ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0325-1577
Lot 74 Ducks Landing

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: I73479963 thru I73479980

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

North Carolina COA: C-0844


May 15,2025

Gilbert, Eric

**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 74 Ducks Landing | |
|---|---|---|---|---|---|---|
| J0325-1577 | A1 | Attic | 1 | 1 | Job Reference (optional) | I73479963 |

Comtech, Inc, Fayetteville, NC - 28314,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Wed May 14 09:51:49 Page: 1
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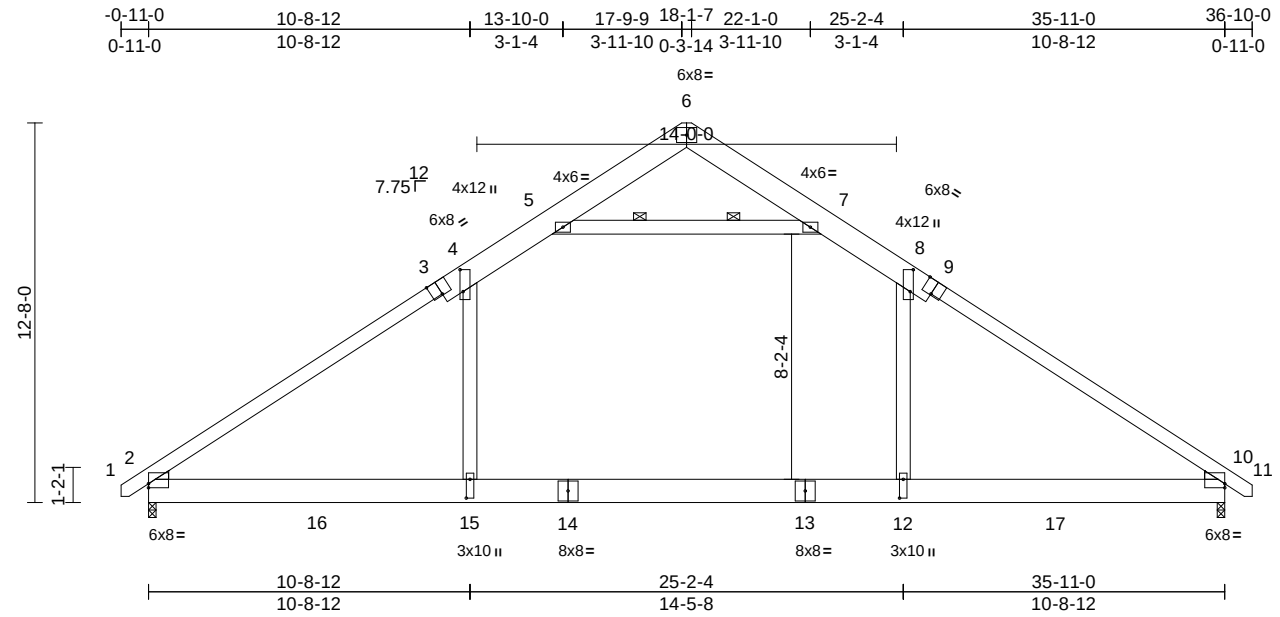


Scale = 1:76.9

Plate Offsets (X, Y): [2:Edge,0-1-10], [3:0-4-0,Edge], [4:0-8-12,0-1-4], [8:0-8-12,0-1-4], [9:0-4-0,Edge], [10:Edge,0-1-10], [12:0-7-8,0-1-8], [15:0-7-8,0-1-8]

| 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 | 0.99 | Vert(LL) | -0.32 | 12-15 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.88 | Vert(CT) | -0.54 | 12-15 | >791 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.18 | Horz(CT) | 0.05 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-S | | Wind(LL) | 0.28 | 2-15 | >999 | 240 | Weight: 331 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x10 SP No.1 *Except* 1-3,9-11:2x6 SP No.1
BOT CHORD 2x10 SP No.1 *Except* 14-13:2x10 SP 2400F 2.0E
WEBS 2x6 SP No.1
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

**BRACING**
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2 Rows at 1/3 pts 5-7

**REACTIONS** (size) 2=0-3-0, 10=0-3-0
Max Horiz 2=356 (LC 9)
Max Uplift 2=-57 (LC 12), 10=-57 (LC 13)
Max Grav 2=2413 (LC 20), 10=2413 (LC 21)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/0, 2-4=-3628/113, 4-5=-2605/277, 5-6=-50/773, 6-7=-50/774, 7-8=-2605/277, 8-10=-3628/113, 10-11=0/0
BOT CHORD 2-15=0/2853, 12-15=0/2853, 10-12=0/2853
WEBS 8-12=0/1320, 4-15=0/1320, 5-7=-3616/424

**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) exterior zone and C-C Corner(3E) -0-8-15 to 3-7-14, Exterior (2N) 3-7-14 to 18-0-0, Corner(3R) 18-0-0 to 22-8-5, Exterior(2N) 22-8-5 to 36-8-15 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) 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, with BCDL = 10.0psf.
7) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).8-12, 4-15
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-15
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 at joint(s) 2.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 57 lb uplift at joint 2 and 57 lb uplift at joint 10.
12) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard


May 15,2025



ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 74 Ducks Landing |
|---|---|---|---|---|---|
| J0325-1577 | A2 | Attic | 7 | 1 | I73479964 Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314,

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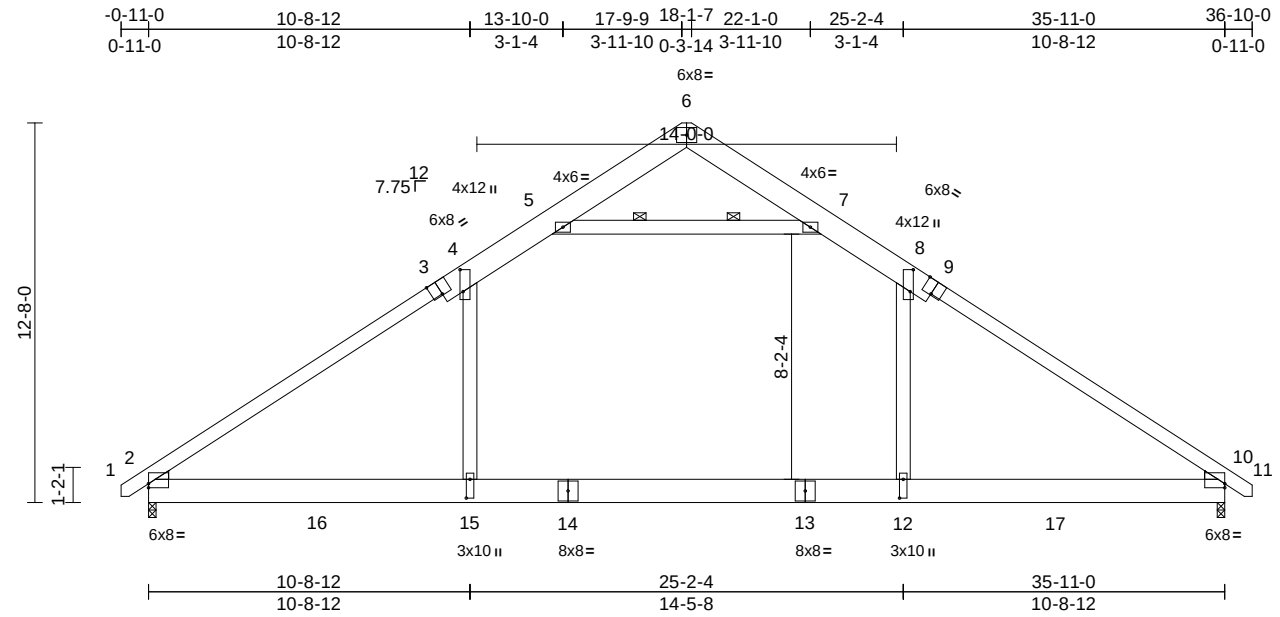


Scale = 1:76.9

Plate Offsets (X, Y): [2:Edge,0-1-10], [3:0-4-0,Edge], [4:0-8-12,0-1-4], [8:0-8-12,0-1-4], [9:0-4-0,Edge], [10:Edge,0-1-10], [12:0-7-8,0-1-8], [15:0-7-8,0-1-8]

| 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 | 0.99 | Vert(LL) | -0.32 | 12-15 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.88 | Vert(CT) | -0.54 | 12-15 | >791 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.18 | Horz(CT) | 0.05 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-S | | Wind(LL) | 0.23 | 2-15 | >999 | 240 | Weight: 331 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x10 SP No.1 *Except* 1-3,9-11:2x6 SP No.1
BOT CHORD 2x10 SP No.1 *Except* 14-13:2x10 SP 2400F 2.0E
WEBS 2x6 SP No.1
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

**BRACING**
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2 Rows at 1/3 pts 5-7

**REACTIONS** (size) 2=0-3-0, 10=0-3-0
Max Horiz 2=285 (LC 9)
Max Grav 2=2410 (LC 20), 10=2410 (LC 21)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/0, 2-4=-3621/0, 4-5=-2612/142, 5-6=0/770, 6-7=0/770, 7-8=-2611/142, 8-10=-3621/0, 10-11=0/0
BOT CHORD 2-15=0/2835, 12-15=0/2835, 10-12=0/2835
WEBS 8-12=0/1320, 4-15=0/1320, 5-7=-3635/186

