrwNo: 026.24.0823.01158 SSB / DF 01/26/2024
-----------------------------	---------------------------	--	--



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
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 7-22 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 8th Ed. 2023 Res. HVHZ TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/def L/# VERT(LL): 0.047 H 999 240 VERT(CL): 0.091 H 999 180 HORZ(LL): 0.019 F - - HORZ(TL): 0.038 F - - Creep Factor: 2.0 Max TC CSI: 0.287 Max BC CSI: 0.539 Max Web CSI: 0.202 VIEW Ver: 23.02.01A.1204.18	Gravity Loc R+ / R- / Rh / Rw / U / RL Non-Gravity B 1059 - / - /603 /173 /205 F 1059 - / - /603 /173 - 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# <b>Maximum Top Chord Forces Per Ply (lbs)</b> Chords Tens.Comp. Chords Tens. Comp. B - C 441 - 1498 D - E 478 - 1340 C - D 479 - 1339 E - F 440 - 1499

#### 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.

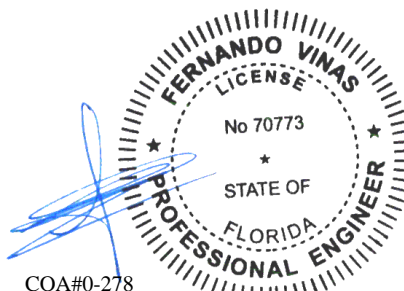
#### Wind

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 6'-9-5/8".



COA#0-278

Florida Certificate of Product Approval #FL1999  
01/26/2024

#### Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens. Comp.
B - I	1223 -247	H - F	1224 -252
I - H	830 -57		

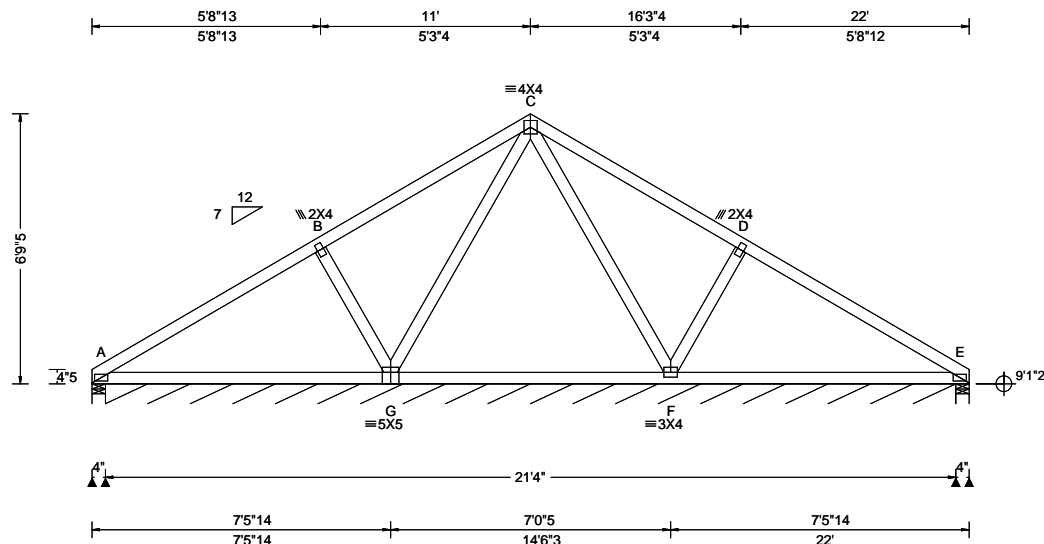
#### Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. Comp.
I - D	528 -164	D - H	530 -163

**\*\*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 continuous lateral restraint (CLR), installed with diagonal bracing installed on the CLR 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. Refer to job's General Notes page for additional information.  
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 and 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 these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBCA: [sbccomponents.com](http://sbccomponents.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)

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

SEQN: 744411 / FROM: CDM	SPEC Ply: 1 Qty: 1	Job Number: 24-0494 Lane Addition Truss Label: B03	Cust: R 215 JRRef: 1XWT2150005 T7 / DrwNo: 026.24.0823.01365 SSB / DF 01/26/2024
-----------------------------	--------------------------	--	--



