

Mark Morris, P.E.

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

AST #: 26558
JOB: 20-4572-R01
JOB NAME: LOT 1112 ANDERSON CREEK
Wind Code: 37
Wind Speed: Vult= 135mph
Exposure Category: B
Mean Roof Height (feet): 23

50 Truss Design(s)

Trusses:

D01, D02, D03, D04, J01, J02, J03, J04, J05, J06, J07, J08, M01, M02, PB01, PB02, PB03, R01, R02, R03, R04, R05, R06, R07, R08, R09, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, VT01, VT02, VT03, VT04, VT05, VT06, VT07, VT08, VT09, VT10, VT11, VT12, VT13, VT14



4/27/2021

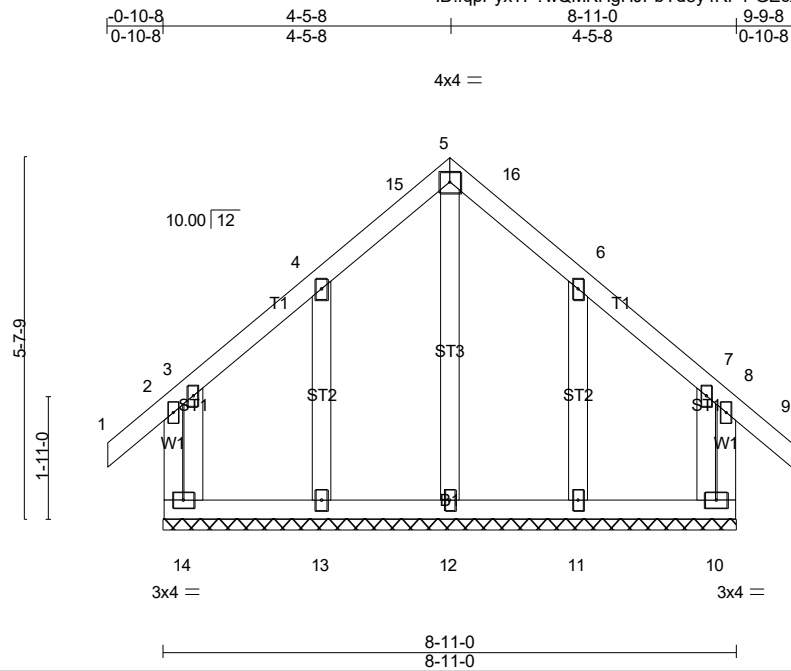
Mark Morris

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 53719.

Job 20-4572-R01	Truss D01	Truss Type Common Supported Gable	Qty 1	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:39:48 2021 Page 1
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Scale = 1:35.9

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.16	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.14	Vert(LL) -0.00 9 n/r 180		
TCDL 10.0	Lumber DOL 1.25	WB 0.18	Vert(CT) -0.00 9 n/r 80		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R	Horz(CT) -0.00 10 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 62 lb	FT = 20%

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 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. All bearings 8-11-0.
(lb) - Max Horz 14=-171(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 14, 10 except 13=-127(LC 12), 11=-126(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 14, 10 except 12=284(LC 23), 13=300(LC 20), 11=298(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-14=-211/258, 4-15=-149/348, 5-15=-130/354, 5-16=-130/354, 6-16=-149/348, 8-10=-206/258
WEBS 5-12=-339/83, 3-14=-252/207

- NOTES-** (14-17)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Corner(3R) 3-11-2 to 4-11-14, Corner(3E) 4-11-14 to 9-9-8 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=1.25 Plate DOL=1.25); 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 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) 14, 10 except (jt=lb) 13=127, 11=126.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



4/27/2021

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Job	Truss	Truss Type	Qty	Ply	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC
20-4572-R01	D01	Common Supported Gable	1	1	Job Reference (optional) # 26558

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:39:53 2021 Page 2
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- 14) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 15) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 16) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 17) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

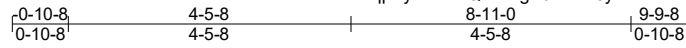


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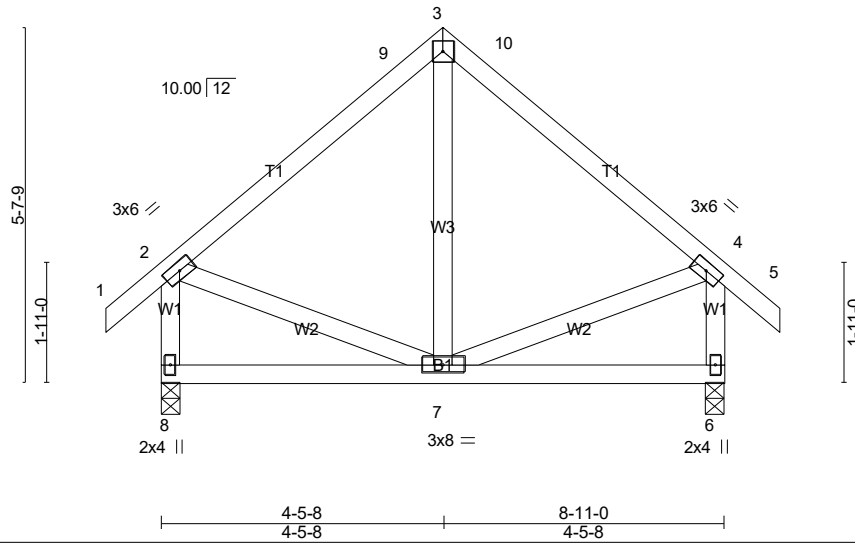
Job 20-4572-R01	Truss D02	Truss Type Common	Qty 2	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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4x4 =

Scale = 1:36.5



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.34	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.18	Vert(LL) -0.01 7-8 >999 240		
TCDL 10.0	Lumber DOL 1.25	WB 0.06	Vert(CT) -0.02 7-8 >999 180		
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: 59 lb	FT = 20%

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

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

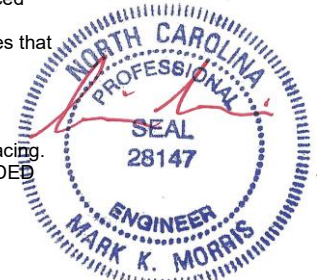
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 8=406/0-3-8 (min. 0-1-8), 6=406/0-3-8 (min. 0-1-8)
Max Horz 8=-171(LC 10)
Max Uplift 8=-66(LC 12), 6=-66(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-9=-273/131, 4-10=-273/131, 2-8=-373/199, 4-6=-373/199

NOTES- (9-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Exterior(2R) 3-11-2 to 4-11-14, Exterior(2E) 4-11-14 to 9-9-8 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=1.25 Plate DOL=1.25); 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.
- 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, 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.
- Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 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.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



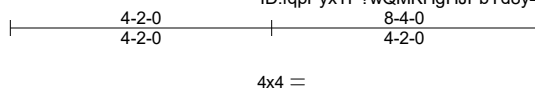
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LOAD CASE(S) Standard

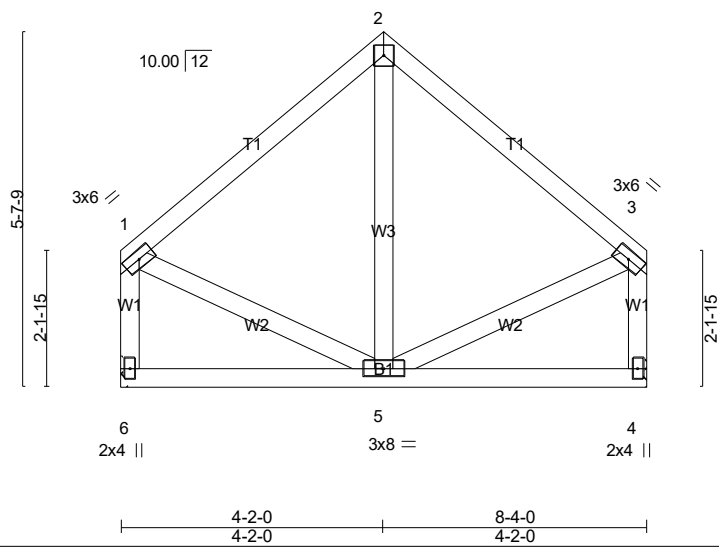
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Job 20-4572-R01	Truss D03	Truss Type Common	Qty 3	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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Scale = 1:36.5



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.32	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.16	Vert(LL) -0.01 5-6 >999 240		
TCDL 10.0	Lumber DOL 1.25	WB 0.06	Vert(CT) -0.01 5-6 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 4 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 54 lb	FT = 20%

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

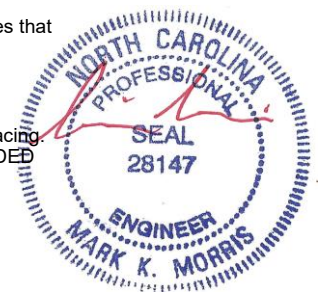
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size) 6=322/Mechanical, 4=322/Mechanical
Max Horz 6=-83(LC 8)
Max Uplift 6=-50(LC 13), 4=-50(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-6=-291/135, 3-4=-291/135

- NOTES-** (9-12)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 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.
 - Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - 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.
 - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
 - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

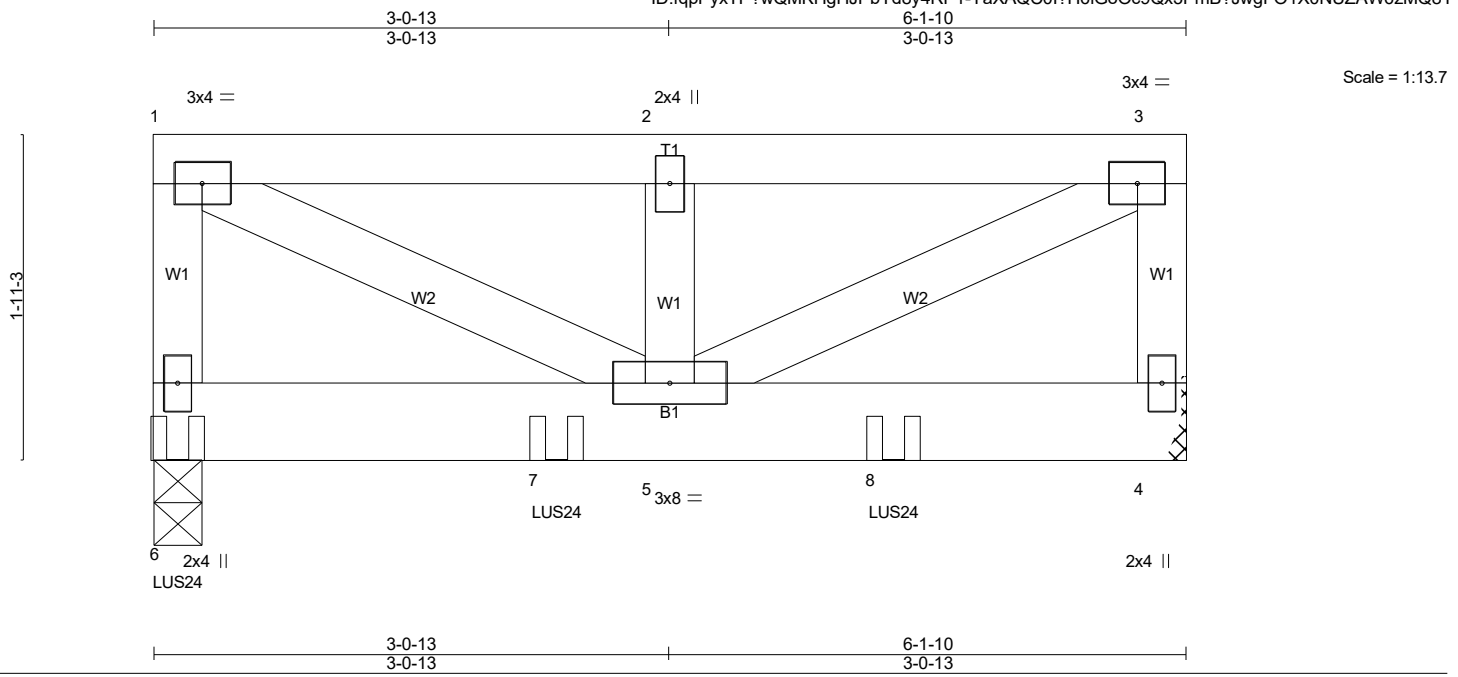


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Job 20-4572-R01	Truss D04	Truss Type Flat Girder	Qty 2	Ply 2	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC # 26558
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6-1-10



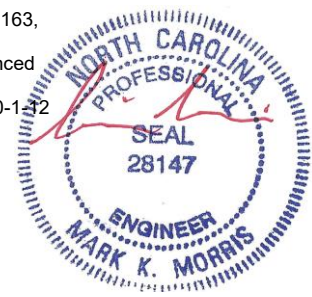
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.25	TC 0.06	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.25	BC 0.11	Vert(LL) -0.00 5 >999 240		
TCDL 10.0	Rep Stress Incr NO	WB 0.16	Vert(CT) -0.01 5 >999 180		
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-P	Horz(CT) 0.00 4 n/a n/a		
BCDL 10.0				Weight: 75 lb	FT = 20%

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 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS. (lb/size) 6=811/0-3-8 (min. 0-1-8), 4=569/Mechanical
Max Uplift 6=-163(LC 6), 4=-121(LC 6)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-6=-429/108, 1-2=-666/140, 2-3=-666/140, 3-4=-429/108
WEBS 1-5=-159/755, 3-5=-159/755

- NOTES-** (13-16)
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; 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
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 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.
 - 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 100 lb uplift at joint(s) except (jt=lb) 6=163, 4=121.
 - 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.
 - Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-3-0 oc max. starting at 0-1-12 from the left end to 4-4-12 to connect truss(es) D03 (1 ply 2x4 SP) to back face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.



4/27/2021

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Job 20-4572-R01	Truss D04	Truss Type Flat Girder	Qty 2	Ply 2	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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- 13) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 14) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 15) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 16) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-3=-60, 4-6=-20
 - Concentrated Loads (lb)
 - Vert: 6=-309(B) 7=-302(B) 8=-302(B)



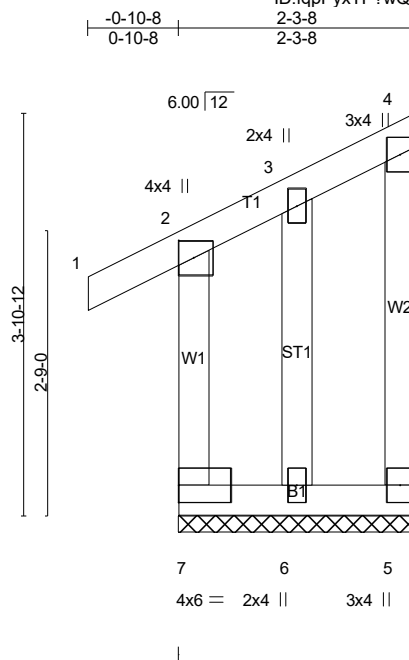
4/27/2021

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Job 20-4572-R01	Truss J01	Truss Type Monopitch Supported Gable	Qty 1	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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Scale = 1:22.3

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.75	Vert(LL) 0.00	1	n/r	180	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.60	Vert(CT) -0.00	2	n/r	80		
TCDL 10.0	Lumber DOL 1.25	WB 0.06	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: 21 lb	FT = 20%

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 2-3-8 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) 7=126/2-3-8 (min. 0-1-8), 5=34/2-3-8 (min. 0-1-8), 6=61/2-3-8 (min. 0-1-8)
Max Horz 7=84(LC 11)
Max Uplift 7=-20(LC 12), 5=-43(LC 11), 6=-74(LC 11)
Max Grav 7=178(LC 21), 5=45(LC 21), 6=86(LC 24)

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

NOTES- (13-16)

- 1) Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 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=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) Gable requires continuous bottom chord bearing.
- 7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5, 6.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



4/27/2021

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Job	Truss	Truss Type	Qty	Ply	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC
20-4572-R01	J01	Monopitch Supported Gable	1	1	Job Reference (optional) # 26558

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:39:56 2021 Page 2
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- 13) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 14) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 15) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 16) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

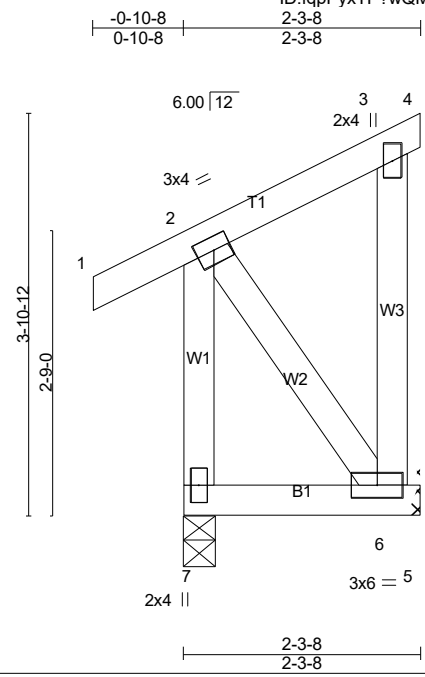


4/27/2021

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 20-4572-R01	Truss J02	Truss Type Monopitch	Qty 6	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:39:56 2021 Page 1
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Scale = 1:22.3

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 1.25	BC 0.04	Vert(LL) -0.00 7 >999 240		
TCDL 10.0	Lumber DOL 1.25	WB 0.08	Vert(CT) -0.00 6-7 >999 180		
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: 21 lb	FT = 20%

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

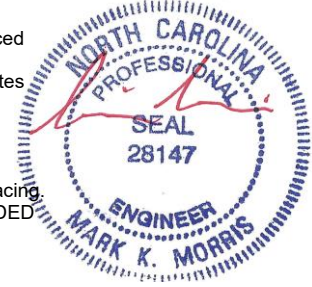
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-3-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size) 6=82/Mechanical, 7=151/0-3-8 (min. 0-1-8)
Max Horz 7=85(LC 11)
Max Uplift 6=-86(LC 11), 7=-4(LC 10)
Max Grav 6=107(LC 21), 7=211(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-6=-101/255

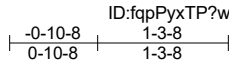
- NOTES-** (10-13)
- 1) Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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, 7.
 - 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 bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - 11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
 - 12) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
 - 13) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



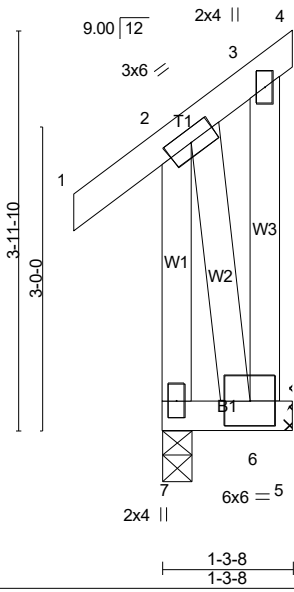
4/27/2021

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 20-4572-R01	Truss J03	Truss Type Monopitch	Qty 4	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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Scale = 1:22.8



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.16	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.16	Vert(LL) -0.00 7 >999 240		
TCDL 10.0	Lumber DOL 1.25	WB 0.17	Vert(CT) -0.00 7 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) -0.00 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 19 lb	FT = 20%

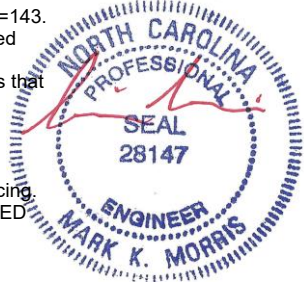
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-3-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 7=134/0-3-8 (min. 0-1-8), 5=19/Mechanical
Max Horz 7=-92(LC 10)
Max Uplift 7=-63(LC 10), 5=-143(LC 9)
Max Grav 7=171(LC 18), 5=152(LC 10)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-377/171
WEBS 2-6=-182/577

- NOTES-** (9-12)
- 1) Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 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=1.25 Plate DOL=1.25); 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 100 lb uplift at joint(s) 7 except (jt=lb) 5=143.
 - 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 bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - 10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
 - 11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
 - 12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



4/27/2021

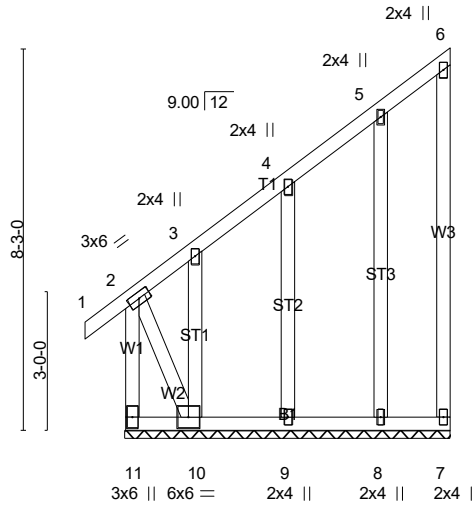
LOAD CASE(S) Standard
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Job 20-4572-R01	Truss J04	Truss Type Monopitch Supported Gable	Qty 1	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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 -0-10-8 7-0-0
 0-10-8 7-0-0

Scale = 1:49.7



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.25	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.10	Vert(LL) 0.00 1 n/r 180		
TCDL 10.0	Lumber DOL 1.25	WB 0.35	Vert(CT) 0.00 2 n/r 80		
BCDL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) -0.00 7 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 67 lb	FT = 20%

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" oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing, Except: 7'-10" oc bracing: 10'-11".

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

REACTIONS. All bearings 7-0-0.
 (lb) - Max Horz 11=183(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) 7, 9, 8 except 11=-211(LC 10), 10=-457(LC 12)
 Max Grav All reactions 250 lb or less at joint(s) 7, 8 except 11=493(LC 12), 9=283(LC 20), 10=347(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-11=-1142/472, 2-3=-402/193, 3-4=-328/141
 BOT CHORD 10-11=-520/184
 WEBS 2-10=-421/1187

- NOTES-** (12-15)
- 1) Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 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=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 7) Gable studs spaced at 2'-0" oc.
 - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3'-6" tall by 1'-0" wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 9, 8 except (it=11) 11=211, 10=457.
 - 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



4/27/2021

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Job	Truss	Truss Type	Qty	Ply	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC
20-4572-R01	J04	Monopitch Supported Gable	1	1	Job Reference (optional) # 26558

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ID:fqpPyxTP?wQMKHgHJPbYd8y4RP1-z9CJ3E2BICUK7F7BrZVm1PpUe8h5bLBS3Snq7RzMq8V

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

LOAD CASE(S) Standard



4/27/2021

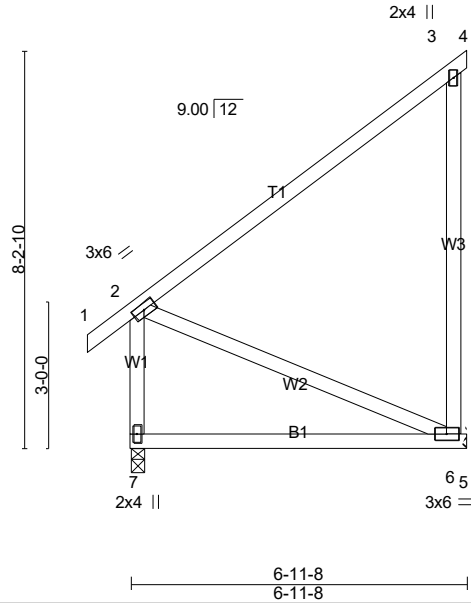
Warning !—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – 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 20-4572-R01	Truss J05	Truss Type Monopitch	Qty 7	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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ID:fqpPyxTP?wQMKGhJJPbYd8y4RP1-RLmhGa3p3VcBIPhOOG0?ZcLVxXwFKr1cH6XNfuzMQ8U
 -0-10-8 6-11-8
 0-10-8 6-11-8

Scale: 1/4"=1'



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.86	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.56	Vert(LL) -0.11 6-7 >718 240		
TCDL 10.0	Lumber DOL 1.25	WB 0.19	Vert(CT) -0.22 6-7 >359 180		
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: 50 lb	FT = 20%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 9-3-8 oc bracing.