**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) -0-8-15 to 3-7-14, Interior (1) 3-7-14 to 18-0-0, Exterior(2R) 18-0-0 to 22-8-5, Interior (1) 22-8-5 to 36-8-15 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) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).8-12, 4-15
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-15
7) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2.
9) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard


May 15,2025



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

| Job | Truss | Truss Type | Qty | Ply | Lot 74 Ducks Landing | |
|---|---|---|---|---|---|---|
| J0325-1577 | B1 | Common Supported Gable | 1 | 1 | Job Reference (optional) | I73479965 |

Comtech, Inc, Fayetteville, NC - 28314,

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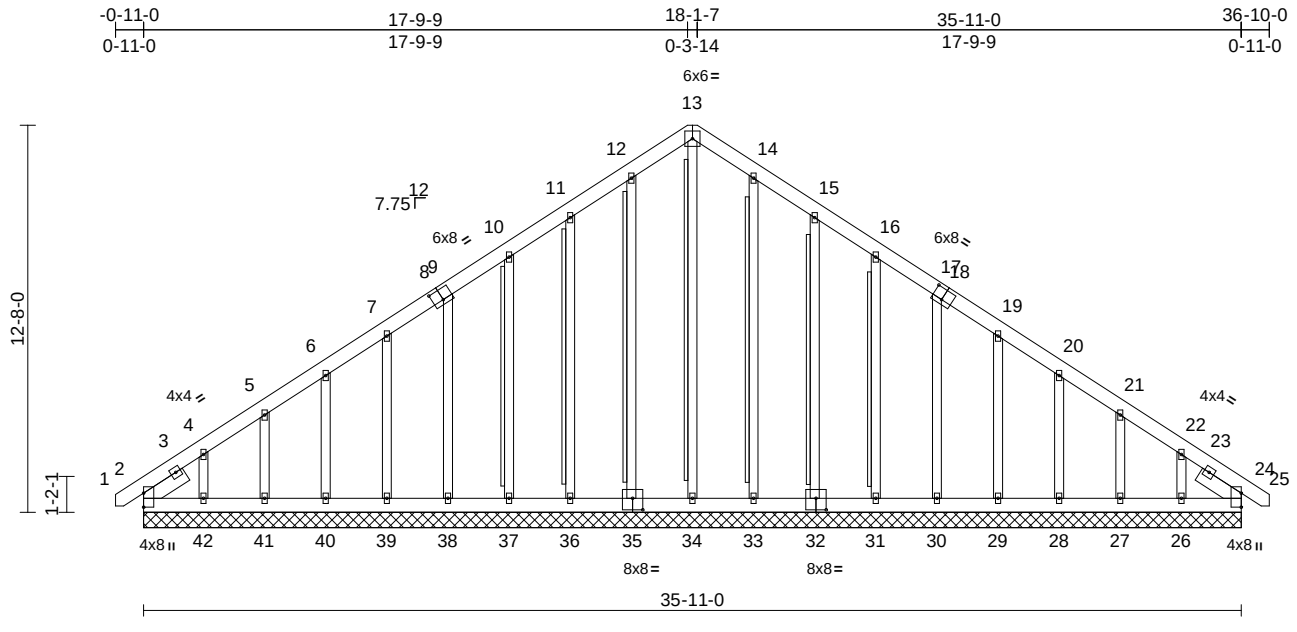


Scale = 1:75.4

Plate Offsets (X, Y): [8:0-4-0,0-4-4], [18:0-4-0,0-4-4], [32:0-4-0,0-4-8], [35:0-4-0,0-4-8]

| 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 | 0.05 | 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 | 0.18 | Horz(CT) | 0.01 | 24 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-S | | | | | | | Weight: 358 lb | FT = 20% |

**LUMBER**

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2 *Except* 0-0,0-0,0-0,0-0,0-0,0-0,0-0:2x4 SPF No.2 (flat)
SLIDER Left 2x6 SP No.1 -- 1-7-2, Right 2x6 SP No.1 -- 1-7-2

**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 T-Brace: 2x4 SPF No.2 - 13-34, 12-35, 11-36, 10-37, 14-33, 15-32, 16-31
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=35-11-0, 24=35-11-0, 26=35-11-0, 27=35-11-0, 28=35-11-0, 29=35-11-0, 30=35-11-0, 31=35-11-0, 32=35-11-0, 33=35-11-0, 34=35-11-0, 35=35-11-0, 36=35-11-0, 37=35-11-0, 38=35-11-0, 39=35-11-0, 40=35-11-0, 41=35-11-0, 42=35-11-0
Max Horiz 2=-366 (LC 8)
Max Uplift 2=-151 (LC 10), 24=-48 (LC 11), 26=-199 (LC 13), 27=-73 (LC 13), 28=-86 (LC 13), 29=-84 (LC 13), 30=-84 (LC 13), 31=-87 (LC 13), 32=-101 (LC 13), 33=-31 (LC 13), 35=-45 (LC 12), 36=-97 (LC 12), 37=-86 (LC 12), 38=-84 (LC 12), 39=-84 (LC 12), 40=-87 (LC 12), 41=-70 (LC 12), 42=-227 (LC 12)
Max Grav 2=274 (LC 9), 24=217 (LC 23), 26=214 (LC 21), 27=172 (LC 21), 28=177 (LC 21), 29=176 (LC 21), 30=176 (LC 21), 31=176 (LC 21), 32=181 (LC 21), 33=167 (LC 21), 34=245 (LC 13), 35=180 (LC 20), 36=178 (LC 20), 37=175 (LC 20), 38=176 (LC 20), 39=176 (LC 20), 40=177 (LC 20), 41=169 (LC 20), 42=245 (LC 20)

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

TOP CHORD 1-2=-10/0, 2-4=-429/306, 4-5=-278/234, 5-6=-242/212, 6-7=-209/187, 7-9=-189/182, 9-10=-169/209, 10-11=-150/250, 11-12=-188/298, 12-13=-207/320, 13-14=-207/320, 14-15=-188/281, 15-16=-143/205, 16-17=-103/136, 17-19=-89/87, 19-20=-104/66, 20-21=-130/92, 21-22=-198/117, 22-24=-335/168, 24-25=-10/0
BOT CHORD 2-42=-132/278, 41-42=-132/278, 40-41=-132/278, 39-40=-132/278, 38-39=-132/278, 37-38=-132/278, 36-37=-132/278, 34-36=-132/278, 33-34=-132/278, 31-33=-132/278, 30-31=-132/278, 29-30=-132/278, 28-29=-132/278, 27-28=-132/278, 26-27=-132/278, 24-26=-132/278
WEBS 13-34=-221/92, 12-35=-140/69, 11-36=-137/122, 10-37=-136/110, 9-38=-136/108, 7-39=-136/109, 6-40=-136/109, 5-41=-132/99, 4-42=-190/230, 14-33=-126/56, 15-32=-141/125, 16-31=-136/111, 17-30=-136/108, 19-29=-136/109, 20-28=-136/109, 21-27=-135/101, 22-26=-163/205

**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) exterior zone and C-C Corner(3E) -0-8-15 to 3-7-14, Exterior (2N) 3-7-14 to 18-0-0, Corner(3R) 18-0-0 to 22-4-13, Exterior(2N) 22-4-13 to 36-8-15 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60


May 15,2025

Continued on page 2



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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 151 lb uplift at joint 2, 48 lb uplift at joint 24, 45 lb uplift at joint 35, 97 lb uplift at joint 36, 86 lb uplift at joint 37, 84 lb uplift at joint 38, 84 lb uplift at joint 39, 87 lb uplift at joint 40, 70 lb uplift at joint 41, 227 lb uplift at joint 42, 31 lb uplift at joint 33, 101 lb uplift at joint 32, 87 lb uplift at joint 31, 84 lb uplift at joint 30, 84 lb uplift at joint 29, 86 lb uplift at joint 28, 73 lb uplift at joint 27 and 199 lb uplift at joint 26.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
12) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
13) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard


May 15,2025




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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 74 Ducks Landing | |
|---|---|---|---|---|---|---|
| J0325-1577 | B2 | Common | 4 | 1 | Job Reference (optional) | I73479966 |

Comtech, Inc, Fayetteville, NC - 28314,

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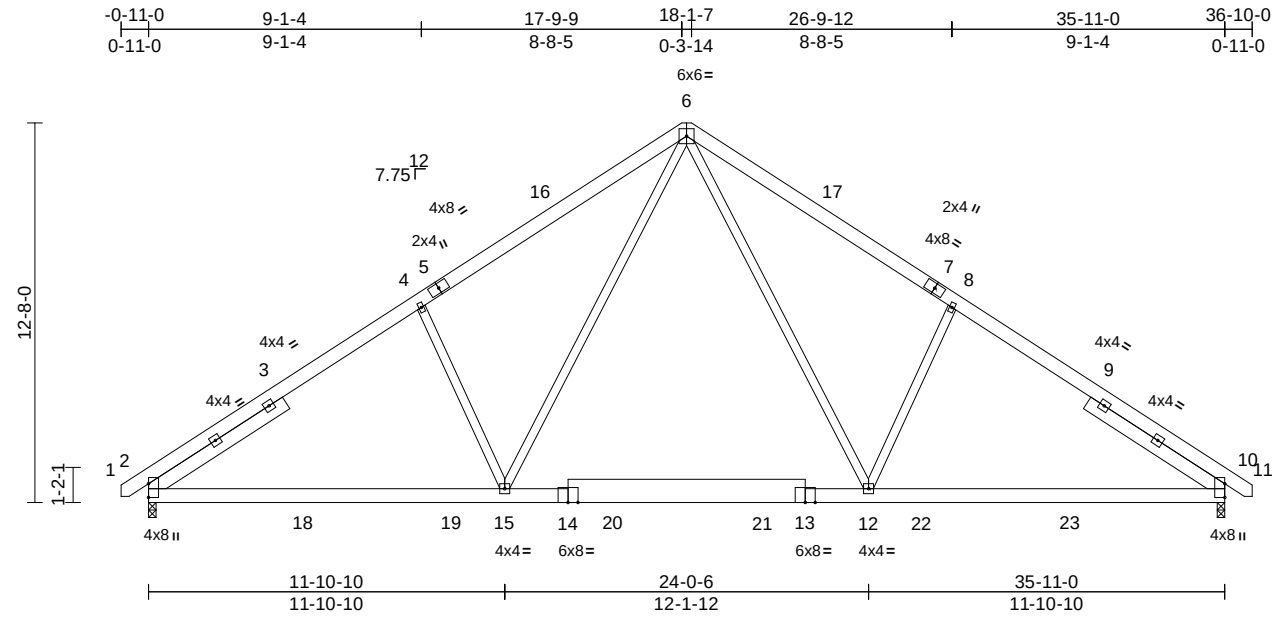


