

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 #: 31195

JOB: 22-1366-R01

JOB NAME: LOT 190 CROSSING @ ANDERSON CR

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.

28 Truss Design(s)

Trusses:

M01, M02, M03, M04, M05, M06, M07, PB01, PB02, R01, R02, R03, R04, R05, R06, R07, R09, R10, R11, R12, R13, R14, VT01, VT02, VT03, VT04, VT05, VT06



2/22/2022

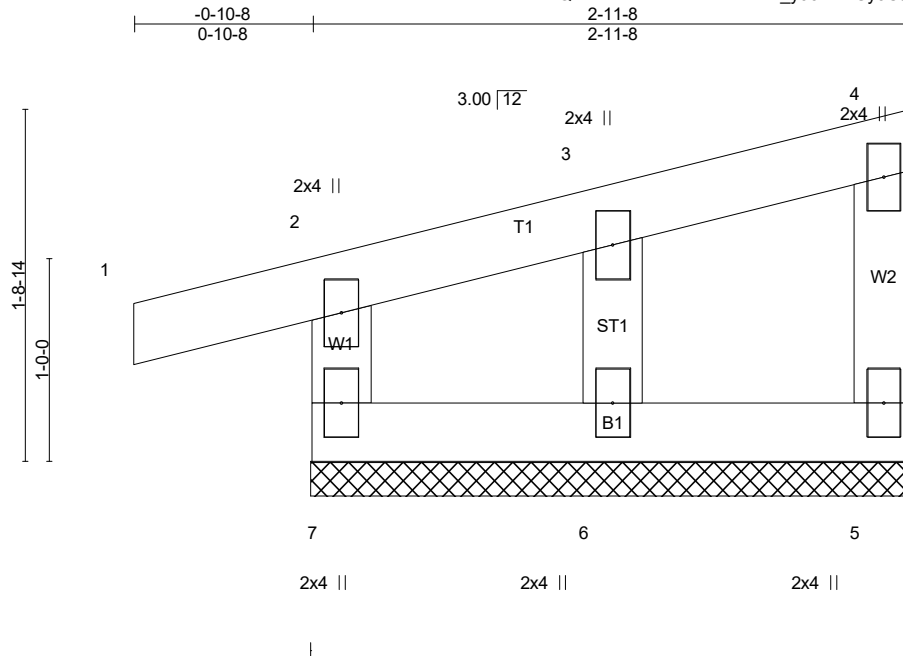
Mark Morris

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Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	M01	Monopitch Supported Gable	2	1	Job Reference (optional) # 31195

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Feb 23 15:04:26 2022 Page 1
 ID:NQLeVDd4PWwD4SswrTSDr_y95ve-2Gy3CJDeXQVWnBdEDk_DJvTqImpwxbu6BKxtziEMo



Scale = 1:11.3

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.11	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) -0.00 1 n/r 180		
TCDL 10.0	Lumber DOL 1.15	WB 0.02	Vert(CT) -0.00 1 n/r 80		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R	Horz(CT) -0.00 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 14 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 2-11-8 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
 MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

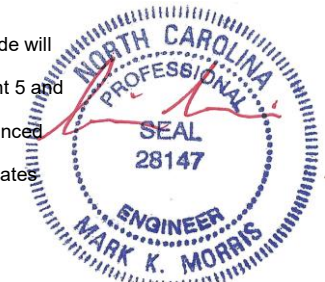
REACTIONS. (lb/size) 7=131/2-11-8 (min. 0-1-8), 5=46/2-11-8 (min. 0-1-8), 6=97/2-11-8 (min. 0-1-8)
 Max Horz 7=55(LC 11)
 Max Uplift 7=-54(LC 10), 5=-9(LC 10), 6=-24(LC 14)
 Max Grav 7=172(LC 21), 5=58(LC 21), 6=120(LC 21)

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

NOTES- (13-14)

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) Gable requires continuous bottom chord bearing.
- 7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 7, 9 lb uplift at joint 5 and 24 lb uplift at joint 6.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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



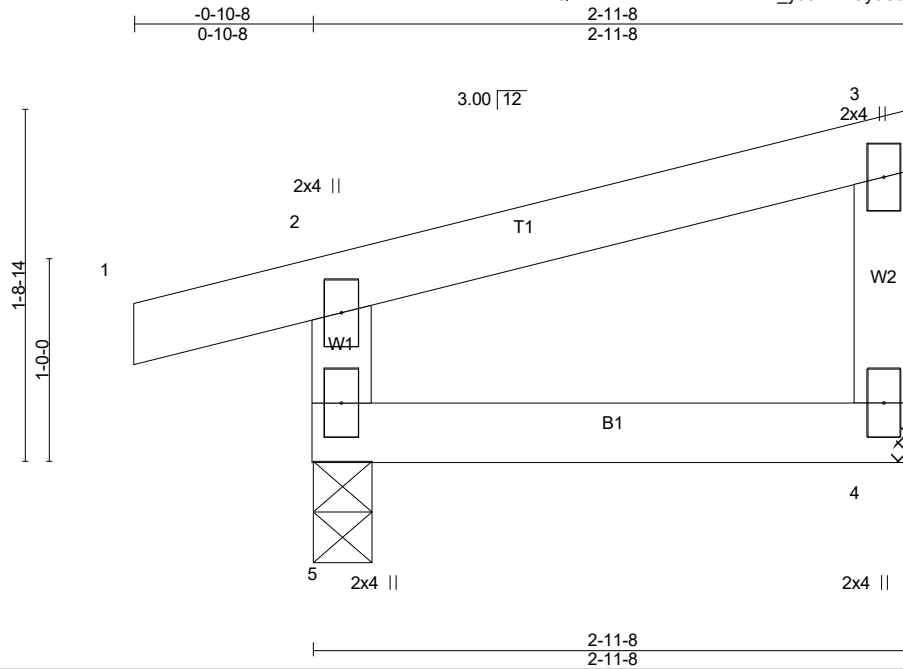
2/22/2022

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Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	M02	Monopitch	7	1	
					# 31195

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Scale = 1:11.3

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.11	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.06	Vert(LL) -0.00 4-5 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.00 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: 13 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 2-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

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

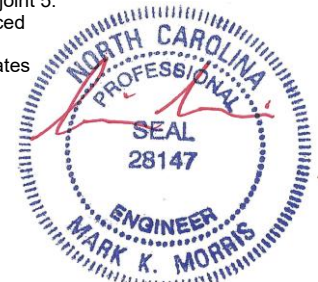
REACTIONS. (lb/size) 4=95/Mechanical, 5=180/0-3-8 (min. 0-1-8)
Max Horz 5=55(LC 11)
Max Uplift 4=-21(LC 14), 5=-63(LC 10)
Max Grav 4=118(LC 21), 5=232(LC 21)

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 21 lb uplift at joint 4 and 63 lb uplift at joint 5.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- 11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard



2/22/2022

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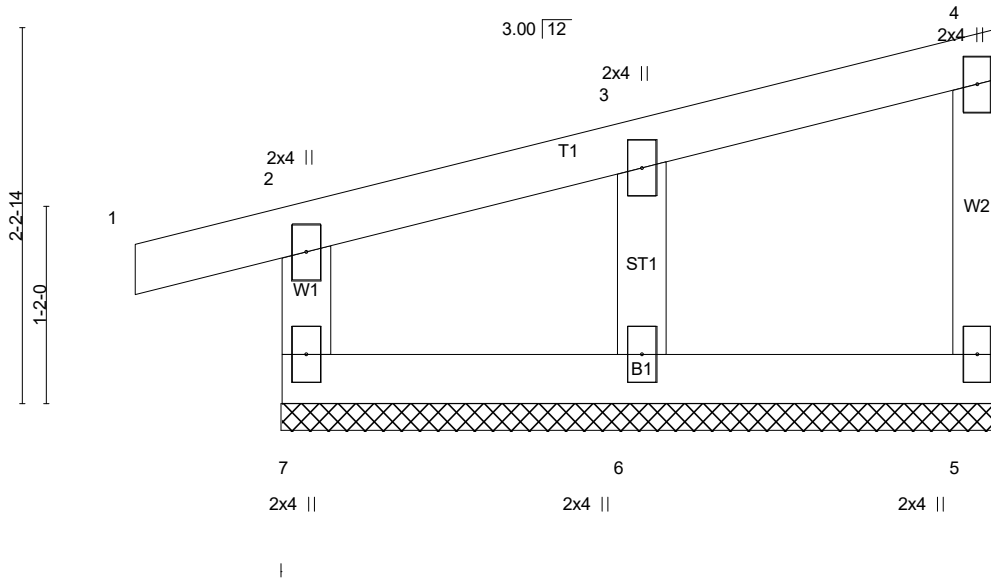
Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	M03	Monopitch Supported Gable	1	1	Job Reference (optional) # 31195

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Scale = 1:13.7



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 1.25	BC 0.12	Vert(LL) -0.00 1 n/r 180		
TCDL 10.0	Lumber DOL 1.25	WB 0.06	Vert(CT) -0.00 1 n/r 80		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R	Horz(CT) -0.00 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 20 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-3-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 7=144/4-3-8 (min. 0-1-8), 5=68/4-3-8 (min. 0-1-8), 6=169/4-3-8 (min. 0-1-8)
Max Horz 7=45(LC 11)
Max Uplift 7=-38(LC 10), 5=-17(LC 10), 6=-52(LC 14)
Max Grav 7=195(LC 21), 5=88(LC 21), 6=217(LC 21)

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

NOTES- (13-16)

- 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; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) Gable requires continuous bottom chord bearing.
- 7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 7, 17 lb uplift at joint 5 and 52 lb uplift at joint 6.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



2/22/2022

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Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	M03	Monopitch Supported Gable	1	1	Job Reference (optional) # 31195

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ID:NQLeVDd4PWwD4SswrTSDr_y95ve-WSWRQeEGljdNOLCQnRVSSw10oi5ffO9?7mwt4IziEMn

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

LOAD CASE(S) Standard



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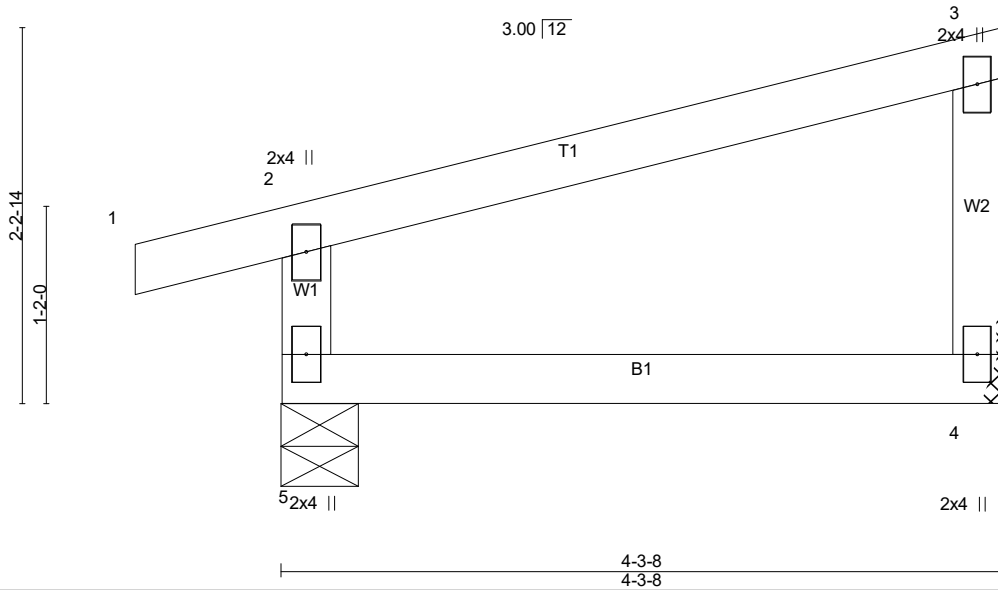
Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	M04	Monopitch	2	1	
					# 31195

