ENGINEERING BY TRENCO
A MiTek Affiliate

RE: 4703093
JSJ Builders

Trenco
818 Soundside Rd
Edenton, NC 27932

**Site Information:**

Customer: JSJ Builders Project Name: 4703093
Lot/Block: 95 Model: GAVIN PRIME B
Address: Subdivision: DUCKS LANDING
City: Lillington State: NC

**General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):**

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.8
Wind Code: ASCE 7-10 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 19 individual, dated Truss Design Drawings and 0 Additional Drawings.

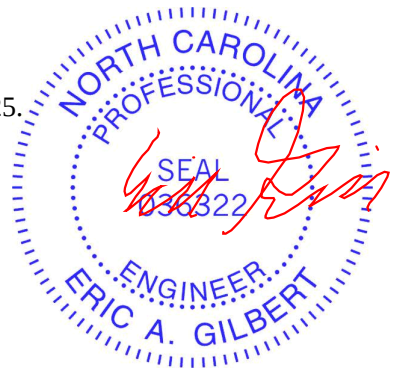
| No. | Seal# | Truss Name | Date |
|---|---|---|---|
| 1 | I74181038 | A01 | 6/13/2025 |
| 2 | I74181039 | A02 | 6/13/2025 |
| 3 | I74181040 | A03 | 6/13/2025 |
| 4 | I74181041 | A04 | 6/13/2025 |
| 5 | I74181042 | A05 | 6/13/2025 |
| 6 | I74181043 | B01 | 6/13/2025 |
| 7 | I74181044 | B02 | 6/13/2025 |
| 8 | I74181045 | C01 | 6/13/2025 |
| 9 | I74181046 | C02 | 6/13/2025 |
| 10 | I74181047 | D01 | 6/13/2025 |
| 11 | I74181048 | D02 | 6/13/2025 |
| 12 | I74181049 | D03 | 6/13/2025 |
| 13 | I74181050 | D04 | 6/13/2025 |
| 14 | I74181051 | D05 | 6/13/2025 |
| 15 | I74181052 | D06 | 6/13/2025 |
| 16 | I74181053 | V01 | 6/13/2025 |
| 17 | I74181054 | V02 | 6/13/2025 |
| 18 | I74181055 | V03 | 6/13/2025 |
| 19 | I74181056 | V04 | 6/13/2025 |

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Builders FirstSource-Sumter,SC.

Truss Design Engineer's Name: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2025.

North Carolina COA: C-0844




IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

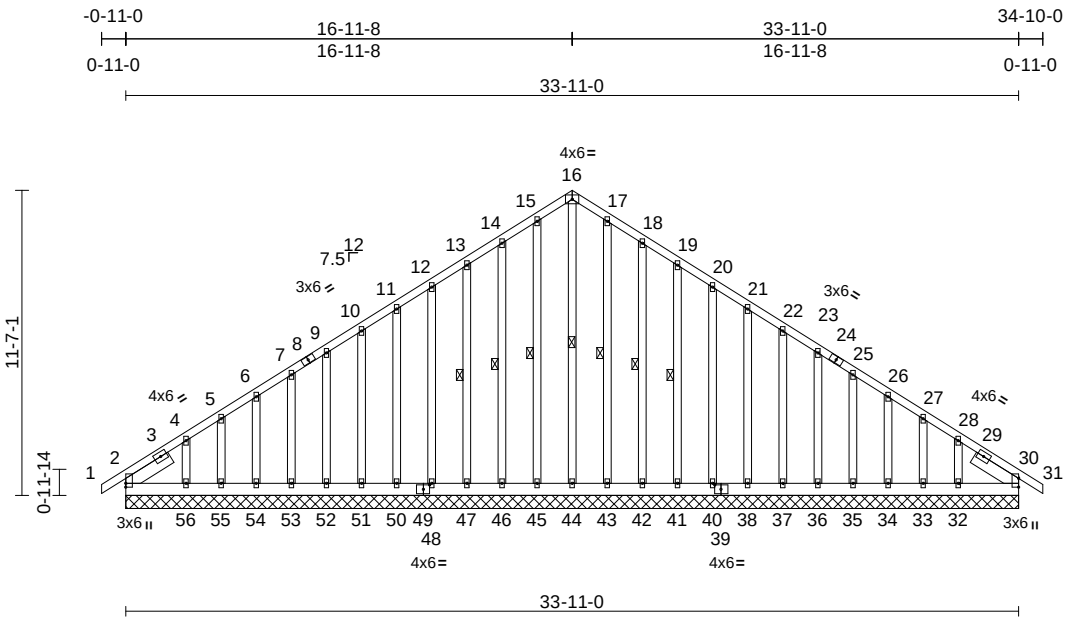
June 13, 2025



Gilbert, Eric

| Job | Truss | Truss Type | Qty | Ply | JSJ Builders |
|---|---|---|---|---|---|
| 4703093 | A01 | Common Supported Gable | 2 | 1 | I74181038<br>Job Reference (optional) |

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 12 15:41:52 Page: 1
ID:s_IUh2KNh2QQ9TMK2QyqqCzmGvY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:87.5

Plate Offsets (X, Y): [39:0-2-13,0-2-0], [49:0-2-13,0-2-0]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.10 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.08 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.16 | Horz(CT) | 0.01 | 30 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MS | | | | | | | Weight: 360 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
OTHERS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -- 1-11-12, Right 2x6 SP No.2 -- 1-11-12

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 16-44, 15-45, 14-46, 13-47, 17-43, 18-42, 19-41

**REACTIONS** (size) 2=33-11-0, 30=33-11-0, 32=33-11-0, 33=33-11-0, 34=33-11-0, 35=33-11-0, 36=33-11-0, 37=33-11-0, 38=33-11-0, 40=33-11-0, 41=33-11-0, 42=33-11-0, 43=33-11-0, 44=33-11-0, 45=33-11-0, 46=33-11-0, 47=33-11-0, 48=33-11-0, 50=33-11-0, 51=33-11-0, 52=33-11-0, 53=33-11-0, 54=33-11-0, 55=33-11-0, 56=33-11-0
Max Horiz 2=-373 (LC 10)
Max Uplift 2=-123 (LC 8), 30=-48 (LC 9), 32=-226 (LC 13), 33=-7 (LC 13), 34=-78 (LC 13), 35=-62 (LC 13), 36=-65 (LC 13), 37=-65 (LC 13), 38=-65 (LC 13), 40=-64 (LC 13), 41=-65 (LC 13), 42=-79 (LC 13), 43=-22 (LC 13), 44=-7 (LC 11), 45=-31 (LC 12), 46=-77 (LC 12), 47=-65 (LC 12), 48=-64 (LC 12), 50=-65 (LC 12), 51=-64 (LC 12), 52=-66 (LC 12), 53=-61 (LC 12), 54=-80 (LC 12), 55=-12 (LC 13), 56=-251 (LC 12)
Max Grav 2=252 (LC 20), 30=205 (LC 22), 32=231 (LC 20), 33=87 (LC 1), 34=129 (LC 20), 35=117 (LC 20), 36=120 (LC 20), 37=119 (LC 20), 38=119 (LC 20), 40=119 (LC 20), 41=119 (LC 20), 42=123 (LC 20), 43=114 (LC 20), 44=254 (LC 13), 45=124 (LC 19), 46=120 (LC 19), 47=119 (LC 19), 48=119 (LC 19), 50=119 (LC 19), 51=119 (LC 19), 52=120 (LC 19), 53=117 (LC 19), 54=131 (LC 19), 55=87 (LC 1), 56=259 (LC 19)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/29, 2-4=-356/273, 4-5=-260/219, 5-6=-235/210, 6-7=-204/190, 7-9=-185/173, 9-10=-170/169, 10-11=-156/182, 11-12=-143/211, 12-13=-183/239, 13-14=-224/269, 14-15=-271/311, 15-16=-289/335, 16-17=-289/335, 17-18=-271/311, 18-19=-224/255, 19-20=-183/207, 20-21=-143/159, 21-22=-103/115, 22-23=-79/86, 23-25=-90/79, 25-26=-110/92, 26-27=-155/112, 27-28=-196/123, 28-30=-285/191, 30-31=0/29


June 13,2025

Continued on page 2



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BOT CHORD 2-56=-184/292, 55-56=-184/292, 54-55=-184/292, 53-54=-184/292, 52-53=-184/292, 51-52=-184/292, 50-51=-184/292, 48-50=-184/292, 47-48=-184/292, 46-47=-184/292, 45-46=-184/292, 44-45=-184/292, 43-44=-184/292, 42-43=-184/292, 41-42=-184/292, 40-41=-184/292, 38-40=-184/292, 37-38=-184/292, 36-37=-184/292, 35-36=-184/292, 34-35=-184/292, 33-34=-184/292, 32-33=-184/292, 30-32=-184/292

WEBS 16-44=-254/181, 15-45=-97/47, 14-46=-115/93, 13-47=-103/81, 12-48=-102/80, 11-50=-102/81, 10-51=-102/81, 9-52=-102/81, 7-53=-102/80, 6-54=-106/84, 5-55=-84/59, 4-56=-171/170, 17-43=-87/38, 18-42=-115/95, 19-41=-103/81, 20-40=-102/80, 21-38=-102/81, 22-37=-102/81, 23-36=-102/81, 25-35=-102/80, 26-34=-106/84, 27-33=-85/60, 28-32=-173/157

**NOTES**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 (||) MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 1-4-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 123 lb uplift at joint 2, 48 lb uplift at joint 30, 7 lb uplift at joint 44, 31 lb uplift at joint 45, 77 lb uplift at joint 46, 65 lb uplift at joint 47, 64 lb uplift at joint 48, 65 lb uplift at joint 50, 64 lb uplift at joint 51, 66 lb uplift at joint 52, 61 lb uplift at joint 53, 80 lb uplift at joint 54, 12 lb uplift at joint 55, 251 lb uplift at joint 56, 22 lb uplift at joint 43, 79 lb uplift at joint 42, 65 lb uplift at joint 41, 64 lb uplift at joint 40, 65 lb uplift at joint 38, 65 lb uplift at joint 37, 65 lb uplift at joint 36, 62 lb uplift at joint 35, 78 lb uplift at joint 34, 7 lb uplift at joint 33, 226 lb uplift at joint 32, 123 lb uplift at joint 2 and 48 lb uplift at joint 30.

