Mark Morris, P.E.

#126, 1317-M, Summerville, SC 29483
843 209-5784, Fax (866)-213-4614

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

AST #: 26511
JOB: 20-4571-R01
JOB NAME: LOT 1113 ANDERSON CREEK
Wind Code: 37
Wind Speed: Vult= 130mph
Exposure Category: B
Mean Roof Height (feet): 23

41 Truss Design(s)

Trusses:
J01, J02, J03, J06, PB01, PB02, PB03, PB04, R01, R02, R02A, R03, R03A, R04, R05, R06, R07, R08, R09, R10, R12, R13, R14, R15, R18, R19, R20, R21, R22, R22A, R23, R24, R25, R26, R27, R28, R29, VT01, VT02, VT03, VT04

4/19/2021
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*,

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	J01	Jack-Closed	5	1	Job Reference (optional) **# 26511**

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:49:39 2021 Page 1
ID:jROaQZCa7AXr4ywaPFSiTyJIBf-oLRbkonpjuGytkP8SGvAxqOmoncrZ4Ri6OWiaOzOjfQ

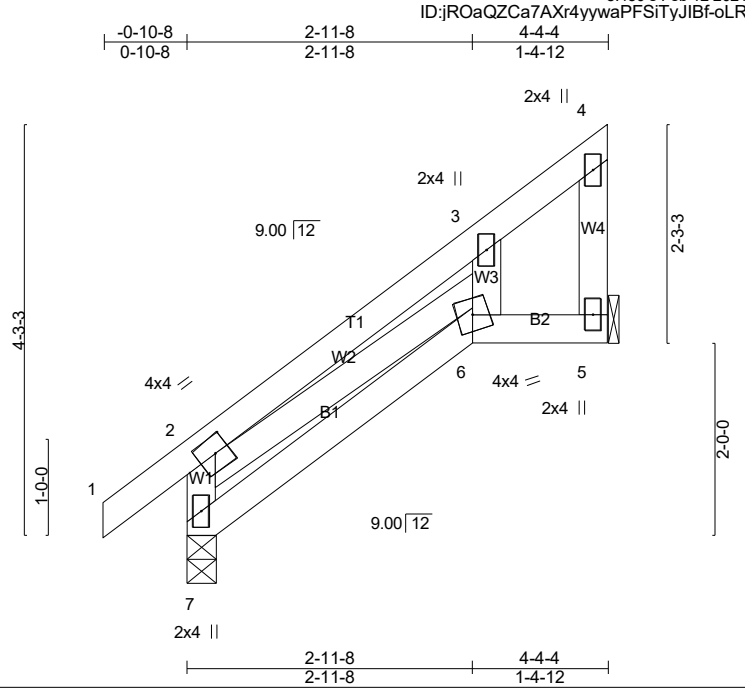


Plate Offsets (X,Y)-- [2:0-1-12,0-2-0]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	0.02	6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.02	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.02	5	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 27 lb	FT = 0%
BCDL	10.0											

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

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

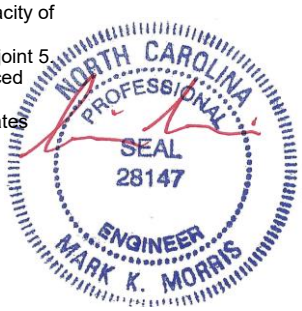
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 7=231/0-3-8 (min. 0-1-8), 5=155/Mechanical
Max Horz 7=116(LC 9)
Max Uplift 7=-14(LC 12), 5=-71(LC 12)
Max Grav 7=231(LC 1), 5=183(LC 20)

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

NOTES- (10-11)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) 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) Bearing at joint(s) 7 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 14 lb uplift at joint 7 and 71 lb uplift at joint 5.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

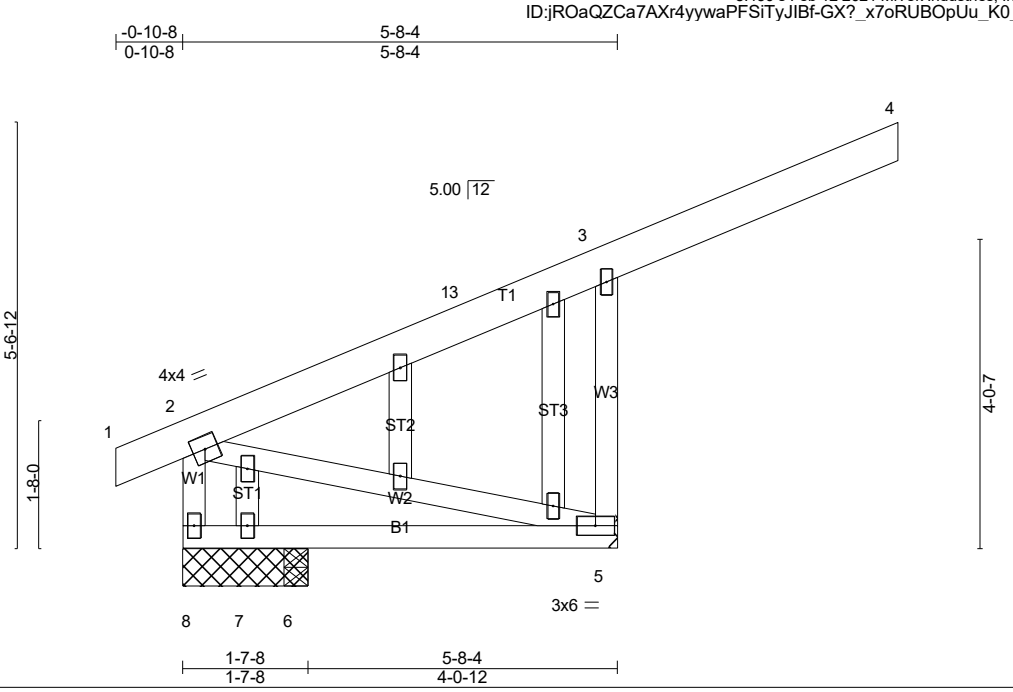
LOAD CASE(S) Standard



4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	J02	Jack-Closed Structural Gable	2	1	Job Reference (optional) **# 26511**

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:49:40 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-GX?_x7oRUBOpUu_K0_QPT1woXBxaIXWsL2FF6qzOjfP



LOADING (psf)

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

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

CSI.	
TC	0.75
BC	0.14
WB	0.05
Matrix-P	

DEFL.	in	(loc)	l/defl	L/d
Vert(LL)	-0.01	5-6	>999	240
Vert(CT)	-0.02	5-6	>999	180
Horz(CT)	-0.00	5	n/a	n/a

PLATES	**GRIP**
MT20	244/190
Weight: 56 lb	FT = 0%

LUMBER-

TOP CHORD	2x6 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-8-4 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size) 5=497/Mechanical, 8=166/1-7-8 (min. 0-1-8), 7=-66/1-7-8 (min. 0-1-8), 6=125/0-3-8 (min. 0-1-8)
Max Horz 8=195(LC 11)
Max Uplift 5=-245(LC 11), 8=-19(LC 10), 7=-133(LC 7)
Max Grav 5=700(LC 21), 8=170(LC 25), 6=250(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-5=-669/222

NOTES- (13-14)

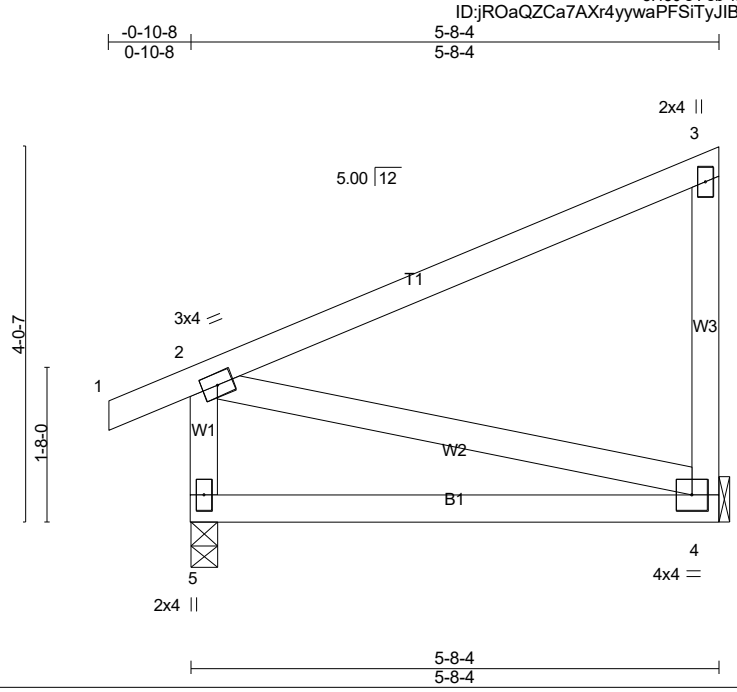
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
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) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 245 lb uplift at joint 5, 19 lb uplift at joint 8 and 133 lb uplift at joint 7.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
14) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	J03	Jack-Closed	5	1	Job Reference (optional) **# 26511**

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:49:42 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-Cw7kMpqi0peXkC7i7PStYS06l?aZmRG8oMkMBjzOjfN



LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.05	4-5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.10	4-5	>637	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00	4	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P							Weight: 34 lb	FT = 0%
BCDL	10.0											

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

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

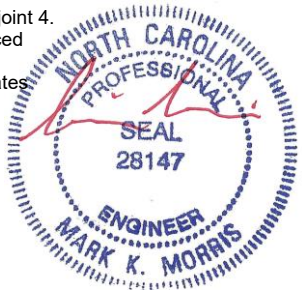
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 5=283/0-3-8 (min. 0-1-8), 4=210/Mechanical
Max Horz 5=142(LC 11)
Max Uplift5=-49(LC 14), 4=-58(LC 11)
Max Grav 5=365(LC 21), 4=292(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-311/76

NOTES- (10-11)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint 5 and 58 lb uplift at joint 4.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

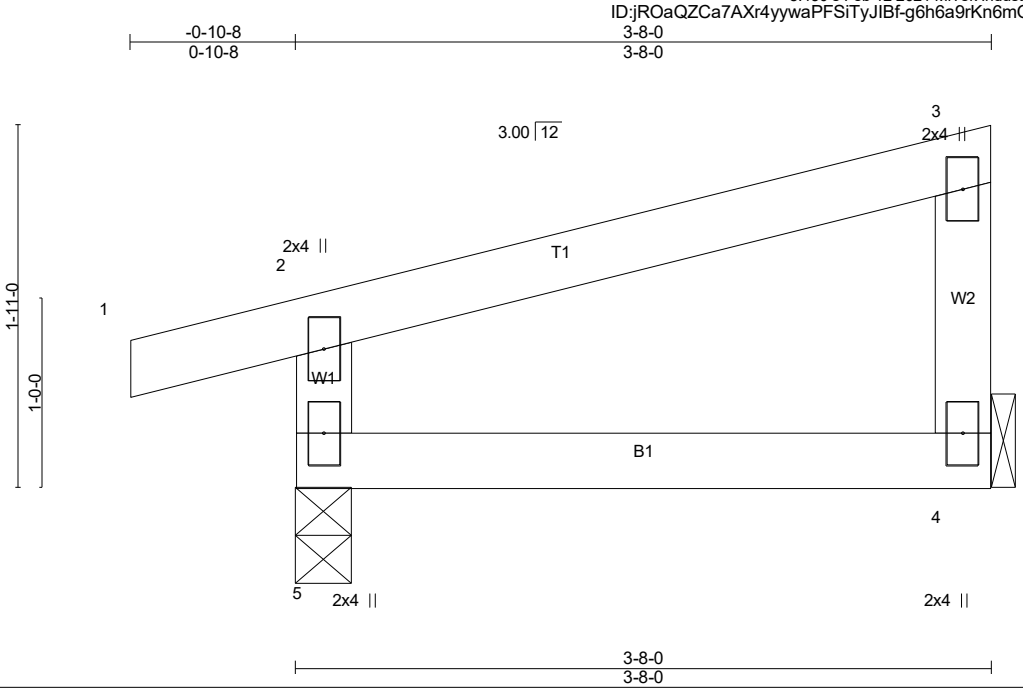
LOAD CASE(S) Standard



4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	J06	Jack-Closed	4	1	**# 26511**
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:49:43 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-g6h6a9rKn6mOLMivh6z65gYS4Oz4Vu?I10Uvj9zOjfM



LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.00	4-5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-R							Weight: 15 lb	FT = 0%
BCDL	10.0											

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

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

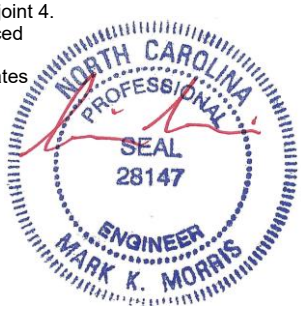
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 5=206/0-3-8 (min. 0-1-8), 4=126/Mechanical
Max Horz 5=61(LC 11)
Max Uplift5=-67(LC 10), 4=-28(LC 14)
Max Grav 5=269(LC 21), 4=160(LC 21)

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

NOTES- (10-11)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 5 and 28 lb uplift at joint 4.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

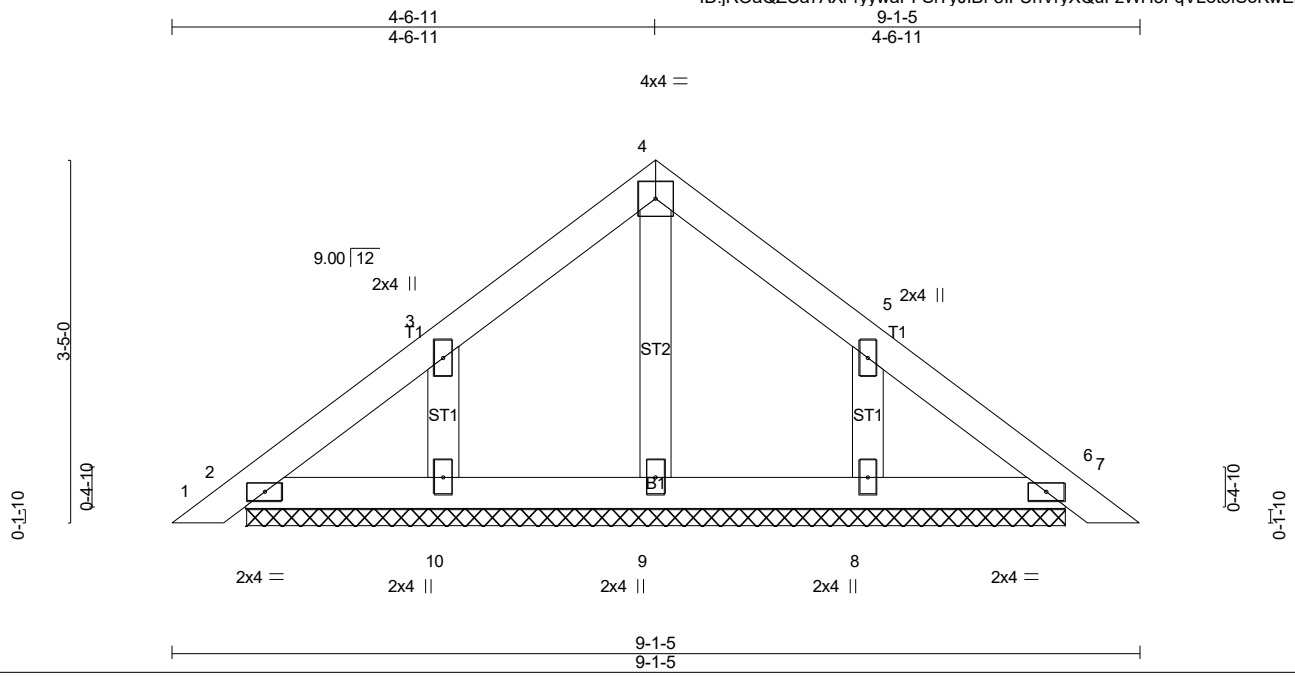
LOAD CASE(S) Standard



4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	PB01	GABLE	2	1	Job Reference (optional) **# 26511**

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:49:44 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-8IFUnVryXQuFzWH5FqVLet5fSoKwELYRGgDTFbzOjfL



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	0.00	6	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	0.00	6	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P							Weight: 36 lb	FT = 0%
BCDL	10.0											

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

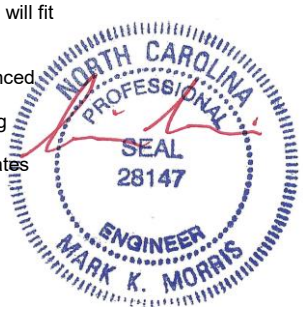
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. All bearings 7-8-11.
(lb) - Max Horz 2=74(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 10, 8
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- (13-14)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 10, 8.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
13) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
14) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

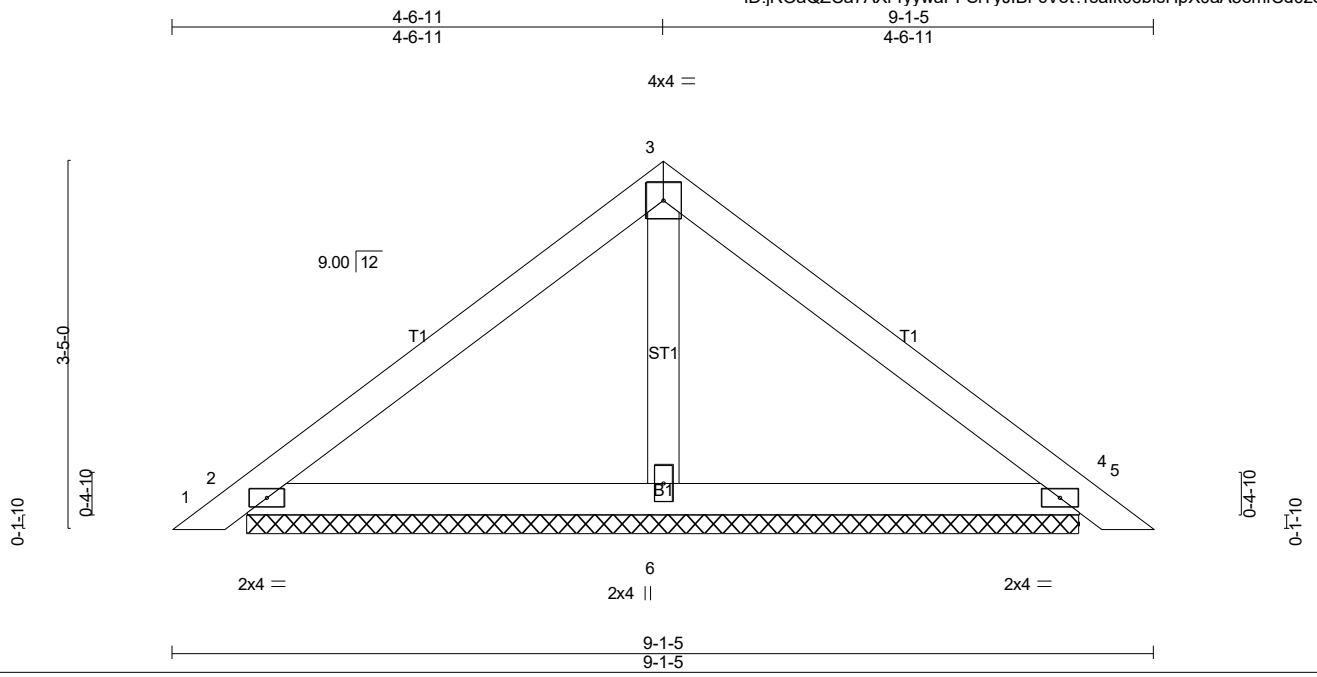


LOAD CASE(S) Standard

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	PB02	Piggyback	10	1	Job Reference (optional) **# 26511**

