

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 #: 40537

JOB: 23-5652-R01

JOB NAME: LOT 39 PROVIDENCE CREEK

Wind Code: 37

Wind Speed: Vult= 120mph

Exposure Category: B

Mean Roof Height (feet): 23

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

30 Truss Design(s)

Trusses:

PB01, PB02, PB03, R01, R02, R03, R04, R05, R06, R07, R08, R09, R10, R11, R12, R13, SP01, SP02, SPJ01, SPJ02, SPJ03, VS01, VS02, VT01, VT02, VT03, VT04, VT05, VT06, VT07



8/9/2023

Mark Morris

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

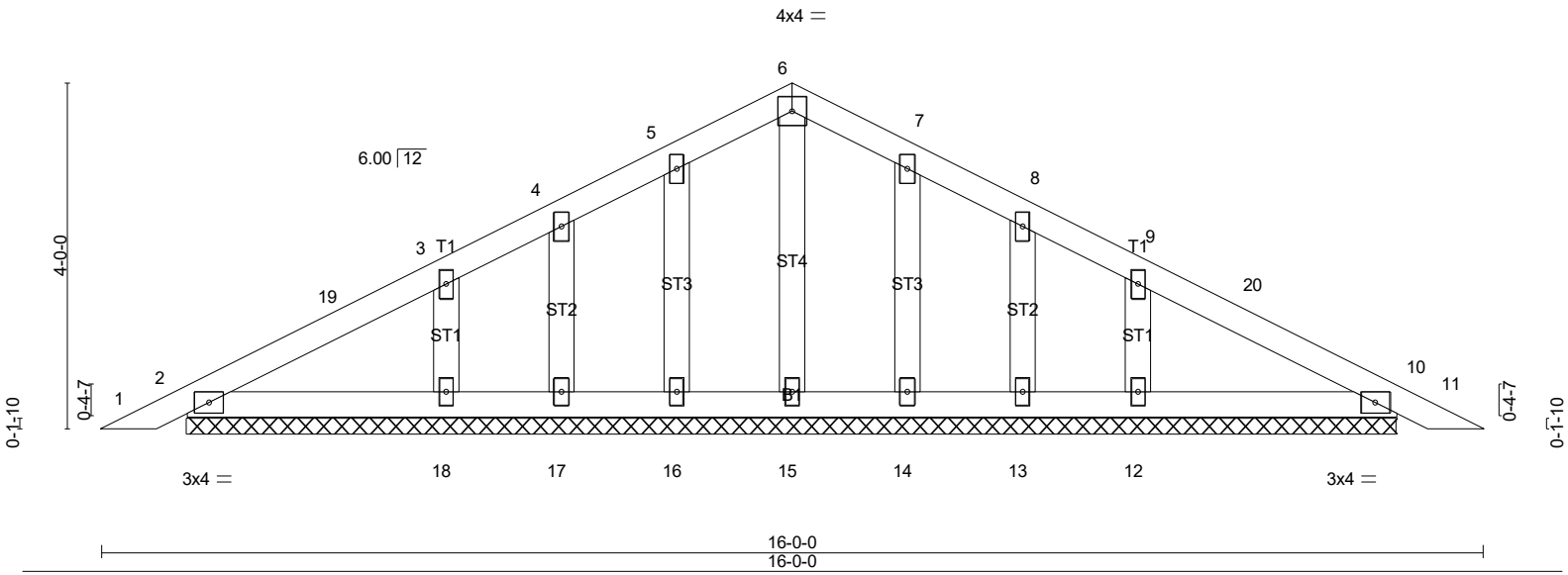
This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is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

Job	Truss	Truss Type	Qty	Ply	LOT 39 PROVIDENCE CREEK 343 WINDSWEEP WAY FUQUAY-VARINA, NC
23-5652-R01	PB01	GABLE	2	1	
Job Reference (optional)					# 40537

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Aug 9 11:05:39 2023 Page 1
 ID:kHdPkcON9g3_0lfrDBlgKRzexCS-v472eFoBJMzvzSaVi2ygg6MK9VBfDsKTK33SFuYjpcw

8-0-0
8-0-0
16-0-0
8-0-0

Scale = 1:26.4



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	0.00	11	n/r	180	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	0.00	11	n/r	80	Weight: 70 lb FT = 20%		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	10	n/a	n/a			
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH									
BCDL	10.0												

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

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

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

REACTIONS. All bearings 13-11-14.
 (lb) - Max Horz 2=51(LC 14)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 16, 17, 18, 14, 13, 12
 Max Grav All reactions 250 lb or less at joint(s) 2, 10, 15, 16, 17, 14, 13 except 18=297(LC 21), 12=297(LC 22)

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

- NOTES-** (14-17)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCCL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 5-4-0, Exterior(2R) 5-4-0 to 10-8-0, Exterior(2E) 10-8-0 to 15-8-1 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 1-4-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 16, 17, 18, 14, 13, 12.
 - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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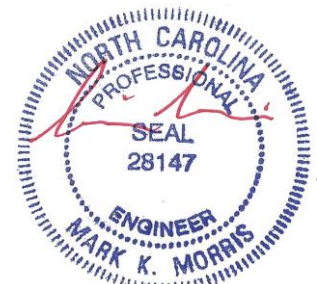
Warning!—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer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

Job	Truss	Truss Type	Qty	Ply	LOT 39 PROVIDENCE CREEK 343 WINDSWEEP WAY FUQUAY-VARINA, NC
23-5652-R01	PB01	GABLE	2	1	Job Reference (optional) # 40537

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ID:kHdPkcoN9g3_0lfrDBlgKRzexCS-v472eFoBJMzvzSaVi2ygg6MK9VBfDsKtk33SFuUyppcc

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

LOAD CASE(S) Standard



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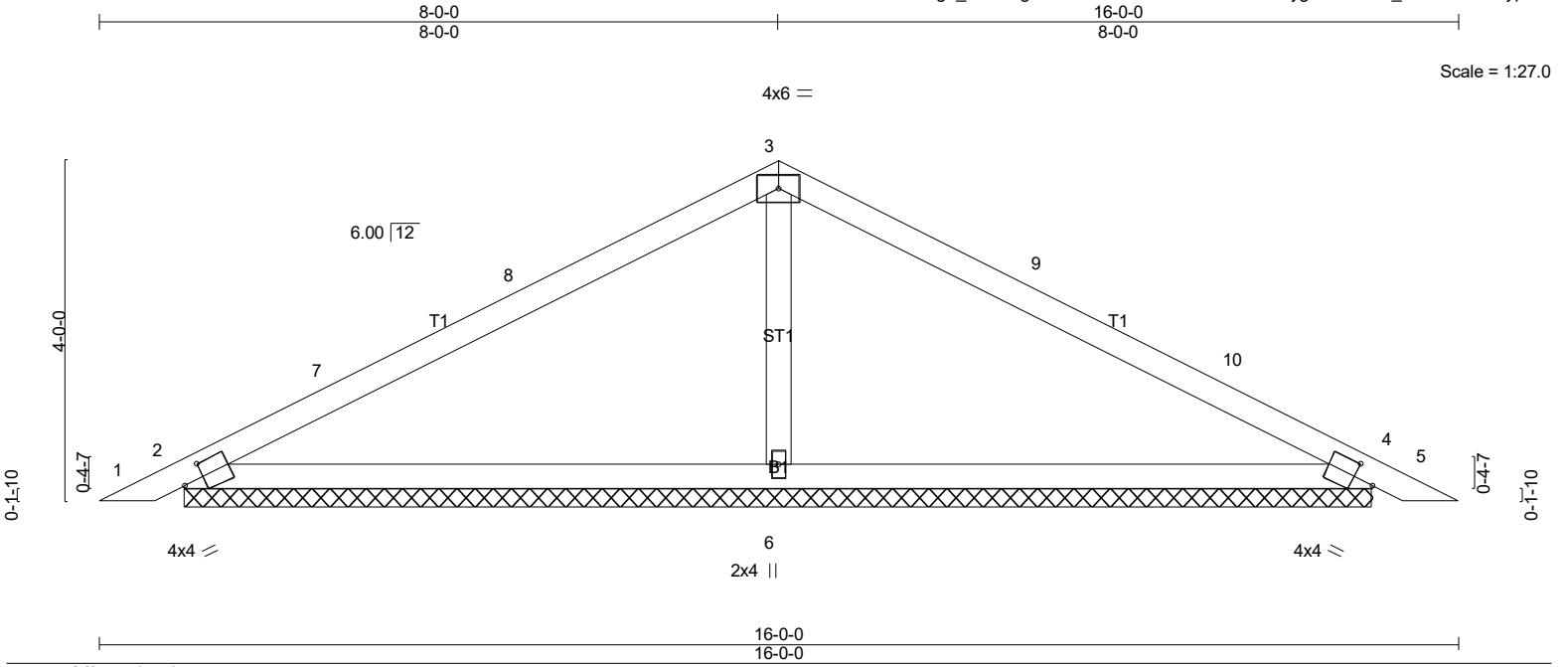


Plate Offsets (X,Y)-- [2:0-2-14,0-2-0], [4:0-2-14,0-2-0]					
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.96	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.63	Vert(LL) 0.03 5 n/r 180		
TCDL 10.0	Lumber DOL 1.15	WB 0.12	Vert(CT) 0.06 5 n/r 80		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 4 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 52 lb	FT = 20%

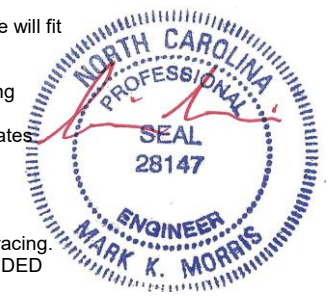
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

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

REACTIONS. (lb/size) 2=295/13-11-14 (min. 0-1-8), 4=295/13-11-14 (min. 0-1-8), 6=611/13-11-14 (min. 0-1-8)
 Max Horz 2=-51(LC 15)
 Max Uplift 2=-48(LC 14), 4=-57(LC 15), 6=-16(LC 14)
 Max Grav 2=358(LC 21), 4=358(LC 22), 6=622(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-393/153

- NOTES-** (11-14)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 5-1-8, Exterior(2R) 5-1-8 to 10-10-8, Exterior(2E) 10-10-8 to 15-8-1 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) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 6) Gable requires continuous bottom chord bearing.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 6.
 - 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
 - 11) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - 12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
 - 13) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
 - 14) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



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Job 23-5652-R01	Truss PB03	Truss Type Piggyback	Qty 5	Ply 1	LOT 39 PROVIDENCE CREEK 343 WINDSWEEP WAY FUQUAY-VARINA, NC
					Job Reference (optional) # 40537

