ENGINEERING BY TRENCO
A MiTek Affiliate

RE: 22-1333-A
JSJ-PINEWOOD A-LOT #45 WFS ROOF

Trenco
818 Soundside Rd
Edenton, NC 27932

**Site Information:**

Customer: Project Name: 22-1333-A
Lot/Block: Model:
Address: Subdivision:
City: State:

**General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):**

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.5
Wind Code: ASCE 7-10 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 26 individual, dated Truss Design Drawings and 0 Additional Drawings.

| No. | Seal# | Truss Name | Date | No. | Seal# | Truss Name | Date |
|---|---|---|---|---|---|---|---|
| 1 | I47495932 | A1 | 8/18/2021 | 21 | I47495952 | EE | 8/18/2021 |
| 2 | I47495933 | A2 | 8/18/2021 | 22 | I47495953 | F1 | 8/18/2021 |
| 3 | I47495934 | A3 | 8/18/2021 | 23 | I47495954 | FE | 8/18/2021 |
| 4 | I47495935 | A4 | 8/18/2021 | 24 | I47495955 | G1 | 8/18/2021 |
| 5 | I47495936 | A5 | 8/18/2021 | 25 | I47495956 | G2 | 8/18/2021 |
| 6 | I47495937 | A5A | 8/18/2021 | 26 | I47495957 | P1 | 8/18/2021 |
| 7 | I47495938 | AE1 | 8/18/2021 | | | | |
| 8 | I47495939 | AE2 | 8/18/2021 | | | | |
| 9 | I47495940 | BE | 8/18/2021 | | | | |
| 10 | I47495941 | BG | 8/18/2021 | | | | |
| 11 | I47495942 | BV1 | 8/18/2021 | | | | |
| 12 | I47495943 | BV2 | 8/18/2021 | | | | |
| 13 | I47495944 | BV3 | 8/18/2021 | | | | |
| 14 | I47495945 | BV4 | 8/18/2021 | | | | |
| 15 | I47495946 | BV5 | 8/18/2021 | | | | |
| 16 | I47495947 | BV6 | 8/18/2021 | | | | |
| 17 | I47495948 | CE | 8/18/2021 | | | | |
| 18 | I47495949 | D1 | 8/18/2021 | | | | |
| 19 | I47495950 | DE | 8/18/2021 | | | | |
| 20 | I47495951 | E1 | 8/18/2021 | | | | |

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Riverside Roof Truss.

Truss Design Engineer's Name: Johnson, Andrew

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

North Carolina COA: C-0844


IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

August 18, 2021

Johnson, Andrew

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | A1 | Piggyback Base | 4 | 1 | I47495932<br>Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541,

Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:39 Page: 1
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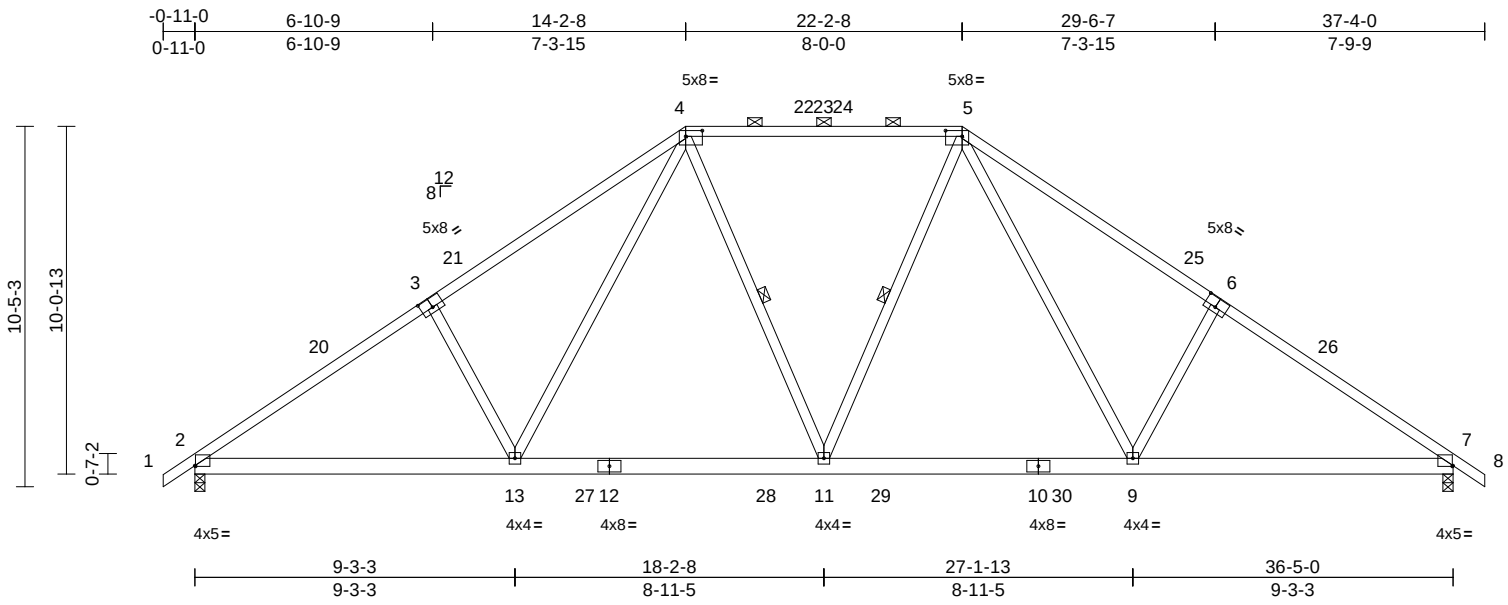


Scale = 1:66.7

Plate Offsets (X, Y): [2:0-0-4,0-0-3], [3:0-4-0,0-3-4], [4:0-5-12,0-2-0], [5:0-5-12,0-2-0], [6:0-4-0,0-3-4], [7:0-0-4,0-0-3]

| 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 | 0.89 | Vert(LL) | -0.14 | 11-13 | >999 | 360 | MT20 | 244/190 |
| Snow (Pf/Pg) | 20.4/20.0 | Lumber DOL | 1.15 | BC | 0.59 | Vert(CT) | -0.23 | 11-13 | >999 | 240 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.36 | Horz(CT) | 0.06 | 7 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-MS | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 228 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP DSS *Except* 1-3,6-8:2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 1-7-8 oc purlins, except 2-0-0 oc purlins (2-2-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-11, 5-11

**REACTIONS** (lb/size) 2=1376/0-3-8, 7=1376/0-3-8
Max Horiz 2=-250 (LC 14)
Max Uplift 2=-189 (LC 16), 7=-189 (LC 17)
Max Grav 2=1681 (LC 39), 7=1681 (LC 39)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-4=-2533/489, 4-5=-1530/389, 5-7=-2533/489, 7-8=0/31
BOT CHORD 2-13=-280/2091, 11-13=-77/1460, 9-11=-45/1449, 7-9=-224/2037
WEBS 3-13=-566/281, 4-13=-161/817, 4-11=-60/305, 5-11=-60/305, 5-9=-161/818, 6-9=-566/281

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
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 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 189 lb uplift at joint 2 and 189 lb uplift at joint 7.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard


August 18,2021



ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | A2 | Piggyback Base | 1 | 1 | I47495933 Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541,

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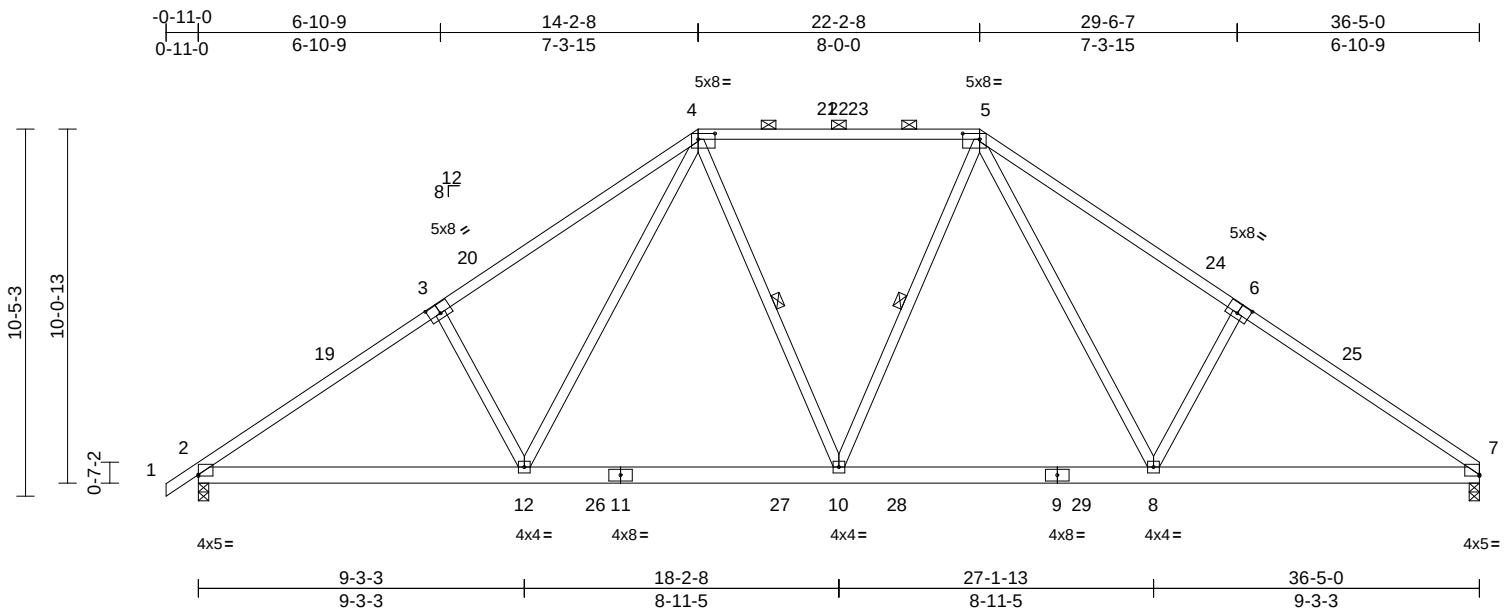



Scale = 1:65.5

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.89 | Vert(LL) | -0.14 | 10-12 | >999 | 360 | MT20 | 244/190 |
| Snow (Pf/Pg) | 20.4/20.0 | Lumber DOL | 1.15 | BC | 0.59 | Vert(CT) | -0.23 | 10-12 | >999 | 240 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.37 | Horz(CT) | 0.06 | 7 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-MS | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 226 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP DSS *Except* 6-7,3-1:2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

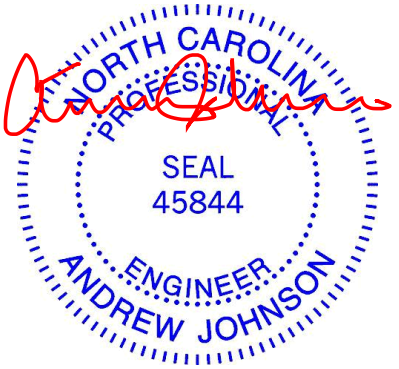
**BRACING**
TOP CHORD Structural wood sheathing directly applied or 1-7-8 oc purlins, except 2-0-0 oc purlins (2-2-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-10, 5-10

**REACTIONS** (lb/size) 2=1376/0-3-8, 7=1329/0-3-8
Max Horiz 2=245 (LC 13)
Max Uplift 2=-189 (LC 16), 7=-169 (LC 17)
Max Grav 2=1681 (LC 39), 7=1634 (LC 39)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-4=-2534/490, 4-5=-1531/390, 5-7=-2537/492
BOT CHORD 2-12=-290/2084, 10-12=-87/1453, 8-10=-66/1450, 7-8=-245/2041
WEBS 3-12=-566/281, 4-12=-161/818, 4-10=-60/306, 5-10=-60/303, 5-8=-163/822, 6-8=-567/281

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
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 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 169 lb uplift at joint 7 and 189 lb uplift at joint 2.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard




August 18,2021



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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | A3 | Piggyback Base | 6 | 1 | I47495934 Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541, Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:42 Page: 1

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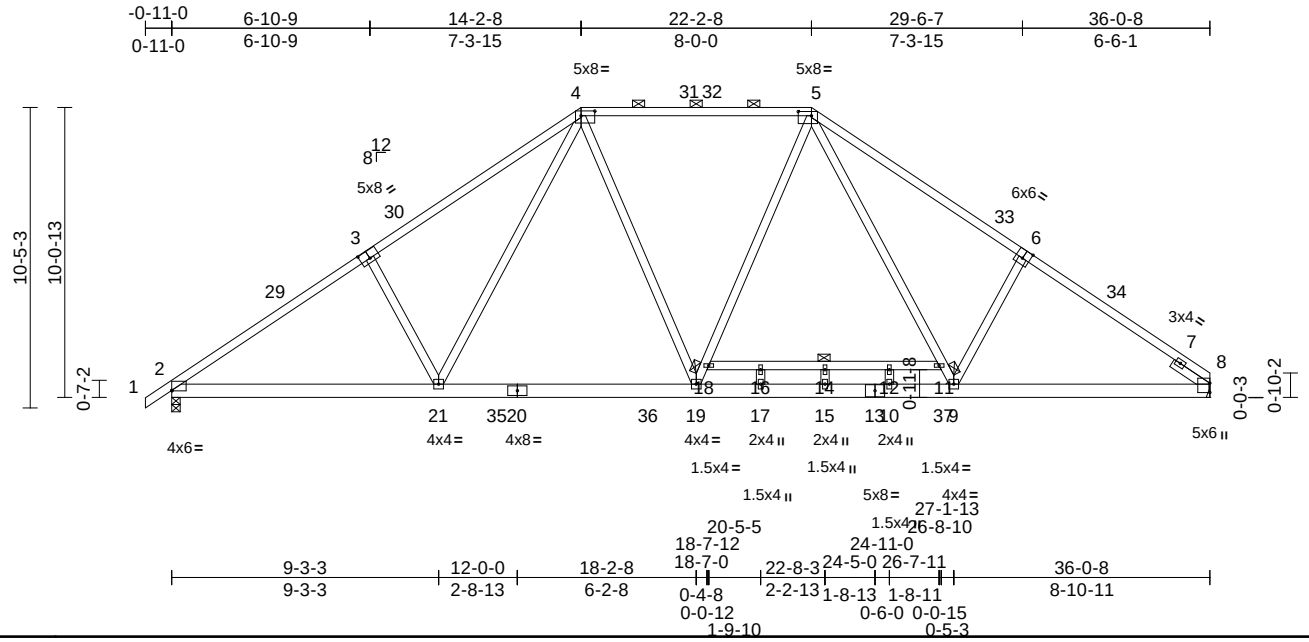



Scale = 1:80

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.94 | Vert(LL) | -0.20 | 12-14 | >999 | 360 | MT20 | 244/190 |
| Snow (Pf/Pg) | 20.4/20.0 | Lumber DOL | 1.15 | BC | 0.81 | Vert(CT) | -0.36 | 12-14 | >999 | 240 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.52 | Horz(CT) | 0.09 | 8 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-MS | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 241 lb | FT = 20% |

**LUMBER**

TOP CHORD 2x4 SP DSS *Except* 6-8,3-1:2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except* 18-11:2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Right 2x4 SP No.3 -- 1-6-0

**BRACING**

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (2-2-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
6-0-0 oc bracing: 11-18