Scale = 1:76.9

| 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 | 0.39 | Vert(LL) | -0.18 | 10-12 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.71 | Vert(CT) | -0.29 | 2-15 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.37 | Horz(CT) | 0.05 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-S | | Wind(LL) | 0.03 | 2-15 | >999 | 240 | Weight: 287 lb | FT = 20% |

**LUMBER**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.1 |
| BOT CHORD | 2x6 SP No.1 *Except* 14-13:2x10 SP No.1 |
| WEBS | 2x4 SP No.2 |
| SLIDER | Left 2x6 SP No.1 -- 5-4-15, Right 2x6 SP No.1 -- 5-4-15 |

**BRACING**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 4-7-8 oc purlins. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |

**REACTIONS** (size) 2=0-3-0, 10=0-3-0
Max Horiz 2=-294 (LC 8)
Max Grav 2=1882 (LC 20), 10=1883 (LC 21)

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

| | |
|---|---|
| TOP CHORD | 1-2=-10/0, 2-4=-2506/236, 4-6=-2344/346, 6-8=-2345/345, 8-10=-2507/235, 10-11=-10/0 |
| BOT CHORD | 2-15=-74/2157, 12-15=0/1454, 10-12=-59/1953 |
| WEBS | 4-15=-441/351, 6-15=-75/1182, 6-12=-73/1184, 8-12=-441/351 |

**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) -0-8-15 to 3-7-14, Interior (1) 3-7-14 to 18-0-0, Exterior(2R) 18-0-0 to 22-4-13, Interior (1) 22-4-13 to 36-8-15 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, 18-0-0 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) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard


May 15,2025



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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 74 Ducks Landing |
|---|---|---|---|---|---|
| J0325-1577 | B3 | Attic | 5 | 1 | I73479967 Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314,

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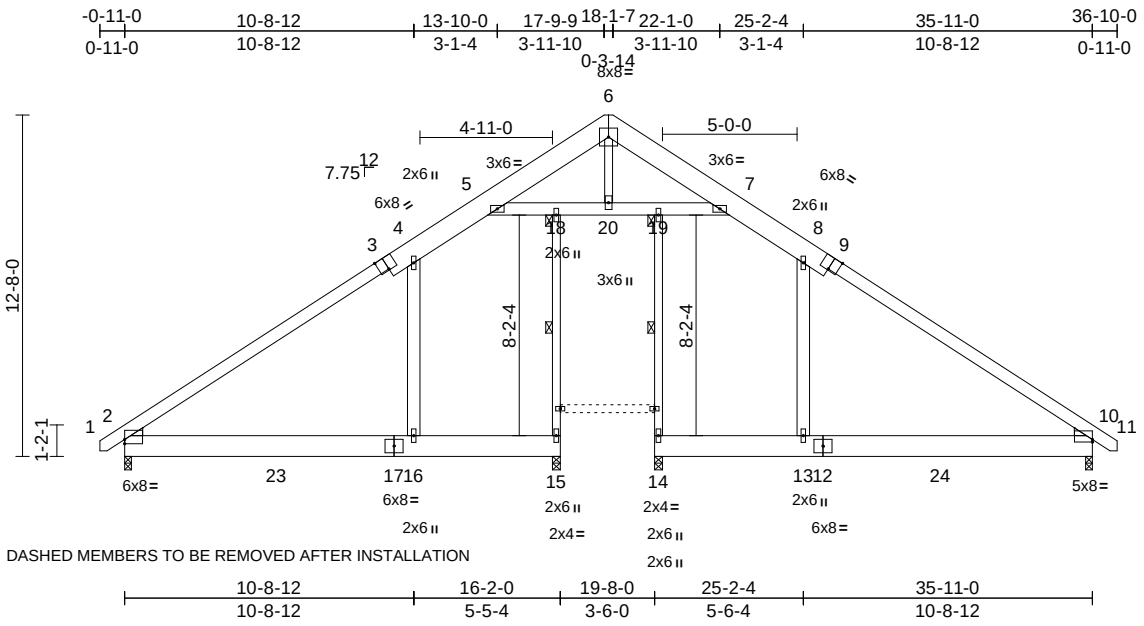


Scale = 1:85.5

Plate Offsets (X, Y): [2:Edge,0-1-14], [3:0-4-0,Edge], [9:0-4-0,Edge], [10:Edge,0-1-2]

| 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 | 0.88 | Vert(LL) | -0.22 | 2-16 | >870 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.48 | Vert(CT) | -0.35 | 2-16 | >544 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.45 | Horz(CT) | 0.16 | 14 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-S | | Wind(LL) | 0.15 | 2-16 | >999 | 240 | Weight: 351 lb | FT = 20% |

**LUMBER**

| | |
|---|---|
| TOP CHORD | 2x10 SP No.1 *Except* 1-3,9-11:2x6 SP No.1 |
| BOT CHORD | 2x10 SP No.1 |
| WEBS | 2x6 SP No.1 *Except* 15-18,14-19:2x4 SP No.1, 6-20:2x4 SP No.2 |
| OTHERS | 2x4 SP No.2 |
| WEDGE | Left: 2x4 SP No.3<br>Right: 2x4 SP No.3 |

**BRACING**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 2-2-0 oc purlins. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS | 1 Row at midpt 15-18, 14-19 |
| JOINTS | 1 Brace at Jt(s): 18, 19 |

**REACTIONS** (size) 2=0-3-0, 10=0-3-0, 14=0-3-8, 15=0-3-8
Max Horiz 2=-286 (LC 8)
Max Uplift 2=-99 (LC 13), 10=-138 (LC 13)
Max Grav 2=619 (LC 21), 10=672 (LC 21), 14=1844 (LC 21), 15=2035 (LC 20)

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

| | |
|---|---|
| TOP CHORD | 1-2=0/0, 2-4=-401/364, 4-5=-66/652, 5-6=0/2239, 6-7=0/2226, 7-8=0/581, 8-10=-225/223, 10-11=0/0 |
| BOT CHORD | 2-16=0/0, 15-16=0/0, 13-14=0/0, 10-13=0/0 |
| WEBS | 4-16=-13/584, 8-13=0/560, 5-18=-2042/392, 18-20=-2034/392, 19-20=-2034/392, 7-19=-2046/392, 15-18=-1557/0, 14-19=-1424/0, 6-20=-1810/0 |

**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) -0-8-15 to 3-7-14, Interior (1) 3-7-14 to 18-0-0, Exterior(2R) 18-0-0 to 22-8-5, Interior (1) 22-8-5 to 36-8-15 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x6 MT20 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, with BCDL = 10.0psf.
6) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-18, 18-20, 19-20, 7-19; Wall dead load (5.0psf) on member(s).4-16, 8-13, 15-18, 14-19
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 15-16, 13-14
8) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 99 lb uplift at joint 2 and 138 lb uplift at joint 10.
10) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard


May 15,2025



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

| Job | Truss | Truss Type | Qty | Ply | Lot 74 Ducks Landing | |
|---|---|---|---|---|---|---|
| J0325-1577 | C1 | ATTIC | 1 | 1 | Job Reference (optional) | I73479968 |

Comtech, Inc, Fayetteville, NC - 28314,

Run: 8.63 E Aug 30 2023 Print: 8.630 E Aug 30 2023 MiTek Industries, Inc. Thu May 15 14:26:15 Page: 1

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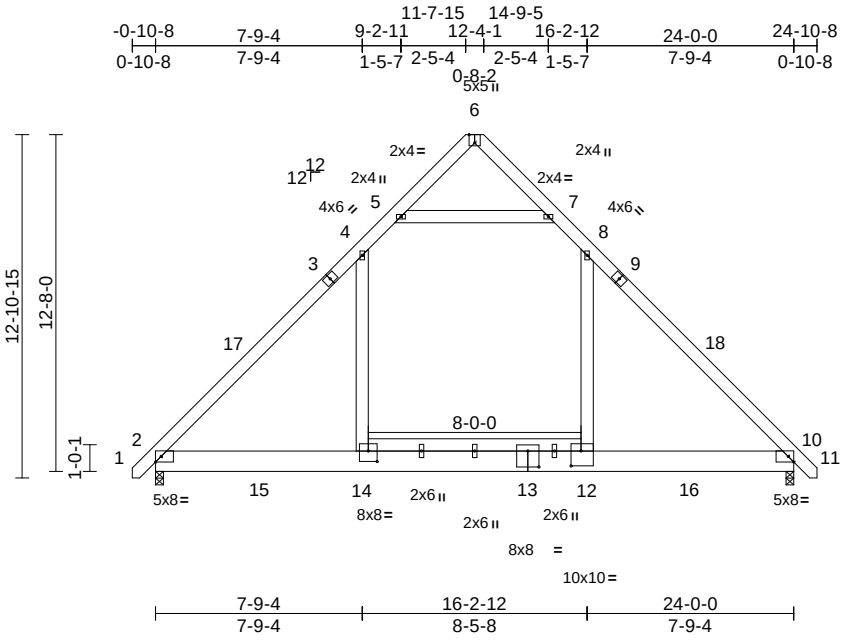


