



FL REG# 278. Yoonhwak Kim, FL PE #86367

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Site Information:	Page 1:
Customer: W. B. Howland Company, Inc.	Job Number: 21-5090
Job Description: Frowick	
Address: 7722 Still Lakes Dr, Odessa, FL 33556	

Job Engineering Criteria:	
Design Code: FBC 7th Ed. 2020 Res	IntelliVIEW Version: 20.01.01A
	JRef #: 1X322150001
Wind Standard: ASCE 7-16	Wind Speed (mph): 130
Building Type: Closed	Design Loading (nsf): 40.00

This package contains general notes pages, 6 truss drawing(s) and 4 detail(s).

Item	Drawing Number	Truss	Item	Drawing Number	Truss
1	050.21.1029.04477	A01	2	050.21.1029.06590	A02
3	050.21.1029.08750	A03	4	050.21.1029.14467	PB01
5	050.21.1029.16447	PB02	6	050.21.1029.32960	PB03
7	A14015ENC160118		8	BRCLBSUB0119	
9	GBLLETIN0118		10	PB160160118	

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.

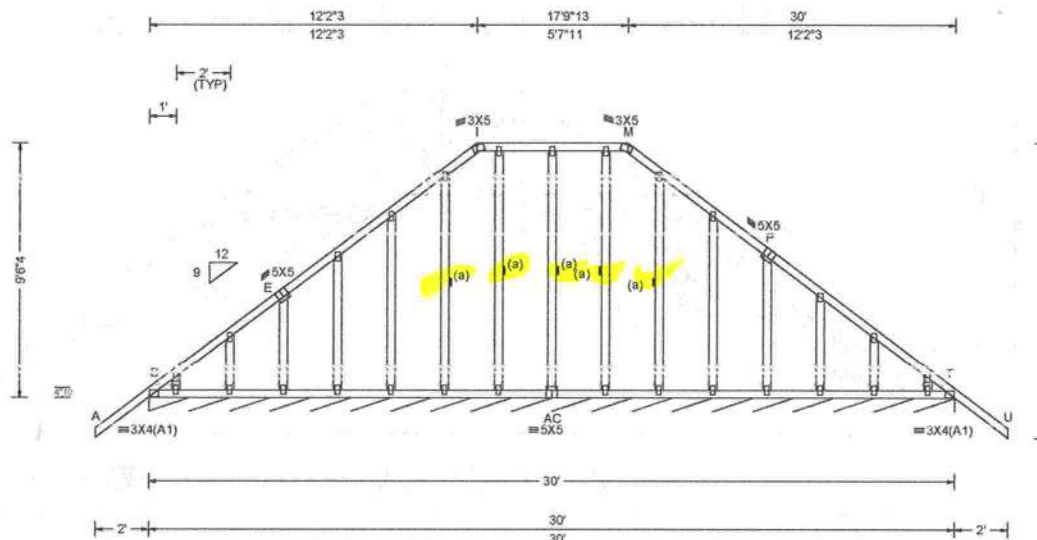
Refer to ASCE-7 for Wind and Seismic abbreviations.

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.: 514 Earth City Expressway, Suite 242, Earth City, MO 63045; 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.sbcindustry.com.

SEQN: 611940 FROM: CDM	GABL Ply: 1 Qty: 2	Job Number: 21-5090 Frowick Truss Label: A01	Cust: R215 JRef: 1X322150001 T6 DrwNo: 050.21.1029.04477 / YK 02/19/2021
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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 7-16 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 Rev. 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): 0.004 I 999 480 VERT(CL): 0.006 I 999 360 HORZ(LL): 0.005 O - - HORZ(TL): 0.007 O - - Creep Factor: 2.0 Max TC CSI: 0.351 Max BC CSI: 0.060 Max Web CSI: 0.119 VIEW Ver: 20.01.01A.0724.11	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL T* 94 /- /- /51 /8 /12 Wind reactions based on MWFRS T Brg Width = 360 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;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Plating Notes

All plates are 2X4 except as noted.

Wind

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

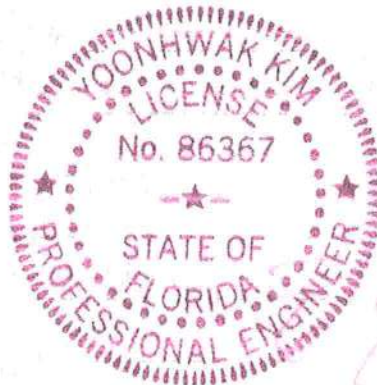
Wind loading based on both gable and hip roof types.

Additional Notes

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

Refer to DWG PB160160118 for piggyback details.

The overall height of this truss excluding overhang is 9-6-4.



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02/19/2021

****WARNING**** READ AND FOLLOW ALL NOTES ON THIS DRAWING!
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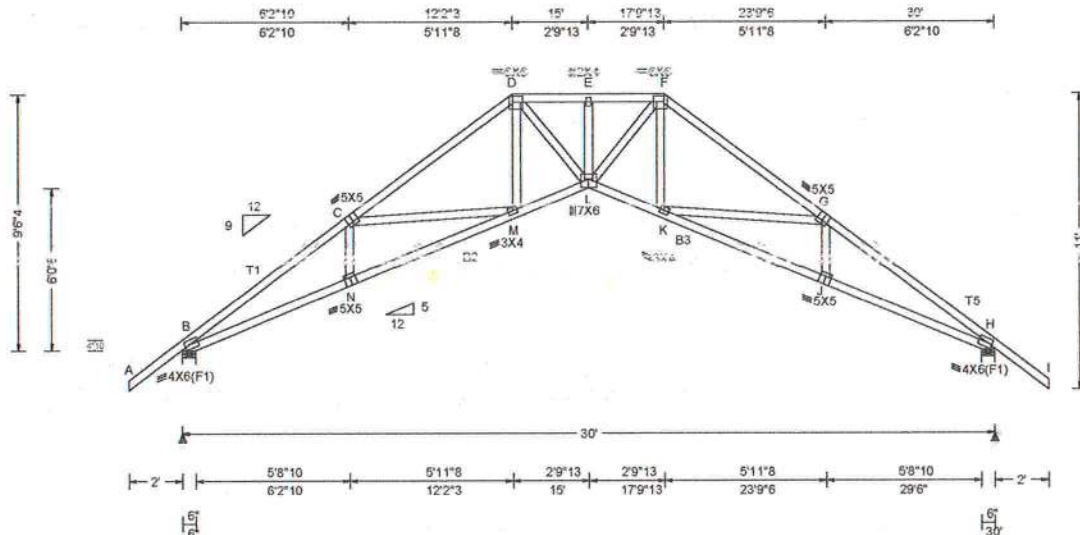
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCEA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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. 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; TPI: tpinst.org; SBCEA: sbceindustry.com; ICC: iccsafe.org; AWC: awc.org

