# Mark Morris, P.E.

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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 #: 26861
JOB: 21-2812-R01
JOB NAME: LOT 1151 CARRIAGE CIRCLE
Wind Code: 37
Wind Speed: Vult= 130mph
Exposure Category: B
Mean Roof Height (feet): 23

*30 Truss Design(s)*

Trusses:
F01, F02, F03, F04, F05, F06, F07, F08, J01, J02, PB01, PB02, R01, R02, R03, R03A, R04, R05, R06, R07, R08, R09, R10, R11, VT01, VT02, VT03, VT04, VT05, VT06


**5/28/2021**
**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*

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | F01 | Floor Supported Gable | 1 | 1 | Job Reference (optional) **# 26861** |

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat May 29 17:13:58 2021 Page 1
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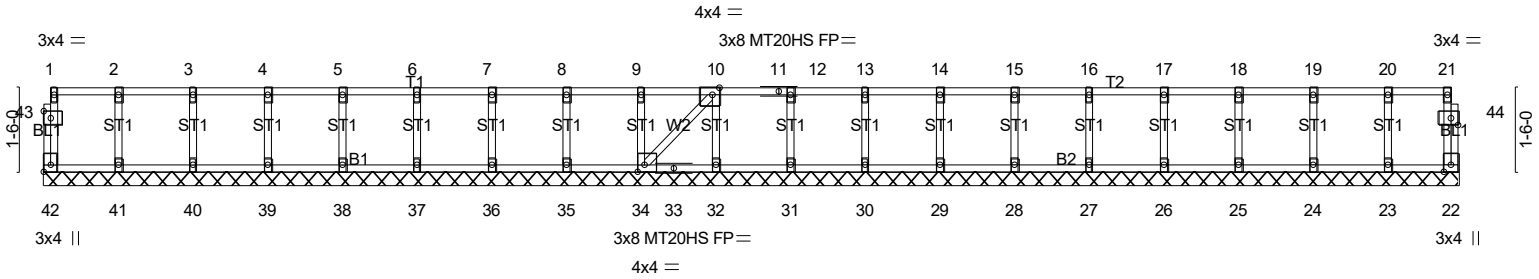
0-1-8 0-1-8

Scale = 1:41.1




25-3-0
25-3-0

Plate Offsets (X,Y)-- [10:0-1-8,Edge], [34:0-1-8,Edge], [42:Edge,0-1-8], [43:0-1-8,0-1-8], [44:0-1-8,0-1-8]

| **LOADING** (psf) | | **SPACING-** | 2-0-0 | **CSI.** | | **DEFL.** | in | (loc) | l/defl | L/d | **PLATES** | **GRIP** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.06 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.01 | Vert(CT) | n/a | - | n/a | 999 | MT20HS | 187/143 |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.00 | 22 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2018/TPI2014 | | Matrix-SH | | | | | | | Weight: 118 lb | FT = 0%F, 0%E |

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

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

**REACTIONS.** All bearings 25-3-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 42, 22, 41, 40, 39, 38, 37, 36, 35, 34, 32, 31, 30, 29, 28, 27, 26, 25, 24, 23

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

**NOTES-** (8-9)
1) All plates are MT20 plates unless otherwise indicated.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
3) Gable requires continuous bottom chord bearing.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) Gable studs spaced at 1-4-0 oc.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
8) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
9) 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.

**LOAD CASE(S)** Standard


5/28/2021

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | F02 | Floor | 10 | 1 | # 26861 |

Job Reference (optional)

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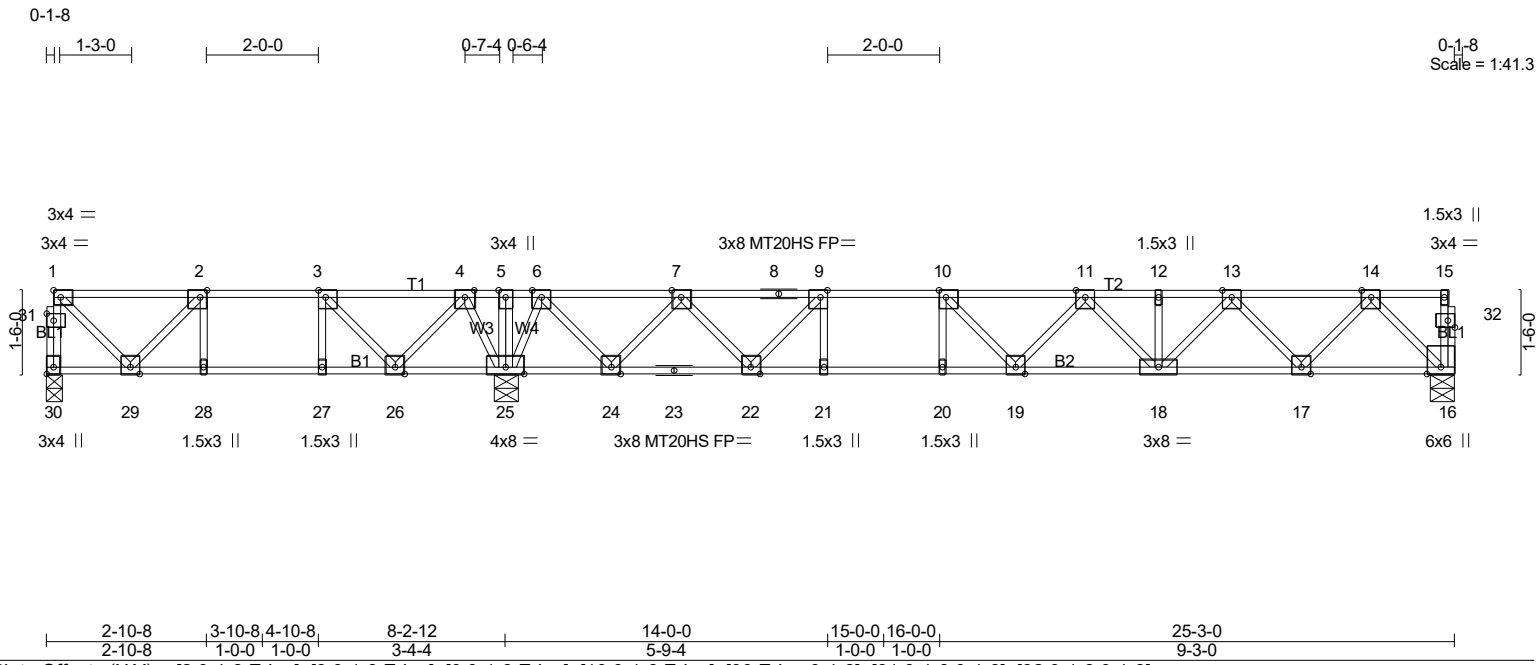






Plate Offsets (X,Y)-- [2:0-1-8,Edge], [3:0-1-8,Edge], [9:0-1-8,Edge], [10:0-1-8,Edge], [30:Edge,0-1-8], [31:0-1-8,0-1-8], [32:0-1-8,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.62 | Vert(LL) | -0.24 | 19-20 | >860 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.82 | Vert(CT) | -0.32 | 19-20 | >637 | 360 | MT20HS | 187/143 |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.50 | Horz(CT) | 0.04 | 16 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2018/TPI2014 | | Matrix-SH | | | | | | | Weight: 138 lb | FT = 0%F, 0%E |

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

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

**REACTIONS.** (lb/size) 30=341/0-3-8 (min. 0-1-8), 16=876/0-5-8 (min. 0-1-8), 25=1521/0-5-8 (min. 0-1-8)
Max Grav 30=394(LC 3), 16=894(LC 7), 25=1526(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 30-31=-390/0, 1-31=-390/0, 1-2=-284/0, 2-3=-522/43, 3-4=-255/230, 4-5=0/735, 5-6=0/735, 6-7=-799/0, 7-8=-1914/0, 8-9=-1914/0, 9-10=-2511/0, 10-11=-2639/0, 11-12=-2306/0, 12-13=-2306/0, 13-14=-1420/0
BOT CHORD 28-29=-43/522, 27-28=-43/522, 26-27=-43/522, 25-26=-454/2, 24-25=-255/116, 23-24=0/1452, 22-23=0/1452, 21-22=0/2511, 20-21=0/2511, 19-20=0/2511, 18-19=0/2618, 17-18=0/1961, 16-17=0/850
WEBS 9-21=0/378, 10-20=-346/0, 1-29=0/385, 2-29=-345/77, 3-26=-536/0, 4-26=0/467, 4-25=-608/0, 9-22=-943/0, 7-22=0/734, 7-24=-1007/0, 6-24=0/1058, 6-25=-1130/0, 10-19=-127/378, 11-18=-452/0, 13-18=0/499, 13-17=-804/0, 14-17=0/847, 14-16=-1200/0

**NOTES-** (7-8)
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 4x4 MT20 unless otherwise indicated.
4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.
7) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
8) 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.

**LOAD CASE(S)** Standard


5/28/2021

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | F03 | Floor | 7 | 1 | Job Reference (optional) **# 26861** |



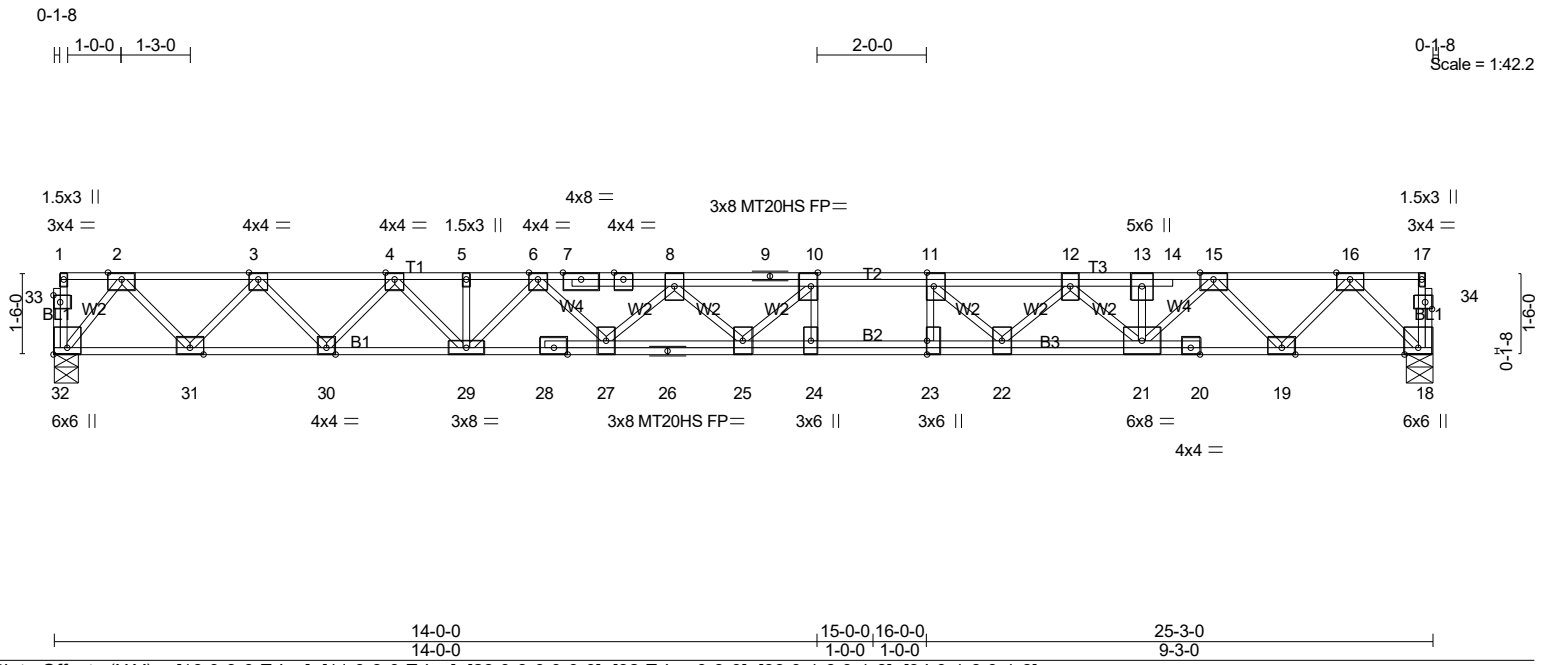






Plate Offsets (X,Y)-- [10:0-3-0,Edge], [11:0-3-0,Edge], [23:0-3-0,0-0-0], [32:Edge,0-3-0], [33:0-1-8,0-1-8], [34:0-1-8,0-1-8]

| **LOADING** (psf) | | **SPACING-** | 2-0-0 | **CSI.** | | **DEFL.** | in | (loc) | l/defl | L/d | **PLATES** | **GRIP** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.76 | Vert(LL) | -0.49 | 25-27 | >614 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.88 | Vert(CT) | -0.67 | 25-27 | >446 | 360 | MT20HS | 187/143 |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.73 | Horz(CT) | 0.11 | 18 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2018/TPI2014 | | Matrix-SH | | | | | | | Weight: 167 lb | FT = 0%F, 0%E |

**LUMBER-**
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat) *Except*
B1: 2x4 SP SS(flat)
WEBS 2x4 SP No.3(flat)

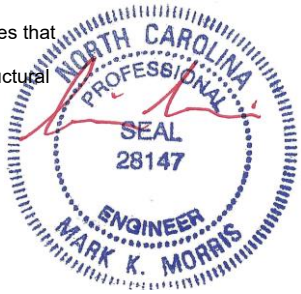
**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-11-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 32=1369/0-5-8 (min. 0-1-8), 18=1369/0-5-8 (min. 0-1-8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2124/0, 3-4=-3901/0, 4-5=-5198/0, 5-6=-5198/0, 6-7=-6248/0, 7-8=-6255/0, 8-9=-6803/0, 9-10=-6803/0, 10-11=-6557/0, 11-12=-5846/0, 12-13=-4331/0, 13-14=-4322/0, 14-15=-4331/0, 15-16=-2305/0
BOT CHORD 31-32=0/1095, 30-31=0/3134, 29-30=0/4627, 28-29=0/5726, 27-28=0/5723, 26-27=0/6760, 25-26=0/6760, 24-25=0/6557, 23-24=0/6557, 22-23=0/6557, 21-22=0/5235, 20-21=0/3313, 19-20=0/3315, 18-19=0/1320
WEBS 10-24=-472/57, 11-23=-64/455, 10-25=-327/678, 8-25=-172/376, 8-27=-724/0, 6-27=0/757, 6-29=-765/0, 4-29=0/827, 4-30=-1079/0, 3-30=0/1141, 3-31=-1502/0, 2-31=0/1530, 2-32=-1727/0, 11-22=-1206/0, 12-22=0/932, 12-21=-1248/0, 15-21=0/1437, 15-19=-1502/0, 16-19=0/1464, 16-18=-1865/0

**NOTES-** (6-7)
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 4x6 MT20 unless otherwise indicated.
4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
7) 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.

