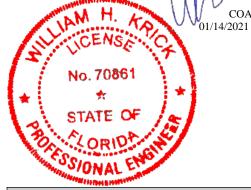
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Alpine, an ITW Company 6750 Forum Drive, Suite 305 Orlando, FL 32821 Phone: (800)755-6001 www.alpineitw.com



Site Information:	Page 1:
Customer: W. B. Howland Company, Inc.	Job Number: 20-4541
Job Description: Sparks Residence	
Address: FL	

Job Engineering Criteria:			
Design Code: FBC 7th Ed. 2020 Res	IntelliVIEW Version: 20.02.01A		
	JRef #: 1X212150007		
Wind Standard: ASCE 7-16 Wind Speed (mph): 130	Design Loading (psf): 40.00		
Building Type: Closed			

This package contains general notes pages, 42 truss drawing(s) and 6 detail(s).

Item	Drawing Number	Truss
1	014.21.0945.26180	A01
3	014.21.0945.29157	A03
5	014.21.0945.31697	B01
7	014.21.0945.38383	B03
9	014.21.0945.42637	C01
11	014.21.0946.03637	C03
13	014.21.0946.38160	C05
15	014.21.0946.40737	C06
17	014.21.0946.55870	C07
19	014.21.0946.58177	C09
21	014.21.0947.00230	C11
23	014.21.0947.02530	D02
25	014.21.0947.04640	M01
27	014.21.0947.06727	J01
29	014.21.0947.08493	J03
31	014.21.0947.10203	J05HJ
33	014.21.0947.53440	FT02
35	014.21.0949.46710	FT04
37	014.21.0947.23683	PB02
39	014.21.0947.39750	V02
41	014.21.0947.41577	V04
43	BRCLBSUB0119	
45	GBLLETIN0118	
47	VAL180160118	

Item	Drawing Number	Truss
2	014.21.0945.27813	A02
4	014.21.0945.30327	A04
6	014.21.0945.37070	B02
8	014.21.0945.41207	B04
10	014.21.0946.02200	C02
12	014.21.0946.26297	C04
14	014.21.0946.39567	C05A
16	014.21.0946.54530	C06A
18	014.21.0946.56977	C08
20	014.21.0946.59190	C10
22	014.21.0947.01333	D01
24	014.21.0947.03517	E01
26	014.21.0947.05760	M02
28	014.21.0947.07667	J02
30	014.21.0947.09350	J04
32	014.21.0947.48707	FT01
34	014.21.0949.37310	FT03
36	014.21.0947.21910	PB01
38	014.21.0947.37930	V01
40	014.21.0947.40707	V03
42	014.21.0947.42610	V05
44	A14015ENC160118	
46	PB160160118	
48	VALTN160118	

## **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.

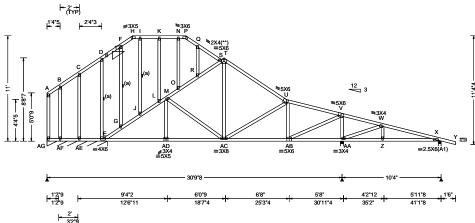
Uppercase Acronyms not explained above are as defined in TPI 1.

### 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; <a href="https://www.alpineitw.com">www.alpineitw.com</a>.
- 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: 334786 SPEC Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T32 FROM: CDM DrwNo: 014.21.0945.26180 Qty: 1 Sparks Residence Truss Label: A01 SSB / WHK 01/14/2021





Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.079 H 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.164 H 999 180
BCDL: 10.00	Risk Category: II EXP: C Kzt: NA	Snow Duration: NA	HORZ(LL): -0.055 A
Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: > 2h C&C Dist a: 4.11 ft Loc. from endwall: not in 13.00 ft	Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s):	HORZ(TL): 0.114 A Creep Factor: 2.0  Max TC CSI: 0.423  Max BC CSI: 0.455  Max Web CSI: 0.572
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11
Lumber	•		-

▲ Maximum Reactions (lbs), or *=PLF							
	G	ravity		Non-Gravity			
Loc	R+	/ R-	/Rh	/ Rw	/ U	/ RL	
AG*	238	/-	/-	/126	/2	/45	
AA	1672	/-	/-	/910	/19	/-	
X :	388	/-	/-	/178	/95	/-	
Wind reactions based on MWFRS							
AG Brg Width = 75.5				Min Re	q = -		
AA Brg Width = 4.0				Min Re	q = 1.6	6	
X Brg Width = 3.5				Min Re	q = 1.5	5	
Bearings AG, AA, & X are a rigid surface.							
Members not listed have forces less than 375#							
Max	imum	Top Ch	ord Fo	rces Per	Ply (lb	s)	
Cho	rds T	ens.Con	np.	Chords	Tens.	Ćomp.	

S-T

T - U

U-V

-832

- 775

- 972

- 971

- 523

0

106

89

77

41

700

Tens. Comp.

Tens. Comp.

50 - 1314

56 - 760

147 - 1368

150 - 1360

150 - 1328 112 - 1204

# 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.

(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

### **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.

Left end vertical 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

Laterally brace chord above/ below filler at 24" OC (or as designed) including a lateral brace on chord directly below both ends of filler (if no rigid diaphragm exists at that point)

М - О О - R	-		V - W	700
			Forces Per Chords	Ply (lbs) Tens. Co
E -AD AD-AC	1117 1115	0	AC-AB AB-AA	942 39
				<b>bs)</b> Tens. Co
M -AC T -AC U -AB	31 - 576	501 0	AB- V V -AA AA- W	1502 50 - 56
	Maximu Chords E -AD AD-AC Maximu Webs M -AC T -AC	Maximum Bot Cl Chords Tens.Co E -AD 1117 AD-AC 1115 Maximum Web F Webs Tens.Co M -AC 31 T -AC 576	O - R 125 - 887  Maximum Bot Chord I Chords Tens.Comp.  E - AD 1117 0 AD-AC 1115 0  Maximum Web Forces Webs Tens.Comp.  M - AC 31 - 501 T - AC 576 0	O - R         125 - 887           Maximum Bot Chord Forces Per Chords           E -AD         1117         0         AC-AB AD-AC           AD-AC         1115         0         AB-AA           Maximum Web Forces Per Ply (I Webs           M -AC         31 - 501         AB- V T -AC           T -AC         576         0         V -AA

E-G

G-J

J - L

L-M



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

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

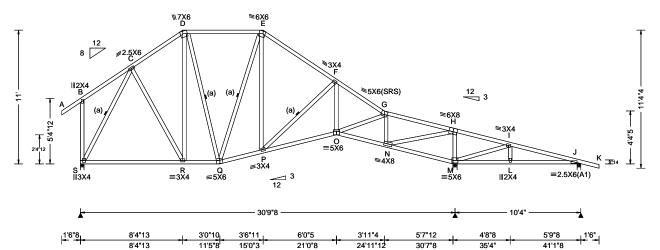
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2. For more information see these web sites: Alpine: alpineitw.com; TPI: tpinst.org; SBCA: sbcindustry.com; ICC: iccsafe.org; AWC: awc.org



SEQN: 334787 COMN Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T36 FROM: CDM DrwNo: 014.21.0945.27813 Qty: 4 Sparks Residence Truss Label: A02 SSB / WHK 01/14/2021





Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	<b>A</b>
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: > 2h C&C Dist a: 4.11 ft Loc. from endwall: not in 13.00 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	PP Deflection in loc L/defl L/# VERT(LL): 0.093 O 999 240 VERT(CL): 0.190 O 999 180 HORZ(LL): 0.047 M HORZ(TL): 0.097 M Creep Factor: 2.0 Max TC CSI: 0.601 Max BC CSI: 0.875 Max Web CSI: 0.934  VIEW Ver: 20.02.01A.1209.11	

▲ Maximum Reactions (lbs)							
	Gravity				n-Grav	rity	
Loc	R+	/ R-	/Rh	/Rw	/ U	/ RL	
S 14	414	/-	/-	/726	/44	/318	
M 2	173	/-	/-	/1188	/28	/-	
J 30	80	/-62	/-	/88	/107	/-	
Wind reactions based on MWFRS							
S Brg Width = 3.5				Min Req = 1.7			
M Brg Width = 4.0				Min Req = 2.6			
J Brg Width = 3.5				Min Req = 1.5			
Bearin	ngs S	S, M, & J	are a rigi	id surfac	ce.		
Members not listed have forces less than 375#							
Maximum Top Chord Forces Per Ply (lbs)							
Chords Tens.Comp. Chords Tens. Comp.						Ćomp.	
J 30 Wind S B M B J B Bearin Memb	reactors with the second secon	/-62 tions bas fidth = 3. fidth = 4. fidth = 3. S, M, & J not listed <b>Top Ch</b>	, /- sed on M\ 5 0 5 are a rigi have for <b>ord Forc</b>	/88 WFRS Min Red Min Red Min Red d surfact ces less es Per	/107 q = 1.7 q = 2.6 q = 1.5 ce. s than 3 <b>Ply (lbs</b>	/- :75# s)	

G - H

H - I

1 - J

- 1262

0

- 4

46

1383

819

#### Lumber

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

(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.

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

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

Left end vertical 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 11-0-0.



## Maximum Bot Chord Forces Per Ply (lbs)

C-D

D-E

E-F

F-G

115 - 937

127 - 755

126 - 1169

65 - 1887

Chords	Tens.Comp.		Chords	Tens. Comp.	
S-R	552	- 69	O - N	1336	0
R-Q	723	0	N - M	45	- 1385
Q-P	930	0	M - L	18	- 788
P - O	1568	0	L-J	21	- 779

### Maximum Web Forces Per Ply (lbs)

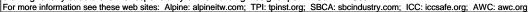
Webs	Tens.Comp.	Webs	Tens. Comp.	
s-c	18 - 1185	G - N	51 - 1104	
Q-E	49 - 420	N - H	2452 0	
E - P	581 0	M - H	63 - 1483	
P - F	61 - 866	M - I	54 - 828	
F - O	702 0			

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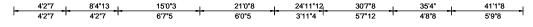
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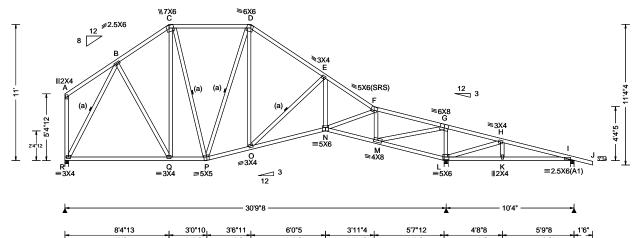
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SEQN: 334788 COMN Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T37 FROM: CDM Qty: 6 DrwNo: 014.21.0945.29157 Sparks Residence Truss Label: A03 SSB / WHK 01/14/2021





24'11"12

30'7"8

35'4

B - C

C-D

D-E

F-F

107 - 946

120 - 759

119 - 1174

56 - 1893

21'0"8

Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	DefI/CSI Criteria	4
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#	١.
	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.093 N 999 240	!
DCLL. 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.190 N 999 180	П
10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.047 L	П
Dec 1 4: 40 00	EXP: C Kzt: NA		HORZ(TL): 0.097 L	
NCBCLL: 10.00	Mean Height: 15.00 ft TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0	1
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.602	
	MWFRS Parallel Dist: h to 2h	TPI Std: 2014	Max BC CSI: 0.877	Н
Spacing: 24.0 "	C&C Dist a: 4.11 ft	Rep Fac: Yes	Max Web CSI: 0.936	П
, ,	Loc. from endwall: not in 13.00 ft	FT/RT:20(0)/10(0)		Ιi
	GCpi: 0.18	Plate Type(s):		Ji
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11	1

11'5"8

15'0"3

8'4"13

▲ Maximum Reactions (lbs)							
	G	ravity		No	n-Grav	rity	
Loc	R+	/ R-	/ Rh	/Rw	/ U	/ RL	
R	1305	/-	/-	/637	/26	/281	
L	2176	/-	/-	/1192	/23	/-	
1	308	/-63	/-	/87	/107	/-	
Win	Wind reactions based on MWFRS						
R	Brg W	/idth = 3	.5	Min Red	q = 1.5		
L	Brg W	/idth = 4	.0	Min Red	q = 2.6		
Ī	Brg W	/idth = 3	.5	Min Red	g = 1.5		
Bea	Bearings R, L, & I are a rigid surface.						
Members not listed have forces less than 375#							
Max	imum	Top Ch	ord Forc	es Per	Ply (lbs	s)	
Cho	rds T	ens.Con	np. Cl	nords	Tens.	Ćomp.	

F-G

G-H

H - I

- 1265

0

- 1

40

1386

822

41'1"8

#### Lumber

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

(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.

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

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

Left end vertical 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 11-0-0.



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

Chords	Tens.C	omp.	Chords	Tens.	Comp.
R - Q	563	-60	N - M	1340	0
Q - P	728	0	M - L	42	- 1388
P - O	934	0	L-K	15	- 791
O - N	1573	0	K-I	19	- 781

### Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. Comp.
R-B	56 - 1209	F-M	47 - 1107
P - D	52 - 418	M - G	2458 0
D - O	581 0	L-G	59 - 1486
O - E	58 - 867	L-H	54 - 828
F - N	703 O		

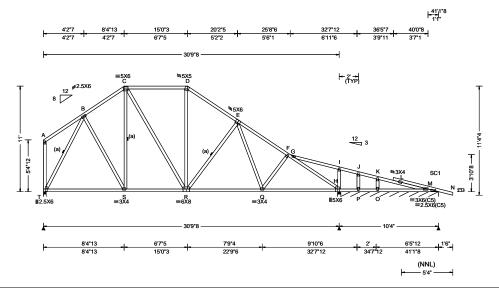
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6750 Forum Drive Suite 305 Orlando FL, 32821 SEQN: 334789 COMN Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T21 FROM: CDM DrwNo: 014.21.0945.30327 Qty: 1 Sparks Residence Truss Label: A04 SSB / WHK 01/14/2021



	Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria
ŀ	TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
ŀ	TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.051 E 999 240
	BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.104 E 999 180
	BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.023 C
h	Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.048 C
h	NCBCLL: 10.00	Mean Height: 15.00 ft TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0
	Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.482
ı		MWFRS Parallel Dist: h/2 to h	TPI Std: 2014	Max BC CSI: 0.724
	Spacing: 24.0 "	C&C Dist a: 4.11 ft	Rep Fac: Yes	Max Web CSI: 0.505
1		Loc. from endwall: not in 6.50 ft	FT/RT:20(0)/10(0)	
1		GCpi: 0.18	Plate Type(s):	
		Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11

Lumber
--------

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

(a) Continuous lateral restraint equally spaced on member

#### **Plating Notes**

All plates are 2X4 except as noted.

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

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

Left end vertical not exposed to wind pressure. Wind loading based on both gable and hip roof types.

### **Additional Notes**

Stacked top chord must NOT be notched or cut in area (NNL). 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 11-0-0.