**REACTIONS** (lb/size) 2=1424/0-3-8, 8=1420/ Mechanical
Max Horiz 2=244 (LC 13)
Max Uplift 2=-149 (LC 16), 8=-105 (LC 17)
Max Grav 2=1726 (LC 39), 8=1732 (LC 45)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-4=-2608/424, 4-5=-1709/312, 5-8=-2625/365
BOT CHORD 2-21=-240/2201, 19-21=-33/1585, 17-19=0/1656, 15-17=0/1656, 10-15=0/1656, 9-10=0/1656, 8-9=-146/2121, 16-18=-63/0, 14-16=-63/0, 12-14=-63/0, 11-12=-63/0
WEBS 3-21=-567/281, 4-21=-171/785, 4-19=-14/427, 18-19=-61/324, 5-18=-39/371, 5-11=-100/859, 9-11=-119/780, 6-9=-519/274, 16-17=-111/0, 10-12=-58/0, 14-15=-87/0

**NOTES**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
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 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 105 lb uplift at joint 8 and 149 lb uplift at joint 2.
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard


August 18,2021



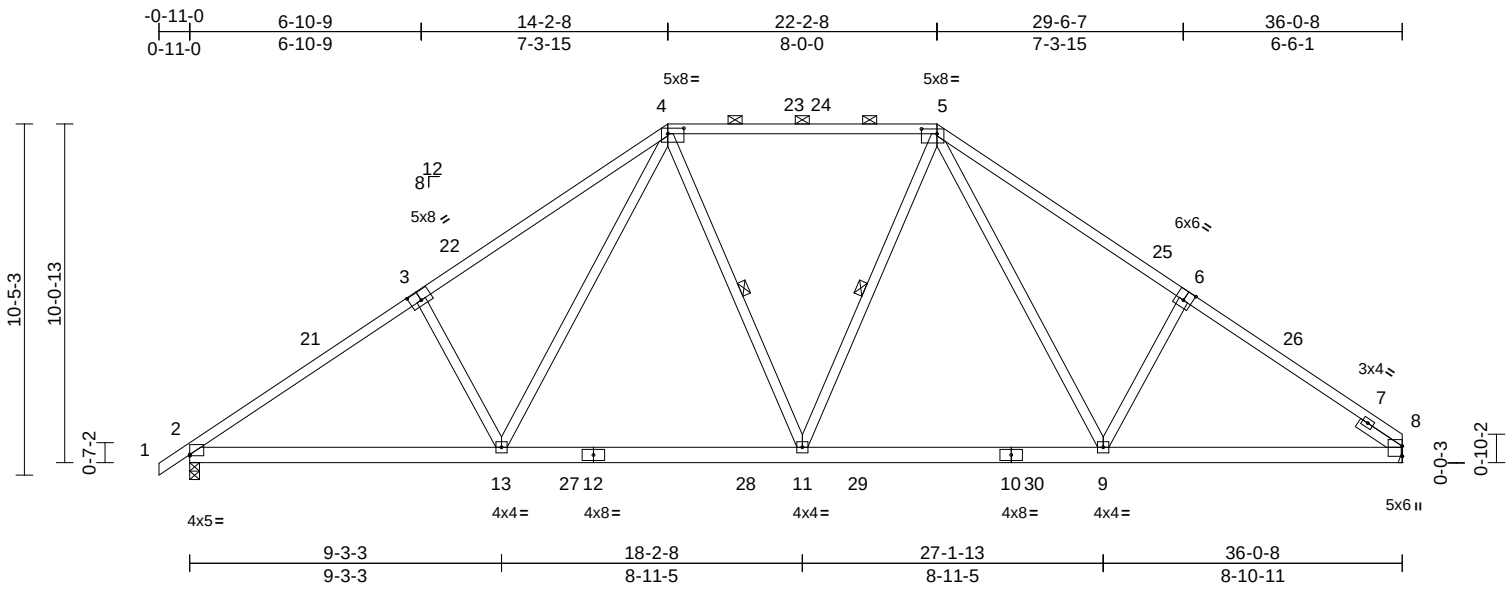
ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | A4 | Piggyback Base | 3 | 1 | I47495935<br>Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541,

Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:43 ID:qJZcoF?4KCjU9SuR3lXTAczCGho-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f






Scale = 1:68.5

Plate Offsets (X, Y): [2:Edge,0-0-7], [3:0-4-0,0-3-4], [4:0-5-12,0-2-0], [5:0-5-8,0-1-12], [6:0-3-0,Edge]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.88 | Vert(LL) | -0.16 | 9-11 | >999 | 360 | MT20 | 244/190 |
| Snow (Pf/Pg) | 20.4/20.0 | Lumber DOL | 1.15 | BC | 0.72 | Vert(CT) | -0.25 | 9-11 | >999 | 240 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.36 | Horz(CT) | 0.07 | 8 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-MS | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 227 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP DSS *Except* 6-8,3-1:2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Right 2x4 SP No.3 -- 1-6-0

**BRACING**
TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (2-4-4 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-11, 5-11

**REACTIONS** (lb/size) 2=1363/0-3-8, 8=1316/ Mechanical
Max Horiz 2=244 (LC 13)
Max Uplift 2=-186 (LC 16), 8=-167 (LC 17)
Max Grav 2=1665 (LC 39), 8=1624 (LC 39)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-4=-2504/486, 4-5=-1504/386, 5-8=-2395/474
BOT CHORD 2-13=-292/2060, 11-13=-89/1430, 9-11=-69/1411, 8-9=-236/1929
WEBS 3-13=-567/281, 4-13=-161/815, 4-11=-61/295, 5-11=-56/327, 5-9=-151/714, 6-9=-525/270

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
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 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 167 lb uplift at joint 8 and 186 lb uplift at joint 2.
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

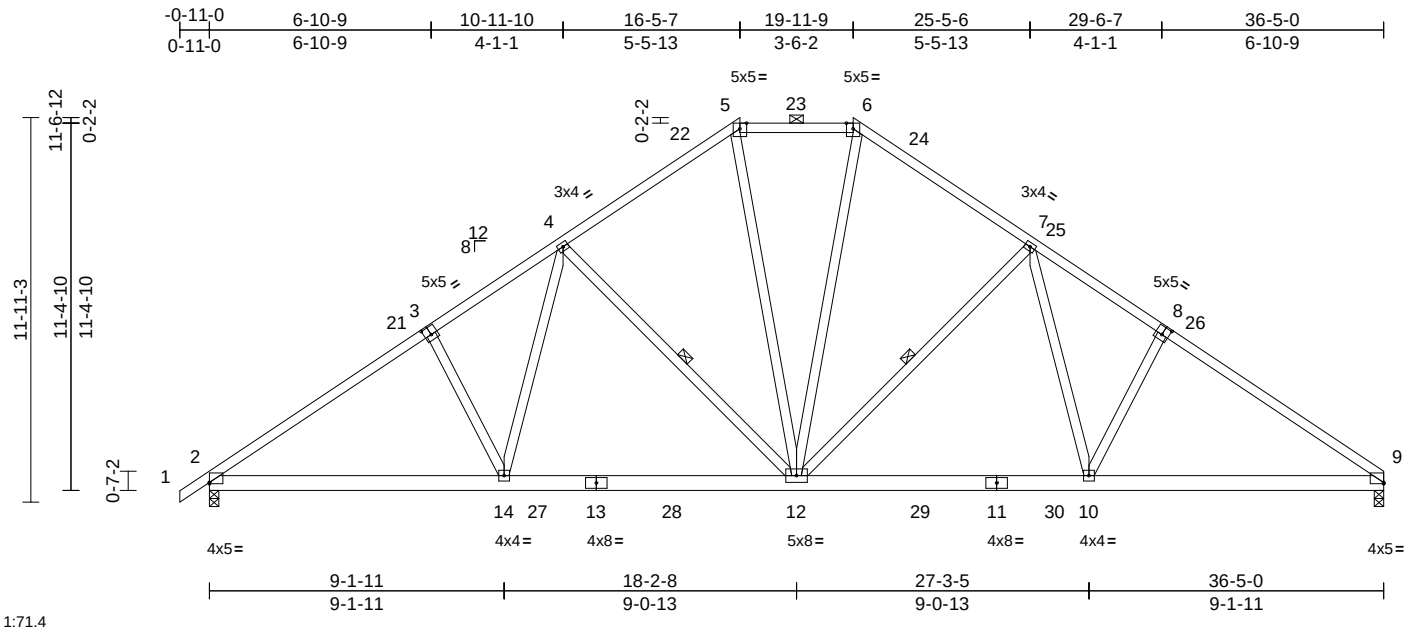

August 18,2021



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

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | A5 | Hip | 1 | 1 | I47495936 Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541, Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:44 Page: 1
ID:qJZcoF?4KCjU9SuR3lXTAczCGho-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:71.4

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.65 | Vert(LL) | -0.15 | 12-14 | >999 | 360 | MT20 | 244/190 |
| Snow (Pf/Pg) | 20.4/20.0 | Lumber DOL | 1.15 | BC | 0.56 | Vert(CT) | -0.24 | 12-14 | >999 | 240 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.41 | Horz(CT) | 0.07 | 9 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-MS | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 250 lb | FT = 20% |

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

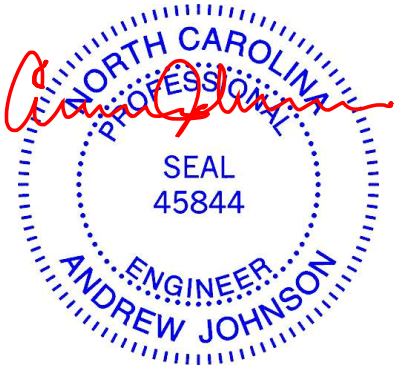
**BRACING**
TOP CHORD Structural wood sheathing directly applied or 3-0-14 oc purlins, except 2-0-0 oc purlins (4-7-12 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-12, 7-12

**REACTIONS** (lb/size) 2=1354/0-3-8, 9=1306/0-3-8
Max Horiz 2=279 (LC 13)
Max Uplift 2=-182 (LC 16), 9=-163 (LC 17)
Max Grav 2=1730 (LC 39), 9=1682 (LC 39)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-4=-2604/439, 4-5=-1781/391, 5-6=-1461/389, 6-7=-1781/391, 7-9=-2607/440
BOT CHORD 2-14=-282/2150, 12-14=-177/1887, 10-12=-122/1855, 9-10=-216/2088
WEBS 4-14=-81/543, 3-14=-302/194, 4-12=-759/235, 5-12=-95/671, 6-12=-95/670, 7-12=-761/236, 7-10=-83/547, 8-10=-304/195

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
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 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 163 lb uplift at joint 9 and 182 lb uplift at joint 2.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard



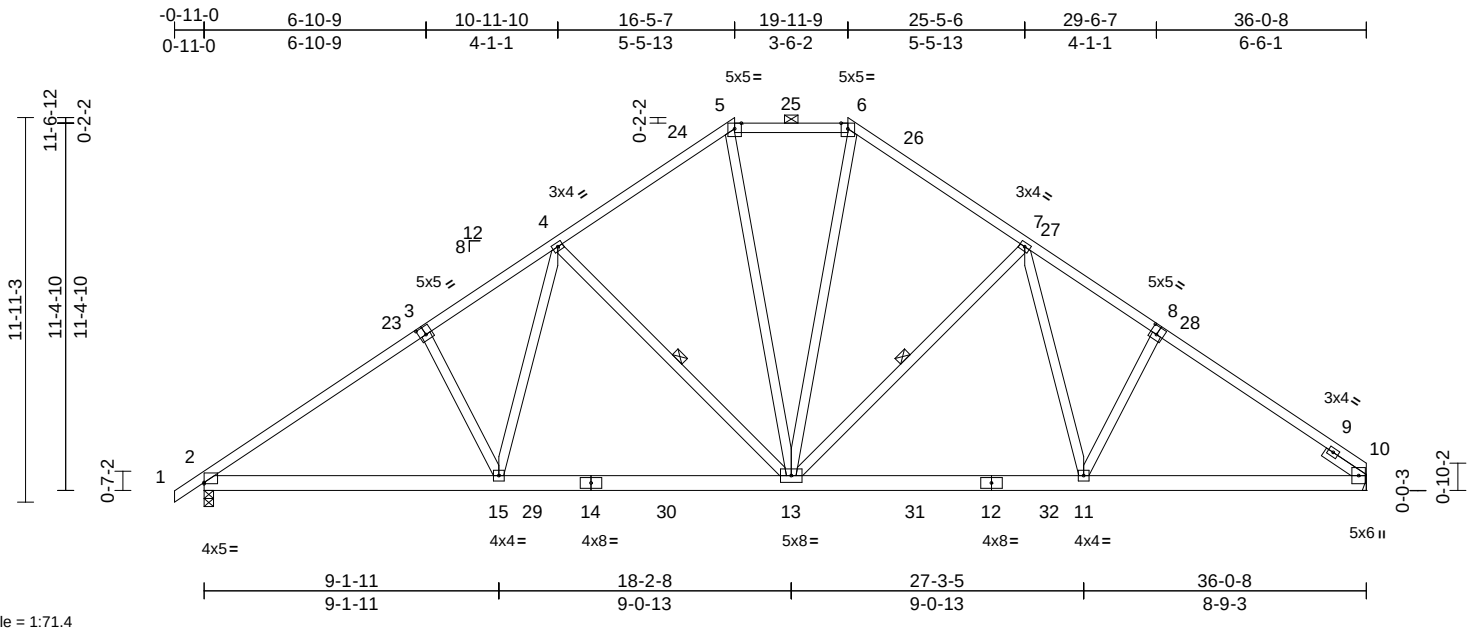

August 18,2021



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

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | A5A | Hip | 1 | 1 | I47495937 Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541, Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:44 Page: 1
ID:qJZcoF?4KCjU9SuR3lXTAczCGho-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:71.4

Plate Offsets (X, Y): [2:Edge,0-0-7], [3:0-2-8,0-3-0], [8:0-2-8,0-3-0], [10:0-3-7,0-0-5]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.88 | Vert(LL) | -0.16 | 11-13 | >999 | 360 | MT20 | 244/190 |
| Snow (Pf/Pg) | 20.4/20.0 | Lumber DOL | 1.15 | BC | 0.68 | Vert(CT) | -0.26 | 11-13 | >999 | 240 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.41 | Horz(CT) | 0.08 | 10 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-MS | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 251 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Right 2x4 SP No.3 -- 1-6-0

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (4-8-4 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-13, 7-13

**REACTIONS** (lb/size) 2=1340/0-3-8, 10=1293/ Mechanical
Max Horiz 2=278 (LC 13)
Max Uplift 2=-181 (LC 16), 10=-159 (LC 17)
Max Grav 2=1712 (LC 39), 10=1673 (LC 39)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-4=-2573/434, 4-5=-1752/387, 5-6=-1434/385, 6-7=-1753/387, 7-10=-2459/422
BOT CHORD 2-15=-287/2125, 13-15=-181/1863, 11-13=-123/1789, 10-11=-206/1968
WEBS 4-15=-81/540, 3-15=-303/194, 4-13=-757/235, 5-13=-92/654, 6-13=-93/660, 7-13=-706/233, 7-11=-70/443, 8-11=-245/179

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
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 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 159 lb uplift at joint 10 and 181 lb uplift at joint 2.
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard