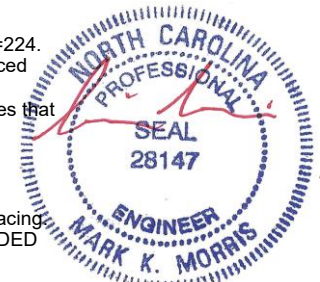
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 6=279/Mechanical, 7=327/0-3-8 (min. 0-1-8)
 Max Horz 7=185(LC 12)
 Max Uplift 6=-224(LC 12)
 Max Grav 6=336(LC 20), 7=327(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-7=-262/0
 BOT CHORD 6-7=-379/181
 WEBS 2-6=-197/411

NOTES- (9-12)

- 1) Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 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=1.25 Plate DOL=1.25); 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 100 lb uplift at joint(s) except (jt=lb) 6=224.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

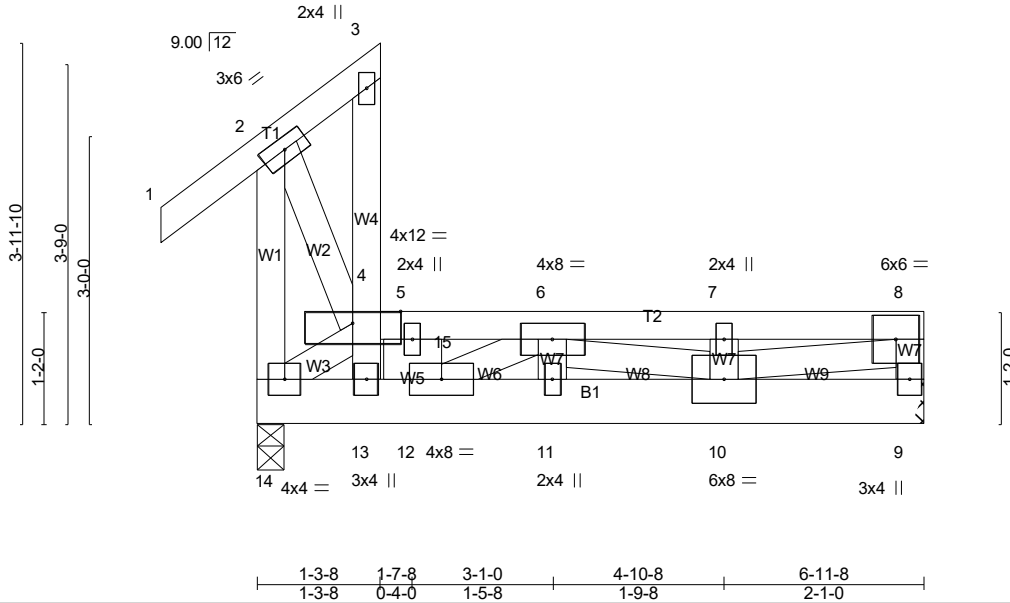
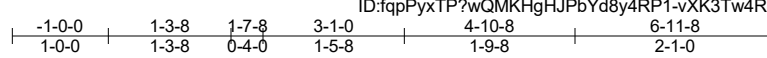


4/27/2021

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 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 20-4572-R01	Truss J06	Truss Type HALF HIP	Qty 2	Ply 2	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC # 26558
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 40.0	2-0-0	TC 0.45	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.00	BC 0.70	Vert(LL) -0.01 11 >999 480		
TCDL 10.0	Lumber DOL 1.00	WB 0.75	Vert(CT) -0.05 10-11 >999 360		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-SH	Horz(CT) 0.01 9 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014		Wind(LL) 0.01 11 >999 240		
				Weight: 103 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x6 SP No.2
 WEBS 2x4 SP No.3 *Except*
 W4: 2x4 SP No.2, W5: 2x8 SP No.2

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

REACTIONS. (lb/size) 9=2053/Mechanical, 14=1669/0-3-8 (min. 0-1-8)
 Max Horz 14=-178(LC 10)
 Max Grav 9=2184(LC 32), 14=1852(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 4-13=0/783, 4-5=-2769/0, 5-15=-2697/0, 6-15=-2697/0, 6-7=-3294/0, 7-8=-3294/0, 8-9=-1636/0, 2-14=-286/117
 BOT CHORD 13-14=0/2210, 12-13=0/2697, 11-12=0/4196, 10-11=0/4196, 9-10=0/388
 WEBS 6-11=0/571, 6-10=-1032/0, 7-10=-655/0, 8-10=0/3140, 6-12=-1831/0, 4-14=-2605/0, 2-4=-169/436

NOTES- (14-17)

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; 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
- C-C wind load user defined.
- TCLL: ASCE 7-16; Pr=40.0 psf (roof LL: Lum DOL=1.00 Plate DOL=1.00); 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.
- 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.
- Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.



4/27/2021

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 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC
20-4572-R01	J06	HALF HIP	2	2	Job Reference (optional) # 26558

8.430 s Feb 12 2021 MITek Industries, Inc. Tue Apr 27 20:40:00 2021 Page 2
 ID:fpPyxTP?wQMKHgHJPbYd8y4RP1-vXK3T4Rqpk2MZGay_XE6qun5xEE39XIWmGwBKzMQ8T

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

LOAD CASE(S)

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-2=-60, 2-3=-60, 4-5=-60, 5-8=-355, 12-14=-20, 9-12=-270(F=-250)
 Concentrated Loads (lb)
 Vert: 5=-293
- 2) Dead + Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (plf)
 Vert: 1-2=-100, 2-3=-100, 4-5=-100, 5-8=-395, 12-14=-20, 9-12=-270(F=-250)
 Concentrated Loads (lb)
 Vert: 5=-293
- 3) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (plf)
 Vert: 1-2=-80, 2-3=-80, 4-5=-80, 5-8=-375, 12-14=-20, 9-12=-270(F=-250)
 Concentrated Loads (lb)
 Vert: 5=-293
- 4) Dead + 0.75 Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-2=-50, 2-3=-50, 4-5=-50, 5-8=-345, 12-14=-20, 9-12=-270(F=-250)
 Concentrated Loads (lb)
 Vert: 5=-293
- 5) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
 Uniform Loads (plf)
 Vert: 1-2=-20, 2-3=-20, 4-5=-20, 5-8=-315, 12-14=-40, 9-12=-290(F=-250)
 Concentrated Loads (lb)
 Vert: 5=-293
- 6) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=60, 2-3=41, 4-5=34, 5-15=-261, 8-15=-254, 12-14=-10, 9-12=-260(F=-250)
 Horz: 1-2=-70, 2-3=-51, 3-4=-49, 4-5=-44, 2-14=-38
 Concentrated Loads (lb)
 Vert: 5=-293
- 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-2, 2-3=-43, 4-5=-43, 5-8=-338, 12-14=-20, 9-12=-270(F=-250)
 Horz: 1-2=-18, 2-3=23, 3-4=29, 4-5=23, 2-14=35
 Concentrated Loads (lb)
 Vert: 5=-293
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=0, 2-3=-13, 4-5=12, 5-8=-283, 12-14=-10, 9-12=-260(F=-250)
 Horz: 1-2=-10, 2-3=3, 3-4=10, 4-5=-22, 2-14=16
 Concentrated Loads (lb)
 Vert: 5=-293
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=6, 2-3=12, 4-5=29, 5-8=-266, 12-14=-10, 9-12=-260(F=-250)
 Horz: 1-2=-16, 2-3=-22, 3-4=-26, 4-5=-39, 2-14=-20
 Concentrated Loads (lb)
 Vert: 5=-293
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-28, 2-3=-34, 4-5=-9, 5-8=-304, 12-14=-20, 9-12=-270(F=-250)
 Horz: 1-2=8, 2-3=14, 3-4=32, 4-5=-11, 2-14=27
 Concentrated Loads (lb)
 Vert: 5=-293
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-4, 2-3=-9, 4-5=8, 5-8=-287, 12-14=-20, 9-12=-270(F=-250)
 Horz: 1-2=-16, 2-3=-11, 3-4=-4, 4-5=-28, 2-14=-9
 Concentrated Loads (lb)
 Vert: 5=-293
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=23, 2-3=29, 4-5=12, 5-8=-283, 12-14=-10, 9-12=-260(F=-250)
 Horz: 1-2=-33, 2-3=-39, 3-4=-44, 4-5=-22, 2-14=13
 Concentrated Loads (lb)
 Vert: 5=-293
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60



4/27/2021

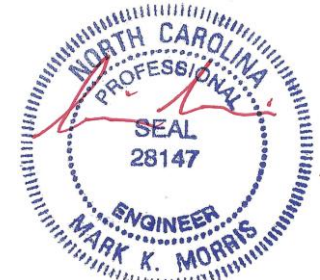
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Job	Truss	Truss Type	Qty	Ply	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC
20-4572-R01	J06	HALF HIP	2	2	Job Reference (optional) # 26558

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:01 2021 Page 3
 ID:fqpPyxTP?wQMKHgHJPbYd8y4RP1-NkuShF53a7su_jrmWh2Tf1RyrLaTocnulP0UjzmzMQ8S

LOAD CASE(S)

- Uniform Loads (plf)
 - Vert: 1-2=6, 2-3=12, 4-5=29, 5-8=-266, 12-14=-10, 9-12=-260(F=-250)
 - Horz: 1-2=-16, 2-3=-22, 3-4=-28, 4-5=-39, 2-14=-19
- Concentrated Loads (lb)
 - Vert: 5=-293
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
 - Uniform Loads (plf)
 - Vert: 1-2=23, 2-3=29, 4-5=12, 5-8=-283, 12-14=-10, 9-12=-260(F=-250)
 - Horz: 1-2=-33, 2-3=-39, 3-4=-44, 4-5=-22, 2-14=13
 - Concentrated Loads (lb)
 - Vert: 5=-293
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
 - Uniform Loads (plf)
 - Vert: 1-2=6, 2-3=12, 4-5=29, 5-8=-266, 12-14=-10, 9-12=-260(F=-250)
 - Horz: 1-2=-16, 2-3=-22, 3-4=-28, 4-5=-39, 2-14=-19
 - Concentrated Loads (lb)
 - Vert: 5=-293
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
 - Uniform Loads (plf)
 - Vert: 1-2=13, 2-3=8, 4-5=-9, 5-8=-304, 12-14=-20, 9-12=-270(F=-250)
 - Horz: 1-2=-33, 2-3=-28, 3-4=-22, 4-5=-11, 2-14=24
 - Concentrated Loads (lb)
 - Vert: 5=-293
- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
 - Uniform Loads (plf)
 - Vert: 1-2=-4, 2-3=-9, 4-5=8, 5-8=-287, 12-14=-20, 9-12=-270(F=-250)
 - Horz: 1-2=-16, 2-3=-11, 3-4=-5, 4-5=-28, 2-14=-8
 - Concentrated Loads (lb)
 - Vert: 5=-293
- 18) Dead + Snow on Overhangs: Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-2=-100, 2-3=-20, 4-5=-20, 5-8=-315, 12-14=-20, 9-12=-270(F=-250)
 - Concentrated Loads (lb)
 - Vert: 5=-293
- 19) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
 - Uniform Loads (plf)
 - Vert: 1-2=-20, 2-3=-20, 4-5=-20, 5-8=-315, 12-14=-20, 9-12=-270(F=-250)
 - Concentrated Loads (lb)
 - Vert: 5=-293
- 20) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
 - Uniform Loads (plf)
 - Vert: 1-2=-56, 2-3=-60, 4-5=-42, 5-8=-337, 12-14=-20, 9-12=-270(F=-250)
 - Horz: 1-2=6, 2-3=10, 3-4=24, 4-5=8, 2-14=20
 - Concentrated Loads (lb)
 - Vert: 5=-293
- 21) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
 - Uniform Loads (plf)
 - Vert: 1-2=-38, 2-3=-42, 4-5=-29, 5-8=-324, 12-14=-20, 9-12=-270(F=-250)
 - Horz: 1-2=-12, 2-3=-8, 3-4=-3, 4-5=-21, 2-14=-7
 - Concentrated Loads (lb)
 - Vert: 5=-293
- 22) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
 - Uniform Loads (plf)
 - Vert: 1-2=-25, 2-3=-29, 4-5=-42, 5-8=-337, 12-14=-20, 9-12=-270(F=-250)
 - Horz: 1-2=-25, 2-3=-21, 3-4=-16, 4-5=-8, 2-14=18
 - Concentrated Loads (lb)
 - Vert: 5=-293
- 23) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
 - Uniform Loads (plf)
 - Vert: 1-2=-38, 2-3=-42, 4-5=-29, 5-8=-324, 12-14=-20, 9-12=-270(F=-250)
 - Horz: 1-2=-12, 2-3=-8, 3-4=-4, 4-5=-21, 2-14=-6
 - Concentrated Loads (lb)
 - Vert: 5=-293
- 24) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
 - Uniform Loads (plf)
 - Vert: 1-2=-86, 2-3=-90, 4-5=-72, 5-8=-367, 12-14=-20, 9-12=-270(F=-250)
 - Horz: 1-2=6, 2-3=10, 3-4=24, 4-5=8, 2-14=20
 - Concentrated Loads (lb)
 - Vert: 5=-293
- 25) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
 - Uniform Loads (plf)
 - Vert: 1-2=-68, 2-3=-72, 4-5=-59, 5-8=-354, 12-14=-20, 9-12=-270(F=-250)
 - Horz: 1-2=-12, 2-3=-8, 3-4=-3, 4-5=-21, 2-14=-7
 - Concentrated Loads (lb)
 - Vert: 5=-293
- 26) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60



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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 20-4572-R01	Truss J06	Truss Type HALF HIP	Qty 2	Ply 2	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:01 2021 Page 4
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LOAD CASE(S)

- Uniform Loads (plf)
Vert: 1-2=-55, 2-3=-59, 4-5=-72, 5-8=-367, 12-14=-20, 9-12=-270(F=-250)
Horz: 1-2=-25, 2-3=-21, 3-4=-16, 4-5=-8, 2-14=18
- Concentrated Loads (lb)
Vert: 5=-293
- 27) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-2=-68, 2-3=-72, 4-5=-59, 5-8=-354, 12-14=-20, 9-12=-270(F=-250)
Horz: 1-2=-12, 2-3=-8, 3-4=-4, 4-5=-21, 2-14=-6
- Concentrated Loads (lb)
Vert: 5=-293
- 28) Dead + Minimum Snow: Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
Vert: 1-2=-20, 2-3=-20, 4-5=-60, 5-8=-355, 12-14=-20, 9-12=-270(F=-250)
- Concentrated Loads (lb)
Vert: 5=-293
- 29) Dead + 0.6 C-C Wind Min. Down: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-2=6, 2-3=-26, 4-5=-26, 5-8=-321, 12-14=-10, 9-12=-260(F=-250)
Horz: 1-2=-16, 2-3=16, 3-4=16, 4-5=16, 2-14=16
- Concentrated Loads (lb)
Vert: 5=-293
- 30) Dead + 0.6 C-C Wind Min. Upward: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-2=6, 2-3=6, 4-5=6, 5-8=-289, 12-14=-10, 9-12=-260(F=-250)
Horz: 1-2=-16, 2-3=-16, 3-4=-16, 4-5=-16, 2-14=-16
- Concentrated Loads (lb)
Vert: 5=-293
- 31) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
- Uniform Loads (plf)
Vert: 1-2=-100, 2-3=-100, 4-5=-20, 5-8=-315, 12-14=-20, 9-12=-270(F=-250)
- Concentrated Loads (lb)
Vert: 5=-293
- 32) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
- Uniform Loads (plf)
Vert: 1-2=-20, 2-3=-20, 4-5=-100, 5-8=-395, 12-14=-20, 9-12=-270(F=-250)
- Concentrated Loads (lb)
Vert: 5=-293
- 33) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
- Uniform Loads (plf)
Vert: 1-2=-80, 2-3=-80, 4-5=-20, 5-8=-315, 12-14=-20, 9-12=-270(F=-250)
- Concentrated Loads (lb)
Vert: 5=-293
- 34) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
- Uniform Loads (plf)
Vert: 1-2=-20, 2-3=-20, 4-5=-80, 5-8=-375, 12-14=-20, 9-12=-270(F=-250)
- Concentrated Loads (lb)
Vert: 5=-293



4/27/2021

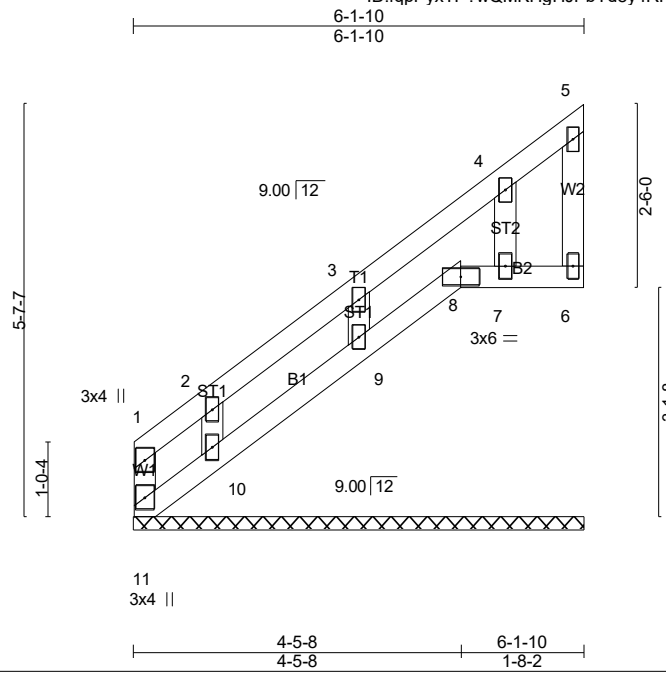
Warning!—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – 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 20-4572-R01	Truss J07	Truss Type Monopitch Supported Gable	Qty 1	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:01 2021 Page 1

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Scale = 1:31.4



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.36	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.35	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.25	WB 0.11	Vert(CT) n/a - n/a 999		
BCDL 0.0 *	Rep Stress Incr YES	Matrix-R	Horz(CT) -0.00 6 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 30 lb	FT = 20%

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

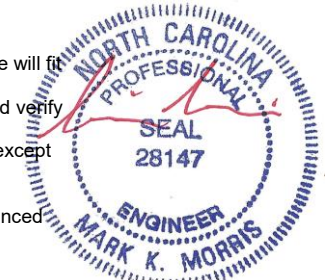
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 8-9.

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

REACTIONS. All bearings 6-1-10.
(lb) - Max Horz 11=169(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 11, 6, 8, 9, 7 except 10=-240(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 6, 8, 9, 10, 7 except 11=281(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-11=-370/144, 1-2=-466/196
WEBS 2-10=-186/362

- NOTES-** (14-17)
- 1) Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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 2x4 MT20 unless otherwise indicated.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 7) Gable studs spaced at 2-0-0 oc.
 - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - 10) Bearing at joint(s) 11, 8, 9, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 6, 8, 9, 7 except (jt=lb) 10=240.
 - 12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 6, 8, 9, 10, 7.
 - 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



4/27/2021

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 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC
20-4572-R01	J07	Monopitch Supported Gable	1	1	Job Reference (optional) # 26558

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

LOAD CASE(S) Standard



4/27/2021

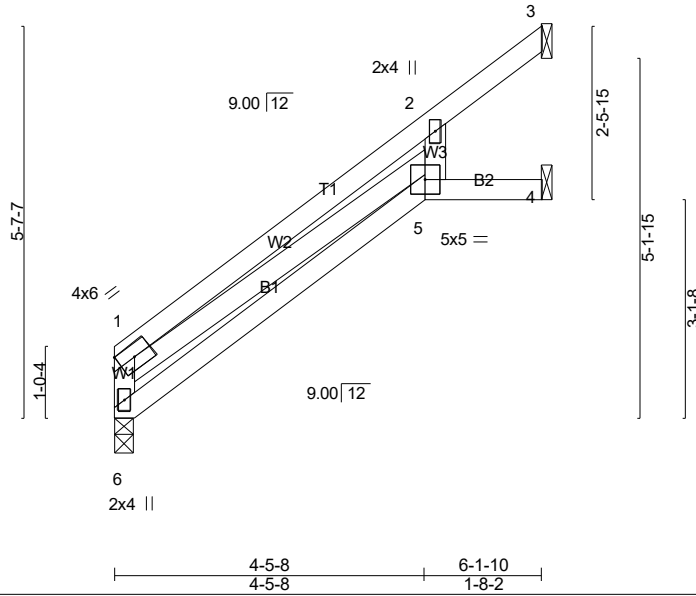
Warning !—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – 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 20-4572-R01	Truss J08	Truss Type Jack-Partial	Qty 7	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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 2-4-8 4-5-8 5-1-13 6-1-10
 2-4-8 2-1-0 0-8-5 0-11-13

Scale = 1:33.0



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 1.25	BC 0.23	Vert(LL) 0.21 5 >333 240		
TCDL 10.0	Lumber DOL 1.25	WB 0.08	Vert(CT) -0.23 5 >311 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.17 4 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 33 lb	FT = 20%

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

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

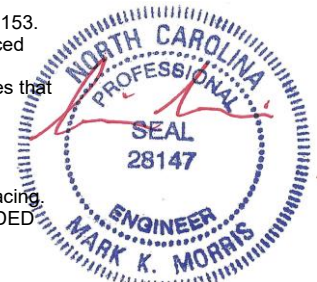
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 6=237/0-3-8 (min. 0-1-8), 3=221/Mechanical, 4=16/Mechanical
 Max Horz 6=172(LC 12)
 Max Uplift 3=-153(LC 12)
 Max Grav 6=237(LC 1), 3=246(LC 19), 4=32(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 BOT CHORD 5-6=-310/157
 WEBS 1-5=-110/270

NOTES- (9-12)

- 1) Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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 100 lb uplift at joint(s) except (jt=lb) 3=153.
- 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 bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



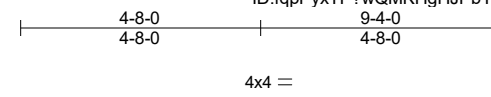
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LOAD CASE(S) Standard