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Aug 9 11:05:40 2023 Page 1
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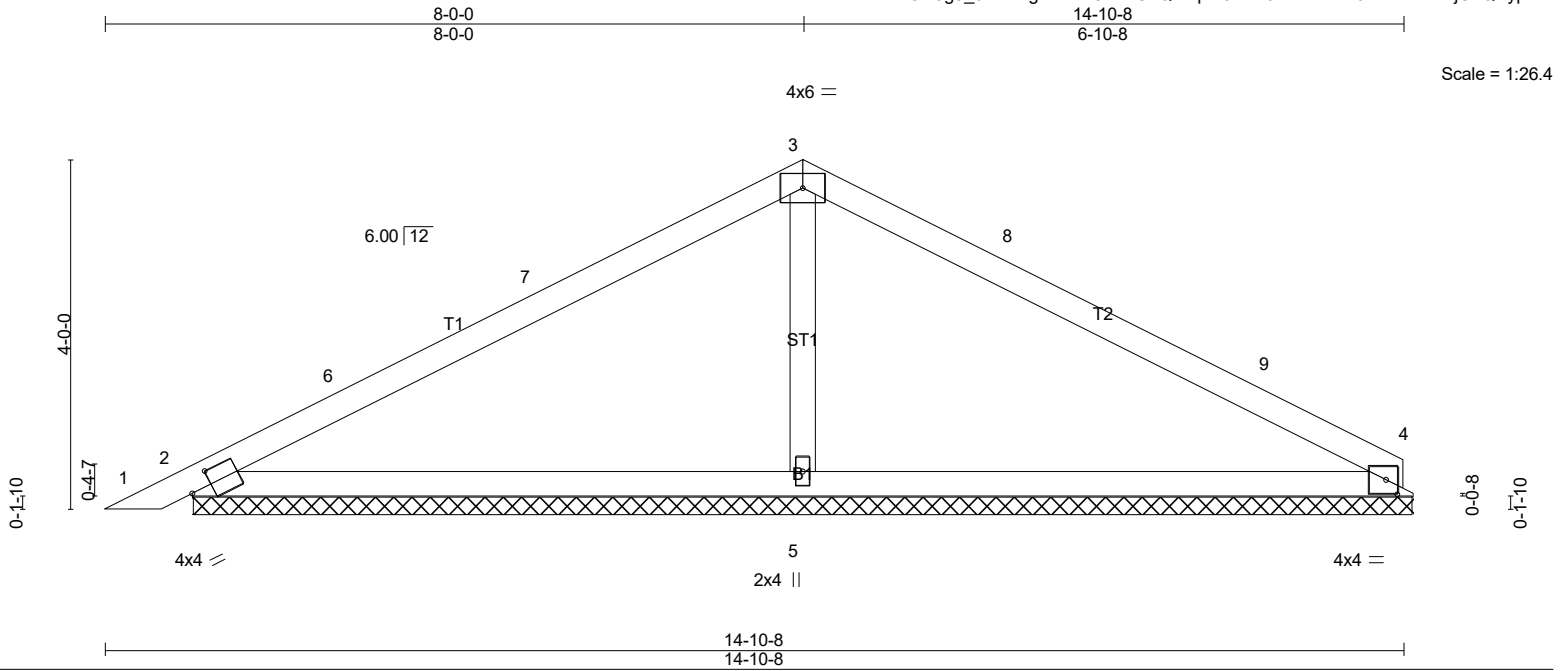


Plate Offsets (X,Y)-- [2:0-2-14,0-2-0], [4:0-1-9,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.97	Vert(LL) -0.01	1	n/r	180	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.65	Vert(CT) 0.02	1	n/r	80		
TCDL 10.0	Lumber DOL 1.15	WB 0.12	Horz(CT) 0.00	4	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH						
BCDL 10.0	Code IRC2021/TPI2014							
							Weight: 51 lb	FT = 20%

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

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

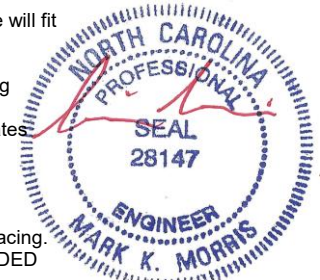
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=294/13-11-14 (min. 0-1-8), 4=252/13-11-14 (min. 0-1-8), 5=614/13-11-14 (min. 0-1-8)
Max Horz 2=54(LC 18)
Max Uplift 2=47(LC 14), 4=44(LC 15), 5=18(LC 14)
Max Grav 2=358(LC 21), 4=315(LC 22), 5=624(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-5=394/155

NOTES- (11-14)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 5-1-8, Exterior(2R) 5-1-8 to 10-2-5, Exterior(2E) 10-2-5 to 14-11-15 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
- 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.
- 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, 5.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



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Job	Truss	Truss Type	Qty	Ply	LOT 39 PROVIDENCE CREEK 343 WINDSWEEP WAY FUQUAY-VARINA, NC
23-5652-R01	R01	Piggyback Base Supported Gable	1	1	# 40537

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Aug 9 11:05:41 2023 Page 1
 ID:kHdPkcON9g3_0lfrDBlgKRzexCS-rTFo3xpRrZDdCmktpT_8BnPW6_MtKAF1XNxlZMyppcu

-0-10-8	21-6-0	37-6-0	59-0-0	59-10-8
0-10-8	21-6-0	16-0-0	21-6-0	0-10-8

Scale = 1:101.3

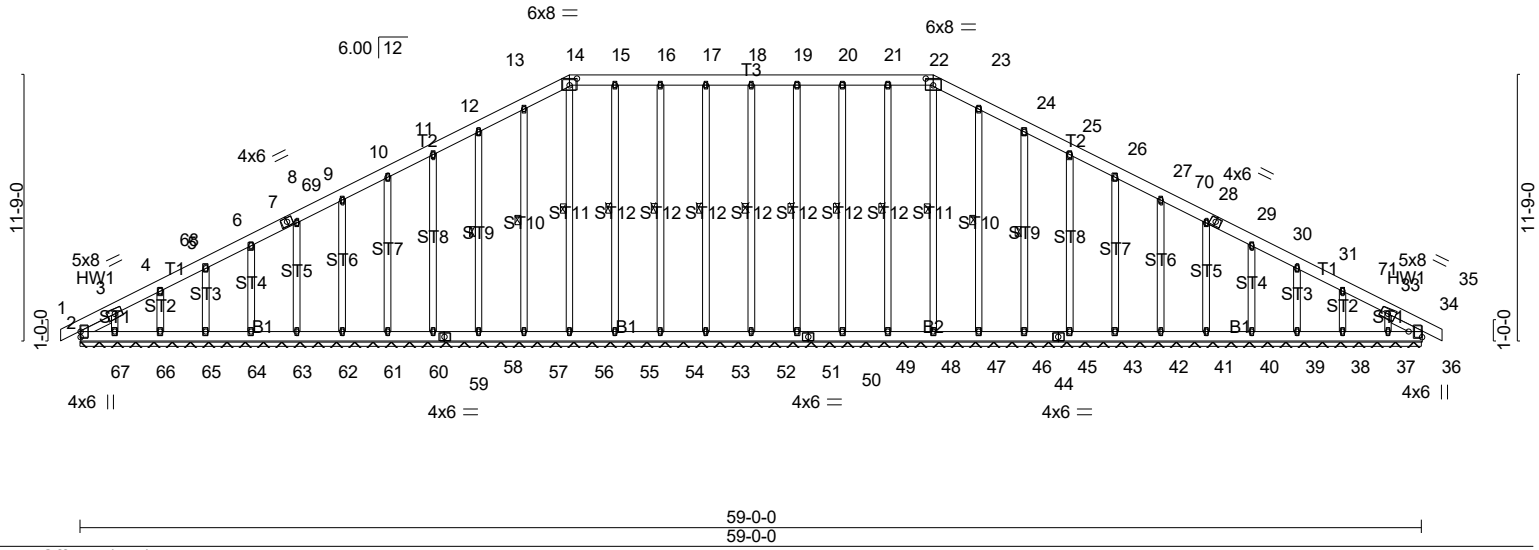


Plate Offsets (X,Y)-- [14:0-4-0,0-3-8], [22:0-4-0,0-3-8], [34:Edge,0-7-2]

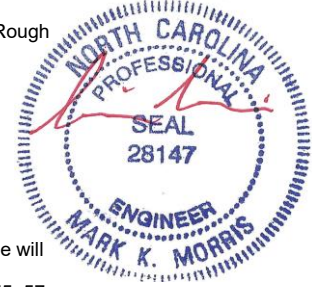
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.05	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) -0.00 34 n/r 180		
TCDL 10.0	Lumber DOL 1.15	WB 0.26	Vert(CT) -0.00 34 n/r 80		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.01 34 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 602 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	WEBS 1 Row at midpt 18-52, 17-53, 16-54, 15-55, 14-56, 13-57, 12-58, 19-51, 20-49, 21-48, 22-47, 23-46, 24-45
SLIDER Left 2x4 SP No.3 -° 1-6-5, Right 2x4 SP No.3 -° 1-6-5	

REACTIONS. All bearings 59-0-0.
 (lb) - Max Horz 2=148(LC 14)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 52, 53, 54, 55, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 51, 49, 48, 46, 45, 43, 42, 41, 40, 39, 38, 37, 36
 Max Grav All reactions 250 lb or less at joint(s) 2, 64, 65, 66, 67, 47, 39, 38, 37, 36, 34 except 52=292(LC 44), 53=292(LC 44), 54=295(LC 44), 55=294(LC 44), 56=255(LC 52), 57=297(LC 47), 58=295(LC 45), 60=292(LC 45), 61=293(LC 45), 62=293(LC 45), 63=278(LC 45), 51=292(LC 44), 49=295(LC 44), 48=294(LC 44), 46=295(LC 45), 45=295(LC 45), 43=292(LC 45), 42=293(LC 45), 41=293(LC 45), 40=278(LC 45)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 13-14=-130/272, 14-15=-122/261, 15-16=-122/261, 16-17=-122/261, 17-18=-122/261, 18-19=-122/261, 19-20=-122/261, 20-21=-122/261, 21-22=-122/261, 22-23=-130/272

- NOTES-** (14-17)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 5-0-5, Exterior(2N) 5-0-5 to 15-6-0, Corner(3R) 15-6-0 to 27-6-0, Exterior(2N) 27-6-0 to 31-6-0, Corner(3R) 31-6-0 to 43-6-0, Exterior(2N) 43-6-0 to 53-11-11, Corner(3E) 53-11-11 to 59-10-8 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 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.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 52, 53, 54, 55, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 51, 49, 48, 46, 45, 43, 42, 41, 40, 39, 38, 37, 36.



8/9/2023

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

Job	Truss	Truss Type	Qty	Ply	LOT 39 PROVIDENCE CREEK 343 WINDSWEEP WAY FUQUAY-VARINA, NC
23-5652-R01	R01	Piggyback Base Supported Gable	1	1	Job Reference (optional) # 40537

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ID:kHdPkcON9g3_0lfrdBlgKRzexCS-JfpAGHq4bHLUqwl3NAVNj?yhsOi63dvBl1hvVoypcct