August 18,2021

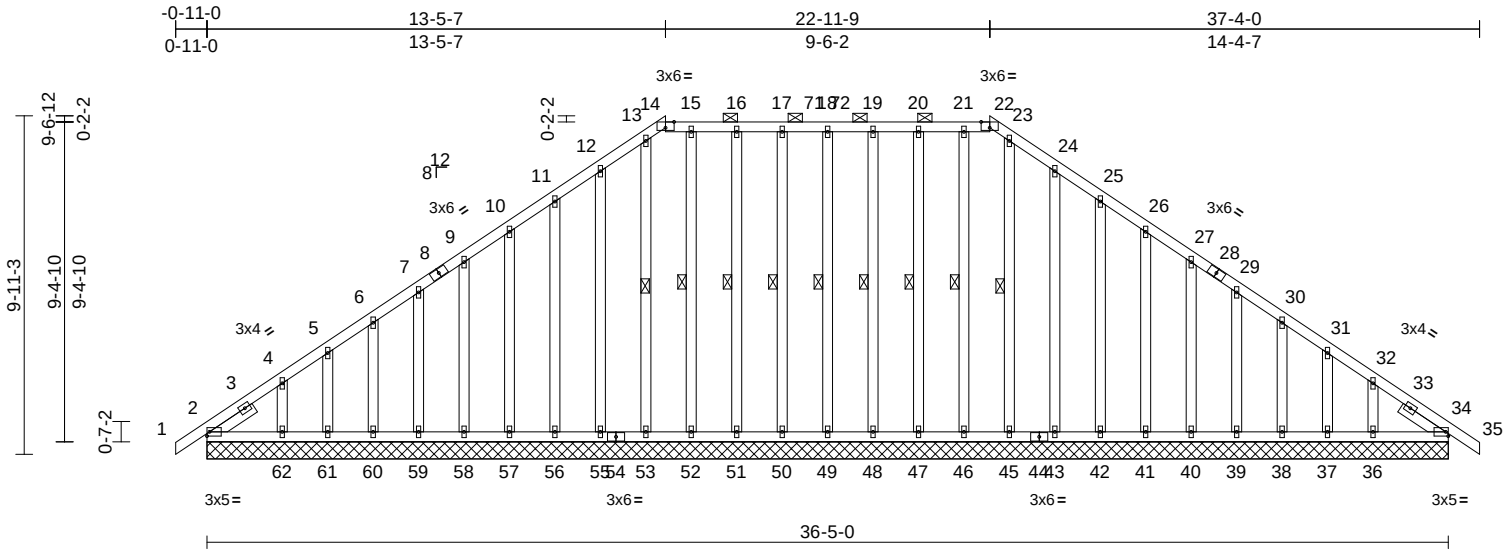


ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | AE1 | Hip Supported Gable | 1 | 1 | I47495938 Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541,

Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:45 Page: 1
ID:ox0U1hUIpVgFs6e180DnW2zCGea-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:67.6

Plate Offsets (X, Y): [14:0-3-0,Edge], [22:0-3-0,Edge]

| Loading | (psf) | Spacing | 1-11-4 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.07 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf/Pg) | 20.4/20.0 | Lumber DOL | 1.15 | BC | 0.05 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.15 | Horz(CT) | 0.01 | 34 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-MS | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 352 lb | FT = 20% |

**LUMBER**

| | |
|---|---|
| TOP CHORD | 2x4 SP No.2 |
| BOT CHORD | 2x4 SP No.2 |
| OTHERS | 2x4 SP No.3 |
| SLIDER | Left 2x4 SP No.3 -- 1-6-0, Right 2x4 SP No.3 -- 1-6-0 |

**BRACING**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 14-22. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS | 1 Row at midpt 18-49, 17-50, 16-51, 15-52, 13-53, 19-48, 20-47, 21-46, 23-45 |

**REACTIONS** (lb/size) 2=130/36-5-0, 34=130/36-5-0, 36=133/36-5-0, 37=77/36-5-0, 38=95/36-5-0, 39=91/36-5-0, 40=92/36-5-0, 41=91/36-5-0, 42=92/36-5-0, 43=91/36-5-0, 45=88/36-5-0, 46=100/36-5-0, 47=105/36-5-0, 48=104/36-5-0, 49=104/36-5-0, 50=104/36-5-0, 51=105/36-5-0, 52=100/36-5-0, 53=88/36-5-0, 55=91/36-5-0, 56=92/36-5-0, 57=91/36-5-0, 58=92/36-5-0, 59=91/36-5-0, 60=95/36-5-0, 61=77/36-5-0, 62=133/36-5-0, 63=130/36-5-0, 67=130/36-5-0
Max Horiz 2=227 (LC 15), 63=227 (LC 15)

Max Uplift 2=-67 (LC 12), 34=-5 (LC 13), 36=-91 (LC 17), 37=-24 (LC 17), 38=-45 (LC 17), 39=-40 (LC 17), 40=-41 (LC 17), 41=-41 (LC 17), 42=-44 (LC 17), 43=-44 (LC 17), 46=-9 (LC 13), 47=-24 (LC 12), 48=-20 (LC 12), 49=-19 (LC 13), 50=-20 (LC 12), 51=-25 (LC 12), 52=-14 (LC 13), 53=-4 (LC 13), 55=-44 (LC 16), 56=-43 (LC 16), 57=-41 (LC 16), 58=-41 (LC 16), 59=-40 (LC 16), 60=-45 (LC 16), 61=-21 (LC 16), 62=-102 (LC 16), 63=-67 (LC 12), 67=-5 (LC 13)

Max Grav 2=188 (LC 31), 34=149 (LC 2), 36=173 (LC 31), 37=105 (LC 39), 38=152 (LC 39), 39=145 (LC 39), 40=146 (LC 39), 41=146 (LC 39), 42=146 (LC 39), 43=149 (LC 39), 45=123 (LC 39), 46=134 (LC 38), 47=149 (LC 38), 48=146 (LC 38), 49=146 (LC 38), 50=146 (LC 38), 51=149 (LC 38), 52=134 (LC 38), 53=139 (LC 53), 55=149 (LC 39), 56=146 (LC 39), 57=146 (LC 39), 58=146 (LC 39), 59=145 (LC 39), 60=152 (LC 39), 61=105 (LC 39), 62=186 (LC 30), 63=188 (LC 31), 67=149 (LC 2)

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

TOP CHORD 1-2=0/30, 2-4=-210/187, 4-5=-160/149, 5-6=-144/142, 6-7=-133/130, 7-9=-123/127, 9-10=-115/146, 10-11=-125/168, 11-12=-157/191, 12-13=-190/218, 13-14=-174/201, 14-15=-170/199, 15-16=-171/201, 16-17=-171/201, 17-18=-171/201, 18-19=-171/201, 19-20=-171/201, 20-21=-171/201, 21-22=-170/199, 22-23=-174/201, 23-24=-190/218, 24-25=-157/180, 25-26=-125/141, 26-27=-93/104, 27-29=-62/66, 29-30=-60/39, 30-31=-67/47, 31-32=-85/55, 32-34=-142/112, 34-35=0/30


August 18,2021

Continued on page 2



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818 Soundside Road
Edenton, NC 27932

BOT CHORD 2-62=-104/162, 61-62=-104/162, 60-61=-104/162, 59-60=-104/162, 58-59=-104/162, 57-58=-104/162, 56-57=-104/162, 55-56=-104/162, 53-55=-104/162, 52-53=-104/162, 51-52=-104/162, 50-51=-104/162, 49-50=-104/162, 48-49=-104/162, 47-48=-104/162, 46-47=-104/162, 45-46=-104/162, 43-45=-104/162, 42-43=-104/162, 41-42=-104/162, 40-41=-104/162, 39-40=-104/162, 38-39=-104/162, 37-38=-104/162, 36-37=-104/162, 34-36=-104/162

WEBS 18-49=-120/35, 17-50=-121/37, 16-51=-123/45, 15-52=-108/29, 13-53=-113/21, 12-55=-123/59, 11-56=-121/59, 10-57=-120/56, 9-58=-120/57, 7-59=-120/56, 6-60=-124/59, 5-61=-87/46, 4-62=-135/98, 19-48=-121/37, 20-47=-123/45, 21-46=-108/24, 23-45=-97/9, 24-43=-123/59, 25-42=-121/59, 26-41=-120/56, 27-40=-120/57, 29-39=-120/56, 30-38=-124/58, 31-37=-87/47, 32-36=-136/90

**LOAD CASE(S)** Standard

**NOTES**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
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 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 1.5x4 MT20 unless otherwise indicated.
9) Gable requires continuous bottom chord bearing.
10) Gable studs spaced at 1-4-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 2, 5 lb uplift at joint 34, 19 lb uplift at joint 49, 20 lb uplift at joint 50, 25 lb uplift at joint 51, 14 lb uplift at joint 52, 4 lb uplift at joint 53, 44 lb uplift at joint 55, 43 lb uplift at joint 56, 41 lb uplift at joint 57, 41 lb uplift at joint 58, 40 lb uplift at joint 59, 45 lb uplift at joint 60, 21 lb uplift at joint 61, 102 lb uplift at joint 62, 20 lb uplift at joint 48, 24 lb uplift at joint 47, 9 lb uplift at joint 46, 44 lb uplift at joint 43, 44 lb uplift at joint 42, 41 lb uplift at joint 41, 41 lb uplift at joint 40, 40 lb uplift at joint 39, 45 lb uplift at joint 38, 24 lb uplift at joint 37, 91 lb uplift at joint 36, 67 lb uplift at joint 2 and 5 lb uplift at joint 34.
14) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | AE2 | Hip Supported Gable | 1 | 1 | I47495939 Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541,

Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:46 Page: 1
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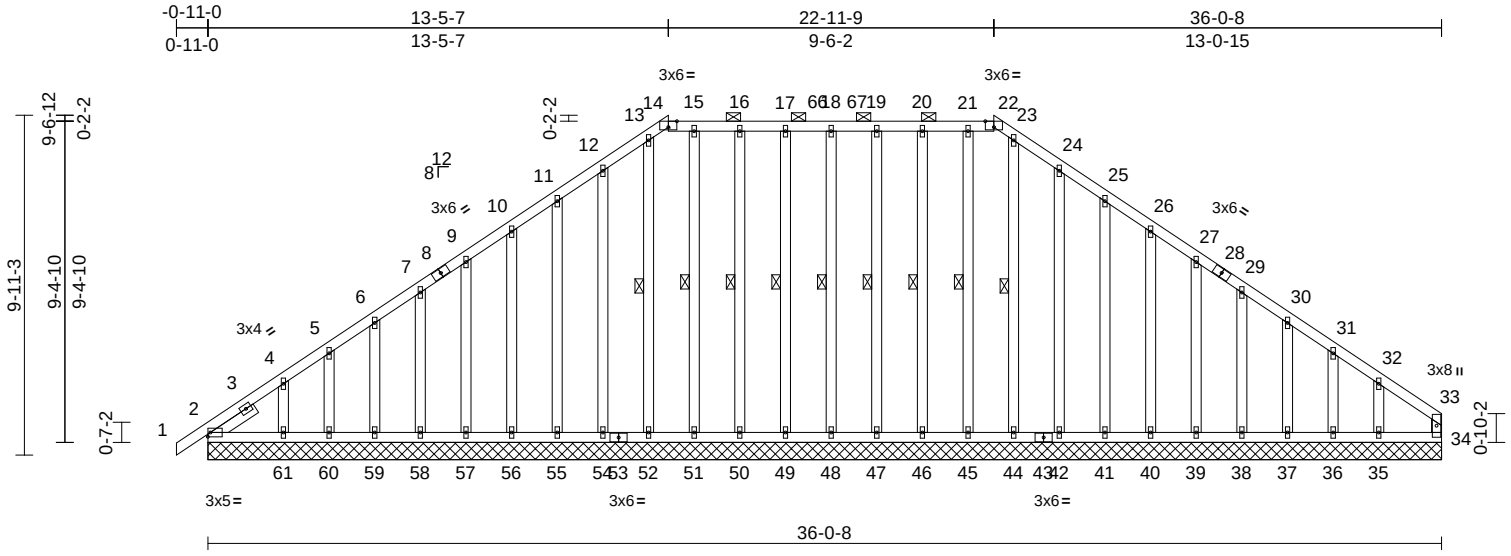



Scale = 1:67.3

Plate Offsets (X, Y): [14:0-3-0,Edge], [22:0-3-0,Edge]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.10 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf/Pg) | 20.4/20.0 | Lumber DOL | 1.15 | BC | 0.08 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.16 | Horz(CT) | 0.01 | 34 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-MS | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 348 lb | FT = 20% |

**LUMBER**

| | |
|---|---|
| TOP CHORD | 2x4 SP No.2 |
| BOT CHORD | 2x4 SP No.2 |
| WEBS | 2x4 SP No.3 |
| OTHERS | 2x4 SP No.3 |
| SLIDER | Left 2x4 SP No.3 -- 1-6-0 |

**BRACING**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 14-22. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS | 1 Row at midpt 18-48, 17-49, 16-50, 15-51, 13-52, 19-47, 20-46, 21-45, 23-44 |

**REACTIONS** (lb/size) 2=133/36-0-8, 34=62/36-0-8, 35=118/36-0-8, 36=88/36-0-8, 37=96/36-0-8, 38=94/36-0-8, 39=94/36-0-8, 40=94/36-0-8, 41=95/36-0-8, 42=94/36-0-8, 44=91/36-0-8, 45=103/36-0-8, 46=108/36-0-8, 47=108/36-0-8, 48=108/36-0-8, 49=108/36-0-8, 50=108/36-0-8, 51=103/36-0-8, 52=91/36-0-8, 54=94/36-0-8, 55=95/36-0-8, 56=94/36-0-8, 57=95/36-0-8, 58=94/36-0-8, 59=98/36-0-8, 60=79/36-0-8, 61=137/36-0-8, 62=133/36-0-8
Max Horiz 2=241 (LC 15), 62=241 (LC 15)

Max Uplift 2=-88 (LC 12), 34=-14 (LC 15), 35=-124 (LC 17), 36=-17 (LC 17), 37=-48 (LC 17), 38=-41 (LC 17), 39=-43 (LC 17), 40=-42 (LC 17), 41=-46 (LC 17), 42=-46 (LC 17), 45=-13 (LC 13), 46=-26 (LC 12), 47=-20 (LC 12), 48=-19 (LC 13), 49=-20 (LC 12), 50=-27 (LC 12), 51=-18 (LC 13), 52=-11 (LC 13), 54=-45 (LC 16), 55=-45 (LC 16), 56=-42 (LC 16), 57=-43 (LC 16), 58=-42 (LC 16), 59=-47 (LC 16), 60=-22 (LC 16), 61=-103 (LC 16), 62=-88 (LC 12)
Max Grav 2=207 (LC 31), 34=111 (LC 33), 35=171 (LC 31), 36=117 (LC 39), 37=155 (LC 39), 38=150 (LC 39), 39=151 (LC 39), 40=151 (LC 39), 41=151 (LC 39), 42=154 (LC 39), 44=129 (LC 53), 45=138 (LC 38), 46=154 (LC 38), 47=151 (LC 38), 48=151 (LC 38), 49=151 (LC 38), 50=154 (LC 38), 51=138 (LC 38), 52=148 (LC 53), 54=154 (LC 39), 55=151 (LC 39), 56=151 (LC 39), 57=151 (LC 39), 58=150 (LC 39), 59=157 (LC 39), 60=108 (LC 39), 61=194 (LC 30), 62=207 (LC 31)

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

TOP CHORD 1-2=0/31, 2-4=-223/210, 4-5=-184/169, 5-6=-175/166, 6-7=-163/162, 7-9=-152/159, 9-10=-140/175, 10-11=-154/199, 11-12=-188/223, 12-13=-222/250, 13-14=-200/227, 14-15=-196/225, 15-16=-198/227, 16-17=-198/227, 17-18=-198/227, 18-19=-198/227, 19-20=-198/227, 20-21=-198/227, 21-22=-196/225, 22-23=-200/227, 23-24=-222/250, 24-25=-188/211, 25-26=-154/170, 26-27=-122/131, 27-29=-90/92, 29-30=-58/53, 30-31=-58/31, 31-32=-66/32, 32-33=-129/87, 33-34=-80/16