**LOAD CASE(S)** Standard


June 13,2025




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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | JSJ Builders | |
|---|---|---|---|---|---|---|
| 4703093 | A02 | Common | 4 | 1 | Job Reference (optional) | I74181039 |

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 12 15:41:54 Page: 1
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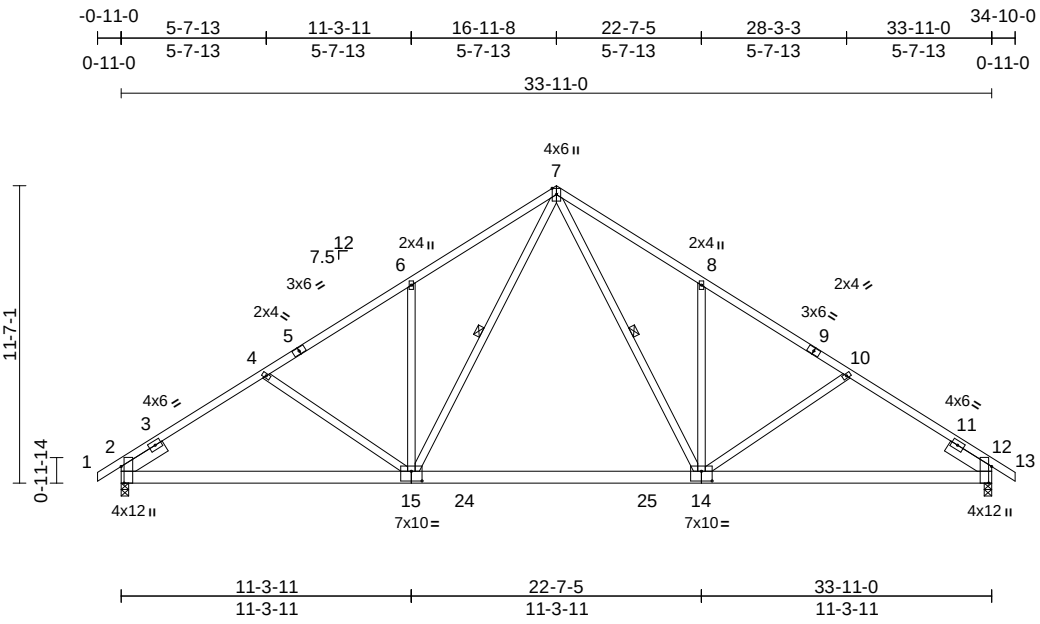


Scale = 1:89.8

Plate Offsets (X, Y): [2:0-7-12,Edge], [12:0-7-12,Edge], [14:0-5-0,0-4-8], [15:0-5-0,0-4-8]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.76 | Vert(LL) | -0.31 | 14-15 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.71 | Vert(CT) | -0.47 | 14-15 | >873 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.53 | Horz(CT) | 0.07 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MS | | Wind(LL) | 0.13 | 14-15 | >999 | 240 | Weight: 230 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 15-7,14-7:2x4 SP No.2
SLIDER Left 2x6 SP No.2 -- 1-11-12, Right 2x6 SP No.2 -- 1-11-12

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 2-6-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-9-6 oc bracing.
WEBS 1 Row at midpt 7-15, 7-14

**REACTIONS** (size) 2=0-3-8, 12=0-3-8
Max Horiz 2=-373 (LC 10)
Max Uplift 2=-370 (LC 12), 12=-370 (LC 13)
Max Grav 2=1434 (LC 19), 12=1434 (LC 20)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/29, 2-4=-1962/685, 4-6=-1768/626, 6-7=-1963/850, 7-8=-1963/850, 8-10=-1768/626, 10-12=-1962/685, 12-13=0/29
BOT CHORD 2-12=-555/1844
WEBS 6-15=-484/382, 7-15=-448/1038, 7-14=-448/1038, 8-14=-484/382, 4-15=-316/275, 10-14=-316/275

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 370 lb uplift at joint 2 and 370 lb uplift at joint 12.

**LOAD CASE(S)** Standard


June 13,2025



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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | JSJ Builders |
|---|---|---|---|---|---|
| 4703093 | A03 | Common | 7 | 1 | I74181040<br>Job Reference (optional) |

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 12 15:41:54 Page: 1
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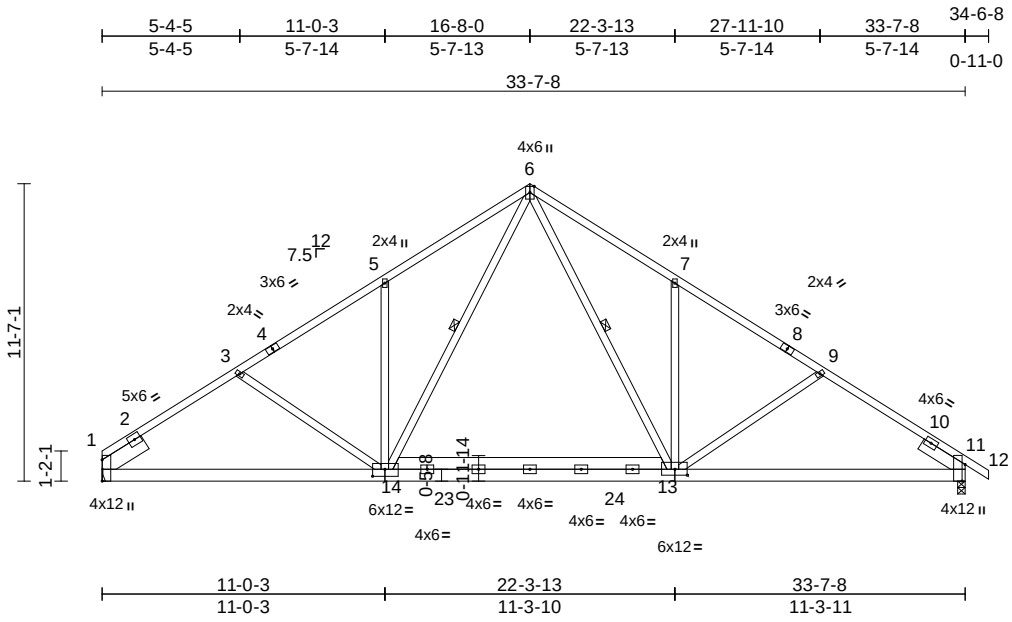


Scale = 1:89.8

Plate Offsets (X, Y): [1:0-9-15,Edge], [11:0-7-12,Edge], [13:0-5-12,0-2-12], [14:0-5-12,0-3-4]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.90 | Vert(LL) | -0.16 | 13-14 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.74 | Vert(CT) | -0.27 | 13-14 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.53 | Horz(CT) | 0.06 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MS | | Wind(LL) | 0.12 | 13-14 | >999 | 240 | Weight: 253 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 14-6,13-6:2x4 SP No.2
SLIDER Left 2x8 SP 2400F 2.0E or DSS -- 1-11-12, Right 2x6 SP No.2 -- 1-11-12

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-9-4 oc bracing.
WEBS 1 Row at midpt 6-14, 6-13

**REACTIONS** (size) 1= Mechanical, 11=0-3-8
Max Horiz 1=-366 (LC 8)
Max Uplift 1=-335 (LC 12), 11=-368 (LC 13)
Max Grav 1=1360 (LC 19), 11=1417 (LC 20)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-1909/675, 3-5=-1736/611, 5-6=-1917/822, 6-7=-1947/830, 7-9=-1772/621, 9-11=-1961/693, 11-12=0/29
BOT CHORD 1-11=-548/1791
WEBS 5-14=-485/378, 6-14=-429/978, 7-13=-474/374, 6-13=-436/1028, 9-13=-324/280, 3-14=-276/263

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 335 lb uplift at joint 1 and 368 lb uplift at joint 11.

