

UPLIFT REACTION(S) :

| Support | C&C Wind | Main Wind | Non-Wind |
|---------|----------|-----------|----------|
| 1       | -408 lb  | -363 lb   |          |
| 4       | -200 lb  | -173 lb   | -128 lb  |
| 5       |          | -7 lb     | -202 lb  |
| 7       | -268 lb  | -178 lb   | -58 lb   |
| 8       | -260 lb  | -138 lb   | -102 lb  |
| 10      | -127 lb  | -62 lb    | -157 lb  |
| 11      | -268 lb  | -171 lb   | -75 lb   |
| 13      | -22 lb   | -18 lb    | -181 lb  |
| 14      | -193 lb  | -170 lb   | -155 lb  |
| 16      | -1 lb    | -11 lb    |          |
| 17      | -398 lb  | -353 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 100 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 = 12.08 ft, mph = 160  
 Occupancy Category II, Wind Dead Load = 7.20 psf  
 Designed as Main Wind Force Resisting System  
 - Low-rise and Components and Cladding  
 Tributary Area = 44 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 | 24-0-0 |
| BC | 12.00"   | 0-0-0  | 22-0-0 |

Galvanization: G60

REACTIONS

| Brg | Reac | Horiz | Brg | Reac | Horiz |
|-----|------|-------|-----|------|-------|
| 1   | 545  | 0     | 10  | 289  | -102  |
| 2   | 222  | 206   | 11  | 413  | 188   |
| 3   | 224  | -16   | 12  | 223  | 0     |
| 4   | 425  | -301  | 13  | 377  | -88   |
| 5   | 323  | 77    | 14  | 385  | 288   |
| 6   | 214  | 0     | 15  | 223  | 0     |
| 7   | 410  | -195  | 16  | 236  | -229  |
| 8   | 415  | 159   | 17  | 533  | -16   |
| 9   | 203  | 0     |     |      |       |

DEFLECTION LOC. ALLOW. LC

|          |                |      |       |    |
|----------|----------------|------|-------|----|
| Vert TL: | -0.04" (L/999) | 9-10 | L/240 | 40 |
| Vert LL: | -0.04" (L/999) | 9-10 | L/360 | 40 |
| Horz TL: | 0.00"          |      |       |    |

Cantilever

|          |                |      |       |   |
|----------|----------------|------|-------|---|
| Vert TL: | -0.15" (L/157) | OL-1 | L/90  | 1 |
| Vert LL: | -0.12" (L/194) | OL-1 | L/120 | 1 |

TC FORCE AXL BND CSI ID SCRWs

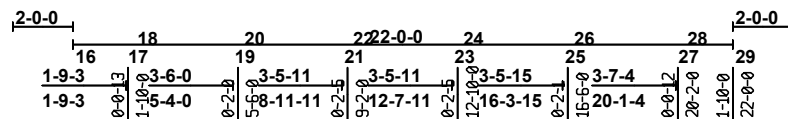
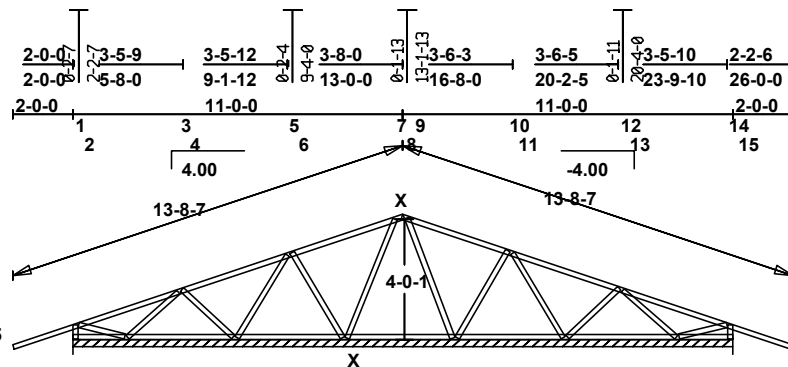
|       |      |      |      |      |   |
|-------|------|------|------|------|---|
| OL-1  | 65   | 0.01 | 0.67 | 0.67 | 1 |
| 1-2   | 137  | 0.02 | 0.61 | 0.63 | 1 |
| 2-3   | 278  | 0.05 | 0.42 | 0.47 | 1 |
| 3-4   | -173 | 0.03 | 0.33 | 0.35 | 1 |
| 4-5   | 173  | 0.03 | 0.38 | 0.39 | 1 |
| 5-6   | -84  | 0.01 | 0.46 | 0.46 | 1 |
| 6-7   | 283  | 0.02 | 0.46 | 0.46 | 1 |
| 7-8   | 68   | 0.00 | 0.12 | 0.12 | 1 |
| 8-9   | 88   | 0.01 | 0.04 | 0.05 | 1 |
| 9-10  | 225  | 0.02 | 0.46 | 0.46 | 1 |
| 10-11 | 45   | 0.00 | 0.46 | 0.46 | 1 |
| 11-12 | 137  | 0.02 | 0.39 | 0.40 | 1 |
| 12-13 | -205 | 0.04 | 0.34 | 0.38 | 1 |
| 13-14 | 260  | 0.05 | 0.43 | 0.47 | 1 |
| 14-15 | 133  | 0.02 | 0.61 | 0.63 | 1 |
| 15-OR | 65   | 0.01 | 0.67 | 0.67 | 1 |