August 18,2021

Continued on page 2



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

BOT CHORD 2-61=-77/105, 60-61=-77/105, 59-60=-77/105, 58-59=-77/105, 57-58=-77/105, 56-57=-77/105, 55-56=-77/105, 54-55=-77/105, 52-54=-77/105, 51-52=-77/105, 50-51=-77/105, 49-50=-77/105, 48-49=-77/105, 47-48=-77/105, 46-47=-77/105, 45-46=-77/105, 44-45=-77/105, 42-44=-77/105, 41-42=-77/105, 40-41=-77/105, 39-40=-77/105, 38-39=-77/105, 37-38=-77/105, 36-37=-77/105, 35-36=-77/105, 34-35=-77/105

WEBS 18-48=-124/36, 17-49=-124/38, 16-50=-127/48, 15-51=-112/34, 13-52=-121/32, 12-54=-127/61, 11-55=-125/61, 10-56=-124/58, 9-57=-124/58, 7-58=-124/58, 6-59=-128/60, 5-60=-90/48, 4-61=-136/100, 19-47=-124/38, 20-46=-127/48, 21-45=-112/29, 23-44=-102/19, 24-42=-127/62, 25-41=-125/62, 26-40=-124/58, 27-39=-124/58, 29-38=-124/58, 30-37=-127/61, 31-36=-92/46, 32-35=-129/105

**NOTES**

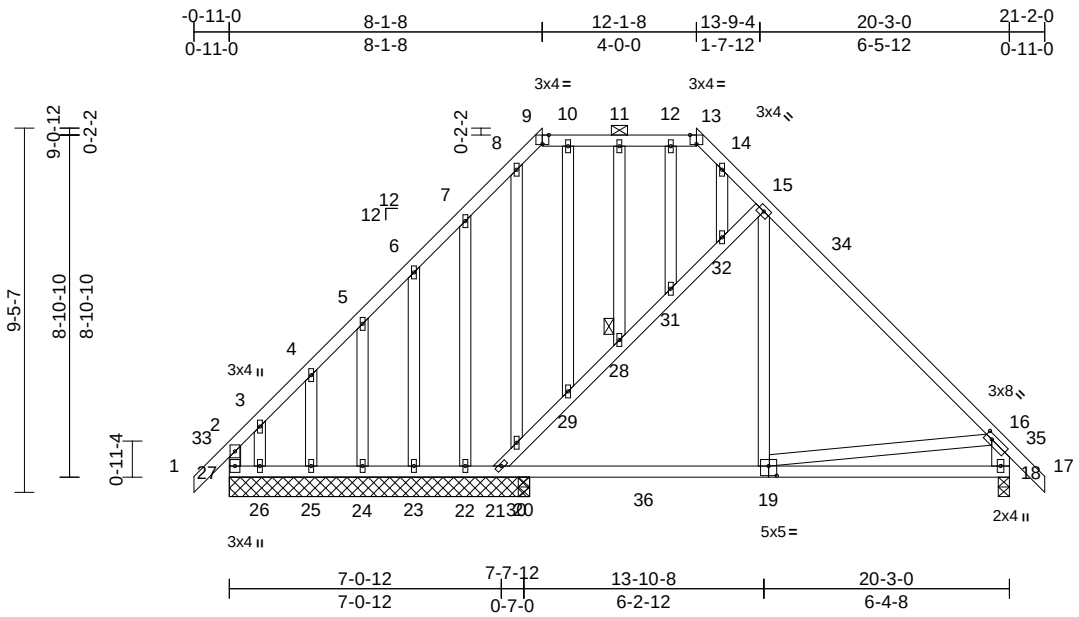
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
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 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 1.5x4 MT20 unless otherwise indicated.
9) Gable requires continuous bottom chord bearing.
10) Gable studs spaced at 1-4-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 88 lb uplift at joint 2, 14 lb uplift at joint 34, 19 lb uplift at joint 48, 20 lb uplift at joint 49, 27 lb uplift at joint 50, 18 lb uplift at joint 51, 11 lb uplift at joint 52, 45 lb uplift at joint 54, 45 lb uplift at joint 55, 42 lb uplift at joint 56, 43 lb uplift at joint 57, 42 lb uplift at joint 58, 47 lb uplift at joint 59, 22 lb uplift at joint 60, 103 lb uplift at joint 61, 20 lb uplift at joint 47, 26 lb uplift at joint 46, 13 lb uplift at joint 45, 46 lb uplift at joint 42, 46 lb uplift at joint 41, 42 lb uplift at joint 40, 43 lb uplift at joint 39, 41 lb uplift at joint 38, 48 lb uplift at joint 37, 17 lb uplift at joint 36, 124 lb uplift at joint 35 and 88 lb uplift at joint 2.
14) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | BE | Hip Structural Gable | 1 | 1 | I47495940 Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541,

Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:47 Page: 1
ID:7BKKzGAMqeXporwznBDwd3zC2F8-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:59.8

Plate Offsets (X, Y): [9:0-2-0,Edge], [13:0-2-0,Edge], [16:0-2-4,0-1-8], [19:0-2-8,0-3-0]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.73 | Vert(LL) | -0.04 | 19-20 | >999 | 360 | MT20 | 244/190 |
| Snow (Pf/Pg) | 20.4/20.0 | Lumber DOL | 1.15 | BC | 0.33 | Vert(CT) | -0.06 | 19-20 | >999 | 240 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.35 | Horz(CT) | 0.01 | 18 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-MS | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 176 lb | FT = 20% |

**LUMBER**

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 27-2:2x4 SP No.2, 18-16:2x6 SP No.2
OTHERS 2x4 SP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 5-6-9 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 9-13.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 28

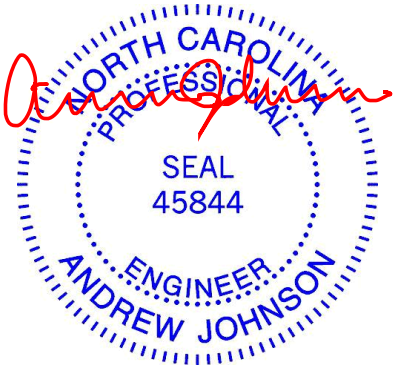
**REACTIONS** (lb/size) 18=607/0-3-8, 20=179/0-3-8, 21=77/7-9-8, 22=141/7-9-8, 23=72/7-9-8, 24=94/7-9-8, 25=115/7-9-8, 26=-168/7-9-8, 27=443/7-9-8
Max Horiz 27=250 (LC 15)
Max Uplift 18=-39 (LC 17), 21=-212 (LC 17), 22=-73 (LC 16), 23=-69 (LC 16), 24=-76 (LC 16), 25=-49 (LC 16), 26=-418 (LC 50), 27=-195 (LC 14)
Max Grav 18=842 (LC 39), 20=345 (LC 7), 21=280 (LC 39), 22=248 (LC 47), 23=138 (LC 47), 24=168 (LC 47), 25=178 (LC 39), 26=213 (LC 14), 27=710 (LC 50)

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

TOP CHORD 1-2=0/51, 2-3=-563/274, 3-4=-408/167, 4-5=-373/110, 5-6=-369/92, 6-7=-350/86, 7-8=-363/100, 8-9=-319/102, 9-10=-245/91, 10-11=-250/92, 11-12=-250/92, 12-13=-245/90, 13-14=-305/106, 14-15=-400/143, 15-16=-772/73, 16-17=0/57, 2-27=-489/231, 16-18=-788/124
BOT CHORD 26-27=-200/341, 25-26=-200/341, 24-25=-200/341, 23-24=-200/341, 22-23=-200/341, 21-22=-200/341, 20-21=-10/389, 18-20=-192/401
WEBS 16-19=-224/384, 21-30=-575/201, 29-30=-512/196, 28-29=-520/199, 28-31=-522/192, 31-32=-492/173, 15-32=-562/227, 15-19=0/253, 11-28=-83/26, 10-29=-9/25, 8-30=-106/37, 7-22=-183/102, 6-23=-117/84, 5-24=-139/87, 4-25=-144/86, 3-26=-183/201, 12-31=-43/27, 14-32=-83/119

**NOTES**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
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 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 1.5x4 MT20 unless otherwise indicated.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 1-4-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 195 lb uplift at joint 27, 39 lb uplift at joint 18, 212 lb uplift at joint 21, 73 lb uplift at joint 22, 69 lb uplift at joint 23, 76 lb uplift at joint 24, 49 lb uplift at joint 25 and 418 lb uplift at joint 26.
14) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.




August 18,2021

Continued on page 2



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

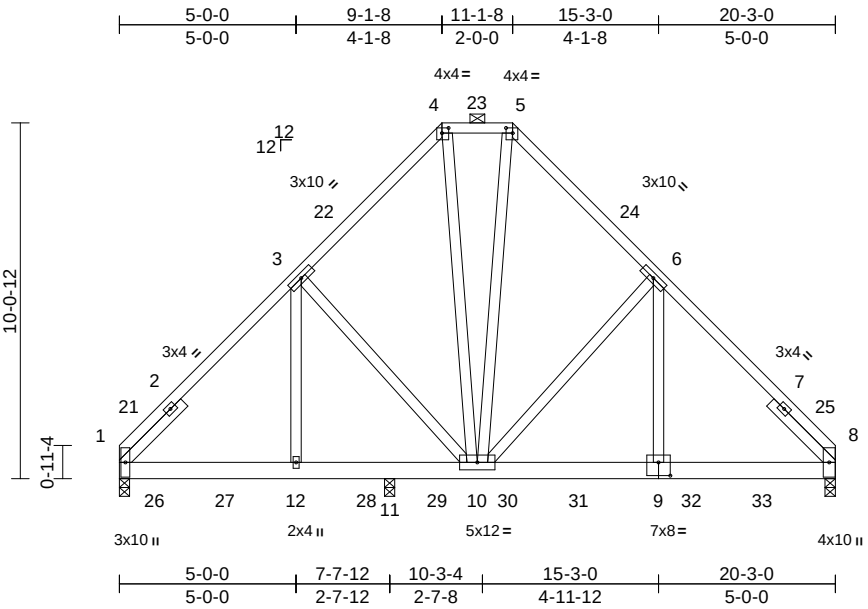
| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | BE | Hip Structural Gable | 1 | 1 | I47495940<br>Job Reference (optional) |



**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | BG | Hip Girder | 1 | 3 | I47495941 Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541, Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:48 Page: 1
ID:DvEGlKRDpWAkIGDk6Qh9?czC2If-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:65.2

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.93 | Vert(LL) | -0.09 | 9-10 | >999 | 360 | MT20 | 244/190 |
| Snow (Pf/Pg) | 20.4/20.0 | Lumber DOL | 1.15 | BC | 0.88 | Vert(CT) | -0.16 | 9-10 | >968 | 240 | | |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.69 | Horz(CT) | 0.03 | 8 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-MS | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 484 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.3 *Except* 4-5:2x4 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E *Except* 9-8:2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 -- 2-6-0, Right 2x4 SP No.3 -- 2-6-0

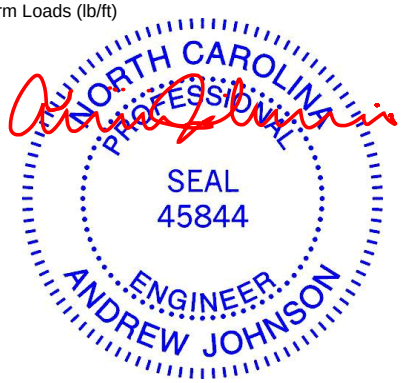
**BRACING**
TOP CHORD Structural wood sheathing directly applied or 5-2-3 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 1=6422/0-3-8, 8=6962/0-3-8, 11=4786/0-3-8
Max Horiz 1=227 (LC 60)
Max Uplift 1=-514 (LC 16), 8=-694 (LC 17), 11=-339 (LC 17)
Max Grav 1=6738 (LC 38), 8=7310 (LC 38), 11=4922 (LC 38)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-5604/557, 3-4=-4319/559, 4-5=-3198/479, 5-6=-4269/557, 6-8=-7959/861
BOT CHORD 1-12=-393/3999, 11-12=-393/3999, 10-11=-393/3999, 8-10=-495/5509
WEBS 3-12=-93/1835, 3-10=-1617/285, 4-10=-333/2772, 5-10=-329/2701, 6-10=-3797/585, 6-9=-517/5012

**NOTES**
1) 3-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.
Bottom chords connected as follows: 2x6 - 3 rows staggered at 0-4-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; 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
5) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
6) Unbalanced snow loads have been considered for this design.
7) Provide adequate drainage to prevent water ponding.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 514 lb uplift at joint 1, 694 lb uplift at joint 8 and 339 lb uplift at joint 11.
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1721 lb down and 117 lb up at 1-0-0, 1721 lb down and 117 lb up at 3-0-0, 1721 lb down and 117 lb up at 5-0-0, 1721 lb down and 117 lb up at 7-0-0, 1721 lb down and 117 lb up at 9-0-0, 1721 lb down and 117 lb up at 11-0-0, 1604 lb down and 179 lb up at 13-0-0, 1604 lb down and 179 lb up at 15-0-0, and 1604 lb down and 179 lb up at 16-2-4, and 1653 lb down and 171 lb up at 18-2-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)




August 18,2021

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

Vert: 1-4=-51, 4-5=-61, 5-8=-51, 13-17=-20

Concentrated Loads (lb)

Vert: 12=-1709 (B), 9=-1604 (B), 26=-1709 (B), 27=-1709 (B), 28=-1709 (B), 29=-1709 (B), 30=-1709 (B), 31=-1604 (B), 32=-1604 (B), 33=-1653 (B)

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | BV1 | Valley | 1 | 1 | I47495942 Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541, Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:49 Page: 1
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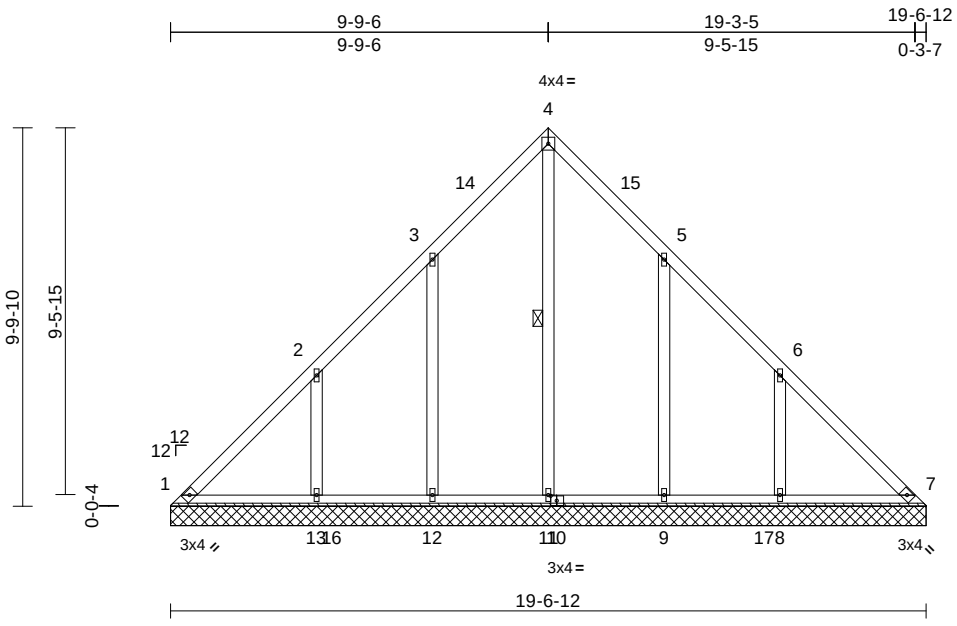