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SEQN: 611937 FROM: CDM	COMN Qty: 16	Ply: 1	Job Number: 21-5090 Frowick Truss Label: A02	Cust: R 215 JRef: 1X322150001 T4 DrwNo: 050.21.1029.06590 / YK 02/19/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	Maximum Reactions (lbs)
TCCL: 20.00 TGDL: 10.00 BCCL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCL: 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: 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 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): 0.282 E 999 480 VERT(CL): 0.596 E 598 360 HORZ(LL): 0.312 J - - HORZ(TL): 0.661 J - - Creep Factor: 2.0 Max TC CSI: 0.720 Max BC CSI: 0.866 Max Web CSI: 0.449 VIEW Ver: 20.01.01A.0724.11	Maximum Reactions (lbs) Gravity Loc R+ /R- /Rh Non-Gravity /Rw /U /RL B 1438 /- /- /906 /116 /348 H 1438 /- /- /906 /116 /- Wind reactions based on MWFRS B Brg Width = 6.0 Min Req = 1.5 H Brg Width = 6.0 Min Req = 1.5 Bearings B & 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 38 -3415 E - F 0 -2935 C - D 0 -2793 F - G 0 -2792 D - E 0 -2935 G - H 40 -3414

Lumber

Top chord: 2x4 SP #2; T1, T5 2x4 SP M-31;
Bot chord: 2x4 SP M-31; B2, B3 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

Refer to DWG PB160160118 for piggyback details.
The overall height of this truss excluding overhang is 9'-6".

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens. Comp.
R - N	2814 -178	I - K	2322 0
N - M	2856 -180	K - J	2855 0
M - L	2323 0	J - H	2813 0

Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. Comp.
C - M	323 -457	L - F	1178 -40
D - M	395 -67	K - F	395 -66
D - L	1176 0	K - G	347 -480



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WARNING READ AND FOLLOW ALL NOTES ON THIS DRAWING!

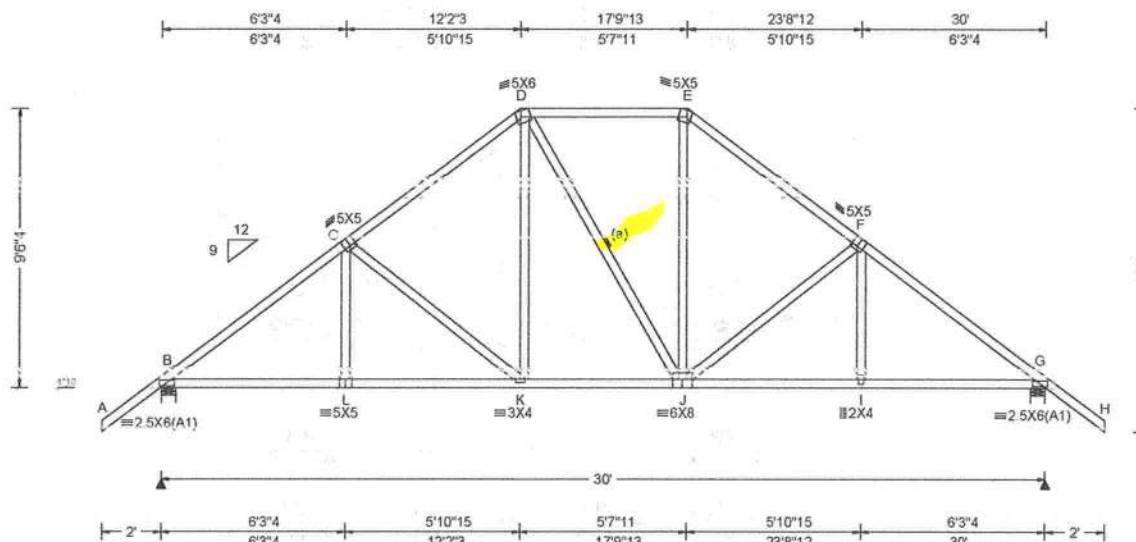
IMPORTANT FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

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. 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; TPI: tpi.net; SBCA: sbcinstitute.com; ICC: iccsafe.org; AISC: asc.org

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Orlando FL 32821



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
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): 0.063 K 999 480	Loc R+ / R- / Rh / Rw / U / RL
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.126 K 999 360	B 1477 /- /- /893 /124 /348
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.034 I - -	G 1468 /- /- /893 /124 /-
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.068 I - -	Wind reactions based on MWFRS
NCBCLL: 10.00	Mean Height: 15.00 ft		Creep Factor: 2.0	B Brg Width = 6.0 Min Req = 1.7
Soffit: 2.00	TCDL: 5.0 psf	Building Code:	Max TC CSI: 0.466	G Brg Width = 6.0 Min Req = 1.7
Load Duration: 1.25	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max BC CSI: 0.561	Bearings B & G are a rigid surface.
Spacing: 24.0 "	MWFRS Parallel Dist: 0 to h/2	TPI Std: 2014	Max Web CSI: 0.443	Members not listed have forces less than 375#
	C&C Dist a: 3.00 ft	Rep Fac: Yes		Maximum Top Chord Forces Per Ply (lbs)
	Loc. from endwall: Any	FT/RT:20(0)/10(0)		Chords Tens.Comp. Chords Tens. Comp.
	GCpi: 0.18	Plate Type(s):		
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.01.01A.0724.11	
Lumber				B - C 248 -1841 E - F 262 -1436
				C - D 265 -1458 F - G 246 -1828
				D - E 278 -1062

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

(a) Continuous lateral restraint equally spaced on member

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

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

Wind loading based on both gable and hip roof types.

