

TC	FORCE	AXL	BND	CSI	ID	SCRWS
OL-1	65	0.01	0.53	0.53	1	
1-2	-70	0.01	0.49	0.50	1	-SP
2-3	-2993	0.39	0.20	0.56	1	SP-
3-4	-2782	0.38	0.19	0.55	1	
4-5	-3527	0.48	0.20	0.65	1	
5-6	-3559	0.49	0.21	0.72	1	
6-7	-3408	0.48	0.25	0.69	1	
7-8	-3318	0.46	0.25	0.74	1	
8-9	-2883	0.40	0.46	0.82	1	
9-10	-2824	0.38	0.52	0.91	1	
10-11	-2246	0.31	0.49	0.78	1	OB- 2B
11-12	-2237	0.31	0.28	0.56	1	2B- OB
12-13	-2796	0.39	0.40	0.80	1	
13-14	-2848	0.40	0.40	0.76	1	
14-15	-3293	0.46	0.28	0.76	1	
15-16	-3385	0.47	0.28	0.71	1	
16-17	-3561	0.49	0.21	0.72	1	
17-18	-3543	0.48	0.21	0.66	1	
18-19	-2829	0.39	0.19	0.56	1	
19-20	-3031	0.39	0.21	0.57	1	-SP
20-21	-69	0.01	0.50	0.51	1	SP-
21-OR	65	0.01	0.53	0.53	1	

UPLIFT REACTION(S) :
 Support C&C Wind Main Wind Non-Wind
 1 -239 lb -195 lb
 2 -239 lb -195 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 100 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 = 12.58 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

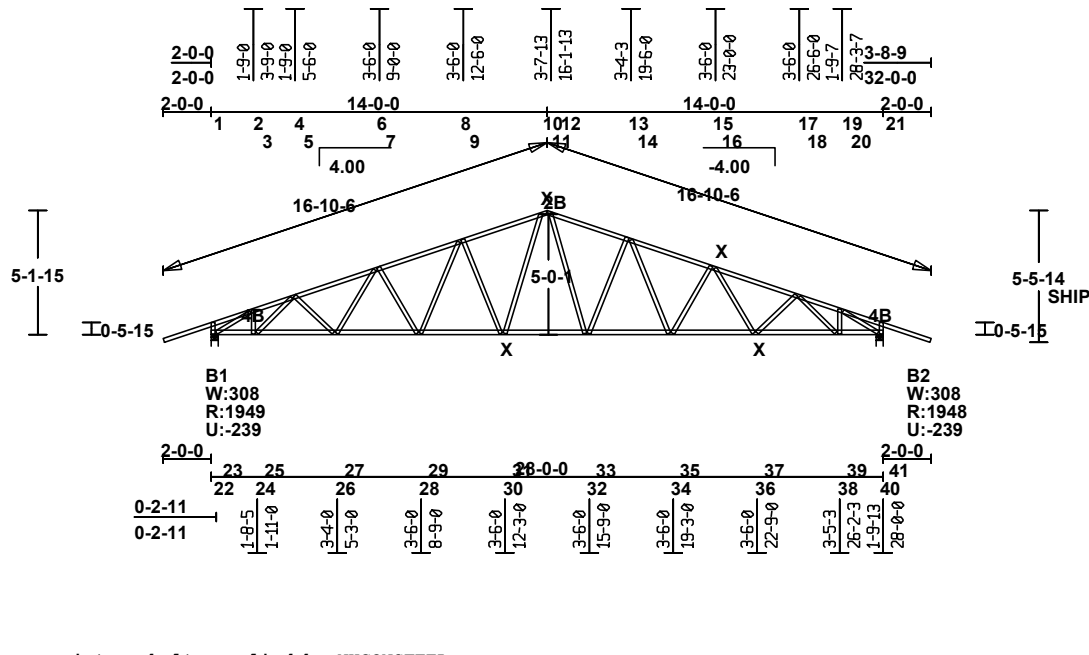
BRG	X-LOC	SIZE	REACT	HORIZ
1	0-1-12	3.50"	1949	63
2	27-10-4	3.50"	1948	63