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs), or *=PLF
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 7-22 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: 3.00 ft Loc. from endwall: not in 4.50 ft 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 8th Ed. 2023 Res. HVHZ 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): 0.008 A 999 240 VERT(CL): 0.018 A 999 180 HORZ(LL): 0.006 A - - HORZ(TL): 0.012 A - - Creep Factor: 2.0 Max TC CSI: 0.547 Max BC CSI: 0.424 Max Web CSI: 0.115 VIEW Ver: 23.02.01A.1204.18	Gravity Loc R+ / R- / Rh / Rw / U / RL Non-Gravity A 346 - / - /197 /44 /165 A* 53 - / - /29 /10 - E 345 - / - /227 /45 - Wind reactions based on MWFRS A Brg Wid = 4.0 Min Req = 1.5 (Truss) A Brg Wid = 255 Min Req = - E Brg Wid = 4.0 Min Req = 1.5 (Truss) Bearings A, A, & E are 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;

#### Plating Notes

All plates are 2X4(A1) except as noted.

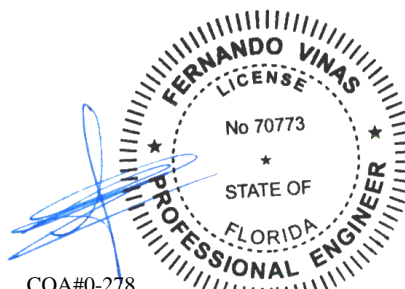
#### Wind

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

Wind loading based on both gable and hip roof types.

#### Additional Notes

The overall height of this truss excluding overhang is 6'-9-5".

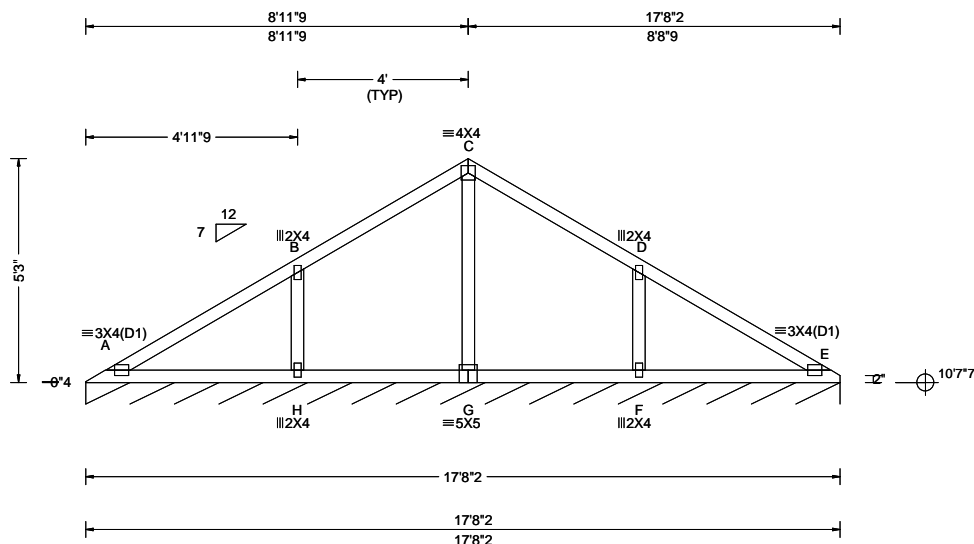


COA#0-278  
Florida Certificate of Product Approval #FL1999  
01/26/2024

**\*\*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 continuous lateral restraint (CLR), installed with diagonal bracing installed on the CLR 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. Refer to job's General Notes page for additional information.  
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 and 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 these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBCA: [sbccomponents.com](http://sbccomponents.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)

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

SEQN: 744402 / FROM: CDM	VAL	Ply: 1 Qty: 1	Job Number: 24-0494 Lane Addition Truss Label: V01	Cust: R 215 JRef: 1XWT2150005 T9 / DrwNo: 026.24.0823.01191 SSB / DF 01/26/2024
-----------------------------	-----	------------------	--	---