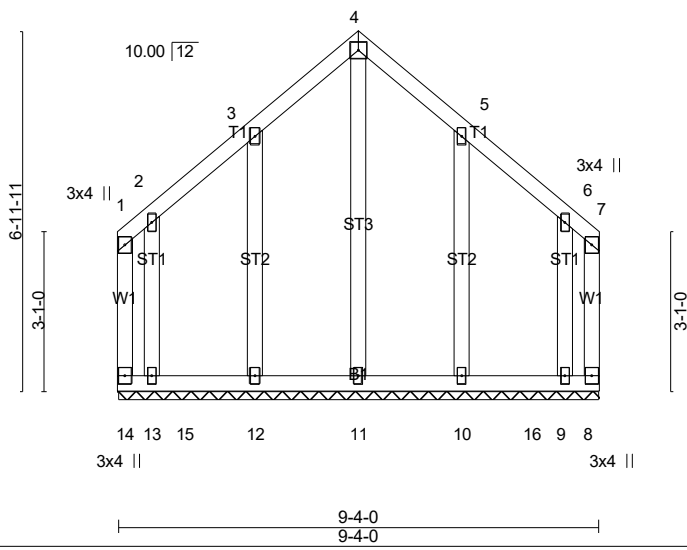
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Job 20-4572-R01	Truss M01	Truss Type Common Supported Gable	Qty 1	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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Scale = 1:44.6



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.46	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.34	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.25	WB 0.26	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R	Horz(CT) -0.00 8 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 73 lb	FT = 20%

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

REACTIONS. All bearings 9-4-0.
(lb) - Max Horz 14=-197(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 12, 10 except 14=-453(LC 8), 8=-447(LC 9), 13=-443(LC 9), 9=-438(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 11 except 14=453(LC 11), 8=447(LC 10), 12=278(LC 19), 13=519(LC 10), 10=278(LC 20), 9=514(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-180/344, 4-5=-180/344
WEBS 4-11=-315/121

- NOTES-** (13-16)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 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=1.25 Plate DOL=1.25); 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 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) 12, 10 except (it=11) 14=453, 8=447, 13=443, 9=438.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



4/27/2021

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Job 20-4572-R01	Truss M01	Truss Type Common Supported Gable	Qty 1	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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- 13) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 14) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 15) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 16) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

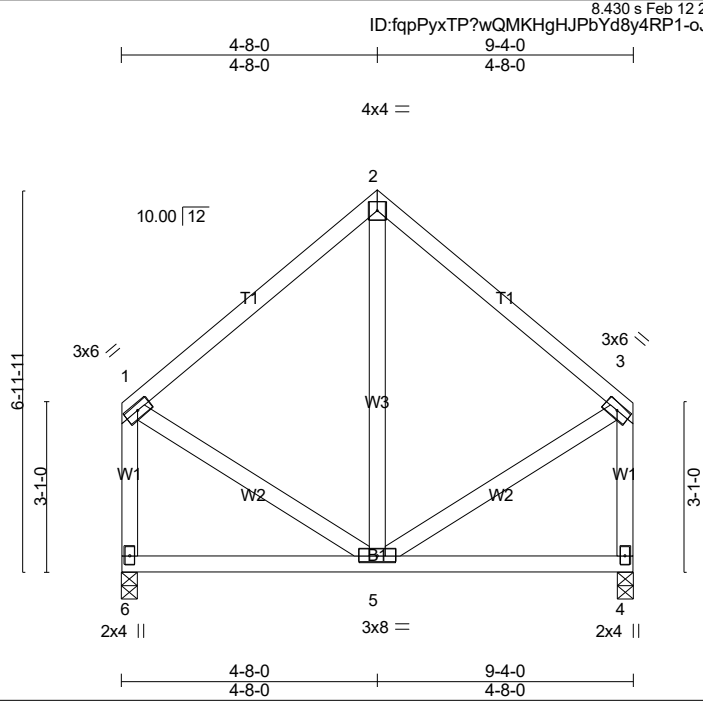


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Job 20-4572-R01	Truss M02	Truss Type Common	Qty 1	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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ID: fqpPyxTP?wQMKHgHJPbYd8y4RP1-oJaaJH7yt2ETrAaLBpbAGg3V?YjI?7HLRNE8K5zMQ8P
8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:04 2021 Page 1



Scale = 1:42.1

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.26	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.18	Vert(LL) -0.01 4-5 >999 240		
TCDL 10.0	Lumber DOL 1.25	WB 0.06	Vert(CT) -0.02 4-5 >999 180		
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: 65 lb	FT = 20%

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

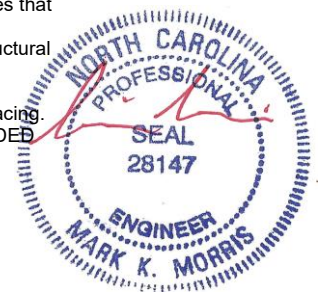
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size) 6=362/0-3-8 (min. 0-1-8), 4=362/0-3-8 (min. 0-1-8)
Max Horz 6=-197(LC 8)
Max Uplift 6=-47(LC 12), 4=-47(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-266/156, 2-3=-266/156, 1-6=-322/141, 3-4=-322/141

- NOTES-** (8-11)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 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=1.25 Plate DOL=1.25); 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 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.
 - Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - 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.
 - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
 - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

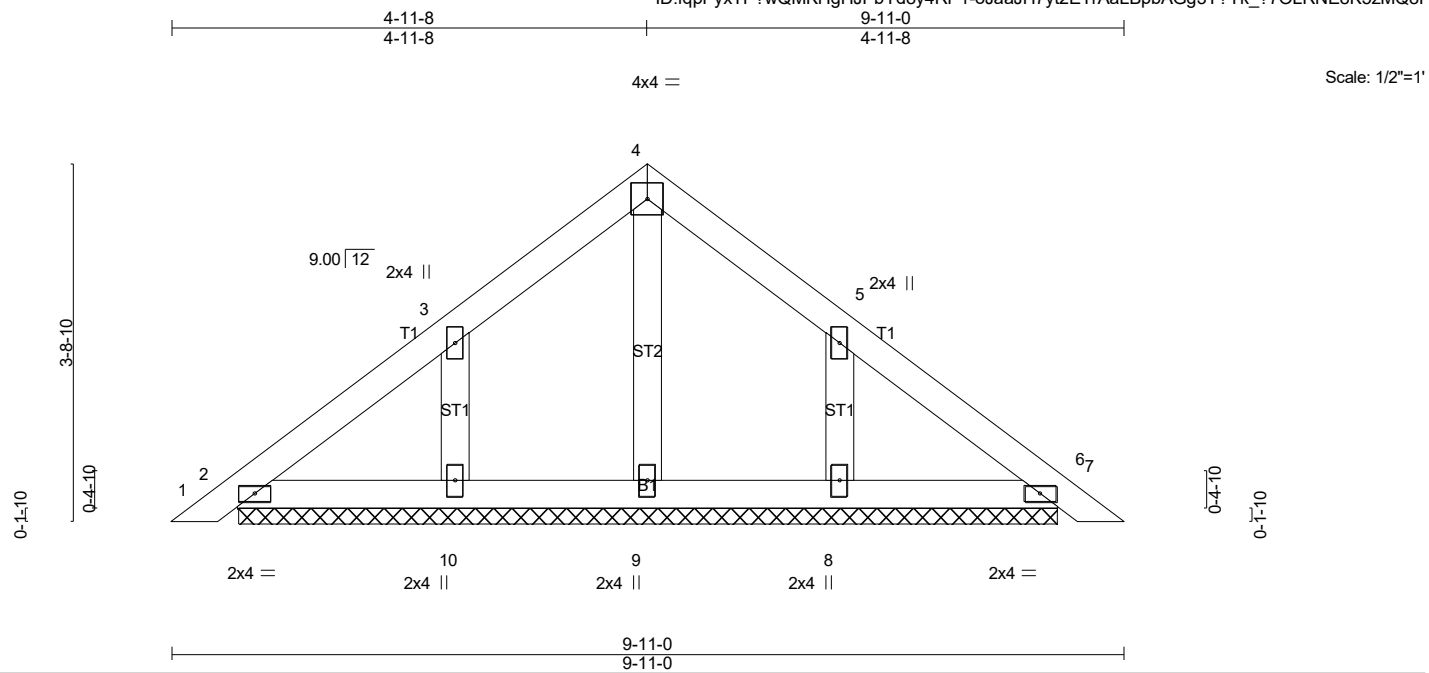


4/27/2021

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Job 20-4572-R01	Truss PB01	Truss Type GABLE	Qty 1	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:04 2021 Page 1
ID: fqpPyxTP?wQMKHgHJPbYd8y4RP1-oJaaJH7yt2ETrAaLBpbAGg3Y?Yk_?7OLRNE8K5zMQ8P



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.07	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.07	Vert(LL) 0.00 6 n/r 180		
TCDL 10.0	Lumber DOL 1.25	WB 0.05	Vert(CT) 0.00 7 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: 40 lb	FT = 20%

LUMBER-	BRACING-	
TOP CHORD 2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 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. All bearings 8-6-5.
 (lb) - Max Horz 2=-87(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=-108(LC 12), 8=-108(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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

- NOTES-** (13-16)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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=1.25 Plate DOL=1.25); 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 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) 2, 6 except (jt=lb) 10=108, 8=108.
 - Non Standard bearing condition. Review required.
 - 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.



4/27/2021

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Job	Truss	Truss Type	Qty	Ply	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC
20-4572-R01	PB01	GABLE	1	1	Job Reference (optional) # 26558

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:05 2021 Page 2
 ID:fqpPyxTP?wQMKHgHJPbYd8y4RP1-GV7yXd8aeLMKTK9XIX7Pptbjly4DkaeUg1_hsXzMQ80

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

LOAD CASE(S) Standard

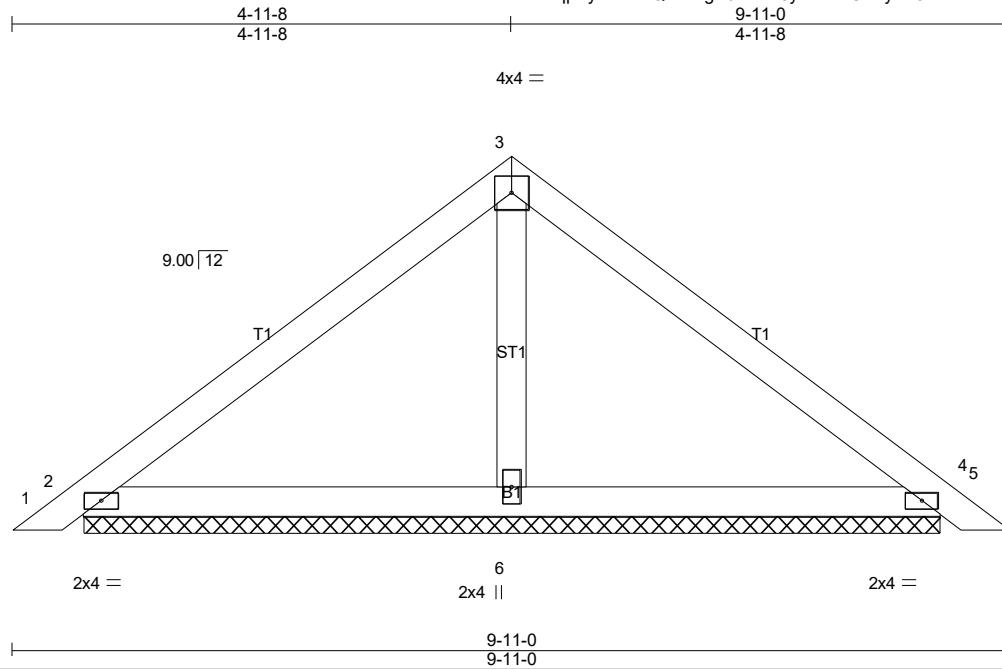


4/27/2021

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Job 20-4572-R01	Truss PB02	Truss Type Piggyback	Qty 4	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:05 2021 Page 1
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Scale = 1:22.9

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.35	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.31	Vert(LL) 0.01 5 n/r 180		
TCDL 10.0	Lumber DOL 1.25	WB 0.05	Vert(CT) 0.02 5 n/r 80		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 4 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 35 lb	FT = 20%

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

BRACING-
TOP CHORD
BOT CHORD

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

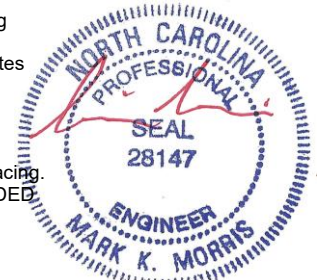
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=218/8-6-5 (min. 0-1-8), 4=218/8-6-5 (min. 0-1-8), 6=300/8-6-5 (min. 0-1-8)
Max Horz 2=-87(LC 10)
Max Uplift 2=61(LC 12), 4=-74(LC 13), 6=-1(LC 12)

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

NOTES- (11-14)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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, 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 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.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



LOAD CASE(S) Standard

4/27/2021

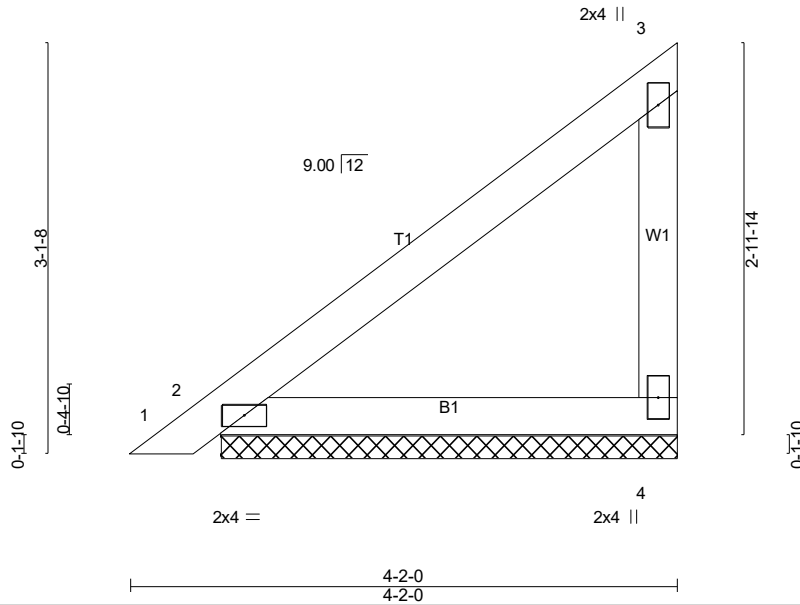
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Job 20-4572-R01	Truss PB03	Truss Type Piggyback	Qty 5	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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4-2-0
4-2-0

Scale = 1:17.5



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.21	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.22	Vert(LL) -0.00 1 n/r 180		
TCDL 10.0	Lumber DOL 1.25	WB 0.00	Vert(CT) 0.00 1 n/r 80		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 16 lb	FT = 20%

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 4-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

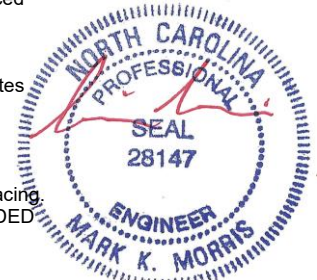
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 4=131/3-5-11 (min. 0-1-8), 2=162/3-5-11 (min. 0-1-8)
Max Horz 2=108(LC 12)
Max Uplift 4=68(LC 12), 2=5(LC 12)
Max Grav 4=142(LC 20), 2=162(LC 1)

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

NOTES- (10-13)

- 1) Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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) 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) 4, 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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 10) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 12) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 13) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



4/27/2021

LOAD CASE(S) Standard

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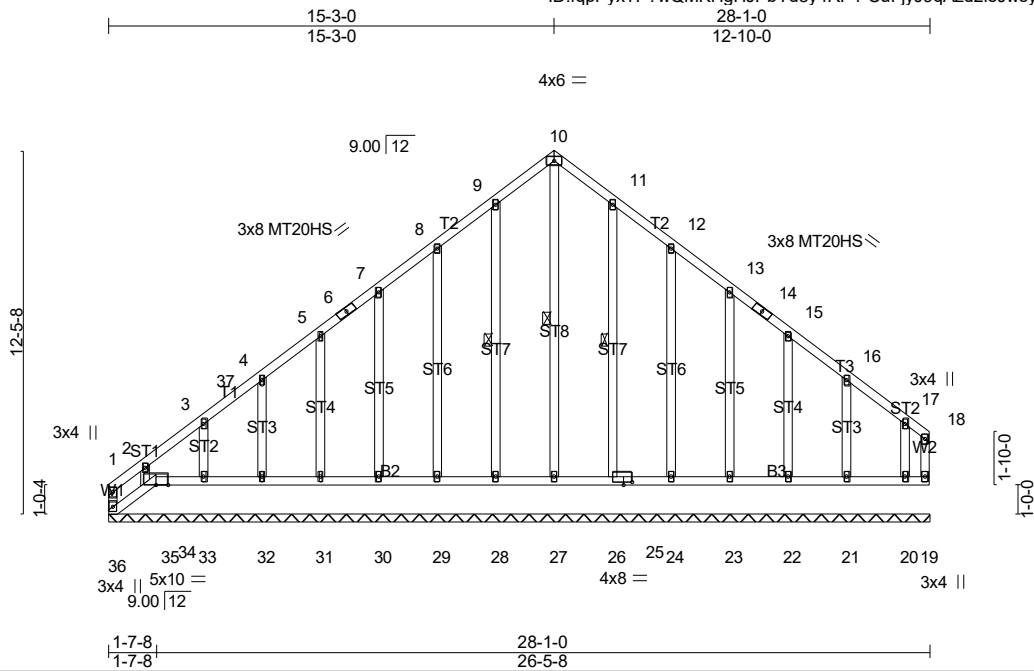


Plate Offsets (X,Y)-- [25:0-3-8,0-1-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.30	Vert(LL) n/a	-	n/a	999	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.28	Vert(CT) n/a	-	n/a	999	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.25	WB 0.23	Horz(CT) 0.00	19	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R						
BCDL 10.0	Code IRC2018/TPI2014							
							Weight: 217 lb	FT = 20%

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

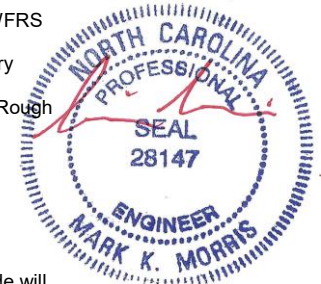
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 10-27, 9-28, 11-26

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

REACTIONS. All bearings 28-1-0.
(lb) - Max Horz 36=293(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 34, 27, 28, 29, 30, 31, 32, 33, 26, 24, 23, 22, 21 except 36=-378(LC 10), 19=-219(LC 11), 35=-387(LC 12), 20=-242(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 19, 34, 32, 33, 21 except 36=429(LC 9), 27=387(LC 22), 28=273(LC 19), 29=261(LC 19), 30=261(LC 19), 31=268(LC 19), 35=407(LC 10), 26=266(LC 20), 24=264(LC 20), 23=261(LC 20), 22=268(LC 20), 20=277(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-36=-256/224, 1-2=-326/301, 7-8=-149/279, 8-9=-191/324, 9-10=-225/373, 10-11=-225/373, 11-12=-191/316
WEBS 10-27=-371/167

- NOTES-** (15-18)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-1-12 to 4-11-6, Exterior(2N) 4-11-6 to 10-5-6, Corner(3R) 10-5-6 to 20-0-10, Exterior(2N) 20-0-10 to 23-1-10, Corner(3E) 23-1-10 to 27-11-4 zone; end vertical 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=1.25 Plate DOL=1.25); 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.
 - 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) 34, 27, 28, 29, 30, 31



4/27/2021

Warning: This design is intended for use 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 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC
20-4572-R01	R01	GABLE	1	1	Job Reference (optional) # 26558

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:07 2021 Page 2
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NOTES- (15-18)

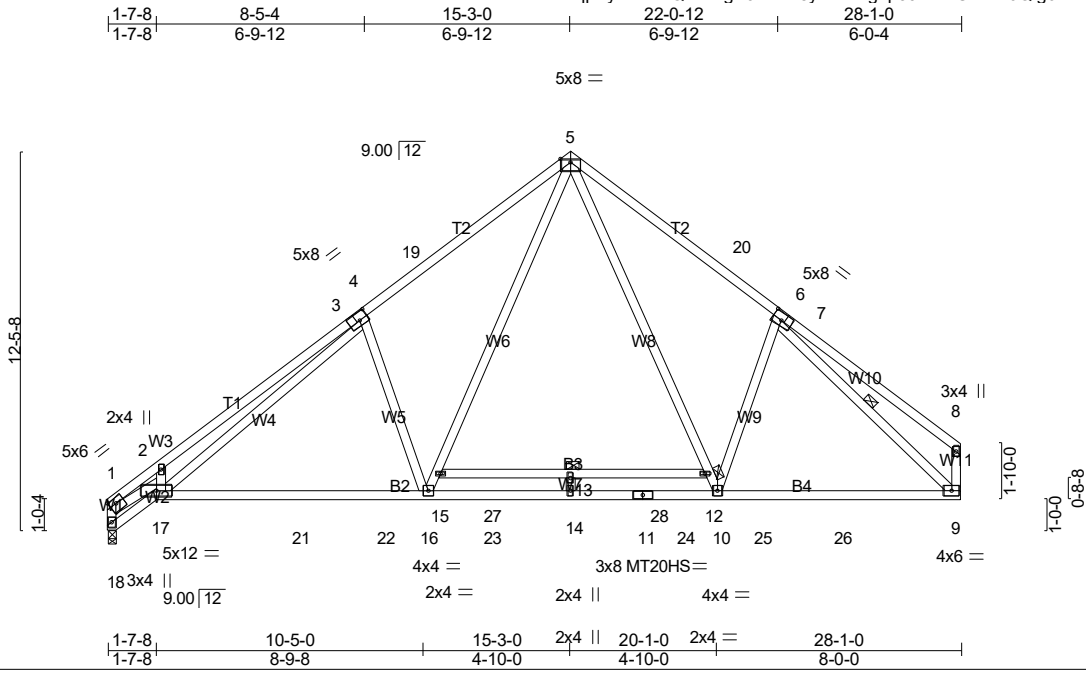
- 13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 19, 34, 27, 28, 29, 30, 31, 32, 33, 35, 26, 24, 23, 22, 21, 20.
- 14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 15) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 16) 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.
- 17) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 18) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



4/27/2021

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.



Scale = 1:75.8

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.69	Vert(LL) -0.58	13	>573	240	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 1.00	Vert(CT) -0.83	13	>402	180	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.25	WB 0.90	Horz(CT) 0.14	9	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH						
BCDL 10.0	Code IRC2018/TPI2014							Weight: 194 lb FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2 *Except*
 B2,B4: 2x4 SP SS
 WEBS 2x4 SP No.3

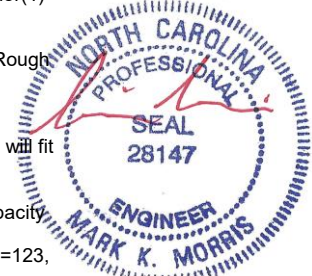
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 9-0-15 oc bracing. Except: 4-7-0 oc bracing: 12-15
 WEBS 1 Row at midpt 6-9

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

REACTIONS. (lb/size) 18=1194/0-3-8 (min. 0-1-8), 9=1210/Mechanical
 Max Horz 18=275(LC 9)
 Max Uplift 18=-123(LC 12), 9=-101(LC 13)
 Max Grav 18=1435(LC 19), 9=1491(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-18=-1531/254, 1-2=-3038/551, 2-3=-3162/783, 3-4=-2984/784, 4-19=-1986/290,
 5-19=-1869/327, 5-20=-1611/302, 6-20=-1725/265
 BOT CHORD 17-18=-323/337, 17-21=-248/1773, 21-22=-248/1773, 16-22=-248/1773, 16-23=-11/1112,
 14-23=-11/1112, 11-14=-11/1112, 11-24=-11/1112, 10-24=-11/1112, 10-25=-75/1305,
 25-26=-75/1305, 9-26=-75/1305
 WEBS 1-17=-448/2395, 2-17=-274/274, 4-17=-615/1165, 4-16=-541/378, 15-16=-269/1163,
 5-15=-234/1297, 5-12=-168/828, 10-12=-197/683, 6-10=-190/313, 6-9=-1773/90

- NOTES-** (11-14)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-11-6, Interior(1) 4-11-6 to 10-5-6, Exterior(2R) 10-5-6 to 20-0-10, Interior(1) 20-0-10 to 23-1-10, Exterior(2E) 23-1-10 to 27-11-4 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=1.25 Plate DOL=1.25); 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) 18 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) except (jt=lb) 18=123, 9=101.
 - 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.



