

Mark Morris, P.E.

#126, 1317-M, Summerville, SC 29483

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

AST #: 26919

JOB: 21-2811-R01

JOB NAME: LOT 1158 CARRIAGE CIRCLE

Wind Code: 37

Wind Speed: Vult= 130mph

Exposure Category: B

Mean Roof Height (feet): 23

37 Truss Design(s)

Trusses:

J01, J02, J02A, J03, J04, J05, J06, J07, J09, J10, PB01, PB02, R01, R02, R03, R04, R05, R06, R08, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R23, R24, R25, R26, VT01,



6/4/2021

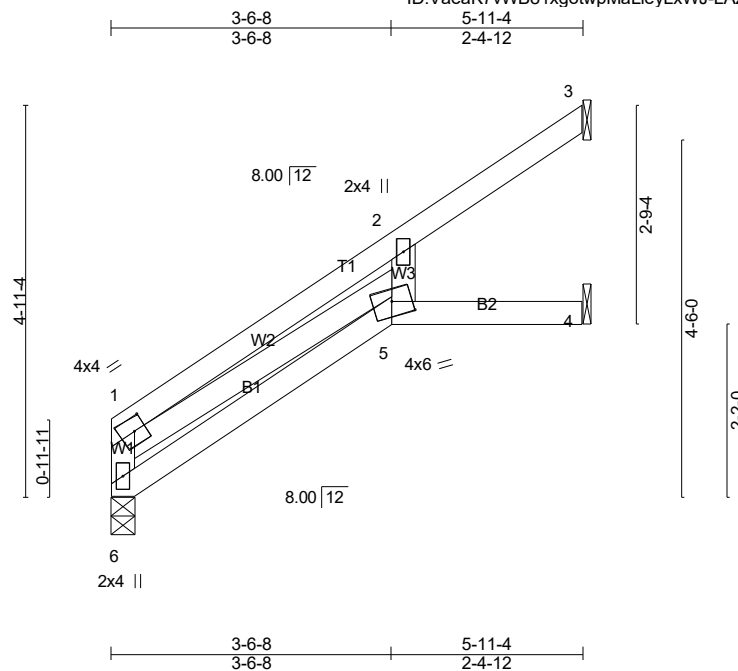
Mark Morris

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

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

| | | | | | |
|--------------------|--------------|-------------------------|----------|----------|--|
| Job 21-2811-R01 | Truss J01 | Truss Type Jack-Open | Qty 2 | Ply 1 | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N Job Reference (optional) # 26919 |
|--------------------|--------------|-------------------------|----------|----------|--|

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| | | | | | |
|---|-----------------------|-------------|----------------------------------|---------------|-------------|
| Plate Offsets (X,Y)-- [1:0-1-12,0-2-0], [5:0-3-0,0-2-4] | | | | | |
| 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 0.78 | Vert(LL) 0.21 5 >330 240 | MT20 | 244/190 |
| Snow (Pf) 20.0 | Lumber DOL 1.15 | BC 0.14 | Vert(CT) -0.26 5 >264 180 | | |
| TCDL 10.0 | Rep Stress Incr YES | WB 0.05 | Horz(CT) 0.17 4 n/a n/a | | |
| BCLL 0.0 * | Code IRC2018/TPI2014 | Matrix-P | | | |
| BCDL 10.0 | | | | Weight: 29 lb | FT = 0% |

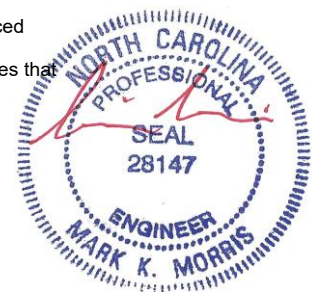
| | |
|-----------------------|--|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP No.2 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.3 | MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide. |

REACTIONS. (lb/size) 6=229/0-3-8 (min. 0-1-8), 3=206/Mechanical, 4=23/Mechanical
 Max Horz 6=127(LC 12)
 Max Uplift 3=-121(LC 12)
 Max Grav 6=229(LC 1), 3=224(LC 19), 4=47(LC 5)

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

- NOTES-** (9-10)
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 121 lb uplift at joint 3.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 - 10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard



6/4/2021

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| | | | | | |
|--------------------------|-------|------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | J02 | Jack-Open | 16 | 1 | |
| Job Reference (optional) | | | | | # 26919 |

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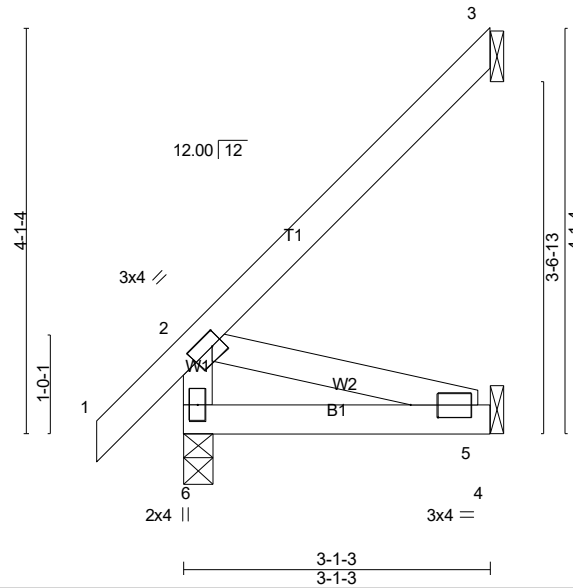


Plate Offsets (X,Y)-- [2:0-1-4,0-1-8], [5:0-3-5,0-1-8]

| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|------------------|----------------------|----------|----------------|----------|--------|-----|---------------|---------|
| TCLL (roof) 20.0 | 2-0-0 | TC 0.15 | Vert(LL) -0.00 | 5-6 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) 20.0 | Plate Grip DOL 1.15 | BC 0.09 | Vert(CT) -0.01 | 5-6 | >999 | 180 | | |
| TCDL 10.0 | Lumber DOL 1.15 | WB 0.04 | Horz(CT) -0.00 | 3 | n/a | n/a | | |
| BCLL 0.0 * | Rep Stress Incr YES | Matrix-P | | | | | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | | | | | Weight: 18 lb | FT = 0% |

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 3-1-3 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

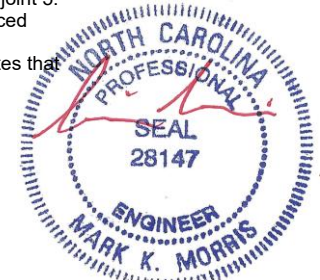
REACTIONS. (lb/size) 6=187/0-3-8 (min. 0-1-8), 3=76/Mechanical, 5=31/Mechanical
 Max Horz6=125(LC 12)
 Max Uplift3=-80(LC 12), 5=-21(LC 12)
 Max Grav6=187(LC 1), 3=89(LC 20), 5=62(LC 5)

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

NOTES- (9-10)

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 80 lb uplift at joint 3 and 21 lb uplift at joint 5.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- 10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard



6/4/2021

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| | | | | | |
|-------------|-------|------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | J02A | Monopitch | 1 | 1 | |

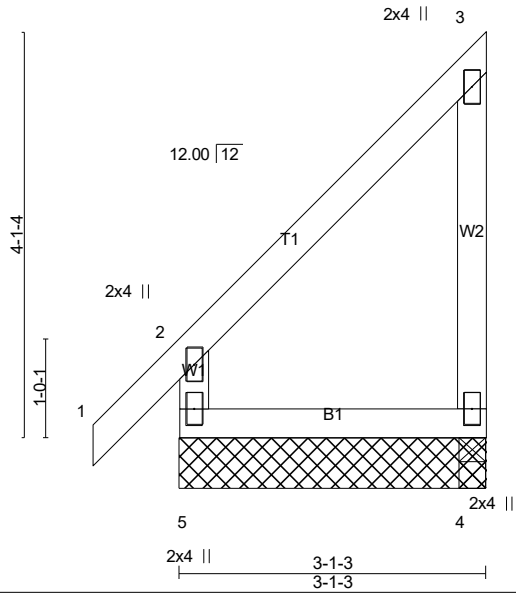
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| | | | | | |
|----------------------|----------------------|-------------|-----------------------------|---------------|-------------|
| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
| TCLL (roof) 20.0 | 2-0-0 | TC 0.14 | in (loc) l/defl L/d | MT20 | 244/190 |
| Snow (Pf) 20.0 | Plate Grip DOL 1.15 | BC 0.09 | Vert(LL) -0.00 4-5 >999 240 | | |
| TCDL 10.0 | Lumber DOL 1.15 | WB 0.00 | Vert(CT) -0.01 4-5 >999 180 | | |
| BCLL 0.0 * | Rep Stress Incr YES | Matrix-R | Horz(CT) -0.00 4 n/a n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | | Weight: 19 lb | FT = 0% |

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

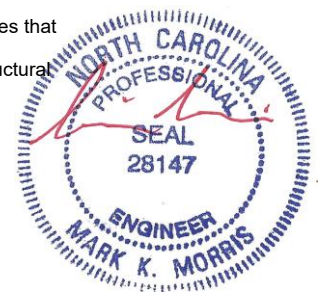
BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-1-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 4=101/3-1-3 (min. 0-1-8), 4=101/3-1-3 (min. 0-1-8), 5=185/3-1-3 (min. 0-1-8)
Max Horz 5=122(LC 12)
Max Uplift 4=99(LC 12)
Max Grav 4=125(LC 20), 4=101(LC 1), 5=185(LC 1)

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

- NOTES-** (8-9)
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 99 lb uplift at joint 4.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 - 9) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

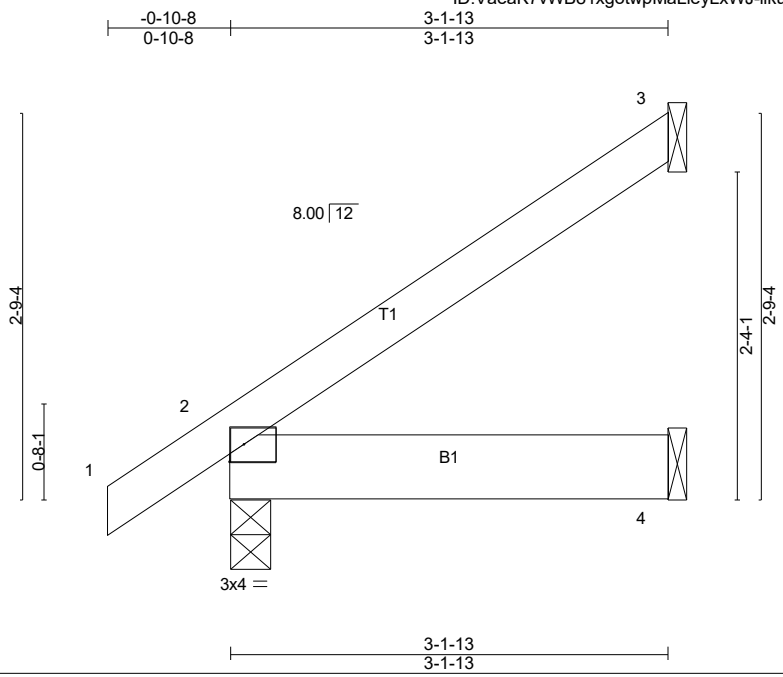


6/4/2021

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| | | | | | |
|--------------------|--------------|-------------------------|----------|----------|---|
| Job 21-2811-R01 | Truss J03 | Truss Type Jack-Open | Qty 1 | Ply 1 | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N.C. Job Reference (optional) # 26919 |
|--------------------|--------------|-------------------------|----------|----------|---|

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|----------------------|----------------------|-------------|-----------------------------|---------------|-------------|
| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
| TCLL (roof) 20.0 | 2-0-0 | TC 0.13 | in (loc) l/defl L/d | MT20 | 244/190 |
| Snow (Pf) 20.0 | Plate Grip DOL 1.15 | BC 0.04 | Vert(LL) -0.00 2-4 >999 240 | | |
| TCDL 10.0 | Lumber DOL 1.15 | WB 0.00 | Vert(CT) -0.00 2-4 >999 180 | | |
| BCLL 0.0 * | Rep Stress Incr YES | Matrix-P | Horz(CT) -0.00 3 n/a n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | | Weight: 15 lb | FT = 0% |

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-1-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

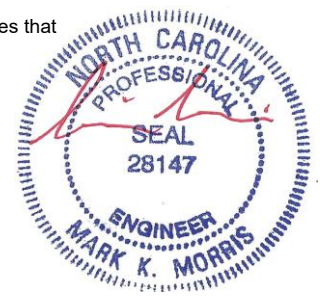
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 3=78/Mechanical, 2=189/0-3-8 (min. 0-1-8), 4=29/Mechanical
Max Horz 2=93(LC 12)
Max Uplift 3=-67(LC 12), 2=-16(LC 12)
Max Grav 3=87(LC 20), 2=189(LC 1), 4=59(LC 5)

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

- NOTES-** (9-10)
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 3 and 16 lb uplift at joint 2.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 - 10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

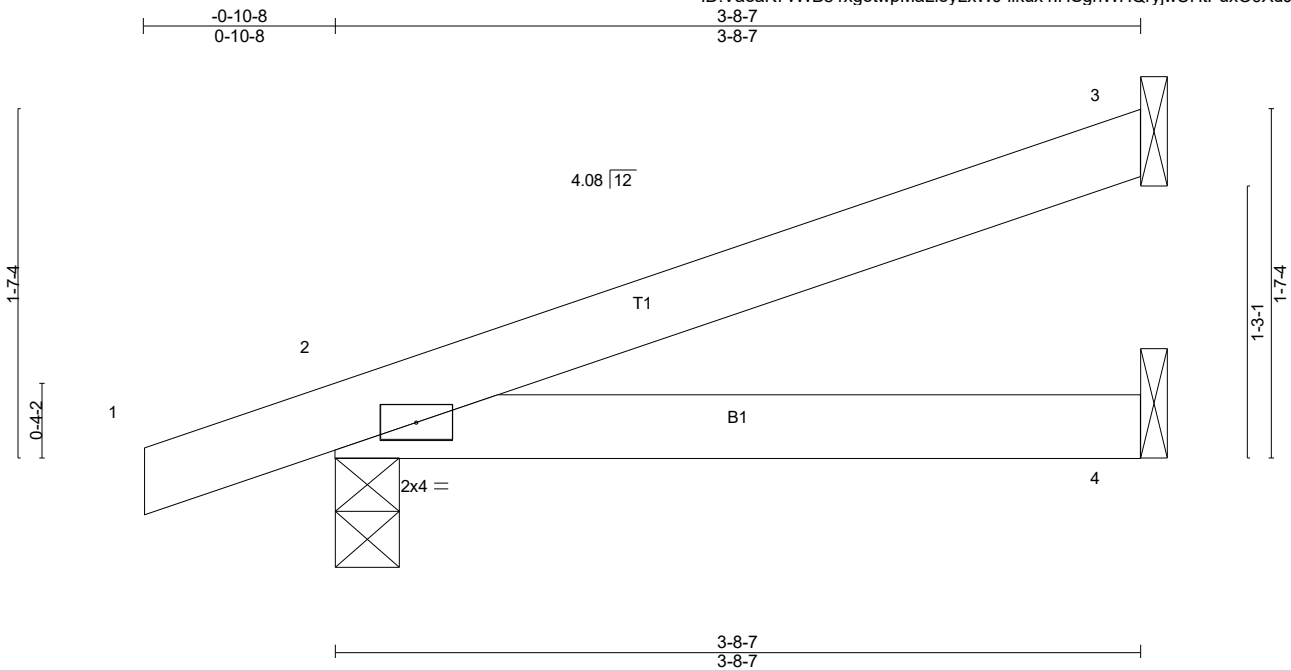


6/4/2021

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| | | | | | |
|--------------------------|--------------|-------------------------|----------|----------|--|
| Job 21-2811-R01 | Truss J04 | Truss Type Jack-Open | Qty 1 | Ply 1 | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| Job Reference (optional) | | | | | # 26919 |

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| | | | | | |
|----------------------|----------------------|-------------|-----------------------------|---------------|-------------|
| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
| TCLL (roof) 20.0 | 2-0-0 | TC 0.27 | in (loc) l/defl L/d | MT20 | 244/190 |
| Snow (Pf) 20.0 | Plate Grip DOL 1.15 | BC 0.14 | Vert(LL) -0.01 2-4 >999 240 | | |
| TCDL 10.0 | Lumber DOL 1.15 | WB 0.00 | Vert(CT) -0.02 2-4 >999 180 | | |
| BCLL 0.0 * | Rep Stress Incr YES | Matrix-P | Horz(CT) -0.00 3 n/a n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | | Weight: 13 lb | FT = 0% |

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

BRACING-
 TOP CHORD
 BOT CHORD

Structural wood sheathing directly applied or 3-8-7 oc purlins.
 Rigid ceiling directly applied or 10-0-0 oc bracing.

