



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

09/24/2025 ABCD Engineering, PLLC NC COA 0838

Site Information:	Page 1:		
Customer: Carpenter Contractors of America	Job Number: REPAIR 2575 LOT 16		
Job Description: 94 DECATUR DRIVE			
Address:			

Job Engineering Criteria:						
Design Code: IRC 2021	IntelliVIEW Version: 23.02.01A through 25.01.00C					
	JRef #: 1YDO89790005					
Loading Standard: ASCE 7-16 Wind Speed (mph): 0	Design Loading (psf): 55.00					
Building Type:						

This package contains general notes pages, 4 truss drawing(s) and 2 detail(s).

Item	Drawing Number	Truss
1	267.25.1006.36027	FF4
3	267.25.1013.03523	FF4 Repair
5	STRBRIBR1014	

Item	Drawing Number	Truss
2	267.25.1006.34527	FF5
4	267.25.1309.04383	FF5 Repair
6	160TL	

# **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.

# **Bearing Information:**

The bearing area factor, Cb, is considered for the allowable capacity of solid sawn wood bearings supporting trusses that are located a minimum of 3" from the end of the lumber piece.

# **General Notes** (continued)

### **Coated Lumber:**

Coated lumber must be properly re-dried and maintained below 19% or less moisture level through all stages of construction and usage. Coated lumber has no adjustments to lumber properties. Coated lumber may be more brittle than uncoated lumber. Special handling care must be taken to prevent breakage during all handling activities. Refer to manufacturer literature, specifications, and code evaluation reports for restrictions, details, and requirements.

### **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.

# **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.

C = Coated lumber.

C-AT = AtTEK coated lumber.

C-FX = FX Lumber Guard coated lumber.

C -TE = TechWood 4400 coated lumber.

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-BF = Boraflame 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-ON = OnWood 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).

# **General Notes** (continued)

# Key to Terms (continued):

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.

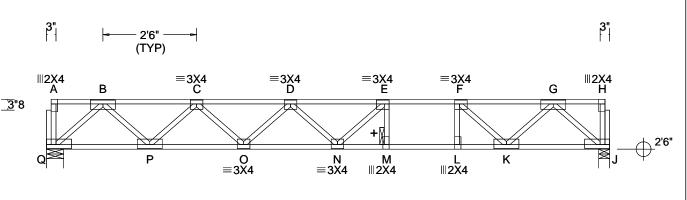
Refer to ASCE-7 for Wind and Seismic abbreviations.

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: 102906 / SY42 Ply: 1 Job Number: REPAIR 2575 LOT 16 Cust: R 8979 JRef: 1YDO89790005 T26 FROM: WEB Qty: 3 94 DECATUR DRIVE DrwNo: 267.25.1006.36027 Truss Label: FF4 / YK 09/15/2025 9'1"8 10'10"8 15' 9'1"8 1'9" 4'1"8



15'

Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	DefI/CSI Criteria
TCLL: 40.00 TCDL: 10.00	Wind Std: NA Speed: NA mph	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA	PP Deflection in loc L/defl L/# VERT(LL): 0.200 E 877 480
BCLL: 0.00 BCDL: 5.00	Enclosure: NA Category: NA EXP: NA Kzt: NA	Lu: NA Cs: NA Snow Duration: NA	VERT(CL): 0.286 E 614 360 HORZ(LL): 0.036 B
Des Ld: 55.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.00	Mean Height: NA ft TCDL: NA psf BCDL: NA psf MWFRS Parallel Dist: NA	Building Code: IRC 2021 TPI Std: 2014	HORZ(TL): 0.050 B
Spacing: 24.0 "	C&C Dist a: NA Loc. from endwall: NA I: NA GCpi: NA Wind Duration: NA	Rep Fac: Yes FT/RT:12(0)/10(0) Plate Type(s): WAVE	Max Web CSI: 0.399  VIEW Ver: 23.02.01A.1204.18

۸N	laxim	um Rea	ctions	(lbs)		
	(	Gravity		N	on-Gra	vity
Loc R+ /R			/ Rh	/ Rw	/ U	/ RL
Q	812	/-	/-	/-	/-	/-
J	-	/-	/-	/-	/-	/-
Q	Brg	Wid = 5.	5 Min	Req = 1.5	5 (Trus	s)
J	Brg	Wid = 3.	5 Min	Req = 1.	5 (Trus	s)
Bea	arings	Q&JF	cperp =	565psi.		
Ме	mbers	s not liste	ed have	forces les	s than	375#
Ma	ximu	m Top C	hord F	orces Per	Ply (lk	os)
Ch	ords	Tens.Co	mp.	Chords	Tens.	Comp.
В-	С	0 -	1379	E-F	0	- 2132
C -	D	0 -	2181	F-G	0	- 1389
D -	E	0 -	2386			

Maximum Bot Chord Forces Per Ply (lbs)

0

0

Maximum Web Forces Per Ply (lbs)

0 - 1118

0

0

Chords

M - L

L-K

K-J

Webs

F-K

K-G

G-J

Tens. Comp.

