ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0425-1937
Lot 19 Turlington Acres

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Pages or sheets covered by this seal: I73175046 thru I73175062

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

North Carolina COA: C-0844


May 2,2025

Galinski, John

**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 MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or 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.

| Job | Truss | Truss Type | Qty | Ply | Lot 19 Turlington Acres<br>- I73175046<br>Job Reference (optional) |
|---|---|---|---|---|---|
| J0425-1937 | A01 | Common Supported Gable | 1 | 1 | |

Comtech, Inc, Fayetteville, NC - 28314,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu May 01 12:22:07 Page: 1
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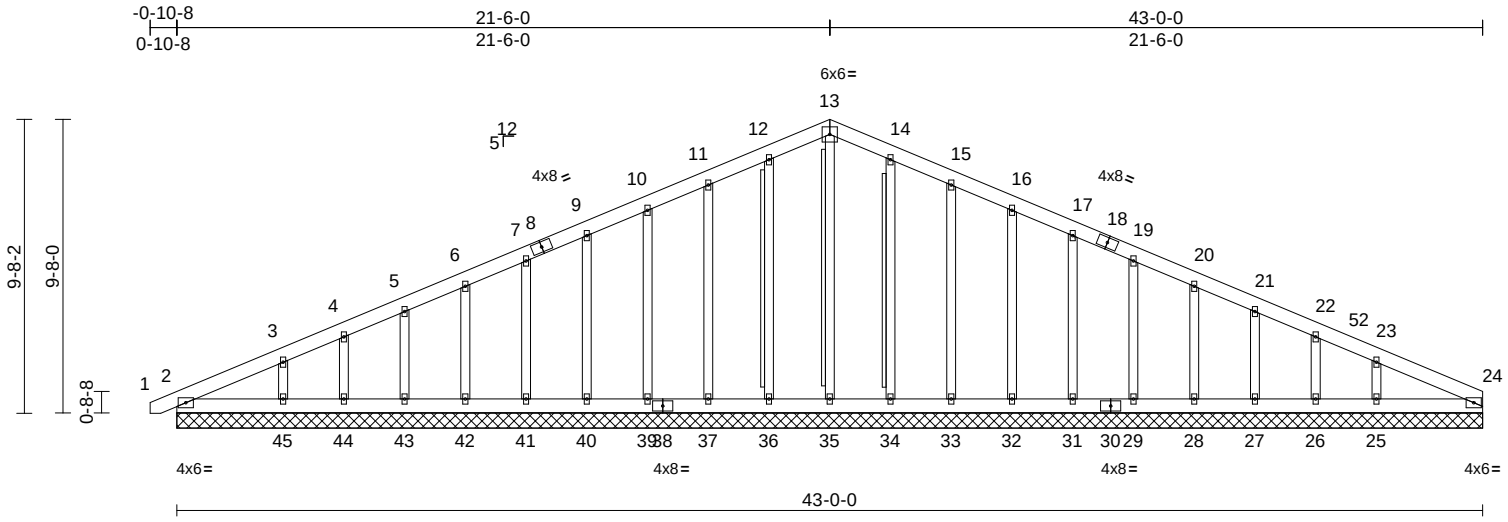



Scale = 1:75.9

| 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 | 0.05 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.05 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.12 | Horz(CT) | 0.00 | 24 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-AS | | | | | | | Weight: 348 lb | FT = 25% |

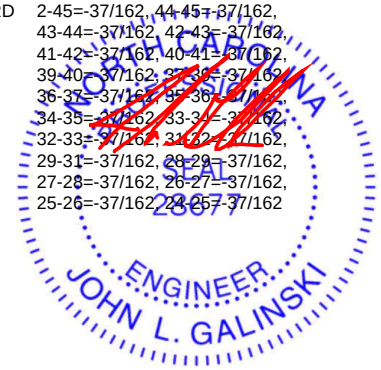
**LUMBER**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2 *Except* 0-0,0-0,0-0:2x4 SPF No.2(flat)

**BRACING**
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Structural wood sheathing directly applied.
WEBS T-Brace: 2x4 SPF No.2 - 13-35, 12-36, 14-34
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance.
Brace must cover 90% of web length.

**REACTIONS** (size) 2=43-0-0, 24=43-0-0, 25=43-0-0, 26=43-0-0, 27=43-0-0, 28=43-0-0, 29=43-0-0, 31=43-0-0, 32=43-0-0, 33=43-0-0, 34=43-0-0, 35=43-0-0, 36=43-0-0, 37=43-0-0, 39=43-0-0, 40=43-0-0, 41=43-0-0, 42=43-0-0, 43=43-0-0, 44=43-0-0, 45=43-0-0, 46=43-0-0, 49=43-0-0
Max Horiz 2=115 (LC 12), 46=115 (LC 12)
Max Uplift 2=-2 (LC 13), 25=-63 (LC 13), 26=-16 (LC 13), 27=-31 (LC 13), 28=-28 (LC 13), 29=-29 (LC 13), 31=-28 (LC 13), 32=-29 (LC 13), 33=-35 (LC 13), 34=-6 (LC 13), 36=-12 (LC 12), 37=-34 (LC 12), 39=-29 (LC 12), 40=-28 (LC 12), 41=-29 (LC 12), 42=-28 (LC 12), 43=-31 (LC 12), 44=-14 (LC 12), 45=-67 (LC 12), 46=-2 (LC 13)
Max Grav 2=175 (LC 1), 24=127 (LC 1), 25=280 (LC 26), 26=116 (LC 1), 27=169 (LC 26), 28=158 (LC 1), 29=160 (LC 26), 31=160 (LC 1), 32=160 (LC 1), 33=162 (LC 26), 34=160 (LC 26), 35=151 (LC 22), 36=160 (LC 25), 37=162 (LC 25), 39=160 (LC 1), 40=160 (LC 1), 41=160 (LC 25), 42=158 (LC 1), 43=168 (LC 25), 44=120 (LC 1), 45=271 (LC 25), 46=175 (LC 1), 49=127 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-141/55, 3-4=-104/53, 4-5=-87/65, 5-6=-75/84, 6-7=-62/119, 7-9=-69/166, 9-10=-86/212, 10-11=-102/259, 11-12=-120/309, 12-13=-131/341, 13-14=-131/341, 14-15=-120/309, 15-16=-102/259, 16-17=-86/212, 17-19=-69/166, 19-20=-53/119, 20-21=-49/72, 21-22=-53/25, 22-23=-70/8, 23-24=-120/41
BOT CHORD 2-45=-37/162, 44-45=-37/162, 43-44=-37/162, 42-43=-37/162, 41-42=-37/162, 40-41=-37/162, 39-40=-37/162, 37-39=-37/162, 36-37=-37/162, 35-36=-37/162, 34-35=-37/162, 33-34=-37/162, 32-33=-37/162, 31-32=-37/162, 29-31=-37/162, 28-29=-37/162, 27-28=-37/162, 26-27=-37/162, 25-26=-37/162, 24-25=-37/162
WEBS 13-35=-129/12, 12-36=-120/58, 11-37=-122/109, 10-39=-120/98, 9-40=-120/97, 7-41=-120/97, 6-42=-120/97, 5-43=-123/101, 4-44=-100/82, 3-45=-183/199, 14-34=-120/58, 15-33=-122/109, 16-32=-120/98, 17-31=-120/97, 19-29=-120/97, 20-28=-120/97, 21-27=-123/100, 22-26=-99/81, 23-25=-187/221

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3E) -0-8-7 to 3-6-0, Exterior(2N) 3-6-0 to 21-6-0, Corner(3R) 21-6-0 to 25-10-13, Exterior(2N) 25-10-13 to 43-0-0 zone;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.




May 2,2025

Continued on page 2



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4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 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) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2 lb uplift at joint 2, 12 lb uplift at joint 36, 34 lb uplift at joint 37, 29 lb uplift at joint 39, 28 lb uplift at joint 40, 29 lb uplift at joint 41, 28 lb uplift at joint 42, 31 lb uplift at joint 43, 14 lb uplift at joint 44, 67 lb uplift at joint 45, 6 lb uplift at joint 34, 35 lb uplift at joint 33, 29 lb uplift at joint 32, 28 lb uplift at joint 31, 29 lb uplift at joint 29, 28 lb uplift at joint 28, 31 lb uplift at joint 27, 16 lb uplift at joint 26, 63 lb uplift at joint 25 and 2 lb uplift at joint 2.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
12) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Lot 19 Turlington Acres - Job Reference (optional) |
|---|---|---|---|---|---|
| J0425-1937 | A02 | Common | 5 | 1 | I73175047 |

