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



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Orlando, FL 32821
Phone: (800)755-6001
www.alpineitw.com

Site Information:	Page 1:
Customer: W. B. Howland Company, Inc.	Job Number: 21-5234
Job Description: BARRS-DUPLEX 161 Yulan St	
Address: 161 Yulan St, FT WHITE, FL	

Job Engineering Criteria:	
Design Code: FBC 7th Ed. 2020 Res	IntelliVIEW Version: 20.01.01A JRef #: 1X372150002
Wind Standard: ASCE 7-16 Wind Speed (mph): 130	Design Loading (psf): 40.00
Building Type: Closed	

This package contains general notes pages, 9 truss drawing(s) and 3 detail(s).

Item	Drawing Number	Truss
1	055.21.1101.08479	A01
3	055.21.1101.08243	B01
5	055.21.1101.08399	C01
7	055.21.1101.08509	C03
9	055.21.1101.08415	C05
11	BRCLBSUB0119	

Item	Drawing Number	Truss
2	055.21.1104.24343	A02
4	055.21.1101.08540	B02
6	055.21.1101.08400	C02
8	055.21.1101.08478	C04
10	A14015ENC160118	
12	GBLLETIN0118	

General Notes

Truss Design Engineer Scope of Work, Design Assumptions and Design Responsibilities:

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

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

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

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

Temporary Lateral Restraint and Bracing:

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

Permanent Lateral Restraint and Bracing:

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

Connector Plate Information:

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

Fire Retardant Treated Lumber:

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

General Notes (continued)

Key to Terms:

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

BCDL = Bottom Chord standard design Dead Load in pounds per square foot.

BCLL = Bottom Chord standard design Live Load in pounds per square foot.

CL = Certified lumber.

Des Ld = total of TCLL, TCDL, BCLL and BCDL Design Load in pounds per square foot.

FRT = Fire Retardant Treated lumber.

FRT-DB = D-Blaze Fire Retardant Treated lumber.

FRT-DC = Dricon Fire Retardant Treated lumber.

FRT-FP = FirePRO Fire Retardant Treated lumber.

FRT-FL = FlamePRO Fire Retardant Treated lumber.

FRT-FT = FlameTech Fire Retardant Treated lumber.

FRT-PG = PYRO-GUARD Fire Retardant Treated lumber.

g = green lumber.

HORZ(LL) = maximum Horizontal panel point deflection due to Live Load, in inches.

HORZ(TL) = maximum Horizontal panel point long term deflection in inches, due to Total Load, including creep adjustment.

HPL = additional Horizontal Load added to a truss Piece in pounds per linear foot or pounds.

Ic = Incised lumber.

FJ = Finger Jointed lumber.

L/# = user specified divisor for limiting span/deflection ratio for evaluation of actual L/defl value.

L/defl = ratio of Length between bearings, in inches, divided by the vertical Deflection due to creep, in inches, at the referenced panel point. Reported as 999 if greater than or equal to 999.

Loc = Location, starting location of left end of bearing or panel point (joint) location of deflection.

Max BC CSI = Maximum bending and axial Combined Stress Index for Bottom Chords for of all load cases.

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

Max Web CSI = Maximum bending and axial Combined Stress Index for Webs for of all load cases.

NCBCLL = Non-Concurrent Bottom Chord design Live Load in pounds per square foot.

PL = additional Load applied at a user specified angle on a truss Piece in pounds per linear foot or pounds.

PLB = additional vertical load added to a Bottom chord Piece of a truss in pounds per linear foot or pounds

PLT = additional vertical load added to a Top chord Piece of a truss in pounds per linear foot or pounds.

PP = Panel Point.

R = maximum downward design Reaction, in pounds, from all specified gravity load cases, at the indicated location (Loc).

-R = maximum upward design Reaction, in pounds, from all specified gravity load cases, at the identified location (Loc).

Rh = maximum horizontal design Reaction in either direction, in pounds, from all specified gravity load cases, at the indicated location (Loc).

RL = maximum horizontal design Reaction in either direction, in pounds, from all specified non-gravity (wind or seismic) load cases, at the indicated location (Loc).

Rw = maximum downward design Reaction, in pounds, from all specified non-gravity (wind or seismic) load cases, at the identified location (Loc).

TCDL = Top Chord standard design Dead Load in pounds per square foot.

TCLL = Top Chord standard design Live Load in pounds per square foot.

U = maximum Upward design reaction, in pounds, from all specified non-gravity (wind or seismic) load cases, at the indicated location (Loc).

VERT(CL) = maximum Vertical panel point deflection in inches due to Live Load and Creep Component of Dead Load in inches.

VERT(CTL) = maximum Vertical panel point deflection ratios due to Live Load and Creep Component of Dead Load, and maximum long term Vertical panel point deflection in inches due to Total load, including creep adjustment.

VERT(LL) = maximum Vertical panel point deflection in inches due to Live Load.

VERT(TL) = maximum Vertical panel point long term deflection in inches due to Total load, including creep adjustment.

W = Width of non-hanger bearing, in inches.

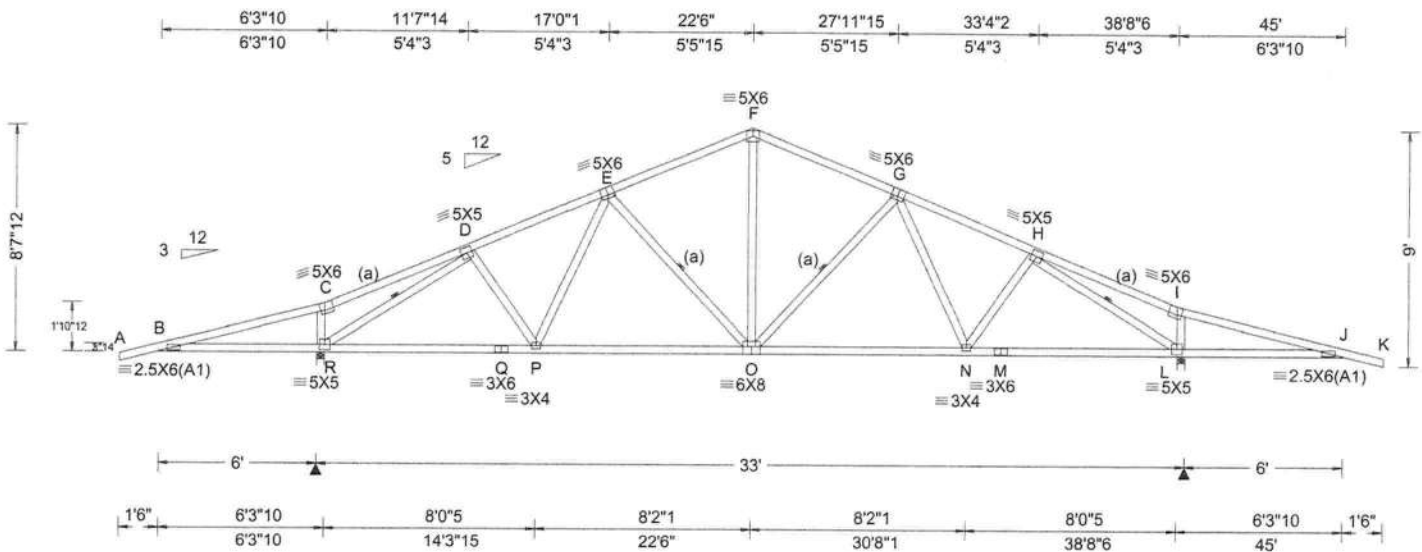
Refer to ASCE-7 for Wind and Seismic abbreviations.