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

LOAD CASE(S) Standard

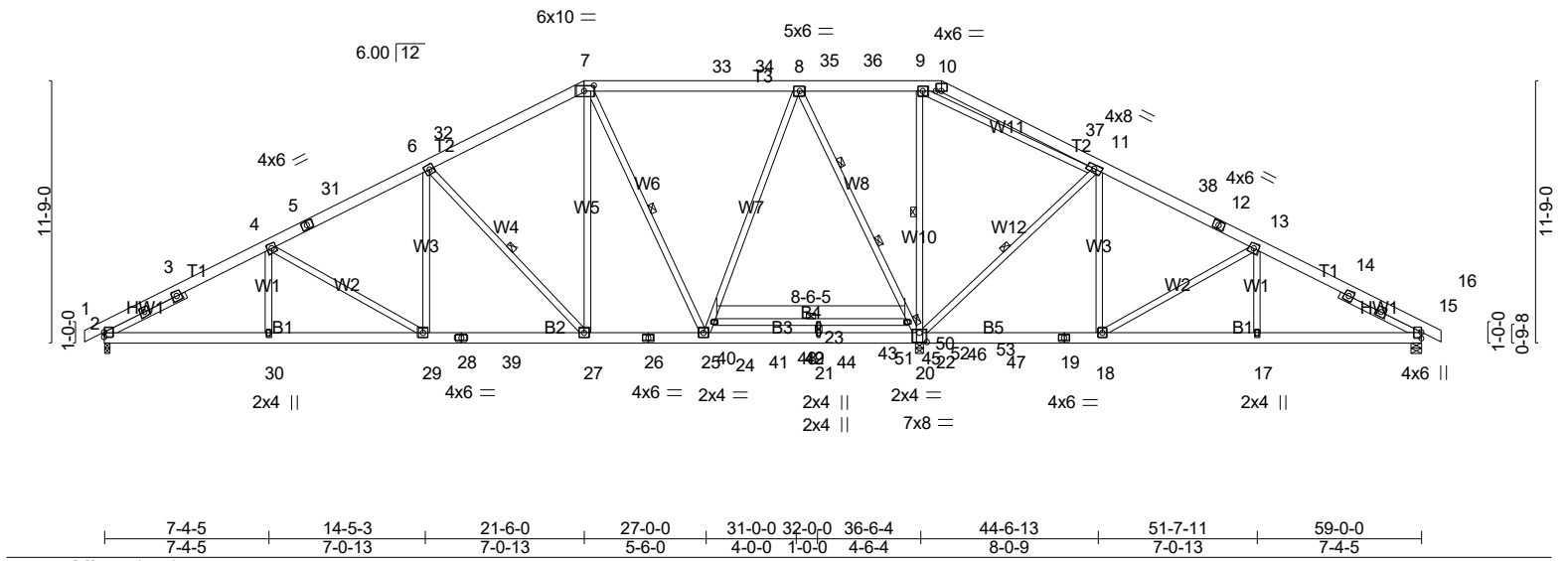


8/9/2023

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 = 1:102.5



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	2.0-0	TC	0.80	Vert(LL)	-0.28 23-24 >999 240	MT20		244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.41 23-24 >999 180				
TCDL	10.0	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.06 15 n/a n/a				
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							
BCDL	10.0										Weight: 503 lb FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-6-3 oc purlins.
BOT CHORD	2x6 SP No.2 *Except* B4: 2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing. Except: 6-0-0 oc bracing: 22-24
WEBS	2x4 SP No.3 *Except* W8: 2x4 SP SS	WEBS	1 Row at midpt 6-27, 7-25, 11-20, 9-20 2 Rows at 1/3 pts 8-22
SLIDER	Left 2x4 SP No.3 -° 4-0-9, Right 2x4 SP No.3 -° 4-0-9		

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

REACTIONS. (lb/size) 2=1297/0-3-8 (min. 0-1-12), 15=562/0-5-8 (min. 0-1-8), 20=3146/0-3-8 (min. 0-2-11)
 Max Horz2=-148(LC 15)
 Max Uplift2=-130(LC 14), 15=-143(LC 15)
 Max Grav2=1509(LC 92), 15=734(LC 41), 20=3903(LC 43)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2467/183, 3-4=-2370/203, 4-5=-1944/201, 5-31=-1835/212, 6-31=-1831/230, 6-32=-1187/217, 7-32=-1052/246, 7-33=-701/201, 33-34=-700/201, 34-35=-700/201, 8-35=-700/201, 8-36=0/958, 9-36=0/958, 9-10=-104/264, 10-37=-117/294, 11-37=-297/222, 11-38=-128/388, 12-38=-265/329, 12-13=-351/307, 13-14=-835/221, 14-15=-940/201
BOT CHORD 2-30=-237/2072, 29-30=-237/2072, 28-29=-116/1645, 28-39=-116/1645, 27-39=-116/1645, 26-27=-33/1030, 26-40=-33/1030, 25-40=-33/1030, 25-41=-81/429, 41-42=-81/429, 42-43=-81/429, 21-43=-81/429, 21-44=-81/429, 44-45=-81/429, 45-46=-81/429, 20-46=-81/429, 20-47=-299/226, 19-47=-299/226, 18-19=-299/226, 17-18=-112/747, 15-17=-112/747
WEBS 4-30=0/270, 4-29=-500/141, 6-29=0/514, 6-27=-1152/194, 7-27=-101/928, 7-25=-1019/150, 24-25=-21/1538, 8-24=0/1661, 8-22=-2224/171, 20-22=-2296/148, 11-20=-1278/203, 11-18=0/556, 13-18=-678/139, 13-17=0/301, 9-20=-861/103, 9-11=-66/1006, 21-23=-288/0

- NOTES-** (17-20)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDD=5.0psf; BCDD=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-10-8 to 5-0-5, Interior(1) 5-0-5 to 15-7-3, Exterior(2R) 15-7-3 to 27-4-13, Interior(1) 27-4-13 to 31-7-3, Exterior(2R) 31-7-3 to 43-4-13, Interior(1) 43-4-13 to 53-11-11, Exterior(2E) 53-11-11 to 59-10-8 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 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.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 5x5 MT20 unless otherwise indicated.



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8) This truss has been designed for a 0.0 psf flat roof live load non concurrent with any other live loads. Continued on page 2
 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 39 PROVIDENCE CREEK 343 WINDSWEPT WAY FUQUAY-VARINA, NC
23-5652-R01	R02	Piggyback Base	4	1	Job Reference (optional) # 40537

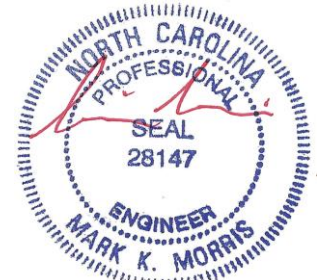
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NOTES- (17-20)

- 9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) Bearing at joint(s) 20 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 11) Provide metal plate or equivalent at bearing(s) 20 to support reaction shown.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=130, 15=143.
- 13) Load case(s) 86, 87, 88, 89, 90, 91, 92, 93, 94 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 14) MULTIPLE LOADCASES – This design is the composite result of multiple load cases.
- 15) User moving load cases exist: Review the load cases for details.
- 16) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 17) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 18) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 19) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 20) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard Except:

- 86) 1st User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-7=-60(F), 7-10=-60(F), 10-16=-60(F), 2-15=-20(F), 22-24=-20(F)
 Concentrated Loads (lb)
 Vert: 25=-150 42=-150
- 87) 2nd User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-7=-60(F), 7-10=-60(F), 10-16=-60(F), 2-15=-20(F), 22-24=-20(F)
 Concentrated Loads (lb)
 Vert: 42=-150 43=-150
- 88) 3rd User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-7=-60(F), 7-10=-60(F), 10-16=-60(F), 2-15=-20(F), 22-24=-20(F)
 Concentrated Loads (lb)
 Vert: 43=-150 44=-150
- 89) 4th User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-7=-60(F), 7-10=-60(F), 10-16=-60(F), 2-15=-20(F), 22-24=-20(F)
 Concentrated Loads (lb)
 Vert: 44=-150 46=-150
- 90) 5th User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-7=-60(F), 7-10=-60(F), 10-16=-60(F), 2-15=-20(F), 22-24=-20(F)
 Concentrated Loads (lb)
 Vert: 20=-150 45=-150
- 91) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-7=-32(F=-20), 7-10=-101(F=-20), 10-16=-32(F=-20), 2-15=-20(F), 22-24=-20(F)
 Concentrated Loads (lb)
 Vert: 25=-150 42=-150
- 92) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-5=-60(F=-20), 5-7=-101(F=-20), 7-10=-32(F=-20), 10-12=-101(F=-20), 12-16=-60(F=-20), 2-15=-20(F), 22-24=-20(F)
 Concentrated Loads (lb)
 Vert: 25=-150 42=-150
- 93) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-7=-32(F=-20), 7-10=-101(F=-20), 10-16=-32(F=-20), 2-15=-20(F), 22-24=-20(F)
 Concentrated Loads (lb)
 Vert: 25=-150 42=-150
- 94) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-5=-60(F=-20), 5-7=-101(F=-20), 7-10=-32(F=-20), 10-12=-101(F=-20), 12-16=-60(F=-20), 2-15=-20(F), 22-24=-20(F)
 Concentrated Loads (lb)
 Vert: 25=-150 42=-150



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Job	Truss	Truss Type	Qty	Ply	LOT 39 PROVIDENCE CREEK 343 WINDSWEEP WAY FUQUAY-VARINA, NC
23-5652-R01	R03	Piggyback Base	5	1	# 40537

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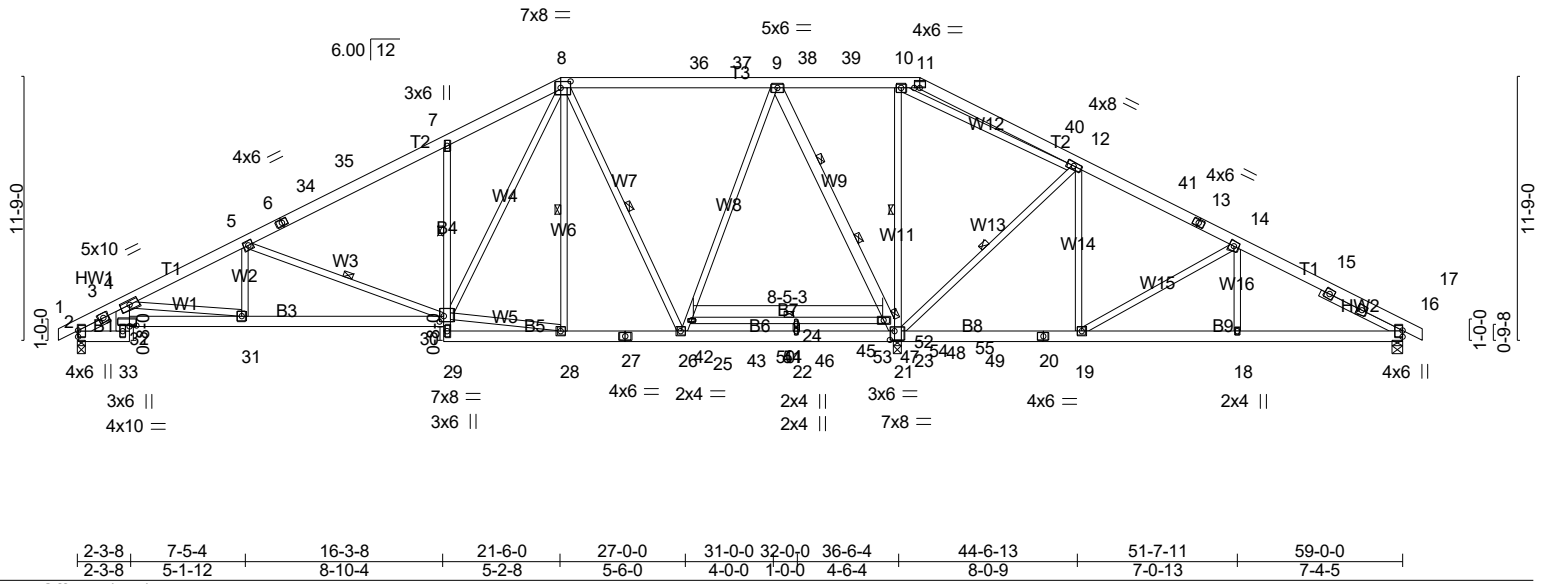
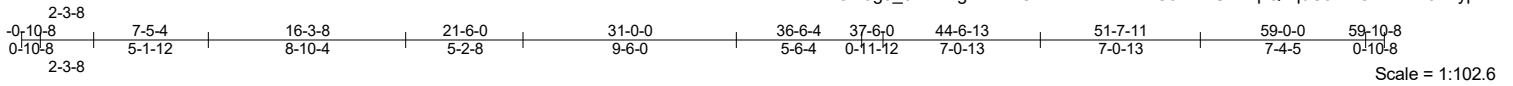