BC FORCE AXL BND CSI ID SCRWs

|       |      |      |      |      |   |
|-------|------|------|------|------|---|
| 16-17 | 0    | 0.00 | 0.15 | 0.15 | 1 |
| 17-18 | -143 | 0.03 | 0.09 | 0.12 | 1 |
| 18-19 | 0    | 0.00 | 0.14 | 0.14 | 1 |
| 19-20 | 0    | 0.00 | 0.14 | 0.15 | 1 |
| 20-21 | 0    | 0.00 | 0.12 | 0.12 | 1 |
| 21-22 | 0    | 0.00 | 0.12 | 0.12 | 1 |
| 22-23 | 0    | 0.00 | 0.11 | 0.11 | 1 |
| 23-24 | 0    | 0.00 | 0.14 | 0.14 | 1 |
| 24-25 | 0    | 0.00 | 0.14 | 0.14 | 1 |
| 25-26 | 0    | 0.00 | 0.14 | 0.14 | 1 |
| 26-27 | 0    | 0.00 | 0.14 | 0.14 | 1 |
| 27-28 | -166 | 0.03 | 0.10 | 0.13 | 1 |
| 28-29 | -16  | 0.00 | 0.17 | 0.17 | 1 |

WEB FORCE CSI ID SCRWs

|       |      |      |   |
|-------|------|------|---|
| 1-16  | -531 | 0.10 | 1 |
| 2-17  | 198  | 0.04 | 1 |
| 3-18  | -192 | 0.09 | 1 |
| 4-19  | -411 | 0.19 | 1 |
| 5-20  | -149 | 0.12 | 1 |
| 6-21  | -382 | 0.33 | 1 |
| 7-22  | -427 | 0.59 | 1 |
| 9-23  | -289 | 0.40 | 1 |
| 10-24 | -375 | 0.33 | 1 |
| 11-25 | -170 | 0.15 | 1 |
| 12-26 | -396 | 0.19 | 1 |
| 13-27 | -155 | 0.07 | 1 |



==== Joint Locations ====

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

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

| BC | TC |
|----|----|
| 22 | 7  |

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

OVER CONTINUOUS SUPPORT

Scale: 5/32" = 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: |           |
| Dsgn Chk: |           |
| Engg Chk: |           |
| Cutting : |           |
| TC Live   | 42.00 psf |
| TC Dead   | 10.00 psf |
| BC Live   | 0.00 psf  |
| BC Dead   | 10.00 psf |
| TOTAL     | 62.00 psf |

|                             |
|-----------------------------|
| WO: C11122_Trusses          |
| Design Spec: AISI S100-2012 |
| Buildg Spec: IBC-2018       |
| Date: 11/23/2022@           |
| Seqn S8.1.0a - 6280         |