Comtech, Inc, Fayetteville, NC - 28314,

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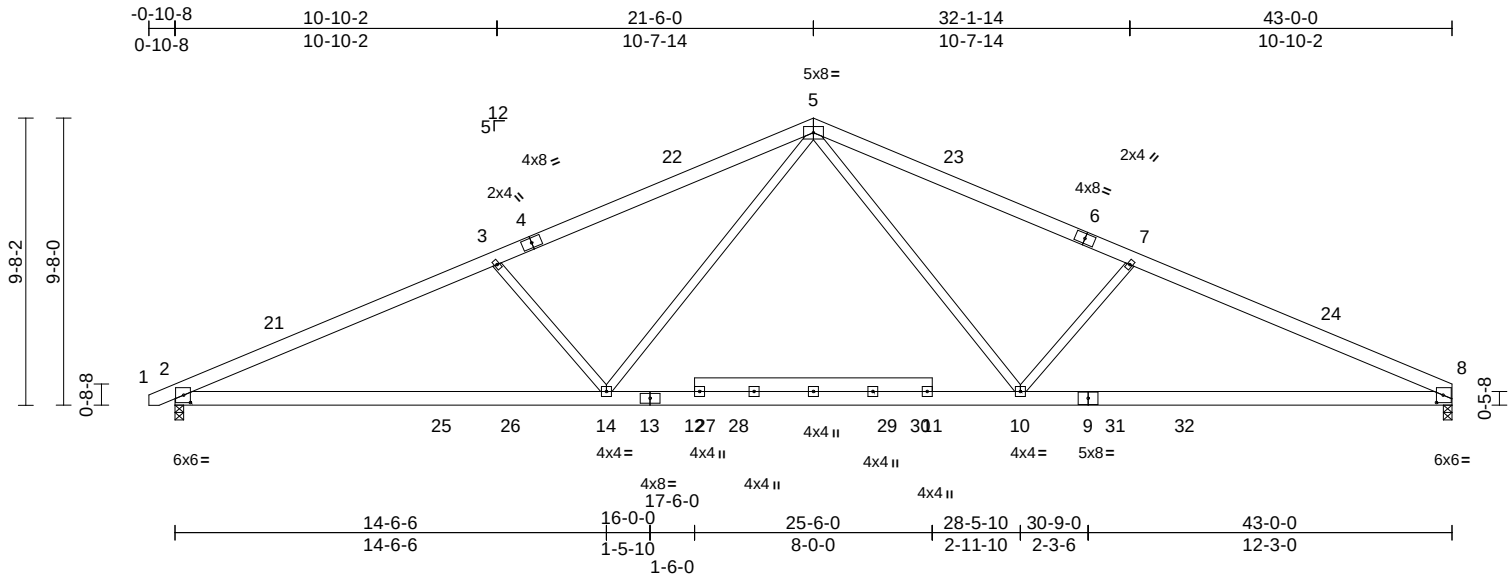


Scale = 1:77.6

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

| 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 | 0.39 | Vert(LL) | -0.26 | 10-17 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.89 | Vert(CT) | -0.50 | 10-14 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.42 | Horz(CT) | 0.10 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-AS | | Wind(LL) | 0.10 | 14-20 | >999 | 240 | Weight: 281 lb | FT = 25% |

**LUMBER**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Structural wood sheathing directly applied.

**REACTIONS** (size) 2=0-3-8, 8=0-3-8
Max Horiz 2=115 (LC 12)
Max Uplift 2=-18 (LC 12), 8=-9 (LC 13)
Max Grav 2=2052 (LC 2), 8=2016 (LC 2)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-4012/452, 3-5=-3661/406, 5-7=-3662/412, 7-8=-4013/459
BOT CHORD 2-14=-323/3625, 10-14=-102/2440, 8-10=-309/3626
WEBS 5-14=0/1416, 3-14=-670/353, 7-10=-671/353, 5-10=0/1418

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-8-7 to 3-8-6, Interior (1) 3-8-6 to 21-6-0, Exterior(2R) 21-6-0 to 25-10-13, Interior (1) 25-10-13 to 43-0-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 200.0lb AC unit load placed on the bottom chord, 21-6-0 from left end, supported at two points, 5-0-0 apart.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * 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.
6) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
7) One RT3A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 and 2. This connection is for uplift only and does not consider lateral forces.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard


May 2,2025



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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 19 Turlington Acres - Job Reference (optional) |
|---|---|---|---|---|---|
| J0425-1937 | A03 | Common | 1 | 1 | I73175048 |

Comtech, Inc, Fayetteville, NC - 28314,

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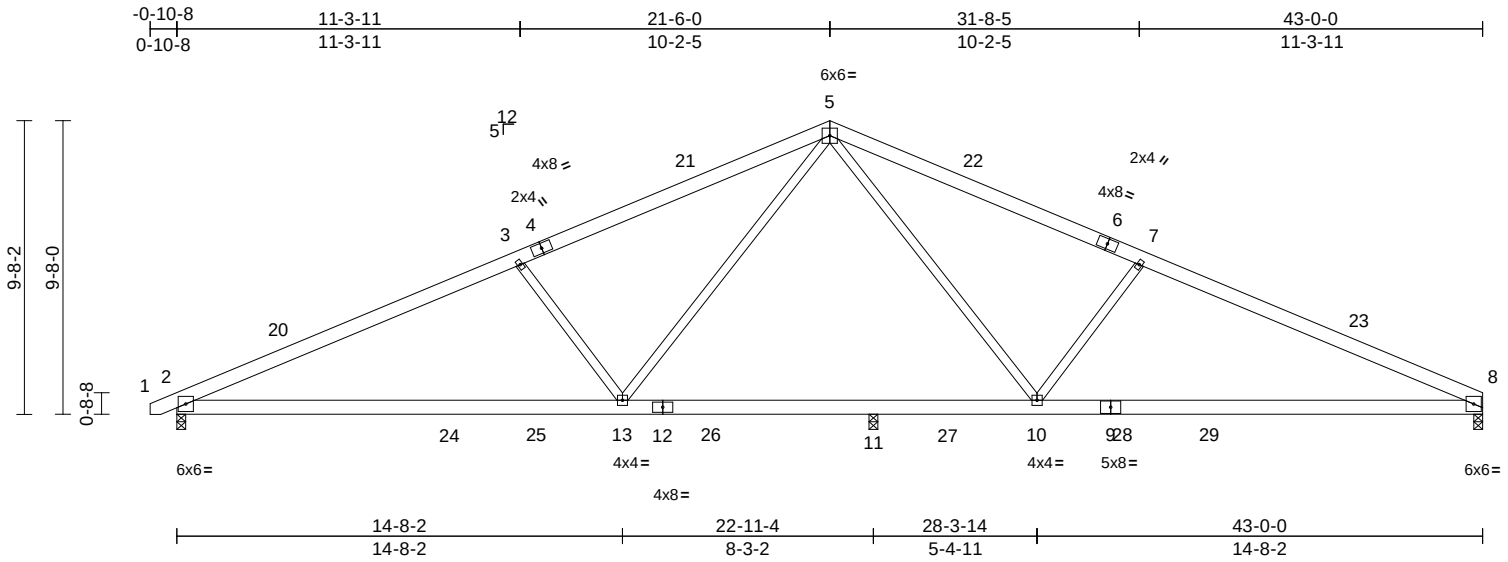


Scale = 1:75.9

| 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 | 0.42 | Vert(LL) | -0.36 | 10-19 | >678 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.82 | Vert(CT) | -0.68 | 10-19 | >354 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.42 | Horz(CT) | 0.08 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-AS | | Wind(LL) | 0.13 | 10-19 | >999 | 240 | Weight: 262 lb | FT = 25% |

**LUMBER**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Structural wood sheathing directly applied.

**REACTIONS** (size) 2=0-3-8, 8=0-3-8, 11=0-3-8
Max Horiz 2=115 (LC 12)
Max Uplift 2=-126 (LC 12), 8=-119 (LC 13)
Max Grav 2=1804 (LC 2), 8=1745 (LC 2), 11=344 (LC 2)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-3307/685, 3-5=-2994/660, 5-7=-2926/665, 7-8=-3241/691
BOT CHORD 2-13=-531/2998, 11-13=-257/1986, 10-11=-257/1986, 8-10=-515/2938
WEBS 3-13=-687/339, 5-13=-128/1177, 5-10=-125/1081, 7-10=-691/340

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-8-7 to 3-8-6, Interior (1) 3-8-6 to 21-6-0, Exterior(2R) 21-6-0 to 25-10-13, Interior (1) 25-10-13 to 43-0-0 zone;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) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
6) One RT3A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 8, and 11. This connection is for uplift only and does not consider lateral forces.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard


May 2,2025



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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 19 Turlington Acres<br>- I73175049<br>Job Reference (optional) |
|---|---|---|---|---|---|
| J0425-1937 | A04 | Roof Special | 4 | 1 | |

Comtech, Inc, Fayetteville, NC - 28314,

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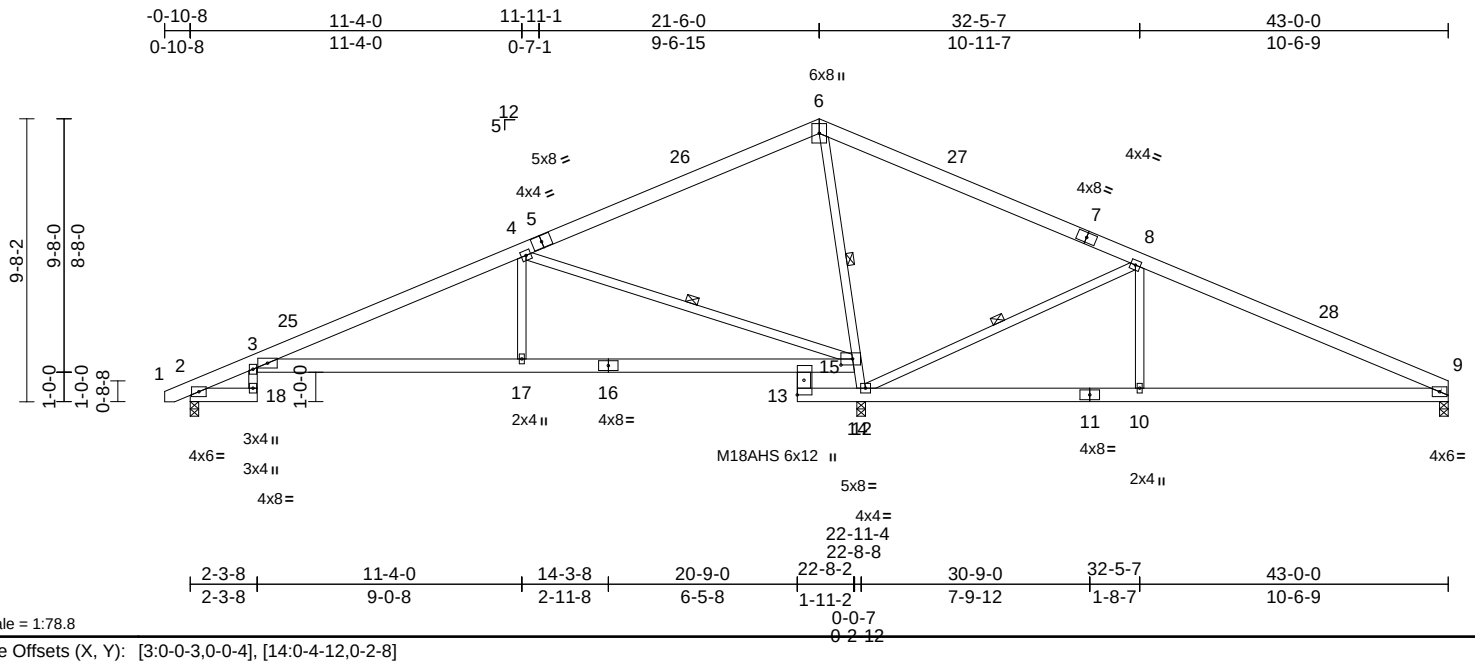