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:49:45 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-cVot?rsaIk06bfsHpX0aA5emfCd0zorbUKz0o2zOjfK



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	0.01	5	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	0.01	5	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P							Weight: 32 lb	FT = 0%
BCDL	10.0											

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

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

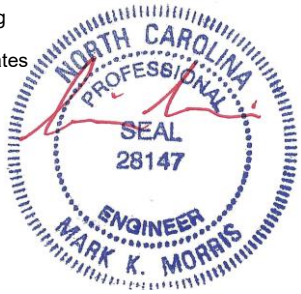
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=200/7-8-11 (min. 0-1-8), 4=200/7-8-11 (min. 0-1-8), 6=271/7-8-11 (min. 0-1-8)
Max Horz 2=-74(LC 10)
Max Uplift2=-50(LC 12), 4=-60(LC 13)

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

NOTES- (11-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
11) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

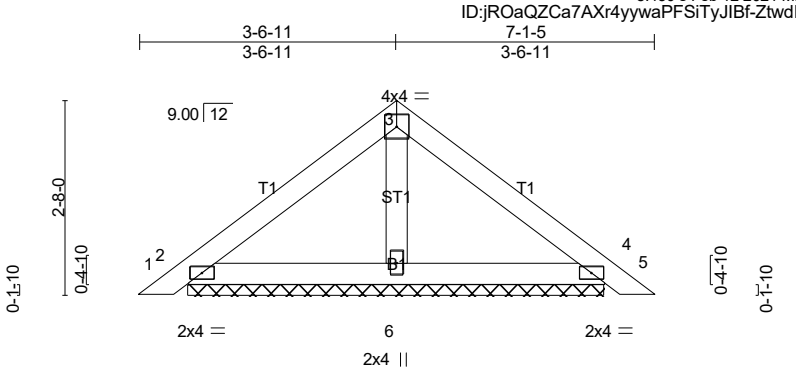
LOAD CASE(S) Standard



4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	PB03	Piggyback	11	1	**# 26511**
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:49:47 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-ZtwdPXuqqLGqqz0gwy22FWj8I0KGRiZuyeS7swzOjfl



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	0.00	5	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	0.01	5	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P							Weight: 25 lb	FT = 0%
BCDL	10.0											

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

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

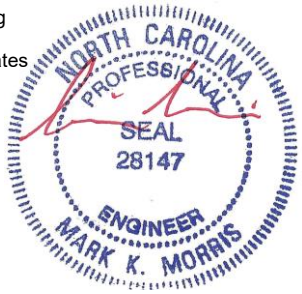
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=156/5-8-11 (min. 0-1-8), 4=156/5-8-11 (min. 0-1-8), 6=199/5-8-11 (min. 0-1-8)
Max Horz 2=-57(LC 10)
Max Uplift2=-40(LC 12), 4=-48(LC 13)

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

NOTES- (11-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
11) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

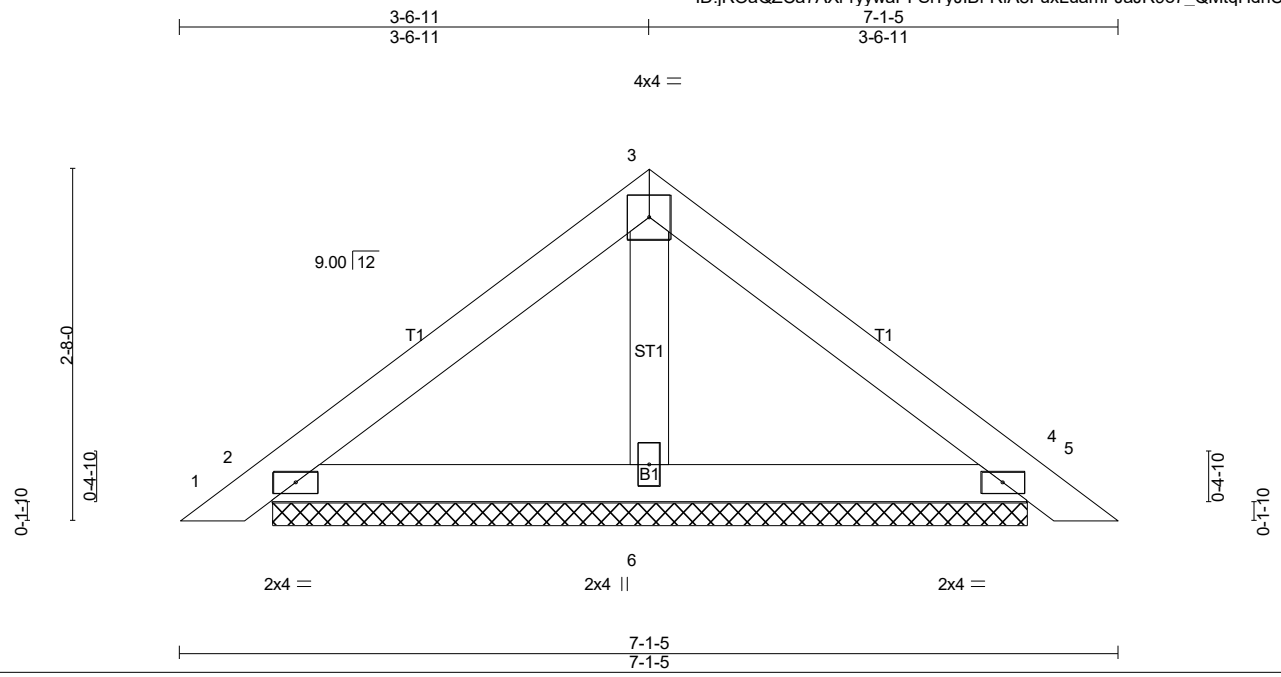
LOAD CASE(S) Standard



4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	PB04	Piggyback	1	1	# 26511
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:49:51 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-RfA8FuxLuamFJaJR9o7_QMtqHdhCNVZTtGQK?izOjfE



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	0.00	5	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	0.01	5	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P							Weight: 25 lb	FT = 0%
BCDL	10.0											

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

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

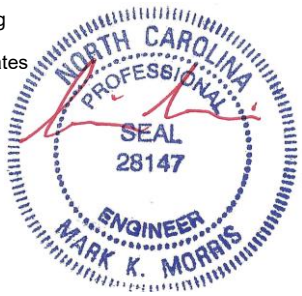
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=156/5-8-11 (min. 0-1-8), 4=156/5-8-11 (min. 0-1-8), 6=199/5-8-11 (min. 0-1-8)
Max Horz 2=57(LC 11)
Max Uplift2=-40(LC 12), 4=-48(LC 13)

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

NOTES- (11-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
11) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

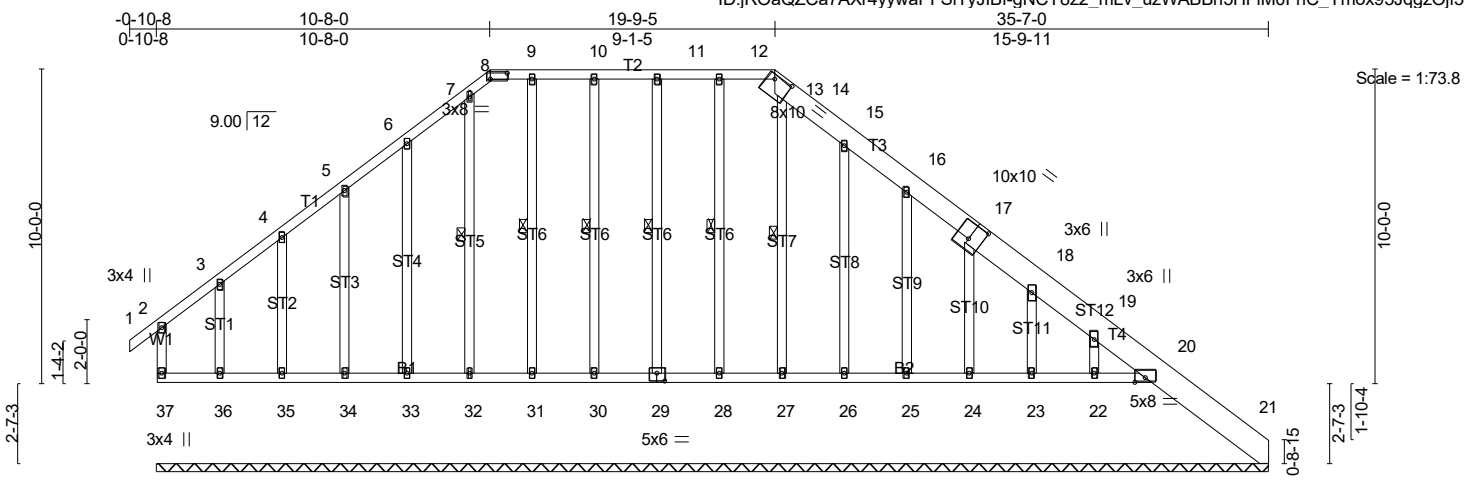
LOAD CASE(S) Standard



4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R01	GABLE	1	1	# 26511
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:00 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-gNCY8z2_mLv_uzWABBn5HFIM0FnC_Ymox95JqgzOjf5



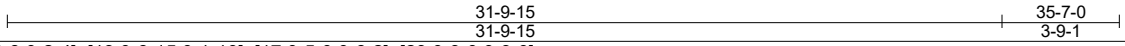


Plate Offsets (X,Y)-- [8:0-6-8,0-2-4], [13:0-6-15,0-1-10], [17:0-5-0,0-6-2], [29:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	0.00	1	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.00	1	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.01	21	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-SH							Weight: 303 lb	FT = 0%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* T3: 2x8 SP No.2, T4: 2x10 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

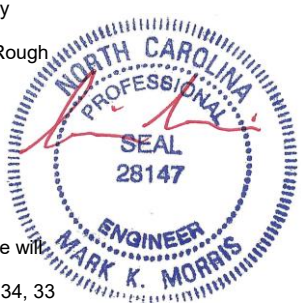
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 7-32, 9-31, 10-30, 11-29, 12-28, 14-27

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

REACTIONS. All bearings 35-7-0.
(lb) - Max Horz 37=-285(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 37, 21, 20, 35, 34, 33, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22 except 36=-115(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 37, 21, 36, 35, 30, 29, 28, 24, 23, 22 except 20=370(LC 20), 34=266(LC 20), 33=268(LC 20), 32=255(LC 22), 31=255(LC 22), 27=308(LC 22), 26=258(LC 21), 25=268(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 5-6=-144/259, 6-7=-190/340, 7-8=-167/284, 8-9=-161/299, 9-10=-161/299, 10-11=-161/299, 11-12=-161/299, 12-13=-161/299, 14-15=-192/347, 15-16=-169/275, 19-20=-270/227

NOTES- (16-17)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 4-0-0, Exterior(2N) 4-0-0 to 5-10-6, Corner(3R) 5-10-6 to 24-6-15, Exterior(2N) 24-6-15 to 30-7-10, Corner(3E) 30-7-10 to 35-5-4 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 37, 21, 20, 35, 34, 33, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22 except (jt=lb) 36=115.
13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 37, 20, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22.



4/19/2021

Continued on page 2

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

NOTES- (16-17)

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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
16) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
17) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R02	Piggyback Base	4	1	Job Reference (optional) **# 26511**

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:03 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-5yugm?4t3GHYIREIsJKovuNkvSbeBoUEd7KzQ?zOjf2

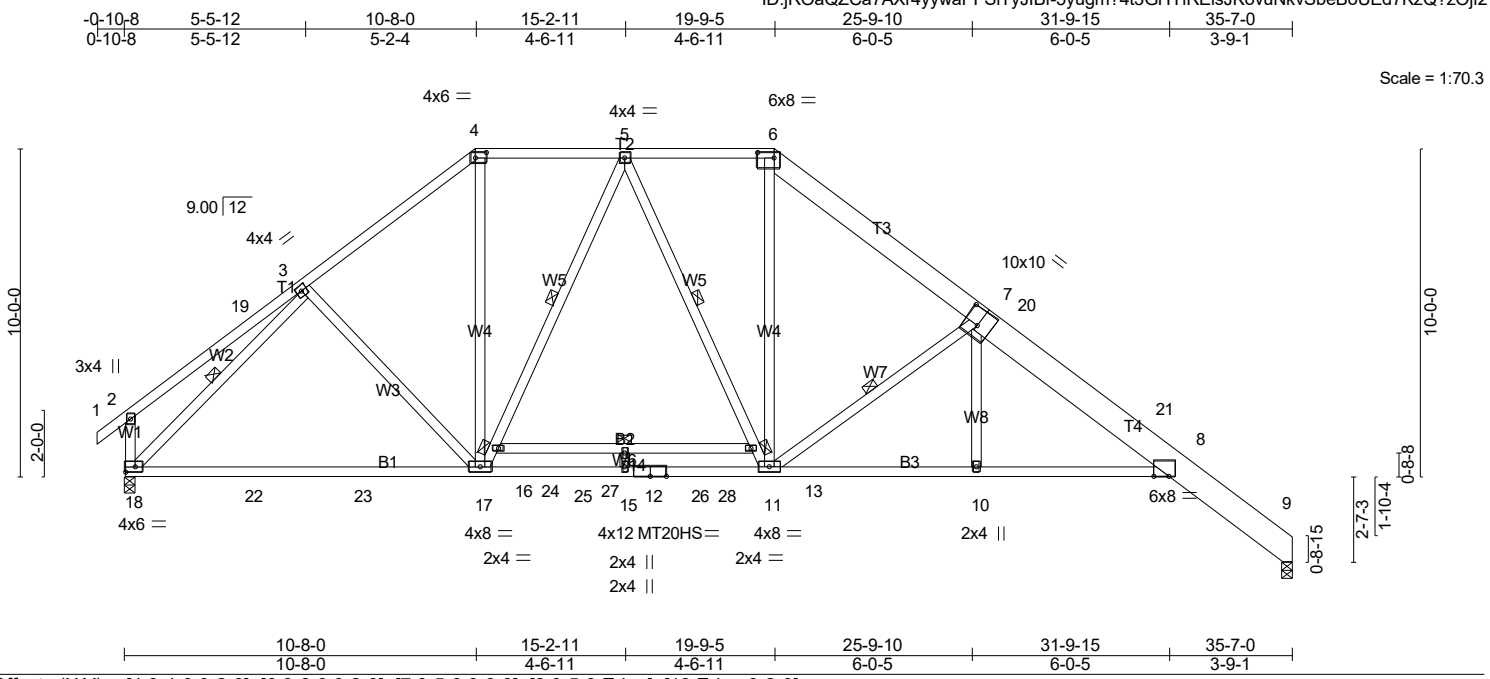


Plate Offsets (X,Y)-- [4:0-4-0,0-2-0], [6:0-6-0,0-2-0], [7:0-5-0,0-6-0], [8:0-5-9,Edge], [18:Edge,0-2-0]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.46	11-15	>930	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.78	11-15	>541	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.47	9	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-SH							Weight: 268 lb	FT = 0%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
T3: 2x8 SP No.2, T4: 2x10 SP 2400F 2.0E
BOT CHORD 2x4 SP No.2 *Except*
B1: 2x4 SP SS, B3: 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 11-15.
6-0-0 oc bracing: 13-16
WEBS 1 Row at midpt 5-16, 5-13, 7-11, 3-18

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

REACTIONS. (lb/size) 18=1566/0-3-8 (min. 0-2-1), 9=1493/0-3-8 (min. 0-1-8)
Max Horz 18=-286(LC 8)
Max Uplift18=-99(LC 12), 9=-137(LC 13)
Max Grav 18=1734(LC 3), 9=1518(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-19=-316/124, 3-4=-1841/275, 4-5=-1415/269, 5-6=-1587/289, 6-7=-2135/288, 7-20=-2506/289, 20-21=-2649/286, 8-21=-2686/257, 8-9=-819/122, 2-18=-353/153
BOT CHORD 18-22=-127/1419, 22-23=-127/1419, 17-23=-127/1419, 17-24=-17/1599, 24-25=-17/1599, 15-25=-17/1599, 12-15=-17/1599, 12-26=-17/1599, 11-26=-17/1599, 10-11=-131/2475, 8-10=-133/2470
WEBS 4-17=-46/820, 16-17=-517/138, 5-16=-458/163, 6-11=-49/999, 7-11=-1209/291, 3-18=-1754/123, 7-10=0/255

NOTES- (12-13)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Exterior(2R) 3-11-2 to 26-6-13, Interior(1) 26-6-13 to 30-7-10, Exterior(2E) 30-7-10 to 35-5-4 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18 except (jt=lb) 9=137.

4/19/2021

Continued on page 2

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

NOTES- (12-13)

11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R02A	PIGGYBACK BASE	1	1	Job Reference (optional) **# 26511**

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:05 2021 Page 1
ID:jROaQZCa7AXr4ywaPFSiTyJIBf-1L0RBh67btXG_kO7_kNG_JT4OGH5fiqX5Rp4VuzOjf0

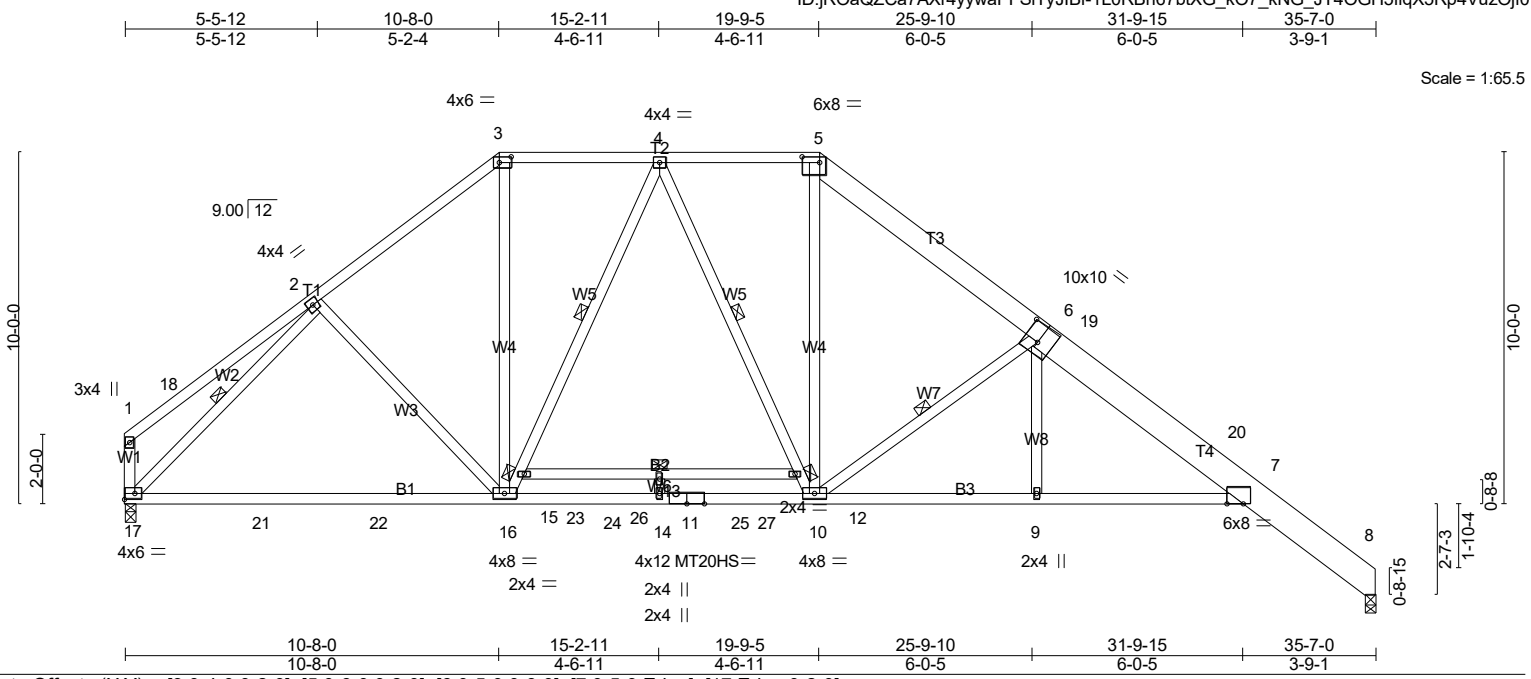


Plate Offsets (X,Y)-- [3:0-4-0,0-2-0], [5:0-6-0,0-2-0], [6:0-5-0,0-6-0], [7:0-5-9,Edge], [17:Edge,0-2-0]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.46	10-14	>930	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.78	10-14	>541	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.47	8	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 266 lb	FT = 0%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
T3: 2x8 SP No.2, T4: 2x10 SP 2400F 2.0E
BOT CHORD 2x4 SP No.2 *Except*
B1: 2x4 SP SS, B3: 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 10-14.
6-0-0 oc bracing: 12-15
WEBS 1 Row at midpt 4-15, 4-12, 6-10, 2-17

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

REACTIONS. (lb/size) 17=1504/0-3-8 (min. 0-2-0), 8=1494/0-3-8 (min. 0-1-8)
Max Horz 17=-293(LC 8)
Max Uplift17=-78(LC 12), 8=-136(LC 13)
Max Grav 17=1682(LC 3), 8=1519(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-18=-284/95, 2-3=-1844/268, 3-4=-1416/263, 4-5=-1588/285, 5-6=-2137/283, 6-19=-2508/284, 19-20=-2650/281, 7-20=-2688/252, 7-8=-820/120, 1-17=-268/91
BOT CHORD 17-21=-125/1425, 21-22=-125/1425, 16-22=-125/1425, 16-23=-16/1600, 23-24=-16/1600, 14-24=-16/1600, 11-14=-16/1600, 11-25=-16/1600, 10-25=-16/1600, 9-10=-127/2477, 7-9=-129/2472
WEBS 3-16=-43/824, 15-16=-517/138, 4-15=-458/164, 5-10=-47/1000, 6-10=-1210/291, 2-17=-1783/160, 6-9=0/255

NOTES- (11-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-11-6, Exterior(2R) 4-11-6 to 26-6-13, Interior(1) 26-6-13 to 30-7-10, Exterior(2E) 30-7-10 to 35-5-4 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17 except (jt=lb) 8=136.
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.