Refer to DWG PB160160118 for piggyback details.

The overall height of this truss excluding overhang is 9.64



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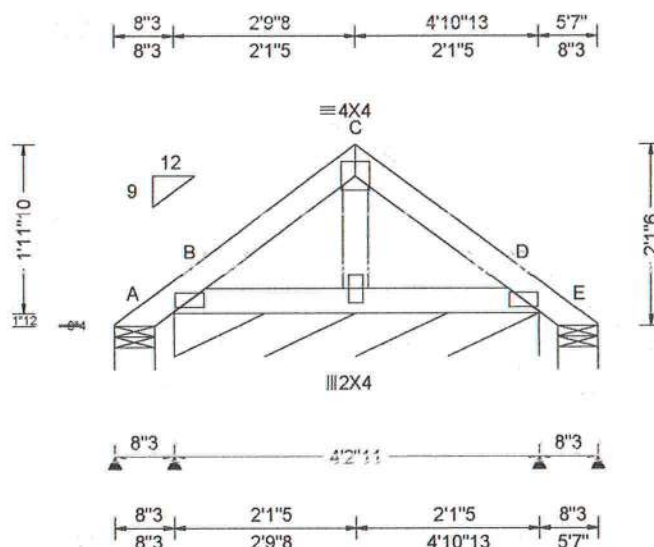
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For more information see these web sites: Alpine: alpineitw.com; TPI: tpinst.org; SBCA: sbcindustry.com; ICC: iccsafe.org; AWC: awc.org



5750 Forum Drive
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SEQN: 611944 FROM: CDM	GABL Qty: 2	Ply: 1 Qty: 2	Job Number: 21-5090 Frowick Truss Label: PB01	Cust: R 215 JRef: 1X322150001 T5 DrwNo: 050.21.1029.14467 / YK 02/19/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	Maximum Reactions (lbs), or *=PLF
TCLL: 20.00 TGDL: 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 TCCL: 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): 0.000 F 999 480 VERT(CL): 0.000 F 999 360 HORZ(LL): 0.000 F - - HORZ(TL): 0.000 F - - Creep Factor: 2.0 Max TC CSI: 0.043 Max BC CSI: 0.022 Max Web CSI: 0.012 VIEW Ver: 20.01.01A.0724.11	Gravity Loc R+ /R- /Rh /Rw /U /RL Non-Gravity A 0 /-1 /- /44 /39 /57 B* 85 /- /- /65 /26 /- E 0 /-1 /- /19 /4 /- Wind reactions based on MWFRS A Brg Width = 5.5 Min Req = 1.5 B Brg Width = 50.7 Min Req = - E Brg Width = 5.5 Min Req = 1.5 Bearings A, B, & E are a rigid surface. Members not listed have forces less than 275#

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.

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.

Refer to DWG PB160160118 for piggyback details.

The overall height of this truss excluding overhang is 11'-7"-0.



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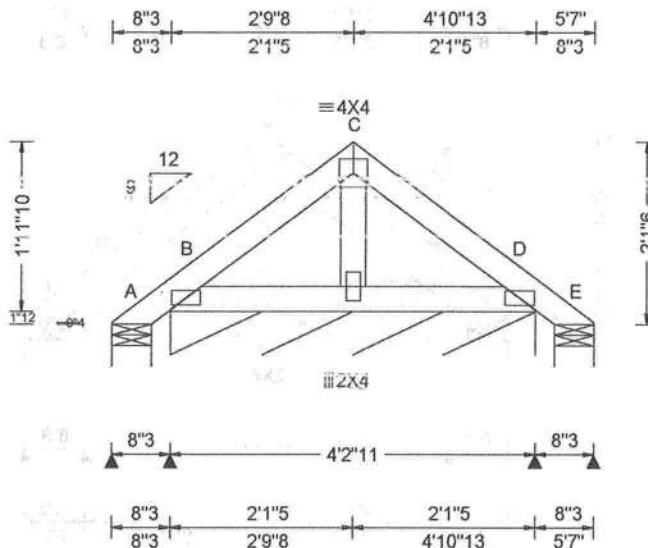
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SEQN: 611942 FROM: CDM	GABL Qty: 16	Ply: 1 Job Number: 21-5090 Frowick Truss Label: PB02	Cust: R 215 JRef: 1X322150001 T3 DrwNo: 050.21.1029.16447 / YK 02/19/2021
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Loading Criteria (psf)		Wind Criteria		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): 0.000 F 999 480	Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
BCLL: 0.00		Enclosure: Closed		Lu: NA	Cs: NA		VERT(CL): 0.000 F 999 360	A	0	/-1	/-	/44	/39	/57
BCDL: 10.00		Risk Category: II		Snow Duration: NA			HORZ(LL): 0.000 F - -	B*	85	/-	/-	/67	/26	/-
Des Ld: 40.00		EXP: C Kzt: NA					HORZ(TL): 0.000 F - -	E	0	/-1	/-	/9	/4	/-
NCBCLL: 10.00		Mean Height: 15.00 ft		Building Code:			Creep Factor: 2.0	Wind reactions based on MWFRS						
Soffit: 2.00		TCDL: 5.0 psf		FBC Title Ed. 2020 Res.			Max TO CSI: 0.043	A	Brg Width = 5.5			Min Req = 1.5		
Load Duration: 1.25		BCDL: 5.0 psf		TPI Std: 2014			Max BC CSI: 0.023	B	Brg Width = 50.7			Min Req = -		
Spacing: 24.0 "		MWFRS Parallel Dist: 0 to h/2		Rep Fac: Yes			Max Web CSI: 0.012	E	Brg Width = 5.5			Min Req = 1.5		
		C&C Dist a: 3.00 ft		FT/RT:20(0)/10(0)				Bearings A, B, & E are a rigid surface.						
		Loc. from endwall: not in 4.50 ft		Plate Type(s):				Members not listed have forces less than 375#						
		GCpi: 0.18		WAVE										
		Wind Duration: 1.60					VIEW Ver: 20.01.01A.0724.11							

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.