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

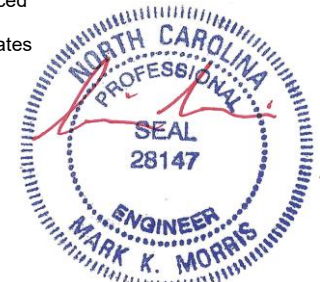
REACTIONS. (lb/size) 3=96/Mechanical, 2=210/0-3-8 (min. 0-1-8), 4=35/Mechanical
 Max Horz 2=58(LC 10)
 Max Uplift 3=-50(LC 14), 2=-64(LC 10)
 Max Grav 3=138(LC 21), 2=287(LC 21), 4=70(LC 7)

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

NOTES- (10-11)

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 50 lb uplift at joint 3 and 64 lb uplift at joint 2.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- 11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard



6/4/2021

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

| | | | | | |
|-------------|-------|------------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | J05 | Jack-Open Girder | 1 | 1 | |
| | | | | | # 26919 |

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8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Jun 5 17:24:02 2021 Page 1

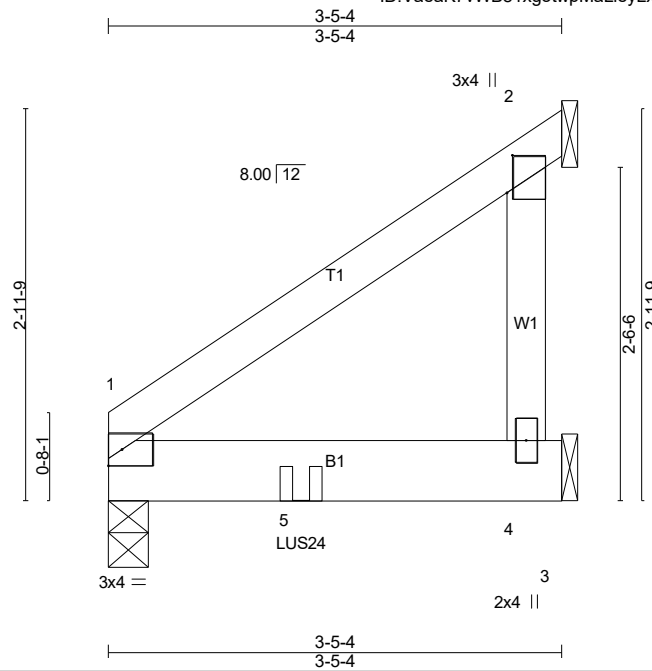


Plate Offsets (X,Y)-- [2:0-3-7,0-0-8]

| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|------------------|----------------------|----------|----------------|----------|--------|-----|---------------|---------|
| TCLL (roof) 20.0 | 2-0-0 | TC 0.20 | Vert(LL) -0.00 | 1-4 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) 20.0 | Plate Grip DOL 1.15 | BC 0.24 | Vert(CT) -0.01 | 1-4 | >999 | 180 | | |
| TCDL 10.0 | Lumber DOL 1.15 | WB 0.00 | Horz(CT) -0.00 | 2 | n/a | n/a | | |
| BCLL 0.0 * | Rep Stress Incr NO | Matrix-P | | | | | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | | | | | Weight: 18 lb | FT = 0% |

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 3-5-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size) 1=262/0-3-8 (min. 0-1-8), 4=145/Mechanical, 2=91/Mechanical
Max Horz 1=85(LC 10)
Max Uplift 1=-12(LC 10), 2=-73(LC 10)
Max Grav 1=262(LC 1), 4=145(LC 1), 2=99(LC 17)

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

NOTES- (12-13)

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 1 and 73 lb uplift at joint 2.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 9) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 1-5-8 from the left end to connect truss(es) R19 (1 ply 2x4 SP) to back face of bottom chord.
- 10) Fill all nail holes where hanger is in contact with lumber.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 12) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- 13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 1-3=-20
Concentrated Loads (lb)
Vert: 5=-251(B)



6/4/2021

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| | | | | | | |
|--------------------|--------------|-------------------------------|----------|----------|---|--|
| Job 21-2811-R01 | Truss J06 | Truss Type Half Hip Girder | Qty 1 | Ply 1 | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, NC | Job Reference (optional) # 26919 |
|--------------------|--------------|-------------------------------|----------|----------|---|--|

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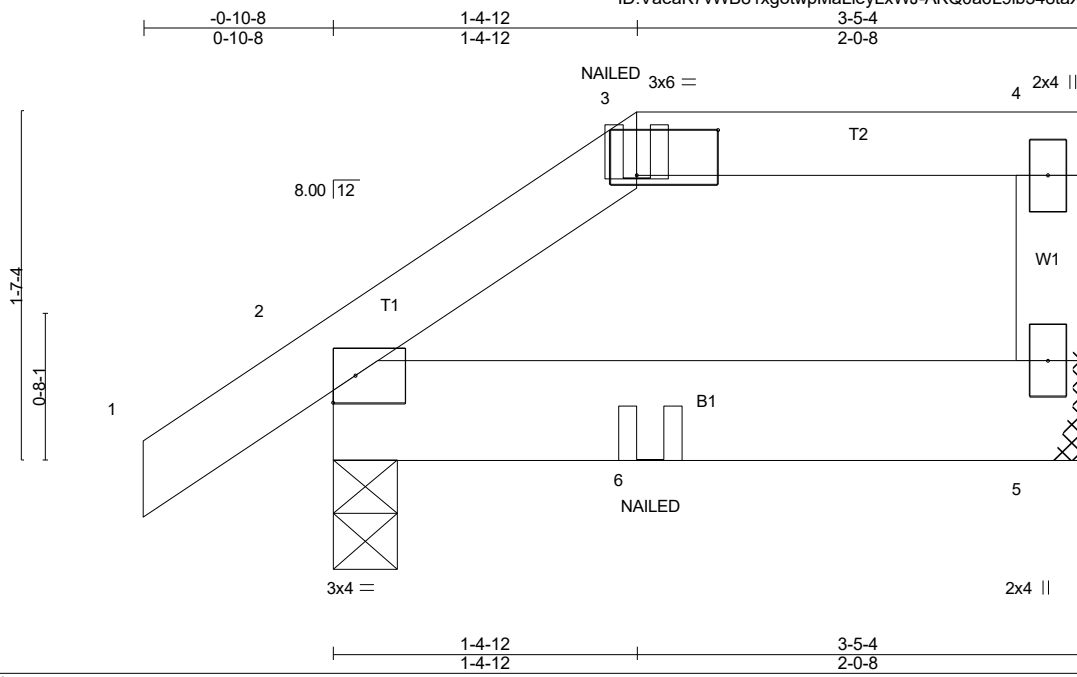


Plate Offsets (X,Y)-- [3:0-4-8,0-2-8]

| LOADING (psf) | SPACING- | CSI. | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|------------------|----------------------|----------|----------------|-----|-------|--------|-----|---------------|---------|
| TCLL (roof) 20.0 | 2-0-0 | TC 0.18 | Vert(LL) -0.00 | 2-5 | >999 | 240 | | MT20 | 244/190 |
| Snow (Pf) 20.0 | Plate Grip DOL 1.15 | BC 0.07 | Vert(CT) -0.00 | 2-5 | >999 | 180 | | | |
| TCDL 10.0 | Lumber DOL 1.15 | WB 0.00 | Horz(CT) 0.00 | 5 | n/a | n/a | | | |
| BCLL 0.0 * | Rep Stress Incr NO | Matrix-R | | | | | | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | | | | | | Weight: 17 lb | FT = 0% |

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 3-5-4 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 5=153/Mechanical, 2=253/0-3-8 (min. 0-1-8)
 Max Horz 2=48(LC 7)
 Max Uplift 5=-38(LC 7), 2=-52(LC 10)
 Max Grav 5=157(LC 26), 2=253(LC 1)

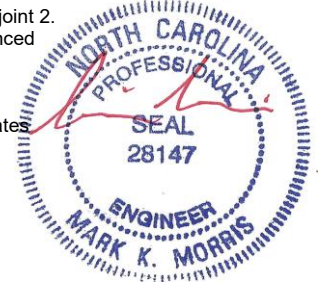
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES- (13-14)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 5 and 52 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-3=-60, 3-4=-60, 2-5=-20



6/4/2021

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| | | | | | |
|-------------|-------|-----------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | J06 | Half Hip Girder | 1 | 1 | Job Reference (optional) # 26919 |

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LOAD CASE(S) Standard
 Concentrated Loads (lb)
 Vert: 3--78(F) 6--15(F)



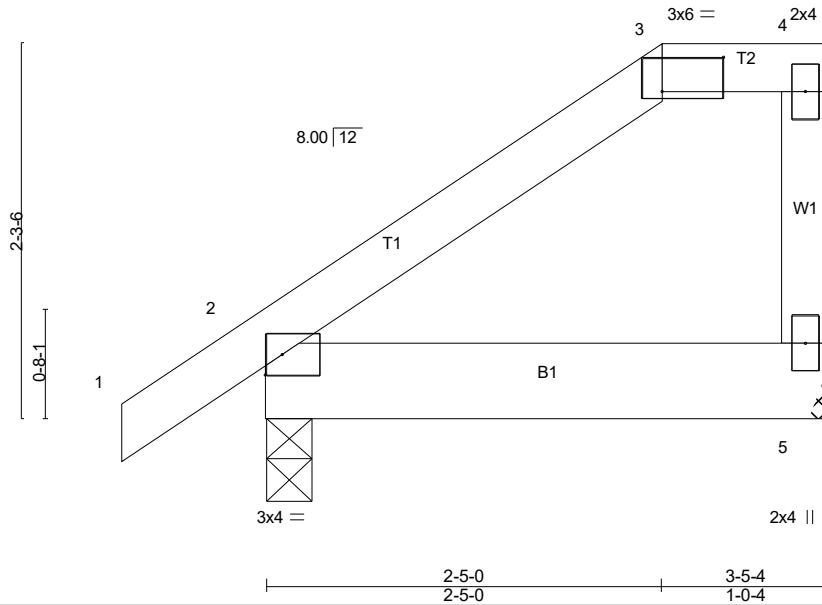
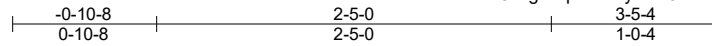
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| | | | | | |
|-------------|-------|------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | J07 | Half Hip | 1 | 1 | |
| | | | | | # 26919 |

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Scale = 1:14.0

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

| LOADING (psf) | SPACING- | CSI. | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|------------------|----------------------|----------|----------|-------|-------|--------|-----|---------------|---------|
| TCLL (roof) 20.0 | 2-0-0 | TC 0.11 | Vert(LL) | -0.00 | 2-5 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) 20.0 | Plate Grip DOL 1.15 | BC 0.05 | Vert(CT) | -0.00 | 2-5 | >999 | 180 | | |
| TCDL 10.0 | Lumber DOL 1.15 | WB 0.00 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCLL 0.0 * | Rep Stress Incr YES | Matrix-R | | | | | | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | | | | | | | |
| | | | | | | | | Weight: 18 lb | FT = 0% |

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 3-5-4 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

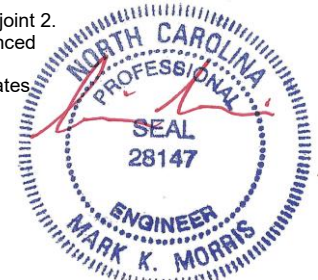
REACTIONS. (lb/size) 5=116/Mechanical, 2=197/0-3-8 (min. 0-1-8)
 Max Horz 2=78(LC 12)
 Max Uplift 5=-30(LC 12), 2=-27(LC 12)

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

NOTES- (11-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 5 and 27 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard



6/4/2021

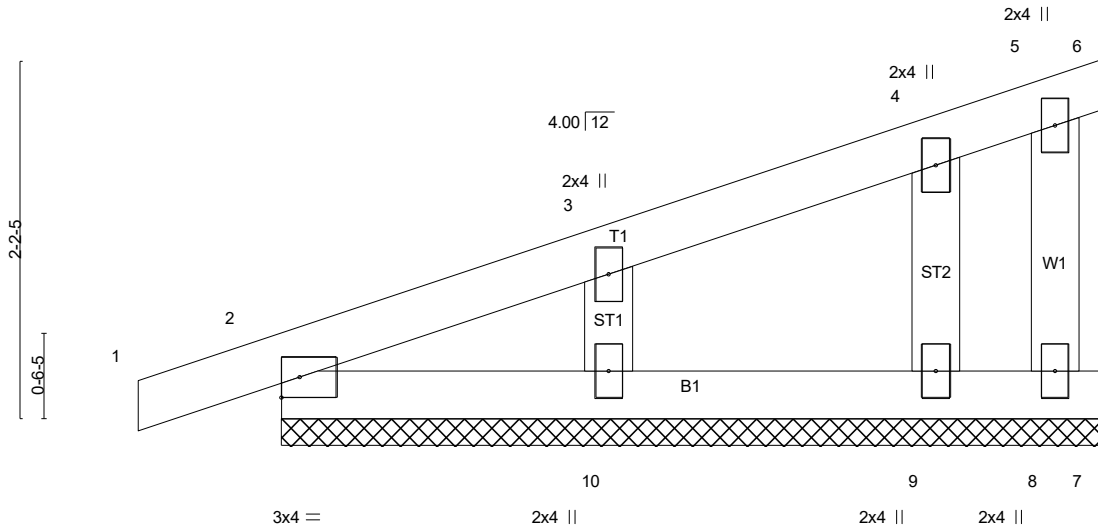
Warning!—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer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

| | | | | | |
|-------------|-------|------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | J09 | GABLE | 1 | 1 | |
| | | | | | # 26919 |

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Scale = 1:14.1



| | | | | | |
|----------------------|----------------------|-------------|--------------------------|---------------|-------------|
| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
| TCLL (roof) 20.0 | 2-0-0 | TC 0.08 | in (loc) l/def L/d | MT20 | 244/190 |
| Snow (Pf) 20.0 | Plate Grip DOL 1.15 | BC 0.06 | Vert(LL) 0.00 1 n/r 180 | | |
| TCDL 10.0 | Lumber DOL 1.15 | WB 0.03 | Vert(CT) -0.00 1 n/r 80 | | |
| BCLL 0.0 * | Rep Stress Incr YES | Matrix-P | Horz(CT) -0.00 6 n/a n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | | Weight: 22 lb | FT = 0% |

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

BRACING-
 TOP CHORD
 BOT CHORD

Structural wood sheathing directly applied or 5-0-0 oc purlins.
 Rigid ceiling directly applied or 10-0-0 oc bracing.

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

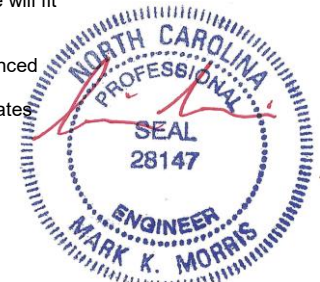
REACTIONS. All bearings 5-0-0.
 (lb) - Max Horz 2=71(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 6, 2, 10, 9, 8
 Max Grav All reactions 250 lb or less at joint(s) 6, 2, 7, 10, 9, 8

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

NOTES- (12-13)

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2, 10, 9, 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

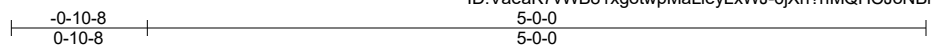


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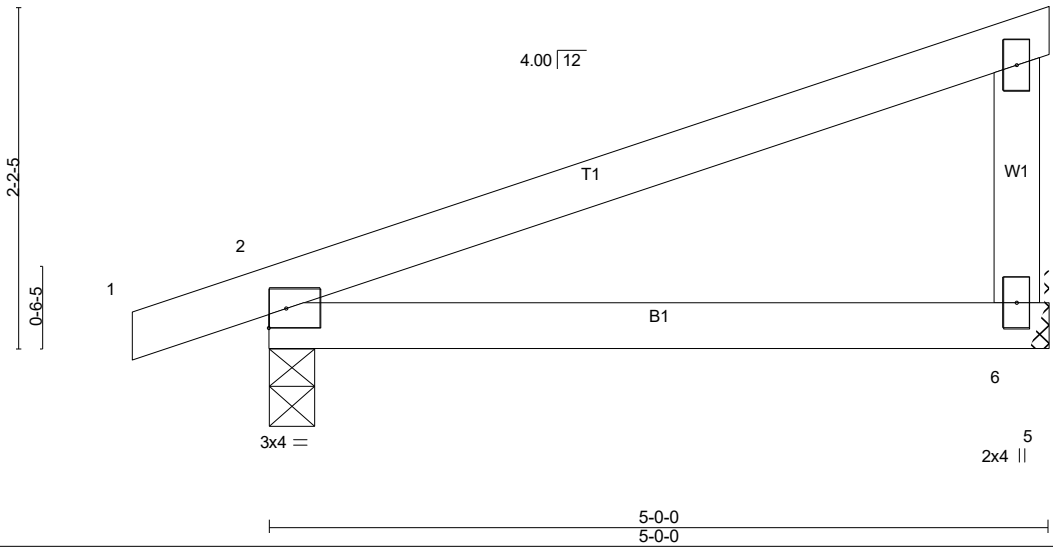
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| | | | | | |
|--------------------|--------------|-------------------------|----------|----------|--|
| Job 21-2811-R01 | Truss J10 | Truss Type Monopitch | Qty 4 | Ply 1 | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| | | | | | # 26919 |

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Scale = 1:14.8



| | | | | | |
|----------------------|----------------------|-------------|-----------------------------|---------------|-------------|
| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
| TCLL (roof) 20.0 | 2-0-0 | TC 0.55 | in (loc) l/defl L/d | MT20 | 244/190 |
| Snow (Pf) 20.0 | Plate Grip DOL 1.15 | BC 0.26 | Vert(LL) -0.03 2-6 >999 240 | | |
| TCDL 10.0 | Lumber DOL 1.15 | WB 0.00 | Vert(CT) -0.06 2-6 >999 180 | | |
| BCLL 0.0 * | Rep Stress Incr YES | Matrix-P | Horz(CT) 0.00 n/a n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | | Weight: 19 lb | FT = 0% |

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

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

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

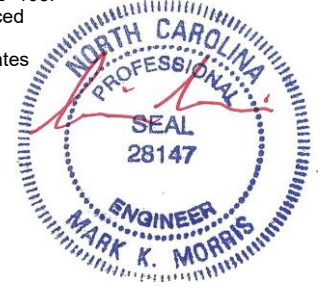
REACTIONS. (lb/size) 6=196/Mechanical, 2=253/0-3-8 (min. 0-1-8)
 Max Horz 2=71(LC 10)
 Max Uplift 6=-88(LC 10), 2=-105(LC 10)
 Max Grav 6=262(LC 21), 2=348(LC 21)

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

NOTES- (10-11)

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 2=105.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- 11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

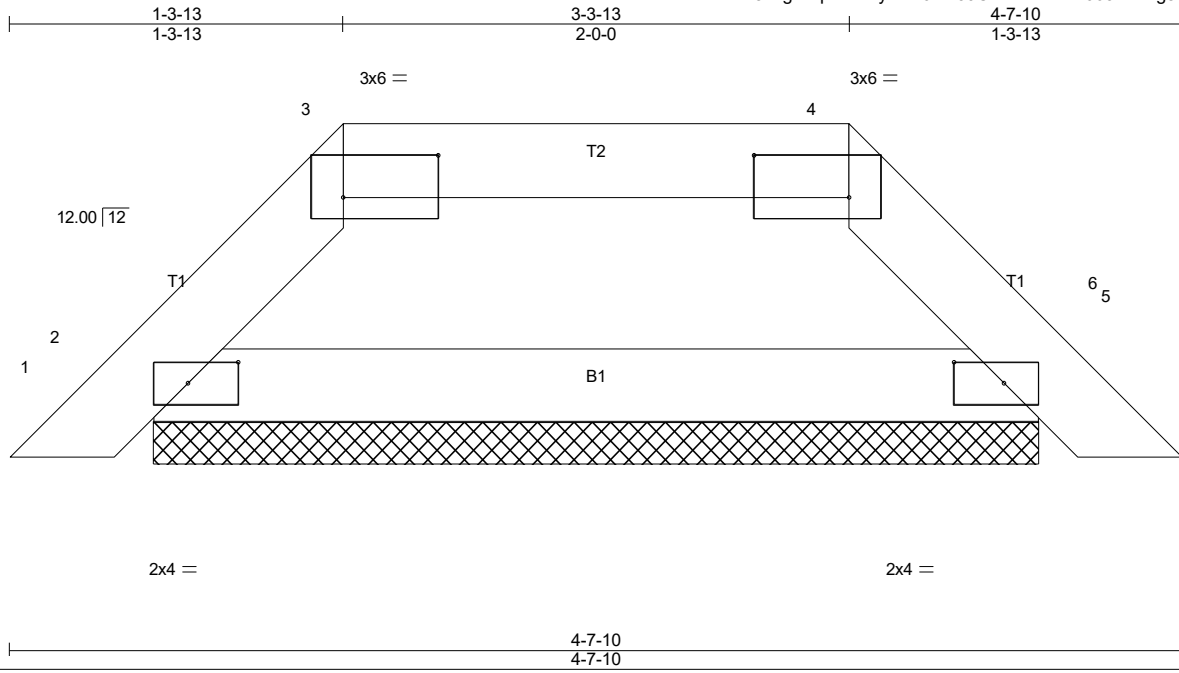


6/4/2021

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

| | | | | | |
|-------------|-------|------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | PB01 | Piggyback | 1 | 1 | |
| | | | | | # 26919 |