Uppercase Acronyms not explained above are as defined in TPI 1.

References:

1. AWC: American Wood Council; 222 Catoctin Circle SE, Suite 201; Leesburg, VA 20175; www.awc.org.
2. ICC: International Code Council; www.iccsafe.org.
3. Alpine, a division of ITW Building Components Group Inc.: 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: 359494 / FROM: CDM	COMN Ply: 1 Qty: 17	Job Number: 21-5234 BARRS-DUPLEX 161 Yulan St Truss Label: A01	Cust: R 215 JRef: 1X372150002 T8 / DrwNo: 055.21.1101.08479 / YK 02/24/2021
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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): 0.101 O 999 240			Loc	R+	/R-	/Rh	/Rw	/U	/RL
BCLL: 0.00		Enclosure: Closed	Lu: NA	Cs: NA		VERT(CL): 0.195 L 378 180			R	2075	/-	/-	/1220	/191	/200
BCDL: 10.00		Risk Category: II	Snow Duration: NA			HORZ(LL): 0.044 I - -			L	2075	/-	/-	/1220	/191	/-
		EXP: C Kzt: NA				HORZ(TL): 0.091 I - -			Wind reactions based on MWFRS						
Des Ld: 40.00		Mean Height: 15.00 ft	Building Code:			Creep Factor: 2.0			R	Brg Width = 3.5			Min Req = 2.1		
NCBCLL: 10.00		TCDL: 5.0 psf	FBC 7th Ed. 2020 Res.			Max TC CSI: 0.786			L	Brg Width = 3.5			Min Req = 2.1		
Soffit: 2.00		BCDL: 5.0 psf	TPI Std: 2014			Max BC CSI: 0.871			Bearings R & L are a rigid surface.						
Load Duration: 1.25		MWFRS Parallel Dist: h to 2h	Rep Fac: Yes			Max Web CSI: 0.808			Members not listed have forces less than 375#						
Spacing: 24.0 "		C&C Dist a: 4.50 ft	FT/RT:20(0)/10(0)						Maximum Top Chord Forces Per Ply (lbs)						
		Loc. from endwall: not in 13.00 ft	Plate Type(s):						Chords	Tens.Comp.		Chords	Tens. Comp.		
		GCpi: 0.18							B - C	1233	-515	F - G	119	-1486	
		Wind Duration: 1.60	WAVE			VIEW Ver: 20.01.01A.0724.11									

Lumber

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

Bracing

(a) Continuous lateral restraint equally spaced on member.

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.

Left and right cantilevers are exposed to wind

Wind loading based on both gable and hip roof types.

Additional Notes

WARNING: Furnish a copy of this DWG to the installation contractor. Special care must be taken during handling, shipping and installation of trusses. See "WARNING" note below.

The overall height of this truss excluding overhang is 8'-7"-12".



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02/24/2021

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

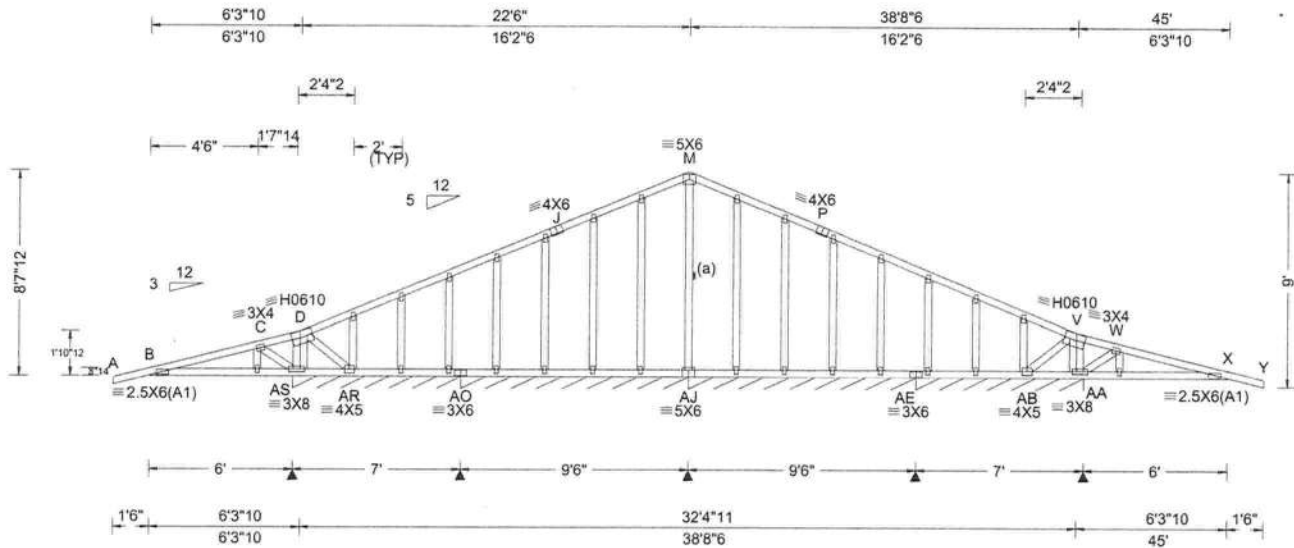
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBICA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

ALPINE
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SEQN: 359507 FROM: CDM	GABL Qty: 2	Ply: 1 Qty: 2	Job Number: 21-5234 BARRS-DUPLEX 161 Yulan St Truss Label: A02	Cust: R 215 JRef: 1X372150002 T11 DrwNo: 055.21.1104.24343 / YK 02/24/2021
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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: 4.50 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, HS	PP Deflection in loc L/def L/# VERT(LL): 0.071 AT 999 240 VERT(CL): 0.144 AT 499 180 HORZ(LL): -0.010 Z - - HORZ(TL): 0.019 Z - - Creep Factor: 2.0 Max TC CSI: 0.571 Max BC CSI: 0.195 Max Web CSI: 0.560 VIEW Ver: 20.01.01A.0724.11	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL AS*165 -/- /110 /28 /29 AO*97 -/- /64 /7 -/ AJ*71 -/- /50 /17 -/ AE*163 -/- /111 /29 -/ AR -/837 AB -/746 Wind reactions based on MWFRS AS Brg Width = 84.0 Min Req = - AO Brg Width = 113 Min Req = - AJ Brg Width = 114 Min Req = - AE Brg Width = 84.0 Min Req = - Bearings AS, AO, AJ, & AE 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 1060 -402 V - W 1408 -507 C - D 1408 -507 W - X 1060 -402

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.

Loading

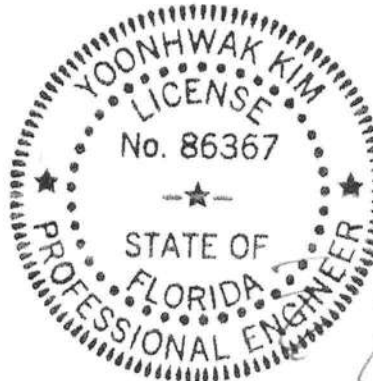
Gable end supports 8" max rake overhang. Top chord must not be cut or notched.

