

Mark Morris, P.E.

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

AST #: 28668

JOB: 21-5762-R01

JOB NAME: LOT 1111 ANDERSON CREEK

Wind Code: 37

Wind Speed: Vult= 130mph

Exposure Category: B

Mean Roof Height (feet): 23

These truss designs comply with IRC 2015 as well as IRC 2018.

40 Truss Design(s)

Trusses:

J01, J02, J06, M01, M02, M03, M04, M05, PB01, PB02, PB03, PB04, R01, R02, R02A, R03, R03A, R04, R05, R07, R08, R09, R10, R12, R13, R14, R15, R18, R19, R21, R22, R23, R24, R29, VT01, VT02, VT03, VT04, VT05, VT06



9/28/2021

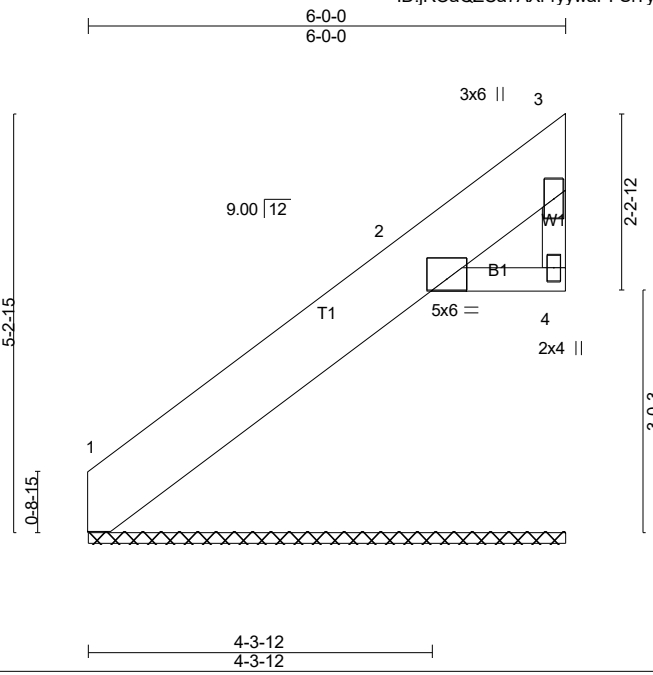
Mark Morris

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

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

Job	Truss	Truss Type	Qty	Ply	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC
21-5762-R01	J01	GABLE	1	1	Job Reference (optional) # 28668

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:12:24 2021 Page 1
 ID: jROaQZCa7AXr4yywaPFSiTyJIBf-R9q89qaJr44YQRReOTjtagj5Zlz6pKpRsQvJvc0yYR?r



Scale = 1:28.9

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.15	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.02	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) -0.01 4 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 35 lb	FT = 0%

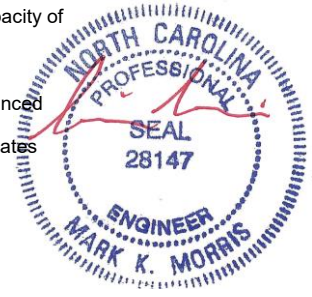
LUMBER-
 TOP CHORD 2x10 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 2-0-0 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=239/6-0-0 (min. 0-1-8), 4=229/6-0-0 (min. 0-1-8)
 Max Horz 1=151(LC 12)
 Max Uplift 4=-96(LC 12)
 Max Grav 1=239(LC 1), 4=244(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-281/109, 3-4=-235/339

- NOTES-** (12-13)
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C 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) Gable studs spaced at 2-0-0 oc.
 - 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) Bearing at joint(s) 1 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) 4.
 - 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 4.
 - 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.



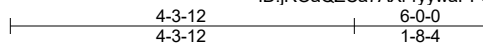
9/28/2021

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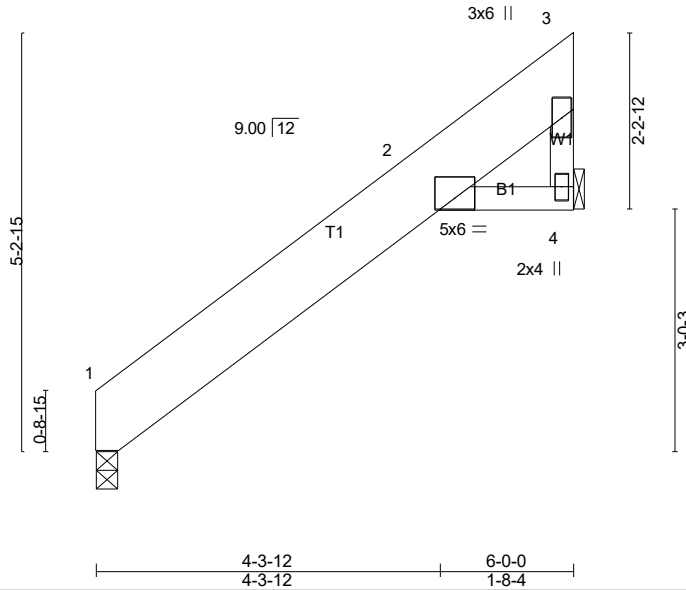
Job 21-5762-R01	Truss J02	Truss Type Jack-Closed	Qty 4	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC # 28668
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Scale = 1:28.9



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.15	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.05	Vert(LL) -0.01 1-2 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.02 1-2 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.01 4 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 35 lb	FT = 0%

LUMBER-
TOP CHORD 2x10 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 2-0-0 oc bracing.

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

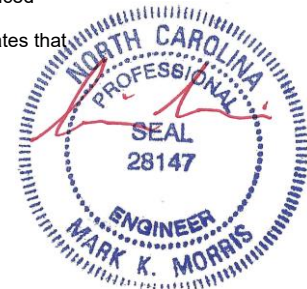
REACTIONS. (lb/size) 1=244/0-3-8 (min. 0-1-8), 4=234/Mechanical
Max Horz 1=154(LC 12)
Max Uplift 4=-98(LC 12)
Max Grav 1=244(LC 1), 4=249(LC 20)

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

NOTES- (9-10)

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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

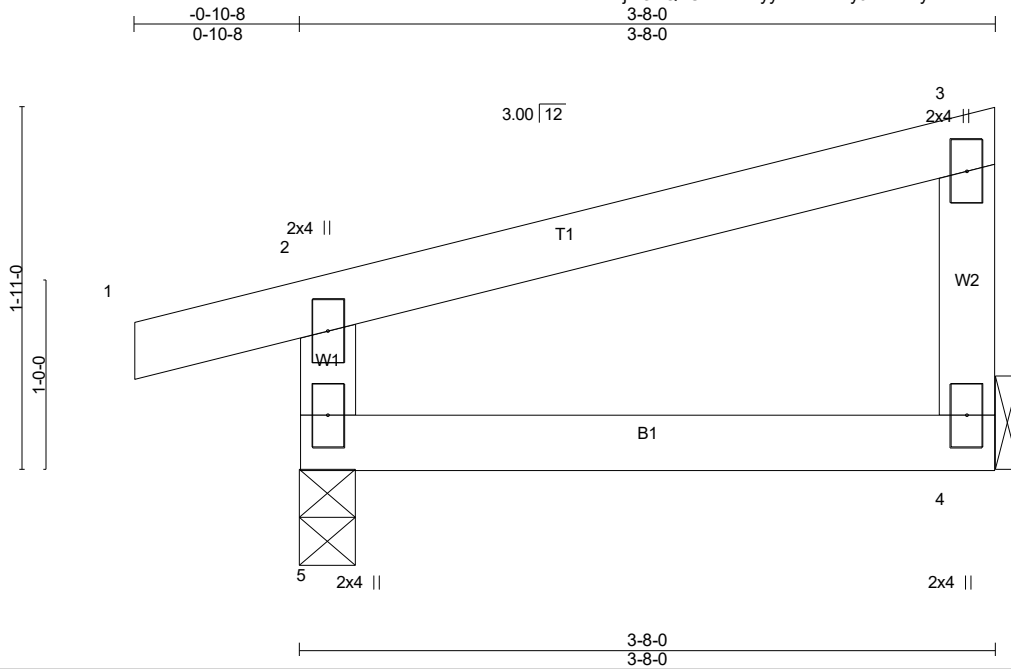


9/28/2021

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Job	Truss	Truss Type	Qty	Ply	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC
21-5762-R01	J06	Jack-Closed	4	1	Job Reference (optional) # 28668

ID: jROaQZCa7AXr4yywaPFSiTyJIBf-NXyuaVcZNhKGglona7v2l8AvdmnAoiv9uDCcguyYR?p
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Scale = 1:12.2

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

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-8-0 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.

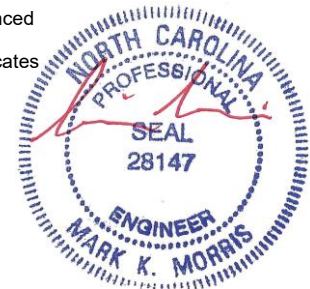
REACTIONS. (lb/size) 5=206/0-3-8 (min. 0-1-8), 4=126/Mechanical
Max Horz 5=61(LC 11)
Max Uplift 5=-67(LC 10), 4=-28(LC 14)
Max Grav 5=269(LC 21), 4=160(LC 21)

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 100 lb uplift at joint(s) 5, 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



9/28/2021

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Job 21-5762-R01	Truss M01	Truss Type GABLE	Qty 1	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC # 28668
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ID: jROaQZCa7AXr4yywaPFSityJIBf-rkVHnrDB8?S7HvNz8rQHHLi3sA6nX5kJ6tx9DLyYR?o
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0-10-8 6-3-8
0-10-8 6-3-8

Scale = 1:47.3

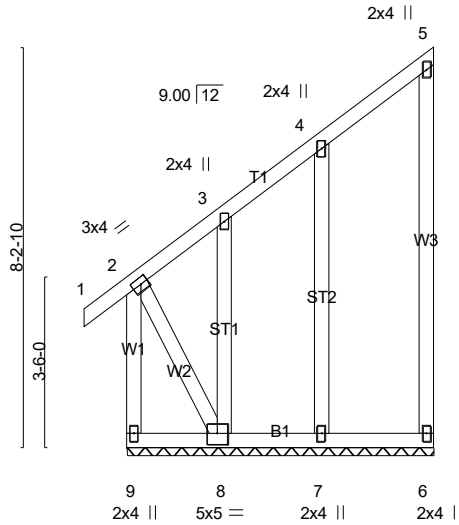


Plate Offsets (X,Y)-- [2:0-1-12,0-1-8], [8:0-2-8,0-2-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.25	Vert(LL) 0.00	1	n/r	180	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.13	Vert(CT) 0.00	2	n/r	80		
TCDL 10.0	Lumber DOL 1.15	WB 0.28	Horz(CT) -0.00	6	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 59 lb	FT = 0%

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

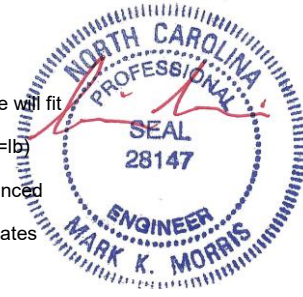
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-3-10 oc bracing.

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 9=165(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 6, 7 except 9=-144(LC 10), 8=-346(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 6 except 9=349(LC 12), 8=329(LC 20), 7=315(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-9=-870/358, 2-3=-335/162
BOT CHORD 8-9=-471/169
WEBS 4-7=-156/257, 2-8=-343/957

- NOTES-** (12-13)
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 7) Gable studs spaced at 2-0-0 oc.
 - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 7 except (jt=15) 9=144, 8=346.
 - 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.



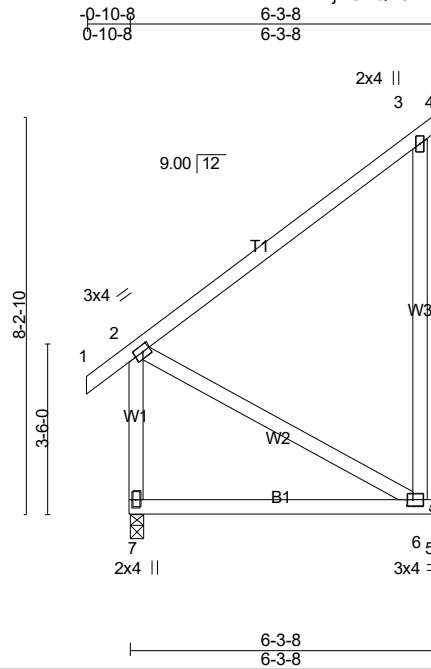
9/28/2021

LOAD CASE(S) Standard
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Job 21-5762-R01	Truss M02	Truss Type Monopitch	Qty 4	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC # 28668
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Scale: 1/4"=1'

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.67	Vert(LL) -0.07	6-7	>992	240	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.44	Vert(CT) -0.14	6-7	>496	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.16	Horz(CT) -0.00	6	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 48 lb	FT = 0%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-9-4 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=252/Mechanical, 7=301/0-3-8 (min. 0-1-8)
Max Horz 7=166(LC 9)
Max Uplift 6=-203(LC 12)
Max Grav 6=311(LC 20), 7=301(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 6-7=-348/166
WEBS 2-6=-190/399

- NOTES-** (9-10)
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone 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) TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) This truss has been designed for 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=203.
 - 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



9/28/2021

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

Job 21-5762-R01	Truss M03	Truss Type HALF HIP	Qty 2	Ply 2	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC # 28668
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ID:ROaQZCa7AXr4yywaPFSiTyJIBf-Jw3?BdpvJa_v3y9iYyWwqZFElajGaSSLXhjInyYR?n
8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:12:28 2021 Page 1



Scale = 1:36.1

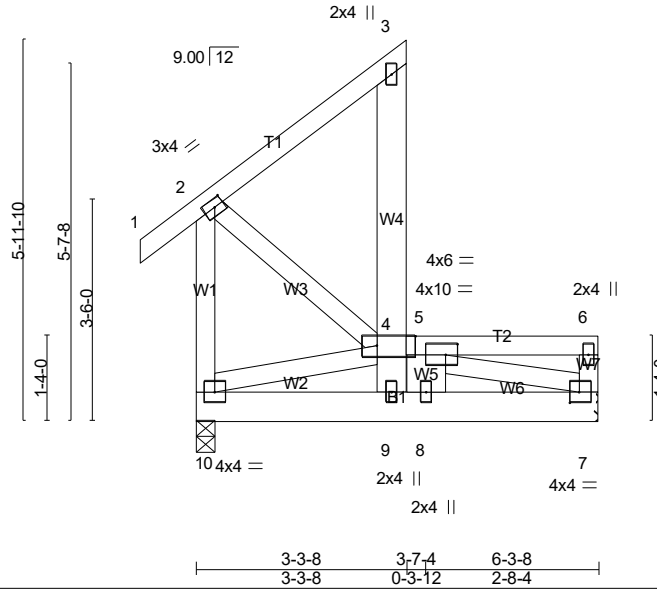


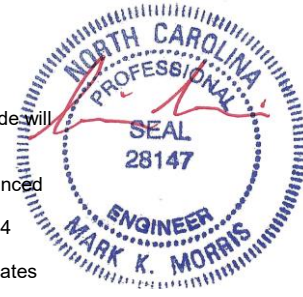
Plate Offsets (X,Y)-- [2:0-1-12,0-1-8], [4:0-7-4,Edge], [5:0-2-4,0-2-0], [7:0-1-12,0-2-0]								
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 40.0	2-0-0	TC 0.25	Vert(LL) -0.00	9	>999	480	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.00	BC 0.34	Vert(CT) -0.02	9	>999	360		
TCDL 10.0	Lumber DOL 1.00	WB 0.19	Horz(CT) 0.00	7	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-SH	Wind(LL) 0.01	9	>999	240		
BCDL 10.0	Code IRC2018/TPI2014						Weight: 117 lb	FT = 0%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except*	
W4: 2x6 SP No.2, W5: 2x8 SP No.2	

REACTIONS. (lb/size) 7=1033/Mechanical, 10=688/0-3-8 (min. 0-1-8)
Max Horz 10=251(LC 12)
Max Grav 7=1166(LC 24), 10=852(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-9=0/471, 4-5=-1843/0, 6-7=-407/0, 2-10=-319/44
BOT CHORD 9-10=0/1589, 8-9=0/1862, 7-8=0/1862
WEBS 2-4=-142/394, 4-10=-1507/0, 5-7=-1778/0, 5-8=-534/0

- NOTES-** (14-15)
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - C-C wind load user defined.
 - TCCL: ASCE 7-16; Pr=40.0 psf (roof LL: Lum DOL=1.00 TPLD DOL=1.00); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Refer to girder(s) for truss to truss connections.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
 - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.



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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.

Job	Truss	Truss Type	Qty	Ply	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC
21-5762-R01	M03	HALF HIP	2	2	Job Reference (optional) # 28668

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:12:29 2021 Page 2
 ID: jROaQZCa7AXr4yywaPFStyJIBf-n6d1CXeRgcirXCWMGGTImmoPS_ly?1icaBQGHdyYR?m

LOAD CASE(S)

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-2=-60, 2-3=-60, 4-5=-60, 5-6=-280, 7-10=-20
 Concentrated Loads (lb)
 Vert: 5=-620
- 2) Dead + Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (plf)
 Vert: 1-2=-100, 2-3=-100, 4-5=-100, 5-6=-320, 7-10=-20
 Concentrated Loads (lb)
 Vert: 5=-620
- 3) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (plf)
 Vert: 1-2=-80, 2-3=-80, 4-5=-80, 5-6=-300, 7-10=-20
 Concentrated Loads (lb)
 Vert: 5=-620
- 4) Dead + 0.75 Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-2=-50, 2-3=-50, 4-5=-50, 5-6=-270, 7-10=-20
 Concentrated Loads (lb)
 Vert: 5=-620
- 5) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
 Uniform Loads (plf)
 Vert: 1-2=-20, 2-3=-20, 4-5=-20, 5-6=-240, 7-10=-40
 Concentrated Loads (lb)
 Vert: 5=-620
- 6) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=57, 2-3=40, 4-5=40, 5-6=-180, 7-10=-10
 Horz: 1-2=-67, 2-3=-50, 3-4=-47, 4-5=-50, 2-10=-36
 Concentrated Loads (lb)
 Vert: 5=-620
- 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-3, 2-3=-43, 4-5=-43, 5-6=-263, 7-10=-20
 Horz: 1-2=-17, 2-3=23, 3-4=28, 4-5=23, 2-10=33
 Concentrated Loads (lb)
 Vert: 5=-620
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-1, 2-3=-13, 4-5=10, 5-6=-210, 7-10=-10
 Horz: 1-2=-9, 2-3=3, 3-4=9, 4-5=-20, 2-10=15
 Concentrated Loads (lb)
 Vert: 5=-620
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=5, 2-3=10, 4-5=26, 5-6=-194, 7-10=-10
 Horz: 1-2=-15, 2-3=-20, 3-4=-24, 4-5=-36, 2-10=-19
 Concentrated Loads (lb)
 Vert: 5=-620
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-28, 2-3=-33, 4-5=-10, 5-6=-230, 7-10=-20
 Horz: 1-2=8, 2-3=13, 3-4=30, 4-5=-10, 2-10=25
 Concentrated Loads (lb)
 Vert: 5=-620
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-5, 2-3=-10, 4-5=6, 5-6=-214, 7-10=-20
 Horz: 1-2=-15, 2-3=-10, 3-4=-3, 4-5=-26, 2-10=-9
 Concentrated Loads (lb)
 Vert: 5=-620
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=21, 2-3=26, 4-5=10, 5-6=-210, 7-10=-10
 Horz: 1-2=-31, 2-3=-36, 3-4=-41, 4-5=-20, 2-10=12
 Concentrated Loads (lb)
 Vert: 5=-620
- 13) 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=26, 5-6=-194, 7-10=-10
 Horz: 1-2=-15, 2-3=-20, 3-4=-26, 4-5=-36, 2-10=-17
 Concentrated Loads (lb)
 Vert: 5=-620
- 14) 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=10, 5-6=-210, 7-10=-10
 Horz: 1-2=-31, 2-3=-36, 3-4=-41, 4-5=-20, 2-10=12



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Continued on Page 3 Design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 *Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D*Onofrio Drive, Madison, WI 53719.