#### Bearings T, H, & H are a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. B - C 285 - 942 G-H 292 - 1974 315 -886 C-D G - I 398 - 9 D-E 322 - 1154 1 - .1 381 - 27 F-F 311 - 1552 K-L 380 - 23 F-G 281 - 1573 L-M 479 -92

▲ Maximum Reactions (lbs), or \*=PLF

/-

/Rh

Non-Gravity

/219

/192 /-

Min Req = 1.5

Min Req = 1.9Min Req = -

/RL

/254

/Rw /U

/674

/902

/32 /-

Gravity

/-

/-125 Wind reactions based on MWFRS Brg Width = 3.5

Brg Width = 4.0

M Brg Width = 122

Loc R+

М\* 70

1242

1630

#### Maximum Bot Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords

5110140	10110.0	onip.	0110140	10110.	oomp.	
Γ-S S-R	561 725		R - Q Q - H	1146 1268	-	

# Maximum Web Forces Per Ply (lbs)

	Tens.Comp.			np.
ть	240 4202	D E	190	127



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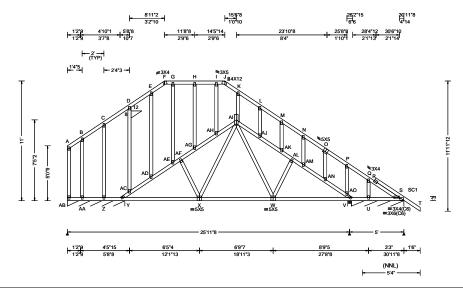
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SEQN: 334790 SPEC Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T24 DrwNo: 014.21.0945.31697 FROM: CDM Qty: 1 Sparks Residence Truss Label: B01 SSB / WHK 01/14/2021



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.044 I 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.093 I 999 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): -0.032 A
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.069 A
NCBCLL: 10.00	Mean Height: 15.00 ft TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.249
Load Duration: 1.25	MWFRS Parallel Dist: 0 to h/2	TPI Std: 2014	Max BC CSI: 0.450
Spacing: 24.0 "	C&C Dist a: 3.10 ft	Rep Fac: Yes	Max Web CSI: 0.238
' "	Loc. from endwall: not in 4.50 ft	FT/RT:20(0)/10(0)	
	GCpi: 0.18	Plate Type(s):	
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11
Lumber		Laterally brace chord above	e/ below filler at

Laterally brace chord above/ below filler at 24" OC (or as designed) including a lateral brace on chord directly below both ends of filler (if no rigid diaphragm exists at that point)

▲ M	▲ Maximum Reactions (lbs), or *=PLF						
	G	ravity		Non-Gravity			
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL	
AB*	248	/-	/-	/148	/8	/36	
٧	991	/-	/-	/560	/-	/-	
S*	84	/-	/-	/45	/37	/-	
Win	d reac	tions bas	sed on M	WFRS			
AΒ	Brg W	/idth = 6	3.5	Min Re	q = -		
V	Brg W	/idth = 4	.0	Min Re	q = 1.5	;	
S	Brg W	/idth = 5	8.0	Min Re	q = -		
Bea	rings A	AB, V, &	V are a ri	gid surf	ace.		
Men	Members not listed have forces less than 375#						
Maximum Bot Chord Forces Per Ply (lbs)							
			np. Cl				
_							

0

Maximum	Weh	Forces	Por	PIV	(lhe)

969

webs	Tens.Comp.	Webs	l ens.	Comp.
Y -AC	0 - 1300	Al-AJ	0	- 966
AC-AD	0 - 1184	Al- W	415	-8
AD-AE	0 - 1165	AJ-AK	0	- 970
AE-AF	0 - 1048	AK-AL	0	- 1047
AF-AG	0 - 1088	AL-AM	0	- 1011
AG-AH	0 - 1022	AM-AN	5	- 1090
X -AI	447 0	AN-AO	9	- 1112
ΔΗ-ΔΙ	0 - 1008	ΔO- V	12	- 1232

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

### **Plating Notes**

All plates are 2X4 except as noted.

In lieu of structural panels use purlins to brace all flat TC

#### Wind

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

Left end vertical not exposed to wind pressure. Wind loading based on both gable and hip roof types.

Blocking reinforcement required to prevent buckling of members over the bearings: Bearing 2 located at 25.8' (blocking >= 5.50" if used)

#### **Additional Notes**

Stacked top chord must NOT be notched or cut in area (NNL). 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 11-0-0.



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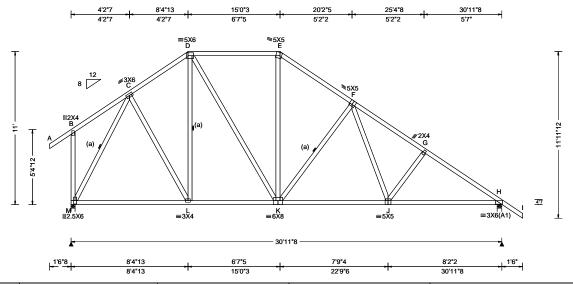
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SEQN: 334791 COMN Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 FROM: CDM DrwNo: 014.21.0945.37070 Qty: 3 Sparks Residence Truss Label: B02 SSB / WHK 01/14/2021



Loading Criteria (psf)   Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria
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: 3.10 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):	PP Deflection in loc L/defl L/# VERT(LL): 0.078 J 999 240 VERT(CL): 0.141 J 999 180 HORZ(LL): 0.037 J HORZ(TL): 0.066 J Creep Factor: 2.0 Max TC CSI: 0.532 Max BC CSI: 0.910 Max Web CSI: 0.628  VIEW Ver: 20.02.01A.1209.11

#### 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.

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

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

Left end vertical 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 11-0-0.

	▲ Ma	ximu	ım Rea	ctions	(lbs)		
		G	ravity		N	on-Grav	<b>∕ity</b>
	Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
	M 1	691	/-	/-	/770	/248	/340
	H 1	574	/-	/-	/889	/225	/-
	Wind	read	tions b	ased or	MWFRS		
	МЕ	3rg V	/idth =	3.5	Min Re	q = 2.0	)
	H E	3rg V	/idth =	4.0	Min Re	q = 1.9	)
	Beari	ngs I	И&На	are a rig	id surface.		
	Mem	bers	not liste	ed have	forces les	s than 3	375#
	Maxi	mum	Top C	hord F	orces Per	Ply (lb	s)
	Chore	ds T	ens.Co	omp.	Chords	Tens.	Comp.
-	C - D		201	1198	F-G	361	- 2052
	D-F			1136	-	332	- 2002 - 2245
	E-F		340 -		<b>5</b> 11	302	2240

# Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.C	omp.	Chords	Tens. (	Comp.	
M - L L - K		- 134 - 43	K - J J - H	1474 1783		

### Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. C	omp.
M - C	190 - 1496	K-F	205	- 569
C - L	509 - 24	F-J	483	- 55
D-K	377 - 118			



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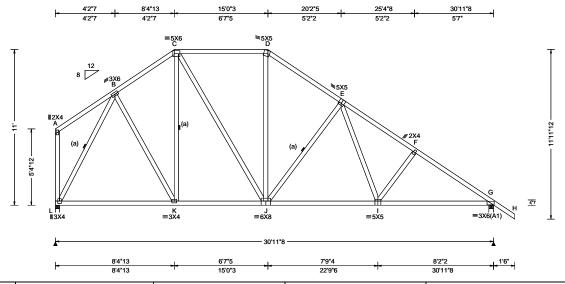
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SEQN: 334792 COMN Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T41 FROM: CDM Qty: 2 DrwNo: 014.21.0945.38383 Sparks Residence Truss Label: B03 SSB / WHK 01/14/2021



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	DefI/CSI Criteria	T
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	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 to 2h	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 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes	Defl/CSI Criteria	
Spacing: 24.0 "	C&C Dist a: 3.10 ft Loc. from endwall: not in 9.00 ft GCpi: 0.18 Wind Duration: 1.60	FT/RT:20(0)/10(0) Plate Type(s): WAVE	VIEW Ver: 20.02.01A.1209.11	
Lumber				

#### ▲ Maximum Reactions (lbs) Gravity Non-Gravity Loc R+ /Rh /Rw /U /RL 1582 /-/684 /40 /305 1577 /-/-/892 /-/53 Wind reactions based on MWFRS Brg Width = 3.5Min Req = 1.9 Brg Width = 4.0 Min Req = 1.9 Bearings L & G 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. 123 - 1207 130 - 2057 C-D 159 - 1140 D-E 153 - 1455

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

Top chord: 2x4 SP #2;

Bracing (a) Continuous lateral restraint equally spaced on

### Loading

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

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

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

Left end vertical 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 11-0-0.

Maximum Bot Chord Forces Per Ply (lbs)							
Chords	Tens.Comp.		Chords	Tens. Comp.			
L-K	709	- 125	J - I	1478	0		
K - J	947	- 37	I-G	1787	- 1		

Maximum Web Forces Per Ply (lbs)								
Webs	Tens.Comp.	Webs	Tens. (	Comp.				
L-B	71 - 1521	J-E	121	- 568				
B - K	496 - 21	E-I	483	- 10				
C - J	375 - 113							



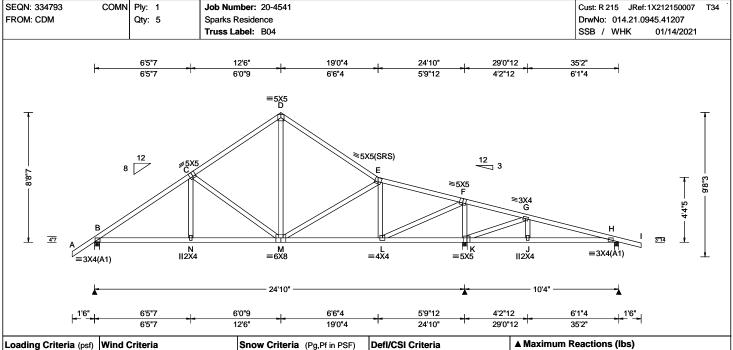
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (II	bs)
TCLL: 20.00	Wind Std: ASCE 7-16	Pa: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#	Gravity	No
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.041 M 999 240	Loc R+ /R- /Rh	/ Rw
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.085 M 999 180	B 1106 /- /-	/687
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.016 C	K 1662 /- /-	/878
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.034 C	H 391 /- /-	/190
NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: h to 2h C&C Dist a: 3.52 ft Loc. from endwall: not in 9.00 ft	Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0)	Creep Factor: 2.0 Max TC CSI: 0.419 Max BC CSI: 0.438 Max Web CSI: 0.567	Wind reactions based on M B Brg Width = 4.0 K Brg Width = 4.0 H Brg Width = 3.5 Bearings B, K, & H are a ri Members not listed have for	Min Red Min Red Min Red igid surfac
	GCpi: 0.18 Wind Duration: 1.60	Plate Type(s): WAVE	VIEW Ver: 20.02.01A.1209.11	Maximum Top Chord For Chords Tens.Comp.	rces Per Chords
Lumber				D C 41 1400 I	

#### Brg Width = 3.5 Bearings B, K, & H are a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. B - C E-F 41 - 1409 48 - 981

F-G

Non-Gravity

/RL

/261

/-/67

/Rw /U

/190 /97

Min Req = 1.5

Min Req = 2.0

Min Req = 1.5

677

0

# Wind

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

Wind loading based on both gable and hip roof types.

### **Additional Notes**

Top chord: 2x4 SP #2;

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

The overall height of this truss excluding overhang is

## Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.		Chords	Tens. (	Comp.	
B - N	1083	- 40	M - L	950	0	
N - M	1081	- 40	L-K	54	- 502	

### Maximum Web Forces Per Ply (lbs)

91 - 965

86

- 972

C-D

D-E

Webs	Tens.C	comp.	Webs	I ens.	Comp.
С - М	113	- 455	L-F	1488	0
D - M	548	- 13	F-K	85	- 1306
E-L	64	- 528	K-G	71	- 760



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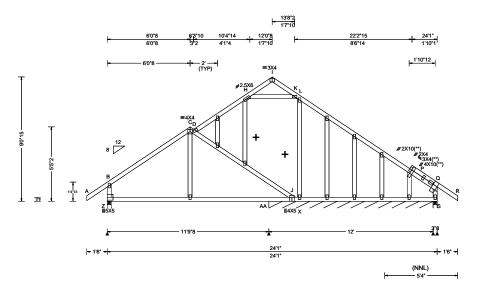
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SEQN: 334972 GABL Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 FROM: CDM DrwNo: 014.21.0945.42637 Qty: 1 Sparks Residence Truss Label: C01 SSB / WHK 01/14/2021



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	DefI/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.181 H 783 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.371 H 381 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): -0.143 B
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.297 B
NCBCLL: 10.00	Mean Height: 15.00 ft TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.560
Load Duration: 1.25	MWFRS Parallel Dist: 0 to h/2	TPI Std: 2014	Max BC CSI: 0.436
Spacing: 24.0 "	C&C Dist a: 3.00 ft	Rep Fac: Yes	Max Web CSI: 0.563
-	Loc. from endwall: Any	FT/RT:20(0)/10(0)	
	GCpi: 0.18	Plate Type(s):	
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11

+ Member to be laterally braced for out of plane wind loads

▲ Ma	▲ Maximum Reactions (lbs), or *=PLF							
	G	ravity		No	n-Grav	ity		
Loc	R+	/ R-	/ Rh	/Rw	/ U	/ RL		
Z	585	/-	/-	/401	/94	/252		
AA*	129	/-	/-	/73	/-	/-		
S	144	/-14	/-	/55	/154	/-		
Win	d reac	tions bas	sed on M\	WFRS				
Z	Brg W	/idth = 3	.5	Min Re	q = 1.5			
AA	Brg W	/idth = 1	44	Min Re	q = -			
S	Brg W	/idth = 3	.5	Min Re	q = 1.5			
Bea	Bearings Z, AA, & S 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 101 - 439 D-J - 493

Maximum Bot Chord Forces Per Ply (lbs)

Chords Tens.Comp.

Z - J

Maximum Gable Forces Per Ply (lbs)

621 - 404

Gables Tens.Comp. Tens. Comp. Gables Z - B 125 - 506 X - L 0 - 517

Lumber

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

# **Plating Notes**

All plates are 2X4 except as noted.

(\*\*) 3 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

# Loading

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

Wind 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.

The overall height of this truss excluding overhang is

Laterally brace chord above/ below filler at 24" OC (or as designed) including a lateral brace on chord directly below both ends of filler (if no rigid diaphragm exists at that point)



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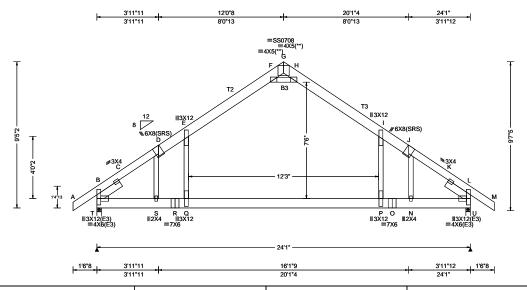
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SEQN: 334795 ATIC Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 FROM: CDM Qty: 2 DrwNo: 014.21.0946.02200 Sparks Residence Truss Label: C02 SSB / WHK 01/14/2021



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	DefI/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.220 P 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.452 P 640 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): -0.157 I
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.327 I
NCBCLL: 10.00	Mean Height: 15.00 ft TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.565
Load Duration: 1.25	MWFRS Parallel Dist: 0 to h/2	TPI Std: 2014	Max BC CSI: 0.517
Spacing: 24.0 "	C&C Dist a: 3.00 ft	Rep Fac: Yes	Max Web CSI: 0.751
' "	Loc. from endwall: Any	FT/RT:20(0)/10(0)	
	GCpi: 0.18	Plate Type(s):	
	Wind Duration: 1.60	WAVE, 18SS	VIEW Ver: 20.02.01A.1209.11

#### Lumber

Top chord: 2x6 SP 2400f-2.0E; T2, T3 2x8 SP 2400f-2.0E;

Bot chord: 2x8 SP 2400f-2.0E; B3 2x4 SP #2;

Webs: 2x4 SP #3;

Lt Slider: 2x6 SP 2400f-2.0E; block length = 1.825' Rt Slider: 2x6 SP 2400f-2.0E; block length = 1.825'

#### **Plating Notes**

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

#### Loading

Attic room loading from 5-11-0 to 18-2-0: Live Load: 40 PSF. Dead Load: 10 PSF Ceiling: 10 PSF, Kneewalls: 10 PSF

Collar-tie braced with continuous lateral bracing at 24" oc. or rigid ceiling.

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

Wind loading based on both gable and hip roof types.

