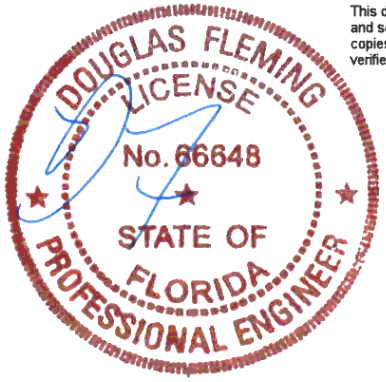


This document has been electronically signed and sealed using a Digital Signature. Printed copies without an original signature must be verified using the original electronic version.

ALPINE AN ITW COMPANY

COA #0 278
Florida Certificate of Product Approval #FL1999

03/26/2024

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

Site Information:	**Page 1:**
Customer: W. B. Howland Company, Inc.	*Job Number:* 23-9243
Job Description: Behr	
Address: FL	

Job Engineering Criteria:	
Design Code: FBC 8th Ed. 2023 Res.	*IntelliVIEW Version:* 23.02.04 *JRef #:* 1XYG2150001
Wind Standard: ASCE 7-22 *Wind Speed (mph):* 130 *Building Type:* Closed	*Design Loading (psf):* 40.00, 55.00

This package contains general notes pages, 11 truss drawing(s) and 2 detail(s).

Item	Drawing Number	Truss
1	086.24.0834.35817	A01
3	086.24.0834.51730	A03
5	086.24.0834.56920	B02
7	086.24.0835.06133	F02
9	086.24.0835.11763	F04
11	086.24.0835.30353	PB02
13	PB160220723	

Item	Drawing Number	Truss
2	086.24.0834.37667	A02
4	086.24.0834.54923	B01
6	086.24.0835.03977	F01
8	086.24.0835.08313	F03
10	086.24.0835.24510	PB01
12	STRBRIBR1014	

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.

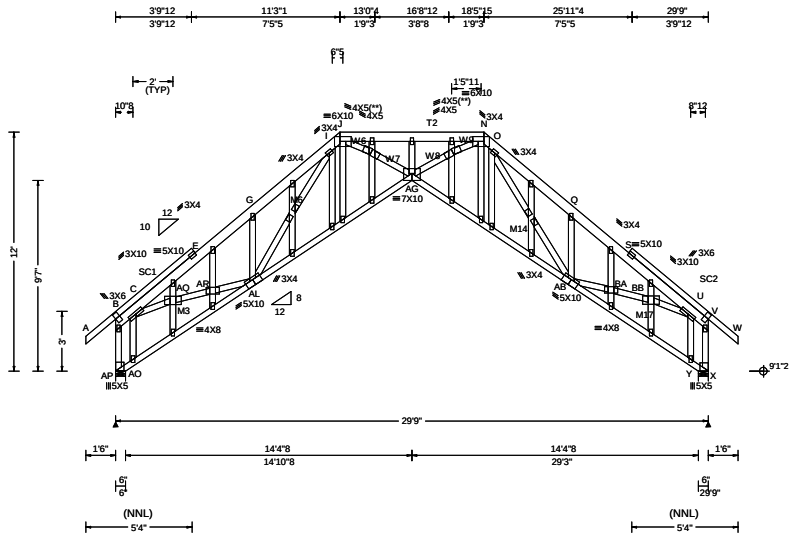
BCDL = Bottom Chord standard design Dead Load in pounds per square foot.
BCLL = Bottom Chord standard design Live Load in pounds per square foot.
CL = Certified lumber.
Des Ld = total of TCLL, TCDL, BCLL and BCDL Design Load in pounds per square foot.
FRT = Fire Retardant Treated lumber.
FRT-DB = D-Blaze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

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

References:

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

SEQN: 756628 GABL FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 23-9243 Behr **Truss Label:** A01		Cust: R 215 JRef:1XYG2150001 T7 DrwNo: 086.24.0834.35817 NW / DF 03/25/2024	



Loading Criteria (psf)

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

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-22
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.97 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

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

Building Code:
FBC 8th Ed. 2023 Res.
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.262	L	999	240
VERT(CL): 0.579	L	607	180
HORZ(LL): 0.392	X	-	-
HORZ(TL): 0.865	X	-	-

Creep Factor: 2.0
Max TC CSI: 0.800
Max BC CSI: 0.685
Max Web CSI: 0.912

VIEW Ver: 23.02.04.0123.14

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
AP	1447	/-	/-	/865	/203	/344
X	1447	/-	/-	/865	/203	/-

Wind reactions based on MWFRS
AP Brg Wid = 6.0 Min Req = 1.5 (Truss)
X Brg Wid = 6.0 Min Req = 1.5 (Truss)
Bearings AP & X 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	54	- 428	N - O	722	- 2722
C - E	535	- 2835	O - Q	968	- 2650
E - G	744	- 2506	Q - S	734	- 2529
G - I	970	- 2630	S - U	577	- 2874
I - J	726	- 2721	U - V	61	- 427
J - N	945	- 4707			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
AP-AO	318	- 520	AL-AG	2534	- 297
AO-AL	635	- 430	AG-AB	2535	- 259

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C -AQ	2363	- 460	O -AB	377	- 611
AQ-AR	2016	- 366	AB-BA	1783	- 303
AR-AL	1788	- 293	BA-BB	2028	- 384
J -AG	3038	- 344	BB- U	2394	- 488
AG- N	3037	- 348			

Maximum Gable Forces Per Ply (lbs)

Gables	Tens.	Comp.	Gables	Tens.	Comp.
B -AP	377	- 1003	AB- Q	264	- 518
C -AO	115	- 443	Y - U	120	- 447
G -AL	269	- 475	X - V	364	- 999

IF END WALL IS NOT BUILT TO THE CEILING, THIS TRUSS DESIGN IS NOT VALID UNLESS BOTTOM CHORD IS PROPERLY BRACED. BRACING SYSTEM TO BE DESIGNED AND PROVIDED BY OTHERS.

Lumber

Top chord: 2x6 SP 2400f-2.0E; T2 2x6 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3; W6,W7,W8,W9,M3,M6,M14, M17 2x4 SP #2;
Stack Chord: SC1 2x4 SP #2;
Stack Chord: SC2 2x4 SP #2;

Plating Notes

All plates are 2X4 except as noted.

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

Loading

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

Purlins

In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

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.

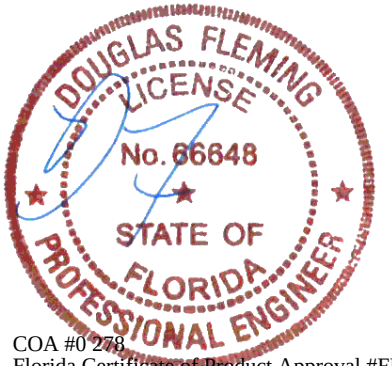
Gable meets L/120 deflection criteria for wind load applied to face. Calculated deflection ratio is L/406.

Additional Notes

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

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

The overall height of this truss excluding overhang is 12-0-0.



COA #0 278
Florida Certificate of Product Approval #FL1999
03/26/2024

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****IMPORTANT**** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

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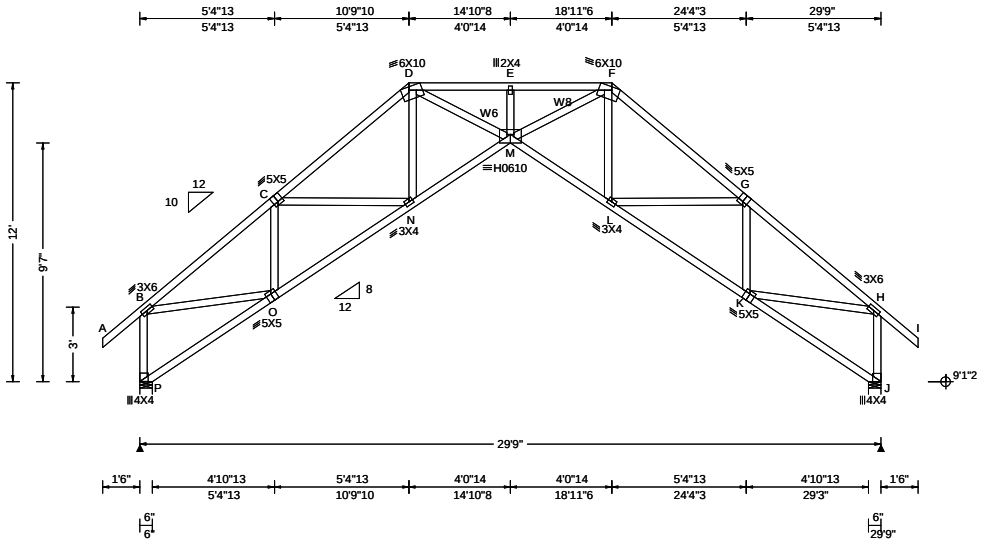
Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing,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

