ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 33353-33353B
CL2574 SP 3 Car

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by 84 Components - #2383.

Pages or sheets covered by this seal: I53810769 thru I53810804

My license renewal date for the state of North Carolina is December 31, 2022.

North Carolina COA: C-0844

August 23,2022

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 | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | 3C | Common | 6 | 1 | I53810769 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:03 2022 Page 1
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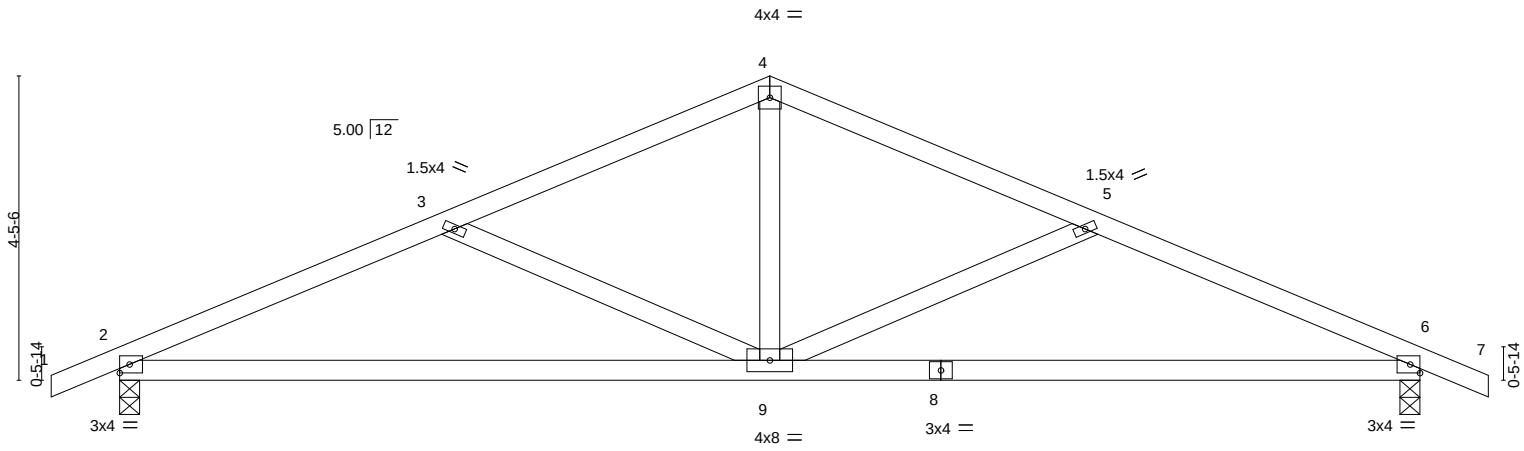
| -1-0-0 | 4-10-12 | 9-6-0 | 14-1-4 | 19-0-0 | 20-0-0 |
|---|---|---|---|---|---|
| 1-0-0 | 4-10-12 | 4-7-4 | 4-7-4 | 4-10-12 | 1-0-0 |

Scale = 1:33.7




| 9-6-0 | 19-0-0 |
|---|---|
| 9-6-0 | 9-6-0 |

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.30 | Vert(LL) | -0.17 | 6-9 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.95 | Vert(CT) | -0.35 | 6-9 | >643 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.20 | Horz(CT) | 0.04 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 83 lb | FT = 20% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-8-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8
Max Horz 2=-73(LC 13)
Max Uplift 2=-115(LC 12), 6=-115(LC 13)
Max Grav 2=817(LC 1), 6=817(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1354/375, 3-4=-1031/251, 4-5=-1031/251, 5-6=-1354/375
BOT CHORD 2-9=-270/1194, 6-9=-275/1194
WEBS 4-9=-49/527, 5-9=-351/218, 3-9=-351/218

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 115 lb uplift at joint 2 and 115 lb uplift at joint 6.

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | 3CE | Common Supported Gable | 1 | 1 | I53810770<br>Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:05 2022 Page 1
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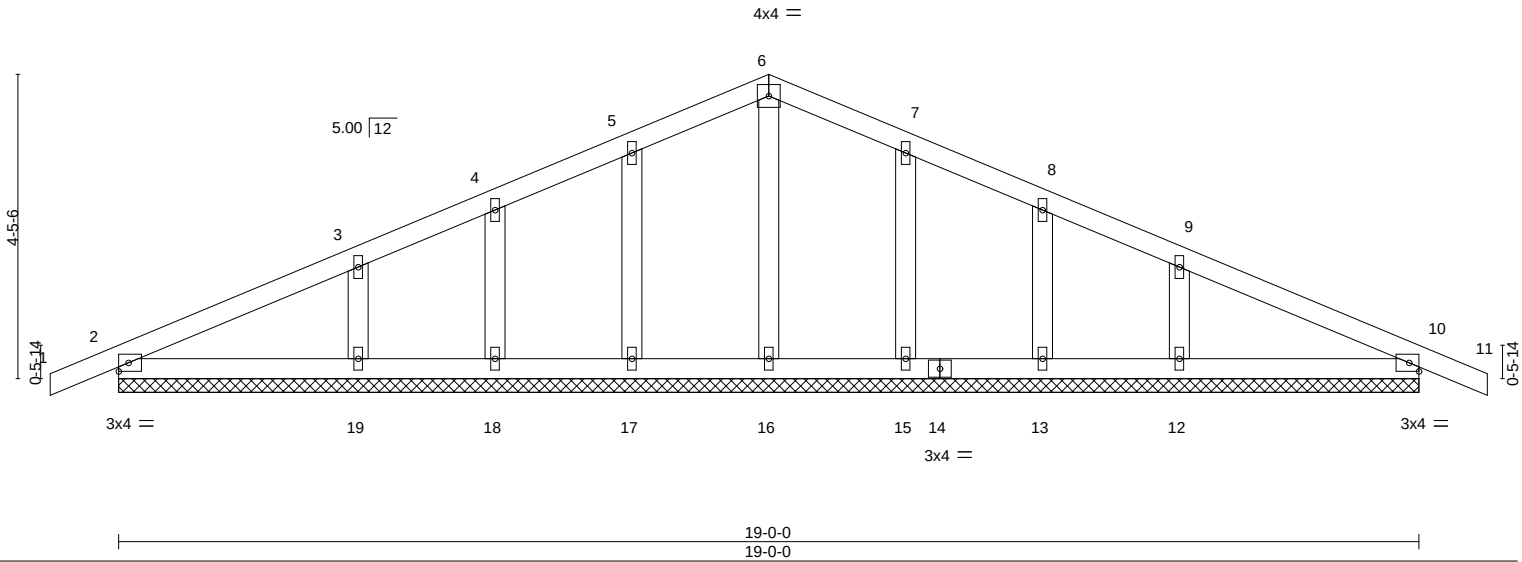
-1-0-0 1-0-0 | 9-6-0 9-6-0 | 19-0-0 9-6-0 | 20-0-0 1-0-0

Scale = 1:33.7




19-0-0
19-0-0

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.12 | Vert(LL) | 0.00 | 11 | n/r | 120 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.09 | Vert(CT) | 0.01 | 11 | n/r | 90 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.04 | Horz(CT) | 0.00 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 88 lb | FT = 20% |

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

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

**REACTIONS.** All bearings 19-0-0.
(lb) - Max Horz 2=-73(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 2, 17, 18, 19, 15, 13, 12, 10
Max Grav All reactions 250 lb or less at joint(s) 2, 16, 17, 18, 15, 13, 10 except 19=268(LC 23), 12=268(LC 24)

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 1.5x4 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 17, 18, 19, 15, 13, 12, 10.

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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | A | Common | 4 | 1 | I53810771 |
| | | | | | Job Reference (optional) |

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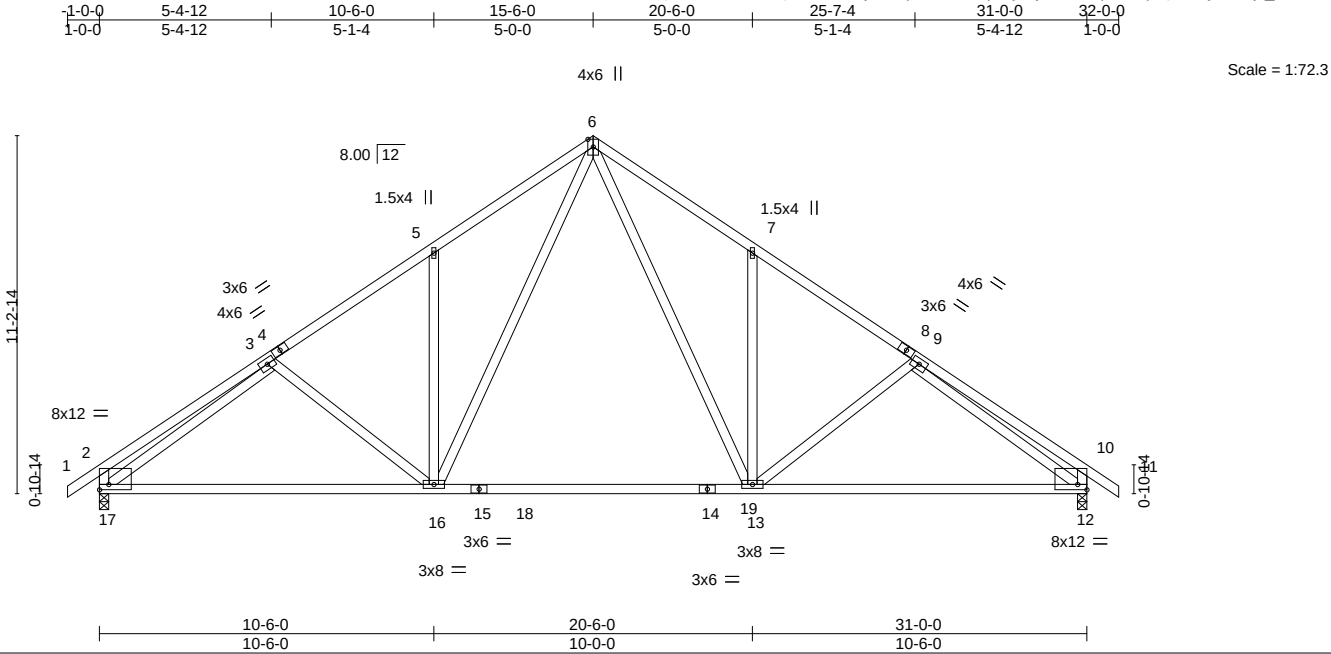


Plate Offsets (X,Y)-- [2:Edge,0-2-0], [12:Edge,0-2-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.64 | Vert(LL) | -0.51 | 13-16 | >728 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.88 | Vert(CT) | -0.63 | 13-16 | >589 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.97 | Horz(CT) | 0.05 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 201 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1 *Except*
14-15: 2x4 SP No.2
WEBS 2x4 SP No.2 *Except*
2-17,10-12: 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-6-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 17=0-3-8, 12=0-3-8
Max Horz 17=272(LC 11)
Max Uplift 17=-153(LC 12), 12=-153(LC 13)
Max Grav 17=1297(LC 1), 12=1297(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-506/127, 3-5=-1484/309, 5-6=-1535/463, 6-7=-1535/463, 7-9=-1484/309, 9-10=-506/127, 2-17=-445/166, 10-12=-445/166
BOT CHORD 16-17=-259/1457, 13-16=-2/964, 12-13=-163/1268
WEBS 6-13=-252/859, 7-13=-354/238, 6-16=-252/859, 5-16=-355/239, 3-17=-1285/211, 9-12=-1284/211

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=153, 12=153.

August 23,2022

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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | A1 | COMMON | 1 | 1 | I53810772 |
| | | | | | Job Reference (optional) |

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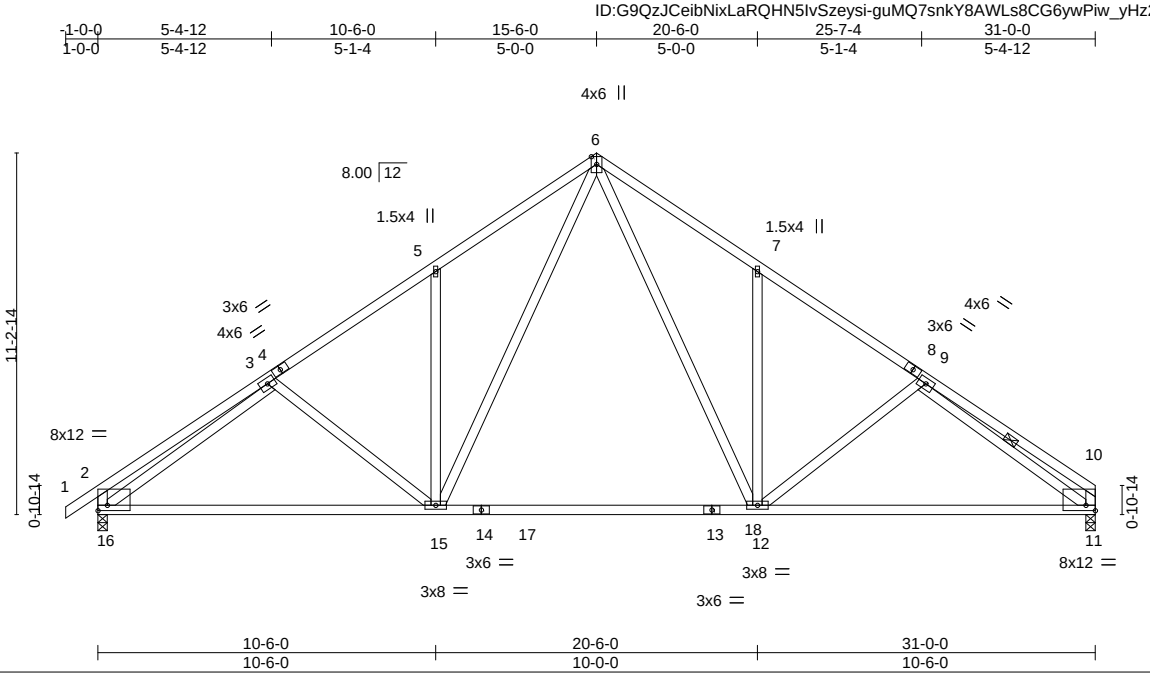


Plate Offsets (X,Y)-- [2:Edge,0-2-0], [11:Edge,0-2-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.64 | Vert(LL) | -0.51 | 12-15 | >728 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.88 | Vert(CT) | -0.63 | 12-15 | >588 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.97 | Horz(CT) | 0.05 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 199 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1 *Except*
13-14: 2x4 SP No.2
WEBS 2x4 SP No.2 *Except*
2-16,10-11: 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-6-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 9-11

**REACTIONS.** (size) 16=0-3-8, 11=0-3-8
Max Horz 16=266(LC 9)
Max Uplift 16=-153(LC 12), 11=-129(LC 13)
Max Grav 16=1298(LC 1), 11=1227(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-506/127, 3-5=-1485/310, 5-6=-1537/464, 6-7=-1538/464, 7-9=-1489/311, 9-10=-426/78, 2-16=-446/166, 10-11=-337/94
BOT CHORD 15-16=-271/1449, 12-15=-14/956, 11-12=-191/1280
WEBS 6-12=-252/861, 7-12=-349/236, 6-15=-252/859, 5-15=-355/239, 3-16=-1287/211, 9-11=-1334/255

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=153, 11=129.

