

WEB	FORCE	CSI ID	SCRWS
1-30	-417	0.05	1
2-31	-2591	0.44	1 2B- 2B
3-32	979	0.13	1
4-33	-1198	0.27	1
5-34	373	0.05	1
6-35	-213	0.12	1
7-36	-169	0.10	1
8-37	293	0.04	1
9-38	-442	0.44	1
10-39	500	0.12	1
11-40	-664	0.95	1
12-41	767	0.24	1
13-42	-1107	0.90	1
14-43	1072	0.45	1
16-44	1064	0.45	1
17-45	-1079	0.90	1
18-46	789	0.25	1
19-47	-702	1.03	1
20-48	521	0.13	1
21-49	-459	0.47	1
22-50	299	0.05	1
23-51	-196	0.12	1
24-52	-168	0.10	1
25-53	319	0.04	1
26-54	-1114	0.27	1
27-55	905	0.12	1
28-56	-2638	0.47	1 2B- 2B
29-57	-411	0.05	1

UPLIFT REACTION(S) :
 Support C&C Wind Main Wind Non-Wind
 1 -322 lb -198 lb
 2 -321 lb -198 lb

Type ID SECTION Fy(ksi) Joints
 TC 1 20TC18 50
 BC 1 20TC18 50
 WEB 1 20TC18 50

20 psf bottom chord live load NOT required on this truss, per IBC/IRC requirements for attics with limited storage.

THIS DESIGN IS THE COMPOSITE RESULT OF MULTIPLE LOAD CASES.
 Loaded for 10 PSF non-concurrent BCLL.
 Loaded for 200 lb non-concurrent moving BCLL.
 Galvanization: G60
 This truss is designed using the ASCE7-16 Wind Specification
 Bldg Enclosed = Yes,
 Truss Location = End Zone
 Exp Category = B
 Bldg Length = 60.00 ft, Bldg Width = 25.00 ft
 Mean roof height = 14.00 ft, mph = 110
 Occupancy Category II, Wind Dead Load = 7.20 psf
 Designed as Main Wind Force Resisting System - Low-rise and Components and Cladding
 Tributary Area = 60 sqft
 Uplifts based on elevation at or above 0 ft

This design based on chord bracing applied per the following schedule:

	max o.c.	from	to
TC	12.00"	-2- 0- 0	32- 0- 0
BC	12.00"	0- 0- 0	30- 0- 0

REACTIONS

BRG	X-LOC	SIZE	REACT	HORIZ
1	0- 1-12	3.50"	2071	101
2	29-10- 4	3.50"	2071	101

	DEFLECTION	LOC.	ALLOW.	LC
Vert TL:	-0.23" (L/999)	13-14	L/240	79
Vert LL:	-0.16" (L/999)	13-14	L/360	79
Horz TL:	0.09"			
Cantilever				
Vert TL:	-0.13" (L/209)	29-OR	L/ 90	75
Vert LL:	-0.13" (L/204)	29-OR	L/120	75

==== Joint Locations ====

1	0- 0- 0	30	0- 0- 0
2	1- 1-10	31	0- 3- 0
3	1- 3- 0	32	1- 3- 0
4	2- 3-13	33	1- 5- 3
5	2- 6- 0	34	3- 6-11
6	4- 9-11	35	3- 9- 0
7	5- 0- 0	36	6- 0-10
8	7- 3-11	37	6- 3- 0
9	7- 6- 0	38	8- 6-10
10	9- 9-12	39	8- 9- 0
11	10- 0- 0	40	11- 0-11
12	12- 3-12	41	11- 3- 0
13	12- 6- 0	42	13- 6-11
14	14- 9- 1	43	13- 9- 0
15	15- 0- 0	44	16- 0-11
16	15- 2- 1	45	16- 3- 0
17	17- 3-12	46	18- 6-11
18	17- 6- 0	47	18- 9- 0
19	19- 9-12	48	21- 0-10
20	20- 0- 0	49	21- 3- 0
21	22- 3-11	50	23- 6-10
22	22- 6- 0	51	23- 9- 0
23	24- 9-11	52	26- 0-11
24	25- 0- 0	53	26- 3- 0
25	27- 3-13	54	28- 5- 6
26	27- 6- 0	55	28- 7- 9
27	28- 7- 9	56	29- 9- 1
28	28- 9- 3	57	30- 0- 0
29	30- 0- 0		