Scale = 1:78.8

Plate Offsets (X, Y): [3:0-0-3,0-0-4], [14:0-4-12,0-2-8]

| 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 | 0.59 | Vert(LL) | -0.21 | 3-17 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.44 | Vert(CT) | -0.40 | 3-17 | >687 | 240 | M18AHS | 186/179 |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.90 | Horz(CT) | 0.10 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-AS | | Wind(LL) | 0.19 | 3-17 | >999 | 240 | Weight: 276 lb | FT = 25% |

**LUMBER**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1 *Except* 18-3:2x4 SP No.2
WEBS 2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Structural wood sheathing directly applied.
WEBS 1 Row at midpt 6-12, 4-14, 8-12

**REACTIONS** (size) 2=0-3-8, 9=0-3-8, 12=0-3-8
Max Horiz 2=115 (LC 12)
Max Uplift 2=-62 (LC 12), 9=-147 (LC 13), 12=-122 (LC 12)
Max Grav 2=539 (LC 25), 9=510 (LC 26), 12=2666 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-294/118, 3-4=-407/196, 4-6=-45/1144, 6-8=-54/1398, 8-9=-514/649
BOT CHORD 2-18=-84/175, 3-18=-50/239, 13-15=-180/0, 12-13=-823/182, 10-12=-549/415, 9-10=-549/415, 3-17=-91/342, 15-17=-91/341, 14-15=-256/1137
WEBS 4-17=0/417, 6-14=-1480/295, 12-14=-1965/430, 8-10=0/453, 4-14=-1348/330, 8-12=-1249/349

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-8-7 to 3-8-6, Interior (1) 3-8-6 to 21-6-0, Exterior(2R) 21-6-0 to 25-10-13, Interior (1) 25-10-13 to 43-0-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * 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.
6) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
7) One RT3A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 12, and 9. This connection is for uplift only and does not consider lateral forces.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard


May 2,2025



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

| Job | Truss | Truss Type | Qty | Ply | Lot 19 Turlington Acres<br>- I73175050<br>Job Reference (optional) |
|---|---|---|---|---|---|
| J0425-1937 | A05 | Roof Special | 2 | 1 | |

Comtech, Inc, Fayetteville, NC - 28314,

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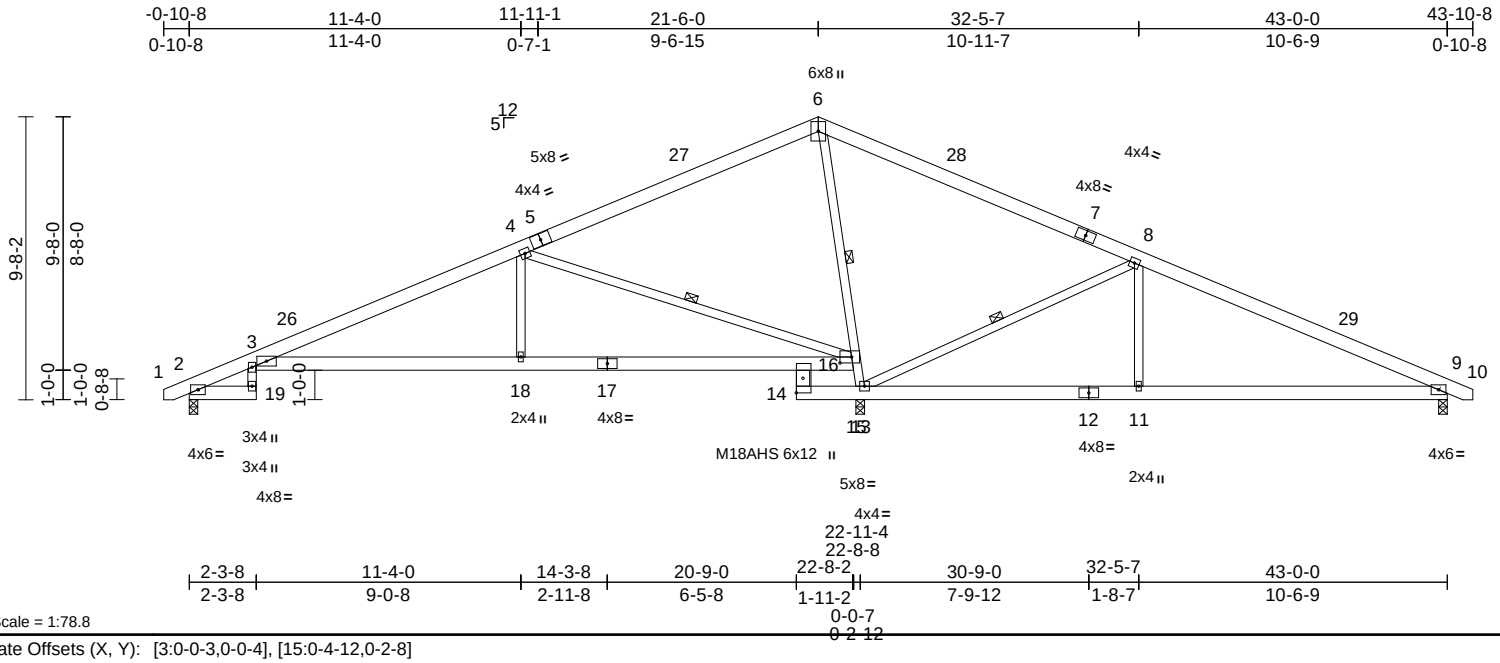


Scale = 1:78.8

Plate Offsets (X, Y): [3:0-0-3,0-0-4], [15:0-4-12,0-2-8]

| 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 | 0.59 | Vert(LL) | -0.21 | 3-18 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.44 | Vert(CT) | -0.40 | 3-18 | >687 | 240 | M18AHS | 186/179 |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.90 | Horz(CT) | 0.10 | 13 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-AS | | Wind(LL) | 0.19 | 3-18 | >999 | 240 | Weight: 278 lb | FT = 25% |

**LUMBER**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1 *Except* 19-3:2x4 SP No.2
WEBS 2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Structural wood sheathing directly applied.
WEBS 1 Row at midpt 6-13, 4-15, 8-13

**REACTIONS** (size) 2=0-3-8, 9=0-3-8, 13=0-3-8
Max Horiz 2=111 (LC 12)
Max Uplift 2=-63 (LC 12), 9=-159 (LC 13), 13=-119 (LC 12)
Max Grav 2=539 (LC 25), 9=553 (LC 26), 13=2665 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-294/125, 3-4=-407/210, 4-6=-41/1145, 6-8=-49/1398, 8-9=-511/650, 9-10=0/16
BOT CHORD 2-19=-82/175, 3-19=-49/239, 14-16=-180/0, 13-14=-823/184, 11-13=-550/412, 9-11=-550/412, 3-18=-90/341, 16-18=-90/341, 15-16=-253/1137
WEBS 4-18=0/417, 6-15=-1481/289, 13-15=-1965/416, 8-11=0/452, 4-15=-1348/328, 8-13=-1246/348

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-8-7 to 3-8-6, Interior (1) 3-8-6 to 21-6-0, Exterior(2R) 21-6-0 to 25-10-13, Interior (1) 25-10-13 to 43-8-7 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * 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.
6) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
7) One RT3A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 13, and 9. This connection is for uplift only and does not consider lateral forces.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard


May 2,2025



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

| Job | Truss | Truss Type | Qty | Ply | Lot 19 Turlington Acres<br>- |
|---|---|---|---|---|---|
| J0425-1937 | A06 | Common | 1 | 1 | I73175051<br>Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314,