Plate Offsets (X,Y)--	[8:0-5-4,0-3-8], [21:0-2-8,0-4-12], [30:0-2-4,0-3-0], [32:0-3-12,0-0-8]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15	TC 0.83	Vert(LL) -0.28 24-25 >999 240	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.15	BC 0.93	Vert(CT) -0.40 24-25 >999 180		
TCDL 10.0	Rep Stress Incr YES	WB 0.88	Horz(CT) 0.09 16 n/a n/a		
BCLL 0.0 *	Code IRC2021/TPI2014	Matrix-SH			
BCDL 10.0					Weight: 532 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-11-1 oc purlins.
BOT CHORD 2x6 SP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except:
B2: 2x8 SP No.2, B4: 2x4 SP No.3, B7: 2x4 SP No.2	1 Row at midpt 7-30
WEBS 2x4 SP No.3 *Except*	6-0-0 oc bracing: 23-25
W9: 2x6 SP No.2	1 Row at midpt 5-30, 8-28, 8-26, 12-21, 10-21
SLIDER Left 2x4 SP No.3 -° 1-6-4, Right 2x4 SP No.3 -° 4-0-9	2 Rows at 1/3 pts 9-23
	MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=1229/0-3-8 (min. 0-1-11), 16=451/0-5-8 (min. 0-1-8), 21=3324/0-3-8 (min. 0-2-11)
 Max Horz 2=148(LC 19)
 Max Uplift 2=116(LC 14), 16=152(LC 15)
 Max Grav 2=1432(LC 92), 16=665(LC 41), 21=3980(LC 43)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2017/149, 3-4=-1883/147, 4-5=-2712/217, 5-6=-1740/182, 6-34=-1629/192, 34-35=-1565/215, 7-35=-1362/218, 7-8=-1700/325, 8-36=-566/183, 36-37=-566/183, 37-38=-565/183, 9-38=-565/183, 9-39=0/1208, 10-39=0/1208, 10-11=-59/302, 11-40=-66/351, 12-40=-246/281, 12-41=-30/622, 13-41=-122/565, 13-14=-208/541, 14-15=-704/268, 15-16=-805/235
 BOT CHORD 2-33=-227/1462, 31-32=-388/2639, 30-31=-259/2425, 7-30=-780/219, 27-28=-24/857, 27-42=-24/857, 26-42=-24/857, 26-43=-301/268, 43-44=-301/268, 44-45=-301/268, 22-45=-301/268, 22-46=-301/268, 46-47=-301/268, 47-48=-301/268, 21-48=-301/268, 21-49=-511/129, 20-49=-511/129, 19-20=-511/129, 18-19=-199/630, 16-18=-199/630
 WEBS 4-31=-322/131, 5-31=0/402, 5-30=-1104/209, 28-30=0/750, 8-30=-241/1563, 8-26=-1096/166, 25-26=-31/1615, 9-25=-5/1683, 9-23=-2284/179, 21-23=-2345/156, 12-21=-1298/201, 12-19=0/563, 14-19=-702/137, 14-18=0/305, 10-12=-85/1191, 10-21=-971/112, 22-24=-288/0

NOTES- (17-20)
 1) Unbalanced roof live loads have been considered for this design.
 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TC DL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 5-0-5, Interior(1) 5-0-5 to 15-7-3, Exterior(2R) 15-7-3 to 27-4-13, Interior(1) 27-4-13 to 31-7-3, Exterior(2R) 31-7-3 to 43-4-13, Interior(1) 43-4-13 to 53-11-11, Exterior(2E) 53-11-11 to 59-10-8 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 4) Unbalanced snow loads have been considered for this design.
 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 6) Provide adequate bracing to prevent water ponding.



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

Job	Truss	Truss Type	Qty	Ply	LOT 39 PROVIDENCE CREEK 343 WINDSWEEP WAY FUQUAY-VARINA, NC
23-5652-R01	R03	Piggyback Base	5	1	Job Reference (optional) # 40537

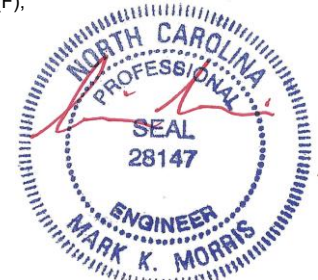
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NOTES- (17-20)

- 7) All plates are 5x5 MT20 unless otherwise indicated.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) Bearing at joint(s) 21 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 11) Provide metal plate or equivalent at bearing(s) 21 to support reaction shown.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=116, 16=152.
- 13) Load case(s) 86, 87, 88, 89, 90, 91, 92, 93, 94 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 14) MULTIPLE LOADCASES – This design is the composite result of multiple load cases.
- 15) User moving load cases exist: Review the load cases for details.
- 16) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 17) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 18) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 19) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 20) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

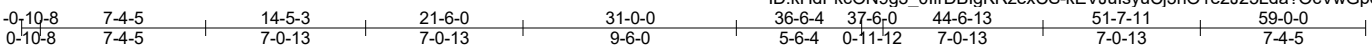
LOAD CASE(S) Standard Except:

- 86) 1st User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-8=-60(F), 8-11=-60(F), 11-17=-60(F), 2-33=-20(F), 30-32=-20(F), 16-29=-20(F), 23-25=-20(F)
Concentrated Loads (lb)
Vert: 26=-150 44=-150
- 87) 2nd User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-8=-60(F), 8-11=-60(F), 11-17=-60(F), 2-33=-20(F), 30-32=-20(F), 16-29=-20(F), 23-25=-20(F)
Concentrated Loads (lb)
Vert: 44=-150 45=-150
- 88) 3rd User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-8=-60(F), 8-11=-60(F), 11-17=-60(F), 2-33=-20(F), 30-32=-20(F), 16-29=-20(F), 23-25=-20(F)
Concentrated Loads (lb)
Vert: 45=-150 46=-150
- 89) 4th User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-8=-60(F), 8-11=-60(F), 11-17=-60(F), 2-33=-20(F), 30-32=-20(F), 16-29=-20(F), 23-25=-20(F)
Concentrated Loads (lb)
Vert: 46=-150 48=-150
- 90) 5th User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-8=-60(F), 8-11=-60(F), 11-17=-60(F), 2-33=-20(F), 30-32=-20(F), 16-29=-20(F), 23-25=-20(F)
Concentrated Loads (lb)
Vert: 21=-150 47=-150
- 91) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-8=-32(F=-20), 8-11=-101(F=-20), 11-17=-32(F=-20), 2-33=-20(F), 30-32=-20(F), 16-29=-20(F), 23-25=-20(F)
Concentrated Loads (lb)
Vert: 26=-150 44=-150
- 92) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-6=-60(F=-20), 6-8=-101(F=-20), 8-11=-32(F=-20), 11-13=-101(F=-20), 13-17=-60(F=-20), 2-33=-20(F), 30-32=-20(F), 16-29=-20(F), 23-25=-20(F)
Concentrated Loads (lb)
Vert: 26=-150 44=-150
- 93) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-8=-32(F=-20), 8-11=-101(F=-20), 11-17=-32(F=-20), 2-33=-20(F), 30-32=-20(F), 16-29=-20(F), 23-25=-20(F)
Concentrated Loads (lb)
Vert: 26=-150 44=-150
- 94) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-6=-60(F=-20), 6-8=-101(F=-20), 8-11=-32(F=-20), 11-13=-101(F=-20), 13-17=-60(F=-20), 2-33=-20(F), 30-32=-20(F), 16-29=-20(F), 23-25=-20(F)
Concentrated Loads (lb)
Vert: 26=-150 44=-150



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Scale = 1:102.6

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	2.0-0	TC	0.79	Vert(LL)	-0.28 21-22 >999 240	MT20		244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.40 21-22 >999 180				
TCDL	10.0	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.05 15 n/a n/a				
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							
BCDL	10.0										Weight: 501 lb FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-7-5 oc purlins.
BOT CHORD	2x6 SP No.2 *Except* B4: 2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing. Except: 6-0-0 oc bracing: 21-23
WEBS	2x4 SP No.3 *Except* W9: 2x4 SP SS	WEBS	1 Row at midpt 6-26, 7-24, 11-19, 9-19 2 Rows at 1/3 pts 8-21
SLIDER	Left 2x4 SP No.3 -° 4-0-9, Right 2x4 SP No.3 -° 4-0-9		

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

REACTIONS. (lb/size) 2=1298/0-3-8 (min. 0-1-11), 15=509/0-5-8 (min. 0-1-8), 19=3145/0-3-8 (min. 0-2-11)
 Max Horz2=-150(LC 15)
 Max Uplift2=-130(LC 14), 15=-129(LC 15)
 Max Grav2=1454(LC 39), 15=681(LC 43), 19=3902(LC 45)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2357/184, 3-4=-2263/204, 4-5=-1911/202, 5-30=-1824/213, 6-30=-1819/231, 6-31=-1184/218, 7-31=-1050/247, 7-32=-699/202, 32-33=-698/202, 33-34=-698/202, 8-34=-698/202, 8-35=0/941, 9-35=0/941, 9-10=-105/265, 10-36=-117/295, 11-36=-297/223, 11-37=-131/386, 12-37=-268/327, 12-13=-354/304, 13-14=-842/224, 14-15=-945/203
 BOT CHORD 2-29=-236/1979, 28-29=-236/1979, 27-28=-115/1647, 27-38=-115/1647, 26-38=-115/1647, 25-26=-32/1031, 25-39=-32/1031, 24-39=-32/1031, 24-40=-138/431, 20-40=-138/431, 20-41=-138/431, 19-41=-138/431, 19-42=-296/228, 18-42=-296/228, 17-18=-296/228, 16-17=-112/753, 15-16=-112/753
 WEBS 4-29=0/270, 4-28=-512/141, 6-28=0/515, 6-26=-1151/194, 7-26=-102/921, 7-24=-1106/151, 23-24=-15/1562, 8-23=0/1665, 8-21=-2182/169, 19-21=-2311/143, 11-19=-1283/202, 11-17=0/562, 13-17=-675/140, 13-16=0/301, 9-19=-837/102, 20-22=-295/0, 9-11=-65/982

- NOTES-** (13-16)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TC DL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 5-0-5, Interior(1) 5-0-5 to 15-7-3, Exterior(2R) 15-7-3 to 27-4-13, Interior(1) 27-4-13 to 31-7-3, Exterior(2R) 31-7-3 to 43-4-13, Interior(1) 43-4-13 to 53-1-3, Exterior(2E) 53-1-3 to 59-0-0 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
 - 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.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 5x5 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



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Job	Truss	Truss Type	Qty	Ply	LOT 39 PROVIDENCE CREEK 343 WINDSWEPT WAY FUQUAY-VARINA, NC
23-5652-R01	R04	PIGGYBACK BASE	1	1	Job Reference (optional) # 40537

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NOTES- (13-16)

- 9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) Bearing at joint(s) 19 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 11) Provide metal plate or equivalent at bearing(s) 19 to support reaction shown.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=130, 15=129.
- 13) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 14) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 15) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 16) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

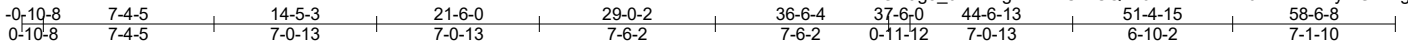


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Job 23-5652-R01	Truss R05	Truss Type Piggyback Base	Qty 5	Ply 1	LOT 39 PROVIDENCE CREEK 343 WINDSWEEP WAY FUQUAY-VARINA, NC Job Reference (optional) # 40537
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Scale = 1:99.7