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Feb 23 15:04:28 2022 Page 1

ID:NQLeVDd4PWwD4SswrTSDr_y95ve-WSWRQeEGljdNOLCQnRVsSw10Zi4Pf07?7mwt4IziEMn



Scale = 1:13.7



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 1.25	BC 0.13	Vert(LL) -0.01 4-5 >999 240		
TCDL 10.0	Lumber DOL 1.25	WB 0.00	Vert(CT) -0.02 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: 18 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-3-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

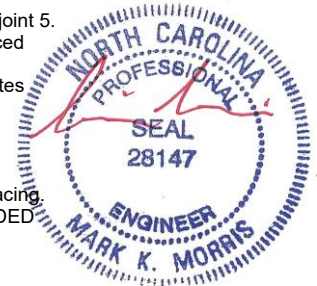
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 4=152/Mechanical, 5=229/0-5-8 (min. 0-1-8)
Max Horz 5=45(LC 11)
Max Uplift 4=-42(LC 14), 5=-62(LC 10)
Max Grav 4=196(LC 21), 5=303(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-271/162

NOTES- (10-13)

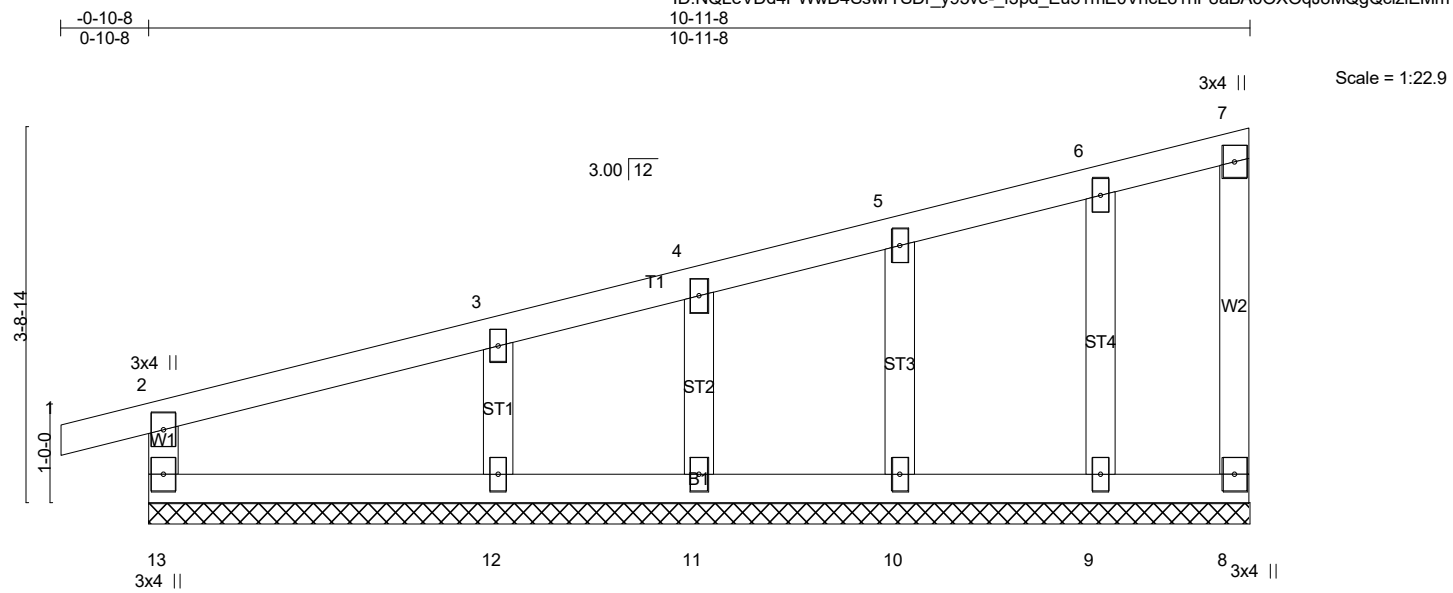
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 4 and 62 lb uplift at joint 5.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 12) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 13) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



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LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.25	Vert(LL)	0.00 1 n/r 180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.25	BC	0.21	Vert(CT)	0.00 1 n/r 80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	-0.00 8 n/a n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-R				Weight: 52 lb	FT = 20%
BCDL	10.0								

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

REACTIONS. All bearings 10-11-8.
 (lb) - Max Horz 13=97(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 13, 8, 11, 12, 10, 9
 Max Grav All reactions 250 lb or less at joint(s) 13, 8, 11, 10, 9 except 12=274(LC 21)

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

- NOTES-** (14-17)
- 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 6-0-2, Corner(3E) 6-0-2 to 10-9-12 zone; end vertical left exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 6) All plates are 2x4 MT20 unless otherwise indicated.
 - 7) Gable requires continuous bottom chord bearing.
 - 8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 9) Gable studs spaced at 2-0-0 oc.
 - 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 11) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 8, 11, 12, 10, 9
 - 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.



2/22/2022

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Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	M05	Monopitch Supported Gable	2	1	Job Reference (optional) # 31195

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

LOAD CASE(S) Standard



2/22/2022

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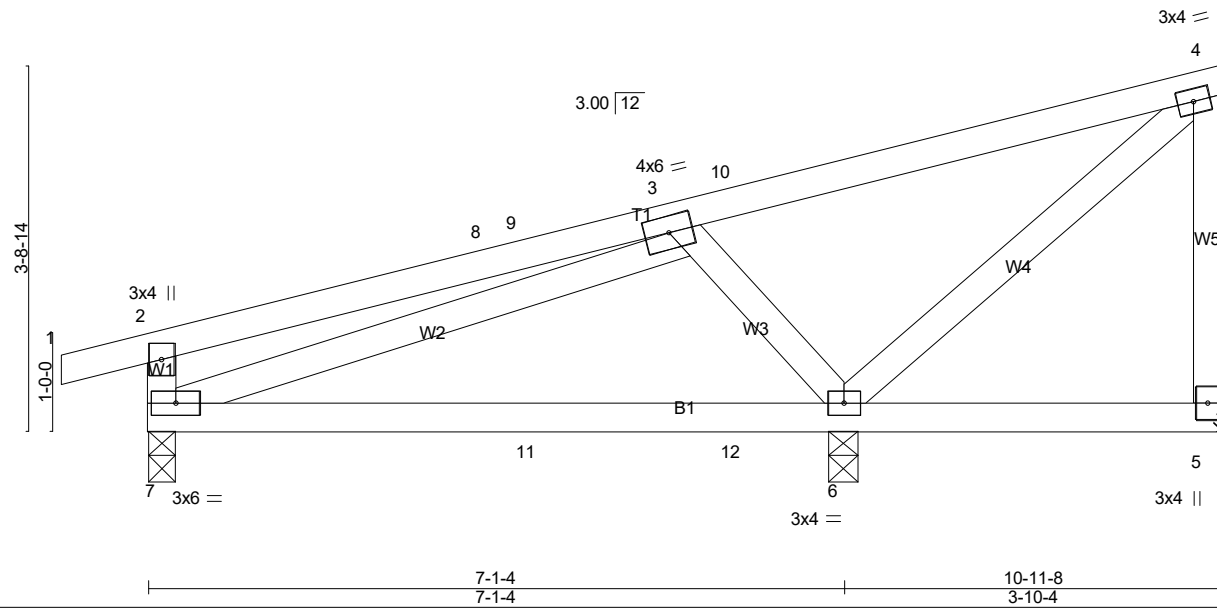
Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	M06	Monopitch	6	1	# 31195

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Scale = 1:23.5



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.49	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.37	Vert(LL) 0.14 6-7 >600 240		
TCDL 10.0	Lumber DOL 1.25	WB 0.12	Vert(CT) -0.12 6-7 >718 180		
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: 59 lb	FT = 20%

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

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

REACTIONS. (lb/size) 5=94/Mechanical, 6=506/0-3-8 (min. 0-1-8), 7=315/0-3-8 (min. 0-1-8)
 Max Horz 7=97(LC 10)
 Max Uplift 5=-36(LC 14), 6=-175(LC 10), 7=-125(LC 10)
 Max Grav 5=124(LC 21), 6=632(LC 21), 7=329(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-8=-187/261, 8-9=-140/264, 3-9=-134/268
 WEBS 3-6=-502/282

- NOTES-** (10-13)
- 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 Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 6-0-2, Exterior(2E) 6-0-2 to 10-9-12 zone; end vertical left exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - 7) Refer to girder(s) for truss to truss connections.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 6=175 7=125.
 - 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 10) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - 11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
 - 12) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
 - 13) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING



2/22/2022

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

Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	M06	Monopitch	6	1	Job Reference (optional) # 31195

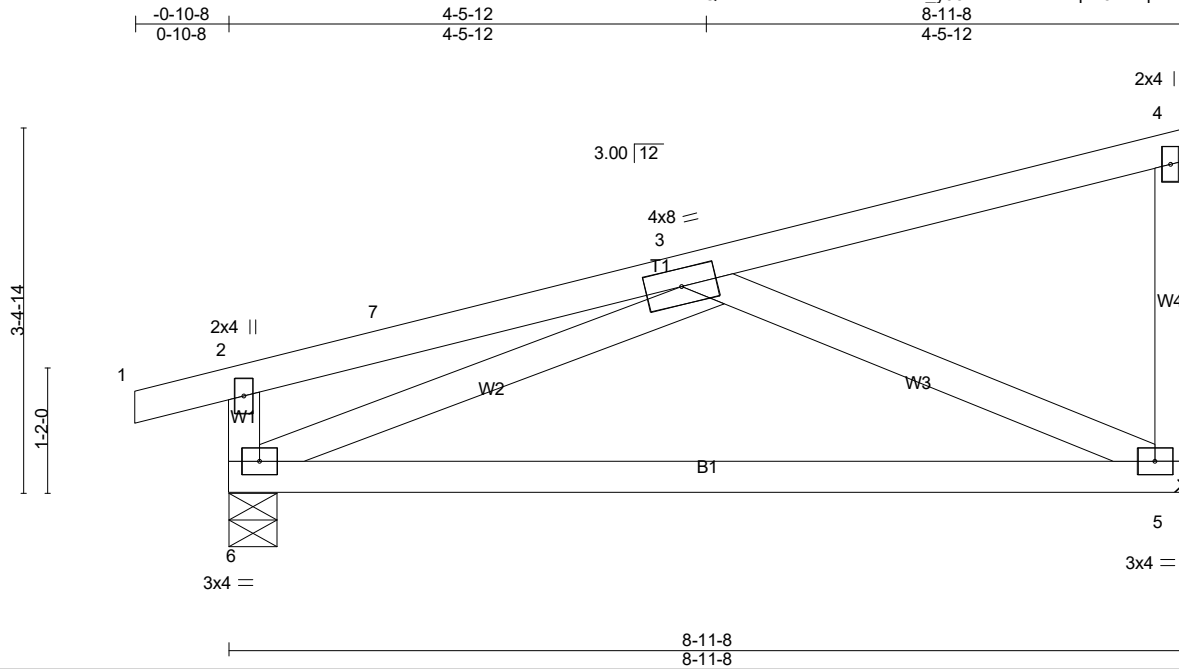
8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Feb 23 15:04:30 2022 Page 2
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LOAD CASE(S) Standard