Wind

Wind loads based on MWFRS with additional C&C member design.
Left and right cantilevers are exposed to wind
Wind loading based on both gable and hip roof types.

Additional Notes

See DWGS A14015ENC160118 & GBLLETIN0118 for gable wind bracing and other requirements.
WARNING: Furnish a copy of this DWG to the installation contractor. Special care must be taken during handling, shipping and installation of trusses. See "WARNING" note below.
The overall height of this truss excluding overhang is 8'-7-12.



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Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens. Comp.
B-AS	419 -1004	AB-AA	495 -1258
AS-AR	494 -1261	AA-X	420 -1004

Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. Comp.
C-AS	146 -461	AB-V	1469 -565
AS-D	476 -1263	V-AA	464 -1263
D-AR	1471 -578	AA-W	146 -458

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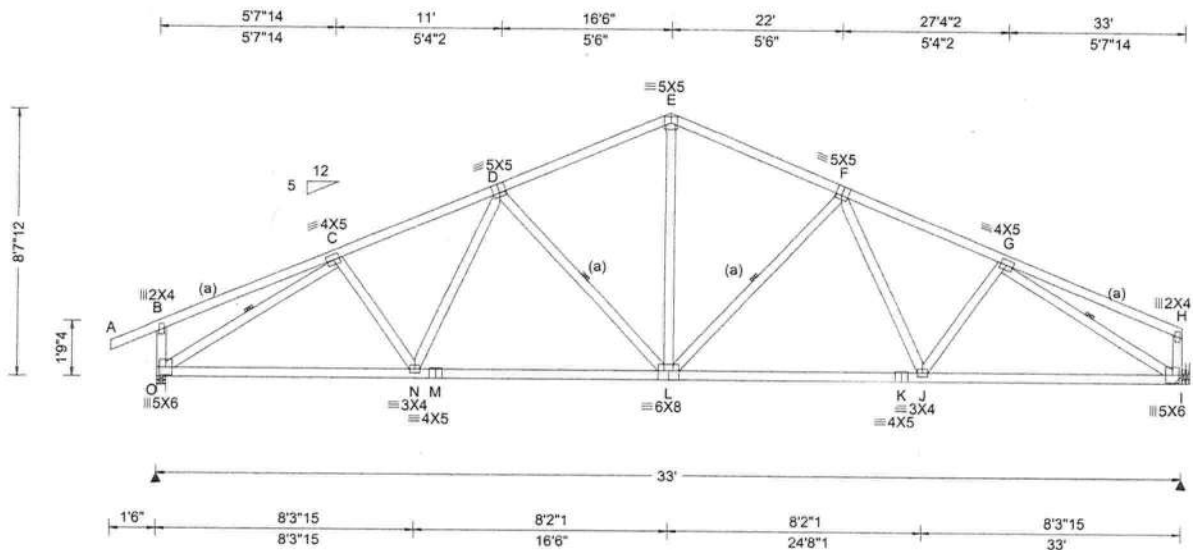
Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, 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; SBICA: sbicindustry.com; ICC: iccsafe.org; AWC: awc.org



6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 359496 / FROM: CDM	COMN Ply: 1 Qty: 10	Job Number: 21-5234 BARRS-DUPLEX 161 Yulan St Truss Label: B01	Cust: R 215 JRef: 1X372150002 T6 / DrwNo: 055.21.1101.08243 / YK 02/24/2021
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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 7-16 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: 3.30 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): 0.110 L 999 240 VERT(CL): 0.208 L 999 180 HORZ(LL): 0.053 I - - HORZ(TL): 0.099 I - - Creep Factor: 2.0 Max TC CSI: 0.361 Max BC CSI: 0.934 Max Web CSI: 0.613 VIEW Ver: 20.01.01A.0724.11	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL O 1560 -/- /- /825 /265 /178 I 1456 -/- /- /747 /238 -/ Wind reactions based on MWFRS O Brg Width = 3.5 Min Req = 1.8 I Brg Width = - Min Req = - Bearing O is a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. C - D 404 -2118 E - F 383 -1717 D - E 383 -1717 F - G 404 -2129

Lumber

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

Bracing

(a) Continuous lateral restraint equally spaced on member.

Hangers / Ties

(J) Hanger Support Required, by others

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.
End verticals not exposed to wind pressure.
Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 8'-7-12.



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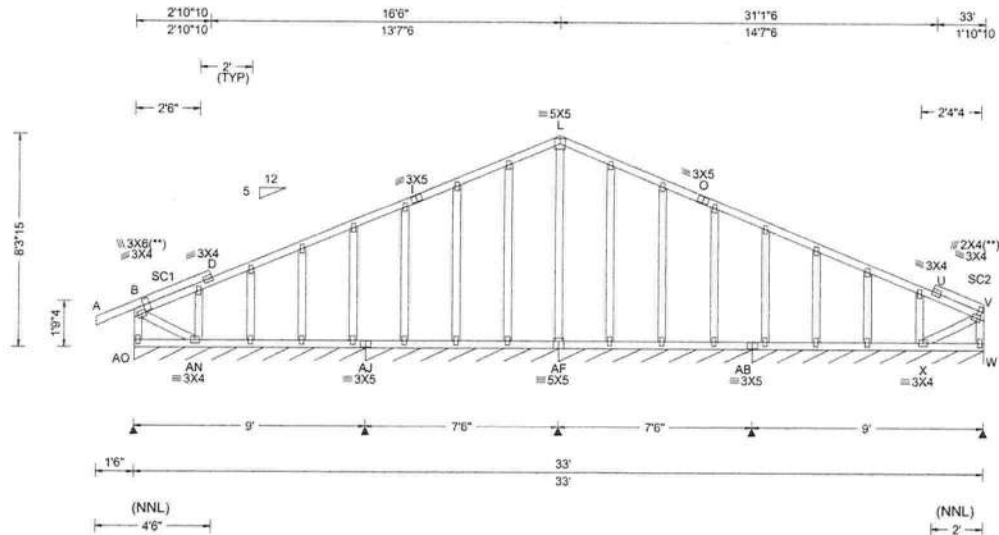
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6750 Forum Drive
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Orlando FL, 32821

SEQN: 359497 / FROM: CDM	GABL Ply: 1 Qty: 2	Job Number: 21-5234 BARRS-DUPLEX 161 Yulan St Truss Label: B02	Cust: R 215 JRef: 1X372150002 T15 DrwNo: 055.21.1101.08540 / YK 02/24/2021
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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: 3.30 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: Varies by Ld Case FT/RT: 20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.004 D 999 240 VERT(CL): 0.008 D 999 180 HORZ(LL): 0.001 D - - HORZ(TL): 0.002 D - - Creep Factor: 2.0 Max TC CSI: 0.429 Max BC CSI: 0.042 Max Web CSI: 0.141 VIEW Ver: 20.01.01A.0724.11	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL AO*178 - / - / - /84 /75 /5 AJ* 162 - / - / - /67 /75 /- AF* 128 - / - / - /53 /75 /- AB*155 - / - / - /66 /75 /- Wind reactions based on MWFRS AO Brg Width = 108 Min Req = - AJ Brg Width = 90.0 Min Req = - AF Brg Width = 90.0 Min Req = - AB Brg Width = 108 Min Req = - Bearings AO, AJ, AF, & AB are a rigid surface.

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.

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

Loading

Truss designed to support 2-0-0 top chord outlookers and cladding load not to exceed 2.00 PSF one face and 24.0" span opposite face. Top chord must not be cut or notched, unless specified otherwise.

