

TC	FORCE	AXL	BND	CSI	ID	SCRWS
OL-1	91	0.01	0.53	0.53	1	
1-2	-96	0.01	0.55	0.56	1	-SP
2-3	-2640	0.35	0.12	0.45	1	SP-
3-4	-2493	0.34	0.34	0.65	1	
4-5	-2683	0.37	0.35	0.69	1	
5-6	-2616	0.40	0.35	0.84	1	
6-7	-2182	0.30	0.24	0.52	1	
7-8	-2114	0.29	0.51	0.78	1	
8-9	-2170	0.26	0.67	0.90	1	
9-10	-2170	0.25	0.42	0.64	1	
10-11	-1445	0.14	0.38	0.51	1	-SP
11-12	-1443	0.14	0.38	0.51	1	SP-
12-13	-2140	0.24	0.41	0.63	1	
13-14	-2155	0.26	0.72	0.96	1	
14-15	-2059	0.24	0.63	0.85	1	
15-16	-2130	0.26	0.34	0.57	1	
16-17	-2605	0.41	0.39	0.92	1	
17-18	-2675	0.37	0.39	0.73	1	
18-19	-2508	0.34	0.38	0.69	1	
19-20	-2649	0.35	0.13	0.46	1	-SP
20-21	-95	0.01	0.56	0.57	1	SP-
21-OR	91	0.01	0.53	0.53	1	

UPLIFT REACTION(S) :
 Support C&C Wind Main Wind Non-Wind
 1 -306 lb -189 lb
 2 -305 lb -188 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 = 13.75 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 = 56 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"	0-0	30-0
BC	12.00"	0-0	28-0

REACTIONS

BRG	X-LOC	SIZE	REACT	HORIZ
1	0-1-12	3.50"	1948	-96
2	27-10-4	3.50"	1947	-96

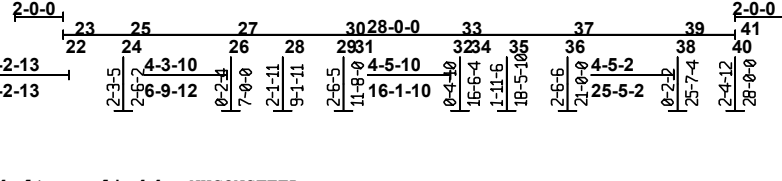
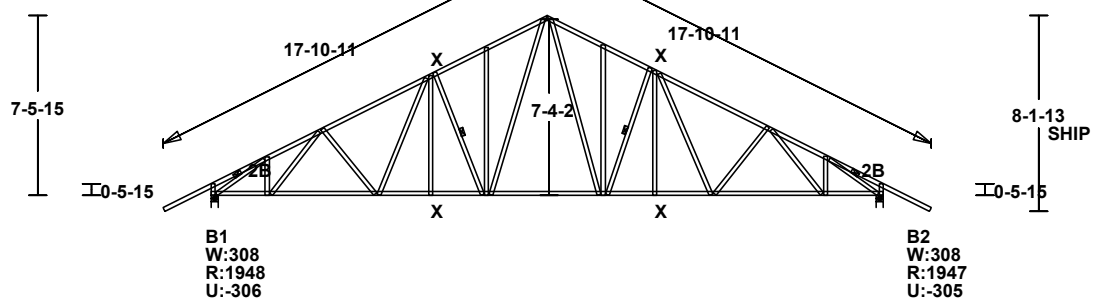
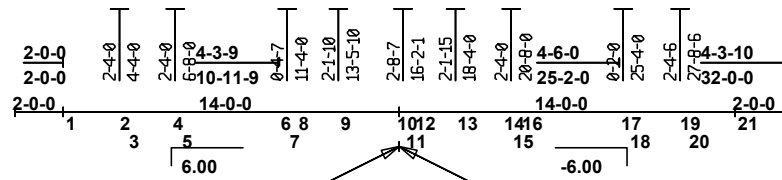
BC	FORCE	AXL	BND	CSI	ID	SCRWS
22-23	0	0.00	0.23	0.23	1	-SP
23-24	2214	0.27	0.23	0.50	1	SP-
24-25	2214	0.13	0.27	0.39	1	
25-26	2411	0.13	0.80	0.80	1	
26-27	2239	0.12	0.30	0.42	1	
27-28	2121	0.10	0.30	0.41	1	
28-29	2121	0.27	0.45	0.67	1	
29-30	1863	0.24	0.42	0.64	1	
30-31	1863	0.20	0.29	0.50	1	
31-32	1606	0.09	0.48	0.48	1	
32-33	1840	0.20	0.30	0.50	1	
33-34	1840	0.24	0.44	0.65	1	
34-35	2087	0.27	0.46	0.68	1	
35-36	2087	0.10	0.31	0.42	1	
36-37	2225	0.12	0.31	0.43	1	
37-38	2413	0.12	0.86	0.86	1	
38-39	2226	0.13	0.28	0.41	1	
39-40	2226	0.27	0.23	0.50	1	-SP
40-41	0	0.00	0.23	0.23	1	SP-