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Scale = 1:21.5

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.25	TC 0.27	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.25	BC 0.49	Vert(LL) -0.26 5-6 >395 240		
TCDL 10.0	Rep Stress Incr YES	WB 0.24	Vert(CT) -0.53 5-6 >198 180		
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-P	Horz(CT) 0.01 5 n/a n/a		
BCDL 10.0				Weight: 47 lb	FT = 20%

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

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

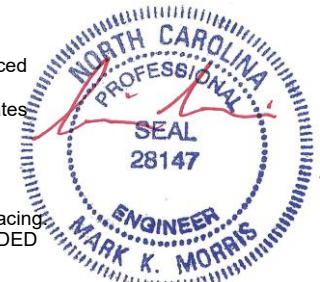
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 5=343/Mechanical, 6=412/0-5-8 (min. 0-1-8)
 Max Horz 6=77(LC 10)
 Max Uplift 5=-85(LC 14), 6=-91(LC 10)
 Max Grav 5=443(LC 21), 6=483(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 BOT CHORD 5-6=-313/479
 WEBS 3-5=-521/340, 3-6=-530/179

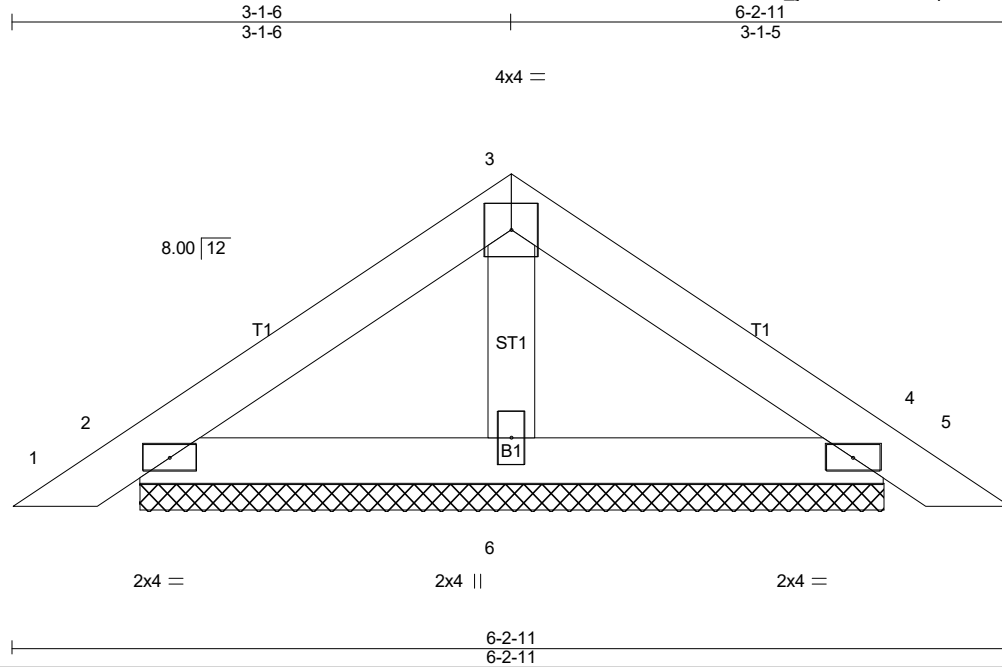
NOTES- (10-13)

- 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 Exterior(2E) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3'-6"-0 tall by 1'-0"-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 12) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 13) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



2/22/2022

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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.09	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.09	Vert(LL) 0.00 5 n/r 180		
TCDL 10.0	Lumber DOL 1.25	WB 0.02	Vert(CT) 0.00 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: 20 lb	FT = 20%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6'-0" oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10'-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=135/4-7-11 (min. 0-1-8), 4=135/4-7-11 (min. 0-1-8), 6=165/4-7-11 (min. 0-1-8)
 Max Horz 2=44(LC 10)
 Max Uplift 2=36(LC 12), 4=42(LC 13)

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

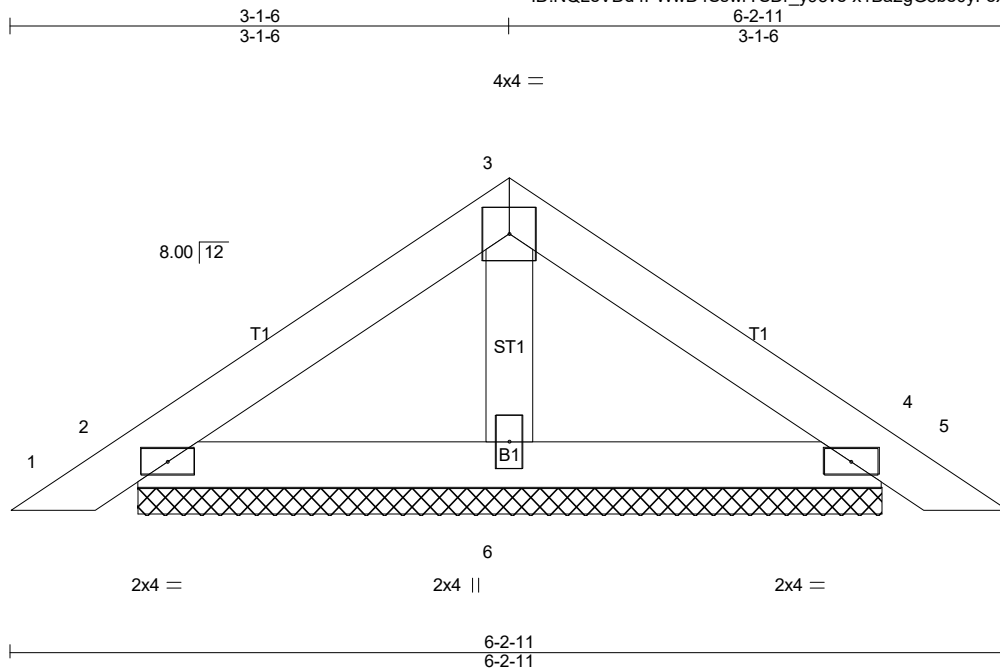
- NOTES-** (11-14)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
 - Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
 - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
 - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



LOAD CASE(S) Standard

2/22/2022

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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.09	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.09	Vert(LL) 0.00 5 n/r 180		
TCDL 10.0	Lumber DOL 1.25	WB 0.02	Vert(CT) 0.00 5 n/r 80		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 4 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 20 lb	FT = 20%

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

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

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

REACTIONS. (lb/size) 2=135/4-7-11 (min. 0-1-8), 4=135/4-7-11 (min. 0-1-8), 6=165/4-7-11 (min. 0-1-8)
 Max Horz 2=44(LC 11)
 Max Uplift 2=36(LC 12), 4=42(LC 13)

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

- NOTES-** (11-14)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=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=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
 - 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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 - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



LOAD CASE(S) Standard

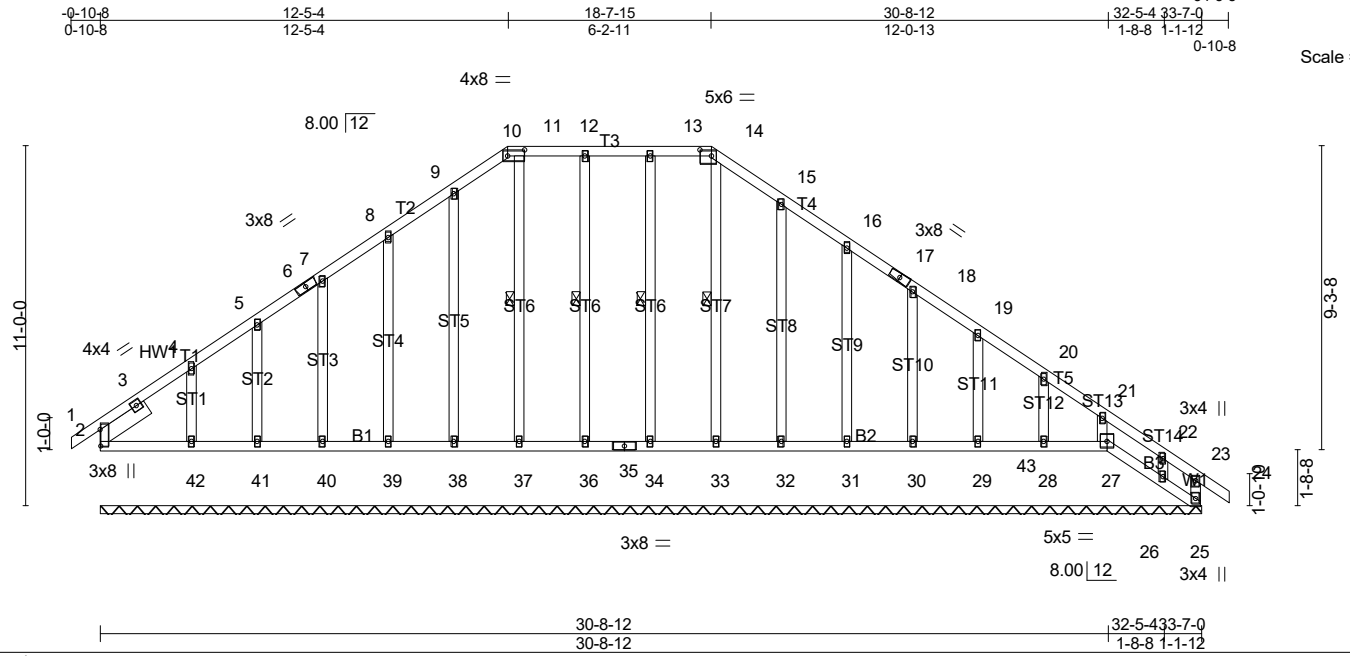
2/22/2022

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Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	R01	Piggyback Base Supported Gable	1	1	# 31195

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Feb 23 15:04:33 2022 Page 1

ID:NQLeVDd4PWwD4SswrTSDr_y95ve-tQJKTMP7GGgV65Oa_5dZ_kuUjnQKdwkH1eelWziEMi



Scale = 1:70.3

Plate Offsets (X,Y)-- [2:0-6-1,0-0-4], [10:0-6-4,0-2-4], [14:0-4-4,0-2-4]