BC	FORCE	AXL	BND	CSI	ID	SCRWS
22-23	0	0.00	0.23	0.23	1	-SP
23-24	2640	0.31	0.23	0.54	1	SP-
24-25	2640	0.34	0.16	0.50	1	
25-26	3270	0.40	0.25	0.59	1	
26-27	3327	0.42	0.05	0.47	1	
27-28	3298	0.42	0.11	0.48	1	
28-29	3094	0.40	0.16	0.55	1	
29-30	2904	0.37	0.27	0.59	1	
30-31	2592	0.33	0.23	0.55	1	
31-32	2356	0.30	0.17	0.47	1	
32-33	2576	0.33	0.17	0.50	1	
33-34	2872	0.37	0.20	0.54	1	
34-35	3067	0.39	0.15	0.54	1	
35-36	3284	0.42	0.12	0.49	1	
36-37	3328	0.43	0.05	0.48	1	
37-38	3294	0.41	0.25	0.59	1	
38-39	2682	0.34	0.16	0.50	1	-SP
39-40	2682	0.31	0.22	0.54	1	SP-
40-41	0	0.00	0.22	0.22	1	

	DEFLECTION	LOC.	ALLOW.	LC
Vert TL:	-0.38" (L/877)	9-10	L/240	74
Vert LL:	-0.26" (L/999)	9-10	L/360	74
Horz TL:	0.11"			

Cantilever

Vert TL:	-0.12" (L/215)	21-OR	L/ 90	70
Vert LL:	-0.14" (L/194)	21-OR	L/120	70



==== Joint Locations ====

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

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

BC	TC
30	10
36	16

WEB	FORCE	CSI	ID	SCRWS
1-22	-427	0.06	1	
2-23	-3091	0.68	1	4B- 4B
3-24	728	0.09	1	
4-25	-1051	0.30	1	
5-26	137	0.02	1	
6-27	244	0.03	1	
7-28	-405	0.24	1	
8-29	499	0.06	1	
9-30	-830	0.80	1	
10-31	820	0.15	1	
12-32	810	0.15	1	
13-33	-802	0.79	1	
14-34	518	0.07	1	
15-35	-438	0.27	1	
16-36	253	0.03	1	
17-37	115	0.01	1	
18-38	-1014	0.31	1	
19-39	697	0.09	1	
20-40	-3128	0.71	1	4B- 4B
21-41	-422	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'

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.

Designer:		WO: C11028_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: 11/22/2022@ 18:39:20 Seqn S8.1.0a - 6224