DEFLECTION

	LOC.	ALLOW.	LC
Vert TL:	-0.30" (L/999)	16-17	L/240 77
Vert LL:	-0.22" (L/999)	16-17	L/360 77
Horz TL:	0.08"		

Cantilever

	LOC.	ALLOW.	LC
Vert TL:	-0.16" (L/162)	21-OR	L/90 73
Vert LL:	-0.16" (L/167)	21-OR	L/120 73



==== Joint Locations ====

1	0-0-0	22	0-0-0
2	2-3-3	23	0-2-13
3	2-4-0	24	2-4-0
4	4-6-0	25	2-6-2
5	4-8-0	26	6-9-12
6	8-11-9	27	7-0-0
7	9-1-11	28	9-1-11
8	9-4-0	29	11-3-6
9	11-5-10	30	11-5-10
10	13-9-15	31	11-8-0
11	14-0-0	32	16-1-10
12	14-2-1	33	16-4-0
13	16-4-0	34	16-6-4
14	18-3-5	35	18-5-10
15	18-5-10	36	20-9-12
16	18-8-0	37	21-0-0
17	23-2-0	38	25-5-2
18	23-4-0	39	25-7-4
19	25-7-4	40	27-9-3
20	25-8-6	41	28-0-0
21	28-0-0		

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

BC	TC
28	7
35	15

WEB	FORCE	CSI	ID	SCRWS
1-22	-420	0.05	1	
2-23	-2720	0.48	1	2B- 2B
3-24	395	0.05	1	
4-25	-454	0.30	1	
5-26	-275	0.20	1	
6-27	356	0.06	1	
7-28	264	0.03	1	
8-29	-744	0.41	1	
9-30	-320	0.53	1	
10-31	1051	0.43	1	
12-32	1049	0.42	1	
13-33	-253	0.43	1	
14-34	-821	0.47	1	
15-35	274	0.04	1	
16-36	366	0.07	1	
17-37	-305	0.22	1	
18-38	-432	0.30	1	
19-39	379	0.05	1	
20-40	-2730	0.49	1	2B- 2B
21-41	-418	0.05	1	

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

Scale: 1/8" = 1'



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.

Designer:		WO: C61228_Trusses
Dsgn Chk:		
Engg Chk:		
Cutting :		
TC Live	42.00 psf	Design Spec: AISI S100-2012
TC Dead	10.00 psf	Buildg Spec: IBC-2018
BC Live	0.00 psf	
BC Dead	10.00 psf	
TOTAL	62.00 psf	Date: 11/23/2022@ 18:41:5
		Seqn S8.1.0a - 6313