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15		TC 0.51	Vert(LL) -0.12 22-24	>999	240		MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.15		BC 0.50	Vert(CT) -0.21 22-24	>999	180			
TCDL 10.0	Rep Stress Incr YES		WB 1.00	Horz(CT) 0.05 15	n/a	n/a			
BCLL 0.0 *	Code IRC2021/TPI2014		Matrix-SH						
BCDL 10.0									
								Weight: 492 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
W5: 2x4 SP No.2
SLIDER Left 2x4 SP No.3 -° 4-0-9, Right 2x6 SP No.2 -° 4-0-6

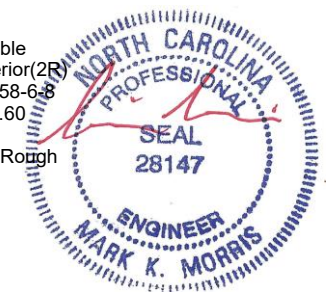
BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-4-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-22, 7-21, 8-21, 9-21, 11-19, 9-11
2 Rows at 1/3 pts 9-19

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

REACTIONS. All bearings 0-3-8 except (jt=length) 15=Mechanical.
(lb) - Max Horz 2=-150(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 19, 16, 15 except 2=-135(LC 14)
Max Grav All reactions 250 lb or less at joint(s) except 2=1575(LC 39), 19=2880(LC 45), 16=691(LC 43), 15=482(LC 43)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2601/232, 3-4=-2500/253, 4-5=-2093/257, 5-26=-2007/267, 6-26=-1993/285,
6-27=-1357/270, 7-27=-1210/298, 7-28=-709/269, 8-28=-708/269, 8-29=-708/269,
29-30=-708/269, 30-31=-708/269, 9-31=-708/269, 9-10=-200/358, 10-32=-224/414,
11-32=-399/331, 12-33=-303/152, 12-13=-386/141, 13-14=-424/173, 14-15=-513/141
BOT CHORD 2-25=-244/2184, 24-25=-244/2184, 23-24=-125/1795, 23-34=-125/1795, 22-34=-125/1795,
22-35=-32/1134, 21-35=-32/1134, 21-36=-444/153, 20-36=-444/153, 19-20=-444/153,
19-37=-131/258, 18-37=-131/258, 17-18=-131/258, 15-16=-96/380
WEBS 4-25=0/275, 4-24=-492/139, 6-24=0/470, 6-22=-1135/200, 7-22=-73/1111, 7-21=-1124/116,
8-21=-835/174, 9-21=-155/1810, 9-19=-2114/250, 11-19=-763/152, 13-17=-106/256,
13-16=-614/164, 9-11=-47/606

- NOTES-** (12-15)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 4-11-12, Interior(1) 4-11-12 to 15-7-12, Exterior(2R) 15-7-12 to 27-4-4, Interior(1) 27-4-4 to 31-7-12, Exterior(2R) 31-7-12 to 43-4-4, Interior(1) 43-4-4 to 52-8-4, Exterior(2E) 52-8-4 to 58-6-8 zone; end vertical left 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) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 5x5 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit



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Continued on page 2
Between the bottom chord and other members with BCDL design. 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 39 PROVIDENCE CREEK 343 WINDSWEPT WAY FUQUAY-VARINA, NC
23-5652-R01	R05	Piggyback Base	5	1	Job Reference (optional) # 40537

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Aug 9 11:05:46 2023 Page 2
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NOTES- (12-15)

- 10) Refer to girder(s) for truss to truss connections.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 16, 15 except (jt=lb) 2=135.
- 12) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 14) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 15) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



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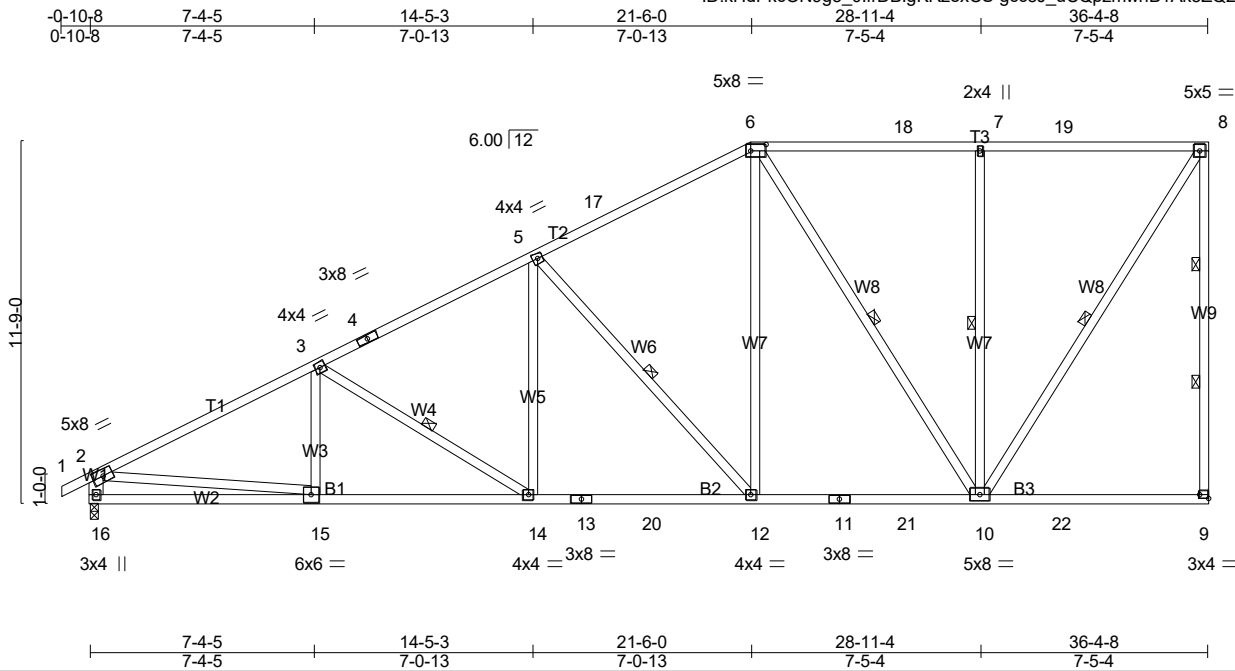


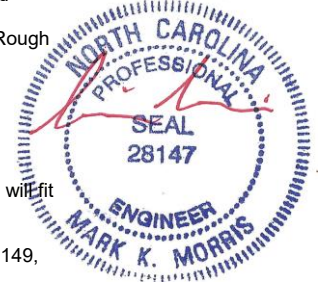
Plate Offsets (X,Y)-- [6:0-6-0,0-2-8], [9:Edge,0-1-8]						
LOADING (psf)	SPACING-	CSI.	DEFL.		PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.98	in (loc) l/defl L/d		MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.90	Vert(LL) -0.19 12-14 >999 240			
TCDL 10.0	Lumber DOL 1.15	WB 0.84	Vert(CT) -0.32 12-14 >999 180			
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.07 9 n/a n/a			
BCDL 10.0	Code IRC2021/TPI2014				Weight: 259 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1 *Except* T1: 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 9-1-3 oc bracing.
WEBS 2x4 SP No.3 *Except* W9: 2x4 SP SS, W1: 2x6 SP No.2	WEBS 1 Row at midpt 3-14, 5-12, 6-10, 7-10, 8-10 2 Rows at 1/3 pts 8-9
	MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 9=1439/Mechanical, 16=1507/0-3-8 (min. 0-2-1)
 Max Horz 16=331(LC 14)
 Max Uplift 9=-149(LC 11), 16=-112(LC 14)
 Max Grav 9=1909(LC 37), 16=1723(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2672/146, 3-4=-2323/115, 4-5=-2116/143, 5-17=-1625/135, 6-17=-1480/156,
 6-18=-953/107, 7-18=-952/107, 7-19=-953/107, 8-19=-953/107, 8-9=-1715/206,
 2-16=-1650/145
 BOT CHORD 15-16=-416/415, 14-15=-387/2304, 13-14=-274/1992, 13-20=-274/1992, 12-20=-274/1992,
 11-12=-181/1336, 11-21=-181/1336, 10-21=-181/1336
 WEBS 3-14=-418/133, 5-14=0/444, 5-12=-1077/200, 6-12=-77/1073, 6-10=-905/144,
 7-10=-878/180, 8-10=-199/1747, 2-15=0/1919

- NOTES-** (10-13)
- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 16-8-6, Exterior(2R) 16-8-6 to 26-3-10, Interior(1) 26-3-10 to 31-5-2, Exterior(2E) 31-5-2 to 36-2-12 zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) 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) Provide adequate drainage to prevent water ponding.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 8) Refer to girder(s) for truss to truss connections.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=149, 16=112.



8/9/2023

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

Job	Truss	Truss Type	Qty	Ply	LOT 39 PROVIDENCE CREEK 343 WINDSWEEP WAY FUQUAY-VARINA, NC
23-5652-R01	R06	PIGGYBACK BASE	5	1	Job Reference (optional) # 40537

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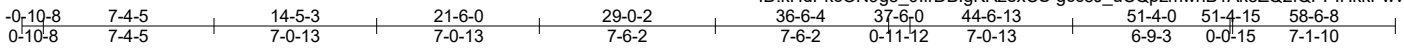
- 10) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the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

LOAD CASE(S) Standard

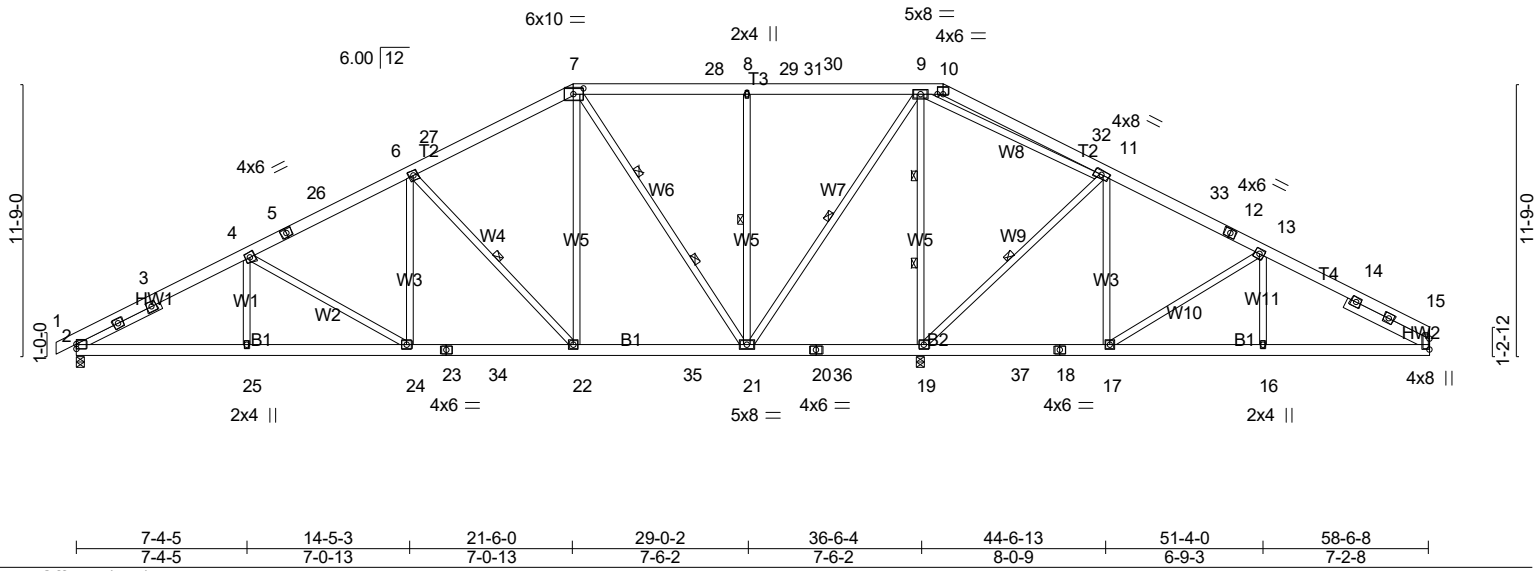


8/9/2023

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 = 1:99.7



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	2.0-0	TC	0.51	Vert(LL)	-0.12	22-24	>999	L/d	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.20	22-24	>999		180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.06	15	n/a	n/a			
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH									
BCDL	10.0												
Weight: 490 lb FT = 20%													

