

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 #: 24696

JOB: 20-5717-R01

JOB NAME: LOT 1161 CARRIAGE CIRCLE

Wind Code: 37

Wind Speed: Vult= 130mph

Exposure Category: B

Mean Roof Height (feet): 23

24 Truss Design(s)

Trusses:

J09, J10, PB01, PB02, R01, R02, R03, R04, R05, R06, R07, R08, R09, R10, R11, R13, R18, R23, R24, R25, R26, VT01, VT03, VT04



12/9/2020

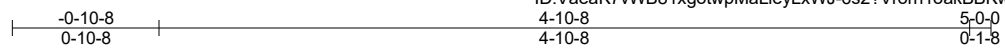
Mark Morris

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

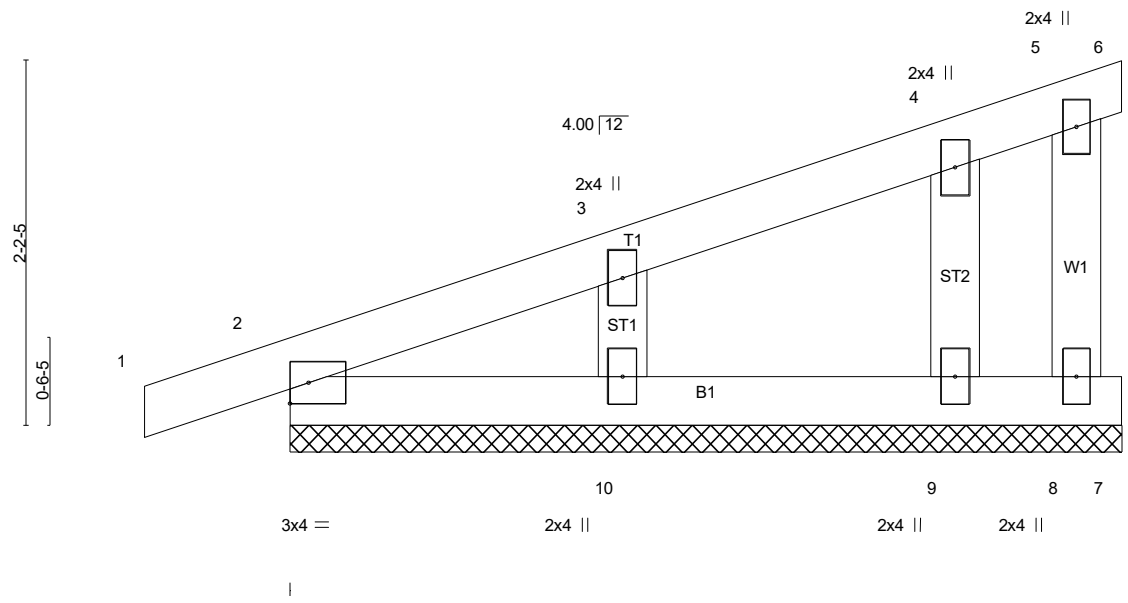
This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is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

Job 20-5717-R01	Truss J09	Truss Type GABLE	Qty 1	Ply 1	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N.C. Job Reference (optional) # 24696
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Scale = 1:13.9



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

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

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

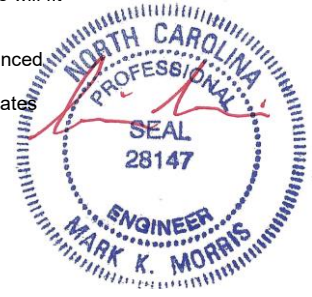
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

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

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

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

LOAD CASE(S) Standard



12/9/2020

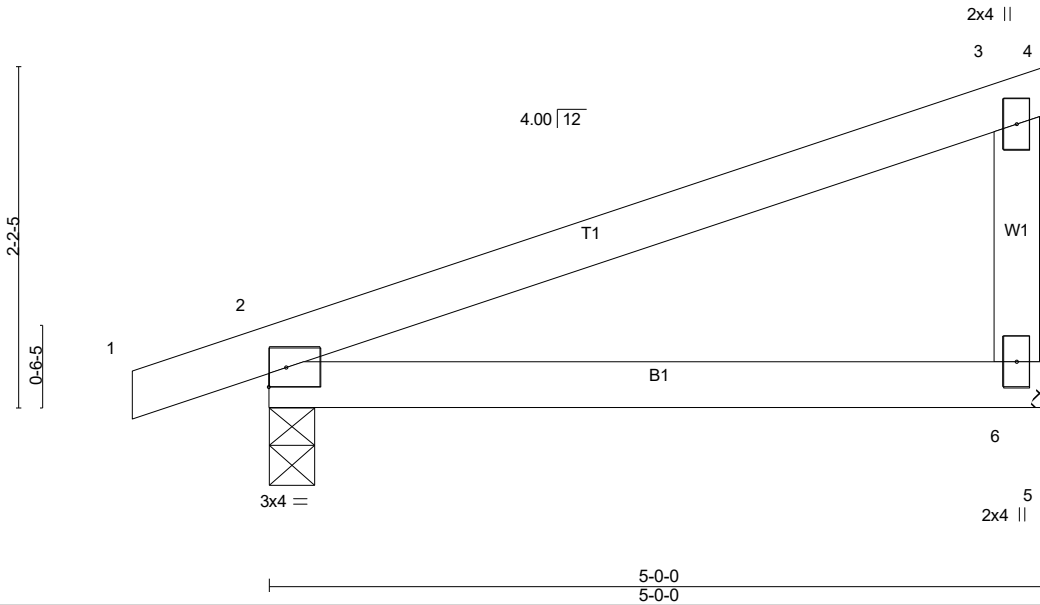
Warning !—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer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

Job 20-5717-R01	Truss J10	Truss Type Monopitch	Qty 4	Ply 1	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N.C. Job Reference (optional) # 24696
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8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:07 2020 Page 1
ID:VaeaK7vWB81xgotwpMaLleyLxWJ-a3cOjBoTSKwRLKmWURoneruuzS2k52UoI0cd7EyAGBs



Scale = 1:14.8



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

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

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

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

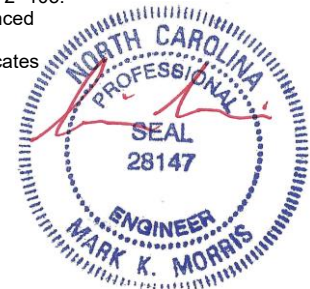
REACTIONS. (lb/size) 6=196/Mechanical, 2=253/0-3-8 (min. 0-1-8)
Max Horz 2=71(LC 10)
Max Uplift 6=-88(LC 10), 2=-105(LC 10)
Max Grav 6=262(LC 21), 2=348(LC 21)

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

NOTES- (10-11)

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

LOAD CASE(S) Standard



12/9/2020

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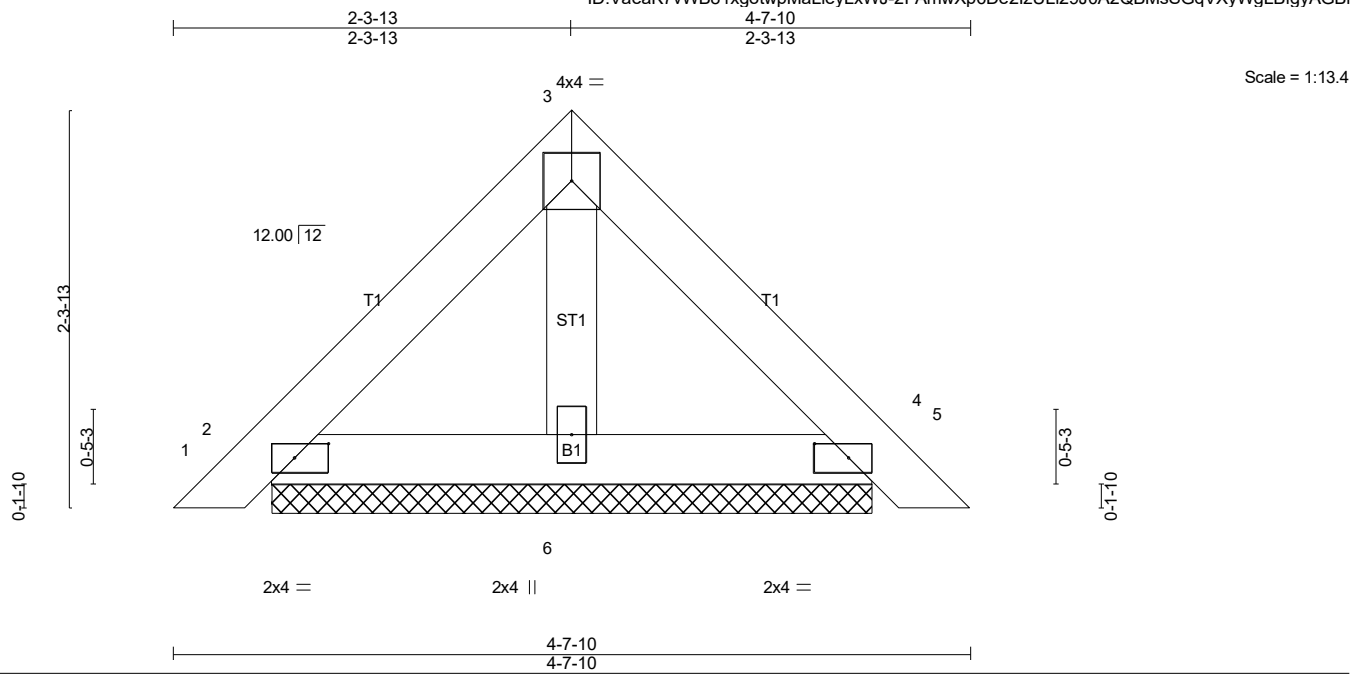


Plate Offsets (X,Y)-- [2:0-2-6,0-1-0], [4:0-2-6,0-1-0]		LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	0.00	in (loc)	4	l/defl	n/r	L/d	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	0.00		5		n/r		80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00		4		n/a		n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P											
BCDL	10.0														
														Weight: 17 lb	FT = 0%

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

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

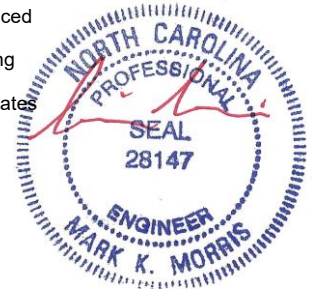
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