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 & BULLETIN0118 for gable wind bracing and other requirements.

Refer to DWG PB160160118 for piggyback details.

The overall height of this truss excluding overhang is 11'-7"-10.



FL REG# 278, Yoonhwak Kim, FL PE #86367
02/19/2021

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

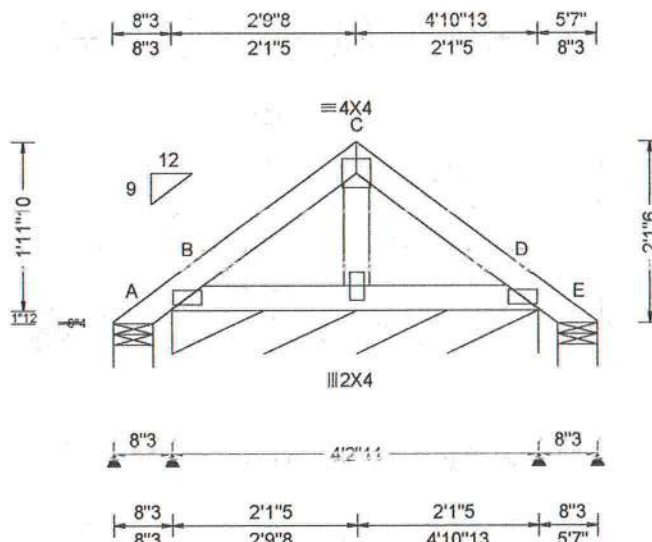
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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 members 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; TPI: tpinst.org; SBCA: sbcindustry.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 612454 FROM: CDM	GABL Qty: 6	Ply: 1 Qty: 6	Job Number: 21-5090 Frowick Truss Label: PB03	Cust: R 215 JRef: 1X322150001 T1 DrwNo: 050.21.1029.32960 / YK 02/19/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	Maximum Reactions (lbs), or *PLF
TCCL: 20.00 TCDL: 10.00 BCCL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCL: 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): 0.000 F 999 480 VERT(UL): 0.000 F 999 360 HORZ(LL): 0.000 F - - HORZ(UL): 0.000 F - - Creep Factor: 2.0 Max TC CSI: 0.043 Max BC CSI: 0.022 Max Web CSI: 0.012 VIEW Ver: 20.01.01A.0724.11	Gravity Loc R+ /R- /Rh Non-Gravity /Rw /U /RL A 0 /-1 /- /44 /39 /57 B* 85 /- /- /65 /26 /- E 0 /-1 /- /9 /4 /- Wind reactions based on MWFRS A Brg Width = 5.5 Min Req = 1.5 B Brg Width = 50.7 Min Req = - E Brg Width = 5.5 Min Req = 1.5 Bearings A, B, & E are a rigid surface. Members not listed have forces less than 275#

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.

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.
Refer to DWG PB160160118 for piggyback details.
The overall height of this truss excluding overhang is 11'-7-10".



FL REG# 272, Yoonhwak Kim, FL PE #86367
02/19/2021

****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-7 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; TPI: tpinet.org; SBCA: sbcaductility.com; ICC: iccsafe.org; AWCI: awci.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando, FL 32821

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

Gable Stud Reinforcement Detail

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

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

Bracing Group Species and Grades

Group A	Group B
Service Pine-Fir #1 / #2 Standard Stud Standard	Hard-Fir #2 Stud Standard

Group B

Hard-Fir

#1 & 2x4

Southern Pine

#1

Group A

Hard-Fir

#1 & 2x4

Southern Pine

#1

Group B

Hard-Fir

#1 & 2x4

Southern Pine

#1

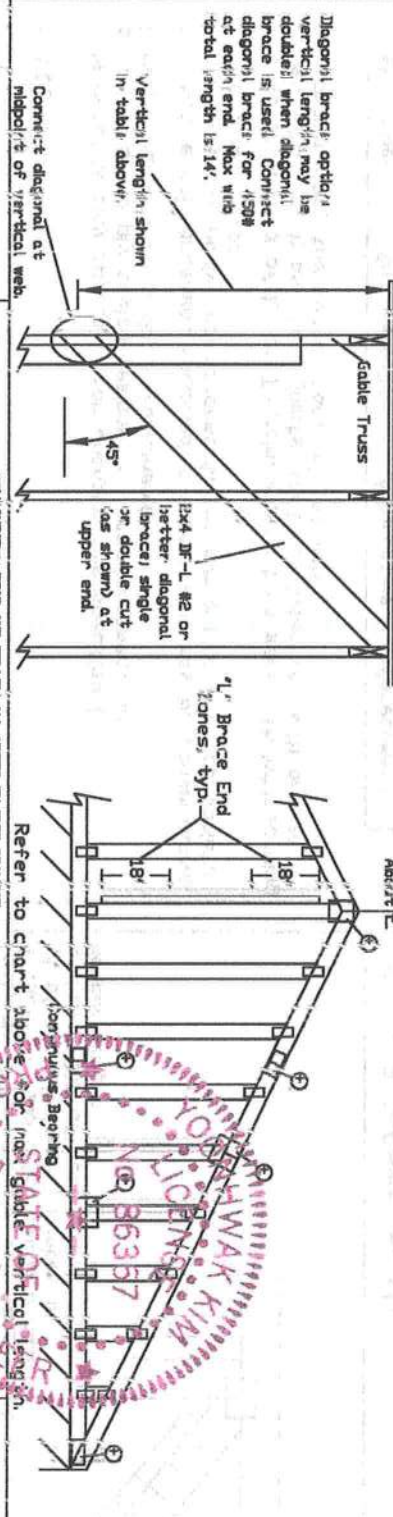
Group A

Hard-Fir

#1 & 2x4

Southern Pine

#1



Attach "L" braces with 10d (162x30) nls nls.