August 23,2022

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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | A2 | Common | 3 | 1 | I53810773 |
| | | | | | Job Reference (optional) |

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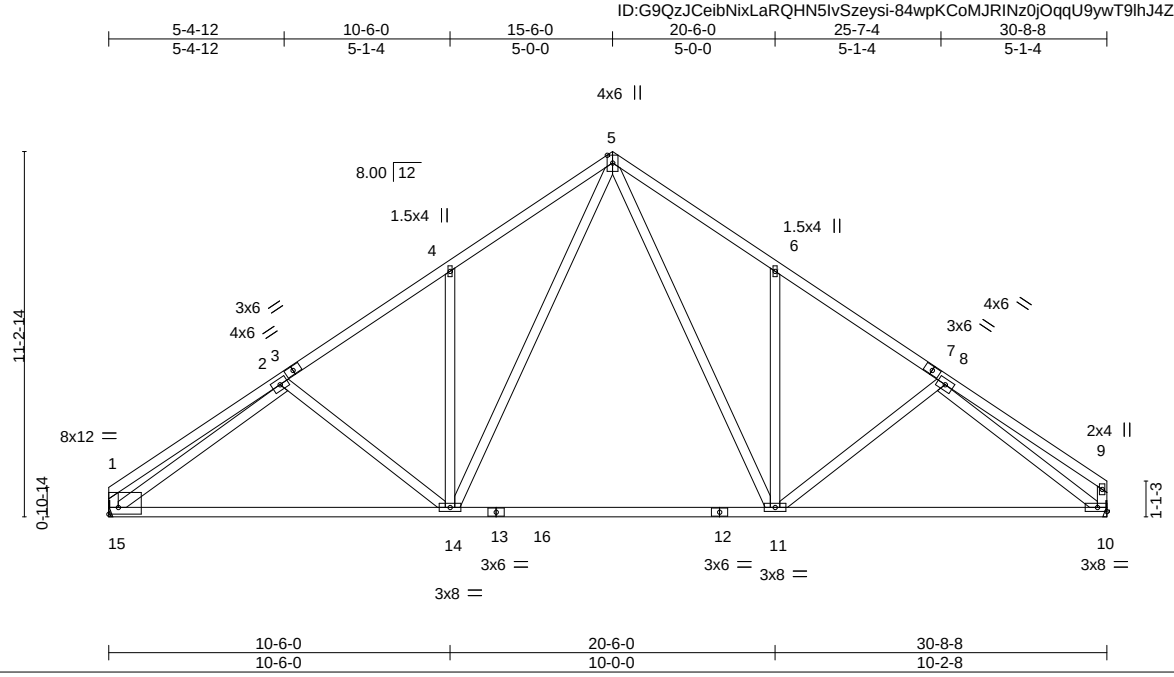


Plate Offsets (X,Y)-- [1:Edge,0-2-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.63 | Vert(LL) | -0.51 | 11-14 | >713 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.89 | Vert(CT) | -0.64 | 11-14 | >573 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 1.00 | Horz(CT) | 0.05 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 197 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1 *Except*
12-13: 2x4 SP No.2
WEBS 2x4 SP No.2 *Except*
1-15,9-10: 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-6-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 15=Mechanical, 10=Mechanical
Max Horz 15=253(LC 9)
Max Uplift 15=-128(LC 12), 10=-126(LC 13)
Max Grav 15=1217(LC 1), 10=1217(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-424/79, 2-4=-1477/308, 4-5=-1526/461, 5-6=-1508/459, 6-8=-1458/305, 8-9=-314/70, 1-15=-336/94, 9-10=-269/85
BOT CHORD 14-15=-278/1449, 11-14=-18/944, 10-11=-183/1209
WEBS 4-14=-349/236, 5-14=-252/863, 5-11=-249/830, 6-11=-352/238, 2-15=-1324/251, 8-10=-1376/255

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=128, 10=126.

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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | A3 | ROOF TRUSS | 3 | 1 | I53810774 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:09 2022 Page 1
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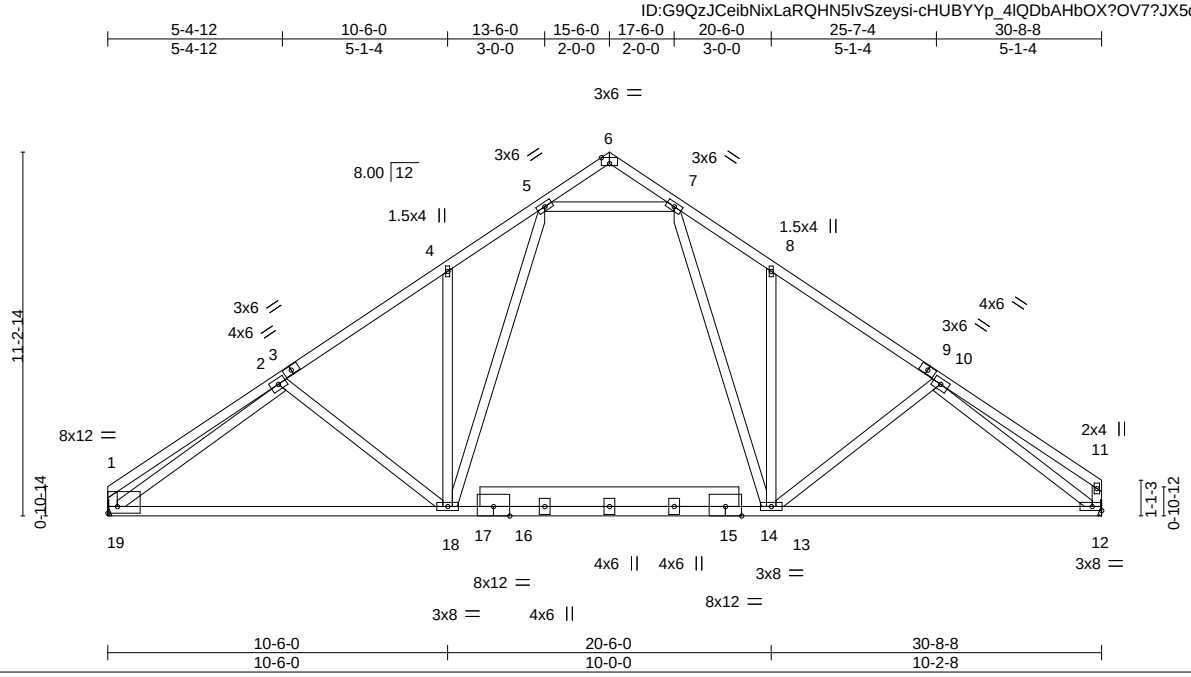


Plate Offsets (X,Y)-- [1:Edge,0-2-8], [6:0-3-0,Edge]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.70 | Vert(LL) | -0.28 | 18-19 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.99 | Vert(CT) | -0.58 | 18-19 | >634 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.98 | Horz(CT) | 0.05 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 221 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
14-17: 2x8 SP DSS
WEBS 2x4 SP No.2 *Except*
1-19,11-12,5-7: 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-0-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

**REACTIONS.** (size) 19=Mechanical, 12=Mechanical
Max Horz 19=253(LC 9)
Max Uplift 19=-128(LC 12), 12=-126(LC 13)
Max Grav 19=1224(LC 20), 12=1224(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-448/89, 2-4=-1470/308, 4-5=-1529/425, 7-8=-1498/423, 8-10=-1450/305, 10-11=-330/77, 1-19=-357/99, 11-12=-283/89
BOT CHORD 18-19=-275/1450, 13-18=-43/1048, 12-13=-185/1211
WEBS 4-18=-375/259, 5-18=-255/832, 7-13=-253/779, 8-13=-363/260, 2-19=-1301/260, 10-12=-1360/264, 5-7=-932/319

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=128, 12=126.
7) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

August 23,2022

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | A4 | ROOF TRUSS | 1 | 1 | I53810775 |
| | | | | | Job Reference (optional) |

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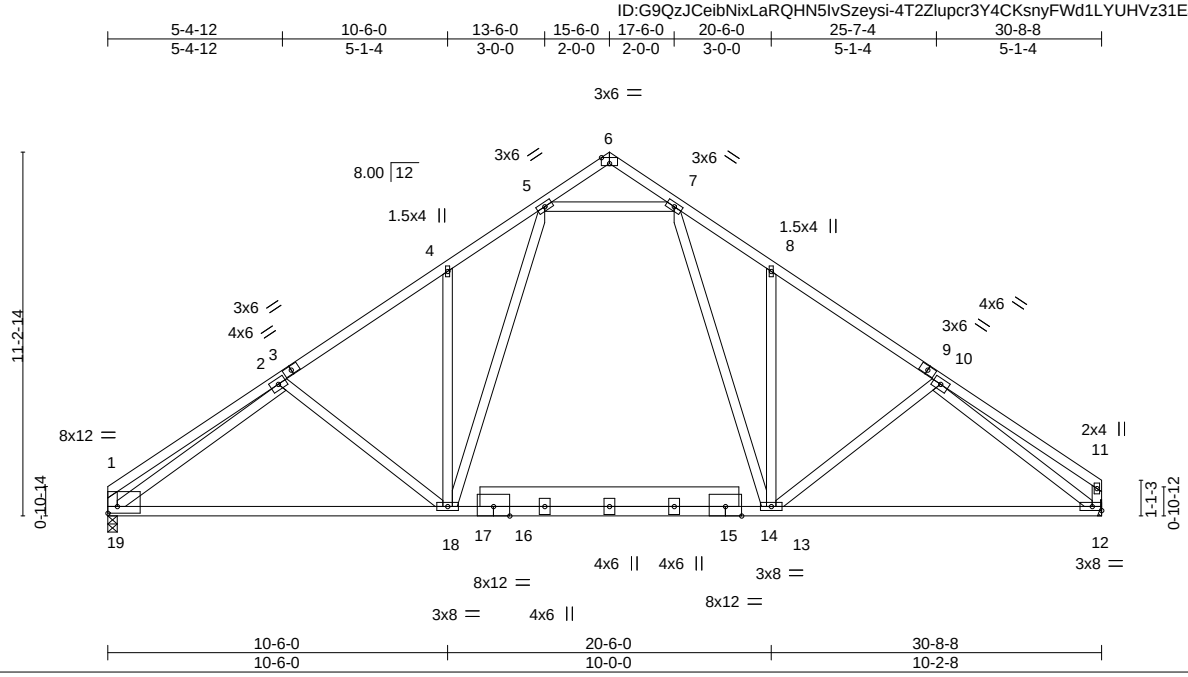


Plate Offsets (X,Y)-- [1:Edge,0-2-8], [6:0-3-0,Edge]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.70 | Vert(LL) | -0.28 | 18-19 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.99 | Vert(CT) | -0.58 | 18-19 | >634 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.98 | Horz(CT) | 0.05 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 221 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
14-17: 2x8 SP DSS
WEBS 2x4 SP No.2 *Except*
1-19,11-12,5-7: 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-0-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

**REACTIONS.** (size) 19=0-3-8, 12=Mechanical
Max Horz 19=253(LC 9)
Max Uplift 19=-128(LC 12), 12=-126(LC 13)
Max Grav 19=1224(LC 20), 12=1224(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-448/89, 2-4=-1470/308, 4-5=-1529/425, 7-8=-1498/423, 8-10=-1450/305, 10-11=-330/77, 1-19=-357/99, 11-12=-283/89
BOT CHORD 18-19=-275/1450, 13-18=-43/1048, 12-13=-185/1211
WEBS 4-18=-375/259, 5-18=-255/832, 7-13=-253/779, 8-13=-363/260, 2-19=-1301/260, 10-12=-1360/264, 5-7=-932/319

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=128, 12=126.
7) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

August 23,2022

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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | A5 | ROOF TRUSS | 2 | 1 | I53810776 |
| | | | | | Job Reference (optional) |

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| -1-0-0 | 5-4-12 | 10-6-0 | 13-6-0 | 15-6-0 | 17-6-0 | 20-6-0 | 25-7-4 | 30-8-8 |
|---|---|---|---|---|---|---|---|---|
| 1-0-0 | 5-4-12 | 5-1-4 | 3-0-0 | 2-0-0 | 2-0-0 | 3-0-0 | 5-1-4 | 5-1-4 |

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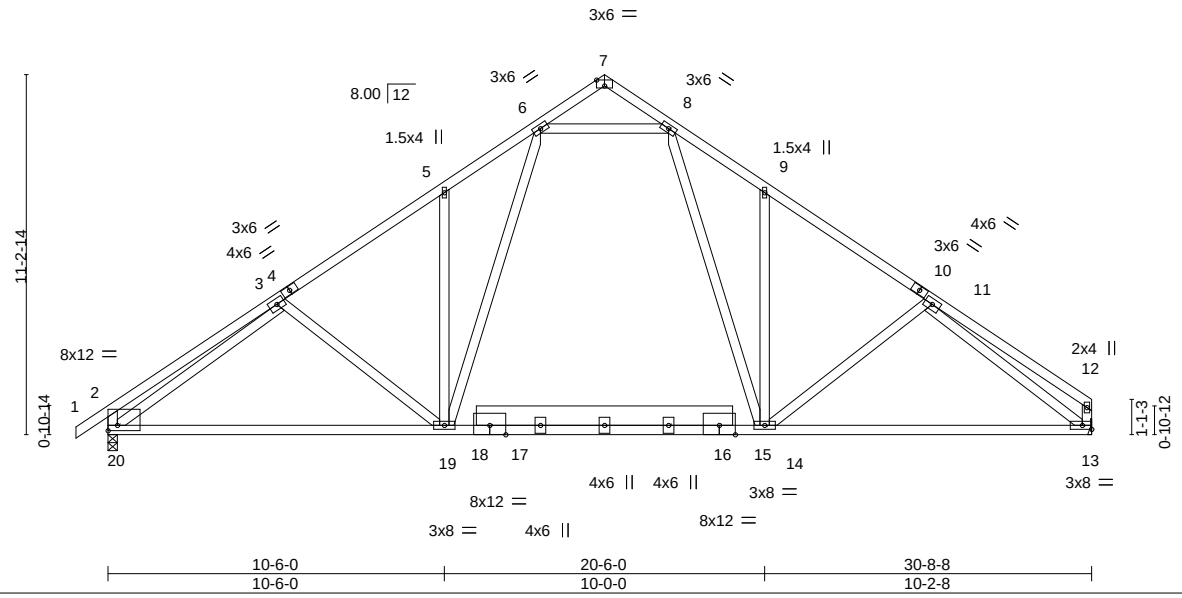


| 10-6-0 | 20-6-0 | 30-8-8 |
|---|---|---|
| 10-6-0 | 10-0-0 | 10-2-8 |

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

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.69 | Vert(LL) | -0.28 | 19-20 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.99 | Vert(CT) | -0.58 | 19-20 | >634 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.95 | Horz(CT) | 0.05 | 13 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 223 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
15-18: 2x8 SP DSS
WEBS 2x4 SP No.2 *Except*
2-20,12-13,6-8: 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-0-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

**REACTIONS.** (size) 20=0-3-8, 13=Mechanical
Max Horz 20=265(LC 9)
Max Uplift 20=-152(LC 12), 13=-126(LC 13)
Max Grav 20=1290(LC 20), 13=1223(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-510/137, 3-5=-1465/307, 5-6=-1527/426, 8-9=-1497/422, 9-11=-1448/305, 11-12=-330/77, 2-20=-467/160, 12-13=-283/89
BOT CHORD 19-20=-272/1438, 14-19=-42/1046, 13-14=-185/1209
WEBS 5-19=-381/262, 6-19=-255/831, 8-14=-253/779, 9-14=-364/260, 3-20=-1256/218, 11-13=-1358/264, 6-8=-931/318