Scale = 1:86.7

Plate Offsets (X, Y): [6:0-3-11,Edge], [10:0-2-8,Edge], [12:0-4-8,0-6-12], [13:0-5-0,0-7-4], [14:0-4-0,0-4-12]

| 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 | 0.57 | Vert(LL) | -0.08 | 12-14 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.36 | Vert(CT) | -0.14 | 12-14 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.11 | Horz(CT) | 0.01 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-S | | Wind(LL) | 0.10 | 2-14 | >999 | 240 | Weight: 248 lb | FT = 20% |

**LUMBER**

TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP No.1
WEBS 2x6 SP No.1

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 5-4-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 2=1251/0-3-8, 10=1251/0-3-8
Max Horiz 2=-377 (LC 10)
Max Grav 2=1571 (LC 20), 10=1571 (LC 21)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-17=-1962/28, 3-17=-1751/33, 3-4=-1713/66, 4-5=-1040/209, 7-8=-1040/209, 8-9=-1712/66, 9-18=-1751/32, 10-18=-1962/28
BOT CHORD 2-15=0/1263, 14-15=0/1263, 13-14=0/1263, 12-13=0/1263, 12-16=0/1263, 10-16=0/1263
WEBS 5-7=-1357/370, 4-14=-32/831, 8-12=-31/912

**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) exterior zone and C-C Corner(3E) -0-8-14 to 3-7-15, Exterior (2N) 3-7-15 to 12-0-0, Corner(3R) 12-0-0 to 16-2-12, Exterior(2N) 16-2-12 to 24-8-14 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) N/A
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, with BCDL = 10.0psf.
7) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-14, 8-12
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
9) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard


May 15,2025



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

| Job | Truss | Truss Type | Qty | Ply | Lot 74 Ducks Landing | |
|---|---|---|---|---|---|---|
| J0325-1577 | C2 | ATTIC | 3 | 1 | Job Reference (optional) | I73479969 |

Comtech, Inc, Fayetteville, NC - 28314,

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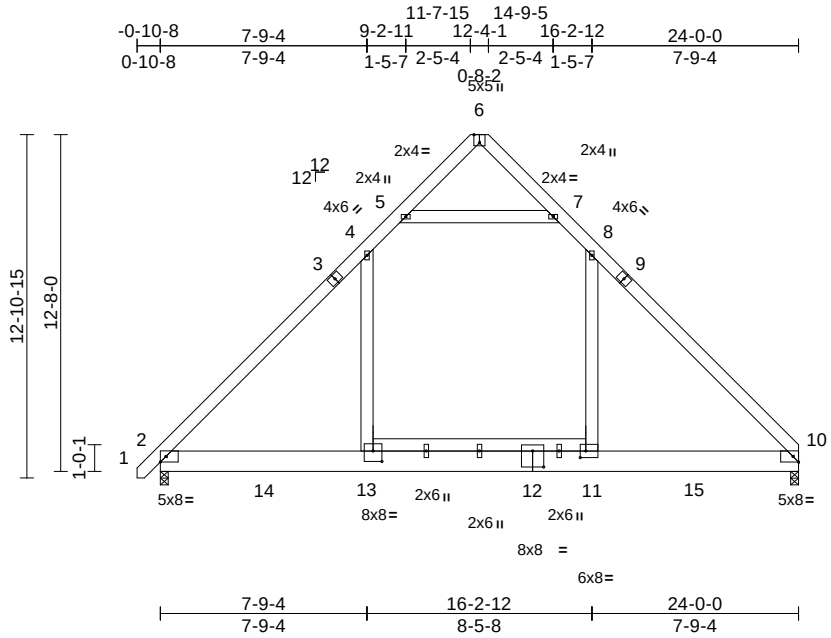


Scale = 1:86.7

Plate Offsets (X, Y): [6:0-3-11,Edge], [10:0-2-8,Edge], [11:0-2-8,0-3-0], [12:0-5-0,0-7-4], [13:0-4-0,0-4-12]

| 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 | 0.59 | Vert(LL) | -0.08 | 11-13 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.36 | Vert(CT) | -0.14 | 11-13 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.11 | Horz(CT) | 0.01 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-S | | Wind(LL) | 0.07 | 2-13 | >999 | 240 | Weight: 245 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP No.1
WEBS 2x6 SP No.1

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 5-1-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 2=1252/0-3-8, 10=1197/0-3-8
Max Horiz 2=298 (LC 9)
Max Grav 2=1577 (LC 20), 10=1530 (LC 20)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1948/0, 3-4=-1698/0, 4-5=-1038/143, 7-8=-1045/151, 8-9=-1683/0, 9-10=-1932/0
BOT CHORD 2-14=0/1233, 13-14=0/1233, 12-13=0/1233, 11-12=0/1233, 11-15=0/1233, 10-15=0/1233
WEBS 5-7=-1380/249, 4-13=0/815, 8-11=0/787

**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) -0-8-14 to 3-7-15, Interior (1) 3-7-15 to 12-0-0, Exterior(2R) 12-0-0 to 16-2-12, Interior (1) 16-2-12 to 23-10-4 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) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-13, 8-11
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
7) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard


May 15,2025



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

| Job | Truss | Truss Type | Qty | Ply | Lot 74 Ducks Landing | |
|---|---|---|---|---|---|---|
| J0325-1577 | G1 | Common Supported Gable | 1 | 1 | Job Reference (optional) | I73479970 |

Comtech, Inc, Fayetteville, NC - 28314,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Wed May 14 09:51:51 Page: 1
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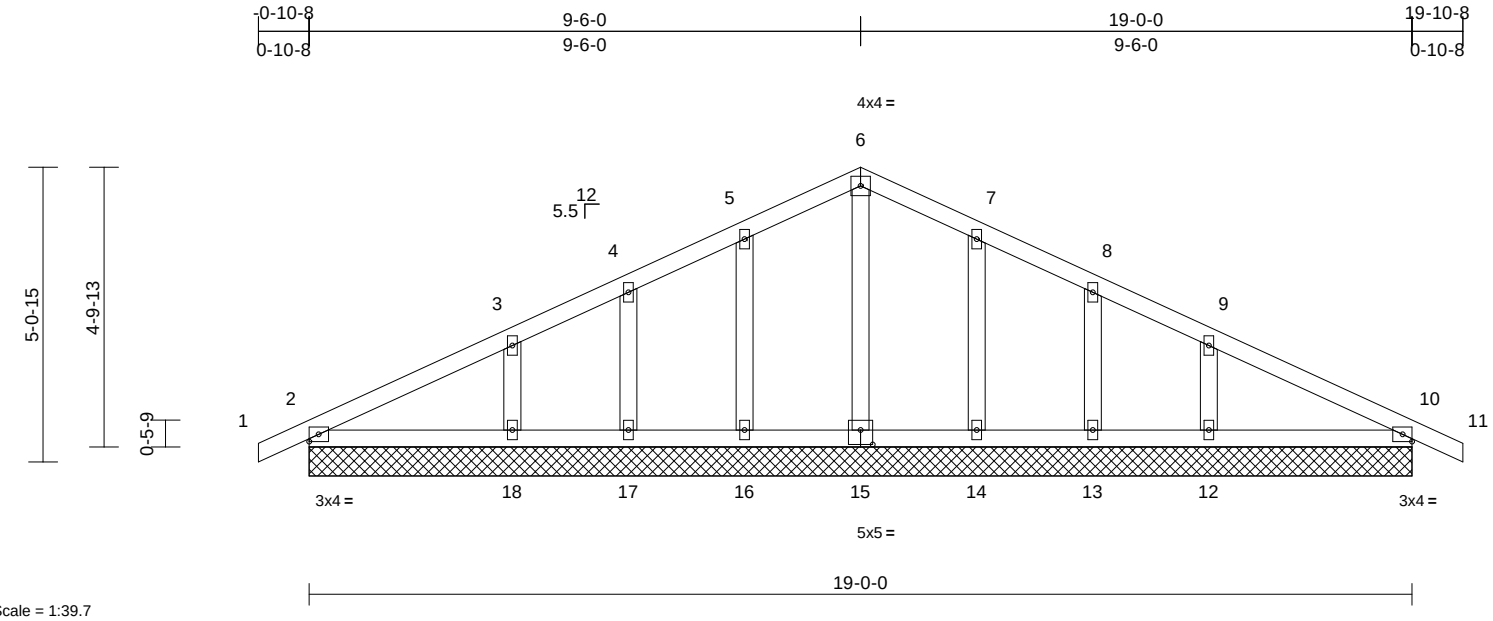