4/27/2021

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Job 20-4572-R01	Truss R02	Truss Type Roof Special	Qty 6	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:09 2021 Page 2
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- 11) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 13) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 14) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

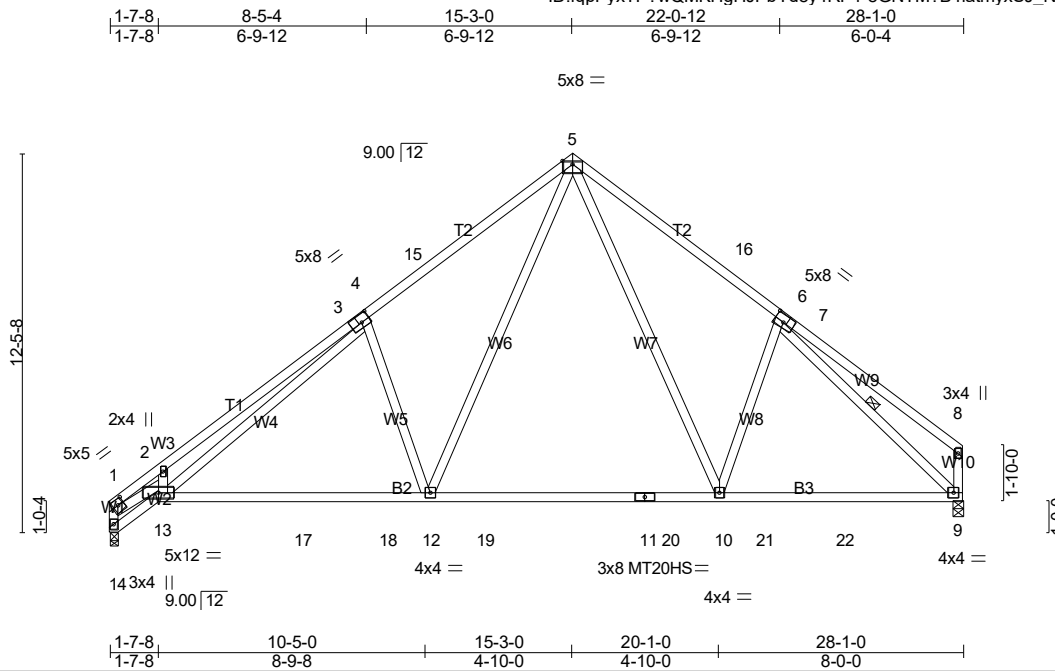


4/27/2021

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Job 20-4572-R01	Truss R03	Truss Type Roof Special	Qty 5	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC # 26558
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8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:09 2021 Page 1



Scale = 1:75.8

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

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.67	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.90	Vert(LL) -0.42 10-12 >796 240	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.25	WB 0.89	Vert(CT) -0.56 10-12 >591 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.13 9 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 180 lb	FT = 20%

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

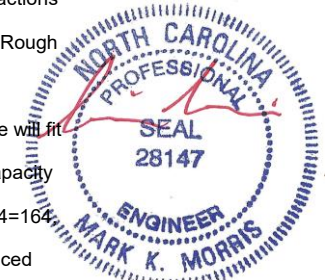
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 2-8-14 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 6-9

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

REACTIONS. (lb/size) 14=1112/0-3-8 (min. 0-1-8), 9=1112/0-3-8 (min. 0-1-8)
 Max Horz 14=293(LC 9)
 Max Uplift 14=-164(LC 12), 9=-151(LC 13)
 Max Grav 14=1254(LC 19), 9=1273(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-14=-1380/288, 1-2=-2737/619, 2-3=-2872/850, 3-4=-2694/851, 4-15=-1659/365,
 5-15=-1541/402, 5-16=-1309/371, 6-16=-1423/334
 BOT CHORD 13-14=-334/351, 13-17=-306/1511, 17-18=-306/1511, 12-18=-306/1511, 12-19=-70/912,
 11-19=-70/912, 11-20=-70/912, 10-20=-70/912, 10-21=-127/1081, 21-22=-127/1081,
 9-22=-127/1081
 WEBS 1-13=-506/2164, 2-13=-281/272, 4-13=-609/1204, 4-12=-544/378, 5-12=-286/1064,
 5-10=-208/651, 6-10=-215/300, 6-9=-1438/167

- NOTES-** (10-13)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-11-6, Interior(1) 4-11-6 to 10-5-6, Exterior(2R) 10-5-6 to 20-0-10, Interior(1) 20-0-10 to 23-1-10, Exterior(2E) 23-1-10 to 27-11-4 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=1.25 Plate DOL=1.25); 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) 14 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) 14=164, 9=151.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



4/27/2021

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Job	Truss	Truss Type	Qty	Ply	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC
20-4572-R01	R03	Roof Special	5	1	Job Reference (optional) # 26558

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:09 2021 Page 2
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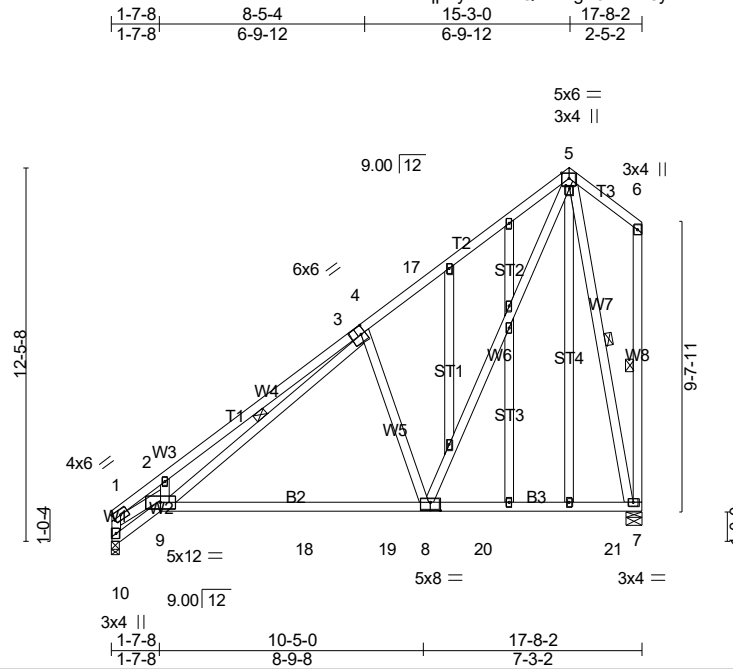
- 10) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 12) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 13) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



4/27/2021

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Scale = 1:76.8

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

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) -0.17	8-9	>999	240	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.90	Vert(CT) -0.36	8-9	>577	180		
TCDL 10.0	Lumber DOL 1.25	WB 0.87	Horz(CT) 0.07	7	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH						
BCDL 10.0	Code IRC2018/TPI2014							
							Weight: 173 lb	FT = 20%

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

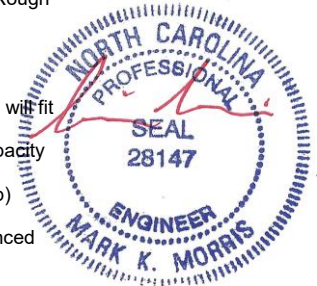
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 3-9-3 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 8-0-1 oc bracing.
 WEBS 1 Row at midpt 4-9, 6-7, 5-7

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

REACTIONS. (lb/size) 10=695/0-3-8 (min. 0-1-8), 7=695/0-6-8 (min. 0-1-8)
 Max Horz 10=400(LC 12)
 Max Uplift 10=-19(LC 12), 7=-266(LC 12)
 Max Grav 10=748(LC 19), 7=927(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-10=-848/269, 1-2=-1711/579, 2-3=-1891/807, 3-4=-1692/808, 4-17=-767/149, 5-17=-648/186
 BOT CHORD 9-10=-467/260, 9-18=-312/729, 18-19=-312/729, 8-19=-312/729
 WEBS 1-9=-471/1384, 2-9=-320/269, 4-9=-785/1090, 4-8=-529/394, 5-8=-309/986, 5-7=-794/307

- NOTES-** (12-15)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-11-6, Interior(1) 4-11-6 to 10-5-6, Exterior(2R) 10-5-6 to 15-3-0, Exterior(2E) 15-3-0 to 17-6-6 zone; 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.
 - TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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 2x4 MT20 unless otherwise indicated.
 - 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.
 - 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=266.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



4/27/2021

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 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC
20-4572-R01	R04	GABLE	1	1	Job Reference (optional) # 26558

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:10 2021 Page 2
 ID:fqpPyxTP?wQMKHgHJPbYd8y4RP1-cTxraKCjTu?dZ51VY4iaWxIRYzbWPe2DpJhSYzMQ8J

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

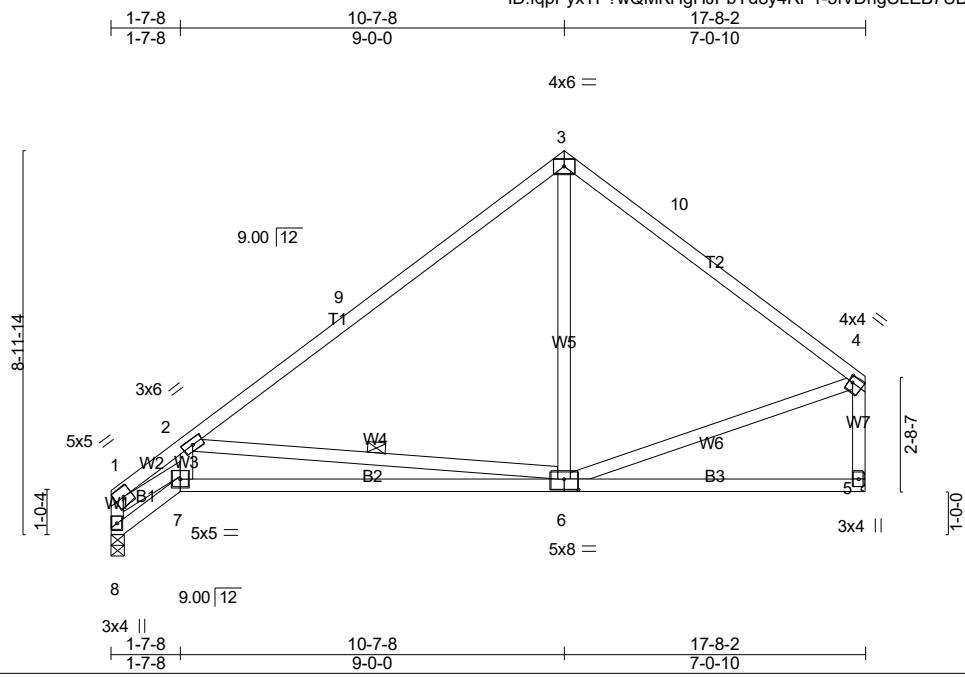
LOAD CASE(S) Standard



4/27/2021

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Job 20-4572-R01	Truss R05	Truss Type Roof Special	Qty 5	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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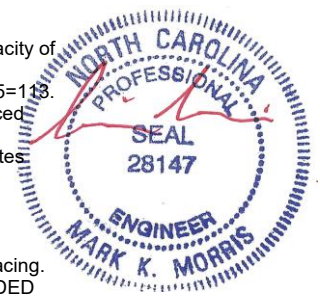
Plate Offsets (X,Y)-- [4:0-1-0,0-1-12], [6:0-4-0,0-3-0]					
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.93	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.83	Vert(LL) -0.17 6-7 >999 240		
TCDL 10.0	Lumber DOL 1.25	WB 0.62	Vert(CT) -0.37 6-7 >566 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.07 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 103 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 2-6
	MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 8=695/0-3-8 (min. 0-1-8), 5=695/Mechanical
 Max Horz 8=190(LC 12)
 Max Uplift 8=95(LC 12), 5=113(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-8=-666/157, 1-2=-1738/639, 2-9=-701/114, 3-9=-530/143, 3-10=-474/166, 4-10=-647/142, 4-5=-644/152
 BOT CHORD 6-7=-778/1587
 WEBS 1-7=-668/1609, 2-7=-93/381, 2-6=-1157/716, 3-6=0/338, 4-6=-60/430

- NOTES-** (10-13)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-11-6, Interior(1) 4-11-6 to 5-9-14, Exterior(2R) 5-9-14 to 12-8-12, Exterior(2E) 12-8-12 to 17-6-6 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=1.25 Plate DOL=1.25); 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) Refer to girder(s) for truss to truss connections.
 - 7) Bearing at joint(s) 8 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) 8 except (jt=lb) 5=113.
 - 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 bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - 11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
 - 12) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
 - 13) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING



4/27/2021

CONSIDERATIONS 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 20-4572-R01	Truss R05	Truss Type Roof Special	Qty 5	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:11 2021 Page 2
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LOAD CASE(S) Standard

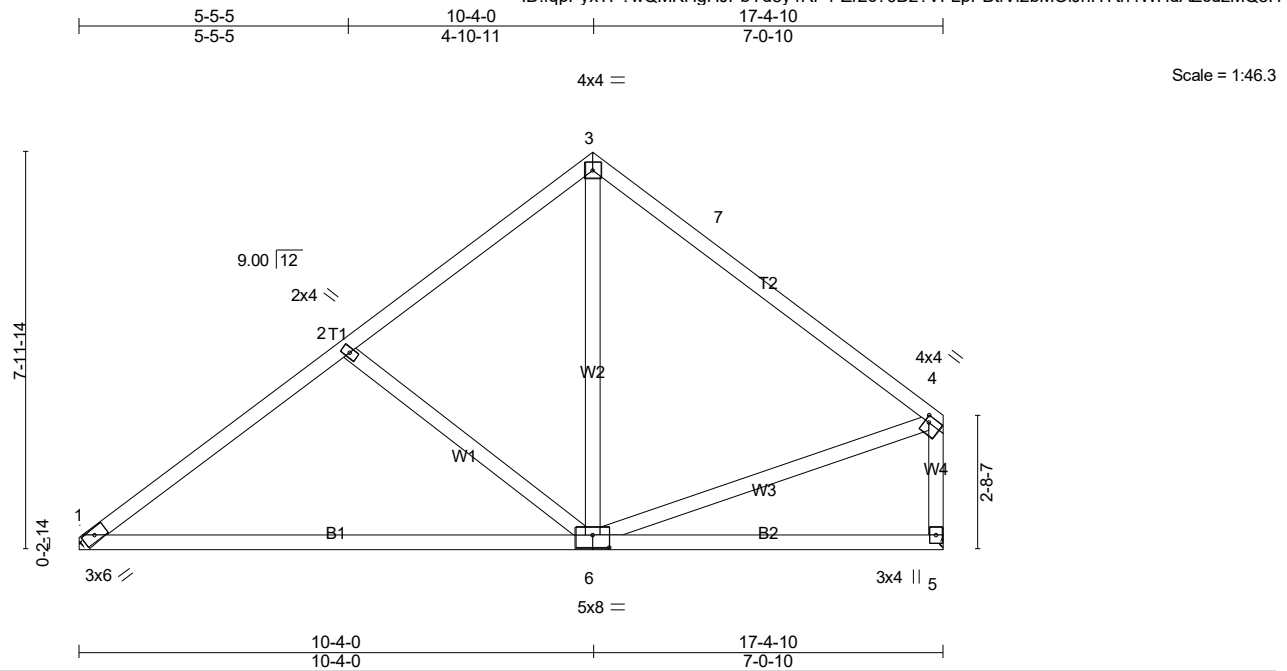


4/27/2021

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 20-4572-R01	Truss R06	Truss Type Common	Qty 6	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC # 26558
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8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:12 2021 Page 1



Scale = 1:46.3

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.75	Vert(LL) -0.24	1-6	>847	240	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.86	Vert(CT) -0.51	1-6	>402	180		
TCDL 10.0	Lumber DOL 1.25	WB 0.26	Horz(CT) 0.01	5	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 92 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-8-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

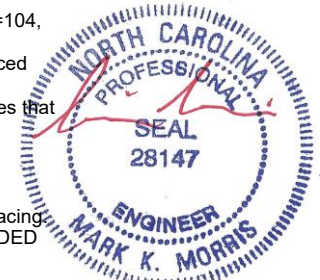
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=687/Mechanical, 5=687/Mechanical
Max Horz 1=183(LC 9)
Max Uplift1=-104(LC 12), 5=-100(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-859/183, 2-3=-609/166, 3-7=-464/148, 4-7=-637/127, 4-5=-640/144
BOT CHORD 1-6=-224/687
WEBS 2-6=-346/227, 3-6=-37/387, 4-6=-29/397

NOTES- (9-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-12 to 4-10-6, Interior(1) 4-10-6 to 5-3-14, Exterior(2R) 5-3-14 to 12-5-4, Exterior(2E) 12-5-4 to 17-2-14 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=1.25 Plate DOL=1.25); 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=104, 5=100.
- 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 bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 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.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



4/27/2021

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 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 20-4572-R01	Truss R07	Truss Type GABLE	Qty 1	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:12 2021 Page 1
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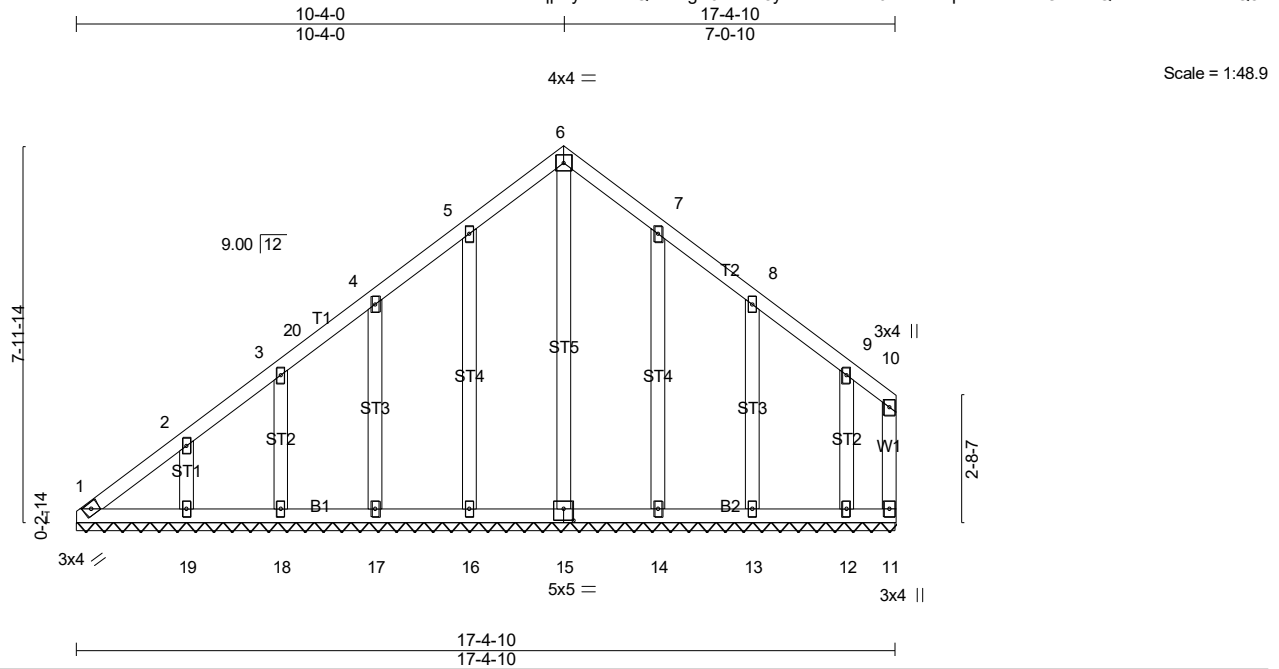


Plate Offsets (X,Y)-- [15:0-2-8,0-3-0]					
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.25	TC 0.07	Vert(LL) n/a - n/a 999	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.25	BC 0.10	Vert(CT) n/a - n/a 999		
TCDL 10.0	Rep Stress Incr YES	WB 0.28	Horz(CT) 0.00 11 n/a n/a		
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-SH			
BCDL 10.0					Weight: 114 lb FT = 20%

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. All bearings 17-4-10.
(lb) - Max Horz 1=183(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 15, 16, 17, 18, 19, 14, 13, 12
Max Grav All reactions 250 lb or less at joint(s) 1, 11, 17, 18, 19, 13, 12 except 15=321(LC 22), 16=280(LC 19), 14=273(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 5-6=-126/271, 6-7=-126/271

- NOTES-** (12-15)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-1-12 to 4-11-6, Exterior(2N) 4-11-6 to 5-6-6, Corner(3R) 5-6-6 to 12-4-0, Corner(3E) 12-4-0 to 17-2-14 zone; 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.
 - TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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 2x4 MT20 unless otherwise indicated.
 - 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, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11, 15, 16, 17, 18, 19, 14, 13, 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.