**LOAD CASE(S)** Standard


June 13,2025



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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | JSJ Builders | |
|---|---|---|---|---|---|---|
| 4703093 | A04 | Common | 1 | 1 | Job Reference (optional) | I74181041 |

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 12 15:41:55 Page: 1
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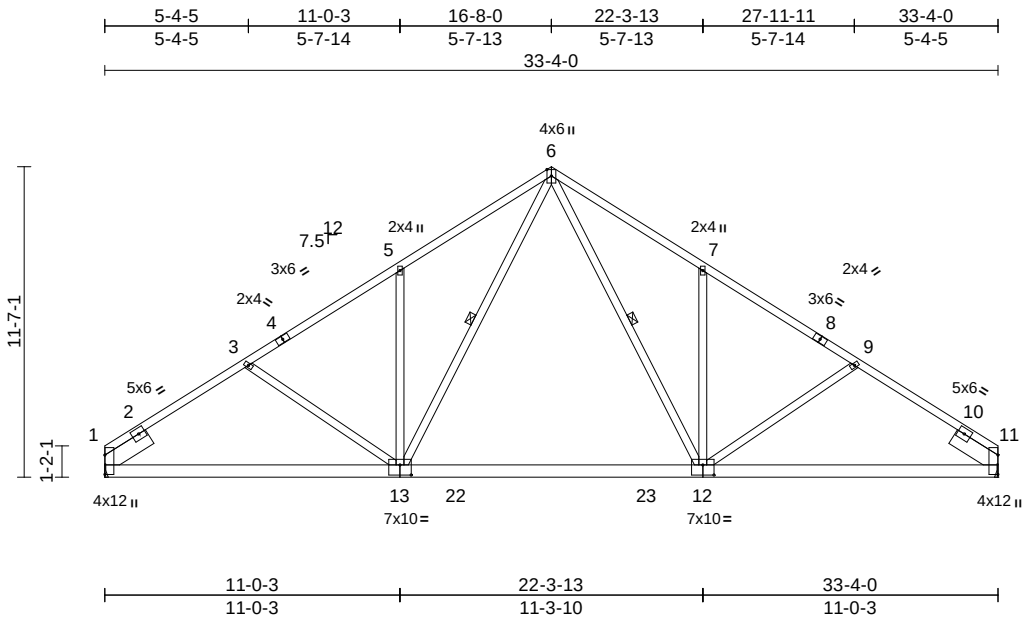


Scale = 1:86

Plate Offsets (X, Y): [1:0-8-11,0-0-1], [11:0-8-11,0-0-1], [12:0-5-0,0-4-8], [13:0-5-0,0-4-8]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.98 | Vert(LL) | -0.33 | 12-13 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.74 | Vert(CT) | -0.51 | 12-13 | >785 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.54 | Horz(CT) | 0.08 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MS | | Wind(LL) | 0.16 | 12-13 | >999 | 240 | Weight: 227 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 13-6,12-6:2x4 SP No.2
SLIDER Left 2x8 SP 2400F 2.0E or DSS -- 1-11-12, Right 2x8 SP 2400F 2.0E or DSS -- 1-11-12

**BRACING**
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 9-9-11 oc bracing.
WEBS 1 Row at midpt 6-13, 6-12

**REACTIONS** (size) 1= Mechanical, 11= Mechanical
Max Horiz 1=-348 (LC 8)
Max Uplift 1=-333 (LC 12), 11=-333 (LC 13)
Max Grav 1=1357 (LC 19), 11=1357 (LC 20)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-1874/657, 3-5=-1699/605, 5-6=-1900/831, 6-7=-1900/831, 7-9=-1699/605, 9-11=-1874/657
BOT CHORD 1-11=-549/1744
WEBS 6-13=-440/1005, 6-12=-440/1005, 5-13=-496/386, 3-13=-269/259, 7-12=-496/386, 9-12=-269/260

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 333 lb uplift at joint 1 and 333 lb uplift at joint 11.

**LOAD CASE(S)** Standard


June 13,2025



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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | JSJ Builders | |
|---|---|---|---|---|---|---|
| 4703093 | A05 | Common | 5 | 1 | Job Reference (optional) | I74181042 |

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 12 15:41:55 Page: 1
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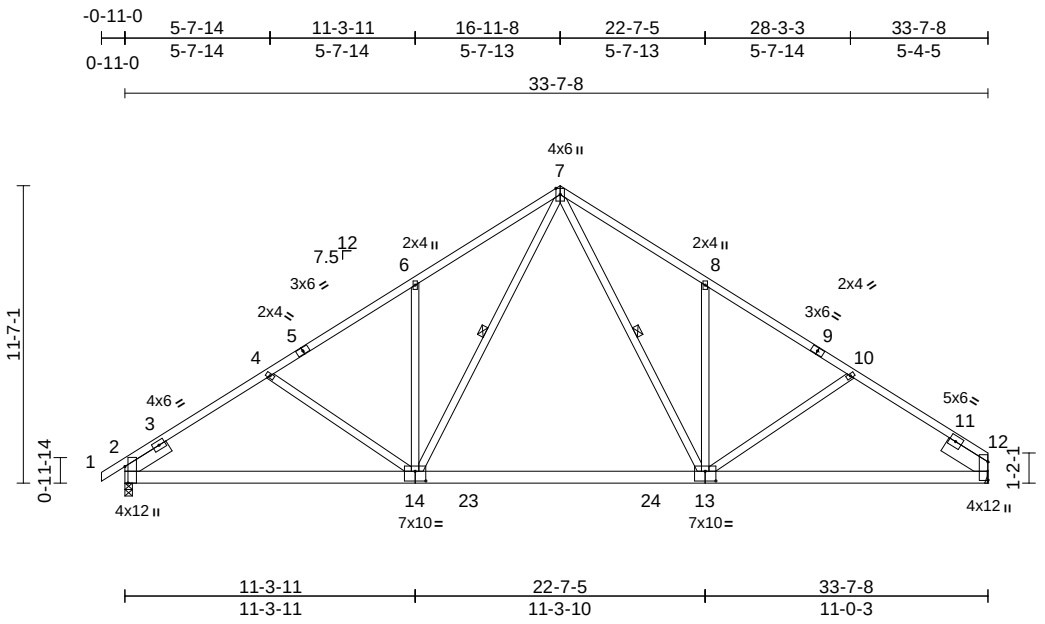


Scale = 1:89.8

Plate Offsets (X, Y): [2:0-7-12,Edge], [12:0-8-11,0-0-1], [13:0-5-0,0-4-8], [14:0-5-0,0-4-8]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.99 | Vert(LL) | -0.32 | 13-14 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.73 | Vert(CT) | -0.49 | 13-14 | >826 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.54 | Horz(CT) | 0.08 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MS | | Wind(LL) | 0.15 | 13-14 | >999 | 240 | Weight: 228 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 14-7,13-7:2x4 SP No.2
SLIDER Left 2x6 SP No.2 -- 1-11-12, Right 2x8 SP 2400F 2.0E or DSS -- 1-11-12

**BRACING**
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 9-7-14 oc bracing.
WEBS 1 Row at midpt 7-14, 7-13

**REACTIONS** (size) 2=0-3-8, 12= Mechanical
Max Horiz 2=366 (LC 9)
Max Uplift 2=-368 (LC 12), 12=-335 (LC 13)
Max Grav 2=1424 (LC 19), 12=1367 (LC 20)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/29, 2-4=-1946/680, 4-6=-1750/621, 6-7=-1945/844, 7-8=-1918/837, 8-10=-1717/611, 10-12=-1890/663
BOT CHORD 2-12=-570/1819
WEBS 7-14=-449/1045, 7-13=-439/997, 6-14=-485/382, 4-14=-317/275, 8-13=-496/386, 10-13=-268/260

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 368 lb uplift at joint 2 and 335 lb uplift at joint 12.

**LOAD CASE(S)** Standard


June 13,2025



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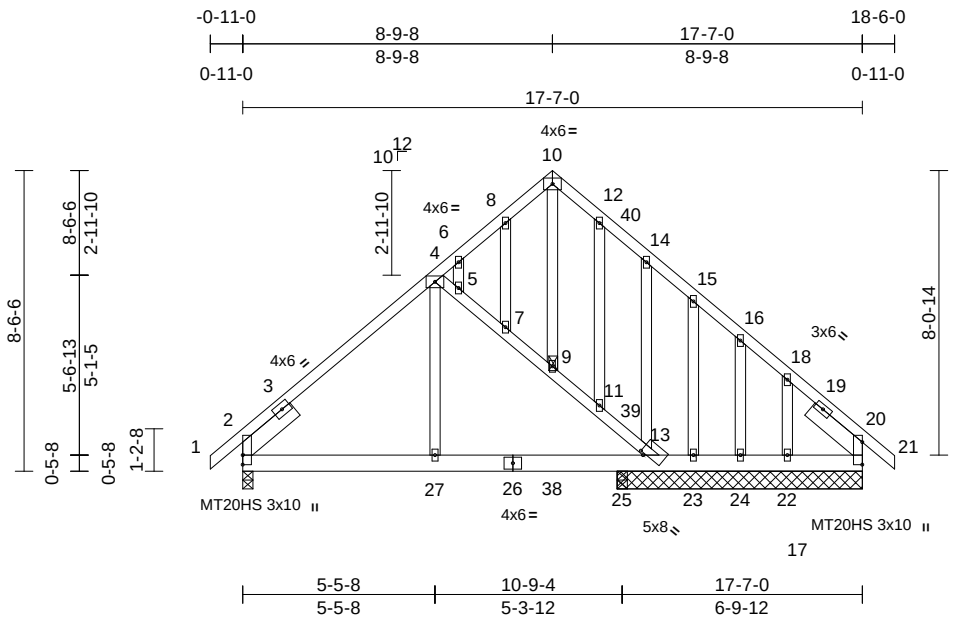
| Job | Truss | Truss Type | Qty | Ply | JSJ Builders |
|---|---|---|---|---|---|
| 4703093 | B01 | Common Structural Gable | 1 | 1 | I74181043 Job Reference (optional) |