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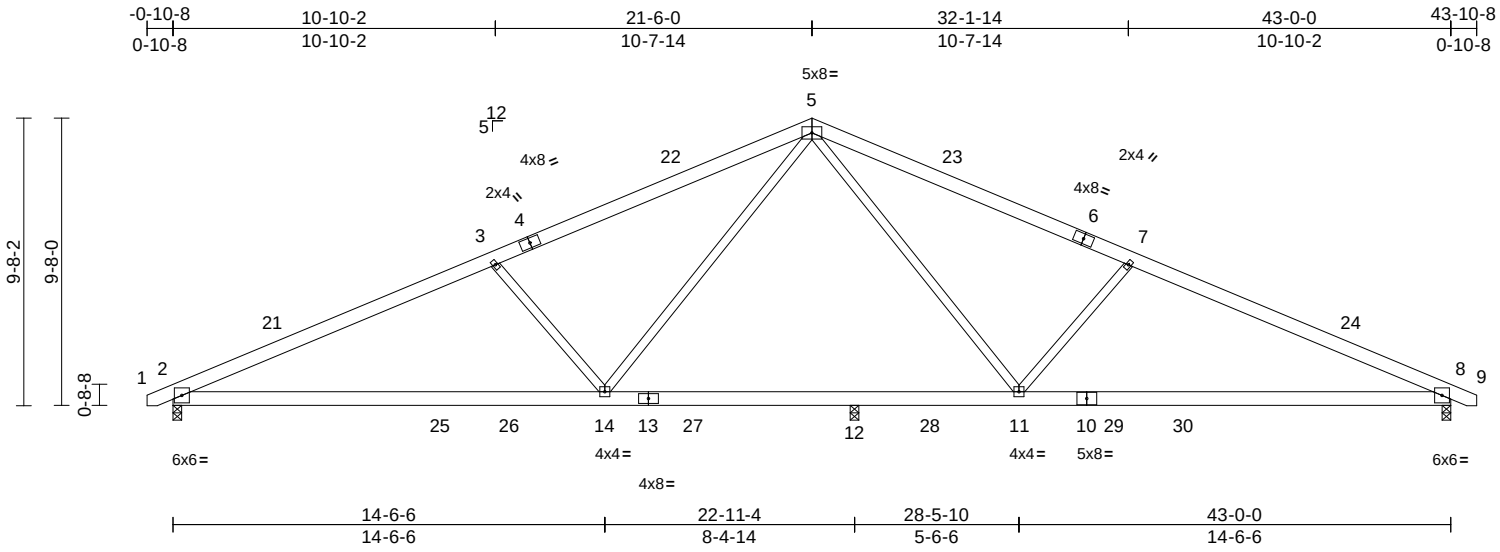


Scale = 1:77.5

| 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 | 0.41 | Vert(LL) | -0.33 | 11-20 | >723 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.80 | Vert(CT) | -0.64 | 11-20 | >374 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.43 | Horz(CT) | 0.08 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-AS | | Wind(LL) | 0.12 | 11-20 | >999 | 240 | Weight: 264 lb | FT = 25% |

**LUMBER**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Structural wood sheathing directly applied.

**REACTIONS** (size) 2=0-3-8, 8=0-3-8, 12=0-3-8
Max Horiz 2=-111 (LC 13)
Max Uplift 2=-128 (LC 12), 8=-131 (LC 13)
Max Grav 2=1787 (LC 2), 8=1763 (LC 2), 12=365 (LC 2)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-3299/699, 3-5=-2957/655, 5-7=-2882/654, 7-8=-3226/698, 8-9=0/16
BOT CHORD 2-14=-527/2994, 12-14=-241/1960, 11-12=-241/1960, 8-11=-522/2929
WEBS 5-14=-114/1146, 7-11=-700/342, 5-11=-111/1042, 3-14=-696/342

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-8-7 to 3-8-6, Interior (1) 3-8-6 to 21-6-0, Exterior(2R) 21-6-0 to 25-10-13, Interior (1) 25-10-13 to 43-8-7 zone;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) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
6) One RT3A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 8, and 12. This connection is for uplift only and does not consider lateral forces.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard


May 2,2025



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

| Job | Truss | Truss Type | Qty | Ply | Lot 19 Turlington Acres - Job Reference (optional) |
|---|---|---|---|---|---|
| J0425-1937 | A07 | Common | 6 | 1 | I73175052 |

Comtech, Inc, Fayetteville, NC - 28314,

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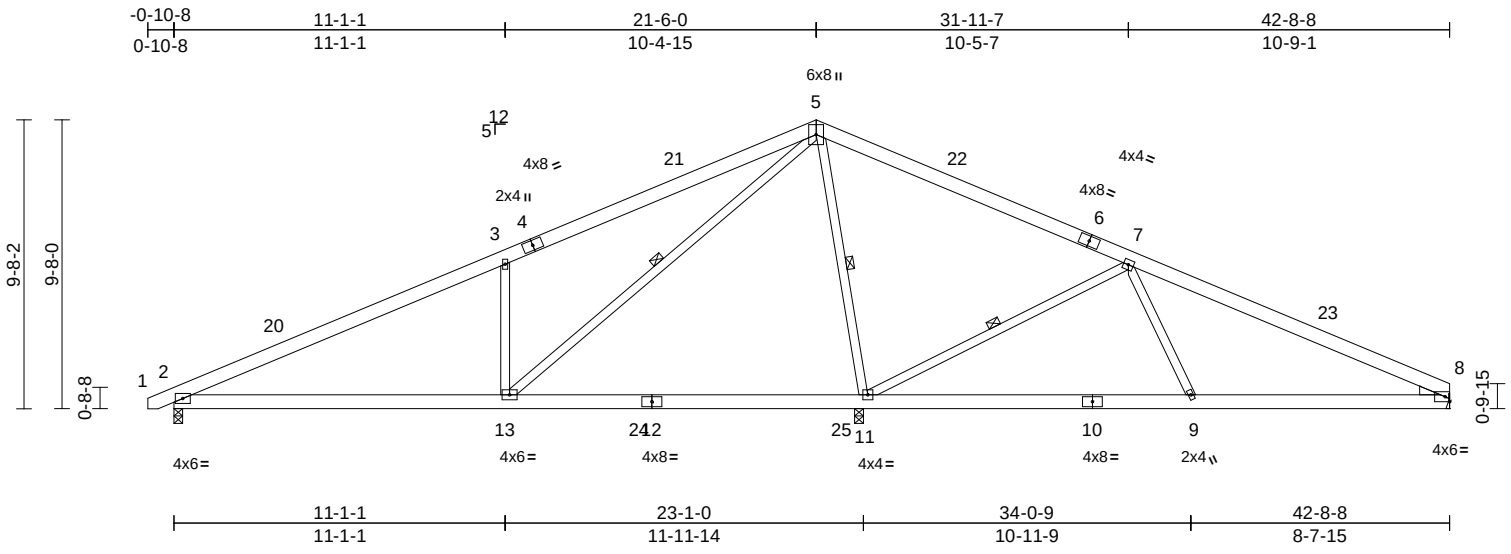


Scale = 1:77.1

| 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 | 0.40 | Vert(LL) | -0.17 | 11-13 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.44 | Vert(CT) | -0.25 | 11-13 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.52 | Horz(CT) | 0.01 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-AS | | Wind(LL) | 0.07 | 13-16 | >999 | 240 | Weight: 273 lb | FT = 25% |

**LUMBER**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
WEDGE Right: 2x4 SP No.3

**BRACING**
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Structural wood sheathing directly applied.
WEBS 1 Row at midpt 5-11, 7-11, 5-13

**REACTIONS** (size) 2=0-3-8, 8= Mechanical, 11=0-3-8
Max Horiz 2=117 (LC 12)
Max Uplift 2=-101 (LC 12), 8=-99 (LC 13), 11=-38 (LC 12)
Max Grav 2=869 (LC 27), 8=645 (LC 28), 11=2306 (LC 2)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-1193/286, 3-5=-1244/471, 5-7=0/578, 7-8=-888/216
BOT CHORD 2-13=-171/1044, 11-13=-218/122, 9-11=-131/620, 8-9=-130/722
WEBS 5-11=-1337/325, 7-11=-1054/349, 7-9=0/447, 3-13=-720/374, 5-13=-370/1633

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-8-7 to 3-8-6, Interior (1) 3-8-6 to 21-6-0, Exterior(2R) 21-6-0 to 25-10-13, Interior (1) 25-10-13 to 42-8-8 zone;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) Bearings are assumed to be: Joint 2 SP No.1 crushing capacity of 565 psi, Joint 11 SP No.1 crushing capacity of 565 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 99 lb uplift at joint 8.
8) One RT3A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 11. This connection is for uplift only and does not consider lateral forces.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard


May 2,2025



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

| Job | Truss | Truss Type | Qty | Ply | Lot 19 Turlington Acres<br>- I73175053<br>Job Reference (optional) |
|---|---|---|---|---|---|
| J0425-1937 | A08 | Common Supported Gable | 1 | 1 | |

Comtech, Inc, Fayetteville, NC - 28314,

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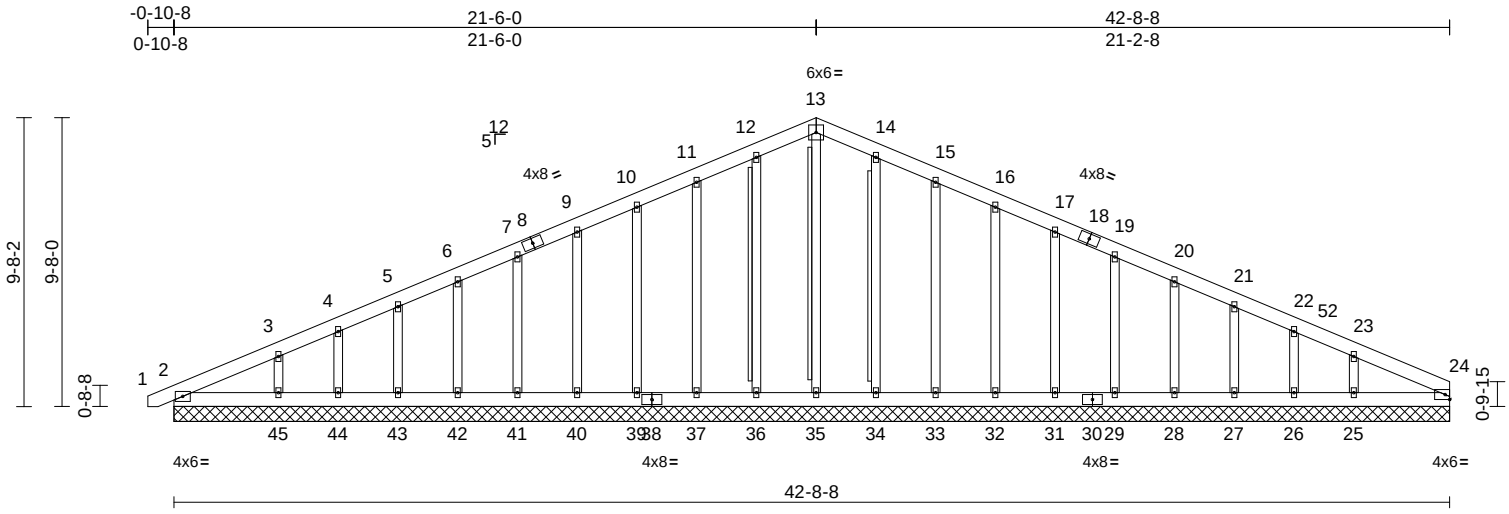