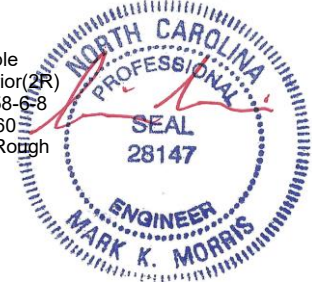
LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-6-1 oc purlins.
BOT CHORD	2x6 SP No.2 *Except* B2: 2x6 SP DSS	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 19-21, 17-19.
WEBS	2x4 SP No.3 *Except* W5: 2x4 SP No.2	WEBS	1 Row at midpt 6-22, 8-21, 9-21, 11-19 2 Rows at 1/3 pts 7-21, 9-19
SLIDER	Left 2x4 SP No.3 -° 4-0-9, Right 2x6 SP No.2 -° 4-0-12		

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

REACTIONS. (lb/size) 2=1350/0-3-8 (min. 0-1-13), 19=2778/0-3-8 (min. 0-3-5), 15=608/Mechanical
 Max Horz2=-150(LC 19)
 Max Uplift2=-142(LC 14), 19=-31(LC 14), 15=-121(LC 15)
 Max Grav2=1511(LC 39), 19=3304(LC 45), 15=760(LC 43)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2473/215, 3-4=-2376/235, 4-5=-1973/238, 5-26=-1887/249, 6-26=-1874/266,
 6-27=-1252/250, 7-27=-1116/279, 7-28=-615/246, 8-28=-614/246, 8-29=-615/246,
 29-30=-615/246, 30-31=-615/246, 9-31=-615/246, 9-10=-112/394, 10-32=-126/453,
 11-32=-303/371, 11-33=-316/195, 12-33=-455/178, 12-13=-533/168, 13-14=-883/203,
 14-15=-1057/182
 BOT CHORD 2-25=-256/2076, 24-25=-256/2076, 23-24=-138/1690, 23-34=-138/1690, 22-34=-138/1690,
 22-35=-46/1085, 21-35=-46/1085, 21-36=-645/162, 20-36=-645/162, 19-20=-645/162,
 19-37=-103/395, 18-37=-103/395, 17-18=-103/395, 16-17=-87/836, 15-16=-87/836
 WEBS 4-25=0/277, 4-24=-504/137, 6-24=0/474, 6-22=-1138/199, 7-22=-73/1115, 7-21=-1188/108,
 8-21=-832/174, 9-21=-167/1844, 9-19=-2194/272, 11-19=-1226/195, 11-17=0/529,
 13-17=-589/130, 13-16=0/282, 9-11=0/730

- NOTES-** (12-15)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TC DL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 4-11-12, Interior(1) 4-11-12 to 15-7-12, Exterior(2R) 15-7-12 to 27-4-4, Interior(1) 27-4-4 to 31-7-12, Exterior(2R) 31-7-12 to 43-4-4, Interior(1) 43-4-4 to 52-8-4, Exterior(2E) 52-8-4 to 58-6-8 zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 5x5 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



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

Job	Truss	Truss Type	Qty	Ply	LOT 39 PROVIDENCE CREEK 343 WINDSWEPT WAY FUQUAY-VARINA, NC
23-5652-R01	R07	Piggyback Base	4	1	Job Reference (optional) # 40537

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NOTES- (12-15)

- 10) Refer to girder(s) for truss to truss connections.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19 except (jt=lb) 2=142, 15=121.
- 12) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 14) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 15) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



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Job 23-5652-R01	Truss R08	Truss Type Piggyback Base Supported Gable	Qty 1	Ply 1	LOT 39 PROVIDENCE CREEK 343 WINDSWEEP WAY FUQUAY-VARINA, NC Job Reference (optional) # 40537
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0-10-8 21-6-0 16-0-0 21-0-8

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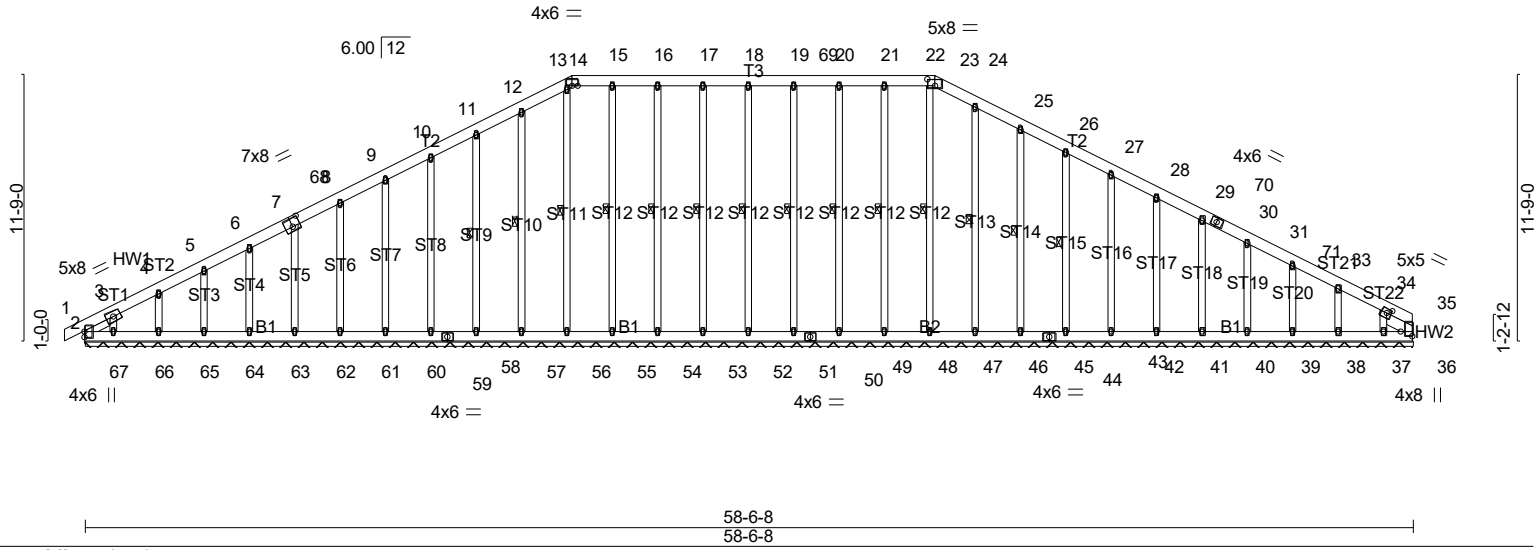


Plate Offsets (X,Y)-- [7:0-4-0-0-4-8], [23:0-4-0-0-3-8], [34:0-2-5-0-2-4], [35:Edge,0-6-2]					
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.05	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) -0.00 1 n/r 180		
TCDL 10.0	Lumber DOL 1.15	WB 0.25	Vert(CT) -0.00 1 n/r 80		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.01 35 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 598 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	WEBS 1 Row at midpt 18-52, 17-53, 16-54, 15-55, 13-56, 12-57, 11-58, 19-51, 20-49, 21-48, 22-47, 24-46, 25-45, 26-43
SLIDER Left 2x4 SP No.3 -° 1-3-4, Right 2x6 SP No.2 -° 1-4-8	

REACTIONS. All bearings 58-6-8.
(lb) - Max Horz 2=-150(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 2, 52, 53, 54, 55, 57, 58, 60, 61, 62, 63, 64, 65, 66, 51, 49, 48, 46, 45, 43, 42, 41, 40, 39, 38, 37 except 67=-103(LC 14), 36=-108(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 2, 64, 65, 66, 67, 39, 38, 37, 36, 35 except 52=292(LC 44), 53=292(LC 44), 54=295(LC 44), 55=288(LC 44), 56=266(LC 53), 57=297(LC 47), 58=294(LC 45), 60=291(LC 45), 61=292(LC 45), 62=301(LC 45), 63=270(LC 45), 51=292(LC 44), 49=294(LC 44), 48=294(LC 44), 47=257(LC 52), 46=289(LC 49), 45=295(LC 45), 43=292(LC 45), 42=292(LC 45), 41=293(LC 45), 40=284(LC 45)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 12-13=-127/276, 14-15=-121/266, 15-16=-121/266, 16-17=-121/266, 17-18=-121/266, 18-69=-121/266, 19-69=-121/266, 19-20=-121/266, 20-21=-121/266, 21-22=-121/266, 22-23=-121/266, 23-24=-128/276, 24-25=-115/251

- NOTES-** (15-18)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TC DL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 5-3-4, Exterior(2N) 5-3-4 to 15-7-12, Corner(3R) 15-7-12 to 27-3-4, Exterior(2N) 27-3-4 to 31-7-12, Corner(3R) 31-7-12 to 43-3-4, Exterior(2N) 43-3-4 to 52-8-4, Corner(3E) 52-8-4 to 58-6-8 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 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.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL= 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 52, 53, 54, 55, 57,



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When used on projects, all truss and rafter notes should be read before use. This design is based on the 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 39 PROVIDENCE CREEK 343 WINDSWEPT WAY FUQUAY-VARINA, NC
23-5652-R01	R08	Piggyback Base Supported Gable	1	1	Job Reference (optional) # 40537

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NOTES- (15-18)

- 14) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 35.
- 15) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 16) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 17) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 18) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

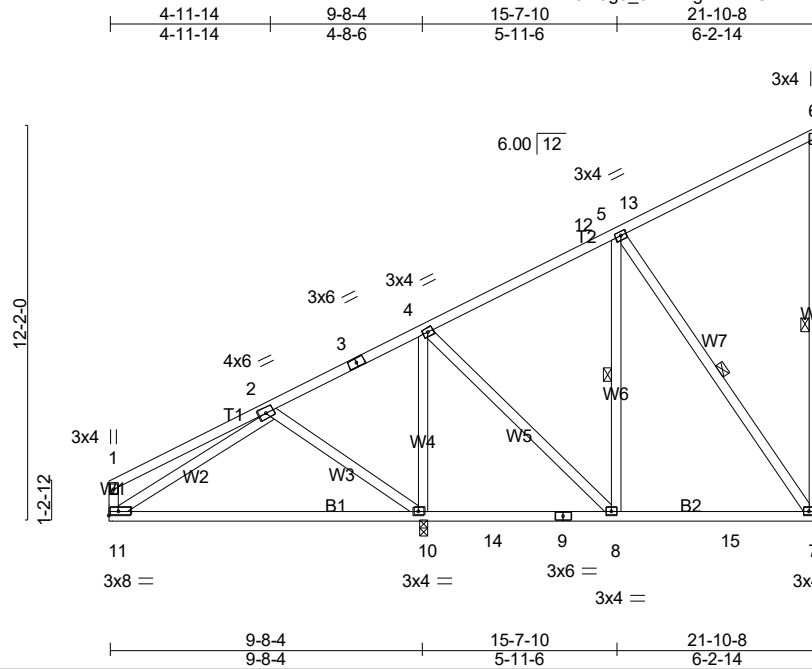


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Job	Truss	Truss Type	Qty	Ply	LOT 39 PROVIDENCE CREEK 343 WINDSWEPT WAY FUQUAY-VARINA, NC
23-5652-R01	R09	Jack-Closed	3	1	Job Reference (optional) # 40537