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 12 15:41:55 Page: 1
ID:ZT1YbH?_DkQPMsDf9yGQ1?zmGhn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:65.4

Plate Offsets (X, Y): [17:0-1-8,0-0-11]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.66 | Vert(LL) | -0.02 | 17-32 | >662 | 360 | MT20HS | 187/143 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.46 | Vert(CT) | -0.04 | 17-32 | >394 | 240 | MT20 | 244/190 |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.15 | Horz(CT) | -0.01 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MS | | Wind(LL) | 0.02 | 17-32 | >924 | 240 | Weight: 153 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -- 1-11-12, Right 2x6 SP No.2 -- 1-11-12

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 9

**REACTIONS** (size) 2=0-3-8, 17=6-11-8, 20=6-11-8, 22=6-11-8, 23=6-11-8, 24=6-11-8, 25=0-3-8
Max Horiz 2=-548 (LC 13)
Max Uplift 2=-242 (LC 13), 17=-92 (LC 13), 22=-284 (LC 13), 23=-255 (LC 13), 24=-48 (LC 19), 25=-122 (LC 13)
Max Grav 2=747 (LC 1), 17=320 (LC 1), 20=507 (LC 1), 22=212 (LC 20), 23=781 (LC 1), 24=39 (LC 12), 25=716 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 4-5=-433/271, 5-7=-430/256, 7-9=-458/266, 9-11=-406/141, 11-13=-528/144, 13-17=-376/585, 1-2=0/35, 2-4=-720/376, 4-6=-474/308, 6-8=-432/296, 8-10=-401/300, 10-12=-425/314, 12-14=-400/270, 14-15=-388/184, 15-16=-373/90, 16-18=-367/36, 18-20=-385/40, 20-21=0/35
BOT CHORD 2-27=-327/593, 25-27=-85/593, 17-25=-93/593, 17-23=-9/297, 23-24=-9/297, 22-24=-9/297, 20-22=-9/297
WEBS 4-27=0/192, 9-10=-262/337, 7-8=-44/44, 5-6=-35/32, 11-12=-100/44, 13-14=-175/142, 15-23=-165/131, 16-24=-140/91, 18-22=-171/199

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are MT20 plates unless otherwise indicated.
5) All plates are 2x4 (||) MT20 unless otherwise indicated.
6) Gable studs spaced at 1-4-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 242 lb uplift at joint 2, 92 lb uplift at joint 17, 255 lb uplift at joint 23, 48 lb uplift at joint 24, 284 lb uplift at joint 22 and 122 lb uplift at joint 25.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 27-28=-20, 25-38=-25 (F=-5), 17-25=-20, 32-34=-20, 9-39=-105 (F=-5), 13-39=-100, 13-33=100, 17-33=-100, 1-4=-60, 10-40=-105 (F=-5), 20-40=-100, 20-21=-60
Trapezoidal Loads (lb/ft)
Vert: 27=-21 (F=-1)-to-26=-24 (F=-4), 26=-24 (F=-4)-to-38=-25 (F=-5), 4=-61 (F=-1)-to-5=-62 (F=-2), 5=-62 (F=-2)-to-7=-63 (F=-3), 7=-63 (F=-3)-to-9=-65 (F=-5), 4=-61 (F=-1)-to-6=-62 (F=-2), 6=-62 (F=-2)-to-8=-63 (F=-3), 8=-63 (F=-3)-to-10=-65 (F=-5)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| Job | Truss | Truss Type | Qty | Ply | JSJ Builders |
|---|---|---|---|---|---|
| 4703093 | B02 | Common Girder | 1 | 3 | I74181044 Job Reference (optional) |

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 12 15:41:56 Page: 1
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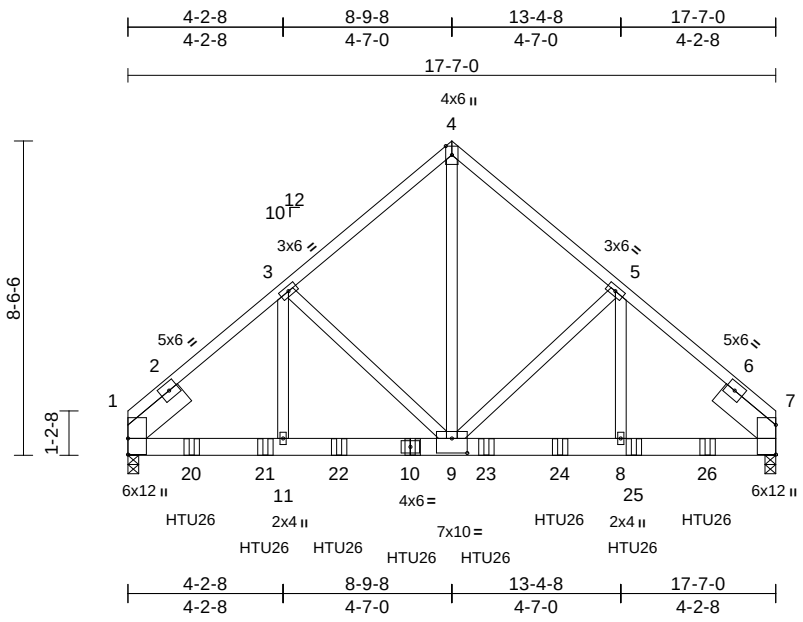


Scale = 1:62.5

Plate Offsets (X, Y): [9:0-5-0,0-4-12]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.75 | Vert(LL) | -0.07 | 9-11 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.99 | Vert(CT) | -0.15 | 9-11 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.47 | Horz(CT) | 0.05 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MS | | Wind(LL) | 0.08 | 9-11 | >999 | 240 | Weight: 386 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2
SLIDER Left 2x8 SP 2400F 2.0E or DSS -- 1-11-12, Right 2x8 SP 2400F 2.0E or DSS -- 1-11-12

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 1=0-3-8, 7=0-3-8
Max Horiz 1=244 (LC 24)
Max Uplift 1=-1556 (LC 8), 7=-1532 (LC 9)
Max Grav 1=6042 (LC 1), 7=5953 (LC 16)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-6535/1725, 3-4=-4911/1392, 4-5=-4910/1392, 5-7=-6502/1716
BOT CHORD 1-11=-1349/5005, 9-11=-1349/5005, 8-9=-1217/4841, 7-8=-1217/4841
WEBS 3-11=-533/2132, 3-9=-1625/607, 4-9=-1585/5832, 5-9=-1592/599, 5-8=-523/2091

**NOTES**
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1556 lb uplift at joint 1 and 1532 lb uplift at joint 7.
8) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-8-12 from the left end to 15-8-12 to connect truss(es) to back face of bottom chord.
9) Fill all nail holes where hanger is in contact with lumber.

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-60, 4-7=-60, 12-16=-20
Concentrated Loads (lb)
Vert: 10=-1324 (B), 20=-1324 (B), 21=-1324 (B), 22=-1324 (B), 23=-1324 (B), 24=-1324 (B), 25=-1324 (B), 26=-1313 (B)


June 13,2025



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| Job | Truss | Truss Type | Qty | Ply | JSJ Builders |
|---|---|---|---|---|---|
| 4703093 | C01 | Common Structural Gable | 1 | 1 | I74181045 Job Reference (optional) |

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 12 15:41:56 Page: 1
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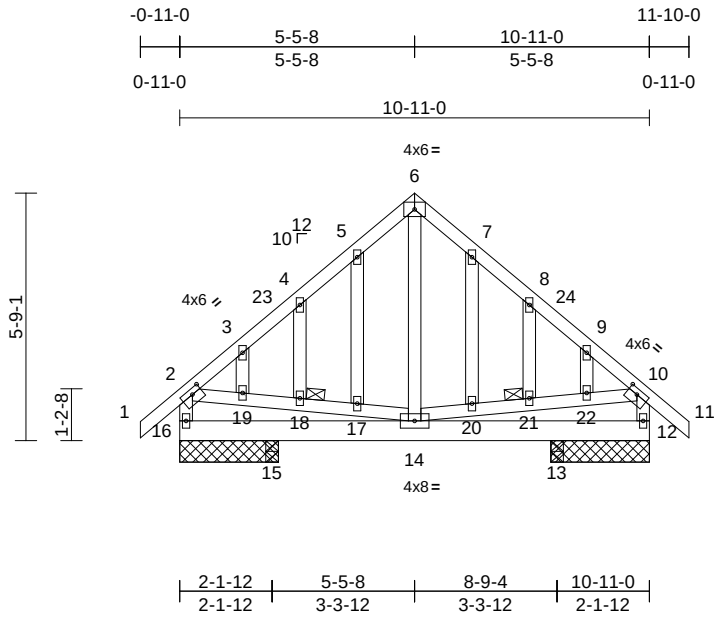