Job	Truss	Truss Type	Qty	Ply	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC
21-5762-R01	M03	HALF HIP	2	2	Job Reference (optional) # 28668

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:12:29 2021 Page 3
 ID:JROaQZCa7AXr4yywaPFStyJIBf-n6d1CXeRgcirXCWMGGTImmoPS_ly?1icaBQGHDyYR?m

LOAD CASE(S)

- Concentrated Loads (lb)
Vert: 5=-620
- 15) 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=26, 5-6=-194, 7-10=-10
Horz: 1-2=-15, 2-3=-20, 3-4=-26, 4-5=-36, 2-10=-17
Concentrated Loads (lb)
Vert: 5=-620
- 16) 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=-10, 5-6=-230, 7-10=-20
Horz: 1-2=-31, 2-3=-26, 3-4=-20, 4-5=-10, 2-10=23
Concentrated Loads (lb)
Vert: 5=-620
- 17) 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=6, 5-6=-214, 7-10=-20
Horz: 1-2=-15, 2-3=-10, 3-4=-5, 4-5=-26, 2-10=-7
Concentrated Loads (lb)
Vert: 5=-620
- 18) Dead + Snow on Overhangs: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-100, 2-3=-20, 4-5=-20, 5-6=-240, 7-10=-20
Concentrated Loads (lb)
Vert: 5=-620
- 19) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 1-2=-20, 2-3=-20, 4-5=-20, 5-6=-240, 7-10=-20
Concentrated Loads (lb)
Vert: 5=-620
- 20) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-56, 2-3=-60, 4-5=-42, 5-6=-262, 7-10=-20
Horz: 1-2=6, 2-3=10, 3-4=23, 4-5=-8, 2-10=19
Concentrated Loads (lb)
Vert: 5=-620
- 21) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-39, 2-3=-42, 4-5=-31, 5-6=-251, 7-10=-20
Horz: 1-2=-11, 2-3=-8, 3-4=-3, 4-5=-19, 2-10=-6
Concentrated Loads (lb)
Vert: 5=-620
- 22) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-27, 2-3=-31, 4-5=-42, 5-6=-262, 7-10=-20
Horz: 1-2=-23, 2-3=-19, 3-4=-15, 4-5=-8, 2-10=17
Concentrated Loads (lb)
Vert: 5=-620
- 23) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-39, 2-3=-42, 4-5=-31, 5-6=-251, 7-10=-20
Horz: 1-2=-11, 2-3=-8, 3-4=-4, 4-5=-19, 2-10=-5
Concentrated Loads (lb)
Vert: 5=-620
- 24) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-86, 2-3=-90, 4-5=-72, 5-6=-292, 7-10=-20
Horz: 1-2=6, 2-3=10, 3-4=23, 4-5=-8, 2-10=19
Concentrated Loads (lb)
Vert: 5=-620
- 25) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-69, 2-3=-72, 4-5=-61, 5-6=-281, 7-10=-20
Horz: 1-2=-11, 2-3=-8, 3-4=-3, 4-5=-19, 2-10=-6
Concentrated Loads (lb)
Vert: 5=-620
- 26) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-57, 2-3=-61, 4-5=-72, 5-6=-292, 7-10=-20
Horz: 1-2=-23, 2-3=-19, 3-4=-15, 4-5=-8, 2-10=17
Concentrated Loads (lb)
Vert: 5=-620
- 27) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-69, 2-3=-72, 4-5=-61, 5-6=-281, 7-10=-20
Horz: 1-2=-11, 2-3=-8, 3-4=-4, 4-5=-19, 2-10=-5
Concentrated Loads (lb)
Vert: 5=-620



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Continued on Page 4
 Design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 *Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D*Onofrio Drive, Madison, WI 53719.

Job	Truss	Truss Type	Qty	Ply	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC
21-5762-R01	M03	HALF HIP	2	2	Job Reference (optional) # 28668

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:12:29 2021 Page 4
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LOAD CASE(S)

- 28) Dead + Minimum Snow: Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-2=-20, 2-3=-20, 4-5=-60, 5-6=-280, 7-10=-20
 - Concentrated Loads (lb)
 - Vert: 5=-620
- 29) Dead + 0.6 C-C Wind Min. Down: Lumber Increase=1.60, Plate Increase=1.60
 - Uniform Loads (plf)
 - Vert: 1-2=6, 2-3=-26, 4-5=-26, 5-6=-246, 7-10=-10
 - Horz: 1-2=-16, 2-3=16, 3-4=16, 4-5=16, 2-10=16
 - Concentrated Loads (lb)
 - Vert: 5=-620
- 30) Dead + 0.6 C-C Wind Min. Upward: Lumber Increase=1.60, Plate Increase=1.60
 - Uniform Loads (plf)
 - Vert: 1-2=6, 2-3=6, 4-5=6, 5-6=-214, 7-10=-10
 - Horz: 1-2=-16, 2-3=-16, 3-4=-16, 4-5=-16, 2-10=-16
 - Concentrated Loads (lb)
 - Vert: 5=-620
- 31) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 1-2=-100, 2-3=-100, 4-5=-20, 5-6=-240, 7-10=-20
 - Concentrated Loads (lb)
 - Vert: 5=-620
- 32) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 1-2=-20, 2-3=-20, 4-5=-100, 5-6=-320, 7-10=-20
 - Concentrated Loads (lb)
 - Vert: 5=-620
- 33) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 1-2=-80, 2-3=-80, 4-5=-20, 5-6=-240, 7-10=-20
 - Concentrated Loads (lb)
 - Vert: 5=-620
- 34) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 1-2=-20, 2-3=-20, 4-5=-80, 5-6=-300, 7-10=-20
 - Concentrated Loads (lb)
 - Vert: 5=-620

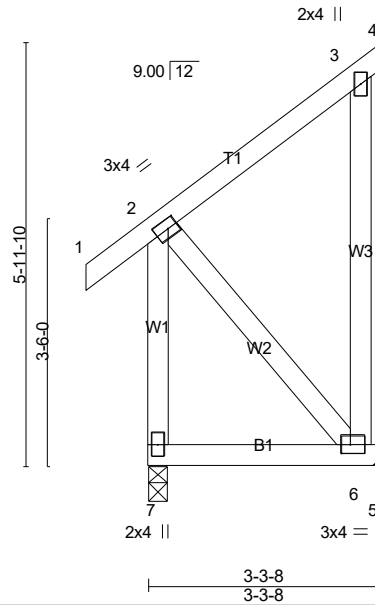
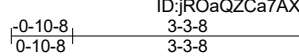


9/28/2021

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

Job 21-5762-R01	Truss M04	Truss Type Monopitch	Qty 6	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 28668
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Scale = 1:32.7

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 0.17	Vert(LL) -0.00	6-7	>999	240	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.15		BC 0.09	Vert(CT) -0.01	6-7	>999	180		
TCDL 10.0	Rep Stress Incr YES		WB 0.11	Horz(CT) -0.00	6	n/a	n/a		
BCLL 0.0 *	Code IRC2018/TPI2014		Matrix-P						
BCDL 10.0								Weight: 31 lb	FT = 0%

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

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

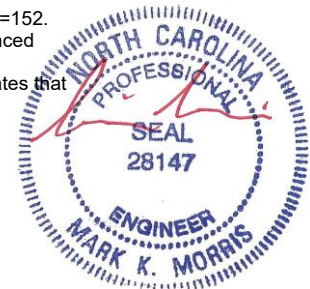
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 6=127/Mechanical, 7=186/0-3-8 (min. 0-1-8)
 Max Horz 7=121(LC 9)
 Max Uplift 6=-152(LC 12)
 Max Grav 6=199(LC 20), 7=187(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-6=-155/366

- 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=152.
 - 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



9/28/2021

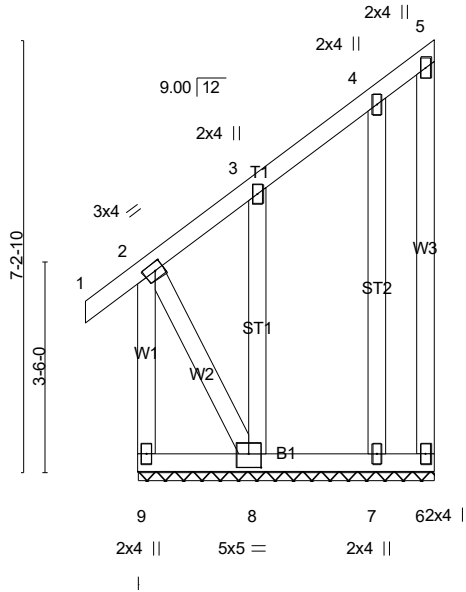
Warning !—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer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

Job 21-5762-R01	Truss M05	Truss Type GABLE	Qty 1	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC # 28668
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8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:12:30 2021 Page 1
Job Reference (optional)

ID: jR0aQZCa7AXr4yywaPFSiTyJIBf-GJBPQtf3Rwqj9M5Ypz__v_KaLN9PKT?lprAppgyYR?
0-10-8 4-11-8
0-10-8 4-11-8

Scale = 1:38.5



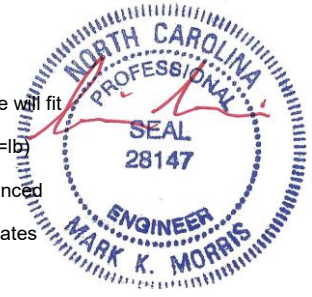
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	20.0	2-0-0		TC	0.24	in	(loc)	l/defl	L/d	MT20	244/190
Snow (Pf)	20.0	Plate Grip DOL	1.15	BC	0.07	Vert(LL)	0.00	1	n/r		
TCDL	10.0	Lumber DOL	1.15	WB	0.25	Vert(CT)	0.00	1	n/r		
BCLL	0.0 *	Rep Stress Incr	YES	Matrix-P		Horz(CT)	-0.00	6	n/a		
BCDL	10.0	Code IRC2018/TPI2014								Weight: 53 lb	FT = 0%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-11-8 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 8-10-1 oc bracing.
WEBS 2x4 SP No.3	MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.
OTHERS 2x4 SP No.3	

REACTIONS. All bearings 4-11-8.
(lb) - Max Horz 9=145(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 6, 7 except 9=-114(LC 10), 8=-290(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 6, 7 except 9=260(LC 12), 8=335(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-9=-720/299, 2-3=-258/132
BOT CHORD 8-9=-415/144
WEBS 2-8=-293/844

- NOTES-** (12-13)
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 7) Gable studs spaced at 2-0-0 oc.
 - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 7 except (jt=15) 9=114, 8=290.
 - 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.

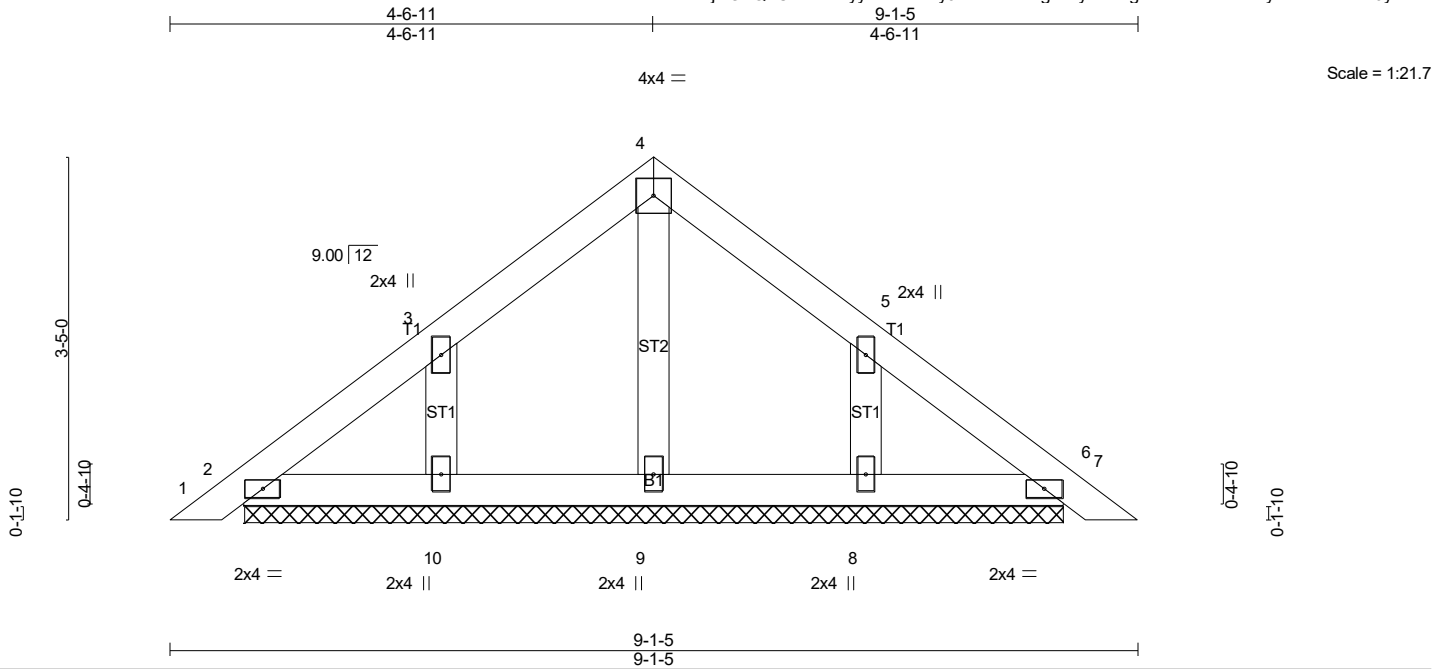


9/28/2021

LOAD CASE(S) Standard
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Job 21-5762-R01	Truss PB01	Truss Type GABLE	Qty 2	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC # 28668
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8,430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:12:31 2021 Page 1
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Scale = 1:21.7

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

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

BRACING-
TOP CHORD
BOT CHORD

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

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

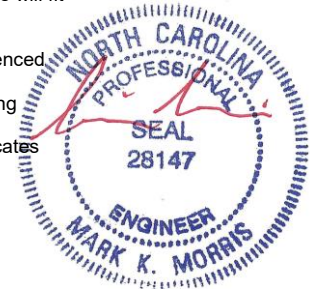
REACTIONS. All bearings 7-8-11.
(lb) - Max Horz 2=74(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 10, 8
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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

NOTES- (13-14)

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

LOAD CASE(S) Standard

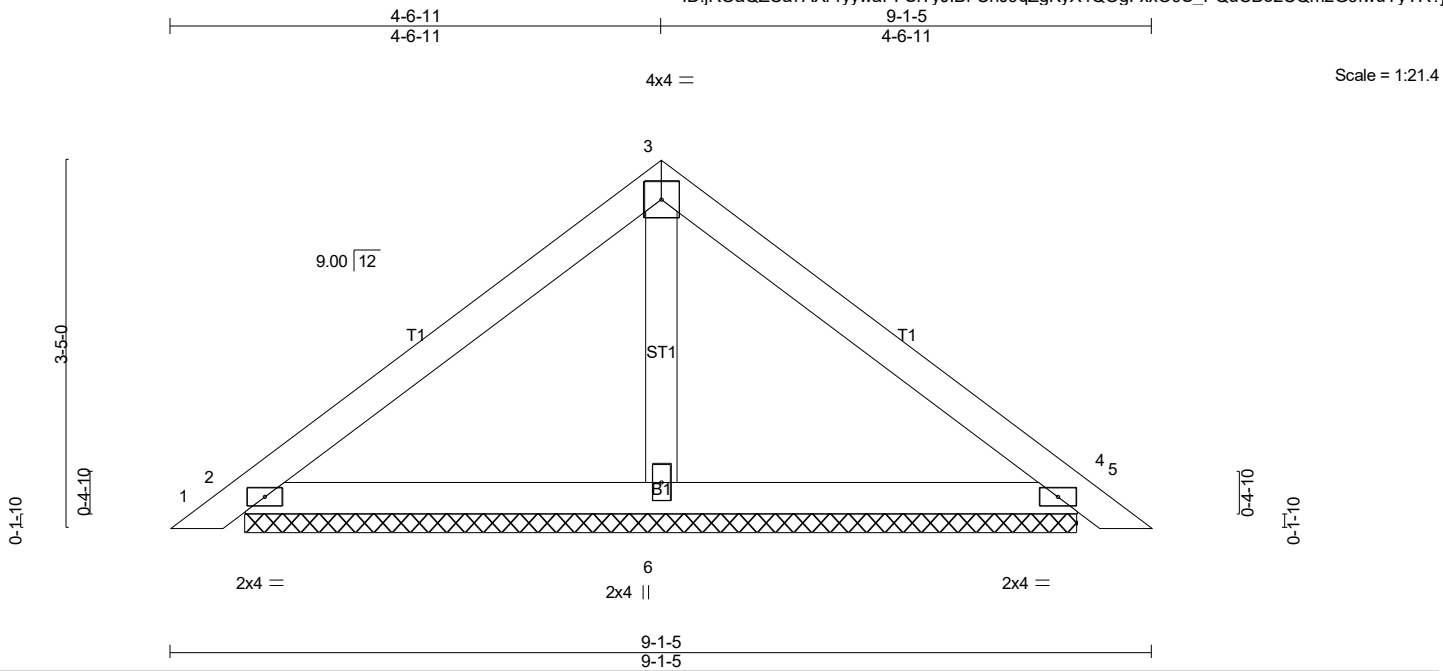


9/28/2021

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Job 21-5762-R01	Truss PB02	Truss Type Piggyback	Qty 10	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC # 28668
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8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:12:32 2021 Page 1
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Scale = 1:21.4