**LOAD CASE(S)** Standard




5/28/2021

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | F04 | Floor Supported Gable | 1 | 1 | Job Reference (optional) **# 26861** |

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat May 29 17:14:10 2021 Page 1
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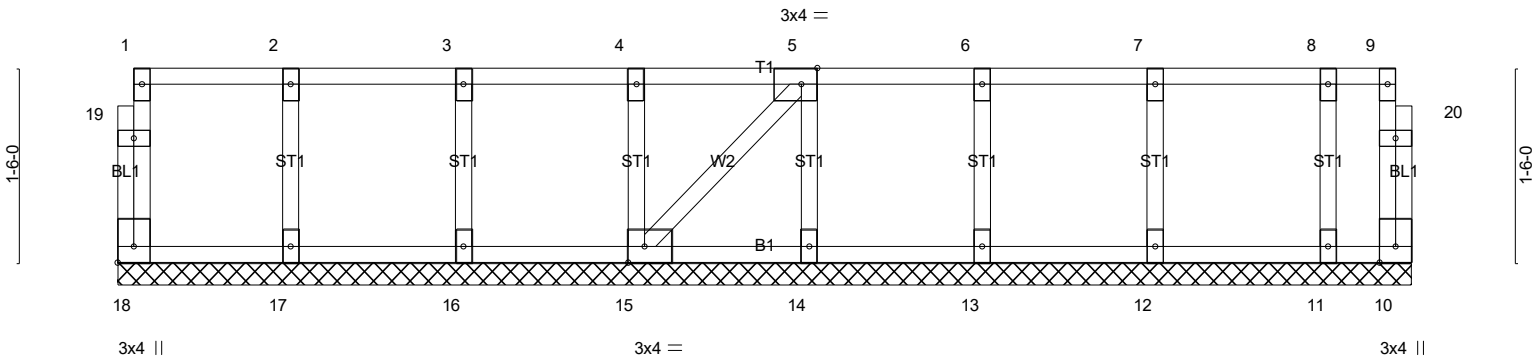
0-1-8 0-1-8

Scale = 1:17.8




9-11-12
9-11-12

Plate Offsets (X,Y)-- [5:0-1-8,Edge], [15:0-1-8,Edge], [18:Edge,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.06 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.01 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.00 | 10 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2018/TPI2014 | | Matrix-SH | | | | | | | Weight: 52 lb | FT = 0%F, 0%E |

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

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

**REACTIONS.** All bearings 9-11-12.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 18, 10, 17, 16, 15, 14, 13, 12, 11

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

**NOTES-** (7-8)
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
7) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
8) 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.

**LOAD CASE(S)** Standard


5/28/2021

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | F05 | Floor | 3 | 1 | Job Reference (optional) **# 26861** |



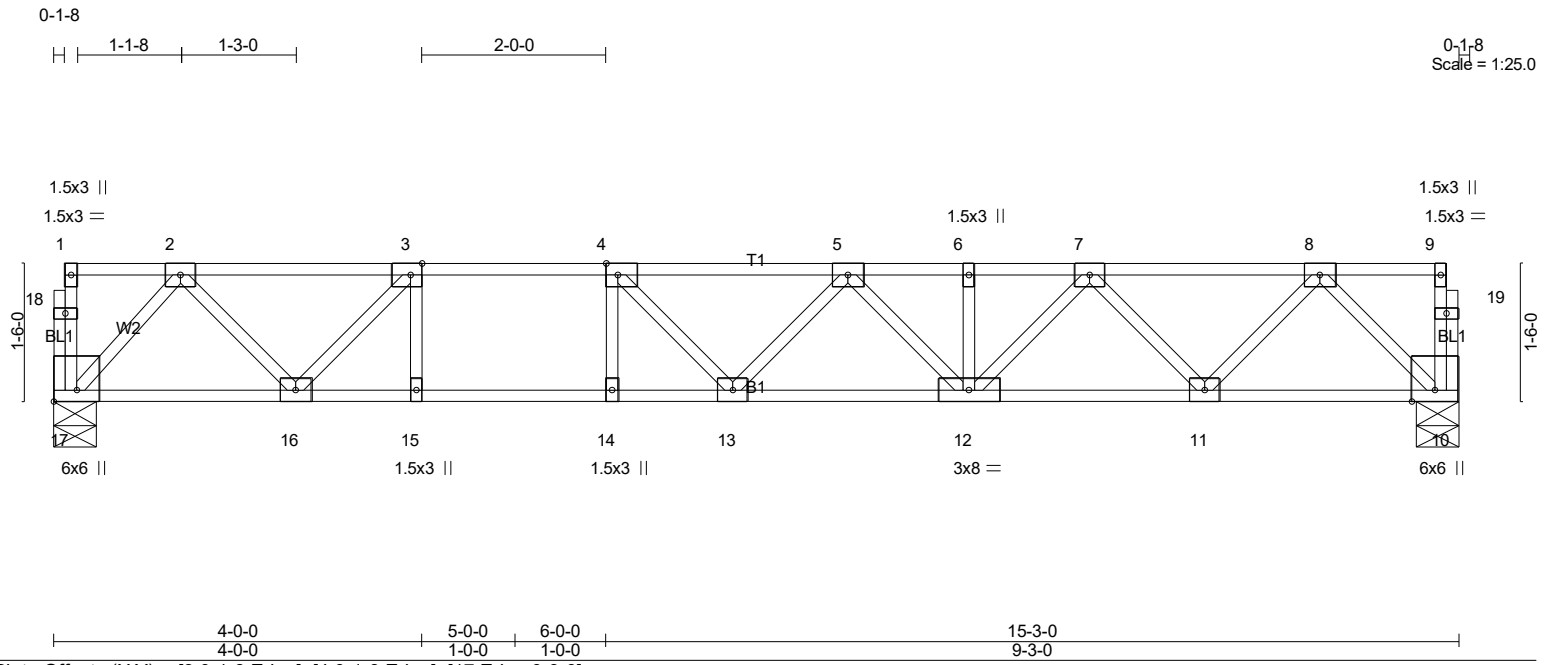



Plate Offsets (X,Y)-- [3:0-1-8,Edge], [4:0-1-8,Edge], [17:Edge,0-3-0]

| **LOADING** (psf) | | **SPACING-** | 2-0-0 | **CSI.** | | **DEFL.** | in | (loc) | l/defl | L/d | **PLATES** | **GRIP** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.80 | Vert(LL) | -0.24 | 13-14 | >741 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.87 | Vert(CT) | -0.33 | 13-14 | >553 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.39 | Horz(CT) | 0.03 | 10 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2018/TPI2014 | | Matrix-SH | | | | | | | Weight: 84 lb | FT = 0%F, 0%E |

**LUMBER-**
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP SS(flat)
WEBS 2x4 SP No.3(flat)

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

**REACTIONS.** (lb/size) 17=819/0-5-8 (min. 0-1-8), 10=819/0-5-8 (min. 0-1-8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1229/0, 3-4=-1959/0, 4-5=-2214/0, 5-6=-2019/0, 6-7=-2019/0, 7-8=-1277/0
BOT CHORD 16-17=0/674, 15-16=0/1959, 14-15=0/1959, 13-14=0/1959, 12-13=0/2273, 11-12=0/1749, 10-11=0/775
WEBS 3-15=0/420, 4-14=-392/0, 3-16=-1057/0, 2-16=0/825, 2-17=-998/0, 4-13=-56/479, 5-12=-368/0, 7-12=0/391, 7-11=-701/0, 8-11=0/746, 8-10=-1094/0

**NOTES-** (5-6)
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
6) 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.

**LOAD CASE(S)** Standard


5/28/2021

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | F06 | Floor | 1 | 1 | Job Reference (optional) **# 26861** |

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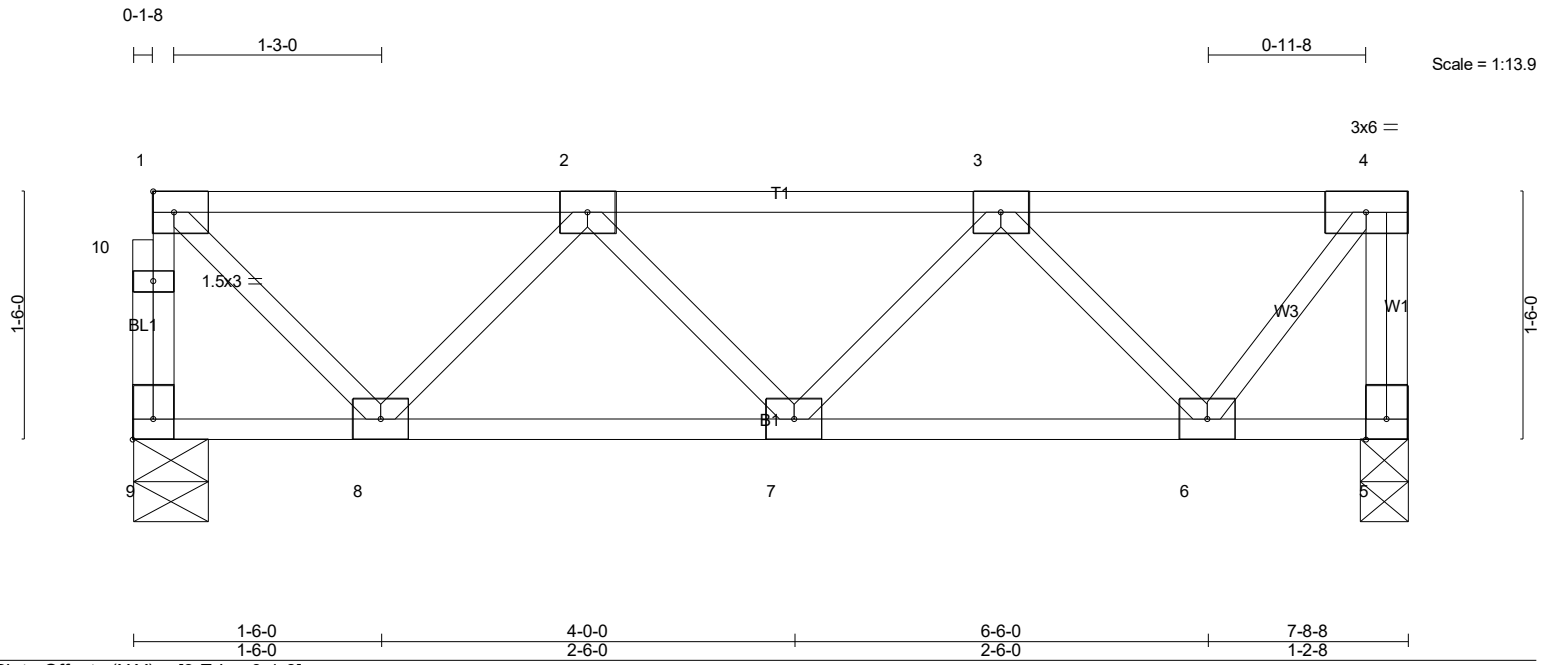


Plate Offsets (X,Y)-- [9:Edge,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.26 | Vert(LL) | -0.01 | 7 | >999 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.12 | Vert(CT) | -0.01 | 7 | >999 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.19 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2018/TPI2014 | | Matrix-P | | | | | | | Weight: 45 lb | FT = 0%F, 0%E |

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

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

**REACTIONS.** (lb/size) 9=404/0-5-8 (min. 0-1-8), 5=410/0-3-8 (min. 0-1-8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 9-10=-399/0, 1-10=-399/0, 4-5=-407/0, 1-2=-301/0, 2-3=-545/0
BOT CHORD 7-8=0/551, 6-7=0/515
WEBS 1-8=0/409, 2-8=-372/0, 3-6=-398/0, 4-6=0/400

**NOTES-** (5-6)
1) All plates are 3x4 MT20 unless otherwise indicated.
2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
4) CAUTION, Do not erect truss backwards.
5) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
6) 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.

**LOAD CASE(S)** Standard


5/28/2021

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | F07 | Floor | 5 | 1 | Job Reference (optional) **# 26861** |

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat May 29 17:14:15 2021 Page 1
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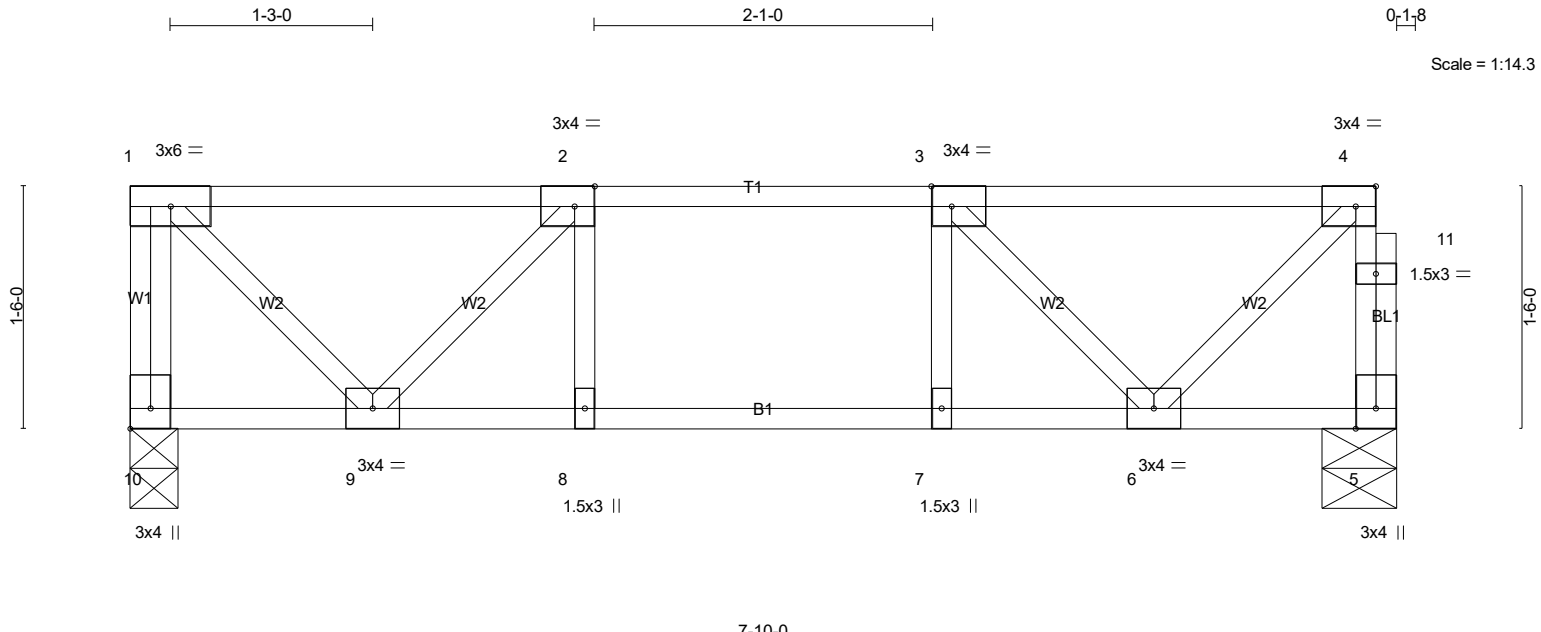


Plate Offsets (X,Y)-- [2:0-1-8,Edge], [3:0-1-8,Edge], [4:0-1-8,Edge], [10:Edge,0-1-8]

| **LOADING** (psf) | | **SPACING-** | 2-0-0 | **CSI.** | | **DEFL.** | in | (loc) | l/defl | L/d | **PLATES** | **GRIP** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.34 | Vert(LL) | -0.03 | 8 | >999 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.29 | Vert(CT) | -0.04 | 8 | >999 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.20 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2018/TPI2014 | | Matrix-SH | | | | | | | Weight: 45 lb | FT = 0%F, 0%E |

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

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

**REACTIONS.** (lb/size) 10=417/0-3-8 (min. 0-1-8), 5=411/0-5-8 (min. 0-1-8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-10=-411/0, 5-11=-405/0, 4-11=-404/0, 1-2=-299/0, 2-3=-571/0, 3-4=-300/0
BOT CHORD 8-9=0/571, 7-8=0/571, 6-7=0/571
WEBS 4-6=0/409, 1-9=0/423, 3-6=-392/0, 2-9=-393/0

**NOTES-** (5-6)
1) Unbalanced floor live loads have been considered for this design.
2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
4) CAUTION, Do not erect truss backwards.
5) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
6) 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.