Scale = 1:59.7

Plate Offsets (X, Y): [10:0-1-14,0-1-8]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.16 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf/Pg) | 15.4/20.0 | Lumber DOL | 1.15 | BC | 0.10 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.19 | Horiz(TL) | 0.01 | 7 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 111 lb | FT = 20% |

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

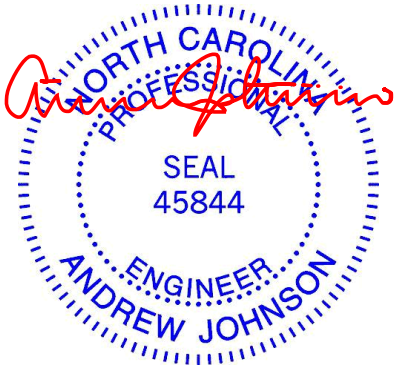
**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-11

**REACTIONS** (lb/size) 1=124/19-6-12, 7=124/19-6-12, 8=263/19-6-12, 9=205/19-6-12, 11=154/19-6-12, 12=205/19-6-12, 13=263/19-6-12
Max Horiz 1=-234 (LC 12)
Max Uplift 1=-45 (LC 12), 7=-6 (LC 13), 8=-197 (LC 17), 9=-159 (LC 17), 12=-160 (LC 16), 13=-197 (LC 16)
Max Grav 1=198 (LC 31), 7=178 (LC 32), 8=367 (LC 30), 9=364 (LC 30), 11=309 (LC 32), 12=365 (LC 29), 13=367 (LC 29)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-265/187, 2-3=-173/115, 3-4=-184/183, 4-5=-184/180, 5-6=-131/59, 6-7=-228/146
BOT CHORD 1-13=-129/211, 12-13=-129/211, 11-12=-129/211, 9-11=-129/211, 8-9=-129/211, 7-8=-129/211
WEBS 4-11=-168/85, 3-12=-238/197, 2-13=-288/230, 5-9=-238/196, 6-8=-288/230

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) All plates are 1.5x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 3-0-0 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 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 1, 6 lb uplift at joint 7, 160 lb uplift at joint 12, 197 lb uplift at joint 13, 159 lb uplift at joint 9 and 197 lb uplift at joint 8.
12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard




August 18,2021

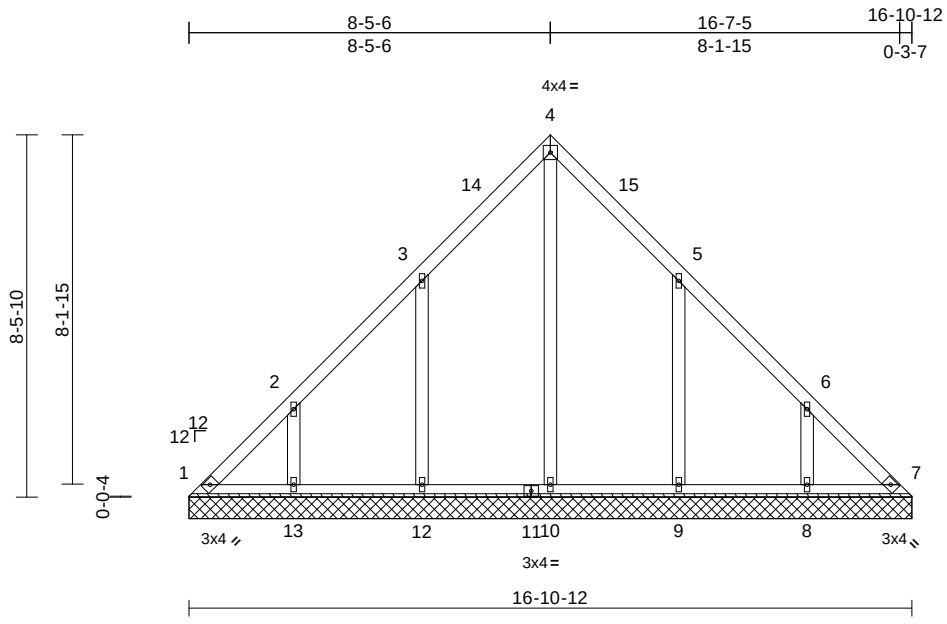


ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | BV2 | Valley | 1 | 1 | I47495943 Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541,

Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:49 Page: 1
ID:VW_7I2aFUSDuMaPcElNB_EzCGfl-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:53.9

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.11 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf/Pg) | 15.4/20.0 | Lumber DOL | 1.15 | BC | 0.11 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.18 | Horiz(TL) | 0.00 | 7 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 91 lb | FT = 20% |

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

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

**REACTIONS** (lb/size) 1=78/16-10-12, 7=78/16-10-12, 8=199/16-10-12, 9=224/16-10-12, 10=147/16-10-12, 12=224/16-10-12, 13=199/16-10-12
Max Horiz 1=201 (LC 13)
Max Uplift 1=-62 (LC 14), 7=-28 (LC 15), 8=-149 (LC 17), 9=-174 (LC 17), 12=-174 (LC 16), 13=-149 (LC 16)
Max Grav 1=162 (LC 31), 7=145 (LC 32), 8=248 (LC 30), 9=336 (LC 30), 10=308 (LC 32), 12=337 (LC 29), 13=248 (LC 29)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-247/163, 2-3=-164/114, 3-4=-162/158, 4-5=-162/154, 5-6=-128/66, 6-7=-214/135
BOT CHORD 1-13=-106/178, 12-13=-106/178, 10-12=-106/178, 9-10=-106/178, 8-9=-106/178, 7-8=-106/178
WEBS 4-10=-146/59, 3-12=-258/212, 2-13=-222/178, 5-9=-258/211, 6-8=-222/178

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) All plates are 1.5x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 3-0-0 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 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 62 lb uplift at joint 1, 28 lb uplift at joint 7, 174 lb uplift at joint 12, 149 lb uplift at joint 13, 174 lb uplift at joint 9 and 149 lb uplift at joint 8.
12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

NORTH CAROLINA PROFESSIONAL SEAL 45844 ENGINEER ANDREW JOHNSON

August 18,2021




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

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | BV3 | Valley | 1 | 1 | I47495944 Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541,

Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:50 Page: 1
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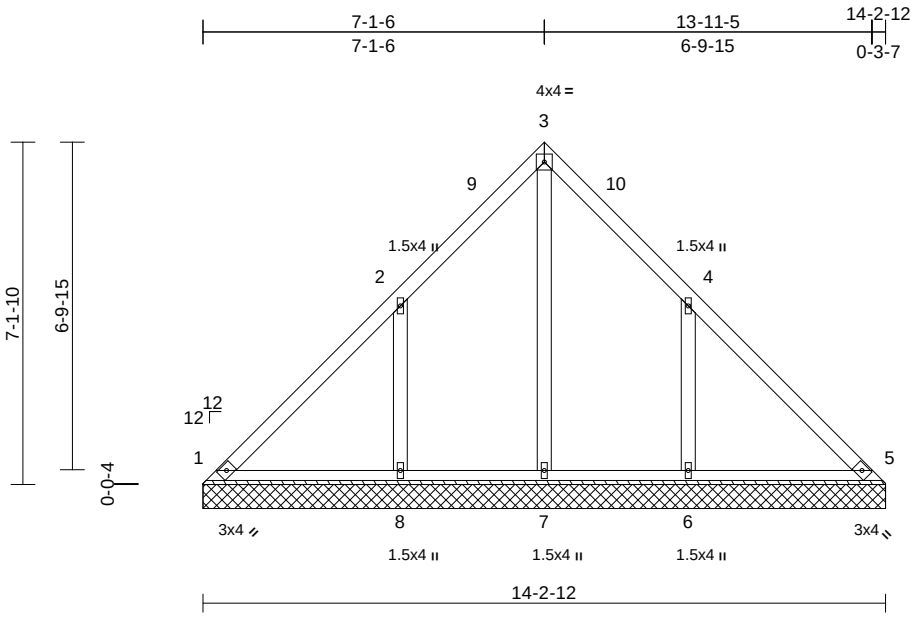



Scale = 1:48

| 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/Pg) | 15.4/20.0 | Lumber DOL | 1.15 | BC | 0.11 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.11 | Horiz(TL) | 0.00 | 5 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 70 lb | FT = 20% |

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

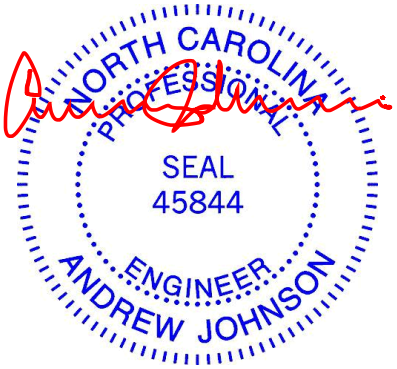
**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 1=128/14-2-12, 5=128/14-2-12, 6=294/14-2-12, 7=117/14-2-12, 8=294/14-2-12
Max Horiz 1=-168 (LC 12)
Max Uplift 1=-18 (LC 12), 6=-224 (LC 17), 8=-224 (LC 16)
Max Grav 1=170 (LC 30), 5=149 (LC 29), 6=419 (LC 30), 7=273 (LC 32), 8=420 (LC 29)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-161/133, 2-3=-143/131, 3-4=-143/130, 4-5=-140/102
BOT CHORD 1-8=-91/149, 7-8=-91/149, 6-7=-91/149, 5-6=-91/149
WEBS 3-7=-123/47, 2-8=-325/258, 4-6=-325/258

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 3-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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 18 lb uplift at joint 1, 224 lb uplift at joint 8 and 224 lb uplift at joint 6.
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard




August 18,2021



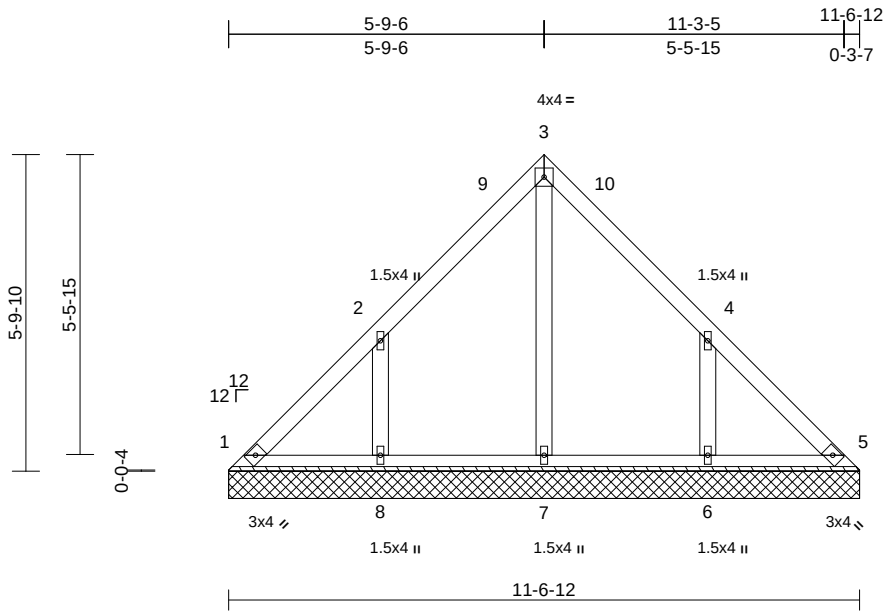
ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | BV4 | Valley | 1 | 1 | I47495945 Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541,

Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:50 ID:ziXWVObtFmLl_k_ooTuQXSzCGfk-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f






Scale = 1:42.2

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.11 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf/Pg) | 15.4/20.0 | Lumber DOL | 1.15 | BC | 0.06 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.06 | Horiz(TL) | 0.00 | 5 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 55 lb | FT = 20% |

**LUMBER**

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

**BRACING**

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

**REACTIONS** (lb/size) 1=89/11-6-12, 5=89/11-6-12, 6=224/11-6-12, 7=146/11-6-12, 8=224/11-6-12
Max Horiz 1=-135 (LC 12)
Max Uplift 1=-26 (LC 12), 5=-3 (LC 13), 6=-175 (LC 17), 8=-176 (LC 16)
Max Grav 1=131 (LC 30), 5=114 (LC 29), 6=292 (LC 30), 7=170 (LC 32), 8=292 (LC 29)

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

| | |
|---|---|
| TOP CHORD | 1-2=-135/106, 2-3=-124/107, 3-4=-119/103, 4-5=-118/74 |
| BOT CHORD | 1-8=-60/111, 7-8=-60/111, 6-7=-60/111, 5-6=-60/111 |
| WEBS | 3-7=-110/0, 2-8=-259/206, 4-6=-259/206 |

**NOTES**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 3-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 1, 3 lb uplift at joint 5, 176 lb uplift at joint 8 and 175 lb uplift at joint 6.
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard


August 18,2021



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

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | BV5 | Valley | 1 | 1 | I47495946 Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541, Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:51 Page: 1
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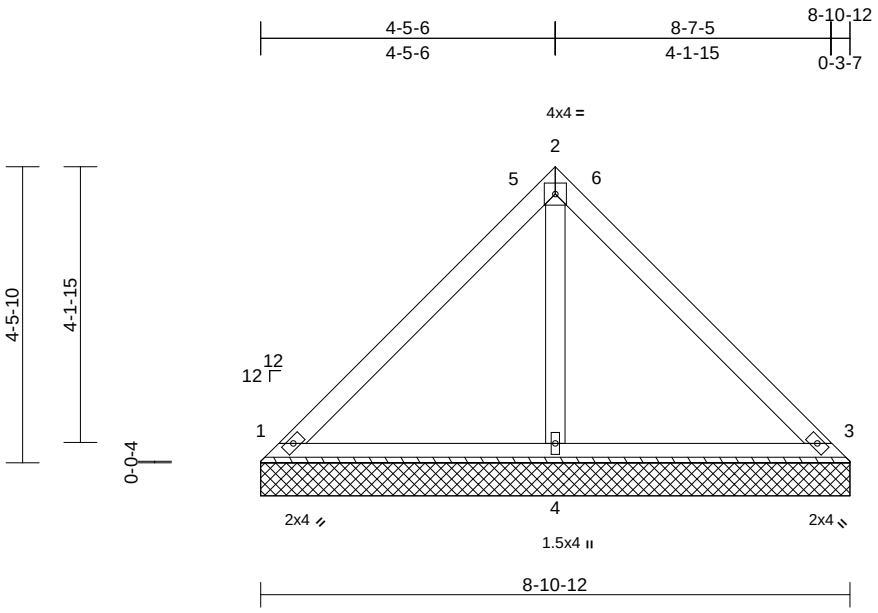



Scale = 1:34.8

| 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 | 0.34 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf/Pg) | 15.4/20.0 | Lumber DOL | 1.15 | BC | 0.17 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.06 | Horiz(TL) | 0.00 | 3 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 36 lb | FT = 20% |