Scale = 1:53.6

Plate Offsets (X, Y): [2:0-2-12,0-1-8], [10:0-2-12,0-1-8]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.29 | Vert(LL) | -0.01 | 14 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.11 | Vert(CT) | -0.01 | 14 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.35 | Horz(CT) | 0.00 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MS | | Wind(LL) | 0.01 | 14 | >999 | 240 | Weight: 96 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 16-2,12-10:2x4 SP No.2
OTHERS 2x4 SP No.3

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 18, 21

**REACTIONS** (size) 12=2-3-8, 13=0-3-8, 15=0-3-8, 16=2-3-8
Max Horiz 16=-222 (LC 10)
Max Uplift 12=-144 (LC 13), 16=-142 (LC 12)
Max Grav 12=427 (LC 1), 13=185 (LC 3), 15=185 (LC 3), 16=427 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/41, 2-3=-393/115, 3-4=-332/106, 4-5=-368/172, 5-6=-343/197, 6-7=-342/197, 7-8=-367/172, 8-9=-338/105, 9-10=-397/114, 10-11=0/41, 2-16=-435/241, 10-12=-433/241
BOT CHORD 15-16=-245/319, 14-15=-245/319, 13-14=-145/273, 12-13=-145/273
WEBS 6-14=-86/163, 2-19=-87/235, 18-19=-85/233, 17-18=-90/240, 14-17=-101/256, 14-20=-116/259, 20-21=-105/243, 21-22=-99/236, 10-22=-102/238, 5-17=-28/53, 4-18=-115/90, 3-19=-35/43, 7-20=-30/56, 8-21=-116/90, 9-22=-35/44

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 (||) MT20 unless otherwise indicated.
5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
6) Gable studs spaced at 1-4-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 142 lb uplift at joint 16 and 144 lb uplift at joint 12.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-60, 2-23=-60, 10-24=-60, 10-11=-60, 15-16=-20, 12-13=-20
Trapezoidal Loads (lb/ft)
Vert: 23=-62 (F=-2)-to-4=-62 (F=-2), 4=-62 (F=-2)-to-5=-64 (F=-4), 5=-64 (F=-4)-to-6=-65 (F=-5), 6=-65 (F=-5)-to-7=-64 (F=-4), 7=-64 (F=-4)-to-8=-62 (F=-2), 8=-62 (F=-2)-to-24=-62 (F=-2), 15=-42 (F=-22)-to-14=-45 (F=-25), 14=-45 (F=-25)-to-13=-42 (F=-22)


June 13,2025



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| Job | Truss | Truss Type | Qty | Ply | JSJ Builders | |
|---|---|---|---|---|---|---|
| 4703093 | C02 | Common | 1 | 1 | Job Reference (optional) | I74181046 |

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 12 15:41:56 Page: 1
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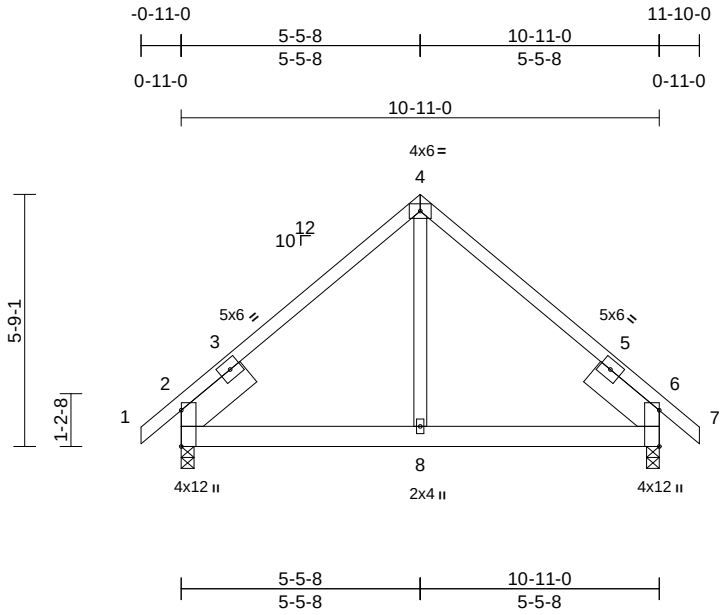


Scale = 1:52.6

Plate Offsets (X, Y): [2:Edge,0-0-0], [6:Edge,0-0-0]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.25 | Vert(LL) | 0.02 | 8-11 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.24 | Vert(CT) | -0.02 | 8-11 | >999 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.09 | Horz(CT) | -0.02 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MS | | | | | | | Weight: 70 lb | FT = 20% |

**LUMBER**

| | |
|---|---|
| TOP CHORD | 2x4 SP No.2 |
| BOT CHORD | 2x6 SP No.2 |
| WEBS | 2x4 SP No.3 |
| SLIDER | Left 2x8 SP 2400F 2.0E or DSS -- 1-11-12, Right 2x8 SP 2400F 2.0E or DSS -- 1-11-12 |

**BRACING**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |

**REACTIONS** (size) 2=0-3-8, 6=0-3-8
Max Horiz 2=177 (LC 11)
Max Uplift 2=-124 (LC 12), 6=-124 (LC 13)
Max Grav 2=492 (LC 1), 6=492 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

| | |
|---|---|
| TOP CHORD | 1-2=0/35, 2-4=-425/279, 4-6=-425/279, 6-7=0/35 |
| BOT CHORD | 2-8=-154/293, 6-8=-73/289 |
| WEBS | 4-8=-82/252 |

**NOTES**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 124 lb uplift at joint 2 and 124 lb uplift at joint 6.

**LOAD CASE(S)** Standard


June 13,2025



ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | JSJ Builders |
|---|---|---|---|---|---|
| 4703093 | D01 | Monopitch Supported Gable | 1 | 1 | I74181047 Job Reference (optional) |

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 12 15:41:57 Page: 1
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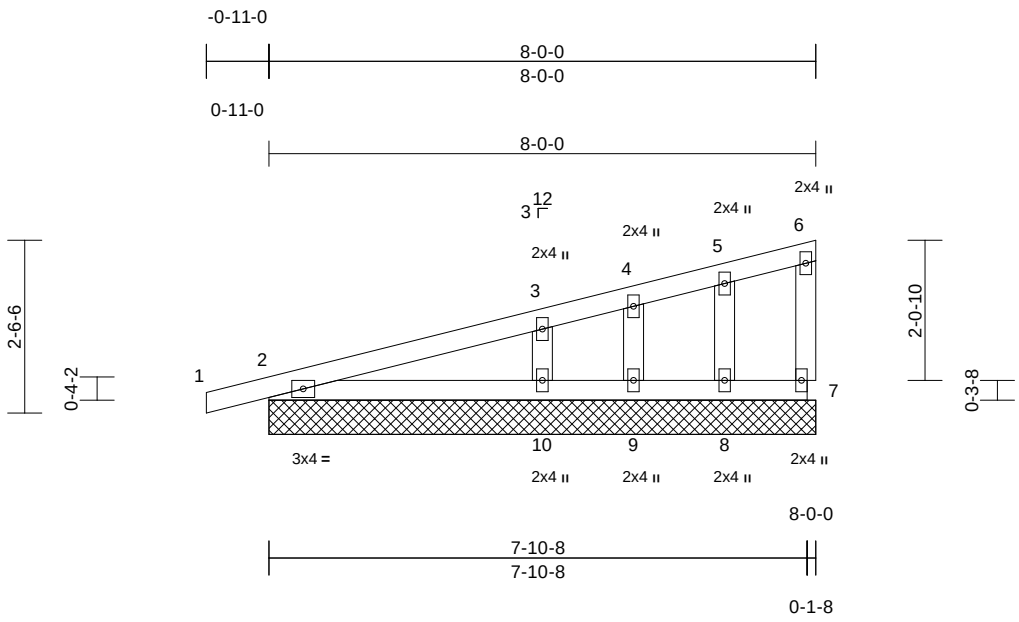



Scale = 1:33.7

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.14 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.13 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.06 | Horz(CT) | 0.00 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MS | | | | | | | Weight: 33 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.3

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=8-0-0, 7=8-0-0, 8=8-0-0, 9=8-0-0, 10=8-0-0
Max Horiz 2=118 (LC 8)
Max Uplift 2=-85 (LC 8), 7=-16 (LC 8), 8=-49 (LC 12), 9=-14 (LC 3), 10=-129 (LC 12)
Max Grav 2=193 (LC 1), 7=35 (LC 1), 8=135 (LC 1), 9=2 (LC 12), 10=330 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-104/48, 3-4=-48/12, 4-5=-36/16, 5-6=-12/5, 6-7=-28/31
BOT CHORD 2-10=-47/76, 9-10=-2/2, 8-9=-2/2, 7-8=-2/2
WEBS 5-8=-94/96, 4-9=-16/35, 3-10=-211/199

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 1-4-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 85 lb uplift at joint 2, 16 lb uplift at joint 7, 49 lb uplift at joint 8, 14 lb uplift at joint 9, 129 lb uplift at joint 10 and 85 lb uplift at joint 2.