4/19/2021

Continued on page 2

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

LOAD CASE(S) Standard

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R03	PIGGYBACK BASE	5	1	Job Reference (optional) **# 26511**

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:07 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-zk8BcM7N7Un_E2YW59Pk3kYRY4ye7coqYIIBZmzOjf_

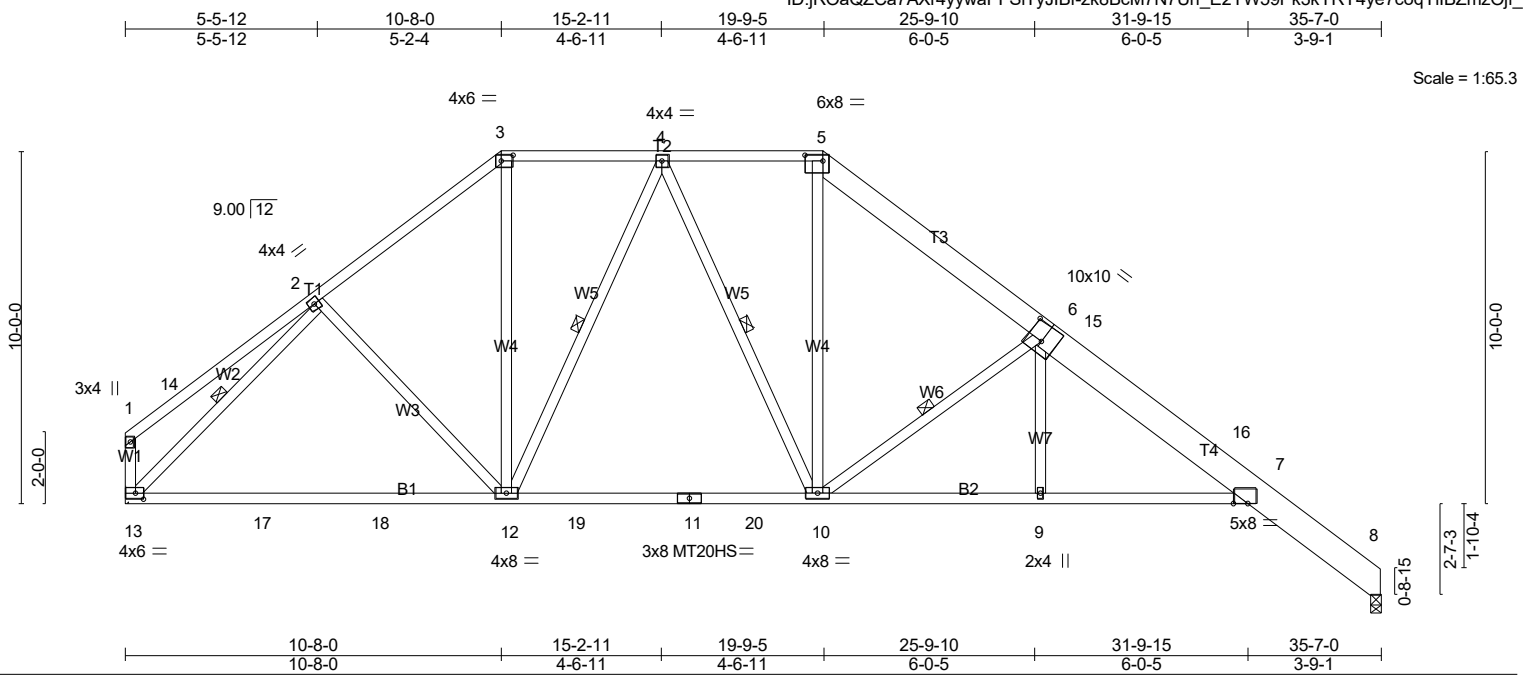


Plate Offsets (X,Y)-- [3:0-4-0,0-2-0], [5:0-6-0,0-2-0], [6:0-5-0,0-6-0], [7:0-4-13,Edge], [13:0-2-12,0-2-0]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.37	10-12	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.69	12-13	>616	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.43	8	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 254 lb	FT = 0%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* T3: 2x8 SP No.2, T4: 2x10 SP 2400F 2.0E
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-4-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 4-12, 4-10, 6-10, 2-13

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

REACTIONS. (lb/size) 13=1412/Mechanical, 8=1425/0-3-8 (min. 0-1-8)
Max Horz 13=-270(LC 13)
Max Uplift13=-124(LC 12), 8=-170(LC 13)
Max Grav 13=1493(LC 3), 8=1425(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-14=-272/85, 2-3=-1579/329, 3-4=-1202/312, 4-5=-1349/342, 5-6=-1834/359, 6-15=-2214/356, 15-16=-2385/353, 7-16=-2430/324, 7-8=-766/138, 1-13=-261/98
BOT CHORD 13-17=-164/1244, 17-18=-164/1244, 12-18=-164/1244, 12-19=-77/1320, 11-19=-77/1320, 11-20=-77/1320, 10-20=-77/1320, 9-10=-193/2235, 7-9=-195/2228
WEBS 3-12=-79/667, 4-12=-446/170, 5-10=-90/818, 6-10=-1168/304, 2-13=-1510/254, 6-9=0/279

NOTES- (12-13)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-11-6, Exterior(2R) 4-11-6 to 26-6-13, Interior(1) 26-6-13 to 30-7-10, Exterior(2E) 30-7-10 to 35-5-4 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=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Refer to girder(s) for truss to truss connections.
9) 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=124, 8=170.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

4/19/2021

Continued on page 2

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

LOAD CASE(S) Standard

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R03A	Piggyback Base	3	1	# 26511

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:09 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJlBf-v6Fx129ef61iTMivDaRC89djuteNbSt703nHdfzOjey

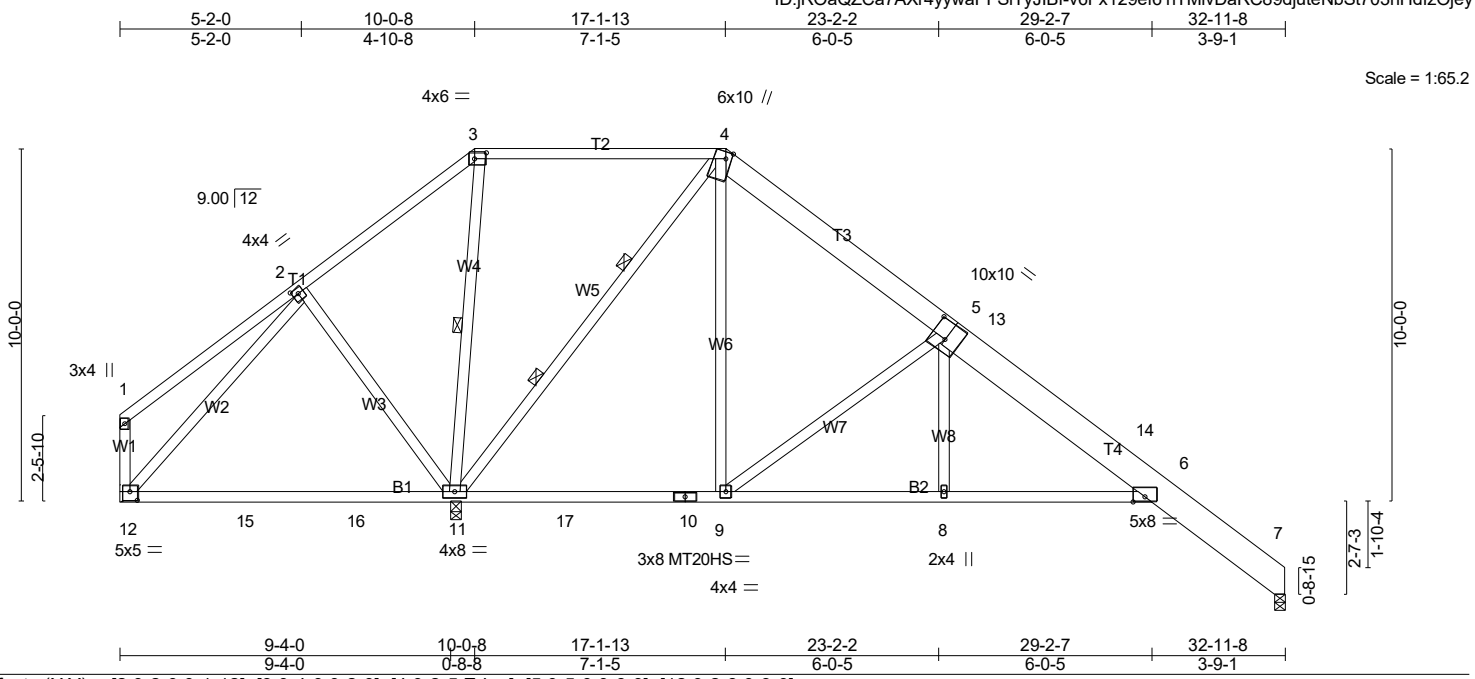


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [3:0-4-0,0-2-0], [4:0-2-5,Edge], [5:0-5-0,0-6-0], [12:0-2-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.28	11-12	>399	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.46	11-12	>243	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.13	7	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 233 lb	FT = 0%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* T3: 2x8 SP No.2, T4: 2x10 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 2-2-0 oc bracing.
WEBS 1 Row at midpt 3-11
2 Rows at 1/3 pts 4-11

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

REACTIONS. (lb/size) 11=2909/0-3-8 (min. 0-3-7), 12=-771/Mechanical, 7=490/0-3-8 (min. 0-1-8)
Max Horz 12=-279(LC 13)
Max Uplift 11=-245(LC 13), 12=-949(LC 31), 7=-93(LC 13)
Max Grav 11=2909(LC 1), 12=91(LC 13), 7=493(LC 31)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-63/1499, 3-4=-0/1060, 4-5=0/386, 13-14=-292/101, 6-14=-337/75, 6-7=-254/90
BOT CHORD 12-15=-926/360, 15-16=-926/360, 11-16=-926/360, 11-17=-293/308, 10-17=-293/308, 9-10=-293/308, 8-9=0/318, 6-8=0/314
WEBS 2-11=-570/218, 4-11=-1365/195, 4-9=-85/664, 5-9=-689/258, 5-8=0/263, 2-12=-112/1418, 3-11=-1215/137

NOTES- (12-13)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 5-0-15, Exterior(2R) 5-0-15 to 23-11-5, Interior(1) 23-11-5 to 28-0-2, Exterior(2E) 28-0-2 to 32-9-12 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=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 11=245, 12=949.
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.

4/19/2021

Continued on page 2

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

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

LOAD CASE(S) Standard

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R04	Piggyback Base Structural Gable COMMON I I Gable I Gable	1	1	Job Reference (optional) **# 26511**

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:12 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-Khx4f4BWx1QHKpQTui?vmnFFm5fnowEZi1?yE_zOjev

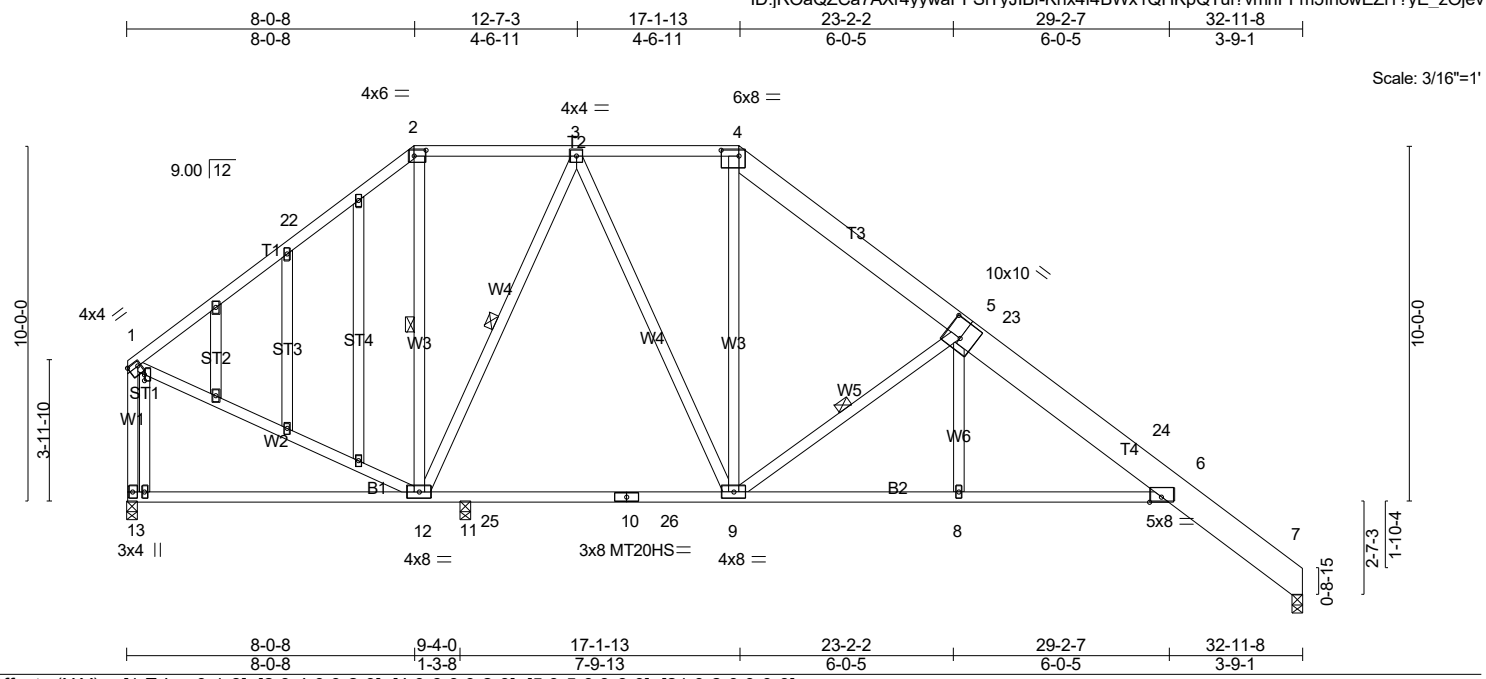


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [2:0-4-0,0-2-0], [4:0-6-0,0-2-0], [5:0-5-0,0-6-0], [21:0-2-0,0-0-0]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.25	6-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.50	6-8	>557	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.32	7	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 266 lb	FT = 0%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.1 *Except*
T2: 2x4 SP No.2, T3: 2x8 SP No.2, T4: 2x10 SP 2400F 2.0E
BOT CHORD 2x4 SP No.1 *Except*
B2: 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

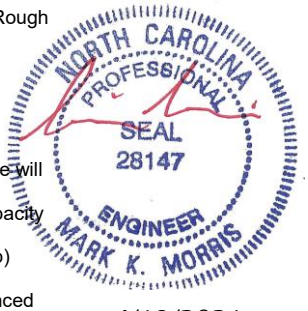
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 2-12, 3-12, 5-9

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

REACTIONS. (lb/size) 7=1150/0-3-8 (min. 0-1-8), 13=883/0-3-8 (min. 0-1-8), 11=595/0-3-8 (min. 0-1-8)
Max Horz 13=-310(LC 13)
Max Uplift7=-153(LC 13), 13=-101(LC 12), 11=-25(LC 13)
Max Grav 7=1150(LC 1), 13=883(LC 1), 11=830(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-22=-724/176, 2-22=-551/199, 2-3=-465/235, 3-4=-836/282, 4-5=-1209/284, 5-23=-1601/278, 23-24=-1772/275, 6-24=-1817/245, 6-7=-615/128, 1-13=-770/194
BOT CHORD 12-13=-190/297, 11-12=-115/703, 11-25=-115/703, 10-25=-115/703, 10-26=-115/703, 9-26=-115/703, 8-9=-121/1674, 6-8=-123/1666
WEBS 3-12=-644/162, 3-9=-82/466, 4-9=-40/385, 5-9=-1043/297, 5-8=0/287, 1-12=-80/435

NOTES- (14-15)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-11-6, Exterior(2R) 4-11-6 to 23-11-5, Interior(1) 23-11-5 to 28-0-2, Exterior(2E) 28-0-2 to 32-9-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 7=153, 13=101.
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.