== X-Brac. Locations (Joints) ==

BC	TC
40	12
48	20

Each connection requires 3/8" diameter proprietary bolt supplied by NUCONSTEEL
 SCRWS = The required number of double-sided #14 screws at each end of the truss member: SP = Spacer supplied by NUCONSTEEL

NUTRUSSTM
 A NUCONSTEEL Product

WARNING Read all notes on this sheet and verify all design parameters.
 Truss design on this sheet is only valid with NUTRUSST sections and is for an individual building component, not a truss system. Bracing shown on this drawing is not erection bracing, wind bracing, portal bracing or similar bracing which is part of the building design and which must be considered by the building designer. Bracing shown is lateral bracing of truss members only. Any additional bracing, temporary and/or permanent, is the responsibility of the truss erector and/or the building designer. The Professional Engineer's seal indicates only that the truss assembly shown on this sheet meets the acceptable design criteria for the loads, loading condition, truss configuration and spans specified.

When the specified screw count cannot be achieved at the chord to web connections, a 16 gauge gusset plate must be added on both sides of the connection. Typically, gusset plates are at pitch break joints.
 Min. screw spacing = 9/16" and min. edge distance = 9/16".

Chk:		WO: C61230_Trusses
Dsgnr:		
TC Live	42.00 psf	Design Spec: AISI-2001
TC Dead	10.00 psf	Buildg Spec: IBC-2018
BC Live	0.00 psf	
BC Dead	10.00 psf	
TOTAL	62.00 psf	Date: 11/24/2022@ 12:07:44
		Seqn S8.1.0a - 6318