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

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

BRACING-
TOP CHORD
BOT CHORD

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

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

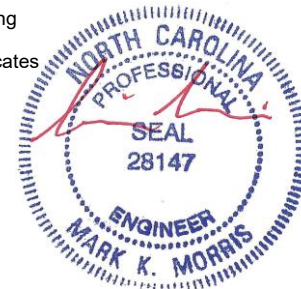
REACTIONS. (lb/size) 2=200/7-8-11 (min. 0-1-8), 4=200/7-8-11 (min. 0-1-8), 6=271/7-8-11 (min. 0-1-8)
Max Horz 2=-74(LC 10)
Max Uplift 2=-50(LC 12), 4=-60(LC 13)

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

NOTES- (11-12)

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

LOAD CASE(S) Standard

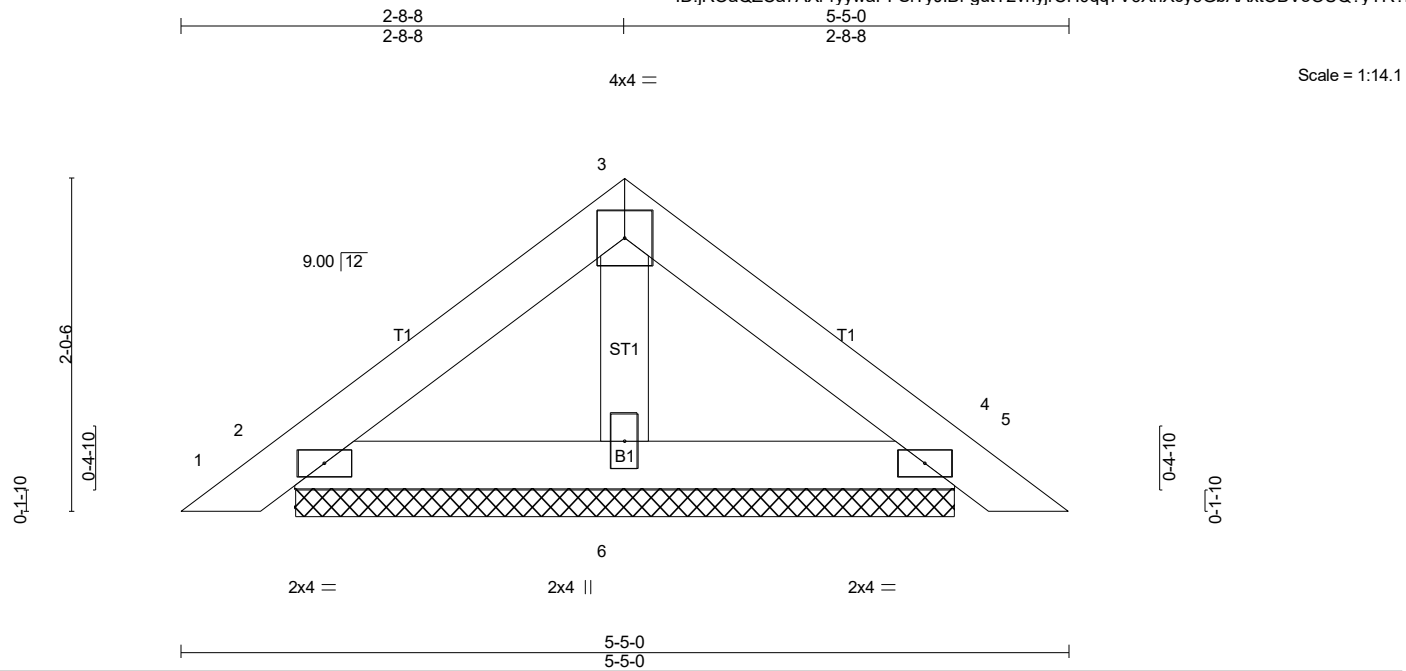


9/28/2021

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Job 21-5762-R01	Truss PB03	Truss Type Piggyback	Qty 11	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 28668
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8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:12:33 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-gutY2vhyjrCH0qq7V6XhXcy6GbAAxtOBVoOUQ?yYR?



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15	TC 0.07	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.15	BC 0.07	Vert(LL) 0.00 5 n/r 180		
TCDL 10.0	Rep Stress Incr YES	WB 0.02	Vert(CT) 0.00 5 n/r 80		
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-P	Horz(CT) 0.00 4 n/a n/a		
BCDL 10.0				Weight: 18 lb	FT = 0%

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

BRACING-
TOP CHORD
BOT CHORD

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

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

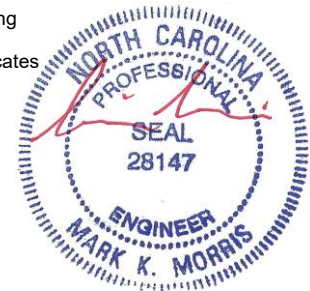
REACTIONS. (lb/size) 2=119/4-0-5 (min. 0-1-8), 4=119/4-0-5 (min. 0-1-8), 6=138/4-0-5 (min. 0-1-8)
Max Horz 2=-42(LC 10)
Max Uplift 2=-32(LC 12), 4=-37(LC 13)

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

NOTES- (11-12)

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

LOAD CASE(S) Standard

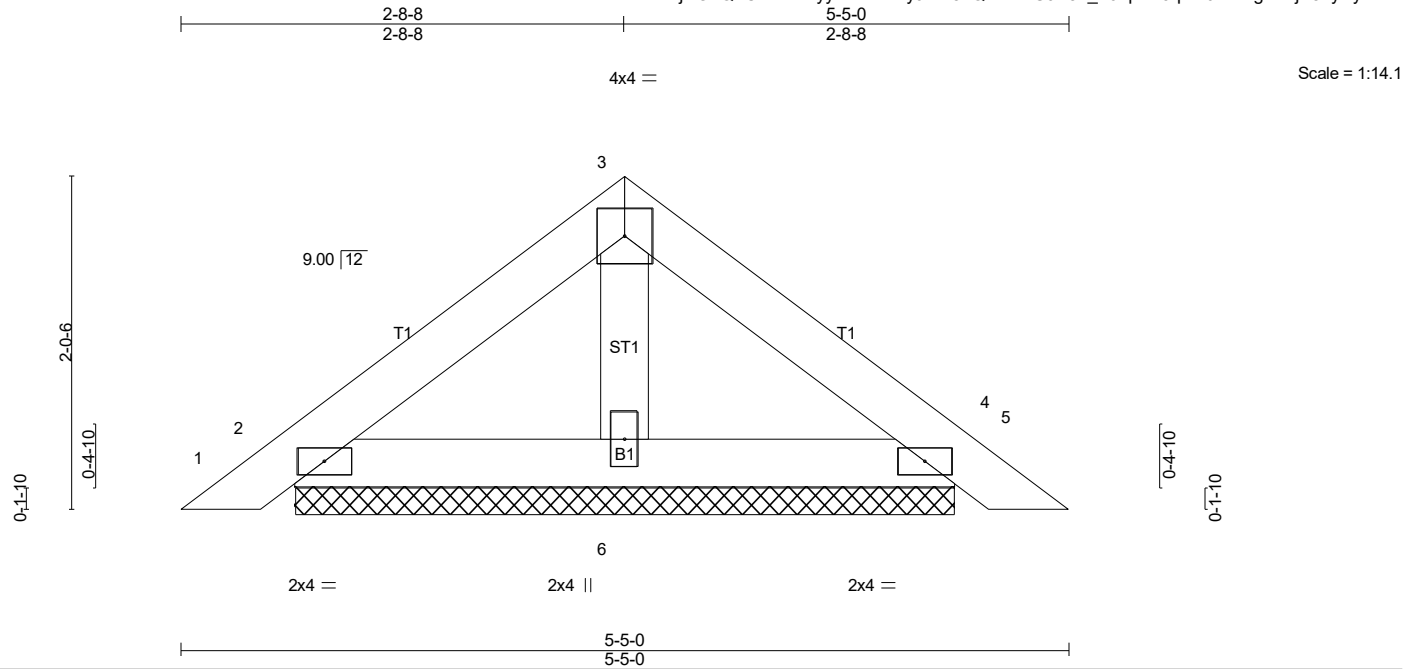


9/28/2021

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Job 21-5762-R01	Truss PB04	Truss Type Piggyback	Qty 1	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC # 28668
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8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:12:34 2021 Page 1
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15	TC 0.07	Vert(LL) 0.00 5 n/r 180	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.15	BC 0.07	Vert(CT) 0.00 5 n/r 80		
TCDL 10.0	Rep Stress Incr YES	WB 0.02	Horz(CT) 0.00 4 n/a n/a		
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-P			
BCDL 10.0				Weight: 18 lb	FT = 0%

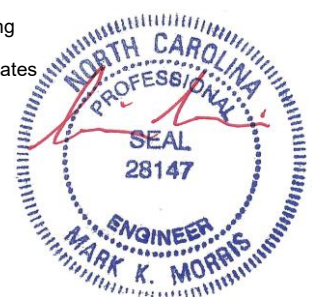
LUMBER-	BRACING-	
TOP CHORD 2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-5-0 oc purlins.
BOT CHORD 2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3		MiTek recommends that Stabilizers and required cross bracing be installed during truss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

REACTIONS. (lb/size) 2=119/4-0-5 (min. 0-1-8), 4=119/4-0-5 (min. 0-1-8), 6=138/4-0-5 (min. 0-1-8)
Max Horz2=42(LC 11)
Max Uplift2=32(LC 12), 4=37(LC 13)

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

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

LOAD CASE(S) Standard



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Scale = 1:68.6

LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP		
TCLL (roof)	20.0	Plate Grip DOL	2.0-0	TC	0.14	Vert(LL)	0.00	in (loc)	1	l/defl	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										
BCDL	10.0													
													Weight: 303 lb	FT = 0%

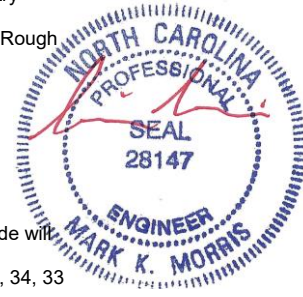
LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2 *Except* T3: 2x8 SP No.2, T4: 2x10 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt 7-32, 9-31, 10-30, 11-29, 12-28, 14-27
OTHERS	2x4 SP No.3		

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

REACTIONS. All bearings 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



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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.

Job	Truss	Truss Type	Qty	Ply	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC
21-5762-R01	R01	GABLE	1	1	Job Reference (optional) # 28668

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:12:38 2021 Page 2
 ID:jROaQZCa7AXr4yywaPFSiTyJIBf-1rgR5cl5YNrZ6bi5Hf7sEggyqct7c6Twe46F6CyYR?d

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



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Job	Truss	Truss Type	Qty	Ply	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC
21-5762-R01	R02	Piggyback Base	2	1	Job Reference (optional) # 28668

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:12:40 2021 Page 2
 ID:jROaQZCa7AXr4yywaPFSiTyJIBf-zEoBWInL4?5HLvsTP49KJ5I9xPML4vwd6ObLA5yYR?b

NOTES- (12-13)

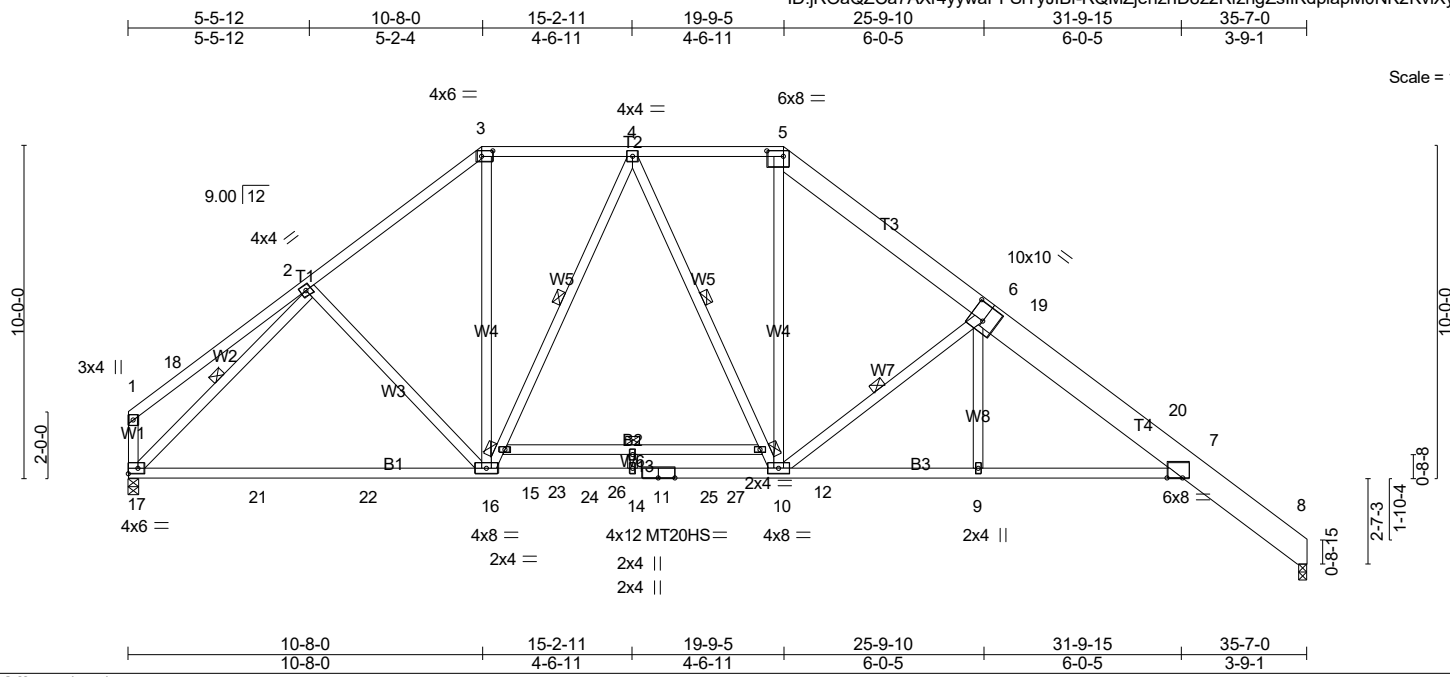
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that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



9/28/2021

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Scale = 1:69.6

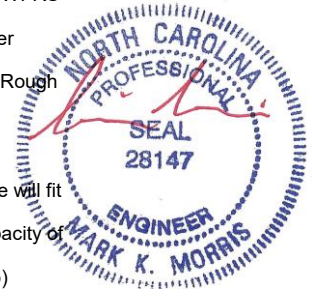
Plate Offsets (X,Y)-- [3:0-4-0,0-2-0], [5:0-6-0,0-2-0], [6:0-5-0,0-6-0], [7:0-5-9,Edge], [17:Edge,0-2-0]					
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.75	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.93	Vert(LL) -0.46 10-14 >928 240	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.15	WB 0.62	Vert(CT) -0.79 10-14 >538 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.47 8 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 267 lb	FT = 0%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* T3: 2x8 SP No.2, T4: 2x10 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 3-11-15 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 *Except* B1: 2x4 SP SS, B3: 2x4 SP No.1	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 2x4 SP No.3	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 Uplift 17=-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=-2138/290,
 6-19=-2491/282, 19-20=-2620/252, 7-20=-2657/248, 7-8=-819/120, 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=-120/2444,
 7-9=-123/2436
 WEBS 3-16=-43/824, 15-16=-517/139, 4-15=-458/164, 5-10=-51/1013, 6-10=-1191/286,
 2-17=-1783/160, 6-9=0/250

- NOTES-** (11-12)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(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
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17 except (jt=lb) 8=136.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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Continued on page 2. Design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 National Design Standard for Metal Plate Connected Wood Truss Construction and BCSI 1-03 Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Job	Truss	Truss Type	Qty	Ply	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC
21-5762-R01	R02A	PIGGYBACK BASE	3	1	Job Reference (optional) # 28668

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:12:41 2021 Page 2
 ID:jROaQZCa7AXr4yywaPFSiTyJIBf-RQMZjenzrID8z2RfzngZsllKdpiapMONK2KviXyYR?a

- 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

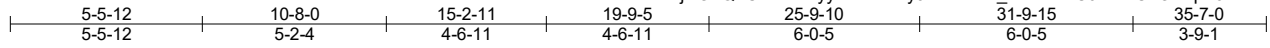


9/28/2021

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

Job 21-5762-R01	Truss R03	Truss Type PIGGYBACK BASE	Qty 5	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC # 28668
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8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:12:42 2021 Page 1
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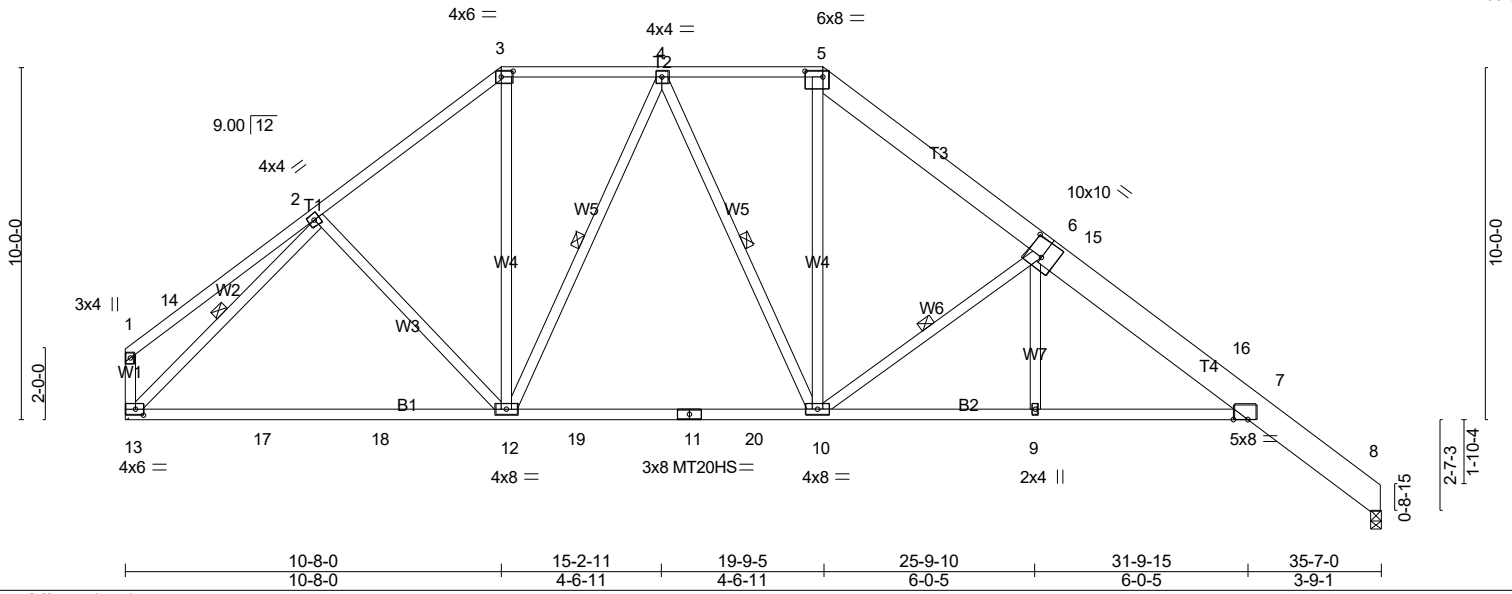


Plate Offsets (X,Y)-- [3:0-4-0,0-2-0], [5:0-6-0,0-2-0], [6:0-5-0,0-6-0], [7:0-4-13,Edge], [13:0-2-12,0-2-0]

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

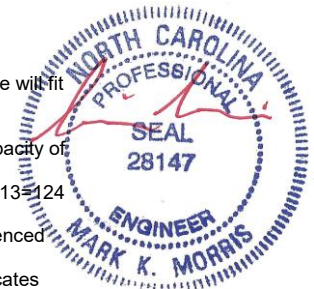
BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-4-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 4-12, 4-10, 6-10, 2-13

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 Uplift 13=-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=-2208/357, 15-16=-2379/355, 7-16=-2425/325, 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=-192/2237, 7-9=-196/2224
WEBS 3-12=-79/667, 4-12=-445/170, 5-10=-90/818, 6-10=-1170/303, 2-13=-1510/254, 6-9=0/277

- 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) TLL: 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.