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 20=152, 13=126.
7) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

August 23,2022


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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | A6 | Roof Special | 1 | 1 | I53810777 |
| | | | | | Job Reference (optional) |

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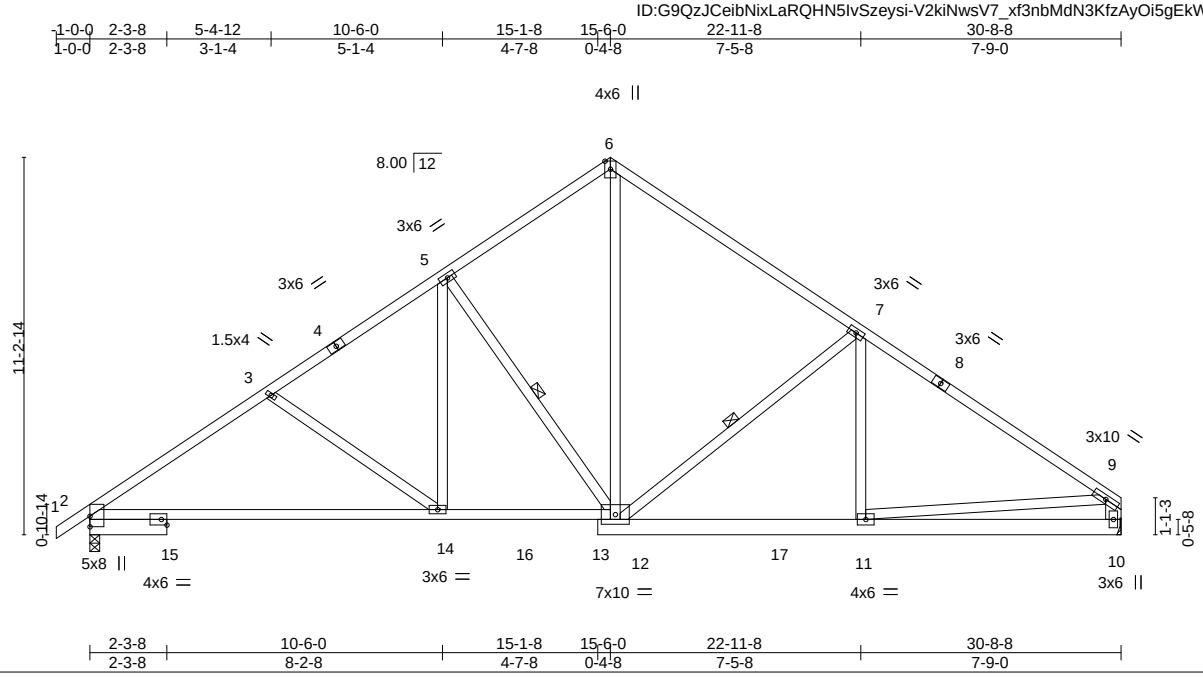


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.77 | Vert(LL) | -0.29 | 2-14 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.61 | Vert(CT) | -0.68 | 2-14 | >537 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.44 | Horz(CT) | 0.10 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 203 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SP No.2 |
| BOT CHORD | 2x6 SP No.2 *Except* 2-12: 2x4 SP DSS |
| WEBS | 2x4 SP No.2 *Except* 7-11: 2x4 SP No.3, 9-10: 2x6 SP No.2 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS | 1 Row at midpt 5-12, 7-12 |

**REACTIONS.** (size) 2=0-3-8, 10=Mechanical
Max Horz 2=268(LC 9)
Max Uplift 2=-151(LC 12), 10=-126(LC 13)
Max Grav 2=1280(LC 1), 10=1218(LC 1)

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

| | |
|---|---|
| TOP CHORD | 2-3=-1828/346, 3-5=-1578/323, 5-6=-1154/349, 6-7=-1213/332, 7-9=-1605/284, 9-10=-1135/227 |
| BOT CHORD | 2-14=-310/1568, 12-14=-141/1353, 11-12=-134/1246, 10-11=-85/299 |
| WEBS | 3-14=-269/196, 5-14=-31/520, 5-12=-705/221, 9-11=-48/987, 6-12=-219/898, 7-12=-549/245 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=151, 10=126.

August 23,2022

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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | A7 | Roof Special | 4 | 1 | I53810778 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:14 2022 Page 1
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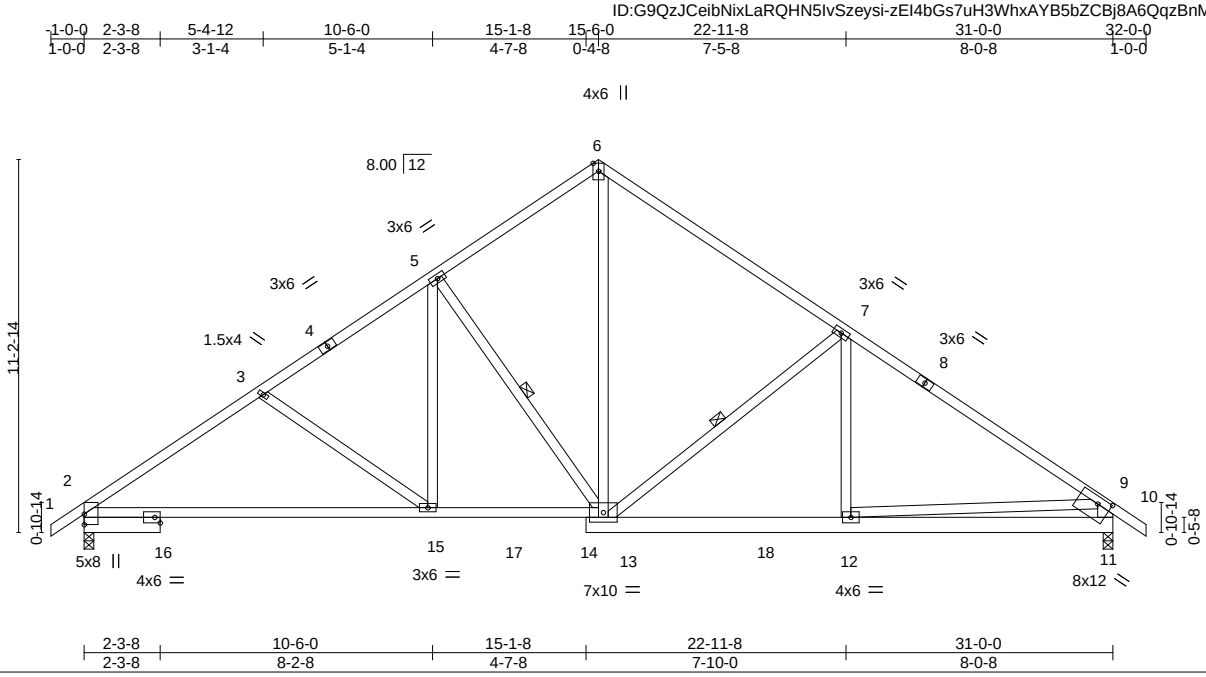


Plate Offsets (X,Y)-- [11:0-4-12,0-2-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.77 | Vert(LL) | -0.29 | 2-15 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.61 | Vert(CT) | -0.68 | 2-15 | >540 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.44 | Horz(CT) | 0.10 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 206 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
2-13: 2x4 SP DSS
WEBS 2x4 SP No.2 *Except*
7-12: 2x4 SP No.3, 9-11: 2x6 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-13, 7-13

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8
Max Horz 2=-276(LC 10)
Max Uplift 2=-152(LC 12), 11=-155(LC 13)
Max Grav 2=1290(LC 1), 11=1305(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1846/344, 3-5=-1596/321, 5-6=-1172/350, 6-7=-1229/332, 7-9=-1668/294, 9-11=-1221/288
BOT CHORD 2-15=-292/1594, 13-15=-123/1380, 12-13=-106/1283, 11-12=-187/600
WEBS 3-15=-268/195, 5-15=-29/522, 5-13=-706/220, 7-12=0/251, 9-12=0/840, 6-13=-219/913, 7-13=-577/247

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=152, 11=155.

August 23,2022

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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | AE | GABLE | 2 | 1 | I53810779 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:15 2022 Page 1
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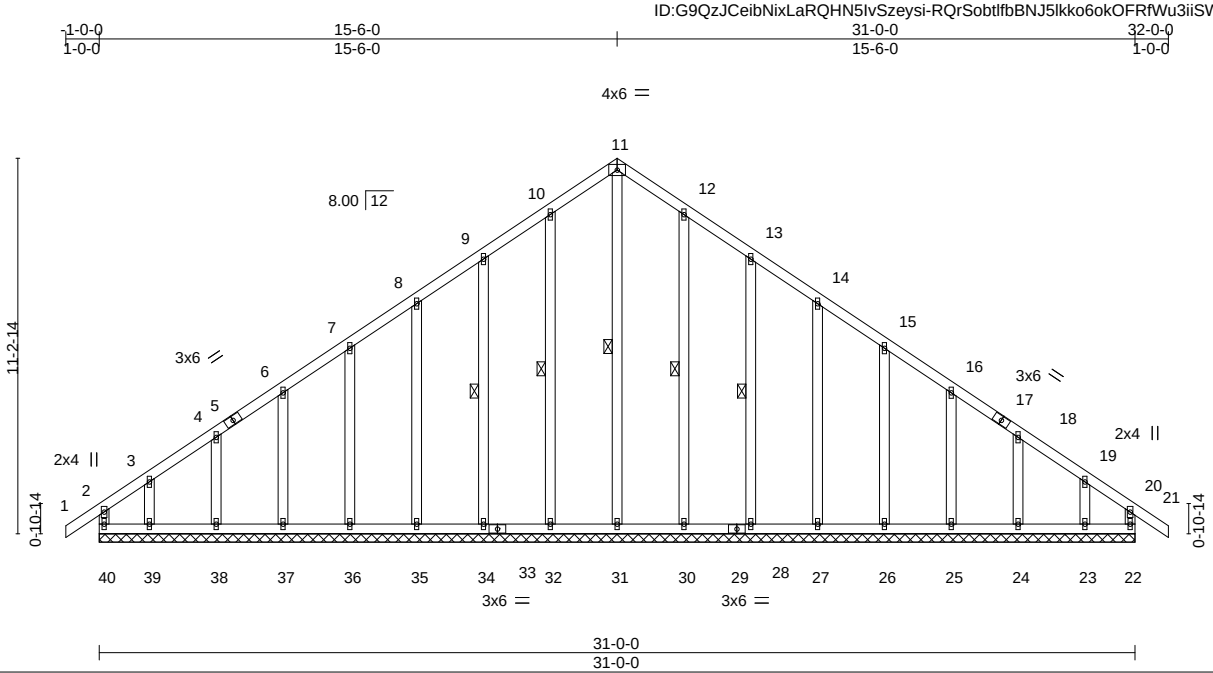


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.21 | Vert(LL) | -0.00 | 21 | n/r | 120 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.10 | Vert(CT) | -0.01 | 21 | n/r | 90 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.15 | Horz(CT) | 0.01 | 22 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-R | | | | | | | Weight: 234 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SP No.2 |
| BOT CHORD | 2x4 SP No.2 |
| WEBS | 2x4 SP No.3 |
| OTHERS | 2x4 SP No.3 *Except* 11-31,10-32,9-34,8-35,12-30,13-28,14-27: 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 6-0-0 oc bracing. |
| WEBS | 1 Row at midpt 11-31, 10-32, 9-34, 12-30, 13-28 |

**REACTIONS.** All bearings 31-0-0.
(lb) - Max Horz 40=272(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 22, 32, 34, 35, 36, 37, 38, 30, 28, 27, 26, 25, 24 except 40=-145(LC 8), 39=-175(LC 12), 23=-151(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 40, 22, 32, 34, 35, 36, 37, 38, 39, 30, 28, 27, 26, 25, 24, 23 except 31=283(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 9-10=-227/268, 10-11=-270/319, 11-12=-270/319, 12-13=-227/268
WEBS 11-31=-285/180

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22, 32, 34, 35, 36, 37, 38, 30, 28, 27, 26, 25, 24 except (jt=lb) 40=145, 39=175, 23=151.

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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | B | Common | 3 | 1 | I53810780<br>Job Reference (optional) |

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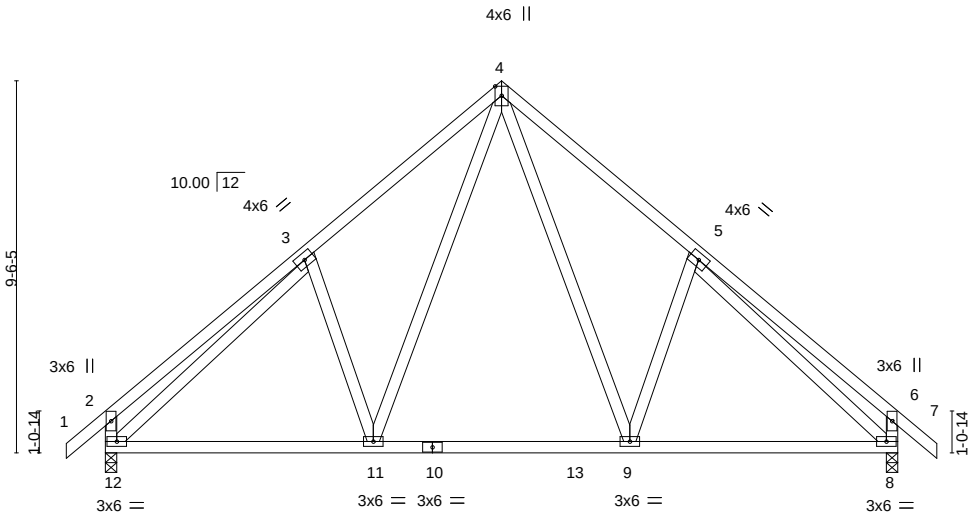
| 1-0-0 | 5-2-10 | 10-1-12 | 15-0-14 | 20-3-8 | 21-3-8 |
|---|---|---|---|---|---|
| 1-0-0 | 5-2-10 | 4-11-2 | 4-11-2 | 5-2-10 | 1-0-0 |

Scale = 1:59.0




| 6-10-5 | 13-5-3 | 20-3-8 |
|---|---|---|
| 6-10-5 | 6-6-13 | 6-10-5 |

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.35 | Vert(LL) | -0.10 | 9-11 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.42 | Vert(CT) | -0.13 | 9-11 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.61 | Horz(CT) | 0.02 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 139 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SP No.2 |
| BOT CHORD | 2x4 SP No.2 |
| WEBS | 2x4 SP No.2 *Except*<br>5-9,3-11,2-12,6-8: 2x4 SP No.3 |

**BRACING-**

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

**REACTIONS.** (size) 12=0-3-8, 8=0-3-8
Max Horz 12=230(LC 11)
Max Uplift 12=-94(LC 12), 8=-94(LC 13)
Max Grav 12=869(LC 1), 8=869(LC 1)

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

| | |
|---|---|
| TOP CHORD | 2-3=-345/193, 3-4=-830/303, 4-5=-831/303, 5-6=-345/193, 2-12=-371/215, 6-8=-371/215 |
| BOT CHORD | 11-12=-118/744, 9-11=0/516, 8-9=-25/637 |
| WEBS | 4-9=-168/453, 5-9=-271/254, 4-11=-168/452, 3-11=-271/254, 3-12=-727/19, 5-8=-727/18 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 8.