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

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

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

LOAD CASE(S) Standard



12/9/2020

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Job 20-5717-R01	Truss PB02	Truss Type Piggyback	Qty 9	Ply 1	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N.C. # 24696
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8,330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:09 2020 Page 1
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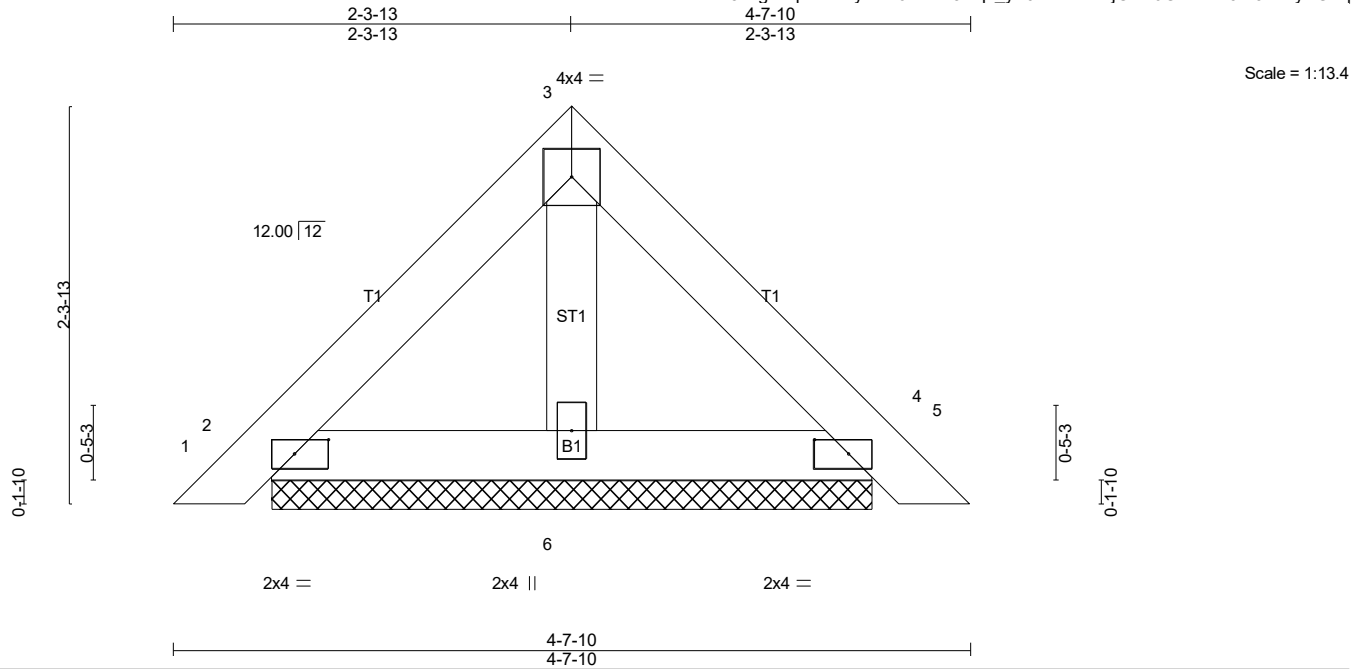


Plate Offsets (X,Y)-- [2:0-2-6,0-1-0], [4:0-2-6,0-1-0]		CSI.		DEFL.		PLATES	GRIP
LOADING (psf)	SPACING-	2-0-0	TC 0.06	in (loc)	l/defl	MT20	244/190
TCLL (roof) 20.0	Plate Grip DOL 1.15		BC 0.05	Vert(LL) 0.00 4 n/r	L/d 180		
Snow (Pf) 20.0	Lumber DOL 1.15		WB 0.01	Vert(CT) 0.00 5 n/r	80		
TCDL 10.0	Rep Stress Incr YES		Matrix-P	Horz(CT) 0.00 4 n/a	n/a		
BCLL 0.0 *	Code IRC2018/TPI2014					Weight: 17 lb	FT = 0%
BCDL 10.0							

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

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

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

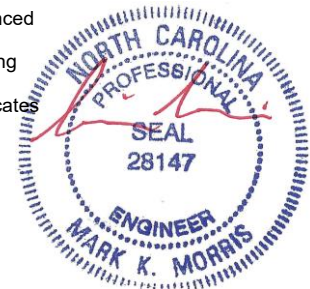
REACTIONS. (lb/size) 2=108/3-6-0 (min. 0-1-8), 4=108/3-6-0 (min. 0-1-8), 6=108/3-6-0 (min. 0-1-8)
Max Horz 2=-48(LC 10)
Max Uplift 2=-26(LC 13), 4=-31(LC 13)
Max Grav 2=108(LC 1), 4=108(LC 1), 6=109(LC 5)

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

NOTES- (11-12)

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

LOAD CASE(S) Standard



12/9/2020

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Job 20-5717-R01	Truss R01	Truss Type Roof Special Supported Gable	Qty 1	Ply 1	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N	Job Reference (optional) # 24696
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8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:11 2020 Page 1
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0-10-8 11-11-8 23-11-0 24-9-8
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4x4 =

Scale = 1:67.2

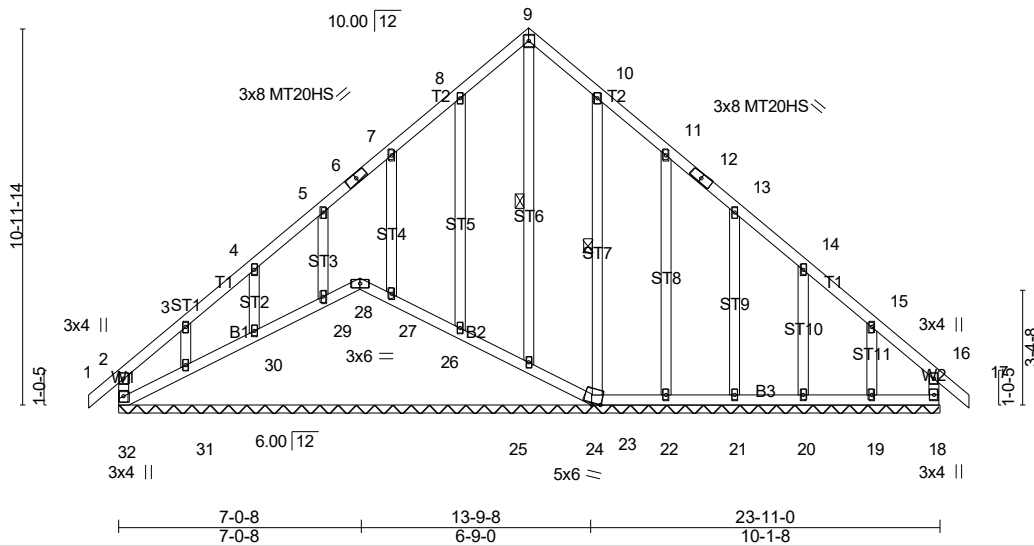


Plate Offsets (X,Y)-- [23:0-1-11,0-0-6], [24:0-0-6,0-1-11]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.20	Vert(LL) -0.00	17	n/r	180	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.11	Vert(CT) -0.00	17	n/r	80	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.15	WB 0.14	Horz(CT) 0.01	18	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R						
BCDL 10.0	Code IRC2018/TPI2014							
							Weight: 170 lb	FT = 0%

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

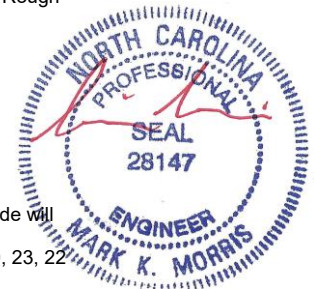
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
 WEBS 1 Row at midpt 9-25, 10-23

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

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

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

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



12/9/2020

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

Job	Truss	Truss Type	Qty	Ply	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N
20-5717-R01	R01	Roof Special Supported Gable	1	1	Job Reference (optional) # 24696

8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:12 2020 Page 2

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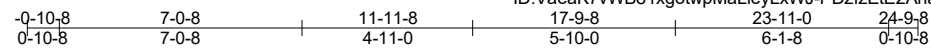
- 16) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 17) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the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

LOAD CASE(S) Standard



12/9/2020

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.



4x6 =

Scale = 1:66.3

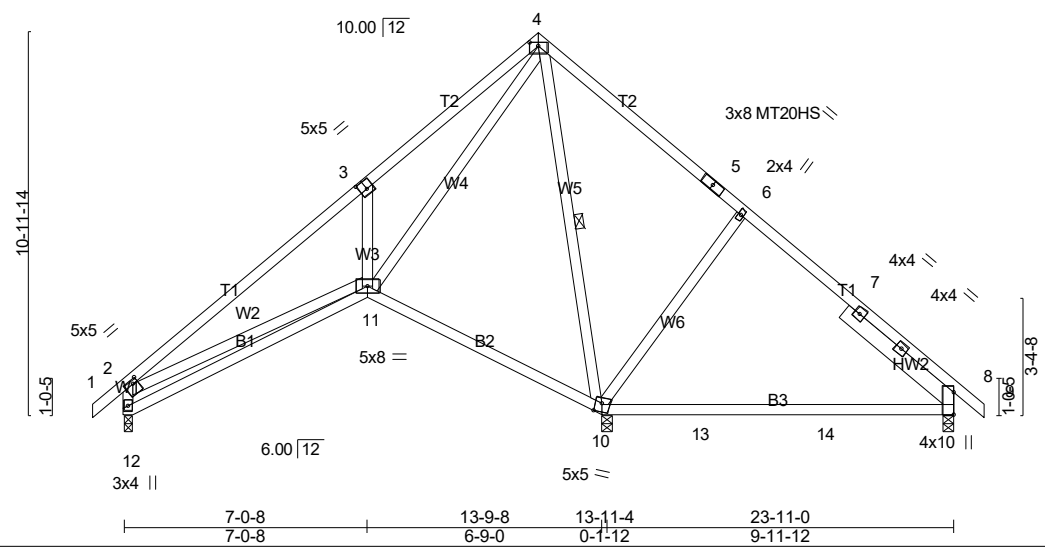


Plate Offsets (X,Y)-- [2:0-1-12,0-1-8], [3:0-2-8,0-3-0], [4:0-3-0,0-1-4], [10:0-2-4,0-3-0]					
LOADING (psf)	TCLL (roof) 20.0	Snow (Pf) 20.0	TCDL 10.0	BCLL 0.0 *	BCDL 10.0
SPACING-	2-0-0	Plate Grip DOL 1.15	Lumber DOL 1.15	Rep Stress Incr YES	Code IRC2018/TPI2014
CSI.	TC 0.77	BC 0.87	WB 0.47	Matrix-SH	
DEFL.	in (loc)	l/defl	L/d		
Vert(LL)	-0.41 8-10	>298	240		
Vert(CT)	-0.65 8-10	>190	180		
Horz(CT)	0.05 8	n/a	n/a		
PLATES	MT20	244/190			
	MT20HS	187/143			
				Weight: 153 lb	FT = 0%

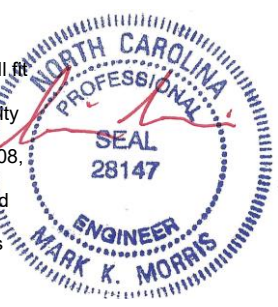
LUMBER-	TOP CHORD 2x4 SP No.2	BRACING-	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
	BOT CHORD 2x4 SP No.2 *Except* B3: 2x4 SP No.1		BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
	WEBS 2x4 SP No.3		WEBS 1 Row at midpt 4-10
	SLIDER Right 2x6 SP No.2 -, 4-1-11		

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

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

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

- NOTES-** (11-12)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 5) All plates are MT20 plates unless otherwise indicated.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 8) Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=408, 8=203, 10=207.
 - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 11) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 - 12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.