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Jun 5 17:24:06 2021 Page 1
 ID:VaeaK7vWB81xgotwpMaLleyLxWJ-av59C7N22WRf?LJ63Aah7g819Qa9iz6dgTQdMbz9HG7



Scale = 1:9.1

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

| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|------------------|----------------------|----------|----------|----------|--------|-----|---------------|---------|
| TCLL (roof) 20.0 | 2-0-0 | TC 0.06 | Vert(LL) | 0.00 | 5 | n/r | MT20 | 244/190 |
| Snow (Pf) 20.0 | Plate Grip DOL 1.15 | BC 0.14 | Vert(CT) | 0.00 | 5 | n/r | | |
| TCDL 10.0 | Lumber DOL 1.15 | WB 0.00 | Horz(CT) | 0.00 | 5 | n/a | | |
| BCLL 0.0 * | Rep Stress Incr YES | Matrix-R | | | | | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | | | | | Weight: 14 lb | FT = 0% |

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

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

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

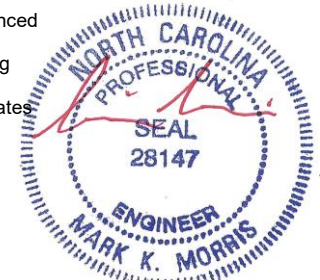
REACTIONS. (lb/size) 2=162/3-6-0 (min. 0-1-8), 5=162/3-6-0 (min. 0-1-8)
 Max Horz 2=-27(LC 10)
 Max Uplift 2=-17(LC 12), 5=-17(LC 13)

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

NOTES- (12-13)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

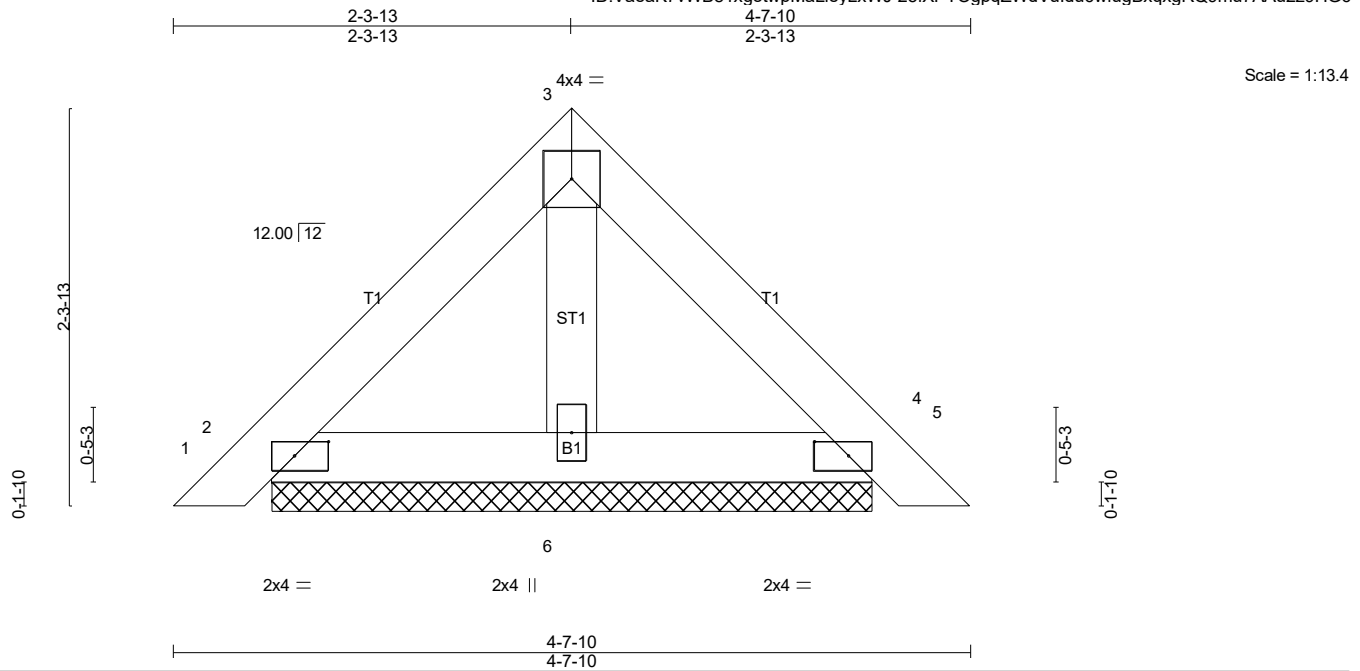


6/4/2021

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| | | | | | | |
|--------------------|---------------|-------------------------|----------|----------|--|--|
| Job 21-2811-R01 | Truss PB02 | Truss Type Piggyback | Qty 8 | Ply 1 | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N | Job Reference (optional) # 26919 |
|--------------------|---------------|-------------------------|----------|----------|--|--|

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Scale = 1:13.4

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

| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|------------------|----------------------|-------|----------|---------------|----------|--------|-----|---------------|---------|
| TCLL (roof) 20.0 | Plate Grip DOL 1.15 | | TC 0.06 | Vert(LL) 0.00 | 4 | n/r | 180 | MT20 | 244/190 |
| Snow (Pf) 20.0 | Lumber DOL 1.15 | | BC 0.05 | Vert(CT) 0.00 | 5 | n/r | 80 | | |
| TCDL 10.0 | Rep Stress Incr YES | | WB 0.01 | Horz(CT) 0.00 | 4 | n/a | n/a | | |
| BCLL 0.0 * | Code IRC2018/TPI2014 | | Matrix-P | | | | | | |
| BCDL 10.0 | | | | | | | | Weight: 17 lb | FT = 0% |

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

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

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

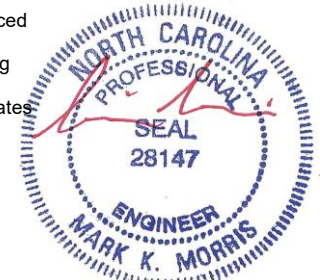
REACTIONS. (lb/size) 2=108/3-6-0 (min. 0-1-8), 4=108/3-6-0 (min. 0-1-8), 6=108/3-6-0 (min. 0-1-8)
Max Horz 2=-48(LC 10)
Max Uplift 2=-26(LC 13), 4=-31(LC 13)
Max Grav 2=108(LC 1), 4=108(LC 1), 6=109(LC 5)

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

NOTES- (11-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard



6/4/2021

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| | | | | | |
|-------------|-------|------------------------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | R01 | Roof Special Supported Gable | 1 | 1 | |
| | | | | | # 26919 |

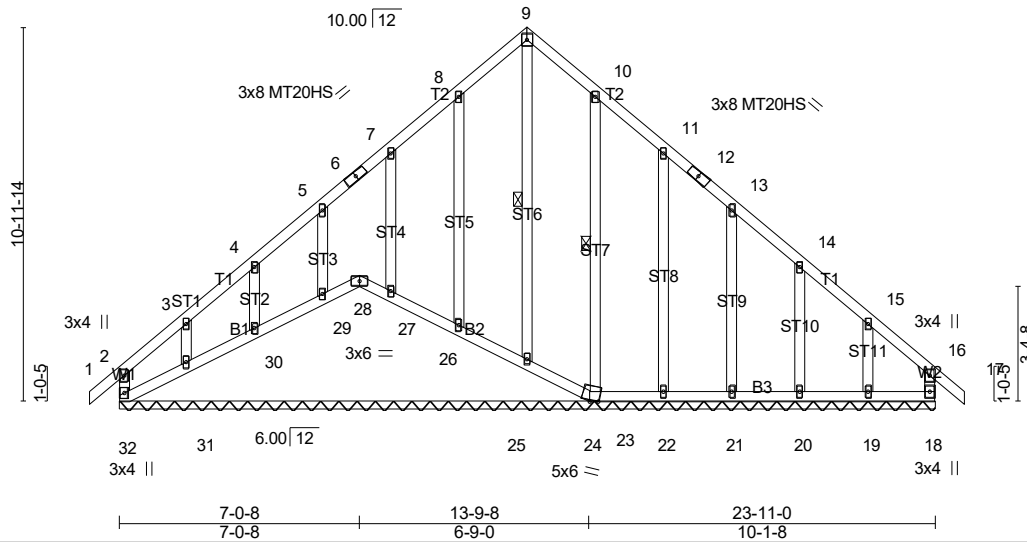
8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Jun 5 17:24:08 2021 Page 1

ID:VaeaK7vWB81xgotwpMaLleyLxWJ-WHDvdpOla7hNEfSUBbd9C5DJQEG1ArNw7nvjQUz9HG5

-0-10-8 11-11-8 23-11-0 24-9-8
 0-10-8 11-11-8 11-11-8 0-10-8

4x4 =

Scale = 1:67.6



| | | | | | |
|----------------------|----------------------|-------------|---------------------------|----------------|-------------|
| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
| TCLL (roof) 20.0 | Plate Grip DOL 1.15 | TC 0.20 | in (loc) l/defl L/d | MT20 244/190 | |
| Snow (Pf) 20.0 | Lumber DOL 1.15 | BC 0.11 | Vert(LL) -0.00 17 n/r 180 | MT20HS 187/143 | |
| TCDL 10.0 | Rep Stress Incr YES | WB 0.14 | Vert(CT) -0.00 17 n/r 80 | | |
| BCLL 0.0 * | Code IRC2018/TPI2014 | Matrix-R | Horz(CT) 0.01 18 n/a n/a | | |
| BCDL 10.0 | | | | Weight: 170 lb | FT = 0% |

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

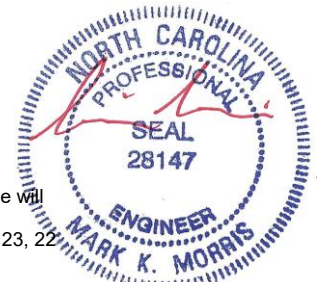
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
 WEBS 1 Row at midpt 9-25, 10-23

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

REACTIONS. All bearings 23-11-0.
 (lb) - Max Horz 32=-274(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 26, 27, 29, 30, 23, 22, 21, 20 except 32=-211(LC 8), 18=-107(LC 9), 28=-115(LC 11), 24=-134(LC 20), 31=-177(LC 12), 19=-163(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 18, 28, 24, 26, 27, 29, 30, 31, 20, 19 except 32=280(LC 21), 25=320(LC 13), 23=314(LC 21), 22=262(LC 21), 21=271(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 8-9=-203/282, 9-10=-203/270
 WEBS 9-25=-298/160

- NOTES-** (16-17)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - All plates are MT20 plates unless otherwise indicated.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 26, 27, 29, 30, 23, 22, 21, 20 except (jt=lb) 32=211, 18=107, 28=115, 24=134, 31=177, 19=163.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 28, 25, 26, 27, 29, 30, 31.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



6/4/2021

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

| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
|-------------|-------|------------------------------|-----|-----|--|
| 21-2811-R01 | R01 | Roof Special Supported Gable | 1 | 1 | Job Reference (optional) # 26919 |

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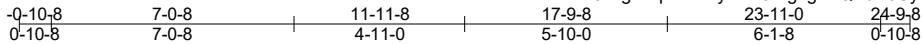
- 16) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- 17) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard



6/4/2021

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Scale = 1:66.3

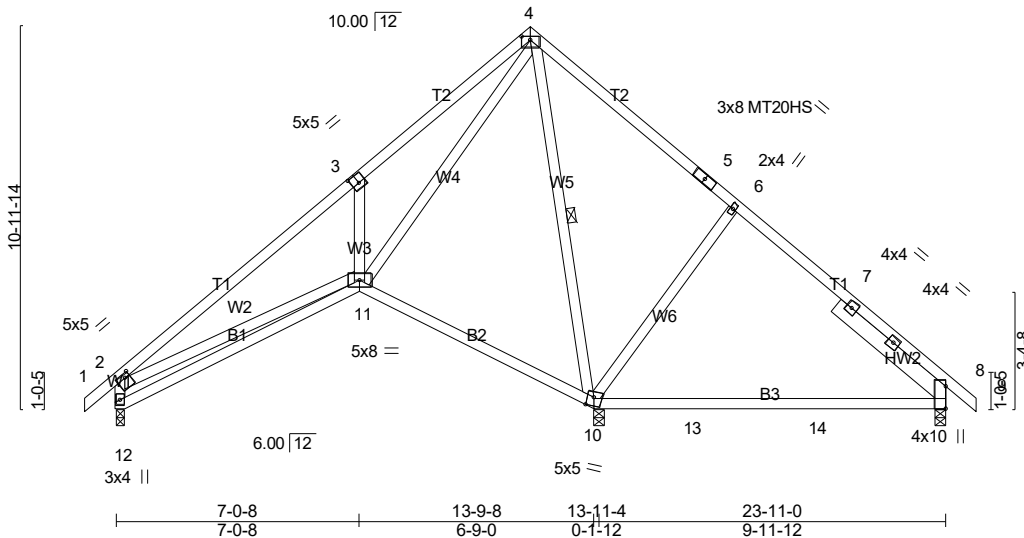


Plate Offsets (X,Y)-- [2:0-1-12,0-1-8], [3:0-2-8,0-3-0], [4:0-3-0,0-1-4], [10:0-2-4,0-3-0]

| | | | | | | | | | |
|----------------------|-------|----------------------|-------|-------------|------|--------------|--------|---------------|------------------------|
| LOADING (psf) | | SPACING- | | CSI. | | DEFL. | | PLATES | GRIP |
| TCLL (roof) | 20.0 | Plate Grip DOL | 2-0-0 | TC | 0.77 | in (loc) | l/defl | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.87 | Vert(LL) | >298 | MT20HS | 187/143 |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.47 | Vert(CT) | >190 | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-SH | | Horz(CT) | 0.05 | | |
| BCDL | 10.0 | | | | | | | | Weight: 153 lb FT = 0% |

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2 *Except*
 B3: 2x4 SP No.1
 WEBS 2x4 SP No.3
 SLIDER Right 2x6 SP No.2 - 4-1-11

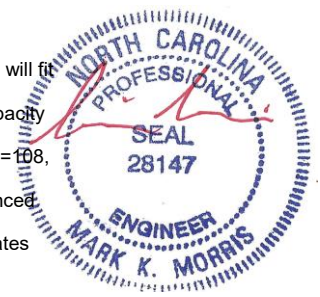
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
 WEBS 1 Row at midpt 4-10

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

REACTIONS. (lb/size) 12=483/0-3-8 (min. 0-1-8), 8=305/0-3-8 (min. 0-1-8), 10=1227/0-3-8 (min. 0-1-8)
 Max Horz 12=-264(LC 10)
 Max Uplift 12=-108(LC 13), 8=-203(LC 8), 10=-207(LC 12)
 Max Grav 12=483(LC 1), 8=450(LC 33), 10=1227(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-637/59, 3-4=-651/287, 4-5=-55/351, 2-12=-560/215
 BOT CHORD 11-12=-338/560
 WEBS 3-11=-413/319, 4-11=-306/953, 4-10=-841/132, 6-10=-392/250, 2-11=-91/266

- NOTES-** (11-12)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TC LL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 5) All plates are MT20 plates unless otherwise indicated.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 8) Bearing at joint(s) 12 considers parallel to grain value using ANSII/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=108, 8=203, 10=207.
 - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSII/TPI 1.
 - 11) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 - 12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

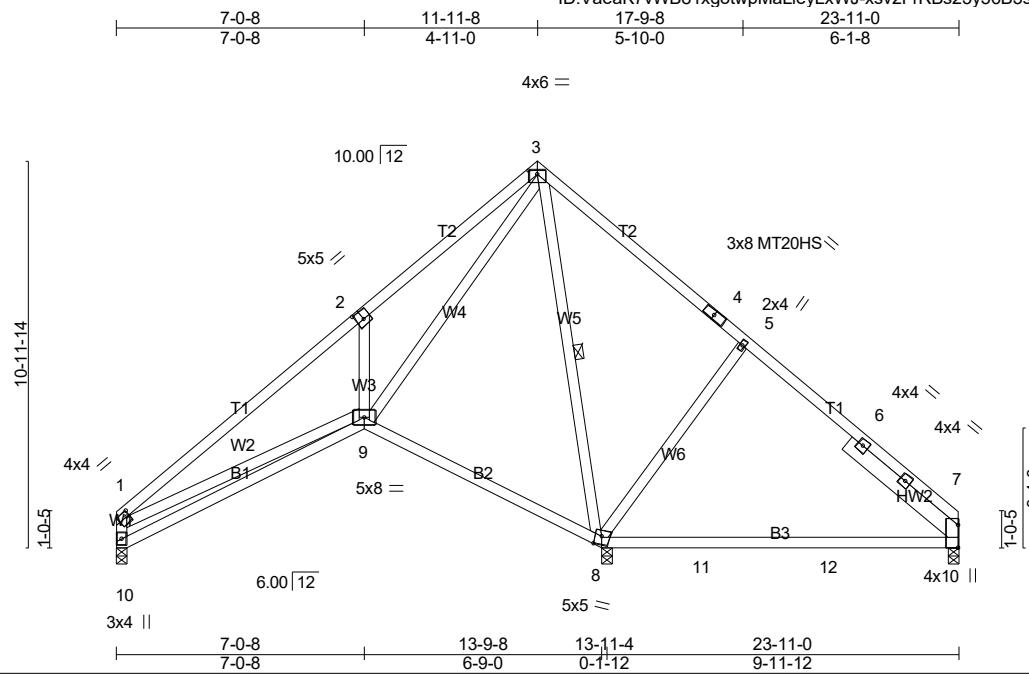


6/4/2021

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

| | | | | | | |
|--------------------|--------------|----------------------------|----------|----------|---|---------|
| Job 21-2811-R01 | Truss R03 | Truss Type ROOF SPECIAL | Qty 3 | Ply 1 | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, NC | # 26919 |
|--------------------|--------------|----------------------------|----------|----------|---|---------|

ID:VaeaK7vWB81xgotwpMaLleyLxWJ-xsv2FrRBs23y56B3skAsqkrhKR6vN7wMpl8O1pz9HG2
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Scale = 1:65.5

| | | | | | |
|---|----------------------|-------------|-----------------------------|----------------|-------------|
| Plate Offsets (X,Y)-- [1:0-1-0,0-1-12], [2:0-2-8,0-3-0], [3:0-3-0,0-1-4], [8:0-2-4,0-3-0] | | | | | |
| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
| TCLL (roof) 20.0 | 2-0-0 | TC 0.80 | in (loc) l/defl L/d | MT20 | 244/190 |
| Snow (Pf) 20.0 | Plate Grip DOL 1.15 | BC 0.87 | Vert(LL) -0.41 7-8 >298 240 | MT20HS | 187/143 |
| TCDL 10.0 | Lumber DOL 1.15 | WB 0.48 | Vert(CT) -0.65 7-8 >189 180 | | |
| BCLL 0.0 * | Rep Stress Incr YES | Matrix-SH | Horz(CT) 0.05 7 n/a n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | | Weight: 150 lb | FT = 0% |

| | |
|---|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 5-11-12 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP No.2 *Except* B3: 2x4 SP No.1 | BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. |
| WEBS 2x4 SP No.3 | WEBS 1 Row at midpt 3-8 |
| SLIDER Right 2x6 SP No.2 - 4-1-11 | |

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

| | |
|---|--|
| REACTIONS. (lb/size) | 10=414/0-3-8 (min. 0-1-8), 7=244/0-3-8 (min. 0-1-8), 8=1244/0-3-8 (min. 0-1-8) |
| | Max Horz 10=-257(LC 10) |
| | Max Uplift 10=-100(LC 13), 7=-200(LC 8), 8=-221(LC 12) |
| | Max Grav 10=431(LC 20), 7=404(LC 32), 8=1244(LC 1) |
| FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. | |
| TOP CHORD | 1-2=-629/43, 2-3=-653/281, 3-4=-54/362, 1-10=-455/149 |
| BOT CHORD | 9-10=-297/471 |
| WEBS | 2-9=-437/336, 3-9=-307/964, 3-8=-852/142, 5-8=-395/252, 1-9=-38/281 |

- NOTES-** (10-11)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10 except (jt=lb) 7=200, 8=221.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.