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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | BE | GABLE | 1 | 1 | I53810781 |
| | | | | | Job Reference (optional) |

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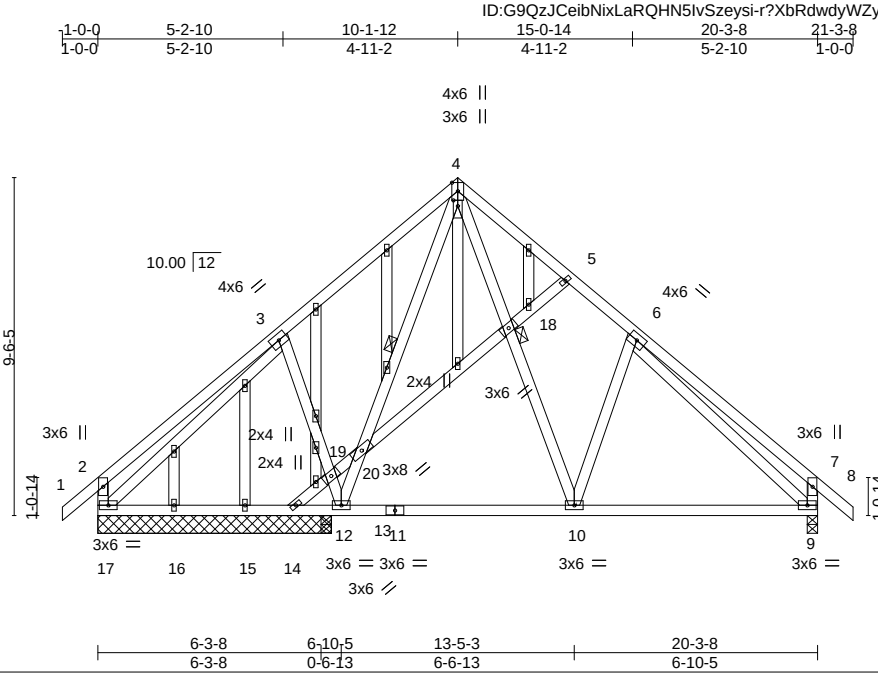


Plate Offsets (X,Y)-- [4:0-1-15,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.39 | Vert(LL) | -0.04 | 9-10 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.51 | Vert(CT) | -0.09 | 9-10 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.31 | Horz(CT) | 0.01 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 184 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
4-10,4-12,3-17,6-9: 2x4 SP No.2
OTHERS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-12
JOINTS 1 Brace at Jt(s): 18

**REACTIONS.** All bearings 6-7-0 except (jt=length) 9=0-3-8, 13=0-3-8.
(lb) - Max Horz 17=230(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 17, 9 except 14=-224(LC 19), 13=-157(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 14, 15, 16 except 17=429(LC 1), 9=677(LC 1), 13=707(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-334/196, 4-5=-510/215, 5-6=-553/203, 6-7=-363/224, 2-17=-301/217, 7-9=-393/236
BOT CHORD 16-17=-87/305, 15-16=-87/305, 14-15=-87/305, 13-14=-55/359, 12-13=-55/359, 10-12=0/292, 9-10=0/412
WEBS 4-18=-103/373, 10-18=-103/373, 3-20=-324/265, 12-20=-324/271, 6-9=-375/0

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 1.5x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 9 except (jt=lb) 14=224, 13=157.

August 23,2022

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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car | |
|---|---|---|---|---|---|---|
| 33353-33353B | BGR | COMMON GIRDER | 1 | 3 | Job Reference (optional) | I53810782 |

84 Components, Kings Mountain, NC 28086

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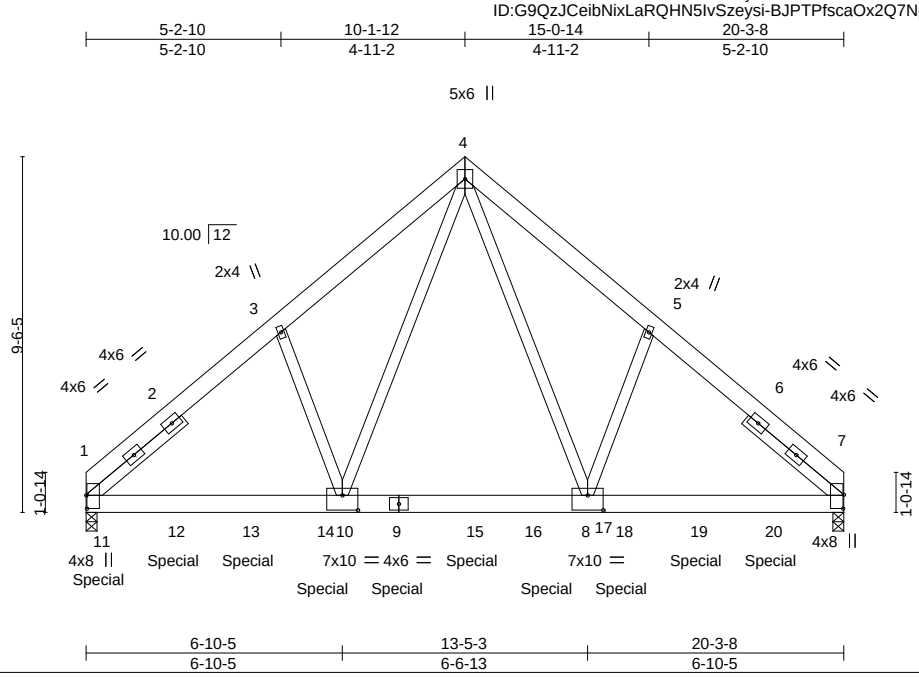


Plate Offsets (X,Y)-- [1:0-4-4,0-0-4], [7:0-4-7,0-0-4], [8:0-5-0,0-4-12], [10:0-5-0,0-4-12]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.25 | Vert(LL) | -0.07 | 1-10 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.44 | Vert(CT) | -0.15 | 1-10 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.61 | Horz(CT) | 0.02 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 486 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.2 |
| BOT CHORD | 2x6 SP DSS |
| WEBS | 2x4 SP No.3 |
| SLIDER | Left 2x4 SP No.3 3-4-0, Right 2x4 SP No.3 3-4-0 |

**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.** (lb/size) 1=7266/0-3-8 (req. 0-3-13), 7=6329/0-3-8 (min. 0-3-5)
Max Horz 1=-223(LC 23)
Max Uplift 1=-811(LC 8), 7=-708(LC 9)

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

| | |
|---|---|
| TOP CHORD | 1-2=-7203/803, 2-3=-7110/843, 3-4=-6922/933, 4-5=-6909/932, 5-6=-7100/837, 6-7=-7194/802 |
| BOT CHORD | 1-11=-653/5252, 11-12=-653/5252, 12-13=-653/5252, 13-14=-653/5252, 10-14=-653/5252, 9-10=-371/3797, 9-15=-371/3797, 15-16=-371/3797, 16-17=-371/3797, 8-17=-371/3797, 8-18=-551/5239, 18-19=-551/5239, 19-20=-551/5239, 7-20=-551/5239 |
| WEBS | 4-8=-633/4424, 5-8=-259/483, 4-10=-636/4452, 3-10=-259/477 |

**NOTES-**

1) 3-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: 2x6 - 2 rows staggered at 0-4-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) WARNING: Required bearing size at joint(s) 1 greater than input bearing size.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 811 lb uplift at joint 1 and 708 lb uplift at joint 7.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1205 lb down and 139 lb up at 0-4-4, 1195 lb down and 146 lb up at 2-4-4, 1195 lb down and 146 lb up at 4-4-4, 1197 lb down and 146 lb up at 6-4-4, 1197 lb down and 146 lb up at 8-4-4, 1197 lb down and 146 lb up at 10-4-4, 1197 lb down and 146 lb up at 12-4-4, 1197 lb down and 146 lb up at 14-4-4, and 1197 lb down and 146 lb up at 16-4-4, and 1197 lb down and 146 lb up at 18-4-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

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Continued on page 2

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**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-4=-60, 4-7=-60, 1-7=-20

Concentrated Loads (lb)

Vert: 9=-1197(B) 11=-1205(B) 12=-1195(B) 13=-1195(B) 14=-1197(B) 15=-1197(B) 17=-1197(B) 18=-1197(B) 19=-1197(B) 20=-1197(B)


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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | C | Common | 1 | 1 | I53810783 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:21 2022 Page 1
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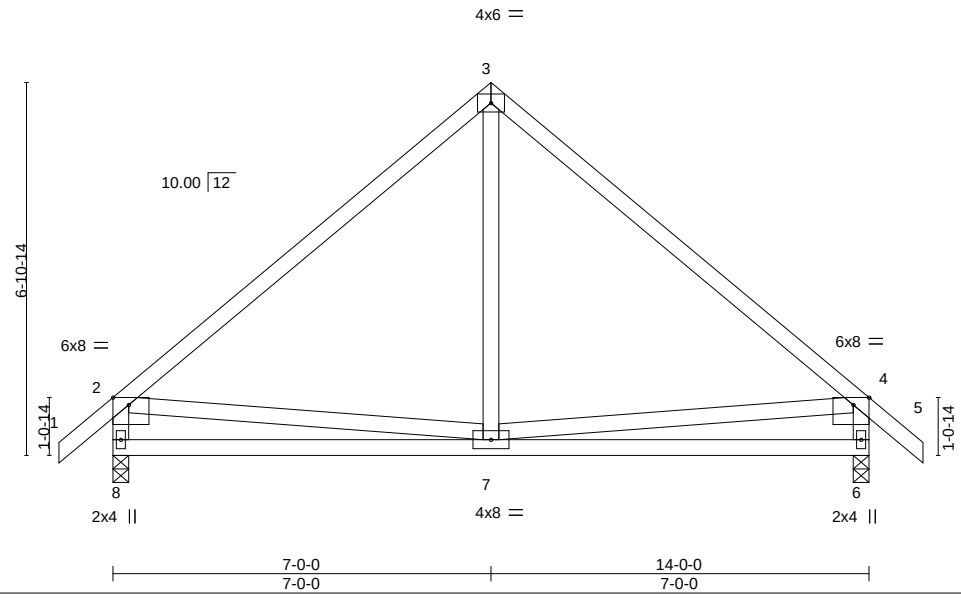


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [4:0-3-8,Edge]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.83 | Vert(LL) | -0.04 | 7-8 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.43 | Vert(CT) | -0.09 | 7-8 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.13 | Horz(CT) | 0.01 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 83 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except*
2-8,4-6: 2x4 SP No.3

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

**REACTIONS.** (size) 8=0-3-8, 6=0-3-8
Max Horz 8=-165(LC 10)
Max Uplift 8=-70(LC 12), 6=-70(LC 13)
Max Grav 8=617(LC 1), 6=617(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-552/127, 3-4=-552/127, 2-8=-557/181, 4-6=-557/181
BOT CHORD 7-8=-310/453, 6-7=-203/389
WEBS 3-7=0/290, 2-7=-154/329, 4-7=-156/333

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.

August 23,2022

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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A MiTek Affiliate
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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | CE | Common Supported Gable | 1 | 1 | I53810784 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:22 2022 Page 1
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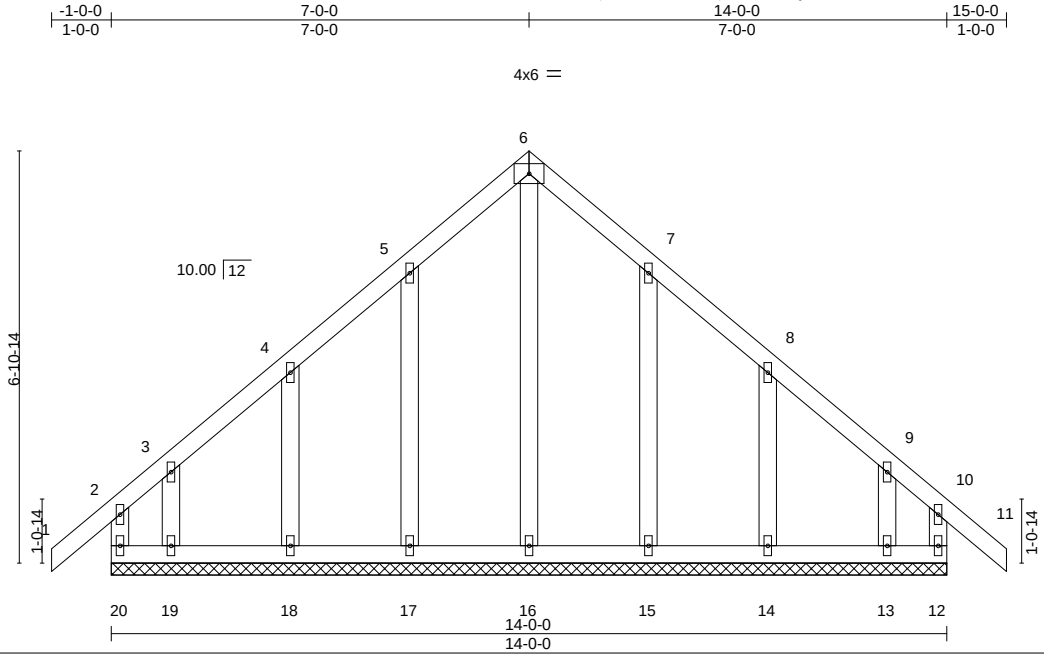


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.14 | Vert(LL) | -0.00 | 11 | n/r | 120 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.07 | Vert(CT) | -0.01 | 11 | n/r | 90 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.16 | Horz(CT) | 0.00 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-R | | | | | | | Weight: 91 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SP No.2 |
| BOT CHORD | 2x4 SP No.2 |
| WEBS | 2x4 SP No.3 |
| OTHERS | 2x4 SP No.3 *Except* 6-16: 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 6-0-0 oc bracing. |

**REACTIONS.** All bearings 14-0-0.
(lb) - Max Horz 20=-165(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 17, 18, 15, 14 except 20=-130(LC 8), 12=-104(LC 9), 19=-159(LC 12), 13=-146(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 20, 12, 16, 17, 18, 19, 15, 14, 13

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

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 18, 15, 14 except (jt=lb) 20=130, 12=104, 19=159, 13=146.

August 23,2022

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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | CP | Monopitch | 5 | 1 | I53810785 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:23 2022 Page 1
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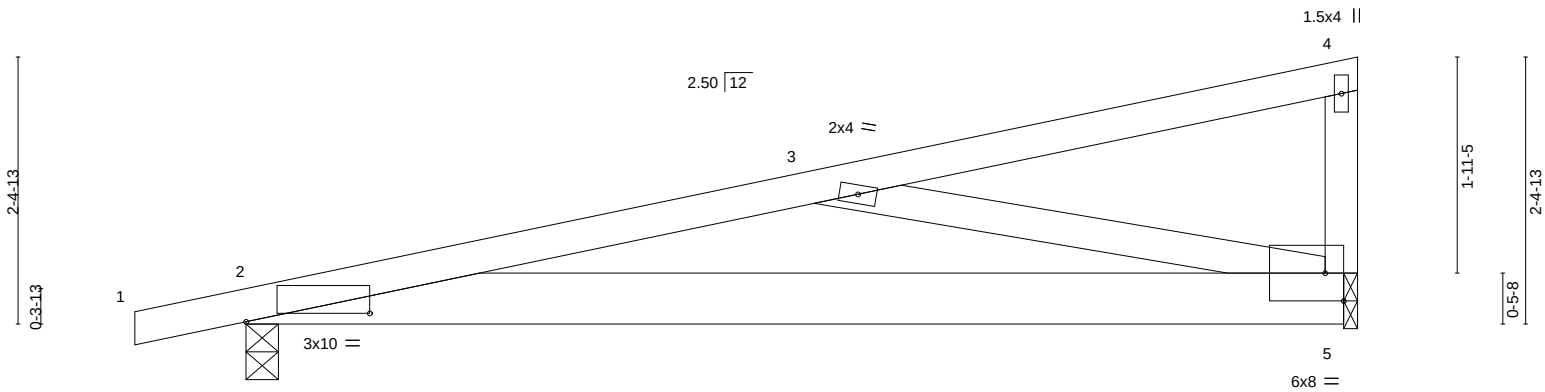


Plate Offsets (X,Y)-- [2:1-1-6,0-0-15]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.46 | Vert(LL) | -0.10 | 2-5 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.47 | Vert(CT) | -0.20 | 2-5 | >588 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.34 | Horz(CT) | 0.01 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 49 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-10-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 5=0-1-8
Max Horz 2=91(LC 8)
Max Uplift 2=-111(LC 8), 5=-77(LC 12)
Max Grav 2=461(LC 1), 5=384(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-882/414
BOT CHORD 2-5=-473/838
WEBS 3-5=-796/486

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) 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.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 2=111.