Scale = 1:39.7

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

| 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 | 0.09 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.06 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.04 | Horz(CT) | 0.00 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-S | | | | | | | Weight: 91 lb | FT = 20% |

**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 or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=19-0-0, 10=19-0-0, 12=19-0-0, 13=19-0-0, 14=19-0-0, 15=19-0-0, 16=19-0-0, 17=19-0-0, 18=19-0-0
Max Horiz 2=-57 (LC 13)
Max Uplift 2=-14 (LC 8), 10=-12 (LC 13), 12=-55 (LC 13), 13=-23 (LC 13), 14=-34 (LC 13), 16=-35 (LC 12), 17=-22 (LC 12), 18=-56 (LC 12)
Max Grav 2=181 (LC 1), 10=181 (LC 1), 12=272 (LC 26), 13=115 (LC 1), 14=180 (LC 26), 15=135 (LC 1), 16=180 (LC 25), 17=115 (LC 1), 18=272 (LC 25)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/14, 2-3=-78/56, 3-4=-46/87, 4-5=-47/133, 5-6=-68/192, 6-7=-68/193, 7-8=-47/132, 8-9=-46/92, 9-10=-60/42, 10-11=0/14
BOT CHORD 2-18=-23/110, 17-18=-23/110, 16-17=-23/110, 14-16=-23/110, 13-14=-23/110, 12-13=-23/110, 10-12=-23/110
WEBS 6-15=-97/0, 5-16=-135/121, 4-17=-91/86, 3-18=-194/229, 7-14=-135/120, 8-13=-91/86, 9-12=-194/228

**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) -0-10-8 to 3-6-0, Exterior(2N) 3-6-0 to 9-6-0, Corner(3R) 9-6-0 to 13-10-13, Exterior(2N) 13-10-13 to 19-10-8 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.
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 14 lb uplift at joint 2, 35 lb uplift at joint 16, 22 lb uplift at joint 17, 56 lb uplift at joint 18, 34 lb uplift at joint 14, 23 lb uplift at joint 13, 55 lb uplift at joint 12 and 12 lb uplift at joint 10.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

**LOAD CASE(S)** Standard


May 15,2025



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

| Job | Truss | Truss Type | Qty | Ply | Lot 74 Ducks Landing | |
|---|---|---|---|---|---|---|
| J0325-1577 | G2 | Common | 6 | 1 | Job Reference (optional) | I73479971 |

Comtech, Inc, Fayetteville, NC - 28314,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Wed May 14 09:51:51 Page: 1
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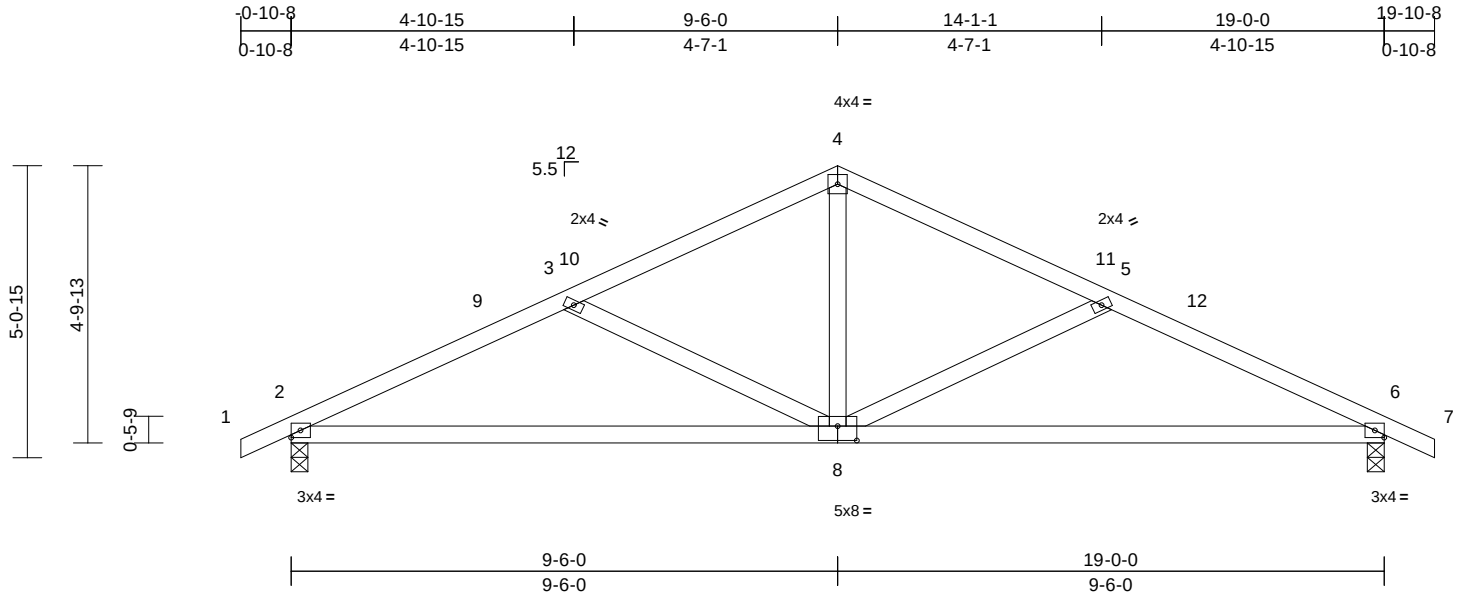


Scale = 1:40

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

| 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 | 0.22 | Vert(LL) | -0.14 | 2-8 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.68 | Vert(CT) | -0.30 | 2-8 | >742 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.16 | Horz(CT) | 0.03 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-S | | Wind(LL) | 0.03 | 2-8 | >999 | 240 | Weight: 84 lb | FT = 20% |

**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 or 5-3-9 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=-57 (LC 13)
Max Uplift 2=-60 (LC 12), 6=-60 (LC 13)
Max Grav 2=810 (LC 1), 6=810 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/14, 2-3=-1281/466, 3-4=-972/334, 4-5=-972/334, 5-6=-1281/466, 6-7=0/14
BOT CHORD 2-6=-348/1110
WEBS 4-8=-95/536, 5-8=-339/268, 3-8=-339/268

**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) -0-10-8 to 3-6-5, Interior (1) 3-6-5 to 9-6-0, Exterior(2R) 9-6-0 to 13-10-13, Interior (1) 13-10-13 to 19-10-8 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.
5) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint 2 and 60 lb uplift at joint 6.

**LOAD CASE(S)** Standard


May 15,2025



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

| Job | Truss | Truss Type | Qty | Ply | Lot 74 Ducks Landing | I73479972 |
|---|---|---|---|---|---|---|
| J0325-1577 | M1 | Monopitch | 1 | 1 | Job Reference (optional) | |

Comtech, Inc, Fayetteville, NC - 28314,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Wed May 14 09:51:51 Page: 1
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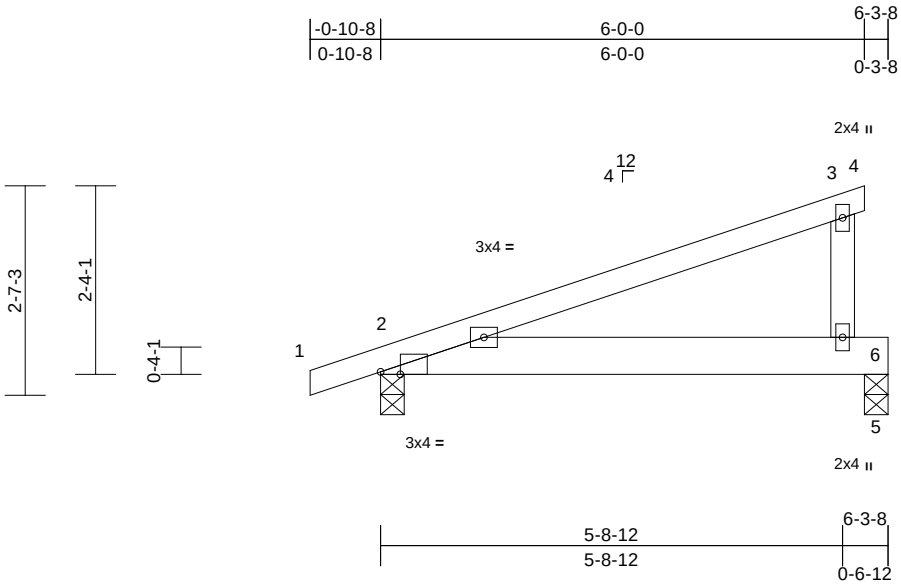


Scale = 1:28.6

Plate Offsets (X, Y): [2:0-2-15,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) | 0.07 | 2-6 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.28 | Vert(CT) | -0.04 | 2-6 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | n/a | - | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-P | | | | | | | Weight: 28 lb | FT = 20% |

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

**REACTIONS** (size) 2=0-3-8, 5=0-3-8
Max Horiz 2=112 (LC 8)
Max Uplift 2=-177 (LC 8), 5=-138 (LC 8)
Max Grav 2=306 (LC 1), 5=216 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/19, 2-3=-94/46, 3-4=-2/0, 3-6=-167/233
BOT CHORD 2-6=0/0, 5-6=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) exterior zone and C-C Exterior(2E) -0-10-8 to 3-6-5, Interior (1) 3-6-5 to 6-0-0 zone; porch left 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 177 lb uplift at joint 2 and 138 lb uplift at joint 5.