LOAD CASE(S) Standard 6/4/2021

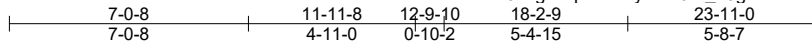
Warning!—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer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

| | | | | | | |
|--------------------|--------------|----------------------------|----------|----------|---|---------|
| Job 21-2811-R01 | Truss R04 | Truss Type Roof Special | Qty 1 | Ply 1 | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, NC | # 26919 |
|--------------------|--------------|----------------------------|----------|----------|---|---------|

Atlantic Building Components, Moncks Corner, South Carolina

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3x6 =

Scale = 1:67.9

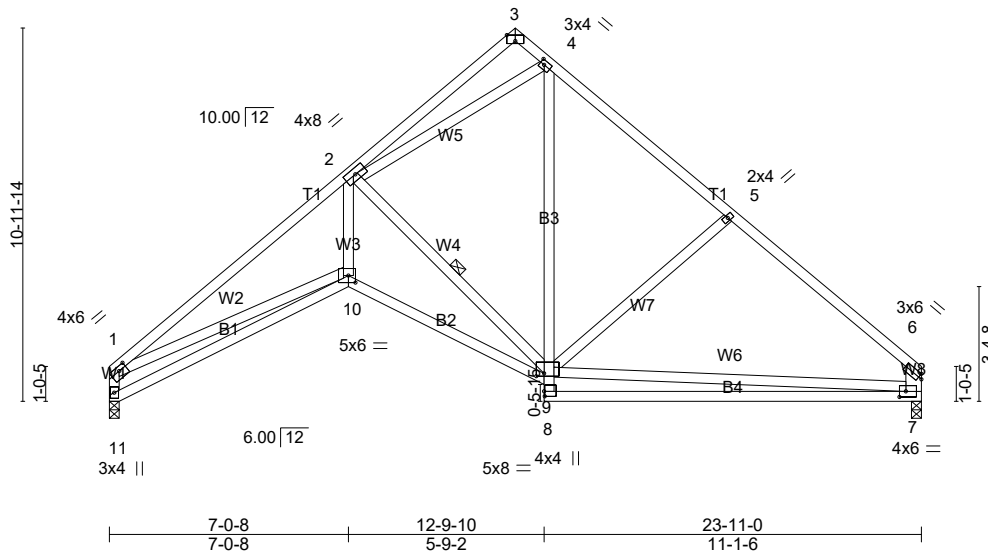


Plate Offsets (X,Y)-- [1:0-2-12,0-1-8], [3:0-3-0,Edge], [4:0-1-8,0-1-8], [7:0-2-4,0-2-0], [8:0-1-12,0-0-4], [9:0-2-12,0-1-0], [10:0-2-8,0-2-8]

| | | | | | | | | | | |
|----------------------|----------------------|-------|-------------|--------------|-------|-------|--------|-----|----------------|-------------|
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.75 | Vert(LL) | -0.40 | 7-8 | >701 | 240 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.95 | Vert(CT) | -0.78 | 7-8 | >363 | 180 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.61 | Horz(CT) | 0.17 | 7 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-SH | | | | | | Weight: 164 lb | FT = 0% |

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.2 *Except*
B3: 2x4 SP No.3
WEBS 2x4 SP No.3 *Except*
W8: 2x6 SP No.2

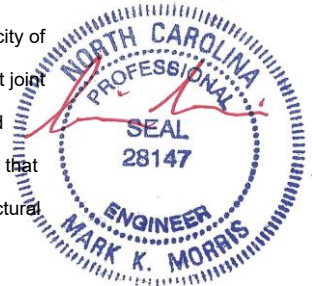
BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-7-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 7-8.
WEBS 1 Row at midpt 2-9

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

REACTIONS. (lb/size) 11=942/0-3-8 (min. 0-1-8), 7=942/0-3-8 (min. 0-1-8)
Max Horz 11=255(LC 9)
Max Uplift 11=104(LC 12), 7=104(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2108/308, 4-5=-874/209, 5-6=-1106/188, 1-11=-992/249, 6-7=-840/161
BOT CHORD 10-11=-310/519, 9-10=-303/1836, 4-9=-124/508, 7-8=0/334
WEBS 2-10=-189/1586, 2-9=-1444/377, 2-4=-685/266, 1-10=-44/1357, 7-9=-121/497

- NOTES-** (9-10)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 104 lb uplift at joint 11 and 104 lb uplift at joint 7.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.



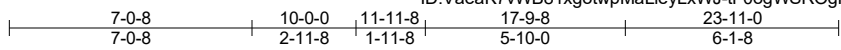
LOAD CASE(S) Standard

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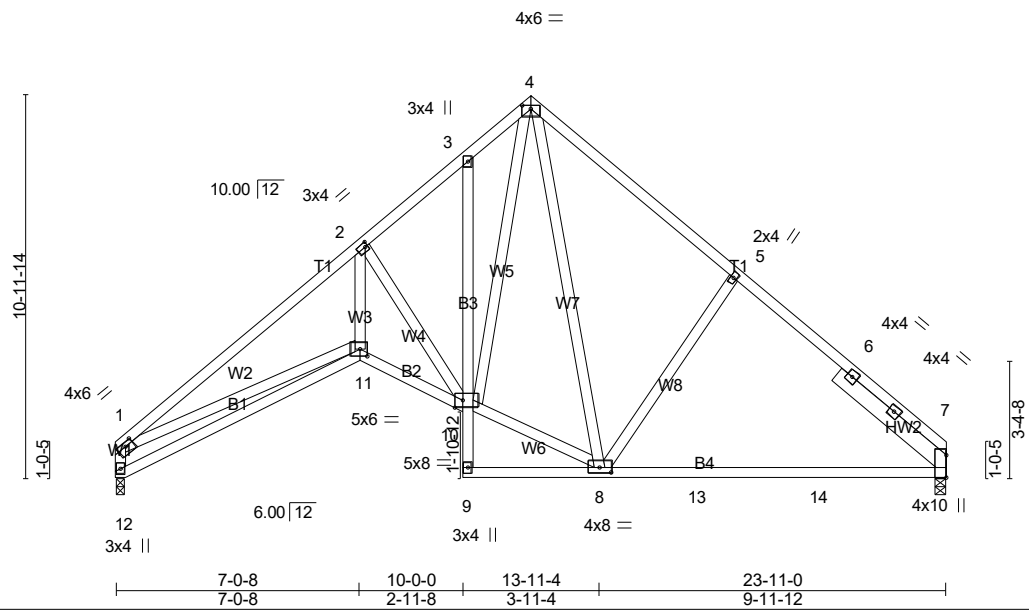
Warning!—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer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

| | | | | | |
|--------------------|--------------|----------------------------|----------|----------|---|
| Job 21-2811-R01 | Truss R05 | Truss Type Roof Special | Qty 1 | Ply 1 | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N.C. Job Reference (optional) # 26919 |
|--------------------|--------------|----------------------------|----------|----------|---|

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Scale = 1:66.3



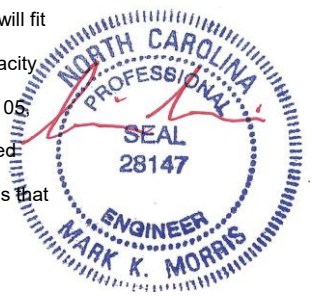
| | | | | | |
|--|----------------------|-------------|-----------------------------|---------------|------------------------|
| Plate Offsets (X,Y)-- [1:0-2-12,0-1-8], [2:0-1-0,0-1-8], [4:0-3-0,0-1-4], [8:0-4-0,0-1-12], [10:0-2-12,Edge], [11:0-2-8,0-2-8] | | | | | |
| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
| TCLL (roof) 20.0 | 2-0-0 | TC 0.78 | in (loc) l/defl L/d | MT20 | 244/190 |
| Snow (Pf) 20.0 | Plate Grip DOL 1.15 | BC 0.74 | Vert(LL) -0.28 7-8 >999 240 | | |
| TCDL 10.0 | Lumber DOL 1.15 | WB 0.92 | Vert(CT) -0.45 7-8 >635 180 | | |
| BCLL 0.0 * | Rep Stress Incr YES | Matrix-SH | Horz(CT) 0.15 7 n/a n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | | | Weight: 176 lb FT = 0% |

| | |
|-----------------------------------|--|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied, except end verticals. |
| BOT CHORD 2x4 SP No.2 *Except* | BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. |
| B3: 2x4 SP No.3, B4: 2x4 SP No.1 | MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide. |
| WEBS 2x4 SP No.3 | |
| SLIDER Right 2x6 SP No.2 - 4-1-11 | |

REACTIONS. (lb/size) 7=951/0-3-8 (min. 0-1-8), 12=951/0-3-8 (min. 0-1-8)
 Max Horz 12=-255(LC 10)
 Max Uplift 7=-105(LC 13), 12=-105(LC 12)
 Max Grav 7=976(LC 20), 12=951(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-2165/306, 2-3=-1093/247, 3-4=-986/272, 4-5=-922/226, 5-6=-981/178, 6-7=-1115/141, 1-12=-1037/249
 BOT CHORD 11-12=-298/524, 10-11=-287/1929, 8-13=-51/787, 13-14=-51/787, 7-14=-51/787
 WEBS 2-11=-189/1618, 2-10=-1574/406, 8-10=0/772, 4-10=-221/864, 4-8=-232/332, 5-8=-330/255, 1-11=-40/1366

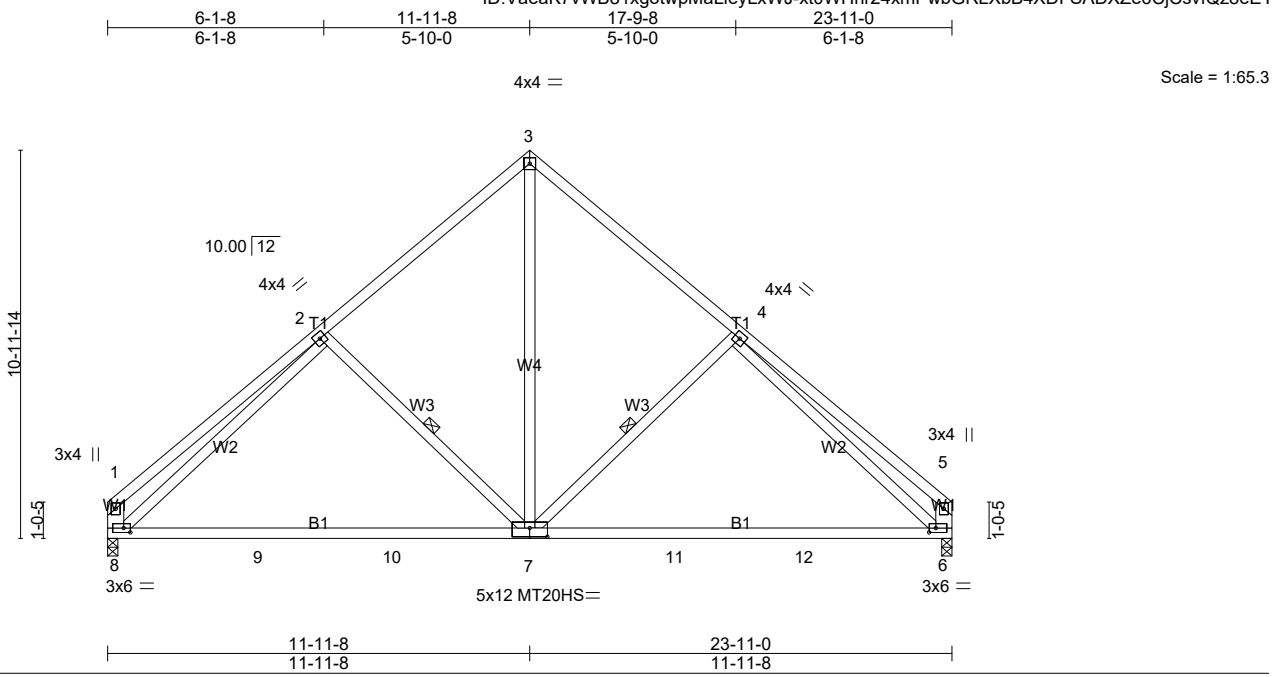
- NOTES-** (9-10)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=105 12=105.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.



6/4/2021

LOAD CASE(S) Standard

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| | | | | | | | | | | |
|---|----------------------|-------|-------------|--------------|-------|-------|--------|-----|----------------|-------------|
| Plate Offsets (X,Y)-- [6:0-2-4,0-1-8], [7:0-6-0,0-3-0], [8:0-2-4,0-1-8] | | | | | | | | | | |
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.46 | Vert(LL) | -0.44 | 6-7 | >639 | 240 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.74 | Vert(CT) | -0.73 | 6-7 | >388 | 180 | MT20HS | 187/143 |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.85 | Horz(CT) | 0.02 | 6 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-SH | | | | | | | |
| | | | | | | | | | Weight: 148 lb | FT = 0% |

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 5-9-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 9-6-15 oc bracing.
 WEBS 1 Row at midpt 4-7, 2-7

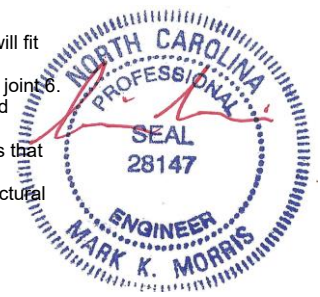
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 8=938/0-3-8 (min. 0-1-8), 6=938/0-3-8 (min. 0-1-8)
 Max Horz 8=-254(LC 8)
 Max Uplift 8=-103(LC 12), 6=-103(LC 13)
 Max Grav 8=1007(LC 19), 6=1007(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-591/122, 2-3=-927/207, 3-4=-927/207, 4-5=-590/122, 1-8=-477/129, 5-6=-477/129
 BOT CHORD 8-9=-166/911, 9-10=-166/911, 7-10=-166/911, 7-11=-58/789, 11-12=-58/789,
 6-12=-58/789
 WEBS 3-7=-124/754, 4-7=-297/260, 2-7=-297/260, 2-8=-682/121, 4-6=-682/120

- NOTES-** (9-10)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=5.0psf; BCCL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCCL = 10.0psf.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 103 lb uplift at joint 8 and 103 lb uplift at joint 6.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 - 10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard



6/4/2021

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| | | | | | |
|-------------|-------|-----------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | R08 | Half Hip Girder | 2 | 1 | Job Reference (optional) # 26919 |

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Jun 5 17:24:15 2021 Page 2
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LOAD CASE(S) Standard
 Concentrated Loads (lb)
 Vert: 3--146(B) 7--3(B)



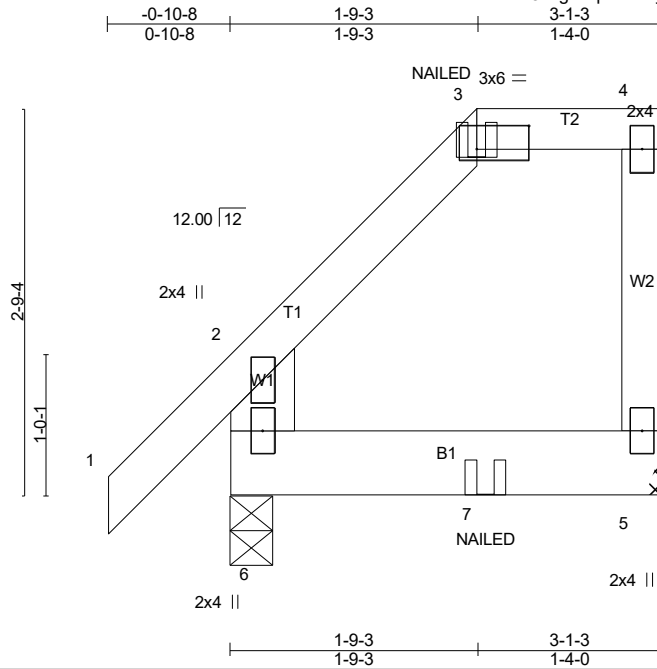
6/4/2021

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| | | | | | |
|-------------|-------|-----------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | R10 | Half Hip Girder | 1 | 1 | |
| | | | | | # 26919 |

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Scale = 1:16.5

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

| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|------------------|----------------------|----------|----------------|----------|--------|-----|---------------|---------|
| TCLL (roof) 20.0 | 2-0-0 | TC 0.17 | Vert(LL) -0.00 | 6 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) 20.0 | Plate Grip DOL 1.15 | BC 0.04 | Vert(CT) -0.00 | 5-6 | >999 | 180 | | |
| TCDL 10.0 | Lumber DOL 1.15 | WB 0.00 | Horz(CT) -0.00 | 5 | n/a | n/a | | |
| BCLL 0.0 * | Rep Stress Incr NO | Matrix-R | | | | | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | | | | | Weight: 20 lb | FT = 0% |