August 23,2022

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818 Soundside Road
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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | CP1E | Monopitch Supported Gable | 1 | 1 | I53810786 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:24 2022 Page 1
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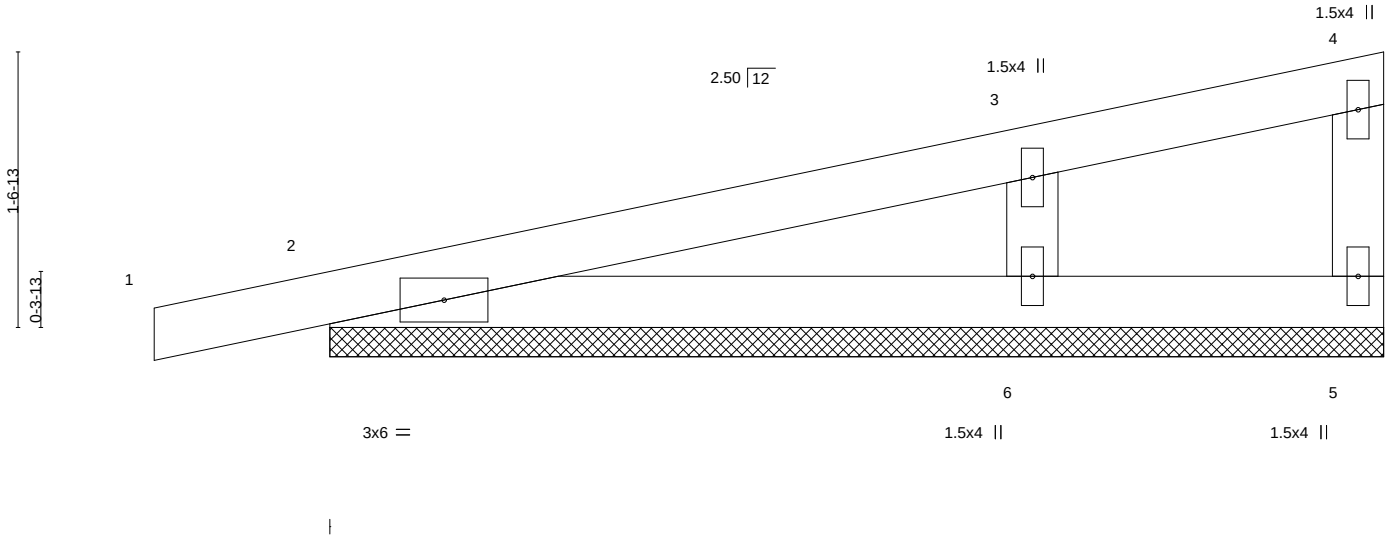


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.18 | Vert(LL) | -0.00 | 1 | n/r | 120 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.13 | Vert(CT) | 0.00 | 1 | n/r | 90 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.05 | Horz(CT) | 0.00 | | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 22 lb | FT = 20% |

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

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

**REACTIONS.** (size) 5=6-0-0, 2=6-0-0, 6=6-0-0
Max Horz 2=58(LC 8)
Max Uplift 5=-6(LC 8), 2=-63(LC 8), 6=-62(LC 12)
Max Grav 5=15(LC 1), 2=200(LC 1), 6=313(LC 1)

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

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 6.

August 23,2022

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car | |
|---|---|---|---|---|---|---|
| 33353-33353B | CPE | Monopitch | 1 | 1 | Job Reference (optional) | I53810787 |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:24 2022 Page 1
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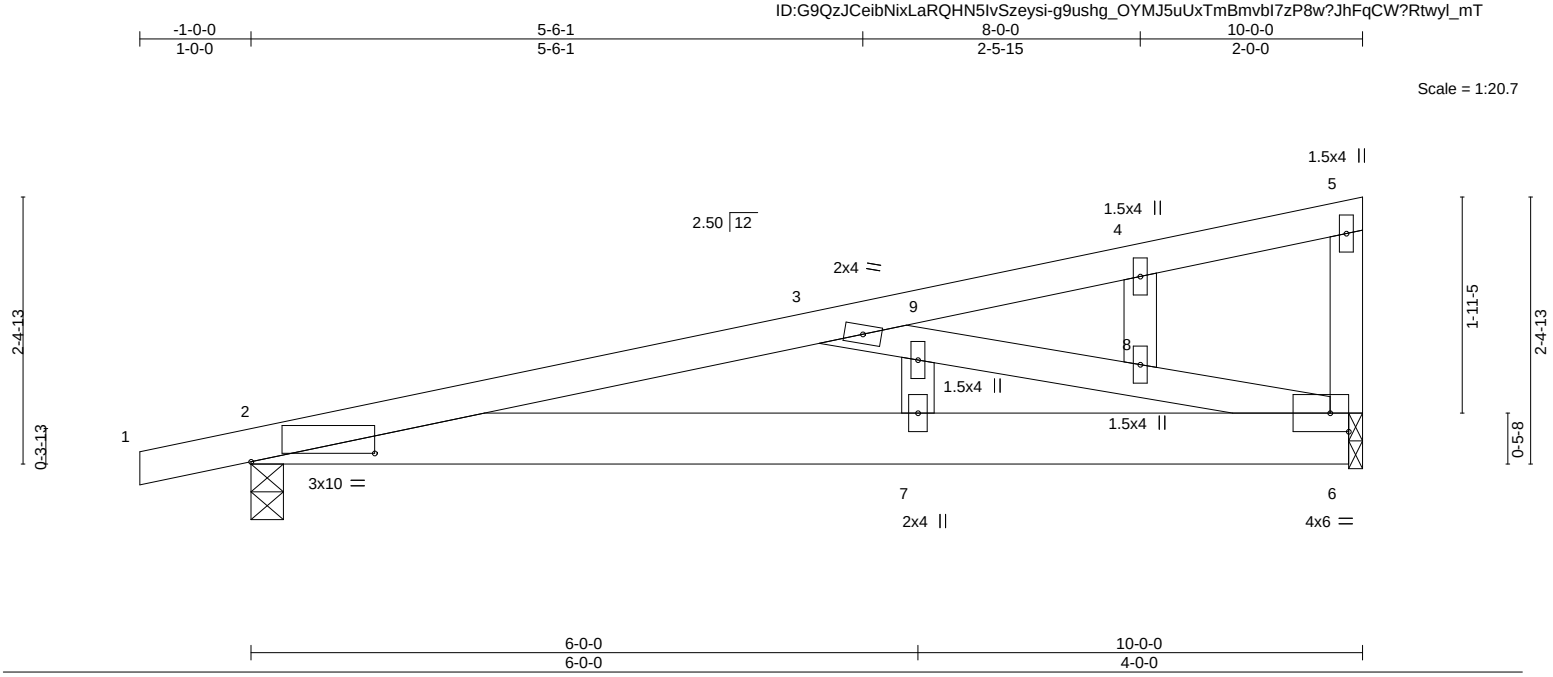


Plate Offsets (X,Y)-- [2:1-1-6,0-0-15]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.27 | Vert(LL) | -0.03 | 2-7 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.30 | Vert(CT) | -0.07 | 2-7 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.50 | Horz(CT) | 0.01 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 51 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-6-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 6=0-1-8
Max Horz 2=91(LC 8)
Max Uplift 2=-111(LC 8), 6=-77(LC 12)
Max Grav 2=461(LC 1), 6=384(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-954/283
BOT CHORD 2-7=-346/906, 6-7=-346/906
WEBS 3-9=-876/351, 8-9=-889/339, 6-8=-908/355

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 2=111.

August 23,2022

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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | D | Common | 1 | 1 | I53810788 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:25 2022 Page 1
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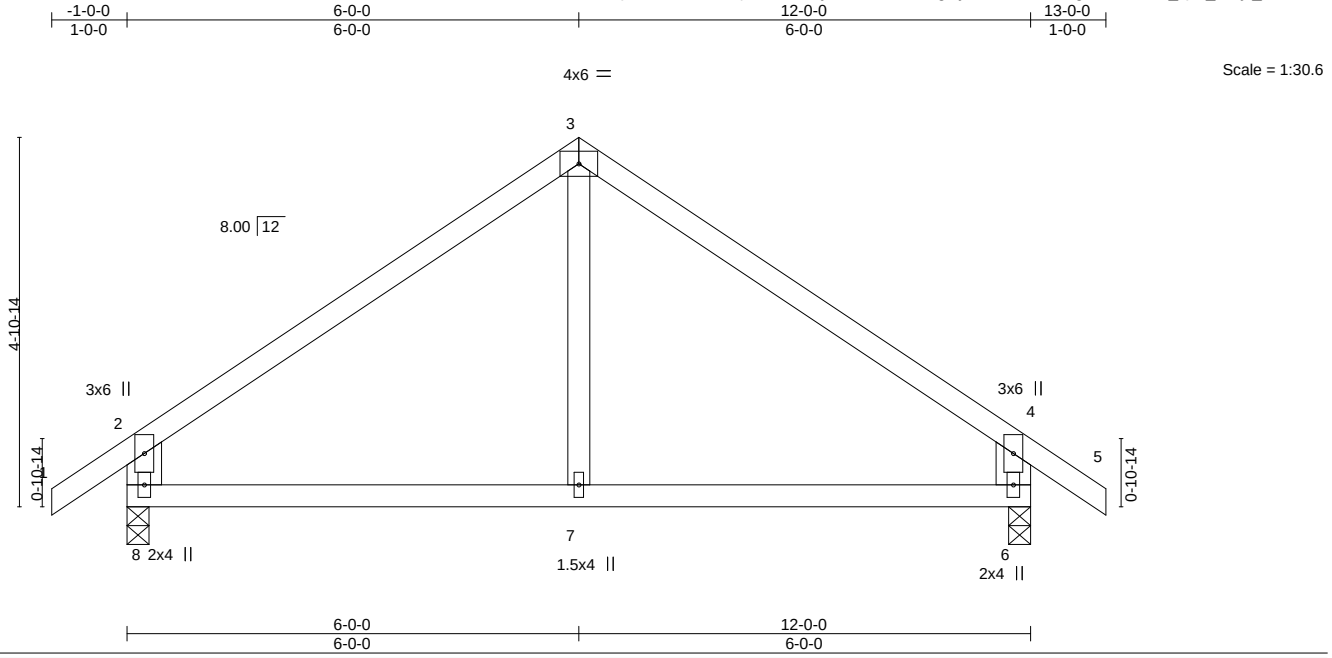


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.47 | Vert(LL) | -0.03 | 7-8 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.27 | Vert(CT) | -0.05 | 7-8 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.09 | Horz(CT) | 0.01 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-R | | | | | | | Weight: 52 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x6 SP No.2 *Except*
3-7: 2x4 SP No.3

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

**REACTIONS.** (size) 8=0-3-8, 6=0-3-8
Max Horz 8=115(LC 11)
Max Uplift 8=-72(LC 12), 6=-72(LC 13)
Max Grav 8=535(LC 1), 6=535(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-481/113, 3-4=-481/113, 2-8=-478/184, 4-6=-478/184
BOT CHORD 7-8=-4/320, 6-7=-4/320

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.

August 23,2022

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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | DE | Common Supported Gable | 1 | 1 | I53810789 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:26 2022 Page 1
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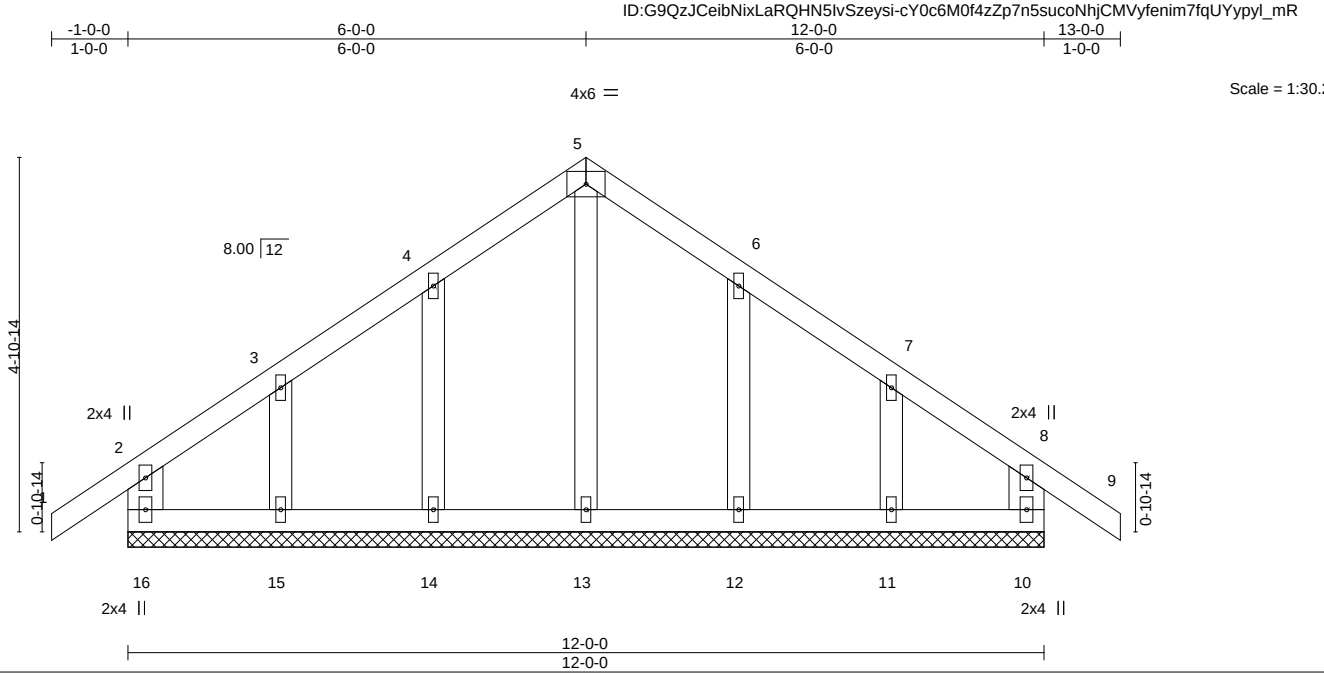


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.10 | Vert(LL) | -0.00 | 9 | n/r | 120 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | -0.01 | 9 | n/r | 90 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.05 | Horz(CT) | 0.00 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-R | | | | | | | Weight: 66 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SP No.2 |
| BOT CHORD | 2x4 SP No.2 |
| WEBS | 2x6 SP No.2 |
| OTHERS | 2x4 SP No.3 |

**BRACING-**

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

**REACTIONS.** All bearings 12-0-0.
(lb) - Max Horz 16=115(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11
Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 11.