Midwest Manufacturing

Address 1
Address 2
City, State Zip

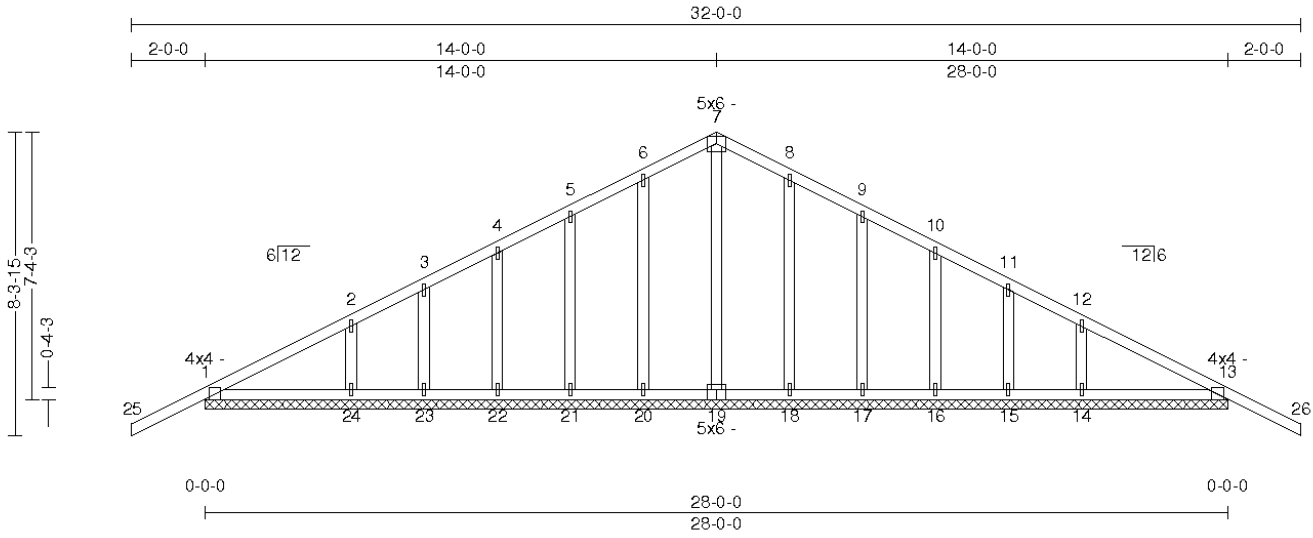
Truss: C61228E

JobName: RES STOCK ENDS

Date: 02/22/17 10:47:39

Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
28-0-0	6/12	1	2-0-0	2-0-0	0-0-0	0-0-0	1	24 in	119 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 (13-26)	Vert TL: 0.01 in	L/999	(13-14)	L/180
Snow(PsPg): 42/60	TPI 1-2007	BC: 0.10 (13-14)	Vert LL: 0 in	L/999	14	L/240
TCDL: 10	Rep Mbr Increase: No	Web: 0.24 (6-20)	Horz TL: 0 in			
BCLL: 0	Lumber D.O.L.: 115 %					
BCLD: 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	.	560 lbs	163 plf	-34 lbs	-8 lbs	-116 lbs	-116 lbs	212 lbs

Material Summary

TC SPF #2 2 x 4
BC SPF #2 2 x 4
Webs SPF Stud 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						
Web	2-24	0.072	-309 lbs	8-18	0.243	-316 lbs
	5-21	0.170	-311 lbs	9-17	0.170	-311 lbs
	6-20	0.243	-316 lbs	12-14	0.072	-309 lbs

JSI Summary

1 = 0.38, 2 = 0.73, 3 = 0.53, 4 = 0.53, 5 = 0.53, 6 = 0.53, 7 = 0.24, 8 = 0.53, 9 = 0.53, 10 = 0.53, 11 = 0.53, 12 = 0.73, 13 = 0.38, 14 = 0.79, 15 = 0.57, 16 = 0.57, 17 = 0.57, 18 = 0.57, 19 = 0.18, 20 = 0.57, 21 = 0.57, 22 = 0.57, 23 = 0.57, and 24 = 0.79

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 14, 24 may need to be considered.
- 10) Listed wind uplift reactions based on MWFRS & C&C loading.