For "L" brace space nls at 2' o.c.

In 13' end zones and 4' i.c. between zones.

For "L" brace space nls at 3' o.c.

In 13' end zones and 6' i.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 the Building Designer for conditions not addressed by this detail.

ALPINE

AN ITW COMPANY

614 Earth City Expressway
 3180 242
 Earth City, MO 63041

IMPORTANT: READ AND FOLLOW ALL NOTES ON THIS DRAWING AND THE SPECIFICATIONS.

These notes apply to the entire drawing. Refer to the notes on the drawings for specific details. The notes on the drawings are the responsibility of the building designer. The notes on the drawings are the responsibility of the building designer. The notes on the drawings are the responsibility of the building designer.

MAX. TOT. LD. 60 PSF

MAX. SPACING 24.0"

REF ASCE 7-16-GAB14015

DATE 01/26/2018

DRWG A14015ENC160118

This detail is to be used when a Continuous Lateral Restraint (CLRS) is specified on a truss design but an alternative web reinforcement method is desired.

This detail is only applicable for changing the specified clear shown on single ply sealed designs to T-reinforcement or L-reinforcement or slab reinforcement.

Alternative reinforcement specified in chart below may be conservative. For minimum alternative reinforcement, re-run design with appropriate reinforcement type.

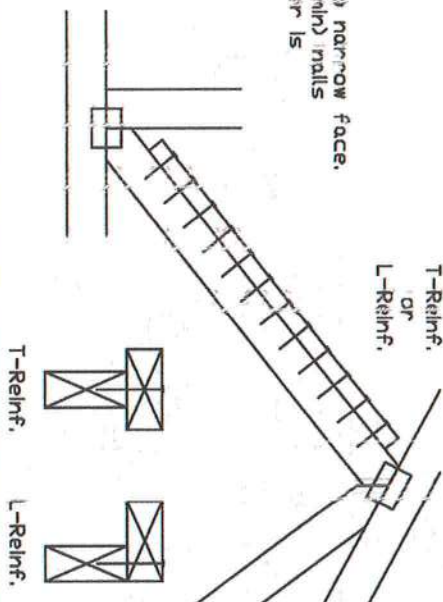
Use scabs instead of L- or T-reinforcement on webs with intersecting truss joints, such as K-web joints, that may interfere with proper application along the narrow face of the web.

Web Member Size	Specified CLR Restrallnt	Alternative Reinforcement T - or L - Reinf.	Scab Reinf.
2x3 or 2x4	1 ROW	2x4	1-2x4
2x3 or 2x4	2 ROWS	2x5	2-2x4
2x6	1 ROW	2x4	1-2x6
2x6	2 ROWS	2x5	2-2x4@0
2x8	1 ROW	2x5	1-2x8
2x8	2 ROWS	2x5	2-2x6@0

T-reinforcement, L-reinforcement, or scab reinforcement to be same species and grade or better than web member unless specified otherwise on Engineer's sealed design.

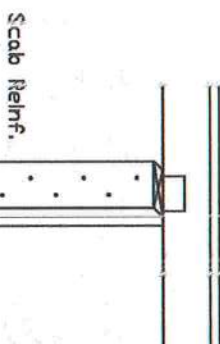
- ① Center scab on wide face of web. Apply (1) scab to each face of web.

Apply to either side of web narrow face Attach with 10d (0.128"x3.0") nails at 6" o.c. Reinforcing member is a minimum 80% of web member length.



Scab Reinforcement

Apply scab(s) to wide face of web. No more than (1) scab per face. Attach with 10d (0.128"x3.0") nails at 6" o.c. Reinforcing member is a minimum 80% of web member length.



IMPORTANT: FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

Trussing regular extreme care in fastening, nailing, stitching and bracing. Refer to and follow the latest edition of ASCE (American Society of Civil Engineers) "Specification for Steel Decking" for details of bracing and fastening. Bracing shall be provided in accordance with the latest edition of ASCE (American Society of Civil Engineers) "Specification for Steel Decking". Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached roof ceiling. Locations free from permanent lateral restraint or tabs shall have bracing installed per ASCE section 33.37 or 33.41, as applicable. Apply plates to each face of truss and position as shown above and on the joint bents, unless noted otherwise. Refer to drawings 150A-2 for standard plate positions.

Alphatec, a division of ITV Building Components Group Inc. will 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, or bracing of trusses.

A seal on retaining or cover plates listing the design engineer's name, address, telephone number and date of issuance shall be required for all drawings. The responsibility of the Building Designer per ANSI/TPI 1 Sec.2 for any structure is the responsibility of the Building Designer.

For more information see this job's general notes page and three web sites:
ALPINE www.alpineit.com IP's www.ipstesting.com ICD www.icdweb.org

Yoonhwak Kim, FL PE #86367

TC LL	PSF	REF	CLR Subst.
TC DL	PSF	DATE	01/02/19
BC DL	PSF	DRWG	BRCLBSUB0119
BC LL	PSF		
7 DT, LD.	PSF		
DUR. FAC.			
SPACING			

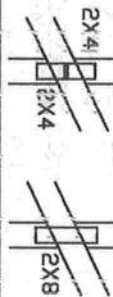
The diagram illustrates a gable roof truss system. Key components and labels include:

- Roof Truss:** The main structural framework of the roof, including the gable end and the main roof slope.
- Supports:** Indicated by circles with a '+' sign, showing the points where the roof structure is supported.
- Connections:** Indicated by circles with an 'x' sign, showing the points where different structural members meet.
- Labels:**
 - Roof Truss** (at the top right)
 - Support** (at the bottom right)
 - Connections** (at the bottom left)
 - Gable Vertical Length** (at the bottom left)

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



Provide connections for uplift specified on the engineered truss design.