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs), or *=PLF
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 7-22 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: not in 4.50 ft 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 8th Ed. 2023 Res. HVHZ 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): 0.011 A 999 240 VERT(CL): 0.023 A 999 180 HORZ(LL): 0.004 A - - HORZ(TL): 0.008 A - - Creep Factor: 2.0 Max TC CSI: 0.350 Max BC CSI: 0.203 Max Web CSI: 0.128 VIEW Ver: 23.02.01A.1204.18	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL E* 83 - / - / 43 / 13 / 7 Wind reactions based on MWFRS E Brg Wid = 212 Min Req = - Bearing A is a rigid surface. Members not listed have forces less than 375#

#### Lumber

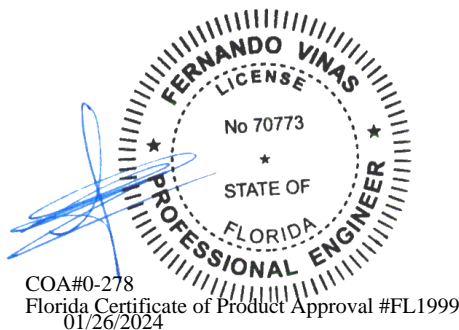
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #3;

#### Wind

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

#### Additional Notes

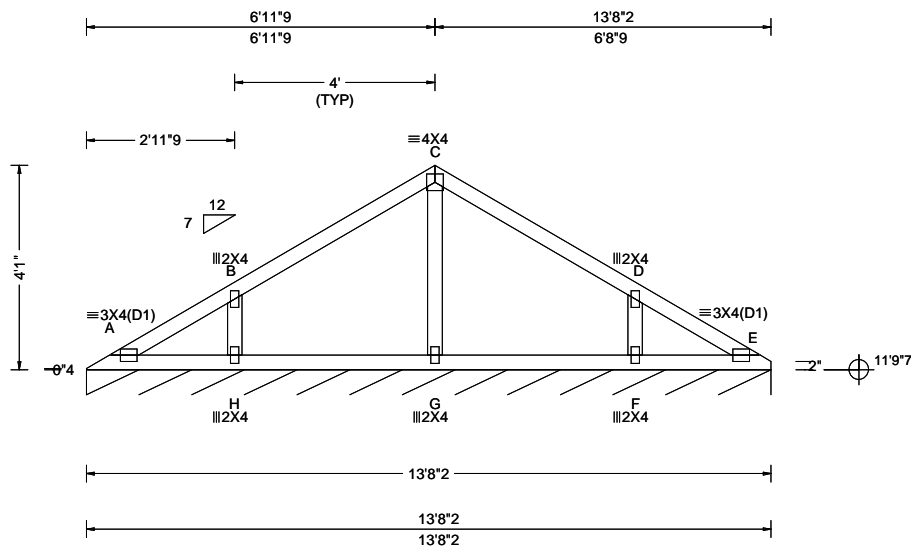
See DWGS VALTN220723 and VAL180220723 for valley details.  
The overall height of this truss excluding overhang is 5'-3"-0."



**\*\*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 continuous lateral restraint (CLR), installed with diagonal bracing installed on the CLR 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. Refer to job's General Notes page for additional information.  
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 and 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 these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBCA: [sbcacomponents.com](http://sbcacomponents.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)



SEQN: 744404 / FROM: CDM	VAL Qty: 1	Ply: 1 Qty: 1	Job Number: 24-0494 Lane Addition Truss Label: V02	Cust: R 215 JRef: 1XWT2150005 T10 / DrwNo: 026.24.0823.01333 SSB / DF 01/26/2024
-----------------------------	---------------	------------------	--	--



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs), or *PLF
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 7-22 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: not in 4.50 ft 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 8th Ed. 2023 Res. HVHZ 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): 0.001 A 999 240 VERT(CL): 0.002 A 999 180 HORZ(LL): -0.001 B - - HORZ(TL): 0.001 B - - Creep Factor: 2.0 Max TC CSI: 0.204 Max BC CSI: 0.111 Max Web CSI: 0.061 VIEW Ver: 23.02.01A.1204.18	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL E* 83 /- /- /43 /12 /7 Wind reactions based on MWFRS E Brg Wid = 164 Min Req = - Bearing A is a rigid surface. Members not listed have forces less than 375#