Tens. Comp.

0

0

0

0

2132

2115

786

379

838

0 - 1010

0 - 1069

Chords Tens.Comp.

1903

2449

2147

Tens.Comp.

774

386

446 - 67

0 - 730

Q-P

P - O

O - N

N - M

Webs

Q-B

B - P

P - C

C - O

N - E

#### Lumber

1'4"

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

### **Plating Notes**

All plates are 3X8 except as noted.

#### Loading

Bottom chord checked for 10.00 psf non-concurrent live load.

Deflection estimate assumes composite action with single layer of the appropriate span rated glue-nailed wood sheathing.

# **End Vertical Attachment**

Attach notched end vertical(s) to next end vertical using (3) qty. 10d box or (0.128"x3"min) gun nails, or (5) qty. 15-Gauge, 7/16" Crown, 2-1/2" length wire staples, through wide face; or (3) qty. 16-Gauge, 1" Crown (minimum), 1-1/2" length wire staples on each narrow face.

# **Additional Notes**

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

Truss must be installed as shown with top chord up.



09/24/2025

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

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

SEQN: 107184 SY42 Ply: 1 Job Number: REPAIR 2575 LOT 16 Cust: R 8979 JRef: 1YDO89790005 T49 FROM: WEB Qty: 4 94 DECATUR DRIVE DrwNo: 267.25.1006.34527 Truss Label: FF5 / YK 09/15/2025 9'1"8 10'10"8 14'8"8 9'1"8 1'9" 3'10" \_11"8 2'6" (TYP) ≡3X4 C ≡3X4 D ≡3X4 E ≡3X4 F ∥2X4 H **∥2X4** G В <u>\_3</u>"8 K ∥2X4 0 =3X4 J **∥2**X4 **≡3X4** 

14'8"8

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): 0.199 E 859 480
BCLL: 0.00	Enclosure: NA	Lu: NA Cs: NA	VERT(CL): 0.286 E 599 360
BCDL: 5.00	Category: NA	Snow Duration: NA	HORZ(LL): 0.035 B
Des Ld: 55.00	EXP: NA Kzt: NA Mean Height: NA ft		HORZ(TL): 0.050 B
NCBCLL: 10.00	TCDL: NA psf	Building Code:	Creep Factor: 2.0
Soffit: 2.00	BCDL: NA psf	IRC 2021	Max TC CSI: 0.474
Load Duration: 1.00	MWFRS Parallel Dist: NA	TPI Std: 2014	Max BC CSI: 0.750
Spacing: 24.0 "	C&C Dist a: NA	Rep Fac: Yes	Max Web CSI: 0.413
-	Loc. from endwall: NA	FT/RT:12(0)/10(0)	
	I: NA GCpi: NA	Plate Type(s):	
	Wind Duration: NA	WAVE	VIEW Ver: 23.02.01A.1204.18

	▲ Maximum Reactions (lbs)							
	Gravity				No	on-Gra	vity	
Loc R+			/ R-	/ Rh	/ Rw	/ U	/ RL	
	Р	793	/-	/-	/-	/-	/-	
	1	813	/-	/-	/-	/-	/-	
	Р	Brg '	Wid = 5.5	Mir	Req = 1.5	5 (Trus	s)	
	1	Brg '	Wid = -	Mir	Req = -	•		
	Bea	ring l	P Fcperp	= 565p	osi.			
	Men	nbers	not listed	d have	forces less	s than :	375#	
	Max	imu	m Top Cł	ord F	orces Per	Ply (lb	s)	
	Cho	rds	Tens.Cor	np.	Chords	Tens.	Comp.	
	B - 0	2	0 - 1	337	E-F	0	- 1973	
	C - I	D	0 - 2	099	F-G	0	- 1190	
	D - I	Ε	0 -2	262				

Maximum Bot Chord Forces Per Ply (lbs)

0

0

n

0

Maximum Web Forces Per Ply (lbs)

0 - 1089

Chords

K-J

Webs

F-J

J - G

G - I

Tens. Comp.

Tens. Comp.