4/19/2021

Continued on page 2

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

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

LOAD CASE(S) Standard

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R05	Piggyback Base	2	1	**# 26511**
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:14 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-G43q4mDmTeg?Z7as?71OrCKcWuMNGkds9LU2lszOjet

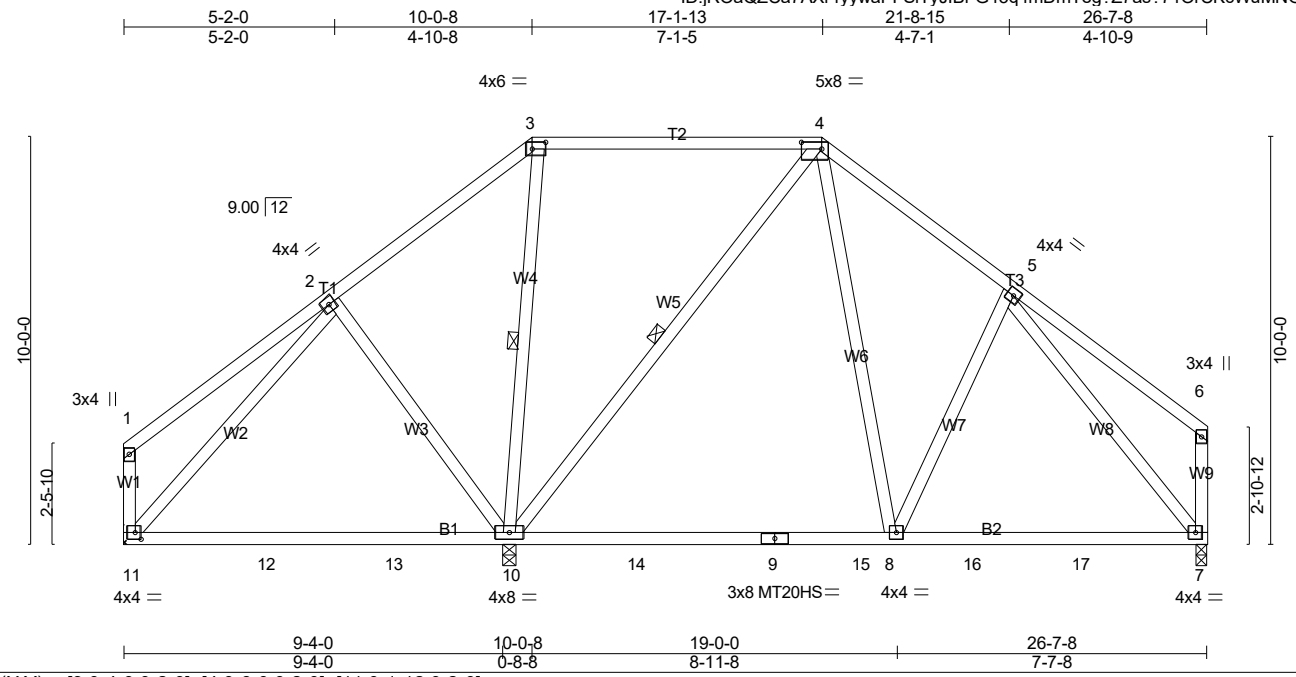


Plate Offsets (X,Y)-- [3:0-4-0,0-2-0], [4:0-6-0,0-2-0], [11:0-1-12,0-2-0]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.28	8-10	>737	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.36	8-10	>569	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.01	7	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 182 lb	FT = 0%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
B1: 2x4 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 2-2-0 oc bracing.
WEBS 1 Row at midpt 4-10, 3-10

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

REACTIONS. (lb/size) 10=1134/0-3-8 (min. 0-1-9), 11=321/Mechanical, 7=652/0-3-8 (min. 0-1-8)
Max Horz 11=169(LC 9)
Max Uplift10=-142(LC 12), 11=-22(LC 13), 7=-80(LC 13)
Max Grav 10=1304(LC 3), 11=339(LC 29), 7=739(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-5=-594/184
BOT CHORD 10-14=-22/348, 9-14=-22/348, 9-15=-22/348, 8-15=-22/348, 8-16=-38/424, 16-17=-38/424, 7-17=-38/424
WEBS 2-10=-293/225, 4-10=-565/99, 4-8=-89/525, 5-7=-638/61, 3-10=-382/119

NOTES- (11-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 5-0-15, Exterior(2R) 5-0-15 to 21-9-11, Exterior(2E) 21-9-11 to 26-5-12 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=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 7 except (jt=lb) 10=142.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R06	Piggyback Base	6	1	Job Reference (optional) **# 26511**

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:16 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-CSAbVRE1?FwipQkF7Y3sxdQzwi3Skb29dfz9NlzOjer

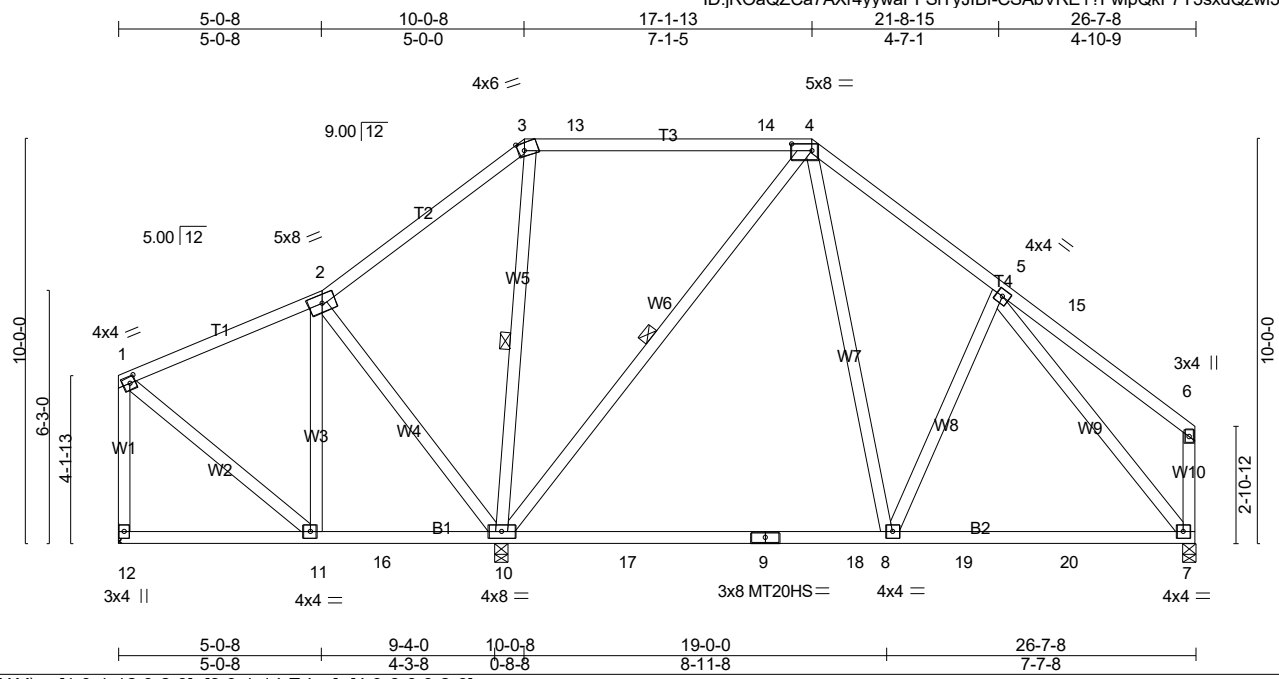


Plate Offsets (X,Y)-- [1:0-1-12,0-2-0], [3:0-1-14,Edge], [4:0-6-0,0-2-0]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.39	8-10	>517	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.55	8-10	>374	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.01	7	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 189 lb	FT = 0%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
T3: 2x4 SP SS
BOT CHORD 2x4 SP No.2 *Except*
B2: 2x4 SP No.1
WEBS 2x4 SP No.3

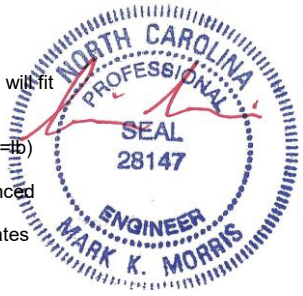
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-10, 3-10

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

REACTIONS. (lb/size) 12=305/Mechanical, 10=1158/0-3-8 (min. 0-1-11), 7=643/0-3-8 (min. 0-1-8)
Max Horz 12=155(LC 13)
Max Uplift12=-31(LC 10), 10=-132(LC 14), 7=-75(LC 15)
Max Grav 12=353(LC 41), 10=1425(LC 48), 7=944(LC 52)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-84/261, 4-5=-741/229, 1-12=-304/69, 6-7=-253/94
BOT CHORD 10-17=-23/386, 9-17=-23/386, 9-18=-23/386, 8-18=-23/386, 8-19=-54/532, 19-20=-54/532, 7-20=-54/532
WEBS 2-10=-313/161, 4-10=-674/133, 4-8=-88/679, 5-8=-265/201, 5-7=-816/80, 3-10=-506/141

NOTES- (12-13)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 5-0-8, Exterior(2R) 5-0-8 to 21-9-10, Exterior(2E) 21-9-10 to 26-5-12 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=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 7 except (jt=lb) 10=132.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.



4/19/2021

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R07	GABLE	1	1	**# 26511**
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:19 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-d1sj7TGvIAlHguSqogdZYG2Z7vDlx88bJcCp_4zOjeo

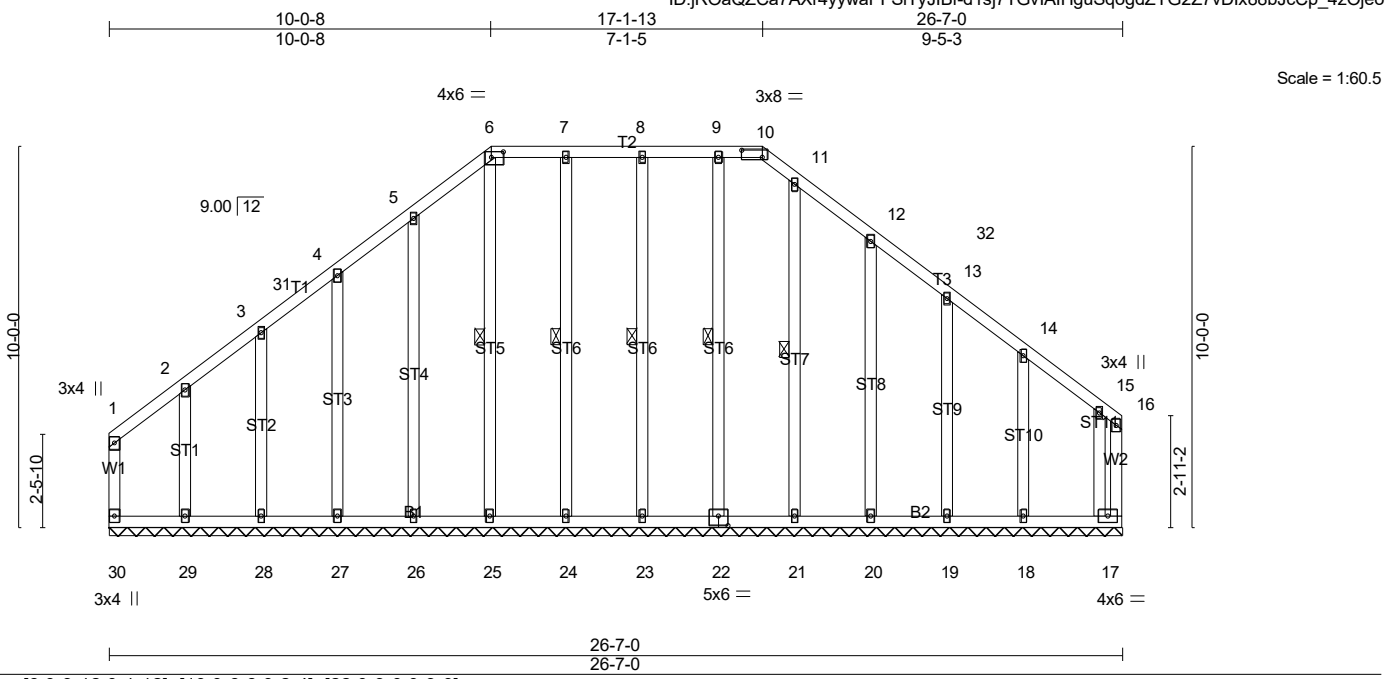


Plate Offsets (X,Y)-- [6:0-3-12,0-1-12], [10:0-6-8,0-2-4], [22:0-3-0,0-3-0]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.00	17	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-R							Weight: 227 lb	FT = 0%
BCDL	10.0											

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

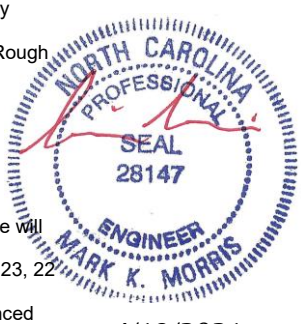
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-25, 7-24, 8-23, 9-22, 11-21

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

REACTIONS. All bearings 26-7-0.
(lb) - Max Horz 30=170(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 28, 27, 26, 24, 23, 22, 19 except 30=-169(LC 8), 17=-166(LC 9), 29=-202(LC 12), 20=-101(LC 13), 18=-193(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 30, 17, 28, 24, 23, 19 except 29=338(LC 19), 27=263(LC 19), 26=270(LC 19), 25=266(LC 22), 22=252(LC 21), 21=252(LC 21), 20=270(LC 20), 18=360(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 5-6=-173/288, 6-7=-143/252, 7-8=-143/252, 8-9=-143/252, 9-10=-143/252, 11-12=-163/273, 16-17=-257/251
WEBS 15-17=-413/395

NOTES- (14-15)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-1-12 to 4-11-6, Corner(3R) 4-11-6 to 21-7-10, Corner(3E) 21-7-10 to 26-5-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Provide adequate drainage to prevent water ponding.
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) 28, 27, 26, 24, 23, 22, 19 except (jt=lb) 30=169, 17=166, 29=202, 20=101, 18=193.
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.



4/19/2021

Continued on page 2

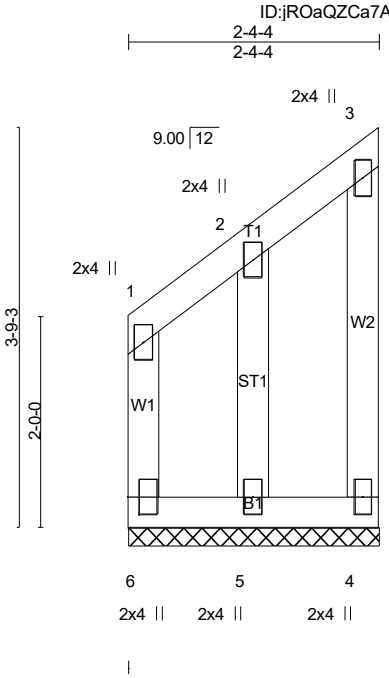
14) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
15) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural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

LOAD CASE(S) Standard

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R08	Monopitch Supported Gable	1	1	Job Reference (optional) **# 26511**

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:20 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-5EQ5LpHX3UQ8H210MO8o5TalhJZwgc8kYGxNWWzOjen



Scale = 1:21.7

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

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	-0.00	4	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-R							Weight: 19 lb	FT = 0%
BCDL	10.0											

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

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

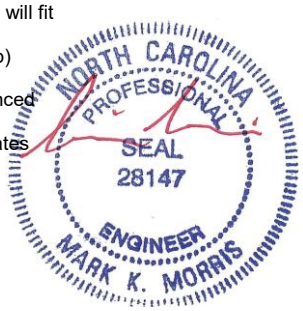
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 6=35/2-4-4 (min. 0-1-8), 4=35/2-4-4 (min. 0-1-8), 5=95/2-4-4 (min. 0-1-8)
Max Horz 6=55(LC 12)
Max Uplift 6=-19(LC 10), 4=-29(LC 12), 5=-112(LC 12)
Max Grav 6=108(LC 12), 4=41(LC 23), 5=120(LC 23)

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

NOTES- (11-12)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Gable requires continuous bottom chord bearing.
5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4 except (jt=lb) 5=112.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard



4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R09	Common Girder	1	2	Job Reference (optional) **# 26511**

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:22 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-1cYsmVJob5gsXLBOToAGAug1174z8O71?aQTaPzOjel

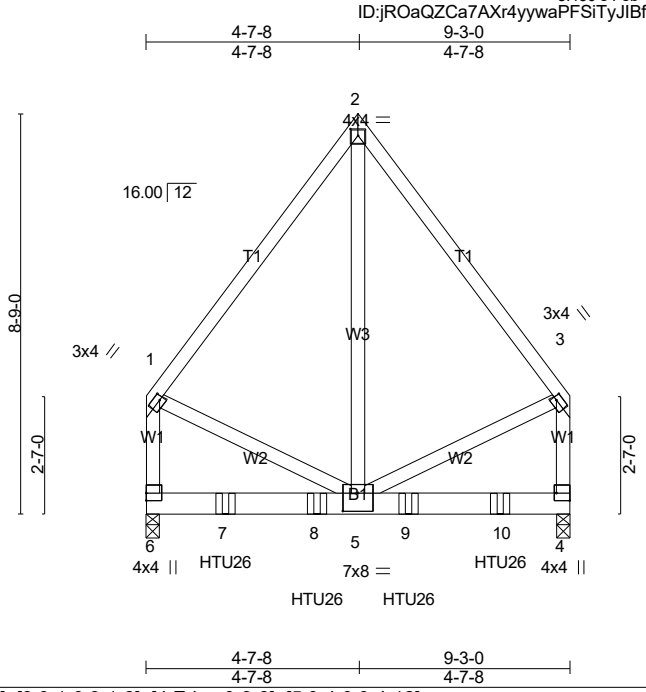


Plate Offsets (X,Y)-- [1:0-1-0,0-1-8], [2:0-2-0,0-1-12], [3:0-1-0,0-1-8], [4:Edge,0-3-8], [5:0-4-0,0-4-12]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.04	4-5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.07	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.61	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 154 lb	FT = 0%
BCDL	10.0											

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

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

REACTIONS. (lb/size) 6=3078/0-3-8 (min. 0-1-14), 4=3208/0-3-8 (min. 0-1-15)
Max Horz 6=226(LC 9)
Max Uplift6=-326(LC 11), 4=-338(LC 10)
Max Grav 6=3192(LC 3), 4=3329(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2064/280, 2-3=-2064/280, 1-6=-2242/259, 3-4=-2239/259
BOT CHORD 6-7=-232/267, 7-8=-232/267, 5-8=-232/267
WEBS 2-5=-279/2951, 1-5=-196/1204, 3-5=-196/1197

NOTES- (12-13)
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=326, 4=338.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-8-12 from the left end to 7-8-12 to connect truss(es) R03 (1 ply 2x4 SP) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.
12) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

4/19/2021

LOAD CASE(S) Standard

Continued on page 2

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-60, 4-6=-20
Concentrated Loads (lb)
Vert: 7=-1392(B) 8=-1392(B) 9=-1392(B) 10=-1392(B)

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R10	Flat Girder	1	2	Job Reference (optional) **# 26511**

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:27 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-OaLlpCNwPeJ9d74MGMmRtyNrT8p1pbvm9s8EGczOjeg