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-1-3 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

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

REACTIONS. (lb/size) 5=111/Mechanical, 6=200/0-3-8 (min. 0-1-8)
 Max Horz 6=81(LC 10)
 Max Uplift 5=-63(LC 10), 6=-29(LC 10)
 Max Grav 5=113(LC 26), 6=200(LC 1)

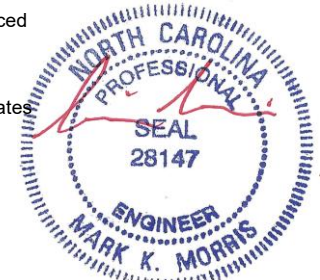
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES- (12-13)

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCDL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 12) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- 13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-2=-60, 2-3=-60, 3-4=-60, 5-6=-20



6/4/2021

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| | | | | | |
|-------------|-------|-----------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | R10 | Half Hip Girder | 1 | 1 | Job Reference (optional) # 26919 |

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Jun 5 17:24:16 2021 Page 2
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LOAD CASE(S) Standard
 Concentrated Loads (lb)
 Vert: 3=-18(B) 7=-9(B)



6/4/2021

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| | | | | | | |
|--------------------|--------------|-------------------------------|----------|----------|---|--|
| Job 21-2811-R01 | Truss R11 | Truss Type Half Hip Girder | Qty 1 | Ply 1 | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, NC | Job Reference (optional) # 26919 |
|--------------------|--------------|-------------------------------|----------|----------|---|--|

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Jun 5 17:24:17 2021 Page 1
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Scale: 1/4"=1'

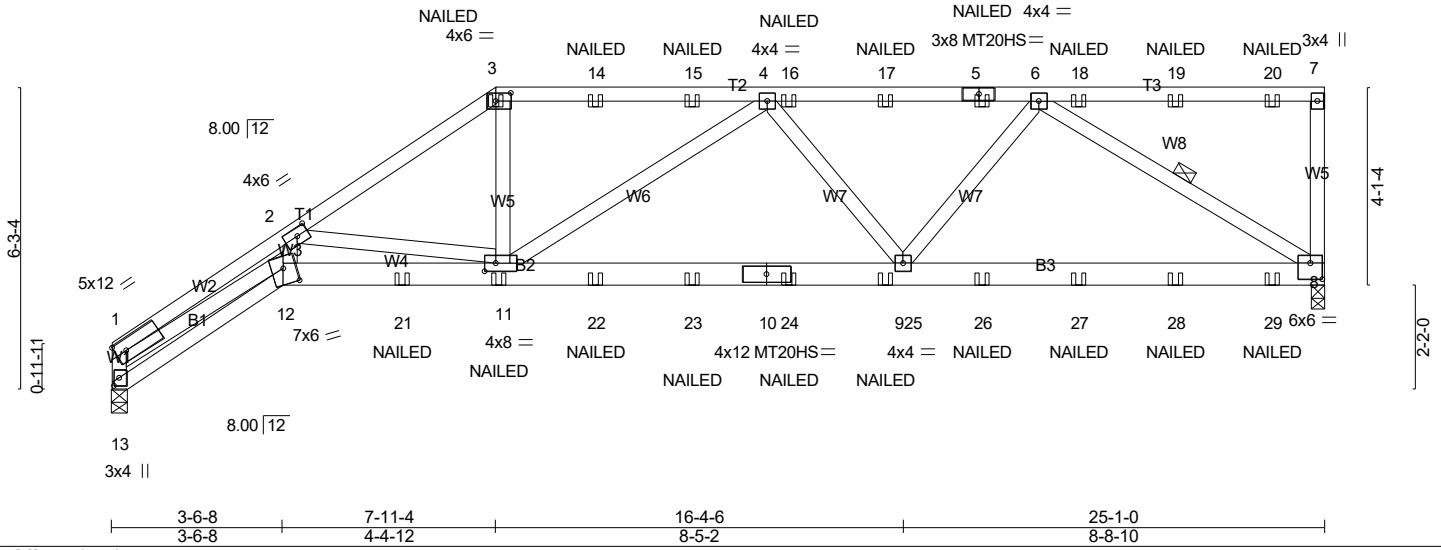


Plate Offsets (X,Y)-- [2:0-2-12,0-2-0], [3:0-3-12,0-2-0], [8:0-3-0,0-4-0], [11:0-2-12,0-2-0], [12:0-3-0,0-4-0], [13:0-2-0,0-1-4]

| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|------------------|----------------------|-----------|----------------|----------|--------|-----|----------------|---------|
| TCLL (roof) 20.0 | 2-0-0 | TC 0.92 | Vert(LL) 0.32 | 11-12 | >917 | 240 | MT20 | 244/190 |
| Snow (Pf) 20.0 | Plate Grip DOL 1.15 | BC 0.95 | Vert(CT) -0.41 | 11-12 | >720 | 180 | MT20HS | 187/143 |
| TCDL 10.0 | Lumber DOL 1.15 | WB 0.85 | Horz(CT) 0.32 | 8 | n/a | n/a | | |
| BCLL 0.0 * | Rep Stress Incr NO | Matrix-SH | | | | | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | | | | | | |
| | | | | | | | Weight: 153 lb | FT = 0% |

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
B1: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
W2: 2x4 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-8-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 4-11-2 oc bracing.
WEBS 1 Row at midpt 6-8

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

REACTIONS. (lb/size) 13=1202/0-3-8 (min. 0-1-8), 8=1186/0-3-8 (min. 0-1-8)
Max Horz 13=187(LC 10)
Max Uplift 13=-483(LC 10), 8=-710(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-13=-1249/655, 1-2=-5037/2634, 2-3=-2234/1164, 3-14=-1865/1035, 14-15=-1864/1035, 4-15=-1864/1035, 4-16=-1815/1039, 16-17=-1815/1039, 5-17=-1815/1039, 5-6=-1815/1039
BOT CHORD 12-13=-341/319, 12-21=-2188/3912, 11-21=-2189/3914, 11-22=-1179/2024, 22-23=-1179/2024, 10-23=-1179/2024, 10-24=-1179/2024, 24-25=-1179/2024, 9-25=-1179/2024, 9-26=-868/1441, 26-27=-868/1441, 27-28=-868/1441, 28-29=-868/1441, 8-29=-868/1441
WEBS 1-12=-2201/4220, 2-12=-985/1821, 2-11=-2132/1191, 3-11=-425/870, 4-11=-282/296, 4-9=-347/242, 6-9=-293/677, 6-8=-1676/1009

- NOTES-** (12-13)
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - 7) Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=483, 8=710.
 - 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



6/4/2021

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| | | | | | |
|-------------|-------|-----------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | R11 | Half Hip Girder | 1 | 1 | Job Reference (optional) # 26919 |

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Jun 5 17:24:17 2021 Page 2
 ID:VaeaK7vWB81xgotwpMaLleyLxWJ-I0GJWuVySuq5q1fDD_HG3?5h0s8_nlaFChbiETz9HFy

- 12) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-60, 3-7=-60, 12-13=-20, 8-12=-20

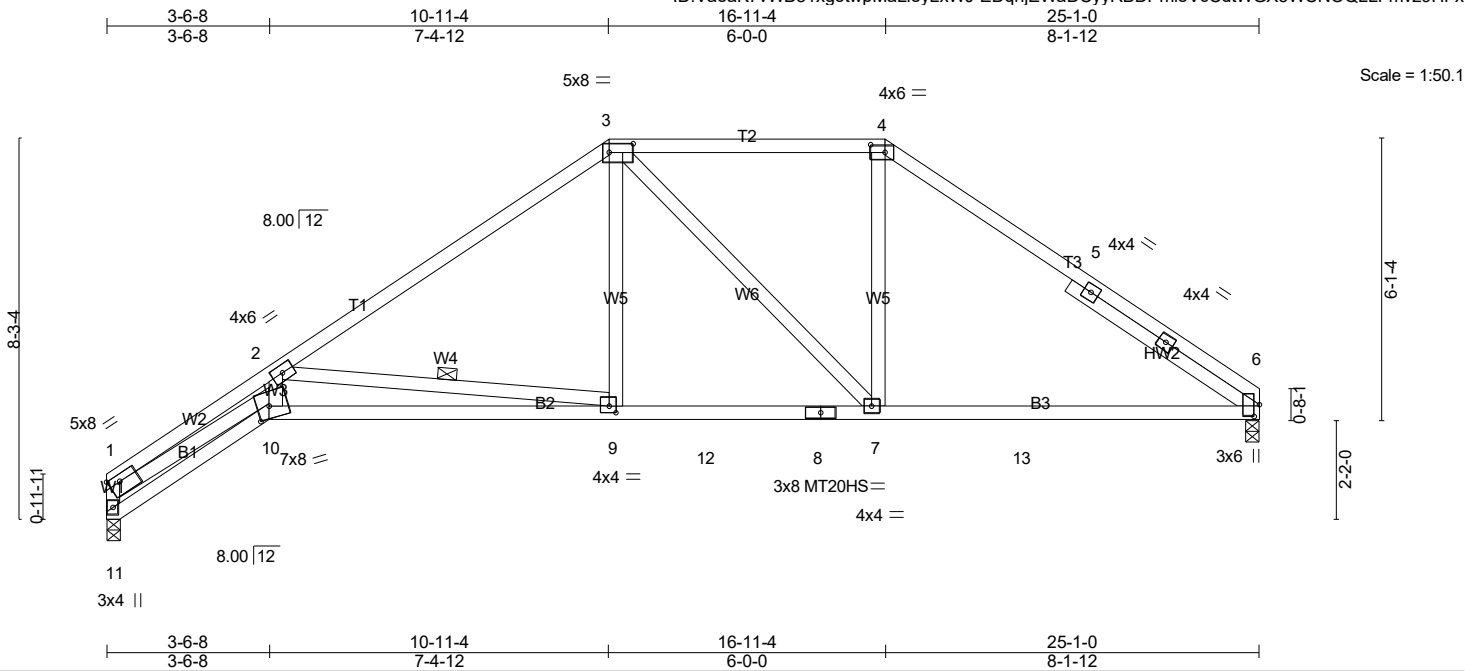
Concentrated Loads (lb)

Vert: 3=-16(F) 5=-16(F) 11=-11(F) 14=-16(F) 15=-16(F) 16=-16(F) 17=-16(F) 18=-16(F) 19=-16(F) 20=-18(F) 21=-162(F) 22=-11(F) 23=-11(F) 24=-11(F) 25=-11(F) 26=-11(F) 27=-11(F) 28=-11(F) 29=-11(F)



6/4/2021

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| LOADING (psf) | | SPACING- | | CSI. | | DEFL. | | | | PLATES | | GRIP | |
|---------------|-------|----------------------|------|-----------|------|----------|-------|------|------|--------|--------|---------|------------------------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.87 | Vert(LL) | -0.21 | 9-10 | >999 | 240 | MT20 | 244/190 | |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.77 | Vert(CT) | -0.49 | 9-10 | >615 | 180 | MT20HS | 187/143 | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.88 | Horz(CT) | 0.32 | 6 | n/a | n/a | | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-SH | | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | | Weight: 136 lb FT = 0% |

| LUMBER- | | BRACING- | |
|-----------|---|-----------|--|
| TOP CHORD | 2x4 SP No.2 *Except* T1: 2x4 SP No.1 | TOP CHORD | Structural wood sheathing directly applied, except end verticals. |
| BOT CHORD | 2x4 SP No.2 *Except* B2: 2x4 SP No.1 | BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 7-0-10 oc bracing: 9-10. |
| WEBS | 2x4 SP No.3 *Except* W2: 2x4 SP No.2 | WEBS | 1 Row at midpt 2-9 |
| SLIDER | Right 2x4 SP No.3 - 4-10-15 | | |

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

REACTIONS. (lb/size) 11=998/0-3-8 (min. 0-1-8), 6=998/0-3-8 (min. 0-1-8)
 Max Horz 11=177(LC 9)
 Max Uplift 11=-114(LC 12), 6=-93(LC 13)
 Max Grav 11=998(LC 1), 6=1015(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-11=-1060/213, 1-2=-4350/883, 2-3=-1427/172, 3-4=-1052/158, 4-5=-1255/137,
 5-6=-1365/115
 BOT CHORD 10-11=-210/324, 9-10=-795/3433, 9-12=-109/1139, 8-12=-109/1139, 7-8=-109/1139,
 7-13=-28/1042, 6-13=-28/1042
 WEBS 1-10=-751/3697, 2-10=-319/1665, 2-9=-2326/710, 3-9=-23/511, 3-7=-257/118, 4-7=-4/423

- NOTES-** (11-12)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 11=114.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the



6/4/2021

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| | | | | | |
|-------------|-------|------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | R12 | Hip | 1 | 1 | Job Reference (optional) # 26919 |

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LOAD CASE(S) Standard

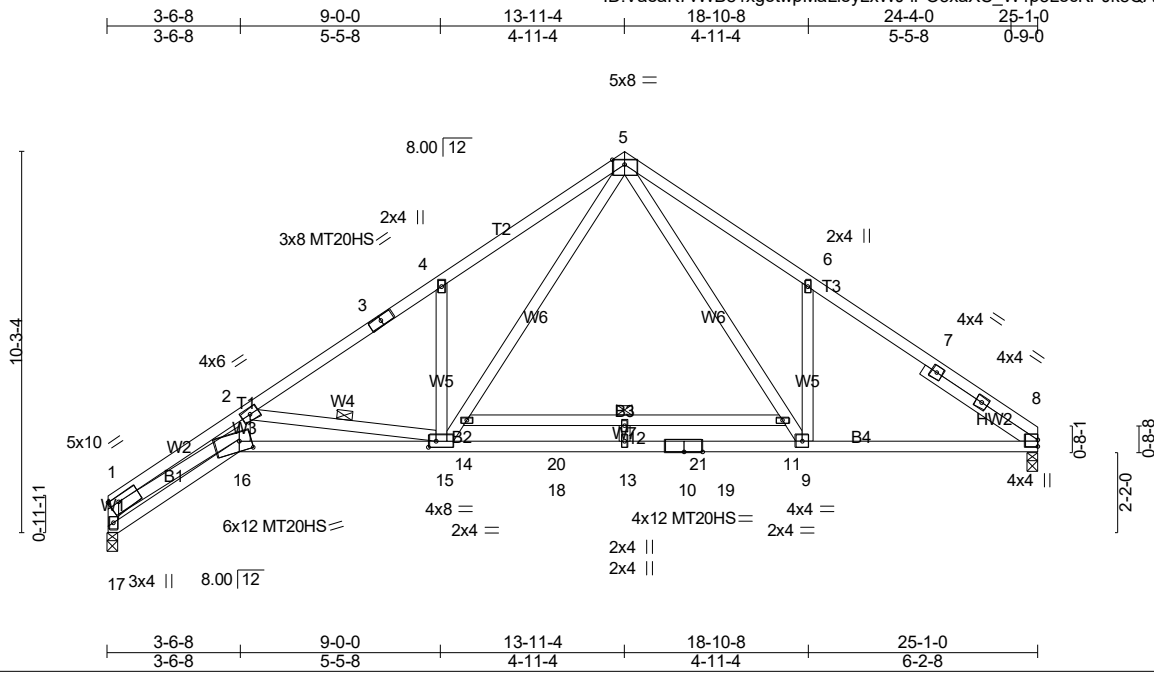


6/4/2021

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| | | | | | | |
|--------------------|--------------|----------------------------|----------|----------|---|---------|
| Job 21-2811-R01 | Truss R13 | Truss Type Roof Special | Qty 2 | Ply 1 | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N.C. | # 26919 |
|--------------------|--------------|----------------------------|----------|----------|---|---------|

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Jun 5 17:24:19 2021 Page 1
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Scale = 1:62.1

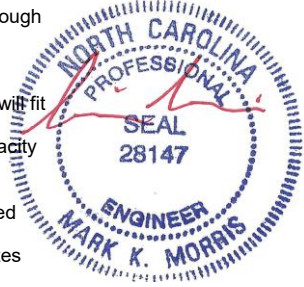
| | | | | | |
|--|----------------------|------------|----------------------------|----------------|-------------|
| Plate Offsets (X,Y)-- [1:Edge,0-1-12], [15:0-2-8,0-2-0], [16:0-3-12,0-3-4] | | | | | |
| LOADING (psf) | SPACING | CSI | DEFL. | PLATES | GRIP |
| TCLL (roof) 20.0 | 2-0-0 | TC 0.57 | in (loc) l/defl L/d | MT20 | 244/190 |
| Snow (Pf) 20.0 | Plate Grip DOL 1.15 | BC 1.00 | Vert(LL) -0.53 12 >560 240 | MT20HS | 187/143 |
| TCDL 10.0 | Lumber DOL 1.15 | WB 0.93 | Vert(CT) -0.90 12 >332 180 | | |
| BCLL 0.0 * | Rep Stress Incr YES | Matrix-SH | Horz(CT) 0.31 8 n/a n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | | Weight: 158 lb | FT = 0% |

| | |
|--|--|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 2-3-9 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP No.2 *Except* B2: 2x4 SP SS, B4: 2x4 SP No.1 | BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except: 4-11-0 oc bracing: 11-14 |
| WEBS 2x4 SP No.3 *Except* W2: 2x4 SP No.2 | WEBS 1 Row at midpt 2-15 |
| SLIDER Right 2x4 SP No.3 - 3-7-14 | MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide. |

REACTIONS. (lb/size) 17=1077/0-3-8 (min. 0-1-8), 8=1096/0-3-8 (min. 0-1-8)
 Max Horz 17=207(LC 9)
 Max Uplift 17=-86(LC 12), 8=-61(LC 13)
 Max Grav 17=1150(LC 19), 8=1183(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-17=-1290/228, 1-2=-5068/773, 2-3=-2173/150, 3-4=-2055/167, 4-5=-2262/329,
 5-6=-1794/230, 6-7=-1763/90, 7-8=-1854/69
 BOT CHORD 16-17=-248/434, 15-16=-717/4017, 15-18=0/1057, 13-18=0/1057, 10-13=0/1057,
 10-19=0/1057, 9-19=0/1057, 8-9=-12/1442
 WEBS 1-16=-613/4236, 2-16=-331/1808, 2-15=-2163/570, 4-15=-399/243, 14-15=-294/1440,
 5-14=-248/1537, 5-11=-170/914, 9-11=-212/815, 6-9=-310/267

- NOTES-** (10-11)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 8.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.