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| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.05 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.05 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.12 | Horz(CT) | 0.00 | 24 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-AS | | | | | | | Weight: 347 lb | FT = 25% |

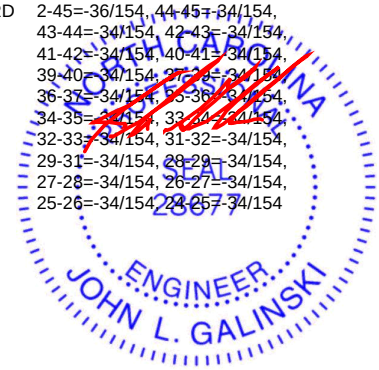
**LUMBER**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2 *Except* 0-0,0-0,0-0:2x4 SPF No.2(flat)

**BRACING**
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Structural wood sheathing directly applied.
WEBS T-Brace: 2x4 SPF No.2 - 13-35, 12-36, 14-34
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance.
Brace must cover 90% of web length.

**REACTIONS** (size) 2=42-8-8, 24=42-8-8, 25=42-8-8, 26=42-8-8, 27=42-8-8, 28=42-8-8, 29=42-8-8, 31=42-8-8, 32=42-8-8, 33=42-8-8, 34=42-8-8, 35=42-8-8, 36=42-8-8, 37=42-8-8, 39=42-8-8, 40=42-8-8, 41=42-8-8, 42=42-8-8, 43=42-8-8, 44=42-8-8, 45=42-8-8, 46=42-8-8, 49=42-8-8
Max Horiz 2=117 (LC 12), 46=117 (LC 12)
Max Uplift 2=-2 (LC 13), 25=-67 (LC 13), 26=-15 (LC 13), 27=-31 (LC 13), 28=-28 (LC 13), 29=-29 (LC 13), 31=-28 (LC 13), 32=-29 (LC 13), 33=-35 (LC 13), 34=-6 (LC 13), 36=-12 (LC 12), 37=-34 (LC 12), 39=-29 (LC 12), 40=-28 (LC 12), 41=-29 (LC 12), 42=-28 (LC 12), 43=-31 (LC 12), 44=-14 (LC 12), 45=-67 (LC 12), 46=-2 (LC 13)
Max Grav 2=176 (LC 1), 24=120 (LC 1), 25=256 (LC 26), 26=128 (LC 1), 27=167 (LC 26), 28=159 (LC 1), 29=160 (LC 26), 31=160 (LC 1), 32=160 (LC 1), 33=162 (LC 26), 34=160 (LC 26), 35=150 (LC 22), 36=160 (LC 25), 37=162 (LC 25), 39=160 (LC 1), 40=160 (LC 1), 41=160 (LC 25), 42=158 (LC 1), 43=168 (LC 25), 44=120 (LC 1), 45=271 (LC 25), 46=176 (LC 1), 49=120 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-141/55, 3-4=-106/53, 4-5=-89/66, 5-6=-76/84, 6-7=-63/121, 7-9=-70/167, 9-10=-87/214, 10-11=-103/261, 11-12=-121/311, 12-13=-132/343, 13-14=-132/343, 14-15=-121/311, 15-16=-103/261, 16-17=-87/214, 17-19=-70/167, 19-20=-54/121, 20-21=-51/74, 21-22=-54/26, 22-23=-70/7, 23-24=-122/39
BOT CHORD 2-45=-36/154, 44-45=-34/154, 43-44=-34/154, 42-43=-34/154, 41-42=-34/154, 40-41=-34/154, 39-40=-34/154, 37-39=-34/154, 36-37=-34/154, 35-36=-34/154, 34-35=-34/154, 33-34=-34/154, 32-33=-34/154, 31-32=-34/154, 29-31=-34/154, 28-29=-34/154, 27-28=-34/154, 26-27=-34/154, 25-26=-34/154, 24-25=-34/154
WEBS 13-35=-130/12, 12-36=-120/58, 11-37=-122/109, 10-39=-120/98, 9-40=-120/97, 7-41=-120/97, 6-42=-120/97, 5-43=-123/101, 4-44=-100/82, 3-45=-183/199, 14-34=-120/58, 15-33=-122/109, 16-32=-120/98, 17-31=-120/97, 19-29=-120/97, 20-28=-120/97, 21-27=-122/100, 22-26=-103/83, 23-25=-176/223

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3E) -0-8-7 to 3-6-0, Exterior(2N) 3-6-0 to 21-6-0, Corner(3R) 21-6-0 to 25-10-13, Exterior(2N) 25-10-13 to 42-8-8 zone;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.




May 2,2025

Continued on page 2



ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 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) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2 lb uplift at joint 2, 12 lb uplift at joint 36, 34 lb uplift at joint 37, 29 lb uplift at joint 39, 28 lb uplift at joint 40, 29 lb uplift at joint 41, 28 lb uplift at joint 42, 31 lb uplift at joint 43, 14 lb uplift at joint 44, 67 lb uplift at joint 45, 6 lb uplift at joint 34, 35 lb uplift at joint 33, 29 lb uplift at joint 32, 28 lb uplift at joint 31, 29 lb uplift at joint 29, 28 lb uplift at joint 28, 31 lb uplift at joint 27, 15 lb uplift at joint 26, 67 lb uplift at joint 25 and 2 lb uplift at joint 2.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
12) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Lot 19 Turlington Acres<br>- I73175054<br>Job Reference (optional) |
|---|---|---|---|---|---|
| J0425-1937 | B01 | Common Supported Gable | 1 | 1 | |

Comtech, Inc, Fayetteville, NC - 28314,

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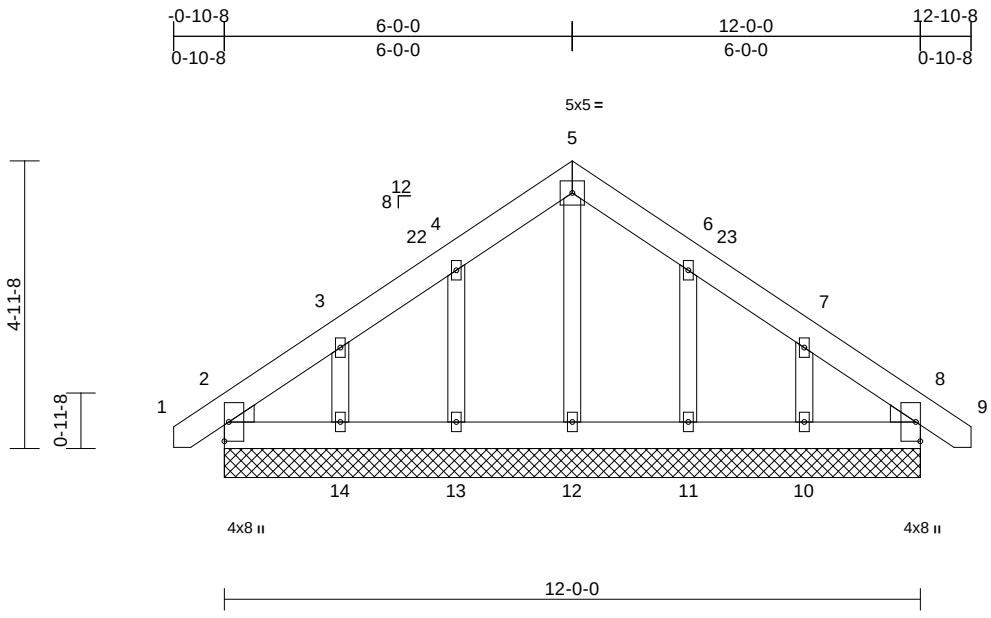


Scale = 1:39.7

| 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 | 0.03 | 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 | 0.04 | Horz(CT) | 0.00 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-AS | | | | | | | Weight: 87 lb | FT = 25% |

**LUMBER**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2
WEDGE Left: 2x4 SP No.2
Right: 2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Structural wood sheathing directly applied.