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

SEQN: 756629 COMN FROM: CDM	Ply: 1 Qty: 11	**Job Number:** 23-9243 Behr **Truss Label:** A02		Cust: R 215 JRef:1XYG2150001 T2 DrwNo: 086.24.0834.37667 NW / DF 03/26/2024	



Loading Criteria (psf)

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

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-22
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 17.67 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

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

Building Code:
FBC 8th Ed. 2023 Res.
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE, HS

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.255	E	999	240
VERT(CL): 0.564	E	623	180
HORZ(LL): 0.379	J	-	-
HORZ(TL): 0.837	J	-	-

Creep Factor: 2.0
Max TC CSI: 0.727
Max BC CSI: 0.611
Max Web CSI: 0.672

VIEW Ver: 23.02.04.0123.14

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
P	1446	/-	/-	/889	/81	/346
J	1446	/-	/-	/889	/81	/-

Wind reactions based on MWFRS
P Brg Wid = 6.0 Min Req = 1.5 (Truss)
J Brg Wid = 6.0 Min Req = 1.5 (Truss)
Bearings P & J 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	126	- 2008	E - F	0	- 4525
C - D	0	- 2565	F - G	0	- 2564
D - E	0	- 4525	G - H	116	- 2008

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
P - O	381	- 479	M - L	2262	0
O - N	1820	- 352	L - K	1819	0
N - M	2263	- 122			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - P	234	- 1329	M - F	2976	0
B - O	1571	0	L - G	505	- 137
O - C	35	- 750	G - K	36	- 750
C - N	422	0	K - H	1571	0
D - M	2975	0	J - H	217	- 1328

Lumber

Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3; W6,W8 2x4 SP #2;

Purlins

In lieu of structural panels or rigid ceiling use purlins to brace all flat TC @ 24" oc, all BC @ 24" oc.

Wind

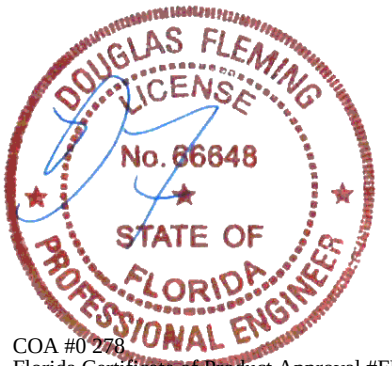
Wind loads based on MWFRS with additional C&C member design.

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 12-0-0.



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03/26/2024

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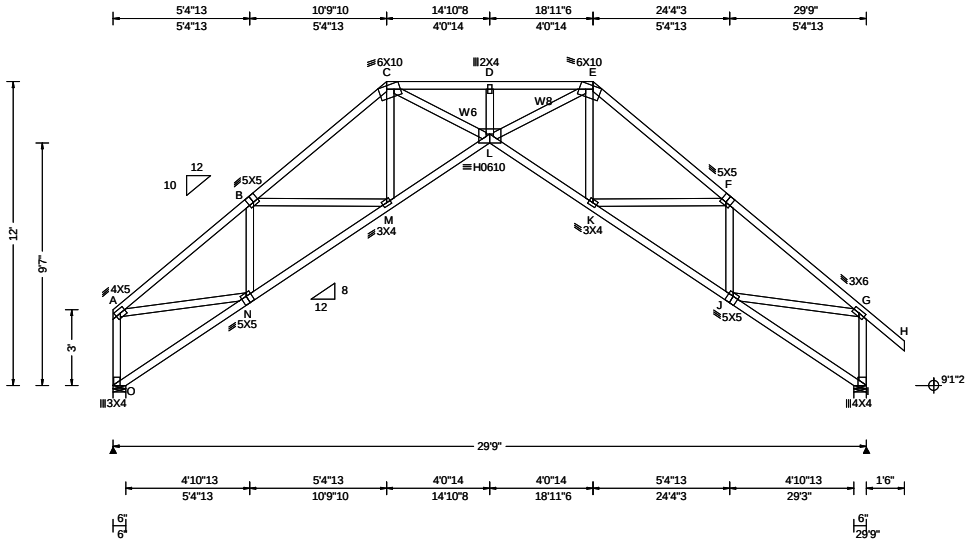
For more information see these web sites: Alpine: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

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

SEQN: 756630 COMN FROM: CDM	Ply: 1 Qty: 4	**Job Number:** 23-9243 Behr **Truss Label:** A03		Cust: R 215 JRef:1XYG2150001 T6 DrwNo: 086.24.0834.51730 NW / DF 03/26/2024	



Loading Criteria (psf)

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

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-22
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 17.67 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

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

Building Code:
FBC 8th Ed. 2023 Res.
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE, HS

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.254	D	999	240
VERT(CL): 0.567	D	619	180
HORZ(LL): 0.378	I	-	-
HORZ(TL): 0.842	I	-	-

Creep Factor: 2.0
Max TC CSI: 0.731
Max BC CSI: 0.615
Max Web CSI: 0.676

VIEW Ver: 23.02.04.0123.14

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
O	1336	/-	/-	/794	/55	/321
I	1449	/-	/-	/891	/78	/-

Wind reactions based on MWFRS
O Brg Wid = 6.0 Min Req = 1.5 (Truss)
I Brg Wid = 6.0 Min Req = 1.5 (Truss)
Bearings O & I 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	87	- 2033	D - E	0	- 4550
B - C	0	- 2585	E - F	0	- 2574
C - D	0	- 4550	F - G	109	- 2014

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
O - N	341	- 450	L - K	2271	0
N - M	1852	- 341	K - J	1825	0
M - L	2279	- 115			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
A - O	110	- 1226	L - E	2995	0
A - N	1584	0	K - F	504	- 135
N - B	53	- 757	F - J	33	- 753
B - M	419	0	J - G	1576	0
C - L	2988	0	I - G	214	- 1332

Lumber

Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3; W6,W8 2x4 SP #2;

Purlins

In lieu of structural panels or rigid ceiling use purlins to brace all flat TC @ 24" oc, all BC @ 24" oc.

Wind

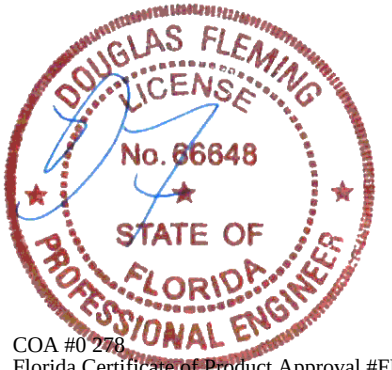
Wind loads based on MWFRS with additional C&C member design.

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 12-0-0.