**LOAD CASE(S)** Standard


5/28/2021

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | F08 | Floor Supported Gable | 1 | 1 | Job Reference (optional) **# 26861** |

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat May 29 17:14:17 2021 Page 1
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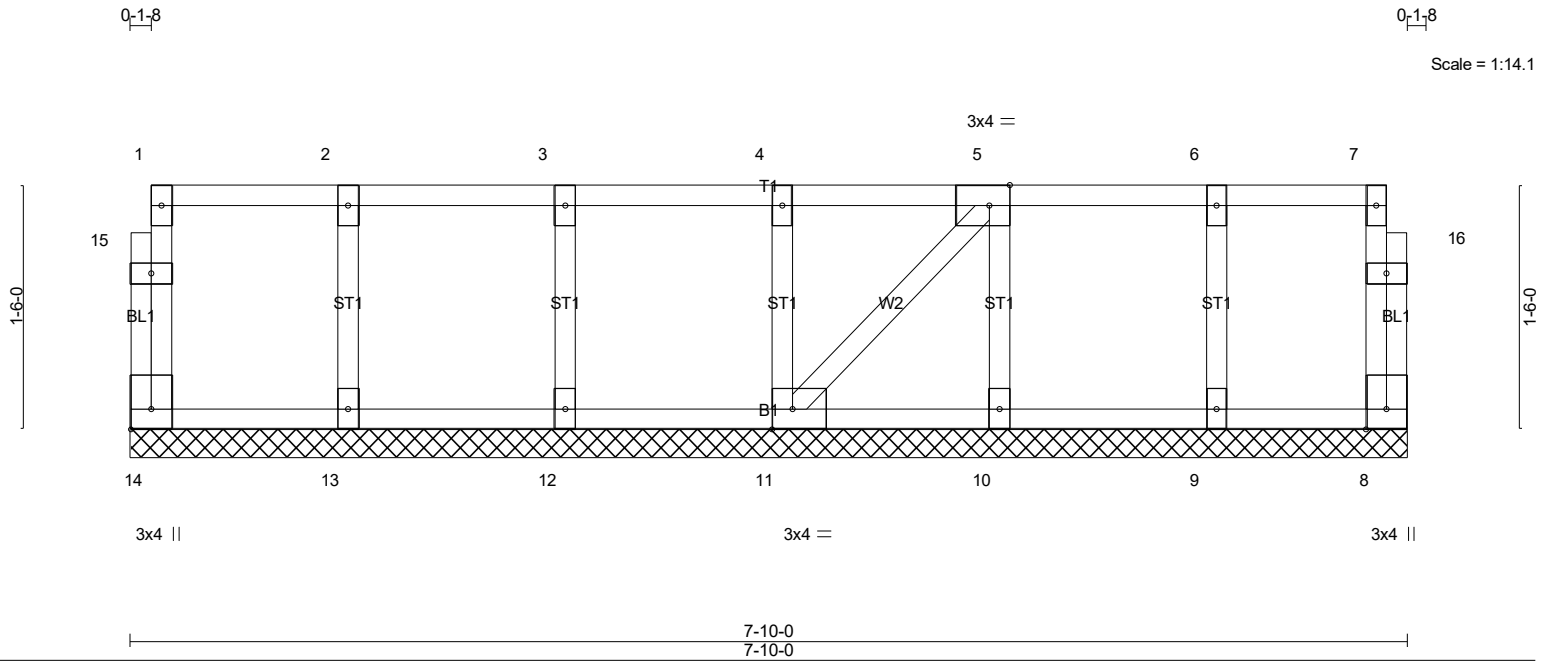


Plate Offsets (X,Y)-- [5:0-1-8,Edge], [11:0-1-8,Edge], [14:Edge,0-1-8]

| **LOADING** (psf) | | **SPACING-** | 2-0-0 | **CSI.** | | **DEFL.** | in | (loc) | l/defl | L/d | **PLATES** | **GRIP** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.06 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.01 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.00 | 8 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2018/TPI2014 | | Matrix-P | | | | | | | Weight: 42 lb | FT = 0%F, 0%E |

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

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

**REACTIONS.** All bearings 7-10-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 14, 8, 13, 12, 11, 10, 9

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

**NOTES-** (7-8)
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
7) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
8) 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.

**LOAD CASE(S)** Standard


5/28/2021

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | J01 | Monopitch Supported Gable | 1 | 1 | Job Reference (optional) **# 26861** |

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat May 29 17:14:21 2021 Page 1
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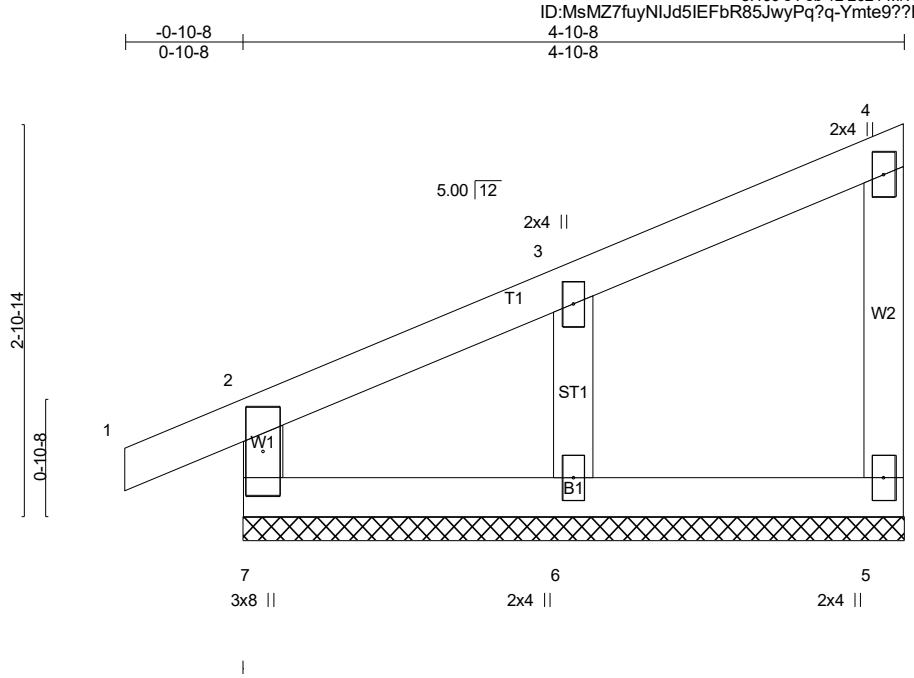


| **LOADING** (psf) | | **SPACING-** | 2-0-0 | **CSI.** | | **DEFL.** | in | (loc) | l/defl | L/d | **PLATES** | **GRIP** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.12 | Vert(LL) | -0.00 | 1 | n/r | 180 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.08 | Vert(CT) | -0.00 | 1 | n/r | 80 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.05 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-R | | | | | | | Weight: 23 lb | FT = 0% |
| 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 4-10-8 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) 7=151/4-10-8 (min. 0-1-8), 5=76/4-10-8 (min. 0-1-8), 6=200/4-10-8 (min. 0-1-8)
Max Horz 7=74(LC 14)
Max Uplift7=-7(LC 10), 5=-18(LC 14), 6=-80(LC 14)
Max Grav 7=219(LC 21), 5=106(LC 21), 6=274(LC 21)

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

**NOTES-** (13-14)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) 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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 7, 18 lb uplift at joint 5 and 80 lb uplift at joint 6.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. 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.


**LOAD CASE(S)** Standard

5/28/2021

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | J02 | Monopitch | 4 | 1 | Job Reference (optional) **# 26861** |

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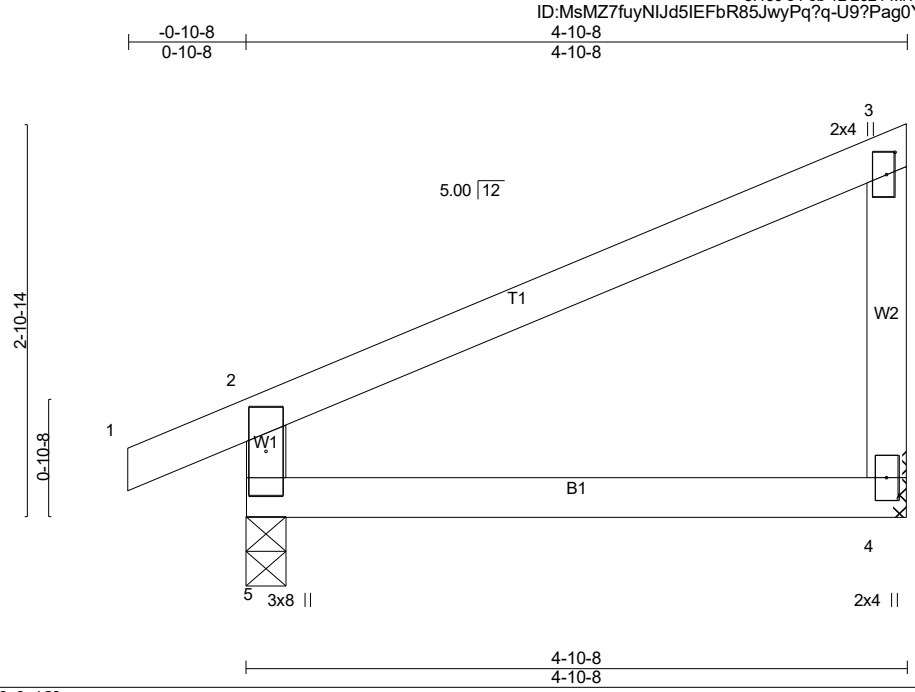



Plate Offsets (X,Y)-- [3:0-2-0,0-0-12]

| **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 | 0.38 | Vert(LL) | -0.02 | 4-5 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.19 | Vert(CT) | -0.03 | 4-5 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-R | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 21 lb | FT = 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 4-10-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

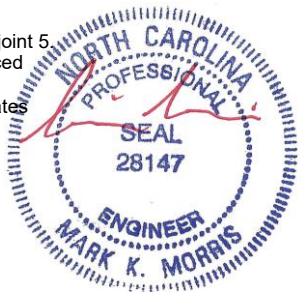
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 4=177/Mechanical, 5=251/0-3-8 (min. 0-1-8)
Max Horz 5=74(LC 14)
Max Uplift4=-67(LC 10), 5=-66(LC 10)
Max Grav 4=243(LC 21), 5=356(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-324/69

**NOTES-** (10-11)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; porch left exposed;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 67 lb uplift at joint 4 and 66 lb uplift at joint 5.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. 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.

**LOAD CASE(S)** Standard




5/28/2021

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | PB01 | Piggyback | 9 | 1 | Job Reference (optional) **# 26861** |

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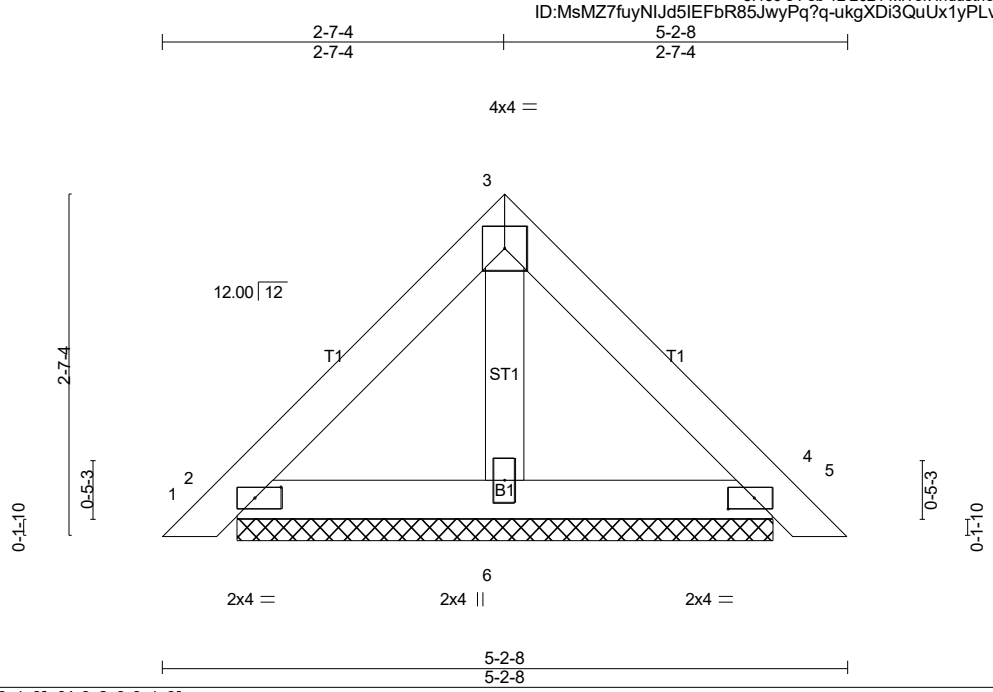



Plate Offsets (X,Y)-- [2:0-2-6,0-1-0], [4:0-2-6,0-1-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.08 | Vert(LL) | 0.00 | 5 | n/r | 180 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.07 | Vert(CT) | 0.00 | 5 | n/r | 80 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.02 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-P | | | | | | | Weight: 20 lb | FT = 0% |
| 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 5-2-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

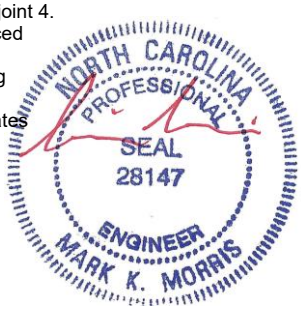
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 2=122/4-0-14 (min. 0-1-8), 4=122/4-0-14 (min. 0-1-8), 6=126/4-0-14 (min. 0-1-8)
Max Horz 2=-55(LC 10)
Max Uplift2=-30(LC 13), 4=-35(LC 13)
Max Grav 2=122(LC 1), 4=122(LC 1), 6=127(LC 5)

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

**NOTES-** (11-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) 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) Gable requires continuous bottom chord bearing.
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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 2 and 35 lb uplift at joint 4.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
11) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. 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.