12/9/2020

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

Job 20-5717-R01	Truss R03	Truss Type ROOF SPECIAL	Qty 3	Ply 1	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, NC	# 24696
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8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:14 2020 Page 1

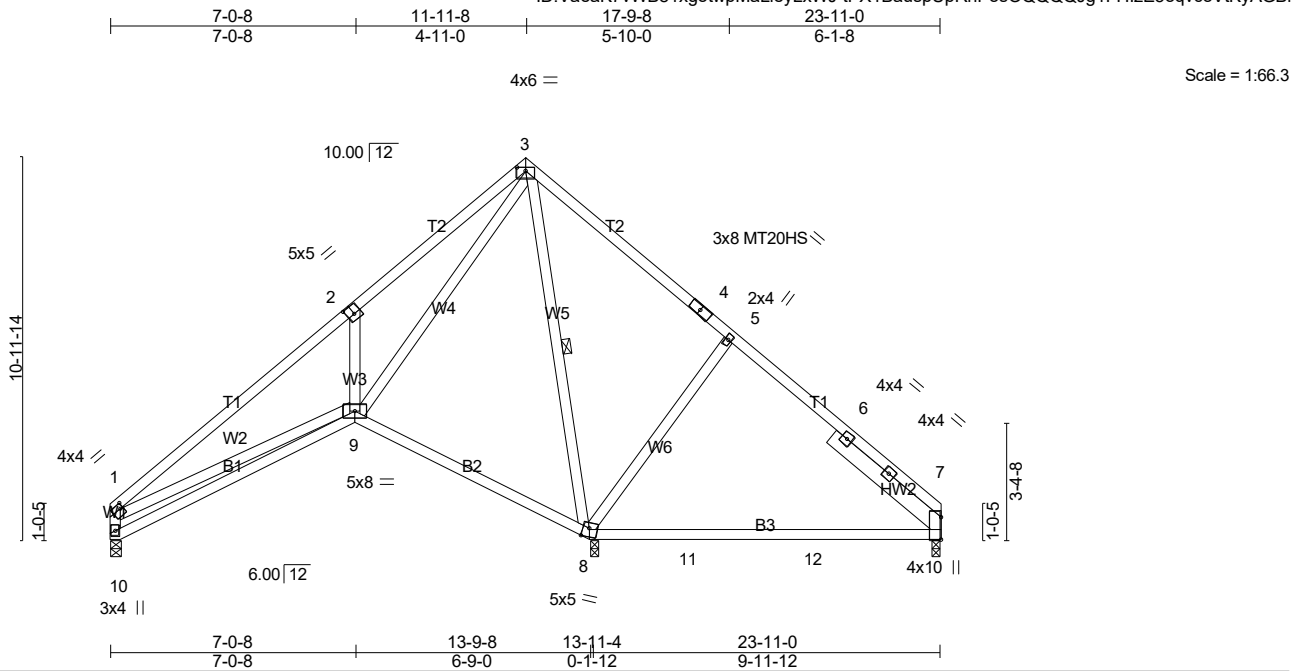


Plate Offsets (X,Y)-- [1:0-1-0,0-1-12], [2:0-2-8,0-3-0], [3:0-3-0,0-1-4], [8:0-2-4,0-3-0]

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

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 3-8

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

REACTIONS. (lb/size) 10=414/0-3-8 (min. 0-1-8), 7=244/0-3-8 (min. 0-1-8), 8=1244/0-3-8 (min. 0-1-8)
Max Horz 10=-257(LC 10)
Max Uplift 10=-100(LC 13), 7=-200(LC 8), 8=-221(LC 12)
Max Grav 10=431(LC 20), 7=404(LC 32), 8=1244(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-629/43, 2-3=-653/281, 3-4=-54/362, 1-10=-455/149
BOT CHORD 9-10=-297/471
WEBS 2-9=-437/336, 3-9=-307/964, 3-8=-852/142, 5-8=-395/252, 1-9=-38/281

NOTES- (10-11)

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

LOAD CASE(S) Standard

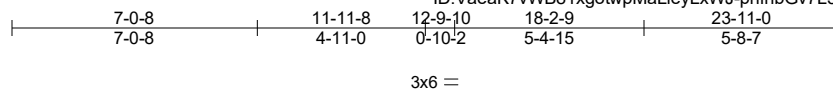


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Job 20-5717-R01	Truss R04	Truss Type Roof Special	Qty 1	Ply 1	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N.C. # 24696
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8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:16 2020 Page 1
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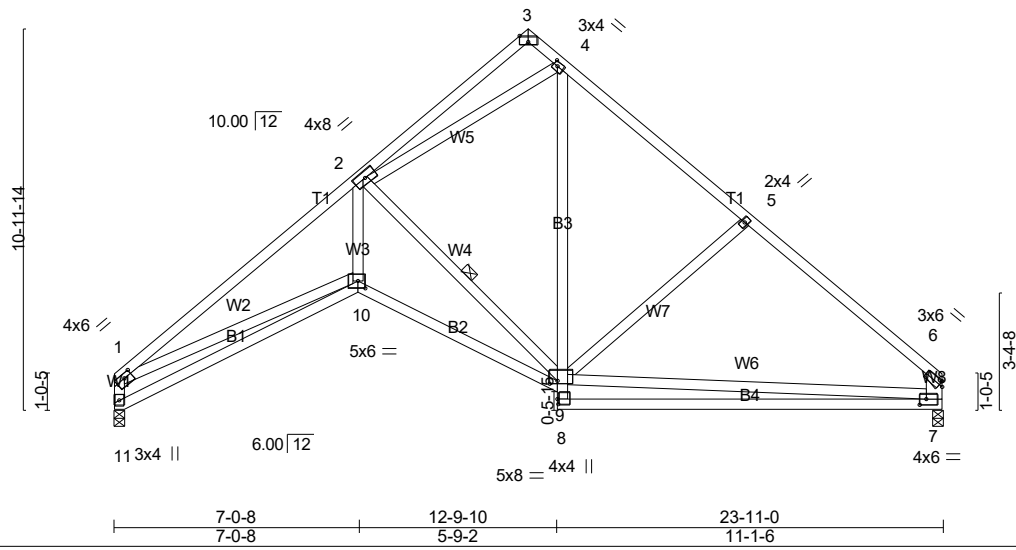


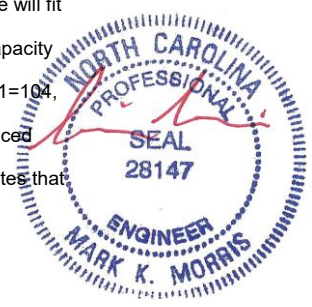
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.75	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.95	Vert(LL) -0.40 7-8 >701 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.61	Vert(CT) -0.78 7-8 >363 180		
BCLL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

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 1-7-8 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 *Except* B3: 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 7-8.
WEBS 2x4 SP No.3 *Except* W8: 2x6 SP No.2	WEBS 1 Row at midpt 2-9
	MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

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

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

- NOTES-** (9-10)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=104, 7=104.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.



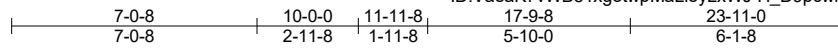
12/9/2020

LOAD CASE(S) Standard

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Job 20-5717-R01	Truss R05	Truss Type Roof Special	Qty 1	Ply 1	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N.C. Job Reference (optional) # 24696
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8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:17 2020 Page 1
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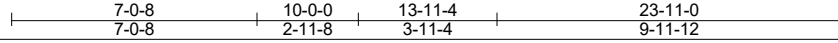
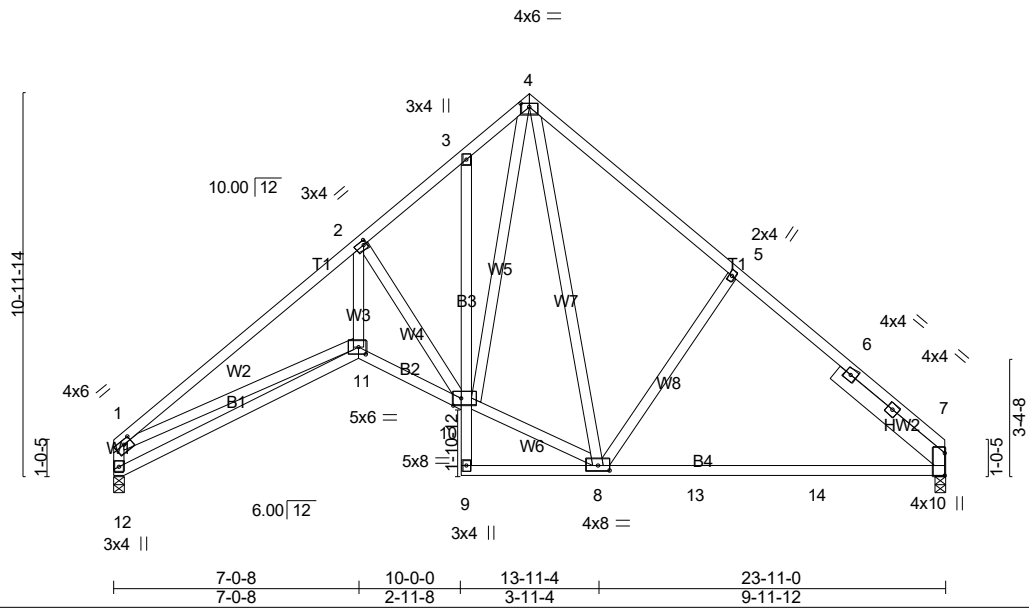


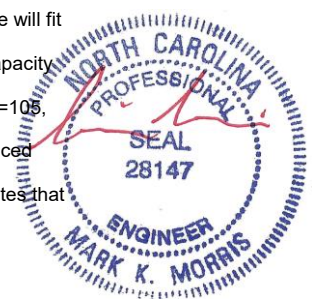
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.78	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.74	Vert(LL) -0.28 7-8 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.92	Vert(CT) -0.45 7-8 >635 180		
BCLL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

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

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

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

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



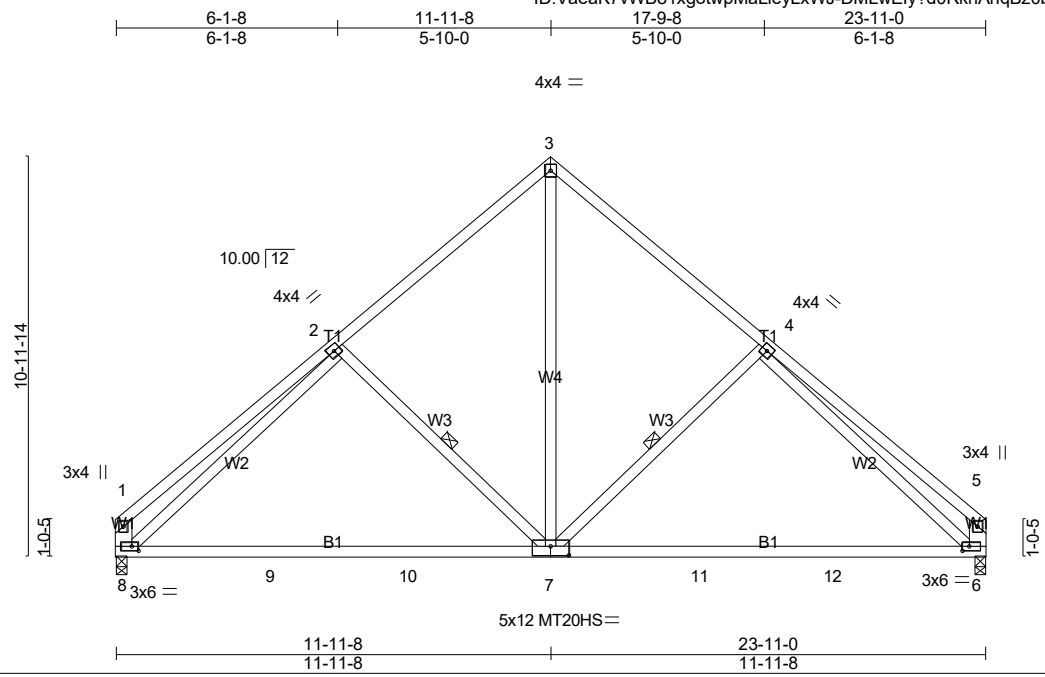
LOAD CASE(S) Standard

12/9/2020

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

Job 20-5717-R01	Truss R06	Truss Type Common	Qty 1	Ply 1	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N	# 24696
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ID:Vaeak7vWB81xgotwpMaLleyLxWJ-DMLwEly?d0RknAhqBz0b7NOyJl15vG8Z2uWGYyAGBg
8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:19 2020 Page 1