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Florida Certificate of Product Approval #FL1999
03/26/2024

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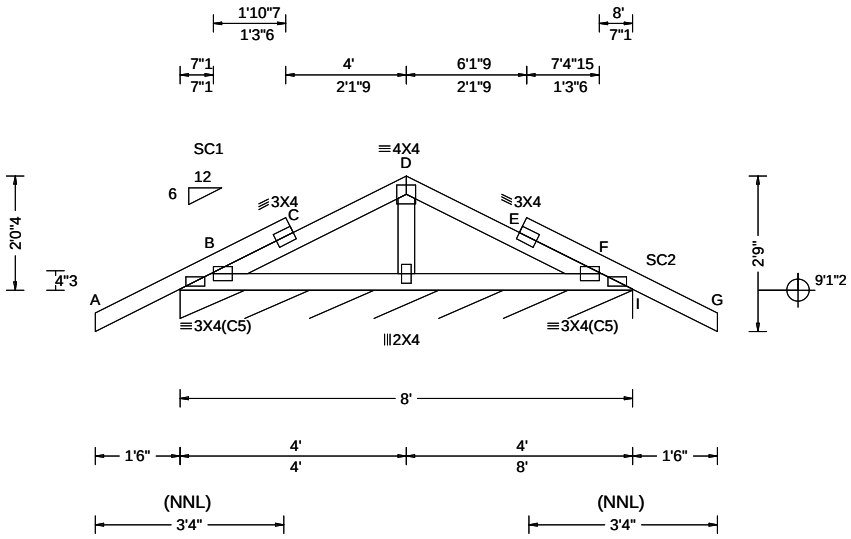
ALPINE
AN ITW COMPANY
155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

SEQN: 756631 GABL FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 23-9243 Behr **Truss Label:** B01	Cust: R 215 JRef:1XYG2150001 T4 DrwNo: 086.24.0834.54923 NW / DF 03/26/2024



Loading Criteria (psf)

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

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-22
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

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

Building Code:
FBC 8th Ed. 2023 Res.
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.007	E	999	240
VERT(CL): 0.013	E	999	180
HORZ(LL): 0.003	C	-	-
HORZ(TL): 0.006	C	-	-

Creep Factor: 2.0
Max TC CSI: 0.231
Max BC CSI: 0.117
Max Web CSI: 0.057

VIEW Ver: 23.02.04.0123.14

▲Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
I*	107	/-	/-	/53	/19	/11

Wind reactions based on MWFRS
I Brg Wid = 96.0 Min Req = -
Bearing B is a rigid surface.
Members not listed have forces less than 375#

Lumber

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

Plating Notes

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

Wind

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

Wind loading based on both gable and hip roof types.

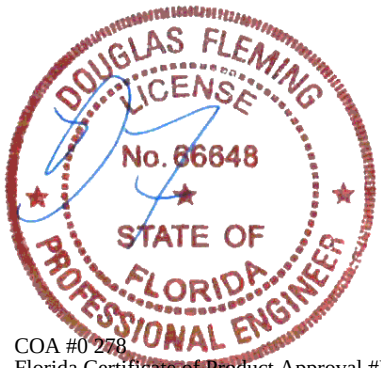
Gable meets L/120 deflection criteria for wind load applied to face. Calculated deflection ratio is L/999.

Additional Notes

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

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

The overall height of this truss excluding overhang is 2-0-4.



COA #0 278
Florida Certificate of Product Approval #FL1999
03/26/2024

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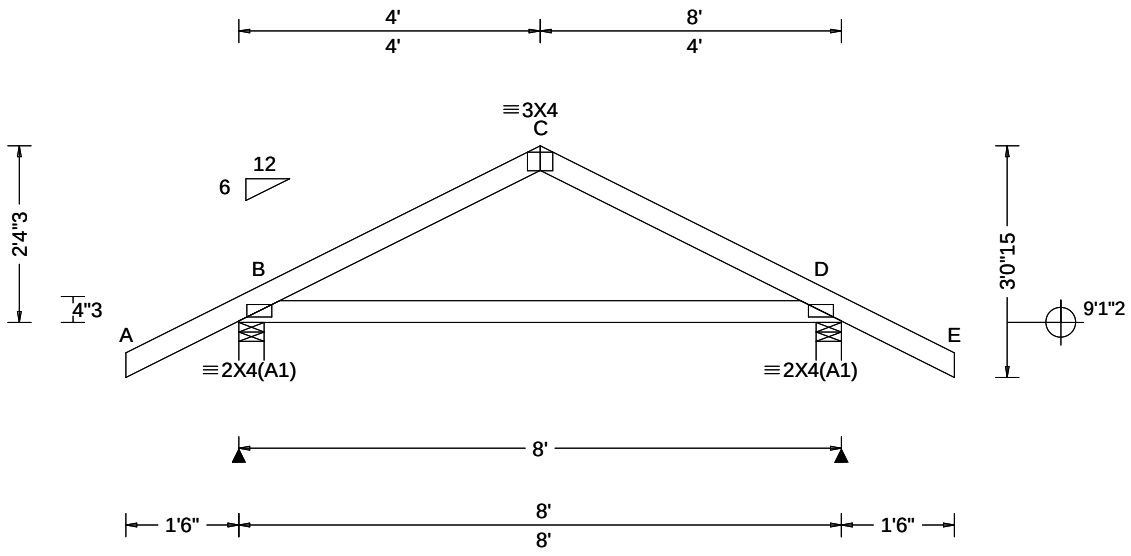
ALPINE
AN ITW COMPANY
155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

SEQN: 756632 COMN FROM: CDM	Ply: 1 Qty: 3	**Job Number:** 23-9243 Behr **Truss Label:** B02	Cust: R 215 JRef:1XYG2150001 T3 DrwNo: 086.24.0834.56920 NW / DF 03/26/2024



Loading Criteria (psf)

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

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-22
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

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

Building Code:
FBC 8th Ed. 2023 Res.
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.005	D	999	240
VERT(CL): 0.017	D	999	180
HORZ(LL): -0.003	D	-	-
HORZ(TL): 0.009	D	-	-

Creep Factor: 2.0
Max TC CSI: 0.226
Max BC CSI: 0.395
Max Web CSI: 0.000

VIEW Ver: 23.02.04.0123.14

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	430	/-	/-	/281	/81	/89
D	430	/-	/-	/281	/81	/-

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

Lumber

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

Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 2-4-3.

DOUGLAS FLEMING LICENSE No. 66648 STATE OF FLORIDA PROFESSIONAL ENGINEER

COA #0 278
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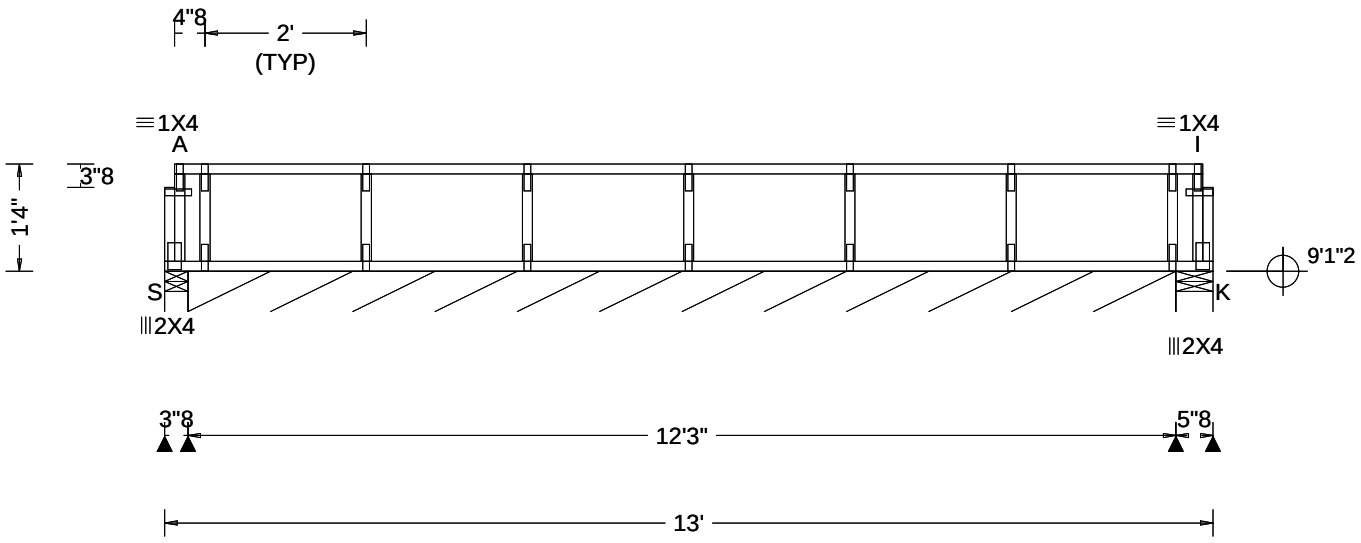
03/26/2024

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

SEQN: 756646 SY42 FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 23-9243 Behr **Truss Label:** F01		Cust: R 215 JRef:1XYG2150001 T5 DrwNo: 086.24.0835.03977 NW / DF 03/25/2024	



Loading Criteria (psf)
TCLL: 40.00
TCDL: 10.00
BCLL: 0.00
BCDL: 5.00
Des Ld: 55.00
NCBCLL: 10.00
Soffit: 0.00
Load Duration: 1.00
Spacing: 24.0 "