August 23,2022


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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car | |
|---|---|---|---|---|---|---|
| 33353-33353B | DGR | Common Girder | 1 | 2 | Job Reference (optional) | I53810790 |

84 Components, Kings Mountain, NC 28086

8.610 s May 25 2022 MiTek Industries, Inc. Tue Aug 23 11:30:31 2022 Page 1

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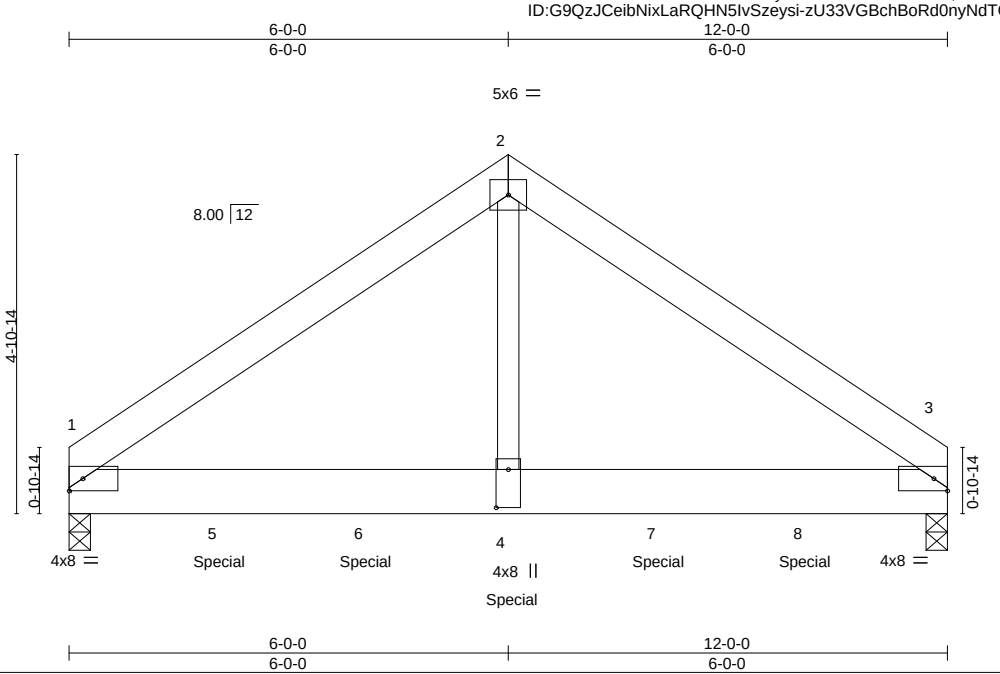


Plate Offsets (X,Y)-- [4:0-6-4,0-2-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.22 | Vert(LL) | -0.03 | 1-4 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.35 | Vert(CT) | -0.07 | 1-4 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.88 | Horz(CT) | 0.01 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 155 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP DSS
WEBS 2x4 SP No.3

**BRACING-**

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

**REACTIONS.** (lb/size) 1=3435/0-3-8 (min. 0-2-11), 3=3485/0-3-8 (min. 0-2-12)
Max Horz 1=107(LC 26)
Max Uplift 1=-394(LC 8), 3=-400(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-4004/490, 2-3=-4004/489
BOT CHORD 1-5=-334/3174, 5-6=-334/3174, 4-6=-334/3174, 4-7=-334/3174, 7-8=-334/3174, 3-8=-334/3174
WEBS 2-4=-418/4252

**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.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 394 lb uplift at joint 1 and 400 lb uplift at joint 3.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1197 lb down and 148 lb up at 2-0-12, 1197 lb down and 148 lb up at 4-0-12, 1197 lb down and 148 lb up at 6-0-12, and 1197 lb down and 148 lb up at 8-0-12, and 1197 lb down and 148 lb up at 10-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-60, 2-3=-60, 1-3=-20

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Continued on page 2

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**LOAD CASE(S)** Standard
Concentrated Loads (lb)
Vert: 4=-1197(F) 5=-1197(F) 6=-1197(F) 7=-1197(F) 8=-1197(F)


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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car | I53810791 |
|---|---|---|---|---|---|---|
| 33353-33353B | E | Common | 3 | 1 | Job Reference (optional) | |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:28 2022 Page 1
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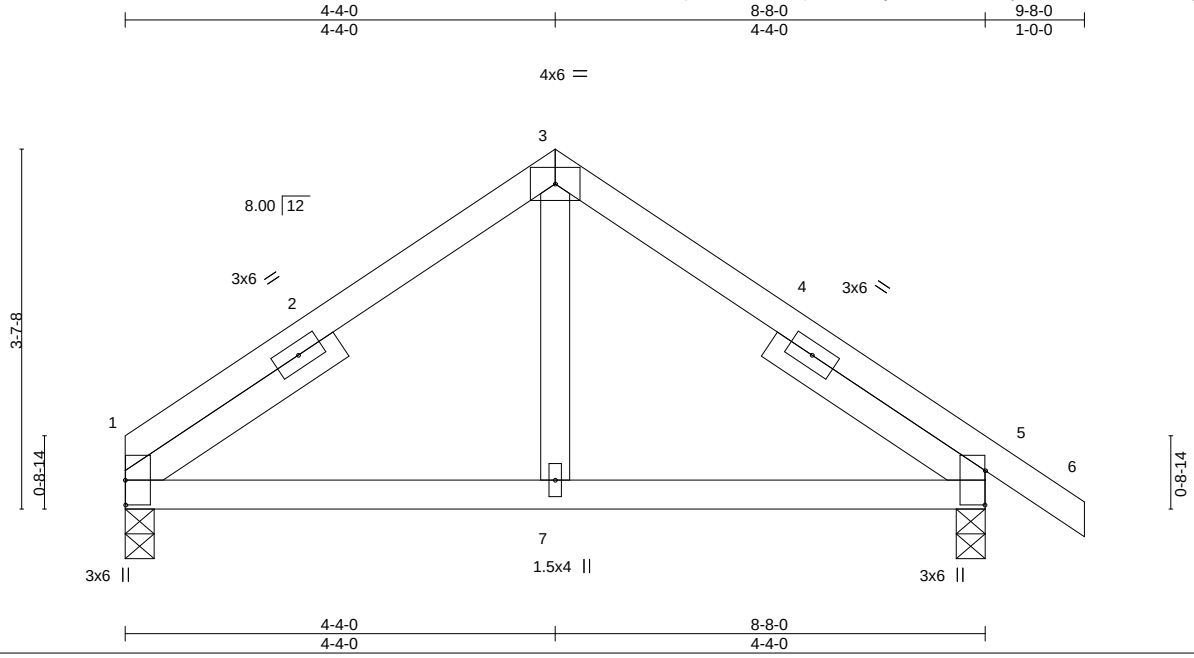


Plate Offsets (X,Y)-- [1:0-3-0,0-0-1], [5:0-4-2,0-0-1]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.28 | Vert(LL) | -0.01 | 1-7 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.22 | Vert(CT) | -0.02 | 1-7 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.08 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-P | | | | | | | Weight: 43 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 2-6-13, Right 2x4 SP No.3 2-6-13

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

**REACTIONS.** (size) 1=0-3-8, 5=0-3-8
Max Horz 1=-86(LC 10)
Max Uplift 1=-35(LC 12), 5=-57(LC 13)
Max Grav 1=343(LC 1), 5=410(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-367/66, 3-5=-388/67

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.

August 23,2022

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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | E1 | Common | 1 | 1 | I53810792 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:29 2022 Page 1
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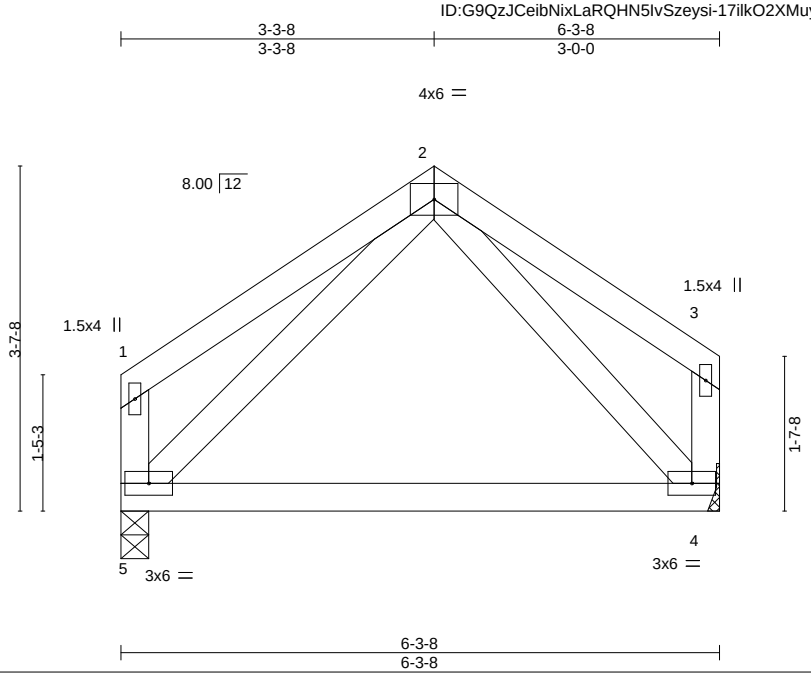


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.18 | Vert(LL) | -0.08 | 4-5 | >926 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.47 | Vert(CT) | -0.16 | 4-5 | >463 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.05 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 37 lb | FT = 20% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 6-3-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-3-8, 4=Mechanical
Max Horz 5=51(LC 9)
Max Uplift 5=-19(LC 12), 4=-22(LC 12)
Max Grav 5=240(LC 1), 4=240(LC 1)

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.

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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | EE | COMMON | 1 | 1 | I53810793 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:30 2022 Page 1
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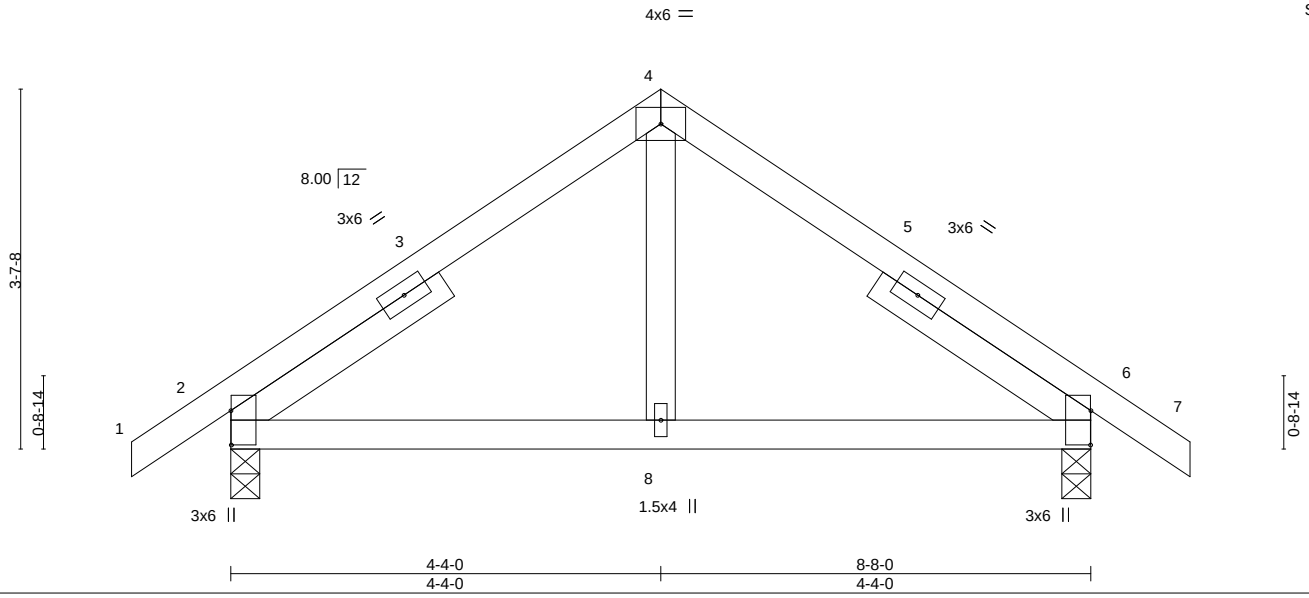


Plate Offsets (X,Y)-- [2:0-4-2,0-0-1], [6:0-4-2,0-0-1]

| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.25 | Vert(LL) | -0.01 | 2-8 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.22 | Vert(CT) | -0.02 | 2-8 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.08 | Horz(CT) | 0.00 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-P | | | | | | | Weight: 45 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 2-6-13, Right 2x4 SP No.3 2-6-13

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

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8
Max Horz 2=88(LC 11)
Max Uplift 2=-57(LC 12), 6=-57(LC 13)
Max Grav 2=407(LC 1), 6=407(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-382/64, 4-6=-382/64

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.

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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | M1 | Monopitch Supported Gable | 1 | 1 | I53810794 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:31 2022 Page 1
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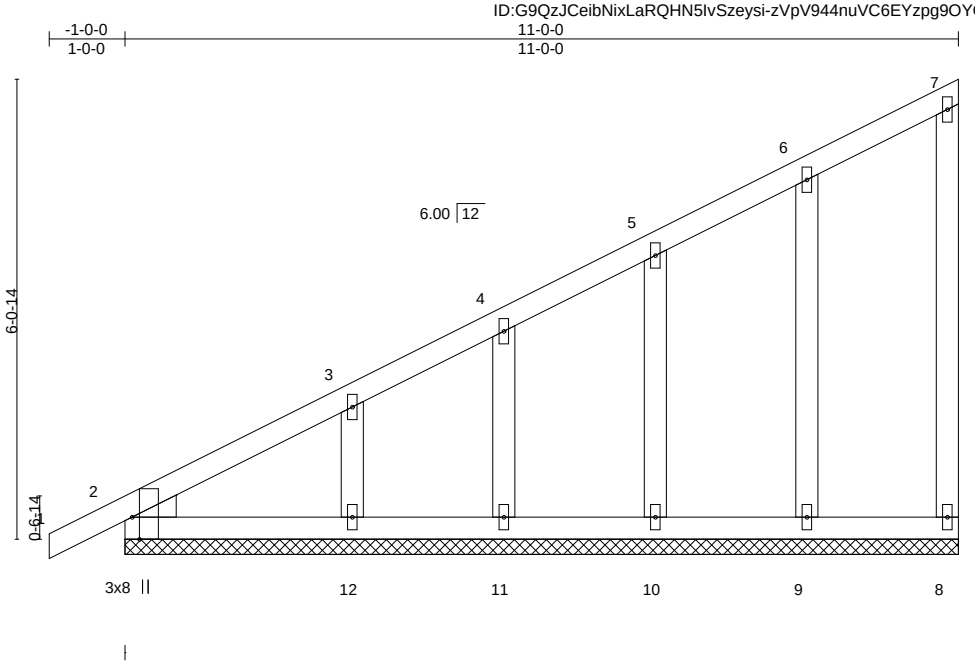


Plate Offsets (X,Y)-- [2:0-3-8,Edge]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.09 | Vert(LL) | -0.00 | 1 | n/r | 120 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.06 | Vert(CT) | 0.00 | 1 | n/r | 90 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.06 | Horz(CT) | 0.00 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 63 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3

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

**REACTIONS.** All bearings 11-0-0.
(lb) - Max Horz 2=228(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 8, 9, 10, 11, 12
Max Grav All reactions 250 lb or less at joint(s) 8, 2, 9, 10, 11, 12

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-281/114

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) All plates are 1.5x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 9, 10, 11, 12.