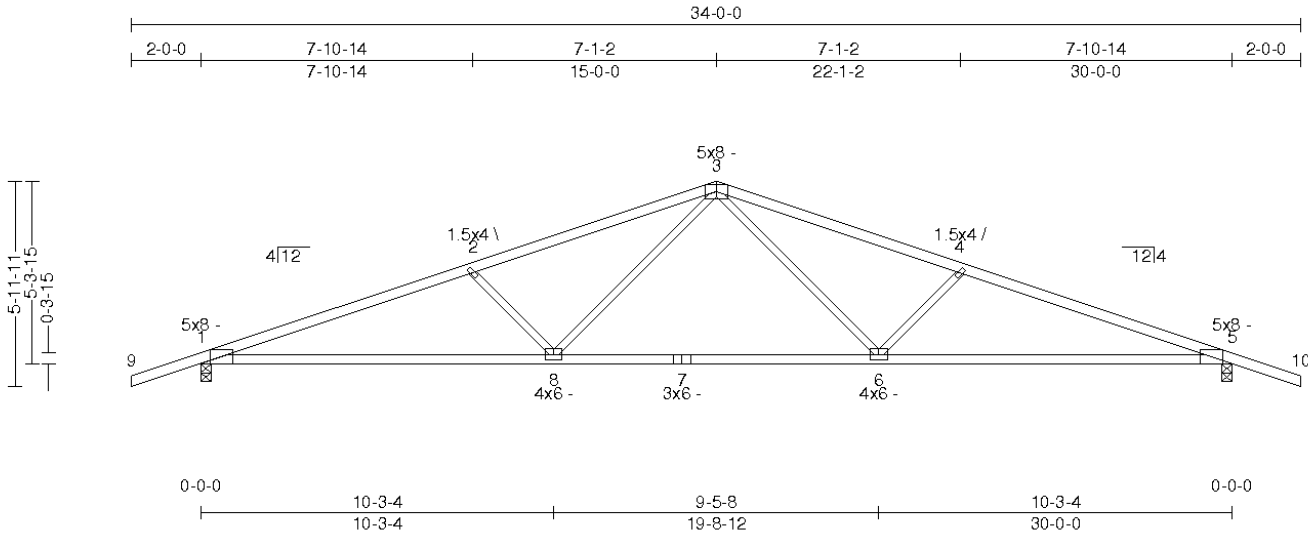
Midwest Manufacturing

Address 1
Address 2
City, State Zip

Truss: C11030

JobName: RESSTOCK
Date: 02/22/17 09:26:38
Page: 1 of 1

SPAN 30-0-0	PITCH 4/12	QTY 1	OHL 2-0-0	OHR 2-0-0	CANT L 0-0-0	CANT R 0-0-0	PLYS 1	SPACING 24 in	WGT/PLY 90 lbs
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All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI Summary	Deflection	L/	(loc)	Allowed
TCLL: 42	Bldg Code: IRC 2015/	TC: 0.83 (1-2)	Vert TL: 0.66 in	L/532	(5-6)	L/180
Snow(PsPg): 42/60	TPI 1-2007	BC: 0.96 (5-6)	Vert LL: 0.35 in	L/997	(5-6)	L/240
TCDL: 10	Rep Mbr Increase: Yes	Web: 0.82 (3-6)	Horz TL: 0.17 in		5	
BCLL: 0	Lumber D.O.L.: 115 %					
BCDL: 10						

Reaction Summary

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	3.5 in	3.24 in	2,068 lbs	.	.	-319 lbs	-319 lbs	7 lbs
5	1	3.5 in	3.24 in	2,068 lbs	.	.	-319 lbs	-319 lbs	.

Material Summary

TC SPF 2100/1.8 2 x 4
BC SPF 1650/1.5 2 x 4
Webs SPF Stud 2 x 3

Bracing Summary

TC Bracing: Sheathed or Purlins at 2-7-0, Purlin design by Others.
BC Bracing: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads Summary

- 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. Unventilated. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.
- This truss has been designed to account for the effects of ice dams forming at the eaves.
- 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
- Minimum storage attic loading has been applied in accordance with IRC 301.5

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.

Member	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-1	1-3	3-5	5-7	7-9	9-10
TC	0.829	-4,502 lbs	0.806	-3,902 lbs	0.829	-4,502 lbs							
BC	0.960	4,182 lbs	0.724	2,808 lbs	0.818	1,358 lbs	0.960	4,182 lbs	0.818	1,358 lbs	0.960	4,182 lbs	0.818
Web	0.500	-1,071 lbs	0.818	1,358 lbs	0.818	1,358 lbs	0.818	1,358 lbs	0.818	1,358 lbs	0.818	1,358 lbs	0.818

JSI Summary

1 = 0.91, 2 = 0.83, 3 = 0.91, 4 = 0.83, 5 = 0.91, 6 = 0.90, 7 = 0.92, and 8 = 0.90

Notes

- Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
- When this truss has been chosen for quality assurance inspection, the Double Polygon Method per TPI 1-2007/Chapter 3 shall be used.
- The fabrication tolerance for this roof truss is 5% (Cq = 0.95).
- Brace bottom chord with approved sheathing or purlins per Bracing Summary.
- Creep has been considered in the analysis of this truss.
- Listed wind uplift reactions based on MWFRS & C&C loading.