**REACTIONS** (size) 2=12-0-0, 8=12-0-0, 10=12-0-0, 11=12-0-0, 12=12-0-0, 13=12-0-0, 14=12-0-0, 15=12-0-0, 19=12-0-0
Max Horiz 2=108 (LC 11), 15=108 (LC 11)
Max Uplift 2=-20 (LC 8), 10=-72 (LC 13), 11=-34 (LC 13), 13=-34 (LC 12), 14=-76 (LC 12), 15=-20 (LC 8)
Max Grav 2=144 (LC 20), 8=143 (LC 1), 10=186 (LC 20), 11=169 (LC 20), 12=121 (LC 1), 13=170 (LC 19), 14=192 (LC 19), 15=144 (LC 20), 19=143 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-93/66, 3-4=-90/94, 4-5=-106/182, 5-6=-106/183, 6-7=-68/88, 7-8=-69/35, 8-9=0/24
BOT CHORD 2-14=-70/133, 13-14=-32/133, 12-13=-32/133, 11-12=-32/133, 10-11=-32/133, 8-10=-32/133
WEBS 5-12=-80/0, 4-13=-135/149, 3-14=-135/203, 6-11=-133/147, 7-10=-136/202

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3E) -0-8-12 to 3-8-1, Exterior(2N) 3-8-1 to 6-0-0, Corner(3R) 6-0-0 to 10-4-13, Exterior(2N) 10-4-13 to 12-8-12 zone;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 2-0-0 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) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 2, 34 lb uplift at joint 13, 76 lb uplift at joint 14, 34 lb uplift at joint 11, 72 lb uplift at joint 10 and 20 lb uplift at joint 2.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard


May 2,2025



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

| Job | Truss | Truss Type | Qty | Ply | Lot 19 Turlington Acres |
|---|---|---|---|---|---|
| J0425-1937 | B02 | Common Girder | 1 | 2 | - I73175055 Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314,

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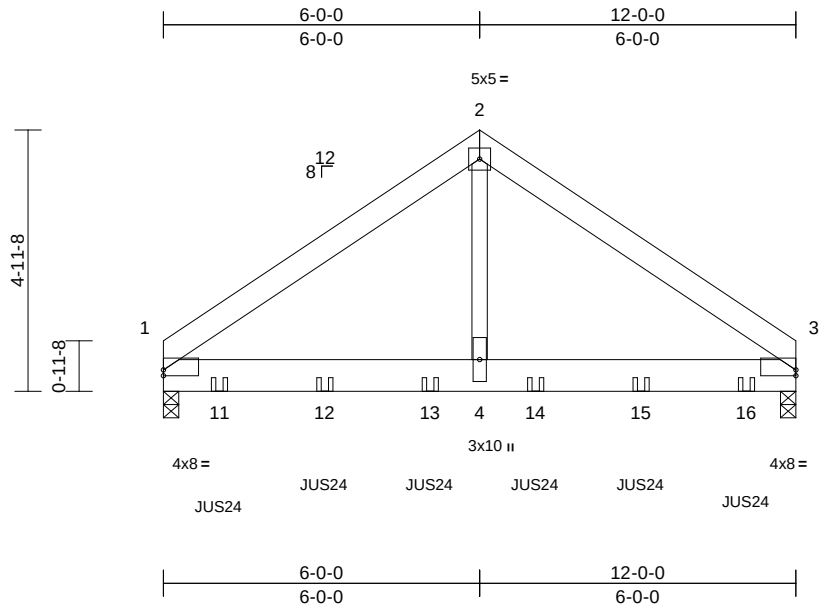


Scale = 1:43.7

Plate Offsets (X, Y): [1:Edge,0-1-5], [3:Edge,0-1-5]

| 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 | 0.10 | Vert(LL) | -0.02 | 4-7 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.36 | Vert(CT) | -0.03 | 4-7 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.26 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-MS | | Wind(LL) | 0.02 | 4-7 | >999 | 240 | Weight: 155 lb | FT = 25% |

**LUMBER**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x8 SP No.1
WEBS 2x4 SP No.2

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

**REACTIONS** (size) 1=0-3-8, 3=0-3-8
Max Horiz 1=-96 (LC 4)
Max Uplift 1=-354 (LC 8), 3=-361 (LC 9)
Max Grav 1=2336 (LC 1), 3=2375 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2359/388, 2-3=-2359/387
BOT CHORD 1-4=-266/1890, 3-4=-266/1890
WEBS 2-4=-309/2153

**NOTES**
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
8) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.
9) Use MiTek JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-0-12 from the left end to 11-0-12 to connect truss(es) to back face of bottom chord.
10) 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: 1-2=-60, 2-3=-60, 5-8=-20
Concentrated Loads (lb)
Vert: 11=-625 (B), 12=-625 (B), 13=-625 (B), 14=-625 (B), 15=-625 (B), 16=-626 (B)


May 2,2025



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

| Job | Truss | Truss Type | Qty | Ply | Lot 19 Turlington Acres<br>- |
|---|---|---|---|---|---|
| J0425-1937 | M01 | Monopitch Structural Gable | 1 | 1 | I73175056<br>Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314,

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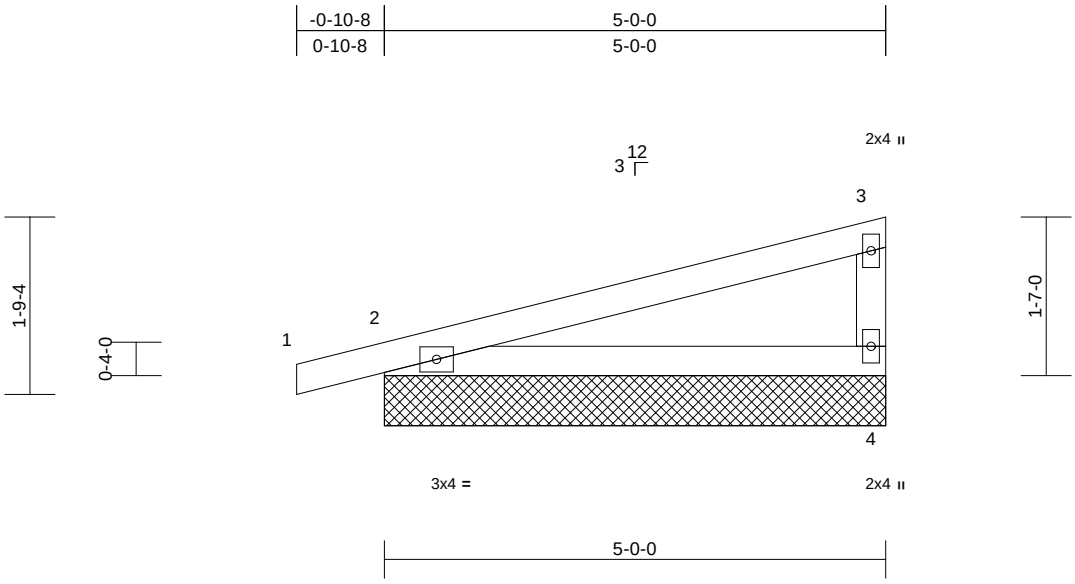


Scale = 1:23

| 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) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.25 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.00 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-AS | | | | | | | Weight: 18 lb | FT = 25% |

**LUMBER**
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.1

**BRACING**
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Structural wood sheathing directly applied.

**REACTIONS** (size) 2=5-0-0, 4=5-0-0, 5=5-0-0
Max Horiz 2=50 (LC 8), 5=50 (LC 8)
Max Uplift 2=-50 (LC 8), 4=-23 (LC 12), 5=-50 (LC 8)
Max Grav 2=251 (LC 1), 4=192 (LC 1), 5=251 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-133/86
BOT CHORD 2-4=-153/144
WEBS 3-4=-125/215

**NOTES**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3E) -0-10-8 to 3-6-5, Exterior(2N) 3-6-5 to 4-10-4 zone;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) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
8) One RT3A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard


May 2,2025



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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 19 Turlington Acres - Job Reference (optional) |
|---|---|---|---|---|---|
| J0425-1937 | M02 | Monopitch | 13 | 1 | I73175057 |

Comtech, Inc, Fayetteville, NC - 28314,

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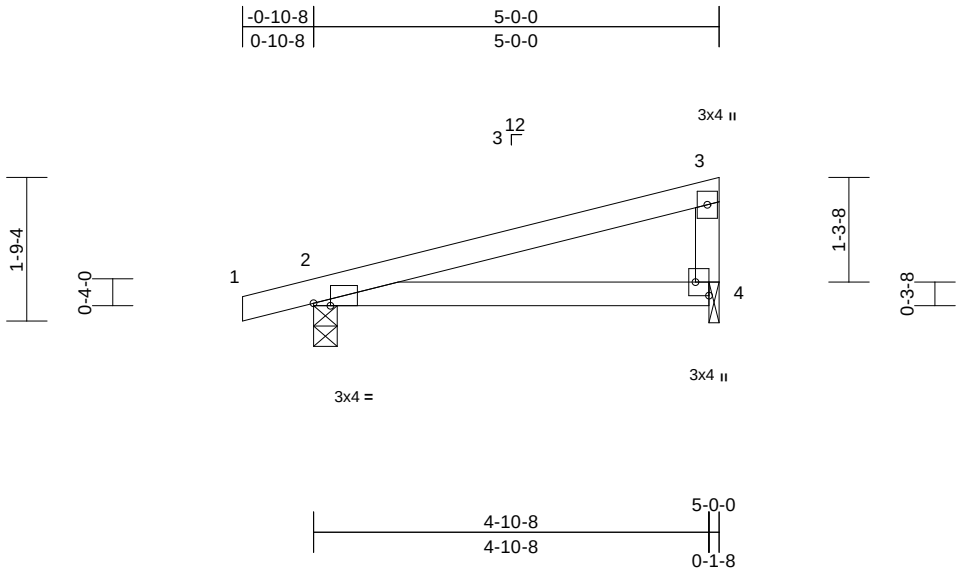


Scale = 1:28.4

Plate Offsets (X, Y): [2:0-2-8,Edge], [4:Edge,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 | 0.28 | Vert(LL) | -0.02 | 4-7 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.29 | Vert(CT) | -0.05 | 4-7 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-AS | | Wind(LL) | 0.08 | 4-7 | >690 | 240 | Weight: 18 lb | FT = 25% |

**LUMBER**
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.1

**BRACING**
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Structural wood sheathing directly applied.

**REACTIONS** (size) 2=0-3-8, 4=0-1-8
Max Horiz 2=50 (LC 8)
Max Uplift 2=-104 (LC 8), 4=-77 (LC 8)
Max Grav 2=251 (LC 1), 4=189 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-129/234, 3-4=-125/185
BOT CHORD 2-4=-260/114

**NOTES**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-10-8 to 3-6-5, Interior (1) 3-6-5 to 4-10-4 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
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) One RT3A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard


May 2,2025



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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 19 Turlington Acres<br>- |
|---|---|---|---|---|---|
| J0425-1937 | M03 | Jack-Closed | 6 | 1 | I73175058<br>Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314,