9/28/2021

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.

Job	Truss	Truss Type	Qty	Ply	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC
21-5762-R01	R03	PIGGYBACK BASE	5	1	Job Reference (optional) # 28668

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:12:42 2021 Page 2
 ID:jROaQZCa7AXr4yywaPFsITyJlBf-vcvxx_obccL?bC0sWWCoOWqW6D1tYqIWZi4SFzyYR?Z

LOAD CASE(S) Standard



9/28/2021

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

Job 21-5762-R01	Truss R03A	Truss Type Piggyback Base	Qty 3	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 28668
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8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:12:43 2021 Page 1
ID:jROaQQZCa7AXr4yywaPFSiTyJIBf-NpTK8JpDNwTsCMb24Cj1xjNfLdNKHJRfMp?nPyYR?Y



Scale = 1:65.1

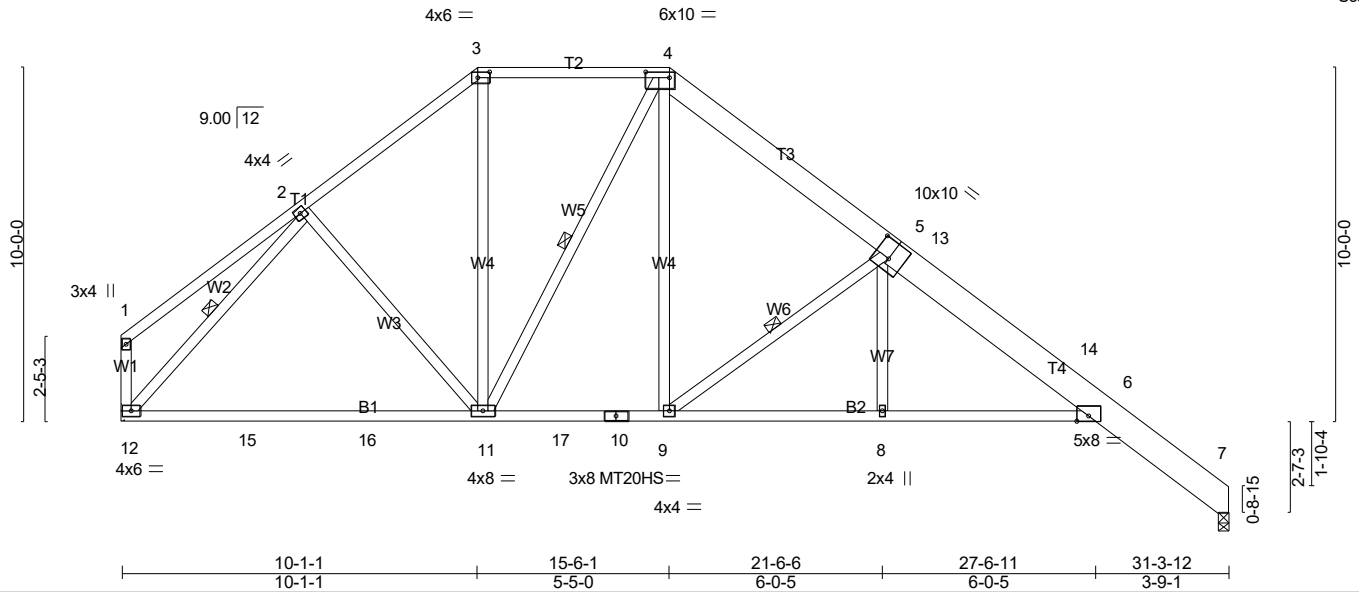


Plate Offsets (X,Y)-- [3:0-4-0,0-2-0], [4:0-8-0,0-2-0], [5:0-5-0,0-6-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.80	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.91	Vert(LL) -0.39 11-12 >956 240	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.15	WB 0.43	Vert(CT) -0.68 11-12 >545 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.37 7 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 227 lb	FT = 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 No.1
WEBS 2x4 SP No.3

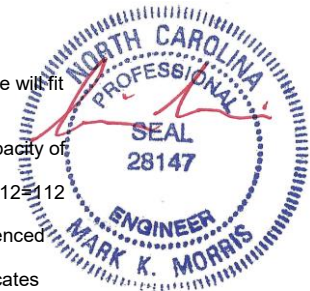
BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-11, 5-9, 2-12

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

REACTIONS. (lb/size) 12=1242/Mechanical, 7=1254/0-3-8 (min. 0-1-8)
Max Horz 12=-278(LC 13)
Max Uplift 12=-112(LC 12), 7=-159(LC 13)
Max Grav 12=1290(LC 3), 7=1254(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1244/283, 3-4=-939/272, 4-5=-1432/301, 5-13=-1821/288, 13-14=-1992/285,
6-14=-2038/255, 6-7=-672/131
BOT CHORD 12-15=-119/999, 15-16=-119/999, 11-16=-119/999, 11-17=0/1030, 10-17=0/1030,
9-10=0/1030, 8-9=-129/1883, 6-8=-133/1870
WEBS 3-11=-61/498, 4-11=-325/114, 4-9=-127/773, 5-9=-1101/289, 5-8=0/298, 2-12=-1254/207

- 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; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 5-1-2, Exterior(2R) 5-1-2 to 22-3-9, Interior(1) 22-3-9 to 26-4-6, Exterior(2E) 26-4-6 to 31-2-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 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) except (jt=lb) 12=112, 7=159.
 - 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.



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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.

Job	Truss	Truss Type	Qty	Ply	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC
21-5762-R01	R03A	Piggyback Base	3	1	Job Reference (optional) # 28668

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:12:43 2021 Page 2
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LOAD CASE(S) Standard



9/28/2021

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

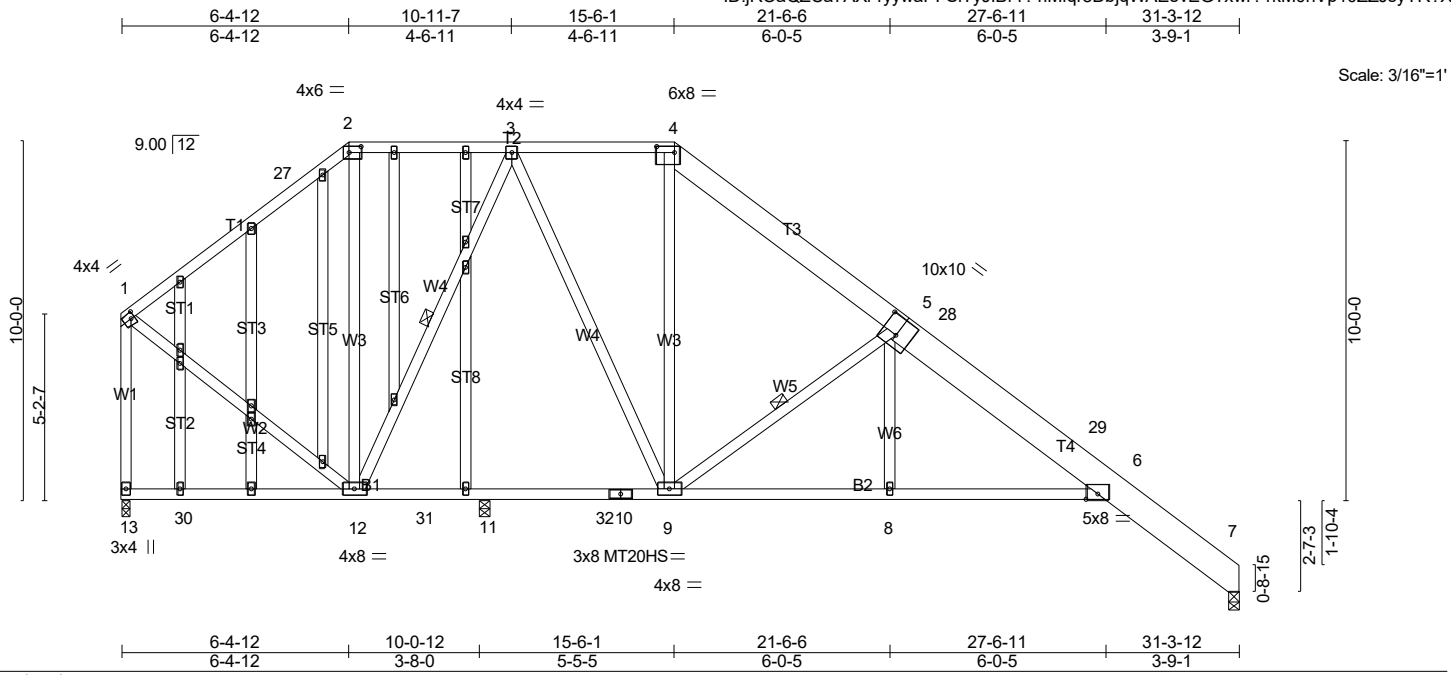


Plate Offsets (X,Y)-- [1:0-1-4,0-2-0], [2:0-4-0,0-2-0], [4:0-6-0,0-2-0], [5:0-5-0,0-6-0]
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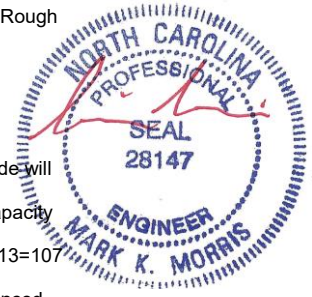
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.74	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.86	Vert(LL) -0.25 6-8 >986 240	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.15	WB 0.38	Vert(CT) -0.52 6-8 >486 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.33 7 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 290 lb	FT = 0%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* T3: 2x8 SP No.2, T4: 2x10 SP 2400F 2.0E BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 OTHERS 2x4 SP No.3	TOP CHORD Structural wood sheathing directly applied or 4-6-4 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. WEBS 1 Row at midpt 3-12, 5-9 <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide. </div>

REACTIONS. (lb/size) 13=1092/0-3-8 (min. 0-1-8), 7=1183/0-3-8 (min. 0-1-8), 11=221/0-3-8 (min. 0-1-8)
 Max Horz 13=-335(LC 13)
 Max Uplift 13=-107(LC 13), 7=-158(LC 13)
 Max Grav 13=1092(LC 1), 7=1183(LC 1), 11=395(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-27=-804/185, 2-27=-631/204, 2-3=-556/221, 3-4=-888/282, 4-5=-1274/283, 5-28=-1669/275, 28-29=-1841/272, 6-29=-1886/243, 6-7=-633/130, 1-13=-1010/224
BOT CHORD 13-30=-190/330, 12-30=-190/330, 12-31=-97/779, 11-31=-97/779, 11-32=-97/779, 10-32=-97/779, 9-10=-97/779, 8-9=-117/1745, 6-8=-121/1731
WEBS 3-12=-586/163, 3-9=-84/344, 4-9=-42/419, 5-9=-1066/296, 5-8=0/297, 1-12=-92/666

- 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 22-3-9, Interior(1) 22-3-9 to 26-4-6, Exterior(2E) 26-4-6 to 31-2-0 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) except (jt=lb) 13=107, 7=158.
 - 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.



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.

Job	Truss	Truss Type	Qty	Ply	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC
21-5762-R01	R04	GABLE COMMON	1	1	Job Reference (optional) # 28668

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ID:jROaQZCa7AXr4yywaPFSiTyJlBf-JBb4Z?qUuXjaSglRCdIV08S0IQ4blDlyFgl6rlyYR?W

- 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

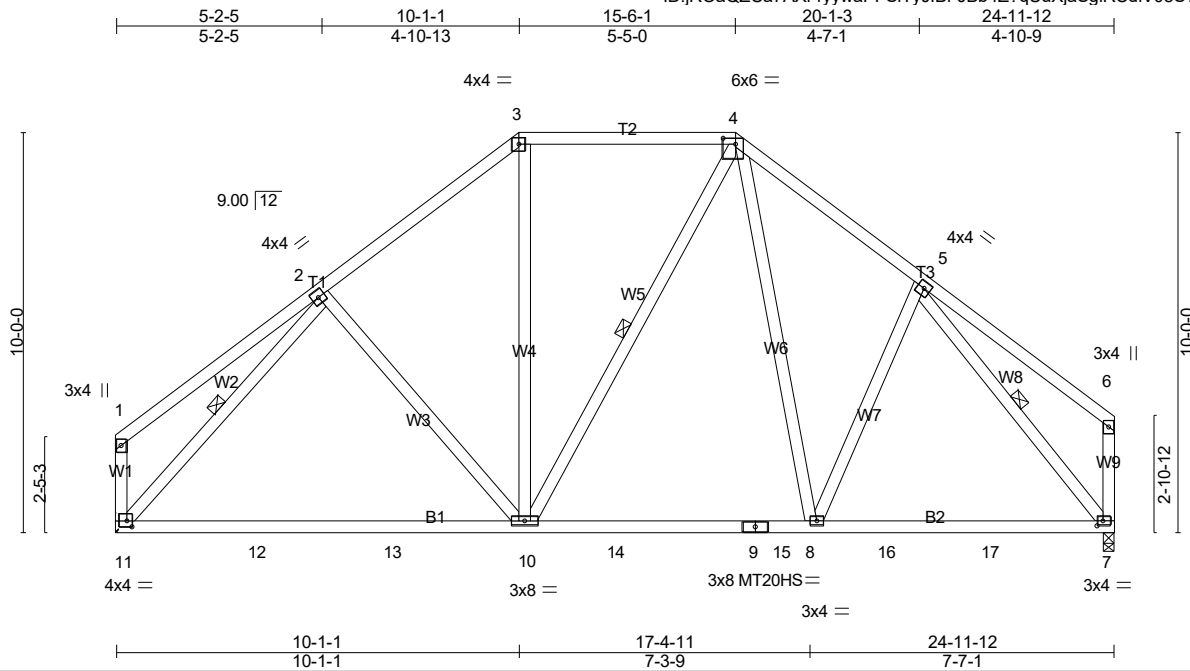


9/28/2021

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Job 21-5762-R01	Truss R05	Truss Type Piggyback Base	Qty 8	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 28668
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8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:12:45 2021 Page 1
ID:jROaQZCa7AXr4yywaPFSiTyJIBf-JBb4Z?qUuXjaSglRCdIV08S?6Q4sID?yFgl6rlyYR?W



Scale = 1:57.6

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.78	Vert(LL) -0.37	10-11	>808	240	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.85	Vert(CT) -0.61	10-11	>484	180	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.15	WB 0.36	Horz(CT) 0.03	7	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH						
BCDL 10.0	Code IRC2018/TPI2014							Weight: 176 lb FT = 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 5-8-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-10, 2-11, 5-7

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

REACTIONS. (lb/size) 11=988/Mechanical, 7=988/0-3-8 (min. 0-1-8)
Max Horz 11=171(LC 9)
Max Uplift 11=98(LC 12), 7=95(LC 13)
Max Grav 11=1084(LC 3), 7=1100(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-980/240, 3-4=-723/238, 4-5=-990/262
BOT CHORD 11-12=-166/804, 12-13=-166/804, 10-13=-166/804, 10-14=-28/683, 9-14=-28/683,
9-15=-28/683, 8-15=-28/683, 8-16=-87/693, 16-17=-87/693, 7-17=-87/693
WEBS 3-10=-36/323, 4-8=-108/330, 2-11=-958/163, 5-7=-1068/144

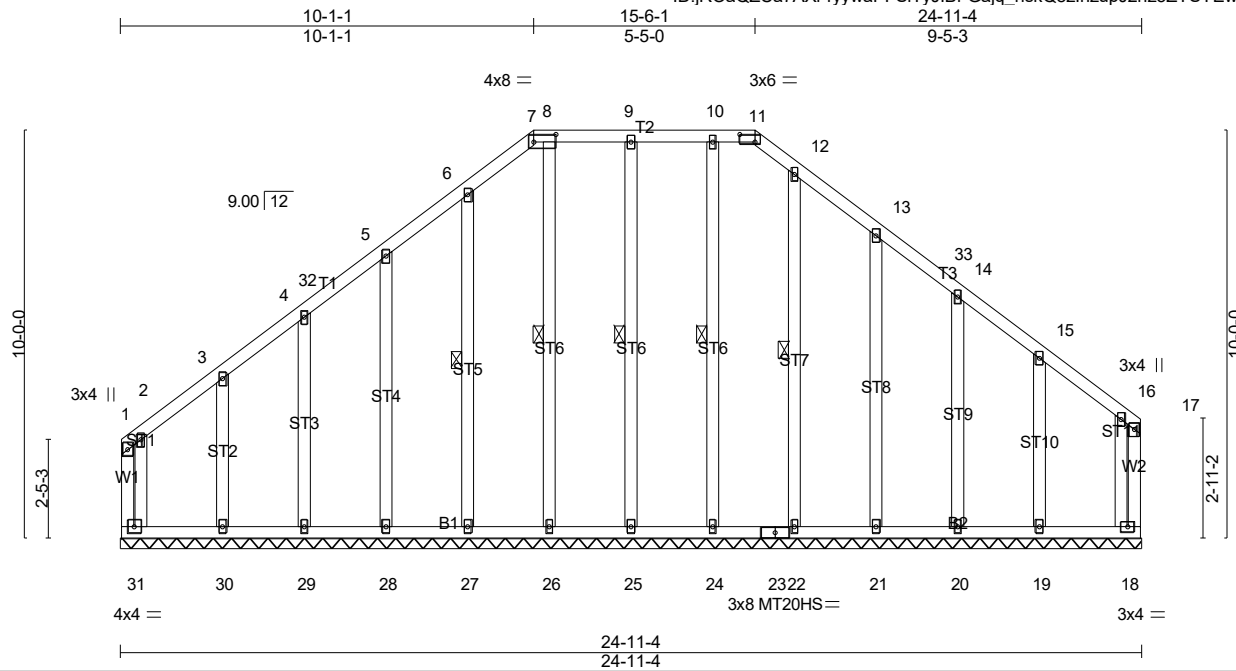
- NOTES-** (11-12)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 5-1-2, Exterior(2R) 5-1-2 to 20-1-14, Exterior(2E) 20-1-14 to 24-10-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 7.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.