Wind Criteria
Wind Std: NA
Speed: NA mph
Enclosure: NA
Category: NA
EXP: NA Kzt: NA
Mean Height: NA ft
TCDL: NA psf
BCDL: NA psf
MWFRS Parallel Dist: NA
C&C Dist a: NA ft
Loc. from endwall: NA
I: NA GCpi: NA
Wind Duration: NA

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

Building Code:
FBC 8th Ed. 2023 Res.
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.000	C	999	480
VERT(CL): 0.000	C	999	360
HORZ(LL): 0.001	I	-	-
HORZ(TL): 0.001	B	-	-

Creep Factor: 2.0
Max TC CSI: 0.182
Max BC CSI: 0.043
Max Web CSI: 0.048

VIEW Ver: 23.02.04.0123.14

▲Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
S	11	/-68	/-	/9	/20	/-
S*	124	/-	/-	/46	/17	/-
K	-	/-58	/-	/9	/20	/-

S Brg Wid = 3.5 Min Req = 1.5 (Truss)
S Brg Wid = 147 Min Req = -
K Brg Wid = 5.5 Min Req = 1.5 (Truss)
Bearings S, S, & L are a rigid surface.
Members not listed have forces less than 375#

Lumber
Top chord: 4x2 SP #2;
Bot chord: 4x2 SP #2;
Webs: 4x2 SP #3;

Bracing
Sheathing is required for any longitudinal(drag) forces. All connections to be designed by the building designer.

Fasten rated sheathing to one face of this frame.

Plating Notes
All plates are 1X4 except as noted.

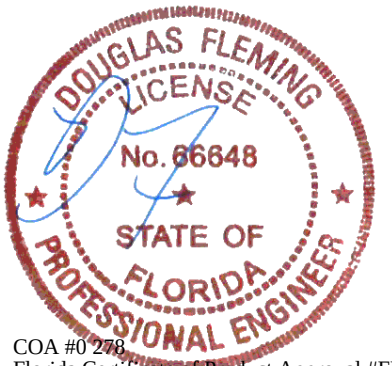
Wind
End verticals not exposed to wind pressure.

Additional Notes
See detail STRBRIBR1014 for bracing and bridging recommendations.

Provide uplift connections at bearings as indicated.
UPLIFT (LB): 120 plf
BRG.LOC (FT): OVER CONTINUOUS SUPPORT
Truss designed for 130.00 mph wind, 15.00 ft mean height with dead load of 5.00 psf (Top) and 5.00 psf (Bottom).
Enclosed building (SBC)

Truss must be installed as shown with top chord up.

The overall height of this truss excluding overhang is 1-4-0.



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03/26/2024

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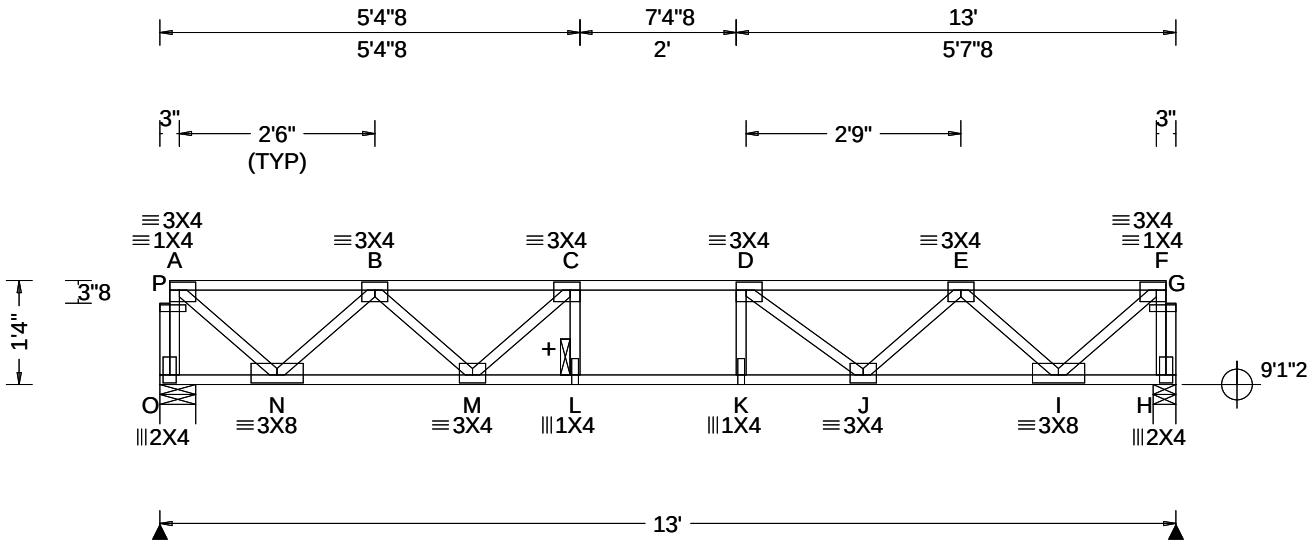
ALPINE AN ITW COMPANY
155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

SEQN: 756651 SY42 FROM: CDM	Ply: 1 Qty: 10	**Job Number:** 23-9243 Behr **Truss Label:** F02		Cust: R 215 JRef:1XYG2150001 T8 DrwNo: 086.24.0835.06133 NW / DF 03/26/2024	



Loading Criteria (psf)

TCLL:	40.00
TCDL:	10.00
BCLL:	0.00
BCDL:	5.00
Des Ld:	55.00
NCBCLL:	10.00
Soffit:	0.00

Load Duration: 1.00
Spacing: 24.0 "

Wind Criteria
Wind Std: NA
Speed: NA mph
Enclosure: NA
Category: NA
EXP: NA Kzt: NA
Mean Height: NA ft
TCDL: NA psf
BCDL: NA psf
MWFRS Parallel Dist: NA
C&C Dist a: NA ft
Loc. from endwall: NA
I: NA GCpi: NA
Wind Duration: NA

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

Building Code:
FBC 8th Ed. 2023 Res.
TPI Std: 2014
Rep Fac: Yes
FT/RT:12(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL):	0.103 K	999	480
VERT(CL):	0.169 K	894	360
HORZ(LL):	0.018 I	-	-
HORZ(TL):	0.029 B	-	-

Creep Factor: 2.0
Max TC CSI: 0.530
Max BC CSI: 0.813
Max Web CSI: 0.412

VIEW Ver: 23.02.04.0123.14

▲Maximum Reactions (lbs)

		Gravity		Non-Gravity		
Loc	R+ / R-	/ Rh	/ Rw	/ U	/ RL	
O	702 /-	/-	/-	/-	/-	
H	702 /-	/-	/-	/-	/-	

O Brg Wid = 5.5 Min Req = 1.5 (Truss)
H Brg Wid = 3.5 Min Req = 1.5 (Truss)
Bearings O & 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.
A - B	0	-633	D - E	0	-1500
B - C	0	-1507	E - F	0	-636
C - D	0	-1786			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
N - M	1217	0	K - J	1787	0
M - L	1784	0	J - I	1226	0
L - K	1786	0			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
P - O	0	-703	D - J	0	-461
A - P	0	-687	J - E	382	0
A - N	861	0	E - I	0	-821
N - B	0	-813	I - F	864	0
B - M	411	0	F - G	0	-686
M - C	0	-481	G - H	0	-691

Lumber

Top chord: 4x2 SP #2;
Bot chord: 4x2 SP #2;
Webs: 4x2 SP #3;

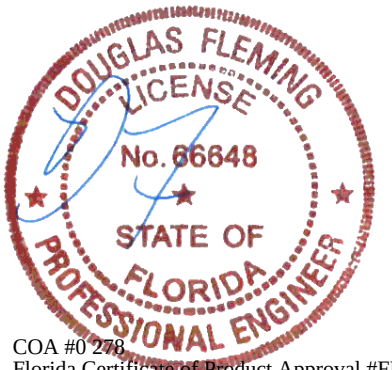
Additional Notes

+ 2x6 continuous strongback. See detail STRBRIBR1014 for bracing and bridging recommendations.

Maximum panel length exceeds 30". TPI allows non-bearing partition walls to be supported at any point when panels are 30" or less.

Truss must be installed as shown with top chord up.

The overall height of this truss excluding overhang is 1-4-0.



