Mark Morris, P.E.
#126, 1317-M, Summerville, SC 29483
843 209-5784, Fax (866)-213-4614

The truss drawing(s) listed below have been prepared by **Atlantic Building Components** under my direct supervision based on the parameters provided by the truss designers.

AST #: 57144
JOB: 25-1795-R01
JOB NAME: LOT 0.0013 HONEYCUTT HILLS
Wind Code: ASCE7-16
Wind Speed: Vult= 120mph
Exposure Category: B
Mean Roof Height (feet): 23
These truss designs comply with IRC 2015 as well as IRC 2018.
*21 Truss Design(s)*

Trusses:
GR01, GR02, PB01, PB02, PB03, PB03A, PB04, R01, R02, R03, R05, R06, R07, R08, R09, R10, R11, R12, R14, SP01, SP02

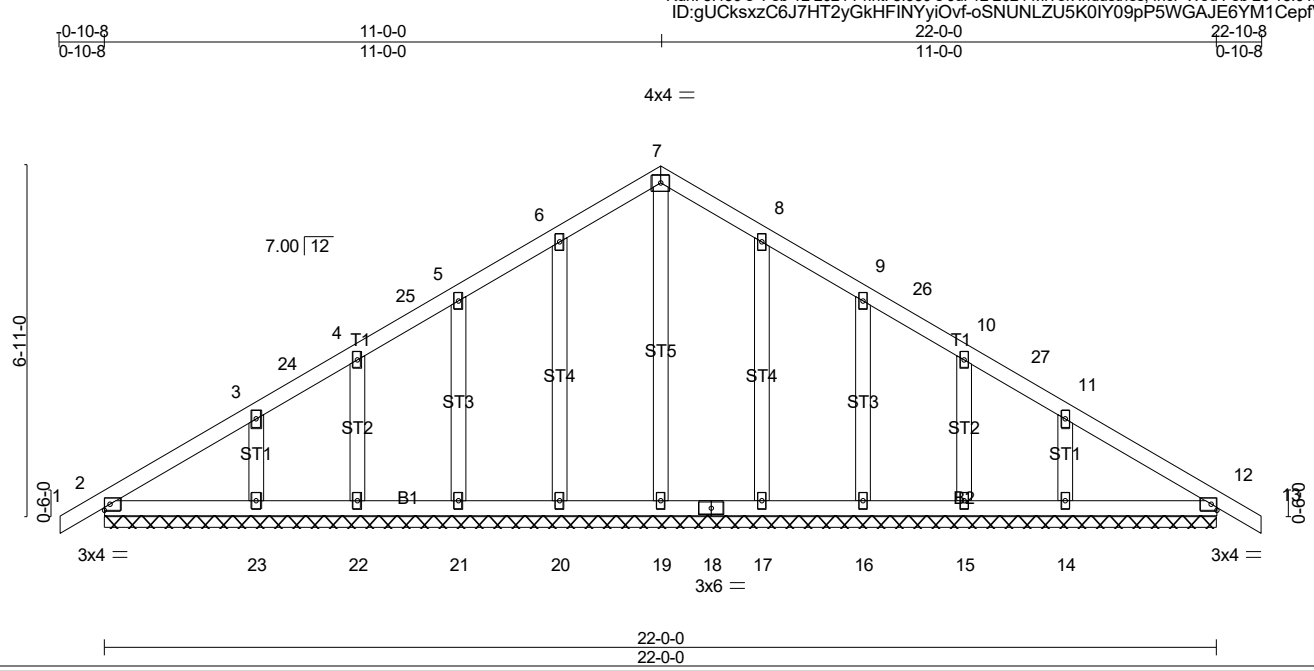

**2/25/2025**
**Mark Morris**

***Warning !—Verify design parameters and read notes before use.***

This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 Guide to *Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

| Job | Truss | Truss Type | Qty | Ply | LOT 0.0013 HONEYCUTT HILLS \| 311 SHELBY MEADOW LANE ANGIER, NC |
|---|---|---|---|---|---|
| 25-1795-R01 | GR01 | Common Supported Gable | 1 | 1 | # 57144 |
| | | | | | Job Reference (optional) |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Feb 26 15:01:01 2025 Page 1
ID:gUCksxzC6J7HT2yGkHFINYyiOvf-oSNUNLZU5K0IY09pP5WGAJE6YM1CepfVTOjw2AzhF80




| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.09 | Vert(LL) | 0.00 | 12 | n/r | 180 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.10 | Vert(CT) | 0.00 | 13 | n/r | 80 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.12 | Horz(CT) | 0.00 | 12 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2021/TPI2014 | | Matrix-SH | | | | | | | Weight: 125 lb | FT = 20% |
| BCDL | 10.0 | | | | | | | | | | | |

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 22-0-0.
(lb) - Max Horz 2=-135(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 21, 22, 23, 17, 16, 15, 14
Max Grav All reactions 250 lb or less at joint(s) 2, 19, 21, 22, 23, 16, 15, 14, 12 except 20=302(LC 5), 17=302(LC 6)

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

**NOTES-** (13-16)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Exterior(2N) 3-11-2 to 6-2-6, Corner(3R) 6-2-6 to 15-9-10, Exterior(2N) 15-9-10 to 18-0-14, Corner(3E) 18-0-14 to 22-10-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20, 21, 22, 23, 17, 16, 15, 14.


Continued on page 2

2/25/2025

13) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
14) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
15) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
16) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard

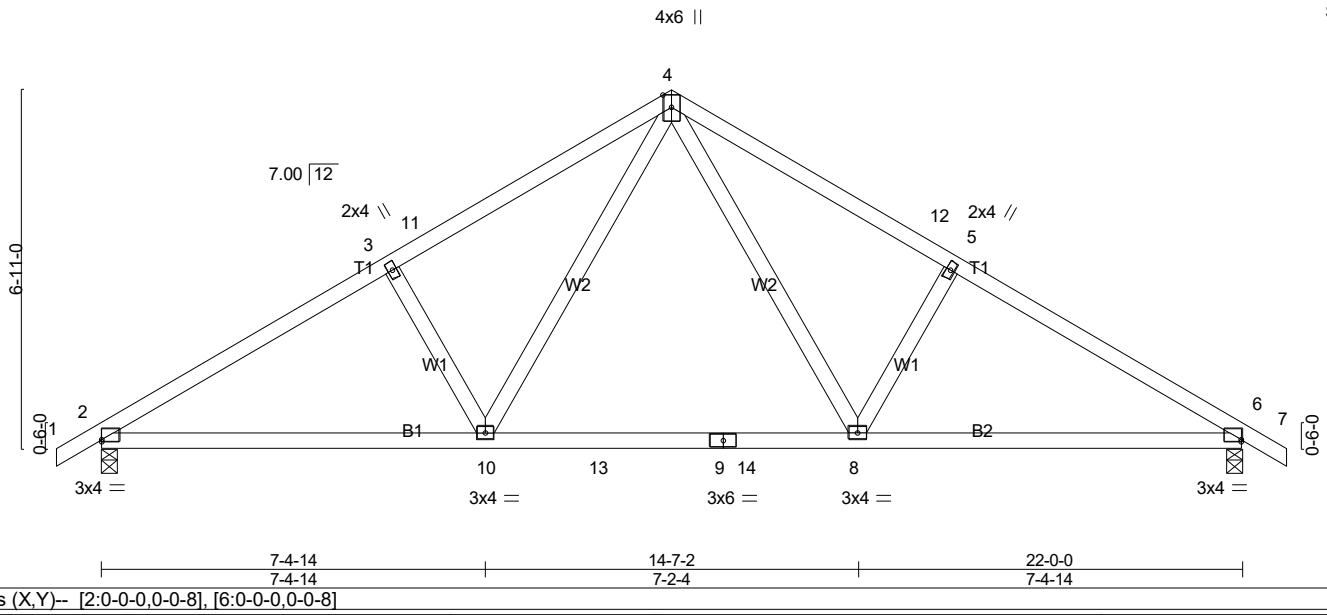

2/25/2025

| Job | Truss | Truss Type | Qty | Ply | LOT 0.0013 HONEYCUTT HILLS \| 311 SHELBY MEADOW LANE ANGIER, NC |
|---|---|---|---|---|---|
| 25-1795-R01 | GR02 | Common | 6 | 1 | # 57144 |
| | | | | | Job Reference (optional) |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Feb 26 15:01:02 2025 Page 1
ID:gUCksxzC6J7HT2yGkHFINYyiOvf-Gfxsaha6re889Ak?zo1VjWnAvmEiNEHfi1TTaczhF8?

0-10-8 | 5-7-5 | 11-0-0 | 16-4-11 | 22-0-0 | 22-10-8
0-10-8 | 5-7-5 | 5-4-11 | 5-4-11 | 5-7-5 | 0-10-8

Scale = 1:44.5




7-4-14 | 14-7-2 | 22-0-0
7-4-14 | 7-2-4 | 7-4-14

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

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.56 | Vert(LL) | -0.16 | 8-10 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.60 | Vert(CT) | -0.22 | 8-10 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.22 | Horz(CT) | 0.03 | 6 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2021/TPI2014 | | Matrix-SH | | | | | | | Weight: 106 lb | FT = 20% |
| BCDL | 10.0 | | | | | | | | | | | |

**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 4-5-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 2=930/0-3-8 (min. 0-1-8), 6=930/0-3-8 (min. 0-1-8)
Max Horz 2=-135(LC 12)
Max Uplift2=-82(LC 14), 6=-82(LC 15)
Max Grav 2=958(LC 21), 6=958(LC 22)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1384/112, 3-11=-1244/121, 4-11=-1121/146, 4-12=-1121/146, 5-12=-1244/122, 5-6=-1384/112
BOT CHORD 2-10=-115/1159, 10-13=-2/764, 9-13=-2/764, 9-14=-2/764, 8-14=-2/764, 6-8=-24/1130
WEBS 4-8=-78/547, 5-8=-357/158, 4-10=-78/547, 3-10=-357/158

**NOTES-** (9-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 6-2-6, Exterior(2R) 6-2-6 to 15-9-10, Interior(1) 15-9-10 to 18-0-14, Exterior(2E) 18-0-14 to 22-10-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.


Continued on page 2

2/25/2025

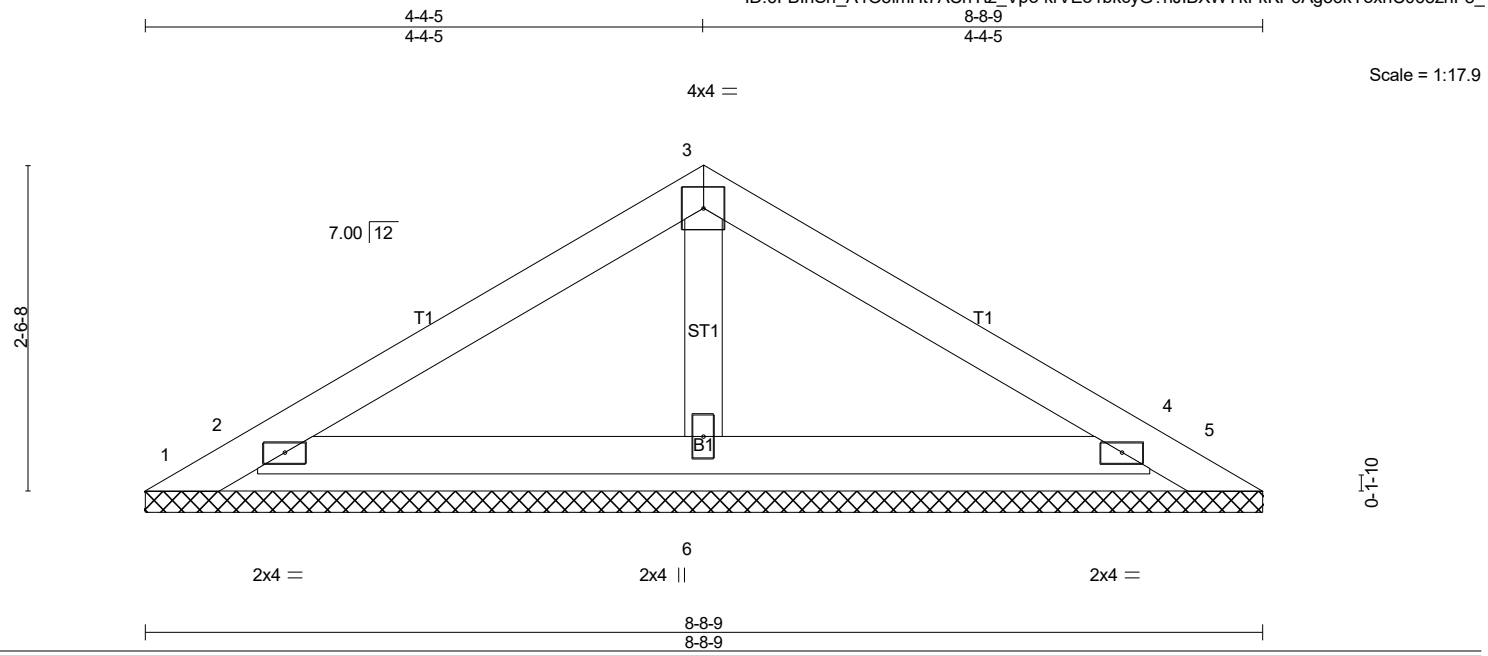
9) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard