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

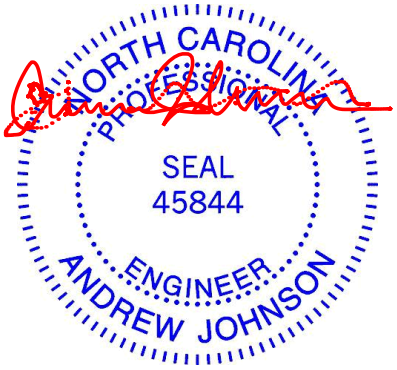
**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 1=173/8-10-12, 3=173/8-10-12, 4=237/8-10-12
Max Horiz 1=-102 (LC 12)
Max Uplift 1=-49 (LC 17), 3=-49 (LC 17)
Max Grav 1=199 (LC 2), 3=199 (LC 2), 4=261 (LC 2)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-148/81, 2-3=-133/65
BOT CHORD 1-4=-29/73, 3-4=-29/73
WEBS 2-4=-158/46

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 3-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint 1 and 49 lb uplift at joint 3.
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard




August 18,2021



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

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | BV6 | Valley | 1 | 1 | I47495947 Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541, Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:51 Page: 1
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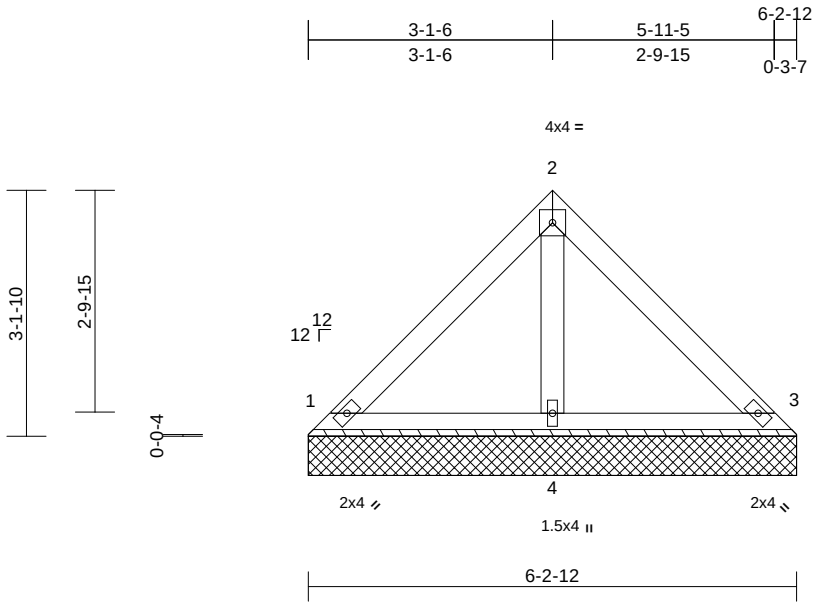



Scale = 1:29.4

| 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 | 0.15 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf/Pg) | 15.4/20.0 | Lumber DOL | 1.15 | BC | 0.08 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.03 | Horiz(TL) | 0.00 | 3 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 25 lb | FT = 20% |

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

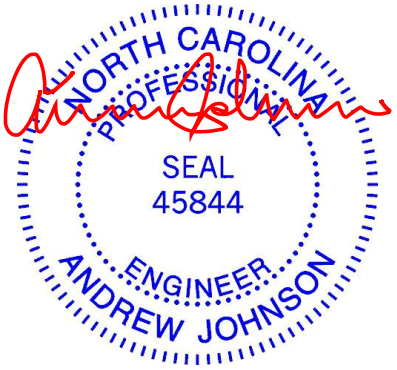
**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 1=117/6-2-12, 3=117/6-2-12, 4=160/6-2-12
Max Horiz 1=-69 (LC 12)
Max Uplift 1=-33 (LC 17), 3=-33 (LC 17)
Max Grav 1=134 (LC 2), 3=134 (LC 2), 4=176 (LC 2)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-100/54, 2-3=-90/44
BOT CHORD 1-4=-20/49, 3-4=-20/49
WEBS 2-4=-107/34

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 1 and 33 lb uplift at joint 3.
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard




August 18,2021

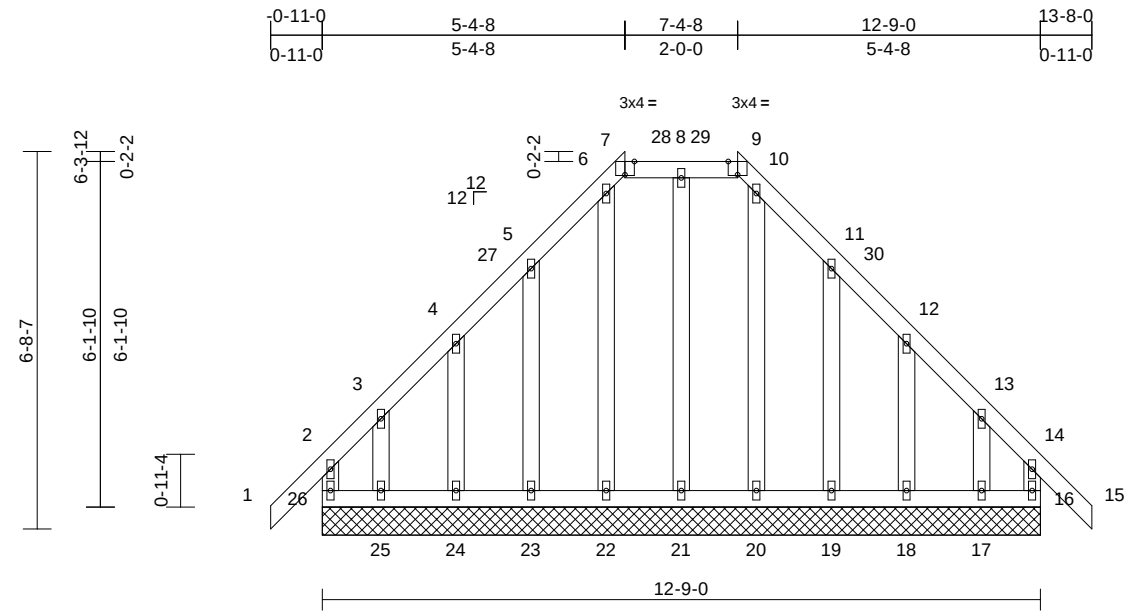


ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | CE | Hip Supported Gable | 1 | 1 | I47495948 |
| | | | | | Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541,

Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:51 Page: 1
ID:uG9?I8WgF6rP0wUJzIEAKUzCGby-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:40.9

Plate Offsets (X, Y): [7:0-2-0,Edge], [9:0-2-0,Edge]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.14 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf/Pg) | 20.4/20.0 | Lumber DOL | 1.15 | BC | 0.06 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.09 | Horz(CT) | 0.00 | 16 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-MR | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 100 lb | FT = 20% |

**LUMBER**

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

**BRACING**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9. |
| BOT CHORD | Rigid ceiling directly applied or 6-0-0 oc bracing. |

**REACTIONS** (lb/size) 16=107/12-9-0, 17=49/12-9-0, 18=101/12-9-0, 19=93/12-9-0, 20=100/12-9-0, 21=109/12-9-0, 22=100/12-9-0, 23=93/12-9-0, 24=101/12-9-0, 25=49/12-9-0, 26=107/12-9-0
Max Horiz 26=-180 (LC 14)
Max Uplift 16=-92 (LC 13), 17=-123 (LC 17), 18=-65 (LC 17), 19=-77 (LC 17), 23=-78 (LC 16), 24=-64 (LC 16), 25=-132 (LC 16), 26=-124 (LC 12)
Max Grav 16=213 (LC 47), 17=148 (LC 49), 18=174 (LC 39), 19=171 (LC 49), 20=147 (LC 51), 21=158 (LC 38), 22=152 (LC 53), 23=171 (LC 47), 24=174 (LC 39), 25=163 (LC 47), 26=240 (LC 49)

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

| | |
|---|---|
| TOP CHORD | 2-26=-198/95, 1-2=0/77, 2-3=-124/126, 3-4=-81/113, 4-5=-99/128, 5-6=-160/199, 6-7=-135/168, 7-8=-132/168, 8-9=-132/168, 9-10=-135/168, 10-11=-160/199, 11-12=-99/126, 12-13=-55/97, 13-14=-95/96, 14-15=0/77, 14-16=-181/70 |
| BOT CHORD | 25-26=-86/91, 24-25=-86/91, 23-24=-86/91, 22-23=-86/91, 21-22=-86/91, 20-21=-86/91, 19-20=-86/91, 18-19=-86/91, 17-18=-86/91, 16-17=-86/91 |
| WEBS | 8-21=-132/20, 6-22=-125/16, 5-23=-143/91, 4-24=-145/92, 3-25=-114/97, 10-20=-121/15, 11-19=-143/91, 12-18=-145/92, 13-17=-119/93 |

**NOTES**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
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 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 1.5x4 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 1-4-0 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 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 124 lb uplift at joint 26, 92 lb uplift at joint 16, 78 lb uplift at joint 23, 64 lb uplift at joint 24, 132 lb uplift at joint 25, 77 lb uplift at joint 19, 65 lb uplift at joint 18 and 123 lb uplift at joint 17.
15) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

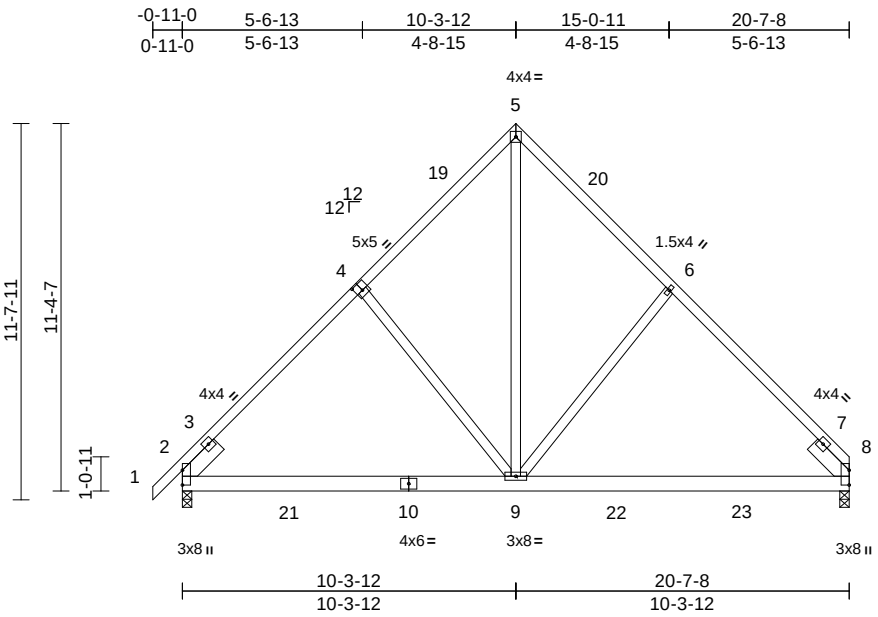

August 18,2021



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

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | D1 | Common | 3 | 1 | I47495949 Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541, Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:52 Page: 1
ID:sNcDmpk_vh1WyT3Jw6X6UKzCHk_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:71.3

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.30 | Vert(LL) | -0.07 | 9-13 | >999 | 360 | MT20 | 244/190 |
| Snow (Pf/Pg) | 15.4/20.0 | Lumber DOL | 1.15 | BC | 0.43 | Vert(CT) | -0.12 | 9-13 | >999 | 240 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.57 | Horz(CT) | 0.02 | 2 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-MS | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 139 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -- 1-6-0, Right 2x6 SP No.2 -- 1-6-0

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

**REACTIONS** (lb/size) 2=778/0-3-8, 8=729/0-3-8
Max Horiz 2=270 (LC 15)
Max Uplift 2=-79 (LC 16), 8=-70 (LC 16)
Max Grav 2=893 (LC 30), 8=853 (LC 30)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/39, 2-5=-894/272, 5-6=-741/272, 6-8=-894/204
BOT CHORD 2-9=-206/700, 8-9=-76/602
WEBS 5-9=-253/726, 6-9=-308/255, 4-9=-308/254

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 70 lb uplift at joint 8 and 79 lb uplift at joint 2.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

NORTH CAROLINA PROFESSIONAL SEAL 45844 ENGINEER ANDREW JOHNSON

August 18,2021




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

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | DE | Hip Supported Gable | 1 | 1 | I47495950 Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541,

Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:52 Page: 1
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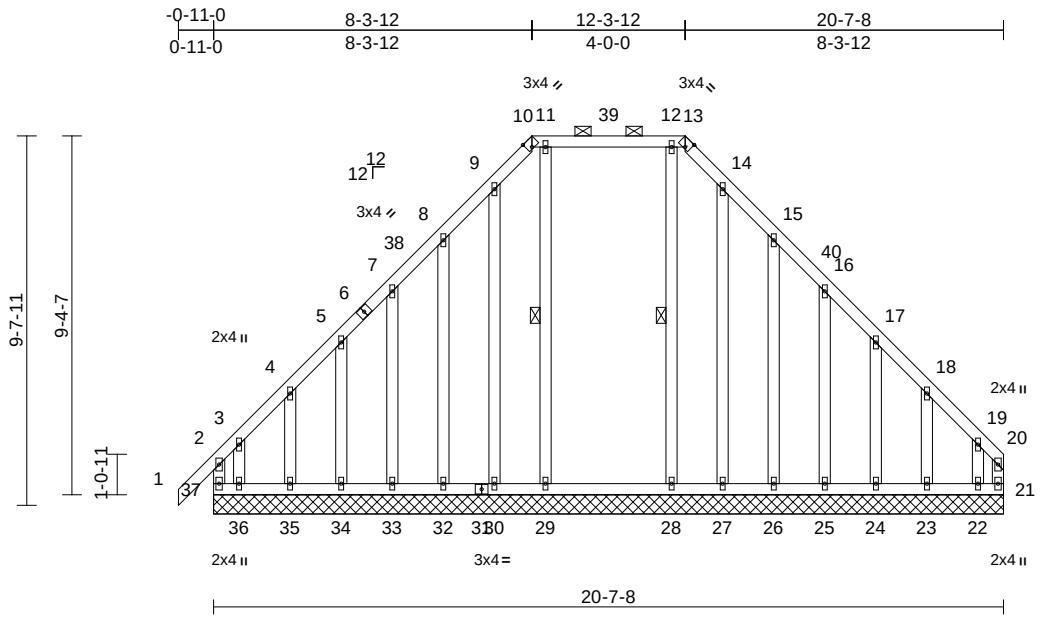



Scale = 1:60.1

Plate Offsets (X, Y): [10:0-1-8,Edge], [13:0-1-8,Edge]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.20 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf/Pg) | 20.4/20.0 | Lumber DOL | 1.15 | BC | 0.11 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.16 | Horz(CT) | 0.00 | 21 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-MR | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 183 lb | FT = 20% |

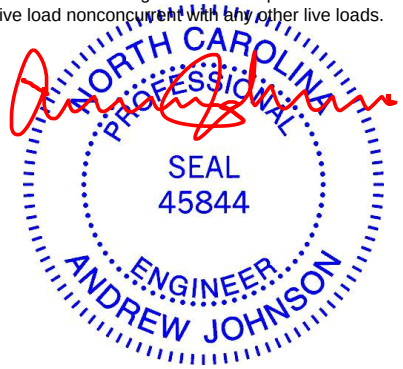
**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 10-13.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 11-29, 12-28

**REACTIONS** (lb/size) 21=11/20-7-8, 22=73/20-7-8, 23=98/20-7-8, 24=94/20-7-8, 25=94/20-7-8, 26=100/20-7-8, 27=52/20-7-8, 28=218/20-7-8, 29=218/20-7-8, 30=52/20-7-8, 32=100/20-7-8, 33=94/20-7-8, 34=94/20-7-8, 35=98/20-7-8, 36=16/20-7-8, 37=121/20-7-8
Max Horiz 37=252 (LC 13)
Max Uplift 21=-261 (LC 15), 22=-281 (LC 17), 23=-64 (LC 17), 24=-73 (LC 17), 25=-70 (LC 17), 26=-86 (LC 17), 27=-36 (LC 52), 29=-10 (LC 13), 30=-40 (LC 50), 32=-84 (LC 16), 33=-70 (LC 16), 34=-73 (LC 16), 35=-61 (LC 16), 36=-309 (LC 16), 37=-287 (LC 14)
Max Grav 21=339 (LC 17), 22=263 (LC 49), 23=170 (LC 39), 24=165 (LC 49), 25=163 (LC 39), 26=180 (LC 49), 27=131 (LC 39), 28=369 (LC 50), 29=377 (LC 52), 30=131 (LC 39), 32=178 (LC 47), 33=163 (LC 39), 34=165 (LC 47), 35=170 (LC 39), 36=286 (LC 14), 37=396 (LC 13)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-37=-238/174, 1-2=0/45, 2-3=-269/224, 3-4=-164/154, 4-5=-139/133, 5-7=-124/139, 7-8=-139/180, 8-9=-208/251, 9-10=-213/258, 10-11=-184/227, 11-12=-184/227, 12-13=-184/227, 13-14=-213/258, 14-15=-208/251, 15-16=-139/169, 16-17=-92/119, 17-18=-107/90, 18-19=-123/112, 19-20=-238/179, 20-21=-209/154
BOT CHORD 36-37=-111/123, 35-36=-111/123, 34-35=-111/123, 33-34=-111/123, 32-33=-111/123, 30-32=-111/123, 29-30=-111/123, 28-29=-111/123, 27-28=-111/123, 26-27=-111/123, 25-26=-111/123, 24-25=-111/123, 23-24=-111/123, 22-23=-111/123, 21-22=-111/123
WEBS 11-29=-254/44, 12-28=-254/37, 9-30=-130/26, 8-32=-141/103, 7-33=-137/87, 5-34=-136/86, 4-35=-142/91, 3-36=-136/155, 14-27=-123/22, 15-26=-142/104, 16-25=-137/87, 17-24=-136/86, 18-23=-142/91, 19-22=-159/156

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
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 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 1.5x4 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 1-4-0 oc.
12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.