#### Lumber

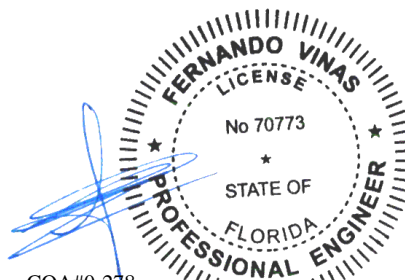
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #3;

#### 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 VALTN220723 and VAL180220723 for valley details.  
The overall height of this truss excluding overhang is 4'-1-0.

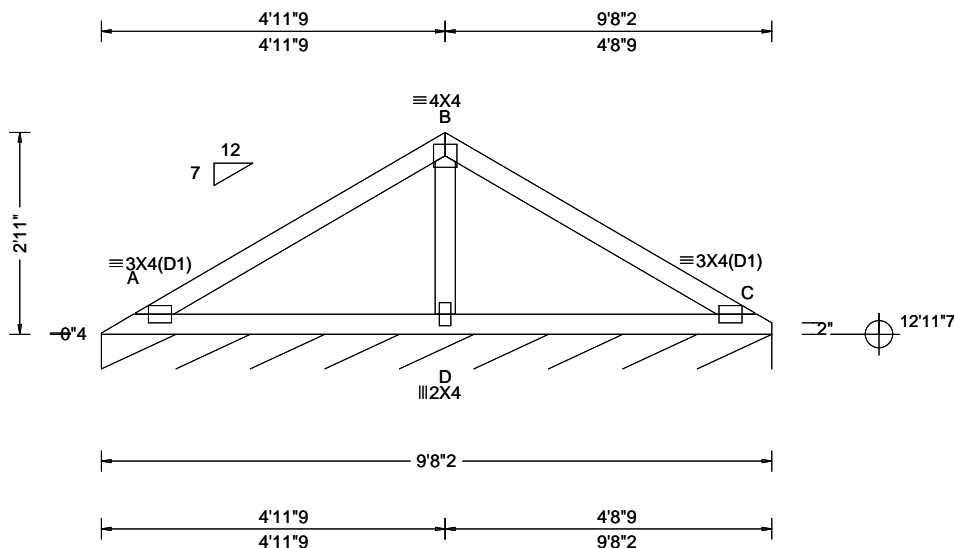


COA#0-278  
Florida Certificate of Product Approval #FL1999  
01/26/2024

**\*\*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 continuous lateral restraint (CLR), installed with diagonal bracing installed on the CLR 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. Refer to job's General Notes page for additional information.  
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 and 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 these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBCA: [sbccomponents.com](http://sbccomponents.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)

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

SEQN: 744406 / FROM: CDM	VAL	Ply: 1 Qty: 1	Job Number: 24-0494 Lane Addition Truss Label: V03	Cust: R 215 JRef: 1XWT2150005 T8 / DrwNo: 026.24.0823.01528 SSB / DF 01/26/2024
-----------------------------	-----	------------------	--	---



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs), or *=PLF
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 7-22 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 8th Ed. 2023 Res. HVHZ 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): 0.014 A 999 240 VERT(CL): 0.029 A 999 180 HORZ(LL): 0.005 A - - HORZ(TL): 0.010 A - - Creep Factor: 2.0 Max TC CSI: 0.320 Max BC CSI: 0.280 Max Web CSI: 0.104 VIEW Ver: 23.02.01A.1204.18	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL C* 83 /- /- /42 /11 /7 Wind reactions based on MWFRS C Brg Wid = 116 Min Req = - Bearing A is a rigid surface. Members not listed have forces less than 375# <b>Maximum Web Forces Per Ply (lbs)</b> Webs Tens.Comp. B - D 351 -438

#### Lumber

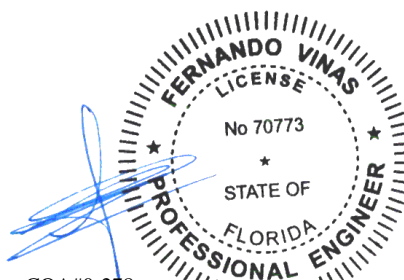
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #3;

#### Wind

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

#### Additional Notes

See DWGS VALTN220723 and VAL180220723 for valley details.  
The overall height of this truss excluding overhang is 2-11-0.