396

867

0 - 1064

0 - 917

0

0

0

0

0

1973

1955

567

Chords Tens.Comp.

1841

2348

1989

Tens.Comp.

746

477

0 - 701

P - 0

O - N

N - M

M - L

Webs

P - B

B - O

0 - C

M - E

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

# **Plating Notes**

All plates are 3X8 except as noted.

#### Loading

Bottom chord checked for 10.00 psf non-concurrent live load.

Deflection estimate assumes composite action with single layer of the appropriate span rated glue-nailed wood sheathing.

# **End Vertical Attachment**

Attach notched end vertical(s) to next end vertical using (3) qty. 10d box or (0.128"x3"min) gun nails, or (5) qty. 15-Gauge, 7/16" Crown, 2-1/2" length wire staples, through wide face; or (3) qty. 16-Gauge, 1" Crown (minimum), 1-1/2" length wire staples on each narrow face.

# **Additional Notes**

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

Truss must be installed as shown with top chord up.



09/24/2025

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



Qty: 3

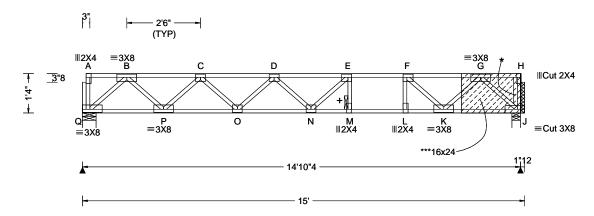
Ply: 1

Job Number: REPAIR 2575 LOT 16

94 DECATUR DRIVE Truss Label: FF4 Repair

Cust: R 8979 JRef: 1YDO89790005 T50 DrwNo: 267.25.1013.03523 / YK 09/24/2025

# 1-3/4" stubbed off right end



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	in PSF) DefI/CSI Criteria		
TCLL: 40.00 TCDL: 10.00 BCLL: 0.00 BCDL: 5.00 Des Ld: 55.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.00 Spacing: 24.0 "	Speed: NA mph Category: NA Enclosure: NA EXP: NA Kzt: NA TCDL: NA psf BCDL: NA psf Mean Height: NA ft MWFRS Parallel Dist: NA C&C Dist a: NA Loc. from endwall: NA I: NA Wind Duration: NA	Pg: NA Ct: NA CAT: NA Pf(ASD): NA Ce: NA Lu: NA Cs: NA Snow Duration: NA  Building Code: IRC 2021 Load Std: ASCE 7-16 TPI Std: 2014 Rep Fac: Yes FT/RT:12(0)/10(0) Plate Type(s):	PP Deflection in loc L/defl L/# VERT(LL): 0.211 E 844 480 VERT(CL): 0.286 E 621 360 HORZ(LL): 0.037 B HORZ(TL): 0.050 B Creep Factor: 2.0 Max TC CSI: 0.462 Max BC CSI: 0.734 Max Web CSI: 0.378		
		WAVE	VIEW Ver: 25.01.00C.0728.19		
Lumber	_umber This truss is repaired to stub 1-3/4" off right end of				

truss as shown.

#### Lumber

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

### **Plating Notes**

All plates are 3X4 except as noted.

Bottom chord checked for 10.00 psf non-concurrent live load.

## **Deflection**

Deflection estimate assumes composite action with single layer of the appropriate span rated glue-nailed wood sheathing.

#### **End Vertical Attachment**

Attach notched end vertical(s) to next end vertical using (3) qty. 10d box or (0.128"x3"min) gun nails, or (5) qty. 15-Gauge, 7/16" Crown, 2-1/2" length wire staples, through wide face; or (3) qty. 16-Gauge, 1 Crown (minimum), 1-1/2" length wire staples on each narrow face.

# **Additional Notes**

PLANE.

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

Truss must be installed as shown with top chord up.

(1)4X2 SP #2 OR BETTER CUT TO FIT FIELD-INSTALLED MEMBER TO BE ADDED AS SHOWN INTO PLANE OF TRUSS.
THERE WILL BE A TOTAL OF (1) MEMBERS ADDED IN Repair(s) must comply with Alpine designs & specifications

Shore Truss and any supported spans in proper position as repair is being made.

(2) 1/2"(NOM.) APA 32/16 EXP 1 Rated sheathing (PLYWOOD OR OSB) required. Apply one gusset to each face as shown and attach with 0.113x2.0" nails at 1-1/2" OC in each member covered without splitting lumber.