**LOAD CASE(S)** Standard




5/28/2021

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | PB02 | Piggyback | 1 | 1 | Job Reference (optional) **# 26861** |

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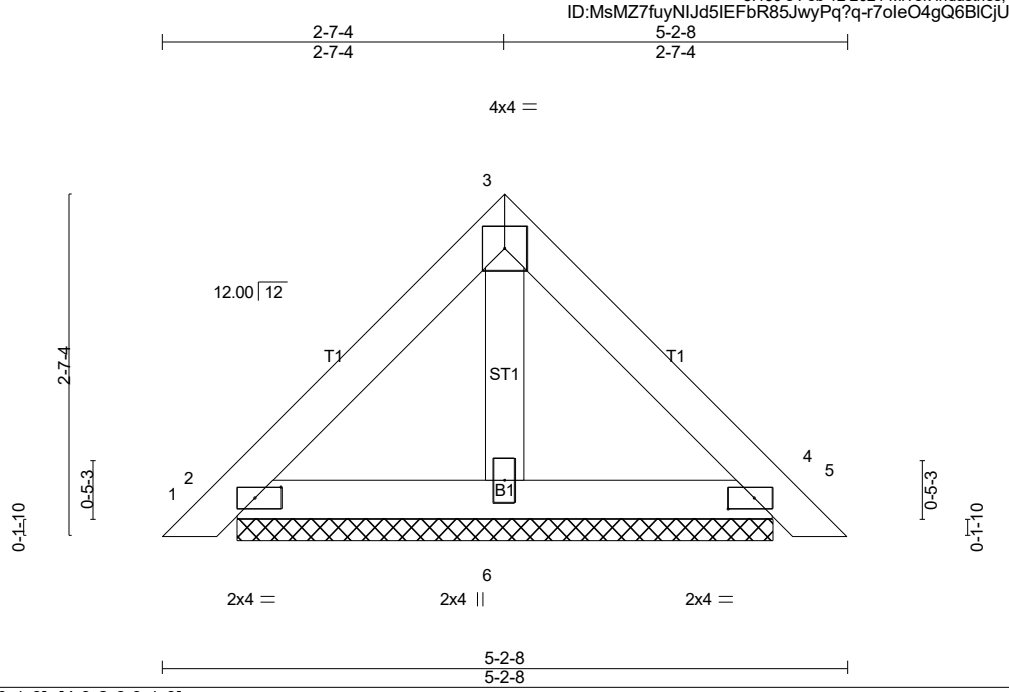



Plate Offsets (X,Y)-- [2:0-2-6,0-1-0], [4:0-2-6,0-1-0]

| **LOADING** (psf) | | **SPACING-** | 2-0-0 | **CSI.** | | **DEFL.** | in | (loc) | l/defl | L/d | **PLATES** | **GRIP** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.08 | Vert(LL) | 0.00 | 5 | n/r | 180 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.07 | Vert(CT) | 0.00 | 5 | n/r | 80 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.02 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-P | | | | | | | Weight: 20 lb | FT = 0% |
| 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 5-2-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

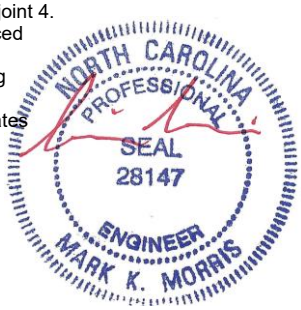
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 2=122/4-0-14 (min. 0-1-8), 4=122/4-0-14 (min. 0-1-8), 6=126/4-0-14 (min. 0-1-8)
Max Horz 2=-55(LC 10)
Max Uplift2=-30(LC 13), 4=-35(LC 13)
Max Grav 2=122(LC 1), 4=122(LC 1), 6=127(LC 5)

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

**NOTES-** (11-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) 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) Gable requires continuous bottom chord bearing.
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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 2 and 35 lb uplift at joint 4.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
11) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. 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.

**LOAD CASE(S)** Standard

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| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | R01 | GABLE | 1 | 1 | # 26861 |

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat May 29 17:14:33 2021 Page 1
ID:MsMZ7fuyNIJd5IEFbR85JwyPq?q-B4bBh58pEep1IUNF4XITFlw13ufZlhd0MtbRJRzBb34

-0-10-8 | 17-7-8 | 35-3-0 | 36-1-8
0-10-8 | 17-7-8 | 17-7-8 | 0-10-8

Scale = 1:69.4

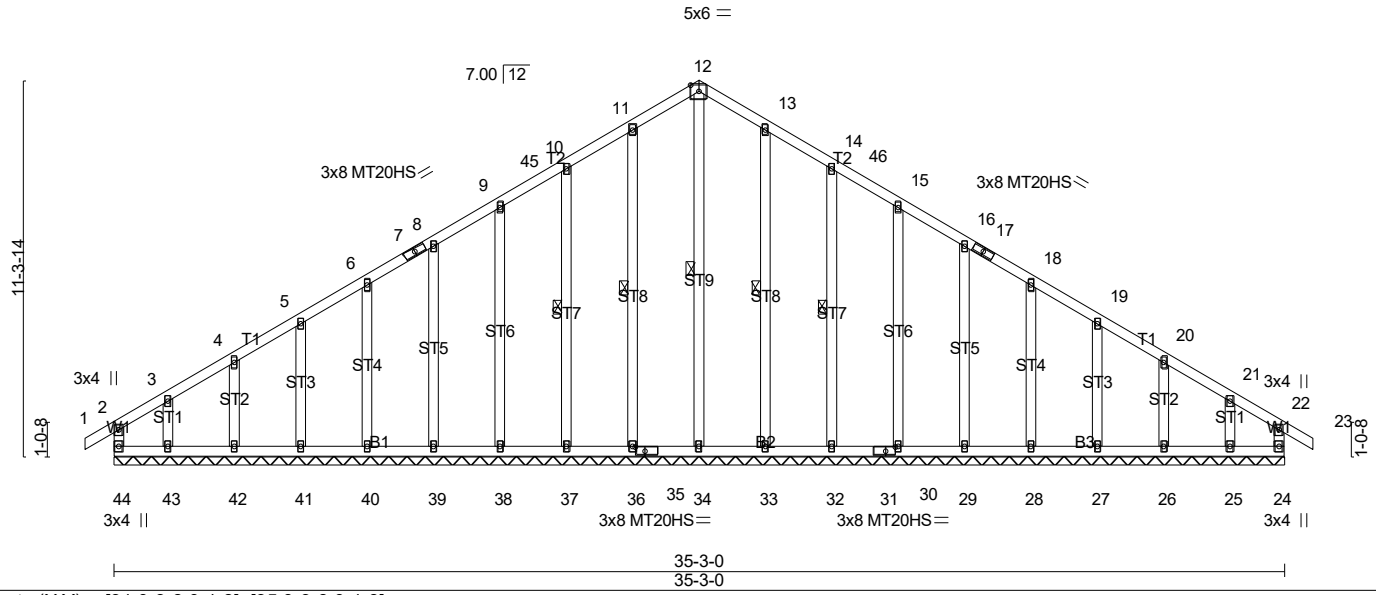



Plate Offsets (X,Y)-- [31:0-3-8,0-1-8], [35:0-3-8,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.21 | Vert(LL) | -0.00 | 23 | n/r | 180 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.10 | Vert(CT) | -0.00 | 23 | n/r | 80 | MT20HS | 187/143 |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.14 | Horz(CT) | 0.01 | 24 | n/a | n/a | | |
| BCLL | 0.0 * | Code | IRC2018/TPI2014 | Matrix-R | | | | | | | Weight: 266 lb | FT = 0% |
| BCDL | 10.0 | | | | | | | | | | | |

**LUMBER-**

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

**BRACING-**

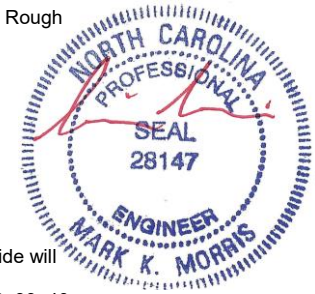
| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 6-0-0 oc bracing. |
| WEBS | 1 Row at midpt 12-34, 11-36, 10-37, 13-33, 14-32 |

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

**REACTIONS.** All bearings 35-3-0.
(lb) - Max Horz 44=-275(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 24, 36, 37, 38, 39, 40, 41, 42, 33, 32, 30, 29, 28, 27, 26 except 44=-145(LC 10), 43=-158(LC 14), 25=-139(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 44, 24, 41, 42, 43, 27, 26, 25 except 34=319(LC 27), 36=296(LC 5), 37=273(LC 5), 38=256(LC 24), 39=254(LC 24), 40=261(LC 24), 33=296(LC 6), 32=273(LC 6), 30=256(LC 25), 29=254(LC 29), 28=262(LC 25)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 10-11=-168/254, 11-12=-191/275, 12-13=-191/266

**NOTES-** (16-17)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) 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 MT20 plates unless otherwise indicated.
8) All plates are 2x4 MT20 unless otherwise indicated.
9) Gable requires continuous bottom chord bearing.
10) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
11) Gable studs spaced at 2-0-0 oc.
12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
13) * 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.
14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 36, 37, 38, 39, 40 , 41, 42, 33, 32, 30, 29, 28, 27, 26 except (jt=lb) 44=145, 43=158, 25=139.

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Continued on page 2

**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.

**NOTES-** (16-17)

15) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
16) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
17) 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.

**LOAD CASE(S)** Standard


5/28/2021

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | R02 | Common | 3 | 1 | # 26861 |

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat May 29 17:14:38 2021 Page 1
ID:MsMZ7fuyNlJd5IEFbR85JwyPq?q-Y2P4kpCy3ASKOFFDt4teyodj1vAXzp1lW9JC_fzBb3?

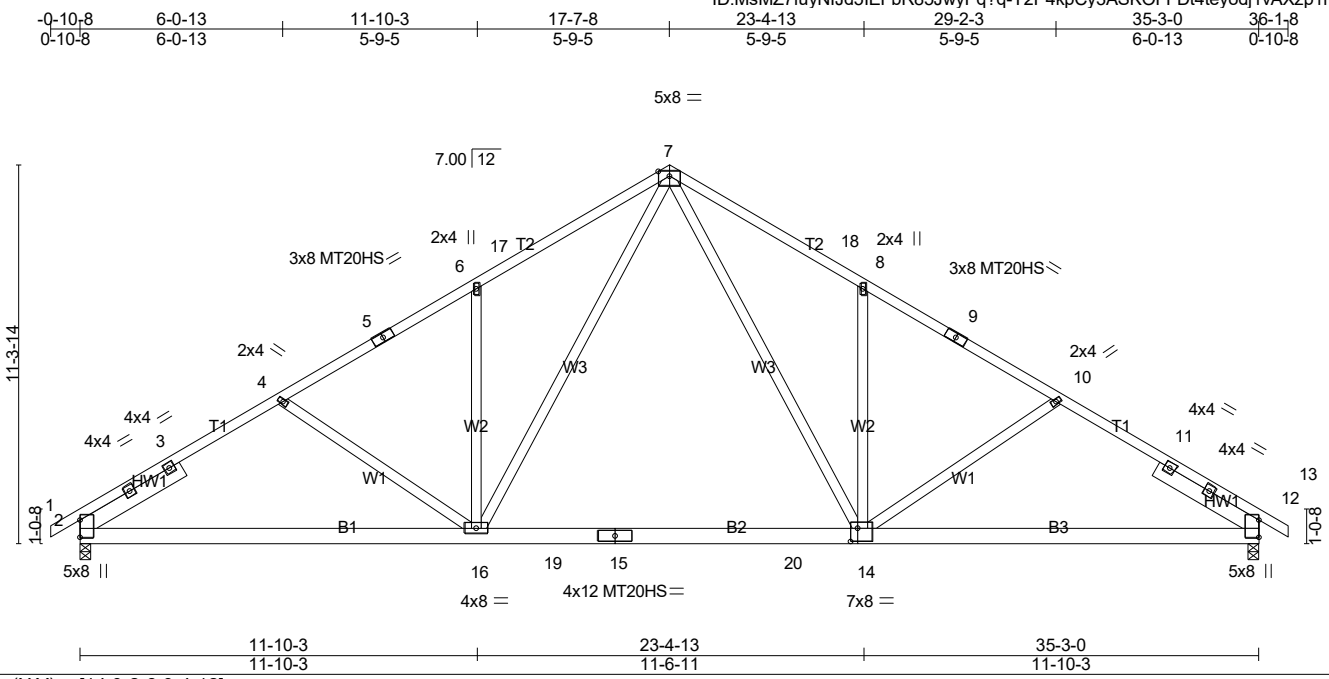



Plate Offsets (X,Y)-- [14:0-2-8,0-4-12]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.90 | Vert(LL) | -0.41 | 14-16 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.89 | Vert(CT) | -0.56 | 14-16 | >756 | 180 | MT20HS | 187/143 |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.76 | Horz(CT) | 0.06 | 12 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-SH | | | | | | | Weight: 241 lb | FT = 0% |
| BCDL | 10.0 | | | | | | | | | | | |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 - 3-6-11, Right 2x6 SP No.2 - 3-6-11

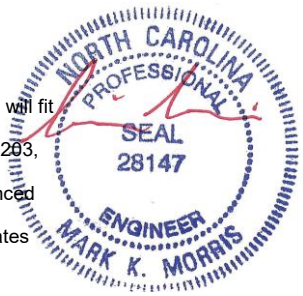
**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) 2=1463/0-3-8 (min. 0-1-13), 12=1463/0-3-8 (min. 0-1-13)
Max Horz 2=-250(LC 10)
Max Uplift2=-203(LC 14), 12=-203(LC 15)
Max Grav 2=1510(LC 24), 12=1510(LC 25)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2218/279, 3-4=-2130/309, 4-5=-1978/246, 5-6=-1899/262, 6-17=-2043/388, 7-17=-1960/414, 7-18=-1960/414, 8-18=-2043/388, 8-9=-1899/262, 9-10=-1978/246, 10-11=-2131/309, 11-12=-2218/280
BOT CHORD 2-16=-329/1935, 16-19=-56/1288, 15-19=-56/1288, 15-20=-56/1288, 14-20=-56/1288, 12-14=-162/1750
WEBS 7-14=-263/1068, 8-14=-490/245, 7-16=-263/1068, 6-16=-490/245

**NOTES-** (11-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) except (jt=lb) 2=203, 12=203.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. 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.