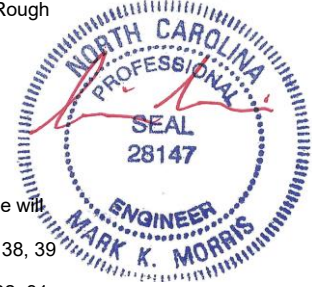
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.17	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.14	Vert(LL) -0.00 24 n/r 180		
TCDL 10.0	Lumber DOL 1.25	WB 0.16	Vert(CT) -0.00 24 n/r 80		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.01 25 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 244 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 13-34, 12-36, 11-37, 14-33
OTHERS 2x4 SP No.3	
SLIDER Left 2x6 SP No.2 - 1-9-8	

REACTIONS. All bearings 33-7-0.
 (lb) - Max Horz 2=-253(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 25, 34, 36, 37, 38, 39, 40, 41, 32, 31, 30, 29, 28 except 2=-124(LC 8), 42=-133(LC 12), 26=-179(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 25, 2, 27, 34, 36, 41, 29, 28, 26 except 37=285(LC 23), 38=263(LC 20), 39=254(LC 20), 40=271(LC 20), 42=262(LC 20), 33=261(LC 23), 32=271(LC 21), 31=255(LC 21), 30=263(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 8-9=-170/274, 9-10=-192/310, 10-11=-165/281, 11-12=-165/281, 12-13=-165/281, 13-14=-165/281, 14-15=-195/316, 15-16=-160/260

- NOTES-** (15-18)
- 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, Exterior(2N) 3-11-2 to 7-7-10, Corner(3R) 7-7-10 to 23-5-9, Exterior(2N) 23-5-9 to 29-7-14, Corner(3E) 29-7-14 to 34-5-8 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=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.0 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25, 34, 36, 37, 38, 39, 40, 41, 32, 31, 30, 29, 28 except (jt=lb) 2=124, 42=133, 26=179.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 27, 34, 36, 37, 38, 39, 40, 41, 42, 33, 32, 31, 30, 29, 28, 26.



2/22/2022

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Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	R01	Piggyback Base Supported Gable	1	1	Job Reference (optional) # 31195

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Feb 23 15:04:33 2022 Page 2

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NOTES- (15-18)

- 14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 15) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 16) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 17) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 18) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



2/22/2022

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Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	R02	Piggyback Base	1	1	Job Reference (optional) # 31195

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Feb 23 15:04:34 2022 Page 2
 ID:NQLeVDd4PWwD4SswrTSDr_y95ve-Lctigil1uZOX6Gga8ics6BHtn7wE3uotVhNBHyziEMh

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

LOAD CASE(S) Standard



2/22/2022

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Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	R03	Piggyback Base	5	1	Job Reference (optional) # 31195

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Feb 23 15:04:38 2022 Page 2
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NOTES- (11-14)

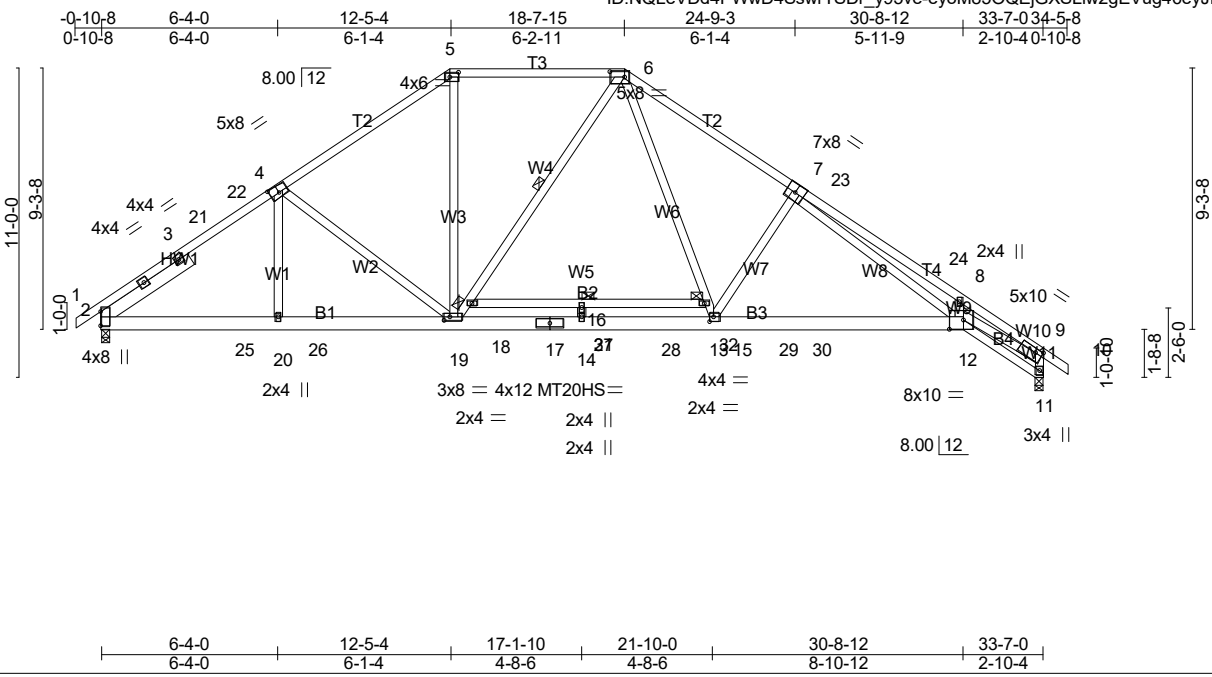
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 13) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 14) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



2/22/2022

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Scale = 1:82.1

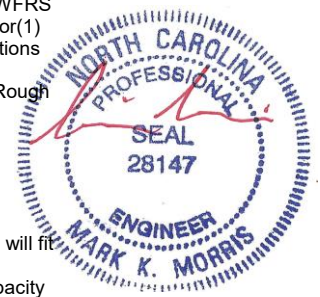
Plate Offsets (X,Y)--	LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
[4:0-4-0,0-3-0], [5:0-3-12,0-2-0], [6:0-6-4,0-2-4], [9:0-3-0,0-1-12], [12:0-6-0,0-4-0], [13:0-1-12,0-2-0], [19:0-2-8,0-1-8]	TCLL (roof) 20.0 Snow (Pf) 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES Code IRC2018/TPI2014	TC 0.73 BC 0.91 WB 0.96 Matrix-SH	in (loc) l/defl L/d Vert(LL) -0.31 15-16 >999 240 Vert(CT) -0.53 15-16 >751 180 Horz(CT) 0.32 11 n/a n/a	MT20 MT20HS	244/190 187/143 Weight: 245 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* T4: 2x4 SP SS	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 *Except* B1,B3: 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 15-18
WEBS 2x4 SP No.3 *Except* W10: 2x4 SP No.2	WEBS 1 Row at midpt 6-18
SLIDER Left 2x6 SP No.2 - 3-9-14	MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 11=1488/0-3-8 (min. 0-1-8), 2=1473/0-3-8 (min. 0-1-14)
Max Horz 2=-251(LC 8)
Max Uplift 1=-143(LC 13), 2=-120(LC 12)
Max Grav 11=1612(LC 21), 2=1592(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2227/200, 3-21=-2134/207, 21-22=-2108/222, 4-22=-2043/225, 4-5=-1920/238,
5-6=-1539/249, 6-7=-2471/263, 7-23=-4659/464, 23-24=-4758/460, 8-24=-4787/437,
8-9=-4834/311, 9-11=-1628/154
BOT CHORD 2-25=-105/1836, 20-25=-105/1836, 20-26=-105/1837, 19-26=-105/1837, 19-27=0/1644,
17-27=0/1644, 14-17=0/1644, 14-28=0/1644, 13-28=0/1644, 13-29=-32/2262,
29-30=-32/2261, 12-30=-32/2261
WEBS 4-19=-349/220, 5-19=-2/735, 18-19=-252/101, 6-15=-91/1249, 13-15=-113/1132,
7-13=-638/271, 7-12=-311/2244, 9-12=-209/3904, 14-16=-259/0

- NOTES-** (12-15)
- 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) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 5-7-13, Exterior(2R) 5-7-13 to 25-5-6, Interior(1) 25-5-6 to 29-7-14, Exterior(2E) 29-7-14 to 34-5-8 zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 11=143



2/22/2022

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Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	R04	Piggyback Base	3	1	Job Reference (optional) # 31195

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Feb 23 15:04:41 2022 Page 2
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NOTES- (12-15)

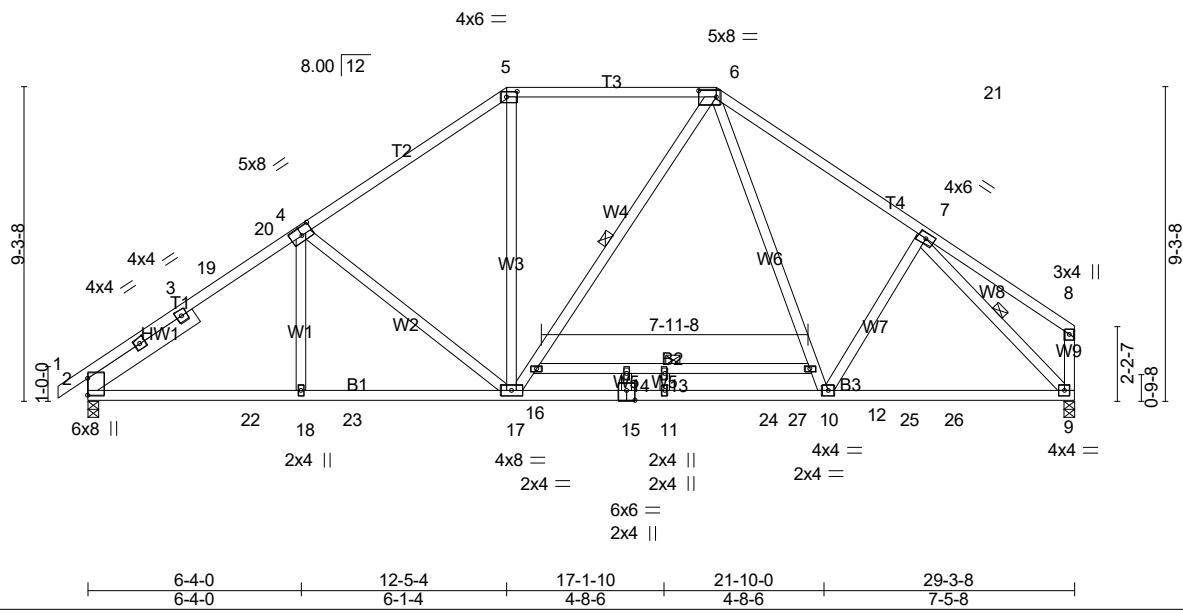
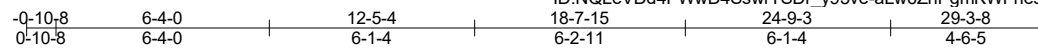
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 14) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 15) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