9/28/2021

LOAD CASE(S) Standard

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Scale = 1:56.4

Plate Offsets (X,Y)-- [7:0-6-8,0-2-4], [11:0-4-8,0-2-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.34	Vert(LL)	n/a	-	n/a	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.22	Vert(CT)	n/a	-	n/a	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.15	WB 0.15	Horz(CT)	0.00	18	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R						
BCDL 10.0	Code IRC2018/TPI2014							
							Weight: 212 lb	FT = 0%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 9-25, 8-26, 6-27, 10-24, 12-22

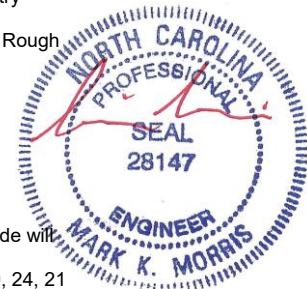
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 24-11-4.
 (lb) - Max Horz 31=171(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 25, 27, 28, 29, 24, 21, 20 except
 31=-183(LC 8), 18=-131(LC 9), 30=-224(LC 12), 19=-170(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 31, 18, 25, 29, 22, 20 except
 26=281(LC 22), 27=259(LC 19), 28=268(LC 19), 30=365(LC 19), 24=256(LC 22),
 21=269(LC 20), 19=329(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-31=-305/316, 6-7=-171/289, 7-8=-143/257, 8-9=-143/257, 9-10=-143/257,
 10-11=-143/257, 11-12=-158/261, 12-13=-162/276
 WEBS 2-31=-481/440, 16-18=-376/347

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) 0-1-12 to 4-11-6, Exterior(2N) 4-11-6 to 5-3-8, Corner(3R) 5-3-8 to 19-11-14, Corner(3E) 19-11-14 to 24-9-8 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 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) 25, 27, 28, 29, 24, 21, 20 except (jt=lb) 31=183, 18=131, 30=224, 19=170.
- 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.



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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.

Job	Truss	Truss Type	Qty	Ply	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC
21-5762-R01	R07	GABLE	1	1	Job Reference (optional) # 28668

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- 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

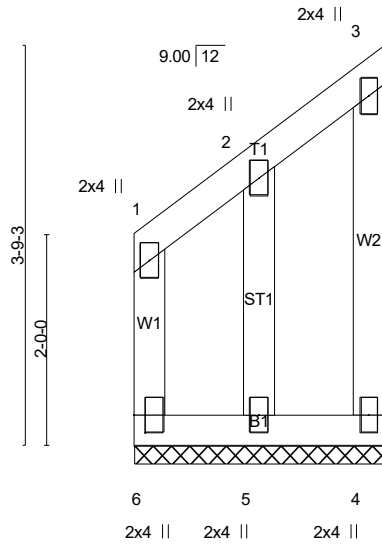
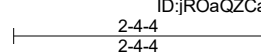


9/28/2021

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Job 21-5762-R01	Truss R08	Truss Type Monopitch Supported Gable	Qty 1	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 28668
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Scale = 1:21.7

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

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

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 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.

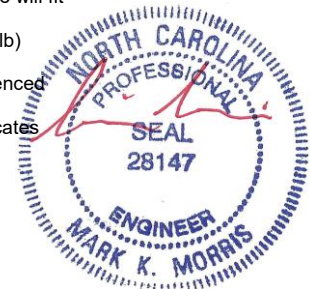
REACTIONS. (lb/size) 6=35/2-4-4 (min. 0-1-8), 4=35/2-4-4 (min. 0-1-8), 5=95/2-4-4 (min. 0-1-8)
Max Horz6=55(LC 12)
Max Uplift6=-19(LC 10), 4=-29(LC 12), 5=-112(LC 12)
Max Grav6=108(LC 12), 4=41(LC 23), 5=120(LC 23)

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

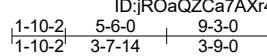


9/28/2021

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

Job 21-5762-R01	Truss R09	Truss Type Common Girder	Qty 1	Ply 2	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC # 28668
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8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:12:49 2021 Page 1



5x6 =

Scale = 1:82.8

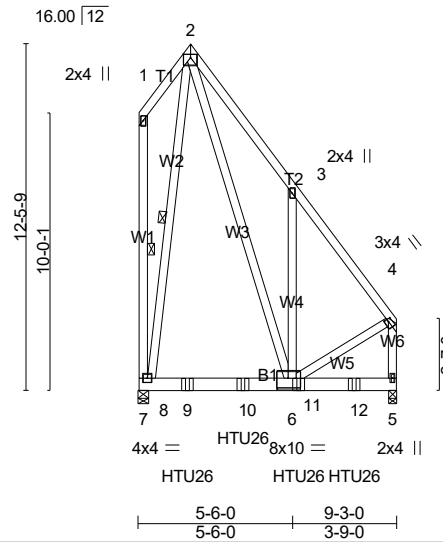


Plate Offsets (X,Y)-- [2:0-3-0,0-1-8], [4:0-1-0,0-1-8], [6:0-4-12,0-4-12]

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	0.41	Vert(LL)	-0.09 6-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.16 6-7	>664	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.77	Horz(CT)	0.00 5	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							
BCDL	10.0									Weight: 227 lb	FT = 0%

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

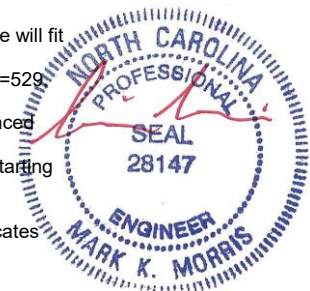
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 1-7, 2-7

REACTIONS. (lb/size) 7=3114/0-3-8 (min. 0-1-15), 5=3172/0-3-8 (min. 0-1-15)
Max Horz 7=-272(LC 11)
Max Uplift 7=-529(LC 11), 5=-259(LC 7)
Max Grav 7=3284(LC 3), 5=3309(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2333/412, 3-4=-2360/212, 4-5=-2769/227
BOT CHORD 7-8=-202/347, 8-9=-202/347, 9-10=-202/347, 10-11=-202/347, 6-11=-202/347
WEBS 2-6=-721/3728, 3-6=-336/390, 2-7=-1865/410, 4-6=-195/1569

NOTES- (12-13)

- 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.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=529 5=259.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 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.
- Fill all nail holes where hanger is in contact with lumber.
- Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.



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LOAD CASE(S) Standard

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.

Job	Truss	Truss Type	Qty	Ply	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC
21-5762-R01	R09	Common Girder	1	2	Job Reference (optional) # 28668

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:12:50 2021 Page 2
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LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-2=-60, 2-4=-60, 5-7=-20
- Concentrated Loads (lb)
 - Vert: 6=-1392(B) 9=-1392(B) 10=-1392(B) 12=-1392(B)

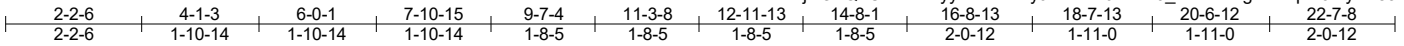


9/28/2021

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

Job 21-5762-R01	Truss R10	Truss Type Flat Girder	Qty 1	Ply 2	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC # 28668
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8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:12:53 2021 Page 1
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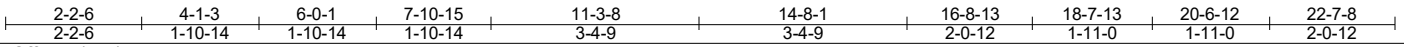
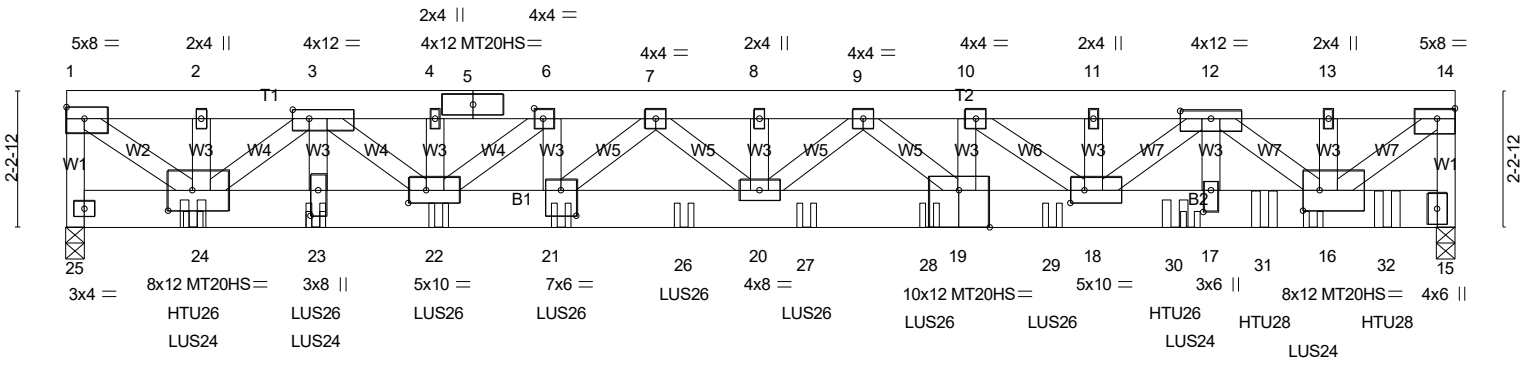


Plate Offsets (X, Y)-- [1:Edge,0-2-4], [3:0-3-4,0-1-12], [6:0-1-12,0-2-0], [12:0-6-0,0-1-8], [14:Edge,0-2-0], [16:0-3-4,0-4-0], [17:0-4-4,0-1-8], [18:0-2-12,0-2-8], [19:0-6-0,Edge], [21:0-3-0,0-5-0], [22:0-3-8,0-2-8], [23:0-5-0,0-1-8], [24:0-4-12,0-4-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15	TC 0.96	in (loc) l/defl L/d	MT20 244/190	
Snow (Pf) 20.0	Lumber DOL 1.15	BC 0.96	Vert(LL) -0.31 20 >858 240	MT20HS 187/143	
TCDL 10.0	Rep Stress Incr NO	WB 0.94	Vert(CT) -0.71 20 >376 180		
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-SH	Horz(CT) 0.12 15 n/a n/a		
BCDL 10.0				Weight: 354 lb	FT = 0%

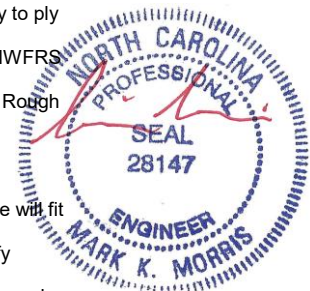
LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2 *Except* T2: 2x6 SP DSS	TOP CHORD Structural wood sheathing directly applied or 1-5-14 oc purlins, except end verticals.
BOT CHORD 2x8 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* W1: 2x4 SP No.2, W2,W4,W6,W7: 2x4 SP No.1	

REACTIONS. (lb/size) 25=7514/0-3-8 (min. 0-1-9), 15=8695/0-3-8 (min. 0-1-13)
Max Grav 25=7826(LC 3), 15=8962(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-25=-7162/0, 1-2=-8567/0, 2-3=-8567/0, 3-4=-21109/0, 4-5=-21109/0, 5-6=-21109/0, 6-7=-25409/0, 7-8=-28241/0, 8-9=-28241/0, 9-10=-26100/0, 10-11=-21712/0, 11-12=-21712/0, 12-13=-8809/0, 13-14=-8809/0, 14-15=-7863/0
BOT CHORD 23-24=0/15920, 22-23=0/15920, 21-22=0/25409, 21-26=0/27025, 20-26=0/27025, 20-27=0/27342, 27-28=0/27342, 19-28=0/27342, 19-29=0/25892, 18-29=0/25892, 18-30=0/16350, 17-30=0/16350, 17-31=0/16350, 16-31=0/16350, 16-32=0/271, 15-32=0/271
WEBS 1-24=0/10803, 3-24=-9849/0, 3-23=-134/1612, 3-22=0/6951, 6-22=-5759/0, 6-21=0/3054, 7-21=-2290/0, 7-20=0/1724, 8-20=-535/0, 9-20=0/1274, 9-19=-1836/0, 10-19=0/2717, 10-18=-5415/0, 12-18=0/7165, 12-17=-167/1748, 12-16=-10077/0, 14-16=0/11408

NOTES- (18-19)

- 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 0-7-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-7-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 25, 15 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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Continued on page 2 Design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 National Design Standard for Metal Plate Connected Wood Truss Construction and BCSI 1-03 Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Job	Truss	Truss Type	Qty	Ply	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC
21-5762-R01	R10	Flat Girder	1	2	# 28668

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:12:53 2021 Page 2
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NOTES- (18-19)

- 11) 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 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 12) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent at 2-0-12 from the left end to connect truss(es) R05 (1 ply 2x4 SP) to front face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
- 13) Use Simpson Strong-Tie LUS26 (4-SD9112 Girder, 4-SD9212 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 4-0-12 from the left end to 16-0-12 to connect truss(es) R05 (1 ply 2x4 SP) to front face of bottom chord.
- 14) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent at 18-0-12 from the left end to connect truss(es) R03A (1 ply 2x4 SP) to front face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
- 15) Use Simpson Strong-Tie HTU28 (26-10d Girder, 14-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 19-6-4 from the left end to 21-6-4 to connect truss(es) R03A (1 ply 2x4 SP) to front face of bottom chord.
- 16) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 14-3-0 oc max. starting at 2-0-12 from the left end to 20-3-12 to connect truss(es) J02 (1 ply 2x4 SP) to back face of bottom chord.
- 17) Fill all nail holes where hanger is in contact with lumber.
- 18) 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.
- 19) 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)

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-14=-60, 15-25=-20
 Concentrated Loads (lb)
 Vert: 24=-1182(F=-968, B=-214) 23=-1182(F=-968, B=-214) 22=-968(F) 6=-720 21=-968(F) 8=-720 10=-720 16=-214(B) 26=-968(F) 27=-968(F) 28=-968(F) 29=-968(F) 30=-1436(F=-1222, B=-214) 31=-1222(F) 32=-1222(F)
- 2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-14=-60, 15-25=-20
 Concentrated Loads (lb)
 Vert: 24=-1182(F=-968, B=-214) 23=-1182(F=-968, B=-214) 22=-968(F) 6=-720 21=-968(F) 8=-720 10=-720 16=-214(B) 26=-968(F) 27=-968(F) 28=-968(F) 29=-968(F) 30=-1436(F=-1222, B=-214) 31=-1222(F) 32=-1222(F)
- 3) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-14=-50, 15-25=-20
 Concentrated Loads (lb)
 Vert: 24=-1250(F=-1064, B=-186) 23=-1250(F=-1064, B=-186) 22=-1064(F) 6=-720 21=-1064(F) 8=-720 10=-720 16=-186(B) 26=-1064(F) 27=-1064(F) 28=-1064(F) 29=-1064(F) 30=-1456(F=-1270, B=-186) 31=-1270(F) 32=-1271(F)
- 4) Dead + 0.75 Snow (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-14=-50, 15-25=-20
 Concentrated Loads (lb)
 Vert: 24=-1250(F=-1064, B=-186) 23=-1250(F=-1064, B=-186) 22=-1064(F) 6=-720 21=-1064(F) 8=-720 10=-720 16=-186(B) 26=-1064(F) 27=-1064(F) 28=-1064(F) 29=-1064(F) 30=-1456(F=-1270, B=-186) 31=-1270(F) 32=-1271(F)
- 5) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
 Uniform Loads (plf)
 Vert: 1-14=-20, 15-25=-40
 Concentrated Loads (lb)
 Vert: 24=-809(F=-701, B=-108) 23=-809(F=-701, B=-108) 22=-701(F) 6=-720 21=-701(F) 8=-720 10=-720 16=-108(B) 26=-701(F) 27=-701(F) 28=-701(F) 29=-701(F) 30=-995(F=-887, B=-108) 31=-887(F) 32=-888(F)
- 6) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-14=26, 15-25=-10
 Concentrated Loads (lb)
 Vert: 24=216(F=108, B=108) 23=216(F=108, B=108) 22=108(F) 6=-720 21=108(F) 8=-720 10=-720 16=108(B) 26=108(F) 27=108(F) 28=108(F) 29=108(F) 30=229(F=122, B=108) 31=122(F) 32=122(F)
- 7) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-14=26, 15-25=-10
 Concentrated Loads (lb)
 Vert: 24=216(F=108, B=108) 23=216(F=108, B=108) 22=108(F) 6=-720 21=108(F) 8=-720 10=-720 16=108(B) 26=108(F) 27=108(F) 28=108(F) 29=108(F) 30=229(F=122, B=108) 31=122(F) 32=122(F)
- 8) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-14=6, 15-25=-20
 Concentrated Loads (lb)
 Vert: 24=236(F=118, B=118) 23=236(F=118, B=118) 22=118(F) 6=-720 21=118(F) 8=-720 10=-720 16=118(B) 26=118(F) 27=118(F) 28=118(F) 29=118(F) 30=249(F=132, B=118) 31=132(F) 32=131(F)
- 9) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-14=6, 15-25=-20
 Concentrated Loads (lb)
 Vert: 24=236(F=118, B=118) 23=236(F=118, B=118) 22=118(F) 6=-720 21=118(F) 8=-720 10=-720 16=118(B) 26=118(F) 27=118(F) 28=118(F) 29=118(F) 30=249(F=132, B=118) 31=132(F) 32=131(F)
- 10) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-14=26, 15-25=-10
 Concentrated Loads (lb)
 Vert: 24=216(F=108, B=108) 23=216(F=108, B=108) 22=108(F) 6=-720 21=108(F) 8=-720 10=-720 16=108(B) 26=108(F) 27=108(F) 28=108(F) 29=108(F) 30=229(F=122, B=108) 31=122(F) 32=122(F)