**LOAD CASE(S)** Standard


May 15,2025



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

| Job | Truss | Truss Type | Qty | Ply | Lot 74 Ducks Landing |
|---|---|---|---|---|---|
| J0325-1577 | M2 | GABLE | 4 | 1 | I73479973 Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314,

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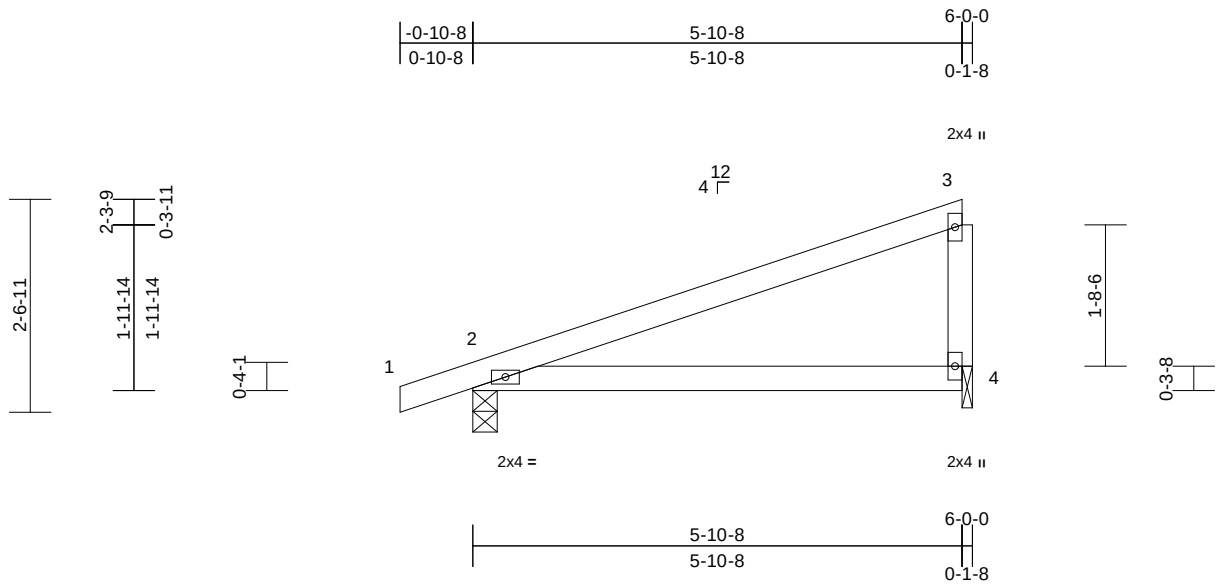


Scale = 1:27.7

| 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 | 0.52 | Vert(LL) | -0.06 | 2-4 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.67 | Vert(CT) | -0.11 | 2-4 | >615 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-P | | Wind(LL) | 0.18 | 2-4 | >375 | 240 | Weight: 22 lb | FT = 20% |

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

**REACTIONS** (size) 2=0-3-8, 4=0-1-8
Max Horiz 2=77 (LC 8)
Max Uplift 2=-117 (LC 8), 4=-95 (LC 8)
Max Grav 2=295 (LC 1), 4=221 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-90/46, 3-4=-164/219
BOT CHORD 2-4=-3/2

**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 5-9-15 zone; porch left 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) Bearings are assumed to be: Joint 4 SP No.2 crushing capacity of 565 psi, Joint 2 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 117 lb uplift at joint 2 and 95 lb uplift at joint 4.

**LOAD CASE(S)** Standard


May 15,2025



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

| Job | Truss | Truss Type | Qty | Ply | Lot 74 Ducks Landing | |
|---|---|---|---|---|---|---|
| J0325-1577 | P1 | GABLE | 1 | 1 | Job Reference (optional) | I73479974 |

Comtech, Inc, Fayetteville, NC - 28314,

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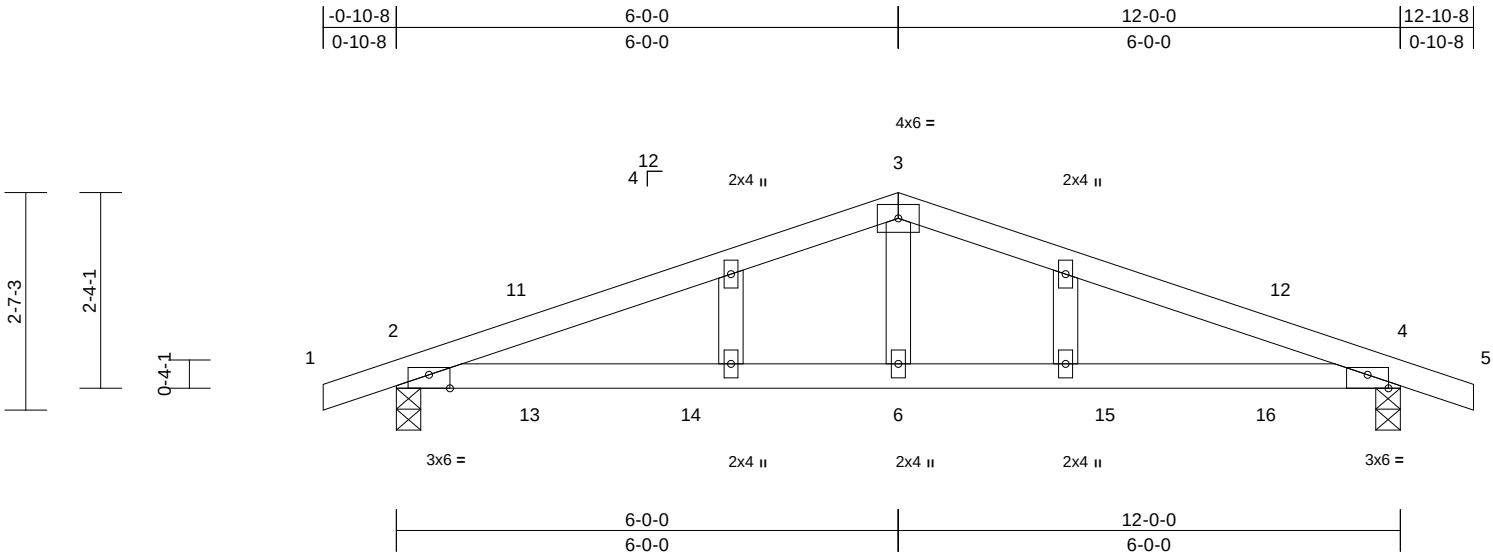


Scale = 1:27.5

Plate Offsets (X, Y): [2:0-3-0,Edge], [4:0-3-0,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 | 0.60 | Vert(LL) | 0.16 | 2-6 | >901 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.46 | Vert(CT) | -0.07 | 2-6 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.07 | Horz(CT) | -0.02 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-S | | | | | | | Weight: 46 lb | FT = 20% |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 4-4-9 oc bracing.

**REACTIONS** (size) 2=0-3-8, 4=0-3-8
Max Horiz 2=-46 (LC 13)
Max Uplift 2=-293 (LC 8), 4=-293 (LC 9)
Max Grav 2=530 (LC 1), 4=530 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-859/1828, 3-4=-859/1828, 4-5=0/15
BOT CHORD 2-6=-1611/759, 4-6=-1611/759
WEBS 3-6=-703/281

**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) exterior zone and C-C Corner(3E) -0-10-8 to 3-6-5, Exterior(2N) 3-6-5 to 6-0-0, Corner(3R) 6-0-0 to 10-4-13, Exterior(2N) 10-4-13 to 12-10-8 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
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 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 293 lb uplift at joint 2 and 293 lb uplift at joint 4.

**LOAD CASE(S)** Standard


May 15,2025



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

| Job | Truss | Truss Type | Qty | Ply | Lot 74 Ducks Landing | |
|---|---|---|---|---|---|---|
| J0325-1577 | P2 | Common | 4 | 1 | Job Reference (optional) | I73479975 |

Comtech, Inc, Fayetteville, NC - 28314,

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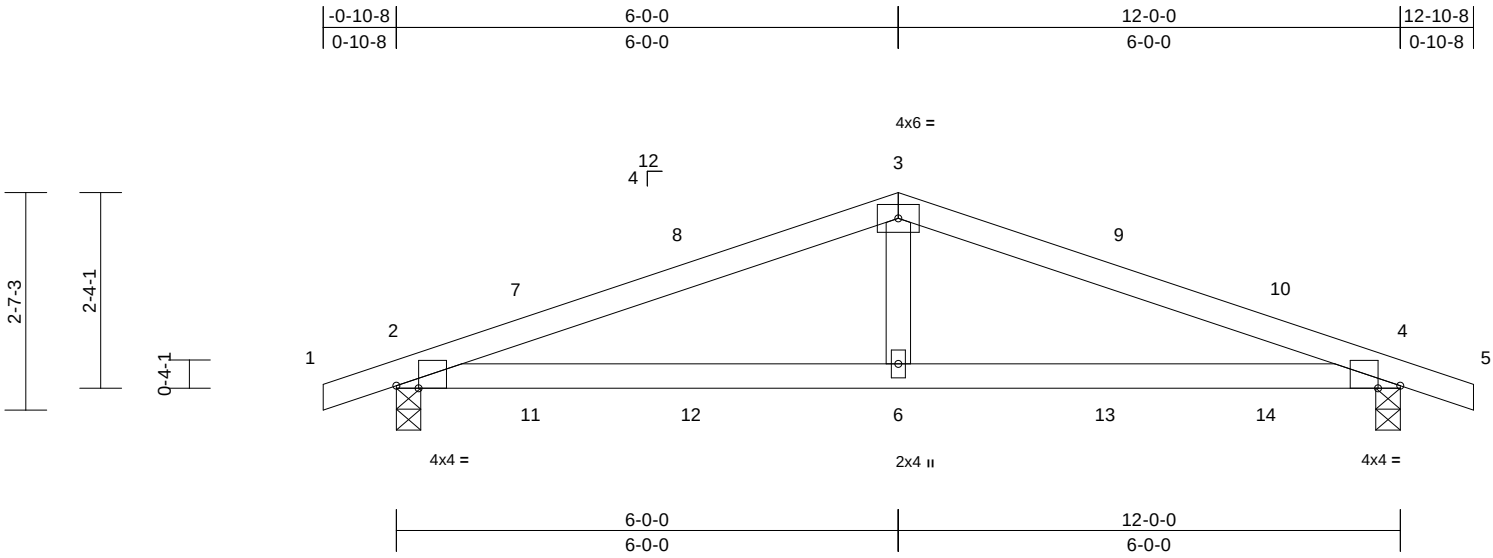