2/22/2022

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Scale = 1:68.4

Plate Offsets (X,Y)-- [4:0-4-0,0-3-0], [5:0-3-12,0-2-0], [6:0-6-4,0-2-4], [15:0-3-0,Edge]					
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.79	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.77	Vert(LL) -0.41 12-13 >852 240		
TCDL 10.0	Lumber DOL 1.25	WB 0.49	Vert(CT) -0.62 12-13 >560 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.05 9 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 199 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.1 *Except*
 B3: 2x4 SP SS
 WEBS 2x4 SP No.3
 SLIDER Left 2x6 SP No.2 - 3-11-0

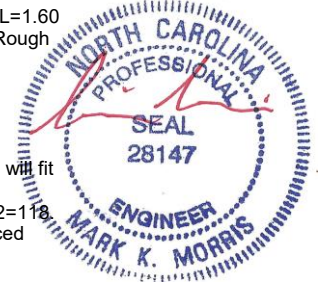
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 2-4-4 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
 6-0-0 oc bracing: 12-16
 WEBS 1 Row at midpt 6-17, 7-9

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

REACTIONS. (lb/size) 2=1287/0-3-8 (min. 0-1-10), 9=1266/0-3-8 (min. 0-1-11)
 Max Horz2=199(LC 9)
 Max Uplift2=-118(LC 12), 9=-69(LC 13)
 Max Grav2=1396(LC 20), 9=1429(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1908/180, 3-19=-1810/188, 19-20=-1785/203, 4-20=-1720/206, 4-5=-1531/223,
 5-6=-1213/236, 6-21=-1592/224, 7-21=-1605/190
 BOT CHORD 2-22=-186/1541, 18-22=-186/1541, 18-23=-185/1543, 17-23=-185/1543, 15-17=-8/1168,
 11-15=-8/1168, 11-24=-8/1168, 10-24=-8/1168, 10-25=-94/1162, 25-26=-94/1162,
 9-26=-94/1162
 WEBS 4-17=-410/215, 5-17=0/521, 6-16=-73/251, 6-12=-42/506, 10-12=-77/349, 7-10=-41/282,
 7-9=-1707/144

- NOTES-** (10-13)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 5-7-13, Exterior(2R) 5-7-13 to 24-4-2, Exterior(2E) 24-4-2 to 29-1-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCDL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 5) Provide adequate drainage to prevent water ponding.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 2=118
 - 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.



2/22/2022

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Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	R05	Piggyback Base	3	1	Job Reference (optional) # 31195

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ID:NQLeVDd4PWwD4SswrTSDr_y95ve-2XUUUn7QlXee6JoQVjooCWlicz9NEPWSMoFojeNziEMX

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

LOAD CASE(S) Standard



2/22/2022

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Scale = 1:56.5

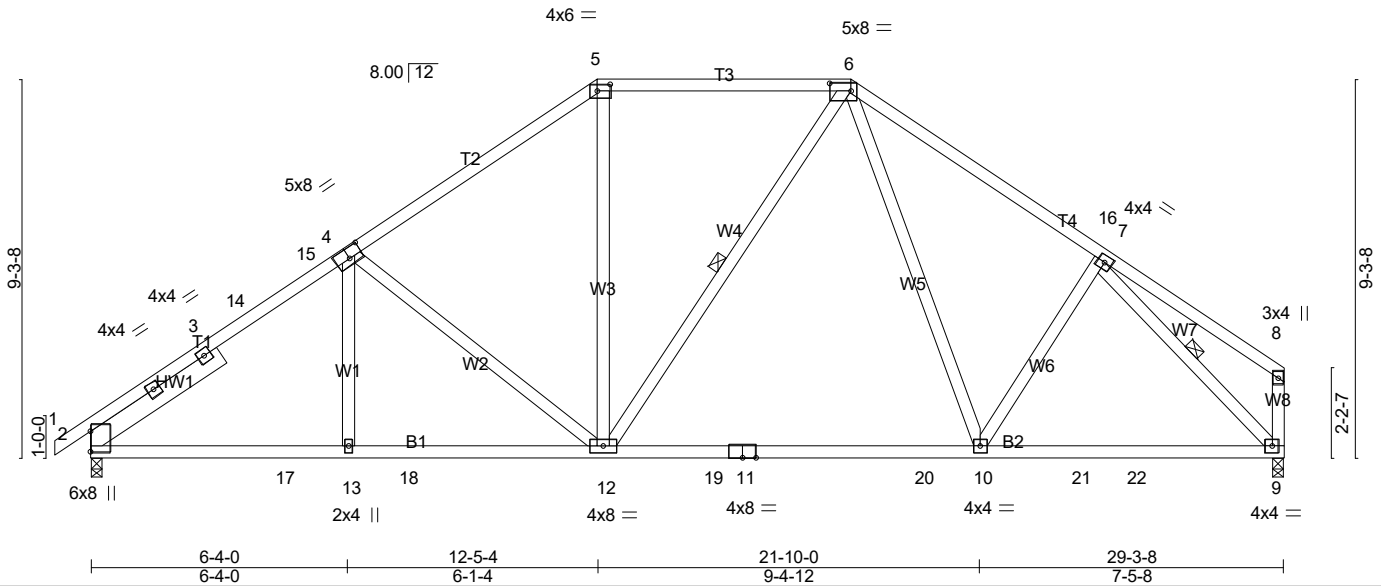


Plate Offsets (X,Y)-- [4:0-4-0,0-3-0], [5:0-3-12,0-2-0], [6:0-6-4,0-2-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.65	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.92	Vert(LL) -0.41 10-12 >863 240		
TCDL 10.0	Lumber DOL 1.25	WB 0.52	Vert(CT) -0.56 10-12 >622 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.05 9 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 186 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2 *Except*
 B2: 2x4 SP No.1
 WEBS 2x4 SP No.3
 SLIDER Left 2x6 SP No.2 - 3-11-0

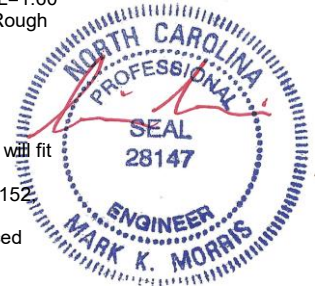
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 3-3-10 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 10-12.
 WEBS 1 Row at midpt 6-12, 7-9

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

REACTIONS. (lb/size) 2=1219/0-3-8 (min. 0-1-8), 9=1165/0-3-8 (min. 0-1-8)
 Max Horz2=199(LC 9)
 Max Uplift2=-152(LC 12), 9=-119(LC 13)
 Max Grav2=1278(LC 20), 9=1243(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1725/232, 3-14=-1628/241, 14-15=-1602/255, 4-15=-1537/259, 4-5=-1330/282, 5-6=-1043/286, 6-16=-1346/291, 7-16=-1360/256
 BOT CHORD 2-17=-227/1395, 13-17=-227/1395, 13-18=-227/1397, 12-18=-227/1397, 12-19=-70/958, 11-19=-70/958, 11-20=-70/958, 10-20=-70/958, 10-21=-141/992, 21-22=-141/992, 9-22=-141/992
 WEBS 4-12=-439/205, 5-12=-25/411, 6-10=-72/379, 7-9=-1447/217

- NOTES-** (10-13)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 5-7-13, Exterior(2R) 5-7-13 to 24-4-2, Exterior(2E) 24-4-2 to 29-1-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 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, 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) 2=152 9=119.
 - 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.



2/22/2022

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Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	R06	Piggyback Base	6	1	Job Reference (optional) # 31195

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

LOAD CASE(S) Standard



2/22/2022

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Job 22-1366-R01	Truss R07	Truss Type Piggyback Base Supported Gable	Qty 1	Ply 1	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING Job Reference (optional) # 31195
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Scale = 1:61.1

Plate Offsets (X,Y)-- [2:0-6-1,0-0-4], [6:0-3-5,Edge], [10:0-6-4,0-2-4], [14:0-4-4,0-2-4]

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 1.25	BC 0.10	Vert(LL) 0.00 1 n/r 180		
TCDL 10.0	Lumber DOL 1.25	WB 0.15	Vert(CT) 0.00 1 n/r 80		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 21 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 226 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 12-30, 11-31, 13-28, 14-27
OTHERS 2x4 SP No.3	
SLIDER Left 2x6 SP No.2 - 1-9-9	

REACTIONS. All bearings 29-3-8.
 (lb) - Max Horz 2=199(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 21, 30, 31, 32, 33, 34, 35, 28, 26, 25, 24, 23 except 2=-117(LC 8),
 36=-146(LC 12), 22=-133(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 21, 2, 30, 35, 28, 23, 22 except 31=285(LC 23), 32=265(LC 20),
 33=254(LC 20), 34=270(LC 20), 36=257(LC 20), 27=262(LC 23), 26=264(LC 21), 25=256(LC 21), 24=262(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 9-10=-155/263, 14-15=-156/255

- NOTES-** (15-18)
- 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, Exterior(2N) 3-11-2 to 7-7-10, Corner(3R) 7-7-10 to 23-5-9, Exterior(2N) 23-5-9 to 24-4-2, Corner(3E) 24-4-2 to 29-1-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 21, 30, 31, 32, 33, 34, 35, 28, 26, 25, 24, 23 except (jt=lb) 2=117, 36=146, 22=133.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



2/22/2022

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Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	R07	Piggyback Base Supported Gable	1	1	Job Reference (optional) # 31195

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

LOAD CASE(S) Standard



2/22/2022

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Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	R09	Common Supported Gable	1	1	
					# 31195

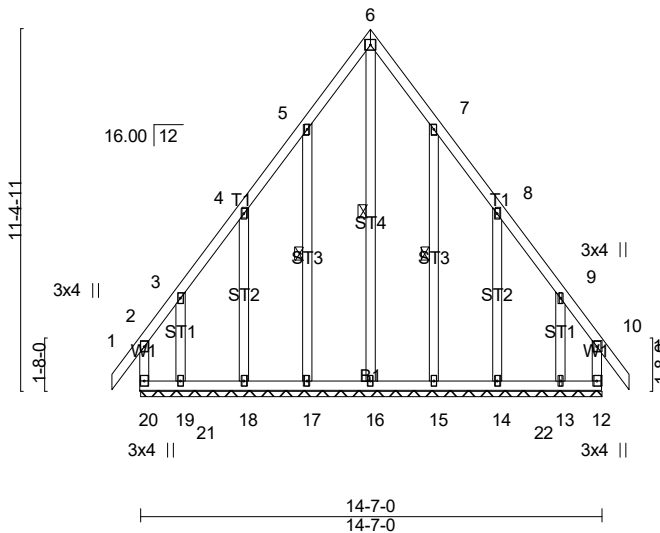
8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Feb 23 15:04:49 2022 Page 1

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-0-10-8 7-3-8 14-7-0 15-5-8
0-10-8 7-3-8 7-3-8 0-10-8

4x4 =

Scale = 1:72.8



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 1.25	BC 0.34	Vert(LL) -0.00 11 n/r 180		
TCDL 10.0	Lumber DOL 1.25	WB 0.41	Vert(CT) -0.01 11 n/r 80		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R	Horz(CT) 0.00 12 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 132 lb	FT = 20%

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

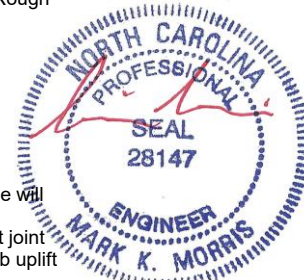
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-16, 5-17, 7-15

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

REACTIONS. All bearings 14-7-0.
(lb) - Max Horz 20=-320(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) except 20=-331(LC 8), 12=-309(LC 9), 17=-148(LC 12), 18=-151(LC 12), 19=-318(LC 12), 15=-148(LC 13), 14=-152(LC 13), 13=-312(LC 13)
Max Grav All reactions 250 lb or less at joint(s) except 20=383(LC 11), 12=359(LC 10), 16=509(LC 13), 17=306(LC 20), 18=278(LC 20), 19=377(LC 10), 15=305(LC 21), 14=279(LC 21), 13=363(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-20=-264/240, 2-3=-280/282, 4-5=-221/330, 5-6=-339/471, 6-7=-339/471, 7-8=-221/330, 9-10=-261/263
WEBS 6-16=-675/412

- NOTES-** (14-17)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Corner(3R) 3-11-2 to 10-7-14, Corner(3E) 10-7-14 to 15-5-8 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=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 331 lb uplift at joint 20, 309 lb uplift at joint 12, 148 lb uplift at joint 17, 151 lb uplift at joint 18, 318 lb uplift at joint 19, 148 lb uplift at joint 15, 152 lb uplift at joint 14 and 312 lb uplift at joint 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.