5/28/2021

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | R03 | COMMON | 3 | 1 | # 26861 |

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat May 29 17:14:41 2021 Page 1
ID:MsMZ7fuyNIJd5IEFbR85JwyPq?q-yd4CMqEqM5qvFj_oYDRLaRFEG7BEA9kBC7XsazzBb2y

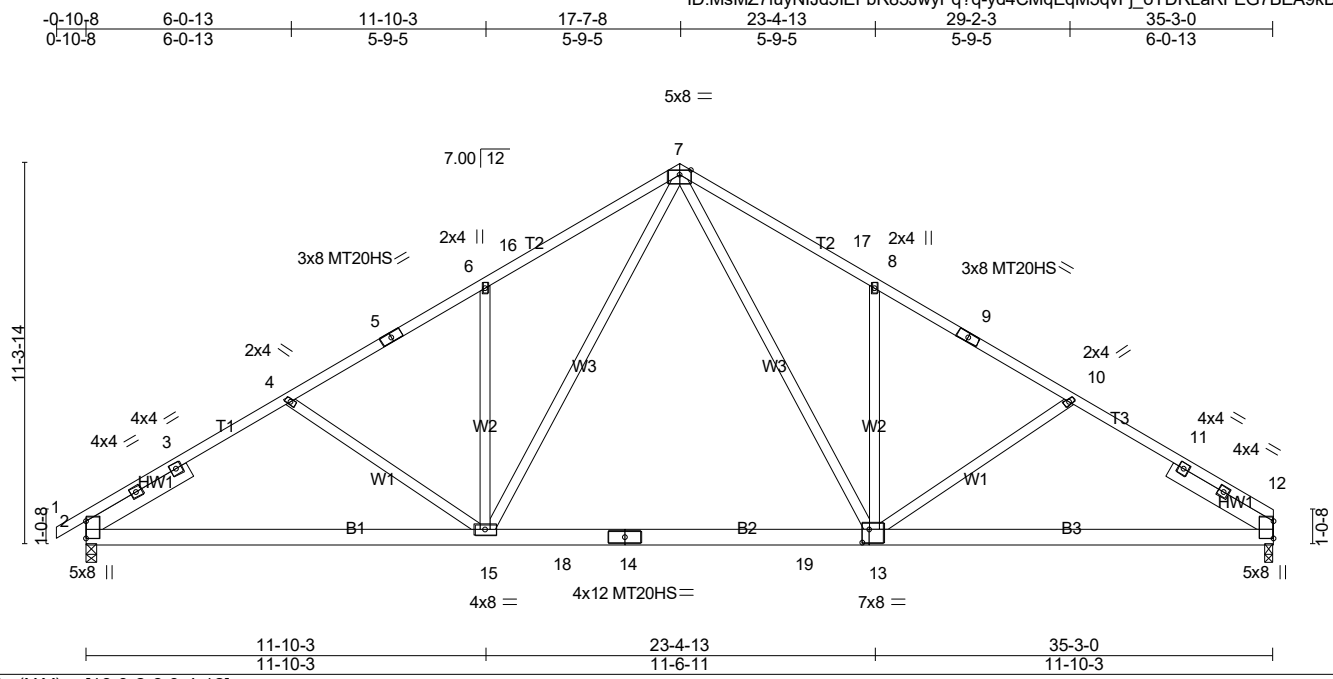



Plate Offsets (X,Y)-- [13:0-2-8,0-4-12]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.90 | Vert(LL) | -0.41 | 13-15 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.89 | Vert(CT) | -0.56 | 13-15 | >756 | 180 | MT20HS | 187/143 |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.77 | Horz(CT) | 0.06 | 12 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-SH | | | | | | | Weight: 239 lb | FT = 0% |
| BCDL | 10.0 | | | | | | | | | | | |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 - 3-6-11, Right 2x6 SP No.2 - 3-6-11

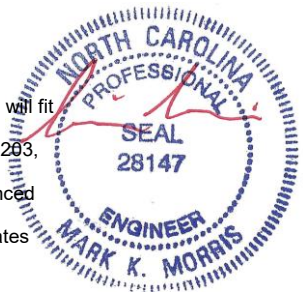
**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) 2=1463/0-3-8 (min. 0-1-13), 12=1409/0-3-8 (min. 0-1-12)
Max Horz 2=-252(LC 10)
Max Uplift2=-203(LC 14), 12=-184(LC 15)
Max Grav 2=1511(LC 24), 12=1461(LC 25)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2218/280, 3-4=-2131/309, 4-5=-1979/246, 5-6=-1900/262, 6-16=-2044/388, 7-16=-1960/414, 7-17=-1962/415, 8-17=-2045/389, 8-9=-1902/263, 9-10=-1981/247, 10-11=-2135/311, 11-12=-2221/281
BOT CHORD 2-15=-327/1937, 15-18=-54/1290, 14-18=-54/1290, 14-19=-54/1290, 13-19=-54/1290, 12-13=-160/1754
WEBS 7-13=-264/1071, 8-13=-489/244, 7-15=-263/1068, 6-15=-490/245

**NOTES-** (11-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) except (jt=lb) 2=203, 12=184.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. 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.

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**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | R03A | Common | 1 | 1 | **# 26861** |

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat May 29 17:14:44 2021 Page 1
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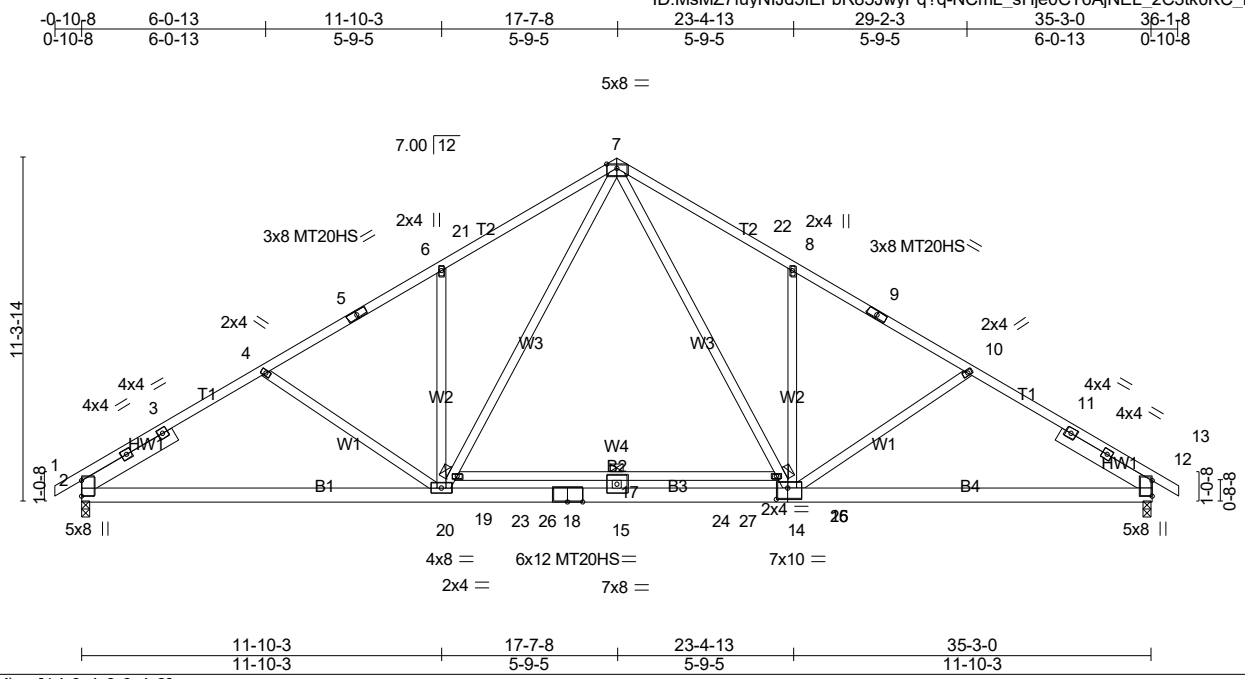



Plate Offsets (X,Y)-- [14:0-4-8,0-4-8]

| **LOADING** (psf) | | **SPACING-** | 2-0-0 | **CSI.** | | **DEFL.** | in | (loc) | l/defl | L/d | **PLATES** | **GRIP** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.99 | Vert(LL) | -0.58 | 17 | >730 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.95 | Vert(CT) | -0.83 | 17 | >512 | 180 | MT20HS | 187/143 |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.57 | Horz(CT) | 0.06 | 12 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-SH | | | | | | | Weight: 257 lb | FT = 0% |
| BCDL | 10.0 | | | | | | | | | | | |

**LUMBER-**
TOP CHORD 2x4 SP No.2 *Except*
T1: 2x4 SP No.1
BOT CHORD 2x4 SP No.2 *Except*
B1: 2x6 SP No.1, B3: 2x6 SP DSS, B4: 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 - 3-6-11, Right 2x6 SP No.2 - 3-6-11

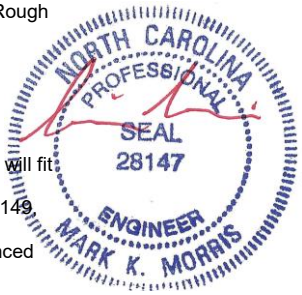
**BRACING-**
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except:
6-0-0 oc bracing: 16-19

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

**REACTIONS.** (lb/size) 2=1571/0-3-8 (min. 0-2-1), 12=1571/0-3-8 (min. 0-2-1)
Max Horz 2=-250(LC 10)
Max Uplift2=-149(LC 14), 12=-149(LC 15)
Max Grav 2=1754(LC 24), 12=1754(LC 25)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2667/180, 3-4=-2578/210, 4-5=-2436/141, 5-6=-2372/157, 6-21=-2520/282, 7-21=-2436/308, 7-22=-2431/308, 8-22=-2514/282, 8-9=-2366/157, 9-10=-2430/141, 10-11=-2573/211, 11-12=-2662/181
BOT CHORD 2-20=-249/2299, 20-23=0/1567, 18-23=0/1567, 15-18=0/1567, 15-24=0/1567, 24-25=0/1567, 14-25=0/1567, 12-14=-82/2109
WEBS 7-16=-202/1332, 14-16=-231/1241, 8-14=-493/241, 19-20=-232/1252, 7-19=-202/1342, 6-20=-493/242, 15-17=-365/0

**NOTES-** (11-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) except (jt=lb) 2=149, 12=149.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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Continued on page 2

**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.

11) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. 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.

**LOAD CASE(S)** Standard


5/28/2021

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | R04 | COMMON | 5 | 1 | # 26861 |

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat May 29 17:14:48 2021 Page 1
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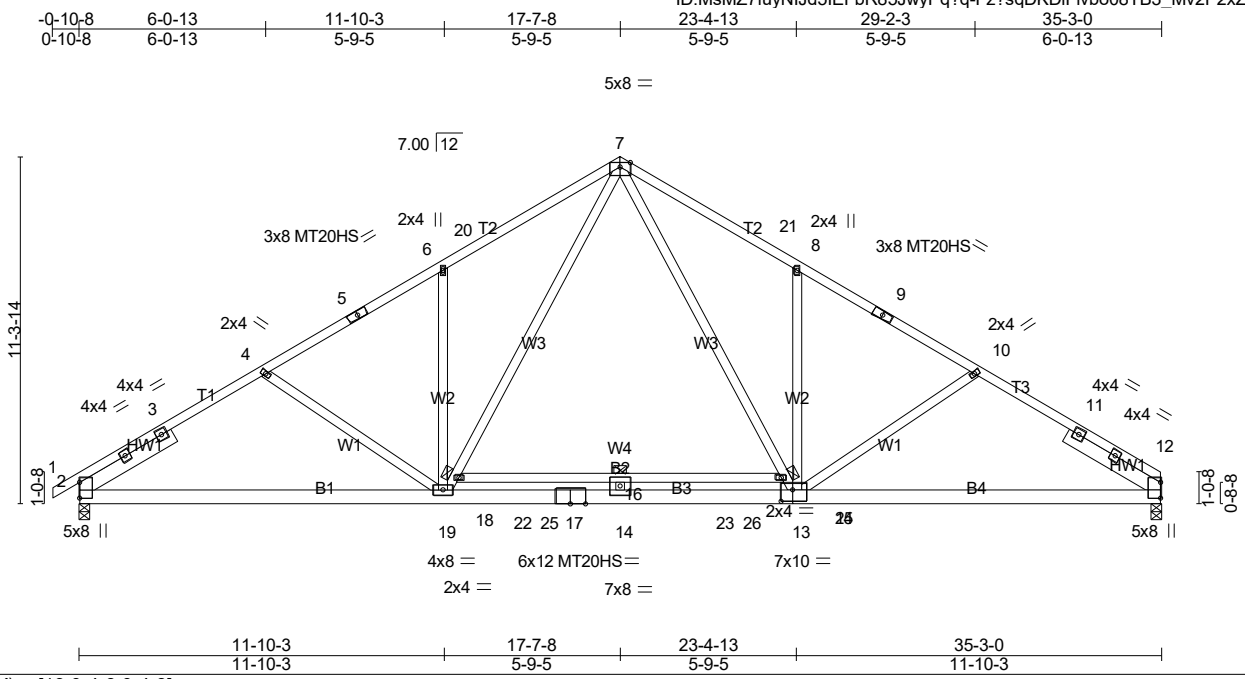



Plate Offsets (X,Y)-- [13:0-4-8,0-4-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.99 | Vert(LL) | -0.58 | 16 | >730 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.95 | Vert(CT) | -0.83 | 16 | >512 | 180 | MT20HS | 187/143 |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.57 | Horz(CT) | 0.06 | 12 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-SH | | | | | | | Weight: 255 lb | FT = 0% |
| BCDL | 10.0 | | | | | | | | | | | |

**LUMBER-**
TOP CHORD 2x4 SP No.2 *Except*
T1,T3: 2x4 SP No.1
BOT CHORD 2x4 SP No.2 *Except*
B1: 2x6 SP No.1, B3: 2x6 SP DSS, B4: 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 - 3-6-11, Right 2x6 SP No.2 - 3-6-11

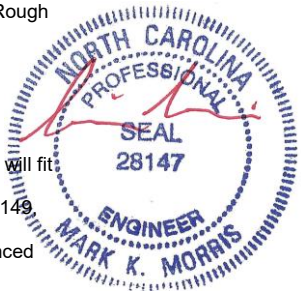
**BRACING-**
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except:
6-0-0 oc bracing: 15-18

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

**REACTIONS.** (lb/size) 2=1572/0-3-8 (min. 0-2-1), 12=1518/0-3-8 (min. 0-2-0)
Max Horz 2=-252(LC 10)
Max Uplift2=-149(LC 14), 12=-130(LC 15)
Max Grav 2=1755(LC 24), 12=1705(LC 25)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2668/180, 3-4=-2579/210, 4-5=-2436/141, 5-6=-2372/157, 6-20=-2520/282, 7-20=-2437/308, 7-21=-2433/309, 8-21=-2517/283, 8-9=-2369/158, 9-10=-2433/143, 10-11=-2577/212, 11-12=-2666/182
BOT CHORD 2-19=-247/2301, 19-22=0/1569, 17-22=0/1569, 14-17=0/1569, 14-23=0/1569, 23-24=0/1569, 13-24=0/1569, 12-13=-80/2113
WEBS 7-15=-203/1334, 13-15=-232/1243, 8-13=-492/241, 18-19=-232/1252, 7-18=-202/1342, 6-19=-493/242, 14-16=-365/0

**NOTES-** (11-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) except (jt=lb) 2=149, 12=130.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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Continued on page 2

**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.

11) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. 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.