**LOAD CASE(S)** Standard

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

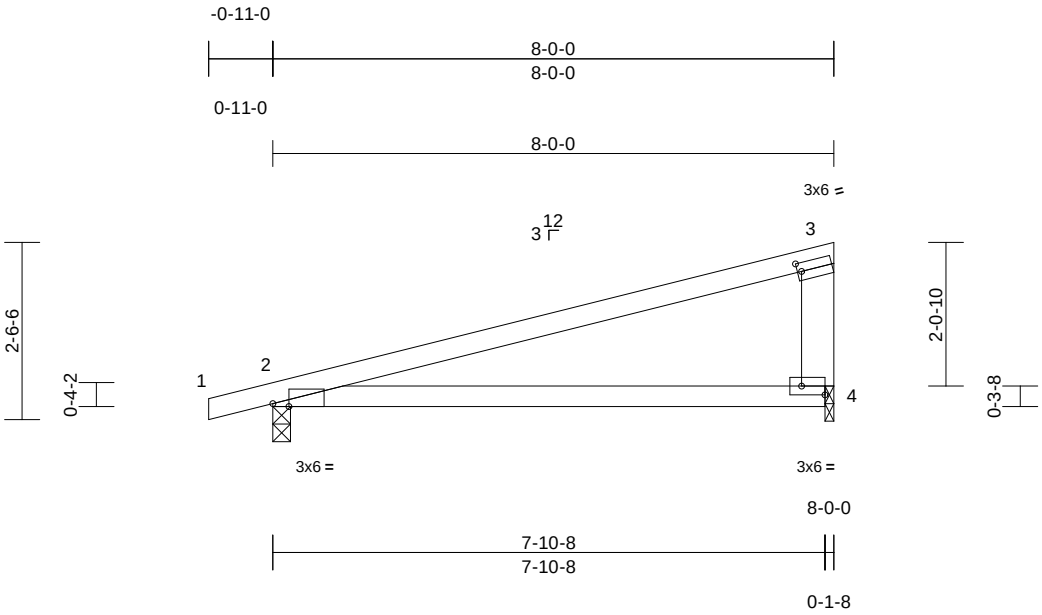
June 13,2025




ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | JSJ Builders |
|---|---|---|---|---|---|
| 4703093 | D02 | Monopitch | 4 | 1 | I74181048 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 12 15:41:57 Page: 1
ID:r9gKzFdE0Pg3pj_G5udF2mzmGbo-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:32.9

Plate Offsets (X, Y): [2:0-2-12,Edge], [3:0-0-11,0-1-8], [4:Edge,0-1-8]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.70 | Vert(LL) | 0.36 | 4-7 | >263 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.69 | Vert(CT) | -0.24 | 4-7 | >382 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.01 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MS | | | | | | | Weight: 30 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x6 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-4-11 oc bracing.

**REACTIONS** (size) 2=0-3-0, 4=0-1-8
Max Horiz 2=117 (LC 8)
Max Uplift 2=-248 (LC 8), 4=-216 (LC 8)
Max Grav 2=369 (LC 1), 4=308 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-217/309, 3-4=-191/211
BOT CHORD 2-4=-352/204

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 248 lb uplift at joint 2 and 216 lb uplift at joint 4.

**LOAD CASE(S)** Standard


June 13,2025



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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | JSJ Builders |
|---|---|---|---|---|---|
| 4703093 | D03 | Monopitch | 3 | 1 | I74181049 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Sumter, SC), Sumter, SC - 29153, Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 12 15:41:57 Page: 1
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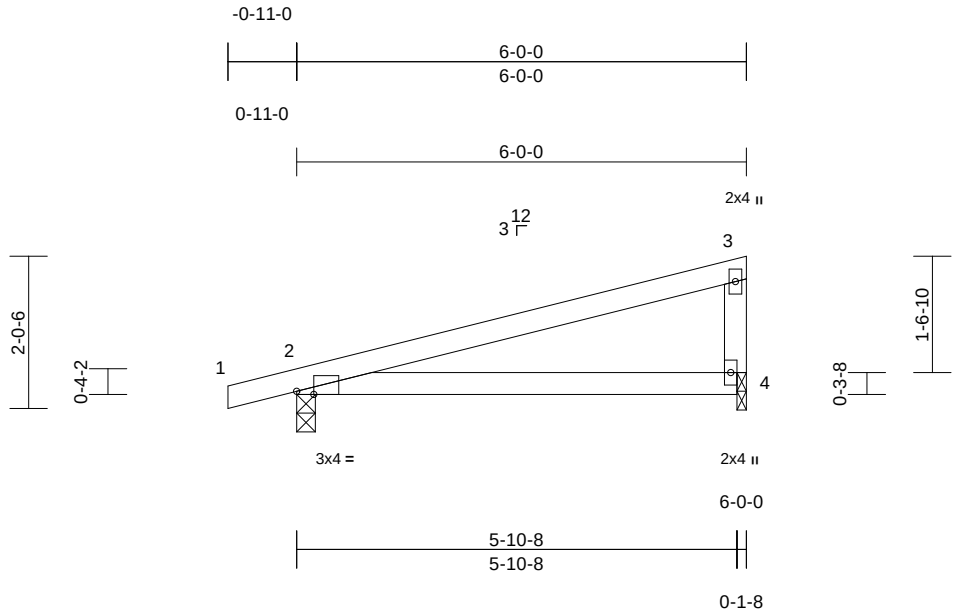


Scale = 1:30.7

Plate Offsets (X, Y): [2:0-2-12,Edge]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.51 | Vert(LL) | 0.18 | 4-7 | >391 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.52 | Vert(CT) | -0.12 | 4-7 | >575 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MP | | | | | | | Weight: 21 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=0-3-0, 4=0-1-8
Max Horiz 2=92 (LC 8)
Max Uplift 2=-202 (LC 8), 4=-161 (LC 8)
Max Grav 2=293 (LC 1), 4=230 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-146/214, 3-4=-151/195
BOT CHORD 2-4=-249/133

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2, 4.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 202 lb uplift at joint 2 and 161 lb uplift at joint 4.

**LOAD CASE(S)** Standard


June 13,2025



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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | JSJ Builders |
|---|---|---|---|---|---|
| 4703093 | D04 | Monopitch Supported Gable | 1 | 1 | I74181050 Job Reference (optional) |

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 12 15:41:57 Page: 1
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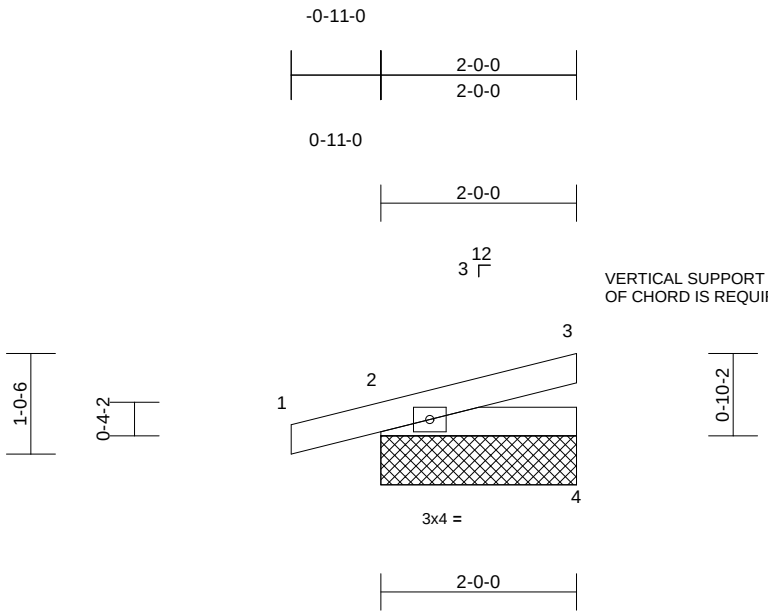


Scale = 1:23.5

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.06 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.03 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MP | | | | | | | Weight: 8 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=2-0-0, 3=2-0-0, 4=2-0-0
Max Horiz 2=42 (LC 8)
Max Uplift 2=-90 (LC 8), 3=-23 (LC 12), 4=-2 (LC 12)
Max Grav 2=148 (LC 1), 3=42 (LC 1), 4=32 (LC 3)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-38/9
BOT CHORD 2-4=-9/39

**NOTES**
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 90 lb uplift at joint 2, 2 lb uplift at joint 4, 23 lb uplift at joint 3 and 90 lb uplift at joint 2.
8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 3, 5.