### **Blocking**

Blocking reinforcement required to prevent buckling of members over the bearings: Bearing 1 located at 0.0' (blocking >= 3.50" if used) Bearing 2 located at 23.8' (blocking >= 3.50" if used)

# **Additional Notes**

9-5-2

The overall height of this truss excluding overhang is

▲ Maximum Reactions (lbs)						
	Gravity		No	on-Grav	/ity	
Loc R+	· /R-	/ Rh	/ Rw	/ U	/ RL	
T 197	9 /-	/-	/680	/181	/275	
U 197	9 /-	/-	/680	/181	/-	
Wind re	actions b	ased on	MWFRS			
T Brg	Width =	3.5	Min Re	q = 1.6		
U Brg	Width =	3.5	Min Re	q = 1.6		
Bearing	s T & U a	re a rigid	surface.			
Member	s not list	ed have f	orces less	s than 3	375#	
Maximu	m Top C	hord Fo	rces Per	Ply (lb:	s)	
Chords	Tens.Co	omp.	Chords	Tens.	Comp.	
B-C	112 -	2246	G - H	1569	- 182	
LC-D			H-I	265	- 1771	
	-	-				
D-E	-	2670		-	- 2670	
E-F			J - K	126	-	
F-G	1568	- 182	K-L	112	- 2245	

## Maximum Bot Chord Forces Per Ply (lbs)

noras	rens.C	omp.	Cnoras	rens. C	omp.	
3 - S	1655	- 27	P-0	1680	- 19	
S - R	1680	- 23	O - N	1680	- 19	
₹ - Q	1680	- 23	N - L	1655	- 19	
Q - P	1742	- 16				

### Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. Comp.
S-D	127 - 1038	P-I	1661 0
E-Q	1660 0	J - N	127 - 1039
F-H	538 - 3627		



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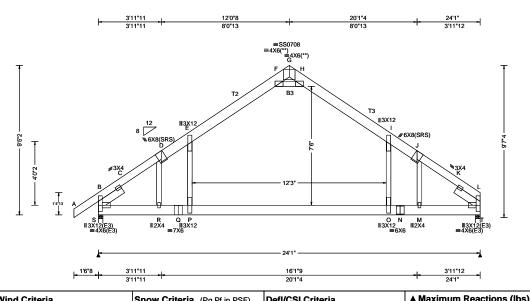
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SEQN: 334796 ATIC Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T43 FROM: CDM Qty: 8 DrwNo: 014.21.0946.03637 Sparks Residence Truss Label: C03 SSB / WHK 01/14/2021



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.224 O 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.459 O 629 180
	Risk Category: II	Snow Duration: NA	HORZ(LL): -0.160 I
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.333 I
NCBCLL: 10.00	Mean Height: 15.00 ft TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.567
Load Duration: 1.25	MWFRS Parallel Dist: h/2 to h	TPI Std: 2014	Max BC CSI: 0.517
Spacing: 24.0 "	C&C Dist a: 3.00 ft	Rep Fac: Yes	Max Web CSI: 0.754
' - "	Loc. from endwall: not in 4.50 ft	FT/RT:20(0)/10(0)	
	GCpi: 0.18	Plate Type(s):	
	Wind Duration: 1.60	WAVE, 18SS	VIEW Ver: 20.02.01A.1209.11

#### Lumber

Top chord: 2x6 SP 2400f-2.0E; T2, T3 2x8 SP 2400f-2.0E; Bot chord: 2x8 SP 2400f-2.0E; B3 2x4 SP #2;

Webs: 2x4 SP #3;

Lt Slider: 2x6 SP 2400f-2.0E; block length = 1.825' Rt Slider: 2x6 SP 2400f-2.0E; block length = 1.825'

#### **Plating Notes**

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

#### Loading

Attic room loading from 5-11-0 to 18-2-0: Live Load: 40 PSF. Dead Load: 10 PSF Ceiling: 10 PSF, Kneewalls: 10 PSF

Collar-tie braced with continuous lateral bracing at 24" oc. or rigid ceiling.

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

Wind loading based on both gable and hip roof types.

### **Blocking**

Blocking reinforcement required to prevent buckling of members over the bearings: Bearing 1 located at 0.0' (blocking >= 3.50" if used) Bearing 2 located at 23.8' (blocking >= 3.50" if used)

# **Additional Notes**

The overall height of this truss excluding overhang is 9-5-2

- 14	Iaxiiii	TILL LAG	101113	(IDS)		
	G	ravity		No	on-Grav	/ity
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
s	1982	/-	/-	/681	/181	/255
Т	1869	/-	/-	/588	/155	/-
Wir	nd read	ctions b	ased on	MWFRS		
s	Brg V	Vidth =	3.5	Min Re	q = 1.6	;
Т	Brg V	Vidth =	3.5	Min Re	q = 1.5	;
Bea	arings	S&Ta	re a rigi	d surface.	-	
Mei	mbers	not list	ed have	forces less	s than 3	375#
Max	ximun	Top (	Chord F	orces Per	Ply (lb	s)
Cho	ords 1	Tens.Co	omp.	Chords	Tens.	Comp.
В-	<u></u>	111	2254	G-H	1580	- 181
1	-					
C -	_	-	2187		265	- 1776
D -	E	213 -	2679	I - J	213	- 2682
E -	F	265 -	1778	J - K	123	- 2174
F-	G	1579	- 181	K - I	110	- 2241

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

onoras	rens.c	omp.	Cnoras	rens. C	omp.	
3 - R	1662	- 45	O - N	1687	- 46	
₹ - Q	1687	- 46	N - M	1687	- 46	
Q - P	1687	- 46	M - L	1661	- 45	
-0	1749	- 45				

### Maximum Web Forces Per Ply (lbs)

vvebs	rens.Comp	o. webs	i ens.	Comp.
R - D	127 - 104	1 O-I	1667	0
E-P	1667	0 J-M	131	- 1067
F-H	536 - 364	ı <b>Q</b>		



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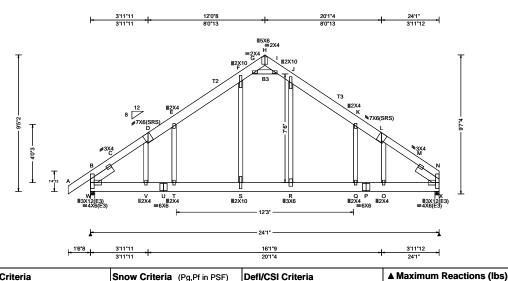
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SEQN: 334827 ATIC Ply: 2 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T35 FROM: CDM DrwNo: 014.21.0946.26297 Qty: 1 Sparks Residence Truss Label: C04 SSB / WHK 01/14/2021

### 2 Complete Trusses Required



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.048 Q 999 240
DCLL. 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.103 Q 999 180
	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.027 E
Des Ld: 40.00	EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf	Building Code:	HORZ(TL): 0.061 K Creep Factor: 2.0
Soffit: 2.00	BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2	FBC 7th Ed. 2020 Res. TPI Std: 2014	Max TC CSI: 0.177 Max BC CSI: 0.142
Spacing: 24.0 "	C&C Dist a: 3.00 ft Loc. from endwall: not in 9.00 ft	Rep Fac: Varies by Ld Case FT/RT:20(0)/10(0)	Max Web CSI: 0.262
	GCpi: 0.18	Plate Type(s):	
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11

Top chord: 2x6 SP 2400f-2.0E; T2, T3 2x8 SP 2400f-2.0E; Bot chord: 2x8 SP 2400f-2.0E; B3 2x4 SP #2; Webs: 2x4 SP #3;

Lt Slider: 2x6 SP 2400f-2.0E; block length = 1.825 Rt Slider: 2x6 SP 2400f-2.0E; block length = 1.824'

#### Nailnote

Top Chord: 1 Row @12.00" o.c. Bot Chord: 1 Row @12.00" o.c. :1 Row @ 4" o.c. Use equal spacing between rows and stagger nails

in each row to avoid splitting.

Nail Schedule:0.131"x3", min. nails

#### **Purlins**

Collar-tie braced with continuous lateral bracing at 24" oc. or rigid ceiling.

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

It is the responsibility of the Building Designer and Truss Fabricator to review this drawing prior to cutting lumber to verify that all data,including dimensions and loads, conform to the architectural plans/specifications and fabricators truss layout.

Special loads ----(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25) TC: From 64 plf at -1.54 to 64 plf at 24. 24.08 PLT: From 24 plf at 5.92 to 24 plf at 11.15 11.15 to PLT: From 20 plf at 20 plf at PLT: From 12.93 to 24 plf at 18.17 PLT: From 100 plf at BC: From 5 plf at 5.92 to -1.54 to 100 plf at 18.17 5 plf at 0.00 20 plf at 0.00 to 20 plf at BC: From 24.08 80 lb Conc. Load at 5.92,18.17 647 lb Conc. Load at 10.46

BC: 630 lb Conc. Load at 13.75

Gravity

/R

Brg Width = 3.5

/Rh

/-

Wind reactions based on MWFRS Brg Width = 3.5

Bearings W & X are a rigid surface.

Loc R+

2619 /-

2510 /-

W

Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. B - C 217 - 1728 139 - 1158 C-D 205 - 1691 J - K 204 - 1621 D-E 195 - 1620 K-L 196 - 1623 204 - 1620 L-M 203 - 1685 E-F 214 - 1722 F-G 137 - 1135 M - N G-H 378 - 44

Members not listed have forces less than 375#

Non-Gravity

/352

/312

/RL

/-

/Rw /U

Min Rea = 1.5

Min Req = 1.5

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

Chords	Tens.C	Comp.	Chords	Tens. (	Comp.
B - V	1316	- 158	R-Q	1307	- 155
V - U	1309	- 157	Q-P	1309	- 157
U - T	1309	- 157	P - O	1309	- 157
T-S	1307	- 155	O - N	1317	- 158
S-R	1322	- 157			

### Maximum Web Forces Per Ply (lbs)

Webs	Tens.Co	mp.	Webs	Tens. C	omp.
F-S	688		R - J	654	-62
G-I	209 -	1765			



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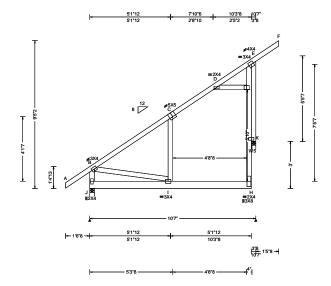
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SEQN: 334797 MONO Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T23 Qty: 2 FROM: CDM DrwNo: 014.21.0946.38160 Sparks Residence Truss Label: C05 SSB / WHK 01/14/2021



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.240 C 522 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.419 C 299 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.206 C
Des Ld: 40.00	EXP: C Kzt: NA Mean Height: 15.00 ft		HORZ(TL): 0.359 C
NCBCLL: 10.00	TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.526
Load Duration: 1.25	MWFRS Parallel Dist: h to 2h	TPI Std: 2014	Max BC CSI: 0.341
Spacing: 24.0 "	C&C Dist a: 3.00 ft	Rep Fac: Yes	Max Web CSI: 0.698
	Loc. from endwall: not in 9.00 ft	FT/RT:20(0)/10(0)	
	GCpi: 0.18	Plate Type(s):	
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11
Lumber		Special leads	

▲ Maximum Reactions (lbs)						
	(	Gravity	-	No	on-Grav	vity
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
J	594	/-	/-	/339	/-	/226
K	684	/-	/-	/431	/145	/-
Win	d rea	ctions b	ased on	MWFRS		
J	Brg	Width =	3.5	Min Re	q = 1.5	5
K	Brg	Width =	3.0	Min Re	q = 1.5	5
Bea	rings	J&Ka	re a rigid	surface.		
Men	nbers	s not list	ed have f	orces less	s than 3	375#
Maximum Web Forces Per Ply (lbs)						
Web	os	Tens.Co	omp.	_		
E - I	K	181	- 849			

Top chord: 2x4 SP #2; Bot chord: 2x6 SP 2400f-2.0E; Webs: 2x4 SP #3; W5 2x4 SP #2; Rt Bearing Leg: 2x4 SP #3;

### Loading

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

Wind 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

Collar-Tie braced with continuous lateral bracing @24" OC, or rigid sheathing

#### Special loads

r Dur.Fac.=	1.25 / Plate	Dur.Fac.=1	1.25)
64 plf at	-1.54 to	64 plf at	12.04
40 plf at	5.29 to	40 plf at	10.00
5 plf at	-1.54 to	5 plf at	0.00
20 plf at	0.00 to	20 plf at	10.29
5 plf at	10.58 to	5 plf at	12.04
	64 plf at 40 plf at 5 plf at 20 plf at	64 plf at -1.54 to 40 plf at 5.29 to 5 plf at -1.54 to 20 plf at 0.00 to	40 plf at 5.29 to 40 plf at 5 plf at -1.54 to 5 plf at 20 plf at 0.00 to 20 plf at



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

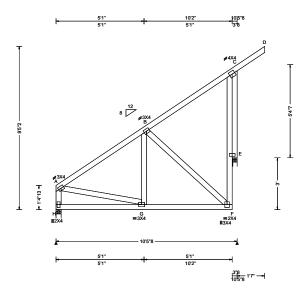
\*\*IMPORTANT\*\* FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

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SEQN: 334798 MONO Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T39 FROM: CDM Qty: 2 DrwNo: 014.21.0946.39567 Sparks Residence Truss Label: C05A SSB / WHK 01/14/2021



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maxii
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 to 2h 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): 0.006 G 999 240 VERT(CL): 0.013 G 999 180 HORZ(LL): -0.004 C HORZ(TL): 0.005 C Creep Factor: 2.0 Max TC CSI: 0.339 Max BC CSI: 0.274 Max Web CSI: 0.315  VIEW Ver: 20.02.01A.1209.11	Loc R4 H 423 E 559 Wind re H Brg E Brg Bearing Membe Maximu Chords A - B

	▲ Maximum Reactions (lbs)								
		(	Gravity		No	on-Grav	/ity		
)	Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL		
)	Н	423	/-	/-	/239		/206		
	E	559	/-	/-	/439	/149	/-		
	Win	d rea	actions b	ased on I	<b>MWFRS</b>				
	Н	Brg	Width =	3.5	Min Re	q = 1.5	;		
	Ε	Brg	Width =	3.0	Min Re	q = 1.5	;		
	Bea	rings	H & E a	are a rigid	surface.				
	Mer	nber	s not liste	ed have fo	orces less	s than 3	375#		
	Maximum Top Chord Forces Per Ply (lbs)								
	Cho	rds	Tens.Co	omp.			•		
	A - I	В	0	- 421					

#### Lumber

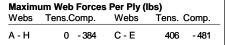
Top chord: 2x4 SP #2; Bot chord: 2x4 SP #2; Webs: 2x4 SP #3; Rt Bearing Leg: 2x4 SP #3;

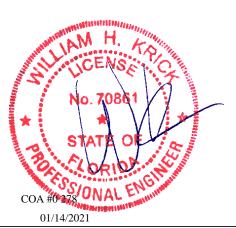
Wind loads based on MWFRS with additional C&C member design.

End verticals not exposed to wind pressure.

Wind loading based on both gable and hip roof types.