2/25/2025

| Job | Truss | Truss Type | Qty | Ply | LOT 0.0013 HONEYCUTT HILLS \| 311 SHELBY MEADOW LANE ANGIER, NC |
|---|---|---|---|---|---|
| 25-1795-R01 | PB01 | GABLE | 1 | 1 | # 57144 |
| | | | | | Job Reference (optional) |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Feb 26 15:01:03 2025 Page 1
ID:6FBInSn_A4O3imHt7ACnTtz_Vpo-krVEo1bkcyG?nJlBXWYkFkKP6Ag36kYoxhC063zhF8_




| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.27 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.21 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2021/TPI2014 | | Matrix-P | | | | | | | Weight: 28 lb | FT = 20% |
| BCDL | 10.0 | | | | | | | | | | | |

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 8-8-9.
(lb) - Max Horz 1=43(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 4 except 1=-170(LC 21), 5=-170(LC 22), 2=-105(LC 14)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 2=470(LC 21), 4=470(LC 22)

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

**NOTES-** (12-15)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 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) 4 except (jt=lb) 1=170, 5=170, 2=105.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
12) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
14) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
15) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

Continued on page 2

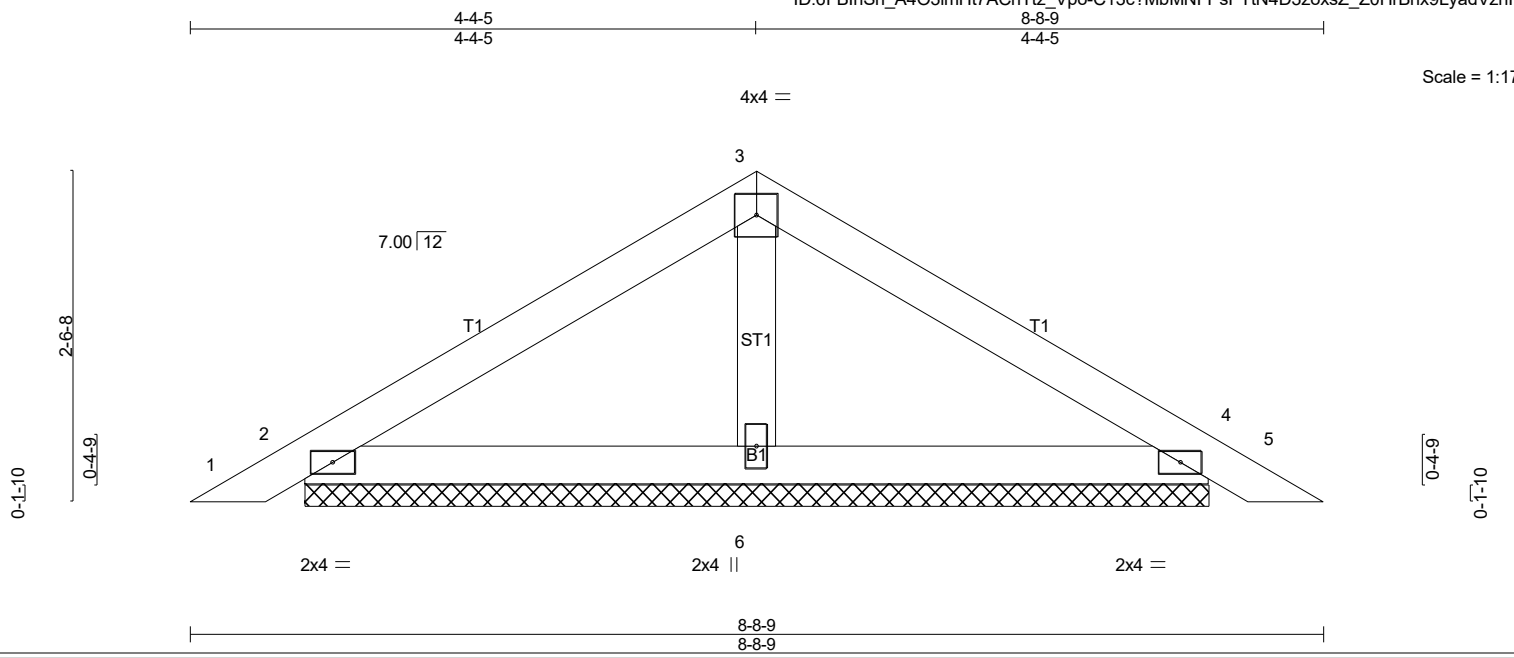

2/25/2025

**LOAD CASE(S)** Standard


2/25/2025

| Job | Truss | Truss Type | Qty | Ply | LOT 0.0013 HONEYCUTT HILLS \| 311 SHELBY MEADOW LANE ANGIER, NC |
|---|---|---|---|---|---|
| 25-1795-R01 | PB02 | Piggyback | 5 | 1 | # 57144 |
| | | | | | Job Reference (optional) |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Feb 26 15:01:04 2025 Page 1
ID:6FBlnSn_A4O3imHt7ACnTtz_Vpo-C13c?MbMNFPsPTtN4D3zoxsZ_Z0HrBhx9LyadVzhF7z




| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.33 | Vert(LL) | 0.01 | 5 | n/r | 180 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.21 | Vert(CT) | 0.01 | 5 | n/r | 80 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.04 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2021/TPI2014 | | Matrix-P | | | | | | | Weight: 28 lb | FT = 20% |
| BCDL | 10.0 | | | | | | | | | | | |

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 2=184/6-11-6 (min. 0-1-8), 4=184/6-11-6 (min. 0-1-8), 6=260/6-11-6 (min. 0-1-8)
Max Horz 2=43(LC 13)
Max Uplift2=-30(LC 14), 4=-35(LC 15)
Max Grav 2=262(LC 21), 4=262(LC 22), 6=267(LC 21)

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

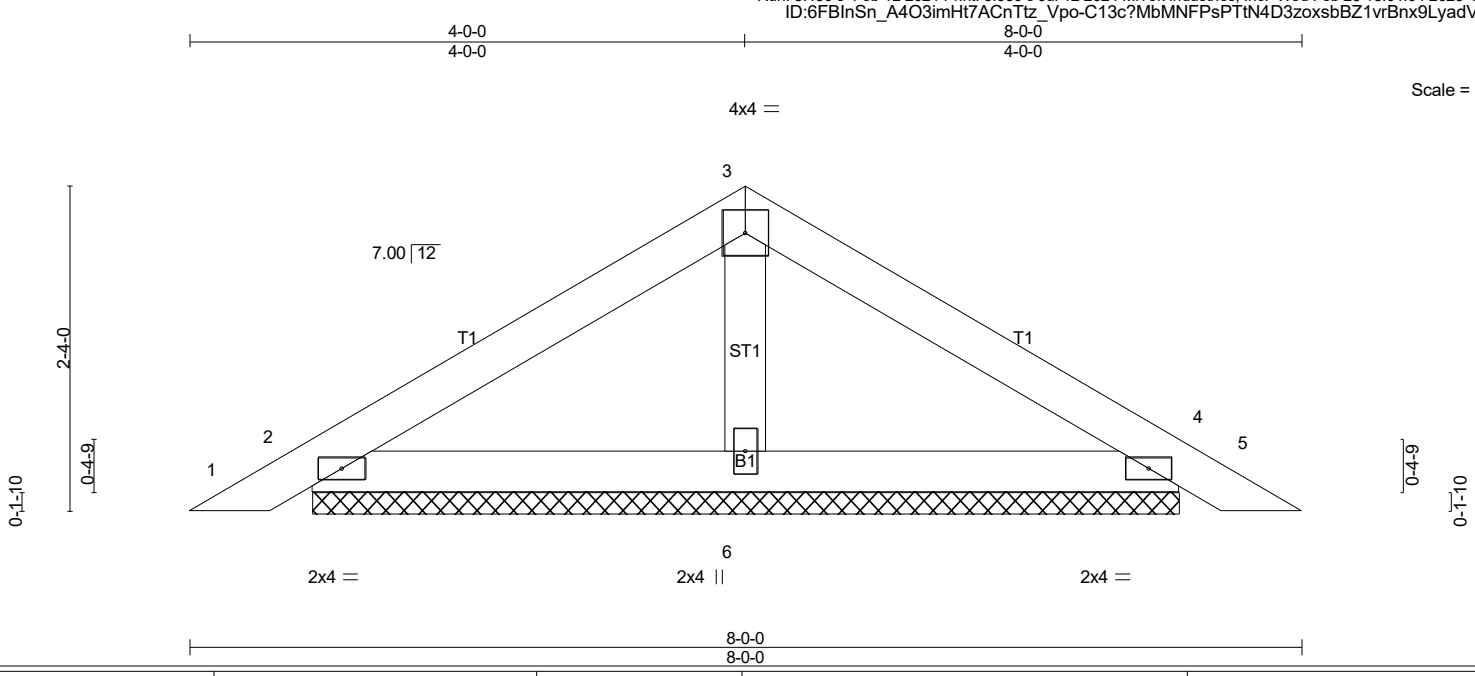
**NOTES-** (11-14)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Gable requires continuous bottom chord bearing.
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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 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, 4.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
11) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
13) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
14) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.


**LOAD CASE(S)** Standard

2/25/2025

| Job | Truss | Truss Type | Qty | Ply | LOT 0.0013 HONEYCUTT HILLS \| 311 SHELBY MEADOW LANE ANGIER, NC |
|---|---|---|---|---|---|
| 25-1795-R01 | PB03 | Piggyback | 9 | 1 | Job Reference (optional) **# 57144** |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Feb 26 15:01:04 2025 Page 1
ID:6FBInSn_A4O3imHt7ACnTtz_Vpo-C13c?MbMNFPsPTtN4D3zoxsbBZ1vrBnx9LyadVzhF7z




| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.25 | Vert(LL) | 0.01 | 5 | n/r | 180 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.17 | Vert(CT) | 0.01 | 5 | n/r | 80 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2021/TPI2014 | | Matrix-P | | | | | | | Weight: 25 lb | FT = 20% |
| BCDL | 10.0 | | | | | | | | | | | |

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 2=169/6-2-13 (min. 0-1-8), 4=169/6-2-13 (min. 0-1-8), 6=232/6-2-13 (min. 0-1-8)
Max Horz 2=39(LC 13)
Max Uplift2=-28(LC 14), 4=-33(LC 15)
Max Grav 2=238(LC 21), 4=238(LC 22), 6=236(LC 21)

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

**NOTES-** (11-14)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Gable requires continuous bottom chord bearing.
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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 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, 4.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
11) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
13) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
14) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

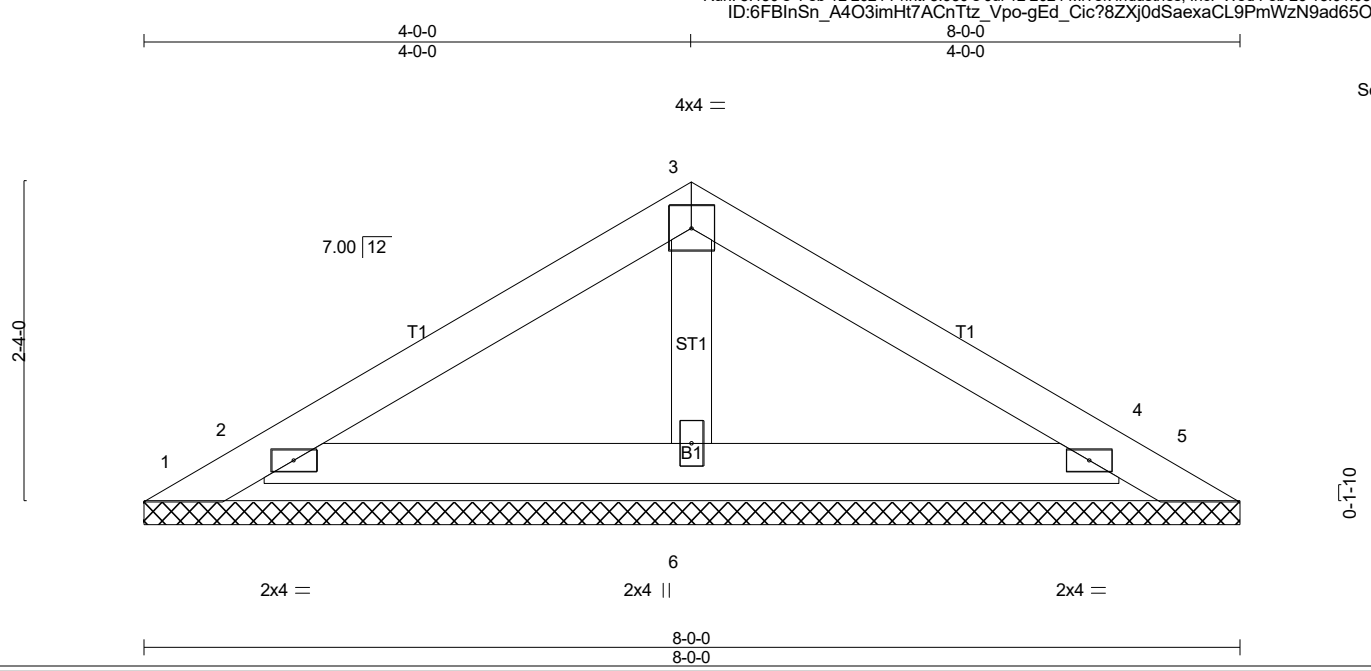

**LOAD CASE(S)** Standard

2/25/2025

**Warning !—Verify design parameters and read notes before use.** This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 Guide to *Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

| Job | Truss | Truss Type | Qty | Ply | LOT 0.0013 HONEYCUTT HILLS \| 311 SHELBY MEADOW LANE ANGIER, NC |
|---|---|---|---|---|---|
| 25-1795-R01 | PB03A | GABLE | 1 | 1 | # 57144 |
| | | | | | Job Reference (optional) |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Feb 26 15:01:05 2025 Page 1
ID:6FBInSn_A4O3imHt7ACnTtz_Vpo-gEd_Cic?8ZXj0dSaexaCL9PmWzN9ad65O?h7AxzhF7y




| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.22 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.17 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2021/TPI2014 | | Matrix-P | | | | | | | Weight: 25 lb | FT = 20% |
| BCDL | 10.0 | | | | | | | | | | | |