End Driver Nalls!

(4) **Common** (0.148"x 3.2"min) Nails at 4' o.c. plus
nails in the top and bottom chords.

Toenailed Halls:
10d Common (11.48"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 Drawing: 4

A1:015051014, A12015051014, A110115051014, A140115051014, A1:030051014, A12030051014, A11030051014, A14030051014

ASCE 7-10 & ASCE 7-16 Gable Detail Drawings

A151515ENC100118, A1201515ENC100119, A1401515ENC100118, A1601515ENC100117,
A1801515ENC100118, A2001515ENC100118, A2201515ENC100118, A2401515ENC100118, A2601515ENC100118

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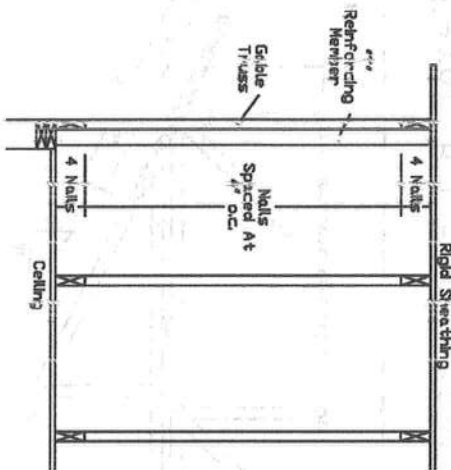
A11030ENCI00118, A20030JNCI00118, A20300ENCI00119, A20030JNCI00119

S1E01SENCL00118 S2001SINCL00118 S2011SENCL00118
S1I01SENCL00118 S2001SINCL00118 S2011SENCL00118
S1J01SENCL00118 S2001SINCL00118 S2011SENCL00118
S1K01SENCL00118 S2001SINCL00118 S2011SENCL00118
S1L01SENCL00118 S2001SINCL00118 S2011SENCL00118
S1M01SENCL00118 S2001SINCL00118 S2011SENCL00118
S1N01SENCL00118 S2001SINCL00118 S2011SENCL00118
S1O01SENCL00118 S2001SINCL00118 S2011SENCL00118
S1P01SENCL00118 S2001SINCL00118 S2011SENCL00118
S1Q01SENCL00118 S2001SINCL00118 S2011SENCL00118
S1R01SENCL00118 S2001SINCL00118 S2011SENCL00118
S1S01SENCL00118 S2001SINCL00118 S2011SENCL00118
S1T01SENCL00118 S2001SINCL00118 S2011SENCL00118
S1U01SENCL00118 S2001SINCL00118 S2011SENCL00118
S1V01SENCL00118 S2001SINCL00118 S2011SENCL00118
S1W01SENCL00118 S2001SINCL00118 S2011SENCL00118
S1X01SENCL00118 S2001SINCL00118 S2011SENCL00118
S1Y01SENCL00118 S2001SINCL00118 S2011SENCL00118
S1Z01SENCL00118 S2001SINCL00118 S2011SENCL00118

SIU530ENC100118, SI20301NC100118, SI4130ENC100113, SI62301NC100116,

SI03030ENIC100118, S200303INC100118, S240303CNT100118, S200303PED100118

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



IMPORTANT: READ AND FOLLOW ALL NOTES ON THIS DRAWING
BEFORE BEGINNING THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS.

Threats against extreme care in fabricating, handling, siting, installing and bracing. Refer to and follow the relevant section of BSIC Calling Component Safety Information, by III and SIVC for safety practices prior to performing these functions. Installers shall provide temporary bracing per BSIC. Unless noted otherwise, 2x2 chord shall have properly attached structural sheathing and bottom chord shall have a properly attached mid rail section. Locations for permanent lateral restraint of webs shall have bracing installed per BSIC calling. 2x2, 3I or 30A, as applicable. Apply bolting to each face of thrust and position as shown above and on the Joint Details. Refer to each face of thrust and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 1504-Z for standard plate positions.

Alpine, a division of ITV Holding Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in accordance with AWS/T1, or for hoisting, slipping, installation or handling 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/T11.1 Sec2.

For more information see this job's general notes page and the web site at: www.alphindustrial.com. TTY: alphatrans@att.net, FAX: alphatrans@att.net, or call 800-769-2778.

ALPINE

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Suite 242
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ALPNED www.alphatv.com TPU www.tphs.org :3CM www.isochindustry.org :CD www.itsa-televisi#278 Yoonhwak k.im. FI PE #86367

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

REF LET-IN VERT

DATE 01/02/2018

DRWG GBLETTIN0118

Maximum allowable 7" reinforced gable vertical length is 14' from top to bottom chord.
7" reinforcing member material must match size, species, and grade of the 1" reinforcing member.
Web Length Increase w/ 7" Brace