**LOAD CASE(S)** Standard


5/28/2021

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | R05 | GABLE | 1 | 1 | # 26861 |

Job Reference (optional)

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ID:MsMZ7fuyNlJd5IEFbR85JwyPq?q-8kFMgbNkmTDL4PKvi08wXICHPY86FHKpkKiyTrzBb2n

-0-10-8 17-7-8 35-3-0
0-10-8 17-7-8 17-7-8

Scale = 1:68.9

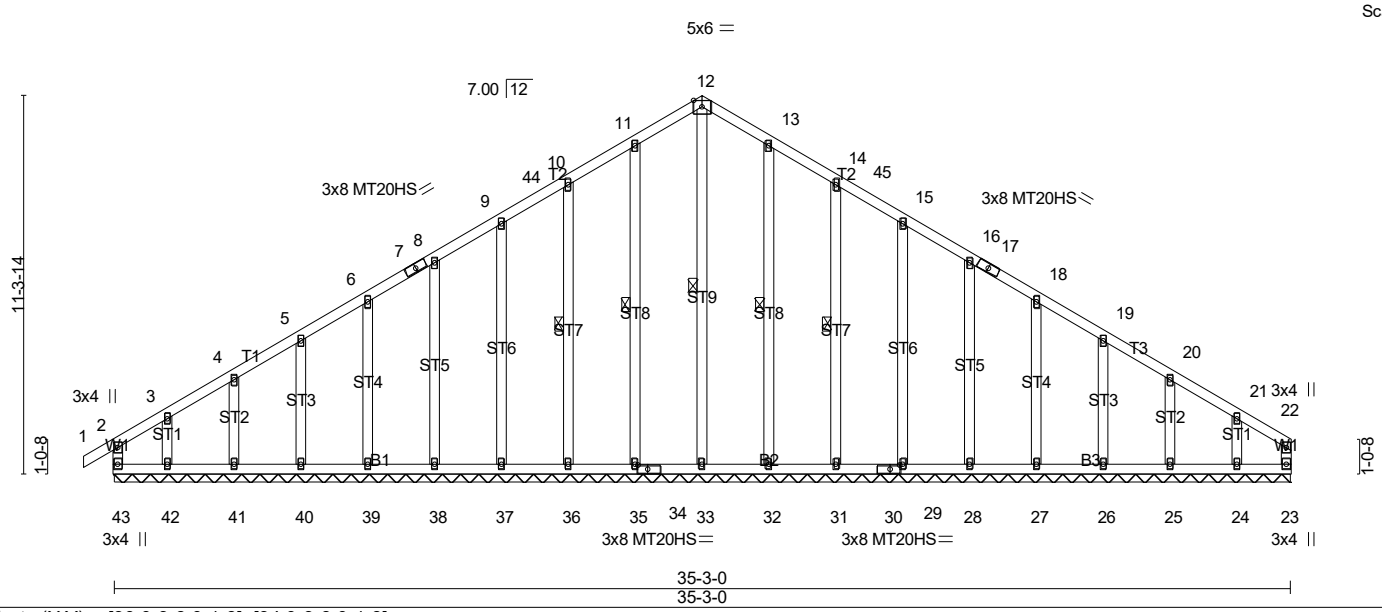


Plate Offsets (X,Y)-- [30:0-3-8,0-1-8], [34:0-3-8,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.20 | 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 | MT20HS | 187/143 |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.14 | Horz(CT) | 0.01 | 23 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-R | | | | | | | Weight: 264 lb | FT = 0% |
| BCDL | 10.0 | | | | | | | | | | | |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 12-33, 11-35, 10-36, 13-32, 14-31

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

**REACTIONS.** All bearings 35-3-0.
(lb) - Max Horz 43=243(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 23, 35, 36, 37, 38, 39, 40, 41, 32, 31, 29, 28, 27, 26, 25 except 43=-140(LC 10), 42=-167(LC 14), 24=-142(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 43, 23, 40, 41, 42, 26, 25, 24 except 33=319(LC 27), 35=296(LC 5), 36=273(LC 5), 37=256(LC 24), 38=254(LC 28), 39=261(LC 24), 32=296(LC 6), 31=273(LC 6), 29=256(LC 25), 28=254(LC 25), 27=261(LC 25)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 10-11=-164/257, 11-12=-187/278, 12-13=-187/269

**NOTES-** (16-17)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) 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 MT20 plates unless otherwise indicated.
8) All plates are 2x4 MT20 unless otherwise indicated.
9) Gable requires continuous bottom chord bearing.
10) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
11) Gable studs spaced at 2-0-0 oc.
12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
13) * 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.
14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 35, 36, 37, 38, 39 , 40, 41, 32, 31, 29, 28, 27, 26, 25 except (jt=lb) 43=140, 42=167, 24=142.

NORTH CAROLINA PROFESSIONAL SEAL 28147 ENGINEER MARK K. MORRIS

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**NOTES-** (16-17)

15) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
16) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
17) 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.

**LOAD CASE(S)** Standard


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| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | R06 | Common Girder | 1 | 2 | Job Reference (optional) # 26861 |

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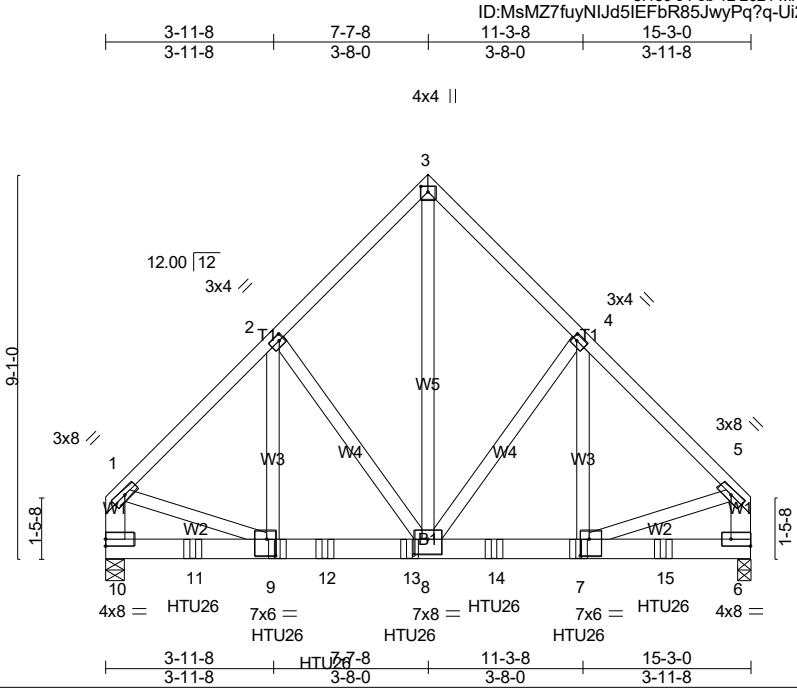



Plate Offsets (X,Y)-- [2:0-1-4,0-1-8], [3:0-1-8,0-2-0], [4:0-1-4,0-1-8], [6:Edge,0-2-0], [7:0-2-8,0-4-12], [8:0-4-0,0-4-8], [9:0-2-8,0-4-12]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.30 | Vert(LL) | -0.06 | 8-9 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.84 | Vert(CT) | -0.11 | 8-9 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.78 | Horz(CT) | 0.02 | 6 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-SH | | | | | | | Weight: 255 lb | FT = 0% |
| BCDL | 10.0 | | | | | | | | | | | |

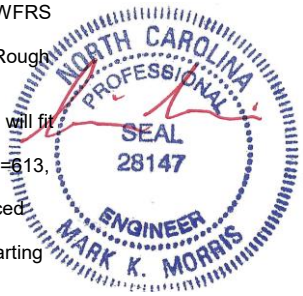
**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
W5: 2x4 SP No.2, W1: 2x6 SP No.2

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

**REACTIONS.** (lb/size) 10=5883/0-5-8 (min. 0-3-10), 6=5459/0-3-8 (min. 0-3-4)
Max Horz 10=212(LC 7)
Max Uplift10=-613(LC 11), 6=-667(LC 10)
Max Grav 10=6140(LC 3), 6=5497(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-5764/621, 2-3=-4103/565, 3-4=-4104/565, 4-5=-5131/652, 1-10=-5333/559, 5-6=-4742/585
BOT CHORD 10-11=-239/559, 9-11=-239/559, 9-12=-459/4019, 12-13=-459/4019, 8-13=-459/4019, 8-14=-394/3572, 7-14=-394/3572, 7-15=-81/424, 6-15=-81/424
WEBS 3-8=-700/5525, 4-8=-1268/341, 4-7=-261/1597, 2-8=-1943/304, 2-9=-212/2583, 1-9=-350/3774, 5-7=-363/3325

**NOTES-** (12-13)
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) 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
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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=613, 6=667.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 13-2-4 to connect truss(es) R04 (1 ply 2x6 SP), R03 (1 ply 2x6 SP) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.

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12) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. 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.

**LOAD CASE(S)** Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-5=-60, 6-10=-20
Concentrated Loads (lb)
Vert: 7=-1389(B) 9=-1498(B) 11=-1498(B) 12=-1498(B) 13=-1498(B) 14=-1389(B) 15=-1389(B)


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| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | R07 | Common | 7 | 1 | Job Reference (optional) **# 26861** |

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat May 29 17:14:59 2021 Page 1
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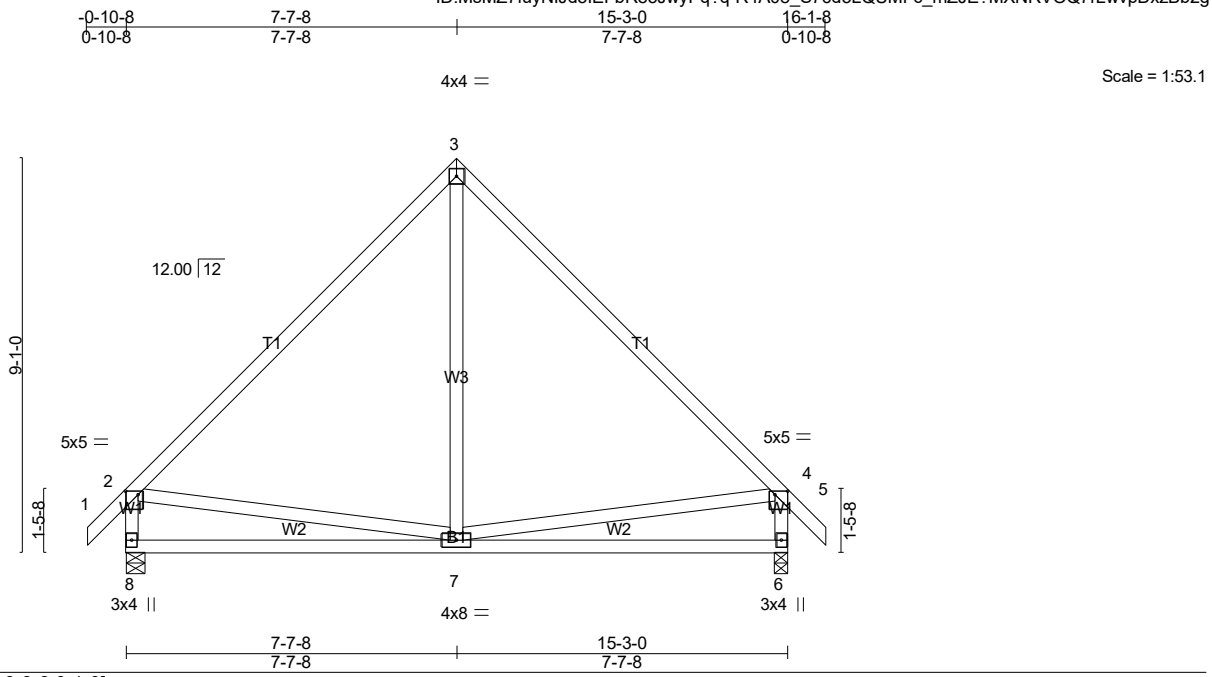


Plate Offsets (X,Y)-- [2:0-3-8,0-1-0], [4:0-3-8,0-1-0]

| **LOADING** (psf) | | **SPACING-** | 2-0-0 | **CSI.** | | **DEFL.** | in | (loc) | l/defl | L/d | **PLATES** | **GRIP** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.72 | Vert(LL) | -0.06 | 7-8 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.50 | Vert(CT) | -0.13 | 7-8 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.20 | Horz(CT) | 0.01 | 6 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-SH | | | | | | | Weight: 96 lb | FT = 0% |
| BCDL | 10.0 | | | | | | | | | | | |

**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
W1: 2x4 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-9-2 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) 8=660/0-5-8 (min. 0-1-8), 6=660/0-3-8 (min. 0-1-8)
Max Horz 8=-237(LC 10)
Max Uplift8=-74(LC 13), 6=-74(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-572/137, 3-4=-572/137, 2-8=-593/105, 4-6=-593/105
BOT CHORD 7-8=-315/456, 6-7=-219/281
WEBS 3-7=0/311, 2-7=-175/352, 4-7=-179/353

**NOTES-** (9-10)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. 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.


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**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | R08 | Common Supported Gable | 1 | 1 | # 26861 |

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat May 29 17:15:01 2021 Page 1
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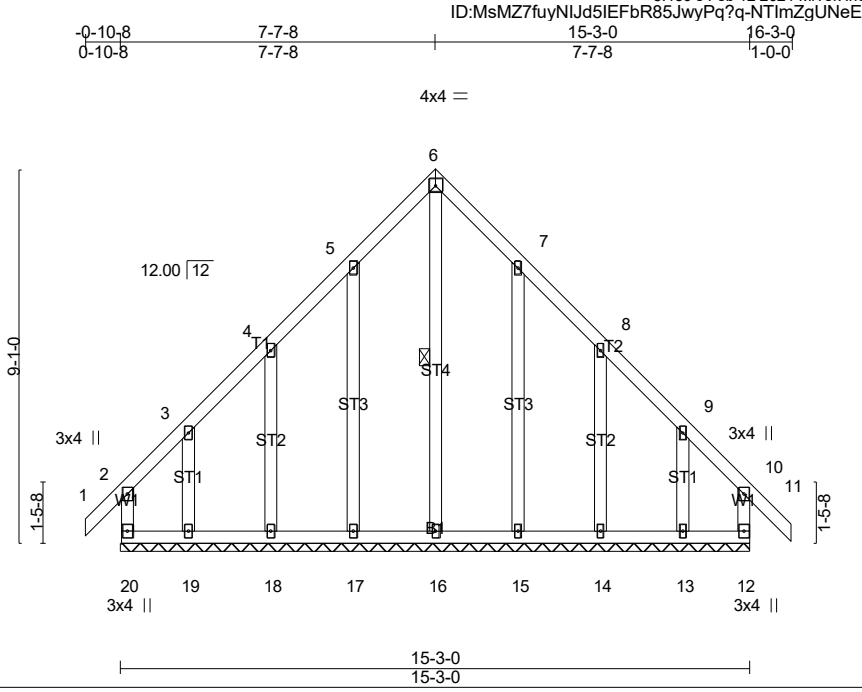



| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.22 | Vert(LL) | -0.00 | 11 | n/r | 180 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.12 | Vert(CT) | -0.01 | 11 | n/r | 80 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.13 | Horz(CT) | 0.00 | 12 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-R | | | | | | | Weight: 115 lb | FT = 0% |
| BCDL | 10.0 | | | | | | | | | | | |

**LUMBER-**

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

**BRACING-**

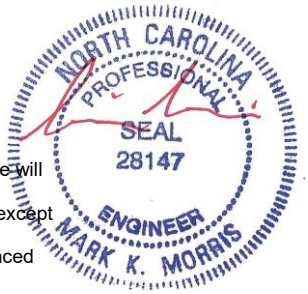
| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 6-0-0 oc bracing. |
| WEBS | 1 Row at midpt 6-16 |

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

**REACTIONS.** All bearings 15-3-0.
(lb) - Max Horz 20=-239(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 17, 18, 15, 14 except 20=-171(LC 8), 12=-154(LC 9), 19=-185(LC 12), 13=-178(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 20, 12, 18, 19, 14, 13 except 16=354(LC 23), 17=287(LC 20), 15=286(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 5-6=-189/256, 6-7=-189/251
WEBS 6-16=-298/164

**NOTES-** (14-15)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) 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) 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 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
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) 17, 18, 15, 14 except (jt=lb) 20=171, 12=154, 19=185, 13=178.
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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Continued on page 2

**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.

14) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. 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.