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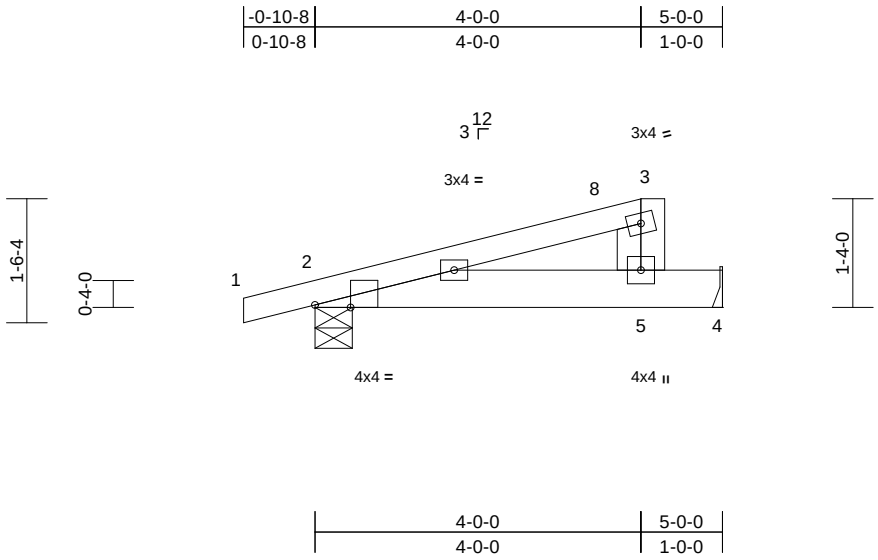


Scale = 1:28.3

Plate Offsets (X, Y): [2:0-5-4,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 | 0.18 | Vert(LL) | -0.03 | 5-7 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.48 | Vert(CT) | -0.06 | 5-7 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.01 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-AS | | Wind(LL) | 0.02 | 5-7 | >999 | 240 | Weight: 21 lb | FT = 25% |

**LUMBER**
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Structural wood sheathing directly applied.

**REACTIONS** (size) 2=0-5-8, 4= Mechanical
Max Horiz 2=44 (LC 8)
Max Uplift 2=-6 (LC 8)
Max Grav 2=355 (LC 1), 4=595 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-99/40
BOT CHORD 2-5=-22/19, 4-5=0/0
WEBS 3-5=-113/110

**NOTES**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-10-8 to 3-6-5, Interior (1) 3-6-5 to 4-1-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) Bearings are assumed to be: Joint 2 SP No.1 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) One RT3A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
7) 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.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 55 lb down and 50 lb up at 4-1-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) 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: 1-3=-60, 2-4=-20
Concentrated Loads (lb)
Vert: 5=-550 (F=-55)


May 2,2025



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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 19 Turlington Acres - Job Reference (optional) |
|---|---|---|---|---|---|
| J0425-1937 | M04 | Monopitch | 1 | 1 | I73175059 |

Comtech, Inc, Fayetteville, NC - 28314,

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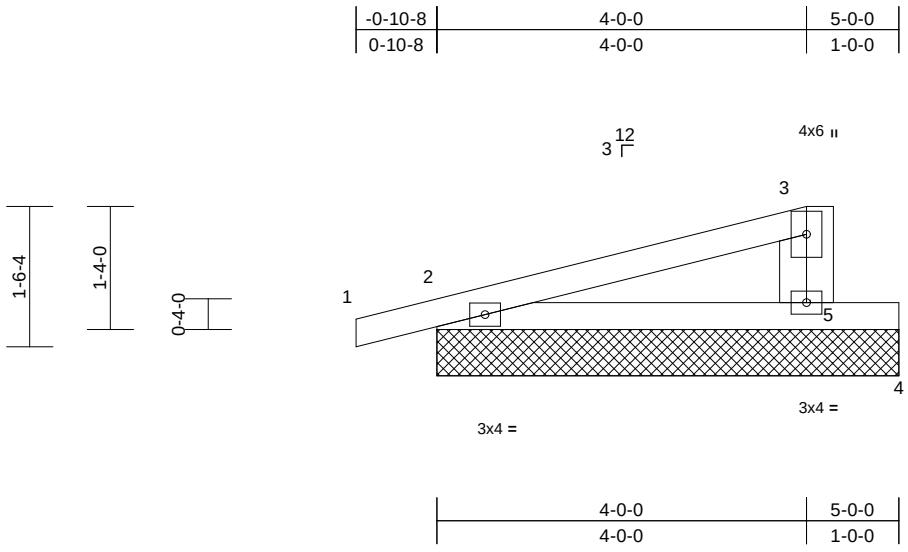


Scale = 1:24.9

| 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 | 0.13 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.15 | 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 | IRC2021/TPI2014 | Matrix-AS | | | | | | | Weight: 18 lb | FT = 25% |

**LUMBER**
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Structural wood sheathing directly applied.

**REACTIONS** (size) 2=5-0-0, 4=5-0-0, 5=5-0-0, 6=5-0-0
Max Horiz 2=42 (LC 8), 6=42 (LC 8)
Max Uplift 2=-49 (LC 8), 4=-48 (LC 1), 5=-11 (LC 12), 6=-49 (LC 8)
Max Grav 2=204 (LC 1), 4=6 (LC 12), 5=228 (LC 1), 6=204 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-92/51, 3-5=-88/153
BOT CHORD 2-5=-102/102, 4-5=0/0

**NOTES**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3E) -0-10-8 to 3-6-5, Exterior(2N) 3-6-5 to 3-10-4 zone;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) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
8) One RT3A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5, 2, and 4. This connection is for uplift only and does not consider lateral forces.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard


May 2,2025



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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 19 Turlington Acres<br>- |
|---|---|---|---|---|---|
| J0425-1937 | P01 | Monopitch Structural Gable | 2 | 1 | I73175060<br>Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314,

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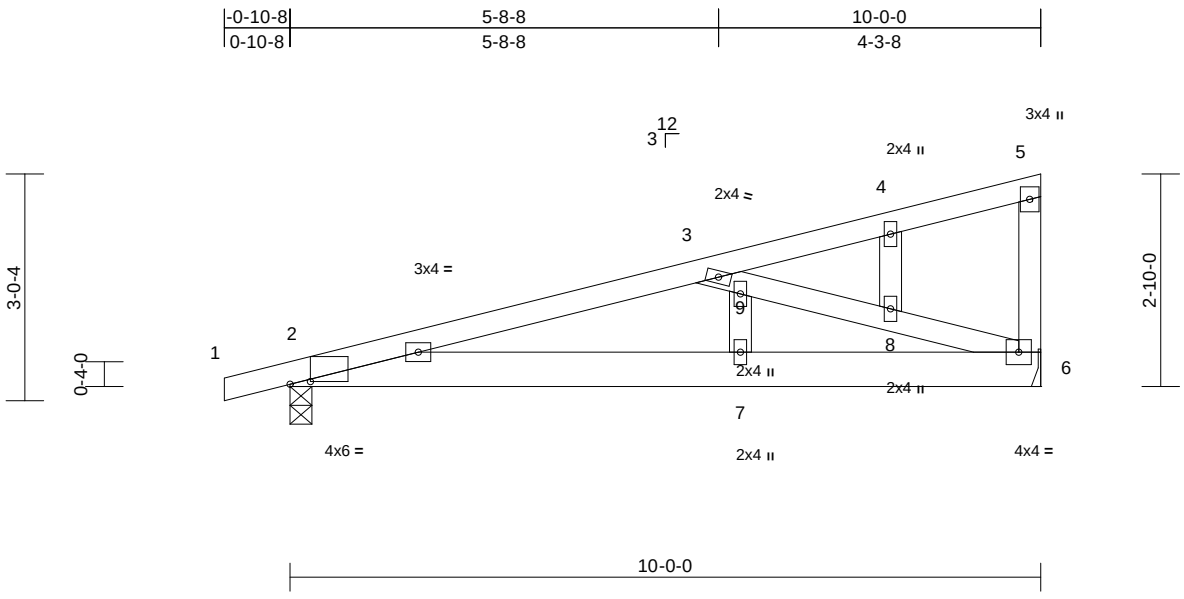


Scale = 1:30.7

Plate Offsets (X, Y): [2:0-3-4,0-0-7]

| 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 | 0.17 | Vert(LL) | -0.02 | 7-11 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.21 | Vert(CT) | -0.05 | 7-11 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.25 | Horz(CT) | 0.01 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-AS | | Wind(LL) | 0.04 | 7-11 | >999 | 240 | Weight: 53 lb | FT = 25% |

**LUMBER**
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Structural wood sheathing directly applied.

**REACTIONS** (lb/size) 2=453/0-3-8, 6=385/ Mechanical
Max Horiz 2=91 (LC 8)
Max Uplift 2=-71 (LC 8), 6=-51 (LC 12)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-785/568
BOT CHORD 2-7=-694/747, 6-7=-694/747
WEBS 3-9=-718/693, 8-9=-748/688, 6-8=-765/718

**NOTES**
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3E) -0-10-8 to 3-6-5, Exterior(2N) 3-6-5 to 9-10-4 zone;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 studs spaced at 2-0-0 oc.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * 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.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 71 lb uplift at joint 2 and 51 lb uplift at joint 6.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard


May 2,2025



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

| Job | Truss | Truss Type | Qty | Ply | Lot 19 Turlington Acres - Job Reference (optional) | I73175061 |
|---|---|---|---|---|---|---|
| J0425-1937 | P02 | Monopitch | 4 | 1 | | |