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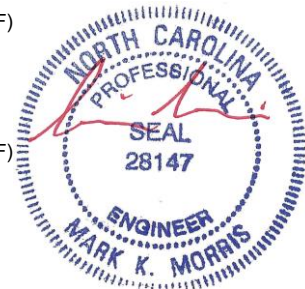
Continued on Page 3 Design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 *Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Job	Truss	Truss Type	Qty	Ply	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC
21-5762-R01	R10	Flat Girder	1	2	# 28668

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:12:54 2021 Page 3
 ID: jROaQZCa7AXr4yywaPFSiTyJIBf-ZweUS4x7nlsI2x9D0Pct2KV337BM96Hka_5gHyYR?N

LOAD CASE(S)

- 11) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-14=26, 15-25=-10
 Concentrated Loads (lb)
 Vert: 24=216(F=108, B=108) 23=216(F=108, B=108) 22=108(F) 6=-720 21=108(F) 8=-720 10=-720 16=108(B) 26=108(F) 27=108(F) 28=108(F) 29=108(F)
 30=229(F=122, B=108) 31=122(F) 32=122(F)
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-14=26, 15-25=-10
 Concentrated Loads (lb)
 Vert: 24=216(F=108, B=108) 23=216(F=108, B=108) 22=108(F) 6=-720 21=108(F) 8=-720 10=-720 16=108(B) 26=108(F) 27=108(F) 28=108(F) 29=108(F)
 30=229(F=122, B=108) 31=122(F) 32=122(F)
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-14=26, 15-25=-10
 Concentrated Loads (lb)
 Vert: 24=216(F=108, B=108) 23=216(F=108, B=108) 22=108(F) 6=-720 21=108(F) 8=-720 10=-720 16=108(B) 26=108(F) 27=108(F) 28=108(F) 29=108(F)
 30=229(F=122, B=108) 31=122(F) 32=122(F)
- 14) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-14=6, 15-25=-20
 Concentrated Loads (lb)
 Vert: 24=236(F=118, B=118) 23=236(F=118, B=118) 22=118(F) 6=-720 21=118(F) 8=-720 10=-720 16=118(B) 26=118(F) 27=118(F) 28=118(F) 29=118(F)
 30=249(F=132, B=118) 31=132(F) 32=131(F)
- 15) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-14=6, 15-25=-20
 Concentrated Loads (lb)
 Vert: 24=236(F=118, B=118) 23=236(F=118, B=118) 22=118(F) 6=-720 21=118(F) 8=-720 10=-720 16=118(B) 26=118(F) 27=118(F) 28=118(F) 29=118(F)
 30=249(F=132, B=118) 31=132(F) 32=131(F)
- 16) Dead + Uninhabitable Attic Storage: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
 Uniform Loads (plf)
 Vert: 1-14=-20, 15-25=-20
 Concentrated Loads (lb)
 Vert: 24=-868(F=-767, B=-101) 23=-868(F=-767, B=-101) 22=-767(F) 6=-720 21=-767(F) 8=-720 10=-720 16=-101(B) 26=-767(F) 27=-767(F) 28=-767(F) 29=-767(F)
 30=-974(F=-873, B=-101) 31=-873(F) 32=-873(F)
- 17) 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: 1-14=-31, 15-25=-20
 Concentrated Loads (lb)
 Vert: 24=110(F=32, B=78) 23=110(F=32, B=78) 22=32(F) 6=-720 21=32(F) 8=-720 10=-720 16=78(B) 26=32(F) 27=32(F) 28=32(F) 29=32(F) 30=104(F=26, B=78)
 31=26(F) 32=26(F)
- 18) 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: 1-14=-31, 15-25=-20
 Concentrated Loads (lb)
 Vert: 24=110(F=32, B=78) 23=110(F=32, B=78) 22=32(F) 6=-720 21=32(F) 8=-720 10=-720 16=78(B) 26=32(F) 27=32(F) 28=32(F) 29=32(F) 30=104(F=26, B=78)
 31=26(F) 32=26(F)
- 19) 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: 1-14=-31, 15-25=-20
 Concentrated Loads (lb)
 Vert: 24=110(F=32, B=78) 23=110(F=32, B=78) 22=32(F) 6=-720 21=32(F) 8=-720 10=-720 16=78(B) 26=32(F) 27=32(F)
 28=32(F) 29=32(F) 30=104(F=26, B=78) 31=26(F) 32=26(F)
- 20) 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: 1-14=-31, 15-25=-20
 Concentrated Loads (lb)
 Vert: 24=110(F=32, B=78) 23=110(F=32, B=78) 22=32(F) 6=-720 21=32(F) 8=-720 10=-720 16=78(B) 26=32(F) 27=32(F)
 28=32(F) 29=32(F) 30=104(F=26, B=78) 31=26(F) 32=26(F)
- 21) 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: 1-14=-31, 15-25=-20
 Concentrated Loads (lb)
 Vert: 24=110(F=32, B=78) 23=110(F=32, B=78) 22=32(F) 6=-720 21=32(F) 8=-720 10=-720 16=78(B) 26=32(F) 27=32(F)
 28=32(F) 29=32(F) 30=104(F=26, B=78) 31=26(F) 32=26(F)
- 22) 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: 1-14=-31, 15-25=-20
 Concentrated Loads (lb)
 Vert: 24=110(F=32, B=78) 23=110(F=32, B=78) 22=32(F) 6=-720 21=32(F) 8=-720 10=-720 16=78(B) 26=32(F) 27=32(F)
 28=32(F) 29=32(F) 30=104(F=26, B=78) 31=26(F) 32=26(F)
- 23) 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: 1-14=-31, 15-25=-20



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Continued on Page 4
 Design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 *Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Job	Truss	Truss Type	Qty	Ply	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC
21-5762-R01	R10	Flat Girder	1	2	# 28668

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ID: jROaQZCa7AXr4yywaPFSiTyJIBf-ZweUS4x7nls12x9D0Pct2KV337BM96Hka_5gHyYR?N

LOAD CASE(S)

- Concentrated Loads (lb)
Vert: 24=110(F=32, B=78) 23=110(F=32, B=78) 22=32(F) 6=-720 21=32(F) 8=-720 10=-720 16=78(B) 26=32(F) 27=32(F) 28=32(F) 29=32(F) 30=104(F=26, B=78) 31=26(F) 32=26(F)
- 24) 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: 1-14=-31, 15-25=-20
Concentrated Loads (lb)
Vert: 24=110(F=32, B=78) 23=110(F=32, B=78) 22=32(F) 6=-720 21=32(F) 8=-720 10=-720 16=78(B) 26=32(F) 27=32(F) 28=32(F) 29=32(F) 30=104(F=26, B=78) 31=26(F) 32=26(F)
- 25) Dead + Minimum Snow: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-14=-60, 15-25=-20
Concentrated Loads (lb)
Vert: 24=-1182(F=-968, B=-214) 23=-1182(F=-968, B=-214) 22=-968(F) 6=-720 21=-968(F) 8=-720 10=-720 16=-214(B) 26=-968(F) 27=-968(F) 28=-968(F) 29=-968(F) 30=-1436(F=-1222, B=-214) 31=-1222(F) 32=-1222(F)
- 26) Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 1-14=-10, 15-25=-10
Concentrated Loads (lb)
Vert: 24=-595(F=-484, B=-111) 23=-595(F=-484, B=-111) 22=-484(F) 6=-720 21=-484(F) 8=-720 10=-720 16=-111(B) 26=-484(F) 27=-484(F) 28=-484(F) 29=-484(F) 30=-722(F=-611, B=-111) 31=-611(F) 32=-611(F)
- 27) Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 1-14=-10, 15-25=-10
Concentrated Loads (lb)
Vert: 24=-595(F=-484, B=-111) 23=-595(F=-484, B=-111) 22=-484(F) 6=-720 21=-484(F) 8=-720 10=-720 16=-111(B) 26=-484(F) 27=-484(F) 28=-484(F) 29=-484(F) 30=-722(F=-611, B=-111) 31=-611(F) 32=-611(F)
- 28) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-14=26, 15-25=-10
Concentrated Loads (lb)
Vert: 24=-650(F=-482, B=-168) 23=-650(F=-482, B=-168) 22=-482(F) 6=-720 21=-482(F) 8=-720 10=-720 16=-168(B) 26=-482(F) 27=-482(F) 28=-482(F) 29=-482(F) 30=-764(F=-596, B=-168) 31=-596(F) 32=-596(F)
- 29) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-14=26, 15-25=-10
Concentrated Loads (lb)
Vert: 24=-650(F=-482, B=-168) 23=-650(F=-482, B=-168) 22=-482(F) 6=-720 21=-482(F) 8=-720 10=-720 16=-168(B) 26=-482(F) 27=-482(F) 28=-482(F) 29=-482(F) 30=-764(F=-596, B=-168) 31=-596(F) 32=-596(F)
- 30) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-14=6, 15-25=-20
Concentrated Loads (lb)
Vert: 24=-630(F=-472, B=-158) 23=-630(F=-472, B=-158) 22=-472(F) 6=-720 21=-472(F) 8=-720 10=-720 16=-158(B) 26=-472(F) 27=-472(F) 28=-472(F) 29=-472(F) 30=-744(F=-586, B=-158) 31=-586(F) 32=-586(F)
- 31) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-14=6, 15-25=-20
Concentrated Loads (lb)
Vert: 24=-630(F=-472, B=-158) 23=-630(F=-472, B=-158) 22=-472(F) 6=-720 21=-472(F) 8=-720 10=-720 16=-158(B) 26=-472(F) 27=-472(F) 28=-472(F) 29=-472(F) 30=-744(F=-586, B=-158) 31=-586(F) 32=-586(F)
- 32) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-14=26, 15-25=-10
Concentrated Loads (lb)
Vert: 24=-650(F=-482, B=-168) 23=-650(F=-482, B=-168) 22=-482(F) 6=-720 21=-482(F) 8=-720 10=-720 16=-168(B) 26=-482(F) 27=-482(F) 28=-482(F) 29=-482(F) 30=-764(F=-596, B=-168) 31=-596(F) 32=-596(F)
- 33) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-14=26, 15-25=-10
Concentrated Loads (lb)
Vert: 24=-650(F=-482, B=-168) 23=-650(F=-482, B=-168) 22=-482(F) 6=-720 21=-482(F) 8=-720 10=-720 16=-168(B) 26=-482(F) 27=-482(F) 28=-482(F) 29=-482(F) 30=-764(F=-596, B=-168) 31=-596(F) 32=-596(F)
- 34) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-14=26, 15-25=-10
Concentrated Loads (lb)
Vert: 24=-650(F=-482, B=-168) 23=-650(F=-482, B=-168) 22=-482(F) 6=-720 21=-482(F) 8=-720 10=-720 16=-168(B) 26=-482(F) 27=-482(F) 28=-482(F) 29=-482(F) 30=-764(F=-596, B=-168) 31=-596(F) 32=-596(F)
- 35) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-14=26, 15-25=-10
Concentrated Loads (lb)
Vert: 24=-650(F=-482, B=-168) 23=-650(F=-482, B=-168) 22=-482(F) 6=-720 21=-482(F) 8=-720 10=-720 16=-168(B) 26=-482(F) 27=-482(F) 28=-482(F) 29=-482(F) 30=-764(F=-596, B=-168) 31=-596(F) 32=-596(F)
- 36) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-14=6, 15-25=-20



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Continued on Page 5
Design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 *Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Job	Truss	Truss Type	Qty	Ply	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC
21-5762-R01	R10	Flat Girder	1	2	Job Reference (optional) # 28668

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ID:JROaQZCa7AXr4yywaPFSiTyJIBf-ZweUS4x7nlsI2x9D0Pct2KV337BM96Hka_5gHyYR?N

LOAD CASE(S)

- Concentrated Loads (lb)
 - Vert: 24=-630(F=-472, B=-158) 23=-630(F=-472, B=-158) 22=-472(F) 6=-720 21=-472(F) 8=-720 10=-720 16=-158(B) 26=-472(F) 27=-472(F) 28=-472(F) 29=-472(F) 30=-744(F=-586, B=-158) 31=-586(F) 32=-586(F)
- 37) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
 - Uniform Loads (plf)
 - Vert: 1-14=6, 15-25=-20
 - Concentrated Loads (lb)
 - Vert: 24=-630(F=-472, B=-158) 23=-630(F=-472, B=-158) 22=-472(F) 6=-720 21=-472(F) 8=-720 10=-720 16=-158(B) 26=-472(F) 27=-472(F) 28=-472(F) 29=-472(F) 30=-744(F=-586, B=-158) 31=-586(F) 32=-586(F)
- 38) Reversal: 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: 1-14=-31, 15-25=-20
 - Concentrated Loads (lb)
 - Vert: 24=-1123(F=-915, B=-208) 23=-1123(F=-915, B=-208) 22=-915(F) 6=-720 21=-915(F) 8=-720 10=-720 16=-208(B) 26=-915(F) 27=-915(F) 28=-915(F) 29=-915(F) 30=-1299(F=-1092, B=-208) 31=-1092(F) 32=-1092(F)
- 39) Reversal: 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: 1-14=-31, 15-25=-20
 - Concentrated Loads (lb)
 - Vert: 24=-1123(F=-915, B=-208) 23=-1123(F=-915, B=-208) 22=-915(F) 6=-720 21=-915(F) 8=-720 10=-720 16=-208(B) 26=-915(F) 27=-915(F) 28=-915(F) 29=-915(F) 30=-1299(F=-1092, B=-208) 31=-1092(F) 32=-1092(F)
- 40) Reversal: 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: 1-14=-31, 15-25=-20
 - Concentrated Loads (lb)
 - Vert: 24=-1123(F=-915, B=-208) 23=-1123(F=-915, B=-208) 22=-915(F) 6=-720 21=-915(F) 8=-720 10=-720 16=-208(B) 26=-915(F) 27=-915(F) 28=-915(F) 29=-915(F) 30=-1299(F=-1092, B=-208) 31=-1092(F) 32=-1092(F)
- 41) Reversal: 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: 1-14=-31, 15-25=-20
 - Concentrated Loads (lb)
 - Vert: 24=-1123(F=-915, B=-208) 23=-1123(F=-915, B=-208) 22=-915(F) 6=-720 21=-915(F) 8=-720 10=-720 16=-208(B) 26=-915(F) 27=-915(F) 28=-915(F) 29=-915(F) 30=-1299(F=-1092, B=-208) 31=-1092(F) 32=-1092(F)
- 42) Reversal: 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: 1-14=-31, 15-25=-20
 - Concentrated Loads (lb)
 - Vert: 24=-1123(F=-915, B=-208) 23=-1123(F=-915, B=-208) 22=-915(F) 6=-720 21=-915(F) 8=-720 10=-720 16=-208(B) 26=-915(F) 27=-915(F) 28=-915(F) 29=-915(F) 30=-1299(F=-1092, B=-208) 31=-1092(F) 32=-1092(F)
- 43) Reversal: 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: 1-14=-31, 15-25=-20
 - Concentrated Loads (lb)
 - Vert: 24=-1123(F=-915, B=-208) 23=-1123(F=-915, B=-208) 22=-915(F) 6=-720 21=-915(F) 8=-720 10=-720 16=-208(B) 26=-915(F) 27=-915(F) 28=-915(F) 29=-915(F) 30=-1299(F=-1092, B=-208) 31=-1092(F) 32=-1092(F)
- 44) Reversal: 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: 1-14=-31, 15-25=-20
 - Concentrated Loads (lb)
 - Vert: 24=-1123(F=-915, B=-208) 23=-1123(F=-915, B=-208) 22=-915(F) 6=-720 21=-915(F) 8=-720 10=-720 16=-208(B) 26=-915(F) 27=-915(F) 28=-915(F) 29=-915(F) 30=-1299(F=-1092, B=-208) 31=-1092(F) 32=-1092(F)
- 45) Reversal: 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: 1-14=-31, 15-25=-20
 - Concentrated Loads (lb)
 - Vert: 24=-1123(F=-915, B=-208) 23=-1123(F=-915, B=-208) 22=-915(F) 6=-720 21=-915(F) 8=-720 10=-720 16=-208(B) 26=-915(F) 27=-915(F) 28=-915(F) 29=-915(F) 30=-1299(F=-1092, B=-208) 31=-1092(F) 32=-1092(F)



9/28/2021

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Job 21-5762-R01	Truss R12	Truss Type Monopitch	Qty 6	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 28668
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ID: jROaQZCa7AXr4yywaPFSiTyJIBF-ZweUS4x7nls12x9D0Pct2Kbd3BfMKdHKa_5gHyYR?N

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0-10-8 7-10-8

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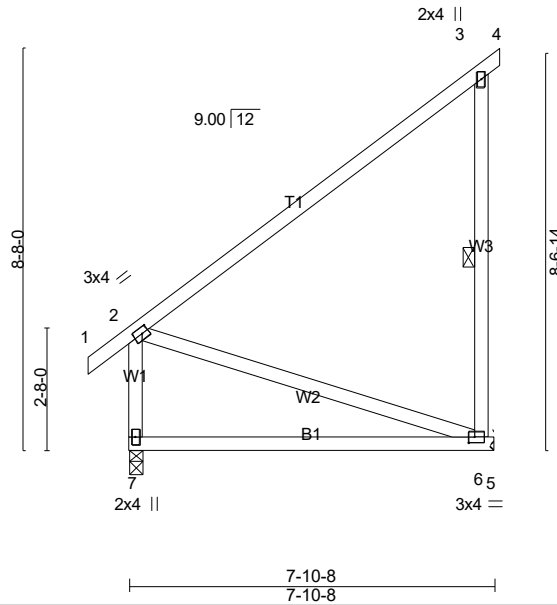


Plate Offsets (X,Y)-- [2:0-1-12,0-1-8], [6:0-1-8,0-1-8]