2/22/2022

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Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	R09	Common Supported Gable	1	1	Job Reference (optional) # 31195

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- 14) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
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LOAD CASE(S) Standard



2/22/2022

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 22-1366-R01	Truss R10	Truss Type Common	Qty 1	Ply 1	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING # 31195
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8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Feb 23 15:04:50 2022 Page 1

ID:NQLeVdD4PWwD4SswrTSDr_y95ve-thr1AV37UPF1juf43vclZygsaVdpHPEBBF2r1ziEMR

-0-10-8 7-3-8 14-7-0 15-5-8
0-10-8 7-3-8 7-3-8 0-10-8

4x6 ||

Scale = 1:71.3

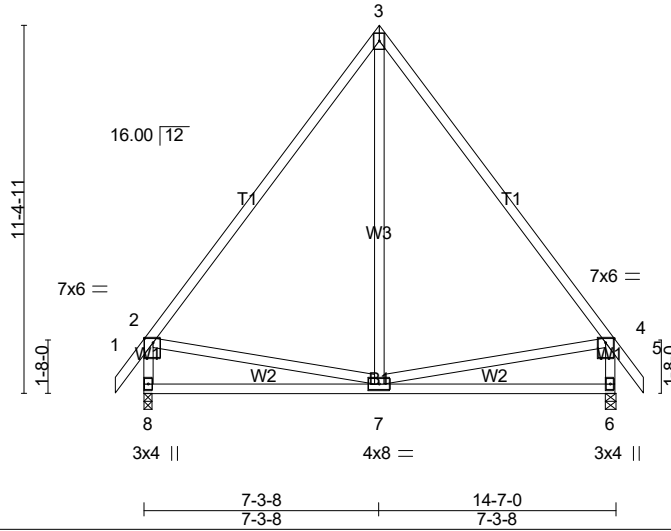


Plate Offsets (X,Y)-- [2:Edge,0-1-8], [4:Edge,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.70	Vert(LL) -0.05	6-7	>999	240	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.45	Vert(CT) -0.11	6-7	>999	180		
TCDL 10.0	Lumber DOL 1.25	WB 0.27	Horz(CT) -0.01	6	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH						
BCDL 10.0	Code IRC2018/TPI2014							
							Weight: 104 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
W1: 2x4 SP No.2

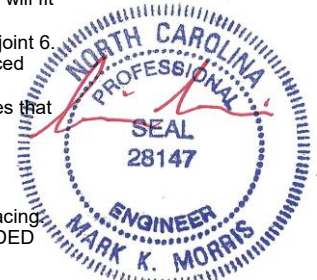
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-1-6 oc bracing.

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

REACTIONS. (lb/size) 8=633/0-3-8 (min. 0-1-8), 6=633/0-3-8 (min. 0-1-8)
Max Horz 8=-320(LC 10)
Max Uplift 8=-98(LC 13), 6=-98(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-527/171, 3-4=-527/171, 2-8=-569/138, 4-6=-569/138
BOT CHORD 7-8=-412/511, 6-7=-246/312
WEBS 3-7=-57/301, 2-7=-261/437, 4-7=-265/438

- NOTES-** (9-12)
- 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) -0-10-8 to 3-11-2, Exterior(2R) 3-11-2 to 10-7-14, Exterior(2E) 10-7-14 to 15-5-8 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
 - TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 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 98 lb uplift at joint 8 and 98 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 bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
 - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
 - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

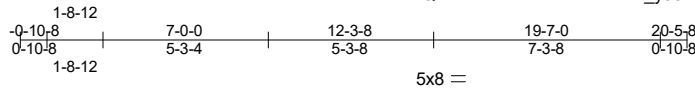


2/22/2022

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

Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	R11	Roof Special Structural Gable	1	1	# 31195

Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Feb 23 15:04:50 2022 Page 1
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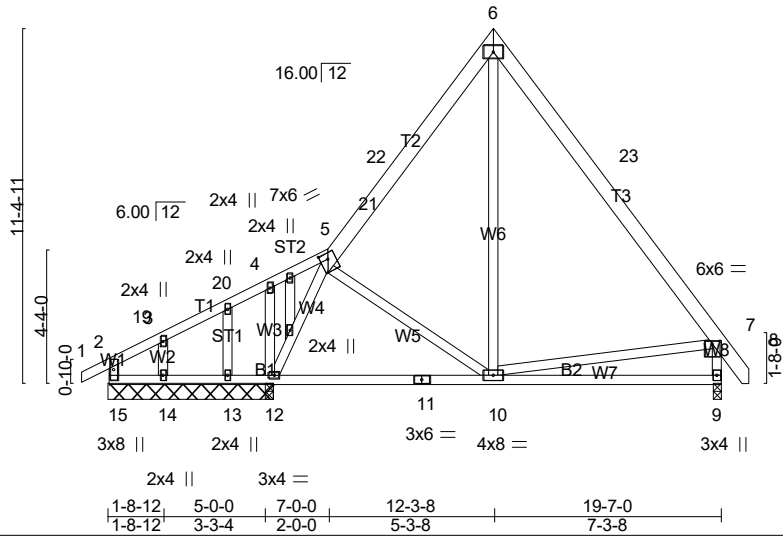


Plate Offsets (X,Y)-- [5:0-3-0,0-2-4], [7:0-3-0,0-1-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.84	Vert(LL)	-0.06 9-10	>999	240	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.42	Vert(CT)	-0.12 9-10	>999	180		
TCDL 10.0	Lumber DOL 1.25	WB 0.24	Horz(CT)	0.00 9	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 152 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2 *Except* T1: 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.
OTHERS 2x4 SP No.3	

REACTIONS. All bearings 5-3-8 except (jt=length) 9=0-3-8.
 (lb) - Max Horz 15=308(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) 15, 9, 13, 12 except 14=-116(LC 14)
 Max Grav All reactions 250 lb or less at joint(s) 15 except 9=670(LC 22), 12=836(LC 21), 12=781(LC 1), 14=304(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 5-21=-505/195, 21-22=-391/208, 6-22=-339/233, 6-23=-357/194, 7-23=-568/166, 7-9=-599/212
 BOT CHORD 11-12=-154/280, 10-11=-154/280
 WEBS 6-10=-94/266, 7-10=-209/364, 4-12=-268/55, 3-14=-251/126, 5-12=-610/146

- NOTES-** (12-15)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 7-5-14, Exterior(2R) 7-5-14 to 15-6-10, Exterior(2E) 15-6-10 to 20-4-4 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Gable 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) 15, 9, 13, 12 except (jt=lb) 14=116.
 - 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.



2/22/2022

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Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	R11	Roof Special Structural Gable	1	1	Job Reference (optional) # 31195

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ID:NQLeVDd4PWwD4SswrTSDr_y95ve-LtP8FWVhuoX6ftTrdmQrlmUoQ_sjYI?OPr?bOTziEMQ

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

LOAD CASE(S) Standard



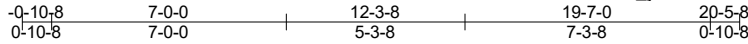
2/22/2022

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Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	R12	Roof Special	2	1	
Job Reference (optional)					# 31195

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Feb 23 15:04:51 2022 Page 1

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5x8 =

Scale = 1:68.5

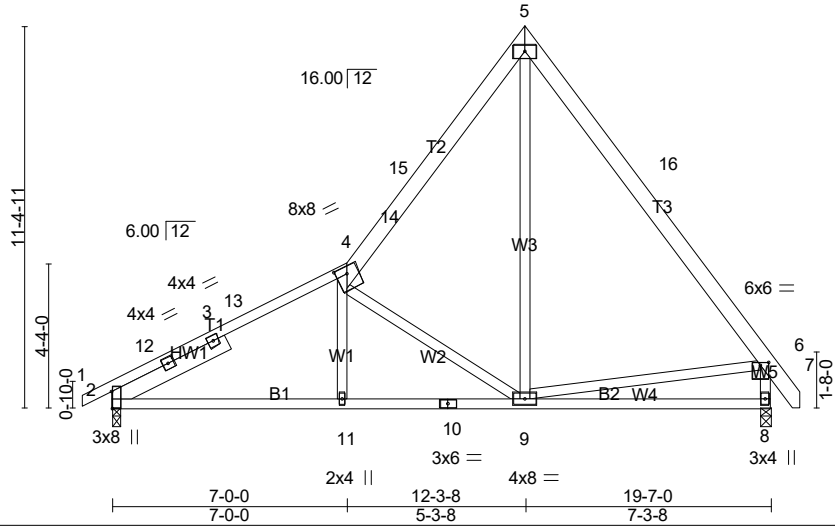


Plate Offsets (X,Y)-- [2:0-6-1,Edge], [4:0-4-0,0-2-8], [6:0-3-0,0-1-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.85	Vert(LL) -0.07	8-9	>999	240	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.48	Vert(CT) -0.15	8-9	>999	180		
TCDL 10.0	Lumber DOL 1.25	WB 0.62	Horz(CT) 0.02	8	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH						
BCDL 10.0	Code IRC2018/TPI2014							
							Weight: 148 lb	FT = 20%

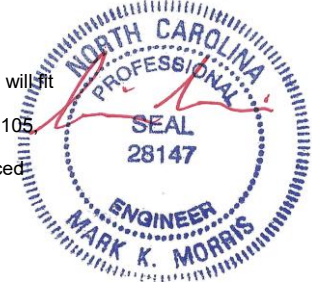
LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
T1: 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 - 3-10-3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-7-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=830/0-3-8 (min. 0-1-8), 8=832/0-3-8 (min. 0-1-8)
Max Horz 2=300(LC 13)
Max Uplift 2=-105(LC 14), 8=-114(LC 14)
Max Grav 2=870(LC 21), 8=846(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-12=-1220/255, 3-12=-1189/263, 3-13=-1118/268, 4-13=-1097/281, 4-14=-755/241,
14-15=-729/258, 5-15=-596/283, 5-16=-586/243, 6-16=-758/215, 6-8=-772/257
BOT CHORD 2-11=-158/993, 10-11=-160/989, 9-10=-160/989
WEBS 4-9=-781/324, 5-9=-178/560, 6-9=-139/352