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03/26/2024

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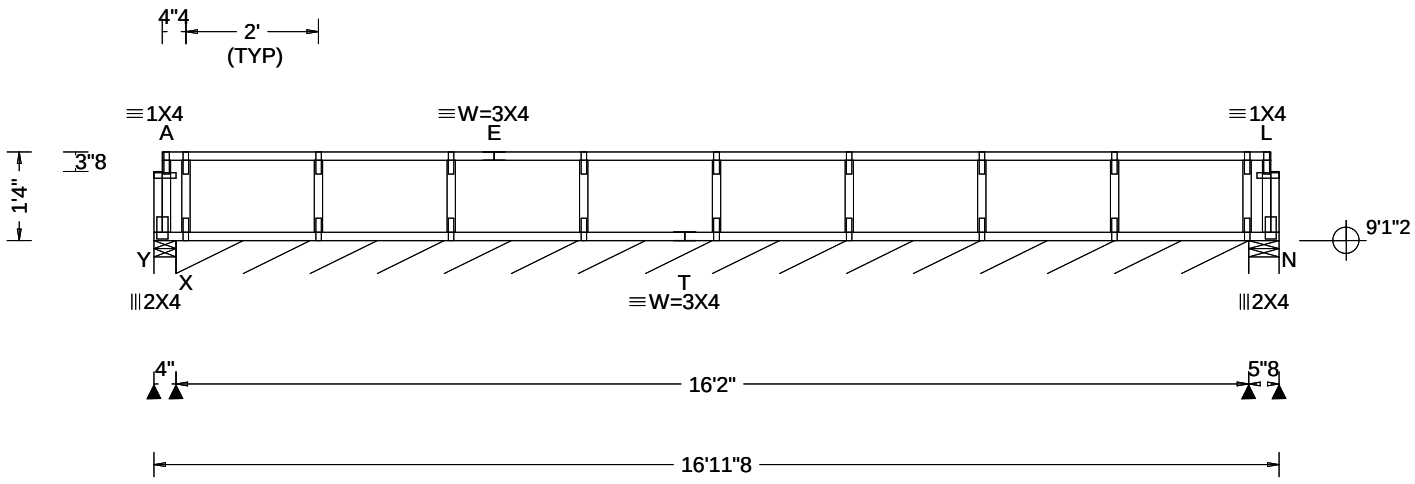
ALPINE
AN ITW COMPANY
155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

SEQN: 756648 SY42 FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 23-9243 Behr **Truss Label:** F03		Cust: R 215 JRef:1XYG2150001 T13 DrwNo: 086.24.0835.08313 NW / DF 03/26/2024	



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria
TCLL: 40.00	Wind Std: NA	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: NA mph	Pf: NA Ce: NA	VERT(LL): -0.000 L 999 480
BCLL: 0.00	Enclosure: NA	Lu: NA Cs: NA	VERT(CL): -0.000 L 999 360
BCDL: 5.00	Category: NA	Snow Duration: NA	HORZ(LL): 0.001 L - -
Des Ld: 55.00	EXP: NA Kzt: NA		HORZ(TL): 0.001 B - -
NCBCLL: 10.00	Mean Height: NA ft	Building Code:	Creep Factor: 2.0
Soffit: 0.00	TCDL: NA psf	FBC 8th Ed. 2023 Res.	Max TC CSI: 0.183
Load Duration: 1.00	BCDL: NA psf	TPI Std: 2014	Max BC CSI: 0.043
Spacing: 24.0 "	MWFRS Parallel Dist: NA	Rep Fac: Yes	Max Web CSI: 0.048
	C&C Dist a: NA ft	FT/RT:20(0)/10(0)	
	Loc. from endwall: NA	Plate Type(s):	
	I: NA GCpi: NA	WAVE	VIEW Ver: 23.02.04.0123.14
	Wind Duration: NA		

▲Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
Y	11	/-76	/-	/10	/22	/-
X*	122	/-	/-	/45	/17	/-
N	-	/-63	/-	/10	/22	/-

Y Brg Wid = 4.0 Min Req = 1.5 (Truss)
X Brg Wid = 194 Min Req = -
N Brg Wid = 5.5 Min Req = 1.5 (Truss)
Bearings Y, X, & O are a rigid surface.
Members not listed have forces less than 375#

Lumber

Top chord: 4x2 SP #2;
Bot chord: 4x2 SP #2;
Webs: 4x2 SP #3;

Bracing

Sheathing is required for any longitudinal(drag) forces. All connections to be designed by the building designer.

Fasten rated sheathing to one face of this frame.

Plating Notes

All plates are 1X4 except as noted.

Wind

End verticals not exposed to wind pressure.

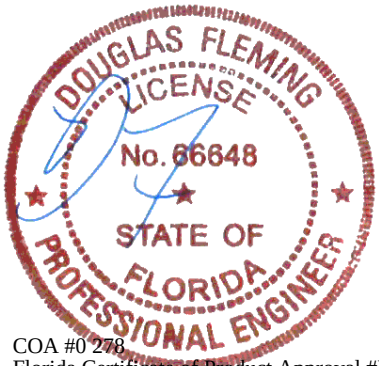
Additional Notes

See detail STRBRIBR1014 for bracing and bridging recommendations.

Provide uplift connections at bearings as indicated.
UPLIFT (LB): 120 plf
BRG.LOC (FT): OVER CONTINUOUS SUPPORT
Truss designed for 130.00 mph wind, 15.00 ft mean height with dead load of 5.00 psf (Top) and 5.00 psf (Bottom). Enclosed building (SBC)

Truss must be installed as shown with top chord up.

The overall height of this truss excluding overhang is 1-4-0.



COA #0 278
Florida Certificate of Product Approval #FL1999
03/26/2024

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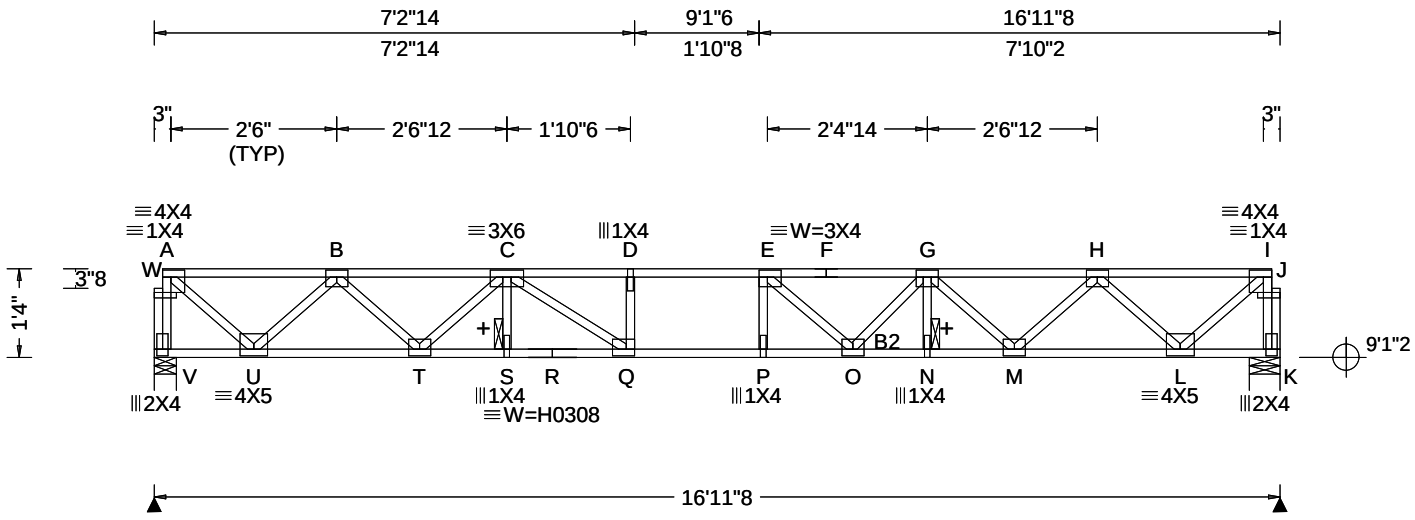
ALPINE
AN ITW COMPANY
155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

SEQN: 756649 SY42 FROM: CDM	Ply: 1 Qty: 10	**Job Number:** 23-9243 Behr **Truss Label:** F04		Cust: R 215 JRef:1XYG2150001 T12 DrwNo: 086.24.0835.11763 NW / DF 03/26/2024	



Loading Criteria (psf)