**LOAD CASE(S)** Standard


5/28/2021

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | R09 | Attic | 9 | 1 | Job Reference (optional) **# 26861** |

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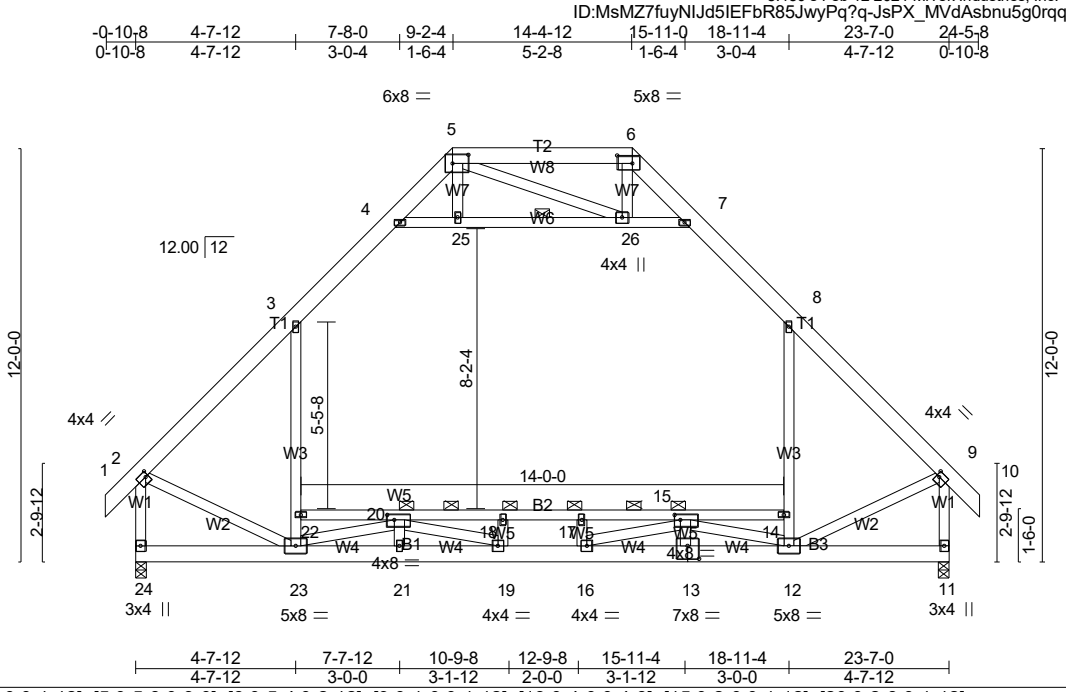



Plate Offsets (X,Y)-- [2:0-1-0,0-1-12], [5:0-5-8,0-3-0], [6:0-5-4,0-2-12], [9:0-1-0,0-1-12], [13:0-4-0,0-4-8], [15:0-2-0,0-1-12], [20:0-2-8,0-1-12]

| **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 | 0.87 | Vert(LL) | -0.23 | 17-18 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.78 | Vert(CT) | -0.37 | 17-18 | >760 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.50 | Horz(CT) | 0.04 | 11 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-SH | | Attic | -0.13 | 14-22 | 1276 | 360 | Weight: 242 lb | FT = 0% |
| BCDL | 10.0 | | | | | | | | | | | |

**LUMBER-**
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
B2: 2x4 SP No.3
WEBS 2x4 SP No.3 *Except*
W3,W6: 2x4 SP No.2

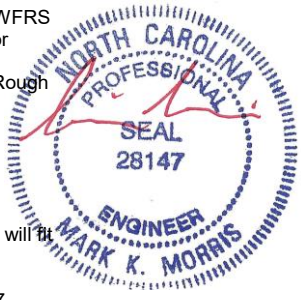
**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
2-9-0 oc bracing: 18-20, 15-17
3-0-0 oc bracing: 17-18
6-0-0 oc bracing: 20-22, 14-15
WEBS 1 Row at midpt 4-7
JOINTS 1 Brace at Jt(s): 17, 18, 20, 15

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

**REACTIONS.** (lb/size) 24=1207/0-3-8 (min. 0-1-12), 11=1207/0-3-8 (min. 0-1-12)
Max Horz 24=-312(LC 10)
Max Grav 24=1510(LC 3), 11=1510(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1294/41, 3-4=-855/126, 4-5=-314/124, 5-6=-157/285, 6-7=-307/127, 7-8=-855/127, 8-9=-1295/42, 2-24=-1479/12, 9-11=-1481/13
BOT CHORD 23-24=-301/334, 21-23=-32/2458, 19-21=-32/2458, 16-19=0/3133, 13-16=0/2356, 12-13=0/2356, 18-20=-2456/0, 17-18=-2456/0, 15-17=-2456/0
WEBS 22-23=-31/458, 3-22=-3/584, 12-14=-32/458, 8-14=-3/584, 4-25=-996/204, 25-26=-991/206, 7-26=-1013/209, 2-23=-34/902, 9-12=-38/905, 15-16=-152/920, 12-15=-1795/0, 19-20=-140/910, 20-23=-1797/0

**NOTES-** (13-14)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) 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) Provide adequate drainage to prevent water ponding.
6) All plates are 2x4 MT20 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.
9) Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-25, 25-26, 7-26
10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 20-22, 18-20, 17-18, 15-17, 14-15

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Continued on page 2

**NOTES-** (13-14)

11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Attic room checked for L/360 deflection.
13) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. 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.

**LOAD CASE(S)** Standard


5/28/2021

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | R10 | GABLE | 1 | 1 | # 26861 |

Job Reference (optional)

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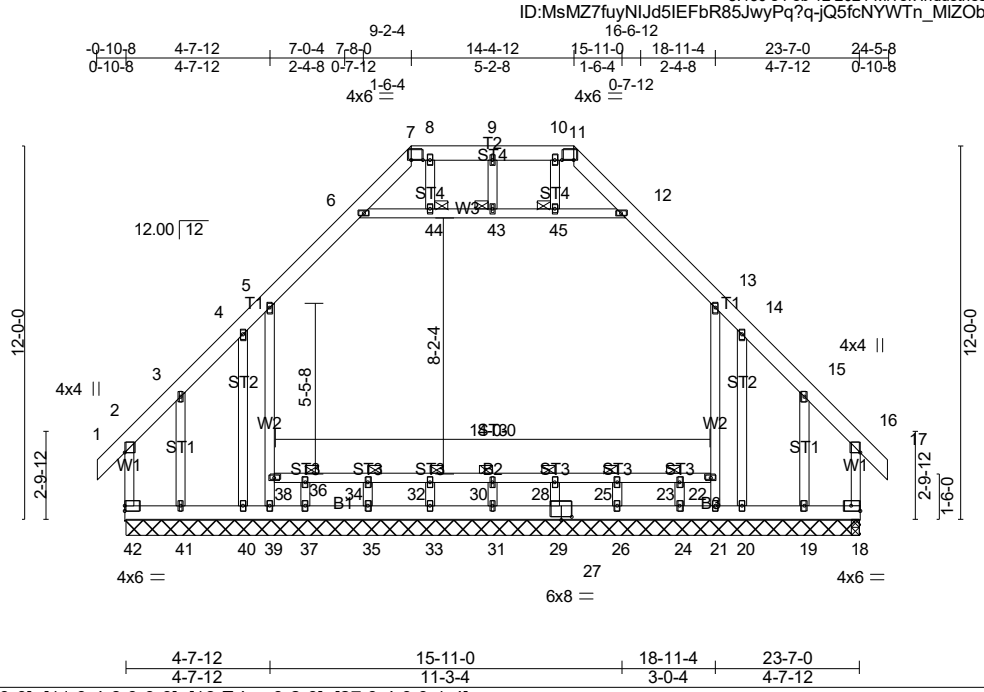





Plate Offsets (X,Y)-- [7:0-4-8,0-0-0], [11:0-4-8,0-0-0], [18:Edge,0-2-0], [27:0-4-0,0-1-4]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.74 | Vert(LL) | -0.00 | 13 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.18 | Vert(CT) | -0.01 | 13 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.33 | Horz(CT) | -0.00 | 18 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-SH | | | | | | | Weight: 237 lb | FT = 0% |
| BCDL | 10.0 | | | | | | | | | | | |

**LUMBER-**

TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
B2: 2x4 SP No.3
WEBS 2x4 SP No.2 *Except*
W1: 2x4 SP No.3
OTHERS 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 43, 30, 44, 32, 34, 36, 45, 28, 23, 25

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

**REACTIONS.** All bearings 23-7-0.
(lb) - Max Horz 42=-313(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) except 42=-290(LC 8), 39=-131(LC 9), 21=-125(LC 8), 18=-282(LC 9), 40=-146(LC 13), 41=-308(LC 12), 20=-146(LC 12), 19=-306(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 31, 33, 35, 37, 40, 29, 24, 20, 26 except 42=587(LC 22), 39=735(LC 31), 21=735(LC 32), 18=581(LC 21), 18=480(LC 1), 41=294(LC 10), 19=289(LC 11)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-379/220, 4-5=-136/298, 5-6=-442/164, 6-7=-551/88, 7-8=-484/48, 8-9=-484/48, 9-10=-484/48, 10-11=-484/48, 11-12=-551/89, 12-13=-442/164, 13-14=-129/296, 15-16=-374/214, 2-42=-404/185, 16-18=-400/180
WEBS 38-39=-744/109, 5-38=-742/113, 21-22=-744/103, 13-22=-742/108, 6-44=0/401, 43-44=0/401, 43-45=0/401, 12-45=0/401

**NOTES-** (16-17)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) 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) 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 2x4 MT20 unless otherwise indicated.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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.
11) Ceiling dead load (5.0 psf) on member(s). 5-6, 12-13, 6-44, 43-44, 43-45, 12-45


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Continued on page 2

**NOTES-** (16-17)

12) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 36-38, 34-36, 32-34, 30-32, 28-30, 25-28, 23-25, 22-23
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 290 lb uplift at joint 42, 131 lb uplift at joint 39, 125 lb uplift at joint 21, 282 lb uplift at joint 18, 146 lb uplift at joint 40, 308 lb uplift at joint 41, 146 lb uplift at joint 20 and 306 lb uplift at joint 19.
14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
15) Attic room checked for L/360 deflection.
16) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
17) 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.

**LOAD CASE(S)** Standard


5/28/2021

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | R11 | Monopitch Supported Gable | 1 | 1 | Job Reference (optional) **# 26861** |

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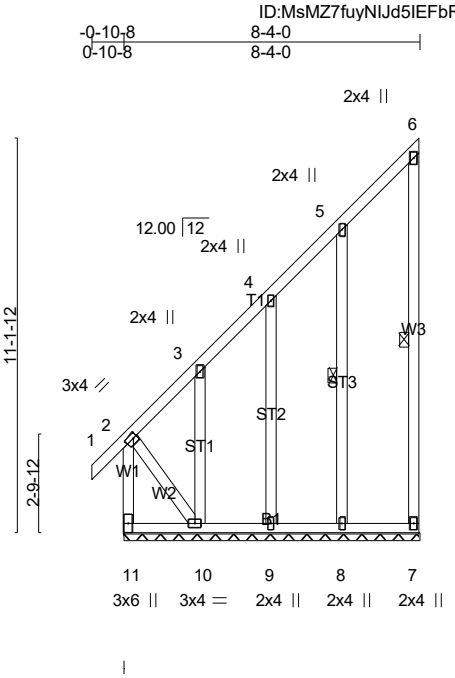


Plate Offsets (X,Y)-- [2:0-1-4,0-1-8]

| 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 | 0.22 | Vert(LL) | 0.00 | 1 | n/r | 180 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.11 | Vert(CT) | 0.00 | 1 | n/r | 80 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.15 | Horz(CT) | -0.00 | 7 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-P | | | | | | | Weight: 84 lb | FT = 0% |
| 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 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-7, 5-8

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

**REACTIONS.** All bearings 8-4-0.
(lb) - Max Horz 11=287(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 7 except 11=-196(LC 10), 9=-106(LC 12), 10=-484(LC 12), 8=-114(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 7 except 11=598(LC 12), 9=268(LC 20), 10=362(LC 20), 8=302(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-11=-590/467, 2-3=-359/295, 3-4=-263/201
BOT CHORD 10-11=-303/235
WEBS 2-10=-383/495

**NOTES-** (12-13)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) 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) 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) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 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) 7 except (jt=lb) 11=196, 9=106, 10=484, 8=114.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.


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Continued on page 2

12) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. 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.

**LOAD CASE(S)** Standard


5/28/2021

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | VT01 | Valley | 1 | 1 | Job Reference (optional) **# 26861** |

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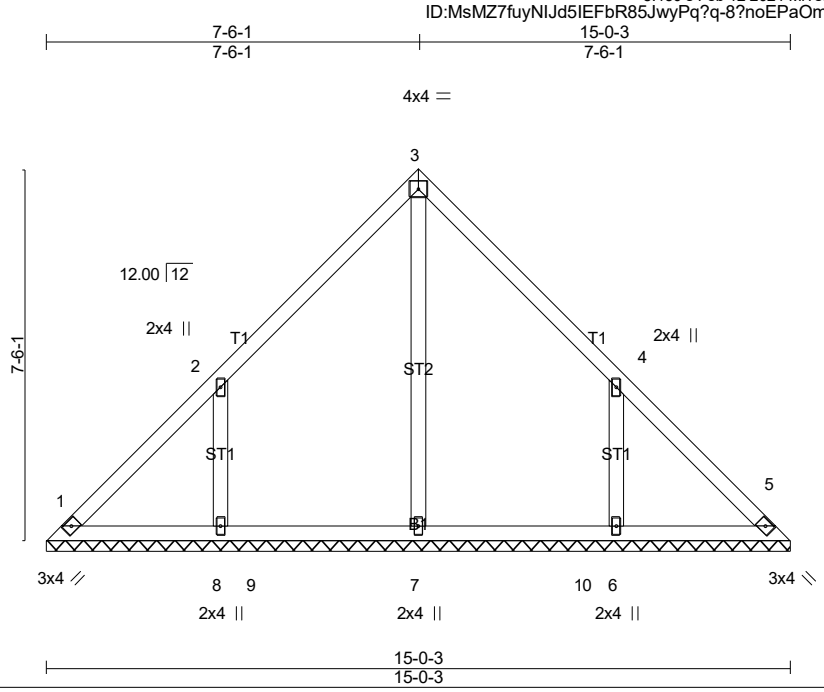



| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.19 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.42 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.14 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-SH | | | | | | | Weight: 72 lb | FT = 0% |
| 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.