6/4/2021

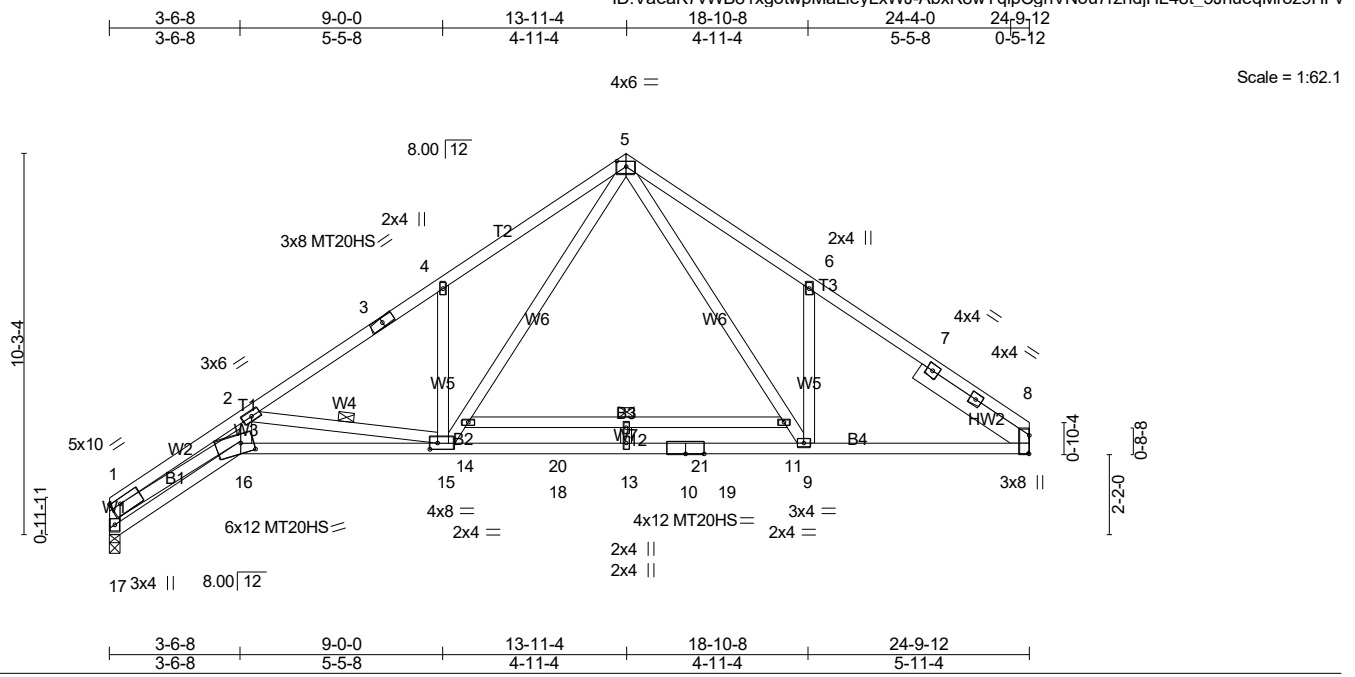
Warning!—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded in accordance with design parameters and proper incorporation of component is responsibility of building designer – not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

| | | | | | |
|-------------|-------|--------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | R14 | Roof Special | 3 | 1 | |

26919

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Jun 5 17:24:20 2021 Page 1

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Scale = 1:62.1

| | | | | | |
|---|----------------------|------------|----------------------------|----------------|-------------|
| Plate Offsets (X,Y)-- [1:Edge,0-1-12], [5:0-3-0,0-1-12], [8:0-6-0,Edge], [15:0-2-8,0-2-0], [16:0-4-0,0-3-4] | | | | | |
| LOADING (psf) | SPACING | CSI | DEFL. | PLATES | GRIP |
| TCLL (roof) 20.0 | 2-0-0 | TC 0.59 | in (loc) l/defl L/d | MT20 | 244/190 |
| Snow (Pf) 20.0 | Plate Grip DOL 1.15 | BC 1.00 | Vert(LL) -0.53 12 >556 240 | MT20HS | 187/143 |
| TCDL 10.0 | Lumber DOL 1.15 | WB 0.91 | Vert(CT) -0.90 12 >330 180 | | |
| BCLL 0.0 * | Rep Stress Incr YES | Matrix-SH | Horz(CT) 0.30 8 n/a n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | | Weight: 160 lb | FT = 0% |

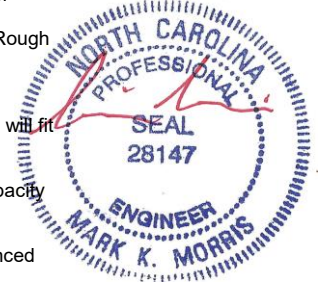
| | |
|--|--|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 2-4-0 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP No.2 *Except* B2: 2x4 SP SS, B4: 2x4 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 7-10-9 oc bracing: 15-16. 4-7-0 oc bracing: 11-14 |
| WEBS 2x4 SP No.3 *Except* W2: 2x4 SP No.2 | WEBS 1 Row at midpt 2-15 |
| SLIDER Right 2x6 SP No.2 - 3-7-2 | |

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

REACTIONS. (lb/size) 17=1065/0-3-8 (min. 0-1-8), 8=1086/Mechanical
 Max Horz 17=223(LC 9)
 Max Uplift 17=-86(LC 12), 8=-58(LC 13)
 Max Grav 17=1137(LC 19), 8=1174(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-17=-1281/224, 1-2=-5018/766, 2-3=-2144/149, 3-4=-2026/165, 4-5=-2231/327,
 5-6=-1711/224, 6-7=-1711/87, 7-8=-1785/66
 BOT CHORD 16-17=-257/440, 15-16=-711/3979, 15-18=0/1038, 13-18=0/1038, 10-13=0/1038,
 10-19=0/1038, 9-19=0/1038, 8-9=-9/1379
 WEBS 1-16=-612/4186, 2-16=-328/1793, 2-15=-2149/567, 4-15=-396/243, 14-15=-292/1433,
 5-14=-247/1532, 5-11=-164/836, 9-11=-205/734, 6-9=-266/264

- NOTES-** (11-12)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 7) Refer to girder(s) for truss to truss connections.
 - 8) Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 8.
 - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



6/4/2021

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

| | | | | | |
|-------------|-------|--------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | R14 | Roof Special | 3 | 1 | Job Reference (optional) # 26919 |

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Jun 5 17:24:21 2021 Page 2
 ID:VaeaK7vWB81xgotwpMaLleyLxWJ-eoVqLGZSW7KXley_SqMCErFS5TU6jYZq7IZvNEz9HFu

- 11) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- 12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

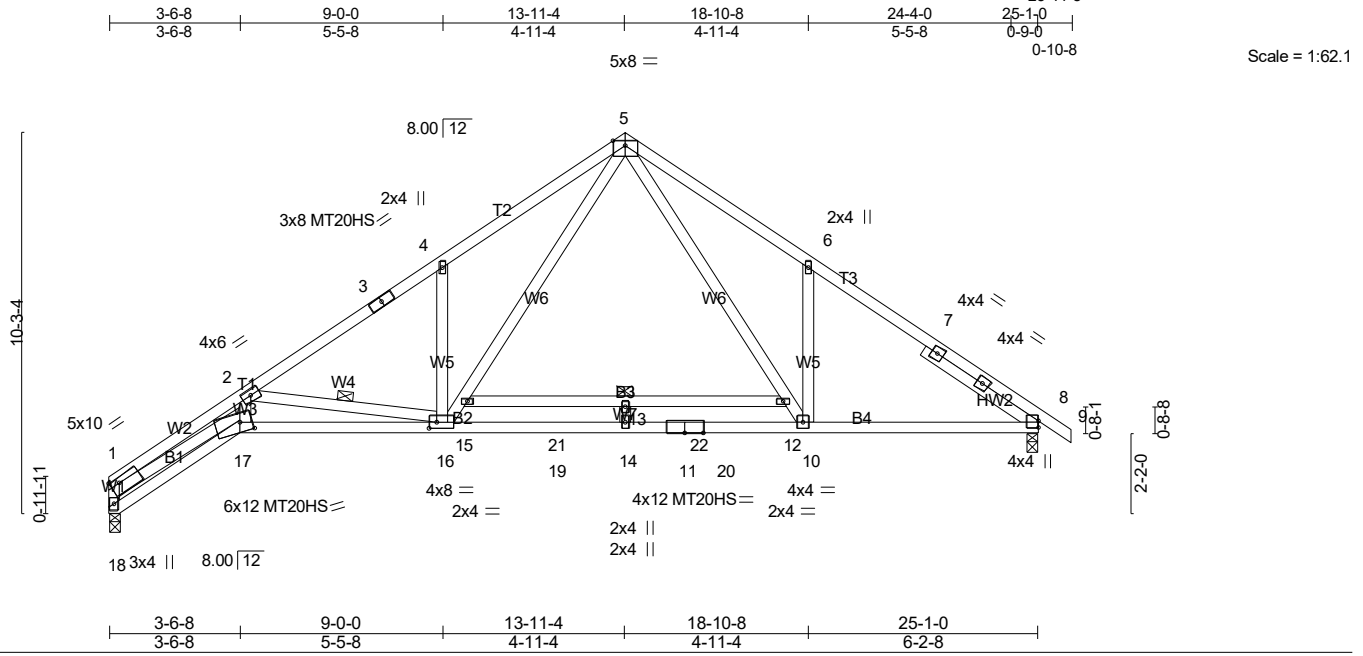


6/4/2021

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| | | | | | | |
|--------------------|--------------|----------------------------|----------|----------|---|---------|
| Job 21-2811-R01 | Truss R15 | Truss Type ROOF SPECIAL | Qty 1 | Ply 1 | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N.C. | # 26919 |
|--------------------|--------------|----------------------------|----------|----------|---|---------|

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Jun 5 17:24:22 2021 Page 1
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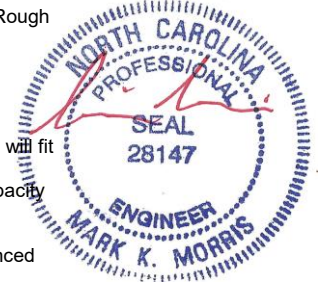
| | | | | | |
|---|----------------------|-------------|----------------------------|---------------|------------------------|
| Plate Offsets (X,Y)-- [1:Edge,0-1-12], [16:0-2-8,0-2-0], [17:0-4-0,0-3-4] | | | | | |
| LOADING (psf) | SPACING | CSI. | DEFL. | PLATES | GRIP |
| TCLL (roof) 20.0 | 2-0-0 | TC 0.57 | in (loc) l/defl L/d | MT20 | 244/190 |
| Snow (Pf) 20.0 | Plate Grip DOL 1.15 | BC 1.00 | Vert(LL) -0.53 13 >560 240 | MT20HS | 187/143 |
| TCDL 10.0 | Lumber DOL 1.15 | WB 0.92 | Vert(CT) -0.90 13 >332 180 | | |
| BCLL 0.0 * | Rep Stress Incr YES | Matrix-SH | Horz(CT) 0.31 8 n/a n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | | | Weight: 159 lb FT = 0% |

| | |
|--|--|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 2-3-10 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP No.2 *Except* B2: 2x4 SP SS, B4: 2x4 SP No.1 | BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except: 4-7-0 oc bracing: 12-15 |
| WEBS 2x4 SP No.3 *Except* W2: 2x4 SP No.2 | WEBS 1 Row at midpt 2-16 |
| SLIDER Right 2x4 SP No.3 - 3-7-14 | |

REACTIONS. (lb/size) 18=1076/0-3-8 (min. 0-1-8), 8=1149/0-3-8 (min. 0-1-8)
 Max Horz 18=205(LC 9)
 Max Uplift 18=-87(LC 12), 8=-79(LC 13)
 Max Grav 18=1149(LC 20), 8=1233(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-18=-1291/225, 1-2=-5072/763, 2-3=-2173/149, 3-4=-2055/165, 4-5=-2261/328,
 5-6=-1788/226, 6-7=-1760/89, 7-8=-1852/68
 BOT CHORD 17-18=-245/437, 16-17=-706/4023, 16-19=0/1059, 14-19=0/1059, 11-14=0/1059,
 11-20=0/1059, 10-20=0/1059, 8-10=-8/1442
 WEBS 1-17=-605/4239, 2-17=-326/1811, 2-16=-2166/565, 4-16=-398/243, 15-16=-292/1441,
 5-15=-247/1538, 5-12=-168/909, 10-12=-210/809, 6-10=-306/266

- NOTES-** (11-12)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Bearing at joint(s) 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



6/4/2021

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| | | | | | |
|-------------|-------|--------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | R15 | ROOF SPECIAL | 1 | 1 | Job Reference (optional) # 26919 |

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Jun 5 17:24:22 2021 Page 2
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- 11) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- 12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard



6/4/2021

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| | | | | | |
|-------------|-------|------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | R16 | Hip | 1 | 1 | Job Reference (optional) # 26919 |

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Jun 5 17:24:23 2021 Page 2
 ID:VaeaK7vWB81xgotwpMaLleyLxWJ-aAdamxai2kaFYy6NZFOgJGLjZHEHBTd7ac20R6z9HFfs

- 12) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- 13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard



6/4/2021

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| | | | | | |
|-------------|-------|------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | R17 | Hip Girder | 1 | 1 | Job Reference (optional) # 26919 |

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Jun 5 17:24:25 2021 Page 2
 ID:VaeaK7vWB81xgotwpMaLleyLxWJ-WZIKBdczZLqznGGIhgQ8OhQ2r5tmfMUQ1wX7W?z9HFq

- 14) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 15) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-60, 3-5=-60, 5-7=-60, 12-13=-20, 6-12=-20

Concentrated Loads (lb)

Vert: 3=-16(B) 5=-16(B) 11=-11(B) 4=-16(B) 10=-11(B) 8=-11(B) 14=-16(B) 15=-16(B) 16=-16(B) 17=-16(B) 18=-162(B) 19=-11(B) 20=-11(B) 21=-11(B) 22=-11(B) 23=-93(B)



6/4/2021

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

| | | | | | |
|--------------------------|-------|--------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | R18 | Roof Special | 5 | 1 | |
| Job Reference (optional) | | | | | # 26919 |

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Jun 5 17:24:26 2021 Page 1
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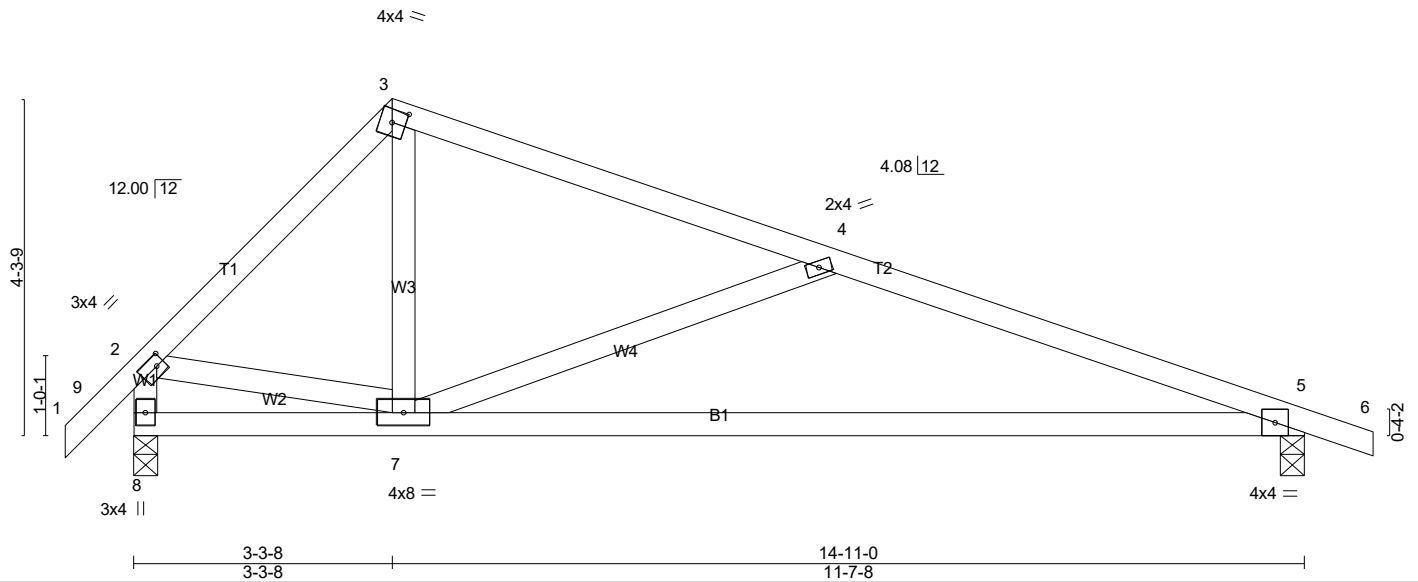


Plate Offsets (X,Y)-- [2:0-1-4,0-1-8], [3:0-2-1,0-2-0]

| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|------------------|----------------------|-----------|----------------|----------|--------|-----|---------------|---------|
| TCLL (roof) 20.0 | 2-0-0 | TC 0.64 | Vert(LL) -0.32 | 5-7 | >554 | 240 | MT20 | 244/190 |
| Snow (Pf) 20.0 | Plate Grip DOL 1.15 | BC 0.78 | Vert(CT) -0.66 | 5-7 | >266 | 180 | | |
| TCDL 10.0 | Lumber DOL 1.15 | WB 0.48 | Horz(CT) 0.02 | 5 | n/a | n/a | | |
| BCLL 0.0 * | Rep Stress Incr YES | Matrix-SH | | | | | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | | | | | Weight: 70 lb | FT = 0% |

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-5-15 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

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

REACTIONS. (lb/size) 8=646/0-3-8 (min. 0-1-8), 5=646/0-3-8 (min. 0-1-8)
 Max Horz 8=-130(LC 12)
 Max Uplift 8=-85(LC 15), 5=-142(LC 11)
 Max Grav 8=677(LC 21), 5=696(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-689/90, 3-4=-598/71, 4-5=-1264/251, 2-8=-714/69
 BOT CHORD 5-7=-180/1165
 WEBS 3-7=0/441, 4-7=-727/257, 2-7=0/526

NOTES- (10-11)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 5=142.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.