The overall height of this truss excluding overhang is





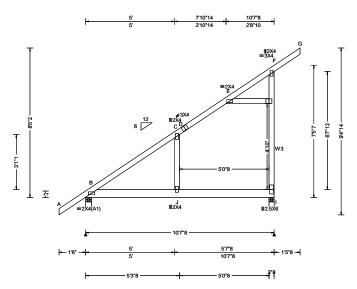
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6750 Forum Drive Suite 305 Orlando FL, 32821 SEQN: 334799 MONO Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T13 FROM: CDM DrwNo: 014.21.0946.40737 Qty: 2 Sparks Residence Truss Label: C06 SSB / WHK 01/14/2021



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	DefI/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.259 J 486 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.457 J 275 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.173 C
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.306 C
NCBCLL: 10.00	Mean Height: 15.00 ft TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.482
Load Duration: 1.25	MWFRS Parallel Dist: h to 2h	TPI Std: 2014	Max BC CSI: 0.411
Spacing: 24.0 "	C&C Dist a: 3.00 ft	Rep Fac: Yes	Max Web CSI: 0.889
-	Loc. from endwall: not in 9.00 ft	FT/RT:20(0)/10(0)	
	GCpi: 0.18	Plate Type(s):	
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11

#### ▲ Maximum Reactions (lbs) Gravity Non-Gravity Loc R+ /Rh /Rw /U /RL В 600 /364 /226 674 /-/-/412 /119 /-Wind reactions based on MWFRS Brg Width = 4.0В Min Req = 1.5Brg Width = 3.5 Min Req = 1.5 Bearings B & I are a rigid surface. Members not listed have forces less than 375#

#### Lumber

Top chord: 2x4 SP #2; Bot chord: 2x6 SP 2400f-2.0E; Webs: 2x4 SP #3; W3 2x4 SP #2;

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

Wind loads based on MWFRS with additional C&C

Right end vertical 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

### Special loads

--(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25) C: From 64 plf at -1.50 to 64 plf at 12. TC: From 64 plf at 40 plf at 64 plf at 40 plf at 12.08 PLB: From 5.91 to 10.33 5 plf at -1.50 to 5 plf at 0.00 BC: From BC: From 20 plf at 0.00 to 20 plf at 10.62 BC: From 5 plf at 10.62 to 5 plf at 12.08

Collar-Tie braced with continuous lateral bracing @24" OC, or rigid sheathing



01/14/2021

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

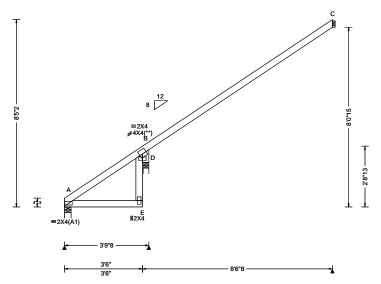
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SEQN: 334970 MONO Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 Qty: 2 FROM: CDM DrwNo: 014.21.0946.54530 Sparks Residence Truss Label: C06A SSB / WHK 01/14/2021



Loading	Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (It	os)
TCLL:	20.00	Wind Std: ASCE 7-16	Pa: 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): 0.004 B 999 240	Loc R+ /R- /Rh	/Rw /U /RL
BCLL:	0.00	Enclosure: Closed	Lu: NA Cs: NA	l;;	A 105 /-51 /-	/172 /78 /206
BCDL:	10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.003 B	D 607 /- /-	/453 /218 /-
Des Ld:	40.00	EXP: C Kzt: NA		HORZ(TL): 0.005 B	C 213 /- /-	/153 /84 /-
NCBCLI		Mean Height: 15.00 ft TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0	Wind reactions based on N	
Soffit:	2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.446	A Brg Width = 3.5 D Brg Width = 3.0	Min Req = 1.5
Load Du	ration: 1.25	MWFRS Parallel Dist: h to 2h	TPI Std: 2014	Max BC CSI: 0.094	D Brg Width = 3.0 C Brg Width = 1.5	Min Req = 1.5 Min Rea = -
Spacing	: 24.0 "	C&C Dist a: 3.00 ft	Rep Fac: Yes	Max Web CSI: 0.596	Bearings A & D are a rigid	- 1
' "		Loc. from endwall: not in 9.00 ft	FT/RT:20(0)/10(0)		Members not listed have for	
		GCpi: 0.18	Plate Type(s):		Maximum Web Forces Pe	
		Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11	Webs Tens.Comp.	(100)

#### Lumber

Top chord: 2x4 SP M-31; Bot chord: 2x4 SP #2; Webs: 2x4 SP #3; Rt Bearing Leg: 2x4 SP #3;

### **Plating Notes**

(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

### Wind

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

Wind loading based on both gable and hip roof types.

#### **Additional Notes**

The overall height of this truss excluding overhang is 8-5-2.



B - D

607 - 175

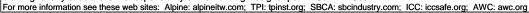
01/14/2021

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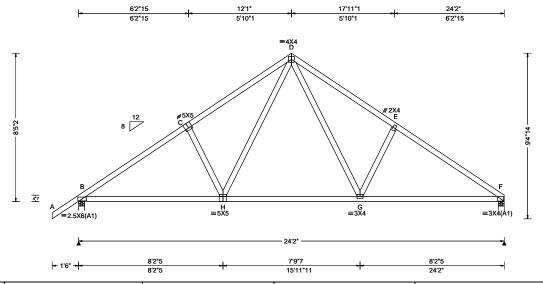
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SEQN: 334801 COMN Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 FROM: CDM Qty: 7 DrwNo: 014.21.0946.55870 Sparks Residence Truss Label: C07 SSB / WHK 01/14/2021



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	DefI/CSI Criteria	▲ Maximum Reactions (Ib	s)
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): 0.050 H 999 240	Loc R+ /R- /Rh	/Rw /U /RL
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.097 H 999 180	B 1202 /- /-	/688 /12 /257
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.022 G	F 1091 /- /-	/597 /6 /-
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.042 G	Wind reactions based on M	-
NCBCLL: 10.00	Mean Height: 15.00 ft TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0	B Brg Width = 4.0	Min Req = 1.5
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.388	F Brg Width = 4.0	Min Req = 1.5
Load Duration: 1.25	MWFRS Parallel Dist: h to 2h	TPI Std: 2014	Max BC CSI: 0.678	Bearings B & F are a rigid s	
Spacing: 24.0 "	C&C Dist a: 3.00 ft	Rep Fac: Yes	Max Web CSI: 0.235	Members not listed have fo	
-, 3	Loc. from endwall: not in 9.00 ft	FT/RT:20(0)/10(0)		Maximum Top Chord Ford Chords Tens.Comp. C	ces Per Ply (IDS) Chords Tens. Comp.
	GCpi: 0.18	Plate Type(s):		Chords rens.comp. C	norus rens. Comp.
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11		) - E 105 - 1435 - F 51 - 1598
Lumber	•		-	- C - D 104 - 1419 E	- 51 -1596

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

### Loading

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

Wind loads based on MWFRS with additional C&C

Wind loading based on both gable and hip roof types.

# **Additional Notes**

The overall height of this truss excluding overhang is 8-5-2.

# Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.		Chords	Tens. Comp.	
B - H	1232	- 65	G-F	1249	0
H - G	837	0			

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

Н

ebs	Tens.Comp.		Webs	Tens. Comp.	
- D	592	- 57	D-G	618	- 61



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

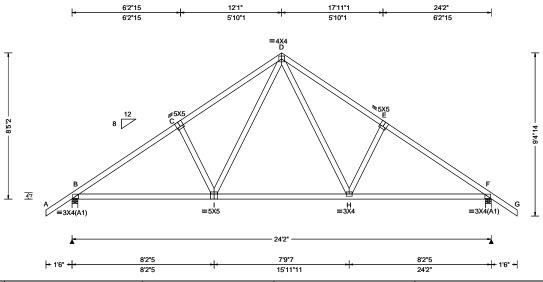
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SEQN: 334802 COMN Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T12 FROM: CDM DrwNo: 014.21.0946.56977 Qty: 1 Sparks Residence Truss Label: C08 SSB / WHK 01/14/2021



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): 0.040 H 999 240	Loc R+ /R- /Rh /Rw /U /RL
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.083 H 999 180	B 1119 /- /- /688 /184 /276
10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.018 H	F 1119 /- /- /688 /184 /-
Dec 1 d: 40 00	EXP: C Kzt: NA		HORZ(TL): 0.037 H	Wind reactions based on MWFRS
NCBCLL: 10.00	Mean Height: 15.00 ft	Building Code:	Creep Factor: 2.0	B Brg Width = 4.0 Min Req = 1.5
0-4:4	TCDL: 5.0 psf BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.365	F Brg Width = 4.0 Min Req = 1.5
1.77	MWFRS Parallel Dist: h/2 to h	TPI Std: 2014	Max BC CSI: 0.620	Bearings B & F are a rigid surface.
	C&C Dist a: 3.00 ft	Rep Fac: Yes	Max Web CSI: 0.191	Members not listed have forces less than 375#
Opacing. 2 1.0	Loc. from endwall: not in 9.00 ft	FT/RT:20(0)/10(0)		Maximum Top Chord Forces Per Ply (lbs)
	GCpi: 0.18	Plate Type(s):		Chords Tens.Comp. Chords Tens. Comp.
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11	B-C 257-1422 D-E 323-1259
Lumber	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	IMANE		C-D 324-1259 E-F 257-1423

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

### Wind

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

Wind loading based on both gable and hip roof types.

### **Additional Notes**

The overall height of this truss excluding overhang is

# Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.		Chords	Tens. Comp.	
B - I I - H		- 103 - 17	H-F	1101	- 97

#### Maximum Web Forces Per Ply (lbs) Tens.Comp. Webs Tens. Comp.

			101101 00111p1
- D	501 - 113	D-H	503 - 112



01/14/2021

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

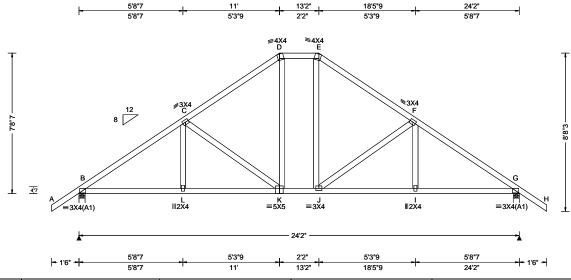
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SEQN: 334803 HIPS Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T11 FROM: CDM Qty: 1 DrwNo: 014.21.0946.58177 Sparks Residence Truss Label: C09 SSB / WHK 01/14/2021



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	
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	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	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 7th Ed. 2020 Res.	Defl/CSI Criteria	
Load Duration: 1.25 Spacing: 24.0 "	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	TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Max BC CSI: 0.402 Max Web CSI: 0.374 VIEW Ver: 20.02.01A.1209.11	

#### Lumber

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

### **Purlins**

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

Wind loads based on MWFRS with additional C&C

Wind loading based on both gable and hip roof types.

# **Additional Notes**

The overall height of this truss excluding overhang is

▲ Maximum Reactions (lbs)							
G	ravity	N	on-Grav	/ity			
Loc R+	/R- /F	Rh / Rw	/ U	/ RL			
B 1119	/- /-	/689	/186	/256			
G 1119	/- /-	/689	/186	/-			
Wind reac	tions based	on MWFRS					
B Brg W	/idth = 4.0	Min Re	eq = 1.5	;			
G Brg W	/idth = 4.0	Min Re	eq = 1.5	;			
Bearings E	3 & G are a	rigid surface.					
Members	not listed ha	ve forces les	s than 3	375#			
Maximum	Top Chord	d Forces Per	Ply (lb	s)			
Chords Tens.Comp. Chords Tens. Comp.							
B-C	251 - 1457	E-F	265	- 1071			
C-D	265 - 1071	F-G	251	- 1457			
D-E	262 - 806						

#### Maximum Bot Chord Forces Per Ply (lbs) Tens. Comp. Chords Tens.Comp. Chords B-L 1130 - 100 1132 - 99 1 - G L - K 1130 - 100 1132 - 99

K-J

806

#### Maximum Web Forces Per Ply (lbs) Webs Tens.Comp. Webs Tens. Comp. C - K J-F 155 - 442 155 - 443



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Ply: 1 FROM: CDM DrwNo: 014.21.0946.59190 Qty: 1 Sparks Residence Truss Label: C10 SSB / WHK 01/14/2021 4'8"7 15'2' 19'5"9 24'2' 4'8"7 4'3"9 6'2" 4'3"9 4'8"7 =5X6 D ≅4X4 E <sup>8</sup>2X4 C 4\*7 ≡5X5 =3X8 =3X4(A1) 6'2" - 1'6" -1'6" -15'2' 24'2"

Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	DefI/CSI Criteria	1
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	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):	PP Deflection in loc L/defl L/# VERT(LL): 0.039 J 999 240 VERT(CL): 0.080 J 999 180 HORZ(LL): 0.020 l HORZ(TL): 0.041 l Creep Factor: 2.0 Max TC CSI: 0.456 Max BC CSI: 0.693 Max Web CSI: 0.139	
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11	٦٦
Lumber				

Job Number: 20-4541

▲ Ma	aximu	ım Rea	ctions (	(lbs)
	G	ravity		
100	D.	/ D	/ Dh	

Non-Gravity /Rw / U /RL 1119 /-/685 /190 /219 1119 /685 /190 /-Wind reactions based on MWFRS Min Req = 1.5 Brg Width = 4.0Brg Width = 4.0 Min Req = 1.5 Bearings B & G 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. 262 - 1201 C - D 264 - 1205 285 - 1439

Cust: R 215 JRef: 1X212150007

T10

### D-E 259 - 947 Maximum Bot Chord Forces Per Ply (lbs)

Chords Tens.Comp. Chords Tens. Comp. B-J 1131 - 137 I - G 1131 - 137 944 J - I - 21

SEQN: 334804

HIPS

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

### **Purlins**

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

Wind loads based on MWFRS with additional C&C

Wind loading based on both gable and hip roof types.

#### **Additional Notes**

The overall height of this truss excluding overhang is 6-4-7.



01/14/2021

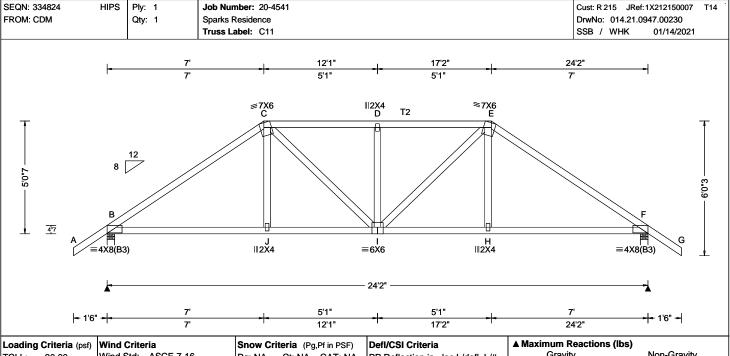
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6750 Forum Drive Suite 305 Orlando FL, 32821



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria		
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#		
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.120 D 999 240		
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.242 D 999 180		
10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.046 H		
Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25	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	Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014	HORZ(TL): 0.092 H Creep Factor: 2.0  Max TC CSI: 0.845  Max BC CSI: 0.433  Max Web CSI: 0.383		
	GCpi: 0.18	Plate Type(s):			
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11		

	▲ Ma	ximu	ım Re	actions	(lbs)				
Gravity					· · · I	Non-	Grav	rity .	
	Loc	R+	/ R-	/ Rh	/Rw	, /	U	/ RL	
	B 2	460	/-	/-	/-	/6	343	/-	
	F 2	460	/-	/-	/-	/6	643	/-	
	Wind	reac	tions I	oased or	n MWFRS	3			
	ВЕ	3rg W	/idth =	4.0	Min R	eq =	= 2.0		
	FE	3rg W	/idth =	4.0	Min R	eq =	= 2.0		
	Beari	ngs E	3 & F	are a rig	id surface	<b>)</b> .			
	Mem	bers	not lis	ted have	forces le	ss th	nan 3	75#	
	Maxi	mum	Тор	Chord F	orces Pe	r Pl	y (lb:	s)	
	Chore	ds T	ens.C	omp.	Chords	Te	ens.	Comp.	_
	B-C		1018 -	- 3738	D-E	1	032	- 3756	
	l С - D		1032 -	- 3756	E-F	1	018	- 3738	

#### Lumber

Top chord: 2x4 SP #2; T2 2x4 SP M-31; Bot chord: 2x4 SP M-31; Webs: 2x4 SP #3;

### **Special Loads**

(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)							
TC: From	64 plf at	-1.50 to	64 plf at	7.00			
TC: From	32 plf at	7.00 to	32 plf at	17.17			
TC: From	64 plf at	17.17 to	64 plf at	25.67			
BC: From	5 plf at	-1.50 to	5 plf at	0.00			
BC: From	20 plf at	0.00 to	20 plf at	7.03			
BC: From	10 plf at	7.03 to	10 plf at	17.14			
BC: From		17.14 to	20 plf at	24.17			
BC: From	5 plf at	24.17 to	5 plf at	25.67			
TC: 275 lb	Conc. Load	at 7.03,17	.14				
TC: 193 lb	Conc. Load	at 9.06,11	.06,12.08,1	3.10			
15.10							
	Conc. Load						
BC: 131 lb	Conc. Load	lat 9.06,11	.06,12.08,1	3.10			
15.10							

### **Purlins**

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

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 5-0-7.