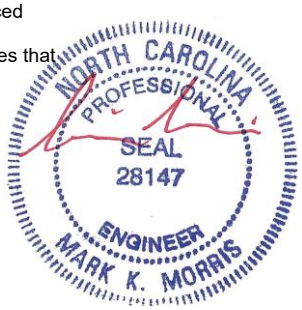
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 15-0-3.
(lb) - Max Horz 1=164(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-225(LC 12), 6=-224(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=425(LC 22), 8=435(LC 19), 6=435(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-287/253, 4-6=-287/252

**NOTES-** (9-10)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) Gable requires continuous bottom chord bearing.
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, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=225, 6=224.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. 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.

**LOAD CASE(S)** Standard




5/28/2021

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | VT02 | Valley | 1 | 1 | Job Reference (optional) **# 26861** |

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat May 29 17:15:11 2021 Page 1
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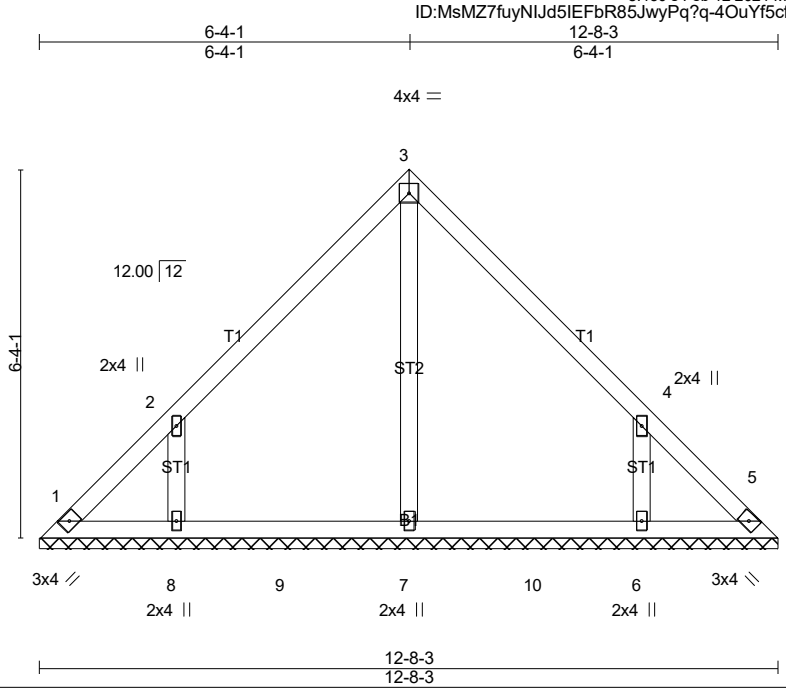



| **LOADING** (psf) | | **SPACING-** | 2-0-0 | **CSI.** | | **DEFL.** | in | (loc) | l/defl | L/d | **PLATES** | **GRIP** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.18 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.32 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.10 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-SH | | | | | | | Weight: 58 lb | FT = 0% |
| 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.

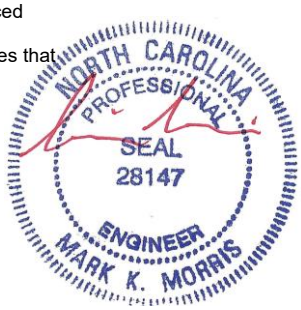
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 12-8-3.
(lb) - Max Horz 1=-137(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-201(LC 12), 6=-200(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=380(LC 19), 8=356(LC 19), 6=355(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-266/237, 4-6=-266/237

**NOTES-** (9-10)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) Gable requires continuous bottom chord bearing.
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, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=201, 6=200.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. 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.

**LOAD CASE(S)** Standard




5/28/2021

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | VT03 | Valley | 1 | 1 | Job Reference (optional) **# 26861** |

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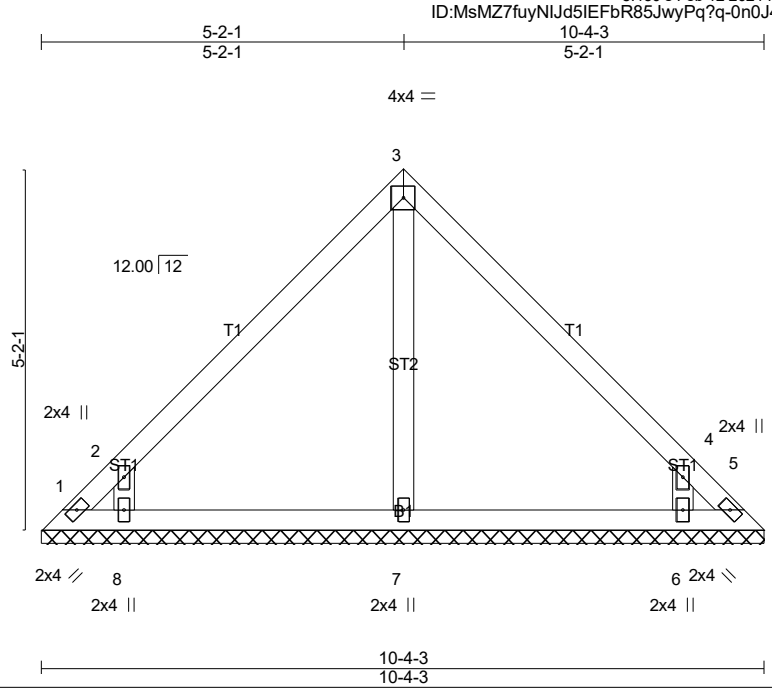



**LOADING** (psf)

| | |
|---|---|
| TCLL (roof) | 20.0 |
| Snow (Pf) | 20.0 |
| TCDL | 10.0 |
| BCLL | 0.0 * |
| BCDL | 10.0 |

| **SPACING-** | 2-0-0 |
|---|---|
| Plate Grip DOL | 1.15 |
| Lumber DOL | 1.15 |
| Rep Stress Incr | YES |
| Code IRC2018/TPI2014 | |

| **CSI.** | |
|---|---|
| TC | 0.20 |
| BC | 0.20 |
| WB | 0.09 |
| Matrix-SH | |

| **DEFL.** | in | (loc) | l/defl | L/d |
|---|---|---|---|---|
| Vert(LL) | n/a | - | n/a | 999 |
| Vert(CT) | n/a | - | n/a | 999 |
| Horz(CT) | 0.00 | 5 | n/a | n/a |

| **PLATES** | **GRIP** |
|---|---|
| MT20 | 244/190 |

Weight: 44 lb FT = 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. |

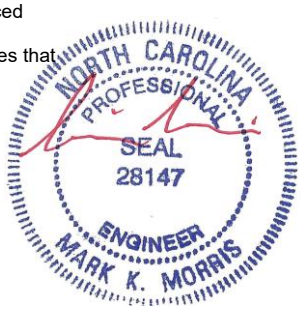
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 10-4-3.
(lb) - Max Horz 1=-111(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-135(LC 10), 5=-115(LC 11), 8=-230(LC 12), 6=-230(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=374(LC 19), 6=373(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-325/293, 4-6=-324/293

**NOTES-** (9-10)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) Gable requires continuous bottom chord bearing.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 135 lb uplift at joint 1, 115 lb uplift at joint 5, 230 lb uplift at joint 8 and 230 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. 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.

**LOAD CASE(S)** Standard




5/28/2021

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | VT04 | Valley | 1 | 1 | Job Reference (optional) **# 26861** |

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat May 29 17:15:14 2021 Page 1
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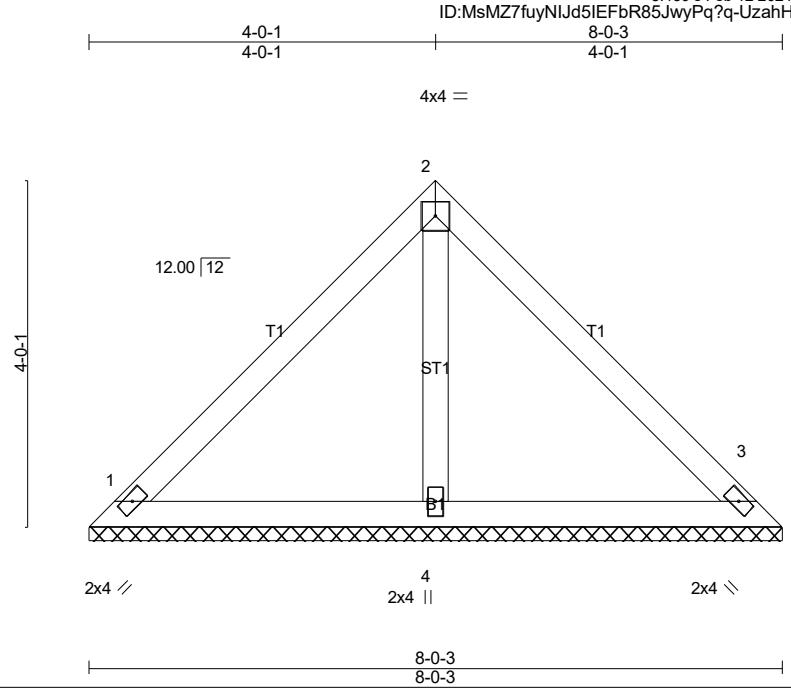


| **LOADING** (psf) | | **SPACING-** | 2-0-0 | **CSI.** | | **DEFL.** | in | (loc) | l/defl | L/d | **PLATES** | **GRIP** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.26 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.23 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.04 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-P | | | | | | | Weight: 32 lb | FT = 0% |
| 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) 1=176/8-0-3 (min. 0-1-8), 3=176/8-0-3 (min. 0-1-8), 4=233/8-0-3 (min. 0-1-8)
Max Horz 1=-84(LC 8)
Max Uplift1=-45(LC 13), 3=-45(LC 13)

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

**NOTES-** (9-10)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) Gable requires continuous bottom chord bearing.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 1 and 45 lb uplift at joint 3.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. 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.

**LOAD CASE(S)** Standard


5/28/2021

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | VT05 | Valley | 1 | 1 | Job Reference (optional) **# 26861** |

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat May 29 17:15:14 2021 Page 1
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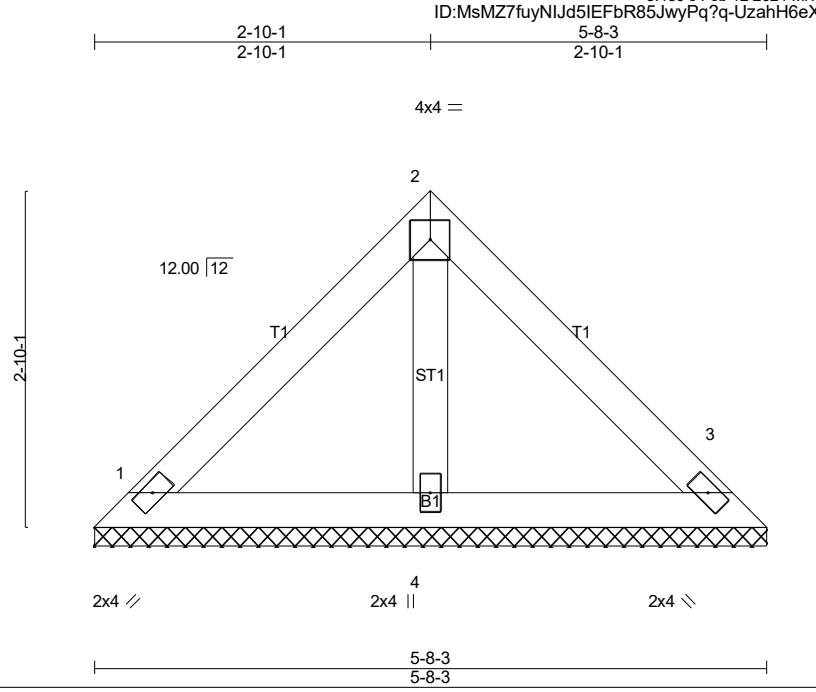


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.11 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.11 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.02 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-P | | | | | | | Weight: 22 lb | FT = 0% |
| 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 5-8-3 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) 1=120/5-8-3 (min. 0-1-8), 3=120/5-8-3 (min. 0-1-8), 4=158/5-8-3 (min. 0-1-8)
Max Horz 1=57(LC 9)
Max Uplift1=-31(LC 13), 3=-31(LC 13)

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

**NOTES-** (9-10)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) Gable requires continuous bottom chord bearing.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 1 and 31 lb uplift at joint 3.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. 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.

**LOAD CASE(S)** Standard


5/28/2021

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 21-2812-R01 | VT06 | Valley | 1 | 1 | Job Reference (optional) **# 26861** |

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat May 29 17:15:15 2021 Page 1
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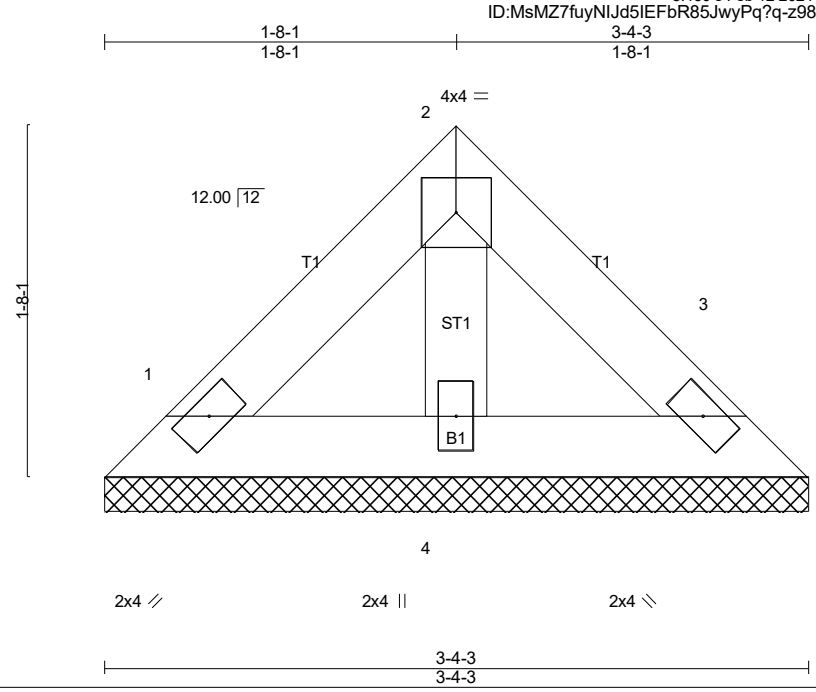


| **LOADING** (psf) | | **SPACING-** | 2-0-0 | **CSI.** | | **DEFL.** | in | (loc) | l/defl | L/d | **PLATES** | **GRIP** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.03 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.03 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.01 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-P | | | | | | | Weight: 12 lb | FT = 0% |
| 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 3-4-3 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) 1=64/3-4-3 (min. 0-1-8), 3=64/3-4-3 (min. 0-1-8), 4=84/3-4-3 (min. 0-1-8)
Max Horz 1=-30(LC 8)
Max Uplift1=-16(LC 13), 3=-16(LC 13)

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

**NOTES-** (9-10)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) Gable requires continuous bottom chord bearing.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 1 and 16 lb uplift at joint 3.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. 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.

**LOAD CASE(S)** Standard


5/28/2021