

| TC | FORCE | AXL | BND | CSI | ID | SCRWS |
|-------|-------|------|------|------|----|--------|
| OL-1 | 65 | 0.01 | 0.53 | 0.53 | 1 | |
| 1-2 | -70 | 0.01 | 0.50 | 0.51 | 1 | -SP |
| 2-3 | -3313 | 0.43 | 0.20 | 0.61 | 1 | SP- |
| 3-4 | -3103 | 0.43 | 0.20 | 0.61 | 1 | |
| 4-5 | -3855 | 0.53 | 0.22 | 0.72 | 1 | |
| 5-6 | -3876 | 0.54 | 0.23 | 0.81 | 1 | |
| 6-7 | -3695 | 0.52 | 0.32 | 0.79 | 1 | |
| 7-8 | -3590 | 0.52 | 0.32 | 0.90 | 1 | |
| 8-9 | -3080 | 0.43 | 0.51 | 0.90 | 1 | |
| 9-10 | -3054 | 0.41 | 0.55 | 0.99 | 1 | |
| 10-11 | -2422 | 0.34 | 0.53 | 0.84 | 1 | OB- 2B |
| 11-12 | -2414 | 0.34 | 0.31 | 0.61 | 1 | 2B- OB |
| 12-13 | -3023 | 0.42 | 0.46 | 0.90 | 1 | |
| 13-14 | -3044 | 0.43 | 0.46 | 0.84 | 1 | |
| 14-15 | -3564 | 0.51 | 0.34 | 0.92 | 1 | |
| 15-16 | -3672 | 0.51 | 0.34 | 0.80 | 1 | |
| 16-17 | -3876 | 0.55 | 0.23 | 0.82 | 1 | |
| 17-18 | -3869 | 0.53 | 0.22 | 0.72 | 1 | |
| 18-19 | -3144 | 0.43 | 0.21 | 0.62 | 1 | |
| 19-20 | -3346 | 0.44 | 0.21 | 0.62 | 1 | -SP |
| 20-21 | -69 | 0.01 | 0.51 | 0.52 | 1 | SP- |
| 21-OR | 65 | 0.01 | 0.53 | 0.53 | 1 | |

UPLIFT REACTION(S) :
 Support C&C Wind Main Wind Non-Wind
 1 -251 lb -205 lb
 2 -251 lb -205 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 = 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

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 |

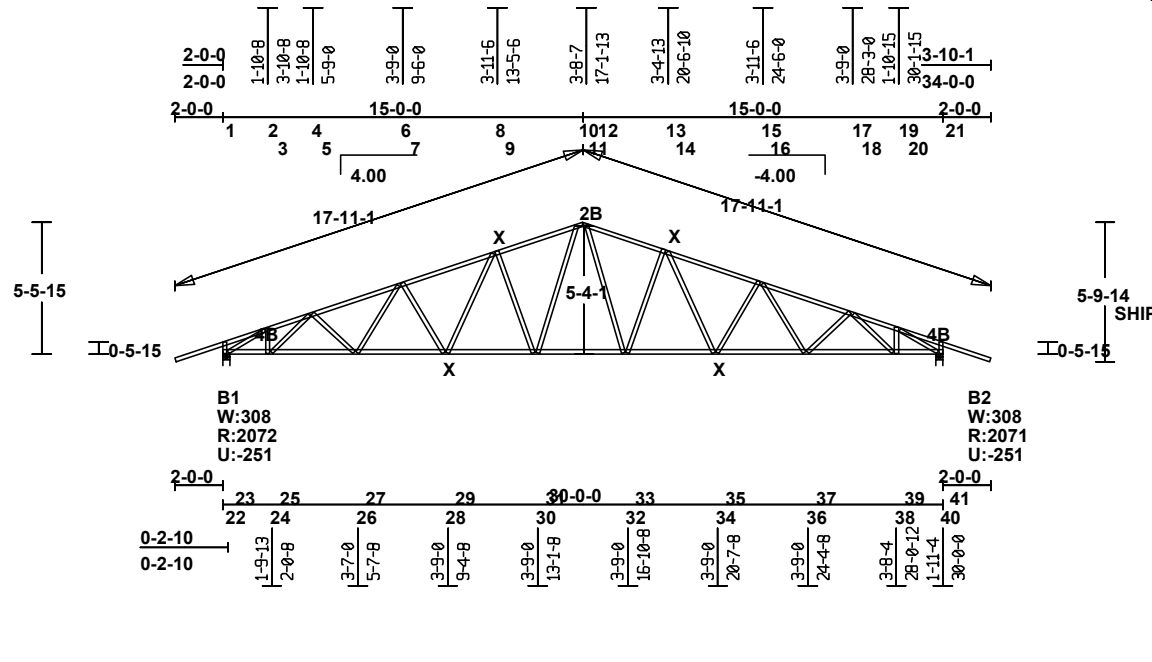
| BRG | X-LOC | SIZE | REACT | HORIZ |
|-----|----------|-------|-------|-------|
| 1 | 0- 1-12 | 3.50" | 2072 | 67 |
| 2 | 29-10- 4 | 3.50" | 2071 | 67 |