#### Maximum Bot Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp.

B - J	3000	- 808	I - H	3019	- 808
J - I	3019	- 808	H-F	3000	- 808

Maximum Web Forces Per Ply (lbs)							
Webs	Tens.C	Comp.	Webs	Tens. (	Comp.		
C-J	629	-9	D-I	479	- 845		
C - I	1005	- 306	H - E	629	- 9		
	1005	206					



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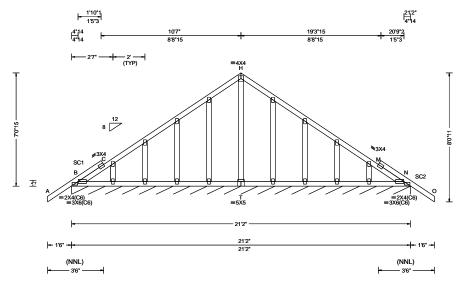
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SEQN: 334805 GABL Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T2 FROM: CDM DrwNo: 014.21.0947.01333 Qty: 1 Sparks Residence Truss Label: D01 SSB / WHK 01/14/2021



Loading Criteria (psf) Wind Criteria		Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.001 X 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.003 X 999 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): -0.000 D
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.001 D
NCBCLL: 10.00	Mean Height: 15.00 ft TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.189
Load Duration: 1.25	MWFRS Parallel Dist: 0 to h/2	TPI Std: 2014	Max BC CSI: 0.078
Spacing: 24.0 "	C&C Dist a: 3.00 ft	Rep Fac: Yes	Max Web CSI: 0.106
-	Loc. from endwall: Any	FT/RT:20(0)/10(0)	
	GCpi: 0.18	Plate Type(s):	
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11
1			

#### ▲ Maximum Reactions (lbs), or \*=PLF Gravity Non-Gravity Loc R+ /R /Rw /U /RL N\* 94 /-/49 Wind reactions based on MWFRS N Brg Width = 254 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 except as noted.

In lieu of structural panels use purlins to brace TC @ 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**

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 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 7-0-15.



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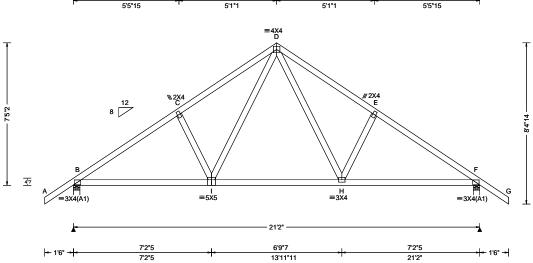


SEQN: 334806 COMN Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 FROM: CDM Qty: 2 DrwNo: 014.21.0947.02530 Sparks Residence Truss Label: D02 SSB / WHK 01/14/2021

15'8"1

21'2'

10'7'



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ M
Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00	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	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):	PP Deflection in loc L/defl L/# VERT(LL): 0.038 H 999 240 VERT(CL): 0.074 H 999 180 HORZ(LL): 0.016 H HORZ(TL): 0.032 H Creep Factor: 2.0 Max TC CSI: 0.296 Max BC CSI: 0.519 Max Web CSI: 0.191	F Wir B F Bea Mer Max
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11	В-
Lumber	•	•		C -

5'5"15

	▲ M	aximı	ım Re	actions	(lbs)		
		G	ravity		N	on-Grav	vity
0	Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
0	_	1052		/-		/164	
	F	1052	/-	/-	/614	/164	/-
	Win	d read	ctions b	oased or	n MWFRS		
	В	Brg V	Vidth =	4.0	Min Re	q = 1.5	;
	F	Brg V	Vidth =	4.0	Min Re	eq = 1.5	;
	Bea	rings	B&Fa	are a rig	id surface.		
	Men	nbers	not list	ed have	forces les	s than 3	375#
	Max	imun	Top (	Chord F	orces Per	Ply (lb	s)
	Cho	rds 7	Tens.C	omp.	Chords	Tens.	Comp.
	B - 0	3	223 -	1346	D-E	281	- 1204
	ا ـ م ا	-	-	1203	F F	223	- 13/18

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

### Loading

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

Wind loads based on MWFRS with additional C&C

Wind loading based on both gable and hip roof types.

# **Additional Notes**

The overall height of this truss excluding overhang is 7-5-2.

B - I I - H	1044 710		H-F	1044	- 79	
Maximum Web Forces Per Ply (lbs)						

Chords Tens. Comp.

Maximum Bot Chord Forces Per Ply (lbs)

Chords Tens.Comp.

#### Tens. Comp. Webs Tens.Comp Webs I - D D-H 501 - 97 498



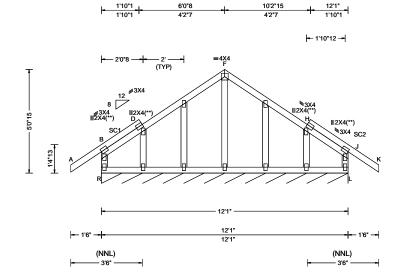
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6750 Forum Drive Suite 305 Orlando FL, 32821 SEQN: 334807 GABL Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 FROM: CDM DrwNo: 014.21.0947.03517 Qty: 1 Sparks Residence Truss Label: E01 SSB / WHK 01/14/2021



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria		
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#		
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.001 B 999 240		
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.002 B 999 180		
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.009 B		
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.018 B		
NCBCLL: 10.00	Mean Height: 15.00 ft TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0		
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.183		
Load Duration: 1.25	MWFRS Parallel Dist: 0 to h/2	TPI Std: 2014	Max BC CSI: 0.038		
Spacing: 24.0 "	C&C Dist a: 3.00 ft	Rep Fac: Yes	Max Web CSI: 0.051		
' '	Loc. from endwall: Any	FT/RT:20(0)/10(0)			
	GCpi: 0.18	Plate Type(s):		1	
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11		
Lumber	-	Additional Notes		_	

#### ▲ Maximum Reactions (lbs), or \*=PLF Gravity Non-Gravity Loc R+ /Rw /U /RL L\* 101 /-/52 Wind reactions based on MWFRS Brg Width = 145 Min Req = -Bearing R is a rigid surface. Members not listed have forces less than 375#

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;

#### **Bracing**

Fasten rated sheathing to one face of this frame.

#### **Plating Notes**

All plates are 2X4 except as noted.

(\*\*) 4 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

#### **Purlins**

In lieu of structural panels use purlins to brace TC @

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.

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 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



01/14/2021

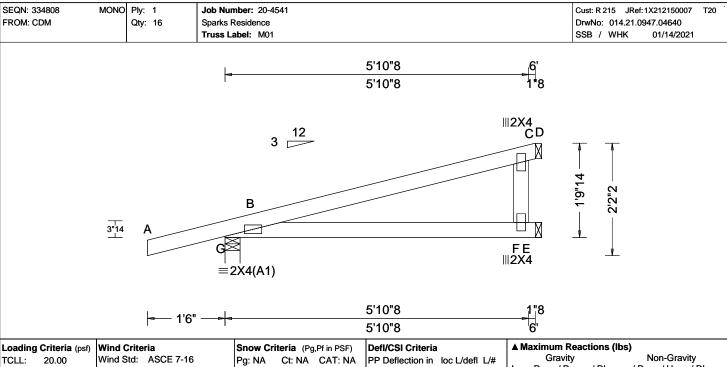
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	DefI/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): NA
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): NA
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.008 F
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.015 F
NCBCLL: 10.00	Mean Height: 15.00 ft TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.388
Load Duration: 1.25	MWFRS Parallel Dist: 0 to h/2	TPI Std: 2014	Max BC CSI: 0.299
Spacing: 24.0 "	C&C Dist a: 3.00 ft	Rep Fac: Yes	Max Web CSI: 0.123
-	Loc. from endwall: Any	FT/RT:20(0)/10(0)	
	GCpi: 0.18	Plate Type(s):	
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11
Lumber		•	

#### Loc R+ /Rh /Rw /U G 360 /198 /64 Е 264 /-/-/67 /162 /-/-43 154 /115 Wind reactions based on MWFRS Brg Width = 3.5 Min Req = 1.5 Brg Width = 1.5 Min Req = -Brg Width = 1.5 Min Req = -Bearing G is a rigid surface. Members not listed have forces less than 375#

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

### Wind

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

Wind loading based on both gable and hip roof types.

### **Additional Notes**

The overall height of this truss excluding overhang is



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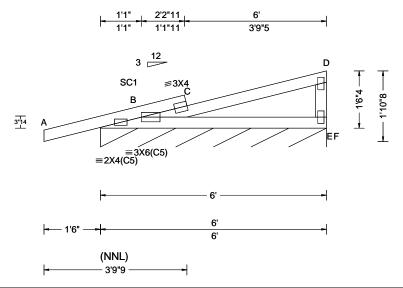
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SEQN: 334809 GABL Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T22 FROM: CDM Qty: 2 DrwNo: 014.21.0947.05760 Sparks Residence Truss Label: M02 SSB / WHK 01/14/2021



Loading Criteria (psf) Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs), or *=PLF
Coading Criteria (psf)	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA  Building Code: FBC 7th Ed. 2020 Res.	Defl/CSI Criteria	Gravity Non-Gravity Loc R+ /R- /Rh /Rw /U /RL
Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11	

#### Lumbe

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

Stack Chord: SC1 2x4 SP #2;

### **Plating Notes**

All plates are 2X4 except as noted.

In lieu of structural panels use purlins to brace TC @

#### Wind

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

Right end vertical not exposed to wind pressure. Wind loading based on both gable and hip roof types.

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 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



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

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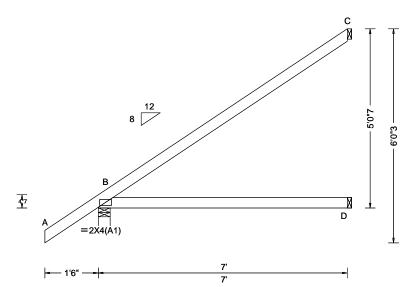
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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SEQN: 334810 **EJAC** Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T18 FROM: CDM DrwNo: 014.21.0947.06727 Qty: 7 Sparks Residence Truss Label: J01 SSB / WHK 01/14/2021



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	DefI/CSI Criteria
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00	Wind Stid: 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 4.50 ft GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA  Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): NA VERT(CL): NA HORZ(LL): 0.013 D HORZ(TL): 0.027 D Creep Factor: 2.0 Max TC CSI: 0.747 Max BC CSI: 0.527 Max Web CSI: 0.000
Lumban	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11

		actions (I	•		
Gravity		No	on-Grav	<b>∕ity</b>	
Loc R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B 417	/-	/-	/287	/18	/192
D 131	/-	/-	/75	/-	/-
C 193	/-	/-	/140	/113	/-
Wind rea	actions b	ased on I	MWFRS		
B Brg	Width =	4.0	Min Re	q = 1.5	;
D Brg	Width =	1.5	Min Re	q = -	
C Brg	Width =	1.5	Min Re	q = -	
Bearing	B is a rig	gid surfac	e.	-	
Member	s not list	ed have f	orces les	s than 3	375#

#### Lumber

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

Wind loads based on MWFRS with additional C&C

Wind loading based on both gable and hip roof types.

#### **Additional Notes**

The overall height of this truss excluding overhang is 5-0-7.



01/14/2021

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

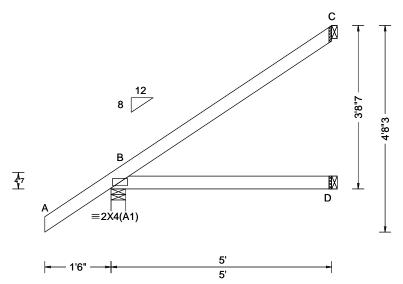
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SEQN: 334811 **JACK** Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T15 FROM: CDM DrwNo: 014.21.0947.07667 Qty: 4 Sparks Residence Truss Label: J02 SSB / WHK 01/14/2021



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	DefI/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): NA
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): NA
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.004 D
Des Ld: 40.00	EXP: C Kzt: NA Mean Height: 15.00 ft		HORZ(TL): 0.008 D
NCBCLL: 10.00	TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.327
Load Duration: 1.25	MWFRS Parallel Dist: 0 to h/2	TPI Std: 2014	Max BC CSI: 0.242
Spacing: 24.0 "	C&C Dist a: 3.00 ft	Rep Fac: Yes	Max Web CSI: 0.000
	Loc. from endwall: not in 4.50 ft	FT/RT:20(0)/10(0)	
	GCpi: 0.18	Plate Type(s):	
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11

#### ▲ Maximum Reactions (lbs) Gravity Non-Gravity Loc R+ /Rh /Rw /U В 339 /240 /145 D 91 /-/52 131 /94 Wind reactions based on MWFRS Brg Width = 4.0 Min Req = 1.5 Brg Width = 1.5 Min Req = -Brg Width = 1.5 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;

Wind loads based on MWFRS with additional C&C

Wind loading based on both gable and hip roof types.

### **Additional Notes**

The overall height of this truss excluding overhang is 3-8-7.



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

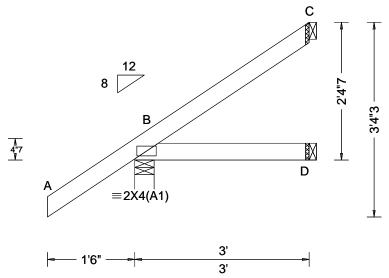
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SEQN: 334812 **JACK** Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T16 FROM: CDM Sparks Residence DrwNo: 014.21.0947.08493 Qty: 4 Truss Label: J03 SSB / WHK 01/14/2021



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	DefI/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): NA
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): NA
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.001 D
Des Ld: 40.00	EXP: C Kzt: NA Mean Height: 15.00 ft		HORZ(TL): 0.001 D
NCBCLL: 10.00	TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.167
Load Duration: 1.25	MWFRS Parallel Dist: 0 to h/2	TPI Std: 2014	Max BC CSI: 0.067
Spacing: 24.0 "	C&C Dist a: 3.00 ft	Rep Fac: Yes	Max Web CSI: 0.000
-	Loc. from endwall: not in 4.50 ft	FT/RT:20(0)/10(0)	
	GCpi: 0.18	Plate Type(s):	
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11
Lumban			

	G	avity		No	on-Gra	vity
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
В	268	/-	/-	/200	/29	/98
D	50	/-	/-	/32	/-	/-
С	64	/-	/-	/43	/43	/-
Wir	nd read	ctions b	ased on I	MWFRS		
В	Brg V	Vidth =	4.0	Min Re	q = 1.5	5
D	Brg V	Vidth =	1.5	Min Re	q = -	
С	Brg V	Vidth =	1.5	Min Re	q = -	
Bea	ring B	is a rig	id surfac	e.	-	
Mei	nbers	not list	ed have f	orces les	s than	375#

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

Wind loads based on MWFRS with additional C&C

Wind loading based on both gable and hip roof types.