4/27/2021

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Job	Truss	Truss Type	Qty	Ply	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC
20-4572-R01	R07	GABLE	1	1	Job Reference (optional) # 26558

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:13 2021 Page 2

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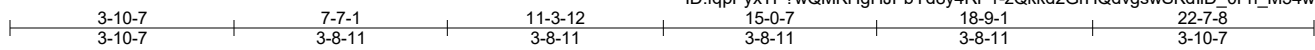
- 12) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the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

LOAD CASE(S) Standard



4/27/2021

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Scale = 1:40.0

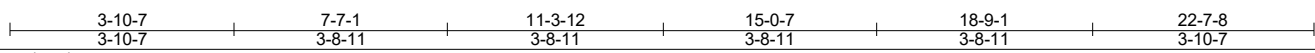
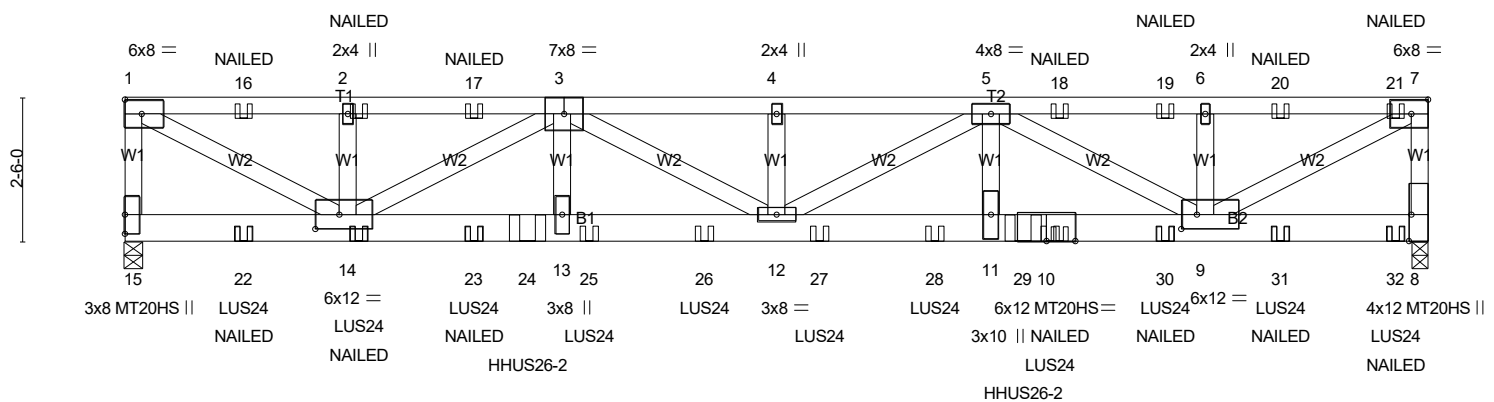


Plate Offsets (X,Y)-- [8:0-5-8,Edge], [9:0-3-4,0-3-0], [14:0-5-0,0-3-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.25		TC 0.81	Vert(LL) -0.28	12	>965	240	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.25		BC 0.61	Vert(CT) -0.54	12	>496	180	MT20HS	187/143
TCDL 10.0	Rep Stress Incr NO		WB 0.80	Horz(CT) 0.08	8	n/a	n/a		
BCLL 0.0 *	Code IRC2018/TPI2014		Matrix-SH						
BCDL 10.0									
								Weight: 278 lb	FT = 20%

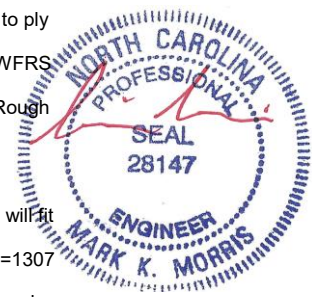
LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
T2: 2x4 SP No.1
BOT CHORD 2x6 SP DSS
WEBS 2x4 SP No.3 *Except*
W2: 2x4 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-7-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 15=5379/0-3-8 (min. 0-2-11), 8=6037/0-3-8 (min. 0-3-1)
Max Horz 15=-77(LC 6)
Max Uplift 15=-1307(LC 6), 8=-1532(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-15=-4931/1235, 1-16=-8433/2037, 2-16=-8433/2037, 2-17=-8433/2037, 3-17=-8433/2037, 3-4=-14724/3339, 4-5=-14724/3339, 5-18=-8551/2120, 18-19=-8551/2120, 6-19=-8551/2120, 6-20=-8551/2120, 20-21=-8551/2120, 7-21=-8551/2120, 7-8=-5121/1374
BOT CHORD 14-23=-3192/13673, 23-24=-3192/13673, 13-24=-3192/13673, 13-25=-3187/13641, 25-26=-3187/13641, 12-26=-3187/13641, 12-27=-3259/13747, 27-28=-3259/13747, 11-28=-3259/13747, 11-29=-3259/13747, 10-29=-3259/13747, 10-30=-3259/13747, 9-30=-3259/13747
WEBS 1-14=-2282/9533, 2-14=-510/362, 3-14=-6018/1304, 3-13=-334/1965, 3-12=-227/1250, 5-12=-130/1125, 5-11=-358/1997, 5-9=-5981/1302, 6-9=-522/373, 7-9=-2373/9656

- NOTES-** (15-18)
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; 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=1.25 Plate DOL=1.25); 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=1307, 8=1532.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



4/27/2021

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 20-4572-R01	Truss R08	Truss Type Flat Girder	Qty 1	Ply 2	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:16 2021 Page 2
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NOTES- (15-18)

- 11) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 22-0-12 to connect truss(es) R06 (1 ply 2x4 SP), R05 (1 ply 2x4 SP) to front face of bottom chord.
- 12) Use Simpson Strong-Tie HHUS26-2 (14-10d Girder, 4-10d Truss) or equivalent spaced at 8-7-4 oc max. starting at 6-11-14 from the left end to 15-7-2 to connect truss(es) D04 (2 ply 2x6 SP) to back face of bottom chord.
- 13) Fill all nail holes where hanger is in contact with lumber.
- 14) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 15) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 16) 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.
- 17) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 18) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-60, 8-15=-20
Concentrated Loads (lb)
Vert: 10=-675(F) 14=-667(F) 2=-161(B) 16=-161(B) 17=-161(B) 18=-161(B) 19=-161(B) 20=-161(B) 21=-178(B) 22=-667(F) 23=-667(F) 24=-549(B) 25=-667(F) 26=-667(F) 27=-667(F) 28=-675(F) 29=-549(B) 30=-675(F) 31=-675(F) 32=-683(F=-681, B=-2)

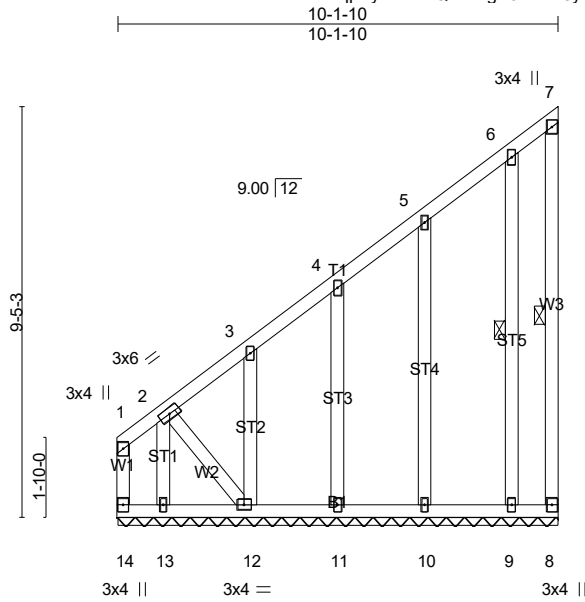


4/27/2021

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Job 20-4572-R01	Truss R09	Truss Type Monopitch Supported Gable	Qty 1	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.09	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.10	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.25	WB 0.20	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) -0.00 8 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 91 lb	FT = 20%

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

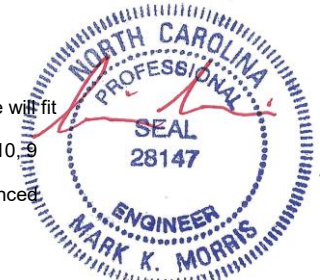
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 7-8, 6-9

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

REACTIONS. All bearings 10-1-10.
(lb) - Max Horz 14=285(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 14, 8, 11, 13, 10, 9 except 12=369(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 14, 8, 9 except 11=266(LC 19), 12=304(LC 19), 13=360(LC 12), 10=273(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-486/208, 3-4=-374/161
BOT CHORD 13-14=-449/183, 12-13=-449/183
WEBS 2-13=-612/211, 2-12=-279/684

- NOTES-** (12-15)
- 1) Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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 2x4 MT20 unless otherwise indicated.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 7) Gable studs spaced at 2-0-0 oc.
 - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 8, 11, 13, 10, 9 except (jt=lb) 12=369.
 - 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



4/27/2021

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Job	Truss	Truss Type	Qty	Ply	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC
20-4572-R01	R09	Monopitch Supported Gable	1	1	Job Reference (optional) # 26558

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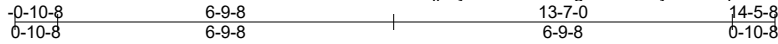
- 12) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the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

LOAD CASE(S) Standard

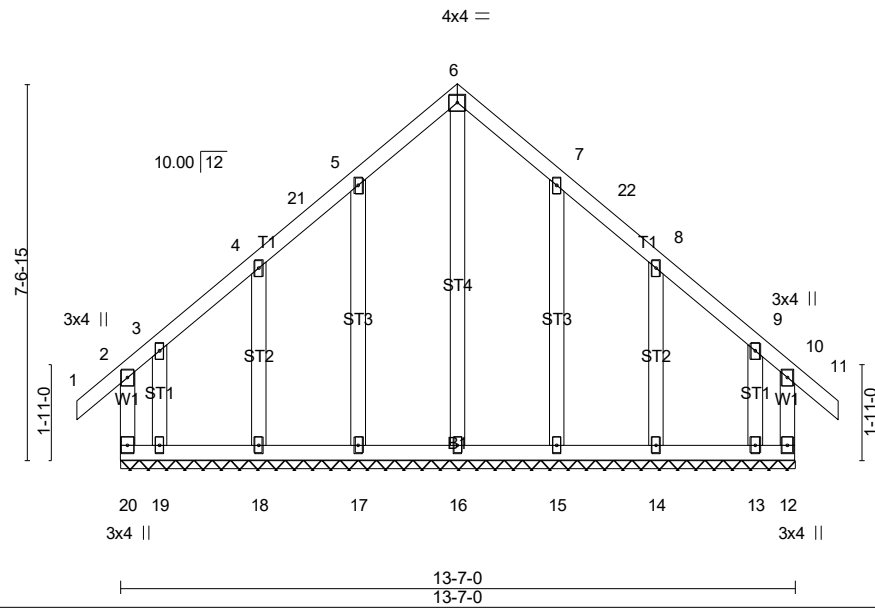


4/27/2021

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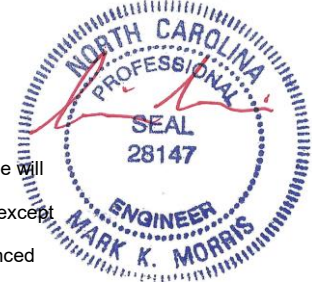
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.27	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.25	Vert(LL) -0.00 11 n/r 180		
TCDL 10.0	Lumber DOL 1.25	WB 0.44	Vert(CT) -0.00 11 n/r 80		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R	Horz(CT) -0.00 12 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 98 lb	FT = 20%

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 6-0-0 oc bracing.
WEBS 2x4 SP No.3	
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. All bearings 13-7-0.
 (lb) - Max Horz 20=-220(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 17, 18, 15, 14 except 20=-312(LC 8), 12=-292(LC 9), 19=-291(LC 9), 13=-275(LC 8)
 Max Grav All reactions 250 lb or less at joint(s) 18, 14 except 20=332(LC 11), 12=310(LC 10), 16=308(LC 23), 17=281(LC 20), 19=365(LC 10), 15=281(LC 21), 13=348(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 4-21=-117/316, 5-21=-103/321, 5-6=-167/420, 6-7=-167/420, 7-22=-103/321, 8-22=-117/316
 WEBS 6-16=-444/110

- NOTES-** (14-17)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Corner(3R) 3-11-2 to 9-7-14, Corner(3E) 9-7-14 to 14-5-8 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=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 6) All plates are 2x4 MT20 unless otherwise indicated.
 - 7) Gable requires continuous bottom chord bearing.
 - 8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 9) Gable studs spaced at 2-0-0 oc.
 - 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 11) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 18, 15, 14 except (jt=lb) 20=312, 12=292, 19=291, 13=275.
 - 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



4/27/2021

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Job	Truss	Truss Type	Qty	Ply	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC
20-4572-R01	R10	Common Supported Gable	1	1	Job Reference (optional) # 26558

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

LOAD CASE(S) Standard

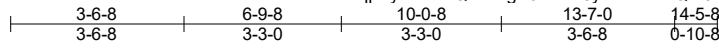


4/27/2021

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Job 20-4572-R01	Truss R11	Truss Type Common Girder	Qty 1	Ply 2	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC # 26558
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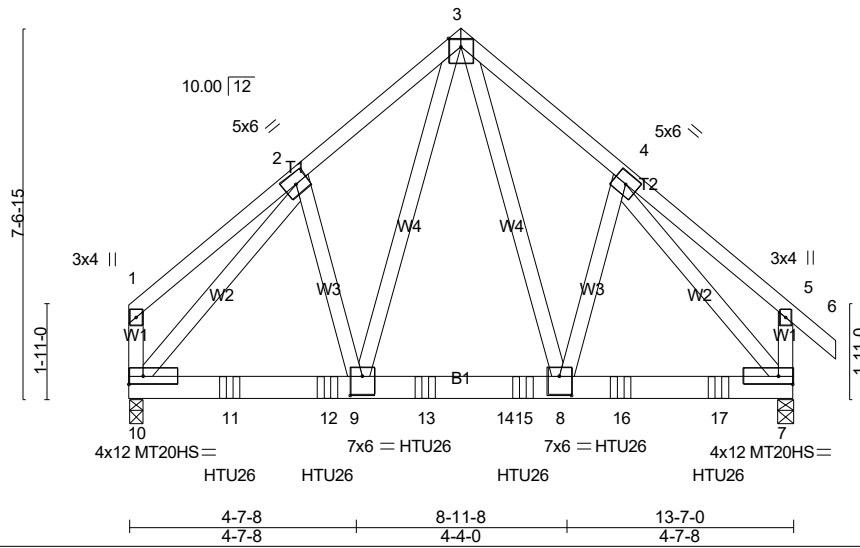


Plate Offsets (X,Y)-- [8:0-3-0,0-4-12], [9:0-3-0,0-4-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.85	Vert(LL) -0.05	7-8	>999	240	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.76	Vert(CT) -0.09	7-8	>999	180	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.25	WB 0.62	Horz(CT) 0.02	7	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-SH						
BCDL 10.0	Code IRC2018/TPI2014							
							Weight: 226 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.3

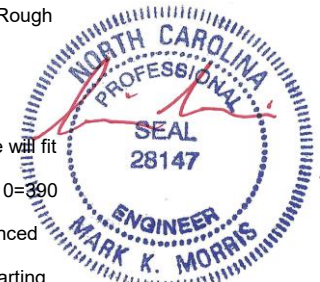
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 10=3954/0-3-8 (min. 0-2-12), 7=4311/0-3-8 (min. 0-3-0)
Max Horz 10=-209(LC 32)
Max Uplift 10=-390(LC 10), 7=-438(LC 11)
Max Grav 10=4653(LC 3), 7=5064(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-460/101, 2-3=-4092/460, 3-4=-4121/463, 4-5=-548/140, 1-10=-376/99, 5-7=-503/153
BOT CHORD 10-11=-287/2873, 11-12=-287/2873, 9-12=-287/2873, 9-13=-202/2403, 13-14=-202/2403,
14-15=-202/2403, 8-15=-202/2403, 8-16=-202/2894, 16-17=-202/2894, 7-17=-202/2894
WEBS 3-8=-319/2666, 4-8=-182/1052, 3-9=-309/2579, 2-9=-185/1044, 2-10=-4268/337,
4-7=-4212/313

NOTES- (14-17)

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; 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=1.25 Plate DOL=1.25); 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=390, 7=438.
- 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.
- Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 12-0-12 to connect truss(es) R02 (1 ply 2x4 SP) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.



4/27/2021

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 20-4572-R01	Truss R11	Truss Type Common Girder	Qty 1	Ply 2	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:19 2021 Page 2
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- 14) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 15) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 16) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 17) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

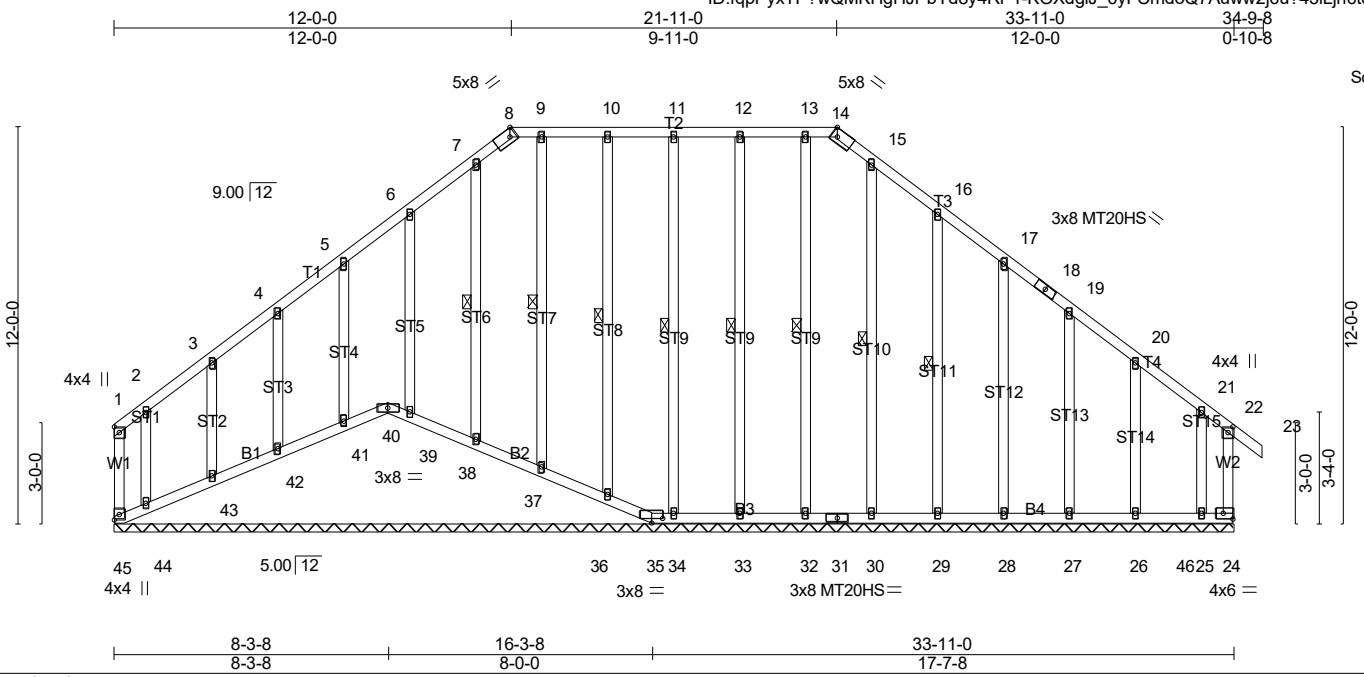
LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-3=-60, 3-5=-60, 5-6=-60, 7-10=-20
 - Concentrated Loads (lb)
 - Vert: 11=-1190(B) 12=-1190(B) 13=-1190(B) 15=-1190(B) 16=-1190(B) 17=-1190(B)



4/27/2021

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LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP			
TCLL (roof)	20.0	Plate Grip DOL	2.0-0	TC	0.78	Vert(LL)	-0.00	in (loc)	23	l/defl	n/r	L/d	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.25	BC	0.63	Vert(CT)	-0.00		23		n/r		80	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.24		14		n/a		n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-R											
BCDL	10.0														Weight: 311 lb FT = 20%

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

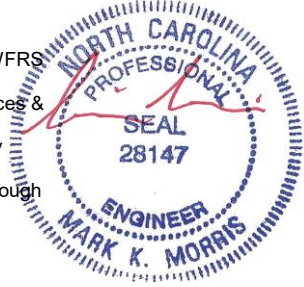
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 8-6-15 oc bracing: 44-45.
 WEBS 1 Row at midpt 11-34, 10-36, 9-37, 7-38, 12-33, 13-32, 15-30, 16-29

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

REACTIONS. All bearings 33-11-0.
 (lb) - Max Horz 45=-335(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 14, 35, 34, 36, 41, 42, 43, 33, 32, 30, 29, 28, 27, 26 except 45=-674(LC 8), 24=-601(LC 9), 40=-142(LC 11), 39=-113(LC 12), 44=-547(LC 9), 25=-607(LC 8)
 Max Grav All reactions 250 lb or less at joint(s) 14, 40, 35, 34, 36, 37, 38, 39, 41, 42, 43, 33, 32, 30, 26 except 45=678(LC 11), 24=651(LC 10), 44=657(LC 10), 29=271(LC 21), 28=260(LC 21), 27=267(LC 21), 25=657(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-45=-322/315, 1-2=-289/283, 4-5=-163/272, 5-6=-200/337, 6-7=-252/427, 7-8=-236/392, 8-9=-217/379, 9-10=-217/379, 10-11=-217/379, 11-12=-217/379, 12-13=-217/379, 13-14=-217/379, 14-15=-269/464, 15-16=-245/412, 16-17=-202/340, 17-18=-151/272, 18-19=-163/261, 21-22=-309/299, 22-24=-356/329
 BOT CHORD 44-45=-306/305
 WEBS 2-44=-306/266, 21-25=-305/298

- NOTES-** (17-20)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-1-12 to 4-11-8, Exterior(2N) 4-11-8 to 6-11-8, Corner(3R) 6-11-8 to 26-11-8, Exterior(2N) 26-11-8 to 29-11-14, Corner(3E) 29-11-14 to 34-9-8 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=1.25 Plate DOL=1.25); 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.