- NOTES-** (10-13)
- 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, Interior(1) 3-11-2 to 7-5-14, Exterior(2R) 7-5-14 to 15-6-10, Exterior(2E) 15-6-10 to 20-4-4 zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=105, 8=114.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



2/22/2022

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Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	R12	Roof Special	2	1	Job Reference (optional) # 31195

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ID:NQLeVDd4PWwD4SswrTSDr_y95ve-p4yWSsWKf5fzG121BUx4q_1z_NBdH6JXeVk8wvziEMP

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

LOAD CASE(S) Standard



2/22/2022

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

Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	R13	Roof Special	1	1	
					# 31195

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Feb 23 15:04:53 2022 Page 1

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 0-10-8 7-0-0 12-3-8 19-3-8 20-5-8
 0-10-8 7-0-0 5-3-8 7-0-0 1-2-0

5x8 = Scale = 1:68.5

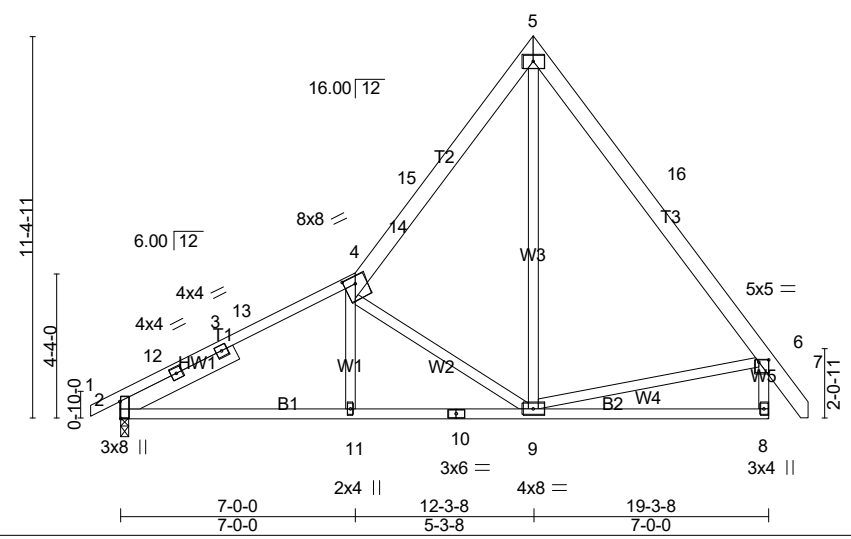


Plate Offsets (X,Y)-- [2:0-6-1,Edge], [4:0-4-0,0-2-8], [6:0-3-8,0-0-12]					
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.74	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.47	Vert(LL) -0.06 8-9 >999 240		
TCDL 10.0	Lumber DOL 1.25	WB 0.62	Vert(CT) -0.13 8-9 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.02 8 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 148 lb	FT = 20%

LUMBER-
 TOP CHORD 2x6 SP No.2 *Except*
 T1: 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3
 SLIDER Left 2x6 SP No.2 - 3-10-3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 3-7-13 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=817/0-3-8 (min. 0-1-8), 8=839/Mechanical
 Max Horz 2=266(LC 13)
 Max Uplift 2=-103(LC 14), 8=-119(LC 14)
 Max Grav 2=859(LC 21), 8=853(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-12=-1198/250, 3-12=-1167/258, 3-13=-1096/263, 4-13=-1076/277, 4-14=-733/237,
 14-15=-708/254, 5-15=-574/279, 5-16=-566/246, 6-16=-723/220, 6-8=-785/276
 BOT CHORD 2-11=-178/974, 10-11=-179/969, 9-10=-179/969
 WEBS 4-9=-773/327, 5-9=-180/533, 6-9=-75/361

- NOTES-** (11-14)
- 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) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 7-5-14, Exterior(2R) 7-5-14 to 15-6-10, Exterior(2E) 15-6-10 to 20-4-4 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=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=103, 8=119.
 - 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.



2/22/2022

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

Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	R13	Roof Special	1	1	Job Reference (optional) # 31195

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

LOAD CASE(S) Standard



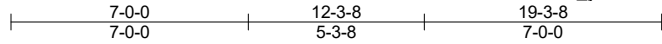
2/22/2022

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

Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	R14	ROOF SPECIAL	1	1	# 31195

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5x8 =

Scale = 1:68.5

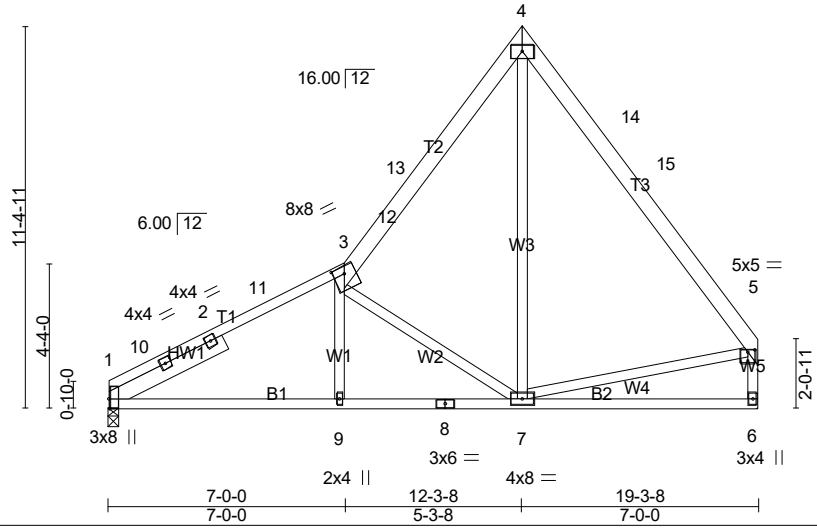


Plate Offsets (X,Y)-- [1:0-3-8,Edge], [3:0-4-0,0-2-8], [5:0-2-8,0-0-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.76	Vert(LL)	-0.06 6-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.25	BC	0.47	Vert(CT)	-0.13 6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.02 6	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							
BCDL	10.0									Weight: 142 lb	FT = 20%

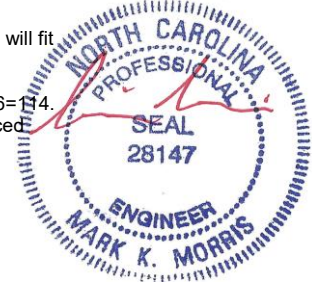
LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
T1: 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 - 3-10-3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-5-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=766/0-3-8 (min. 0-1-8), 6=768/Mechanical
Max Horz 1=269(LC 11)
Max Uplift1=-83(LC 14), 6=-114(LC 14)
Max Grav 1=807(LC 20), 6=781(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-10=-1204/246, 2-10=-1175/254, 2-11=-1084/259, 3-11=-1080/272, 3-12=-737/229,
12-13=-712/246, 4-13=-578/271, 4-14=-540/230, 14-15=-566/205, 5-15=-720/202,
5-6=-714/222
BOT CHORD 1-9=-212/981, 8-9=-213/976, 7-8=-213/976
WEBS 3-7=-779/328, 4-7=-156/533, 5-7=-72/329

- NOTES-** (10-13)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 4-9-10, Interior(1) 4-9-10 to 7-5-14, Exterior(2R) 7-5-14 to 14-4-10, Exterior(2E) 14-4-10 to 19-2-3 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 6=114.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



2/22/2022

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Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	R14	ROOF SPECIAL	1	1	Job Reference (optional) # 31195

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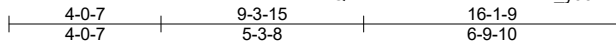
- 10) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the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

LOAD CASE(S) Standard



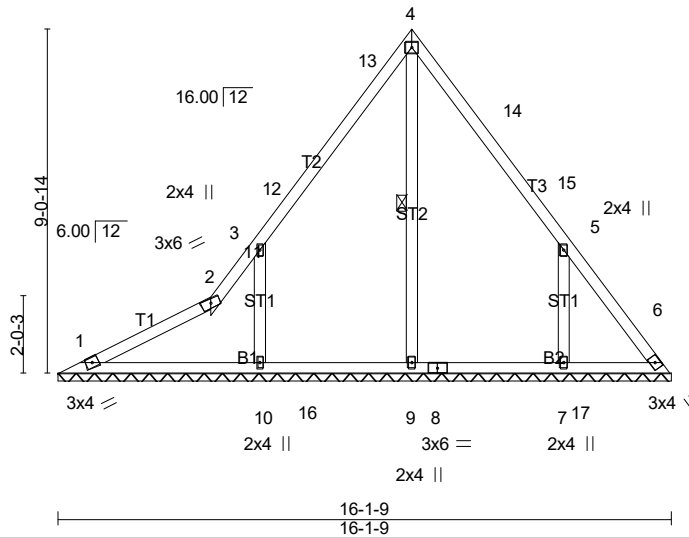
2/22/2022

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.



4x4 =

Scale = 1:60.7



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.25	TC 0.36	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.25	BC 0.41	Vert(LL) n/a - n/a 999		
TCDL 10.0	Rep Stress Incr YES	WB 0.15	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-SH	Horz(CT) 0.01 6 n/a n/a		
BCDL 10.0				Weight: 81 lb	FT = 20%

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

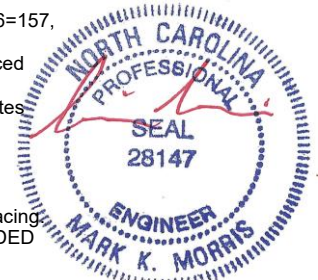
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
 WEBS 1 Row at midpt 4-9

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

REACTIONS. All bearings 16-1-9.
 (lb) - Max Horz 1=219(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 9 except 6=-157(LC 13), 10=-247(LC 14), 7=-318(LC 15)
 Max Grav All reactions 250 lb or less at joint(s) 1, 6 except 9=611(LC 25), 10=493(LC 20), 7=479(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 5-6=-271/287
 WEBS 4-9=-363/47, 3-10=-381/397, 5-7=-342/406

- NOTES-** (10-13)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-7 to 4-0-7, Interior(1) 4-0-7 to 4-6-5, Exterior(2R) 4-6-5 to 11-0-8, Exterior(2E) 11-0-8 to 15-10-1 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 6=157, 10=247, 7=318.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
 - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
 - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



2/22/2022

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

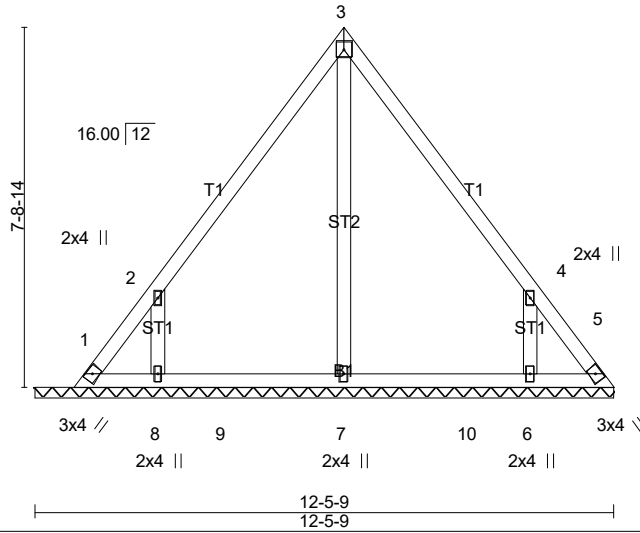
Job 22-1366-R01	Truss VT02	Truss Type Valley	Qty 1	Ply 1	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING Job Reference (optional) # 31195
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8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Feb 23 15:04:58 2022 Page 1
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4x4 =