### **Additional Notes**

The overall height of this truss excluding overhang is



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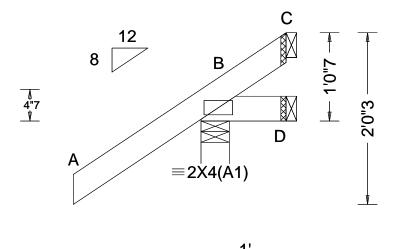
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SEQN: 334813 **JACK** Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T17 FROM: CDM DrwNo: 014.21.0947.09350 Qty: 4 Sparks Residence Truss Label: J04 SSB / WHK 01/14/2021



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	DefI/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): NA
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): NA
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): -0.000 D
Des Ld: 40.00	EXP: C Kzt: NA Mean Height: 15.00 ft		HORZ(TL): 0.001 D
NCBCLL: 10.00	TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.167
Load Duration: 1.25	MWFRS Parallel Dist: 0 to h/2	TPI Std: 2014	Max BC CSI: 0.025
Spacing: 24.0 "	C&C Dist a: 3.00 ft	Rep Fac: Yes	Max Web CSI: 0.000
	Loc. from endwall: Any	FT/RT:20(0)/10(0)	
	GCpi: 0.18	Plate Type(s):	
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11
Lumbor			

- 1'6" -

▲ Ma	aximu	ım Rea	ctions (I	bs)		
	G	ravity		No	on-Gra	vity
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
		/-	/-	/221	/63	/50
D :	5	/-16	/-	/15	/17	/-
C ·	-	/-57	/-	/37	/68	/-
Wind	d read	ctions ba	ased on I	MWFRS		
В	Brg V	Vidth =	4.0	Min Re	q = 1.5	5
D	Brg V	Vidth =	1.5	Min Re	g = -	
		Vidth =		Min Re	q = -	
Bear	ring B	is a rig	id surfac	e.	•	
Mem	nbers	not liste	ed have f	orces les	s than	375#

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

Wind loads based on MWFRS with additional C&C

Wind loading based on both gable and hip roof types.

### **Additional Notes**

The overall height of this truss excluding overhang is 1-0-7.



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

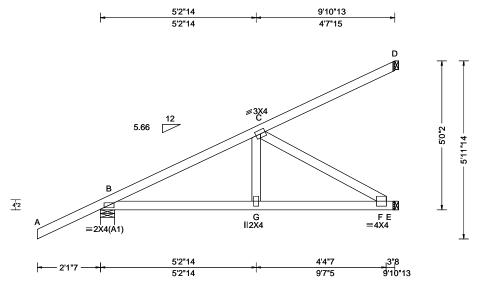
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SEQN: 334821 HIP\_ Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T19 FROM: CDM Qty: 2 DrwNo: 014.21.0947.10203 Sparks Residence Truss Label: J05HJ SSB / WHK 01/14/2021



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	DefI/CSI Criteria	1
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: Varies by Ld Case FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.018 G 999 240 VERT(CL): 0.035 G 999 180 HORZ(LL): 0.004 F HORZ(TL): 0.009 F Creep Factor: 2.0 Max TC CSI: 0.607 Max BC CSI: 0.642 Max Web CSI: 0.306  VIEW Ver: 20.02.01A.1209.11	
Lumber				

#### Gravity Non-Gravity Loc R+ /Rh /Rw /U /RL В 375 /245 /-Е 342 /-/-/104 /-82 /34 Wind reactions based on MWFRS Brg Width = 5.7 Min Req = 1.5 Brg Width = 1.5 Min Req = -Brg Width = 1.5 Min Rea = -Bearing B is a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs)

Chords Tens.Comp. B - C 278 - 567

▲ Maximum Reactions (lbs)

# Bot chord: 2x4 SP #2; Webs: 2x4 SP #3; **Special Loads**

Top chord: 2x4 SP #2;

--(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25) TC: From TC: From -0 plf at -2.12 to 0.00 to 62 plf at 0.00 2 plf at 0 plf at 2 plf at 9.90 BC: From -2.12 to 4 plf at 0.00 2 plf at 0.00 to BC: From 2 plf at -48 lb Conc. Load at 1.48 128 lb Conc. Load at 4.31 263 lb Conc. Load at 7.13 10 lb Conc. Load at 1.48 TC: TC:

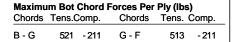
100 lb Conc. Load at 4.31 182 lb Conc. Load at 7.13

### 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 5-0-2.



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

Webs Tens.Comp. C-F 245 - 597



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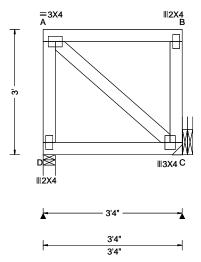
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SEQN: 334825 FLAT Ply: 2 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 FROM: CDM DrwNo: 014.21.0947.48707 Qty: 1 Sparks Residence Truss Label: FT01 SSB / WHK 01/14/2021

#### 2 Complete Trusses Required



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	DefI/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.001 B 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.001 B 999 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): -0.001 B
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.001 B
NCBCLL: 0.00	Mean Height: 15.00 ft TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.515
Load Duration: 1.25	MWFRS Parallel Dist: 0 to h/2	TPI Std: 2014	Max BC CSI: 0.032
Spacing: 24.0 "	C&C Dist a: 3.00 ft	Rep Fac: No	Max Web CSI: 0.102
-	Loc. from endwall: not in 10.50 ft	FT/RT:20(0)/10(0)	
	GCpi: 0.18	Plate Type(s):	
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11

#### ▲ Maximum Reactions (lbs) Gravity Non-Gravity Loc R+ /Rh /Rw /U /RL D 616 /115 /-/-/-647 /138 Wind reactions based on MWFRS Brg Width = 3.5 Min Rea = 1.5Brg Width = -Min Req = -Bearing D 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;

### **Nailnote**

Nail Schedule:0.131"x3", min. nails Top Chord: 1 Row @ 4.50" o.c. Bot Chord: 1 Row @12.00" o.c. 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 0.00 to 2 plf at 2 plf at BC: From 20 plf at 0.00 to 20 plf at TC: 630 lb Conc. Load at 0.77 TC: 559 lb Conc. Load at 2.77

### Hangers / Ties

(J) Hanger Support Required, by others

The TC of this truss shall be braced with attached spans at 24" oc in lieu of structural sheathing.

Wind loads and reactions based on MWFRS. End verticals not exposed to wind pressure.

#### **Additional Notes**

Truss must be installed as shown with top chord up. The overall height of this truss excluding overhang is

It is the responsibility of the Building Designer and Truss Fabricator to review this drawing prior to cutting lumber to verify that all data,including dimensions and loads, conform to the architectural plans/specifications and fabricators truss layout.



01/14/2021

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

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

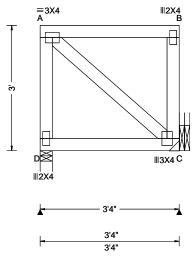
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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SEQN: 334822 FLAT Ply: 2 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 FROM: CDM DrwNo: 014.21.0947.53440 Qty: 1 Sparks Residence Truss Label: FT02 SSB / WHK 01/14/2021

#### 2 Complete Trusses Required



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	DefI/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.001 B 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.001 B 999 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): -0.000 B
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.001 B
NCBCLL: 0.00	Mean Height: 15.00 ft TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.465
Load Duration: 1.25	MWFRS Parallel Dist: 0 to h/2	TPI Std: 2014	Max BC CSI: 0.032
Spacing: 24.0 "	C&C Dist a: 3.00 ft	Rep Fac: No	Max Web CSI: 0.093
	Loc. from endwall: not in 10.50 ft	FT/RT:20(0)/10(0)	
	GCpi: 0.18	Plate Type(s):	
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11

#### ▲ Maximum Reactions (lbs) Gravity Non-Gravity Loc R+ /Rh /Rw /U /RL D 560 /122 /-/-/-630 /140 Wind reactions based on MWFRS Brg Width = 3.5 Min Rea = 1.5Brg Width = -Min Req = -Bearing D 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;

### **Nailnote**

Nail Schedule:0.131"x3", min. nails Top Chord: 1 Row @ 4.75" o.c. Bot Chord: 1 Row @12.00" o.c. 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) 0.00 to 2 plf at TC: From 2 plf at BC: From 20 plf at 0.00 to 20 plf at TC: 559 lb Conc. Load at 0.77, 2.77

#### Hangers / Ties

(J) Hanger Support Required, by others

The TC of this truss shall be braced with attached spans at 24" oc in lieu of structural sheathing.

Wind loads and reactions based on MWFRS. End verticals not exposed to wind pressure.

#### **Additional Notes**

Truss must be installed as shown with top chord up. The overall height of this truss excluding overhang is

It is the responsibility of the Building Designer and Truss Fabricator to review this drawing prior to cutting lumber to verify that all data,including dimensions and loads, conform to the architectural plans/specifications and fabricators truss layout.



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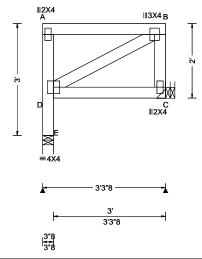
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SEQN: 334823 FLAT Ply: 2 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T40 DrwNo: 014.21.0949.37310 FROM: CDM Qty: 1 Sparks Residence Truss Label: FT03 SSB / WHK 01/14/2021

#### 2 Complete Trusses Required



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.001 A 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.002 A 844 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): -0.004 A
Des Ld: 40.00	EXP: C Kzt: NA Mean Height: 15.00 ft		HORZ(TL): 0.009 A
NCBCLL: 0.00	TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.484
Load Duration: 1.25	MWFRS Parallel Dist: 0 to h/2	TPI Std: 2014	Max BC CSI: 0.030
Spacing: 24.0 "	C&C Dist a: 3.00 ft	Rep Fac: No	Max Web CSI: 0.099
	Loc. from endwall: not in 21.00 ft	FT/RT:20(0)/10(0)	
	GCpi: 0.18	Plate Type(s):	
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11
Lumber	•	Additional Notes	

#### ▲ Maximum Reactions (lbs) Gravity Non-Gravity Loc R+ /Rh /Rw /U /RL Е 635 /200 /-/-/-/-645 /202 Wind reactions based on MWFRS Brg Width = 3.5 Min Rea = 1.5Brg Width = -Min Req = -Bearing E is a rigid surface. Members not listed have forces less than 375#

#### Lumbe

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

### **Nailnote**

Nail Schedule:0.131"x3", min. nails Top Chord: 1 Row @ 4.25" o.c. Bot Chord: 1 Row @12.00" o.c. 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) 0.00 to 2 plf at TC: From 2 plf at BC: From 20 plf at 0.29 to 20 plf at TC: 607 lb Conc. Load at 0.73, 2.73

### Hangers / Ties

(J) Hanger Support Required, by others

Wind loads and reactions based on MWFRS.

End verticals not exposed to wind pressure.

It is the responsibility of the Building Designer and Truss Fabricator to review this drawing prior to cutting lumber to verify that all data,including dimensions and loads, conform to the architectural plans/specifications and fabricators truss layout.

#### Additional Notes

Truss must be installed as shown with top chord up. The overall height of this truss excluding overhang is

Drop leg is not designed to resist any lateral loading from wind pressure on the wall. End vertical does not provide support for wall.



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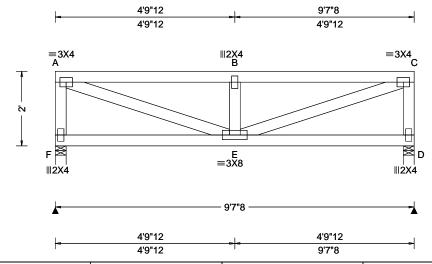
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SEQN: 334826 FLAT Ply: 2 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T31 FROM: CDM DrwNo: 014.21.0949.46710 Qty: 1 Sparks Residence Truss Label: FT04 SSB / 01/14/2021

## 2 Complete Trusses Required



Loading Criteria (psf) Wind Criteria	Snow Criteria (Pg,Pf in PSF)	DefI/CSI Criteria
TCLL: 20.00 Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00 Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.019 B 999 240
BCLL: 0.00 Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.038 B 999 180
BCDL: 10.00 Risk Category: II	Snow Duration: NA	HORZ(LL): 0.003 A
Des Ld: 40.00 EXP: C Kzt: NA Mean Height: 15.00 ft		HORZ(TL): 0.006 A
NCBCLL: 0.00 TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0
Soffit: 2.00 BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.152
Load Duration: 1.25 MWFRS Parallel Dist: 0 to h/2	TPI Std: 2014	Max BC CSI: 0.555
Spacing: 24.0 " C&C Dist a: 3.00 ft	Rep Fac: No	Max Web CSI: 0.292
Loc. from endwall: not in 21.00		
GCpi: 0.18	Plate Type(s):	
Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11

▲ Maximum Reactions (lbs) Gravity Non-Gravity Loc R+ /Rh /Rw /U /RL 785 /199 /-D /-/-631 /151 Wind reactions based on MWFRS Brg Width = 3.5Min Req = 1.5 Brg Width = 3.5 Min Req = 1.5 Bearings F & D 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. 188 - 726 188

#### Lumber

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

### **Nailnote**

Nail Schedule:0.131"x3", min. nails Top Chord: 1 Row @12.00" o.c. Bot Chord: 1 Row @12.00" o.c. :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 0.00 to 60 plf at 60 plf at BC: From 20 plf at 0.00 to 20 plf at BC: 645 lb Conc. Load at 3.67

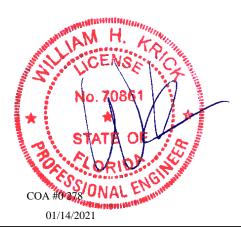
Wind loads and reactions based on MWFRS. End verticals not exposed to wind pressure.

#### **Additional Notes**

Truss must be installed as shown with top chord up. The overall height of this truss excluding overhang is 2-0-0.

It is the responsibility of the Building Designer and Truss Fabricator to review this drawing prior to cutting lumber to verify that all data,including dimensions and loads, conform to the architectural plans/specifications and fabricators truss layout.

#### Maximum Web Forces Per Ply (lbs) Webs Tens.Comp. Webs Tens. Comp. 750 - 194 E-C 766 - 199



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

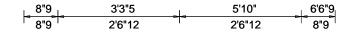
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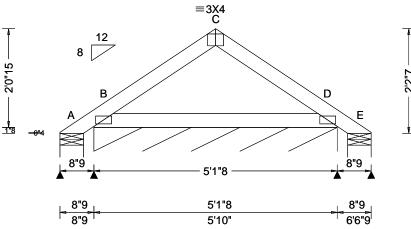
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SEQN: 334814 SPEC Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T25 FROM: CDM DrwNo: 014.21.0947.21910 Qty: 16 Sparks Residence Truss Label: PB01 SSB / WHK 01/14/2021





Loading Criteria (psf) Wind Criteria Snow	Criteria (Pg,Pf in PSF) Defl/CSI Criteria
TCLL: 20.00 Wind Std: ASCE 7-16 TCDL: 10.00 Speed: 130 mph BCLL: 0.00 Enclosure: Closed BCDL: 10.00 Experiment Fisher Fis	A Ct: NA CAT: NA CAT: NA Ce: NA Ce: NA VERT(LL): 0.000 999 240 VERT(CL): 0.002 999 180 HORZ(LL): -0.000 HORZ(TL): 0.001 HORZ(TL): 0.000 - HORZ

Gravity Non-Gravity Loc R+ /R- /Rh /Rw /U // A - /-3 /- /- /16 /- B* 6 /- /- /- /30 /- /- E - /-3 /- /- /16 /- Wind reactions based on MWFRS A Brg Width = 5.9 Min Req = 1.5 B Brg Width = 61.5 Min Req = -	/ RL
A - /-3 /- /- /16 /- B* 6 /- /- /-30 /- /- E - /-3 /- /- /16 /- Wind reactions based on MWFRS A Brg Width = 5.9 Min Req = 1.5	RI
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
E - /-3 /- /- /16 /- Wind reactions based on MWFRS A Brg Width = 5.9 Min Req = 1.5	_
Wind reactions based on MWFRS A Brg Width = 5.9 Min Req = 1.5	-
A Brg Width = 5.9 Min Req = 1.5	-
B Brg Width - 61 5 Min Peg	
D Dig Width = 01.5 Will Neq = -	
E Brg Width = 5.9 Min Req = 1.5	
Bearings A, B, & E are a rigid surface.	
Members not listed have forces less than 375	5#
iviembers not listed have forces less than 375	Э#

#### Lumber

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

## **Plating Notes**

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

#### **Purlins**

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

Wind loads based on MWFRS with additional C&C

Wind loading based on both gable and hip roof types.

