

UPLIFT REACTION(S) :	Support	C&C Wind	Main Wind	Non-Wind
2-19 68 0.02 1	1	-101 lb	-118 lb	
3-20 -279 0.22 1	3	-12 lb	-13 lb	
4-21 -478 0.38 1	6	-72 lb	-82 lb	-71 lb
5-22 -551 0.78 1	7	-54 lb	-57 lb	-112 lb
6-23 -138 0.19 1	10	-22 lb	-29 lb	
7-24 -265 0.40 1	11	-85 lb	-52 lb	-127 lb
8-25 -227 0.51 1	12	-44 lb	-13 lb	
10-26 -133 0.30 1	15	-7 lb		
11-27 -264 0.41 1	16	-89 lb	-52 lb	-128 lb
12-28 -120 0.17 1	17	-17 lb	-25 lb	
13-29 -587 0.85 1	20	-61 lb	-62 lb	-89 lb
14-30 -478 0.39 1	21	-70 lb	-80 lb	-103 lb
15-31 -333 0.28 1	24	-21 lb	-18 lb	
16-32 -77 0.04 1	26	-99 lb	-115 lb	
17-33 -427 0.08 1				

Type	ID	SECTION	Fy (ksi)	Joints
TC	1	20TC20	50	
BC	1	20TC20	50	
WEB	1	20TC20	50	

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. Mark all interior bearing locations. Install interior support(s) before erection. 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 = 12.75 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 = 60 sqft  
 Uplifts based on elevation at or above 0 ft  
 20 psf bottom chord live load NOT required on this truss, per IBC/IRC requirements for attics with limited storage.

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

Galvanization: G60

REACTIONS

Brg	Reac	Horiz	Brg	Reac	Horiz
1	447	0	14	216	0
2	192	0	15	320	-50
3	249	169	16	240	0
4	201	-10	17	307	59
5	216	0	18	210	0
6	388	-364	19	209	0
7	478	298	20	508	-316
8	193	0	21	349	363
9	217	0	22	210	0
10	344	-69	23	211	0
11	241	0	24	255	-186
12	283	89	25	197	15
13	203	0	26	438	0

DEFLECTION	LOC.	ALLOW.	LC
Vert TL: -0.14"	(L/999) 13-14	L/240	40
Vert LL: -0.12"	(L/999) 13-14	L/360	40
Horz TL: 0.00"			

Cantilever

Vert TL: -0.09"	(L/271) OL-1	L/ 90	1
Vert LL: -0.07"	(L/335) OL-1	L/120	1


==== Joint Locations =====

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

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

BC	TC
23	7
29	13

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



**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: C11130_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	
<b>TOTAL</b>	<b>62.00 psf</b>	<b>Date: 11/24/2022@</b>
		<b>Seqn S8.1.0a - 6351</b>

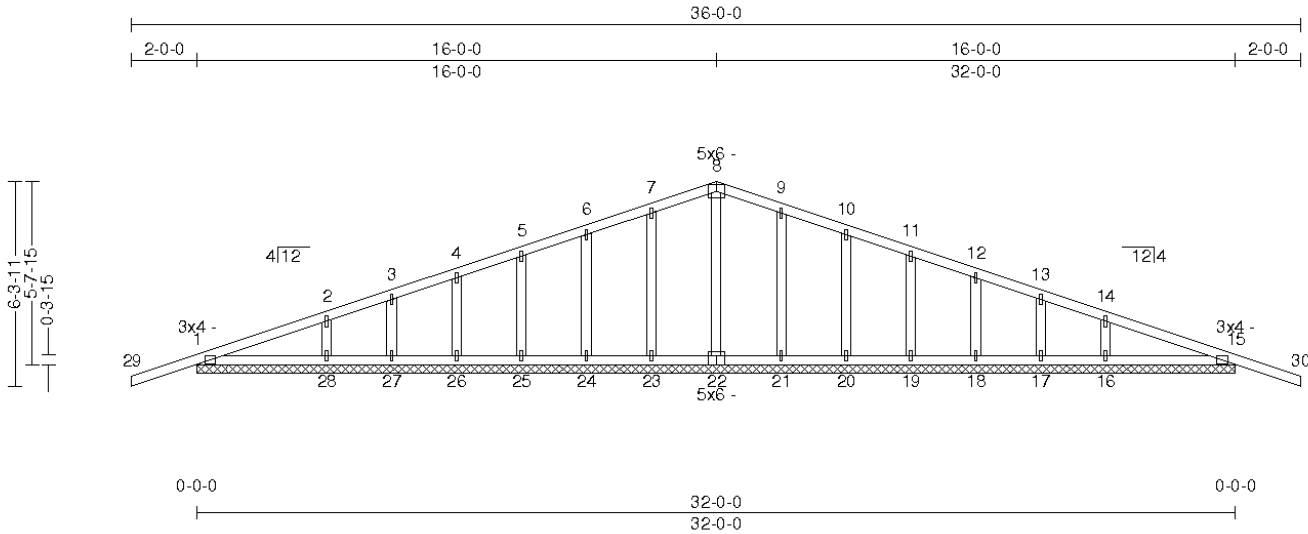
# Midwest Manufacturing

Address 1  
Address 2  
City, State Zip

Truss: C11132

JobName: RES STOCK ENDS  
Date: 02/22/17 09:37:17  
Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
32-0-0	4/12	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 Snow(PsPg): 42/60 TCDL: 10 BCLL: 0 BCDL: 10	Bldg Code: IRC 2012/ TPI 1-2007 Rep Mbr Increase: No Lumber D.O.L.: 115 %	TC: 0.77 (15-30) BC: 0.10 (27-28) Web: 0.15 (7-23)	Vert TL: 0.01 in Vert LL: 0 in Horz TL: 0 in	L/999 L/999	(15-16) 16	L/180 L/240

### 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	.	561 lbs	162 plf	-34 lbs	-3 lbs	-140 lbs	-140 lbs	-148 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 300 lbs are shown in this table.

TC	BC	Member ID	Max CSI	Max Axial Force
		2-28	0.069	-309 lbs
		7-23	0.149	-305 lbs
		9-21	0.149	-305 lbs
		14-16	0.069	-309 lbs

### JSI Summary

1 = 0.48, 2 = 0.76, 3 = 0.55, 4 = 0.55, 5 = 0.55, 6 = 0.55, 7 = 0.55, 8 = 0.25, 9 = 0.55, 10 = 0.55, 11 = 0.55, 12 = 0.55, 13 = 0.55, 14 = 0.76, 15 = 0.48, 16 = 0.79, 17 = 0.57, 18 = 0.57, 19 = 0.57, 20 = 0.57, 21 = 0.57, 22 = 0.18, 23 = 0.57, 24 = 0.57, 25 = 0.57

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