Scale = 1:63.3

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

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

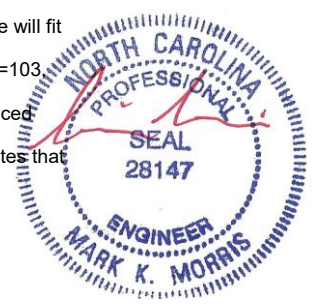
BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-9-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-6-15 oc bracing.
WEBS 1 Row at midpt 4-7, 2-7

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

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

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

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



12/9/2020

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Job 20-5717-R01	Truss R07	Truss Type GABLE	Qty 1	Ply 1	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N.C. Job Reference (optional) # 24696
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8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:21 2020 Page 1
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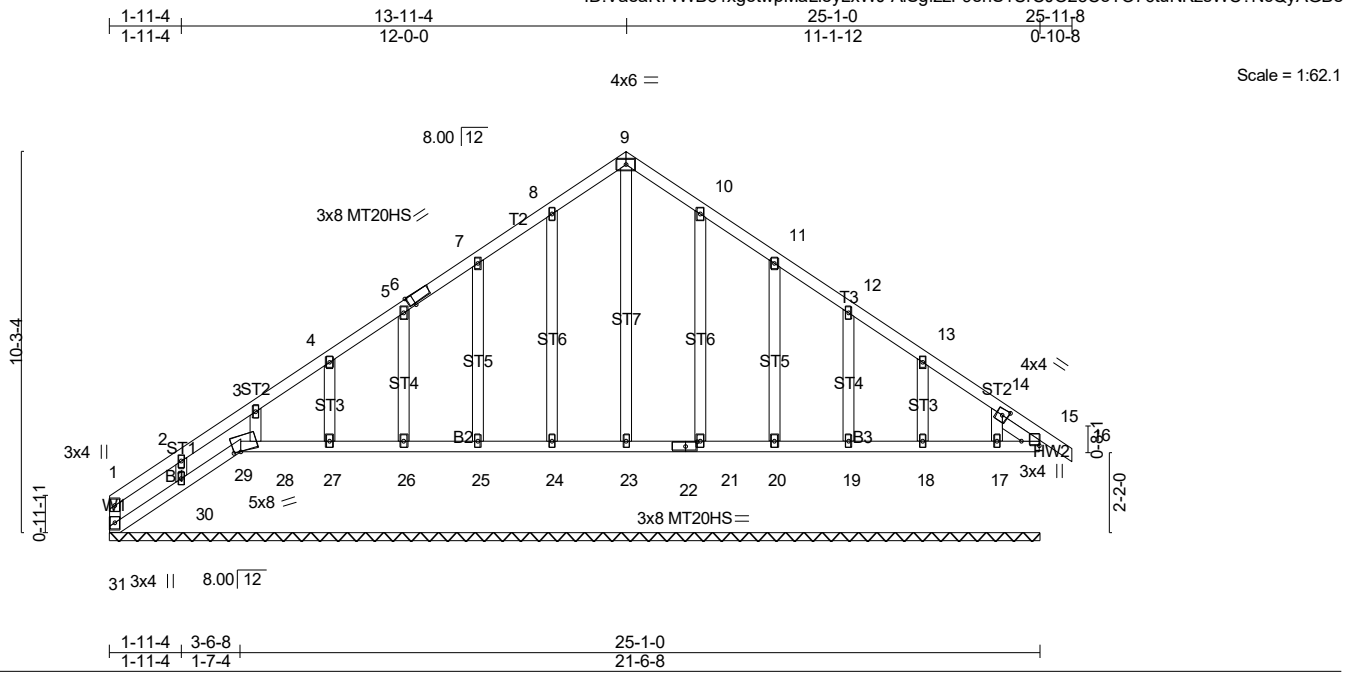


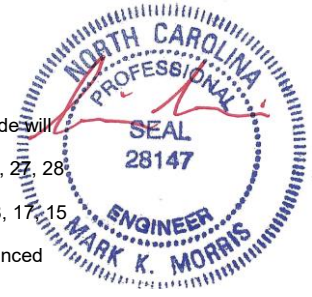
Plate Offsets (X,Y)-- [6:0-2-1,Edge], [14:0-1-14,0-2-0], [15:Edge,0-5-12], [22:0-3-12,0-1-8], [28:0-1-11,0-0-8], [29:0-0-8,0-1-11], [29:0-2-4,0-0-3]					
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.12	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.08	Vert(LL) -0.00 15 n/r 180	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.15	WB 0.26	Vert(CT) -0.00 16 n/r 80		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.01 15 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014				Weight: 153 lb FT = 0%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 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.
SLIDER Right 2x4 SP No.3 -, 1-2-10	

REACTIONS. All bearings 25-1-0.
 (lb) - Max Horz 31=-221(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 29, 24, 25, 26, 27, 28, 21, 20, 19, 18, 17 except 31=-136(LC 8), 15=-110(LC 9), 30=-145(LC 12)
 Max Grav All reactions 250 lb or less at joint(s) 31, 29, 26, 27, 28, 19, 18, 17, 15, 30 except 23=312(LC 22), 24=262(LC 20), 25=264(LC 20), 21=265(LC 21), 20=262(LC 21)

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

- NOTES-** (15-16)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - All plates are MT20 plates unless otherwise indicated.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - 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) 29, 24, 25, 26, 27, 28, 21, 20, 19, 18, 17 except (jt=lb) 31=136, 15=110, 30=145.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 29, 23, 24, 25, 26, 27, 28, 21, 20, 19, 18, 17, 15, 30.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

Job	Truss	Truss Type	Qty	Ply	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N
20-5717-R01	R07	GABLE	1	1	Job Reference (optional) # 24696

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

LOAD CASE(S) Standard

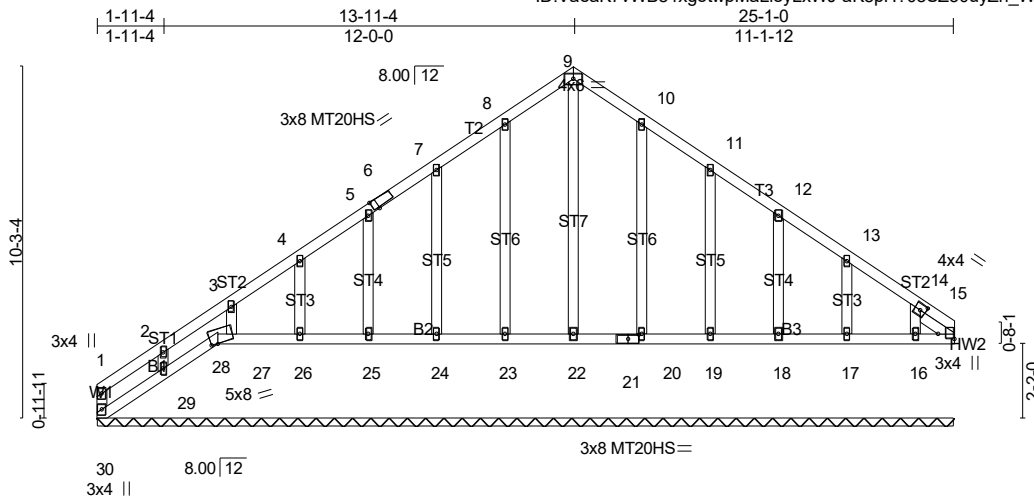


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Job 20-5717-R01	Truss R08	Truss Type GABLE	Qty 1	Ply 1	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N.C.	Job Reference (optional) # 24696
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8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:24 2020 Page 1
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Scale = 1:67.4

Plate Offsets (X,Y)-- [6:0-2-1,Edge], [14:0-1-14,0-2-0], [15:Edge,0-5-12], [21:0-3-12,0-1-8], [27:0-1-11,0-0-8], [28:0-2-4,0-0-3], [28:0-0-8,0-1-11]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.12	Vert(LL)	n/a	-	n/a	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.08	Vert(CT)	n/a	-	n/a	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.15	WB 0.25	Horz(CT)	0.01	15	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH						
BCDL 10.0	Code IRC2018/TPI2014							
							Weight: 152 lb	FT = 0%

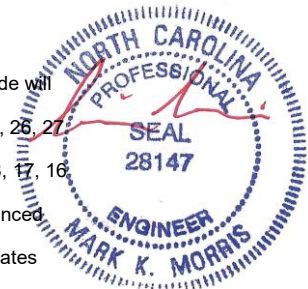
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3
SLIDER Right 2x4 SP No.3 -, 1-2-10

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

REACTIONS. All bearings 25-1-0.
(lb) - Max Horz 30=223(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 28, 23, 24, 25, 26, 27, 20, 19, 18, 17, 16 except 30=-133(LC 8), 15=-110(LC 9), 29=-146(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 30, 15, 28, 25, 26, 27, 18, 17, 16, 29 except 22=312(LC 25), 23=262(LC 19), 24=264(LC 19), 20=265(LC 20), 19=262(LC 20)

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

- NOTES-** (14-15)
- 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(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - All plates are MT20 plates unless otherwise indicated.
 - 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) 28, 23, 24, 25, 26, 27, 20, 19, 18, 17, 16 except (jt=lb) 30=133, 15=110, 29=146.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 15, 28, 22, 23, 24, 25, 26, 27, 20, 19, 18, 17, 16, 29.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.