**LOAD CASE(S)** Standard


June 13,2025



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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | JSJ Builders |
|---|---|---|---|---|---|
| 4703093 | D05 | Monopitch Supported Gable | 1 | 1 | I74181051 Job Reference (optional) |

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

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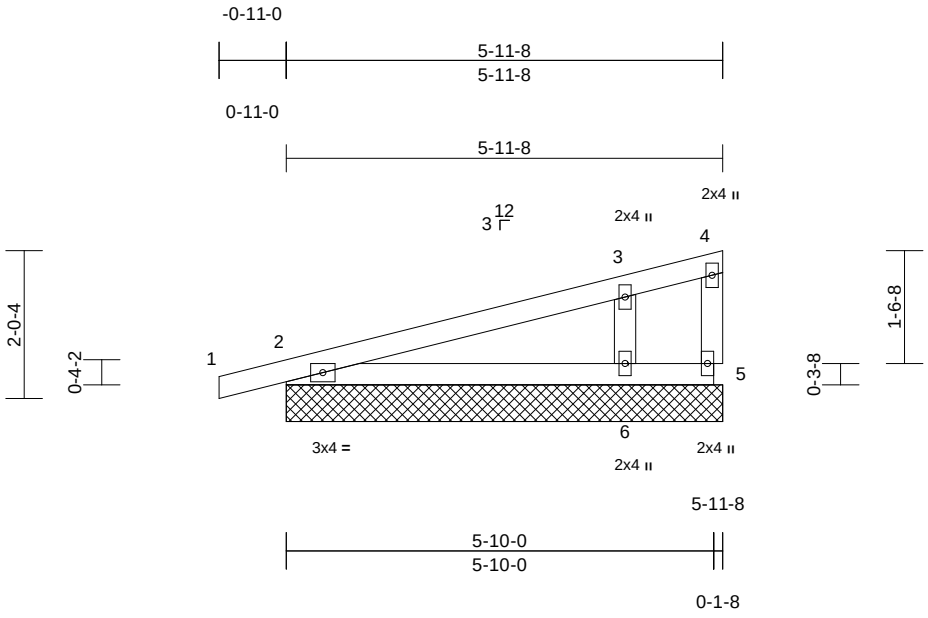


Scale = 1:31.4

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.20 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.18 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.08 | Horz(CT) | 0.00 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MP | | | | | | | Weight: 23 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.3

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 5-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=5-11-8, 5=5-11-8, 6=5-11-8
Max Horiz 2=92 (LC 8)
Max Uplift 2=-99 (LC 8), 5=-87 (LC 1), 6=-154 (LC 12)
Max Grav 2=211 (LC 1), 5=33 (LC 12), 6=396 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-78/38, 3-4=-28/8, 4-5=-34/44
BOT CHORD 2-6=-56/91, 5-6=0/0
WEBS 3-6=-256/263

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 1-4-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 99 lb uplift at joint 2, 87 lb uplift at joint 5, 154 lb uplift at joint 6 and 99 lb uplift at joint 2.

**LOAD CASE(S)** Standard


June 13,2025



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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | JSJ Builders |
|---|---|---|---|---|---|
| 4703093 | D06 | Monopitch | 4 | 1 | I74181052 Job Reference (optional) |

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 12 15:41:58 Page: 1
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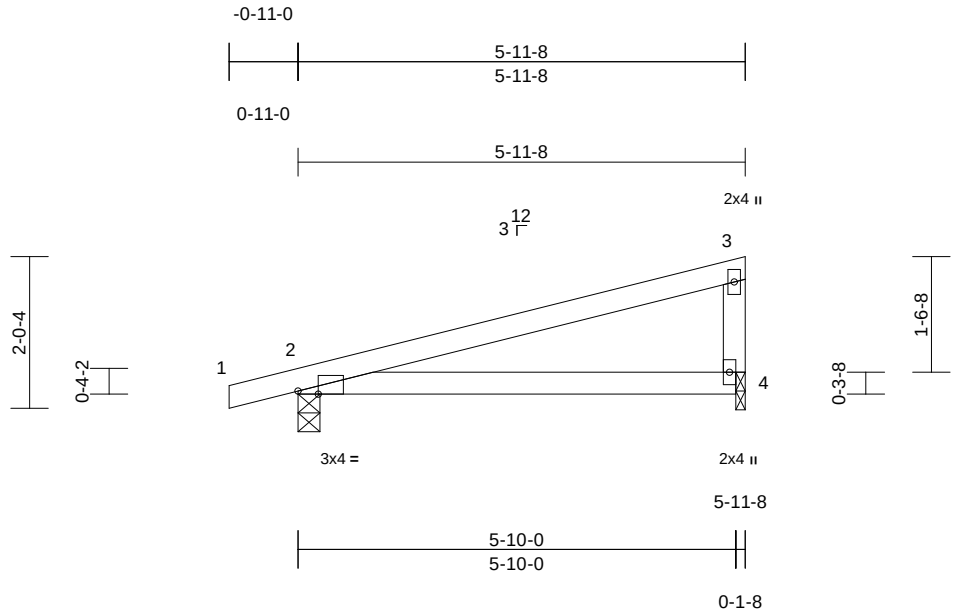


Scale = 1:30.7

Plate Offsets (X, Y): [2:0-3-4,Edge]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.49 | Vert(LL) | -0.05 | 4-7 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.41 | Vert(CT) | -0.12 | 4-7 | >587 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MP | | Wind(LL) | 0.08 | 4-7 | >899 | 240 | Weight: 21 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 5-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=0-3-8, 4=0-1-8
Max Horiz 2=92 (LC 8)
Max Uplift 2=-129 (LC 8), 4=-89 (LC 12)
Max Grav 2=292 (LC 1), 4=228 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-144/46, 3-4=-150/156
BOT CHORD 2-4=-102/150

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 129 lb uplift at joint 2 and 89 lb uplift at joint 4.

**LOAD CASE(S)** Standard


June 13,2025



ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | JSJ Builders |
|---|---|---|---|---|---|
| 4703093 | V01 | Valley | 1 | 1 | I74181053 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 12 15:41:58 Page: 1
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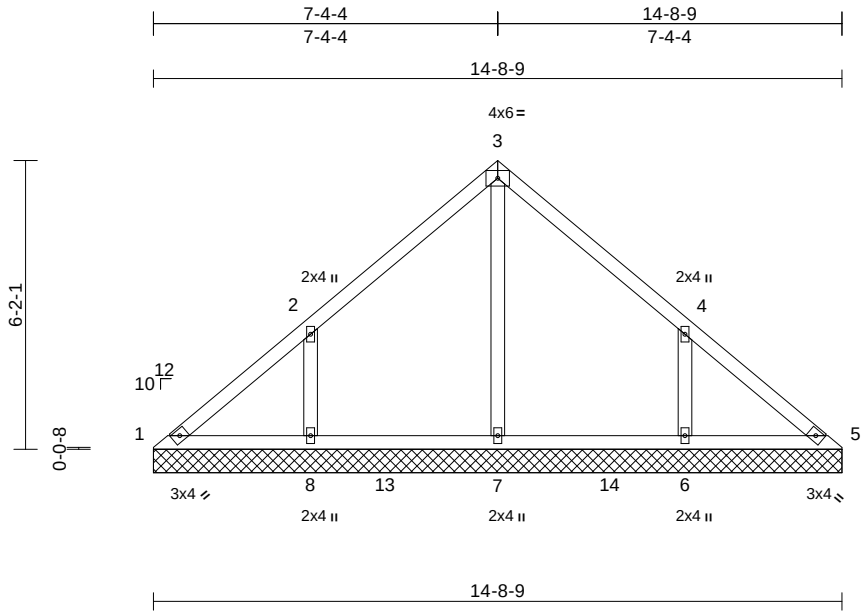


Scale = 1:49.2

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.20 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.15 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.15 | Horiz(TL) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MS | | | | | | | Weight: 64 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS** (size) 1=14-8-9, 5=14-8-9, 6=14-8-9, 7=14-8-9, 8=14-8-9
Max Horiz 1=200 (LC 11)
Max Uplift 1=-45 (LC 8), 6=-267 (LC 13), 8=-272 (LC 12)
Max Grav 1=137 (LC 20), 5=101 (LC 19), 6=418 (LC 20), 7=405 (LC 19), 8=423 (LC 19)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-169/181, 2-3=-121/161, 3-4=-120/142, 4-5=-125/119
BOT CHORD 1-8=-113/150, 7-8=-113/150, 6-7=-113/150, 5-6=-113/150
WEBS 3-7=-222/4, 2-8=-362/304, 4-6=-362/302

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 1, 272 lb uplift at joint 8 and 267 lb uplift at joint 6.