9) Gable requires continuous bottom chord bearing 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 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC
20-4572-R01	R12	GABLE	1	1	Job Reference (optional) # 26558

NOTES- (17-20)

- 10) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 11) Gable studs spaced at 2-0-0 oc.
- 12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 13) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 35, 34, 36, 41, 42, 43, 33, 32, 30, 29, 28, 27, 26 except (jt=lb) 45=674, 24=601, 40=142, 39=113, 44=547, 25=607.
- 15) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 40, 36, 37, 38, 39, 41, 42, 43, 44.
- 16) 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.
- 17) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 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.
- 19) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 20) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



4/27/2021

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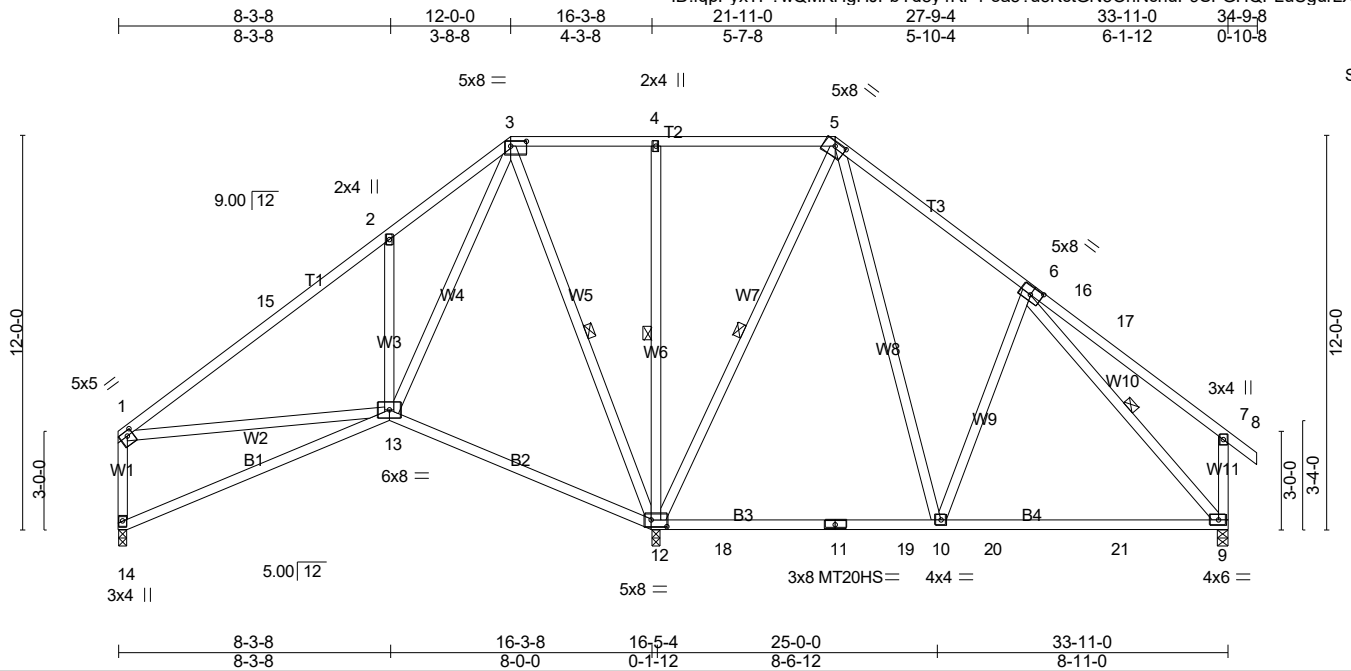


Plate Offsets (X,Y)-- [1:0-2-0,0-1-12], [3:0-5-12,0-1-12], [5:0-4-0,0-1-6], [6:0-4-0,0-3-0], [12:0-5-12,0-2-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.79	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.84	Vert(LL) -0.35 10-12 >599 240	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.25	WB 0.67	Vert(CT) -0.44 10-12 >471 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.03 9 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 251 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2 *Except*
 B4: 2x4 SP No.1
 WEBS 2x4 SP No.3

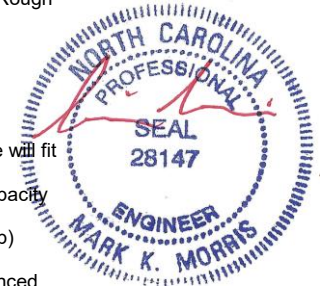
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-8-2 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
 WEBS 1 Row at midpt 3-12, 4-12, 5-12, 6-9

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

REACTIONS. (lb/size) 14=432/0-3-8 (min. 0-1-8), 12=1770/0-3-8 (min. 0-2-2), 9=550/0-3-8 (min. 0-1-8)
 Max Horz 14=-334(LC 10)
 Max Uplift 14=-56(LC 13), 12=-225(LC 9), 9=-150(LC 13)
 Max Grav 14=446(LC 30), 12=1801(LC 3), 9=771(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-15=-442/48, 2-15=-269/74, 2-3=-429/318, 3-4=-47/346, 4-5=-46/345, 5-6=-554/269,
 1-14=-397/134, 7-9=-306/191
 BOT CHORD 13-14=-345/418, 12-13=-239/260, 10-20=-49/364, 20-21=-49/364, 9-21=-49/364
 WEBS 2-13=-512/393, 3-13=-319/878, 3-12=-717/218, 4-12=-362/178, 5-12=-793/127,
 5-10=-161/751, 6-10=-255/276, 6-9=-482/42

- NOTES-** (12-15)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-11-6, Exterior(2R) 4-11-6 to 28-8-7, Interior(1) 28-8-7 to 29-11-14, Exterior(2E) 29-11-14 to 34-9-8 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=1.25 Plate DOL=1.25); 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.
 - 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) 14 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) 14 except (jt=lb) 12=225, 9=150.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



4/27/2021

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 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC
20-4572-R01	R13	Piggyback Base	4	1	Job Reference (optional) # 26558

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

LOAD CASE(S) Standard

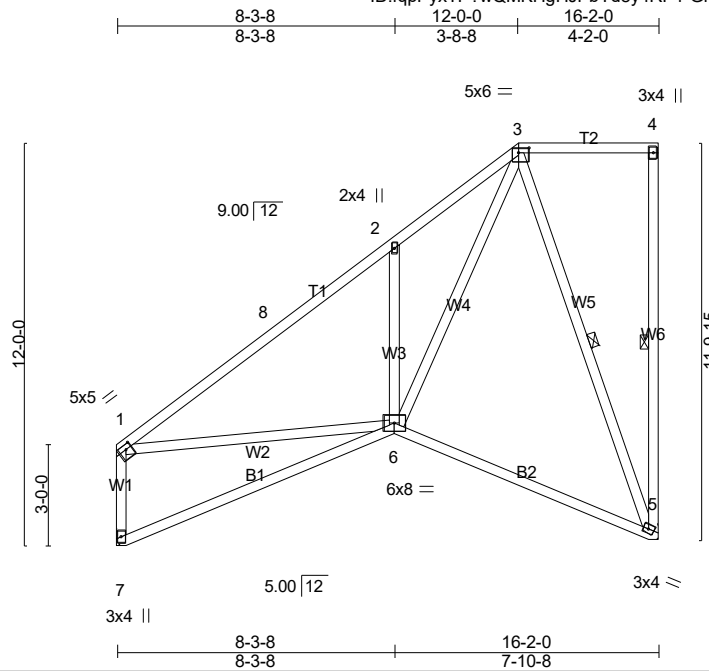


4/27/2021

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 20-4572-R01	Truss R14	Truss Type Piggyback Base	Qty 5	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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Scale = 1:68.7

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.87	Vert(LL) -0.15	6-7	>999	240	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.56	Vert(CT) -0.31	6-7	>608	180		
TCDL 10.0	Lumber DOL 1.25	WB 0.88	Horz(CT) 0.04	5	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH						
BCDL 10.0	Code IRC2018/TPI2014							
							Weight: 126 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-8-11 oc bracing.
WEBS 1 Row at midpt 4-5, 3-5

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

REACTIONS. (lb/size) 5=635/Mechanical, 7=635/Mechanical
Max Horz 7=345(LC 12)
Max Uplift 5=-247(LC 12)

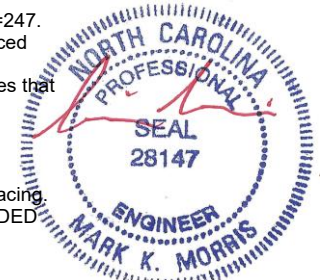
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-8=-788/112, 2-8=-616/139, 2-3=-796/395, 1-7=-587/178
BOT CHORD 6-7=-428/250
WEBS 2-6=-510/392, 3-6=-551/931, 3-5=-547/316, 1-6=0/444

NOTES- (9-12)

- 1) Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-11-6, Exterior(2R) 4-11-6 to 12-0-0, Exterior(2E) 12-0-0 to 16-0-4 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=1.25 Plate DOL=1.25); 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) 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 100 lb uplift at joint(s) except (jt=lb) 5=247.
- 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 bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

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.



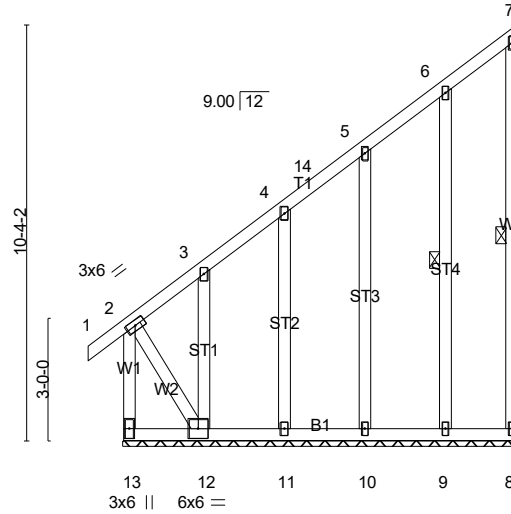
4/27/2021

Job 20-4572-R01	Truss R15	Truss Type GABLE	Qty 1	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:23 2021 Page 1

ID:fqpPyxTP?wQMKHgHJPbYd8y4RP1-kzDmInMsPtend5X?oJRdYgLnJDD0yf08prLeVvzMQ86
-0-10-8 9-9-8
0-10-8 9-9-8

Scale = 1:57.3



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.19	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.10	Vert(LL) 0.00 1 n/r 180		
TCDL 10.0	Lumber DOL 1.25	WB 0.31	Vert(CT) -0.00 2 n/r 80		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) -0.00 8 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 94 lb	FT = 20%

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

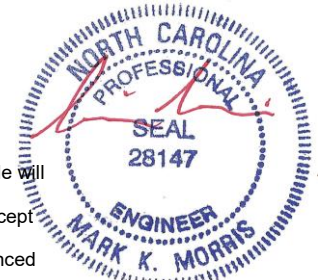
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6'-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing, Except: 6'-0-0 oc bracing: 12-13.
WEBS 1 Row at midpt 7-8, 6-9

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

REACTIONS. All bearings 9-9-8.
(lb) - Max Horz 13=264(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 8, 11, 10, 9 except 13=-202(LC 10), 12=-490(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 8 except 13=561(LC 12), 12=365(LC 20), 11=271(LC 20), 10=263(LC 20), 9=260(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-13=-1034/430, 2-3=-517/231, 3-4=-419/182, 4-14=-293/108, 5-14=-282/130
BOT CHORD 12-13=-584/225
WEBS 2-12=-405/1051

- NOTES-** (13-16)
- 1) Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 4-0-0, Exterior(2N) 4-0-0 to 4-10-2, Corner(3E) 4-10-2 to 9-7-12 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=1.25 Plate DOL=1.25); 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) 8, 11, 10, 9 except (jt=lb) 13=202, 12=490.
 - 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.



4/27/2021

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 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC
20-4572-R01	R15	GABLE	1	1	Job Reference (optional) # 26558

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:23 2021 Page 2
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- 13) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 14) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 15) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 16) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



4/27/2021

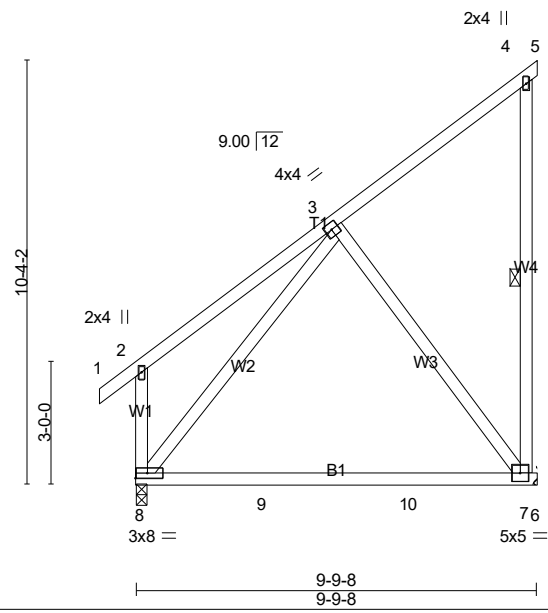
Warning !—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – 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 20-4572-R01	Truss R16	Truss Type Monopitch	Qty 5	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC # 26558
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-0-10-8 4-10-12 9-9-8
0-10-8 4-10-12 4-10-12

Scale = 1:56.1



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.87	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.58	Vert(LL) -0.39 7-8 >286 240		
TCDL 10.0	Lumber DOL 1.25	WB 0.37	Vert(CT) -0.62 7-8 >181 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) -0.00 7 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 75 lb	FT = 20%

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

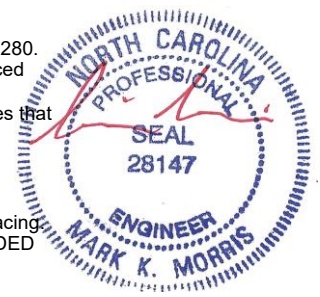
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-7

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

REACTIONS. (lb/size) 7=394/Mechanical, 8=439/0-3-8 (min. 0-1-8)
Max Horz 8=267(LC 12)
Max Uplift 7=-280(LC 12)
Max Grav 7=533(LC 20), 8=459(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-291/250
WEBS 3-7=-306/359, 3-8=-329/134

- NOTES-** (9-12)
- 1) Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 4-9-11, Exterior(2E) 4-9-11 to 9-9-8 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=1.25 Plate DOL=1.25); 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, with BCDL = 10.0psf.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=280.
 - 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 bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - 10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
 - 11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
 - 12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

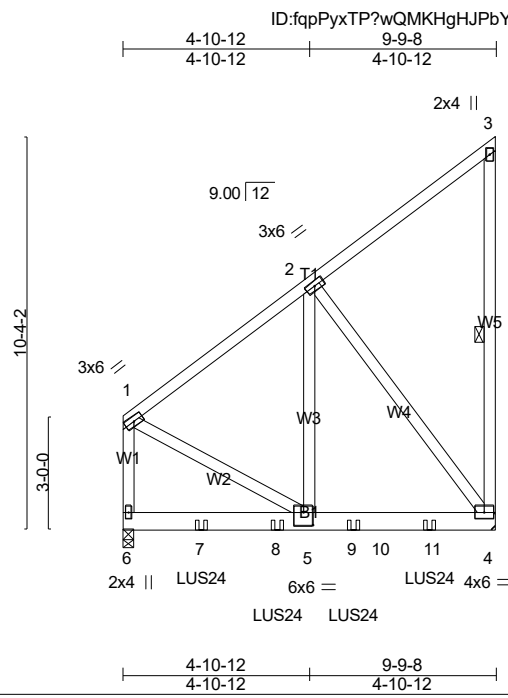


4/27/2021

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 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 20-4572-R01	Truss R17	Truss Type Monopitch Girder	Qty 1	Ply 2	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC # 26558
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Scale = 1:60.6

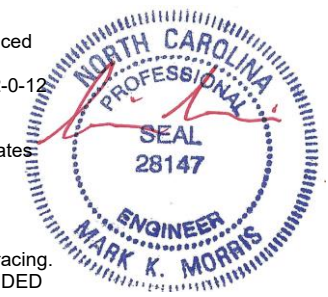
Plate Offsets (X,Y)-- [5:0-3-0,0-4-0]					
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.23	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.52	Vert(LL) -0.02 4-5 >999 240		
TCDL 10.0	Lumber DOL 1.25	WB 0.36	Vert(CT) -0.04 4-5 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-SH	Horz(CT) 0.00 4 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 173 lb	FT = 20%

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 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 3-4

REACTIONS. (lb/size) 4=1653/Mechanical, 6=1567/0-3-8 (min. 0-1-8)
Max Horz 6=239(LC 10)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1124/0, 1-6=-1200/0
BOT CHORD 6-7=-262/164, 7-8=-262/164, 5-8=-262/164, 5-9=0/840, 9-10=0/840, 10-11=0/840, 4-11=0/840
WEBS 2-5=0/1393, 2-4=-1378/0, 1-5=0/907

- NOTES-** (11-14)
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TC DL=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
 - TC LL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); 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.
 - Refer to girder(s) for truss to truss connections.
 - 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.
 - Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 8-0-12 to connect truss(es) R14 (1 ply 2x4 SP) to back face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.
 - Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - 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.
 - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
 - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING



CONSIDERATIONS 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 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC
20-4572-R01	R17	Monopitch Girder	1	2	Job Reference (optional) # 26558

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:25 2021 Page 2
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LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-3=-60, 4-6=-20
- Concentrated Loads (lb)
 - Vert: 7=-615(B) 8=-615(B) 9=-615(B) 11=-615(B)



4/27/2021

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 20-4572-R01	Truss R18	Truss Type Roof Special Supported Gable	Qty 1	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC
					Job Reference (optional) # 26558

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:26 2021 Page 1
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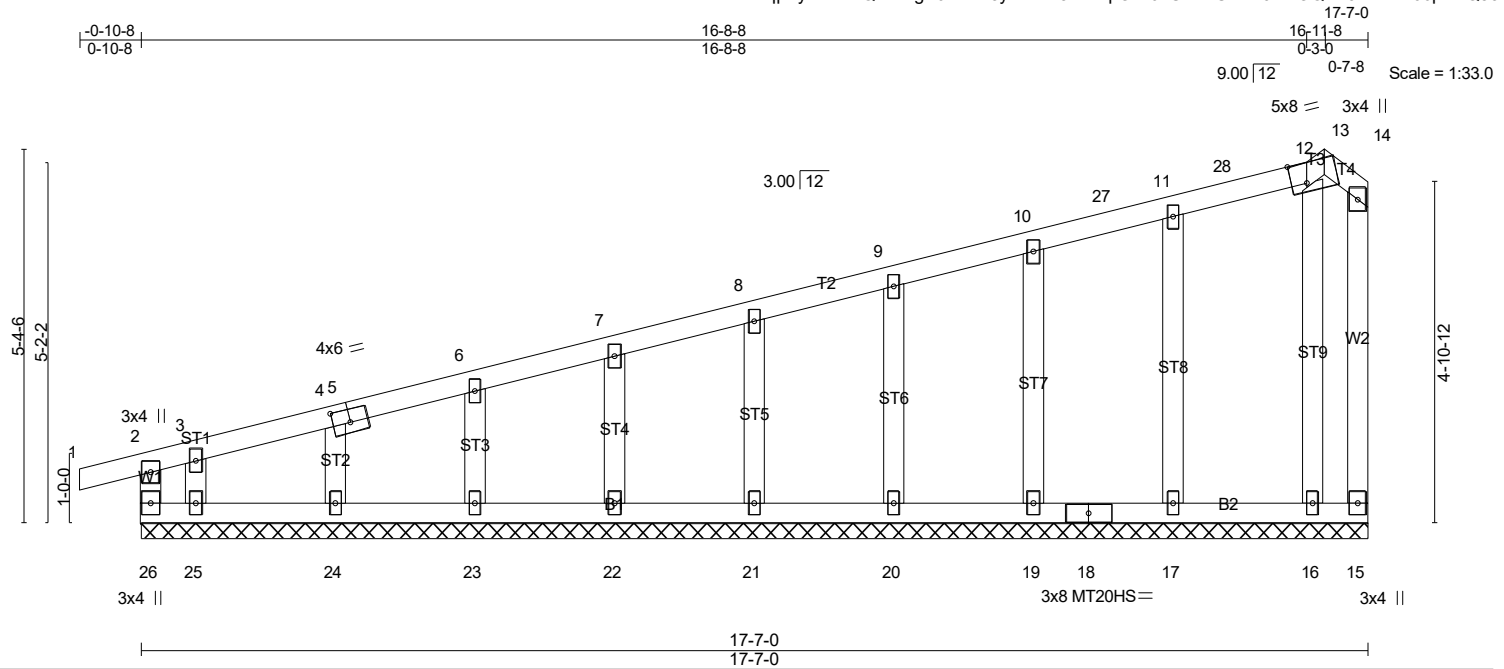


Plate Offsets (X,Y)-- [5:0-3-0,0-2-4], [12:0-2-9,Edge]

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) -0.00	1	n/r	180	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.21	Vert(CT) -0.00	1	n/r	80	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.25	WB 0.06	Horz(CT) -0.00	15	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 98 lb	FT = 20%

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

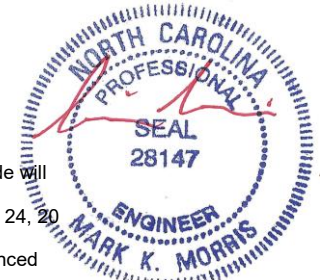
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 15-16.

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

REACTIONS. All bearings 17-7-0.
(lb) - Max Horz 26=157(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 15, 21, 22, 23, 24, 20, 19, 17, 16 except 25=222(LC 14)
Max Grav All reactions 250 lb or less at joint(s) 26, 15, 21, 22, 23, 24, 25, 20, 19, 16 except 17=259(LC 36)

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

- NOTES-** (16-19)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Exterior(2N) 3-11-2 to 16-8-8, Corner(3R) 16-8-8 to 16-11-8, Corner(3E) 16-11-8 to 17-5-4 zone; end vertical 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=1.25 Plate DOL=1.25); 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.
 - 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) 15, 21, 22, 23, 24, 20, 19, 17, 16 except (jt=lb) 25=222.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



4/27/2021

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Job 20-4572-R01	Truss R18	Truss Type Roof Special Supported Gable	Qty 1	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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- 16) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 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.
- 18) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 19) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



4/27/2021

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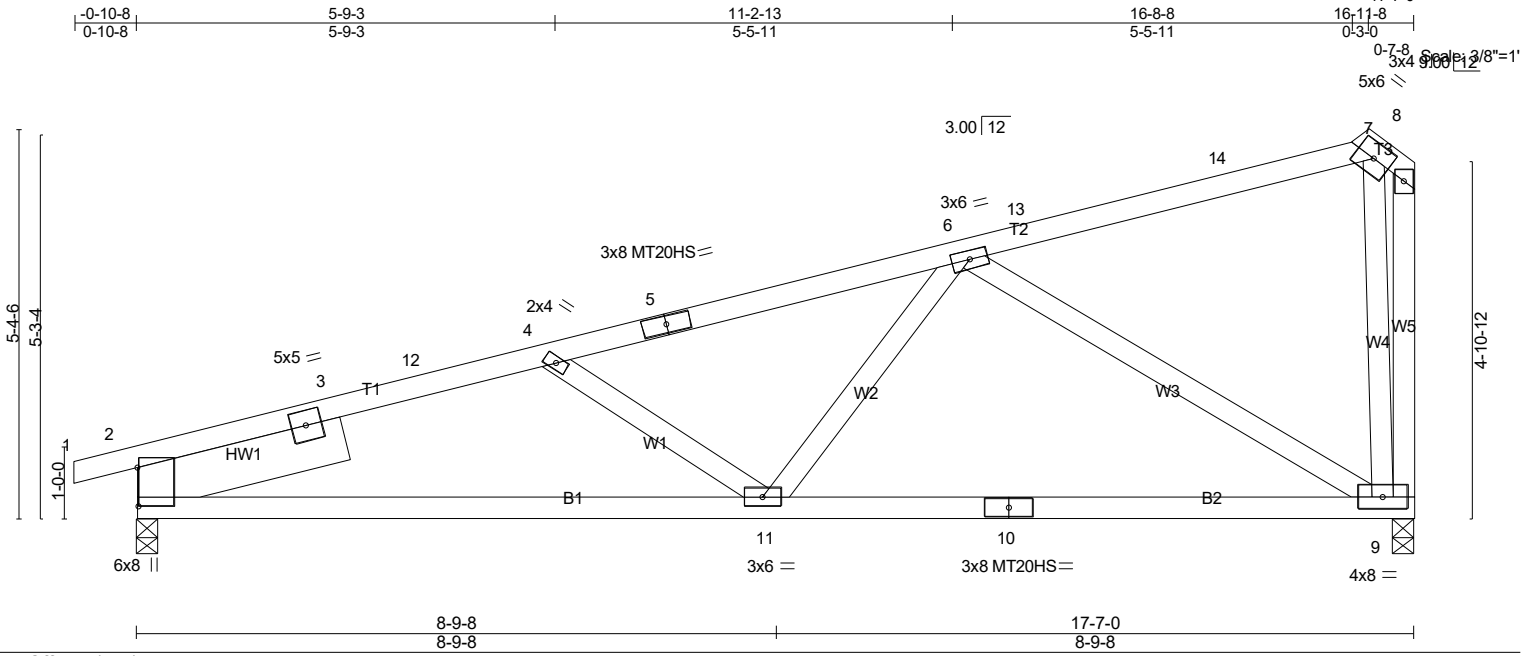


Plate Offsets (X,Y)-- [2:0-6-6,0-0-3]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.50	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.73	Vert(LL) -0.13 9-11 >999 240	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.25	WB 0.79	Vert(CT) -0.28 9-11 >732 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.03 9 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 99 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-3-1 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 9-2-1 oc bracing.
WEBS 2x4 SP No.3	
SLIDER Left 2x8 SP No.2 - 2-11-10	