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

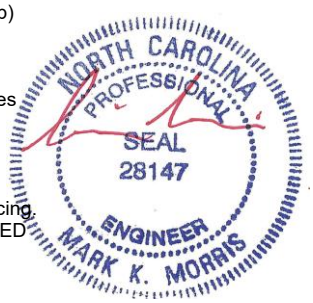
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 8-0-0.
(lb) - Max Horz 1=39(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 2, 4 except 1=-126(LC 21), 5=-126(LC 22)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 2=398(LC 21), 4=398(LC 22)

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

**NOTES-** (12-15)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 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) 2, 4 except (jt=lb) 1=126, 5=126.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
12) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
14) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
15) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

Continued on page 2




2/25/2025

| Job | Truss | Truss Type | Qty | Ply | LOT 0.0013 HONEYCUTT HILLS \| 311 SHELBY MEADOW LANE ANGIER, NC |
|---|---|---|---|---|---|
| 25-1795-R01 | PB03A | GABLE | 1 | 1 | # 57144 |
| | | | | | Job Reference (optional) |

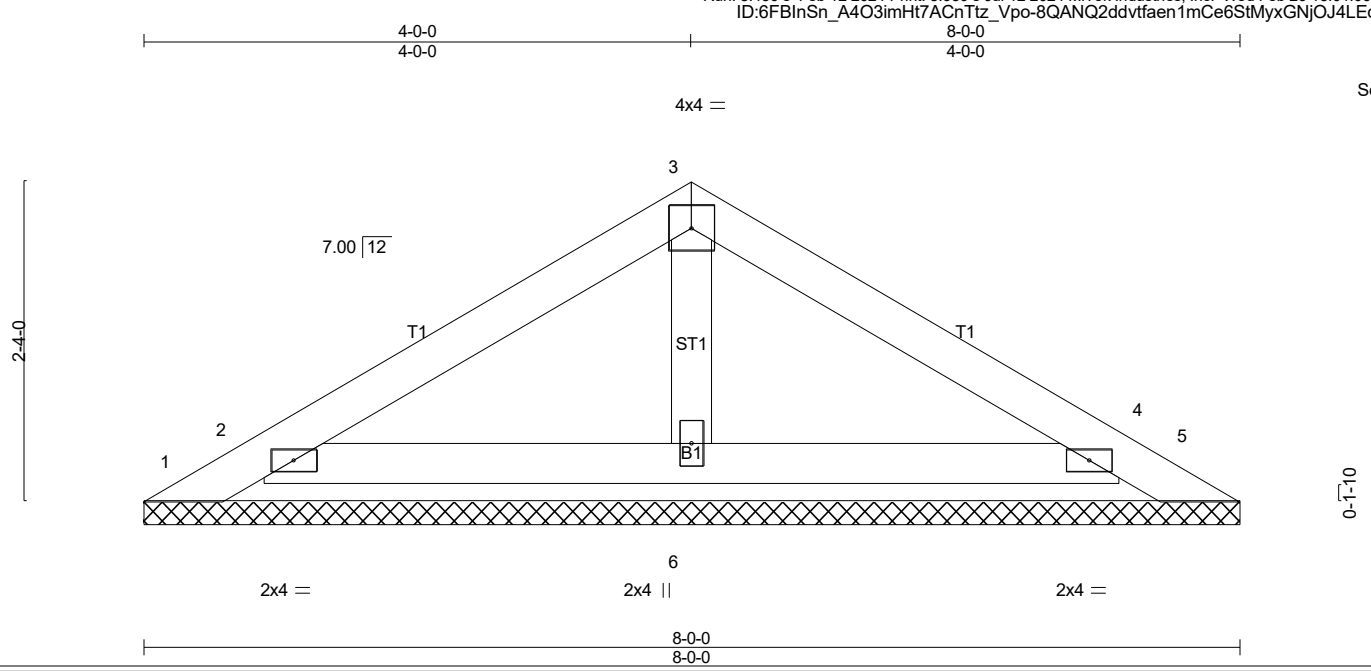


**LOAD CASE(S)** Standard


2/25/2025

| Job | Truss | Truss Type | Qty | Ply | LOT 0.0013 HONEYCUTT HILLS \| 311 SHELBY MEADOW LANE ANGIER, NC |
|---|---|---|---|---|---|
| 25-1795-R01 | PB04 | GABLE | 1 | 1 | # 57144 |
| | | | | | Job Reference (optional) |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Feb 26 15:01:06 2025 Page 1
ID:6FBInSn_A4O3imHt7ACnTtz_Vpo-8QANQ2ddvtfaen1mCe6StMyxGNjOJ4LEdfRhiOzhF7x




| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.22 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.17 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2021/TPI2014 | | Matrix-P | | | | | | | Weight: 25 lb | FT = 20% |
| BCDL | 10.0 | | | | | | | | | | | |

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

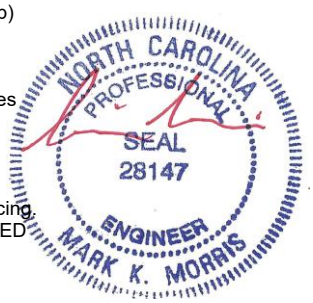
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 8-0-0.
(lb) - Max Horz 1=39(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 2, 4 except 1=-126(LC 21), 5=-126(LC 22)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 2=398(LC 21), 4=398(LC 22)

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

**NOTES-** (12-15)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 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) 2, 4 except (jt=lb) 1=126, 5=126.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
12) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
14) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
15) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

Continued on page 2




2/25/2025

| Job | Truss | Truss Type | Qty | Ply | LOT 0.0013 HONEYCUTT HILLS \| 311 SHELBY MEADOW LANE ANGIER, NC |
|---|---|---|---|---|---|
| 25-1795-R01 | PB04 | GABLE | 1 | 1 | # 57144 |
| | | | | | Job Reference (optional) |



**LOAD CASE(S)** Standard


2/25/2025

| Job | Truss | Truss Type | Qty | Ply | LOT 0.0013 HONEYCUTT HILLS \| 311 SHELBY MEADOW LANE ANGIER, NC |
|---|---|---|---|---|---|
| 25-1795-R01 | R01 | GABLE | 2 | 1 | # 57144 |
| | | | | | Job Reference (optional) |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Feb 26 15:01:06 2025 Page 1
ID:6FBInSn_A4O3imHt7ACnTtz_Vpo-8QANQ2ddvtfaen1mCe6StMymFNaVJ4mEdfRhiOzhF7x

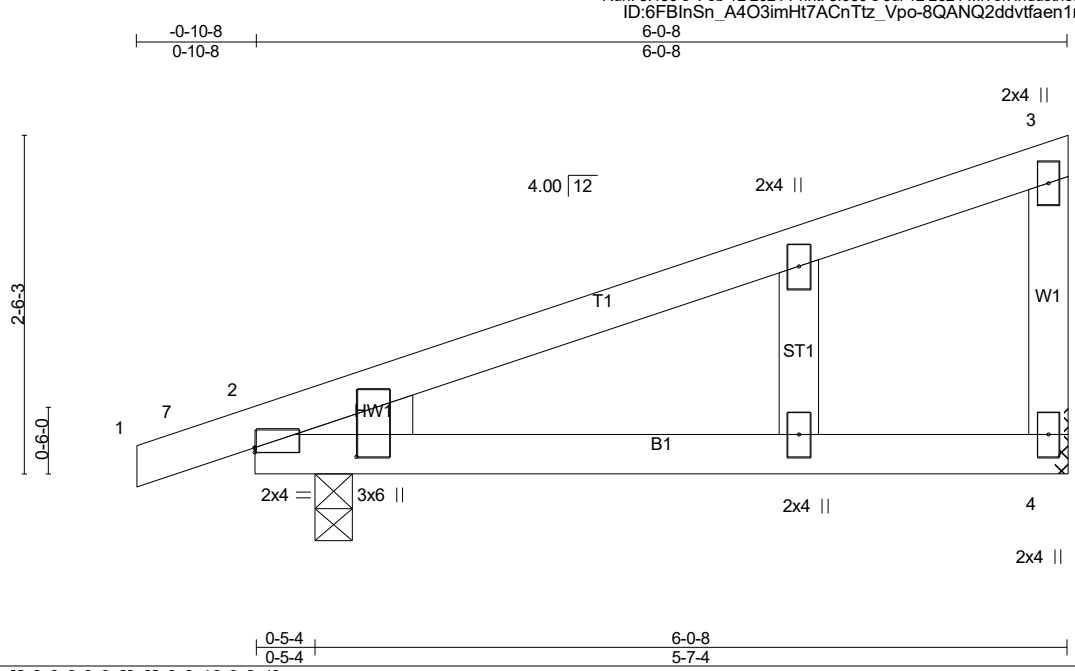



Plate Offsets (X,Y)-- [2:0-0-0,0-0-6], [2:0-0-13,0-9-1]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.92 | Vert(LL) | -0.07 | 2-4 | >977 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.73 | Vert(CT) | -0.14 | 2-4 | >489 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2021/TPI2014 | | Matrix-P | | | | | | | Weight: 26 lb | FT = 20% |
| BCDL | 10.0 | | | | | | | | | | | |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.3
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 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 4=225/Mechanical, 2=297/0-3-8 (min. 0-1-8)
Max Horz 2=64(LC 10)
Max Uplift 4=-33(LC 14), 2=-42(LC 10)
Max Grav 4=302(LC 21), 2=390(LC 21)

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

**NOTES-** (11-14)
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
11) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
13) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
14) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

Continued on page 2


2/25/2025

| Job | Truss | Truss Type | Qty | Ply | LOT 0.0013 HONEYCUTT HILLS \| 311 SHELBY MEADOW LANE ANGIER, NC |
|---|---|---|---|---|---|
| 25-1795-R01 | R01 | GABLE | 2 | 1 | Job Reference (optional) # 57144 |



**LOAD CASE(S)** Standard


2/25/2025

| Job | Truss | Truss Type | Qty | Ply | LOT 0.0013 HONEYCUTT HILLS \| 311 SHELBY MEADOW LANE ANGIER, NC |
|---|---|---|---|---|---|
| 25-1795-R01 | R02 | Monopitch | 8 | 1 | Job Reference (optional) **# 57144** |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Feb 26 15:01:07 2025 Page 1
ID:6FBInSn_A4O3imHt7ACnTtz_Vpo-dckldOeFgAnRGxcymMdhQaUx?n?F2X0OsJAEEqzhF7w