Wind

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

End verticals not exposed to wind pressure.

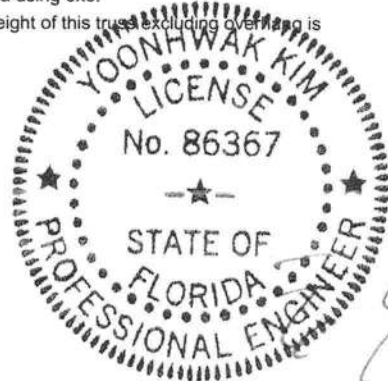
Wind loading based on both gable and hip roof types.

Additional Notes

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

Stacked top chord must NOT be notched or cut in area (NNL). Dropped top chord braced at 24" oc intervals. Attach stacked top chord (SC) to dropped top chord in 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 8-3-15.



FL REG# 278, Yoonhwak Kim, FL PE #86367
02/24/2021

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IMPORTANT FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

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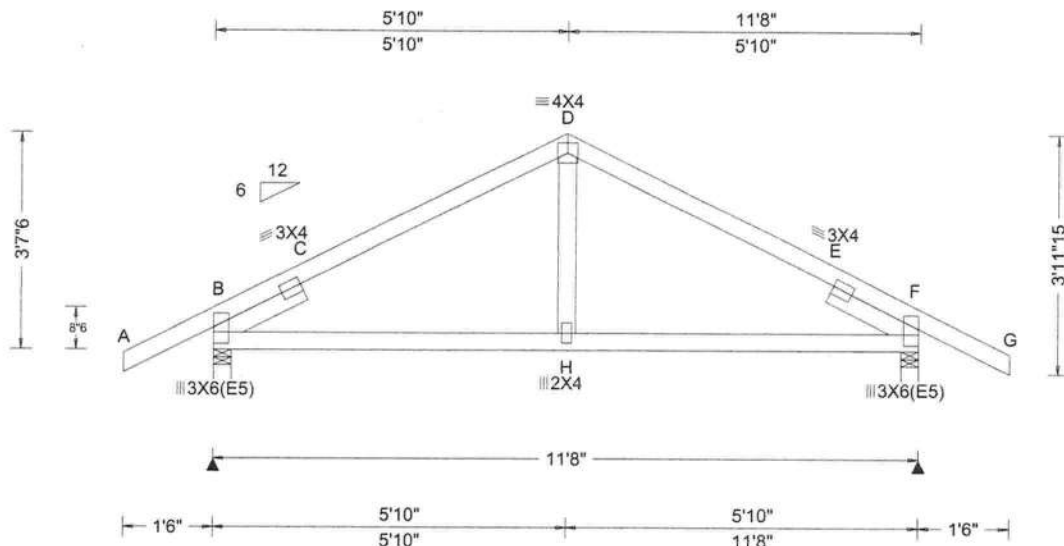
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6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 359498 / FROM: CDM	COMN Ply: 1 Qty: 2	Job Number: 21-5234 BARRS-DUPLEX 161 Yulan St Truss Label: C01	Cust: R 215 JRef: 1X372150002 T2 / DrwNo: 055.21.1101.08399 / YK 02/24/2021
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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 7-16 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): 0.030 E 999 240 VERT(CL): 0.059 E 999 180 HORZ(LL): 0.017 C - - HORZ(TL): 0.033 C - - Creep Factor: 2.0 Max TC CSI: 0.338 Max BC CSI: 0.386 Max Web CSI: 0.146 VIEW Ver: 20.01.01A.0724.11	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 581 - / - / - / 361 / 107 / 113 F 581 - / - / - / 361 / 107 / - Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 F Brg Width = 3.5 Min Req = 1.5 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 258 -796 D - E 120 -583 C - D 120 -583 E - F 257 -796

Lumber

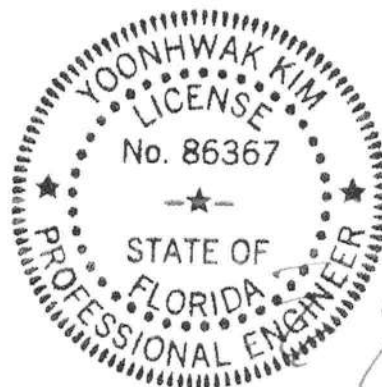
Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;
Lt Slider: 2x4 SP #3; block length = 1.626'
Rt Slider: 2x4 SP #3; block length = 1.626'

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 3'-7".



FL REG# 278, Yoonhwak Kim, FL PE #86367
02/24/2021

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens. Comp.
B - H	480 -26	H - F	480 -26

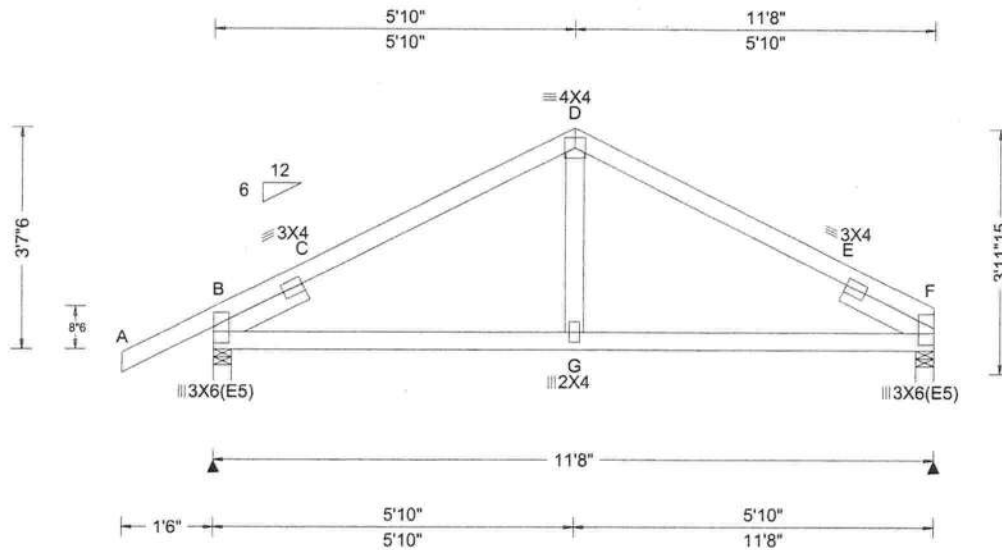
****WARNING**** READ AND FOLLOW ALL NOTES ON THIS DRAWING!
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ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 359499 / FROM: CDM	COMN Ply: 1 Qty: 4	Job Number: 21-5234 BARRS-DUPLEX 161 Yulan St Truss Label: C02	Cust: R 215 JRef: 1X372150002 T4 / DrwNo: 055.21.1101.08400 / YK 02/24/2021
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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 7-16 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/def L/# VERT(LL): 0.040 E 999 240 VERT(CL): 0.082 E 999 180 HORZ(LL): -0.019 E - - HORZ(TL): 0.037 E - - Creep Factor: 2.0 Max TC CSI: 0.463 Max BC CSI: 0.392 Max Web CSI: 0.191 VIEW Ver: 20.01.01A.0724.11	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 587 /- /- /361 /108 /98 F 474 /- /- /274 /79 /- Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 F Brg Width = 3.5 Min Req = 1.5 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 259 -804 D - E 122 -596 C - D 123 -600 E - F 353 -860

Lumber

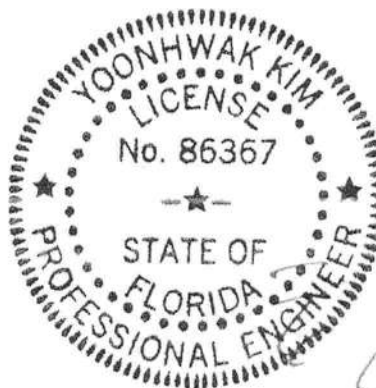
Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;
Lt Slider: 2x4 SP #3; block length = 1.626'
Rt Slider: 2x4 SP #3; block length = 1.626'

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 3'-7-6".