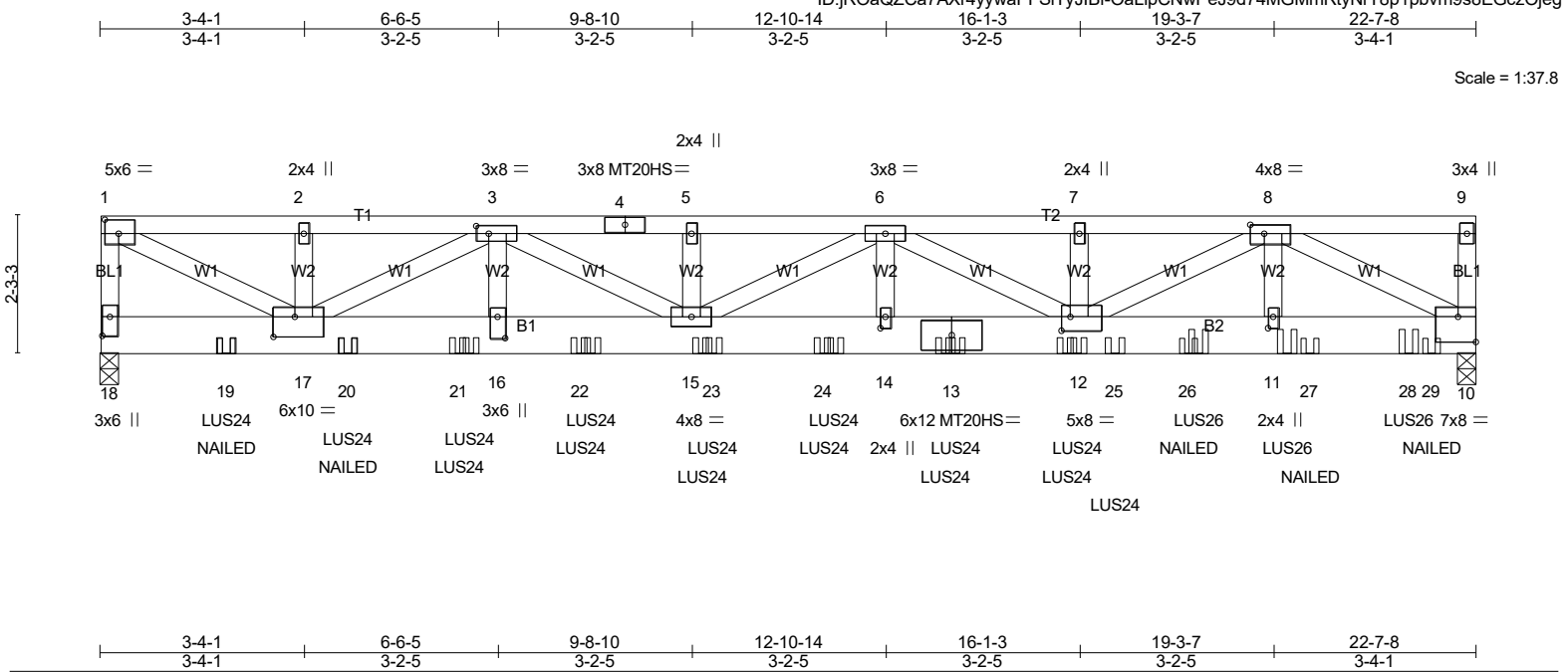


Plate Offsets (X,Y)-- [1:0-2-12,0-2-12], [3:0-2-8,0-1-8], [8:0-2-12,0-1-12], [10:Edge,0-5-0], [11:0-2-4,0-1-0], [12:0-1-12,0-2-12], [14:0-2-4,0-1-0], [16:0-4-4,0-1-8], [17:0-4-4,0-4-0], [18:0-3-12,0-1-8]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.34	14-15	>792	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.50	14-15	>539	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	NO	WB	0.83	Horz(CT)	0.06	10	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 306 lb	FT = 0%
BCDL	10.0											

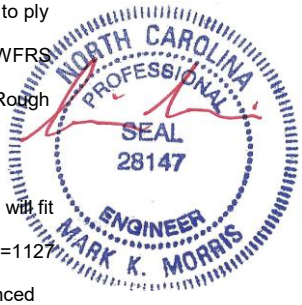
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP No.1
WEBS 2x4 SP No.2 *Except*
W2: 2x4 SP No.3
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-11-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (lb/size) 18=3891/0-3-8 (min. 0-2-5), 10=2657/0-3-8 (min. 0-1-9)
Max Uplift18=-1127(LC 6), 10=-2188(LC 6)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-18=-3488/1035, 1-2=-6026/1770, 2-3=-6026/1770, 3-4=-11925/3767, 4-5=-11925/3767, 5-6=-11925/3767, 6-7=-9166/4080, 7-8=-9166/4080
BOT CHORD 17-20=-3239/10740, 20-21=-3239/10740, 16-21=-3239/10740, 16-22=-3239/10740, 15-22=-3239/10740, 15-23=-4264/12089, 23-24=-4264/12089, 14-24=-4264/12089, 13-14=-4264/12089, 12-13=-4264/12089, 12-25=-3078/4712, 25-26=-3078/4712, 11-26=-3078/4712, 11-27=-3078/4712, 27-28=-3078/4712, 28-29=-3078/4712, 10-29=-3078/4712
WEBS 1-17=-1989/6776, 3-17=-5425/1690, 3-16=-438/1768, 3-15=-609/1364, 6-15=-272/599, 6-14=-280/1503, 6-12=-3364/211, 8-12=-1154/5126, 8-11=-1513/484, 8-10=-5341/3463

NOTES- (16-17)
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=1127, 10=2188.
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.



4/19/2021

Continued on page 2

NOTES- (16-17)

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 16-0-12 to connect truss(es) R05 (1 ply 2x4 SP), R06 (1 ply 2x4 SP) to front face of bottom chord.
12) Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 18-0-12 from the left end to 21-6-4 to connect truss(es) R03A (1 ply 2x4 SP) to front face of bottom chord.
13) 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 5-10-12 from the left end to 16-8-4 to connect truss(es) J02 (1 ply 2x4 SP), J03 (1 ply 2x4 SP), J02 (1 ply 2x4 SP) to back face of bottom chord.
14) Fill all nail holes where hanger is in contact with lumber.
15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
16) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
17) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
      Vert: 1-9=-60, 10-18=-20
   Concentrated Loads (lb)
      Vert: 13=-605(F=-333, B=-272) 15=-272(B) 12=-605(F=-333, B=-272) 11=413(F) 19=-436(F=-301, B=-135) 20=-436(F=-301, B=-135) 21=-1013(F=-333, B=-680) 22=-605(F=-333, B=-272) 23=-333(F) 24=-605(F=-333, B=-272) 25=-680(B) 26=278(F=413, B=-135) 27=-135(B) 28=413(F) 29=-139(B)

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R12	Monopitch	6	1	Job Reference (optional) **# 26511**

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:29 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-KyTVEuOBxFZstQDlOnovyNSDXxWmHe93cAdLKVzOjee

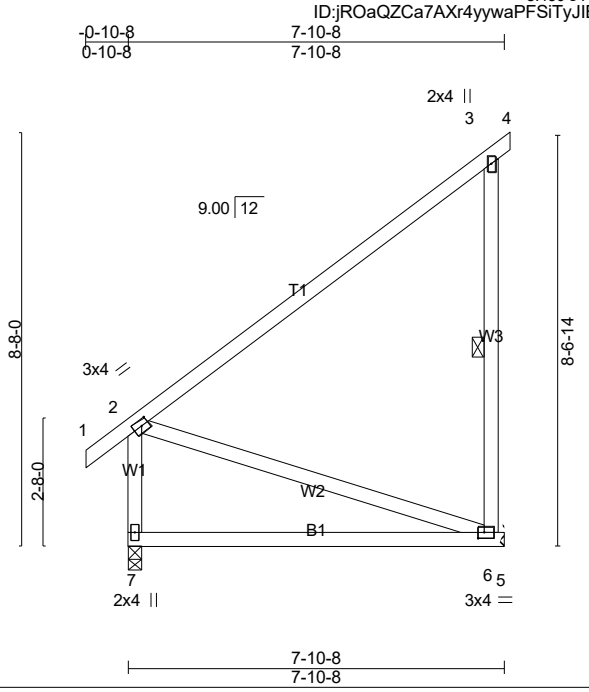


Plate Offsets (X,Y)-- [2:0-1-12,0-1-8], [6:0-1-8,0-1-8]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.18	6-7	>484	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.37	6-7	>242	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	-0.00	6	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P								
BCDL	10.0										Weight: 55 lb	FT = 0%

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

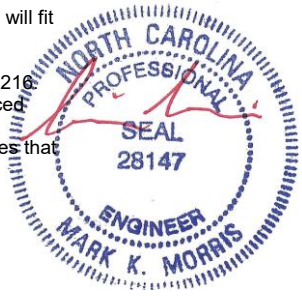
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-1-8 oc bracing.
WEBS 1 Row at midpt 3-6

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

REACTIONS. (lb/size) 6=324/Mechanical, 7=363/0-3-8 (min. 0-1-8)
Max Horz 7=203(LC 12)
Max Uplift6=-216(LC 12)
Max Grav 6=370(LC 20), 7=363(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-6=-263/272, 2-7=-289/0
BOT CHORD 6-7=-379/169
WEBS 2-6=-178/399

NOTES- (9-10)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(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=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=216.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

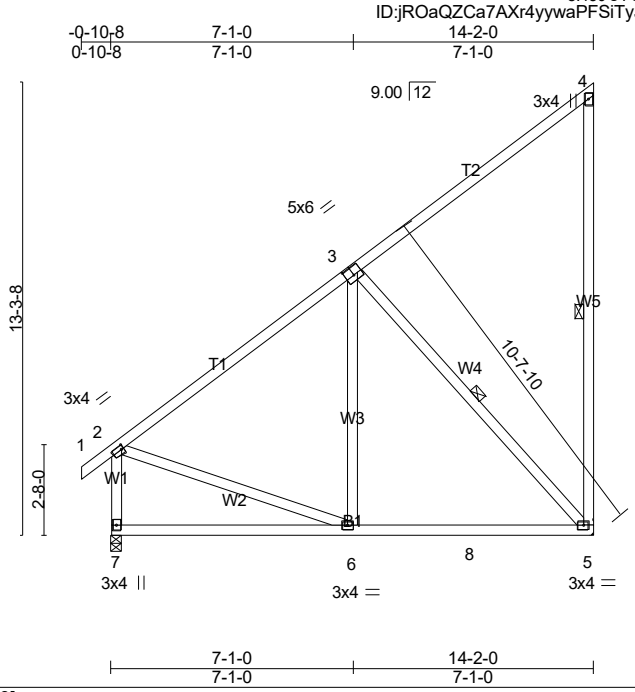


LOAD CASE(S) Standard

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R13	Monopitch	2	1	Job Reference (optional) **# 26511**

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:31 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-GLaGfaQRTspa6kN7VBrN2oXXrlFTlXvM3U6SPNzOjec



Scale = 1:67.7

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

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.68	Vert(LL)	-0.13	5-6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.18	5-6	>902	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	-0.01	5	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 108 lb	FT = 0%
BCDL	10.0											

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

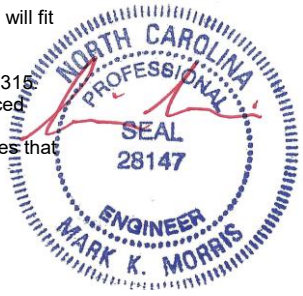
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-9-8 oc bracing.
WEBS 1 Row at midpt 4-5, 3-5

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

REACTIONS. (lb/size) 5=553/Mechanical, 7=619/0-3-8 (min. 0-1-8)
Max Horz 7=366(LC 12)
Max Uplift 5=-315(LC 12)
Max Grav 5=708(LC 24), 7=619(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-517/0, 2-7=-563/0
BOT CHORD 6-7=-444/312, 6-8=-198/409, 5-8=-198/409
WEBS 3-6=-7/271, 3-5=-594/288, 2-6=-17/376

NOTES- (9-10)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 9-2-10, Exterior(2E) 9-2-10 to 14-0-4 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, 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) 5=315.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.



LOAD CASE(S) Standard

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R14	Monopitch	6	1	**# 26511**
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:33 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-Cki03FRh?U3IL2XWdctr7DdvHYtDDJifXobZTGzOjea

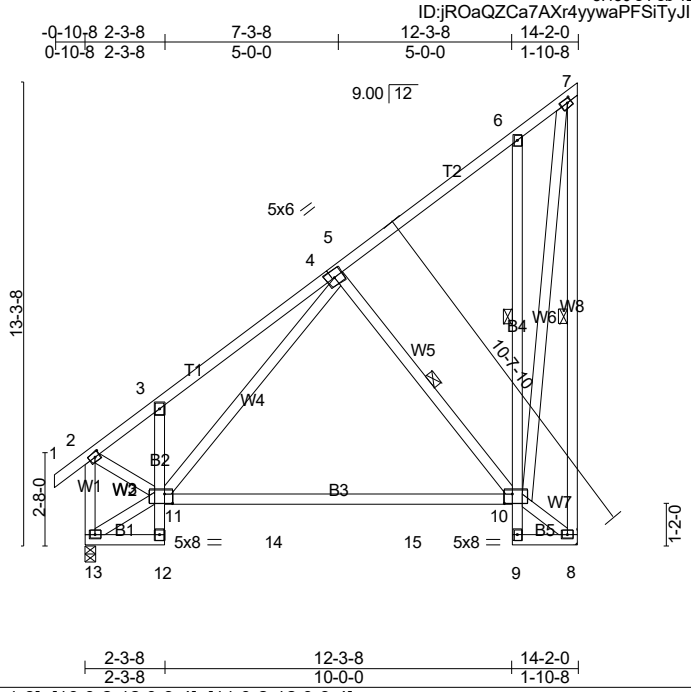


Plate Offsets (X,Y)-- [2:0-1-12,0-1-8], [7:0-1-8,0-1-8], [10:0-2-12,0-3-4], [11:0-2-12,0-3-4]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.49	10-11	>343	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.76	10-11	>218	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.04	8	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-SH							Weight: 143 lb	FT = 0%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
B2,B4: 2x4 SP No.3, B3: 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 6-0-0 oc bracing. Except:
1 Row at midpt 6-10
WEBS 1 Row at midpt 7-8, 5-10

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

REACTIONS. (lb/size) 8=553/Mechanical, 13=619/0-3-8 (min. 0-1-8)
Max Horz 13=366(LC 12)
Max Uplift8=-315(LC 12)
Max Grav 8=704(LC 20), 13=638(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-635/150, 3-4=-776/269, 4-5=-624/270, 7-8=-788/278, 2-13=-765/162
BOT CHORD 3-11=-263/175, 11-14=-229/379, 14-15=-229/379, 10-15=-229/379
WEBS 5-10=-405/297, 8-10=0/270, 7-10=-312/865, 2-11=-69/539, 5-11=-364/420, 11-13=-416/343

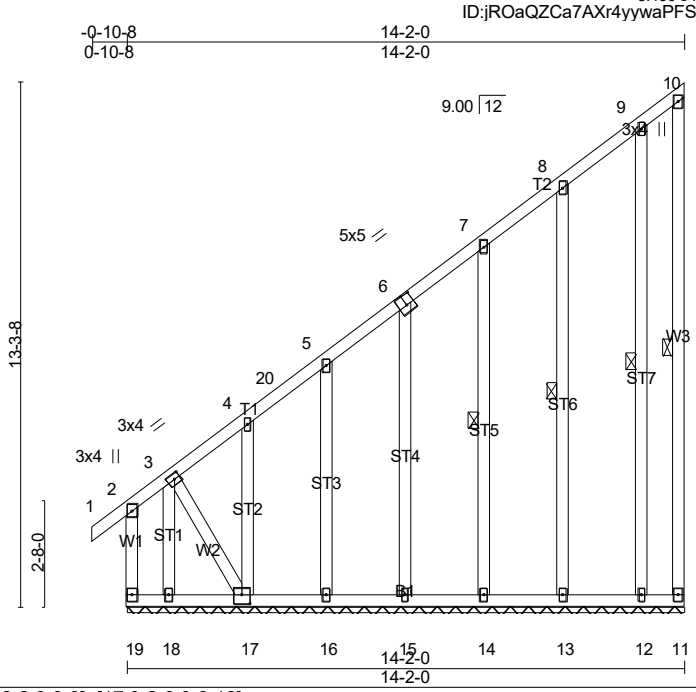
NOTES- (10-11)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 9-2-10, Exterior(2E) 9-2-10 to 14-0-4 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
4) All plates are 3x4 MT20 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=315.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R15	Monopitch Supported Gable	1	1	Job Reference (optional) **# 26511**

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:35 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-96qmUxTxX5J0bLhuk1vJCeiKDMibhLxy_64fY8zOjeY



Scale = 1:58.5

Plate Offsets (X,Y)-- [3:0-1-12,0-1-8], [6:0-2-8,0-3-0], [17:0-2-8,0-2-12]

LOADING (psf)		**SPACING-** 2-0-0	**CSI.**	**DEFL.** in (loc) l/defl L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL 1.15	TC 0.20	Vert(LL) 0.00 1 n/r 180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL 1.15	BC 0.14	Vert(CT) 0.00 1 n/r 80		
TCDL	10.0	Rep Stress Incr YES	WB 0.32	Horz(CT) -0.00 11 n/a n/a		
BCLL	0.0 *	Code IRC2018/TPI2014	Matrix-SH		Weight: 154 lb	FT = 0%
BCDL	10.0					

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

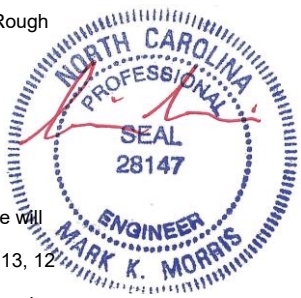
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 18-19,17-18.
WEBS 1 Row at midpt 10-11, 7-14, 8-13, 9-12

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

REACTIONS. All bearings 14-2-0.
(lb) - Max Horz 19=366(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 11, 15, 16, 14, 13, 12 except 17=-602(LC 12), 18=-224(LC 10)
Max Grav All reactions 250 lb or less at joint(s) 19, 11, 12 except 15=258(LC 20), 16=266(LC 20), 17=395(LC 20), 18=660(LC 12), 14=260(LC 20), 13=272(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-535/245, 4-20=-462/200, 5-20=-458/214, 5-6=-373/171, 6-7=-293/132
BOT CHORD 18-19=-571/233, 17-18=-571/233
WEBS 3-18=-1111/399, 3-17=-434/1063

NOTES- (13-14)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Exterior(2N) 3-11-2 to 9-1-0, Corner(3E) 9-1-0 to 14-0-4 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 15, 16, 14, 13, 12 except (jt=lb) 17=602, 18=224.
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.



4/19/2021

Continued on page 2

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

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

LOAD CASE(S) Standard

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R18	Common Supported Gable	1	1	# 26511

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:37 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-5VyXvdUC3iZkqfrHsSxnH3nbLAKf9GvFSQZmc1zOjeW

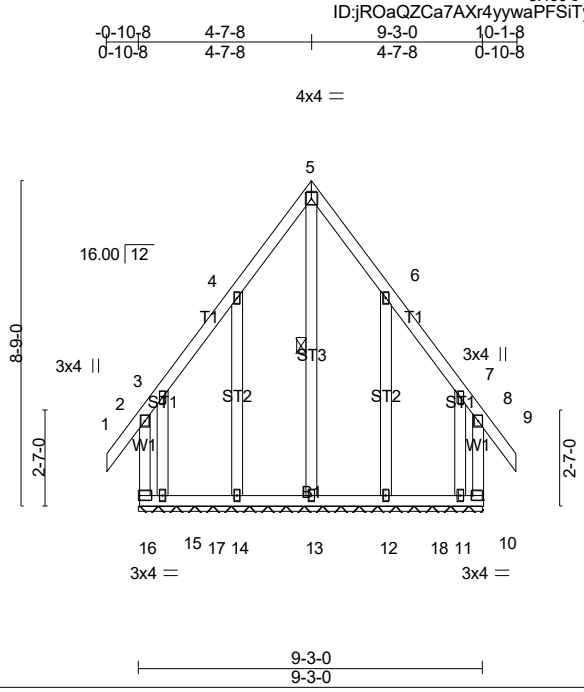


Plate Offsets (X,Y)-- [10:Edge,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.00	9	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.00	9	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	-0.00	10	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-R							Weight: 85 lb	FT = 0%
BCDL	10.0											

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

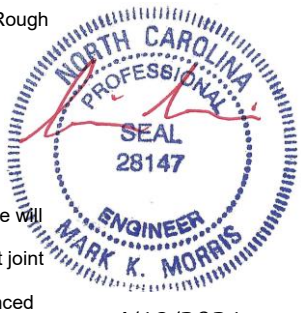
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 5-13

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

REACTIONS. All bearings 9-3-0.
(lb) - Max Horz 16=262(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) except 16=-613(LC 10), 10=-601(LC 9), 14=-158(LC 12), 15=-568(LC 9), 12=-158(LC 13), 11=-559(LC 8)
Max Grav All reactions 250 lb or less at joint(s) except 16=645(LC 11), 10=633(LC 10), 13=382(LC 23), 14=306(LC 20), 15=669(LC 10), 12=305(LC 21), 11=660(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-16=-330/323, 2-3=-308/317, 3-4=-124/264, 4-5=-259/435, 5-6=-259/435, 6-7=-120/264, 7-8=-301/311, 8-10=-323/317
WEBS 5-13=-616/286, 3-15=-286/263, 7-11=-282/259

NOTES- (14-15)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Corner(3R) 3-11-2 to 5-3-14, Corner(3E) 5-3-14 to 10-1-8 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=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 613 lb uplift at joint 16, 601 lb uplift at joint 10, 158 lb uplift at joint 14, 568 lb uplift at joint 15, 158 lb uplift at joint 12 and 559 lb uplift at joint 11.
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.



