

UPLIFT REACTION(S) :

Support	C&C Wind	Main Wind	Non-Wind
1	-139 lb	-142 lb	
2			-2 lb
6	-112 lb	-103 lb	-24 lb
7			-108 lb
10	-163 lb	-109 lb	-48 lb
11	-144 lb	-70 lb	
14	-82 lb	-33 lb	-37 lb
15	-162 lb	-105 lb	-44 lb
18			-74 lb
19	-109 lb	-101 lb	-60 lb
24	-132 lb	-135 lb	

Type	ID	SECTION	Fy(ksi)	Joints
TC	1	20TC20	50	
BC	1	20TC20	50	
WEB	1	20TC20	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.  
 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 = 13.50 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 = 52 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	28- 0- 0
BC	12.00"	0- 0- 0	26- 0- 0

Galvanization: G60

REACTIONS

Brg	Reac	Horiz	Brg	Reac	Horiz
1	475	0	13	210	0
2	148	0	14	459	-118
3	205	114	15	456	183
4	212	-9	16	209	0
5	190	0	17	185	0
6	295	-221	18	246	-54
7	178	39	19	281	205
8	182	0	20	179	0
9	197	0	21	209	0
10	475	-195	22	228	-113
11	591	165	23	167	9
12	200	0	24	456	0

DEFLECTION LOC. ALLOW. LC

Vert TL:	-0.10" (L/999)	6-7	L/240	41
Vert LL:	-0.09" (L/999)	6-7	L/360	41
Horz TL:	0.01"			

Cantilever

Vert TL:	-0.13" (L/181)	OL-1	L/ 90	1
Vert LL:	-0.11" (L/224)	OL-1	L/120	1


==== Joint Locations ====

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

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

BC	TC
21	7
27	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: C61226E_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: 11/23/2022@ 18:31:41</b>
		Seqn S8.1.0a - 6309

# Midwest Manufacturing

5311 Kane Road  
Eau Claire, WI 54703

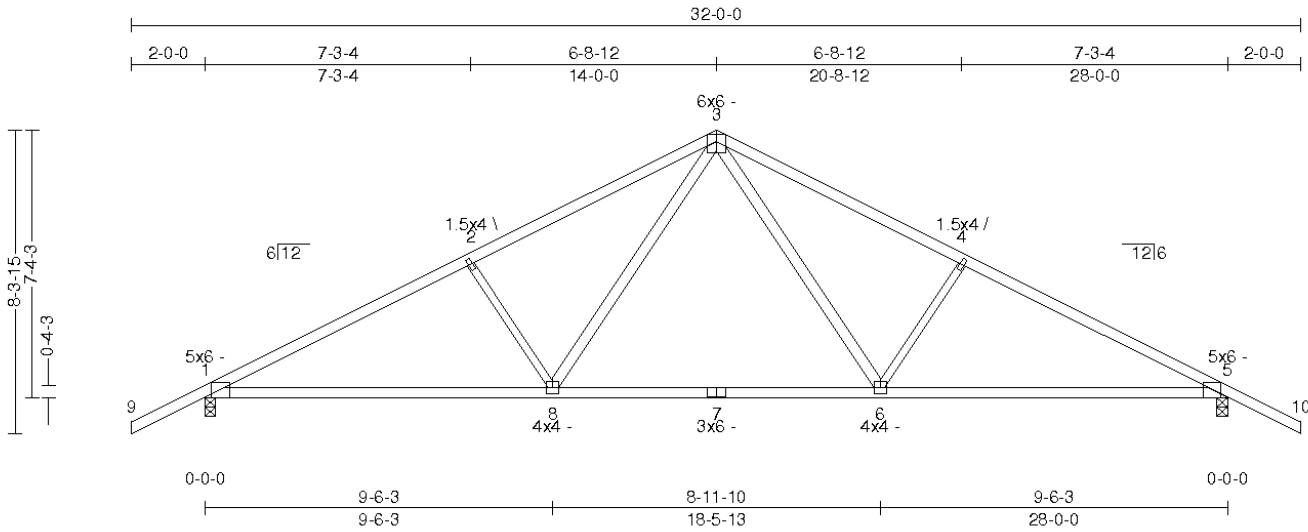
Truss: C61228

JobName: RES STOCK

Date: 03/30/17 14:57:18

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SPAN 28-0-0	PITCH 6/12	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 95 lbs
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All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 42	Bldg Code: IRC 2015/	TC: 0.90 (3-4)	Vert TL: 0.42 in	L/786	(5-6)	L/180
Snow(PsPg): 42/60	TPI 1-2014	BC: 0.94 (5-6)	Vert LL: 0.19 in	L/999	(5-6)	L/240
TCDL: 10	Rep Mbr Increase: Yes	Web: 0.50 (2-8)	Horz TL: 0.1 in		5	
BCLL: 0	Lumber D.O.L.: 115 %					
BCTL: 10						

### Reaction

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	3.05 in	1,944 lbs	.	.	-305 lbs	-305 lbs	-40 lbs
5	1	3.5 in	3.05 in	1,944 lbs	.	.	-305 lbs	-305 lbs	.

### Material

TC: SPF 1650/1.5 2 x 4  
BC: SPF #2 2 x 4  
Web: SPF #2 2 x 4 except  
SPF Stud 2 x 3: 2-8, 4-6

### Bracing

TC: Sheathed or Purlins at 3-1-0, Purlin design by Others.  
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

### Loads

1) This truss has been designed for the effects of balanced (41.6 psf) and unbalanced sloped roof snow loads in accordance with ASCE7 - 10 with the following user defined input: 60 psf GSL, Terrain B, Exposure (Ce = 0.9), Risk Category II (I = 1.00), Thermal (Ct = 1.10), DOL = 1.15. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.

2) 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 50 ft x 50 ft, h = 15 ft, End Zone Truss, Both end webs considered. DOL = 1.60

3) Minimum storage attic loading has been applied in accordance with IRC 301.5

### Member Forces

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	1-2	0.856	-3,051 lbs	3-4	0.896	-2,664 lbs								
	2-3	0.896	-2,664 lbs	4-5	0.856	-3,051 lbs								
BC	5-6	0.939	2,606 lbs	6-8	0.748	1,746 lbs	(-5 lbs)	8-1	0.939	2,606 lbs	(-158 lbs)			
Web	2-8	0.502	-838 lbs	3-8	0.263	1,071 lbs	(-76 lbs)	3-6	0.263	1,071 lbs	(-76 lbs)	4-6	0.502	-838 lbs

### JSI

1 = 0.99, 2 = 0.57, 3 = 0.89, 4 = 0.57, 5 = 0.99, 6 = 0.84, 7 = 0.91, and 8 = 0.84

### Notes

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