FL REG# 278, Yoonhwak Kim, FL PE #86367
02/24/2021

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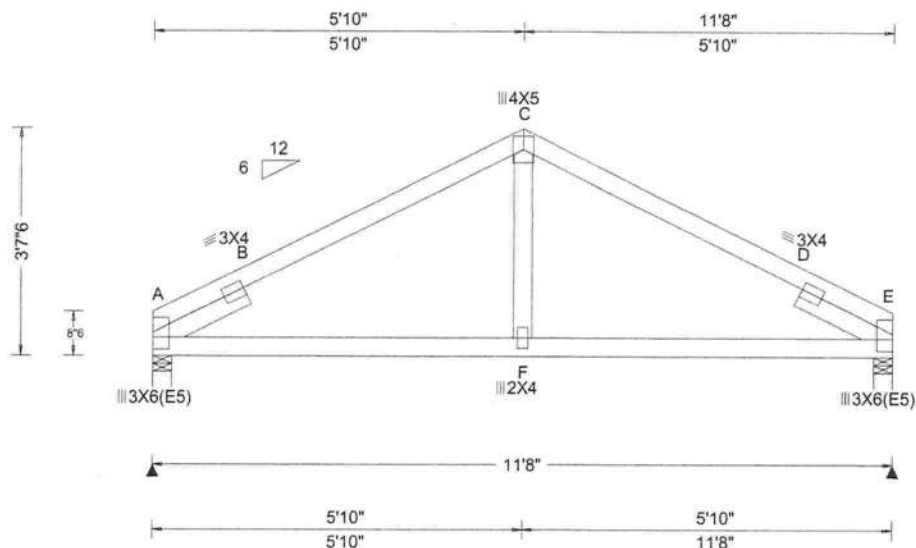
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6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 359500 / FROM: CDM	COMN Ply: 1 Qty: 2	Job Number: 21-5234 BARRS-DUPLEX 161 Yulan St Truss Label: C03	Cust: R 215 JRef: 1X372150002 T7 / DrwNo: 055.21.1101.08509 / YK 02/24/2021
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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 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: h/2 to h C&C Dist a: 3.00 ft Loc. from endwall: not in 9.00 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): 0.038 D 999 240 VERT(CL): 0.078 D 999 180 HORZ(LL): 0.021 B - - HORZ(TL): 0.044 B - - Creep Factor: 2.0 Max TC CSI: 0.494 Max BC CSI: 0.396 Max Web CSI: 0.191 VIEW Ver: 20.01.01A.0724.11	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL A 480 /- /- /275 /81 /75 E 480 /- /- /275 /81 /- Wind reactions based on MWFRS A Brg Width = 3.5 Min Req = 1.5 E Brg Width = 3.5 Min Req = 1.5 Bearings A & E 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. A - B 357 -868 C - D 127 -613 B - C 127 -613 D - E 355 -868

Lumber
Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;
Lt Slider: 2x4 SP #3; block length = 1.626'
Rt Slider: 2x4 SP #3; block length = 1.626'

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 3-7-6.



FL REG# 278, Yoonhwak Kim, FL PE #86367
02/24/2021

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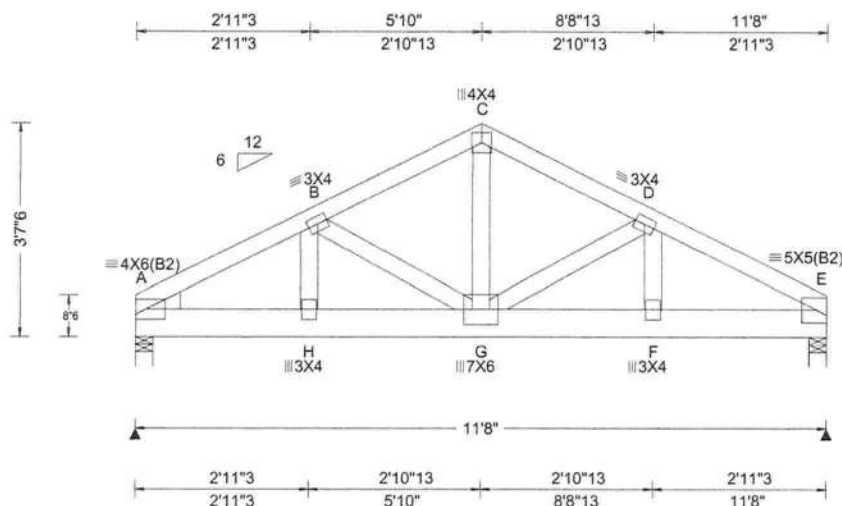
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A/ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 359502 / FROM: CDM	SPEC Ply: 2 Qty: 2	Job Number: 21-5234 BARRS-DUPLEX 161 Yulan St Truss Label: C04	Cust: R 215 JRef: 1X372150002 T5 / DrwNo: 055.21.1101.08478 / YK 02/24/2021
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2 Complete Trusses Required



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: 0.00 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 9.00 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: No FT/RT: 20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/def L/# VERT(LL): 0.060 G 999 240 VERT(CL): 0.120 G 999 180 HORZ(LL): 0.017 F - - HORZ(TL): 0.034 F - - Creep Factor: 2.0 Max TC CSI: 0.705 Max BC CSI: 0.427 Max Web CSI: 0.741 VIEW Ver: 20.01.01A.0724.11	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL A 3918 /- /- /- /685 /- E 4208 /- /- /- /732 /- Wind reactions based on MWFRS A Brg Width = 3.5 Min Req = 1.6 E Brg Width = 3.5 Min Req = 1.7 Bearings A & E 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. A - B 510 -2921 C - D 420 -2406 B - C 420 -2406 D - E 519 -2976

Lumber

Top chord: 2x4 SP #2;
Bot chord: 2x6 SP 2400f-2.0E;
Webs: 2x4 SP #3;
Lt Wedge: 2x4 SP #3;

Nailnote

Nail Schedule: 0.131"x3", min. nails
Top Chord: 1 Row @ 12.00" o.c.
Bot Chord: 2 Rows @ 5.00" o.c. (Each Row)
Webs: 1 Row @ 4" o.c.
Use equal spacing between rows and stagger nails in each row to avoid splitting.

Special Loads

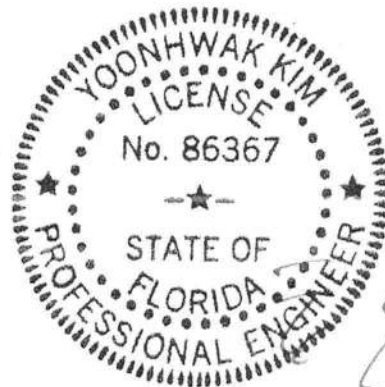
---(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)
TC: From 62 plf at 0.00 to 62 plf at 11.67
BC: From 10 plf at 0.00 to 10 plf at 11.67
BC: 1456 lb Conc. Load at 2.06, 4.06, 6.06, 8.06
10.06

Wind

Wind loads and reactions based on MWFRS.
Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 3'-7.6."