August 23,2022

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | M2 | Monopitch | 3 | 1 | I53810795 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:31 2022 Page 1
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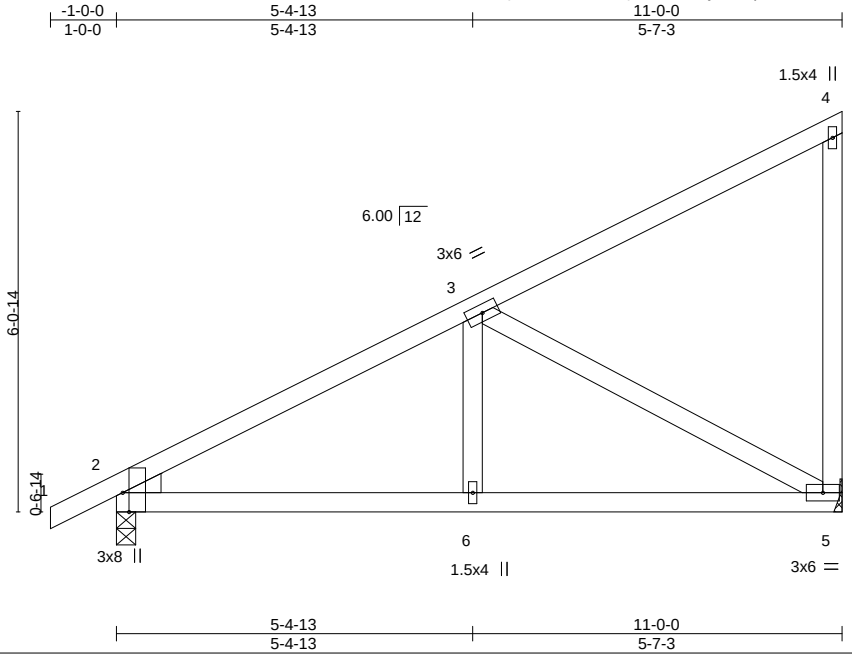


Plate Offsets (X,Y)-- [2:0-3-8,Edge]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.38 | Vert(LL) | -0.02 | 5-6 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.32 | Vert(CT) | -0.05 | 5-6 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.38 | Horz(CT) | 0.01 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 58 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3

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

**REACTIONS.** (size) 5=Mechanical, 2=0-3-8
Max Horz 2=228(LC 12)
Max Uplift 5=-135(LC 12), 2=-46(LC 12)
Max Grav 5=425(LC 1), 2=501(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-597/36
BOT CHORD 2-6=-231/463, 5-6=-231/463
WEBS 3-6=0/253, 3-5=-516/258

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 5=135.

August 23,2022

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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | M3 | Monopitch Supported Gable | 1 | 1 | I53810796 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:32 2022 Page 1
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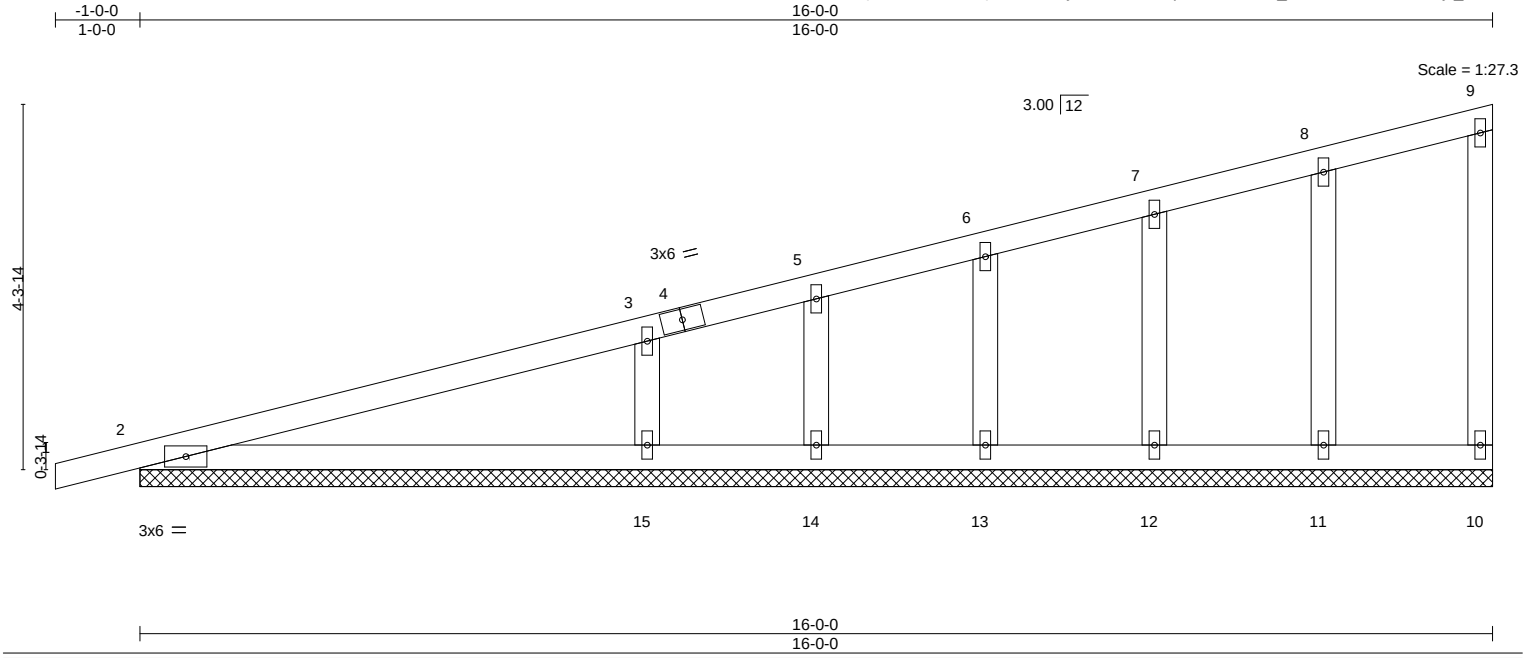


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.42 | Vert(LL) | -0.01 | 1 | n/r | 120 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.28 | Vert(CT) | 0.02 | 1 | n/r | 90 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.07 | Horz(CT) | 0.00 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 72 lb | FT = 20% |

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

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

**REACTIONS.** All bearings 16-0-0.
(lb) - Max Horz 2=166(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 10, 2, 11, 12, 13, 14 except 15=-108(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 10, 11, 12, 13, 14 except 2=260(LC 1), 15=514(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-15=-363/198

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) All plates are 1.5x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 2, 11, 12, 13, 14 except (jt=lb) 15=108.

August 23,2022

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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | M4 | Monopitch | 5 | 1 | I53810797 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:33 2022 Page 1
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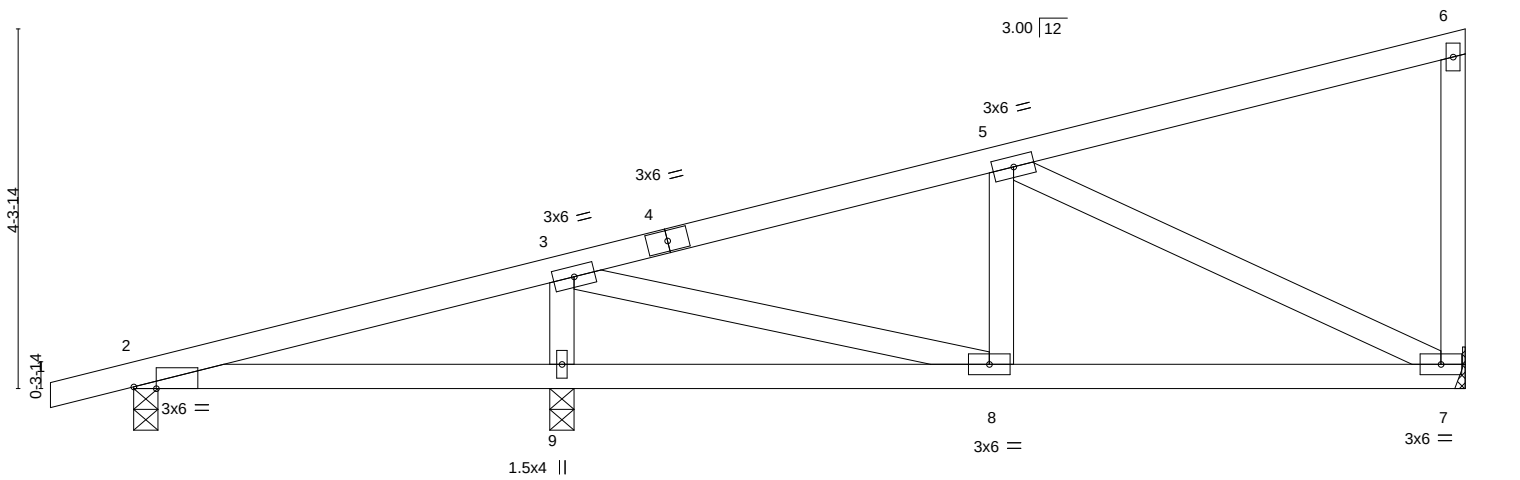


5-1-12 5-1-12 | 10-5-2 5-3-6 | 16-0-0 5-6-14

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

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.34 | Vert(LL) | -0.03 | 7-8 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.29 | Vert(CT) | -0.05 | 7-8 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.35 | Horz(CT) | 0.00 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 77 lb | FT = 20% |

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

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

**REACTIONS.** (size) 7=Mechanical, 2=0-3-8, 9=0-3-8
Max Horz 2=166(LC 8)
Max Uplift 7=-93(LC 8), 2=-58(LC 8), 9=-128(LC 12)
Max Grav 7=410(LC 1), 2=237(LC 1), 9=678(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-5=-526/68
BOT CHORD 7-8=-148/473
WEBS 3-9=-554/228, 3-8=-97/474, 5-7=-505/158

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2 except (jt=lb) 9=128.

August 23,2022

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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | V1 | Valley | 1 | 1 | I53810798 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:34 2022 Page 1
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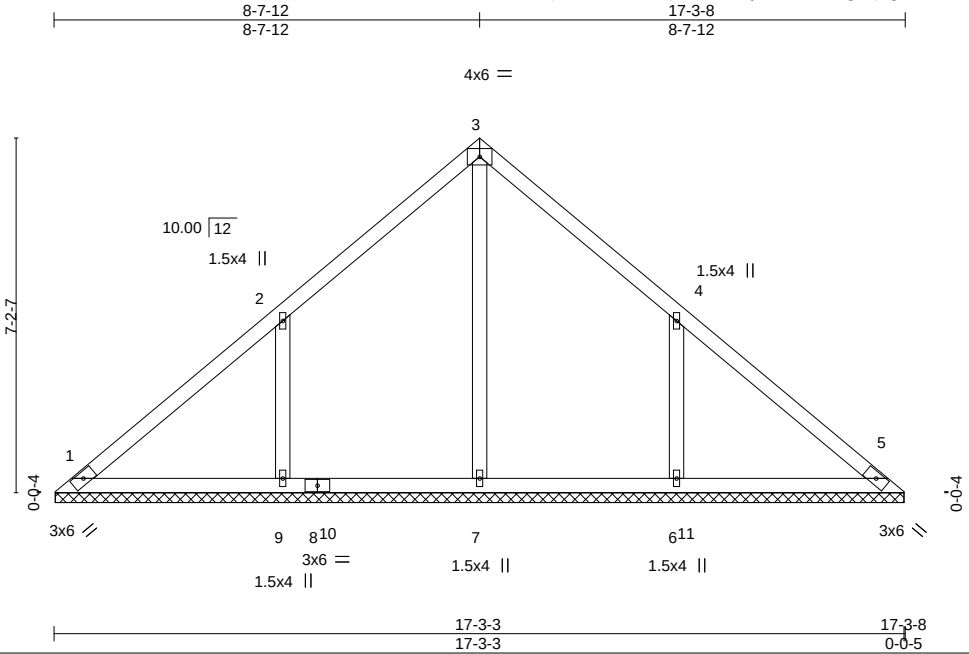


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.24 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.18 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.13 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 77 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3 *Except*
3-7: 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.** All bearings 17-2-14.
(lb) - Max Horz 1=-170(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-210(LC 12), 6=-210(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=365(LC 22), 9=478(LC 19), 6=478(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-342/255, 4-6=-342/255

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=210, 6=210.

August 23,2022

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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | V2 | Valley | 1 | 1 | I53810799 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:35 2022 Page 1
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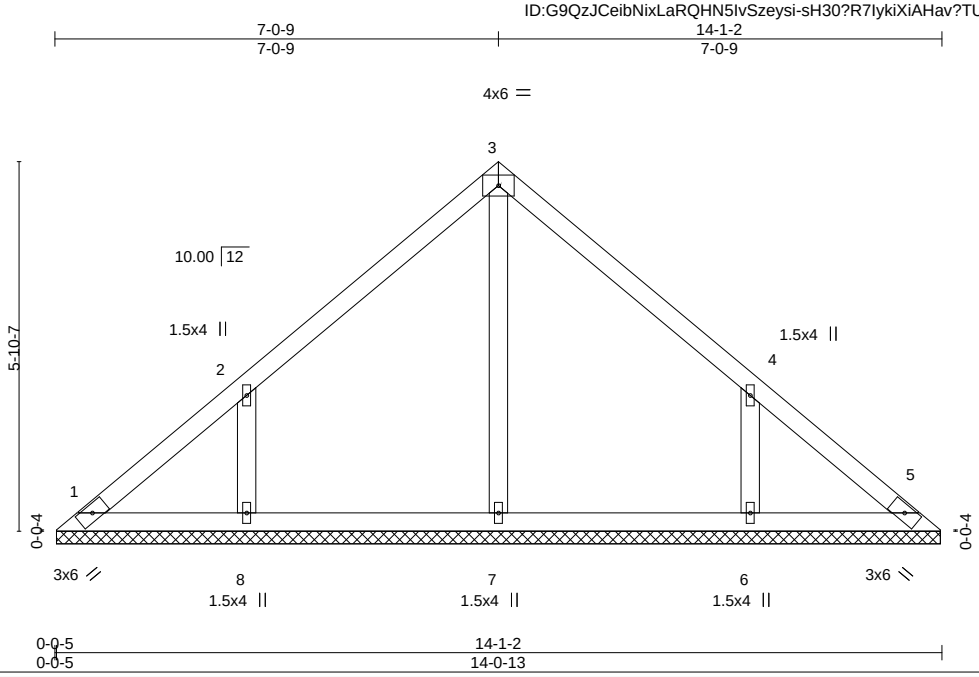


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.18 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.12 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.09 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 60 lb | FT = 20% |

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

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

**REACTIONS.** All bearings 14-0-8.
(lb) - Max Horz 1=-137(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-172(LC 12), 6=-172(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=346(LC 19), 6=346(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-283/213, 4-6=-283/213

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=172, 6=172.