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Scale = 1:71.0

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.72	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.69	Vert(LL) 0.36 10-11 >317 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.39	Vert(CT) -0.42 10-11 >274 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.01 7 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 152 lb	FT = 20%

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

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

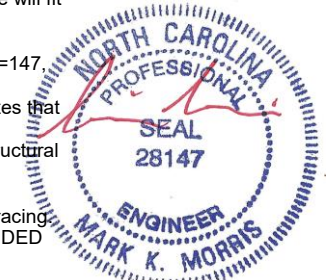
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 11=362/Mechanical, 7=466/Mechanical, 10=899/0-3-8 (min. 0-1-8)
 Max Horz 11=329(LC 14)
 Max Uplift 7=-147(LC 14), 10=-145(LC 14)
 Max Grav 11=367(LC 20), 7=620(LC 5), 10=963(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 4-12=-325/0
 BOT CHORD 10-11=-253/254
 WEBS 2-11=-292/91, 2-10=-286/180, 4-10=-593/138, 4-8=0/325, 5-7=-409/126

NOTES- (8-11)

- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TC DL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; End Jack Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-10-4, Interior(1) 4-10-4 to 14-11-5, Exterior(2R) 14-11-5 to 21-8-12 zone; 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 a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=147 10=145.
- 8) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 9) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 10) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 11) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



8/9/2023

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

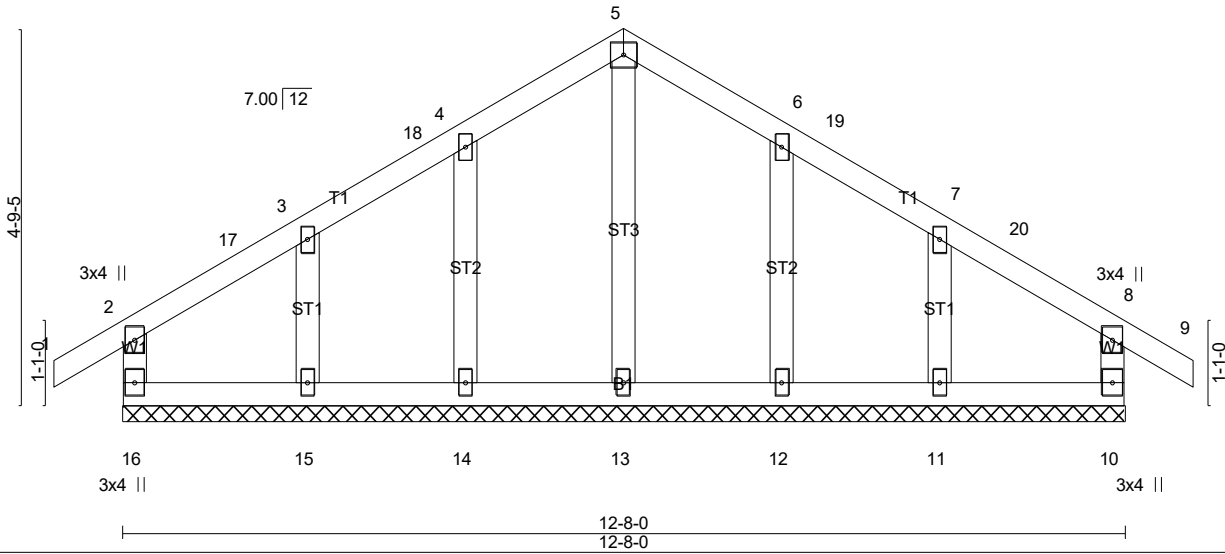
Job	Truss	Truss Type	Qty	Ply	LOT 39 PROVIDENCE CREEK 343 WINDSWEEP WAY FUQUAY-VARINA, NC
23-5652-R01	R11	Common Supported Gable	1	1	
					# 40537

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Aug 9 11:05:51 2023 Page 1
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4x4 =

Scale = 1:29.2



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.12	in (loc) l/def L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.06	Vert(LL) -0.00 9 n/r 180		
TCDL 10.0	Lumber DOL 1.15	WB 0.06	Vert(CT) -0.00 9 n/r 80		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R	Horz(CT) 0.00 10 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 67 lb	FT = 20%

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

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

REACTIONS. All bearings 12-8-0.
 (lb) - Max Horz 16=107(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11
 Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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

- NOTES-** (14-17)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Corner(3R) 3-11-2 to 8-8-14, Corner(3E) 8-8-14 to 13-6-8 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - All plates are 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 11.



8/9/2023

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

Job	Truss	Truss Type	Qty	Ply	LOT 39 PROVIDENCE CREEK 343 WINDSWEEP WAY FUQUAY-VARINA, NC
23-5652-R01	R11	Common Supported Gable	1	1	Job Reference (optional) # 40537

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

LOAD CASE(S) Standard



8/9/2023

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Job 23-5652-R01	Truss R12	Truss Type GABLE	Qty 1	Ply 1	LOT 39 PROVIDENCE CREEK 343 WINDSWEEP WAY FUQUAY-VARINA, NC	# 40537
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-Q-10-8 7-6-6 14-9-4 22-0-2 29-6-8 30-5-0
0-10-8 7-6-6 7-2-14 7-2-14 7-6-6 0-10-8

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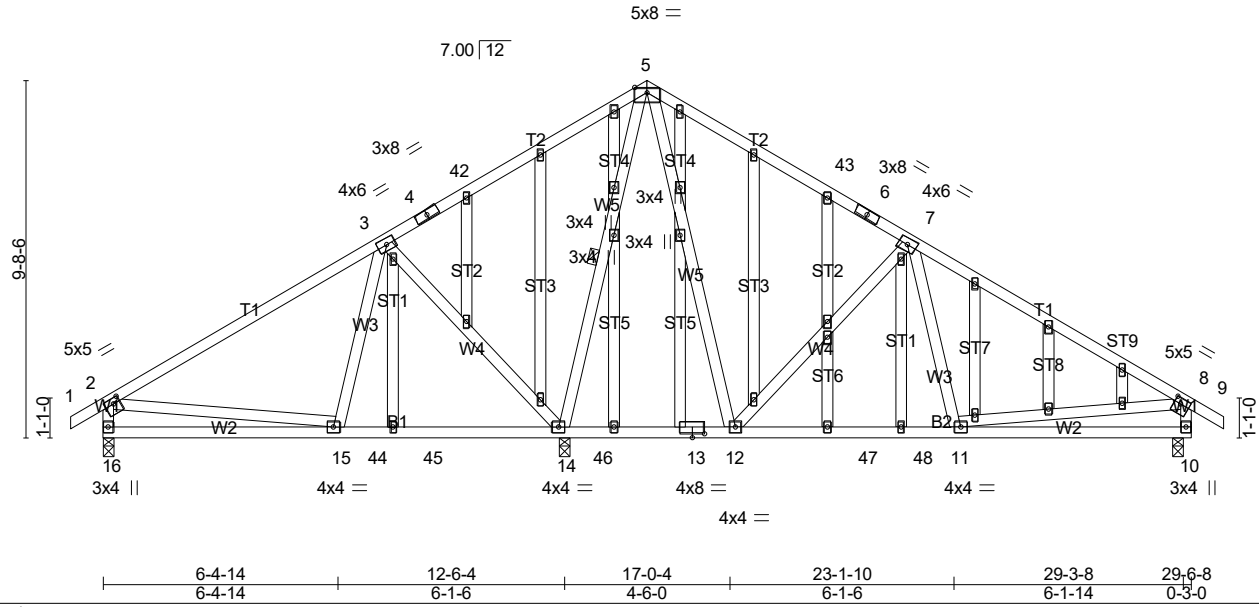


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [8:0-2-0,0-1-12], [13:0-4-0,0-1-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.92	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.37	Vert(LL) 0.05 10-11 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.67	Vert(CT) -0.07 11-12 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.01 10 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 266 lb	FT = 20%

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

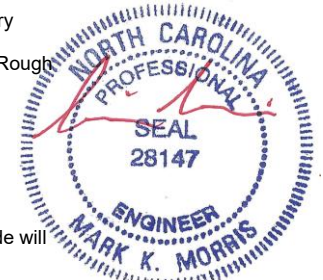
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-14

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

REACTIONS. (lb/size) 16=460/0-3-8 (min. 0-1-8), 14=1333/0-3-8 (min. 0-1-10), 10=669/0-3-0 (min. 0-1-8)
Max Horz 16=-203(LC 12)
Max Uplift 16=-52(LC 14), 14=-88(LC 15), 10=-86(LC 15)
Max Grav 16=491(LC 21), 14=1373(LC 3), 10=719(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-434/50, 5-42=0/314, 5-43=-235/253, 6-43=-315/230, 6-7=-389/221, 7-8=-799/408,
2-16=-434/80, 8-10=-661/292
BOT CHORD 15-16=-208/394, 15-44=-97/303, 44-45=-97/303, 14-45=-97/303, 12-47=-200/586,
47-48=-200/586, 11-48=-200/586, 10-11=-119/271
WEBS 5-12=-386/559, 7-12=-556/289, 5-14=-896/334, 3-14=-588/185, 3-15=0/273, 8-11=-123/380

- NOTES-** (12-15)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 9-11-10, Exterior(2R) 9-11-10 to 19-6-14, Interior(1) 19-6-14 to 25-7-6, Exterior(2E) 25-7-6 to 30-5-0 zone; cantilever right exposed; 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
 - 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 14, 10.