August 18,2021

Continued on page 2



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

13) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 287 lb uplift at joint 37, 261 lb uplift at joint 21, 10 lb uplift at joint 29, 40 lb uplift at joint 30, 84 lb uplift at joint 32, 70 lb uplift at joint 33, 73 lb uplift at joint 34, 61 lb uplift at joint 35, 309 lb uplift at joint 36, 36 lb uplift at joint 27, 86 lb uplift at joint 26, 70 lb uplift at joint 25, 73 lb uplift at joint 24, 64 lb uplift at joint 23 and 281 lb uplift at joint 22.
15) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | E1 | Monopitch | 7 | 1 | I47495951 |
| | | | | | Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541,

Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:53 Page: 1
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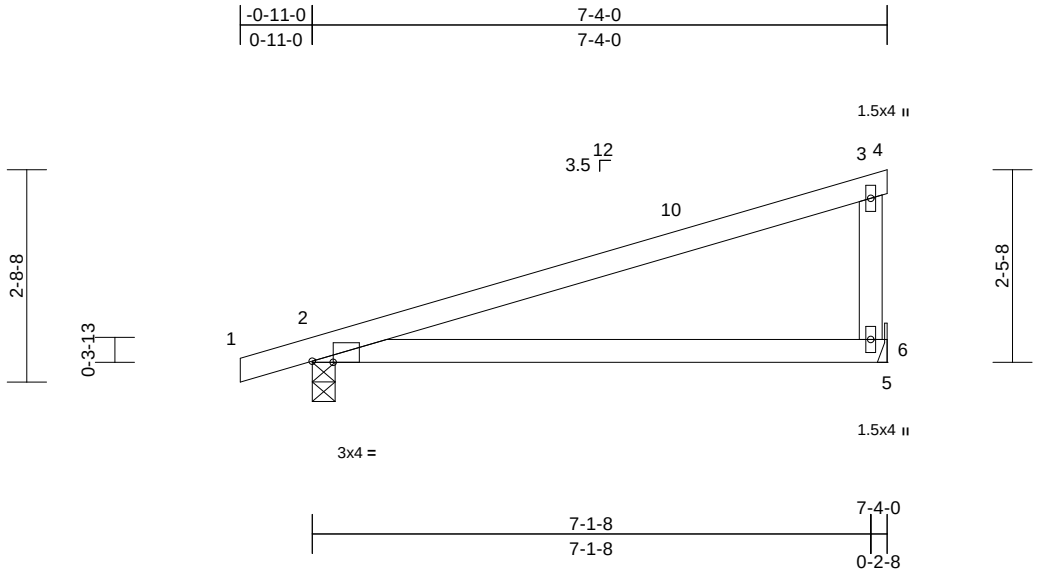



Scale = 1:29.4

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.78 | Vert(LL) | 0.13 | 6-9 | >678 | 360 | MT20 | 244/190 |
| Snow (Pf/Pg) | 15.4/20.0 | Lumber DOL | 1.15 | BC | 0.63 | Vert(CT) | -0.27 | 6-9 | >317 | 240 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 2 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 27 lb | FT = 20% |

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

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

**REACTIONS** (lb/size) 2=302/0-3-8, 6=264/ Mechanical
Max Horiz 2=93 (LC 15)
Max Uplift 2=-85 (LC 12), 6=-59 (LC 16)
Max Grav 2=343 (LC 2), 6=290 (LC 2)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-173/64, 3-4=-4/0, 3-6=-191/145
BOT CHORD 2-6=-91/158, 5-6=0/0

**NOTES**
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; 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
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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 1.00 times flat roof load of 15.4 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 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 59 lb uplift at joint 6 and 85 lb uplift at joint 2.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard


August 18,2021

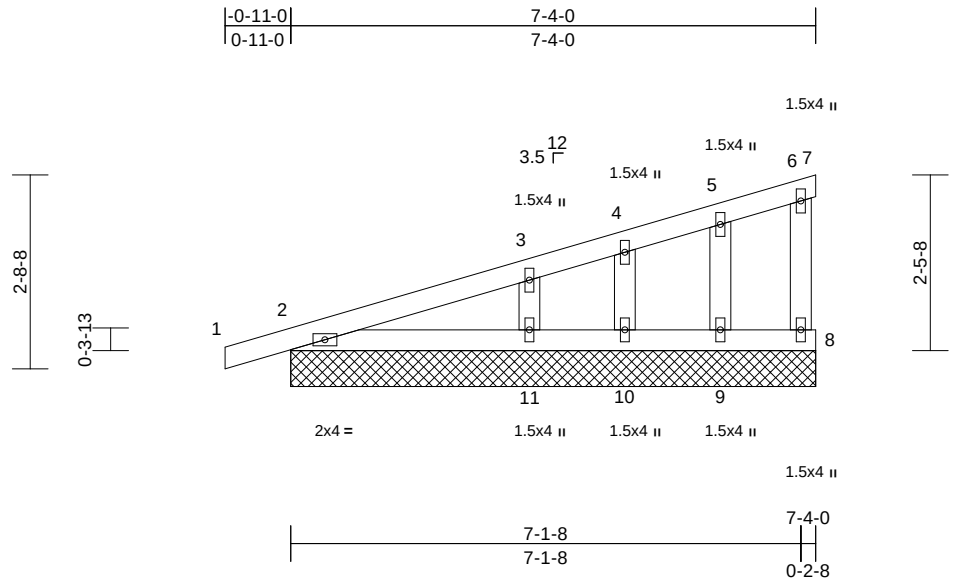


ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | EE | Monopitch Supported Gable | 1 | 1 | I47495952 Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541,

Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:53 Page: 1
ID:J8Qmsruei_t4j6R50BpTKGzCHmM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




Scale = 1:32.2

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.09 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf/Pg) | 15.4/20.0 | Lumber DOL | 1.15 | BC | 0.09 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.00 | 7 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 32 lb | FT = 20% |

**LUMBER**

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

**BRACING**

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

**REACTIONS** (lb/size) 2=151/7-4-0, 7=5/7-4-0, 8=34/7-4-0, 9=111/7-4-0, 10=32/7-4-0, 11=229/7-4-0, 12=151/7-4-0
Max Horiz 2=93 (LC 13), 12=93 (LC 13)
Max Uplift 2=-50 (LC 12), 7=-4 (LC 13), 8=-8 (LC 16), 9=-26 (LC 16), 10=-13 (LC 12), 11=-55 (LC 16), 12=-50 (LC 12)
Max Grav 2=174 (LC 2), 7=6 (LC 23), 8=39 (LC 23), 9=125 (LC 2), 10=38 (LC 23), 11=258 (LC 2), 12=174 (LC 2)

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

| | |
|---|---|
| TOP CHORD | 1-2=0/15, 2-3=-117/72, 3-4=-79/46, 4-5=-62/47, 5-6=-39/35, 6-7=-3/2, 6-8=-32/28 |
| BOT CHORD | 2-11=-37/51, 10-11=-37/40, 9-10=-37/40, 8-9=-37/40 |
| WEBS | 5-9=-89/68, 4-10=-43/45, 3-11=-166/112 |

**NOTES**

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; 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
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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) All plates are 1.5x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 1-4-0 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 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 50 lb uplift at joint 2, 4 lb uplift at joint 7, 8 lb uplift at joint 8, 26 lb uplift at joint 9, 13 lb uplift at joint 10, 55 lb uplift at joint 11 and 50 lb uplift at joint 2.
12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard


August 18,2021



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

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | F1 | Common | 5 | 1 | I47495953 Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541, Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:54 Page: 1
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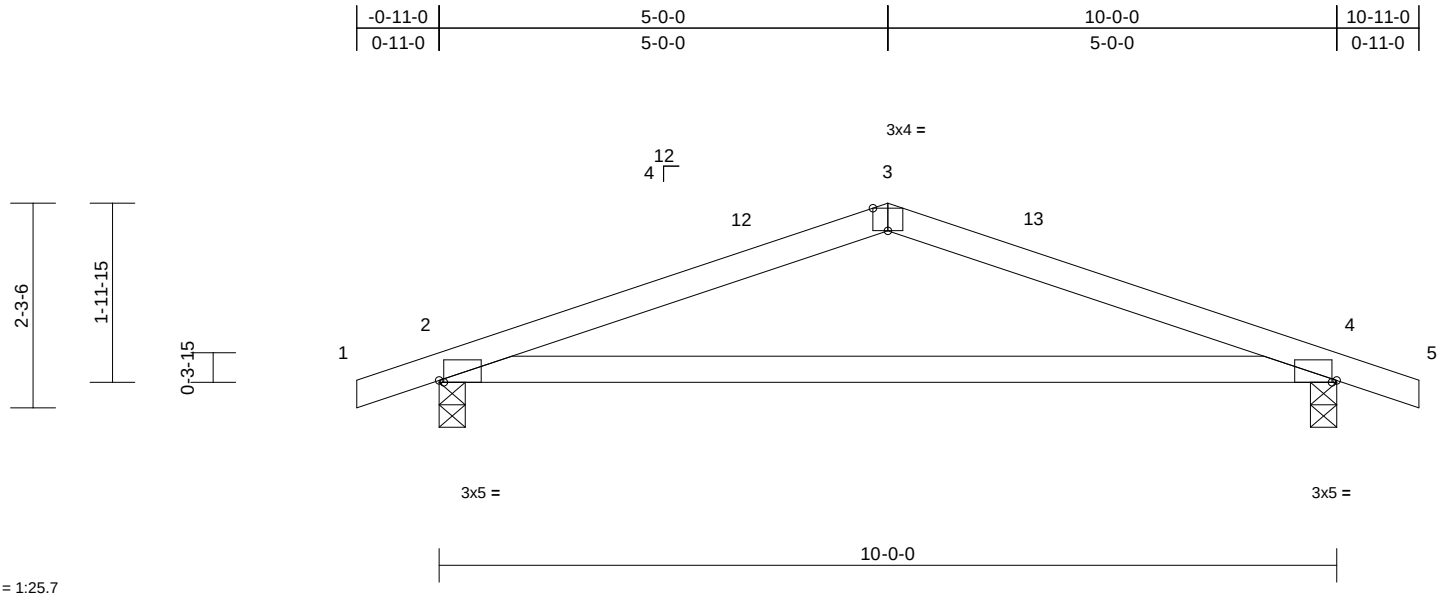


Scale = 1:25.7

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.59 | Vert(LL) | -0.15 | 8-11 | >794 | 360 | MT20 | 244/190 |
| Snow (Pf/Pg) | 15.4/20.0 | Lumber DOL | 1.15 | BC | 0.61 | Vert(CT) | -0.34 | 8-11 | >356 | 240 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.01 | 4 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-MS | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 34 lb | FT = 20% |

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

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

**REACTIONS** (lb/size) 2=401/0-3-8, 4=401/0-3-8
Max Horiz 2=-33 (LC 17)
Max Uplift 2=-94 (LC 12), 4=-94 (LC 13)
Max Grav 2=455 (LC 2), 4=455 (LC 2)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-619/248, 3-4=-619/248, 4-5=0/17
BOT CHORD 2-4=-165/577

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 94 lb uplift at joint 2 and 94 lb uplift at joint 4.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard


August 18,2021



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

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | FE | Common Supported Gable | 1 | 1 | I47495954 Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541, Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:54 Page: 1
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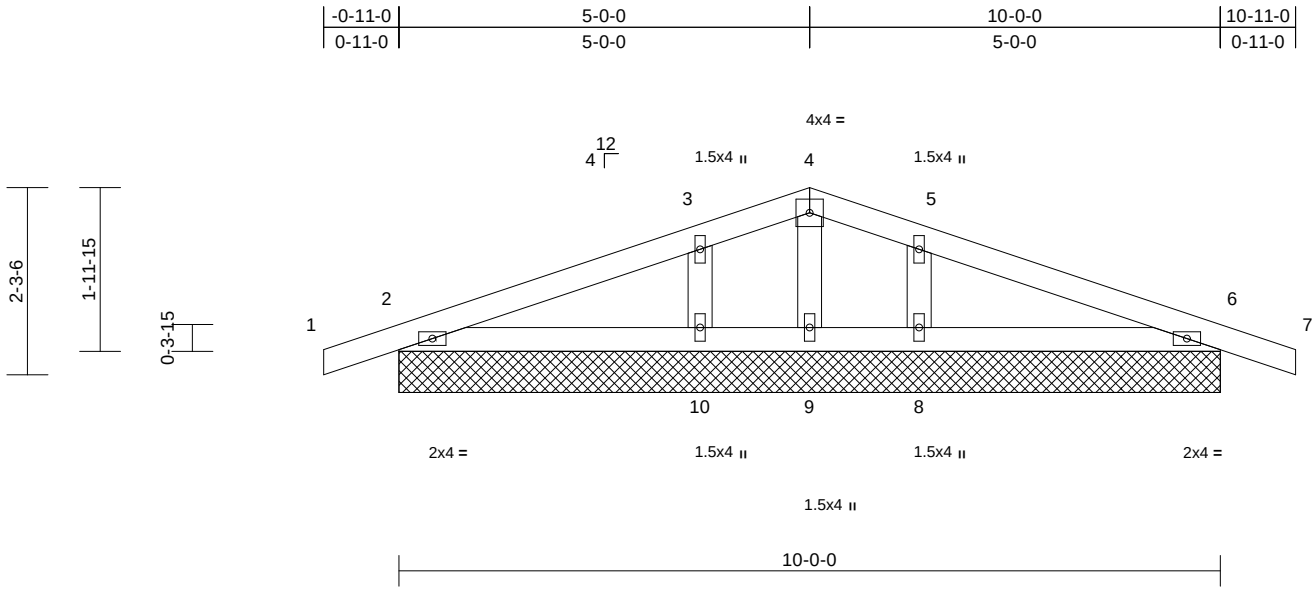