Midwest Manufacturing

Address 1
Address 2
City, State Zip

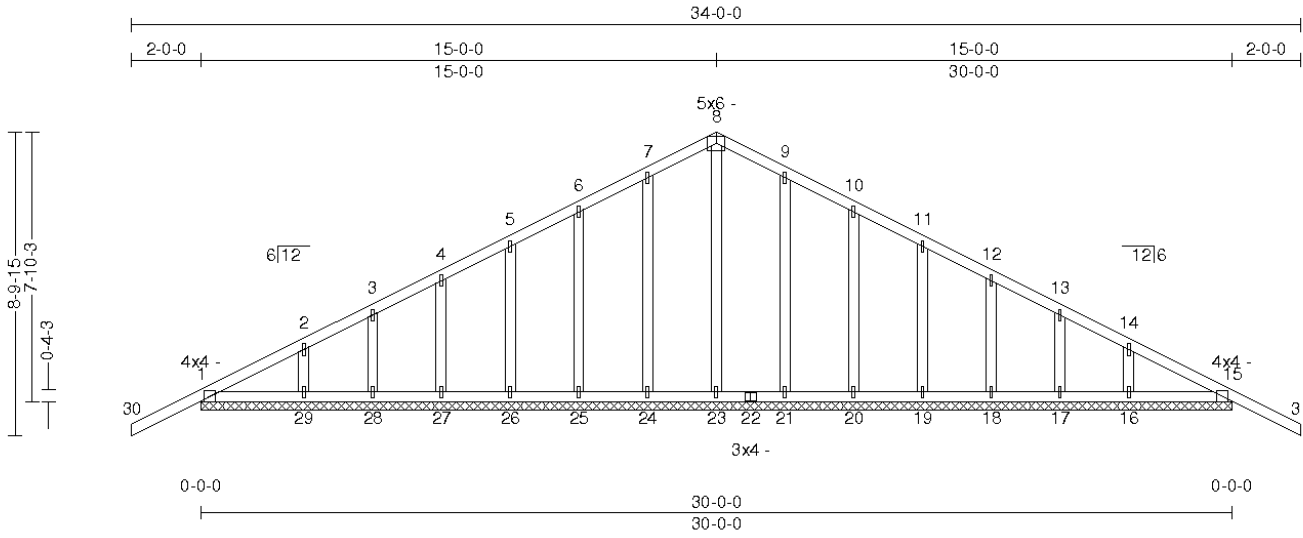
Truss: C61230E

JobName: RES STOCK ENDS

Date: 02/22/17 10:48:45

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SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
30-0-0	6/12	1	2-0-0	2-0-0	0-0-0	0-0-0	1	24 in	133 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI Summary	Deflection	L/	(loc)	Allowed
TCLL: 42	Bldg Code: IRC 2012/	TC: 0.79 (15-31)	Vert TL: 0 in	L/999	16	L/180
Snow(Ps/Pg): 42/60	TPI 1-2007	BC: 0.05 (16-17)	Vert LL: 0 in	L/999	16	L/240
TCDL: 10	Rep Mbr Increase: No	Web: 0.29 (7-24)	Horz TL: 0 in			
BCLL: 0	Lumber D.O.L.: 115 %					
BCDL: 10						

Reaction Summary

Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	.	580 lbs	165 plf	-101 lbs	-8 lbs	-114 lbs	-114 lbs	221 lbs

Material Summary

TC	SPF #2 2 x 4	
BC	SPF #2 2 x 4	
Webs	SPF Stud 2 x 4	except
	8-23	SPF #2 2 x 4

Bracing Summary

TC Bracing	Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC Bracing	Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads Summary

1) This truss has been designed for the effects of balanced and unbalanced snow loads for hips/gables in accordance with ASCE7 - 10 with the following user defined input: 60 psf ground snow load, Terrain Category B, Exposure Category Fully Exposed (Ce = 0.9), Risk Category II (I = 1.00), Thermal Condition Cold ventilated (Ct = 1.1), DOL = 1.15. Ventilated. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.

2) This truss has been designed to account for the effects of ice dams forming at the eaves.

3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 10 with the following user defined input: 115 mph (Factored), Exposure B, Enclosed, Gable/Hip, Risk Category II, Overall Bldg Dims 25 ft x 60 ft, h = 15 ft, End Zone Truss, Both end webs considered. DOL = 1.60

Member Forces Summary

Table indicates: Member ID, max CSI max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	BC	Member ID	Max Axial Force	Max Compr. Force
		6-25	0.206	-316 lbs
		7-24	0.285	-319 lbs
		9-21	0.285	-319 lbs
		10-20	0.206	-316 lbs

JSI Summary

1 = 0.38, 2 = 0.73, 3 = 0.53, 4 = 0.53, 5 = 0.53, 6 = 0.53, 7 = 0.53, 8 = 0.24, 9 = 0.53, 10 = 0.53, 11 = 0.53, 12 = 0.53, 13 = 0.53, 14 = 0.73, 15 = 0.38, 16 = 0.79, 17 = 0.57, 18 = 0.57, 19 = 0.57, 20 = 0.57, 21 = 0.57, 22 = 0.37, 23 = 0.51, 24 = 0.57, 25 = 0.38

Notes

- 1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
- 2) Gable requires continuous bottom chord bearing.
- 3) Gable webs placed at 24" OC, U.N.O.
- 4) Attach gable webs with 1x4 20ga plates, U.N.O.
- 5) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCEA.
- 6) When this truss has been chosen for quality assurance inspection, the Double Polygon Method per TPI 1-2007/Chapter 3 shall be used.
- 7) The fabrication tolerance for this roof truss is 10 % (Cq = 0.90).
- 8) Creep has been considered in the analysis of this truss.
- 9) Due to negative reactions in gravity load cases, special connections to the bearing surface at joints 16, 29 may need to be considered.
- 10) Listed wind uplift reactions based on MWFRS & C&C loading.