12/9/2020

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Job 20-5717-R01	Truss R09	Truss Type ROOF SPECIAL	Qty 3	Ply 1	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N.C.	# 24696
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8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:26 2020 Page 1
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 25-11-8

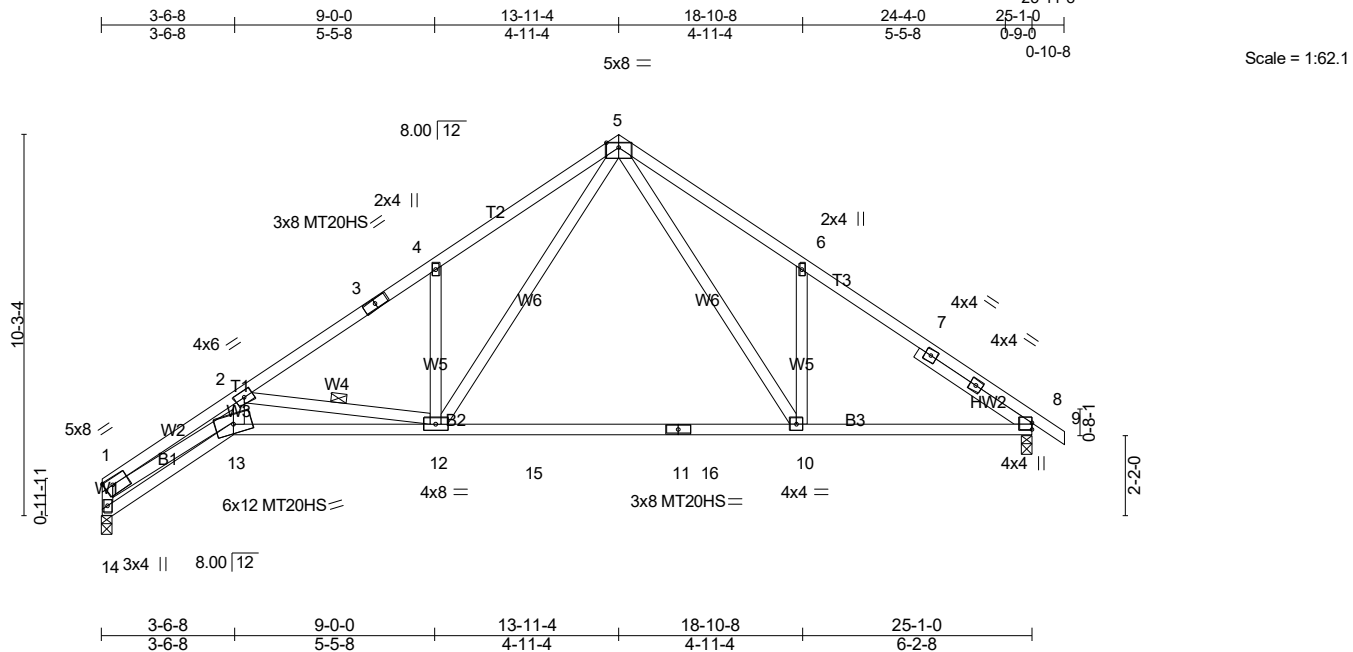


Plate Offsets (X,Y)-- [1:0-2-12,0-2-0]	
LOADING (psf)	SPACING
TCLL (roof) 20.0	2-0-0
Snow (Pf) 20.0	Plate Grip DOL 1.15
TCDL 10.0	Lumber DOL 1.15
BCLL 0.0 *	Rep Stress Incr YES
BCDL 10.0	Code IRC2018/TPI2014
	CSI.
	TC 0.46
	BC 0.80
	WB 0.82
	Matrix-SH
	DEFL.
	in (loc) l/defl L/d
	Vert(LL) -0.45 10-12 >661 240
	Vert(CT) -0.72 10-12 >416 180
	Horz(CT) 0.27 8 n/a n/a
	PLATES
	MT20 244/190
	MT20HS 187/143
	Weight: 146 lb FT = 0%

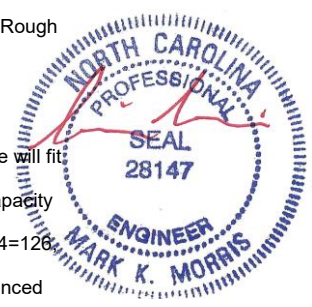
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-6-13 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 *Except* B2: 2x4 SP SS, B3: 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 7-3-12 oc bracing: 12-13.
WEBS 2x4 SP No.3 *Except* W2: 2x4 SP No.2	WEBS 1 Row at midpt 2-12
SLIDER Right 2x4 SP No.3 -, 3-7-14	

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

REACTIONS. (lb/size) 14=997/0-3-8 (min. 0-1-8), 8=1051/0-3-8 (min. 0-1-8)
 Max Horz 14=-221(LC 10)
 Max Uplift 14=-126(LC 12), 8=-128(LC 13)
 Max Grav 14=1011(LC 20), 8=1062(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-14=-1151/264, 1-2=-4473/932, 2-3=-1832/247, 3-4=-1714/263, 4-5=-1918/426,
 5-6=-1498/310, 6-7=-1459/176, 7-8=-1550/155
 BOT CHORD 13-14=-261/421, 12-13=-838/3557, 12-15=-62/910, 11-15=-62/910, 11-16=-62/910,
 10-16=-62/910, 8-10=-78/1199
 WEBS 1-13=-753/3724, 2-13=-377/1626, 2-12=-1983/615, 4-12=-395/244, 5-12=-318/1297,
 5-10=-216/748, 6-10=-320/259

- NOTES-** (11-12)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 5) All plates are MT20 plates unless otherwise indicated.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 8) Bearing at joint(s) 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=126, 8=128.
 - 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.



12/9/2020

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

Job	Truss	Truss Type	Qty	Ply	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N
20-5717-R01	R09	ROOF SPECIAL	3	1	Job Reference (optional) # 24696

8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:27 2020 Page 2
 ID:VaeaK7vWB81xgotwpMaLleyLxWJ-_vqxv120IUSbIPIMfe9TS2jKGWl6nvblu7Shq4yAGBY

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

LOAD CASE(S) Standard



12/9/2020

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

Job 20-5717-R01	Truss R10	Truss Type ROOF SPECIAL	Qty 1	Ply 1	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N.C.	# 24696
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ID:VaeaK7vWB81xgotwpMaLleyLxWJ-S5NK7N3eWnaSNZtYDMgi_GFUPw27WJFu7nBFMWyAGBX
8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:28 2020 Page 1

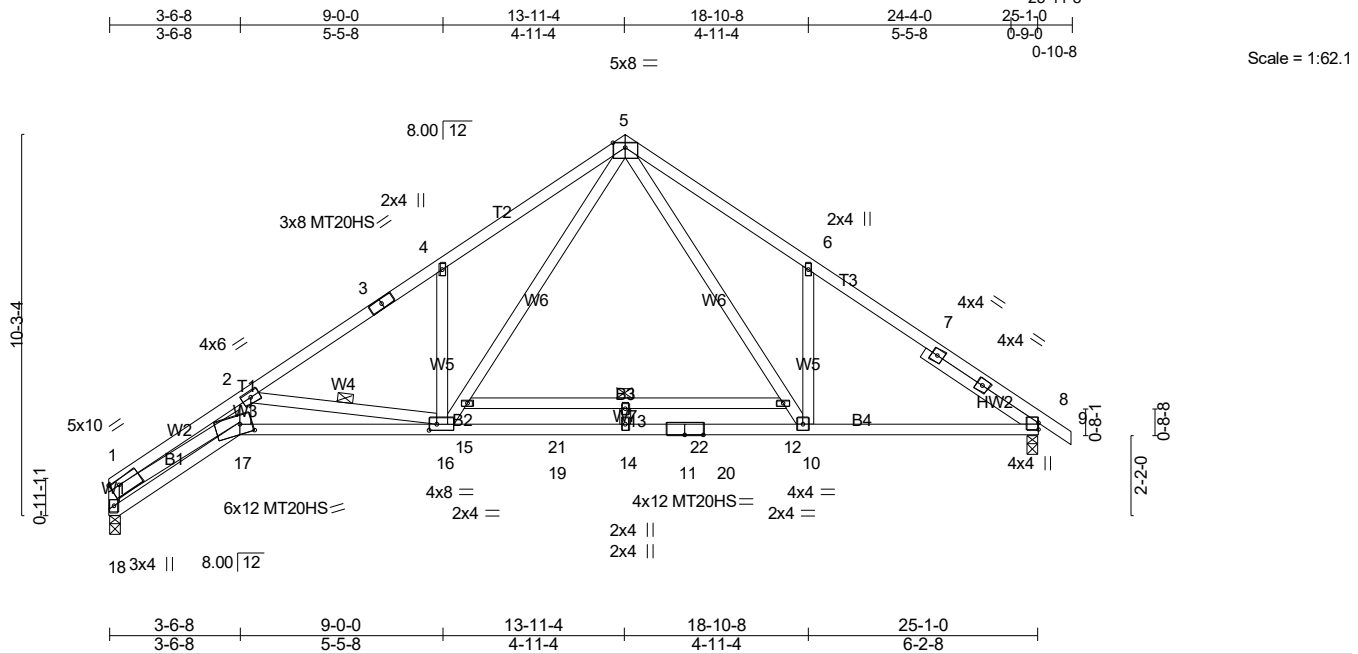


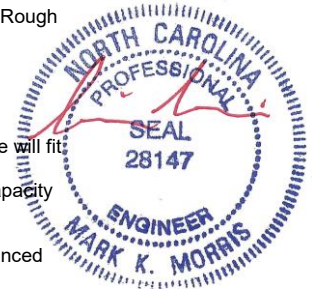
Plate Offsets (X,Y)-- [1:Edge,0-1-12], [16:0-2-8,0-2-0], [17:0-4-0,0-3-4]					
LOADING (psf)	SPACING	CSI	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.57	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 1.00	Vert(LL) -0.53 13 >560 240	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.15	WB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

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-3-10 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 *Except* B2: 2x4 SP SS, B4: 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except: 4-7-0 oc bracing: 12-15
WEBS 2x4 SP No.3 *Except* W2: 2x4 SP No.2	WEBS 1 Row at midpt 2-16
SLIDER Right 2x4 SP No.3 -, 3-7-14	MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

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

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

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



12/9/2020

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

Job	Truss	Truss Type	Qty	Ply	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N
20-5717-R01	R10	ROOF SPECIAL	1	1	Job Reference (optional) # 24696

8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:28 2020 Page 2
 ID:VaeaK7vWB81xgotwpMaLleyLxWJ-S5NK7N3eWnaSNZtYDMgi_GFUPw27WJFu7nBFMWyAGBX

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

LOAD CASE(S) Standard

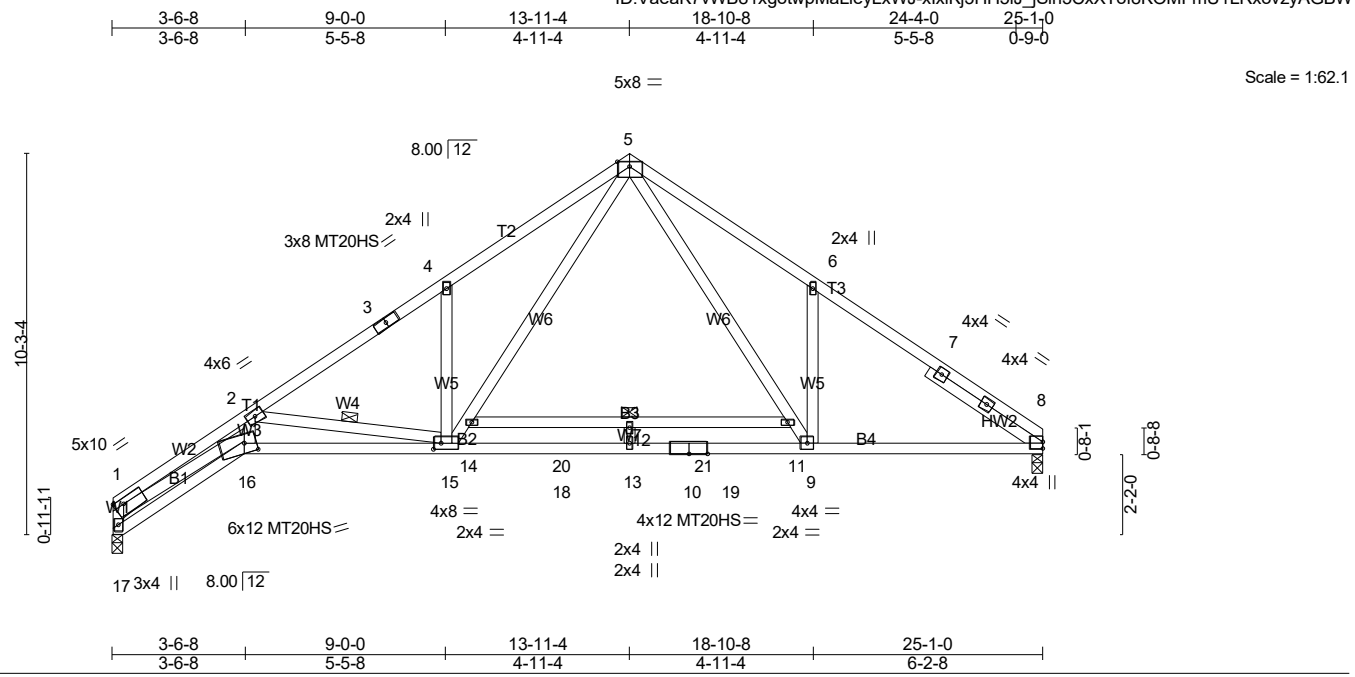


12/9/2020

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

Job 20-5717-R01	Truss R11	Truss Type Roof Special	Qty 5	Ply 1	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N.C.	Job Reference (optional) # 24696
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8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:29 2020 Page 1
 ID:Vaaek7vWB81xgotwpmMaLleyLxWJ-xlxikj3HH5iJ_jSlm3CxxTof8KOMFmU1LRxovzyAGBW