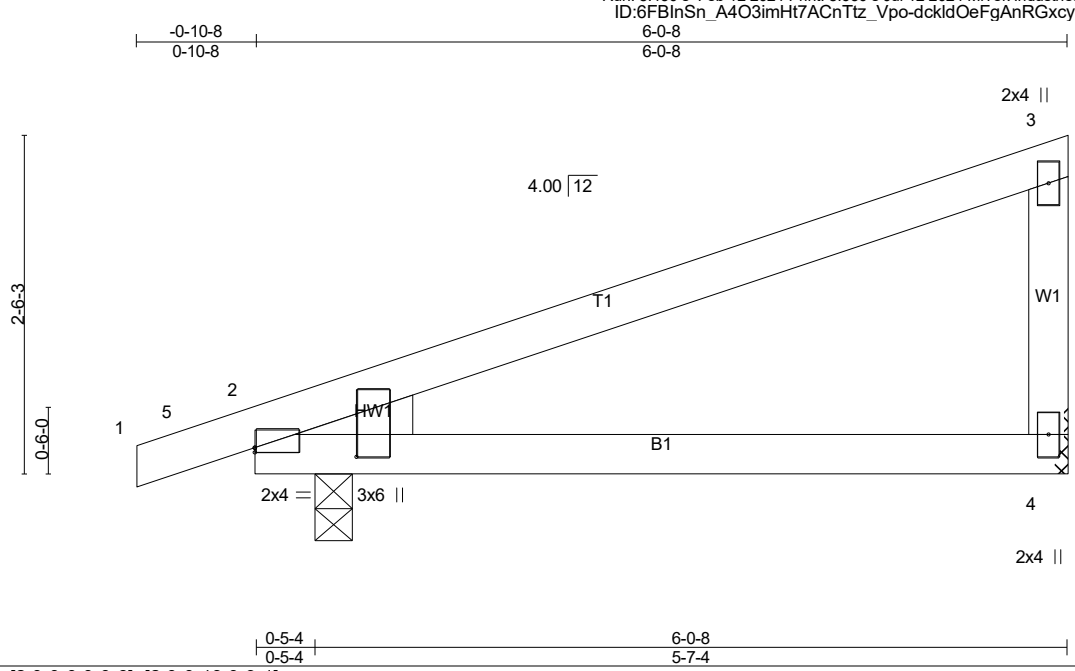



Plate Offsets (X,Y)-- [2:0-0-0,0-0-6], [2:0-0-13,0-9-1]

| **LOADING** (psf) | | **SPACING-** | 2-0-0 | **CSI.** | | **DEFL.** | in | (loc) | l/defl | L/d | **PLATES** | **GRIP** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.92 | Vert(LL) | -0.07 | 2-4 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.45 | Vert(CT) | -0.13 | 2-4 | >526 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2021/TPI2014 | | Matrix-P | | | | | | | Weight: 24 lb | FT = 20% |
| BCDL | 10.0 | | | | | | | | | | | |

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

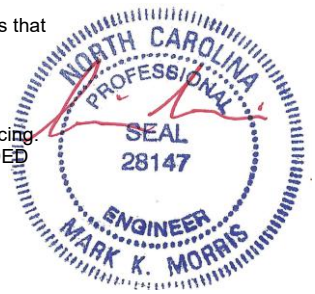
**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 4=225/Mechanical, 2=297/0-3-8 (min. 0-1-8)
Max Horz 2=64(LC 10)
Max Uplift4=-33(LC 14), 2=-42(LC 10)
Max Grav 4=302(LC 21), 2=390(LC 21)

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

**NOTES-** (9-12)
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
9) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.




**LOAD CASE(S)** Standard

2/25/2025

| Job | Truss | Truss Type | Qty | Ply | LOT 0.0013 HONEYCUTT HILLS \| 311 SHELBY MEADOW LANE ANGIER, NC |
|---|---|---|---|---|---|
| 25-1795-R01 | R03 | Piggyback Base Structural Gable COMMON I I Gable I Gable | 1 | 1 | Job Reference (optional) **# 57144** |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Feb 26 15:01:08 2025 Page 1
ID:6FBlnSn_A4O3imHt7ACnTtz_Vpo-5oI7rketRUvlt5B9J38wyn16ZBDwnlbX4zwnmGzhF7v

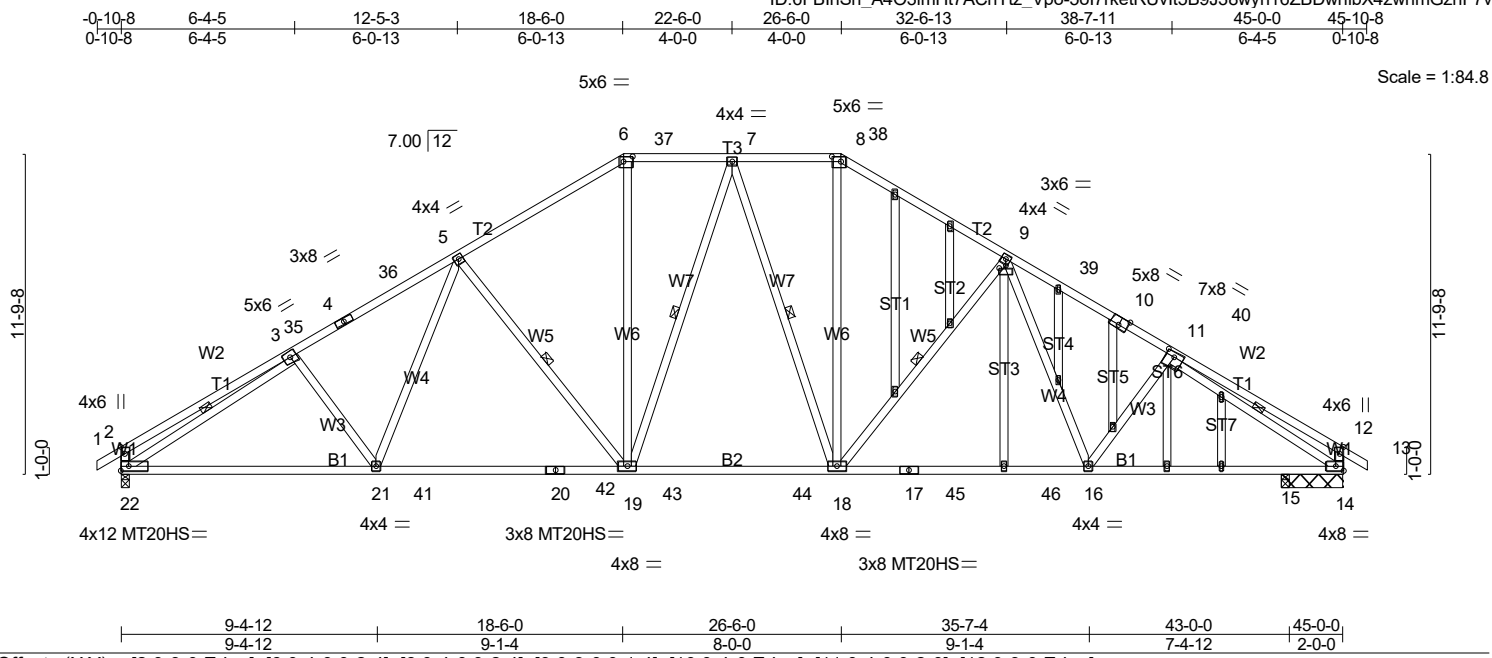



Plate Offsets (X,Y)-- [2:0-3-0,Edge], [6:0-4-0,0-2-4], [8:0-4-0,0-2-4], [9:0-3-0,0-1-4], [10:0-4-0,Edge], [11:0-4-0,0-2-0], [12:0-3-0,Edge]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.93 | Vert(LL) | -0.45 | 19-21 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.93 | Vert(CT) | -0.69 | 16-18 | >742 | 180 | MT20HS | 187/143 |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 1.00 | Horz(CT) | 0.16 | 14 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2021/TPI2014 | | Matrix-SH | | | | | | | Weight: 355 lb | FT = 20% |
| BCDL | 10.0 | | | | | | | | | | | |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1 *Except*
B2: 2x4 SP SS
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 16-18.
WEBS 1 Row at midpt 5-19, 7-19, 7-18, 9-18, 3-22, 11-14

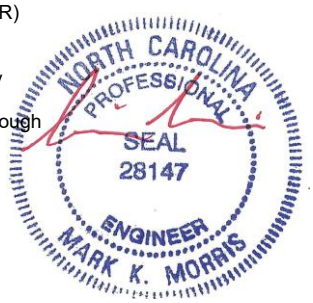
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 22=1843/0-3-8 (min. 0-2-11), 14=1719/2-3-8 (min. 0-2-9), 15=137/0-3-8 (min. 0-1-8)
Max Horz 22=-203(LC 12)
Max Uplift 22=-84(LC 14), 14=-131(LC 15)
Max Grav 22=2256(LC 39), 14=2173(LC 49), 15=243(LC 7)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-584/123, 3-35=-3332/115, 4-35=-3320/118, 4-36=-3223/130, 5-36=-3107/146, 5-6=-2687/168, 6-37=-2206/168, 7-37=-2206/168, 7-38=-2205/169, 8-38=-2205/169, 8-9=-2686/169, 9-39=-3082/161, 10-39=-3198/145, 10-40=-3295/133, 11-40=-3307/130, 11-12=-510/167, 2-22=-497/122, 12-14=-457/144
BOT CHORD 21-22=-172/2935, 21-41=-79/2721, 41-42=-79/2721, 20-42=-79/2721, 19-20=-79/2721, 19-43=0/2213, 43-44=0/2213, 18-44=0/2213, 17-18=0/2638, 17-45=0/2638, 45-46=0/2638, 16-46=0/2638, 15-16=-49/2787, 14-15=-49/2787
WEBS 5-21=-20/429, 5-19=-832/171, 6-19=-19/973, 7-19=-286/166, 7-18=-293/158, 8-18=-19/972, 9-18=-815/181, 9-16=-36/402, 3-22=-2989/31, 11-14=-3012/2

**NOTES-** (14-17)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 13-8-6, Exterior(2R) 13-8-6 to 31-3-10, Interior(1) 31-3-10 to 41-0-14, Exterior(2E) 41-0-14 to 45-10-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are MT20 plates unless otherwise indicated.
9) All plates are 2x4 MT20 unless otherwise indicated.
10) Gable studs spaced at 2-0-0 oc.

Continued on page 2




2/25/2025

**NOTES-** (14-17)

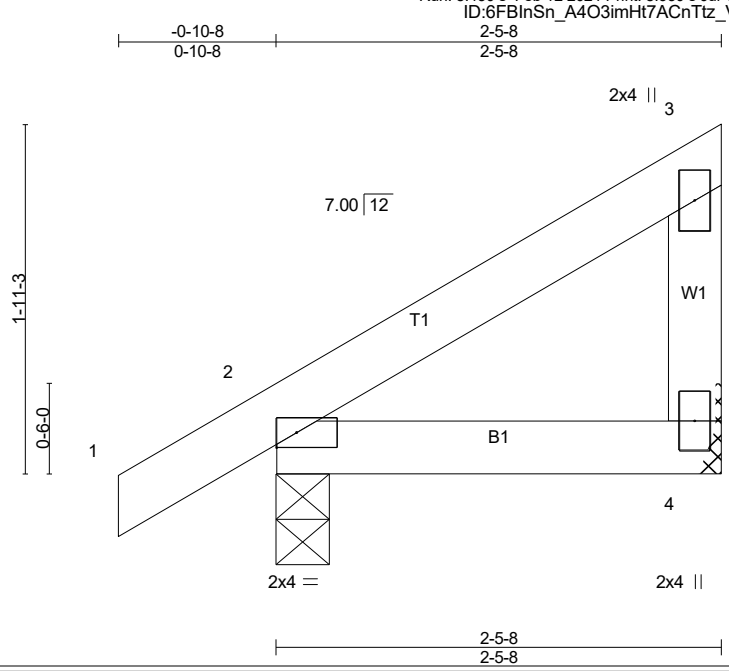
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22 except (jt=lb) 14=131.
14) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
15) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
16) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
17) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard


2/25/2025

| Job | Truss | Truss Type | Qty | Ply | LOT 0.0013 HONEYCUTT HILLS \| 311 SHELBY MEADOW LANE ANGIER, NC |
|---|---|---|---|---|---|
| 25-1795-R01 | R05 | Monopitch | 9 | 1 | Job Reference (optional) **# 57144** |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Feb 26 15:01:08 2025 Page 1
ID:6FBInSn_A4O3imHt7ACnTtz_Vpo-5oI7rketRUvIt5B9J38wyn1JEBRfn_GX4zwnmGzhF7v




| **LOADING** (psf) | | **SPACING-** 2-0-0 | **CSI.** | **DEFL.** in (loc) l/defl L/d | **PLATES** **GRIP** |
|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL 1.15 | TC 0.12 | Vert(LL) -0.00 2-4 >999 240 | MT20 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL 1.15 | BC 0.05 | Vert(CT) -0.00 2-4 >999 180 | |
| TCDL | 10.0 | Rep Stress Incr YES | WB 0.00 | Horz(CT) 0.00 n/a n/a | |
| BCLL | 0.0 * | Code IRC2021/TPI2014 | Matrix-P | | Weight: 12 lb FT = 20% |
| BCDL | 10.0 | | | | |

**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 2-5-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 4=72/Mechanical, 2=162/0-3-8 (min. 0-1-8)
Max Horz 2=51(LC 14)
Max Uplift 4=-20(LC 14), 2=-12(LC 14)
Max Grav 4=97(LC 21), 2=230(LC 21)

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

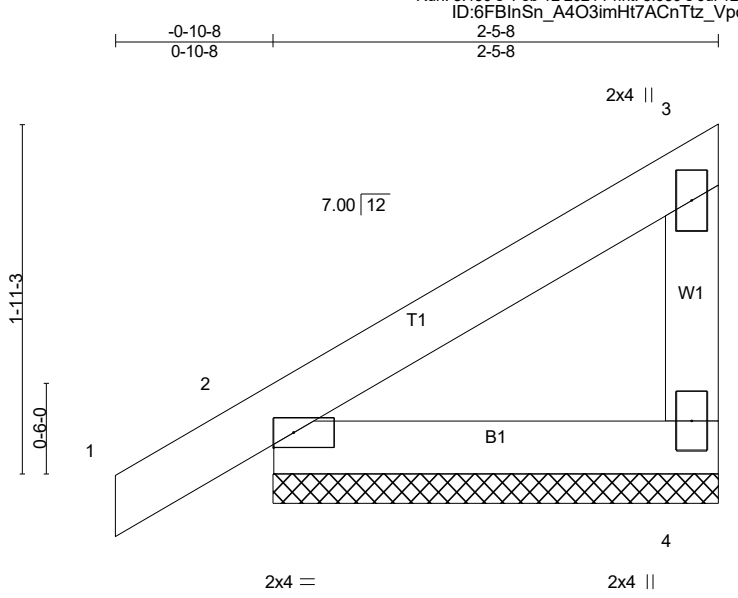
**NOTES-** (9-12)
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
9) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard


2/25/2025

| Job | Truss | Truss Type | Qty | Ply | LOT 0.0013 HONEYCUTT HILLS \| 311 SHELBY MEADOW LANE ANGIER, NC |
|---|---|---|---|---|---|
| 25-1795-R01 | R06 | Monopitch Supported Gable | 1 | 1 | # 57144 |
| | | | | | Job Reference (optional) |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Feb 26 15:01:09 2025 Page 1
ID:6FBInSn_A4O3imHt7ACnTtz_Vpo-Z?sV24fVCo19VEmLtnf9V?aUHaI7WRWhJdfLJizhF7u




| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.10 | Vert(LL) | -0.00 | 1 | n/r | 180 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.10 | Vert(CT) | 0.00 | 1 | n/r | 80 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2021/TPI2014 | | Matrix-P | | | | | | | Weight: 12 lb | FT = 20% |
| BCDL | 10.0 | | | | | | | | | | | |

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

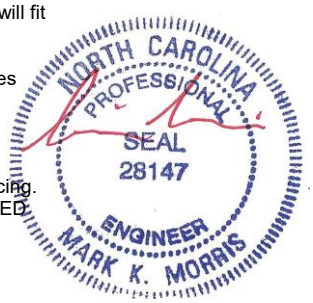
**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-5-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 4=83/2-5-8 (min. 0-1-8), 2=155/2-5-8 (min. 0-1-8)
Max Horz 2=51(LC 14)
Max Uplift4=-21(LC 14), 2=-10(LC 14)
Max Grav 4=111(LC 21), 2=219(LC 21)

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

**NOTES-** (11-14)
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Gable requires continuous bottom chord bearing.
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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 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) 4, 2.
11) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
13) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
14) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.




**LOAD CASE(S)** Standard

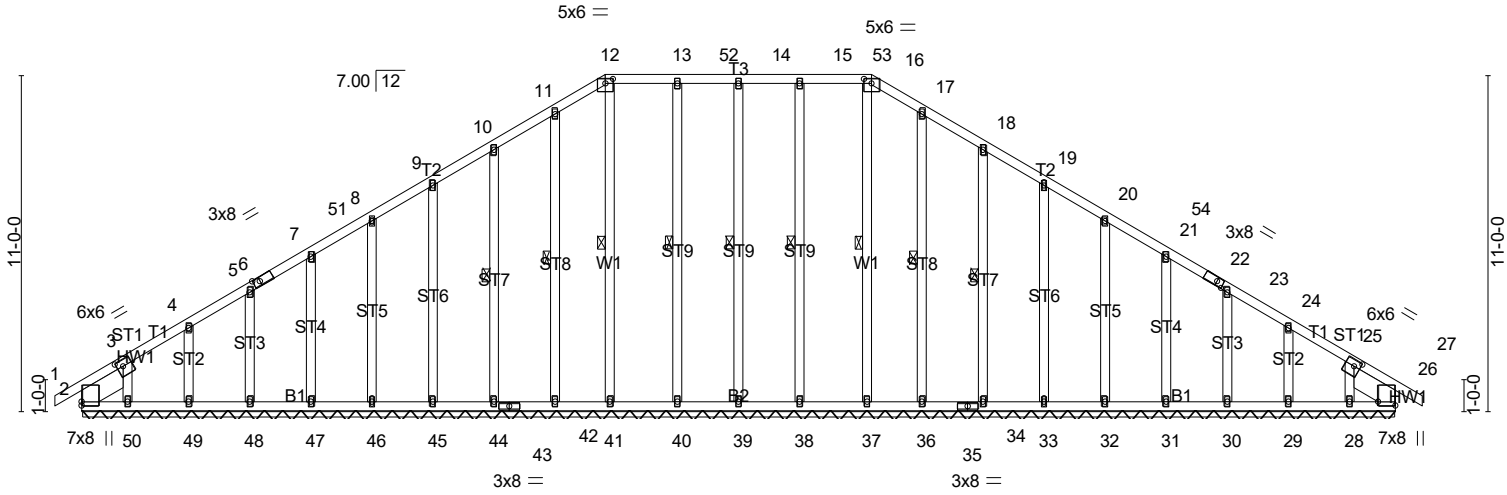
2/25/2025

| Job | Truss | Truss Type | Qty | Ply | LOT 0.0013 HONEYCUTT HILLS \| 311 SHELBY MEADOW LANE ANGIER, NC |
|---|---|---|---|---|---|
| 25-1795-R01 | R07 | GABLE | 1 | 1 | # 57144 |
| | | | | | Job Reference (optional) |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Feb 26 15:01:10 2025 Page 1
ID:6FBInSn_A4O3imHt7ACnTtz_Vpo-1BQtGQg7z5907OLXRUAO2C6f6_5DFrKqYHPur9zhF7t

-0-10-8 | 17-1-12 | 25-10-5 | 43-0-0 | 43-10-8
0-10-8 | 17-1-12 | 8-8-9 | 17-1-11 | 0-10-8

Scale = 1:75.4




17-1-12 | 25-10-5 | 43-0-0
17-1-12 | 8-8-9 | 17-1-11

Plate Offsets (X,Y)-- [3:0-2-8,0-2-4], [6:0-2-10,0-1-8], [12:0-3-0,0-1-12], [16:0-3-0,0-1-12], [22:0-2-10,0-1-8], [25:0-2-8,0-2-4], [26:Edge,0-6-12]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.10 | Vert(LL) | -0.00 | 26 | n/r | 180 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.11 | Vert(CT) | -0.00 | 26 | n/r | 80 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.22 | Horz(CT) | 0.01 | 26 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2021/TPI2014 | | Matrix-SH | | | | | | | Weight: 356 lb | FT = 20% |
| BCDL | 10.0 | | | | | | | | | | | |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.3
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3
SLIDER Left 2x8 SP No.2 1-9-1, Right 2x8 SP No.2 1-9-1

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 14-39, 13-40, 11-42, 10-44, 15-38, 17-36, 18-34, 12-41, 16-37

**REACTIONS.** All bearings 43-0-0.
(lb) - Max Horz 2=-191(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 39, 40, 42, 44, 45, 46, 47, 48, 49, 38, 36, 34, 33, 32, 31, 30, 29, 28, 26, 41 except 50=-108(LC 14)
Max Grav All reactions 250 lb or less at joint(s) 2, 48, 49, 50, 30, 29, 28, 26 except 39=279(LC 44), 40=339(LC 44), 42=298(LC 47), 44=323(LC 47), 45=317(LC 47), 46=315(LC 47), 47=327(LC 47), 38=339(LC 44), 36=296(LC 49), 34=324(LC 49), 33=316(LC 49), 32=315(LC 49), 31=327(LC 49), 41=273(LC 52), 37=264(LC 52)

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

**NOTES-** (14-17)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Exterior(2N) 3-11-2 to 12-4-2, Corner(3R) 12-4-2 to 30-7-14, Exterior(2N) 30-7-14 to 39-0-14, Corner(3E) 39-0-14 to 43-10-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 MT20 unless otherwise indicated.
9) Gable requires continuous bottom chord bearing.
10) Gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 39, 40, 42, 44, 45, 46, 47, 48, 49, 38, 36, 34, 33, 32, 31, 30, 29, 28, 26, 41 except (jt=lb) 50=108.


Continued on page 2

2/25/2025

14) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
15) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
16) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
17) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard

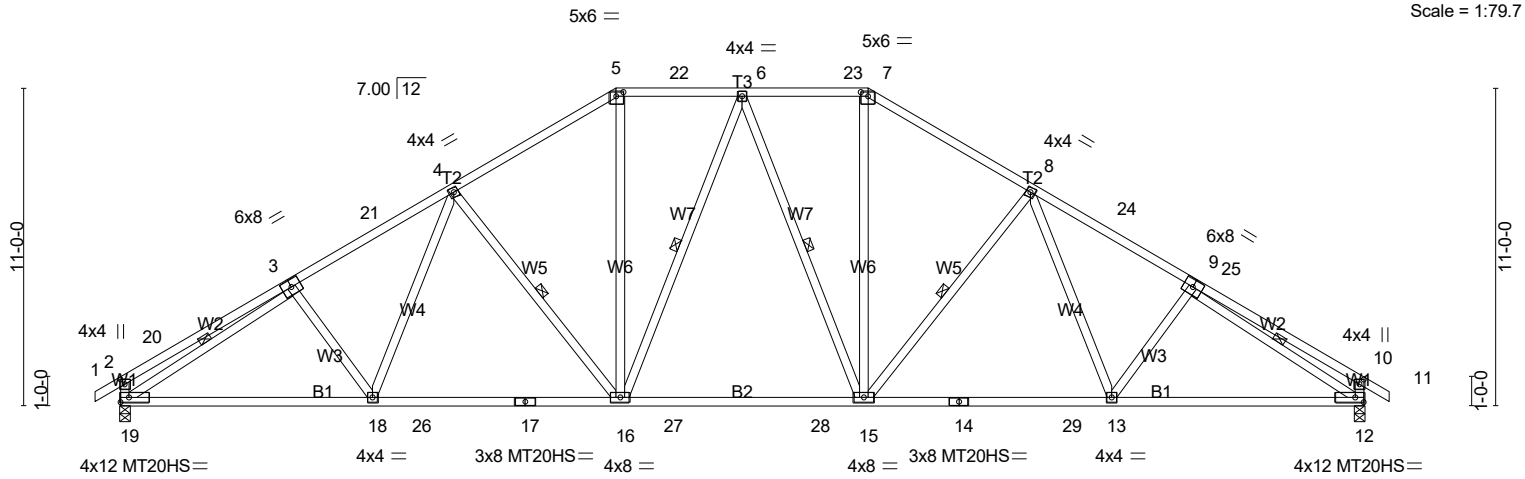

2/25/2025

| Job | Truss | Truss Type | Qty | Ply | LOT 0.0013 HONEYCUTT HILLS \| 311 SHELBY MEADOW LANE ANGIER, NC |
|---|---|---|---|---|---|
| 25-1795-R01 | R08 | Piggyback Base | 5 | 1 | # 57144 |
| | | | | | Job Reference (optional) |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Feb 26 15:01:11 2025 Page 1
ID:6FBlnSn_A4O3imHt7ACnTtz_Vpo-VN_GTmhlkPHtlYwk?BhdaQff6OEu_8dzmx8SNbzhF7s

| -0-10-8 | 5-10-15 | 11-6-5 | 17-1-12 | 21-6-0 | 25-10-5 | 31-5-11 | 37-1-2 | 43-0-0 | 43-10-8 |
|---|---|---|---|---|---|---|---|---|---|
| 0-10-8 | 5-10-15 | 5-7-7 | 5-7-7 | 4-4-5 | 4-4-5 | 5-7-6 | 5-7-6 | 5-10-14 | 0-10-8 |

Scale = 1:79.7




| 8-8-10 | 17-1-12 | 25-10-5 | 34-3-6 | 43-0-0 |
|---|---|---|---|---|
| 8-8-10 | 8-5-2 | 8-8-9 | 8-5-2 | 8-8-10 |

Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [5:0-3-0,0-1-12], [7:0-3-0,0-1-12], [10:0-2-0,0-1-12]

| **LOADING** (psf) | | **SPACING-** | 2-0-0 | **CSI.** | | **DEFL.** | in | (loc) | l/defl | L/d | **PLATES** | **GRIP** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.78 | Vert(LL) | -0.32 | 16-18 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.91 | Vert(CT) | -0.49 | 15-16 | >999 | 180 | MT20HS | 187/143 |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.86 | Horz(CT) | 0.15 | 12 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2021/TPI2014 | | Matrix-SH | | | | | | | Weight: 289 lb | FT = 20% |
| BCDL | 10.0 | | | | | | | | | | | |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

**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 4-16, 6-16, 6-15, 8-15, 3-19, 9-12

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 19=1770/0-3-8 (min. 0-2-9), 12=1770/0-3-8 (min. 0-2-9)
Max Horz 19=-189(LC 12)
Max Uplift 19=-76(LC 14), 12=-76(LC 15)
Max Grav 19=2172(LC 39), 12=2172(LC 39)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-20=-533/108, 3-20=-364/110, 3-21=-3135/105, 4-21=-2920/131, 4-5=-2557/153, 5-22=-2103/153, 6-22=-2103/153, 6-23=-2103/153, 7-23=-2103/153, 7-8=-2557/153, 8-24=-2920/131, 9-24=-3135/105, 9-25=-364/110, 10-25=-533/107, 2-19=-464/112, 10-12=-464/111
BOT CHORD 18-19=-154/2744, 18-26=-68/2556, 17-26=-68/2556, 16-17=-68/2556, 16-27=0/2119, 27-28=0/2119, 15-28=0/2119, 14-15=0/2501, 14-29=0/2501, 13-29=0/2501, 12-13=-26/2640
WEBS 4-18=-21/373, 4-16=-766/160, 5-16=-14/935, 6-16=-296/145, 6-15=-296/145, 7-15=-14/935, 8-15=-766/160, 8-13=-21/373, 3-19=-2827/30, 9-12=-2827/30

**NOTES-** (11-14)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 12-4-2, Exterior(2R) 12-4-2 to 30-7-14, Interior(1) 30-7-14 to 39-0-14, Exterior(2E) 39-0-14 to 43-10-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 12.