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

REACTIONS. (lb/size) 2=740/0-3-8 (min. 0-1-8), 9=702/0-3-8 (min. 0-1-8)
 Max Horz 2=169(LC 14)
 Max Uplift 2=171(LC 10), 9=187(LC 14)
 Max Grav 2=741(LC 21), 9=704(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1361/270, 3-12=-1291/282, 4-12=-1274/286, 4-5=-1090/182, 5-6=-1055/191
 BOT CHORD 2-11=-403/1222, 10-11=-270/785, 9-10=-270/785
 WEBS 6-11=-6/490, 6-9=-891/306, 7-9=-262/245

- NOTES-** (11-14)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 12-3-0, Exterior(2R) 12-3-0 to 17-0-10, Exterior(2E) 17-0-10 to 17-5-4 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=1.25 Plate DOL=1.25); 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.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=171, 9=187.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



4/27/2021

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Job 20-4572-R01	Truss R19	Truss Type Roof Special	Qty 4	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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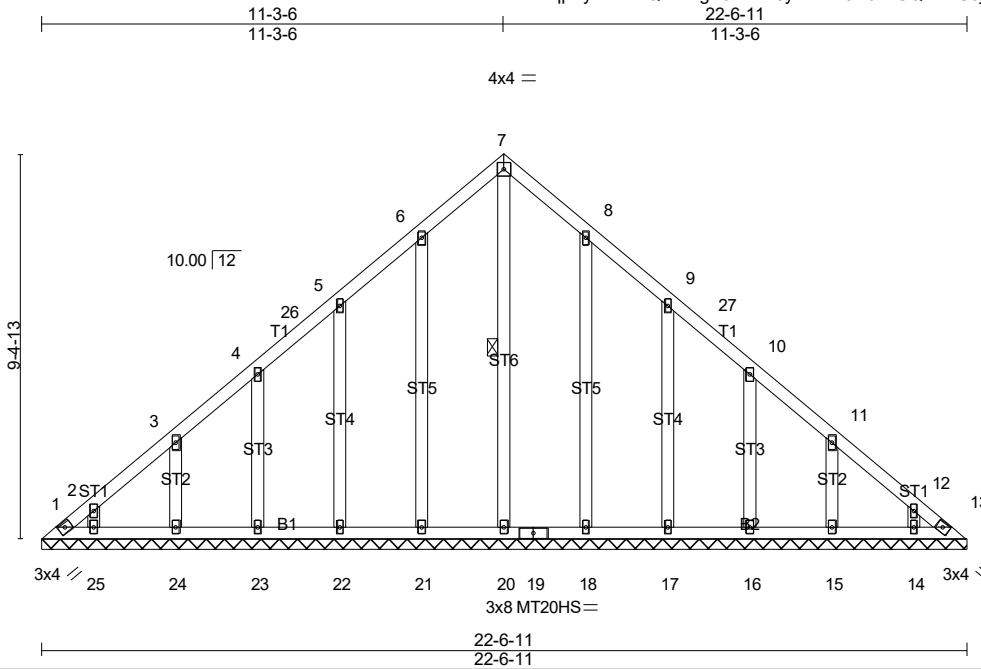
- 11) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 13) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 14) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



4/27/2021

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LOADING (psf)	SPACING-	CSI.	DEFL.		PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.25	TC 0.06	Vert(LL) n/a	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.25	BC 0.10	Vert(CT) n/a	- - n/a 999	MT20HS	187/143
TCDL 10.0	Rep Stress Incr YES	WB 0.15	Horz(CT) 0.01	13 n/a n/a		
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-SH				
BCDL 10.0						Weight: 146 lb FT = 20%

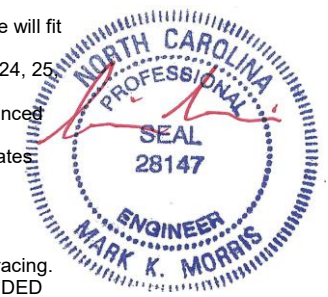
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	WEBS 1 Row at midpt 7-20

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

REACTIONS. All bearings 22-6-11.
 (lb) - Max Horz 1=-224(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 13, 21, 22, 23, 24, 25, 18, 17, 16, 15, 14 except 1=-107(LC 10)
 Max Grav All reactions 250 lb or less at joint(s) 1, 13, 23, 24, 25, 16, 15, 14 except 20=287(LC 22), 21=273(LC 19), 22=270(LC 19), 18=269(LC 20), 17=271(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-281/187

- NOTES-** (11-14)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-13 to 5-3-6, Interior(1) 5-3-6 to 6-5-12, Exterior(2R) 6-5-12 to 16-0-15, Interior(1) 16-0-15 to 17-3-6, Exterior(2E) 17-3-6 to 22-1-14 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=1.25 Plate DOL=1.25); 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) All plates are 2x4 MT20 unless otherwise indicated.
 - 6) Gable requires continuous bottom chord bearing.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 21, 22, 23, 24, 25, 18, 17, 16, 15, 14 except (jt=lb) 1=107.
 - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 11) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - 12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
 - 13) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
 - 14) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING



4/27/2021

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Job	Truss	Truss Type	Qty	Ply	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC
20-4572-R01	VT01	GABLE	1	1	Job Reference (optional) # 26558

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LOAD CASE(S) Standard

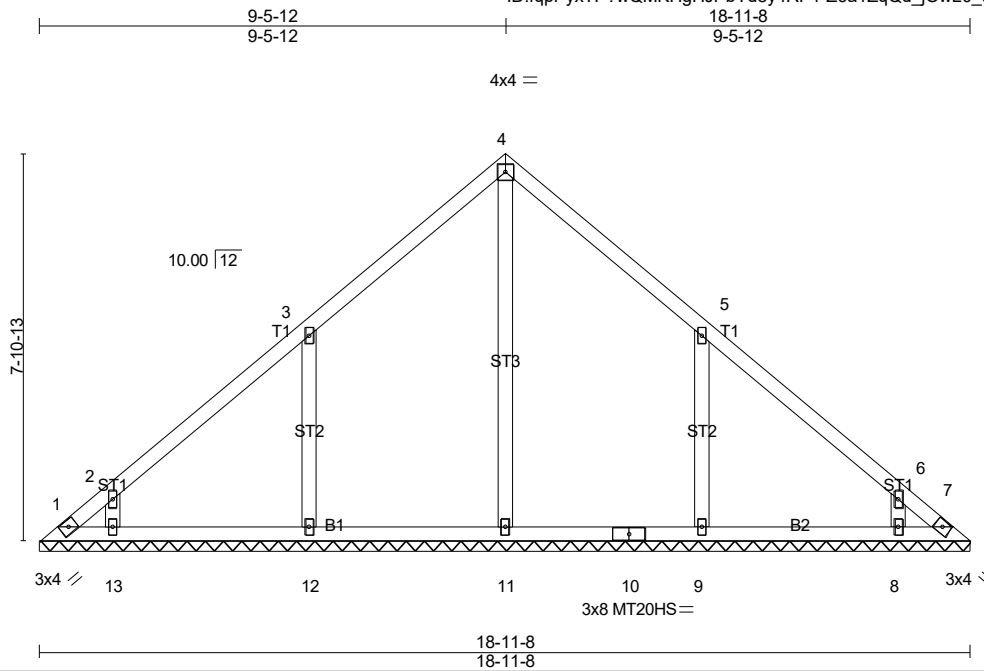


4/27/2021

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Job 20-4572-R01	Truss VT02	Truss Type Valley	Qty 1	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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Scale = 1:46.9

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.19	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.43	Vert(LL) n/a - n/a 999	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.25	WB 0.19	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 7 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 88 lb	FT = 20%

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

BRACING-
TOP CHORD
BOT CHORD

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

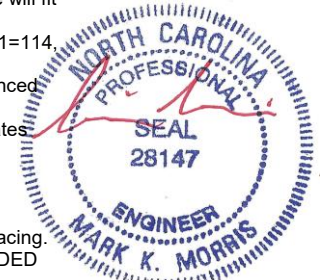
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 18-11-8.
(lb) - Max Horz 1=-187(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 7 except 1=-114(LC 10), 12=-204(LC 12), 13=-148(LC 12), 9=-203(LC 13), 8=-148(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=453(LC 22), 12=471(LC 19), 13=270(LC 19), 9=470(LC 20), 8=270(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-12=-299/245, 5-9=-299/244

NOTES- (11-14)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-13 to 5-5-12, Exterior(2R) 5-5-12 to 13-5-12, Exterior(2E) 13-5-12 to 18-6-11 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=1.25 Plate DOL=1.25); 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 1=114, 12=204, 13=148, 9=203, 8=148.
- 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 bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 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.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

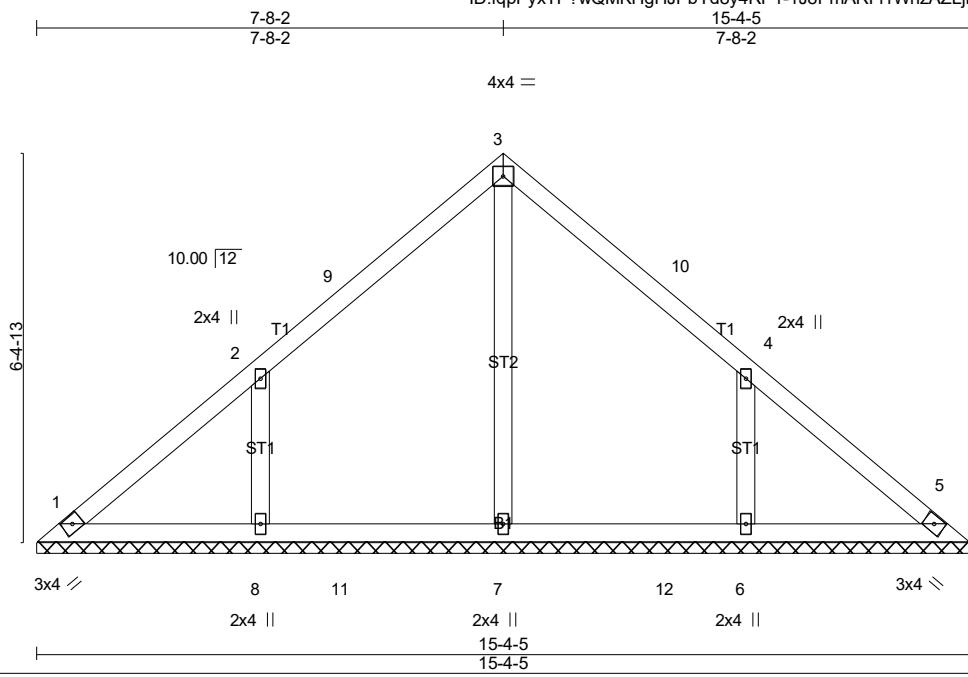


4/27/2021

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Job 20-4572-R01	Truss VT03	Truss Type Valley	Qty 1	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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Scale = 1:38.0

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.18	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.37	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.25	WB 0.11	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 67 lb	FT = 20%

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

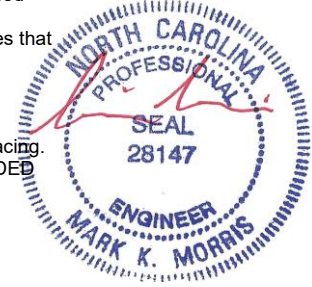
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. All bearings 15-4-5.
(lb) - Max Horz 1=-150(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-201(LC 12), 6=-201(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=413(LC 22), 8=410(LC 19), 6=410(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-285/230, 4-6=-285/230

- NOTES-** (9-12)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-13 to 5-2-7, Exterior(2R) 5-2-7 to 10-1-14, Exterior(2E) 10-1-14 to 14-11-7 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=1.25 Plate DOL=1.25); 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
 - 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, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=201, 6=201.
 - 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 bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - 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.
 - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
 - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



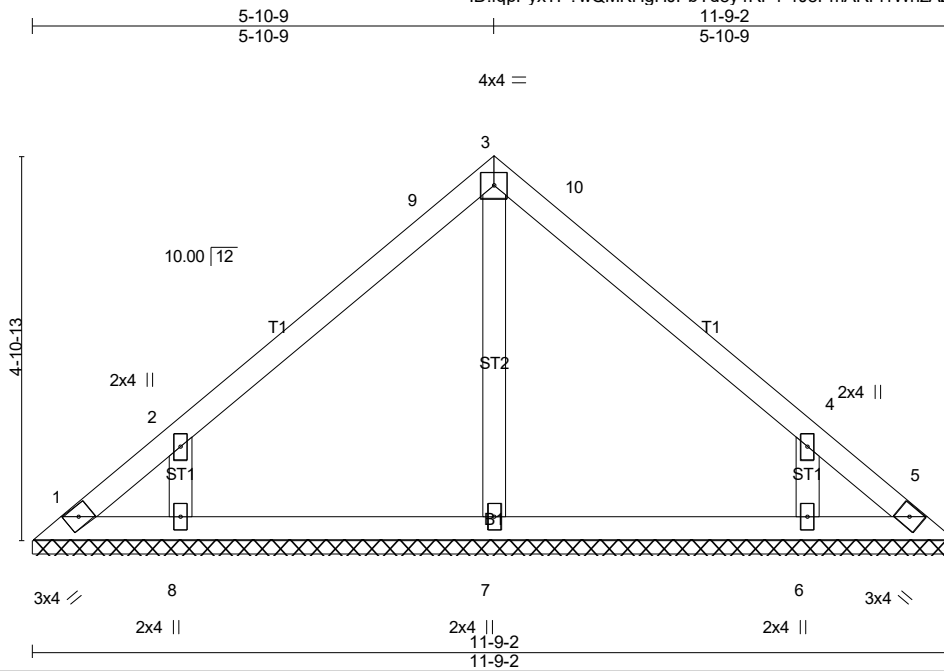
4/27/2021

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 20-4572-R01	Truss VT04	Truss Type Valley	Qty 1	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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ID: fqpPyxTP?wQMKHgHJPbYd8y4RP1-1J8PmARF1WnzAZLjH3GK87zn1ay5taAQXWfzMQ8? 8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:30 2021 Page 1



Scale = 1:29.4

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.17	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.21	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.25	WB 0.07	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 48 lb	FT = 20%

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

BRACING-
TOP CHORD
BOT CHORD

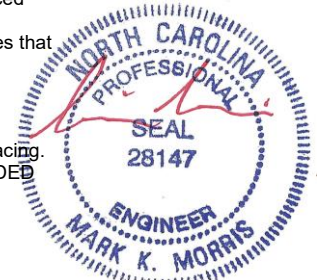
Structural wood sheathing directly applied or 6-0-0 oc purlins.
Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. All bearings 11-9-2.
(lb) - Max Horz 1=113(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=177(LC 12), 6=177(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=322(LC 19), 6=322(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-266/227, 4-6=-266/227

- NOTES-** (9-12)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-13 to 5-2-7, Exterior(2R) 5-2-7 to 6-6-11, Exterior(2E) 6-6-11 to 11-4-4 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=1.25 Plate DOL=1.25); 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
 - 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) 1, 5 except (t=lb) 8=177, 6=177.
 - 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 bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - 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.
 - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
 - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



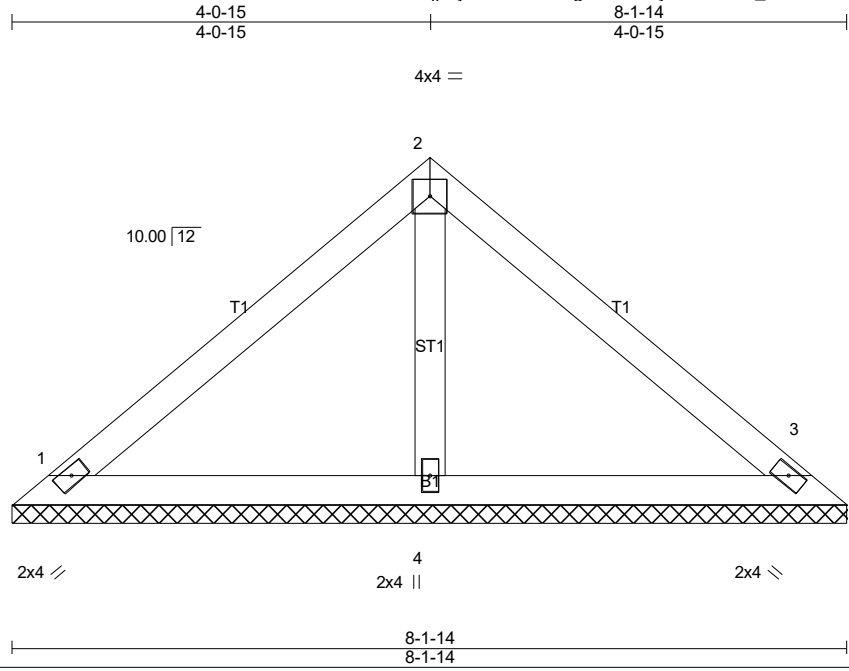
LOAD CASE(S) Standard

4/27/2021

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 20-4572-R01	Truss VT05	Truss Type Valley	Qty 1	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.26	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.23	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.25	WB 0.04	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: 31 lb	FT = 20%

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

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

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

REACTIONS. (lb/size) 1=168/8-1-14 (min. 0-1-8), 3=168/8-1-14 (min. 0-1-8), 4=252/8-1-14 (min. 0-1-8)
Max Horz 1=76(LC 9)
Max Uplift1=43(LC 13), 3=53(LC 13)

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

- NOTES-** (9-12)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 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=1.25 Plate DOL=1.25); 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 bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - 10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
 - 11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
 - 12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

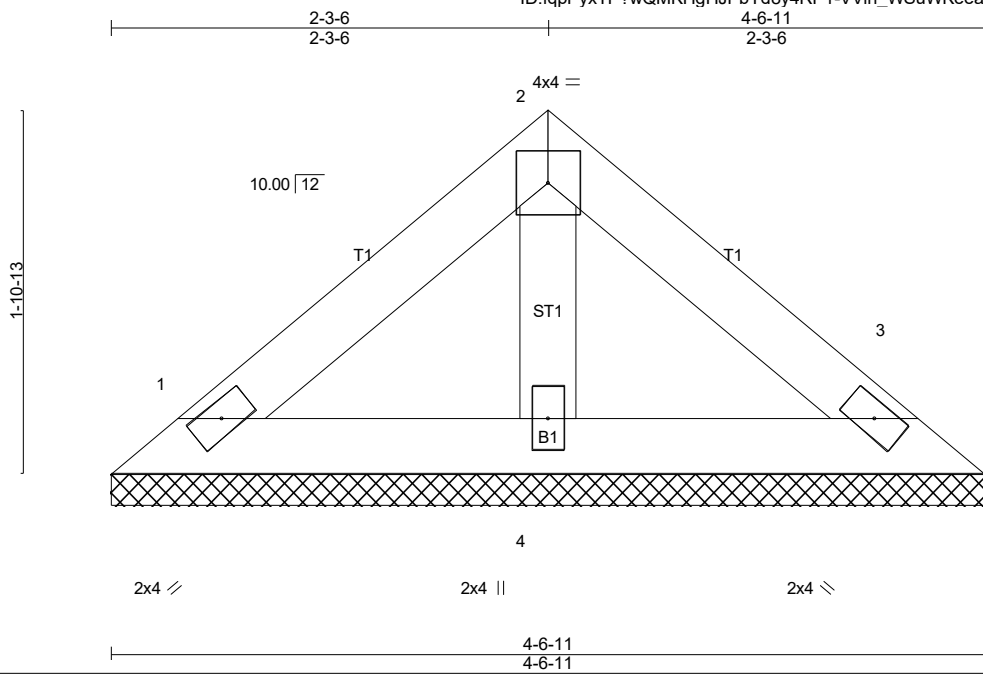


4/27/2021

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Job 20-4572-R01	Truss VT06	Truss Type Valley	Qty 1	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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Scale: 1"=1'

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.07	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.06	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.25	WB 0.02	Vert(CT) n/a - n/a 999		
BCDL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 16 lb	FT = 20%

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 4-6-11 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) 1=86/4-6-11 (min. 0-1-8), 3=86/4-6-11 (min. 0-1-8), 4=129/4-6-11 (min. 0-1-8)
Max Horz 1=-39(LC 8)
Max Uplift1=-22(LC 13), 3=-27(LC 13)

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

- NOTES-** (9-12)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 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=1.25 Plate DOL=1.25); 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
 - 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) 1, 3.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - 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.
 - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
 - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



4/27/2021

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Scale = 1:40.2

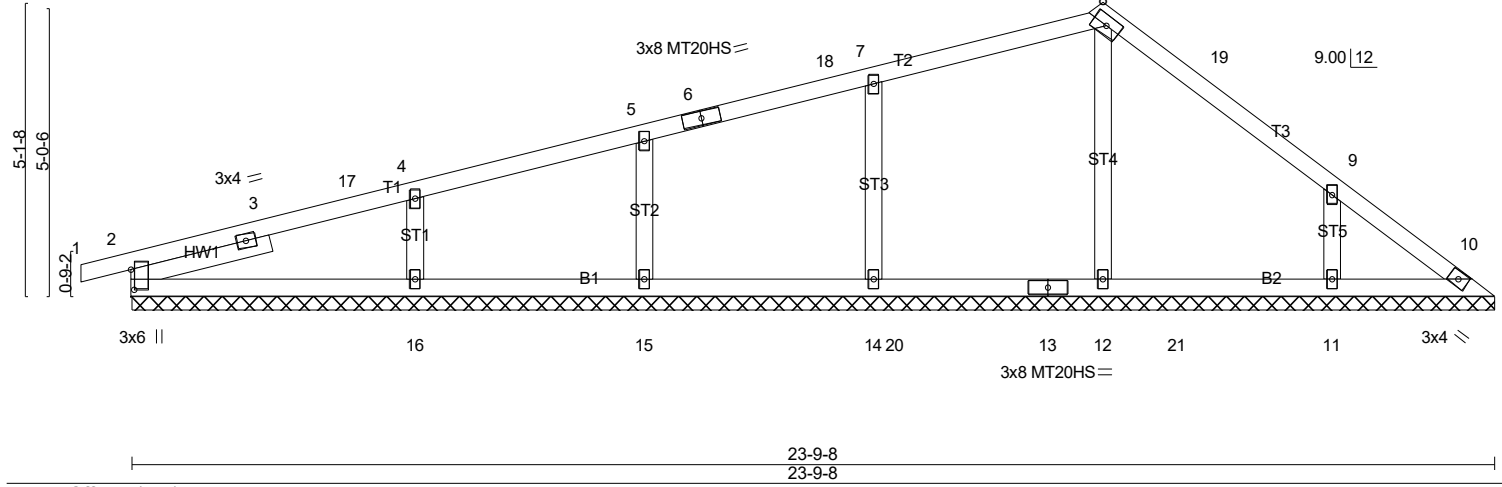


Plate Offsets (X,Y)-- [2:0-4,0-0-11]									
LOADING (psf)	TCLL (roof) 20.0	SPACING-	2-0-0	CSI.		DEFL.		PLATES	GRIP
	Snow (Pf) 20.0	Plate Grip DOL	1.25	TC	0.29	Vert(LL)	-0.00 1 n/r 180	MT20	244/190
	TCDL 10.0	Lumber DOL	1.25	BC	0.33	Vert(CT)	0.01 1 n/r 80	MT20HS	187/143
	BCLL 0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00 10 n/a n/a		
	BCDL 10.0	Code IRC2018/TPI2014		Matrix-SH					
								Weight: 98 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.3
OTHERS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 - 2-6-4

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

REACTIONS. All bearings 23-9-8.
(lb) - Max Horz 2=126(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 10, 2, 14, 15 except 16=-114(LC 14), 11=-160(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 10 except 2=251(LC 21), 12=390(LC 6), 14=464(LC 5), 15=315(LC 21), 16=398(LC 32), 11=407(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 7-14=-374/154, 4-16=-292/152, 9-11=-341/201

- NOTES-** (13-16)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 12-3-0, Exterior(2R) 12-3-0 to 18-6-10, Exterior(2E) 18-6-10 to 23-4-4 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=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 6) All plates are MT20 plates unless otherwise indicated.
 - 7) All plates are 2x4 MT20 unless otherwise indicated.
 - 8) Gable requires continuous bottom chord bearing.
 - 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) 10, 2, 14, 15 except (jt=lb) 16=114, 11=160.
 - 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.