| BC | FORCE | AXL | BND | CSI | ID | SCRWS |
|-------|-------|------|------|------|----|-------|
| 22-23 | 0 | 0.00 | 0.23 | 0.23 | 1 | -SP |
| 23-24 | 2941 | 0.35 | 0.23 | 0.57 | 1 | SP- |
| 24-25 | 2941 | 0.38 | 0.17 | 0.54 | 1 | |
| 25-26 | 3585 | 0.45 | 0.41 | 0.63 | 1 | |
| 26-27 | 3624 | 0.46 | 0.05 | 0.52 | 1 | |
| 27-28 | 3580 | 0.46 | 0.13 | 0.52 | 1 | |
| 28-29 | 3344 | 0.43 | 0.17 | 0.60 | 1 | |
| 29-30 | 3107 | 0.40 | 0.29 | 0.63 | 1 | |
| 30-31 | 2806 | 0.36 | 0.24 | 0.59 | 1 | |
| 31-32 | 2541 | 0.33 | 0.19 | 0.51 | 1 | |
| 32-33 | 2788 | 0.36 | 0.19 | 0.55 | 1 | |
| 33-34 | 3075 | 0.39 | 0.22 | 0.58 | 1 | |
| 34-35 | 3317 | 0.43 | 0.17 | 0.59 | 1 | |
| 35-36 | 3565 | 0.46 | 0.15 | 0.53 | 1 | |
| 36-37 | 3623 | 0.46 | 0.07 | 0.53 | 1 | |
| 37-38 | 3606 | 0.45 | 0.42 | 0.63 | 1 | |
| 38-39 | 2979 | 0.38 | 0.16 | 0.53 | 1 | -SP |
| 39-40 | 2979 | 0.35 | 0.22 | 0.57 | 1 | SP- |
| 40-41 | 0 | 0.00 | 0.22 | 0.22 | 1 | |

| | DEFLECTION | LOC. | ALLOW. | LC |
|----------|----------------|------|--------|----|
| Vert TL: | -0.43" (L/816) | 9-10 | L/240 | 76 |
| Vert LL: | -0.30" (L/999) | 9-10 | L/360 | 76 |
| Horz TL: | 0.13" | | | |

Cantilever

| | | | | |
|----------|----------------|-------|-------|----|
| Vert TL: | -0.12" (L/217) | 21-OR | L/ 90 | 72 |
| Vert LL: | -0.14" (L/189) | 21-OR | L/120 | 72 |



==== Joint Locations ====

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

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

| BC | TC |
|----|----|
| 28 | 8 |
| 34 | 14 |

| WEB | FORCE | CSI | ID | SCRWS |
|-------|-------|------|----|--------|
| 1-22 | -427 | 0.06 | 1 | |
| 2-23 | -3409 | 0.83 | 1 | 4B- 4B |
| 3-24 | 726 | 0.09 | 1 | |
| 4-25 | -1054 | 0.34 | 1 | |
| 5-26 | 117 | 0.02 | 1 | |
| 6-27 | 261 | 0.03 | 1 | |
| 7-28 | -464 | 0.31 | 1 | |
| 8-29 | 566 | 0.07 | 1 | |
| 9-30 | -896 | 0.95 | 1 | |
| 10-31 | 905 | 0.18 | 1 | |
| 12-32 | 890 | 0.18 | 1 | |
| 13-33 | -867 | 0.94 | 1 | |
| 14-34 | 585 | 0.07 | 1 | |
| 15-35 | -494 | 0.34 | 1 | |
| 16-36 | 274 | 0.04 | 1 | |
| 17-37 | 106 | 0.01 | 1 | |
| 18-38 | -1020 | 0.36 | 1 | |
| 19-39 | 698 | 0.09 | 1 | |
| 20-40 | -3441 | 0.86 | 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: C11030_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@ 18:51:09 |
| | | Seqn S8.1.0a - 6227 |