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

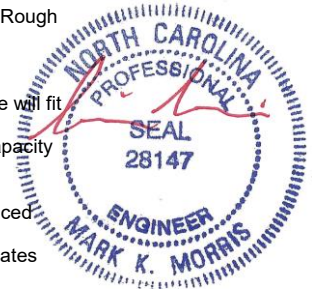
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-3-9 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 *Except* B2: 2x4 SP SS, B4: 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except: 4-11-0 oc bracing: 11-14
WEBS 2x4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

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

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

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

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



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

Job 20-5717-R01	Truss R13	Truss Type Roof Special	Qty 2	Ply 1	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N.C.	# 24696
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8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:31 2020 Page 1
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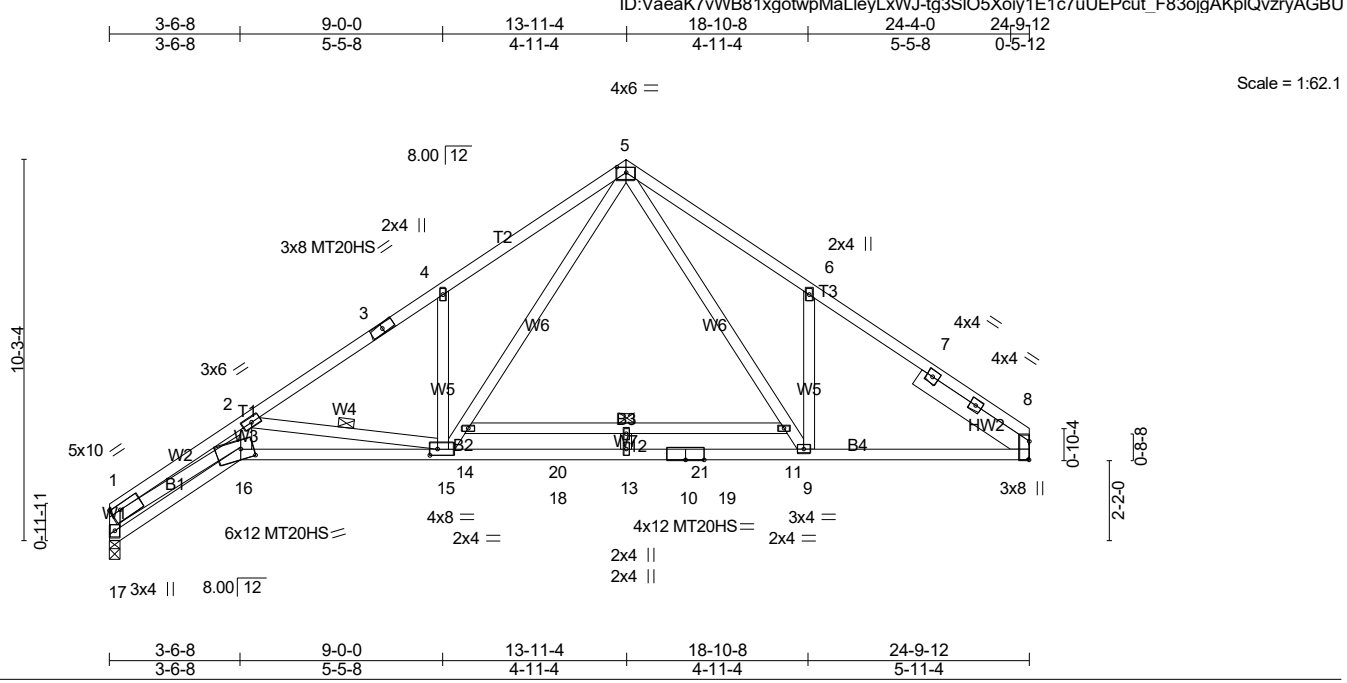


Plate Offsets (X,Y)-- [1:Edge,0-1-12], [5:0-3-0,0-1-12], [8:0-6-0,Edge], [15:0-2-8,0-2-0], [16:0-4-0,0-3-4]					
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.59	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 1.00	Vert(LL) -0.53 12 >556 240	MT20HS	187/143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

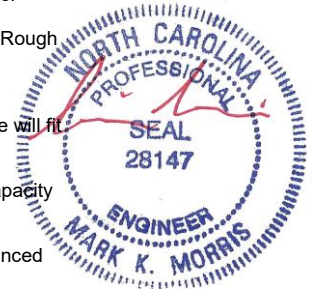
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-4-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 *Except* B2: 2x4 SP SS, B4: 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 7-10-9 oc bracing: 15-16. 4-7-0 oc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

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

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

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

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



12/9/2020

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

Job	Truss	Truss Type	Qty	Ply	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N
20-5717-R01	R13	Roof Special	2	1	Job Reference (optional) # 24696

8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:31 2020 Page 2
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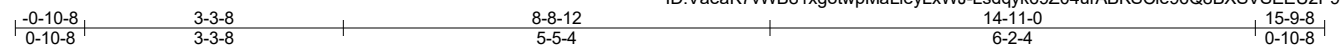
- 11) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- 12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

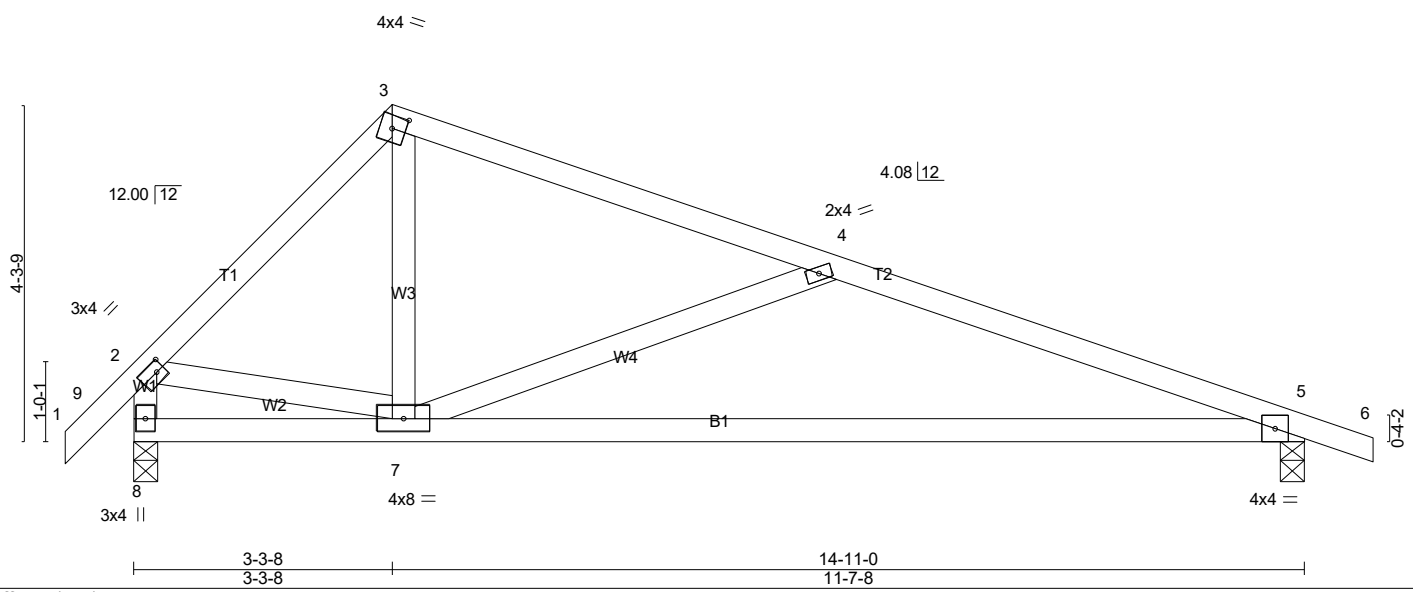


12/9/2020

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



Scale = 1:29.4



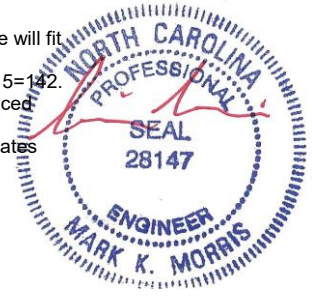
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	20.0	2-0-0	2-0-0	TC	0.64	in	(loc)	l/defl	L/d	MT20	244/190
Snow (Pf)	20.0	Plate Grip DOL	1.15	BC	0.78	Vert(LL)	-0.32	5-7	>554		
TCDL	10.0	Lumber DOL	1.15	WB	0.48	Vert(CT)	-0.66	5-7	>266		
BCLL	0.0 *	Rep Stress Incr	YES	Matrix-SH		Horz(CT)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

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-5-15 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1	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.