TCLL:	40.00
TCDL:	10.00
BCLL:	0.00
BCDL:	5.00
Des Ld:	55.00
NCBCLL:	10.00
Soffit:	0.00

Load Duration: 1.00
Spacing: 24.0 "

Wind Criteria
Wind Std: NA
Speed: NA mph
Enclosure: NA
Category: NA
EXP: NA Kzt: NA
Mean Height: NA ft
TCDL: NA psf
BCDL: NA psf
MWFRS Parallel Dist: NA
C&C Dist a: NA ft
Loc. from endwall: NA
I: NA GCpi: NA
Wind Duration: NA

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

Building Code:
FBC 8th Ed. 2023 Res.
TPI Std: 2014
Rep Fac: Yes
FT/RT:12(0)/10(0)
Plate Type(s):
WAVE, HS

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.234	P	850	480
VERT(CL): 0.304	E	654	360
HORZ(LL): 0.033	L	-	-
HORZ(TL): 0.045	L	-	-

Creep Factor: 2.0
Max TC CSI: 0.624
Max BC CSI: 0.745
Max Web CSI: 0.562

VIEW Ver: 23.02.04.0123.14

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
V	920	/-	/-	/-	/-	/-
K	920	/-	/-	/-	/-	/-

V Brg Wid = 4.0 Min Req = 1.5 (Truss)
K Brg Wid = 5.5 Min Req = 1.5 (Truss)
Bearings V & K 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	0	-869	E - F	0	-2906
B - C	0	-2188	F - G	0	-2906
C - D	0	-3081	G - H	0	-2192
D - E	0	-3091	H - I	0	-866

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
U - T	1681	0	P - O	3093	0
T - S	2690	0	O - N	2700	0
S - R	2690	0	N - M	2700	0
R - Q	2690	0	M - L	1678	0
Q - P	3091	0			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
W - V	0	-919	E - O	60	-497
A - W	0	-903	G - M	0	-690
A - U	1181	0	M - H	716	0
U - B	0	-1130	H - L	0	-1129
B - T	705	0	L - I	1177	0
T - C	0	-681	I - J	0	-901
C - Q	712	0	J - K	0	-906

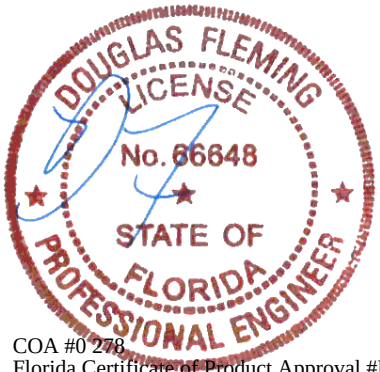
Lumber
Top chord: 4x2 SP #2;
Bot chord: 4x2 SP #2; B2 4x2 SP M-31;
Webs: 4x2 SP #3;

Plating Notes
All plates are 3X4 except as noted.

Additional Notes
+ 2x6 continuous strongback. See detail STRBRIBR1014 for bracing and bridging recommendations.

Truss must be installed as shown with top chord up.

The overall height of this truss excluding overhang is 1-4-0.



COA #0 278
Florida Certificate of Product Approval #FL1999
03/26/2024

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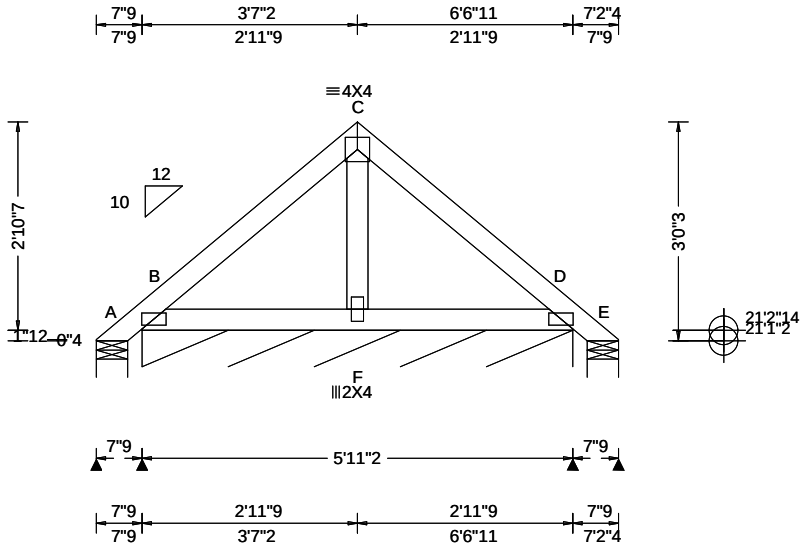
ALPINE
AN ITW COMPANY
155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

SEQN: 756639 GABL FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 23-9243 Behr **Truss Label:** PB01	Cust: R 215 JRef:1XYG2150001 T9 DrwNo: 086.24.0835.24510 NW / DF 03/26/2024



Loading Criteria (psf)

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

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-22
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 22.61 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

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

Building Code:
FBC 8th Ed. 2023 Res.
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): -0.000	B	999	240
VERT(CL): 0.001	B	999	180
HORZ(LL): 0.001	D	-	-
HORZ(TL): 0.001	D	-	-

Creep Factor: 2.0
Max TC CSI: 0.176
Max BC CSI: 0.073
Max Web CSI: 0.014

VIEW Ver: 23.02.04.0123.14

▲Maximum Reactions (lbs), or *=PLF

		Gravity		Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	-	/-47	/-	/88	/106	/88
B*	111	/-	/-	/70	/43	/-
E	-	/-47	/-	/47	/47	/-

Wind reactions based on MWFRS
A Brg Wid = 5.2 Min Req = 1.5 (Truss)
B Brg Wid = 71.1 Min Req = -
E Brg Wid = 5.2 Min Req = 1.5 (Truss)
Bearings A, B, & E are a rigid surface.
Members not listed have forces less than 375#

Lumber

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

Plating Notes

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

Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 3-0-3.

Refer to drawing PB180220723 for piggyback detail.

COA #0 278
Florida Certificate of Product Approval #FL1999
03/26/2024

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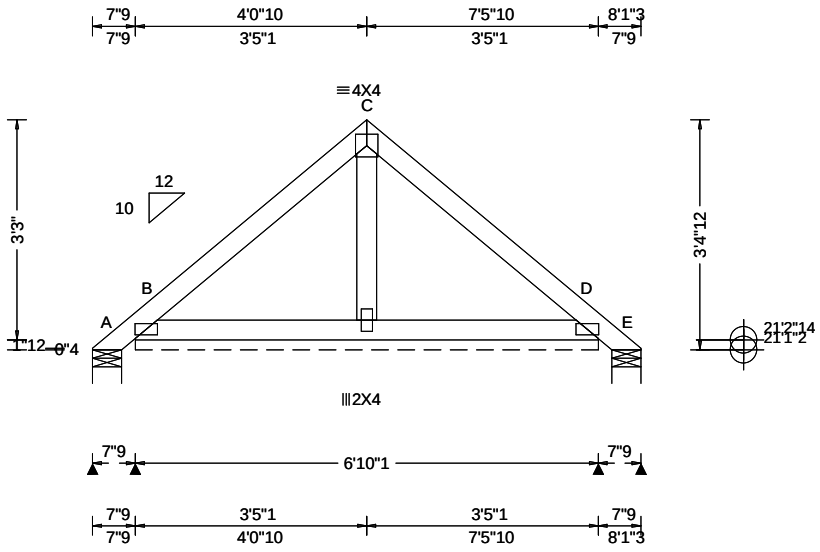
AN ITW COMPANY
155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

SEQN: 756637 COMN FROM: CDM	Ply: 1 Qty: 15	**Job Number:** 23-9243 Behr **Truss Label:** PB02	Cust: R 215 JRef:1XYG2150001 T1 DrwNo: 086.24.0835.30353 NW / DF 03/26/2024



Loading Criteria (psf)

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

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-22
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 17.67 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

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

Building Code:
FBC 8th Ed. 2023 Res.
TPI Std: 2014
Rep Fac: Yes
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.000	B	999	240
VERT(CL): 0.001	D	999	180
HORZ(LL): 0.001	D	-	-
HORZ(TL): 0.001	D	-	-

Creep Factor: 2.0
Max TC CSI: 0.130
Max BC CSI: 0.061
Max Web CSI: 0.019

VIEW Ver: 23.02.04.0123.14

▲Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	-	/-67	/-	/110	/134	/98
B*	99	/-	/-	/78	/42	/-
E	-	/-67	/-	/63	/69	/-

Wind reactions based on MWFRS
A Brg Wid = 5.2 Min Req = 1.5 (Truss)
B Brg Wid = 82.1 Min Req = -
E Brg Wid = 5.2 Min Req = 1.5 (Truss)
Bearings A, B, & E are a rigid surface.
Members not listed have forces less than 375#

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

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

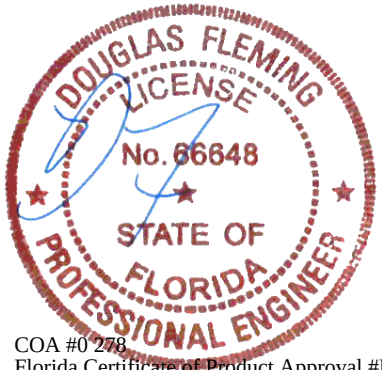
Loading
Gable end supports 8" max rake overhang. Top chord must not be cut or notched.