Midwest Manufacturing

Address 1
Address 2
City, State Zip

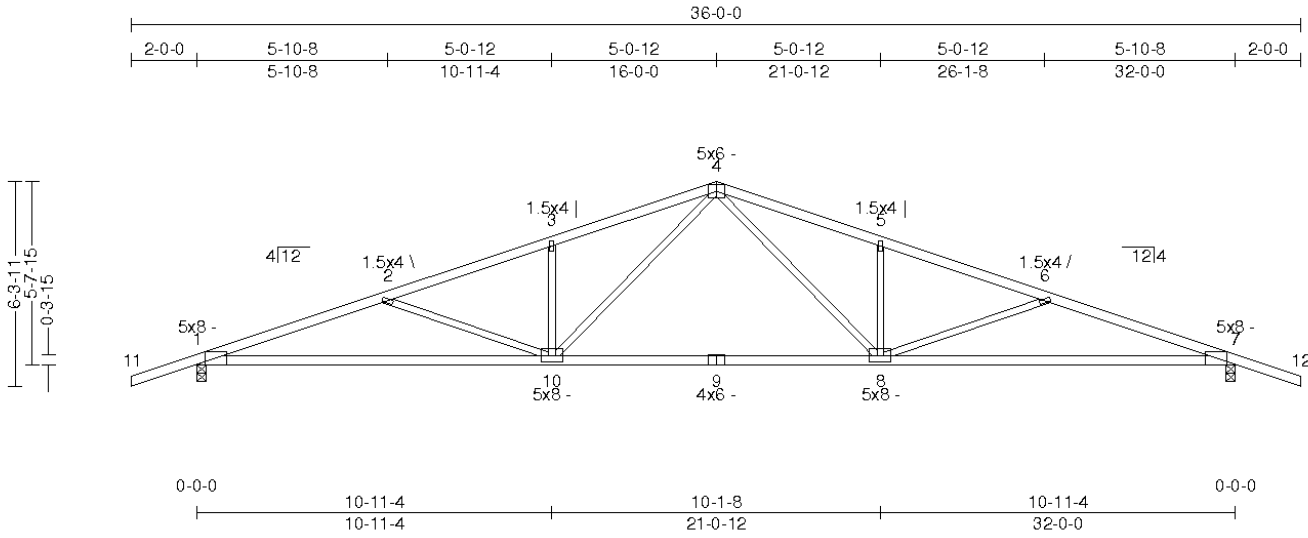
Truss: C11032

JobName: RESSTOCK

Date: 02/22/17 09:26:55

Page: 1 of 1

| | | | | | | | | | |
|----------------|---------------|----------|--------------|--------------|-----------------|-----------------|-----------|------------------|--------------------|
| SPAN 32-0-0 | 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 104 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 2015/ | TC: 0.98 (6-7) | Vert TL: 0.8 in | L/469 | 9 | L/180 |
| Snow(PsPg): 42/60 | TPI 1-2007 | BC: 1.00 (10-1) | Vert LL: 0.49 in | L/766 | 9 | L/240 |
| TCDL: 10 | Rep Mbr Increase: Yes | Web: 0.82 (2-10) | Horz TL: 0.2 in | | 7 | |
| 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 | 3.44 in | 2,192 lbs | . | . | -333 lbs | -333 lbs | -7 lbs |
| 7 | 1 | 3.5 in | 3.44 in | 2,192 lbs | . | . | -333 lbs | -333 lbs | . |

Material Summary

| | | | |
|------|--------------------|---------|--------------|
| TC | SPF #2 2 x 4 | | |
| BC | SPF 1650/1.5 2 x 4 | | |
| Webs | SPF Stud 2 x 3 | except: | |
| 4-10 | SPF #2 2 x 3 | 4-8 | SPF #2 2 x 3 |

Bracing Summary

| | |
|-------------|----------|
| TC Bracing: | Sheathed |
| BC Bracing: | Sheathed |

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, B 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 | Force | Member | Force | Member | Force |
|-----------|-------|------------|-------|--------|------------|
| TC 1-2 | 0.976 | -5,076 lbs | 3-4 | 0.782 | -4,224 lbs |
| TC 2-3 | 0.756 | -4,231 lbs | 4-5 | 0.782 | -4,224 lbs |
| BC 7-8 | 1.003 | 4,745 lbs | 8-10 | 0.738 | 2,951 lbs |
| Webs 2-10 | 0.818 | -894 lbs | 4-10 | 0.613 | 1,784 lbs |
| Webs 3-10 | 0.368 | -779 lbs | 4-8 | 0.613 | 1,784 lbs |

JSI Summary

1 = 0.87, 2 = 0.74, 3 = 0.54, 4 = 0.92, 5 = 0.54, 6 = 0.74, 7 = 0.87, 8 = 0.96, 9 = 0.83, and 10 = 0.96

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 0% (Cq = 1.00).
- 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.