FL REG# 278, Yoonhwak Kim, FL PE #86367
02/24/2021

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens. Comp.
A - H	2541 -440	G - F	2564 -445
H - G	2518 -437	F - E	2590 -448

Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. Comp.
H - B	529 -72	G - D	85 -481
B - G	76 -426	D - F	583 -81
C - G	1946 -319		

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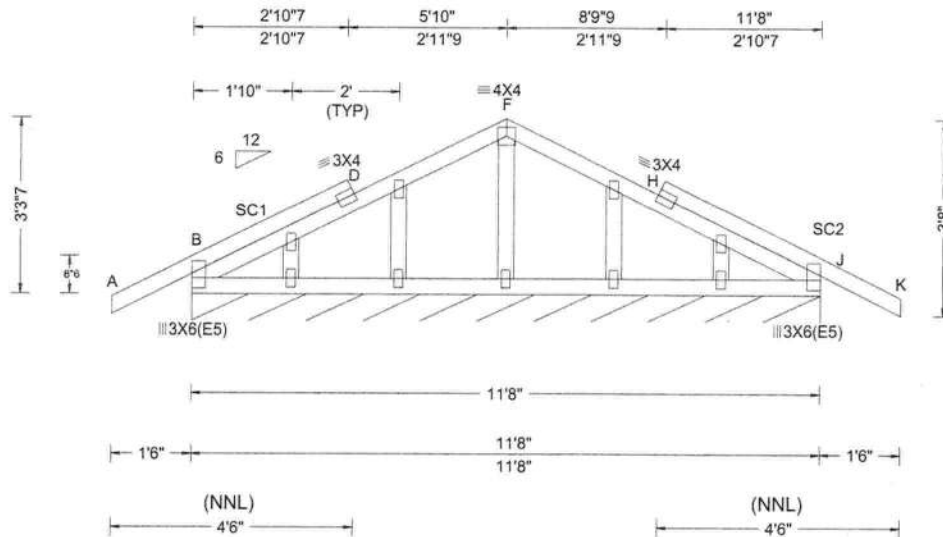
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Orlando FL, 32821

SEQN: 359501 / FROM: CDM	GABL Qty: 2	Ply: 1	Job Number: 21-5234 BARRS-DUPLEX 161 Yulan St Truss Label: C05	Cust: R 215 JRef: 1X372150002 T3 / DrwNo: 055.21.1101.08415 / YK 02/24/2021
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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): 0.003 D 999 240	Loc R+ / R- / Rh / Rw / U / RL
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.006 D 999 180	B* 181 /- /- /79 /84 /7
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): -0.001 H - -	Wind reactions based on MWFRS
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.003 H - -	B Brg Width = 140 Min Req = -
NCBCLL: 10.00	Mean Height: 15.00 ft	Building Code:	Creep Factor: 2.0	Bearing B is a rigid surface.
Soffit: 2.00	TCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.439	Members not listed have forces less than 375#
Load Duration: 1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.030	
Spacing: 24.0"	MWFRS Parallel Dist: 0 to h/2	Rep Fac: Varies by Ld Case	Max Web CSI: 0.033	
	C&C Dist a: 3.00 ft	FT/RT: 20(0)/10(0)		
	Loc. from endwall: Any	Plate Type(s):		
	GCpi: 0.18	WAVE	VIEW Ver: 20.01.01A.0724.11	
	Wind Duration: 1.60			

Lumber

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

Plating Notes

All plates are 2X4 except as noted.

Loading

Truss designed to support 2-0-0 top chord outlookers and cladding load not to exceed 2.00 PSF one face and 24.0" span opposite face. Top chord must not be cut or notched, unless specified otherwise.

Wind

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

End verticals not exposed to wind pressure.

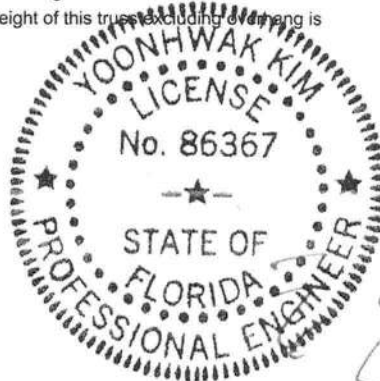
Wind loading based on both gable and hip roof types.

Additional Notes

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

Stacked top chord must NOT be notched or cut in area (NNL). Dropped top chord braced at 24" oc intervals. Attach stacked top chord (SC) to dropped top chord in 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 including overhang is 3-3-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367
02/24/2021

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6750 Forum Drive
Suite 305
Orlando FL, 32821

Gable Stud Reinforcement Detail

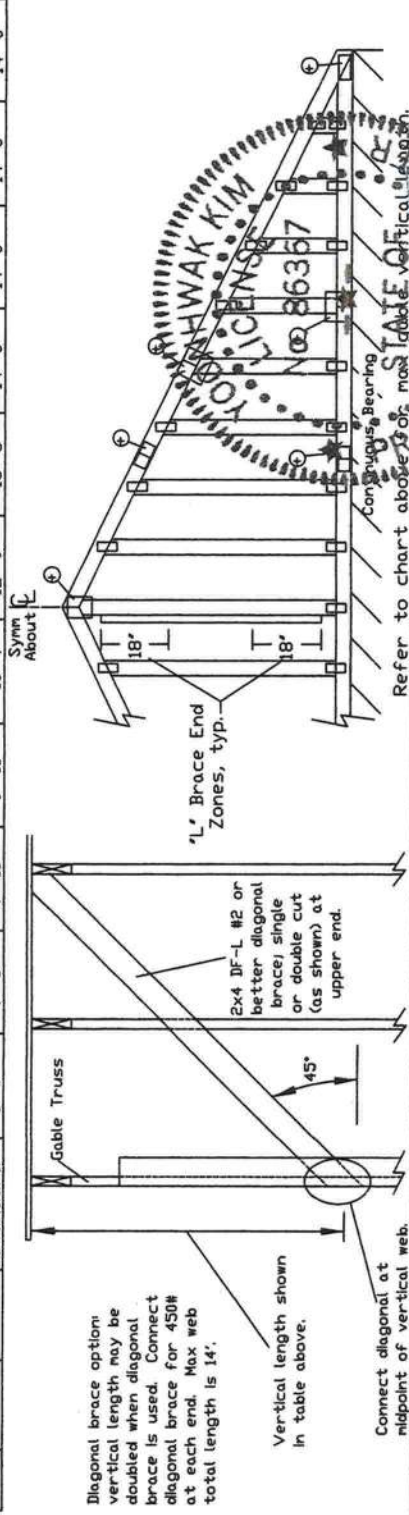
ASCE 7-16: 140 mph Wind Speed, 15' Mean Height, Enclosed, Exposure C, Kzt = 1.00