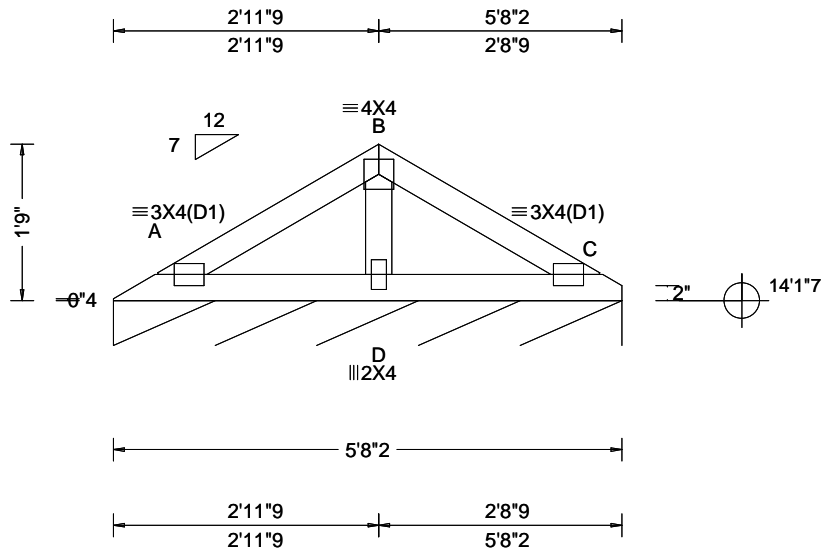


COA#0-278  
Florida Certificate of Product Approval #FL1999  
01/26/2024

**\*\*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 continuous lateral restraint (CLR), installed with diagonal bracing installed on the CLR 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. Refer to job's General Notes page for additional information.  
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 and 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 these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBCA: [sbccomponents.com](http://sbccomponents.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)

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

SEQN: 744408 / FROM: CDM	VAL	Ply: 1 Qty: 1	Job Number: 24-0494 Lane Addition Truss Label: V04	Cust: R 215 JRef: 1XWT2150005 T12 / DrwNo: 026.24.0823.01222 SSB / DF 01/26/2024
-----------------------------	-----	------------------	--	--



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs), or *PLF
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 7-22 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.15 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 8th Ed. 2023 Res. HVHZ 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): 0.003 A 999 240 VERT(CL): 0.006 A 999 180 HORZ(LL): 0.001 A - - HORZ(TL): 0.002 A - - Creep Factor: 2.0 Max TC CSI: 0.100 Max BC CSI: 0.081 Max Web CSI: 0.057 VIEW Ver: 23.02.01A.1204.18	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL C* 83 /- /- /41 /10 /6 Wind reactions based on MWFRS C Brg Wid = 68.1 Min Req = - Bearing A is a rigid surface. Members not listed have forces less than 375#

#### Lumber

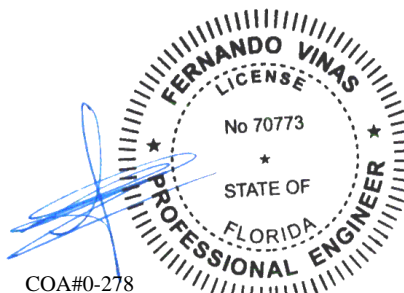
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #3;

#### 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 VALTN220723 and VAL180220723 for valley details.  
The overall height of this truss excluding overhang is 1-9-0.



COA#0-278  
Florida Certificate of Product Approval #FL1999  
01/26/2024

**\*\*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 continuous lateral restraint (CLR), installed with diagonal bracing installed on the CLR 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. Refer to job's General Notes page for additional information.  
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 and 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 these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBCA: [sbccomponents.com](http://sbccomponents.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)





# Valley Detail - ASCE 7-22: 180 mph, 30' Mean Height, Partially Enclosed, Exp. C, Kzt=1.00

Top Chord 2x4 SP #2N, SPF #1/#2, DF-L #2 or better.  
 Bot Chord 2x4 SP #2N or SPF #1/#2 or better.  
 Webs 2x4 SP #3, SPF #1/#2, DF-L #2 or better.