Continued on page 2

2/25/2025

11) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
13) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
14) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard


2/25/2025

| Job | Truss | Truss Type | Qty | Ply | LOT 0.0013 HONEYCUTT HILLS \| 311 SHELBY MEADOW LANE ANGIER, NC |
|---|---|---|---|---|---|
| 25-1795-R01 | R09 | Piggyback Base | 2 | 1 | # 57144 |
| | | | | | Job Reference (optional) |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Feb 26 15:01:12 2025 Page 1
ID:6FBInSn_A4O3imHt7ACnTtz_Vpo-zaYeg6iOVjPkMiUwYvCs7dCnDocBjZf7?bu?w1zhF7r

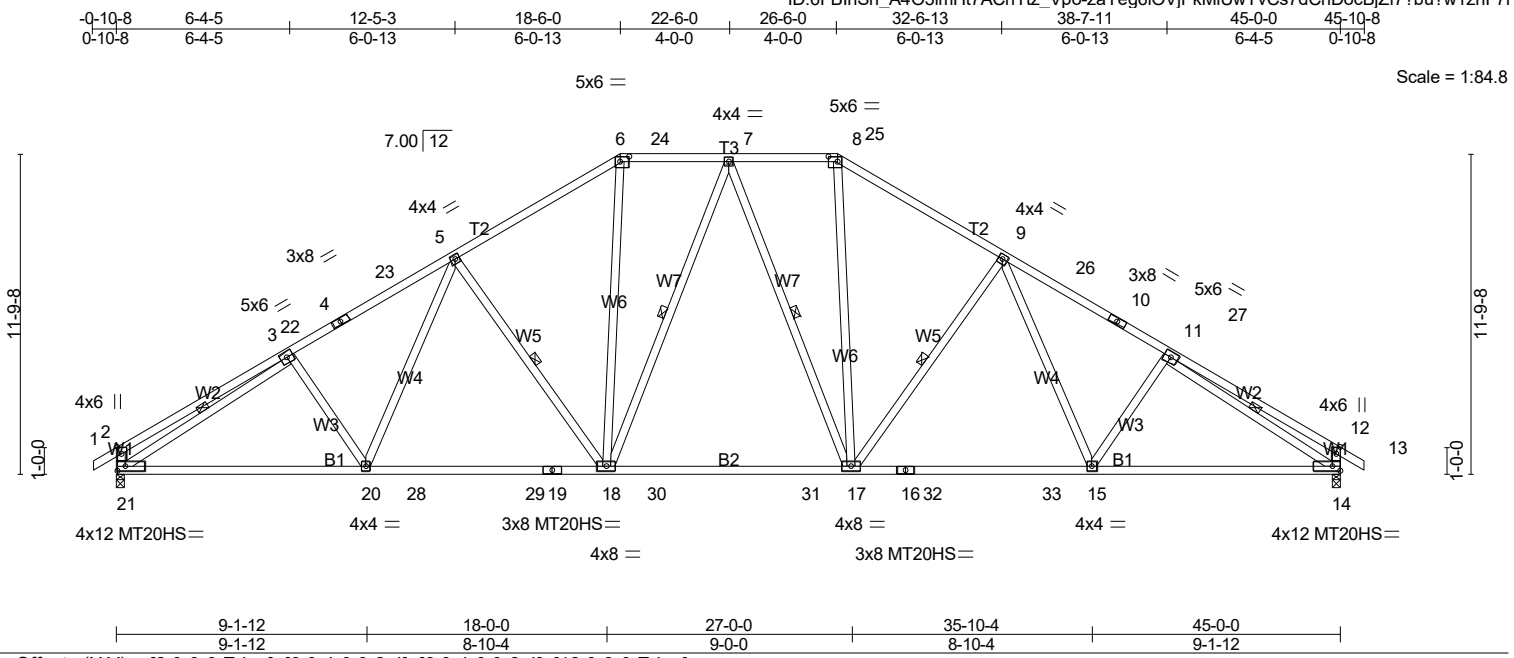



Plate Offsets (X,Y)-- [2:0-3-0,Edge], [6:0-4-0,0-2-4], [8:0-4-0,0-2-4], [12:0-3-0,Edge]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.95 | Vert(LL) | -0.39 | 15-17 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.78 | Vert(CT) | -0.57 | 15-17 | >949 | 180 | MT20HS | 187/143 |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 1.00 | Horz(CT) | 0.16 | 14 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2021/TPI2014 | | Matrix-SH | | | | | | | Weight: 305 lb | FT = 20% |
| BCDL | 10.0 | | | | | | | | | | | |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1 *Except*
B2: 2x4 SP SS
WEBS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-18, 7-18, 7-17, 9-17, 3-21, 11-14

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 21=1850/0-3-8 (min. 0-2-11), 14=1850/0-3-8 (min. 0-2-11)
Max Horz 21=203(LC 13)
Max Uplift 21=-82(LC 14), 14=-82(LC 15)
Max Grav 21=2263(LC 47), 14=2263(LC 49)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-587/124, 3-22=-3355/116, 4-22=-3343/119, 4-23=-3246/132, 5-23=-3130/147, 5-6=-2770/165, 6-24=-2221/164, 7-24=-2221/165, 7-25=-2221/165, 8-25=-2221/164, 8-9=-2770/165, 9-26=-3130/148, 10-26=-3246/132, 10-27=-3343/120, 11-27=-3355/117, 11-12=-587/124, 2-21=-498/122, 12-14=-498/122
BOT CHORD 20-21=-168/2953, 20-28=-75/2743, 28-29=-75/2743, 19-29=-75/2743, 18-19=-75/2743, 18-30=0/2230, 30-31=0/2230, 17-31=0/2230, 16-17=0/2672, 16-32=0/2672, 32-33=0/2672, 15-33=0/2672, 14-15=-31/2828
WEBS 5-20=-30/400, 5-18=-811/176, 6-18=-17/1015, 7-18=-295/165, 7-17=-295/165, 8-17=-17/1015, 9-17=-811/176, 9-15=-30/400, 3-21=-2998/26, 11-14=-2998/26

**NOTES-** (11-14)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 13-8-6, Exterior(2R) 13-8-6 to 31-3-10, Interior(1) 31-3-10 to 41-0-14, Exterior(2E) 41-0-14 to 45-10-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 21, 14.


2/25/2025

Continued on page 2

11) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
13) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
14) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard


2/25/2025

| Job | Truss | Truss Type | Qty | Ply | LOT 0.0013 HONEYCUTT HILLS \| 311 SHELBY MEADOW LANE ANGIER, NC |
|---|---|---|---|---|---|
| 25-1795-R01 | R10 | Piggyback Base | 7 | 1 | # 57144 |
| | | | | | Job Reference (optional) |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Feb 26 15:01:13 2025 Page 1
ID:6FBInSn_A4O3imHt7ACnTtz_Vpo-Rm50uRi0G0Xb_s366ck5frk_RCyOS1EGEFdYSUzhF7q

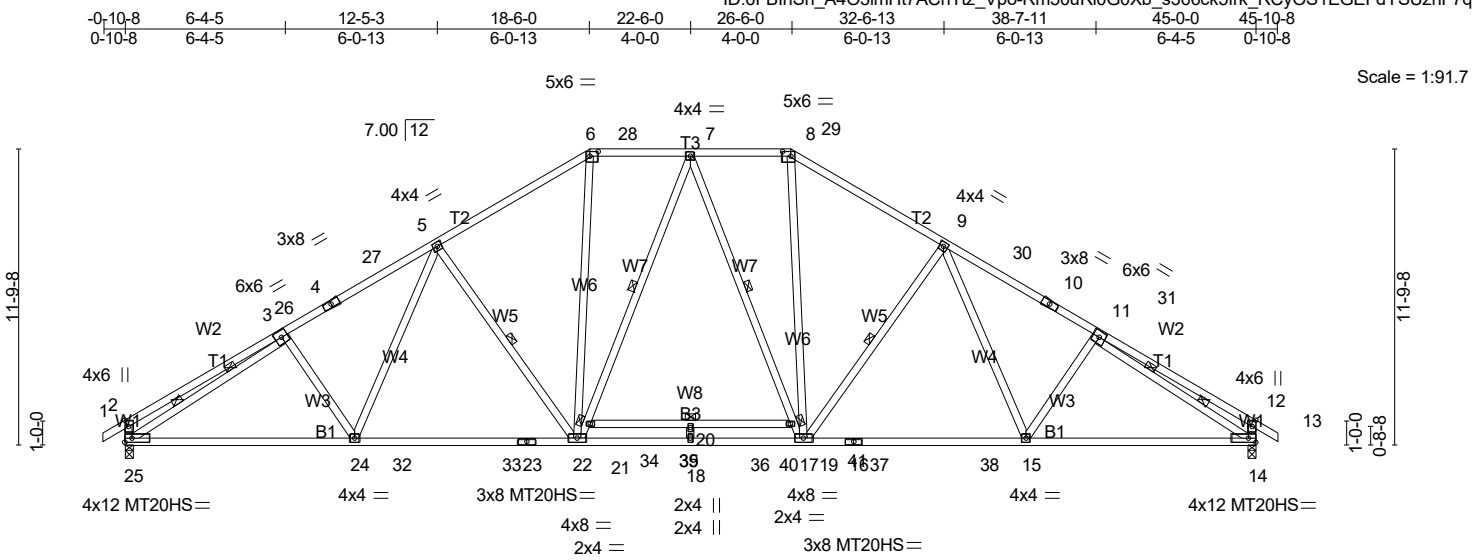



Plate Offsets (X,Y)-- [2:0-3-0,Edge], [6:0-4-0,0-2-4], [8:0-4-0,0-2-4], [12:0-3-0,Edge]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.80 | Vert(LL) | -0.49 | 20 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.78 | Vert(CT) | -0.78 | 20 | >692 | 180 | MT20HS | 187/143 |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.91 | Horz(CT) | 0.18 | 14 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2021/TPI2014 | | Matrix-SH | | | | | | | Weight: 318 lb | FT = 20% |
| BCDL | 10.0 | | | | | | | | | | | |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SP No.2 *Except* T2: 2x4 SP No.1 |
| BOT CHORD | 2x4 SP No.1 *Except* B3: 2x4 SP No.2, B2: 2x4 SP SS |
| WEBS | 2x4 SP No.3 |

**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. Except: 6-0-0 oc bracing: 19-21 |
| WEBS | 1 Row at midpt 5-22, 7-21, 7-19, 9-17<br>2 Rows at 1/3 pts 3-25, 11-14 |

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 25=1932/0-3-8 (min. 0-2-14), 14=1932/0-3-8 (min. 0-2-14)
Max Horz 25=-203(LC 12)
Max Uplift 25=-41(LC 14), 14=-41(LC 15)
Max Grav 25=2449(LC 47), 14=2449(LC 49)

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

| | |
|---|---|
| TOP CHORD | 2-3=-609/118, 3-26=-3669/46, 4-26=-3657/49, 4-27=-3561/61, 5-27=-3444/77, 5-6=-3123/87, 6-28=-2518/99, 7-28=-2517/99, 7-29=-2517/99, 8-29=-2518/99, 8-9=-3123/87, 9-30=-3444/77, 10-30=-3561/61, 10-31=-3657/49, 11-31=-3669/46, 11-12=-609/117, 2-25=-510/119, 12-14=-510/118 |
| BOT CHORD | 24-25=-110/3209, 24-32=-11/3032, 32-33=-11/3032, 23-33=-11/3032, 22-23=-11/3032, 22-34=0/2563, 34-35=0/2563, 18-35=0/2563, 18-36=0/2563, 36-41=0/2563, 17-41=0/2563, 16-17=0/2961, 16-37=0/2961, 37-38=0/2961, 15-38=0/2961, 14-15=0/3084 |
| WEBS | 5-24=-39/354, 5-22=-800/182, 6-22=0/1192, 21-22=-367/124, 7-21=-293/165, 7-19=-293/165, 17-19=-366/122, 8-17=0/1192, 9-17=-800/182, 9-15=-39/354, 3-25=-3275/0, 11-14=-3275/0 |

**NOTES-** (11-14)

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 13-8-6, Exterior(2R) 13-8-6 to 31-3-10, Interior(1) 31-3-10 to 41-0-14, Exterior(2E) 41-0-14 to 45-10-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Continued on page 2