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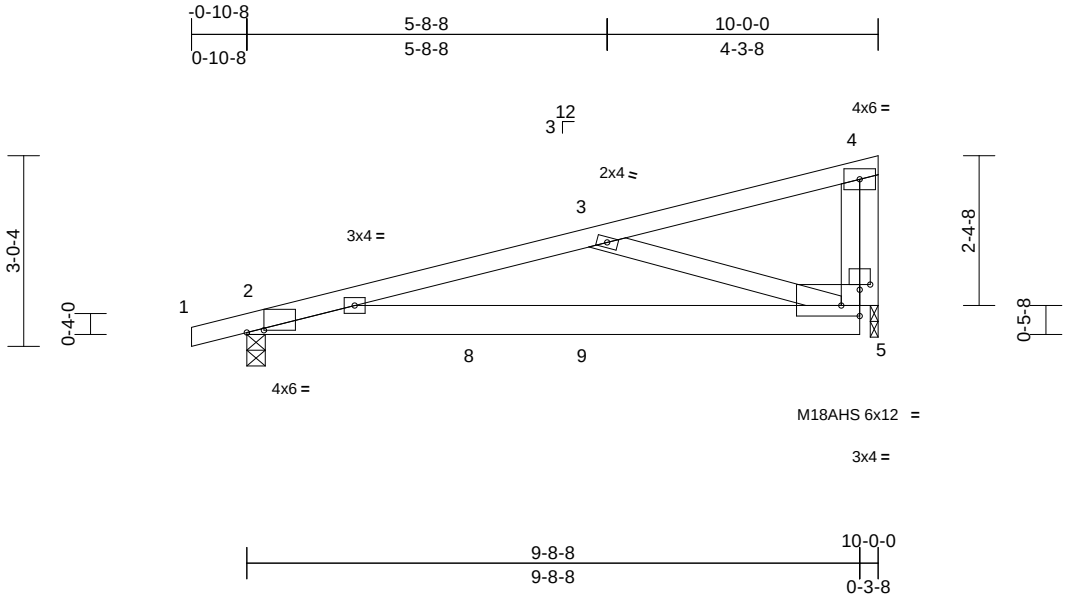


Scale = 1:36.5

Plate Offsets (X, Y): [2:0-3-4,0-0-7], [5:Edge,0-2-0], [5:0-2-0,0-1-0]

| 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 | 0.42 | Vert(LL) | 0.17 | 5-7 | >685 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.30 | Vert(CT) | -0.11 | 5-7 | >999 | 240 | M18AHS | 186/179 |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.18 | Horz(CT) | -0.01 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-AS | | | | | | | Weight: 52 lb | FT = 25% |

**LUMBER**

| | |
|---|---|
| TOP CHORD | 2x4 SP No.1 |
| BOT CHORD | 2x6 SP No.1 |
| WEBS | 2x4 SP No.2 |
| OTHERS | 2x4 SP No.2 |

**BRACING**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied, except end verticals. |
| BOT CHORD | Structural wood sheathing directly applied. |

**REACTIONS** (lb/size) 2=447/0-3-8, 5=379/0-1-8
Max Horiz 2=90 (LC 8)
Max Uplift 2=-177 (LC 8), 5=-155 (LC 8)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

| | |
|---|---|
| TOP CHORD | 2-3=-675/998 |
| BOT CHORD | 2-8=-1076/647, 8-9=-877/647, 5-9=-877/647 |
| WEBS | 3-5=-585/716 |

**NOTES**

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-10-8 to 3-6-5, Interior (1) 3-6-5 to 9-8-8 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) All plates are MT20 plates unless otherwise indicated.
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) 5 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) 5.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 177 lb uplift at joint 2 and 155 lb uplift at joint 5.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard


May 2,2025



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

| Job | Truss | Truss Type | Qty | Ply | Lot 19 Turlington Acres - Job Reference (optional) |
|---|---|---|---|---|---|
| J0425-1937 | V01 | Valley | 1 | 1 | I73175062 |

Comtech, Inc, Fayetteville, NC - 28314,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu May 01 12:22:10
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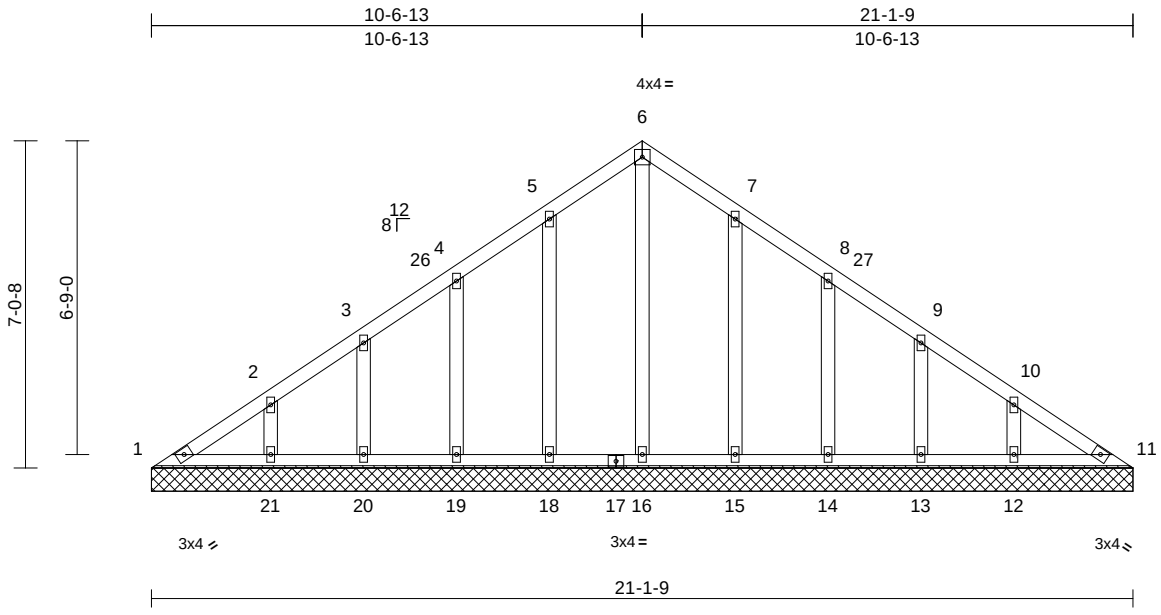


Scale = 1:49.6

| 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 | 0.05 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.10 | Horiz(TL) | 0.00 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-AS | | | | | | | Weight: 115 lb | FT = 25% |

**LUMBER**
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Structural wood sheathing directly applied.

**REACTIONS** (size) 1=21-1-9, 11=21-1-9, 12=21-1-9, 13=21-1-9, 14=21-1-9, 15=21-1-9, 16=21-1-9, 18=21-1-9, 19=21-1-9, 20=21-1-9, 21=21-1-9
Max Horiz 1=-165 (LC 8)
Max Uplift 1=-26 (LC 8), 12=-40 (LC 13), 13=-48 (LC 13), 14=-48 (LC 13), 15=-42 (LC 13), 18=-44 (LC 12), 19=-48 (LC 12), 20=-47 (LC 12), 21=-43 (LC 12)
Max Grav 1=109 (LC 20), 11=83 (LC 1), 12=219 (LC 20), 13=157 (LC 20), 14=175 (LC 20), 15=176 (LC 20), 16=173 (LC 22), 18=178 (LC 19), 19=174 (LC 19), 20=156 (LC 19), 21=223 (LC 19)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-152/144, 2-3=-111/114, 3-4=-87/98, 4-5=-74/117, 5-6=-109/171, 6-7=-109/166, 7-8=-70/109, 8-9=-38/48, 9-10=-53/58, 10-11=-106/85
BOT CHORD 1-21=-76/125, 20-21=-76/110, 19-20=-76/110, 18-19=-76/110, 16-18=-76/110, 15-16=-76/110, 14-15=-76/110, 13-14=-76/110, 12-13=-76/110, 11-12=-76/110
WEBS 6-16=-133/17, 5-18=-139/99, 4-19=-131/100, 3-20=-126/83, 2-21=-150/77, 7-15=-136/99, 8-14=-132/100, 9-13=-127/83, 10-12=-148/77

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-0-0 to 4-6-13, Interior (1) 4-6-13 to 10-6-13, Exterior(2R) 10-6-13 to 14-11-9, Interior (1) 14-11-9 to 21-1-9 zone;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 2-0-0 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) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 1, 44 lb uplift at joint 18, 48 lb uplift at joint 19, 47 lb uplift at joint 20, 43 lb uplift at joint 21, 42 lb uplift at joint 15, 48 lb uplift at joint 14, 48 lb uplift at joint 13 and 40 lb uplift at joint 12.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard


May 2,2025



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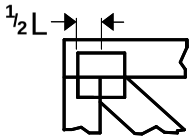
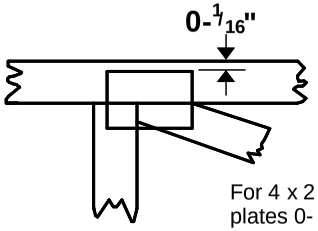
Edenton, NC 27932

# 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.

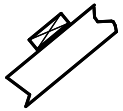
* Plate location details available in MiTek software or upon request.

## PLATE SIZE

4 x 4

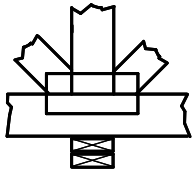
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

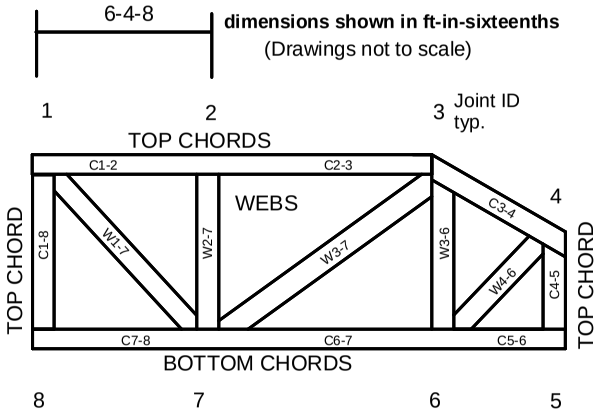


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

**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.



MiTek®

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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.