Purlins
In lieu of rigid ceiling use purlins to brace BC @ 24" oc.

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 3-4-12.

Refer to drawing PB180220723 for piggyback detail.



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03/26/2024

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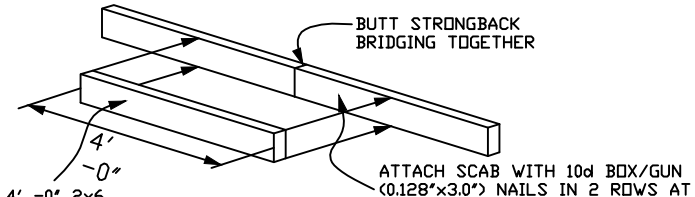
155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

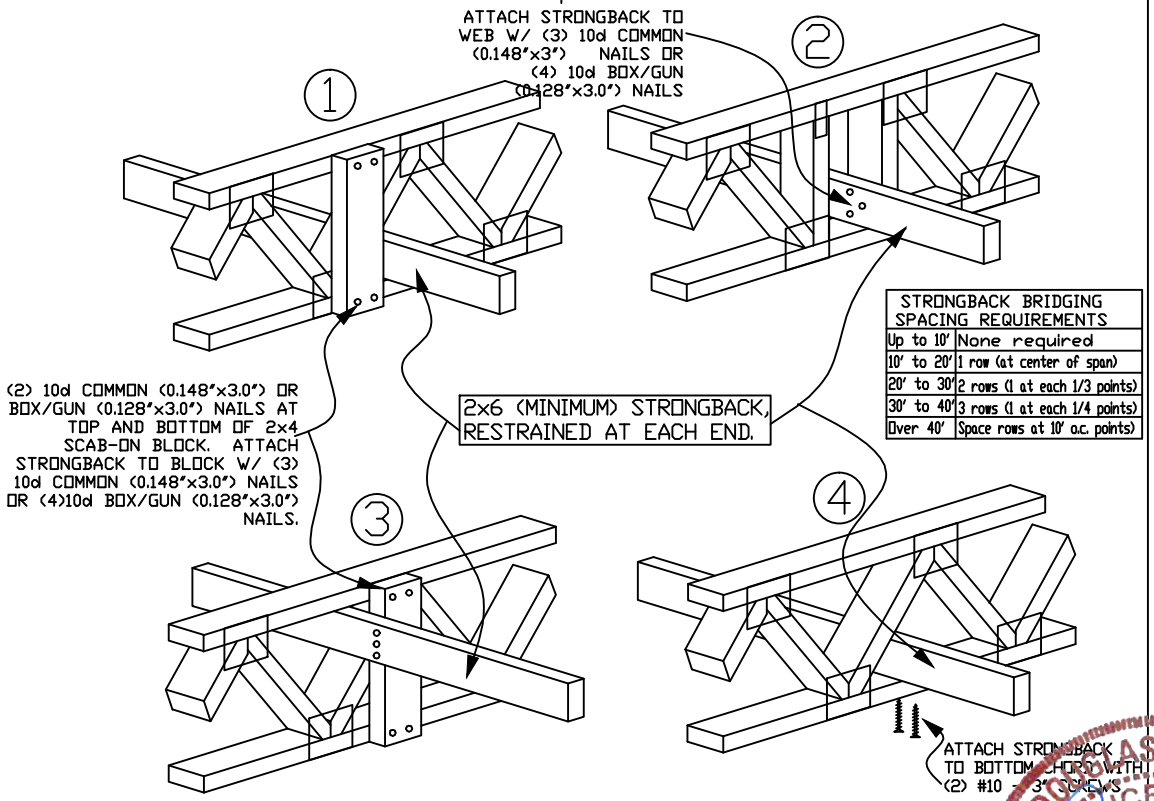
STRONGBACK BRIDGING RECOMMENDATIONS



NOTE: IN LIEU OF SPLICING AS SHOWN, LAP STRONGBACK BRIDGING MEMBERS FOR AT LEAST ONE TRUSS SPACING

STRONGBACK BRIDGING SPLICE DETAIL

NOTE: Details 1 and 2 are the preferred attachment methods



STRONGBACK BRIDGING SPACING REQUIREMENTS	
Up to 10'	None required
10' to 20'	1 row (at center of span)
20' to 30'	2 rows (1 at each 1/3 points)
30' to 40'	3 rows (1 at each 1/4 points)
Over 40'	Space rows at 10' o.c. points)

STRONGBACK BRIDGING ATTACHMENT ALTERNATIVES

- All scab-on blocks shall be a minimum 2x4 "stress graded lumber."
- All strongback bridging and bracing shall be a minimum 2x6 "stress graded lumber."
- The purpose of strongback bridging is to develop load sharing between individual trusses, resulting in an overall increase in the stiffness of the floor system. 2x6 strongback bridging, positioned as shown in details, is recommended at 10' -0" o.c. (max.)
- The terms "bridging" and "bracing" are sometimes mistakenly used interchangeably. "Bracing" is an important structural requirement of any floor or roof system. Refer to the Truss Design Drawing (TDD) for the bracing requirements for each individual truss component. "Bridging," particularly "strongback bridging" is a recommendation for a truss system to help control vibration. In addition to aiding in the distribution of point loads between adjacent truss, strongback bridging serves to reduce "bounce" or residual vibration resulting from moving point loads, such as footsteps.

The performance of all floor systems are enhanced by the installation of strongback bridging and therefore is strongly recommended by Alpine.

For additional information regarding strongback bridging, refer to BCSI (Building Component Safety Information).

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North Building, 4th Floor
Glenview, IL 60025

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ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcacomponents.com; ICC: www.iccsafe.org

DOUGLAS FLEMING LICENSE No. 66648 STATE OF FLORIDA PROFESSIONAL ENGINEER

03/26/2024
COA #0 278

TC LL	PSF	REF	STRONGBACK
TC DL	PSF	DATE	10/01/14
BC DL	PSF	DRWG	STRBRIBR1014
BC LL	PSF		
TOT. LD.	PSF		
DUR. FAC.	1.00		
SPACING			

Piggyback Detail - ASCE 7-22: 160 mph, 30' Mean Height, Enclosed, Exposure C, Kzt=1.00

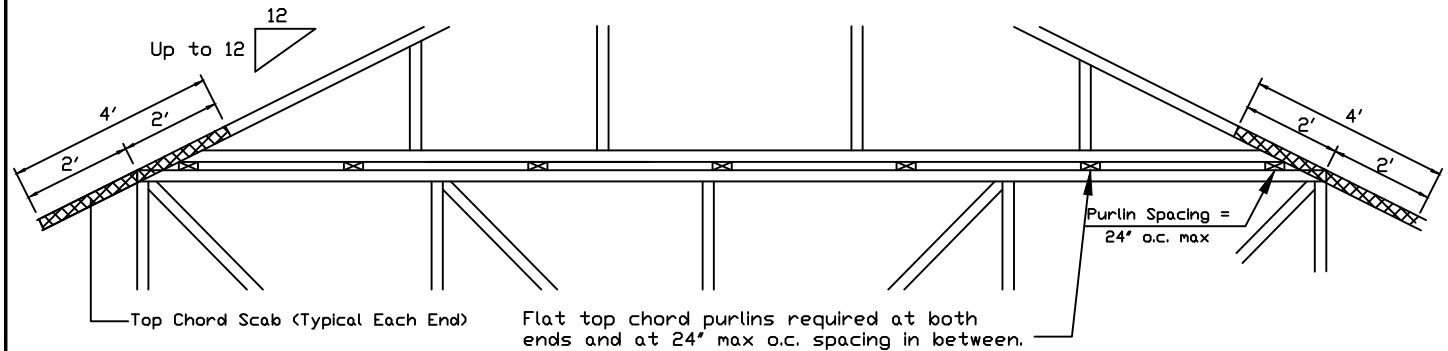
160 mph Wind, 30.00 ft Mean Hgt, ASCE 7-22, Enclosed Bldg. located anywhere in roof, Exp C, Wind DL= 5.0 psf (min), Kzt=1.0.
Or 140 mph wind, 30.00 ft Mean Hgt, ASCE 7-22, Enclosed Bldg. located anywhere in roof, Exp D, Wind DL= 5.0 psf (min), Kzt=1.0.