**\*\* Attach each valley to every supporting truss with:**  
 535# connection or with (1) Simpson H2.5A or  
 equivalent connector for  
 ASCE 7-22 180 mph. 30' Mean Height, Part. Enc.  
 Building, Exp. C, Wind TC DL=5 psf, Kzt = 1.00  
 Or  
 ASCE 7-22 160 mph. 30' Mean Height, Part. Enc.  
 Building, Exp. D, Wind TC DL=5 psf, Kzt = 1.00

Bottom chord may be square or pitched cut  
 as shown.

Valleys short enough to be cut as solid triangular  
 members from a single 2x6, or larger as required,  
 shall be permitted in lieu of fabricating from  
 separate 2x4 members.

All plates shown are Alpine Wave Plates.

Unless specified otherwise on engineer's sealed design, for vertical  
 valley webs taller than 7'-9" apply 2x4 "T" reinforcement, 80% length of  
 web, same species and grade or better, attached with 10d box  
 (0.128" x 3.0") nails at 6" o.c. In lieu of "T" reinforcement, 2x4 Continuous  
 Lateral Restraint applied at mid-length of web is permitted with diagonal  
 bracing as shown in DRWG BRCLBANC1014.

Top chord of truss beneath valley set must be braced with:  
 properly attached, rated sheathing applied prior to valley truss  
 installation.

Or

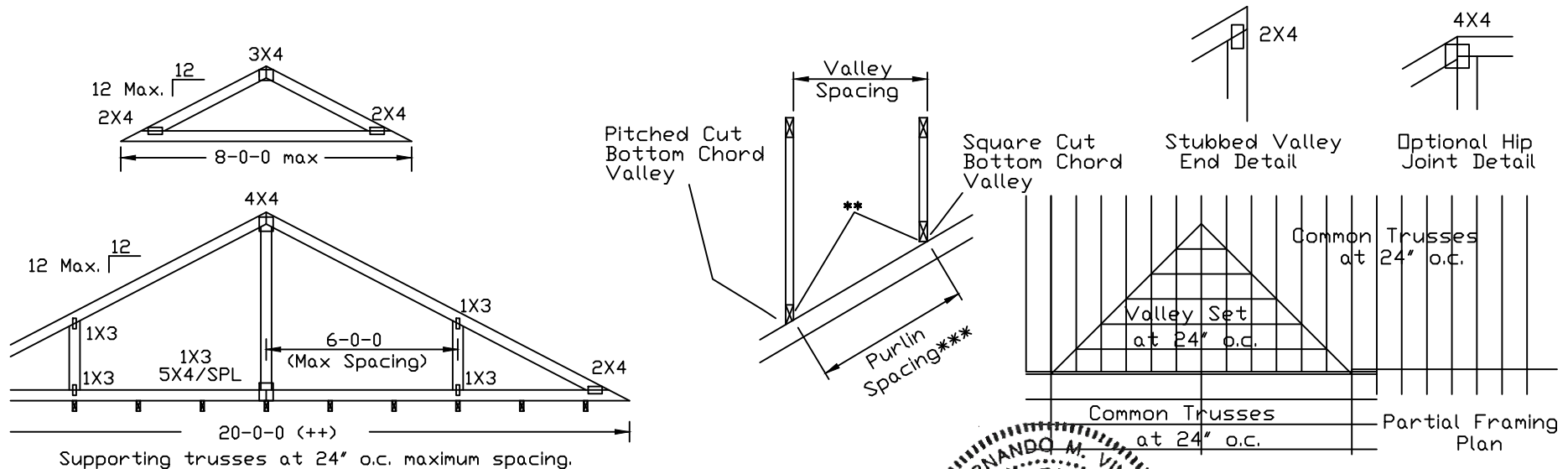
Purlins at 24" o.c. or as otherwise specified on engineer's sealed design

Or

By valley trusses used in lieu of purlin spacing as specified on  
 Engineer's sealed design.