August 23,2022

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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car | |
|---|---|---|---|---|---|---|
| 33353-33353B | V3 | Valley | 1 | 1 | Job Reference (optional) | I53810800 |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:36 2022 Page 1
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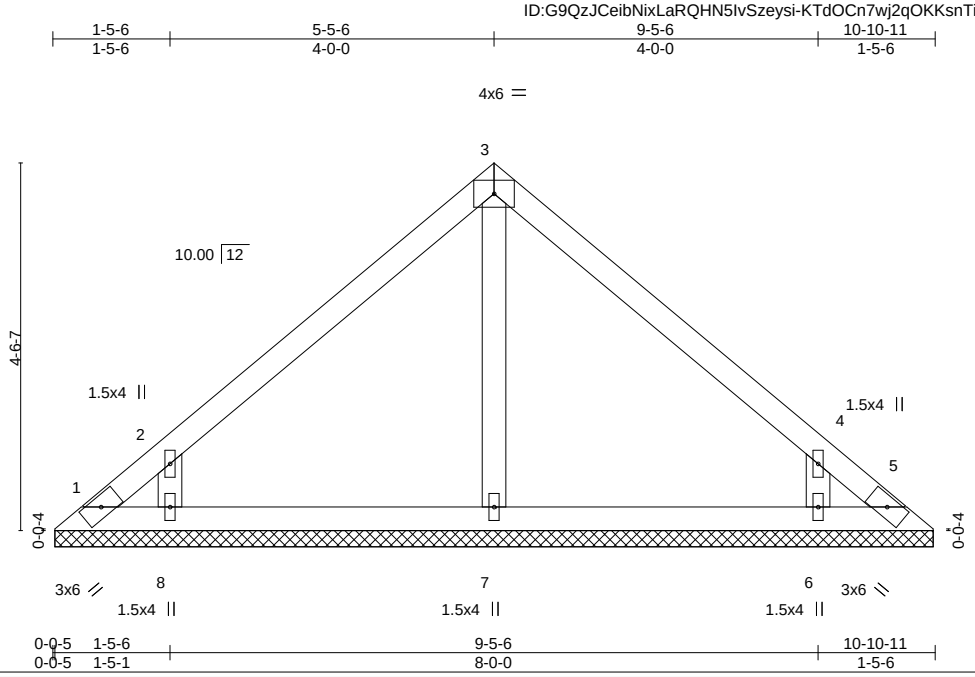


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.19 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.12 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.07 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 43 lb | FT = 20% |

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

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

**REACTIONS.** All bearings 10-10-2.
(lb) - Max Horz 1=-104(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-175(LC 12), 6=-174(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=340(LC 19), 6=340(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-296/226, 4-6=-296/225

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=175, 6=174.

August 23,2022

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | V4 | Valley | 1 | 1 | I53810801 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:37 2022 Page 1
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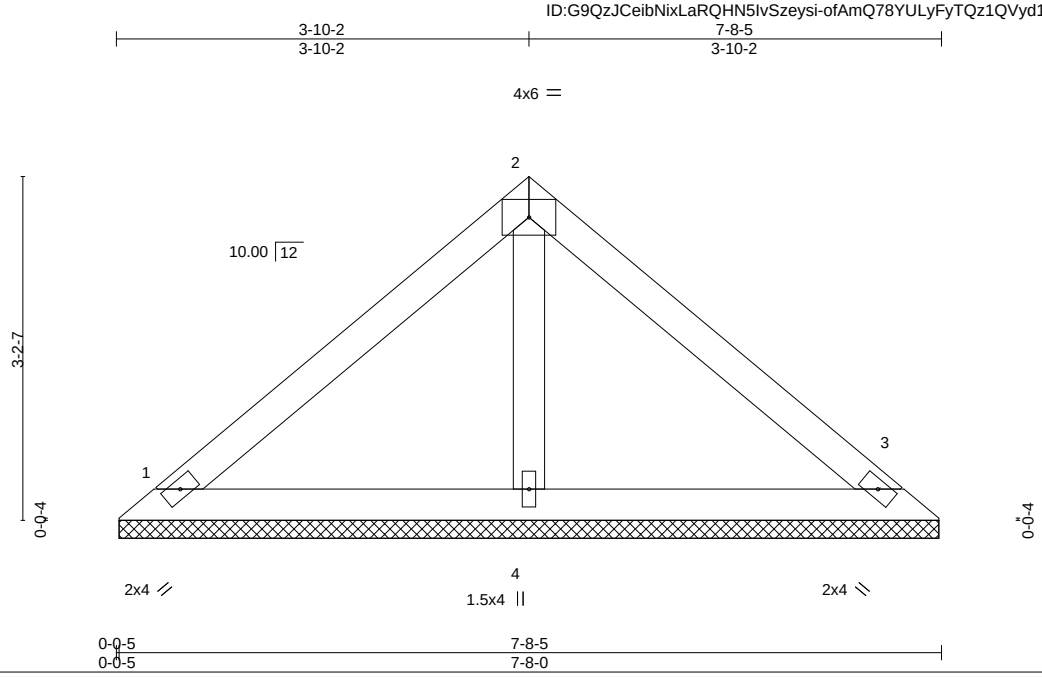


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.38 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.12 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.04 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 29 lb | FT = 20% |

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

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

**REACTIONS.** (size) 1=7-7-11, 3=7-7-11, 4=7-7-11
Max Horz 1=71(LC 9)
Max Uplift 1=-32(LC 12), 3=-41(LC 13)
Max Grav 1=157(LC 1), 3=157(LC 1), 4=237(LC 1)

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

August 23,2022

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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | V5 | Valley | 1 | 1 | I53810802 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:38 2022 Page 1
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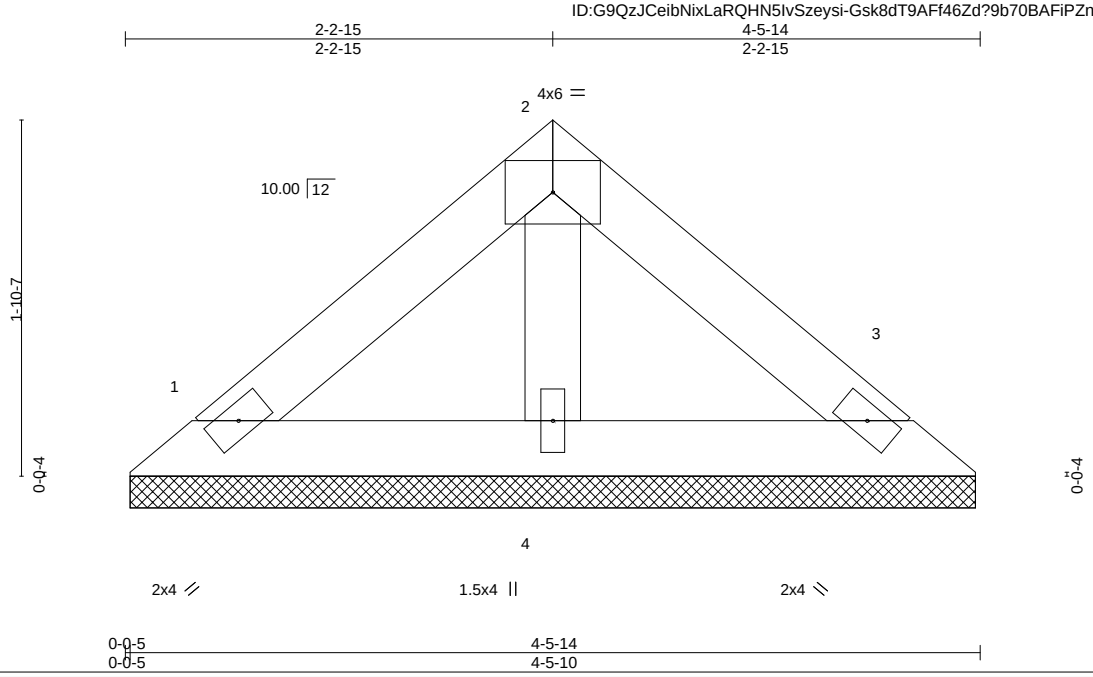


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.10 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.06 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.02 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 16 lb | FT = 20% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-5-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=4-5-5, 3=4-5-5, 4=4-5-5
Max Horz 1=-38(LC 8)
Max Uplift 1=-18(LC 13), 3=-22(LC 13)
Max Grav 1=84(LC 1), 3=84(LC 1), 4=127(LC 1)

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | V6 | Valley | 1 | 1 | I53810803 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:38 2022 Page 1
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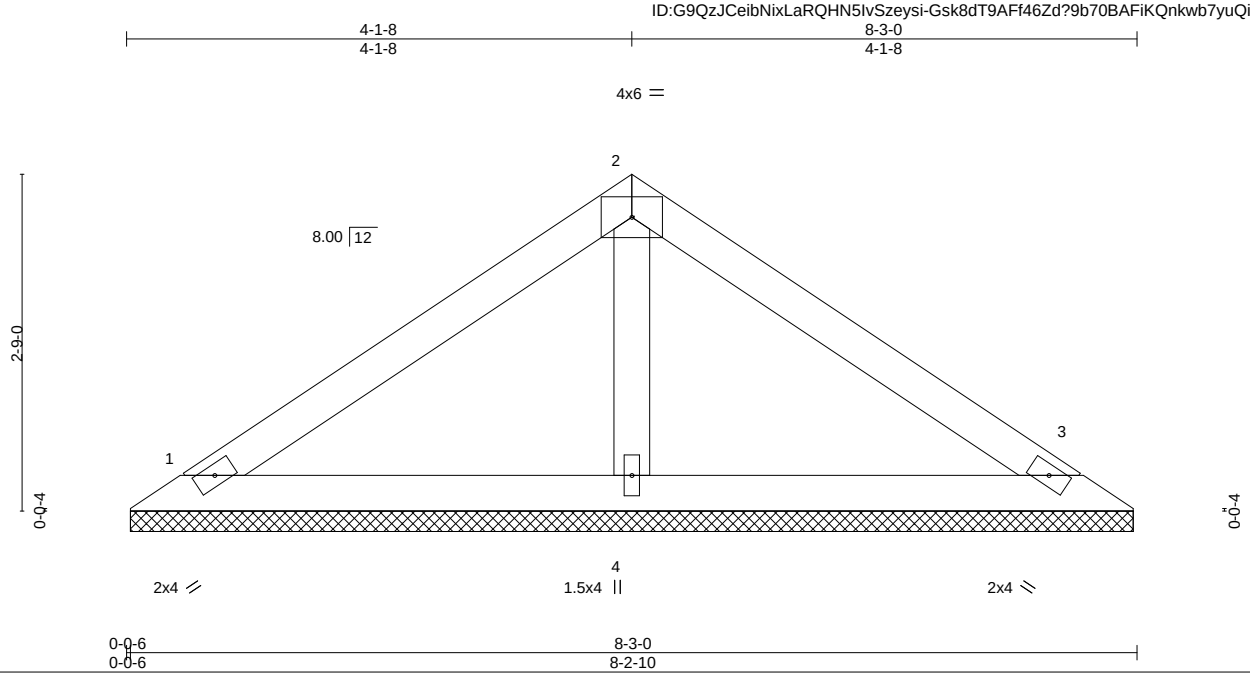


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.43 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.13 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.04 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 28 lb | FT = 20% |

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

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

**REACTIONS.** (size) 1=8-2-4, 3=8-2-4, 4=8-2-4
Max Horz 1=60(LC 9)
Max Uplift 1=-35(LC 12), 3=-42(LC 13)
Max Grav 1=157(LC 1), 3=157(LC 1), 4=270(LC 1)

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

August 23,2022

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| Job | Truss | Truss Type | Qty | Ply | CL2574 SP 3 Car |
|---|---|---|---|---|---|
| 33353-33353B | V7 | Valley | 1 | 1 | I53810804 |
| | | | | | Job Reference (optional) |

84 Components (Dunn), Dunn, NC - 28334, 8.610 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 23 10:42:39 2022 Page 1
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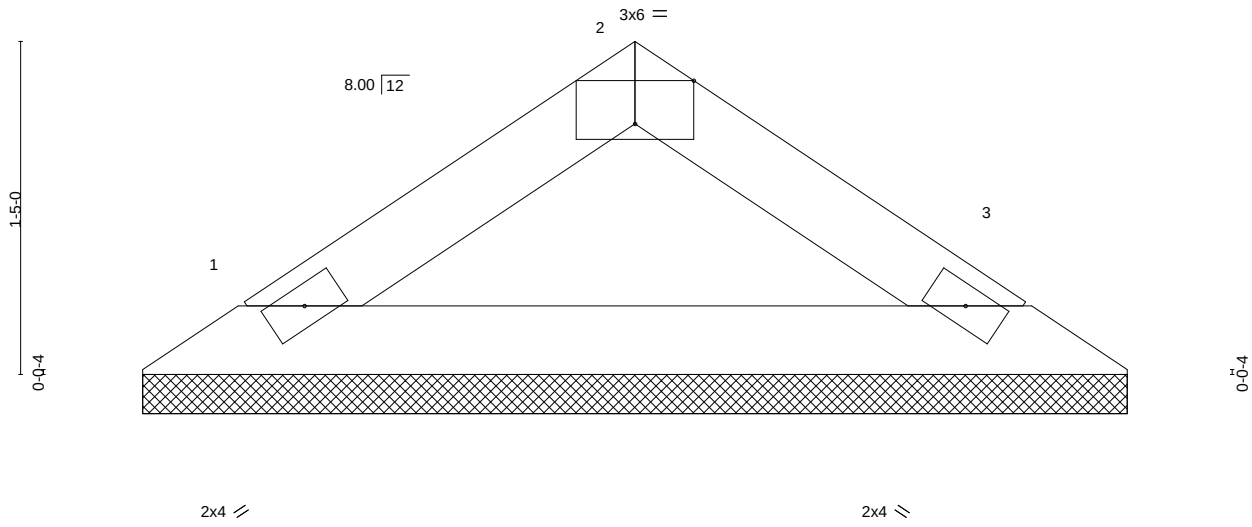


Plate Offsets (X,Y)-- [2:0-3-0,Edge]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.08 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.22 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 12 lb | FT = 20% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-3-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=4-2-4, 3=4-2-4
Max Horz 1=-27(LC 8)
Max Uplift 1=-14(LC 12), 3=-14(LC 13)
Max Grav 1=131(LC 1), 3=131(LC 1)

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

August 23,2022

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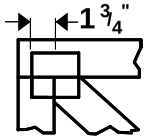
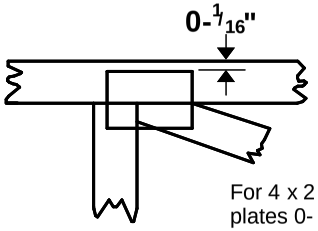
# Symbols

## PLATE LOCATION AND ORIENTATION




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




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

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

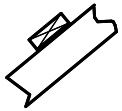
*** Plate location details available in MiTek 20/20 software or upon request.**

## PLATE SIZE

4 x 4

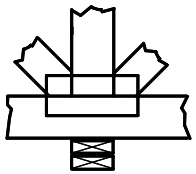
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

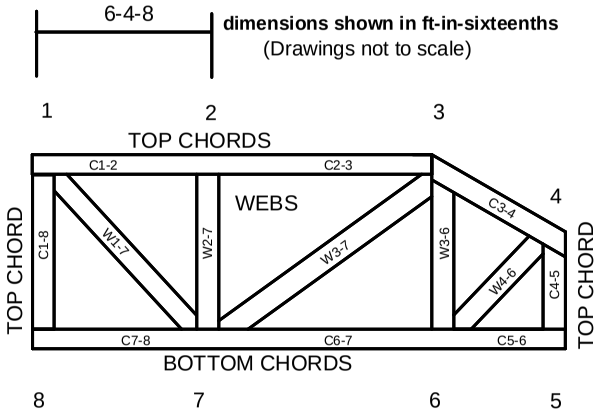


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

**Industry Standards:**

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & 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-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

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MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

# 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.