Scale = 1:27.5

Plate Offsets (X, Y): [2:0-3-3,Edge], [4:0-3-3,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 | 0.50 | Vert(LL) | 0.14 | 2-6 | >995 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.38 | Vert(CT) | -0.07 | 2-6 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.06 | Horz(CT) | -0.02 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-S | | | | | | | Weight: 42 lb | FT = 20% |

**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 or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-0-10 oc bracing.

**REACTIONS** (size) 2=0-3-8, 4=0-3-8
Max Horiz 2=-27 (LC 13)
Max Uplift 2=-205 (LC 8), 4=-205 (LC 9)
Max Grav 2=530 (LC 1), 4=530 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-859/1410, 3-4=-859/1410, 4-5=0/15
BOT CHORD 2-6=-1245/759, 4-6=-1245/759
WEBS 3-6=-555/281

**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) -0-10-8 to 3-6-5, Interior (1) 3-6-5 to 6-0-0, Exterior(2R) 6-0-0 to 10-4-13, Interior (1) 10-4-13 to 12-10-8 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
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) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 205 lb uplift at joint 2 and 205 lb uplift at joint 4.

**LOAD CASE(S)** Standard


May 15,2025



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

| Job | Truss | Truss Type | Qty | Ply | Lot 74 Ducks Landing | |
|---|---|---|---|---|---|---|
| J0325-1577 | P3 | Common | 2 | 1 | Job Reference (optional) | I73479976 |

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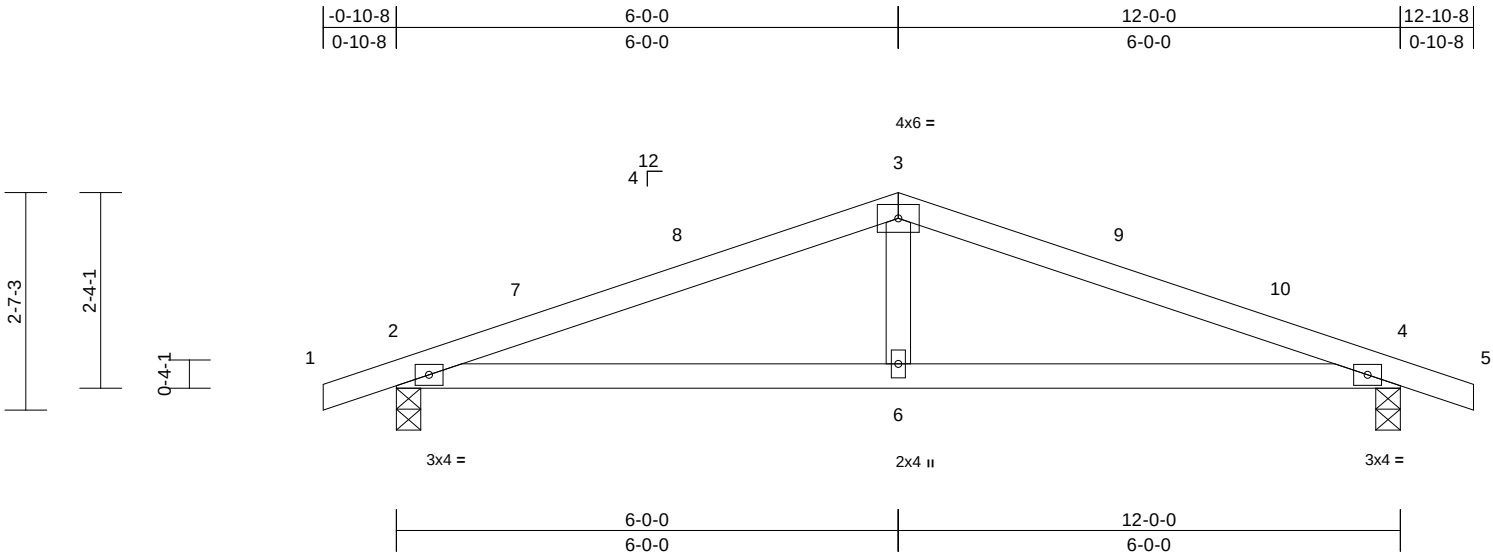


Scale = 1:27.5

| 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 | 0.37 | Vert(LL) | -0.03 | 4-6 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.30 | Vert(CT) | -0.07 | 4-6 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.06 | Horz(CT) | 0.01 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-S | | Wind(LL) | 0.03 | 2-6 | >999 | 240 | Weight: 42 lb | FT = 20% |

**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 or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=0-3-8, 4=0-3-8
Max Horiz 2=27 (LC 16)
Max Uplift 2=-75 (LC 8), 4=-75 (LC 9)
Max Grav 2=530 (LC 1), 4=530 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-859/449, 3-4=-859/449, 4-5=0/15
BOT CHORD 2-6=-334/759, 4-6=-334/759
WEBS 3-6=0/281

**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) -0-10-8 to 3-6-5, Interior (1) 3-6-5 to 6-0-0, Exterior(2R) 6-0-0 to 10-4-13, Interior (1) 10-4-13 to 12-10-8 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.
5) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 75 lb uplift at joint 2 and 75 lb uplift at joint 4.

**LOAD CASE(S)** Standard


May 15,2025



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

| Job | Truss | Truss Type | Qty | Ply | Lot 74 Ducks Landing |
|---|---|---|---|---|---|
| J0325-1577 | V1 | Valley | 1 | 1 | I73479977 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314,

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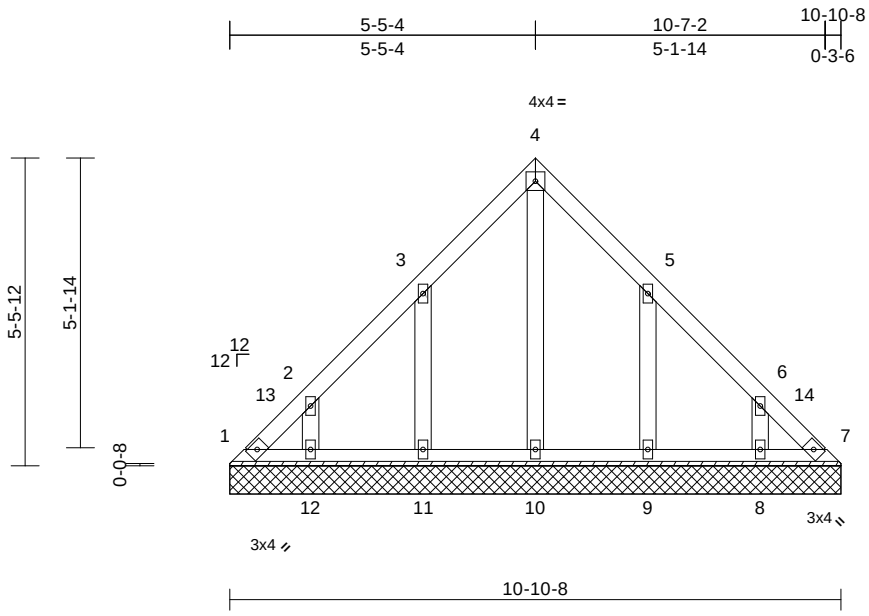


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| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.06 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.02 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.05 | Horiz(TL) | 0.00 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-S | | | | | | | Weight: 56 lb | FT = 20% |

**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 or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 1=10-10-8, 7=10-10-8, 8=10-10-8, 9=10-10-8, 10=10-10-8, 11=10-10-8, 12=10-10-8
Max Horiz 1=-123 (LC 8)
Max Uplift 1=-48 (LC 10), 7=-27 (LC 11), 8=-72 (LC 13), 9=-88 (LC 13), 11=-89 (LC 12), 12=-72 (LC 12)
Max Grav 1=94 (LC 9), 7=80 (LC 13), 8=160 (LC 20), 9=198 (LC 20), 10=120 (LC 22), 11=199 (LC 19), 12=159 (LC 19)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-219/104, 2-3=-107/73, 3-4=-106/161, 4-5=-106/149, 5-6=-85/44, 6-7=-207/92
BOT CHORD 1-12=-68/161, 11-12=-68/161, 10-11=-68/161, 9-10=-68/161, 8-9=-68/161, 7-8=-68/161
WEBS 4-10=-121/32, 3-11=-176/246, 2-12=-144/194, 5-9=-176/246, 6-8=-144/194

**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) 0-4-4 to 4-9-0, Interior (1) 4-9-0 to 5-5-12, Exterior(2R) 5-5-12 to 9-10-9, Interior (1) 9-10-9 to 10-7-4 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 48 lb uplift at joint 1, 27 lb uplift at joint 7, 89 lb uplift at joint 11, 72 lb uplift at joint 12, 88 lb uplift at joint 9 and 72 lb uplift at joint 8.