4/27/2021

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Job 20-4572-R01	Truss VT07	Truss Type Valley	Qty 1	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:33 2021 Page 2
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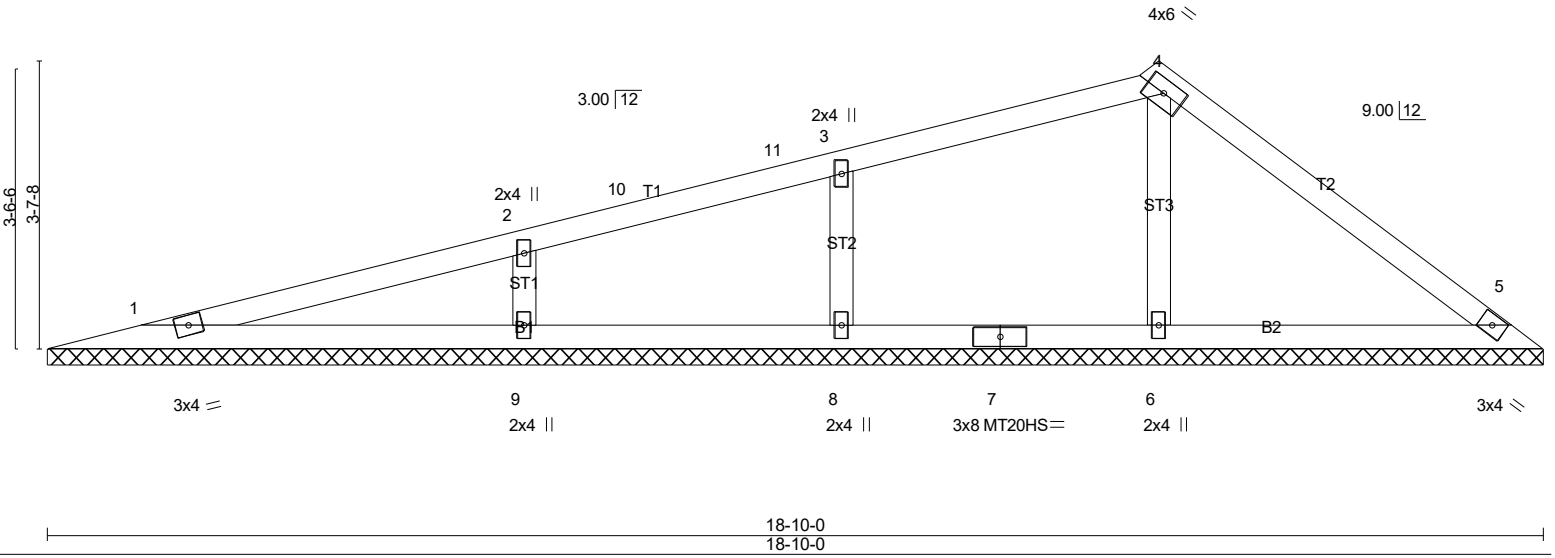
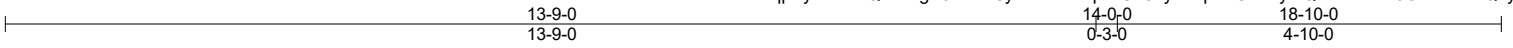
- 13) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 14) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 15) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 16) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



4/27/2021

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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.25	TC 0.39	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.25	BC 0.46	Vert(LL) n/a - n/a 999	MT20HS	187/143
TCDL 10.0	Rep Stress Incr YES	WB 0.07	Vert(CT) n/a - n/a 999	Weight: 65 lb FT = 20%	
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-SH	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0					

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

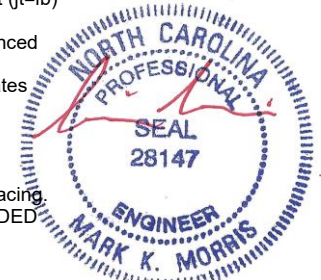
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. All bearings 18-10-0.
 (lb) - Max Horz 1=89(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 6, 8 except 9=-107(LC 10)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=397(LC 21), 8=405(LC 20), 9=422(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 4-6=-261/99, 3-8=-343/158, 2-9=-303/149

- NOTES-** (11-14)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TC DL=5.0psf; BC DL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 1-2-3 to 6-0-0, Interior(1) 6-0-0 to 9-3-8, Exterior(2R) 9-3-8 to 14-1-2, Exterior(2E) 14-1-2 to 18-4-12 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=1.25 Plate DOL=1.25); 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) All plates are MT20 plates unless otherwise indicated.
 - 6) Gable requires continuous bottom chord bearing.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 6, 8 except (jt=lb) 9=107.
 - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 11) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - 12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
 - 13) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
 - 14) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



LOAD CASE(S) Standard

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.

4/27/2021

Job 20-4572-R01	Truss VT09	Truss Type Valley	Qty 1	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:34 2021 Page 1
ID:fqpPyxTP?wQMKHGHJPbYd8y4RP1-v4OwcYUmpF0DRnt6y78CU_IV9eoH1hclK2VknMzMQ7x

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0-3-0 2-10-0

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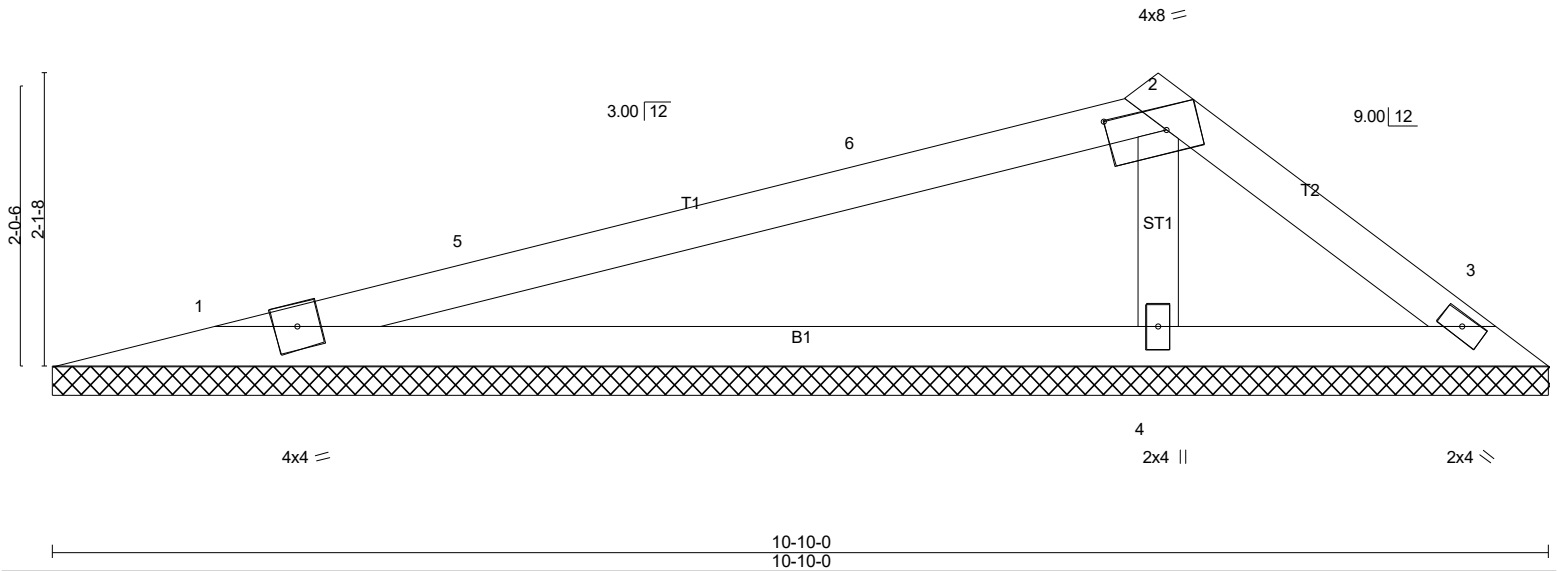


Plate Offsets (X,Y)-- [2:0-5-2,0-2-0]		10-10-0 10-10-0					
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP		
TCLL (roof) 20.0	2-0-0	TC 0.79	in (loc) l/defl L/d	MT20	244/190		
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.82	Vert(LL) n/a - n/a 999				
TCDL 10.0	Lumber DOL 1.25	WB 0.07	Vert(CT) n/a - n/a 999				
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 3 n/a n/a				
BCDL 10.0	Code IRC2018/TPI2014					Weight: 33 lb FT = 20%	

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

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

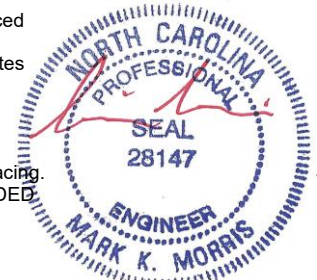
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=243/10-10-0 (min. 0-1-8), 3=11/10-10-0 (min. 0-1-8), 4=483/10-10-0 (min. 0-1-8)
Max Horz 1=48(LC 11)
Max Uplift 1=59(LC 10), 3=36(LC 31), 4=73(LC 10)
Max Grav 1=267(LC 20), 3=83(LC 21), 4=517(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=320/214

NOTES- (10-13)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 1-2-3 to 5-11-13, Exterior(2R) 5-11-13 to 8-1-2, Exterior(2E) 8-1-2 to 10-4-12 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=1.25 Plate DOL=1.25); 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.
- 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) 1, 3, 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.
- Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 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.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



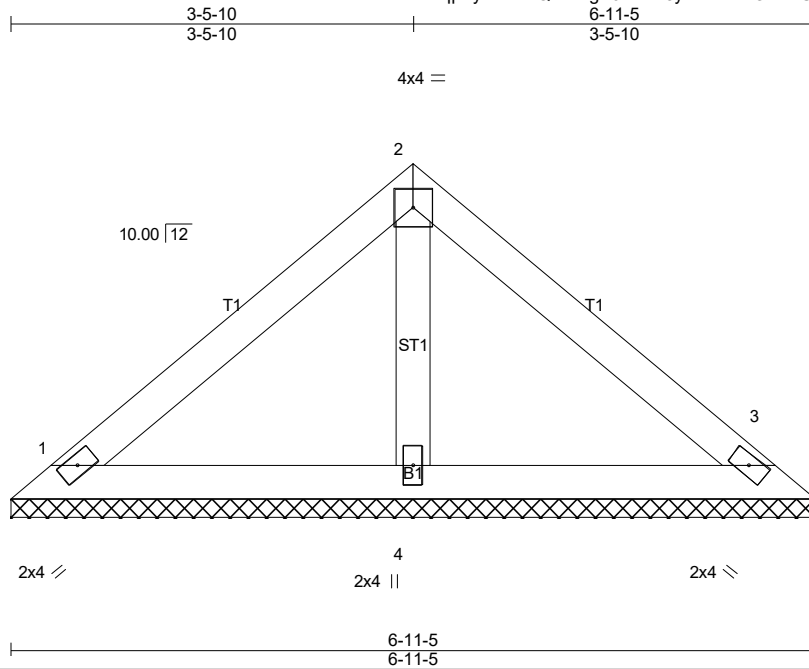
LOAD CASE(S) Standard

4/27/2021

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 20-4572-R01	Truss VT10	Truss Type Valley	Qty 1	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:34 2021 Page 1
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.18	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.16	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.25	WB 0.03	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: 26 lb	FT = 20%

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

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

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

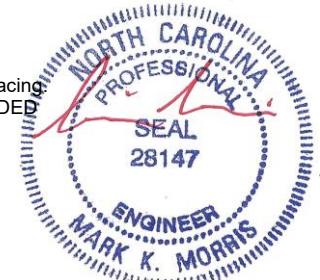
REACTIONS. (lb/size) 1=140/6-11-5 (min. 0-1-8), 3=140/6-11-5 (min. 0-1-8), 4=210/6-11-5 (min. 0-1-8)
Max Horz 1=-63(LC 8)
Max Uplift1=-36(LC 13), 3=-44(LC 13)

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

NOTES- (9-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 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=1.25 Plate DOL=1.25); 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
- 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) 1, 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 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.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

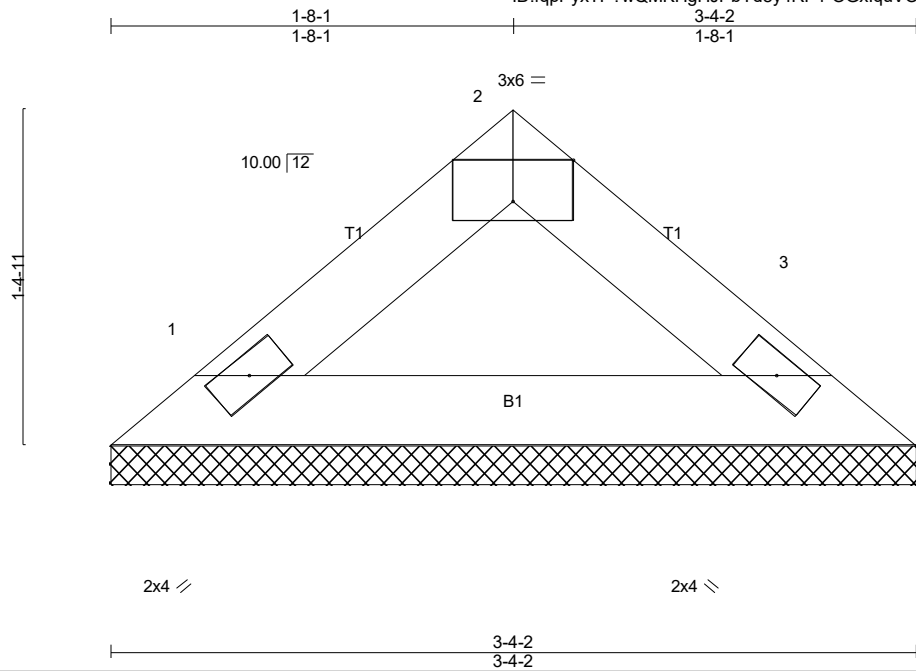


4/27/2021

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 20-4572-R01	Truss VT11	Truss Type Valley	Qty 1	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:35 2021 Page 1
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Scale = 1:9.5

LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP	
TCLL (roof)	20.0	2-0-0	Plate Grip DOL	1.25	TC	0.04	in	(loc)	l/defl	L/d	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.25	BC	0.13	Vert(LL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P		Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0										Weight: 10 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-4-2 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.

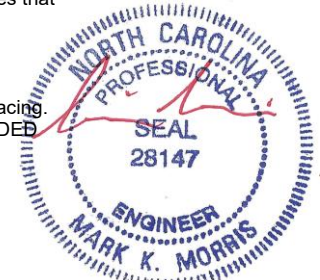
REACTIONS. (lb/size) 1=101/3-4-2 (min. 0-1-8), 3=101/3-4-2 (min. 0-1-8)
Max Horz 1=-26(LC 10)
Max Uplift 1=-15(LC 12), 3=-15(LC 13)

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

NOTES- (9-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 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=1.25 Plate DOL=1.25); 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
- 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) 1, 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 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.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

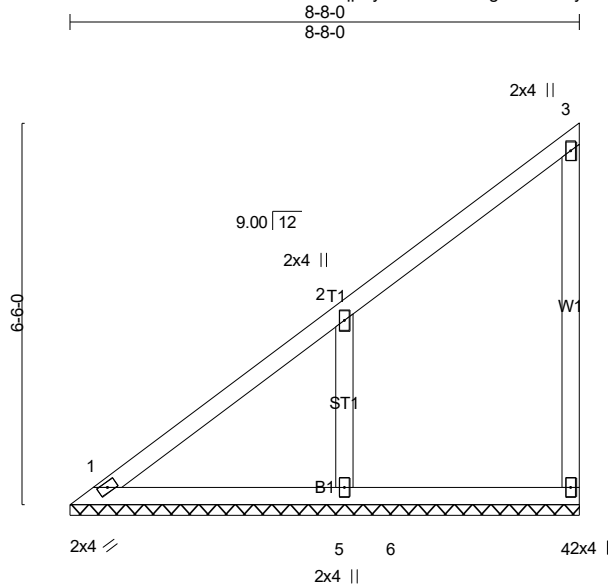


4/27/2021

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Job 20-4572-R01	Truss VT12	Truss Type Valley	Qty 1	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 27 20:40:36 2021 Page 1
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Scale = 1:39.2

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 1.25	BC 0.40	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.25	WB 0.09	Vert(CT) n/a - n/a 999		
BCDL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 41 lb	FT = 20%

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

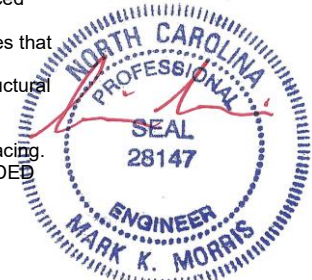
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation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

REACTIONS. (lb/size) 1=130/8-8-0 (min. 0-1-8), 4=112/8-8-0 (min. 0-1-8), 5=404/8-8-0 (min. 0-1-8)
Max Horz 1=234(LC 12)
Max Uplift 4=-56(LC 12), 5=-204(LC 12)
Max Grav 1=147(LC 21), 4=194(LC 19), 5=505(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-286/161
WEBS 2-5=-335/313

NOTES- (8-11)

- 1) Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 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=1.25 Plate DOL=1.25); 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) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=204.
- 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 bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 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.
- 10) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 11) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



LOAD CASE(S) Standard

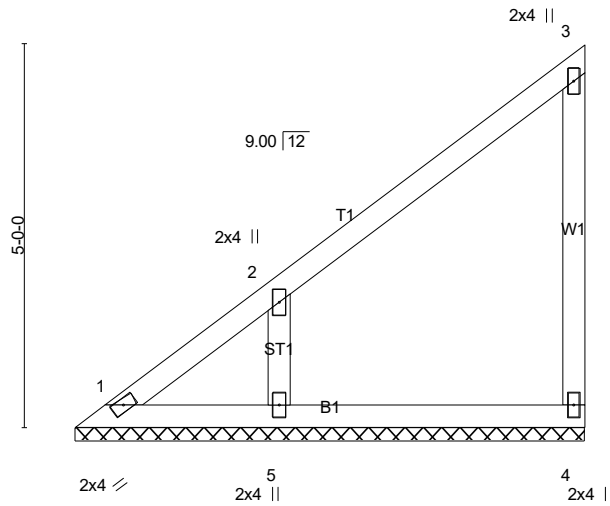
4/27/2021

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Job	Truss	Truss Type	Qty	Ply	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC
20-4572-R01	VT13	Valley	1	1	Job Reference (optional) # 26558

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 6-8-0
 6-8-0

Scale = 1:30.1



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.19	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.20	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.25	WB 0.09	Vert(CT) n/a - n/a 999		
BCDL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 30 lb	FT = 20%

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

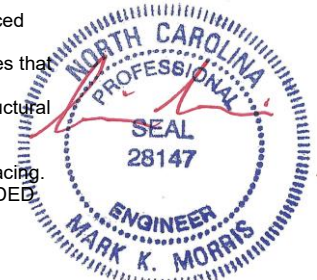
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation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

REACTIONS. (lb/size) 1=39/6-8-0 (min. 0-1-8), 4=125/6-8-0 (min. 0-1-8), 5=322/6-8-0 (min. 0-1-8)
 Max Horz 1=176(LC 12)
 Max Uplift 1=-17(LC 10), 4=-63(LC 12), 5=-162(LC 12)
 Max Grav 1=112(LC 12), 4=135(LC 19), 5=348(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-275/146
 WEBS 2-5=-267/288

NOTES- (8-11)

- Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 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=1.25 Plate DOL=1.25); 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
- 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) 1, 4 except (jt=lb) 5=162.
- 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 bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 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.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



LOAD CASE(S) Standard

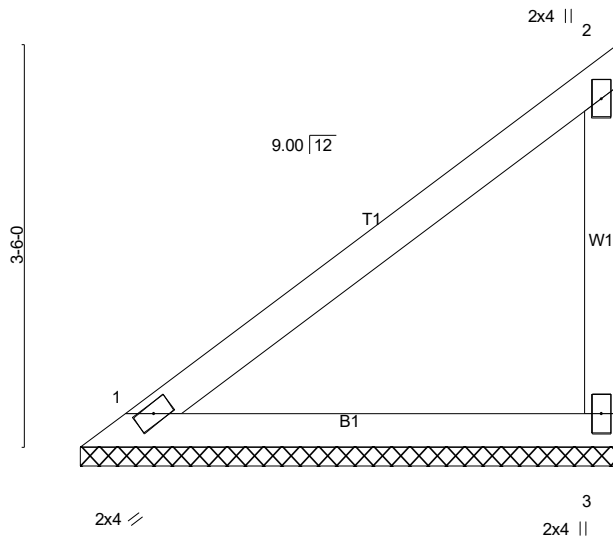
4/27/2021

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Job 20-4572-R01	Truss VT14	Truss Type Valley	Qty 1	Ply 1	LOT 1112 ANDERSON CREEK 173 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 26558
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ID: fqpPyxTP?wQMKHgHJPbYd8y4RP1-Kf33EZXe6APoJFbhdFhw6dw7esxWE3MC10kO_hzMq7u
4-8-0
4-8-0



Scale = 1:20.0

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.25	TC 0.32	Vert(LL) n/a	-	n/a	999	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.25	BC 0.34	Vert(CT) n/a	-	n/a	999		
TCDL 10.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00		n/a	n/a		
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-P						
BCDL 10.0							Weight: 19 lb	FT = 20%

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 4-8-0 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.

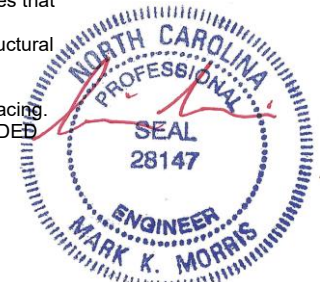
REACTIONS. (lb/size) 1=163/4-8-0 (min. 0-1-8), 3=163/4-8-0 (min. 0-1-8)
Max Horz 1=118(LC 12)
Max Uplift 3=-82(LC 12)
Max Grav 1=163(LC 1), 3=176(LC 19)

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

NOTES- (8-11)

- 1) Wind: ASCE 7-16; Vult=135mph (3-second gust) Vasd=107mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 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=1.25 Plate DOL=1.25); 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) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 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.
- 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 bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
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LOAD CASE(S) Standard



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