**\*\*\* Note that the purlin spacing for bracing the top chord of the truss  
 beneath the valley is measured along the slope of the top chord.**

**++ Larger spans may be built as long as the vertical height does  
 not exceed 14'-0".**



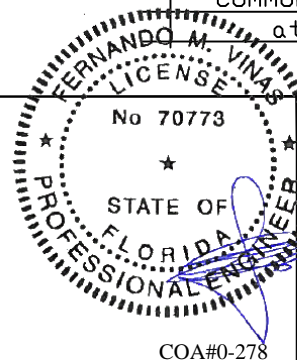
**\*\*\*WARNING\*\*\* READ AND FOLLOW ALL NOTES ON THIS DRAWING**  
**\*\*\*IMPORTANT\*\*\* FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS.**

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](http://www.alpineitw.com); TPI: [www.tpinet.org](http://www.tpinet.org); SBCA: [www.sbcacomponents.com](http://www.sbcacomponents.com); ICC: [www.iccsafe.org](http://www.iccsafe.org)



MC LL	30	30	40PSF	REF	VALLEY DETAIL
MC DL	20	15	7PSF	DATE	07/03/2023
MC DL	10	10	10 PSF	DRWG	VAL180220723
MC LL	0	0	0PSF		
TOT. LD.	60	55	57PSF		
DUR	26	25	1.33	1.15	1.15
SPACING					24.0"

Florida Certificate of Product Approval #FL1999

# Valley Detail - ASCE 7-22: 30' Mean Height, Enclosed, Exp. C, Kzt=1.00

Top Chord 2x4 SP #2N, SPF #1/#2, DF-L #2 or better.  
Bot Chord 2x4 SP #2N or SPF #1/#2 or better.  
Webs 2x4 SP #3, SPF #1/#2, DF-L #2 or better.

\*\* Attach each valley to every supporting truss with:  
(2) 16d box (0.135" x 3.5") nails toe-nailed for  
ASCE 7-22, 30' Mean Height, Enclosed Building, Exp. C,  
Wind TC DL=5 psf, Kzt = 1.00, Max. Wind Speed based on  
supporting truss material at connection location:  
140 mph for SP (G = 0.55, min.),  
125 mph for DF-L (G = 0.50, min.), or  
105 mph for HF & SPF (G = 0.42, min.).

Maximum top chord pitch is 10/12 for supporting trusses  
below valley trusses.

Bottom chord of valley trusses may be square or  
pitched cut as shown.

Valleys short enough to be cut as solid triangular  
members from a single 2x6, or larger as required,  
shall be permitted in lieu of fabricating from  
separate 2x4 members.

All plates shown are Alpine Wave Plates.

Unless specified otherwise on engineer's sealed design, for vertical  
valley webs taller than 7'-9" apply 2x4 "T" reinforcement, 80% length of  
web, same species and grade or better, attached with 10d box  
(0.128" x 3.0") nails at 6" o.c. In lieu of "T" reinforcement, 2x4 Continuous  
Lateral Restraint applied at mid-length of web is permitted with diagonal  
bracing as shown in DRWG BRCLBANC1014.

Top chord of truss beneath valley set must be braced with:  
properly attached, rated sheathing applied prior to valley truss  
installation.