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



9/28/2021

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Job 21-5762-R01	Truss R13	Truss Type Monopitch	Qty 2	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 28668
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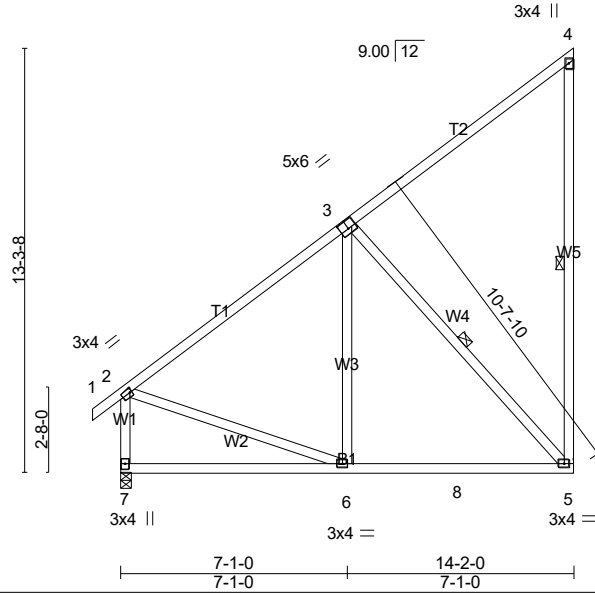


Plate Offsets (X,Y)-- [2:0-0-12,0-1-8], [3:0-3-0,0-3-0]

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

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

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



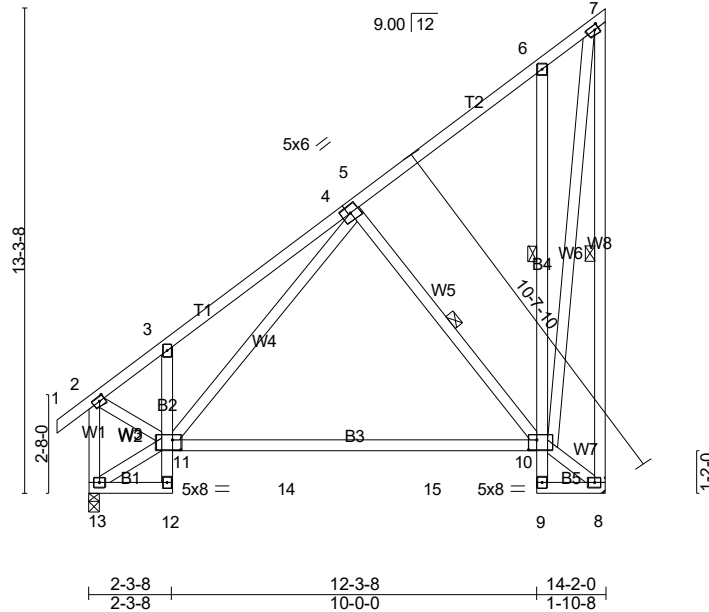
9/28/2021

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Job 21-5762-R01	Truss R14	Truss Type Monopitch	Qty 6	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 28668
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0-10-8 2-3-8 7-3-8 12-3-8 14-2-0
0-10-8 2-3-8 5-0-0 5-0-0 1-10-8



Scale = 1:63.2

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

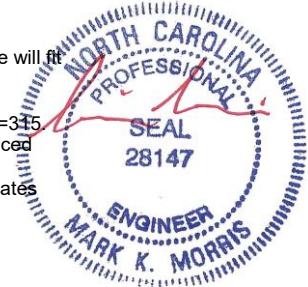
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
1 Row at midpt 6-10
WEBS 1 Row at midpt 7-8, 5-10

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 Uplift 8=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

9/28/2021

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Job 21-5762-R01	Truss R15	Truss Type Monopitch Supported Gable	Qty 1	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC # 28668
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ID: jROaQZCa7AXr4yywaPFStyJIBf-zVJc46_?4DEtuWfkv8zJVgyB4GLnZggj0XCiHbyYR?K

-0-10-8 14-2-0
0-10-8 14-2-0

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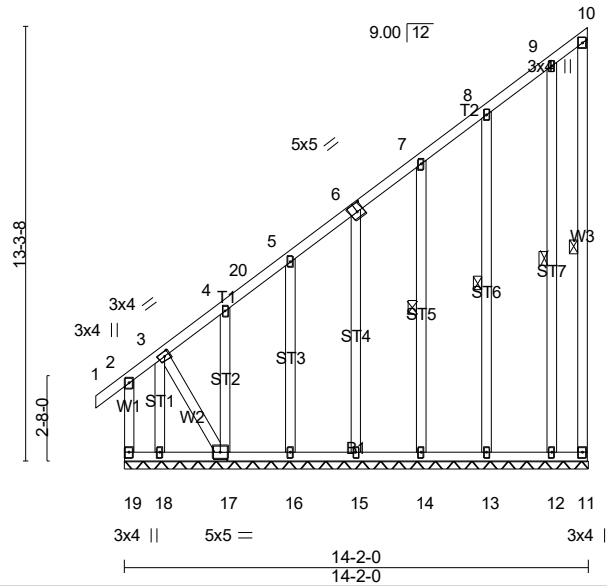


Plate Offsets (X,Y)-- [3:0-1-12,0-1-8], [6:0-2-8,0-3-0], [17:0-2-8,0-2-12]

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

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

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

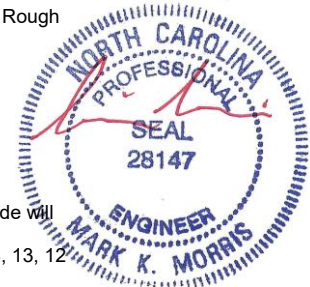
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

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.



9/28/2021

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.

Job	Truss	Truss Type	Qty	Ply	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC
21-5762-R01	R15	Monopitch Supported Gable	1	1	Job Reference (optional) # 28668

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ID:jROaQZCa7AXr4yywaPFSiTyJIBf-zVJc46_?4DEtuWfkv8zJVgyB4GLnZggj0XCIHbyYR?K

- 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



9/28/2021

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

Job 21-5762-R01	Truss R18	Truss Type GABLE	Qty 1	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 28668
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8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:12:58 2021 Page 1

ID: jROaQZCa7AXr4yywaPFSiTyJIBfRit?IS?dqXMKVgExSsUY2uVMbghXI7DtFBylp2yYR?J

1-10-2 9-3-0 10-1-8
1-10-2 7-4-14 0-10-8

4x4 =

Scale = 1:78.4

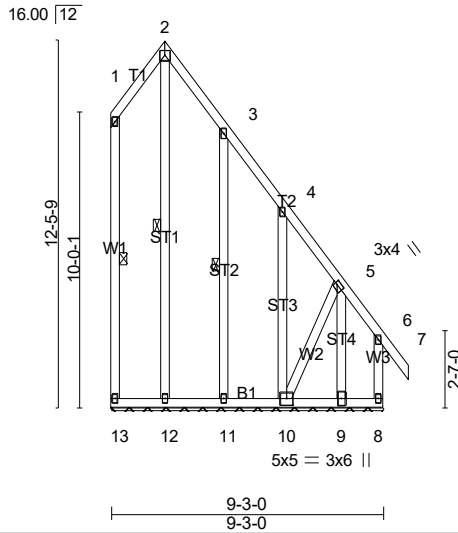


Plate Offsets (X,Y)-- [5:0-1-0,0-1-8], [10:0-2-8,0-2-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.22	Vert(LL)	-0.00	7	n/r	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.17	Vert(CT)	-0.01	7	n/r		
TCDL 10.0	Lumber DOL 1.15	WB 0.30	Horz(CT)	0.00	8	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH						
BCDL 10.0	Code IRC2018/TPI2014							
							Weight: 111 lb	FT = 0%

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

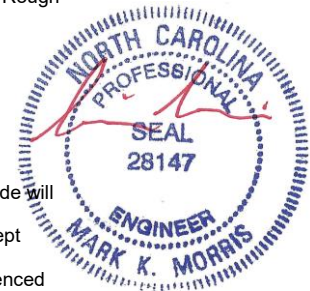
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
 WEBS 1 Row at midpt 1-13, 2-12, 3-11

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 13=-313(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) 13, 8, 12 except 11=-176(LC 13), 10=-717(LC 13), 9=-417(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 13, 8 except 12=268(LC 21), 11=317(LC 21), 10=521(LC 11), 9=738(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 4-5=-314/235
 BOT CHORD 12-13=-273/447, 11-12=-273/447, 10-11=-273/447
 WEBS 5-9=-934/484, 5-10=-498/796

- NOTES-** (14-15)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-1-12 to 1-10-2, Corner(3R) 1-10-2 to 5-3-14, Corner(3E) 5-3-14 to 10-1-8 zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 8, 12 except (jt=lb) 11=176, 10=717, 9=417.
 - 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.



9/28/2021

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.

Job	Truss	Truss Type	Qty	Ply	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC
21-5762-R01	R18	GABLE	1	1	Job Reference (optional) # 28668

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ID:jROaQZCa7AXr4yywaPFSiTyJIBf-Rit?IS?dqXMkVgExSsUY2uVMbghXi7DtFByp2yYR?J

- 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



9/28/2021

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Job 21-5762-R01	Truss R19	Truss Type Common	Qty 1	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 28668
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1-10-2 3-7-14 3-9-0 0-10-8

4x6 ||

Scale = 1:76.6

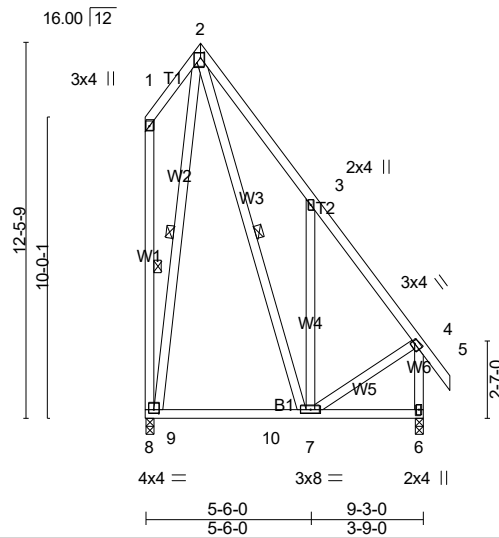


Plate Offsets (X,Y)-- [2:0-2-4,0-1-8], [4:0-1-0,0-1-8], [8:0-2-0,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.75	Vert(LL) -0.07	7-8	>999	240	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.42	Vert(CT) -0.10	7-8	>999	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.42	Horz(CT) 0.00	6	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH						
BCDL 10.0	Code IRC2018/TPI2014							
							Weight: 109 lb	FT = 0%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 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 2-7, 1-8, 2-8

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

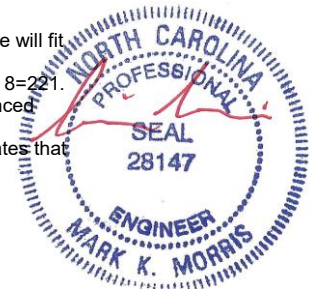
REACTIONS. (lb/size) 8=355/0-3-8 (min. 0-1-8), 6=423/0-3-8 (min. 0-1-8)
Max Horz 8=-414(LC 8)
Max Uplift 8=-221(LC 8), 6=-87(LC 9)
Max Grav 8=589(LC 21), 6=556(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-382/407, 2-3=-568/443, 3-4=-421/144, 1-8=-359/366, 4-6=-560/107
BOT CHORD 8-9=-219/288, 9-10=-219/288, 7-10=-219/288
WEBS 2-7=-421/578, 3-7=-439/358, 2-8=-510/398, 4-7=-102/300

NOTES- (9-10)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 1-10-2, Exterior(2R) 1-10-2 to 5-6-0, Exterior(2E) 5-6-0 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 8=221.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard



9/28/2021

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

Job 21-5762-R01	Truss R21	Truss Type Common Supported Gable	Qty 1	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 28668
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ID: jROaQZCa7AXr4yywPF5iTyJIBf-N4?li80uM8cSlzOJaGW07JabNTDPMzEaIVRPtwyYR?H
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6x8 =

Scale = 1:74.5

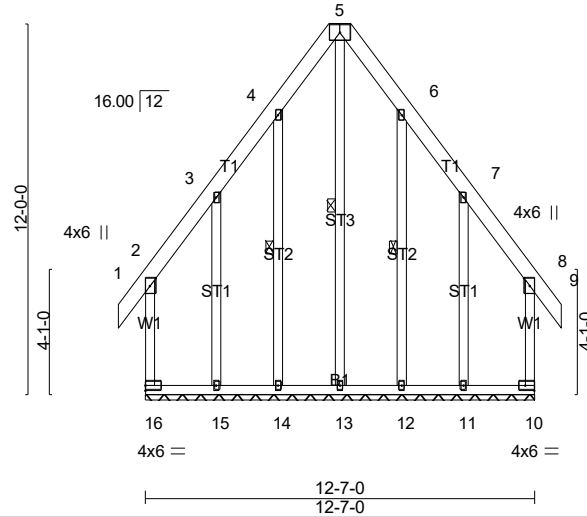


Plate Offsets (X,Y)-- [2:Edge,0-2-4], [8:Edge,0-2-4], [10:Edge,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.65	Vert(LL) -0.00	8	n/r	180	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.78	Vert(CT) -0.00	8	n/r	80		
TCDL 10.0	Lumber DOL 1.15	WB 0.52	Horz(CT) -0.00	10	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 148 lb	FT = 0%

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

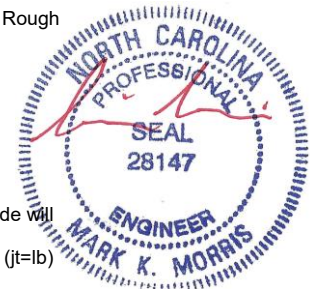
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
 WEBS 1 Row at midpt 5-13, 4-14, 6-12

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 16=-361(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 14, 12 except 16=-415(LC 8), 10=-412(LC 9), 15=-440(LC 9), 11=-438(LC 8)
 Max Grav All reactions 250 lb or less at joint(s) 14, 12 except 16=481(LC 21), 10=478(LC 20), 13=472(LC 13), 15=603(LC 20), 11=601(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-16=-311/285, 2-3=-314/318, 3-4=-288/478, 4-5=-355/550, 5-6=-355/550, 6-7=-288/478, 7-8=-311/316, 8-10=-308/282
 WEBS 5-13=-751/410, 3-15=-315/281, 7-11=-314/280

- NOTES-** (14-15)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Corner(3R) 3-11-2 to 8-7-14, Corner(3E) 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
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 12 except (jt=lb) 16=415, 10=412, 15=440, 11=438.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



9/28/2021

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.

Job	Truss	Truss Type	Qty	Ply	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC
21-5762-R01	R21	Common Supported Gable	1	1	Job Reference (optional) # 28668

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

LOAD CASE(S) Standard



9/28/2021

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Job 21-5762-R01	Truss R22	Truss Type Common	Qty 2	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC # 28668
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8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:13:01 2021 Page 1

ID: jROaQZCa7AXr4yywaPFSiTyJIBf-rGZ7wT1W7SkIN7zV8_1FW7q5tgbVXdJx9AyQNYR?G
 -0-10-8 6-3-8 12-7-0 13-5-8
 0-10-8 6-3-8 6-3-8 0-10-8

6x8 =

Scale = 1:73.1

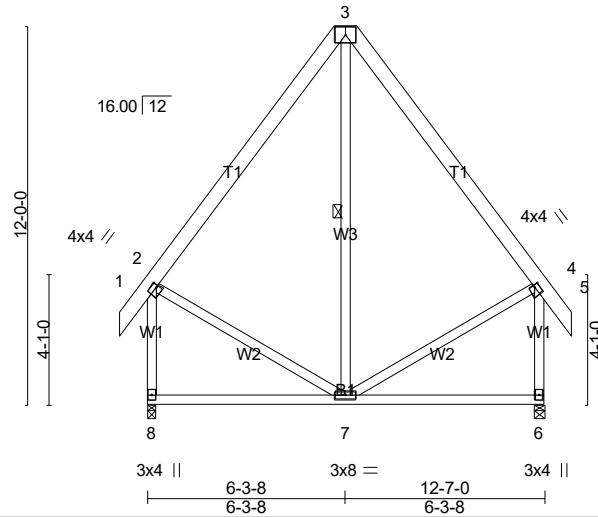


Plate Offsets (X,Y)-- [2:0-0-12,0-1-12], [4:0-0-12,0-1-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.39	Vert(LL) -0.03	7-8	>999	240	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.33	Vert(CT) -0.06	7-8	>999	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.13	Horz(CT) -0.00	6	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH						
BCDL 10.0	Code IRC2018/TPI2014							
							Weight: 123 lb	FT = 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 9-10-2 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=-361(LC 10)
 Max Uplift 8=-100(LC 13), 6=-100(LC 12)
 Max Grav 8=571(LC 21), 6=571(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-399/190, 3-4=-399/190, 2-8=-518/128, 4-6=-518/128
 BOT CHORD 7-8=-347/342
 WEBS 2-7=-131/259, 4-7=-132/260

NOTES- (9-10)

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

LOAD CASE(S) Standard



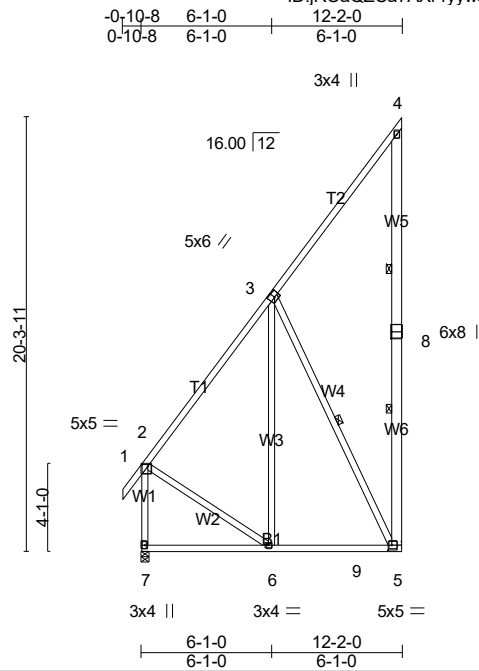
9/28/2021

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

Job 21-5762-R01	Truss R24	Truss Type Monopitch	Qty 1	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC # 28668
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Scale = 1:107.9

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.63	Vert(LL)	-0.10	5-6	>999	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.47	Vert(CT)	-0.12	5-6	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.58	Horz(CT)	-0.01	5	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH						
BCDL 10.0	Code IRC2018/TPI2014							
							Weight: 149 lb	FT = 0%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
W6,W5: 2x6 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 7-3-4 oc bracing.
WEBS 1 Row at midpt 3-5
2 Rows at 1/3 pts 4-5