**LOAD CASE(S)** Standard


May 15,2025



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

| Job | Truss | Truss Type | Qty | Ply | Lot 74 Ducks Landing | |
|---|---|---|---|---|---|---|
| J0325-1577 | V2 | Valley | 1 | 1 | Job Reference (optional) | I73479978 |

Comtech, Inc, Fayetteville, NC - 28314,

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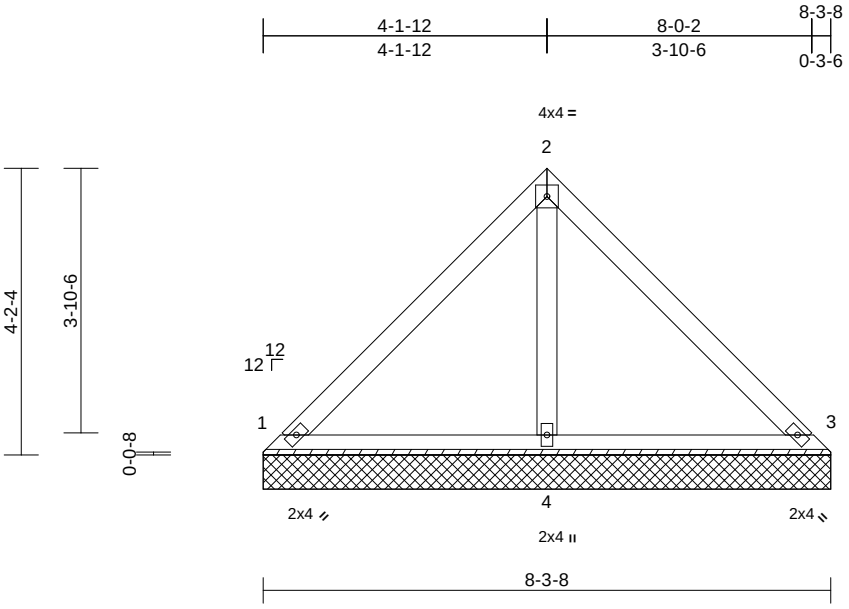


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| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.36 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.11 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.04 | Horiz(TL) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-P | | | | | | | Weight: 34 lb | FT = 20% |

**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 or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 1=8-3-8, 3=8-3-8, 4=8-3-8
Max Horiz 1=92 (LC 9)
Max Uplift 1=-33 (LC 13), 3=-33 (LC 13)
Max Grav 1=187 (LC 1), 3=187 (LC 1), 4=240 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-140/89, 2-3=-126/114
BOT CHORD 1-4=-26/63, 3-4=-26/63
WEBS 2-4=-144/101

**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) 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) 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) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 1 and 33 lb uplift at joint 3.

**LOAD CASE(S)** Standard


May 15,2025



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

| Job | Truss | Truss Type | Qty | Ply | Lot 74 Ducks Landing |
|---|---|---|---|---|---|
| J0325-1577 | V3 | Valley | 1 | 1 | I73479979 Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314,

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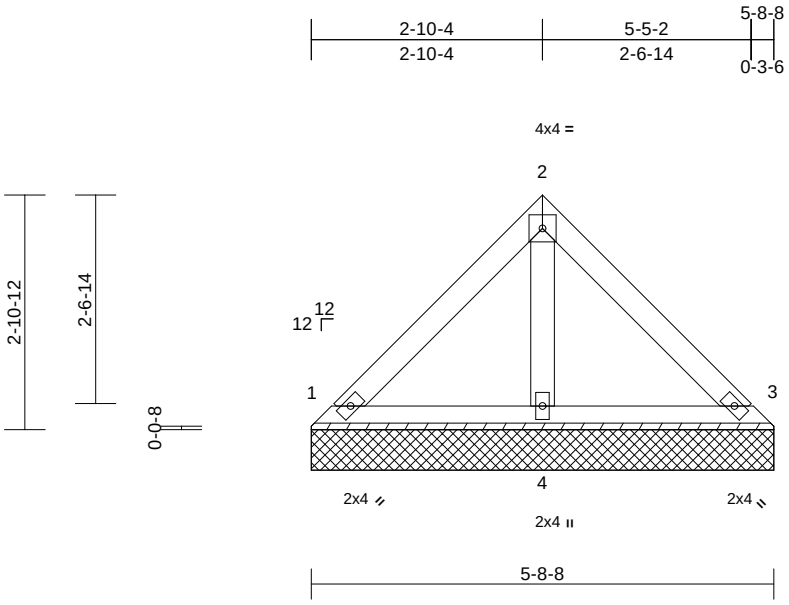



Scale = 1:28.4

| 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 | 0.18 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.05 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.01 | Horiz(TL) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-P | | | | | | | Weight: 23 lb | FT = 20% |

**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 or 5-9-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 1=5-8-8, 3=5-8-8, 4=5-8-8
Max Horiz 1=-61 (LC 8)
Max Uplift 1=-22 (LC 13), 3=-22 (LC 13)
Max Grav 1=124 (LC 1), 3=124 (LC 1), 4=159 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-93/71, 2-3=-83/90
BOT CHORD 1-4=-18/48, 3-4=-18/48
WEBS 2-4=-96/84

**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) 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) 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) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 1 and 22 lb uplift at joint 3.

**LOAD CASE(S)** Standard


May 15,2025



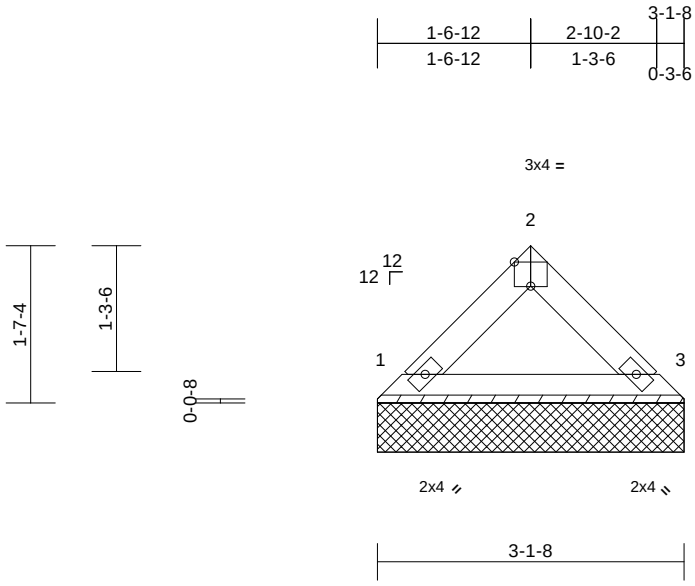
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 74 Ducks Landing |
|---|---|---|---|---|---|
| J0325-1577 | V4 | Valley | 1 | 1 | I73479980 Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Wed May 14 09:51:52 ID:u6q6C?E4SryBymKiUUGRFQzJFq8-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f






Scale = 1:23.5

Plate Offsets (X, Y): [2:0-2-0,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 | 0.05 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.05 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horiz(TL) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-P | | | | | | | Weight: 10 lb | FT = 20% |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 3-2-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 1=3-1-8, 3=3-1-8
Max Horiz 1=-30 (LC 8)
Max Uplift 1=-3 (LC 13), 3=-3 (LC 13)
Max Grav 1=100 (LC 1), 3=100 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-74/70, 2-3=-74/85
BOT CHORD 1-3=-7/43

**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) 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) 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) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 1 and 3 lb uplift at joint 3.

**LOAD CASE(S)** Standard


May 15,2025



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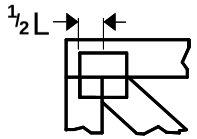
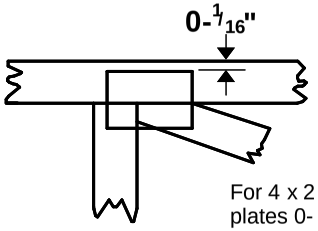
Edenton, NC 27932

# 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.

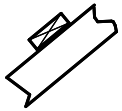
* Plate location details available in MiTek software or upon request.

### PLATE SIZE

4 x 4

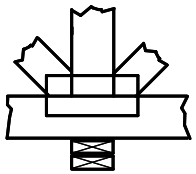
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

### 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

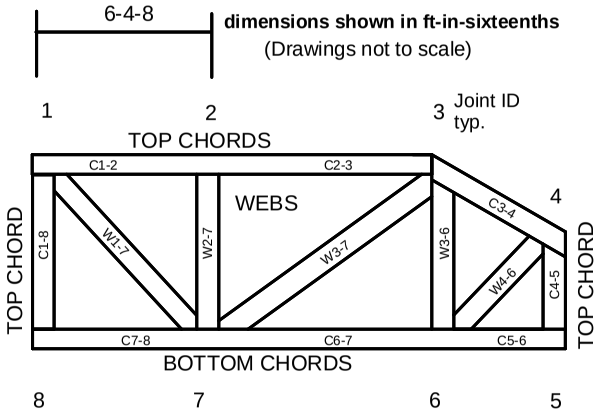


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

**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®

ENGINEERING BY TRENCO
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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.