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

Max Gable Vertical Length	2x4 Gable Vertical Spacing	Brace Species / Grade	No Braces		(1) 1x4 'L' Brace		(2) 2x4 'L' Brace		(1) 2x6 'L' Brace		(2) 2x6 'L' Brace	
			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	7' 3"	7' 7"	8' 7"	8' 11"	10' 3"	10' 8"	13' 6"	14' 0"	14' 0"	14' 0"
		#3	6' 7"	7' 1"	8' 6"	8' 10"	10' 1"	10' 6"	13' 4"	14' 0"	14' 0"	14' 0"
		Stud	6' 7"	7' 0"	8' 6"	8' 10"	10' 1"	10' 6"	13' 4"	14' 0"	14' 0"	14' 0"
		Standard	5' 8"	6' 0"	7' 7"	8' 1"	10' 1"	10' 6"	11' 10"	14' 0"	14' 0"	14' 0"
24" O.C.	SP	#1	7' 4"	7' 8"	8' 8"	9' 0"	10' 4"	10' 9"	13' 8"	14' 0"	14' 0"	14' 0"
		#2	7' 3"	7' 7"	8' 7"	8' 11"	10' 3"	10' 8"	13' 6"	14' 0"	14' 0"	14' 0"
		#3	6' 0"	6' 4"	7' 11"	8' 6"	10' 2"	10' 7"	12' 5"	14' 0"	14' 0"	14' 0"
		Stud	6' 0"	6' 4"	7' 11"	8' 6"	10' 2"	10' 7"	12' 5"	14' 0"	14' 0"	14' 0"
16" O.C.	SPF	Standard	5' 3"	5' 7"	7' 0"	7' 6"	9' 6"	10' 2"	11' 0"	14' 0"	14' 0"	14' 0"
		#1 / #2	8' 4"	8' 8"	9' 10"	10' 3"	11' 8"	12' 2"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	8' 1"	8' 5"	9' 8"	10' 1"	11' 7"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
		Stud	8' 1"	8' 5"	9' 8"	10' 1"	11' 7"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
12" O.C.	SPF	Standard	4' 8"	5' 1"	6' 11"	7' 5"	9' 3"	10' 4"	12' 1"	14' 0"	14' 0"	14' 0"
		#1	8' 5"	8' 9"	9' 11"	10' 4"	11' 10"	12' 4"	14' 0"	14' 0"	14' 0"	14' 0"
		#2	7' 4"	7' 8"	8' 8"	9' 9"	10' 2"	11' 8"	13' 6"	14' 0"	14' 0"	14' 0"
		Stud	7' 4"	7' 8"	8' 8"	9' 9"	10' 2"	11' 8"	13' 6"	14' 0"	14' 0"	14' 0"
12" O.C.	SPF	Standard	4' 8"	5' 1"	6' 11"	7' 5"	9' 3"	10' 4"	12' 1"	14' 0"	14' 0"	14' 0"
		#1 / #2	9' 2"	9' 6"	10' 10"	11' 3"	12' 9"	13' 5"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	9' 0"	9' 4"	10' 8"	11' 1"	12' 9"	13' 3"	14' 0"	14' 0"	14' 0"	14' 0"
		Stud	9' 0"	9' 4"	10' 8"	11' 1"	12' 9"	13' 3"	14' 0"	14' 0"	14' 0"	14' 0"
12" O.C.	SPF	Standard	5' 1"	5' 5"	6' 10"	7' 4"	9' 2"	10' 3"	12' 1"	14' 0"	14' 0"	14' 0"
		#1	8' 0"	8' 4"	9' 8"	10' 1"	11' 8"	12' 2"	14' 0"	14' 0"	14' 0"	14' 0"
		#2	7' 3"	7' 7"	8' 7"	9' 0"	10' 4"	10' 9"	13' 8"	14' 0"	14' 0"	14' 0"
		Stud	7' 3"	7' 7"	8' 7"	9' 0"	10' 4"	10' 9"	13' 8"	14' 0"	14' 0"	14' 0"



Diagonal brace option: vertical length may be doubled when diagonal brace is used. Connect diagonal brace for 450# at each end. Max web total length is 14'.

Vertical length shown in table above.

Connect diagonal at midpoint of vertical web.

Refer to chart above for max Gable Vertical Length.

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

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

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

Max Gable Vertical Length

2x4 Gable Vertical Spacing

Brace Species / Grade

No Braces

(1) 1x4 'L' Brace

(2) 2x4 'L' Brace

(1) 2x6 'L' Brace

(2) 2x6 'L' Brace

Diagonal brace option: vertical length may be doubled when diagonal brace is used. Connect diagonal brace for 450# at each end. Max web total length is 14'.

Vertical length shown in table above.

Connect diagonal at midpoint of vertical web.

Refer to chart above for max Gable Vertical Length.

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

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

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

Max Gable Vertical Length

2x4 Gable Vertical Spacing

Brace Species / Grade

No Braces

(1) 1x4 'L' Brace

(2) 2x4 'L' Brace

(1) 2x6 'L' Brace

(2) 2x6 'L' Brace

Diagonal brace option: vertical length may be doubled when diagonal brace is used. Connect diagonal brace for 450# at each end. Max web total length is 14'.

Vertical length shown in table above.

Connect diagonal at midpoint of vertical web.

Refer to chart above for max Gable Vertical Length.

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

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

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

Max Gable Vertical Length

2x4 Gable Vertical Spacing

Brace Species / Grade

No Braces

(1) 1x4 'L' Brace

(2) 2x4 'L' Brace

(1) 2x6 'L' Brace

(2) 2x6 'L' Brace

Diagonal brace option: vertical length may be doubled when diagonal brace is used. Connect diagonal brace for 450# at each end. Max web total length is 14'.

Vertical length shown in table above.

Connect diagonal at midpoint of vertical web.

Refer to chart above for max Gable Vertical Length.

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

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

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

Max Gable Vertical Length

2x4 Gable Vertical Spacing

Brace Species / Grade

No Braces

(1) 1x4 'L' Brace

(2) 2x4 'L' Brace

(1) 2x6 'L' Brace

(2) 2x6 'L' Brace

Bracing Group Species and Grades:				
Group A:		Group B:		
Spruce-Pine-Fir	#1 / #2	Douglas Fir-Larch	#1	
	Standard		Standard	
Douglas Fir-Larch	#3	Southern Pine	#1	
	Standard		Standard	
1x4 Braces shall be SRB (Stress-Rated Board).				
For 1x4 So. Pine use only Industrial 55 or Industrial 45 Stress-Rated Boards. Group B values may be used with these grades.				

Gable Truss Detail Notes:

Wind Load deflection criterion is L/240.

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

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

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

* For (1) 'L' brace: space nails at 2' o.c.

* In 18' end zones and 4' o.c. between zones.

* For (2) 'L' braces: space nails at 3' o.c.

* In 18' end zones and 6' o.c. between zones.

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

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

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

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

REF	ASCE 7-16-GABI4015
DATE	01/26/2018
DRWG	A14015ENC160118

MAX. TOT. LD. 60 PSF

FLORIDA PROFESSIONAL ENGINEER

NO. 86367

W. H. WAK KIM

IMPORTANT: READ AND FOLLOW ALL NOTES ON THIS DRAWING. 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 BCSI 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 properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs apply to all trusses. Refer to drawings 1504-2 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, or 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: 02/24/2021

ALPINE

AN ITW COMPANY

514 Earth City Expressway

Suite 242

Earth City, MO 63045

CLR Reinforcing

Member Substitution

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

Notes:

This detail is only applicable for changing the specified CLR shown on single ply sealed designs to T-reinforcement or L-reinforcement or scab 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 Restraint	Alternative Reinforcement T- or L- Reinf.	Scab Reinf.
2x3 or 2x4	1 row	2x4	1-2x4
2x3 or 2x4	2 rows	2x6	2-2x4
2x6	1 row	2x4	1-2x6
2x6	2 rows	2x6	2-2x4
2x8	1 row	2x6	1-2x8
2x8	2 rows	2x6	2-2x6

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.