4/19/2021

Continued on page 2

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

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

LOAD CASE(S) Standard

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R19	Common	1	1	**# 26511**
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:38 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-ZhVv7zVqq0hbSpPTPAT0qGKnrZkhukSOg4lK8TzOjeV

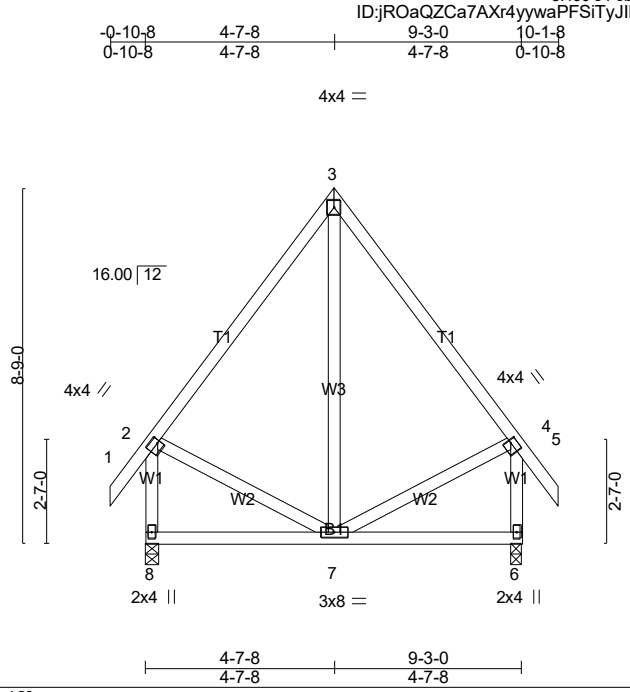


Plate Offsets (X,Y)-- [2:0-0-12,0-1-12], [4:0-0-12,0-1-12]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.01	7-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.02	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 75 lb	FT = 0%
BCDL	10.0											

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

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

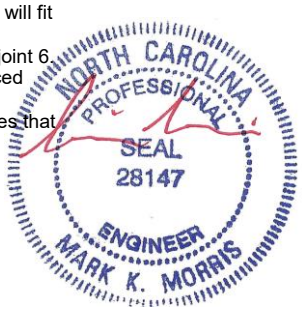
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 8=420/0-3-8 (min. 0-1-8), 6=420/0-3-8 (min. 0-1-8)
Max Horz 8=-262(LC 10)
Max Uplift 8=-73(LC 13), 6=-73(LC 12)
Max Grav 8=420(LC 21), 6=420(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-295/148, 3-4=-295/148, 2-8=-380/108, 4-6=-380/108
BOT CHORD 7-8=-252/270

NOTES- (9-10)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Exterior(2R) 3-11-2 to 5-3-14, Exterior(2E) 5-3-14 to 10-1-8 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 73 lb uplift at joint 8 and 73 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

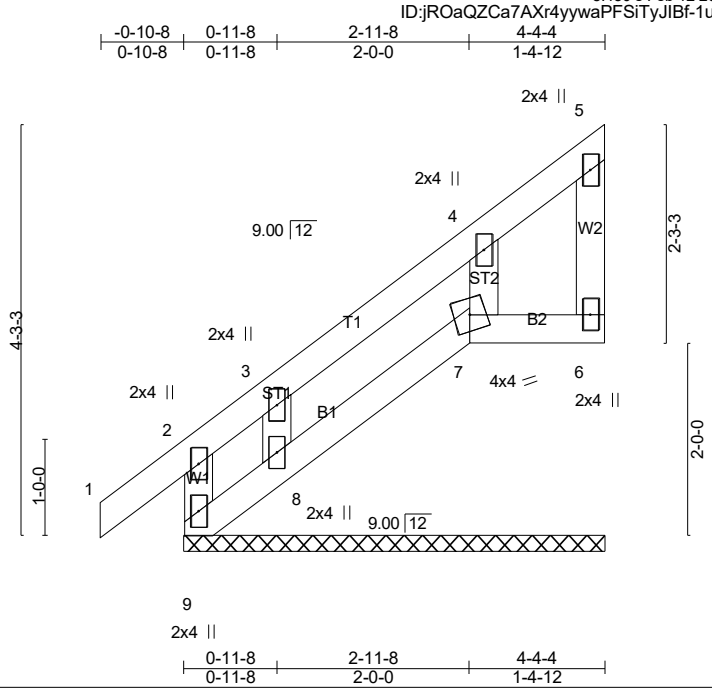
LOAD CASE(S) Standard



4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R20	GABLE	1	1	**# 26511**
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:39 2021 Page 1
ID:jROaQZCa7AXr4ywaPFSiTyJIBf-1u3HKJWSaKpS3z_gzt_FMUt1Bz58dDAXvk2thvzOjeU



LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.00	1	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.00	2	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	-0.00	6	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-R							Weight: 23 lb	FT = 0%
BCDL	10.0											

LUMBER-

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

BRACING-

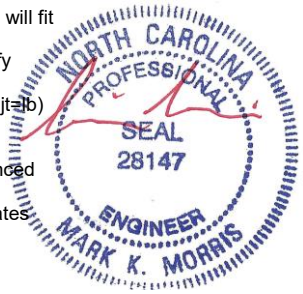
TOP CHORD	Structural wood sheathing directly applied or 4-4-4 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

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

REACTIONS. All bearings 4-4-4.
(lb) - Max Horz 9=116(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 9, 6, 7 except 8=-185(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 9, 6, 7, 8

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

NOTES- (14-15)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 1-4-0 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) 9, 7, 8 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) 9, 6, 7 except (jt=lb) 8=185.
12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 6, 7, 8.
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.
14) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
15) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

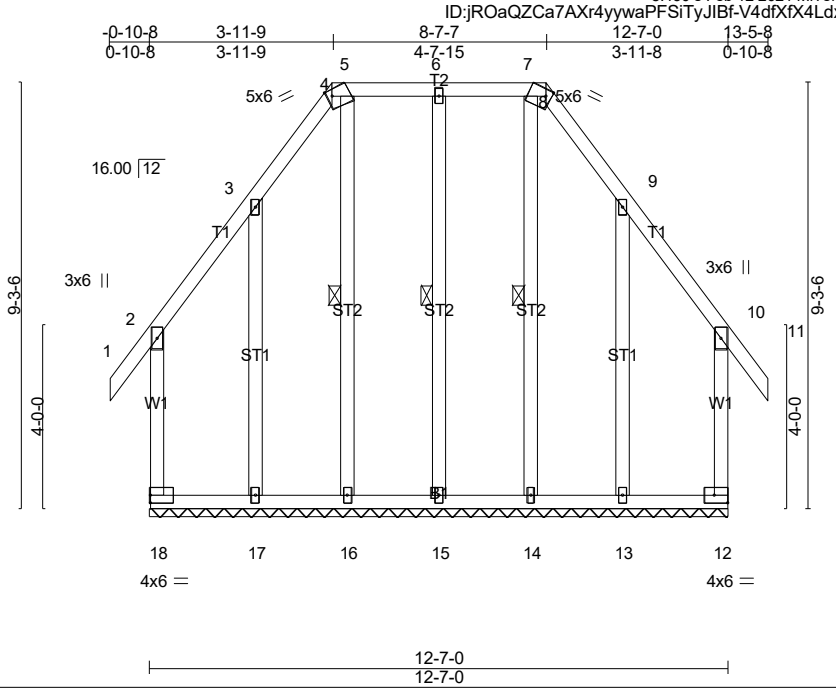


LOAD CASE(S) Standard

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R21	Hip Supported Gable	1	1	**# 26511**
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:40 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-V4dfXfX4LdxJh6ZsXaVUvhP2bNHHMdYh8OnQDMzOjeT



Scale = 1:50.2

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

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.00	11	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.00	11	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.23	Horz(CT)	-0.00	12	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-R							Weight: 120 lb	FT = 0%
BCDL	10.0											

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

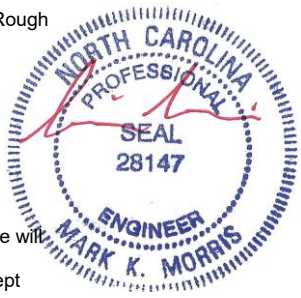
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-15, 5-16, 7-14

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

REACTIONS. All bearings 12-7-0.
(lb) - Max Horz 18=-290(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 15, 16, 14 except 18=-308(LC 8), 12=-306(LC 9), 17=-360(LC 9), 13=-358(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 15 except 18=400(LC 21), 12=398(LC 20), 16=291(LC 23), 17=557(LC 20), 14=291(LC 22), 13=556(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-18=-245/302, 2-3=-221/306, 3-4=-268/435, 4-5=-186/310, 5-6=-186/310, 6-7=-186/310, 7-8=-186/310, 8-9=-268/435, 9-10=-219/306, 10-12=-244/302
WEBS 5-16=-303/112, 3-17=-276/226, 7-14=-303/112, 9-13=-276/226

NOTES- (15-16)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-9, Corner(3R) 3-11-9 to 8-7-7, Corner(3E) 8-7-7 to 13-5-8 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=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 16, 14 except (jt=lb) 18=308, 12=306, 17=360, 13=358.
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.



4/19/2021

Continued on page 2

Warning - 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.

15) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
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.

LOAD CASE(S) Standard

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R22	Common	1	1	**# 26511**
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:42 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-RSlQyKYKtFC0wQjEe?Xy_6VTSB26qZg_bhGXIEzOjeR

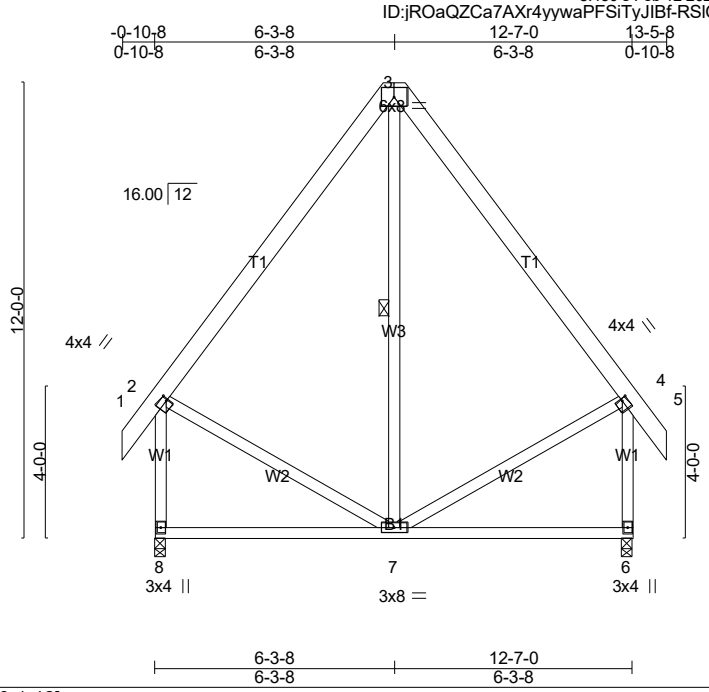


Plate Offsets (X,Y)-- [2:0-0-12,0-1-12], [4:0-0-12,0-1-12]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.03	6-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.06	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	-0.00	6	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 123 lb	FT = 0%
BCDL	10.0											

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

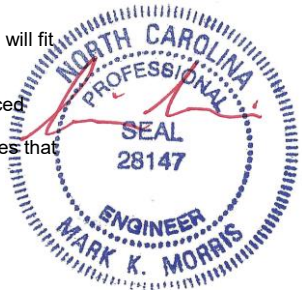
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-10-10 oc bracing.
WEBS 1 Row at midpt 3-7

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

REACTIONS. (lb/size) 8=553/0-3-8 (min. 0-1-8), 6=553/0-3-8 (min. 0-1-8)
Max Horz 8=359(LC 11)
Max Uplift 8=-99(LC 13), 6=-99(LC 12)
Max Grav 8=569(LC 21), 6=569(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-401/188, 3-4=-401/188, 2-8=-516/128, 4-6=-516/128
BOT CHORD 7-8=-345/341
WEBS 2-7=-130/258, 4-7=-131/258

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

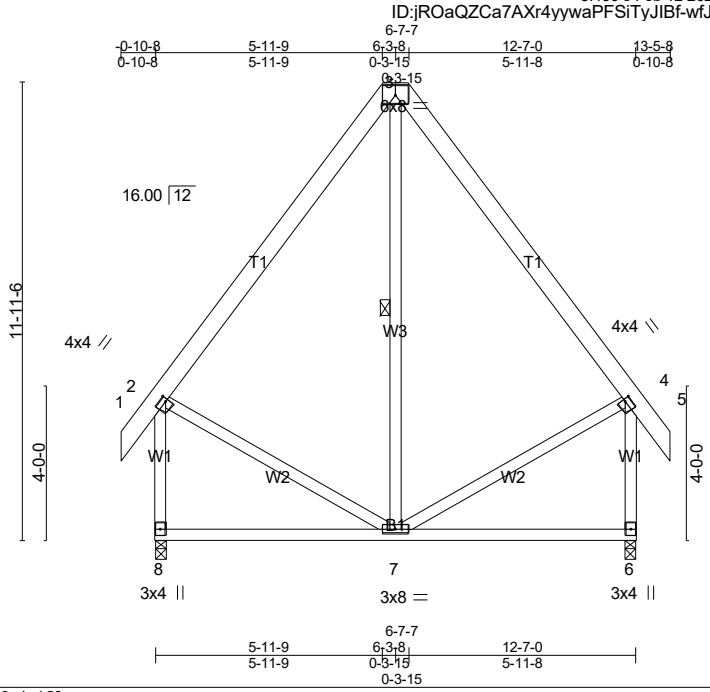


LOAD CASE(S) Standard

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R22A	Hip	1	1	Job Reference (optional) **# 26511**

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:43 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-wfJoAgZzeYKtYaIRCj2BXK1eCaOLZ0w7qL05qhzOjeQ



Scale = 1:60.2

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

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.03	7-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.06	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	-0.00	6	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 123 lb	FT = 0%
BCDL	10.0											

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

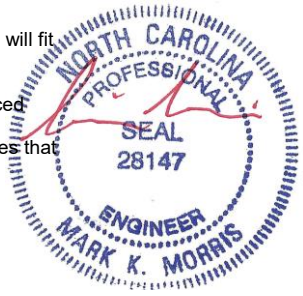
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-10-10 oc bracing.
WEBS 1 Row at midpt 3-7

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

REACTIONS. (lb/size) 8=553/0-3-8 (min. 0-1-8), 6=553/0-3-8 (min. 0-1-8)
Max Horz 8=359(LC 11)
Max Uplift 8=-99(LC 13), 6=-99(LC 12)
Max Grav 8=569(LC 21), 6=569(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-401/188, 3-4=-401/188, 2-8=-516/128, 4-6=-516/128
BOT CHORD 7-8=-345/341
WEBS 2-7=-130/258, 4-7=-131/258

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



LOAD CASE(S) Standard

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R23	Common	2	1	Job Reference (optional) **# 26511**

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:45 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-s1QYbMbDAAabnuSpK85fcl7_aO5H1vNQHfVBuZzOjeO

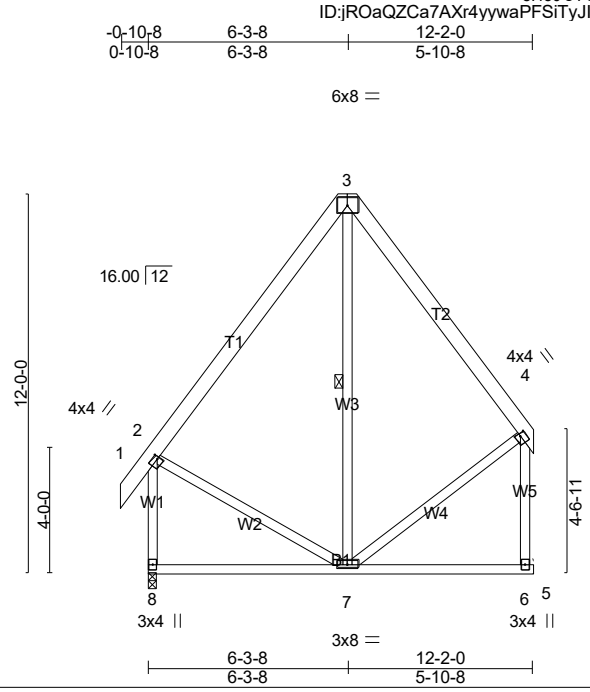


Plate Offsets (X,Y)-- [2:0-0-12,0-1-12], [4:0-1-0,0-2-0]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.03	7-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.07	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 118 lb	FT = 0%
BCDL	10.0											

LUMBER-
TOP CHORD 2x6 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.
WEBS 1 Row at midpt 3-7

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

REACTIONS. (lb/size) 8=534/0-3-8 (min. 0-1-8), 6=475/Mechanical
Max Horz 8=-301(LC 10)
Max Uplift 8=-88(LC 13), 6=-116(LC 12)
Max Grav 8=540(LC 21), 6=515(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-375/166, 3-4=-347/160, 2-8=-486/114, 4-6=-463/139
BOT CHORD 7-8=-270/284

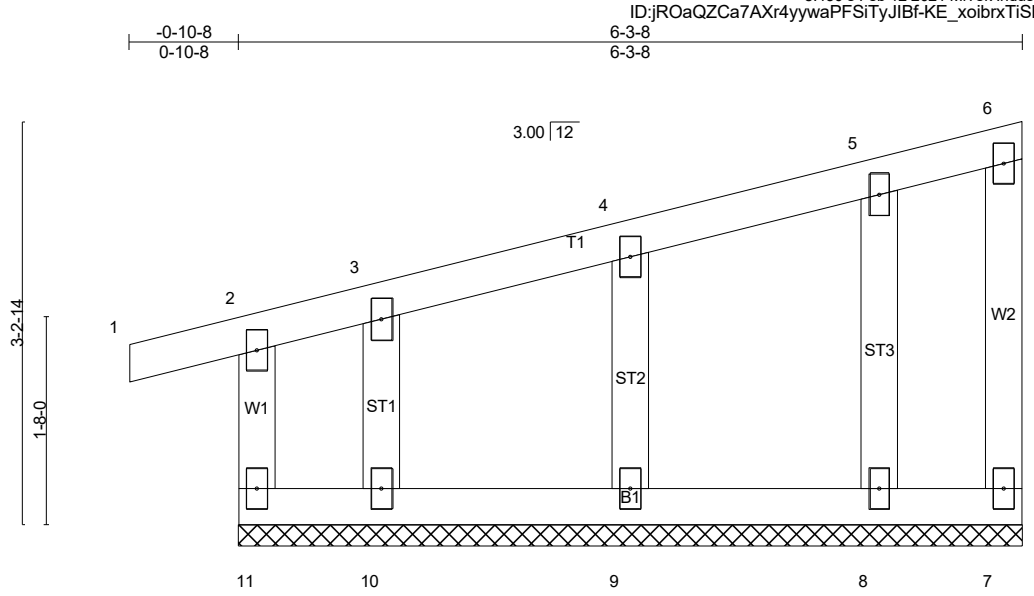
NOTES- (10-11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Exterior(2R) 3-11-2 to 7-1-10, Exterior(2E) 7-1-10 to 11-11-3 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 6=116.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R24	Monopitch Supported Gable	1	1	**# 26511**
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:46 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-KE_xoibrxTiSP110trcu8yfDdoUUmN_ZWJElR0zOjeN



LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.00	1	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.00	1	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	-0.00	7	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-R							Weight: 35 lb	FT = 0%
BCDL	10.0											

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 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 6-3-8.
(lb) - Max Horz 11=108(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 11, 7, 9, 8 except 10=-116(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 11, 7, 9, 10, 8

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

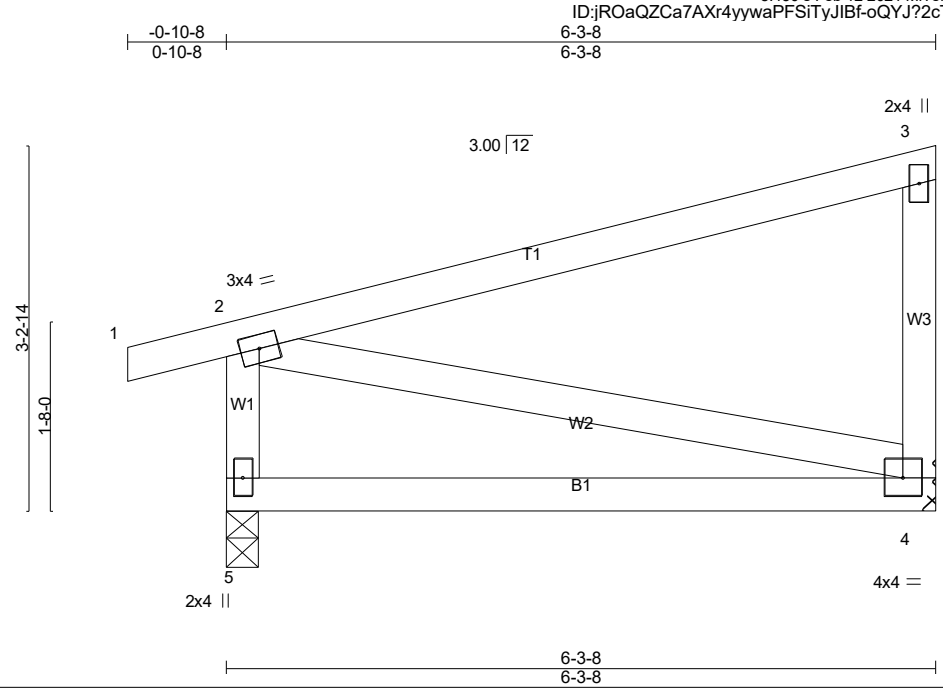
NOTES- (14-15)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) 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.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 7, 9, 8 except (jt=lb) 10=116.
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.
14) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
15) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R25	Monopitch	4	1	**# 26511**
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:47 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-oQYJ?2cTinqJ1BbCRY77hACCWCjHVqVjlz_IzSzOjeM



LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.08	4-5	>926	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.16	4-5	>463	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	-0.00	4	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P							Weight: 35 lb	FT = 0%
BCDL	10.0											

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

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

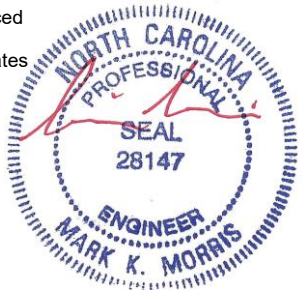
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 4=235/Mechanical, 5=306/0-3-8 (min. 0-1-8)
Max Horz 5=108(LC 13)
Max Uplift4=-52(LC 14), 5=-83(LC 10)
Max Grav 4=304(LC 21), 5=403(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-343/113

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

LOAD CASE(S) Standard



4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R26	HALF HIP	2	2	Job Reference (optional) **# 26511**

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:48 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-Gc6hDOd5T5yAeLAO?GeMENlWVb6bEH5s_djsVuzOjeL

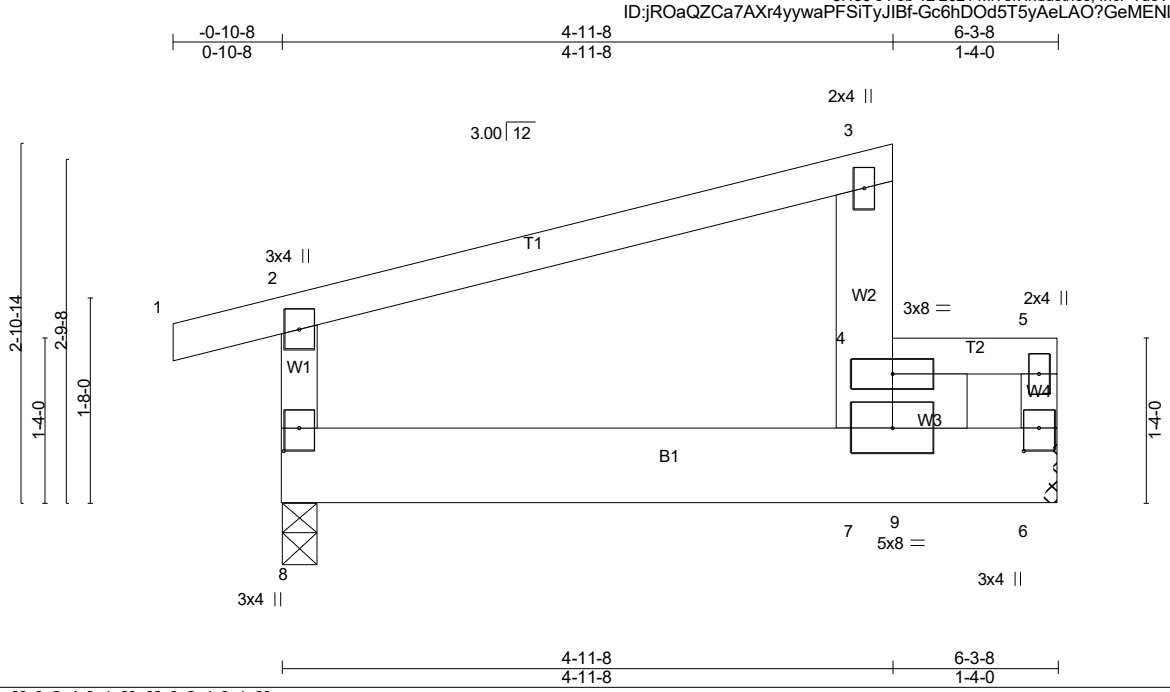


Plate Offsets (X,Y)-- [6:0-2-4,0-1-8], [8:0-2-4,0-1-8]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	40.0	Plate Grip DOL	1.00	TC	0.36	Vert(LL)	-0.00	7	>999	480	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.00	BC	0.27	Vert(CT)	-0.02	7-8	>999	360		
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.00	8	>999	240	Weight: 77 lb	FT = 0%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP No.2
WEBS 2x4 SP No.3 *Except*
W2: 2x6 SP No.2, W3: 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) 6=810/Mechanical, 8=416/0-3-8 (min. 0-1-8)
Max Horz 8=104(LC 11)
Max Grav 6=927(LC 2), 8=580(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-301/0, 2-8=-417/138

NOTES- (15-16)
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 6-1-12 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
5) 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
6) Unbalanced snow loads have been considered for this design.
7) 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.
8) Provide adequate drainage to prevent water ponding.
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) Refer to girder(s) for truss to truss connections.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) 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, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 515 lb down at 5-1-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

4/19/2021

Continued on page 2

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

15) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
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.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-60, 4-5=-180, 6-8=-20
Concentrated Loads (lb)
Vert: 9=-515(F)
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=-220, 6-8=-20
Concentrated Loads (lb)
Vert: 9=-515(F)
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=-200, 6-8=-20
Concentrated Loads (lb)
Vert: 9=-515(F)
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=-170, 6-8=-20
Concentrated Loads (lb)
Vert: 9=-515(F)
5) Dead + 0.75 Snow (Unbal. Left): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-57, 2-3=-57, 4-5=-149, 6-8=-20
Concentrated Loads (lb)
Vert: 9=-515(F)
6) Dead + 0.75 Snow (Unbal. Right): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-29, 2-3=-29, 4-5=-183, 6-8=-20
Concentrated Loads (lb)
Vert: 9=-515(F)
7) 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=-140, 6-8=-40
Concentrated Loads (lb)
Vert: 9=-515(F)
8) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=55, 2-3=45, 4-5=-75, 6-8=-10
Horz: 1-2=-65, 2-3=-55, 3-4=-48, 5-6=36, 2-8=-36
Concentrated Loads (lb)
Vert: 9=-515(F)
9) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-1, 2-3=-44, 4-5=-164, 6-8=-20
Horz: 1-2=-19, 2-3=24, 3-4=29, 5-6=-33, 2-8=33
Concentrated Loads (lb)
Vert: 9=-515(F)
10) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=38, 2-3=26, 4-5=-110, 6-8=-10
Horz: 1-2=-48, 2-3=-36, 3-4=9, 5-6=19, 2-8=15
Concentrated Loads (lb)
Vert: 9=-515(F)
11) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=8, 2-3=13, 4-5=-94, 6-8=-10
Horz: 1-2=-18, 2-3=-23, 3-4=-24, 5-6=-15, 2-8=-19
Concentrated Loads (lb)
Vert: 9=-515(F)
12) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=11, 2-3=6, 4-5=-130, 6-8=-20
Horz: 1-2=-31, 2-3=-26, 3-4=30, 5-6=9, 2-8=25
Concentrated Loads (lb)
Vert: 9=-515(F)
13) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-2, 2-3=-7, 4-5=-114, 6-8=-20
Horz: 1-2=-18, 2-3=-13, 3-4=-3, 5-6=-25, 2-8=-9
Concentrated Loads (lb)
Vert: 9=-515(F)
14) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

4/19/2021

Continued on page 3

LOAD CASE(S) Standard
Uniform Loads (plf)
Vert: 1-2=21, 2-3=26, 4-5=-110, 6-8=-10
Horz: 1-2=-31, 2-3=-36, 3-4=-41, 5-6=17, 2-8=12
Concentrated Loads (lb)
Vert: 9=-515(F)

15) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=5, 2-3=10, 4-5=-94, 6-8=-10
Horz: 1-2=-15, 2-3=-20, 3-4=-26, 5-6=-12, 2-8=-17
Concentrated Loads (lb)
Vert: 9=-515(F)

16) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=21, 2-3=26, 4-5=-110, 6-8=-10
Horz: 1-2=-31, 2-3=-36, 3-4=-41, 5-6=17, 2-8=12
Concentrated Loads (lb)
Vert: 9=-515(F)

17) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=5, 2-3=10, 4-5=-94, 6-8=-10
Horz: 1-2=-15, 2-3=-20, 3-4=-26, 5-6=-12, 2-8=-17
Concentrated Loads (lb)
Vert: 9=-515(F)

18) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=11, 2-3=6, 4-5=-130, 6-8=-20
Horz: 1-2=-31, 2-3=-26, 3-4=-20, 5-6=7, 2-8=23
Concentrated Loads (lb)
Vert: 9=-515(F)

19) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-5, 2-3=-10, 4-5=-114, 6-8=-20
Horz: 1-2=-15, 2-3=-10, 3-4=-5, 5-6=-23, 2-8=-7
Concentrated Loads (lb)
Vert: 9=-515(F)

20) Dead + Snow on Overhangs: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-100, 2-3=-20, 4-5=-140, 6-8=-20
Concentrated Loads (lb)
Vert: 9=-515(F)

21) Dead + Snow (Unbal. Left): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-69, 2-3=-69, 4-5=-152, 6-8=-20
Concentrated Loads (lb)
Vert: 9=-515(F)

22) Dead + Snow (Unbal. Right): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-32, 2-3=-32, 4-5=-197, 6-8=-20
Concentrated Loads (lb)
Vert: 9=-515(F)

23) 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=-140, 6-8=-20
Concentrated Loads (lb)
Vert: 9=-515(F)

24) 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=-27, 2-3=-31, 4-5=-162, 6-8=-20
Horz: 1-2=-23, 2-3=-19, 3-4=23, 5-6=6, 2-8=19
Concentrated Loads (lb)
Vert: 9=-515(F)

25) 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=-37, 2-3=-40, 4-5=-151, 6-8=-20
Horz: 1-2=-13, 2-3=-10, 3-4=-3, 5-6=-19, 2-8=-6
Concentrated Loads (lb)
Vert: 9=-515(F)

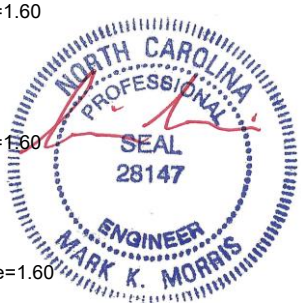
26) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-27, 2-3=-31, 4-5=-162, 6-8=-20
Horz: 1-2=-23, 2-3=-19, 3-4=-15, 5-6=5, 2-8=17
Concentrated Loads (lb)
Vert: 9=-515(F)

27) 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=-39, 2-3=-42, 4-5=-151, 6-8=-20
Horz: 1-2=-11, 2-3=-8, 3-4=-4, 5-6=-17, 2-8=-5

4/19/2021

Continued on page 4

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 9=-515(F)
28) 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=-57, 2-3=-61, 4-5=-192, 6-8=-20
Horz: 1-2=-23, 2-3=-19, 3-4=23, 5-6=6, 2-8=19
Concentrated Loads (lb)
Vert: 9=-515(F)
29) 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=-67, 2-3=-70, 4-5=-181, 6-8=-20
Horz: 1-2=-13, 2-3=-10, 3-4=-3, 5-6=-19, 2-8=-6
Concentrated Loads (lb)
Vert: 9=-515(F)
30) Dead + 0.75 Roof Live (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=-57, 2-3=-61, 4-5=-192, 6-8=-20
Horz: 1-2=-23, 2-3=-19, 3-4=-15, 5-6=5, 2-8=17
Concentrated Loads (lb)
Vert: 9=-515(F)
31) 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=-69, 2-3=-72, 4-5=-181, 6-8=-20
Horz: 1-2=-11, 2-3=-8, 3-4=-4, 5-6=-17, 2-8=-5
Concentrated Loads (lb)
Vert: 9=-515(F)
32) Dead + Minimum Snow: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-60, 4-5=-180, 6-8=-20
Concentrated Loads (lb)
Vert: 9=-515(F)
33) 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=-146, 6-8=-10
Horz: 1-2=-16, 2-3=16, 3-4=16, 5-6=-16, 2-8=16
Concentrated Loads (lb)
Vert: 9=-515(F)
34) 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=-114, 6-8=-10
Horz: 1-2=-16, 2-3=-16, 3-4=-16, 5-6=16, 2-8=-16
Concentrated Loads (lb)
Vert: 9=-515(F)
35) 3rd Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-32, 2-3=-32, 4-5=-209, 6-8=-20
Concentrated Loads (lb)
Vert: 9=-515(F)
36) 4th Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-89, 2-3=-89, 4-5=-152, 6-8=-20
Concentrated Loads (lb)
Vert: 9=-515(F)
37) 5th Unbal.Dead + 0.75 Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-29, 2-3=-29, 4-5=-192, 6-8=-20
Concentrated Loads (lb)
Vert: 9=-515(F)
38) 6th Unbal.Dead + 0.75 Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-72, 2-3=-72, 4-5=-149, 6-8=-20
Concentrated Loads (lb)
Vert: 9=-515(F)
39) 7th Unbal.Dead + 0.75 Snow (unbal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-6, 2-3=-10, 4-5=-184, 6-8=-20
Horz: 1-2=-23, 2-3=-19, 3-4=23, 5-6=6, 2-8=19
Concentrated Loads (lb)
Vert: 9=-515(F)
40) 8th Unbal.Dead + 0.75 Snow (unbal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-49, 2-3=-53, 4-5=-141, 6-8=-20
Horz: 1-2=-23, 2-3=-19, 3-4=23, 5-6=6, 2-8=19
Concentrated Loads (lb)
Vert: 9=-515(F)
41) 9th Unbal.Dead + 0.75 Snow (unbal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.60



4/19/2021

Continued on page 5

 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.

LOAD CASE(S) Standard
Uniform Loads (plf)
Vert: 1-2=-16, 2-3=-19, 4-5=-173, 6-8=-20
Horz: 1-2=-13, 2-3=-10, 3-4=-3, 5-6=-19, 2-8=-6
Concentrated Loads (lb)
Vert: 9=-515(F)

42) 10th Unbal.Dead + 0.75 Snow (unbal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-58, 2-3=-62, 4-5=-130, 6-8=-20
Horz: 1-2=-13, 2-3=-10, 3-4=-3, 5-6=-19, 2-8=-6
Concentrated Loads (lb)
Vert: 9=-515(F)

43) 11th Unbal.Dead + 0.75 Snow (unbal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-6, 2-3=-10, 4-5=-184, 6-8=-20
Horz: 1-2=-23, 2-3=-19, 3-4=-15, 5-6=5, 2-8=17
Concentrated Loads (lb)
Vert: 9=-515(F)

44) 12th Unbal.Dead + 0.75 Snow (unbal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-49, 2-3=-53, 4-5=-141, 6-8=-20
Horz: 1-2=-23, 2-3=-19, 3-4=-15, 5-6=5, 2-8=17
Concentrated Loads (lb)
Vert: 9=-515(F)

45) 13th Unbal.Dead + 0.75 Snow (unbal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-18, 2-3=-21, 4-5=-173, 6-8=-20
Horz: 1-2=-11, 2-3=-8, 3-4=-4, 5-6=-17, 2-8=-5
Concentrated Loads (lb)
Vert: 9=-515(F)

46) 14th Unbal.Dead + 0.75 Snow (unbal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-61, 2-3=-64, 4-5=-130, 6-8=-20
Horz: 1-2=-11, 2-3=-8, 3-4=-4, 5-6=-17, 2-8=-5
Concentrated Loads (lb)
Vert: 9=-515(F)

47) 15th Unbal.Dead + Minimum Snow + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-32, 2-3=-32, 4-5=-209, 6-8=-20
Concentrated Loads (lb)
Vert: 9=-515(F)

48) 16th Unbal.Dead + Minimum Snow + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-89, 2-3=-89, 4-5=-152, 6-8=-20
Concentrated Loads (lb)
Vert: 9=-515(F)

49) 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=-140, 6-8=-20
Concentrated Loads (lb)
Vert: 9=-515(F)

50) 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=-220, 6-8=-20
Concentrated Loads (lb)
Vert: 9=-515(F)

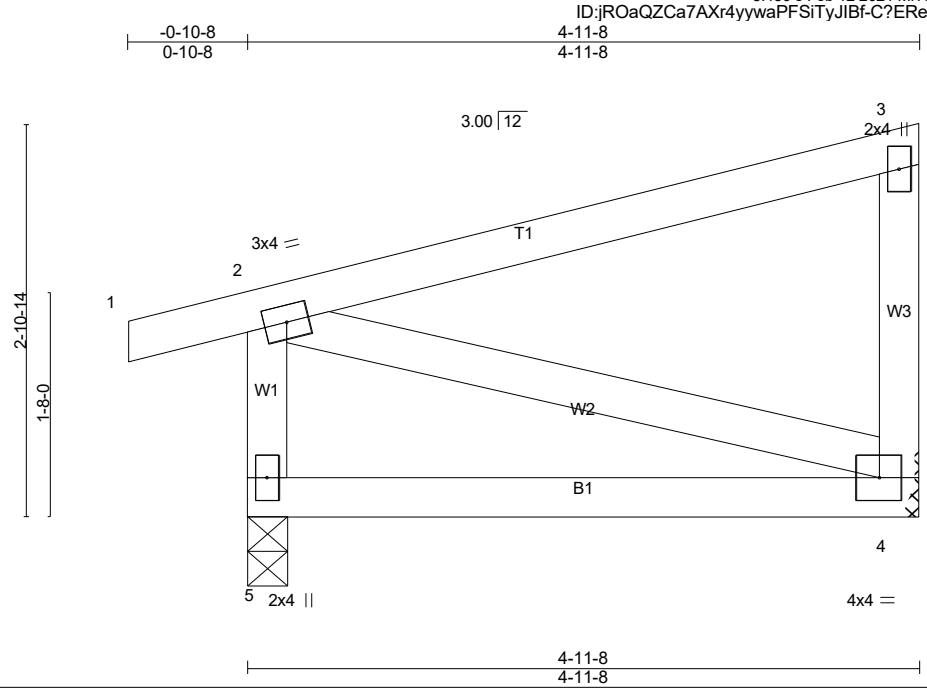
51) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-2=-80, 2-3=-80, 4-5=-140, 6-8=-20
Concentrated Loads (lb)
Vert: 9=-515(F)