2/25/2025

**NOTES-** (11-14)

9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25, 14.
11) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
13) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
14) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard


2/25/2025

| Job | Truss | Truss Type | Qty | Ply | LOT 0.0013 HONEYCUTT HILLS \| 311 SHELBY MEADOW LANE ANGIER, NC |
|---|---|---|---|---|---|
| 25-1795-R01 | R11 | Piggyback Base Structural Gable COMMON | 1 | 1 | # 57144 Job Reference (optional) |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Feb 26 15:01:14 2025 Page 1
ID:6FBlnSn_A4O3imHt7ACnTtz_Vpo-vyfO5nje1KfSc0eIgKFKC2H7mbHvBV1QTvN6_wzhF7p

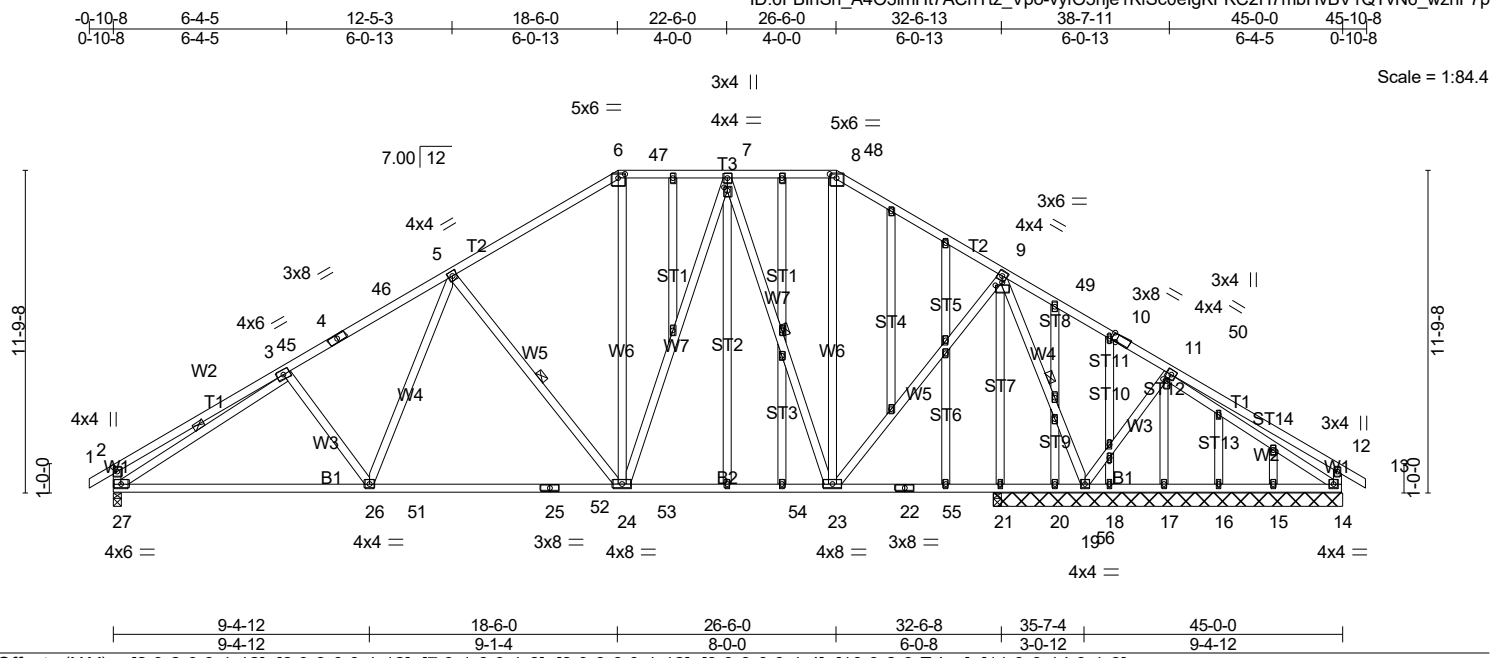



Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [6:0-3-0,0-1-12], [7:0-1-8,0-1-8], [8:0-3-0,0-1-12], [9:0-3-0,0-1-4], [10:0-2-3,Edge], [11:0-0-14,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.95 | Vert(LL) | -0.34 | 24-26 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.89 | Vert(CT) | -0.48 | 24-26 | >807 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.88 | Horz(CT) | 0.07 | 19 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2021/TPI2014 | | Matrix-SH | | | | | | | Weight: 412 lb | FT = 20% |
| BCDL | 10.0 | | | | | | | | | | | |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 5-24, 9-19, 3-27, 7-23

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 12-9-0 except (jt=length) 27=0-3-8.
(lb) - Max Horz 27=-203(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 20, 27, 14 except 19=-128(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 21, 20, 18, 17, 16, 15, 14 except 19=2451(LC 39), 21=333(LC 23), 27=1711(LC 39)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-519/123, 3-45=-2346/115, 4-45=-2334/118, 4-46=-2235/130, 5-46=-2121/146, 5-6=-1627/149, 6-47=-1284/151, 7-47=-1283/152, 7-48=-880/148, 8-48=-880/148, 8-9=-1162/145, 9-49=0/656, 10-49=0/513, 10-50=-1/472, 11-50=-4/399, 11-12=-251/156, 2-27=-467/121, 12-14=-319/138
BOT CHORD 26-27=-172/2153, 26-51=-78/1861, 51-52=-78/1861, 25-52=-78/1861, 24-25=-78/1861, 24-53=-30/1113, 53-54=-30/1113, 23-54=-30/1113, 22-23=0/362, 22-55=0/362, 21-55=0/362, 21-56=0/362, 20-56=0/362, 19-20=0/362, 18-19=-250/34, 17-18=-250/34, 16-17=-250/34, 15-16=-250/34, 14-15=-250/34
WEBS 5-26=-20/503, 5-24=-877/172, 6-24=-10/446, 7-24=-58/697, 8-23=-18/266, 9-23=-23/893, 9-19=-2177/72, 11-19=-453/155, 3-27=-2077/16, 11-14=-73/343, 7-23=-729/90

**NOTES-** (13-16)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 13-8-6, Exterior(2R) 13-8-6 to 31-3-10, Interior(1) 31-3-10 to 41-0-14, Exterior(2E) 41-0-14 to 45-10-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 MT20 unless otherwise indicated.

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 28147 ENGINEER MARK K. MORRIS

2/25/2025

**NOTES-** (13-16)

9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 27, 14 except (jt=lb) 19=128.
13) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
14) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
15) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
16) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard


2/25/2025

| Job | Truss | Truss Type | Qty | Ply | LOT 0.0013 HONEYCUTT HILLS \| 311 SHELBY MEADOW LANE ANGIER, NC |
|---|---|---|---|---|---|
| 25-1795-R01 | R12 | Common | 9 | 1 | # 57144 |
| | | | | | Job Reference (optional) |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Feb 26 15:01:15 2025 Page 1
ID:6FBlnSn_A4O3imHt7ACnTtz_Vpo-O9DmJ7kGoenID9DVE1mZlGpOi?bvw2zZhZ6fWMzhF7o

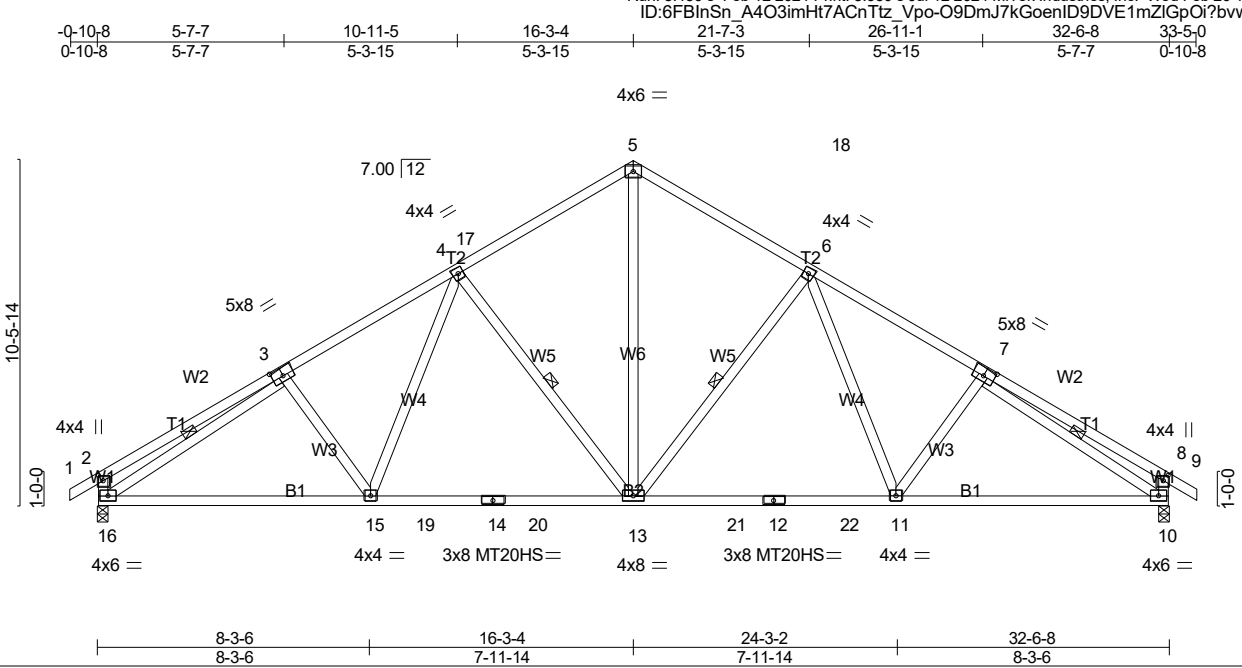



Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [3:0-4-0,0-3-0], [7:0-4-0,0-3-0], [8:0-2-0,0-1-12]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.55 | Vert(LL) | -0.20 | 13-15 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.91 | Vert(CT) | -0.32 | 13-15 | >999 | 180 | MT20HS | 187/143 |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.45 | Horz(CT) | 0.08 | 10 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2021/TPI2014 | | Matrix-SH | | | | | | | Weight: 203 lb | FT = 20% |
| BCDL | 10.0 | | | | | | | | | | | |

**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 4-0-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-13, 4-13, 3-16, 7-10

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 16=1351/0-3-8 (min. 0-1-10), 10=1351/0-3-8 (min. 0-1-10)
Max Horz 16=179(LC 13)
Max Uplift16=-76(LC 14), 10=-76(LC 15)
Max Grav 16=1386(LC 24), 10=1386(LC 25)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-430/101, 3-4=-1835/130, 4-17=-1370/116, 5-17=-1298/140, 5-18=-1298/140, 6-18=-1370/116, 6-7=-1835/130, 7-8=-430/101, 2-16=-409/105, 8-10=-409/105
BOT CHORD 15-16=-149/1686, 15-19=-68/1496, 14-19=-68/1496, 14-20=-68/1496, 13-20=-68/1496, 13-21=0/1411, 12-21=0/1411, 12-22=0/1411, 11-22=0/1411, 10-11=-28/1552
WEBS 5-13=-63/1050, 6-13=-556/151, 6-11=-20/368, 4-13=-556/151, 4-15=-20/368, 3-16=-1591/21, 7-10=-1590/20

**NOTES-** (10-13)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 11-5-10, Exterior(2R) 11-5-10 to 21-0-14, Interior(1) 21-0-14 to 28-7-6, Exterior(2E) 28-7-6 to 33-5-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) All plates are MT20 plates unless otherwise indicated.
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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10.