Examples

ASCE 7-10 Wind Speed = 120 mph

Mean Roof Height = 30 ft, Kzt = 1.0,
Gable Vertical = 24° or. Sp #3

Reinforcing Member Size =

$$T^* \text{ Brace Increase (From Above)} = 10\% = 1.30$$

Maximum 'T' Reinforced Gable Vertical

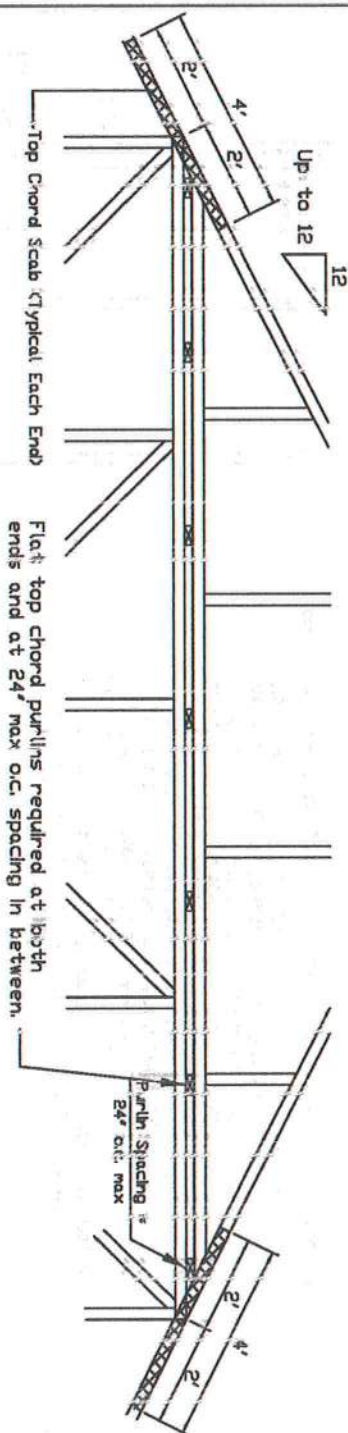
1.30 x 8' 7" = 11' 2"

Piggyback Detail - ASCE 7-16: 160 mph, 30' Mean Height, Enclosed, Exposure C, Kzt=1.00

160 mph Wind, 3000 ft Mean Hgt, ASCE 7-16, Enclosed Bldg, located anywhere in roof, Exp C, Wind III = 50 psf (rh), Kzt=1.0.
Dr 160 mph Wind, 3000 ft Mean Hgt, ASCE 7-16, Enclosed Bldg, located anywhere in roof, Exp II, Wind III = 50 psf (rh), Kzt=1.0.

Note: Top chords of trusses supporting piggyback cap trusses must be adequately braced by sheathing or purlins. The building Engineer of Record shall provide diagonal bracing or any other suitable anchorage to permanently restrain purlins, and lateral bracing for out of plane loads over gable ends. Maximum truss spacing is 24' o.c. detail is not applicable if cap supports additional loads such as (cupola, steeple, chimney or drag strut loads).
Refer to Engineer's sealed truss design drawing for piggyback and base truss specifications.

Detail A : Purlin Spacing = 24" o.c. or less

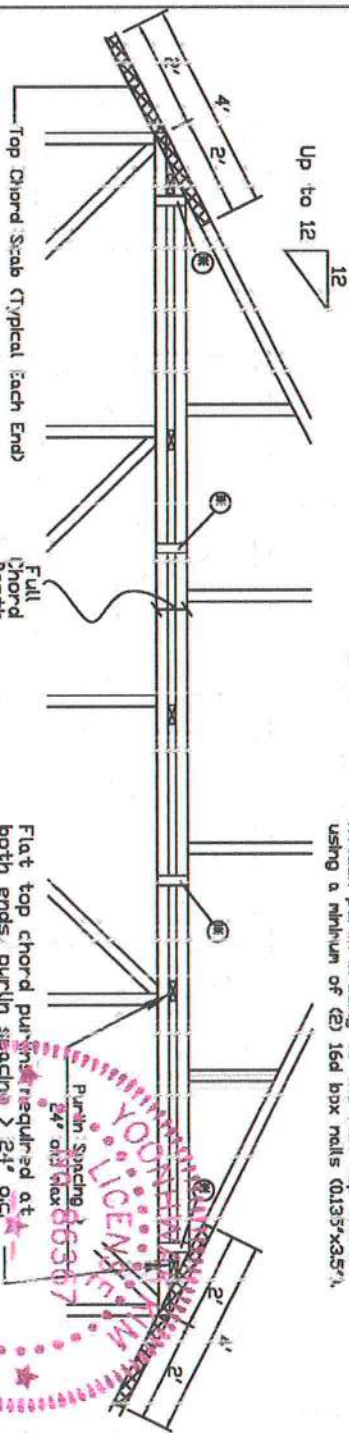


Piggyback cap truss slant nailed to all top chord purlin bracing with (2) 16d box nails (0.135"x3.5") and secure top chord with 2x4 #3 grade scab (1 side only at each end) attached with (2) rows of 10d box nails (0.128"x3") at 4' o.c.

Attach purlin bracing to the flat top chord using (2) 16d box nails (0.135"x3.5").

The top chord #3 grade 2x4 scab may be replaced with either of the following: (1) 3x8 Tru-lux plate attached with (8) 0.120"x1.375" nails, (4) into cap TC & (4) into base truss TC or (2) 2x8 wave piggyback plate attached to the piggyback truss TC and attached to the base truss TC with (4) 0.120"x1.375" nails. Note: Nailing thru holes of wave plate is acceptable.

Detail B : Purlin Spacing > 24" o.c.



Piggyback cap truss slant nailed to all top chord purlin bracing with (2) 16d box nails (0.135"x3.5") and secure top chord with 2x4 #3 grade scab (1 side only at each end) attached with (2) rows of 10d box nails (0.128"x3") at 4' o.c. Attach purlin bracing to the flat top chord using a minimum of (2) 16d box nails (0.135"x3.5").

Flat top chord purlins required at both ends, purlin spacing > 24' o.c.

Note: If purlins or sheathing are not specified on the flat top of the base truss, purlins must be installed at 24' o.c. max. and use Detail A.

ENGINEER'S SEAL AND FILL IN ALL SPACES IN THIS DRAWING.

DESIGNER'S SEAL AND FILL IN ALL SPACES IN THIS DRAWING. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE STRUCTURE AND THE INSTALLATION OF THE STRUCTURE. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE STRUCTURE AND THE INSTALLATION OF THE STRUCTURE.