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

REACTIONS. (lb/size) 5=469/Mechanical, 7=536/0-3-8 (min. 0-1-8)
Max Horz 7=557(LC 12)
Max Uplift 5=-657(LC 12)
Max Grav 5=787(LC 20), 7=684(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-500/166, 2-7=-650/128
BOT CHORD 6-7=-656/555, 6-9=-233/303, 5-9=-233/303
WEBS 3-6=-207/296, 3-5=-672/518, 2-6=-300/511

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 7-1-10, Exterior(2E) 7-1-10 to 11-11-4 zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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=657.
- 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



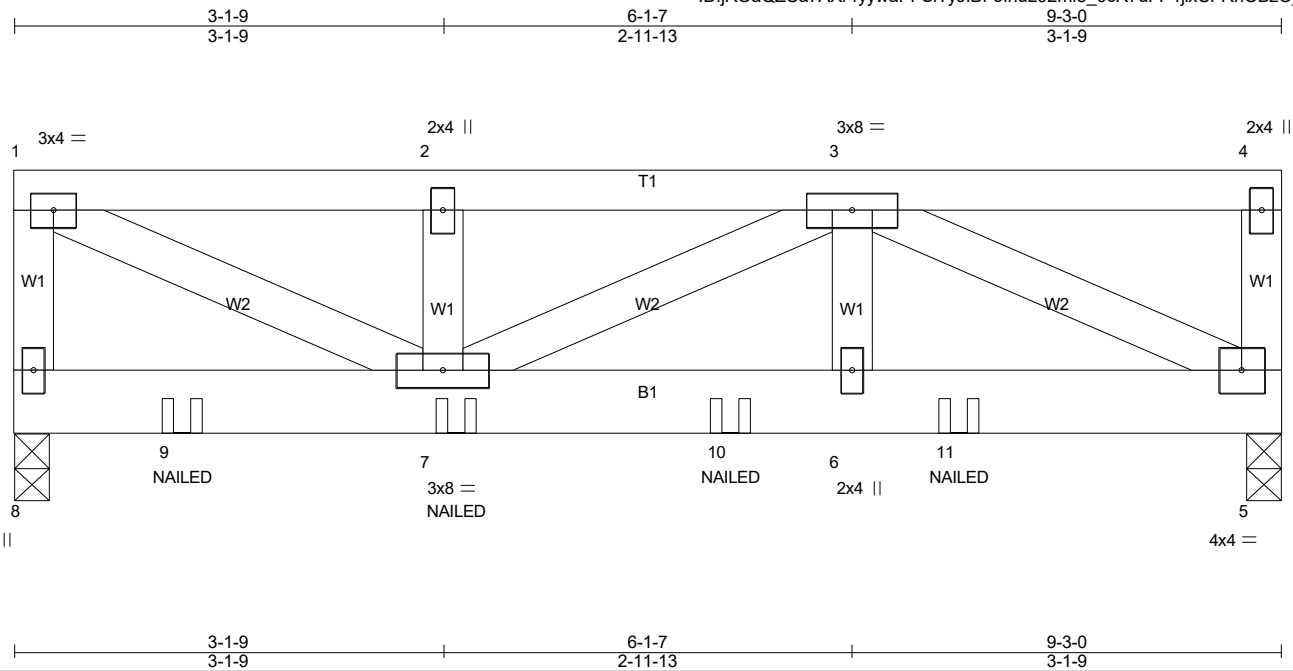
9/28/2021

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

Job 21-5762-R01	Truss R29	Truss Type Flat Girder	Qty 1	Ply 2	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC # 28668
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Scale = 1:16.8



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

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 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)

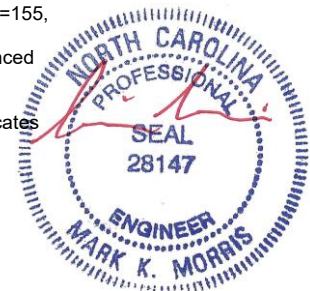
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-8=-532/138, 1-2=-901/208, 2-3=-901/208
BOT CHORD 7-10=-211/909, 6-10=-211/909, 6-11=-211/909, 5-11=-211/909
WEBS 1-7=-221/963, 3-6=-24/270, 3-5=-981/227

NOTES- (11-12)

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-16; Vult=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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=155, 5=138.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

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



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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.

Job	Truss	Truss Type	Qty	Ply	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC
21-5762-R01	R29	Flat Girder	1	2	Job Reference (optional) # 28668

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

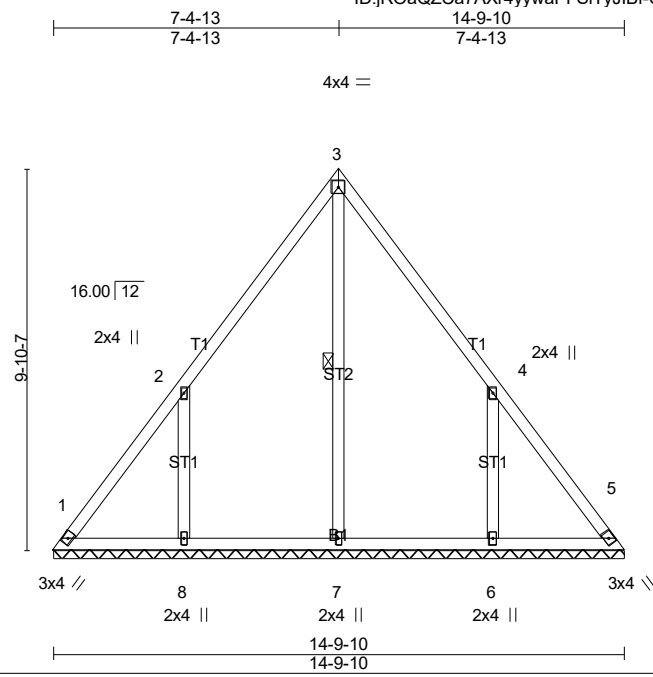


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Job 21-5762-R01	Truss VT01	Truss Type Valley	Qty 1	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 28668
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8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:13:06 2021 Page 1
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Scale = 1:59.7

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.23	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.43	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.13	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.01 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 83 lb	FT = 0%

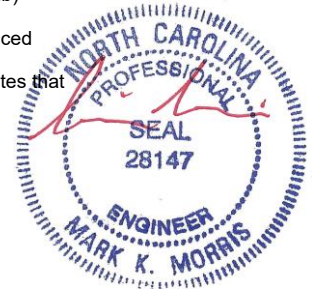
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	WEBS 1 Row at midpt 3-7
	MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 14-9-10.
 (lb) - Max Horz 1=-235(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-341(LC 12), 6=-341(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=428(LC 22), 8=516(LC 19), 6=516(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-274/207
 WEBS 2-8=-410/364, 4-6=-410/364

- NOTES-** (9-10)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-8 to 5-1-2, Exterior(2R) 5-1-2 to 9-8-8, Exterior(2E) 9-8-8 to 14-6-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=341, 6=341.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

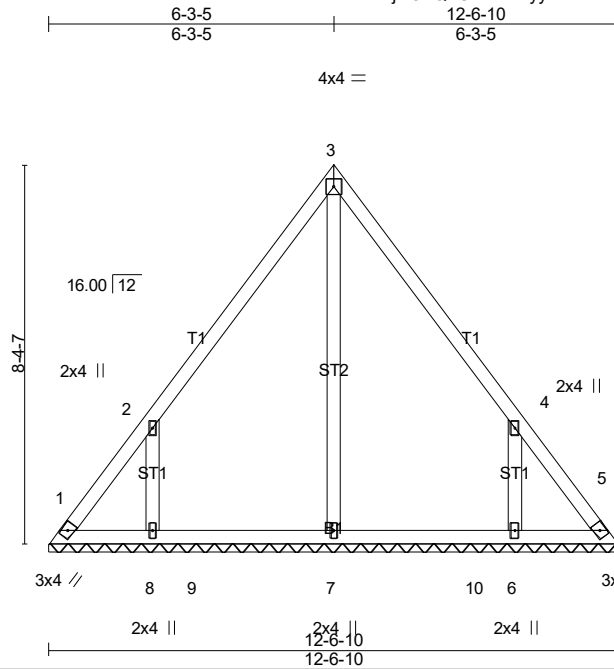


9/28/2021

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

Job 21-5762-R01	Truss VT02	Truss Type Valley	Qty 1	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 28668
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8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:13:07 2021 Page 1
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Scale = 1:50.9

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.21	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.40	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.15	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 67 lb	FT = 0%

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

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

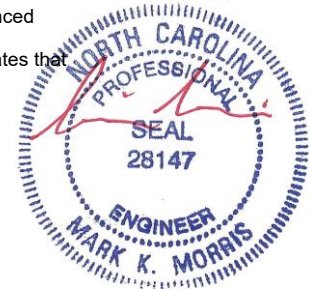
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 12-6-10.
(lb) - Max Horz 1=-198(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 5 except 1=-111(LC 10), 8=-306(LC 12), 6=-305(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=401(LC 22), 8=437(LC 23), 6=437(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-265/193
WEBS 2-8=-387/343, 4-6=-387/342

- 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) 0-3-8 to 5-1-2, Exterior(2R) 5-1-2 to 7-5-8, Exterior(2E) 7-5-8 to 12-3-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Gable requires continuous bottom chord bearing.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 1=111, 8=306, 6=305.
 - 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

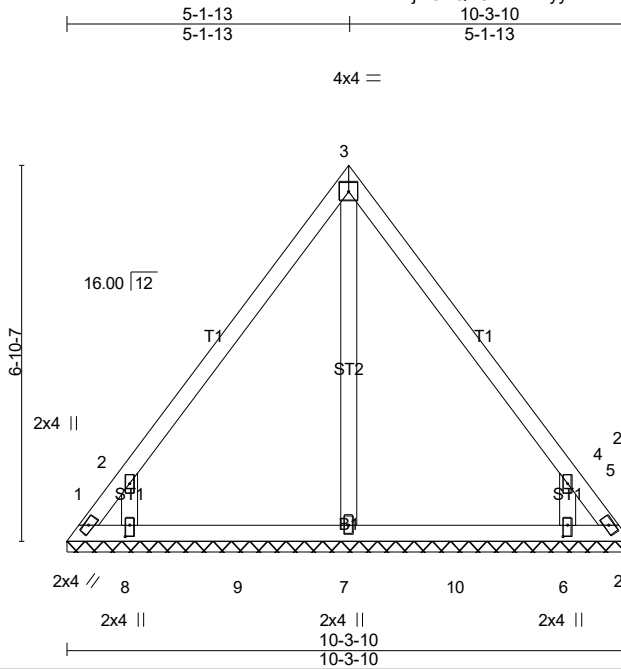


9/28/2021

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Job 21-5762-R01	Truss VT03	Truss Type Valley	Qty 1	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC # 28668
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8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:13:08 2021 Page 1



Scale = 1:42.1

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15		TC 0.25	Vert(LL) n/a	-	n/a	999	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.15		BC 0.29	Vert(CT) n/a	-	n/a	999		
TCDL 10.0	Rep Stress Incr YES		WB 0.12	Horz(CT) 0.00	5	n/a	n/a		
BCLL 0.0 *	Code IRC2018/TPI2014		Matrix-SH						
BCDL 10.0								Weight: 52 lb	FT = 0%

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

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

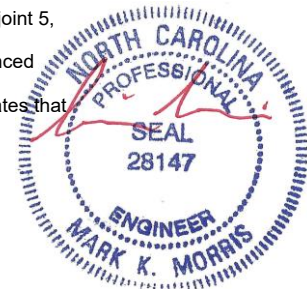
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 10-3-10.
 (lb) - Max Horz 1=161(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) except 1=-205(LC 10), 5=-184(LC 11), 8=-344(LC 12), 6=-343(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) except 1=274(LC 12), 5=260(LC 13), 7=339(LC 19), 8=452(LC 19), 6=452(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-332/240, 4-5=-315/240
 WEBS 2-8=-469/414, 4-6=-469/414

- NOTES-** (9-10)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 205 lb uplift at joint 1, 184 lb uplift at joint 5, 344 lb uplift at joint 8 and 343 lb uplift at joint 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard



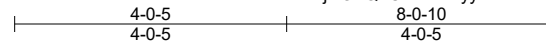
9/28/2021

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Job 21-5762-R01	Truss VT04	Truss Type Valley	Qty 1	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC # 28668
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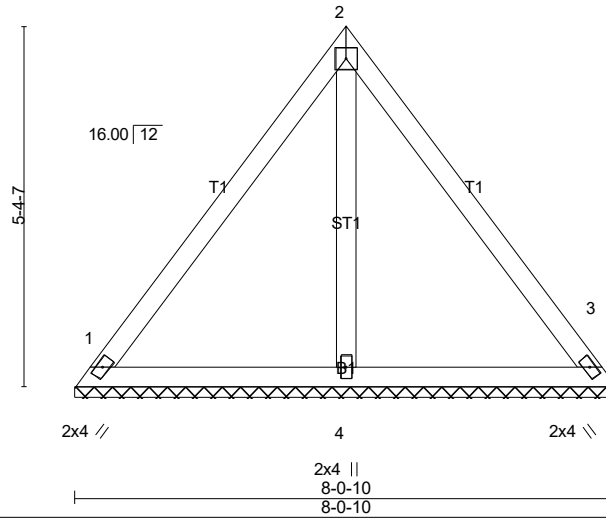
8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:13:09 2021 Page 1

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4x4 =

Scale = 1:34.3



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.37	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.24	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.06	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 38 lb	FT = 0%

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

BRACING-
TOP CHORD
BOT CHORD

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

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

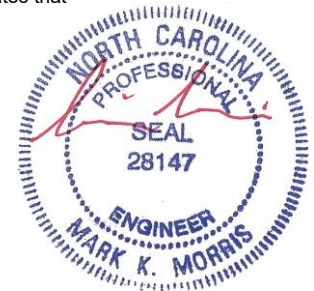
REACTIONS. (lb/size) 1=193/8-0-10 (min. 0-1-8), 3=193/8-0-10 (min. 0-1-8), 4=212/8-0-10 (min. 0-1-8)
Max Horz 1=124(LC 9)
Max Uplift 1=-61(LC 13), 3=-51(LC 12)
Max Grav 1=193(LC 1), 3=193(LC 1), 4=226(LC 5)

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

NOTES- (9-10)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 61 lb uplift at joint 1 and 51 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

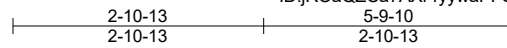


9/28/2021

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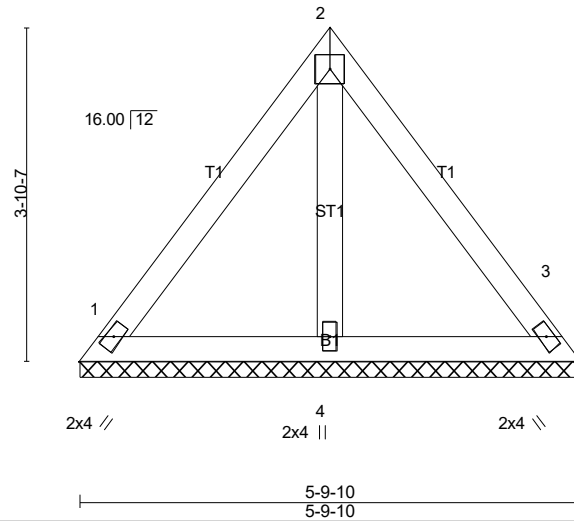
Job 21-5762-R01	Truss VT05	Truss Type Valley	Qty 1	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC Job Reference (optional) # 28668
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4x4 =

Scale = 1:26.6



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.18	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.12	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.02	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 27 lb	FT = 0%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-9-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

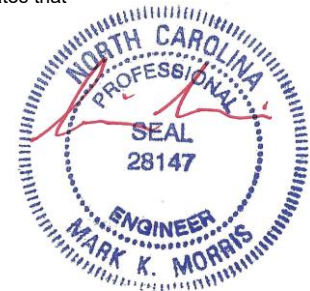
REACTIONS. (lb/size) 1=135/5-9-10 (min. 0-1-8), 3=135/5-9-10 (min. 0-1-8), 4=148/5-9-10 (min. 0-1-8)
Max Horz 1=-86(LC 8)
Max Uplift 1=-43(LC 13), 3=-36(LC 12)
Max Grav 1=135(LC 1), 3=135(LC 1), 4=158(LC 5)

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

NOTES- (9-10)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 1 and 36 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

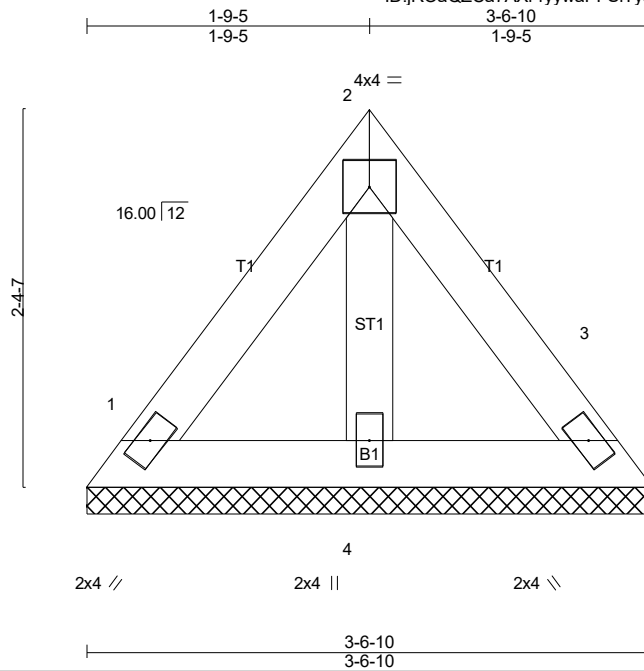


9/28/2021

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Job 21-5762-R01	Truss VT06	Truss Type Valley	Qty 1	Ply 1	LOT 1111 ANDERSON CREEK 159 SCHOLAR DRIVE SPRING LAKE, NC # 28668
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8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Sep 30 14:13:10 2021 Page 1
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Scale = 1:14.5

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.05	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.04	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.01	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 15 lb	FT = 0%

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

BRACING-
TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 3-6-10 oc purlins.
Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size) 1=77/3-6-10 (min. 0-1-8), 3=77/3-6-10 (min. 0-1-8), 4=84/3-6-10 (min. 0-1-8)
Max Horz 1=-49(LC 8)
Max Uplift 1=-24(LC 13), 3=-20(LC 12)
Max Grav 1=77(LC 1), 3=77(LC 1), 4=90(LC 5)

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

NOTES- (9-10)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 1 and 20 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard



9/28/2021

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