Continued on page 2

2/25/2025

10) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
12) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
13) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard

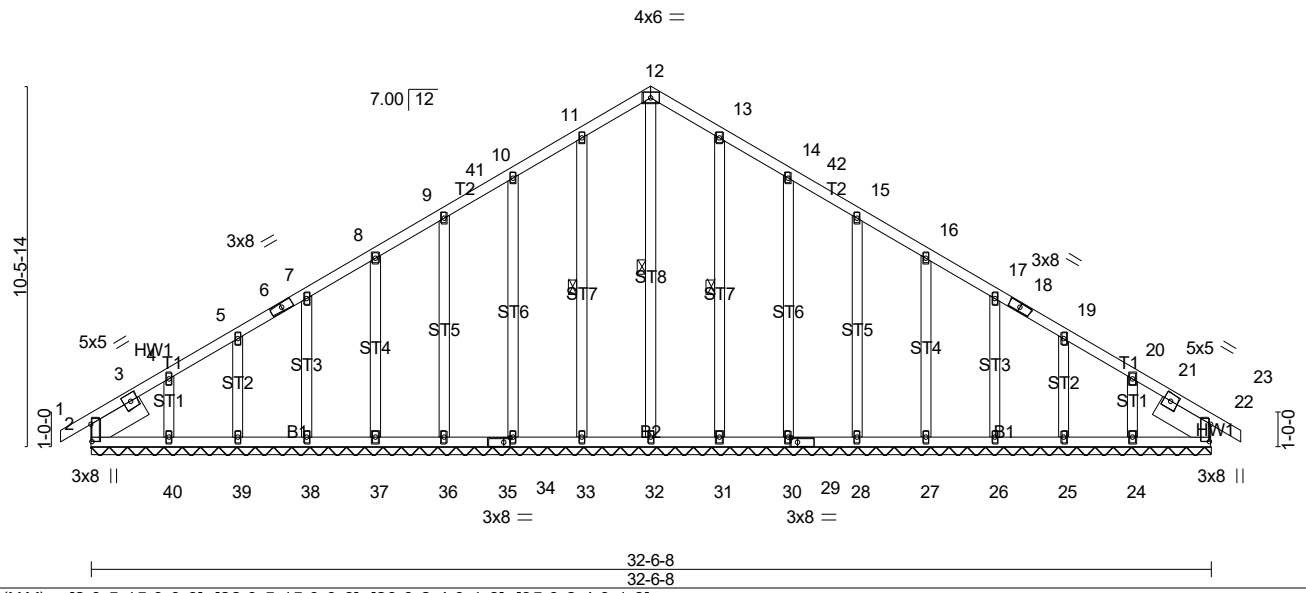

2/25/2025

| Job | Truss | Truss Type | Qty | Ply | LOT 0.0013 HONEYCUTT HILLS \| 311 SHELBY MEADOW LANE ANGIER, NC |
|---|---|---|---|---|---|
| 25-1795-R01 | R14 | Common Supported Gable | 1 | 1 | # 57144 |
| | | | | | Job Reference (optional) |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Feb 26 15:01:15 2025 Page 1
ID:6FBInSn_A4O3imHt7ACnTtz_Vpo-O9DmJ7kGoenID9DVE1mZlGpV0?oVw6iZhZ6fWMzhF7o

-0-10-8 16-3-4 32-6-8 33-5-0
0-10-8 16-3-4 16-3-4 0-10-8

Scale = 1:67.0




32-6-8
32-6-8

Plate Offsets (X,Y)-- [2:0-5-15,0-0-6], [22:0-5-15,0-0-6], [29:0-2-4,0-1-8], [35:0-2-4,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.09 | Vert(LL) | -0.00 | 22 | n/r | 180 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.10 | Vert(CT) | -0.00 | 22 | n/r | 80 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.21 | Horz(CT) | 0.01 | 22 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2021/TPI2014 | | Matrix-SH | | | | | | | Weight: 244 lb | FT = 20% |
| BCDL | 10.0 | | | | | | | | | | | |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.3
OTHERS 2x4 SP No.3
SLIDER Left 2x8 SP No.2 1-9-8, Right 2x8 SP No.2 1-9-8

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 12-32, 11-33, 13-31

**REACTIONS.** All bearings 32-6-8.
(lb) - Max Horz 2=-182(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 33, 34, 36, 37, 38, 39, 40, 31, 30, 28, 27, 26, 25, 24, 22
Max Grav All reactions 250 lb or less at joint(s) 2, 36, 38, 39, 40, 28, 26, 25, 24, 22 except 32=268(LC 27), 33=296(LC 5), 34=262(LC 5), 37=256(LC 24), 31=296(LC 6), 30=262(LC 6), 27=256(LC 25)

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

**NOTES-** (13-16)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Exterior(2N) 3-11-2 to 11-5-10, Corner(3R) 11-5-10 to 21-0-14, Exterior(2N) 21-0-14 to 28-7-6, Corner(3E) 28-7-6 to 33-5-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 33, 34, 36, 37, 38, 39, 40, 31, 30, 28, 27, 26, 25, 24, 22.


Continued on page 2

2/25/2025

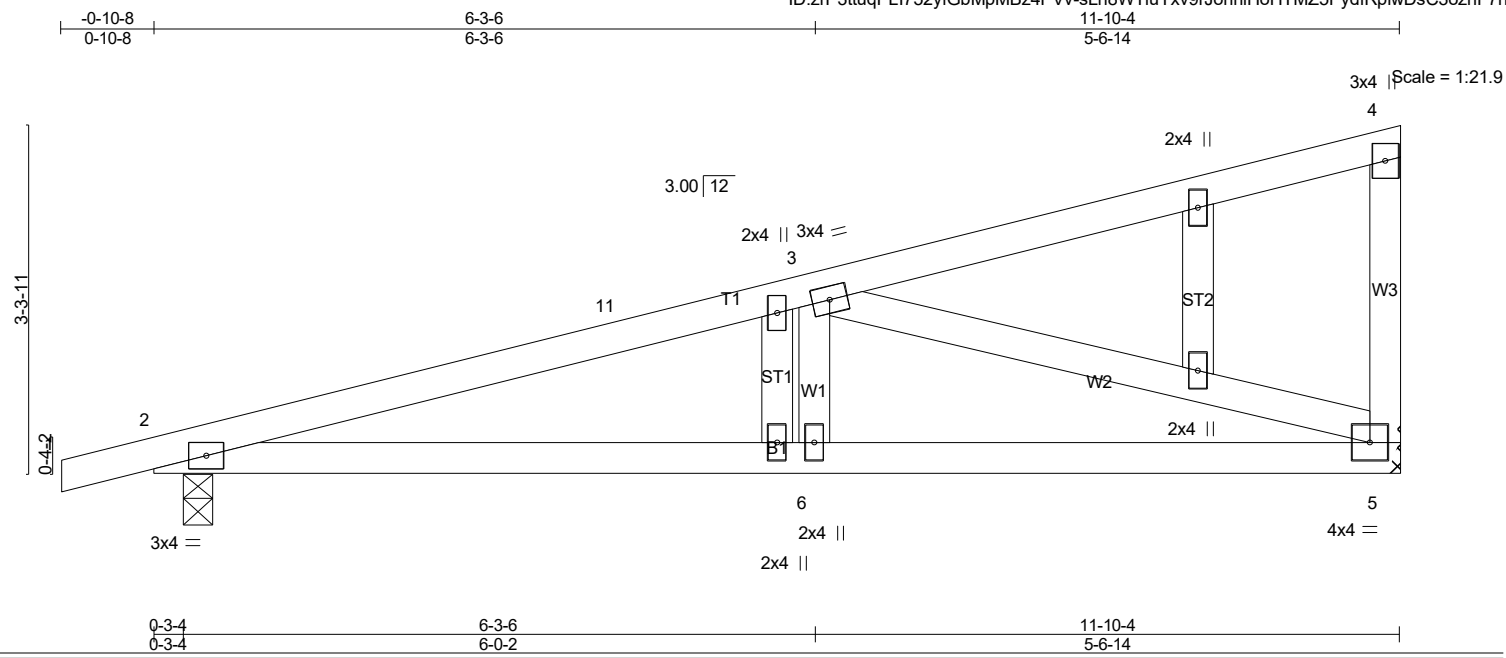
13) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
14) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
15) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
16) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard


2/25/2025

| Job | Truss | Truss Type | Qty | Ply | LOT 0.0013 HONEYCUTT HILLS \| 311 SHELBY MEADOW LANE ANGIER, NC |
|---|---|---|---|---|---|
| 25-1795-R01 | SP01 | Monopitch Structural Gable | 2 | 1 | # 57144 |
| | | | | | Job Reference (optional) |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Feb 26 15:01:16 2025 Page 1
ID:zrP3ttuqPLI752yfGbMpMBz4PVv-sLn8WTluYxv9rJohnlHoHTMZ5PydfRpiwDsC3ozhF7n




| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.51 | Vert(LL) | -0.06 | 2-6 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.88 | Vert(CT) | -0.13 | 2-6 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.73 | Horz(CT) | 0.02 | 5 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2021/TPI2014 | | Matrix-SH | | | | | | | Weight: 55 lb | FT = 20% |
| BCDL | 10.0 | | | | | | | | | | | |

**LUMBER-**

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

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 4-7-15 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 5=460/Mechanical, 2=526/0-3-8 (min. 0-1-8)
Max Horz 2=98(LC 10)
Max Uplift5=-72(LC 14), 2=-82(LC 10)
Max Grav 5=577(LC 21), 2=580(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-11=-1259/121, 3-11=-1168/129
BOT CHORD 2-6=-192/1178, 5-6=-192/1178
WEBS 3-6=0/264, 3-5=-1193/195

**NOTES-** (11-14)
1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 6-10-14, Exterior(2E) 6-10-14 to 11-8-8 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2.


Continued on page 2

2/25/2025

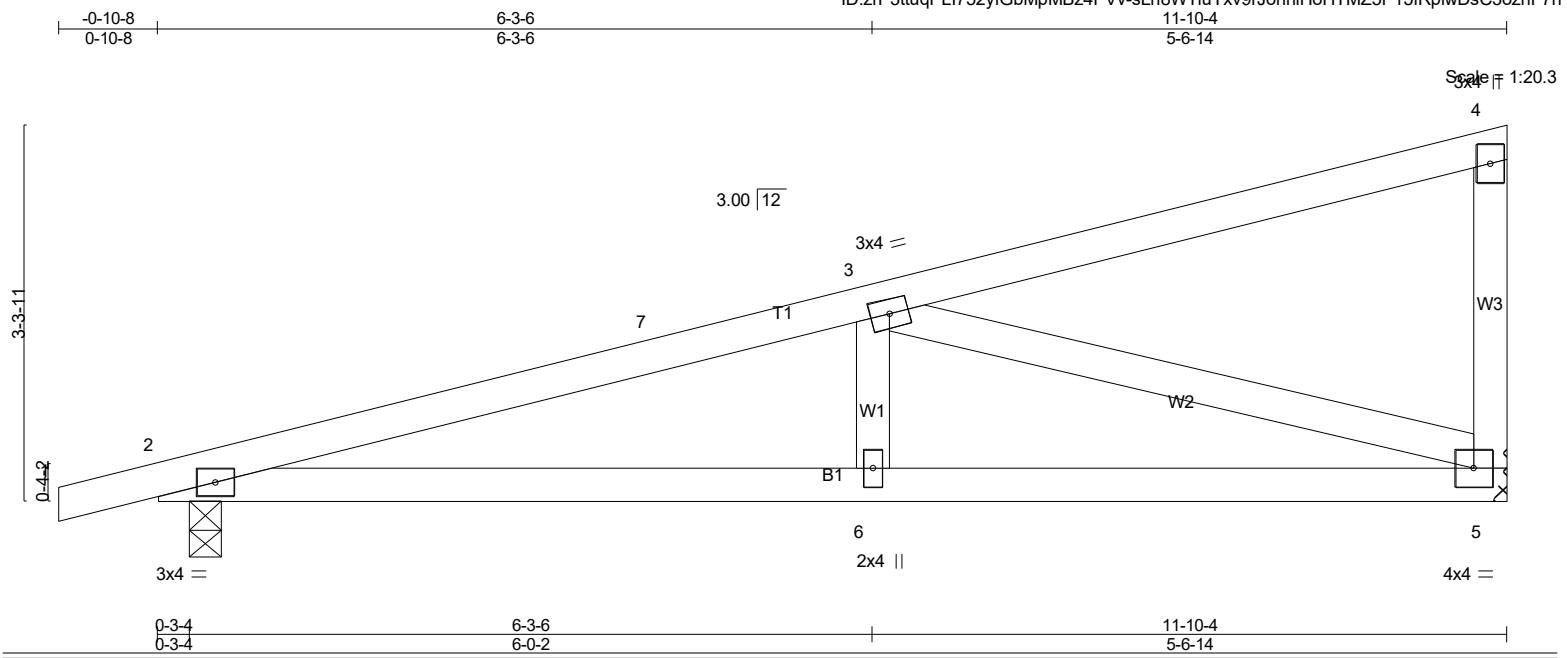
11) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
13) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
14) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard


2/25/2025

| Job | Truss | Truss Type | Qty | Ply | LOT 0.0013 HONEYCUTT HILLS \| 311 SHELBY MEADOW LANE ANGIER, NC |
|---|---|---|---|---|---|
| 25-1795-R01 | SP02 | Monopitch | 18 | 1 | Job Reference (optional) **# 57144** |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Feb 26 15:01:16 2025 Page 1
ID:zrP3ttuqPLI752yfGbMpMBz4PVv-sLn8WTluYxv9rJohnlHoHTMZ5P15fRpiwDsC3ozhF7n




| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.51 | Vert(LL) | -0.06 | 2-6 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.53 | Vert(CT) | -0.12 | 2-6 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.73 | Horz(CT) | 0.02 | 5 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2021/TPI2014 | | Matrix-SH | | | | | | | Weight: 51 lb | FT = 20% |
| BCDL | 10.0 | | | | | | | | | | | |

**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 4-8-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 5=460/Mechanical, 2=526/0-3-8 (min. 0-1-8)
Max Horz 2=98(LC 10)
Max Uplift5=-72(LC 14), 2=-82(LC 10)
Max Grav 5=577(LC 21), 2=580(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-1260/121, 3-7=-1168/129
BOT CHORD 2-6=-192/1178, 5-6=-192/1178
WEBS 3-6=0/265, 3-5=-1193/195

**NOTES-** (9-12)
1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 6-10-14, Exterior(2E) 6-10-14 to 11-8-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2.
9) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.


**LOAD CASE(S)** Standard

2/25/2025