09/24/2025

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#### ▲ Maximum Reactions (lbs) Gravity Non-Gravity Loc R+ /Rh /Rw /U /RL Q 823 /-/-/-799 Brg Wid = 5.5 Min Req = 1.5 (Truss) Brg Wid = 3.5 Min Req = 1.5 (Truss) Bearing J is a rigid surface. Bearing Q Fcperp = 565psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. B - C 0 - 1400 0 -2214 C - D 0 - 2223 - 1492

# Maximum Bot Chord Forces Per Ply (lbs)

0 - 2450

D-E

Chords	Tens.Comp.		Chords	Tens. Comp.		
Q-P	833	0	M - L	2214	0	
P - O	1936	0	L-K	2199	0	
O - N	2501	0	K-J	922	0	
N - M	2229	0				

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

Webs	Tens.Comp.		Webs	Tens. Comp.		
Q-B	0 -	1133	N - E	430	-86	
B - P	789	0	F-K	0	- 984	
P-C	0	- 745	K-G	794	0	
C-O	400	0	G-J	0	- 1151	
O - D	0	- 386				

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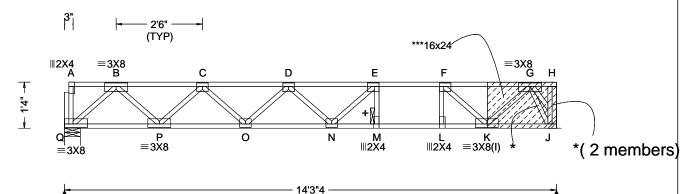
For more information see these web sites: Alpine: alpineitw.com: TPI: binst.org: SBCA: sbcacomponents.com: ICC: iccsafe.org: AWC: awc.org



SEQN: 29806 SY42 Job Number: REPAIR 2575 LOT 16 Cust: R 8979 JRef: 1YDO89790005 T52 Ply: 1 DrwNo: 267.25.1309.04383 FROM: JDB 94 DECATUR DRIVE Qty: 4 Truss Label: FF5 Repair / YK 09/24/2025



5-1/4" stubbed off right end



truss as shown.

# Lumber

Top chord: 4x2 SP SS;

Bot chord: 4x2 SP SS; Webs: 4x2 SP #3; W14,W16,W17 4x2 SP #2;

### **Plating Notes**

All plates are 3X4 except as noted.

(I) - plates so marked were sized using 0% Fabrication Tolerance, 0 degrees Rotational Tolerance, and/or zero Positioning Tolerance.

### Loading

Bottom chord checked for 10.00 psf non-concurrent live load.

Deflection estimate assumes composite action with single layer of the appropriate span rated glue-nailed wood sheathing.

# **End Vertical Attachment**

Attach notched end vertical(s) to next end vertical using (3) qty. 10d box or (0.128"x3"min) gun nails, or (5) qty. 15-Gauge, 7/16" Crown, 2-1/2" length wire staples, through wide face; or (3) qty. 16-Gauge, 1" Crown (minimum), 1-1/2" length wire staples on each narrow face.

## **Additional Notes**

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

Truss must be installed as shown with top chord up.

This truss is repaired to stub 5-1/4" off right end of

Repair(s) must comply with Alpine designs &

Shore Truss and any supported spans in proper position as repair is being made.

(1)4X2 SP #2 OR BETTER CUT TO FIT FIELD-INSTALLED MEMBER TO BE ADDED AS SHOWN INTO PLANE OF TRUSS.

THERE WILL BE A TOTAL OF (3) MEMBERS ADDED IN

\*\*\*(2) 1/2"(NOM.) APA 32/16 EXP 1 Rated sheathing (PLYWOOD OR OSB) required. Apply one gusset to each face as shown and attach with 0.113x2.0" nails at 1-1/2" OC in each member covered without splitting lumber:



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#### ▲ Maximum Reactions (lbs) Gravity Non-Gravity Loc R+ /Rh /Rw /U /RL Q 769 /-/-/-789 /-Brg Wid = 5.5 Min Req = 1.5 (Truss) Min Req = -Brg Wid = -Bearing Q Fcperp = 565psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords B - C 0 - 1286 E - F 0 - 1778 0 - 1999 - 947 D-E 0 - 2111

Maximum Bot Chord Forces Per Ply (lbs)									
Chords	Tens.Co	mp.	Chords	Tens. Comp.					
Q-P	775	0	N - M	1796	0				
P - O	1765	0	M - L	1778	0				

#### 1759 0 O - N 2225 0 L-K

Maximum Web Forces Per Ply (lbs)									
Webs	Tens.Comp.		Webs	Tens.	Tens. Comp.				
Q-B	0 - 105	4	L-F	419	0				
B - P	711	0	F-K	0	- 1129				
P-C	0 -66	5	K-G	896	0				
N - E	517	0	G - J	0	- 740				
E - M	0 -38	7							

\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS DRAWING!