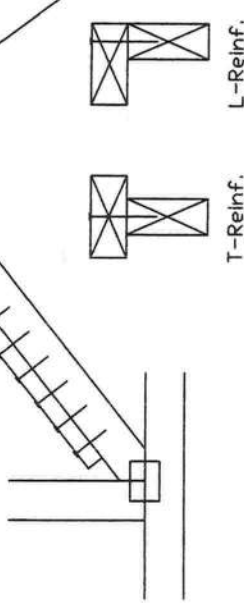
⊗ Center scab on wide face of web. Apply (1) scab to each face of web.

T-Reinforcement

or

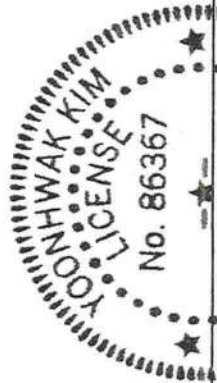
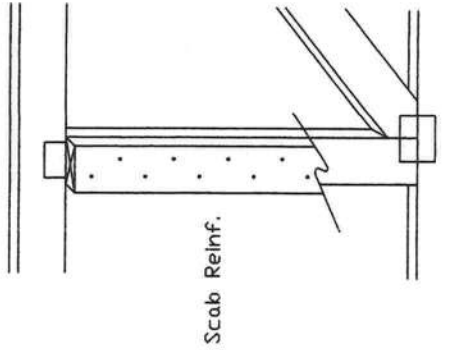
L-Reinforcement:

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

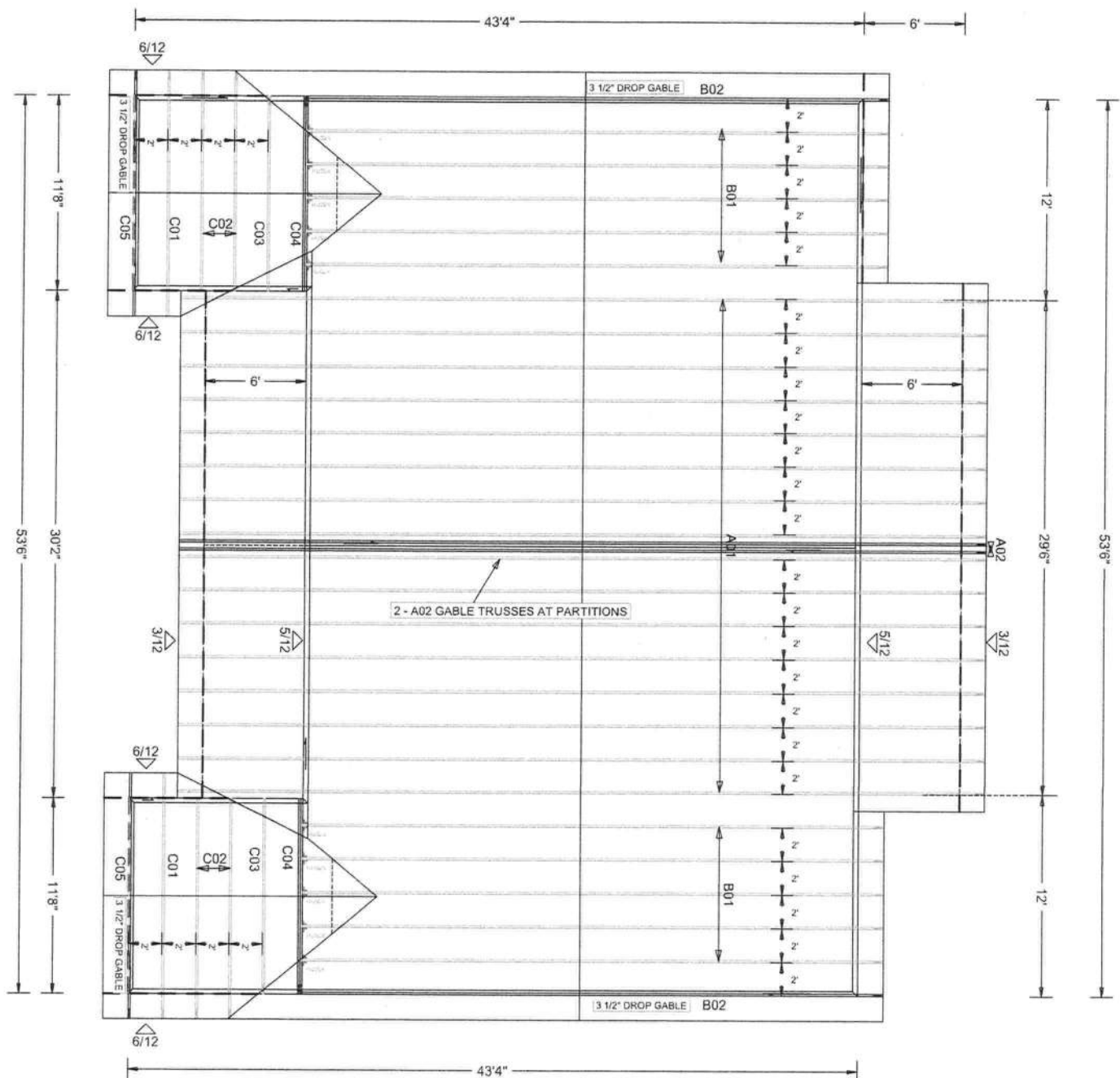


IMPORTANT: READ AND FOLLOW ALL NOTES ON THIS DRAWING INCLUDING THE INSTALLERS.
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI Building Component Safety Information, by TPI and SCSA for safety practices prior to performing 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 webs and posts 10d-12 shown above and on the Joint Details, unless noted otherwise.
Refer to drawing page 1004-12 for standard plate positions.
Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing or the installation of 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 the table nearest where name and those with whom.



514 Earth City Expressway
Suite 242
Earth City MO 63045

TC LL	PSF	REF	CLR Subst.
TC DL	PSF	DATE	01/02/19
BC DL	PSF	DRWG	BRCLBSUB0119
BC LL	PSF		
TOT. LD.	PSF		
DUR. FAC.			



W.B. Howland Truss Co.
610 11th St. SW
Live Oak, FL 32064
(386) 362-1235
(386) 362-7124 (Fax)
howlandtruss@gmail.com

ROOF PITCH: 3, 5, & 6/12
CLG PITCH: FLAT
OVERHANG: 18" Plumb
LOADING: 40 PSF
WIND LOAD: 130 MPH
EXPOSURE: C
EXT WALLS: 2 X 4 X 9'
DATE: 2/24/21

Total Truss Quantity = 44.

10 - TRUSS TO TRUSS CONNECTION
10 - HUS26

JOB #: 21-5234

Job Name: BARRS-DUPLEX 161 Yulan St
Customer: Contractor
Designer: Bob Glover
ADDRESS: 161 Yulan St
SALESMAN: DB
: <Not Found>

JOB NO:
21-5234

PAGE NO:

1 OF 1