Scale = 1:28.1

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.12 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf/Pg) | 15.4/20.0 | Lumber DOL | 1.15 | BC | 0.11 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.04 | Horz(CT) | 0.00 | 6 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-MS | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 39 lb | FT = 20% |

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

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

**REACTIONS** (lb/size) 2=161/10-0-0, 6=161/10-0-0, 8=271/10-0-0, 9=-65/10-0-0, 10=271/10-0-0, 11=161/10-0-0, 15=161/10-0-0
Max Horiz 2=-33 (LC 17), 11=-33 (LC 17)
Max Uplift 2=-62 (LC 12), 6=-66 (LC 13), 8=-66 (LC 17), 9=-72 (LC 2), 10=-67 (LC 16), 11=-62 (LC 12), 15=-66 (LC 13)
Max Grav 2=185 (LC 2), 6=185 (LC 2), 8=306 (LC 2), 9=35 (LC 13), 10=306 (LC 2), 11=185 (LC 2), 15=185 (LC 2)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-47/41, 3-4=-39/71, 4-5=-38/70, 5-6=-46/30, 6-7=0/17
BOT CHORD 2-10=-7/38, 9-10=-7/35, 8-9=-7/35, 6-8=-7/40
WEBS 4-9=-35/32, 3-10=-194/122, 5-8=-194/122

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 1-4-0 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 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 62 lb uplift at joint 2, 66 lb uplift at joint 6, 72 lb uplift at joint 9, 67 lb uplift at joint 10, 66 lb uplift at joint 8, 62 lb uplift at joint 2 and 66 lb uplift at joint 6.
12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 6, 15.
13) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard


August 18,2021



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

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | G1 | Half Hip | 7 | 1 | I47495955 Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541, Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:55 Page: 1
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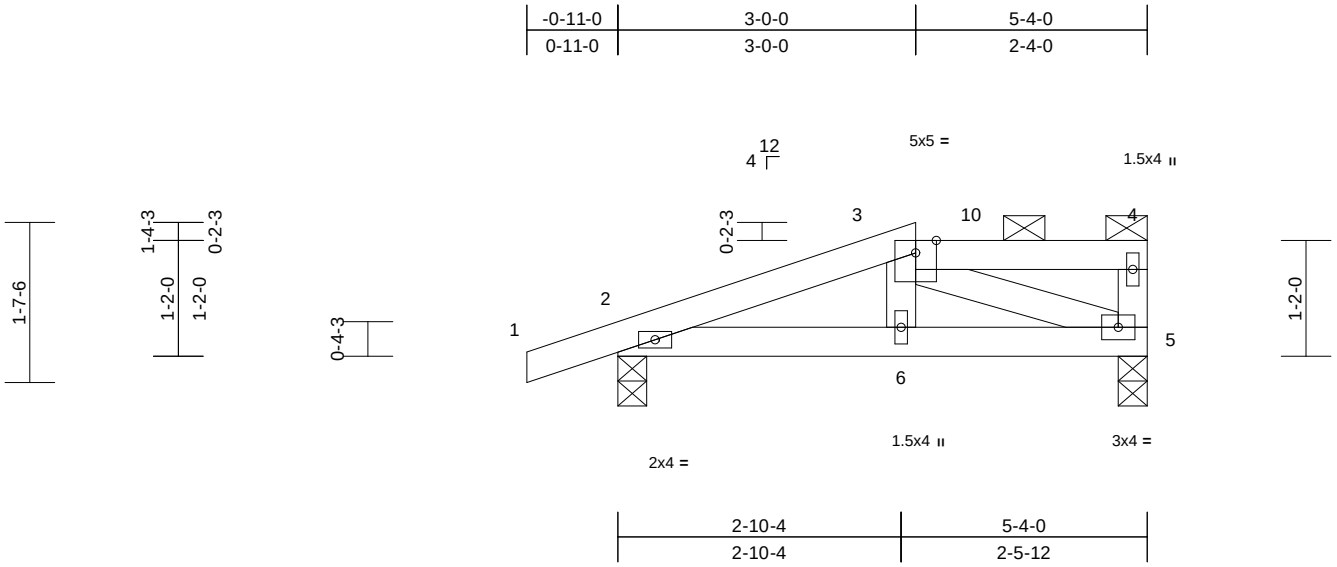



Scale = 1:23.2

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.18 | Vert(LL) | -0.01 | 6-9 | >999 | 360 | MT20 | 244/190 |
| Snow (Pf/Pg) | 20.4/20.0 | Lumber DOL | 1.15 | BC | 0.20 | Vert(CT) | -0.01 | 6-9 | >999 | 240 | | |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.12 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 23 lb | FT = 20% |

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

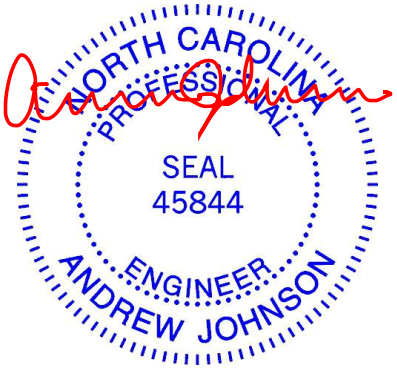
**BRACING**
TOP CHORD Structural wood sheathing directly applied or 5-4-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 2=283/0-3-8, 5=275/0-3-8
Max Horiz 2=41 (LC 15)
Max Uplift 2=-32 (LC 12)
Max Grav 2=362 (LC 37), 5=348 (LC 3)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-3=-554/0, 3-4=-18/21, 4-5=-124/36
BOT CHORD 2-6=-17/517, 5-6=-5/509
WEBS 3-6=0/104, 3-5=-556/0

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
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 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 2.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Load case(s) 1, 2, 3 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-51, 3-4=-77, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-87
2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-4=-76, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-174
3) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-50, 3-4=-98, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-152




August 18,2021



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

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | G2 | Half Hip | 4 | 1 | I47495956 |
| | | | | | Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541,

Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:55 Page: 1
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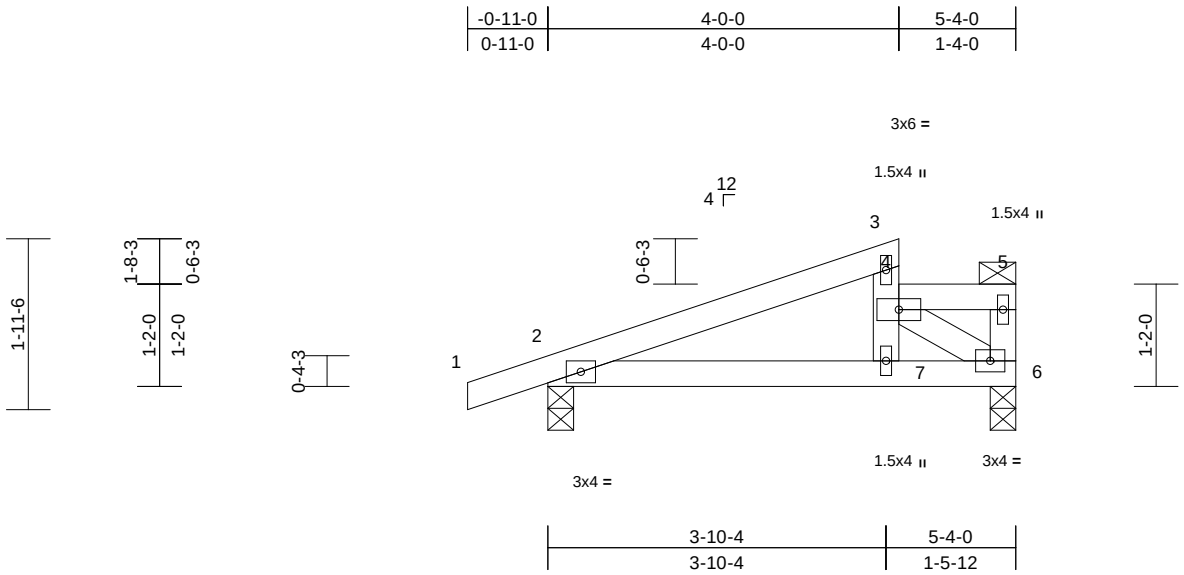



Scale = 1:26.3

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.60 | Vert(LL) | -0.01 | 7-10 | >999 | 360 | MT20 | 244/190 |
| Snow (Pf/Pg) | 20.4/20.0 | Lumber DOL | 1.15 | BC | 0.29 | Vert(CT) | -0.03 | 7-10 | >999 | 240 | | |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.11 | Horz(CT) | 0.00 | 6 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 22 lb | FT = 20% |

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

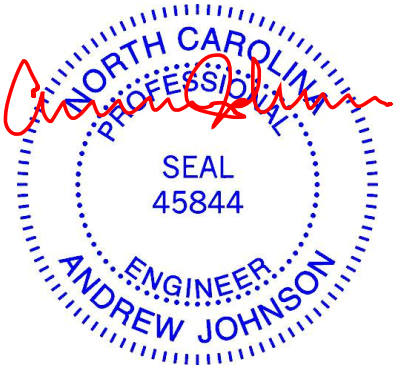
**BRACING**
TOP CHORD Structural wood sheathing directly applied or 5-4-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 4-7, 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 2=264/0-3-8, 6=291/0-3-8
Max Horiz 2=63 (LC 13)
Max Uplift 2=-44 (LC 12)
Max Grav 2=360 (LC 37), 6=395 (LC 3)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-3=-346/0, 4-7=-8/126, 3-4=-171/0, 4-5=-16/17, 5-6=-104/12
BOT CHORD 2-7=-39/306, 6-7=-26/466
WEBS 4-6=-558/18

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-11-0 to 5-2-4 zone; cantilever left and right exposed ; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
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 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 2.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Load case(s) 1, 2, 3 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-51, 4-5=-91, 6-8=-20
Concentrated Loads (lb)
Vert: 3=-87
2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-60, 4-5=-90, 6-8=-20
Concentrated Loads (lb)
Vert: 3=-174
3) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-50, 4-5=-140, 6-8=-20
Concentrated Loads (lb)
Vert: 3=-152




August 18,2021



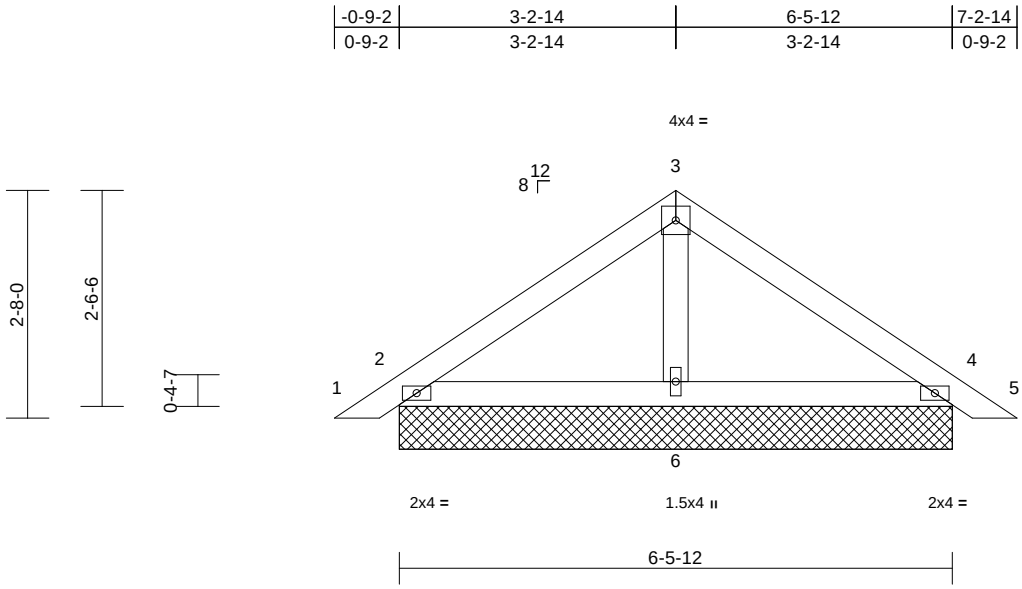
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | JSJ-PINEWOOD A-LOT #45 WFS ROOF |
|---|---|---|---|---|---|
| 22-1333-A | P1 | Piggyback | 14 | 1 | I47495957 Job Reference (optional) |

Riverside Roof Truss, LLC, Danville, Va - 24541,

Run: 8.51 S Jul 28 2021 Print: 8.510 S Jul 28 2021 MiTek Industries, Inc. Tue Aug 17 14:32:56 ID:oXBest6oN4kFbtih7mGfXQzCGlW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1




Scale = 1:27

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.13 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf/Pg) | 15.4/20.0 | Lumber DOL | 1.15 | BC | 0.14 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.02 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2015/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 27 lb | FT = 20% |

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

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

**REACTIONS** (lb/size) 2=156/6-5-12, 4=156/6-5-12, 6=198/6-5-12, 7=156/6-5-12, 11=156/6-5-12
Max Horiz 2=-62 (LC 14), 7=-62 (LC 14)
Max Uplift 2=-39 (LC 16), 4=-47 (LC 17), 7=-39 (LC 16), 11=-47 (LC 17)
Max Grav 2=178 (LC 2), 4=178 (LC 2), 6=221 (LC 2), 7=178 (LC 2), 11=178 (LC 2)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-111/64, 3-4=-109/65, 4-5=0/17
BOT CHORD 2-6=-18/58, 4-6=-8/58
WEBS 3-6=-92/12

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Gable requires continuous bottom chord bearing.
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 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 2, 47 lb uplift at joint 4, 39 lb uplift at joint 2 and 47 lb uplift at joint 4.
12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

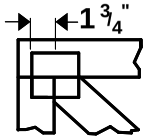

August 18,2021



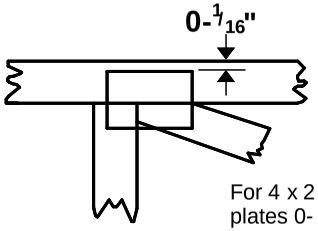
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

# Symbols

## PLATE LOCATION AND ORIENTATION




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




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

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

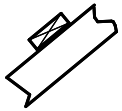
*** Plate location details available in MiTek 20/20 software or upon request.**

## PLATE SIZE

4 x 4

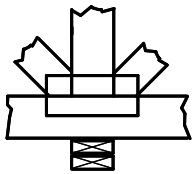
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

## BEARING

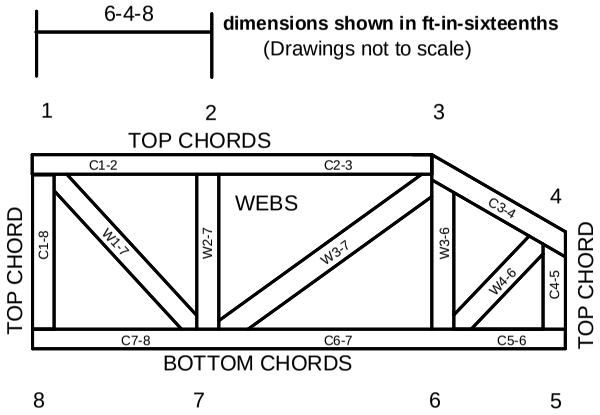


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

**Industry Standards:**

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System




**JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.**

**CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.**

## PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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



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

# General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.