**LOAD CASE(S)** Standard


June 13,2025



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| Job | Truss | Truss Type | Qty | Ply | JSJ Builders |
|---|---|---|---|---|---|
| 4703093 | V02 | Valley | 1 | 1 | I74181054 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 12 15:41:58 Page: 1
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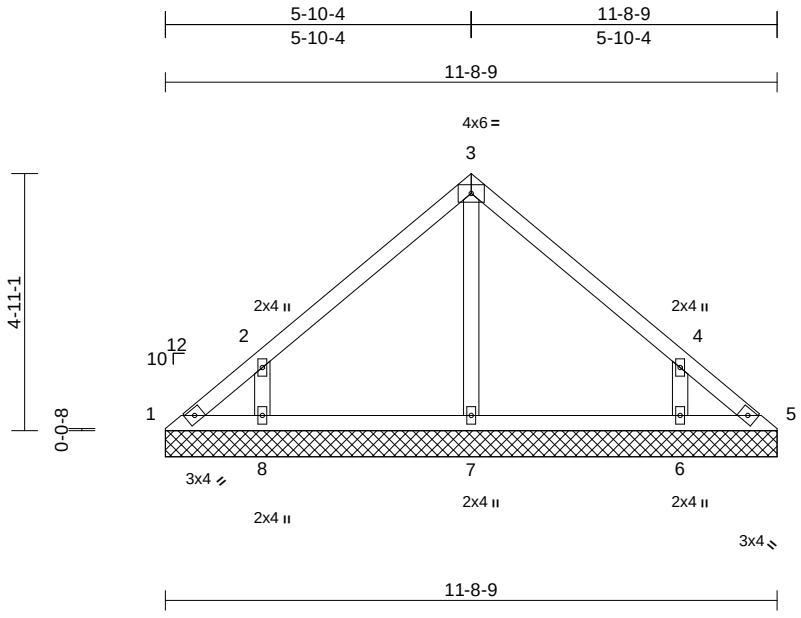


Scale = 1:44.1

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.19 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.12 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.09 | Horiz(TL) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MS | | | | | | | Weight: 48 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 1=11-8-9, 5=11-8-9, 6=11-8-9, 7=11-8-9, 8=11-8-9
Max Horiz 1=-158 (LC 8)
Max Uplift 1=-58 (LC 8), 5=-18 (LC 9), 6=-229 (LC 13), 8=-235 (LC 12)
Max Grav 1=102 (LC 20), 5=72 (LC 19), 6=346 (LC 20), 7=238 (LC 1), 8=352 (LC 19)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-164/141, 2-3=-161/146, 3-4=-158/139, 4-5=-128/89
BOT CHORD 1-8=-54/96, 7-8=-47/96, 6-7=-47/96, 5-6=-47/96
WEBS 3-7=-151/8, 2-8=-358/308, 4-6=-358/306

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 1, 18 lb uplift at joint 5, 235 lb uplift at joint 8 and 229 lb uplift at joint 6.

**LOAD CASE(S)** Standard


June 13,2025



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| Job | Truss | Truss Type | Qty | Ply | JSJ Builders | |
|---|---|---|---|---|---|---|
| 4703093 | V03 | Valley | 1 | 1 | Job Reference (optional) | I74181055 |

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

Run: 8.83 S May 29 2025 Print: 8.830 S May 29 2025 MiTek Industries, Inc. Thu Jun 12 15:41:58 Page: 1
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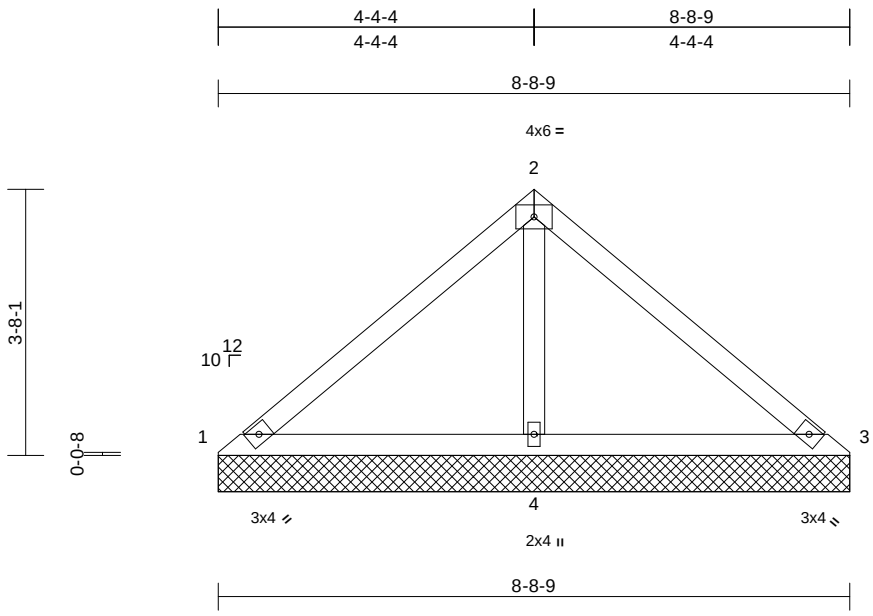


Scale = 1:31.8

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.21 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.21 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.12 | Horiz(TL) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MS | | | | | | | Weight: 33 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 8-8-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS** (size) 1=8-8-9, 3=8-8-9, 4=8-8-9
Max Horiz 1=-116 (LC 8)
Max Uplift 1=-10 (LC 24), 3=-14 (LC 8), 4=-202 (LC 12)
Max Grav 1=77 (LC 23), 3=77 (LC 24), 4=605 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-111/253, 2-3=-111/241
BOT CHORD 1-4=-241/181, 3-4=-241/181
WEBS 2-4=-509/279

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 1, 14 lb uplift at joint 3 and 202 lb uplift at joint 4.

**LOAD CASE(S)** Standard


June 13,2025



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| Job | Truss | Truss Type | Qty | Ply | JSJ Builders |
|---|---|---|---|---|---|
| 4703093 | V04 | Valley | 1 | 1 | I74181056 |
| | | | | | Job Reference (optional) |

Builders FirstSource (Sumter, SC), Sumter, SC - 29153,

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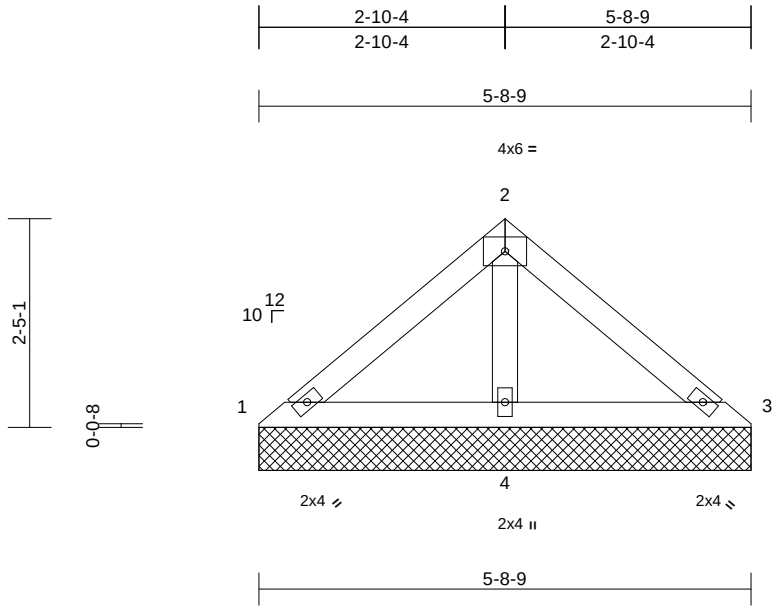


Scale = 1:26.7

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.09 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.10 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.05 | Horiz(TL) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MP | | | | | | | Weight: 21 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 5-8-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS** (size) 1=5-8-9, 3=5-8-9, 4=5-8-9
Max Horiz 1=-74 (LC 8)
Max Uplift 1=-1 (LC 13), 3=-13 (LC 13), 4=-110 (LC 12)
Max Grav 1=67 (LC 23), 3=67 (LC 24), 4=354 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-58/127, 2-3=-58/116
BOT CHORD 1-4=-137/113, 3-4=-137/113
WEBS 2-4=-250/135

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1 lb uplift at joint 1, 13 lb uplift at joint 3 and 110 lb uplift at joint 4.

**LOAD CASE(S)** Standard


June 13,2025



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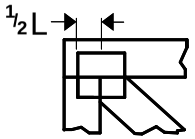
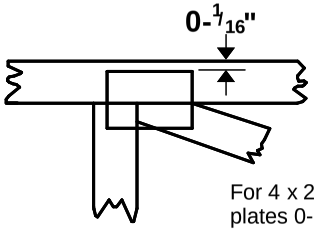
# Symbols

## PLATE LOCATION AND ORIENTATION




Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.




For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

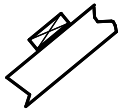
* Plate location details available in MiTek software or upon request.

## PLATE SIZE

4 x 4

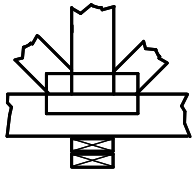
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

## BEARING

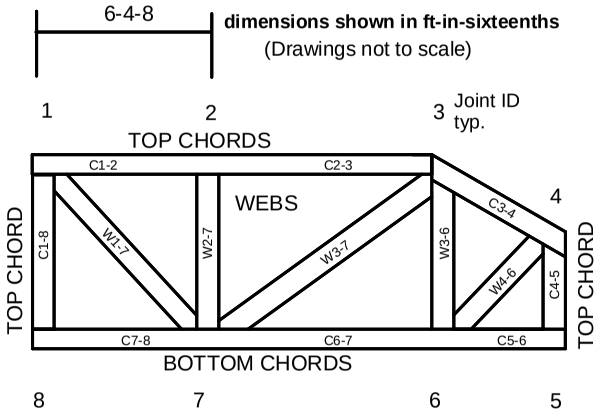


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

**Industry Standards:**

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System




**JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.**

**CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.**

# Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

# Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.



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MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

# General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.