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

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

- NOTES-** (10-11)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 5=142.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

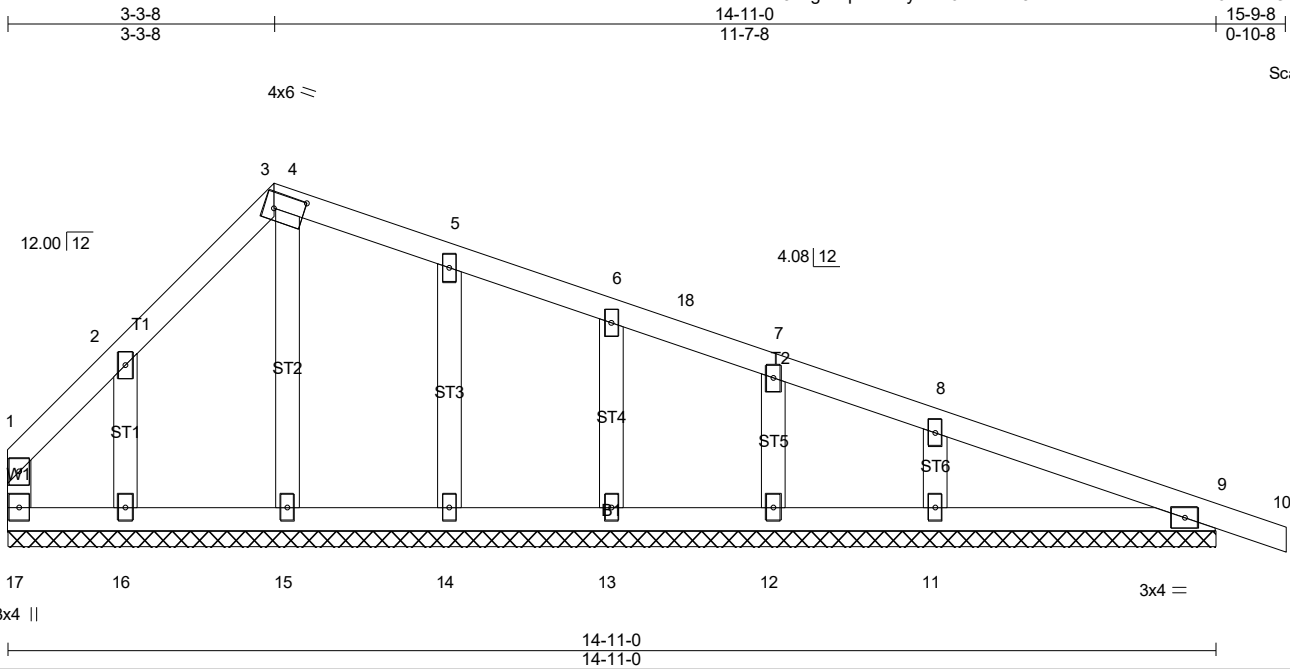


12/9/2020

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

Job 20-5717-R01	Truss R23	Truss Type Roof Special Supported Gable	Qty 1	Ply 1	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N.C.	Job Reference (optional) # 24696
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8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:35 2020 Page 1
ID:VaeaK7vWB81xgotwpmALleyLxWJ-IRlzbm81sxSTievu7KILmk2nhleJfiwkNO666cyAGBQ



Scale = 1:28.5

Plate Offsets (X,Y)-- [3:0-0-10,0-1-12], [3:0-4-6,0-2-4], [4:0-1-14,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.11	Vert(LL)	0.00	10	n/r	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.13	Vert(CT)	0.01	10	n/r		
TCDL 10.0	Lumber DOL 1.15	WB 0.05	Horz(CT)	0.00	9	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 70 lb	FT = 0%

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

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

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

REACTIONS. All bearings 14-11-0.
 (lb) - Max Horz 17=-123(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 17, 9, 13, 14, 12, 11 except 16=-110(LC 14)
 Max Grav All reactions 250 lb or less at joint(s) 17, 9, 13, 14, 15, 16, 12 except 11=269(LC 35)

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

- NOTES-** (14-15)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 5) Unbalanced snow loads have been considered for this design.
 - 6) 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.
 - 7) All plates are 2x4 MT20 unless otherwise indicated.
 - 8) Gable requires continuous bottom chord bearing.
 - 9) Gable studs spaced at 2-0-0 oc.
 - 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 11) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 9, 13, 14, 12, 11 except (jt=lb) 16=110.
 - 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 14) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
 - 15) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.



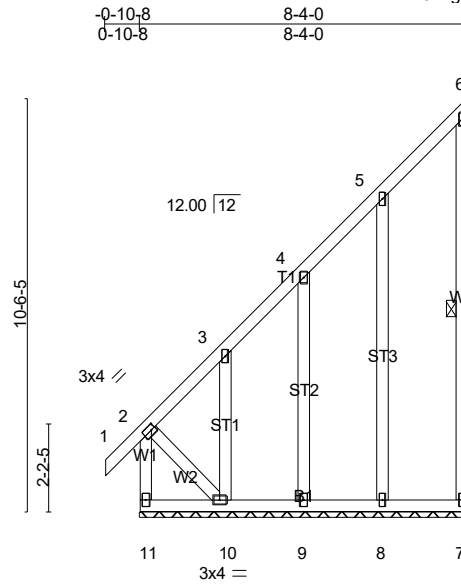
12/9/2020

LOAD CASE(S) Standard

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

Job 20-5717-R01	Truss R24	Truss Type Monopitch Supported Gable	Qty 1	Ply 1	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N Job Reference (optional) # 24696
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8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:36 2020 Page 1
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Scale = 1:58.6

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

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

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

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

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

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

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

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



12/9/2020

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

Job	Truss	Truss Type	Qty	Ply	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N
20-5717-R01	R24	Monopitch Supported Gable	1	1	Job Reference (optional) # 24696

8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:36 2020 Page 2

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

LOAD CASE(S) Standard



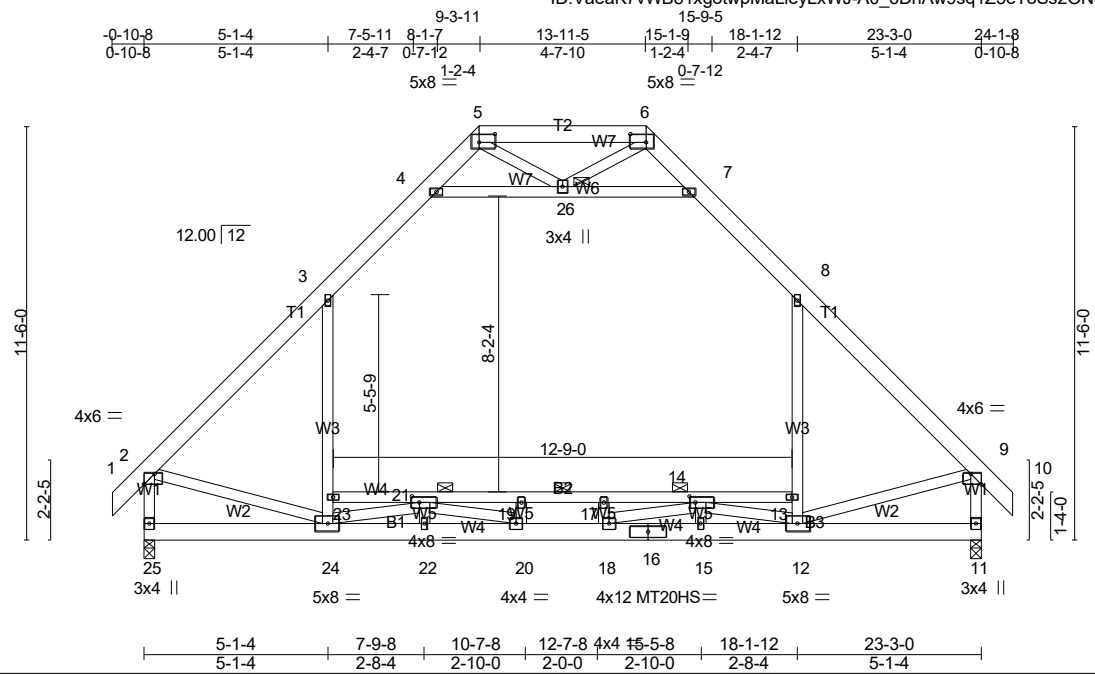
12/9/2020

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

Job 20-5717-R01	Truss R25	Truss Type Attic	Qty 9	Ply 1	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, NC	# 24696
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8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:38 2020 Page 1

ID:VaaeK7vWB81xgotwpMaLleyLxWJ-A0_6DnAw9sq1Z5eToSs2ONG4QyUKszMMQLcmjxyAGBN



Scale: 3/16"=1'

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [5:0-5-4,0-2-12], [6:0-5-4,0-2-12], [9:0-3-8,Edge], [14:0-2-0,0-2-0], [21:0-2-8,0-2-0]					
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.98	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.88	Vert(LL) -0.23 17-19 >999 240	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.15	WB 0.44	Vert(CT) -0.38 17-19 >732 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.03 11 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014		Attic -0.12 13-23 1296 360		Weight: 228 lb FT = 0%

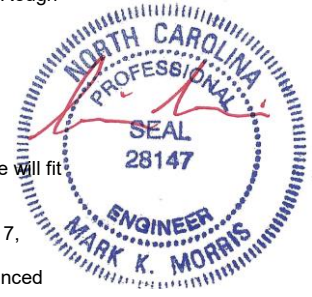
LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x6 SP No.2 *Except* B2: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 3-7-0 oc bracing: 13-23
WEBS 2x4 SP No.3 *Except* W3,W6: 2x4 SP No.2	JOINTS 1 Brace at Jt(s): 26

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

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

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

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



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

Job	Truss	Truss Type	Qty	Ply	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N
20-5717-R01	R25	Attic	9	1	Job Reference (optional) # 24696

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

LOAD CASE(S) Standard

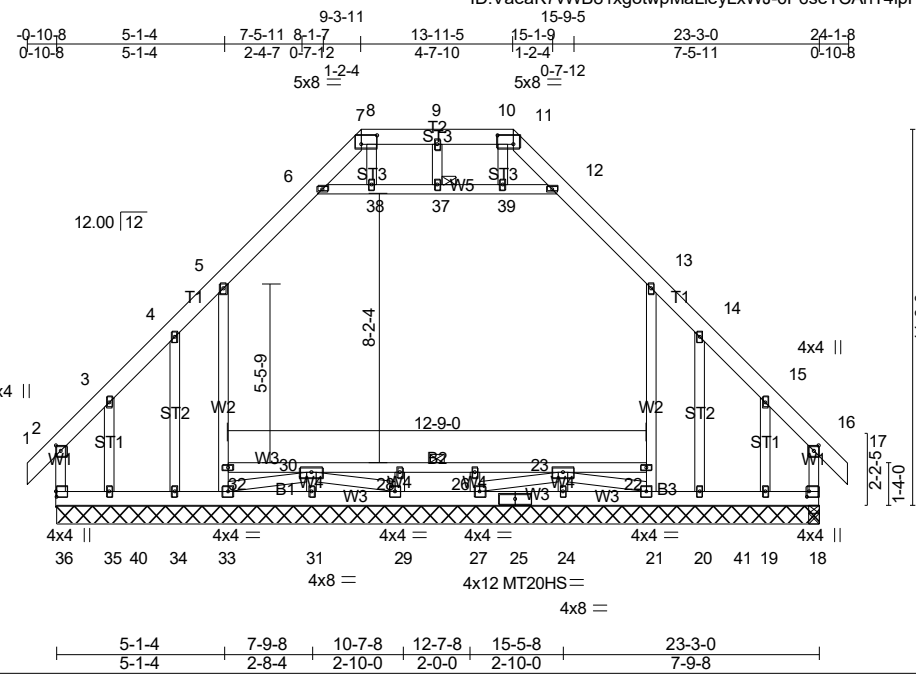


12/9/2020

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Job 20-5717-R01	Truss R26	Truss Type GABLE	Qty 1	Ply 1	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N.C.	Job Reference (optional) # 24696
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8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:40 2020 Page 1