#### Additional Notes

Refer to DWG PB160160118 for piggyback details. The overall height of this truss excluding overhang is



01/14/2021

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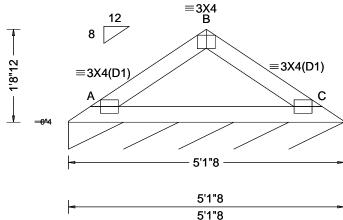
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SEQN: 334815 SPEC Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T26 FROM: CDM DrwNo: 014.21.0947.23683 Qty: 2 Sparks Residence Truss Label: PB02 SSB / WHK 01/14/2021





Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	DefI/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.000 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.004 999 180
	Risk Category: II	Snow Duration: NA	HORZ(LL): -0.000
Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00	EXP: C Kzt: NA Mean Height: 21.23 ft TCDL: 5.0 psf BCDL: 2.0 psf MWFRS Parallel Dist: h to 2h C&C Dist a: 3.00 ft Loc. from endwall: not in 13.00 ft	Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0)	HORZ(TL): 0.001 Creep Factor: 2.0 Max TC CSI: 0.038 Max BC CSI: 0.048 Max Web CSI: 0.000
	GCpi: 0.18	Plate Type(s):	
Louis	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11

#### ▲ Maximum Reactions (lbs), or \*=PLF Gravity Non-Gravity Loc R+ /R /Rh /Rw /U /RL A\* 4 /-/-/20 Wind reactions based on MWFRS A Brg Width = 61.5 Min Req = -Bearing A is a rigid surface. Members not listed have forces less than 375#

#### Lumber

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

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

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

Wind loading based on both gable and hip roof types.

## **Additional Notes**

Refer to DWG PB160160118 for piggyback details. The overall height of this truss excluding overhang is 1-10-4.



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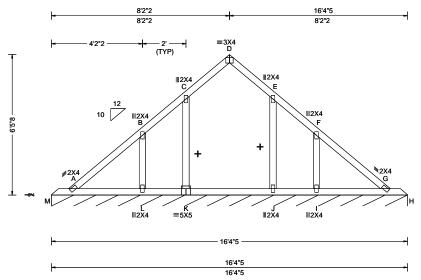
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SEQN: 334816 VAL Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T27 FROM: CDM Qty: 1 DrwNo: 014.21.0947.37930 Sparks Residence Truss Label: V01 SSB / WHK 01/14/2021



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.002 D 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.004 D 999 180
	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.003 F
Des Ld: 40.00	EXP: C Kzt: NA Mean Height: 17.95 ft		HORZ(TL): 0.004 F
NCBCLL: 10.00	TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.115
Load Duration: 1.25	MWFRS Parallel Dist: 0 to h/2	TPI Std: 2014	Max BC CSI: 0.097
Spacing: 24.0 "	C&C Dist a: 3.00 ft	Rep Fac: Yes	Max Web CSI: 0.051
	Loc. from endwall: not in 4.50 ft	FT/RT:20(0)/10(0)	
	GCpi: 0.18	Plate Type(s):	
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11
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#### ▲ Maximum Reactions (lbs), or \*=PLF Gravity Non-Gravity Loc R+ /R /Rh /Rw /U /RL H\* 84 /-/-/45 /11 Wind reactions based on MWFRS H Brg Width = 196 Min Req = -Bearing M is a rigid surface. Members not listed have forces less than 375#

#### Lumber

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

### Wind

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

Wind loading based on both gable and hip roof types.

## **Additional Notes**

See DWGS VALTN160118 and VAL180160118 for valley details

The overall height of this truss excluding overhang is 6-5-8.

+ Member to be laterally braced for out of plane wind loads



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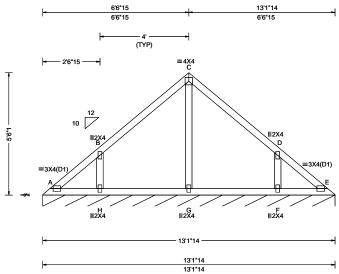
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6750 Forum Drive Suite 305 Orlando FL, 32821

SEQN: 334817 VAL Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T28 FROM: CDM Qty: 1 DrwNo: 014.21.0947.39750 Sparks Residence Truss Label: V02 SSB / WHK 01/14/2021



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.001 C 999 240
DCLL. 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.002 C 999 180
10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): -0.002 B
Doc I d: 40 00	EXP: C Kzt: NA Mean Height: 18.81 ft		HORZ(TL): 0.002 B
NCBCLL: 10.00	TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.220
	MWFRS Parallel Dist: h/2 to h	TPI Std: 2014	Max BC CSI: 0.114
Spacing: 24.0 "	C&C Dist a: 3.00 ft	Rep Fac: Yes	Max Web CSI: 0.092
	Loc. from endwall: not in 9.00 ft	FT/RT:20(0)/10(0)	
	GCpi: 0.18	Plate Type(s):	
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11
1			

#### ▲ Maximum Reactions (lbs), or \*=PLF Gravity Non-Gravity Loc R+ /R /Rw /U /RL E\* 86 /-/-/47 /12 Wind reactions based on MWFRS Brg Width = 157 Min Req = -Bearing A is a rigid surface. Members not listed have forces less than 375#

#### Lumber

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

### Wind

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

Wind loading based on both gable and hip roof types.

### **Additional Notes**

See DWGS VALTN160118 and VAL180160118 for valley details.

The overall height of this truss excluding overhang is



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

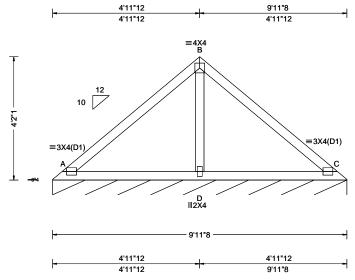
\*\*IMPORTANT\*\* FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

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

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.

6750 Forum Drive Suite 305 Orlando FL, 32821

SEQN: 334818 VAL Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T29 FROM: CDM Qty: 1 DrwNo: 014.21.0947.40707 Sparks Residence Truss Label: V03 SSB / WHK 01/14/2021



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): 0.011 D 999 240	Loc R+ /R- /Rh /Rw /U /I	RL
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.023 D 999 180	C* 86 /- /- /46 /10 /1	12
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): -0.006 D	Wind reactions based on MWFRS	
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.014 D	C Brg Width = 119 Min Req = -	
NCBCLL: 10.00	Mean Height: 19.48 ft TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0	Bearing A is a rigid surface.	
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.359	Members not listed have forces less than 375	#
Load Duration: 1.25	MWFRS Parallel Dist: h/2 to h	TPI Std: 2014	Max BC CSI: 0.302	Maximum Web Forces Per Ply (lbs)	
Spacing: 24.0 "		Rep Fac: Yes	Max Web CSI: 0.170	Webs Tens.Comp.	
' "		FT/RT:20(0)/10(0)		B - D 176 - 542	
	GCpi: 0.18	Plate Type(s):			
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11		
Lumber				-	

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

### Wind

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

Wind loading based on both gable and hip roof types.

### **Additional Notes**

See DWGS VALTN160118 and VAL180160118 for valley details.

The overall height of this truss excluding overhang is



01/14/2021

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

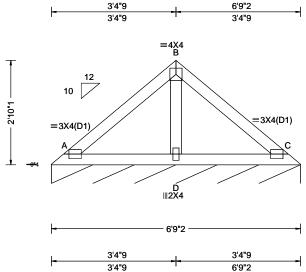
\*\*IMPORTANT\*\* FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

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

6750 Forum Drive Suite 305 Orlando FL, 32821 SEQN: 334819 VAL Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T30 FROM: CDM Qty: 1 DrwNo: 014.21.0947.41577 Sparks Residence Truss Label: V04 SSB / WHK 01/14/2021



Snow Criteria (Pg,Pf in PSF)	DefI/CSI Criteria
Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
Pf: NA Ce: NA	VERT(LL): 0.003 D 999 240
Lu: NA Cs: NA	VERT(CL): 0.007 D 999 180
Snow Duration: NA	HORZ(LL): -0.002 D
	HORZ(TL): 0.004 D
Building Code:	Creep Factor: 2.0
FBC 7th Ed. 2020 Res.	Max TC CSI: 0.146
TPI Std: 2014	Max BC CSI: 0.125
Rep Fac: Yes	Max Web CSI: 0.062
FT/RT:20(0)/10(0)	
Plate Type(s):	
WAVE	VIEW Ver: 20.02.01A.1209.11
	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)

#### ▲ Maximum Reactions (lbs), or \*=PLF Gravity Non-Gravity Loc R+ /R /Rh /Rw /U /RL C\* 85 /-/-/45 /11 Wind reactions based on MWFRS C Brg Width = 81.1 Min Req = -Bearing A is a rigid surface. Members not listed have forces less than 375#

#### Lumber

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

### Wind

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

Wind loading based on both gable and hip roof types.

### **Additional Notes**

See DWGS VALTN160118 and VAL180160118 for valley details.

The overall height of this truss excluding overhang is 2-10-1.



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

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

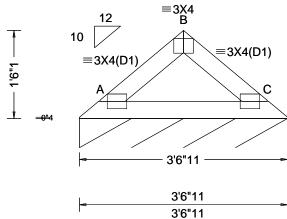
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.



SEQN: 334820 VAL Ply: 1 Job Number: 20-4541 Cust: R 215 JRef: 1X212150007 T33 FROM: CDM DrwNo: 014.21.0947.42610 Qty: 1 Sparks Residence Truss Label: V05 SSB / WHK 01/14/2021





TCLL: 20.00 Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00   Speed: 130 mph	Lu: NA Cs: NA Snow Duration: NA	VERT(LL): 0.002 999 240 VERT(CL): 0.004 999 180 HORZ(LL): -0.001 HORZ(TL): 0.002
NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "  NCBCLL: 5.0 psf BCDL: 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	Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s):	Creep Factor: 2.0 Max TC CSI: 0.054 Max BC CSI: 0.074 Max Web CSI: 0.000
Wind Duration: 1.60	WAVE	VIEW Ver: 20.02.01A.1209.11

#### ▲ Maximum Reactions (lbs), or \*=PLF Gravity Non-Gravity Loc R+ /R /Rh /Rw /U /RL C\* 85 /-/-/43 /10 Wind reactions based on MWFRS C Brg Width = 42.7 Min Req = -Bearing A is a rigid surface. Members not listed have forces less than 375#

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

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

Wind loading based on both gable and hip roof types.

## **Additional Notes**

See DWGS VALTN160118 and VAL180160118 for valley details.

The overall height of this truss excluding overhang is



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# 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.

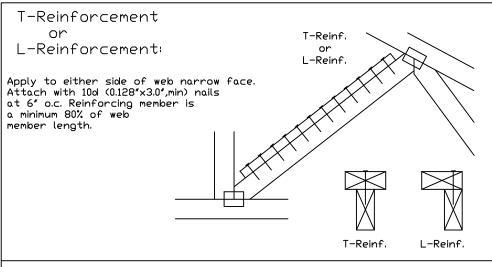
Alternative reinforcement specified in chart below may be conservative. For minimum alternative reinforcement, re-run design with appropriate reinforcement type.

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	Specified CLR	Alternative Reir	
Size	Restraint	T- or L- Reinf.	
2x3 or 2x4	1 row	2×4	1-2×4
2x3 or 2x4	2 rows	2×6	2-2×4
2×6	1 row	2×4	1-2×6
2×6	2 rows	2×6	2-2×4( <b>%</b> )
2×8	1 row	2×6	1-2×8
2×8	2 rows	2×6	2-2×6( <del>%</del> )

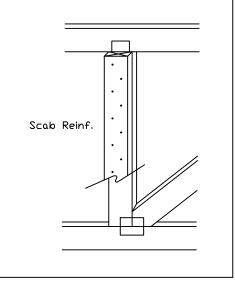
T-reinforcement, L-reinforcement, or scab reinforcement to be same species and grade or better than web member unless specified otherwise on Engineer's sealed design.

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



## 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) nalls at 6" o.c. Reinforcing member is a minimum 80% of web member length.



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Alpine, a division of ITV Building Components Group Inc. shall not be responsible for any deviation and the standard plate positions.

Alpine, a division of ITV Building Components Group Inc. shall not be responsible for any deviation of this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation & bracing of trusses.

A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.

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

STATE OF 100 OF

∓€ 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.			
SPACING			



514 Earth City Expressway Suite 242 Earth City, MO 63045

## Gable Stud Reinforcement Detail

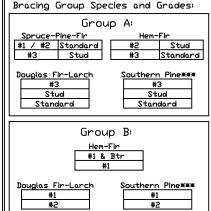
ASCE 7-16: 140 mph Wind Speed, 15' Mean Height, Enclosed, Exposure C, Kzt = 1.00