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

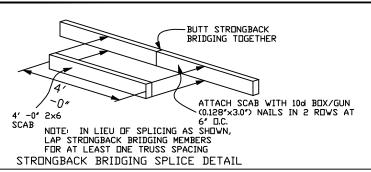
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing 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/TP1 1 Sec. 2.

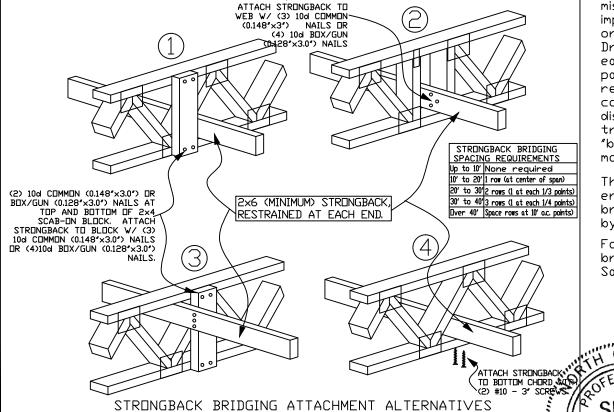
For more information see these web sites: Alpine: alpineitw.com: TPI: binst.org: SBCA: sbcacomponents.com: ICC: iccsafe.org: AWC: awc.org



# STRONGBACK BRIDGING RECOMMENDATIONS



NOTE: Details 1 and 2 are the preferred attachment methods



- ► 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).

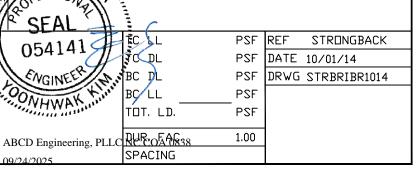
William Contraction CARO

# \*\*\*VARNING\*\*\* 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 (Bullaing Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and botton chord shall have a properly attached rigid celling. 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-2 for standard plate positions.

ANITW COMPANY
Apine, a division of ITV 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, in the standard process of the season of the season this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The subability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.

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

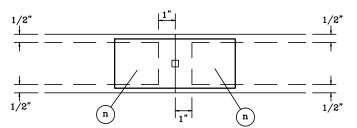




155 Harlem Ave North Building, 4th Floor Glenview, IL 60025

# TRULOX INFORMATION DETAIL

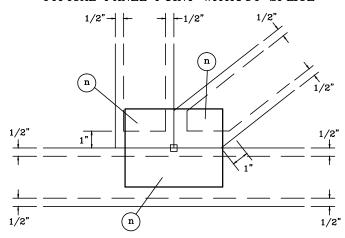
# TYPICAL OFF PANEL SPLICE



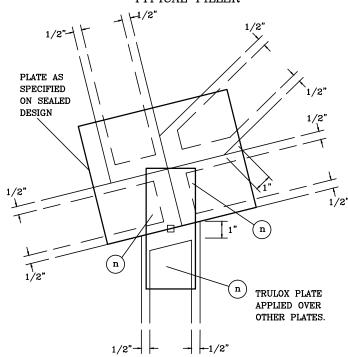
DO NOT APPLY NAILS WITHIN 1/2" OF LUMBER EDGES OR 1" OF LUMBER ENDS ON EACH FACE, AS SHOWN BY DASHED LINES.

NAILS MUST NOT SPLIT LUMBER.

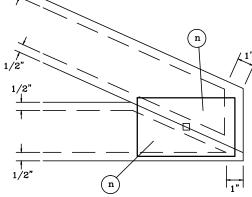
# TYPICAL PANEL POINT WITHOUT SPLICE



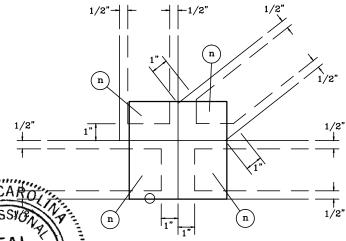




TYPICAL HEEL



TYPICAL PANEL POINT SPLICE



#### NOTES:

- (n) IS THE REQUIRED NUMBER OF 0.120" X 1.375" NAILS, OR EQUAL, PER FACE PER PLY AS SPECIFIED ON THE SEALED DESIGN REFERENCING THIS DETAIL.
- O LOCATES PLATE CORNER OR FLUSH EDGE.
- ☐ LOCATES PLATE CENTER.



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TRULOX PLATING



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