Scale = 1:70.2

Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [7:0-5-12,0-3-4], [7:0-0-0,0-2-12], [8:0-1-12,0-0-0], [10:0-1-12,0-0-0], [11:0-5-12,0-3-4], [11:0-0-0,0-2-12], [16:0-2-0,0-1-12], [18:0-2-0,0-0-12], [36:0-2-0,0-0-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.60	Vert(LL)	-0.01 30-32	>999	240	MT20	244/190
Snow (PF) 20.0	Plate Grip DOL 1.15	BC 0.27	Vert(CT)	-0.01 30-32	>999	180	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.15	WB 0.17	Horz(CT)	-0.00 18	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH						
BCDL 10.0	Code IRC2018/TPI2014							
							Weight: 234 lb	FT = 0%

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

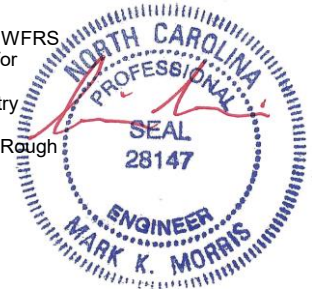
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 10-0-0 oc bracing: 22-32
JOINTS 1 Brace at Jt(s): 37

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

REACTIONS. All bearings 23-3-0.
(lb) - Max Horz 36=295(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 33, 21 except 36=-224(LC 8), 18=-216(LC 9), 34=-130(LC 13), 35=-305(LC 12), 20=-128(LC 12), 19=-303(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 34, 20, 19 except 36=594(LC 22), 33=643(LC 21), 21=669(LC 22), 18=588(LC 21), 18=542(LC 1), 27=340(LC 19), 29=340(LC 19), 31=421(LC 19), 24=421(LC 19), 35=253(LC 10)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-413/186, 3-4=-281/131, 5-6=-445/145, 6-7=-470/80, 7-8=-408/41, 8-9=-408/41, 9-10=-408/41, 10-11=-408/41, 11-12=-470/82, 12-13=-445/144, 14-15=-277/126, 15-16=-408/180, 2-36=-418/151, 16-18=-414/146
WEBS 32-33=-600/82, 5-32=-529/105, 21-22=-595/75, 13-22=-529/99, 6-38=-32/298, 37-38=-32/298, 37-39=-32/298, 12-39=-32/298, 26-27=-285/0, 28-29=-285/0, 30-31=-366/0, 23-24=-366/0

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



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

Job	Truss	Truss Type	Qty	Ply	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N
20-5717-R01	R26	GABLE	1	1	Job Reference (optional) # 24696

8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:41 2020 Page 2
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NOTES- (17-18)

- 11) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 12) Ceiling dead load (5.0 psf) on member(s). 5-6, 12-13, 6-38, 37-38, 37-39, 12-39
- 13) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 30-32, 28-30, 26-28, 23-26, 22-23
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 33, 21 except (jt=lb) 36=224, 18=216, 34=130, 35=305, 20=128, 19=303.
- 15) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 16) Attic room checked for L/360 deflection.
- 17) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
- 18) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

LOAD CASE(S) Standard

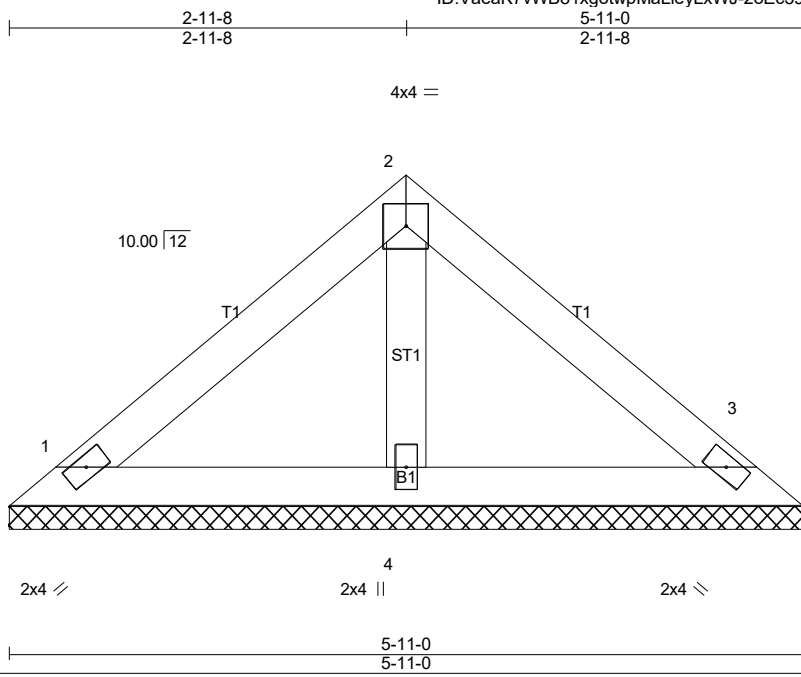


12/9/2020

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Job 20-5717-R01	Truss VT01	Truss Type Valley	Qty 1	Ply 1	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N	Job Reference (optional) # 24696
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8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:42 2020 Page 1
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Scale = 1:17.1

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

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 5-11-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

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

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

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

LOAD CASE(S) Standard

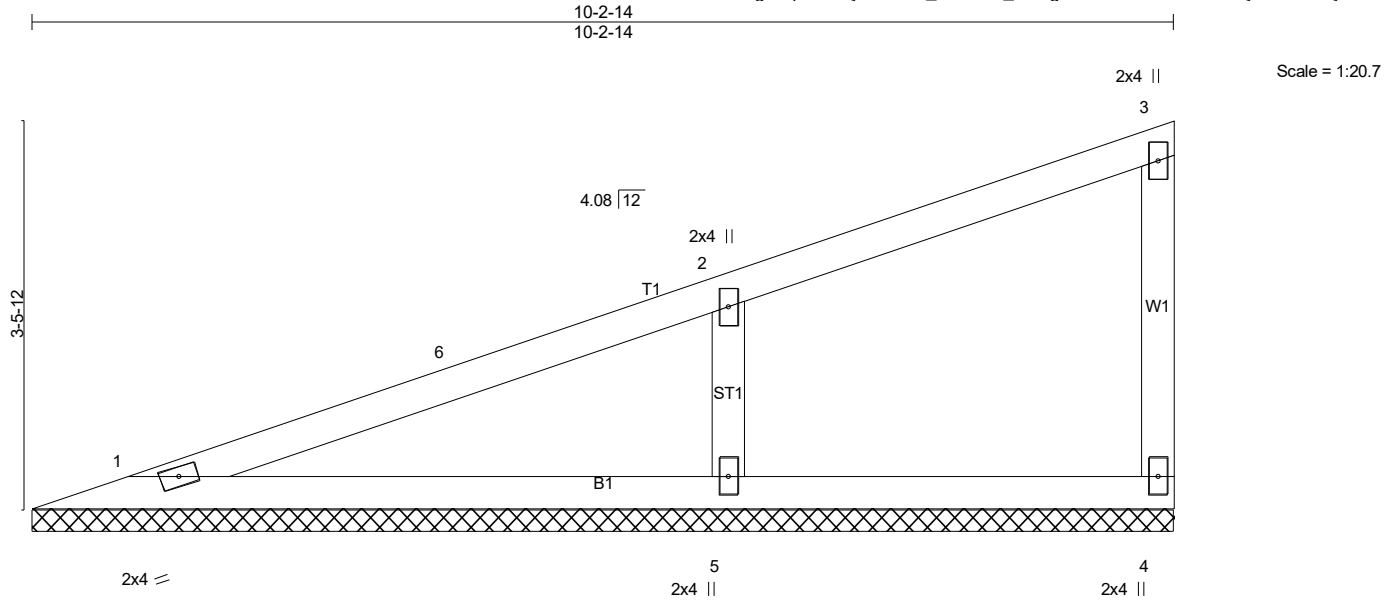


12/9/2020

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Job 20-5717-R01	Truss VT03	Truss Type Valley	Qty 1	Ply 1	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N	# 24696
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8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:43 2020 Page 1



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.43	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.37	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.09	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 4 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 37 lb	FT = 0%

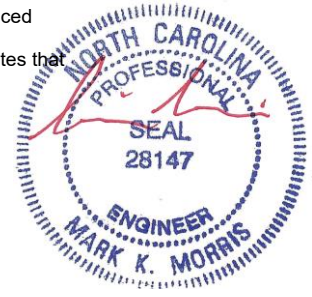
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	MiTek recommends that Stabilizers and required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

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

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

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

LOAD CASE(S) Standard



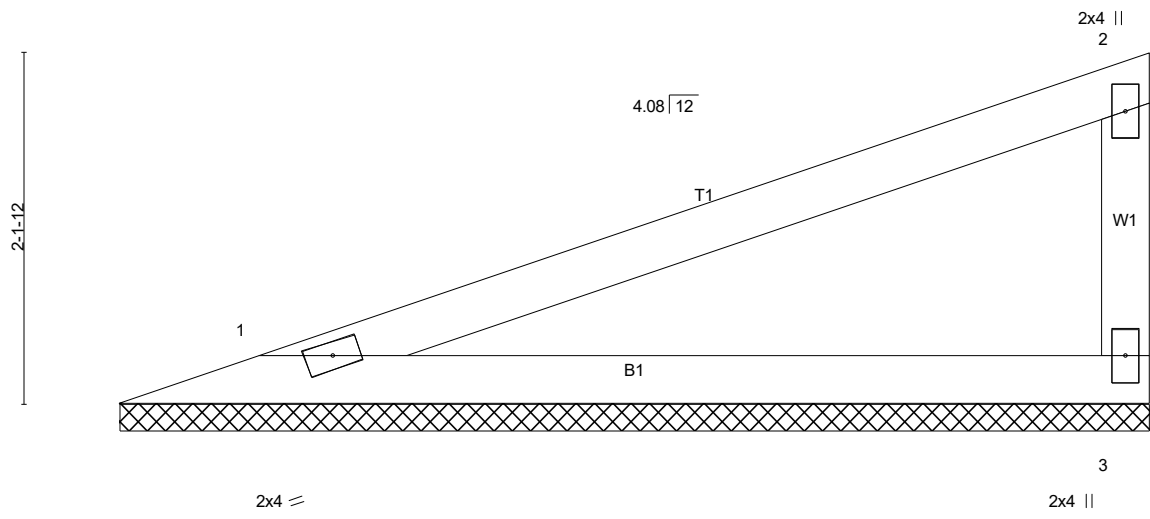
12/9/2020

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Job 20-5717-R01	Truss VT04	Truss Type Valley	Qty 1	Ply 1	LOT 1161 CARRIAGE CIRCLE 116 SPRUCE HOLLOW CIRCLE SPRING LAKE, N.C. Job Reference (optional) # 24696
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8.330 s Mar 10 2020 MiTek Industries, Inc. Thu Dec 10 21:08:43 2020 Page 1
6-3-13
6-3-13

Scale = 1:14.1



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

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

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

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

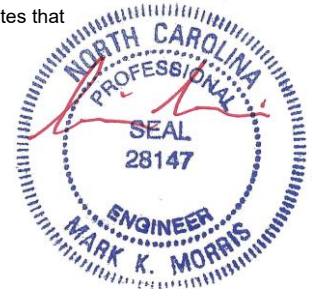
REACTIONS. (lb/size) 1=212/6-3-13 (min. 0-1-8), 3=212/6-3-13 (min. 0-1-8)
Max Horz 1=64(LC 10)
Max Uplift 1=-31(LC 10), 3=-53(LC 10)
Max Grav 1=284(LC 20), 3=284(LC 20)

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

NOTES- (9-10)

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

LOAD CASE(S) Standard



12/9/2020

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