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

							· · · · ·					•			
	2x4 Gable Vertico		Brace	No	(1) 1×4 "L	" Brace *	(1) 2×4 *L	" Brace *	(2) 2×4 *L	" Brace **	(1) 2×6 *L	" Brace *	(2) 2x6 L	Brace **	
	ا ۔ ۔ م	Species	Grade		Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B	
4		SPF	#1 / #2	4′ 3″	7′ 3″	7′ 7″	8′ 7 <b>″</b>	8′ 11 <b>″</b>	10′ 3 <b>″</b>	10′ 8″	13′ 6 <b>″</b>	14′ 0″	14' 0"	14′ 0″	
'o	Ū O	HF 2PF	#3	4′ 1″	6′ 7 <b>″</b>	7′ 1″	8′ 6 <b>″</b>	8′ 10 <b>″</b>	10′ 1″	10′ 6″	13′ 4″	13′ 10″	14′ 0″	14′ 0″	
'2'			Stud	4′ 1″	6′ 7 <b>″</b>	7′ 0″	8′ 6 <b>″</b>	8′ 10 <b>″</b>	10′ 1″	10′ 6 <b>″</b>	13′ 4″	13′ 10″	14′ 0″	14′ 0″	
			Standard	4′ 1″	5′ 8 <b>″</b>	6′ 0 <b>″</b>	7′ 7″	8′ 1 <b>″</b>	10′ 1″	10′ 6″	11′ 10″	12′ 8″	14′ 0″	14′ 0″	
به			#1	4′ 6 <b>″</b>	7′ 4″	7′ 8″	8′ 8 <b>″</b>	9′ 0″	10′ 4″	10′ 9″	13′ 8″	14′ 0″	14′ 0″	14′ 0″	
		SP	#2	4′ 3″	7′ 3″	7′ 7″	8′ 7 <b>″</b>	8′ 11 <b>″</b>	10′ 3″	10′ 8″	13′ 6″	14′ 0″	14′ 0″	14′ 0″	
	4		#3	4′ 2″	6′ 0″	6′ 4″	7′ 11″	8′ 6 <b>″</b>	10′ 2″	10′ 7″	12′ 5 <b>′</b>	13′ 4″	14′ 0″	14′ 0″	
	N	IDFLI	Stud	4′ 2″	6′ 0″	6′ 4″	7′ 11″	8′ 6 <b>″</b>	10′ 2″	10′ 7″	12′ 5 <b>′</b>	13′ 4″	14′ 0″	14′ 0″	
d	. –		Standard	4′ 0″	5′ 3 <b>″</b>	5′ 7 <b>″</b>	7′ 0 <b>″</b>	7′ 6″	9′ 6 <b>″</b>	10′ 2″	11′ 0″	11′ 10″	14′ 0″	14′ 0″	
<u>                                     </u>	,		#1 / #2	4′ 11″	8′ 4″	8′ 8 <b>″</b>	9′ 10 <b>″</b>	10′ 3 <b>″</b>	11′ 8″	12′ 2 <b>′</b>	14′ 0″	14′ 0″	14′ 0″	14′ 0″	
=	l	SPF	#3	4′ 8″	8′ 1 <b>″</b>	8′ 8 <b>″</b>	9′ 8″	10′ 1″	11′ 7″	12′ 1″	14′ 0″	14′ 0″	14′ 0″	14′ 0″	
:	Ų	HF	Stud	4′ 8″	8′ 1 <b>″</b>	8′ 6 <b>″</b>	9′ 8″	10′ 1″	11′ 7″	12′ 1″	14′ 0″	14′ 0″	14′ 0″	14′ 0″	
Ιà	Ιō	1 11	Standard	4′ 8 <b>″</b>	6′ 11 <b>″</b>	7′ 5″	9′ 3 <b>″</b>	9′ 11″	11′ 7″	12′ 1″	14′ 0″	14′ 0″	14′ 0″	14′ 0″	
			#1	5′ 1 <b>″</b>	8′ 5 <b>″</b>	8′ 9 <b>″</b>	9′ 11″	10′ 4″	11′ 10″	12′ 4″	14′ 0″	14′ 0″	14′ 0″	14′ 0″	
>		ISP	#2	4′ 11″	8′ 4″	8′ 8 <b>″</b>	9′ 10″	10′ 3″	11′ 8″	12′ 2 <b>″</b>	14′ 0″	14′ 0″	14′ 0″	14′ 0″	
	Ý.	DFL	#3	4′ 9″	7′ 4″	7′ 9″	9′ 9″	10′ 2″	11′ 8″	12′ 1″	14′ 0″	14′ 0″	14′ 0″	14′ 0″	
lω	'		Stud	4′ 9″	7′ 4″	7′ 9″	9′ 9″	10′ 2″	11′ 8″	12′ 1″	14′ 0″	14′ 0″	14′ 0″	14′ 0″	
			Standard	4′ 8 <b>″</b>	6′ 5 <b>″</b>	6′ 10 <b>″</b>	8′ 7 <b>″</b>	9′ 2″	11′ 7″	12′ 1″	13′ 6″	14′ 0″	14′ 0″	14′ 0″	
Gabl	!		SPF	#1 / #2	5′ 5 <b>″</b>	9′ 2″	9′ 6″	10′ 10 <b>″</b>	11′ 3″	11′ 8″	13′ 5 <b>″</b>	14′ 0″	14′ 0″	14′ 0″	14′ 0″
d		12LL	#3	5′ 1 <b>″</b>	9′ 0″	9′ 4″	10′ 8″	11′ 1″	12′ 9″	13′ 3″	14′ 0″	14′ 0″	14′ 0″	14′ 0″	
0	Ų	HF	Stud	5′ 1 <b>′</b>	9′ 0″	9′ 4″	10′ 8 <b>″</b>	11′ 1″	12′ 9 <b>′</b>	13′ 3″	14′ 0″	14′ 0″	14′ 0″	14′ 0″	
	ر 0 "3	1 11	Standard	5′ 1 <b>″</b>	8′ 0 <b>″</b>	8′ 6 <b>″</b>	10′ 8″	11′ 1″	12′ 9 <b>″</b>	13′ 3″	14′ 0″	14′ 0″	14′ 0″	14′ 0″	
×			#1	5′ 8 <b>″</b>	9′ 3″	9′ 8 <b>″</b>	10′ 11″	11′ 4″	13′ 0″	13′ 6″	14′ 0″	14′ 0″	14' 0"	14′ 0″	
11 2		SP	#2	5′ 5 <b>″</b>	9′ 2″	9′ 6″	10′ 10 <b>″</b>	11′ 3″	12′ 11″	13′ 5 <b>″</b>	14′ 0″	14′ 0″	14′ 0″	14′ 0″	
Μ			#3	5′ 3 <b>″</b>	8′ 5 <b>″</b>	9′ 0″	10′ 9″	11′ 2″	12′ 10 <b>″</b>	13′ 4″	14′ 0″	14′ 0″	14′ 0″	14′ 0″	
	10	IDFLI	Stud	5′ 3 <b>″</b>	8′ 5 <b>″</b>	9′ 0″	10′ 9 <b>″</b>	11′ 2″	12′ 10 <b>″</b>	13′ 4″	14′ 0″	14′ 0″	14′ 0″	14′ 0″	
			Standard	5′ 1 <b>′</b>	7′ 5″	7′ 11 <b>″</b>	9′ 11 <b>″</b>	10′ 7″	12′ 9″	13′ 3″	14′ 0 <b>″</b>	14′ 0″	14′ 0″	14′ 0″	
Summ IC															



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.

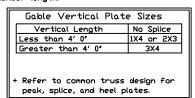
Gable Truss Detail Notes: Wind Load deflection criterion is L/240.

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

Gable end supports load from 4' 0" outlookers 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.



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

#### Gable Truss Diagonal brace option: vertical length may be doubled when diagonal brace is used. Connect diagonal brace for 450# at each end. Max web "L" Brace End total length is 14'. Zones, typ. 2×4 DF-L #2 or better diagonal brace; single Vertical length shown or double cut in table above. (as shown) at upper end. Continuous Bearing Connect diagonal at Refer to chart shove for max gable ventical length. midpoint of vertical web.

\*\*\*VARNINGI\*\*\* READ AND FOLLOW ALL NOTES ON THIS DRAVINGI
\*\*\*\*IMPORTANT\*\*\* FURNISH THIS DRAVING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

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COA #0.278 01/14/2021

ASCE7-16-GAB14015 |DATE 01/26/2018 

MAX, TOT, LD, 60 PSF

MAX. SPACING 24.0"

514 Earth City Expressway Suite 242 Earth City, MO 63045

## Gable Detail For Let-in Verticals Gable Truss Plate Sizes Refer to appropriate Alpine gable detail for minimum plate sizes for vertical studs. (+) Refer to Engineered truss design for peak, splice, web, and heel plates. \*If gable vertical plates overlap, use a single plate that covers the total area of the overlapped plates to span the web. Gable Example: Length typ. (\* )

Provide connections for uplift specified on the engineered truss design.

Attach each "T" reinforcing member with

End Driven Nails:

10d Common (0.148"x 3.", min) Nails at 4" o.c. plus

(4) nails in the top and bottom chords.

10d Common (0.148"x3".min) Toenails at 4" o.c. plus

(4) toenails in the top and bottom chords.

This detail to be used with the appropriate Alpine gable detail for ASCE wind load.

ASCE 7-05 Gable Detail Drawings

A13015051014, A12015051014, A11015051014, A10015051014, A14015051014, A13030051014, A12030051014, A11030051014, A10030051014, A14030051014

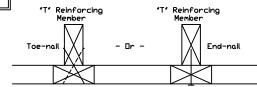
ASCE 7-10 & ASCE 7-16 Gable Detail Drawings

A11515ENC100118, A12015ENC100118, A14015ENC100118, A16015ENC100118, A18015ENC100118, A20015ENC100118, A20015END100118, A20015PED100118, A11530ENC100118, A12030ENC100118, A14030ENC100118, A16030ENC100118, A18030ENC100118, A20030ENC100118, A20030END100118, A20030PED100118, \$11515ENC100118, \$12015ENC100118, \$14015ENC100118, \$16015ENC100118, \$18015ENC100118, \$20015ENC100118, \$20015END100118, \$20015PED100418,

S11530ENC100118, S12030ENC100118, S14030ENC100118, \$16030[NC1001]8, \$1,000 \$18030ENC100118, \$20030ENC100118, \$20030EN0100118, \$20030PED100118

See appropriate Alpine gable detail for maximum inventorces galle ver

"T" Reinforcement Attachment Detail



To convert from "L" to "T" reinforcing members, multiply "T" increase by length (based on appropriate Alpine gable detail).

Maximum allowable "T" reinforced gable vertical length is 14' from top to bottom chord.

"T" reinforcing member material must match size, specie, and grade of the "L" reinforcing member.

Web Length Increase w/ "T" Brace

"T" Reinf.	"T"			
Mbr. Size	Increase			
2×4	30 %			
2x6	20 %			

Example:

ASCE 7-10 Wind Speed = 120 mph Mean Roof Height = 30 ft, Kzt = 1.00Gable Vertical = 24°o.c. SP #3 "T" Reinforcing Member Size = 2x4

"T" Brace Increase (From Above) = 30% = 1.30 (1) 2x4 "L" Brace Length = 8' 7"

Maximum "T" Reinforced Gable Vertical Length  $1.30 \times 8' \ 7'' = 11' \ 2''$ 

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COA#027841001/14/2021

IREF LET-IN VERT DATE 01/02/2018 DRWG GBLLETIN0118

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

Rigid Sheathing

Ceiling

4 Nails

Nails

Spaced At

4 Nails

Reinforcing Member

Gable

Truss

514 Earth City Expressway Suite 242 Earth City, MO 63045

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

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

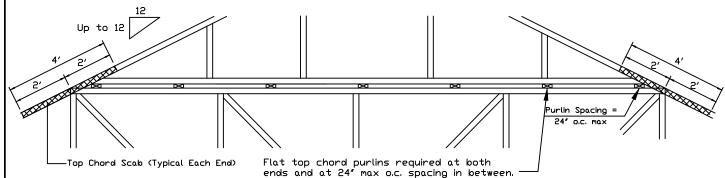
160 mph Wind, 30.00 ft Mean Hgt, ASCE 7-16, Enclosed Bldg. located anywhere in roof, Exp C, Wind DL= 5.0 psf (min), Kzt=1.0. Dr 140 mph wind, 30.00 ft Mean Hgt, ASCE 7-16, Enclosed Bldg. located anywhere in roof, Exp D, wind DL= 5.0 psf (min), Kzt=1.0.

Note: Top chords of trusses supporting piggyback cap trusses must be adequately braced by sheathing or purlins. The building Engineer of Record shall provide diagonal bracing or any other suitable anchorage to permanently restrain purlins, and lateral bracing for out of plane loads over gable ends.

Maximum truss spacing is 24' o.c. detail is not applicable if cap supports additional loads such as cupola, steeple, chimney or drag strut loads.

\*\* Refer to Engineer's sealed truss design drawing for piggyback and base truss specifications.

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



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

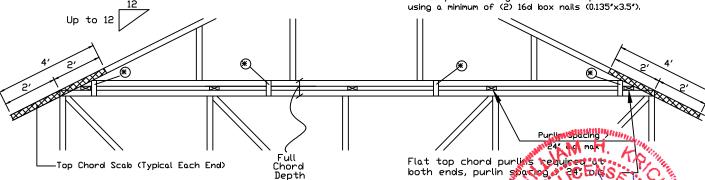
Attach purlin bracing to the flat top chord using (2) 16d box nails (0.135"x3.5").

The top chord #3 grade 2x4 scab may be replaced with either of the following: (1) 3X8 Trulox plate attached with (8) 0.120"x1.375" nalls, (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



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

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

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 (0.13'x2') nalls 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 o.c. front to back faces.

#### 28PB Wave Piggyback Plate

Dine 28PB wave piggyback plate to each face 8 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.

# 

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IREF PIGGYBACK 01/02/2018 DATE

DRWG PB160160118

SPACING 24.0"

13723 Riverport Drive Suite 200 Maryland Heights, MO 63043

# Valley Detail - ASCE 7-16: 180 mph, 30' Mean Height, Partially Enclosed, Exp. C, Kzt=1.00

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

Bot Chord 2x4 SP #2N or SPF #1/#2 or better.

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

\*\* Attach each valley to every supporting truss with:
535# connection or with (1) Simpson H2.5A or
equivalent connector for

ASCE 7-16 180 mph. 30' Mean Height, Part. Enc. Building, Exp. C, Wind TC DL=5 psf, Kzt = 1.00 Dr

ASCE 7-16 160 mph. 30' Mean Height, Part. Enc. Building, Exp. D, Wind TC DL=5 psf, Kzt = 1.00

Bottom chord may be square or pitched cut as shown.

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

All plates shown are Alpine Wave Plates.

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

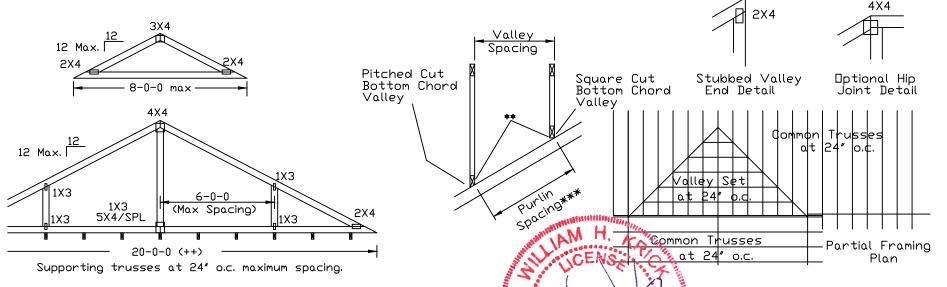
Top chord of truss beneath valley set must be braced with: properly attached, rated sheathing applied prior to valley truss installation.

□r

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

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

- \*\*\* Note that the purlin spacing for bracing the top chord of the truss beneath the valley is measured along the slope of the top chord.
- ++ Larger spans may be built as long as the vertical height does not exceed 14'-0''.



ALPINE AN ITW COMPANY

514 Earth City Expressway Suite 242 Earth City, MO 63045

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7PSF DATE TC DI 20 15 01/26/2018 BC DL 10 VAL180160118 Ω 0 PSF BC II 0 TDT. LD. 60 |55|57PSF DUR.FAC. 1.25/1.33 1.15 1.15 SPACING 24.0"

30

|30 |40 PSF | REF

VALLEY DETAIL

TE-LL

# Valley Detail - ASCE 7-16: 30' Mean Height, Enclosed, Exp. C, Kzt=1.00

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

\*\* Attach each valley to every supporting truss with: (2) 16d box (0.135"  $\times$  3.5") nails toe-nailed for ASCE 7-16, 30' Mean Height, Enclosed Building, Exp. C. Wind TC DL=5 psf, Kzt = 1.00, Max. Wind Speed based on supporting truss material at connection location: 170 mph for SP (G = 0.55, min.), 155 mph for DF-L (G = 0.50, min.), or 120 mph for HF & SPF (G = 0.42, min.).

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

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

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

All plates shown are Alpine Wave Plates.

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

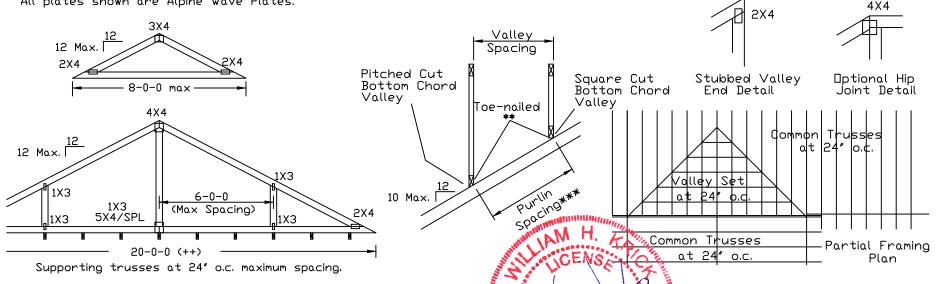
Top chord of truss beneath valley set must be braced with: properly attached, rated sheathing applied prior to valley truss installation.

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

SPACING

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

- \*\*\* Note that the purlin spacing for bracing the top chord of the truss beneath the valley is measured along the slope of the top chord.
- ++ Larger spans may be built as long as the vertical height does not exceed 14'-0''.





514 Earth City Expressway Suite 242 Earth City, MO 63045

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	TC	DL	20	15	7PSF	DATE	01/26/20	018
	BC	DL	10	10	10 PSF	DRWG	VALTN16	0118
	BC	LL	0	0	0 PSF			
	וםד	Γ. LD.	60	55	57PSF			
DUR.FAC. 1.25/1.33			1.15	1.15				

24.0"