Scale = 1:49.5



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 1.25	BC 0.37	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.25	WB 0.12	Vert(CT) n/a - n/a 999		
BCDL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 61 lb	FT = 20%

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

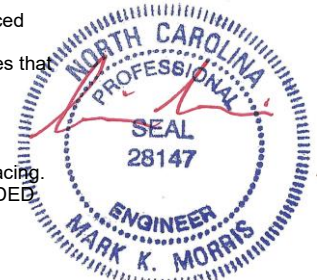
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. All bearings 12-5-9.
(lb) - Max Horz 1=183(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-134(LC 10), 5=-109(LC 11), 8=-304(LC 12), 6=-304(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=379(LC 22), 8=420(LC 19), 6=420(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-277/196, 4-5=-258/171
WEBS 2-8=-397/351, 4-6=-397/351

- NOTES-** (9-12)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 1-1-12 to 5-11-6, Exterior(2R) 5-11-6 to 7-4-8, Exterior(2E) 7-4-8 to 12-2-1 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) 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 134 lb uplift at joint 1, 109 lb uplift at joint 5, 304 lb uplift at joint 8 and 304 lb uplift at joint 6.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - 10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
 - 11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
 - 12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



LOAD CASE(S) Standard

2/22/2022

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Job	Truss	Truss Type	Qty	Ply	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING
22-1366-R01	VT03	Valley	1	1	
					# 31195

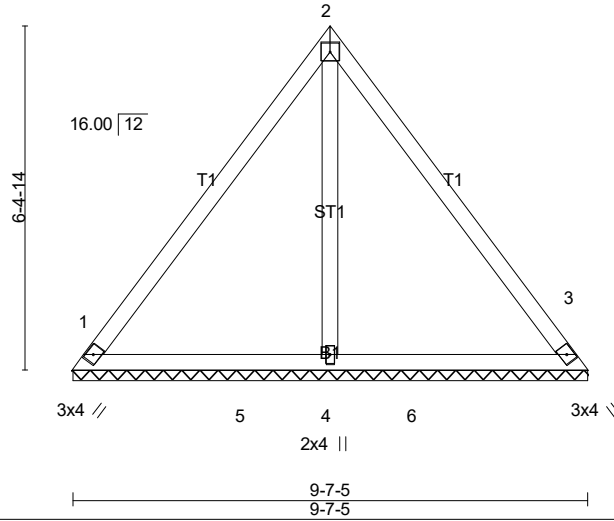
8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Feb 23 15:05:00 2022 Page 1

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4x4 =

Scale = 1:42.9



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.29	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.44	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.25	WB 0.10	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 45 lb	FT = 20%

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

BRACING-
TOP CHORD
BOT CHORD

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

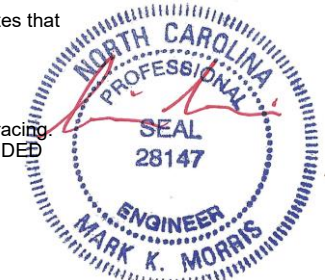
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=210/9-7-5 (min. 0-1-8), 3=210/9-7-5 (min. 0-1-8), 4=302/9-7-5 (min. 0-1-8)
Max Horz 1=-149(LC 8)
Max Uplift 1=-43(LC 13), 3=-31(LC 12), 4=-39(LC 12)
Max Grav 1=215(LC 20), 3=210(LC 1), 4=426(LC 19)

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

NOTES- (9-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=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=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 1, 31 lb uplift at joint 3 and 39 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

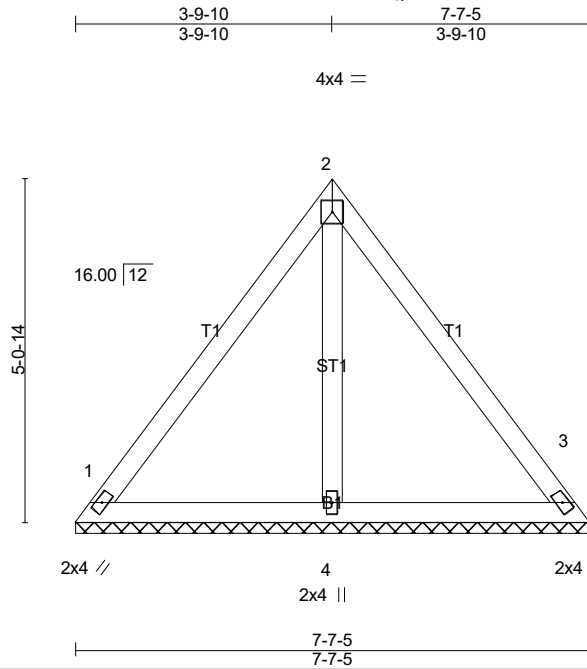


2/22/2022

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 22-1366-R01	Truss VT04	Truss Type Valley	Qty 1	Ply 1	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING Job Reference (optional) # 31195
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ID:NQLeVDd4PWwD4SswrTSDr_y95ve-2p?vLxdzXssoisPEmDtbBitvdy0JvtKYsjjOQ7kuziEMG



Scale = 1:34.1

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.32	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.21	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.25	WB 0.05	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: 35 lb	FT = 20%

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

BRACING-
TOP CHORD
BOT CHORD

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

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

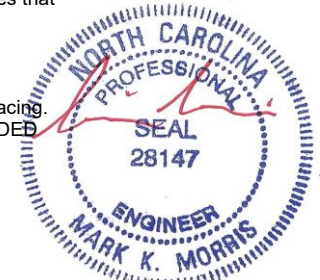
REACTIONS. (lb/size) 1=182/7-7-5 (min. 0-1-8), 3=182/7-7-5 (min. 0-1-8), 4=199/7-7-5 (min. 0-1-8)
Max Horz 1=-116(LC 8)
Max Uplift 1=-58(LC 13), 3=-48(LC 12)
Max Grav 1=182(LC 1), 3=182(LC 1), 4=213(LC 5)

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

NOTES- (9-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=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=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 1 and 48 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 bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



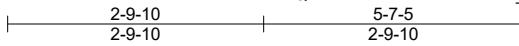
2/22/2022

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 22-1366-R01	Truss VT05	Truss Type Valley	Qty 1	Ply 1	LOT 190 CROSSING @ ANDERSON CREEK 328 KENSINGTON DRIVE SPRING Job Reference (optional) # 31195
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3x6 =

Scale = 1:25.1

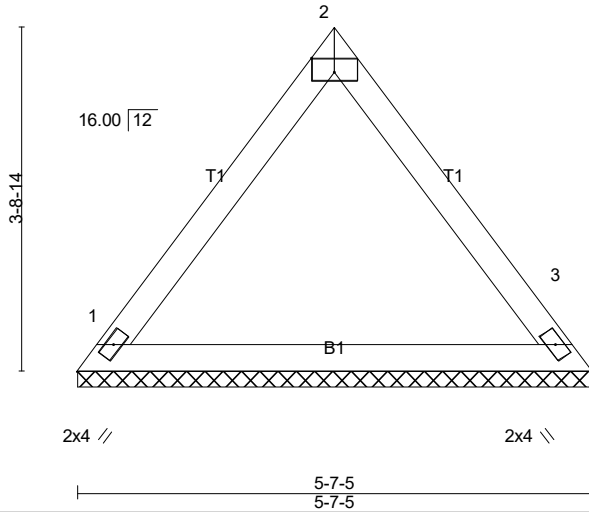


Plate Offsets (X,Y)-- [2:Edge,0-1-13]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.54	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.25	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P							
BCDL 10.0	Code IRC2018/TPI2014								
								Weight: 21 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-7-5 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.

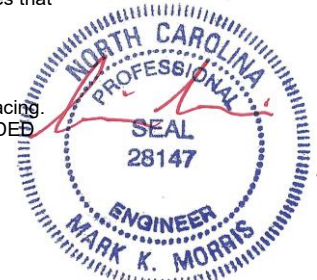
REACTIONS. (lb/size) 1=201/5-7-5 (min. 0-1-8), 3=201/5-7-5 (min. 0-1-8)
Max Horz 1=-83(LC 8)
Max Uplift1=-28(LC 13), 3=-28(LC 12)

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

NOTES- (9-12)

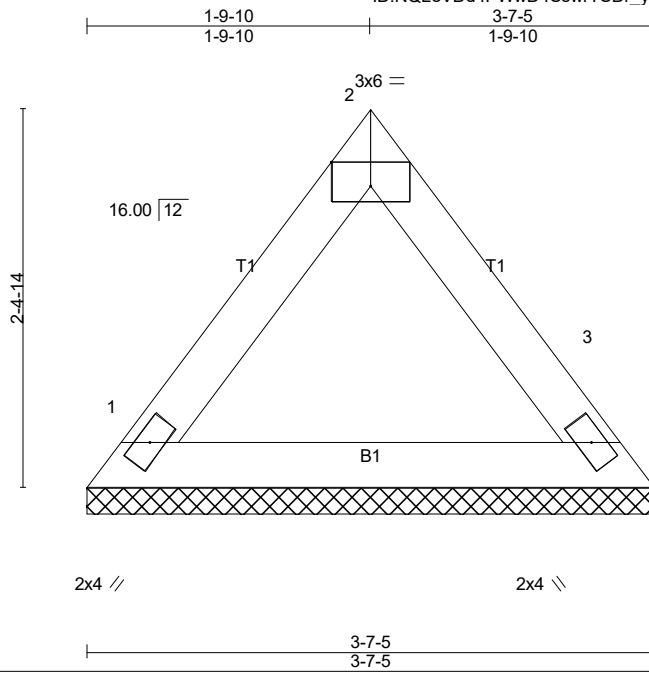
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 1 and 28 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 bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



2/22/2022

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Scale = 1:14.6

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.05	Vert(LL)	n/a	-	n/a	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.25	BC 0.18	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.25	WB 0.00	Horz(CT)	0.00	3	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 13 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-7-5 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.

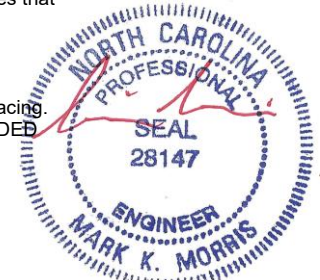
REACTIONS. (lb/size) 1=121/3-7-5 (min. 0-1-8), 3=121/3-7-5 (min. 0-1-8)
Max Horz 1=-50(LC 8)
Max Uplift 1=-17(LC 13), 3=-17(LC 12)

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

NOTES- (9-12)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 1 and 17 lb uplift at joint 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



2/22/2022

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