LOAD CASE(S) Standard

6/4/2021

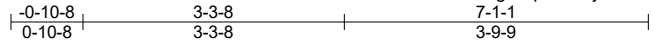
Warning!—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer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

| | | | | | |
|-------------|-------|------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | R19 | Common | 1 | 1 | |

26919

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ID:VaeaK7vWB81xgotwpMaLleyLxWJ-?lJpZcbKfypPQryENxNkuzOZUONO0BZGaHg2Rz9HFp



4x4 =

Scale = 1:28.9

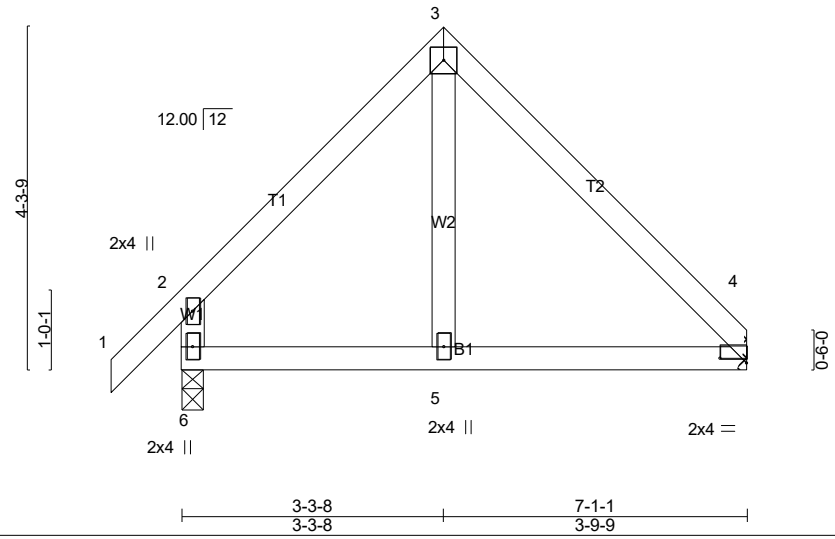


Plate Offsets (X,Y)-- [4:0-4-0,0-0-12]

| LOADING (psf) | SPACING- | CSI. | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|------------------|----------------------|-----------|----------|-------|-------|--------|-----|---------------|---------|
| TCLL (roof) 20.0 | 2-0-0 | TC 0.22 | Vert(LL) | -0.01 | 4-5 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) 20.0 | Plate Grip DOL 1.15 | BC 0.16 | Vert(CT) | -0.02 | 4-5 | >999 | 180 | | |
| TCDL 10.0 | Lumber DOL 1.15 | WB 0.06 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCLL 0.0 * | Rep Stress Incr YES | Matrix-SH | | | | | | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | | | | | | Weight: 34 lb | FT = 0% |

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

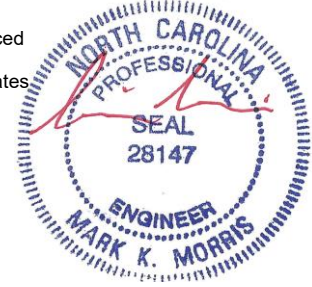
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 4=271/Mechanical, 6=341/0-3-8 (min. 0-1-8)
 Max Horz 6=-108(LC 10)
 Max Uplift 4=-27(LC 12), 6=-45(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-262/71, 3-4=-270/65, 2-6=-303/75

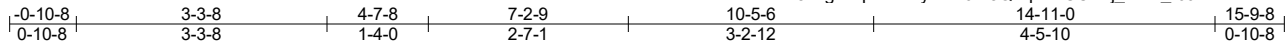
- NOTES-** (10-11)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - 7) Refer to girder(s) for truss to truss connections.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 6.
 - 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 10) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 - 11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

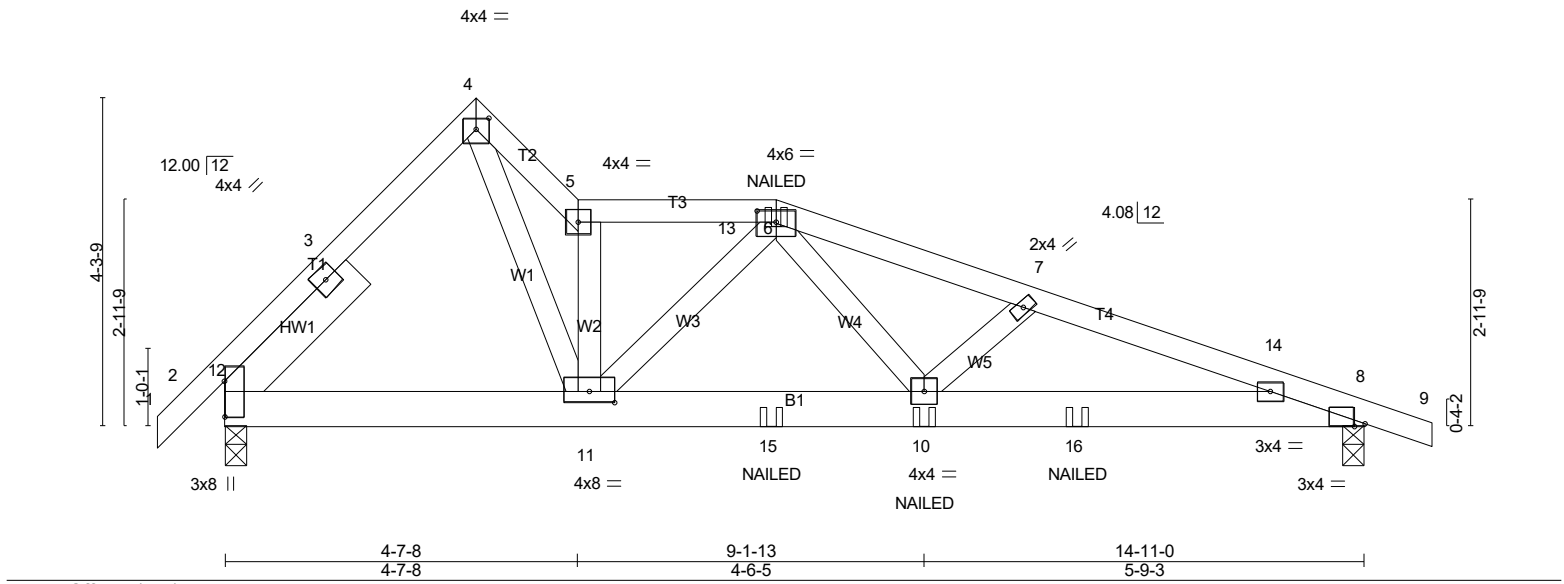


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Warning!—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation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



Scale = 1:30.1



| LOADING (psf) | | SPACING- | | CSI. | | DEFL. | | PLATES | | GRIP | |
|---------------|-------|----------------------|-------|-----------|------|----------|--------------------------|--------|--|---------|-----------------------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 2-0-0 | TC | 0.41 | Vert(LL) | -0.07 10-11 >999 L/d 240 | MT20 | | 244/190 | |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.64 | Vert(CT) | -0.12 10-11 >999 180 | | | | |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.70 | Horz(CT) | 0.02 8 n/a n/a | | | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-SH | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 91 lb FT = 0% |

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x6 SP No.2
 WEBS 2x4 SP No.3
 SLIDER Left 2x6 SP No.2 - 2-4-2

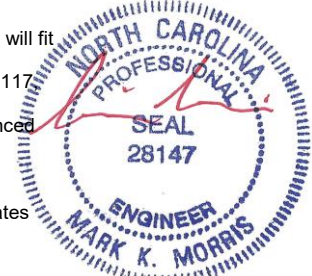
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 3-6-11 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size) 2=793/0-3-8 (min. 0-1-8), 8=891/0-3-8 (min. 0-1-8)
 Max Horz 2=-108(LC 62)
 Max Uplift 2=-117(LC 13), 8=-208(LC 9)
 Max Grav 2=837(LC 19), 8=1101(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-859/147, 3-4=-825/163, 4-5=-1642/303, 5-13=-1091/182, 6-13=-1090/182, 6-7=-2005/359, 7-14=-2235/403, 8-14=-2300/393
 BOT CHORD 2-11=-34/556, 11-15=-179/1333, 10-15=-179/1333, 10-16=-338/2114, 8-16=-338/2114
 WEBS 4-11=-302/1699, 5-11=-1289/249, 6-11=-395/144, 6-10=-120/851, 7-10=-384/128

- NOTES-** (13-14)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 6) Provide adequate drainage to prevent water ponding.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=117, 8=208.
 - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - 12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
 - 13) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 - 14) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.



6/4/2021

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

| | | | | | |
|-------------|-------|---------------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | R20 | Roof Special Girder | 1 | 1 | Job Reference (optional) # 26919 |

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LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-4=-60, 4-5=-60, 5-6=-60, 6-9=-60, 2-8=-20
- Concentrated Loads (lb)
 - Vert: 6=-31(F) 10=-96(F) 15=-125(F) 16=-137(F)

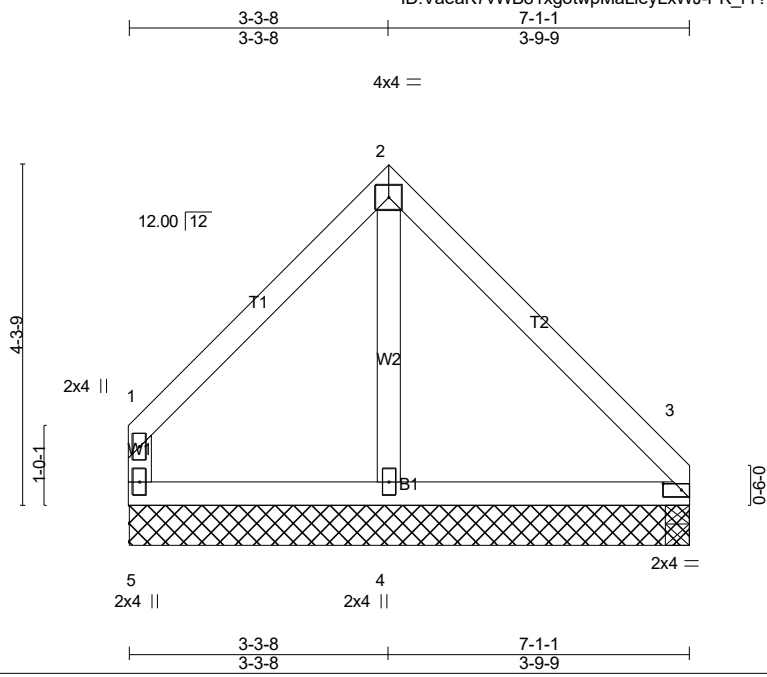


6/4/2021

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

| | | | | | | |
|--------------------|--------------|----------------------|----------|----------|--|--|
| Job 21-2811-R01 | Truss R23 | Truss Type Common | Qty 1 | Ply 1 | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N | Job Reference (optional) # 26919 |
|--------------------|--------------|----------------------|----------|----------|--|--|

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8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Jun 5 17:24:29 2021 Page 1



Scale = 1:29.1

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

| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|------------------|----------------------|----------|----------------|----------|--------|-----|---------------|---------|
| TCLL (roof) 20.0 | 2-0-0 | TC 0.26 | Vert(LL) -0.01 | 3-4 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) 20.0 | Plate Grip DOL 1.15 | BC 0.12 | Vert(CT) -0.01 | 3-4 | >999 | 180 | | |
| TCDL 10.0 | Lumber DOL 1.15 | WB 0.07 | Horz(CT) 0.00 | 3 | n/a | n/a | | |
| BCLL 0.0 * | Rep Stress Incr YES | Matrix-P | | | | | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | | | | | Weight: 33 lb | FT = 0% |

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

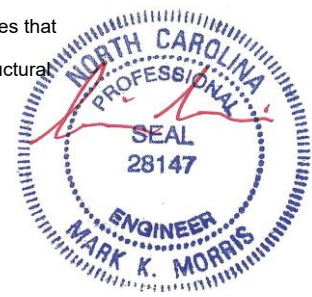
BRACING-
TOP CHORD Structural wood sheathing directly applied or 7-1-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 7-1-1.
(lb) - Max Horz 5=100(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 3, 5, 4
Max Grav All reactions 250 lb or less at joint(s) 3, 3, 5 except 4=324(LC 20)

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

- NOTES-** (8-9)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 5, 4.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 - 9) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard



6/4/2021

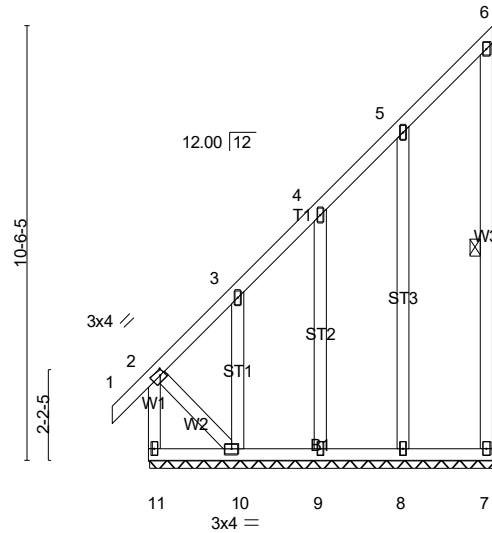
Warning!—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer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

| | | | | | |
|--------------------|--------------|---|----------|----------|--|
| Job 21-2811-R01 | Truss R24 | Truss Type Monopitch Supported Gable | Qty 1 | Ply 1 | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N Job Reference (optional) # 26919 |
|--------------------|--------------|---|----------|----------|--|

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Jun 5 17:24:30 2021 Page 1

ID:VaeaK7vWB81xgotwpmMaLleyLxWJ-tWYDEKg5OuTFt18jTD0J5k75l6n6Kknv9BCFuBCz9HFI
-0-10-8 8-4-0
0-10-8 8-4-0

Scale = 1:55.8



| Plate Offsets (X,Y)-- [2:0-1-4,0-1-8] | | LOADING (psf) | | SPACING- | | CSI. | | DEFL. | | | | PLATES | | GRIP | |
|---------------------------------------|-------|----------------------|----------------|----------|------|----------|----------|-------|-----|-----|-----|---------------|---------|------|--|
| TCLL (roof) | 20.0 | 2-0-0 | Plate Grip DOL | 1.15 | TC | 0.15 | Vert(LL) | 0.00 | 1 | n/r | 180 | MT20 | 244/190 | | |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.11 | Vert(CT) | 0.00 | 1 | n/r | 80 | | | | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.20 | Horz(CT) | -0.00 | 7 | n/a | n/a | | | | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-P | | | | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | Weight: 79 lb | FT = 0% | | |

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

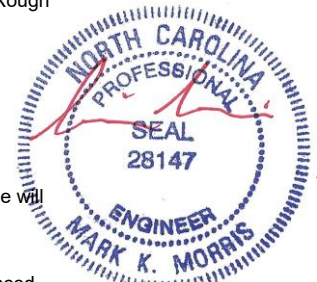
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-7

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

REACTIONS. All bearings 8-4-0.
(lb) - Max Horz 11=295(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 7 except 11=145(LC 10), 9=105(LC 12), 10=396(LC 12), 8=114(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 7 except 11=510(LC 12), 9=268(LC 20), 10=323(LC 20), 8=302(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-11=-502/385, 2-3=-360/296, 3-4=-263/301
BOT CHORD 10-11=-307/225
WEBS 2-10=-315/431

- NOTES-** (13-14)
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 5) All plates are 2x4 MT20 unless otherwise indicated.
 - 6) Gable requires continuous bottom chord bearing.
 - 7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 8) Gable studs spaced at 2-0-0 oc.
 - 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 10) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 11=145, 9=105, 10=396, 8=114.
 - 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



6/4/2021

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| | | | | | |
|-------------|-------|---------------------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | R24 | Monopitch Supported Gable | 1 | 1 | Job Reference (optional) # 26919 |

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Jun 5 17:24:31 2021 Page 2
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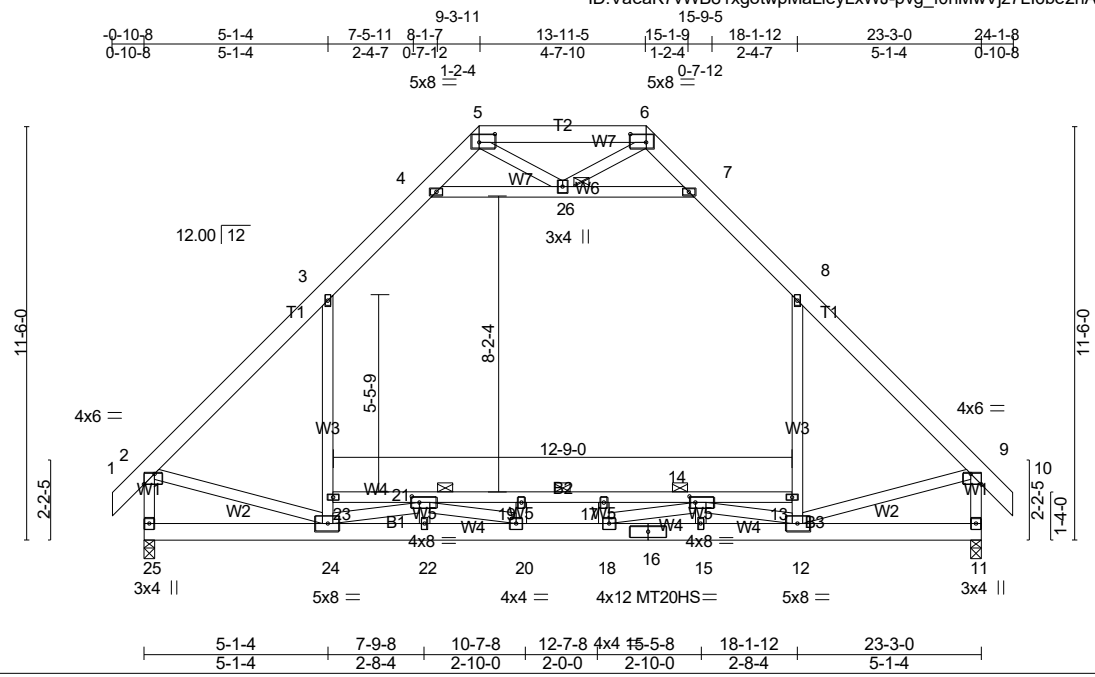
- 13) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- 14) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard



6/4/2021

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Scale: 3/16"=1'

| LOADING (psf) | | SPACING- | | CSI. | | DEFL. | | PLATES | | GRIP | |
|---------------|-------|----------------------|------|-----------|------|----------|----------------------|--------|---------|----------------|---------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.98 | Vert(LL) | -0.23 17-19 >999 240 | MT20 | 244/190 | | |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.88 | Vert(CT) | -0.38 17-19 >732 180 | MT20HS | 187/143 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.44 | Horz(CT) | 0.03 11 n/a n/a | | | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-SH | | Attic | -0.12 13-23 1296 360 | | | | |
| BCDL | 10.0 | | | | | | | | | Weight: 228 lb | FT = 0% |

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
 3-7-0 oc bracing: 13-23
 1 Brace at Jt(s): 26

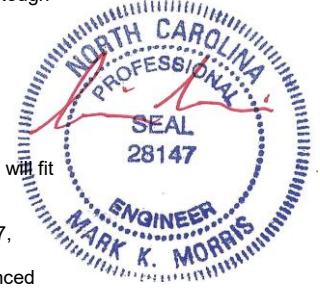
JOINTS

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

REACTIONS. (lb/size) 25=1175/0-3-8 (min. 0-1-11), 11=1175/0-3-8 (min. 0-1-11)
 Max Horz 25=294(LC 11)
 Max Grav 25=1442(LC 3), 11=1442(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1357/36, 3-4=-851/123, 4-5=-172/266, 5-6=-35/419, 6-7=-172/266, 7-8=-851/123,
 8-9=-1358/37, 2-25=-1391/18, 9-11=-1391/19
 BOT CHORD 24-25=-292/367, 22-24=-39/2418, 20-22=-39/2418, 18-20=0/3052, 16-18=0/2281,
 15-16=0/2281, 12-15=0/2281, 19-21=-2349/0, 17-19=-2349/0, 14-17=-2349/0
 WEBS 23-24=0/505, 3-23=0/623, 12-13=0/505, 8-13=0/623, 4-26=-1246/223, 7-26=-1249/225,
 2-24=-41/834, 9-12=-45/838, 21-24=-1671/0, 20-21=-142/901, 14-18=-160/916,
 12-14=-1671/0

- NOTES-** (14-15)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-26, 7-26
 - Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 21-23, 19-21, 17-19, 14-17, 13-14
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Attic room checked for L/360 deflection.