Note: Top chords of trusses supporting piggyback cap trusses must be adequately braced by sheathing or purlins. The building designer 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.

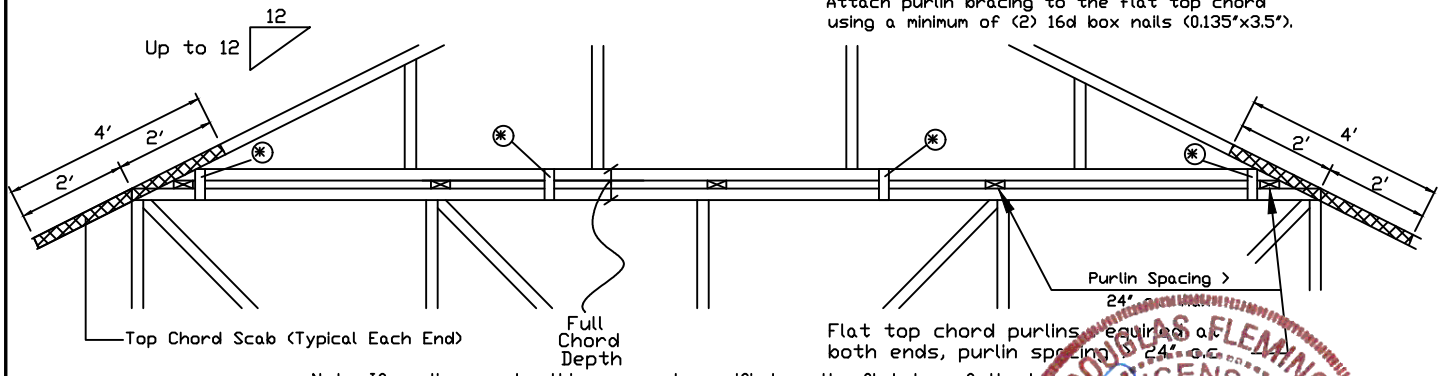
Attach purlin bracing to the flat top chord using (2) 16d box nails (0.135"x3.5").

The top chord #3 grade 2x4 scab may be replaced with either of the following: (1) 3X8 Trulox plate attached with (8) 0.120"x1.375" nails, (4) into cap TC & (4) into base truss TC or (1) 28PB wave piggyback plate plated 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").



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.

* In addition, provide connection with one of the following methods:

Trulox
Use 3X8 Trulox plates for 2x4 chord member, and 3X10 Trulox 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. Trulox 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 Scabs
2x4 SPF #2, full chord depth scabs (each face). Attach @ 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.

28PB Wave Piggyback Plate
One 28PB 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.

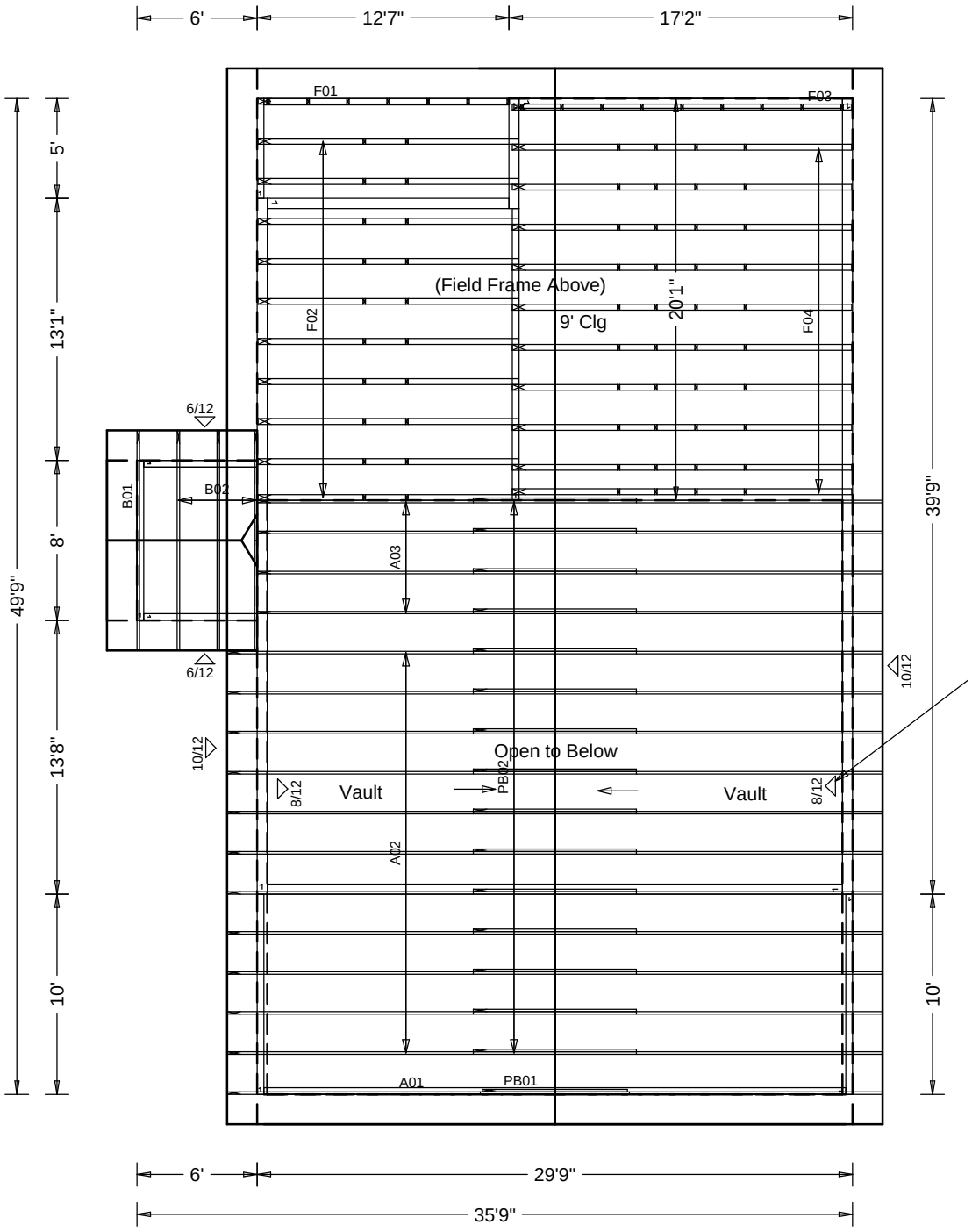
ALPINE
AN ITW COMPANY
155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

DOUGLAS FLEMING LICENSE No. 66648 STATE OF FLORIDA PROFESSIONAL ENGINEER

03/26/2024

COA #0 278

REF	PIGGYBACK
DATE	07/03/2023
DRWG	PB160220723
SPACING	24.0"



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: 6, 10/12
OVERHANG: 18"
CEILING: 9' w/Vault
EXT. WALLS: 6"
LOADING: 40psf
WIND LOAD: 130mph
EXPOSURE: C

DATE: 4/6/23

NOTE
10/12 Ceiling would not work******
*****Designed with 8/12 Interior Vault**

JOB #: 23-9243

Job Name: Behr
Customer: Whiddon Const.
Designer: Kelly Caudill
ADDRESS:
Salesman: 06
: 03-26-2024

JOB NO:
23-9243

PAGE NO:
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