52) 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=-200, 6-8=-20
Concentrated Loads (lb)
Vert: 9=-515(F)

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R27	Monopitch	5	1	Job Reference (optional) **# 26511**

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:50 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-C?ERe3eM?iCuufKn6hgqJoqpLPo0iBI9RxCyanzOjeJ



LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.03	4-5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.06	4-5	>984	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	-0.00	4	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P							Weight: 28 lb	FT = 0%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

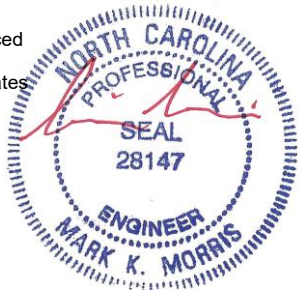
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 4=180/Mechanical, 5=255/0-3-8 (min. 0-1-8)
Max Horz 5=96(LC 11)
Max Uplift4=-40(LC 14), 5=-75(LC 10)
Max Grav 4=232(LC 21), 5=336(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-290/98

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

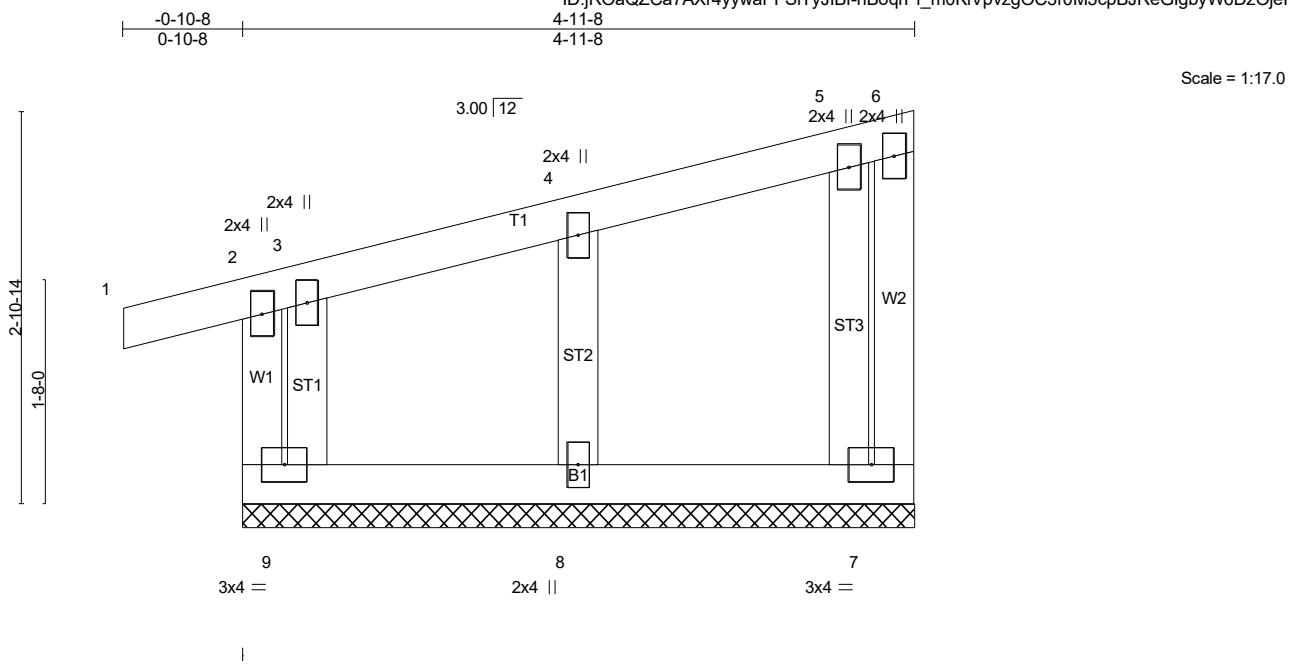
LOAD CASE(S) Standard



4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R28	Monopitch Supported Gable	1	1	Job Reference (optional) **# 26511**

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:51 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-hBoqrPf_m0KlVpvzgOC3r0M5cpBJReGlgbyW6DzOjeI



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	-0.00	1	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01	1	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	-0.00	7	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-R							Weight: 29 lb	FT = 0%
BCDL	10.0											

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-11-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

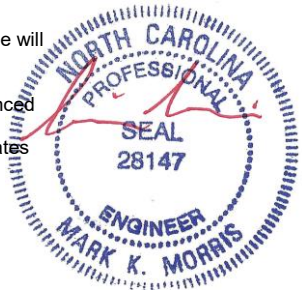
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 9=168/4-11-8 (min. 0-1-8), 7=87/4-11-8 (min. 0-1-8), 8=173/4-11-8 (min. 0-1-8)
Max Horz 9=96(LC 11)
Max Uplift 9=-62(LC 10), 7=-23(LC 11), 8=-42(LC 14)
Max Grav 9=227(LC 21), 7=115(LC 21), 8=221(LC 21)

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

NOTES- (13-14)

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

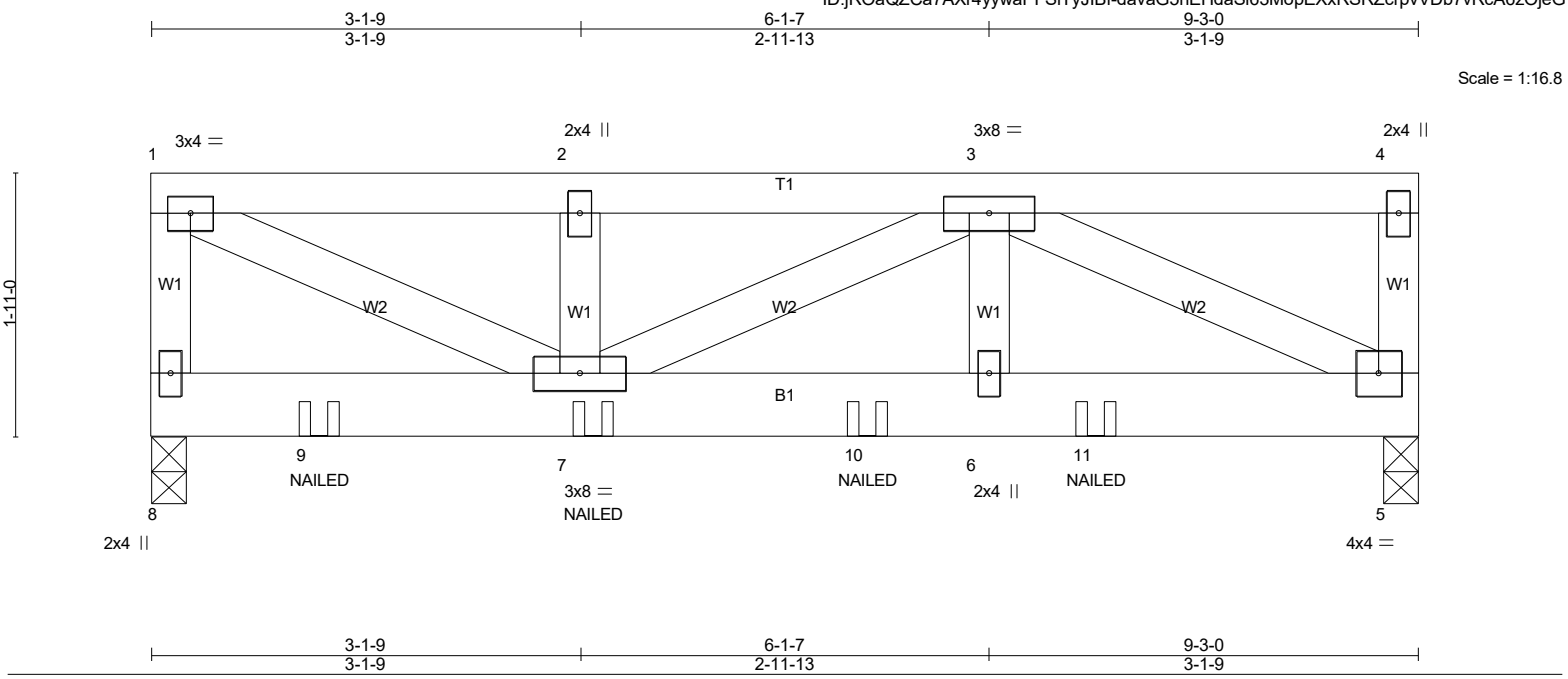


LOAD CASE(S) Standard

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	R29	Flat Girder	1	2	Job Reference (optional) **# 26511**

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:53 2021 Page 1
ID:jROaQZCa7AXr4ywaPFSiTyJIBf-davaG5hEHdaSl63MopEXxRSRZcrpvVDb7vRcA6zOjeG



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.01	6-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.20	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 111 lb	FT = 0%
BCDL	10.0											

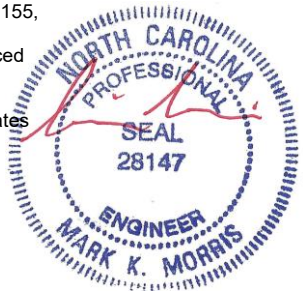
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

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

REACTIONS. (lb/size) 8=670/0-3-0 (min. 0-1-8), 5=607/0-3-0 (min. 0-1-8)
Max Uplift8=-155(LC 6), 5=-138(LC 6)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-8=-532/138, 1-2=-901/208, 2-3=-901/208
BOT CHORD 7-10=-211/909, 6-10=-211/909, 6-11=-211/909, 5-11=-211/909
WEBS 1-7=-221/963, 3-6=-24/270, 3-5=-981/227

NOTES- (11-12)
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
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.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=155, 5=138.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.



LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-60, 5-8=-20

4/19/2021

Continued on page 2

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

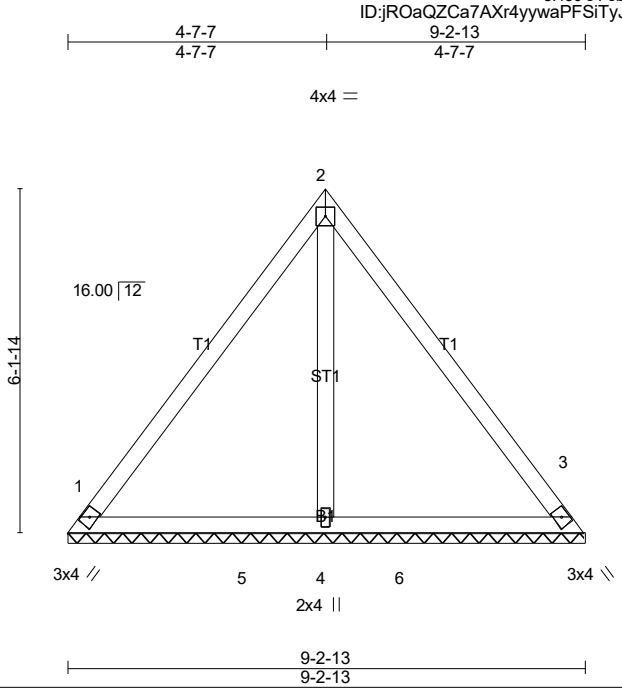
LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 7=-140(F) 9=-140(F) 10=-140(F) 11=-140(F)

4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	VT01	Valley	1	1	# 26511

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:54 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-5mTyTRis2xiJMGeYLXlmTe_ZP07_e_ElMZAAjYzOjeF



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 44 lb	FT = 0%
BCDL	10.0											

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

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

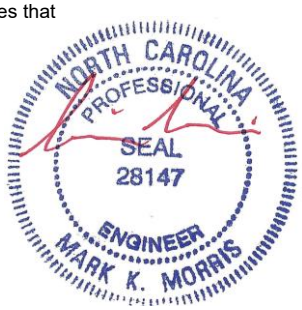
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=202/9-2-13 (min. 0-1-8), 3=202/9-2-13 (min. 0-1-8), 4=289/9-2-13 (min. 0-1-8)
Max Horz 1=-143(LC 8)
Max Uplift1=-41(LC 13), 3=-29(LC 12), 4=-37(LC 12)
Max Grav 1=205(LC 20), 3=202(LC 1), 4=399(LC 19)

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

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

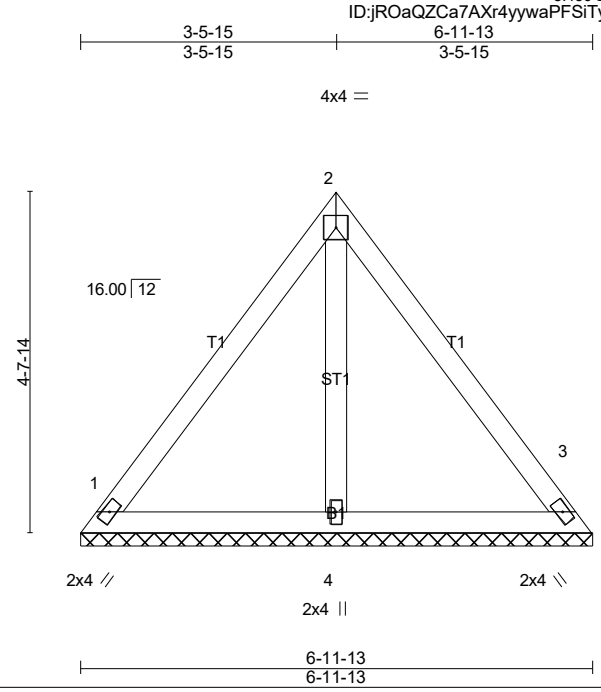
LOAD CASE(S) Standard



4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	VT02	Valley	1	1	**# 26511**
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:55 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-Zz1KhniUpEqA_QDkvEG?0sXkBQXdNSFubDwjF_zOjeE



LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P							Weight: 32 lb	FT = 0%
BCDL	10.0											

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

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

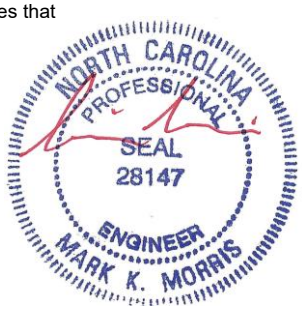
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=165/6-11-13 (min. 0-1-8), 3=165/6-11-13 (min. 0-1-8), 4=181/6-11-13 (min. 0-1-8)
Max Horz 1=106(LC 9)
Max Uplift1=-53(LC 13), 3=-44(LC 12)
Max Grav 1=165(LC 1), 3=165(LC 1), 4=194(LC 5)

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

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

LOAD CASE(S) Standard



4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	VT03	Valley	1	1	# 26511

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:56 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-19biu7j6aYy1canxTxnEY34yRqq16v42ptfHnQzOjeD

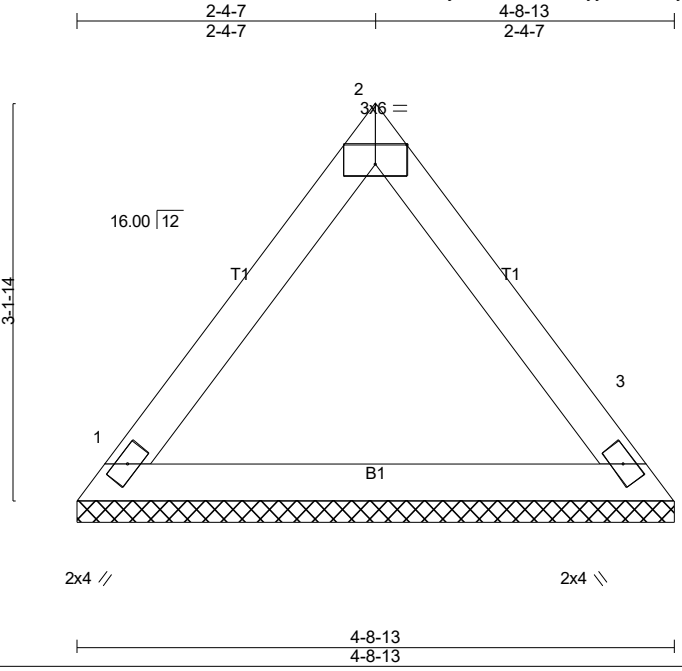


Plate Offsets (X,Y)-- [2:Edge,0-1-13]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P								
BCDL	10.0										Weight: 18 lb	FT = 0%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-8-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

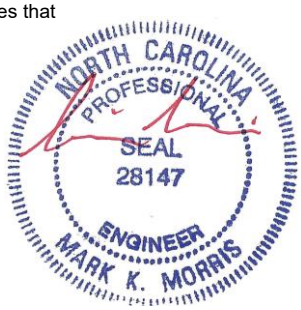
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=166/4-8-13 (min. 0-1-8), 3=166/4-8-13 (min. 0-1-8)
Max Horz 1=-69(LC 8)
Max Uplift1=-23(LC 13), 3=-23(LC 12)

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

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

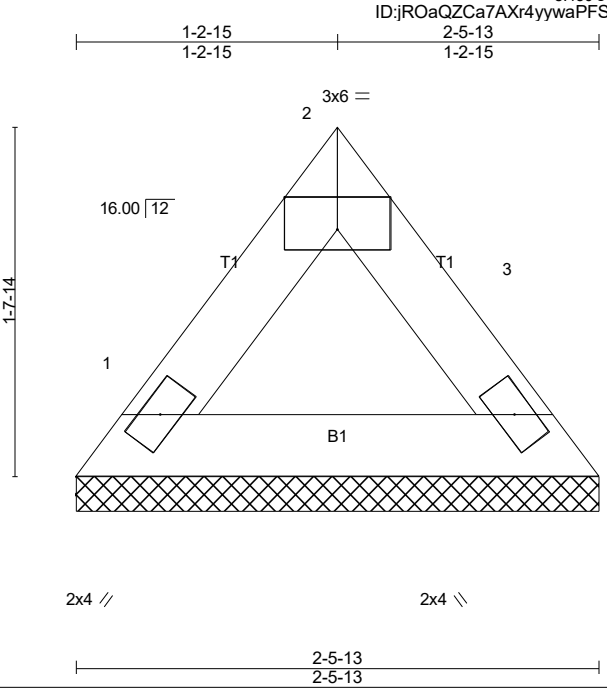
LOAD CASE(S) Standard



4/19/2021

Job	Truss	Truss Type	Qty	Ply	LOT 1113 ANDERSON CREEK | 187 SCHOLAR DRIVE SPRING LAKE, NC
20-4571-R01	VT04	Valley	1	1	Job Reference (optional) **# 26511**

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Apr 20 20:50:57 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-VL956TklLs4uDkM71fIT5Hc8ZEEorMKB2XPqJtzOjeC



Scale = 1:10.9

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

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P							Weight: 9 lb	FT = 0%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-5-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

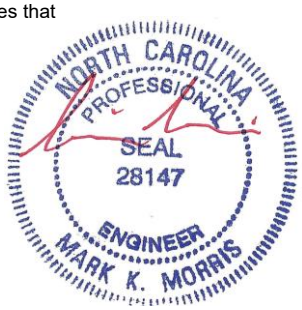
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=76/2-5-13 (min. 0-1-8), 3=76/2-5-13 (min. 0-1-8)
Max Horz 1=-31(LC 8)
Max Uplift1=-11(LC 13), 3=-11(LC 12)

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

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

LOAD CASE(S) Standard



4/19/2021