6/4/2021

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| | | | | | |
|-------------|-------|------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | R25 | Attic | 9 | 1 | Job Reference (optional) # 26919 |

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Jun 5 17:24:33 2021 Page 2
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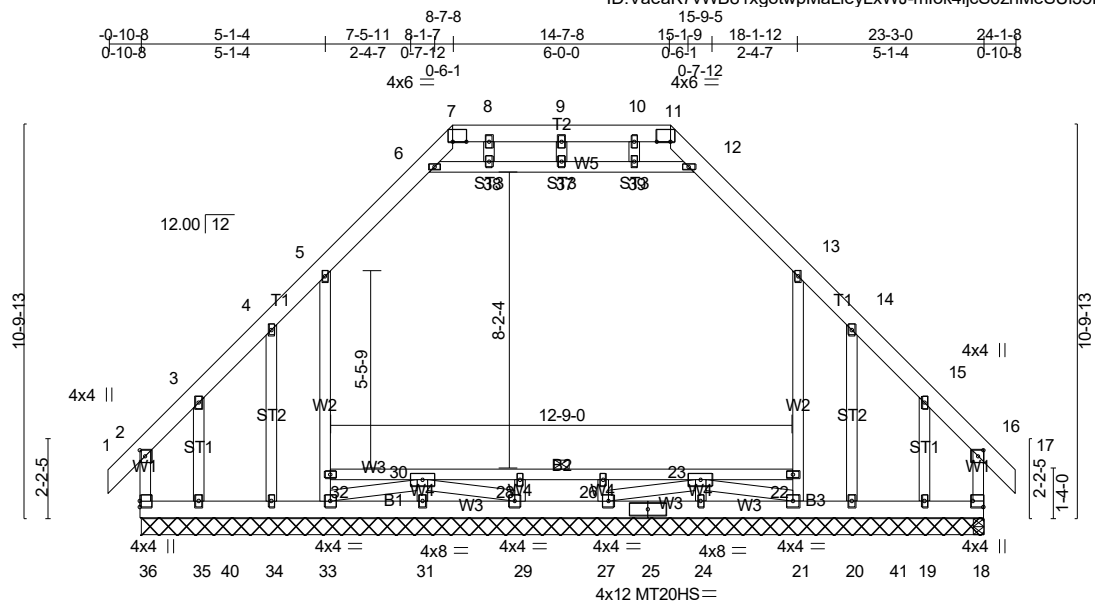
- 14) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- 15) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard



6/4/2021

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Scale: 3/16"=1'

| LOADING (psf) | | SPACING- | | CSI. | | DEFL. | | PLATES | | GRIP | |
|---------------|-------|----------------------|------|-----------|------|----------|----------------------|--------|---------|------|------------------------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.60 | Vert(LL) | -0.01 30-32 >999 240 | MT20 | 244/190 | | |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.38 | Vert(CT) | -0.01 30-32 >999 180 | MT20HS | 187/143 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.23 | Horz(CT) | -0.00 18 n/a n/a | | | | |
| BCLL | 0.0 * | Code IRC2018/TPI2014 | | Matrix-SH | | | | | | | Weight: 229 lb FT = 0% |
| BCDL | 10.0 | | | | | | | | | | |

LUMBER-
 TOP CHORD 2x6 SP No.2
 BOT CHORD 2x6 SP No.2 *Except*
 B2: 2x4 SP No.3
 WEBS 2x4 SP No.3 *Except*
 W2,W5: 2x4 SP No.2
 OTHERS 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 10-0-0 oc bracing: 22-32
 MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 23-3-0.
 (lb) - Max Horz 36=-279(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 33, 21 except 36=-229(LC 8), 18=-221(LC 9), 34=-124(LC 13), 35=-300(LC 12), 20=-123(LC 12), 19=-298(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 34, 20 except 36=562(LC 22), 33=606(LC 24), 21=621(LC 22), 18=556(LC 21), 18=540(LC 1), 35=256(LC 10), 19=251(LC 11), 27=290(LC 19), 29=290(LC 19), 24=363(LC 19), 31=363(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-399/190, 3-4=-265/134, 5-6=-445/136, 6-7=-608/110, 7-8=-624/80, 8-9=-624/80, 9-10=-624/80, 10-11=-624/80, 11-12=-608/113, 12-13=-445/135, 14-15=-265/129, 15-16=-398/184, 2-36=-400/155, 16-18=-400/150
 WEBS 32-33=-563/95, 5-32=-527/106, 21-22=-561/89, 13-22=-527/100, 6-38=-5/485, 37-38=-5/485, 37-39=-5/485, 12-39=-5/485, 23-24=-307/0, 30-31=-307/0

- NOTES-** (17-18)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 6) Provide adequate drainage to prevent water ponding.
 - 7) All plates are MT20 plates unless otherwise indicated.
 - 8) All plates are 2x4 MT20 unless otherwise indicated.
 - 9) Gable studs spaced at 2-0-0 oc.
 - 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 11) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 12) Ceiling dead load (5.0 psf) on member(s). 5-6, 12-13, 6-38, 37-38, 37-39, 12-39



6/4/2021

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| | | | | | |
|-------------|-------|------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | R26 | GABLE | 1 | 1 | Job Reference (optional) # 26919 |

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Jun 5 17:24:35 2021 Page 2
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NOTES- (17-18)

- 13) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 30-32, 28-30, 26-28, 23-26, 22-23
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 33, 21 except (jt=lb) 36=229, 18=221, 34=124, 35=300, 20=123, 19=298.
- 15) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 16) Attic room checked for L/360 deflection.
- 17) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- 18) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

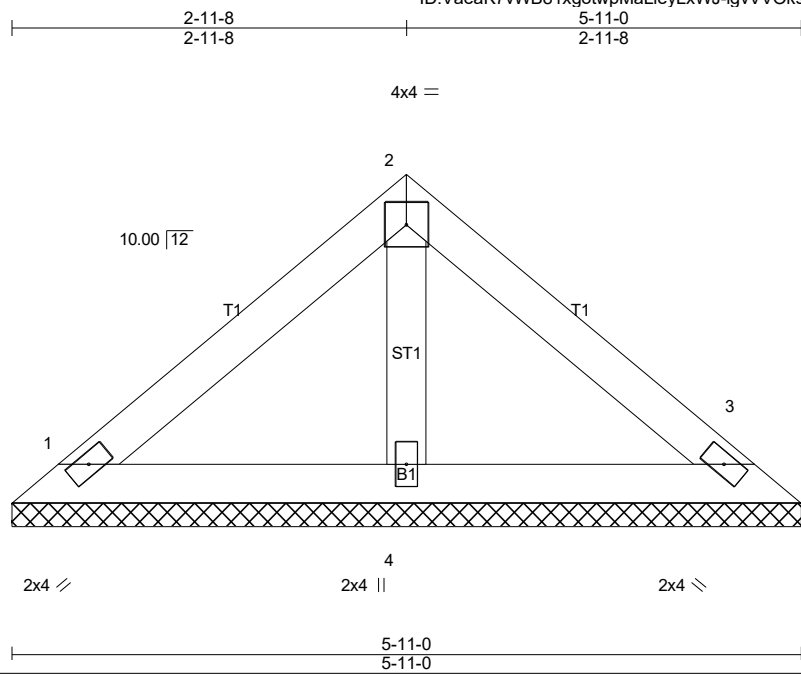


6/4/2021

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| | | | | | | |
|--------------------|---------------|----------------------|----------|----------|--|---------|
| Job 21-2811-R01 | Truss VT01 | Truss Type Valley | Qty 1 | Ply 1 | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N | # 26919 |
|--------------------|---------------|----------------------|----------|----------|--|---------|

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8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Jun 5 17:24:36 2021 Page 1



| | | | | | |
|----------------------|----------------------|-------------|-------------------------|---------------|-------------|
| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
| TCLL (roof) 20.0 | 2-0-0 | TC 0.12 | in (loc) l/defl L/d | MT20 | 244/190 |
| Snow (Pf) 20.0 | Plate Grip DOL 1.15 | BC 0.11 | Vert(LL) n/a - n/a 999 | | |
| TCDL 10.0 | Lumber DOL 1.15 | WB 0.02 | Vert(CT) n/a - n/a 999 | | |
| BCLL 0.0 * | Rep Stress Incr YES | Matrix-P | Horz(CT) 0.00 3 n/a n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | | Weight: 22 lb | FT = 0% |

| | |
|-----------------------|--|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 5-11-0 oc purlins. |
| BOT CHORD 2x4 SP No.3 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| OTHERS 2x4 SP No.3 | MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide. |

REACTIONS. (lb/size) 1=117/5-11-0 (min. 0-1-8), 3=117/5-11-0 (min. 0-1-8), 4=175/5-11-0 (min. 0-1-8)
Max Horz 1=-49(LC 10)
Max Uplift1=-26(LC 13), 3=-32(LC 13)

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

- NOTES-** (9-10)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Gable requires continuous bottom chord bearing.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 - 10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

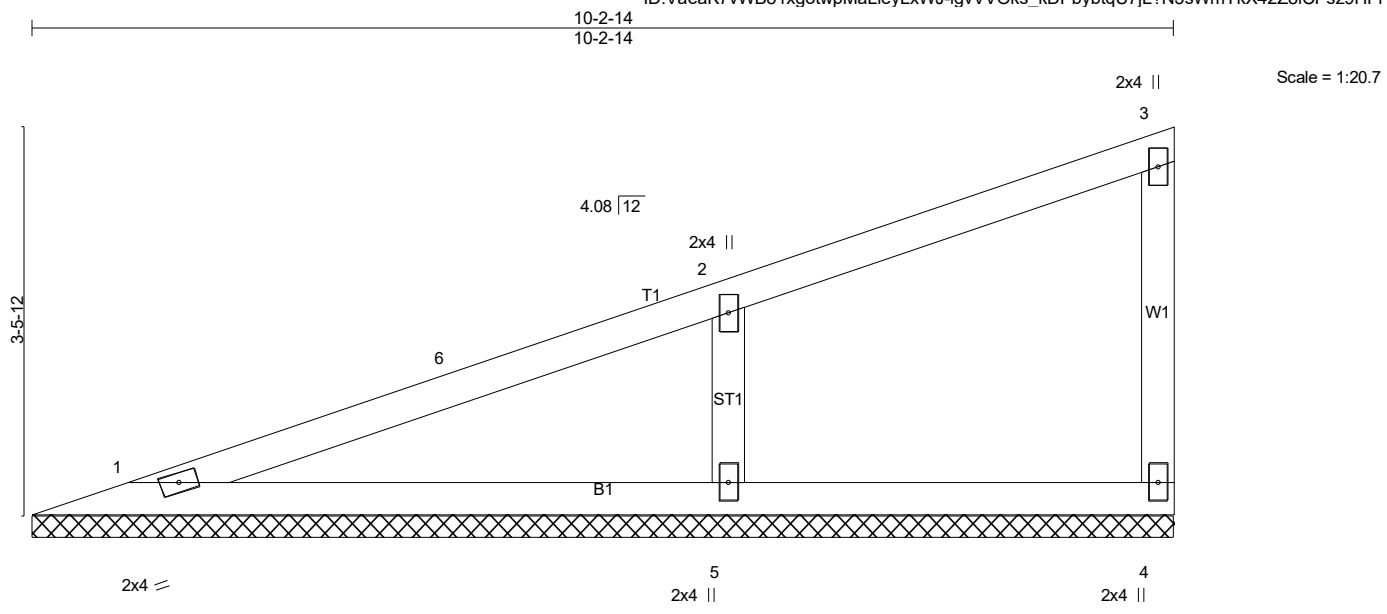


6/4/2021

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| | | | | | |
|--------------------------|-------|------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | VT03 | Valley | 1 | 1 | |
| Job Reference (optional) | | | | | # 26919 |

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Jun 5 17:24:36 2021 Page 1
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| | | | | | |
|----------------------|----------------------|-------------|-------------------------|---------------|-------------|
| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
| TCLL (roof) 20.0 | 2-0-0 | TC 0.43 | in (loc) l/defl L/d | MT20 | 244/190 |
| Snow (Pf) 20.0 | Plate Grip DOL 1.15 | BC 0.37 | Vert(LL) n/a - n/a 999 | | |
| TCDL 10.0 | Lumber DOL 1.15 | WB 0.09 | Vert(CT) n/a - n/a 999 | | |
| BCLL 0.0 * | Rep Stress Incr YES | Matrix-SH | Horz(CT) 0.00 4 n/a n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | | Weight: 37 lb | FT = 0% |

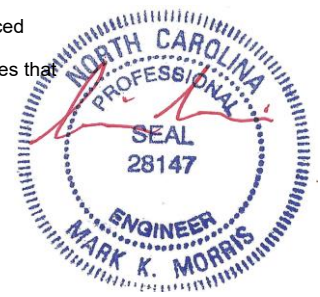
| | |
|-----------------------|--|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP No.3 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.3 | MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide. |
| OTHERS 2x4 SP No.3 | |

REACTIONS. (lb/size) 1=174/10-2-14 (min. 0-1-8), 4=97/10-2-14 (min. 0-1-8), 5=466/10-2-14 (min. 0-1-8)
 Max Horz 1=112(LC 10)
 Max Uplift 1=-5(LC 10), 4=-25(LC 10), 5=-116(LC 10)
 Max Grav 1=180(LC 20), 4=140(LC 20), 5=588(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-5=-453/158

- NOTES-** (9-10)
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) Gable requires continuous bottom chord bearing.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5=116.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 - 10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

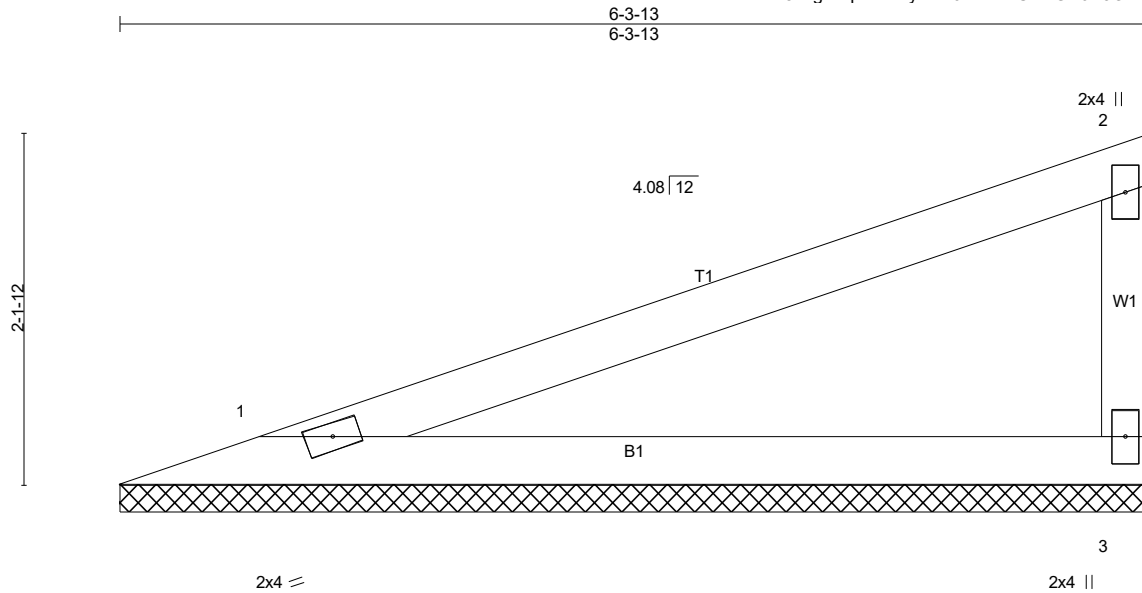


6/4/2021

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

| | | | | | |
|--------------------------|-------|------------|-----|-----|--|
| Job | Truss | Truss Type | Qty | Ply | LOT 1158 CARRIAGE CIRCLE 130 SPRUCE HOLLOW CIRCLE SPRING LAKE, N |
| 21-2811-R01 | VT04 | Valley | 1 | 1 | |
| Job Reference (optional) | | | | | # 26919 |

8.430 s Feb 12 2021 MiTek Industries, Inc. Sat Jun 5 17:24:37 2021 Page 1
 ID:VaeaK7vWB81xgotwpMaLleyLxWJ-AfTtikUI1LGD6A30BeytDw8fw2DT?nBooRmxlz9HFf



Scale = 1:14.1

| | | | | | |
|----------------------|----------------------|-------------|------------------------|---------------|-------------|
| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
| TCLL (roof) 20.0 | 2-0-0 | TC 0.81 | in (loc) l/defl L/d | MT20 | 244/190 |
| Snow (Pf) 20.0 | Plate Grip DOL 1.15 | BC 0.60 | Vert(LL) n/a - n/a 999 | | |
| TCDL 10.0 | Lumber DOL 1.15 | WB 0.00 | Vert(CT) n/a - n/a 999 | | |
| BCLL 0.0 * | Rep Stress Incr YES | Matrix-P | Horz(CT) 0.00 n/a n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | | Weight: 20 lb | FT = 0% |

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-3-13 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

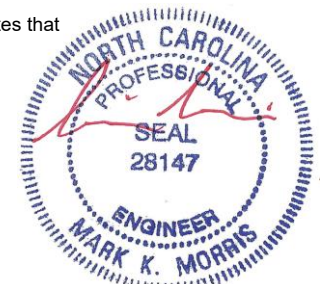
REACTIONS. (lb/size) 1=212/6-3-13 (min. 0-1-8), 3=212/6-3-13 (min. 0-1-8)
 Max Horz 1=64(LC 10)
 Max Uplift 1=-31(LC 10), 3=-53(LC 10)
 Max Grav 1=284(LC 20), 3=284(LC 20)

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

NOTES- (9-10)

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
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- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
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LOAD CASE(S) Standard



6/4/2021

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