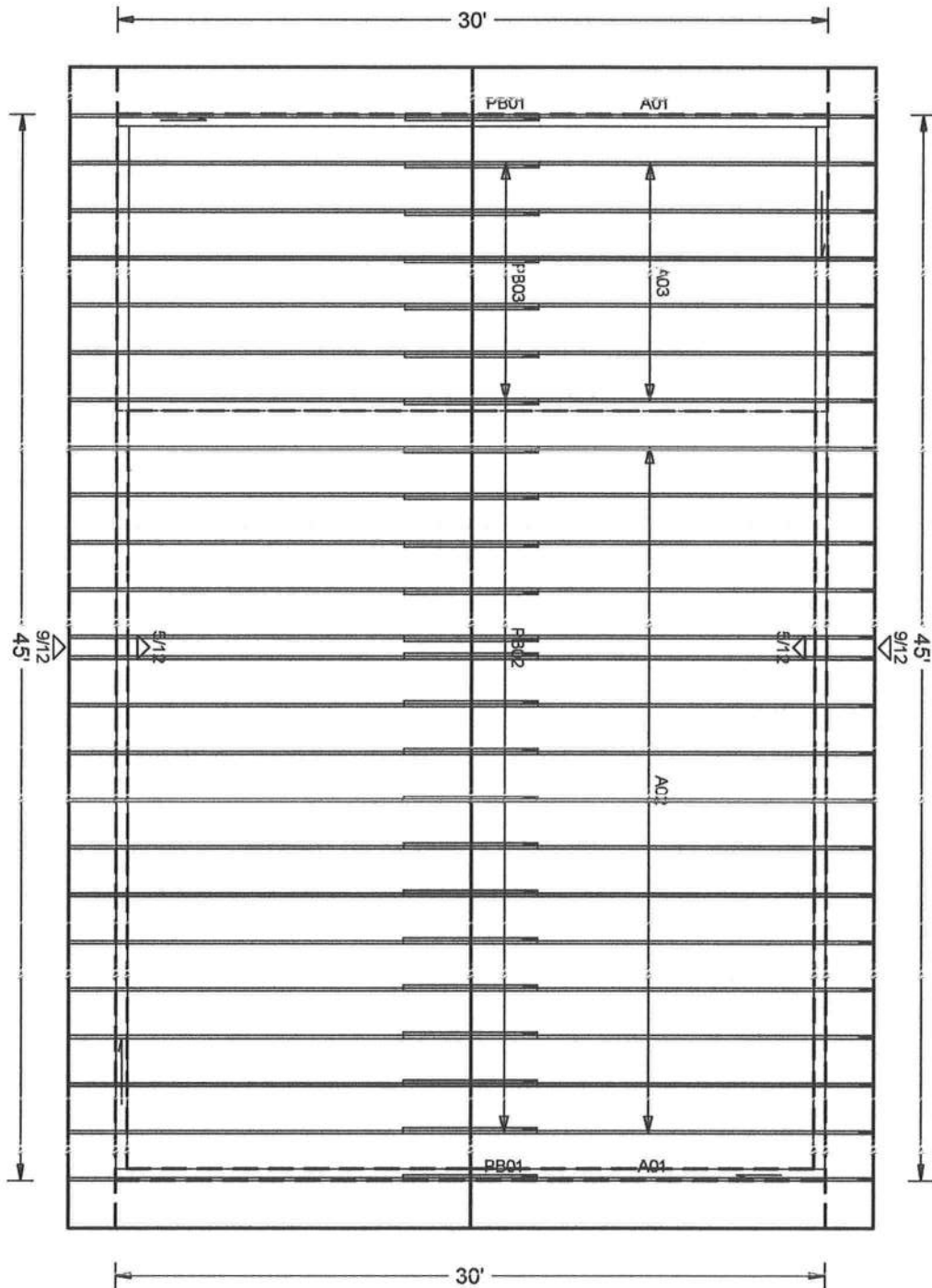
ALPINE
ANITW COMPANY

13723 Riverport Drive
Suite 200
Maryland Heights, MO 63013

STATE OF
FLORIDA
PROFESSIONAL ENGINEER
240178

In addition, provide connection with one of the following methods:	
Tru-lux	Use 3x8 Tru-lux plates for 2x4 chord member, and 3x10 Tru-lux plates for 2x6 and larger chord members. Attach to each face @ 8' o.c. with (4) 0.120"x1.375" nails into cap bottom chord and (4) in base truss top chord. Tru-lux plates may be staggered 4' o.c. front to back faces.
APA Rated Gusset	8"x8"x7/16" (min) APA rated sheathing gussets (each face). Attach @ 8' o.c. with (8) 6d common (0.113"x2") nails per gusset, (4) in cap bottom chord and (4) in base truss top chord. Gussets may be staggered 4' o.c. front to back faces.
2x4 Vertical Joists	Attach 2x4 full chord depth joists (each face) at 8' o.c. with (6) 10d box nails (0.128"x3") per scab, (3) in cap bottom chord and (3) in base truss top chord. Scabs may be staggered 4' o.c. front to back faces.
2x8 Wave Piggyback Plate	One 2x8 wave piggyback plate to each face @ 8' o.c. Attach teeth to piggyback at time of fabrication. Attach to supporting truss with (4) 0.120"x1.375" nails per face per ply. Piggyback plates may be staggered 4' o.c. front to back faces.

REF	PIGGYBACK
DATE	01/02/2018
DRWG	PB160160118
SPACING	24.0"



W. B. Howland Truss Co.
 6011th St. SW
 Live Oak, FL 32064
 (386) 362-1235
 (386) 362-7124 (Fax)
 howlandtruss@gmail.com
 ROOF PITCH: 9/12
 OVERHANG: 2'
 CEILING: 9'
 EXT. WALLS: 6"
 LOADING: 40psf
 WIND LOAD: 130mph
 EXPOSURE: C
 DATE: 2/3/21
 Total Truss Quantity :: 48.



JOB #: 21-5090

Job Name: Frowick
 Customer: QUALITY BUILDERS
 Designer: Kelly Caudill
 ADDRESS: 7722 Still Lakes Dr
 SALESMAN: DB
 : <Not Found>

JOB NO:
 21-5090

PAGE NO:
 1 OF 1