Or

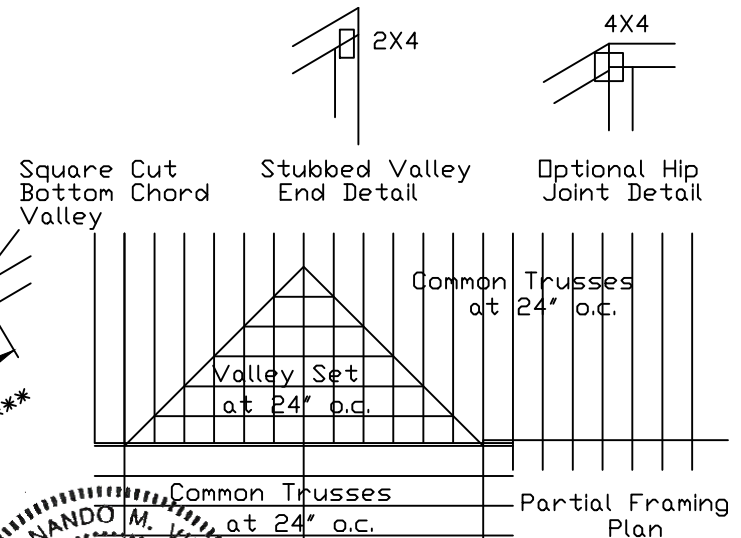
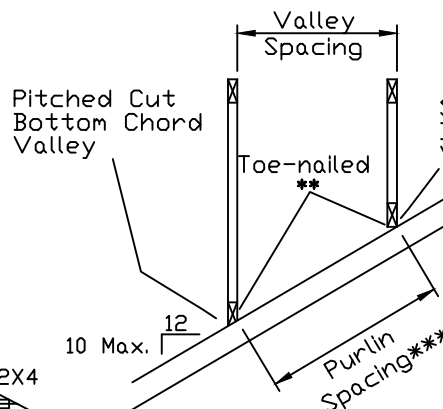
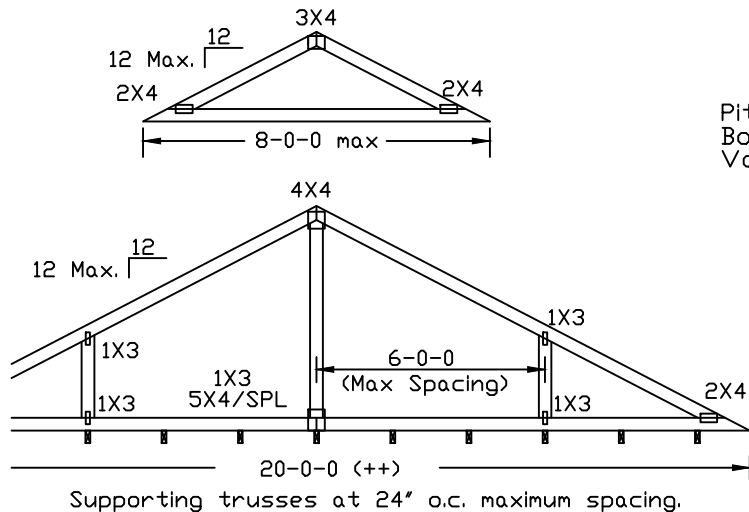
Purlins at 24" o.c. or as otherwise specified on engineer's sealed design

Or

By valley trusses used in lieu of purlin spacing as specified on  
Engineer's sealed design.

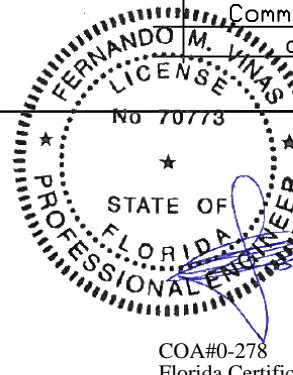
\*\*\* Note that the purlin spacing for bracing the top chord of the truss  
beneath the valley is measured along the slope of the top chord.

++ Larger spans may be built as long as the vertical height does  
not exceed 14'-0".



155 Harlem Ave  
North Building, 4th Floor  
Glenview, IL 60025

**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 83, 87 or 810, 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](http://www.alpineitw.com) TPI: [www.tpinst.org](http://www.tpinst.org) SBCA: [www.sbcacomponents.com](http://www.sbcacomponents.com) ICC: [www.iccsafe.org](http://www.iccsafe.org)



TC LL	30	30	40PSF	REF	VALLEY DETAIL
TC DL	20	15	7 PSF	DATE	07/03/2023
SBC DL	10	10	10 PSF	DRWG	VALTN220723
BC LL	0	0	0 PSF		
TOT. LD.	60	55	57PSF		
01/26/2024					
DUR.FAC.1.25/1.33	1.15	1.15			
SPACING	24.0"				

Florida Certificate of Product Approval #F1 1999