8/9/2023

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Job	Truss	Truss Type	Qty	Ply	LOT 39 PROVIDENCE CREEK 343 WINDSWEEP WAY FUQUAY-VARINA, NC
23-5652-R01	R12	GABLE	1	1	Job Reference (optional) # 40537

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

LOAD CASE(S) Standard

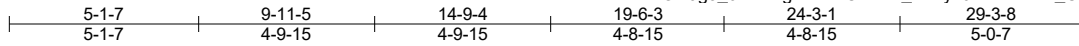


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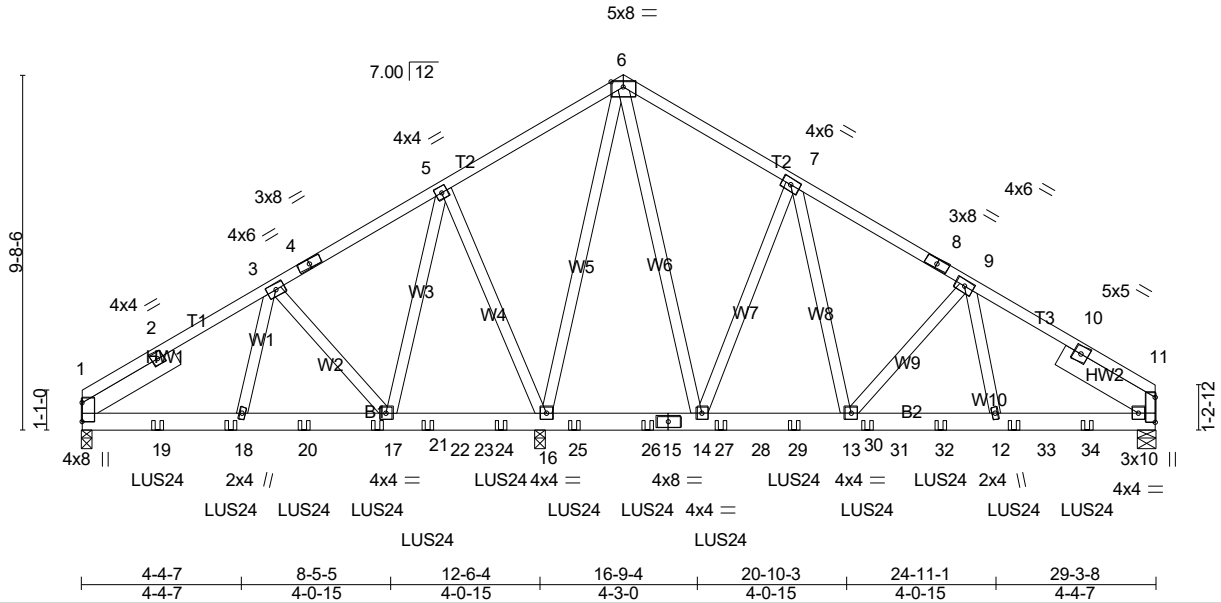
Warning !—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer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

Job 23-5652-R01	Truss R13	Truss Type Common Girder	Qty 1	Ply 3	LOT 39 PROVIDENCE CREEK 343 WINDSWEEP WAY FUQUAY-VARINA, NC	Job Reference (optional) # 40537
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Scale = 1:62.9



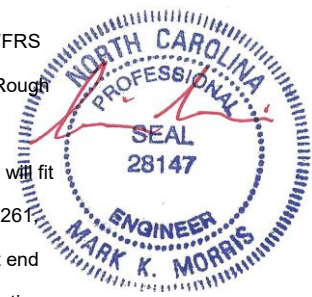
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15	TC 0.27	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.15	BC 0.33	Vert(LL) -0.03 12-13 >999 240		
TCDL 10.0	Rep Stress Incr NO	WB 0.42	Vert(CT) -0.05 12-13 >999 180		
BCLL 0.0 *	Code IRC2021/TPI2014	Matrix-SH	Horz(CT) 0.01 11 n/a n/a		
BCDL 10.0				Weight: 677 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x4 SP No.3	6-0-0 oc bracing: 16-17,14-16.
SLIDER Left 2x6 SP No.2 -° 3-0-1, Right 2x8 SP No.2 -° 3-0-7	

REACTIONS. (lb/size) 1=1792/0-3-8 (min. 0-1-8), 16=6839/0-3-8 (min. 0-2-11), 11=1760/0-5-8 (min. 0-1-8)
 Max Horz 1=182(LC 11)
 Max Uplift 1=-261(LC 12), 16=-490(LC 12), 11=-276(LC 13)
 Max Grav 1=1822(LC 18), 16=6839(LC 1), 11=1811(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-2223/308, 2-3=-2142/331, 3-4=-729/119, 4-5=-614/137, 5-6=-172/1362, 6-7=-356/228,
 7-8=-1172/213, 8-9=-1287/191, 9-10=-2125/346, 10-11=-2203/319
 BOT CHORD 1-19=-329/1787, 18-19=-329/1787, 18-20=-273/1435, 20-21=-273/1435, 17-21=-273/1435,
 16-25=-437/246, 25-26=-437/246, 15-26=-437/246, 14-15=-437/246, 14-27=0/713,
 27-28=0/713, 28-29=0/713, 29-30=0/713, 13-30=0/713, 13-31=-175/1583, 31-32=-175/1583,
 12-32=-175/1583, 12-33=-208/1758, 33-34=-208/1758, 11-34=-208/1758
 WEBS 3-18=-263/1574, 3-17=-1286/309, 5-17=-413/3013, 5-16=-2603/447, 6-16=-3070/256,
 6-14=-196/2190, 7-14=-1687/396, 7-13=-343/1764, 9-13=-785/238, 9-12=-168/910

- NOTES-** (15-18)
- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-8-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 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 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) 1=261, 16=490, 11=276.
 - Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 8-0-12 to connect truss(es) R07 (1 ply 2x6 SP) to front face of bottom chord.
 - Use Simpson Strong-Tie LUS24 (4-SD9112 Girder, 2-SD9212 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 9-5-4 from the left end to 11-5-4 to connect truss(es) R10 (1 ply 2x4 SP) to front face of bottom chord.



8/9/2023

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Job	Truss	Truss Type	Qty	Ply	LOT 39 PROVIDENCE CREEK 343 WINDSWEPT WAY FUQUAY-VARINA, NC
23-5652-R01	R13	Common Girder	1	3	Job Reference (optional) # 40537

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NOTES- (15-18)

- 12) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 13-5-4 from the left end to 17-5-4 to connect truss(es) R09 (1 ply 2x4 SP) to front face of bottom chord.
- 13) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 19-5-4 from the left end to 27-5-4 to connect truss(es) R05 (1 ply 2x6 SP) to front face of bottom chord.
- 14) Fill all nail holes where hanger is in contact with lumber.
- 15) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 16) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 17) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 18) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

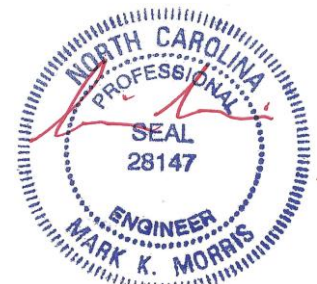
- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-6=-60, 6-11=-60, 1-11=-20

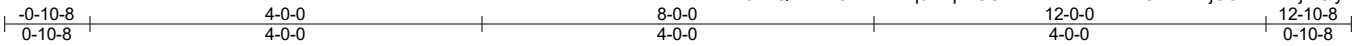
Concentrated Loads (lb)

Vert: 18=-740(F) 19=-740(F) 20=-740(F) 21=-740(F) 22=-867(F) 24=-867(F) 25=-347(F) 26=-347(F) 27=-347(F) 29=-462(F) 31=-462(F) 32=-462(F) 33=-462(F) 34=-462(F)

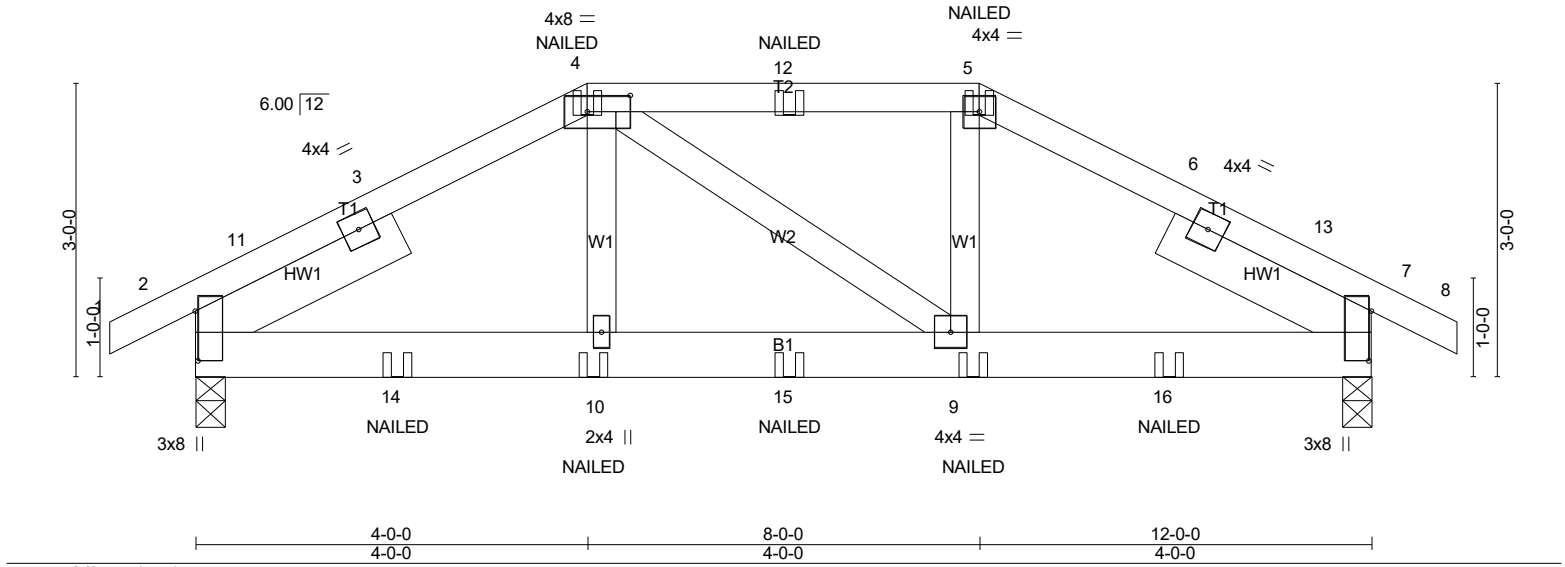


8/9/2023

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Scale = 1:23.5



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	GRIP
TCLL (roof)	20.0	2-0-0	Plate Grip DOL	1.15	TC	0.65	in (loc)	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.37	Vert(LL)	-0.02 9-10 >999	L/d	240
TCDL	10.0	Rep Stress Incr	NO	WB	0.08	Vert(CT)	-0.04 9-10 >999	180	
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH		Horz(CT)	0.01 7 n/a	n/a	
BCDL	10.0								Weight: 74 lb FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x6 SP No.2
 WEBS 2x4 SP No.3
 SLIDER Left 2x6 SP No.2 -° 2-4-0, Right 2x6 SP No.2 -° 2-4-0

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-11-13 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size) 2=795/0-3-8 (min. 0-1-8), 7=796/0-3-8 (min. 0-1-8)
 Max Horz 2=26(LC 60)
 Max Uplift 2=115(LC 9), 7=115(LC 8)
 Max Grav 2=949(LC 37), 7=951(LC 37)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-11=-1144/164, 3-11=-1114/174, 3-4=-1044/185, 4-12=-896/168, 5-12=-896/168,
 5-6=-1045/185, 6-13=-1115/174, 7-13=-1145/164
 BOT CHORD 2-14=-151/890, 10-14=-151/890, 10-15=-152/897, 9-15=-152/897, 9-16=-138/890,
 7-16=-138/890

- NOTES-** (12)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=5.0psf; BCDL=5.0psf; h=11ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; end vertical left and right exposed; porch left and right exposed; 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) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 6) Provide adequate drainage to prevent water ponding.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=115, 7=115.
 - 10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=-60, 4-5=-60, 5-8=-60, 2-7=-20
 Concentrated Loads (lb)
 Vert: 4=-94(B) 5=-94(B) 10=-27(B) 9=-27(B) 12=-94(B) 14=-81(B) 15=-27(B) 16=-81(B)

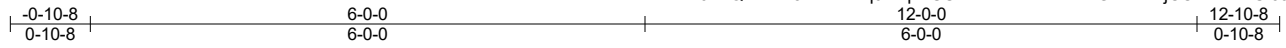


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Job 23-5652-R01	Truss SP02	Truss Type Common	Qty 2	Ply 1	LOT 39 PROVIDENCE CREEK 343 WINDSWEEP WAY FUQUAY-VARINA, NC Job Reference (optional) # 40537
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Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Aug 9 11:05:54 2023 Page 1
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4x4 =

Scale = 1:25.0

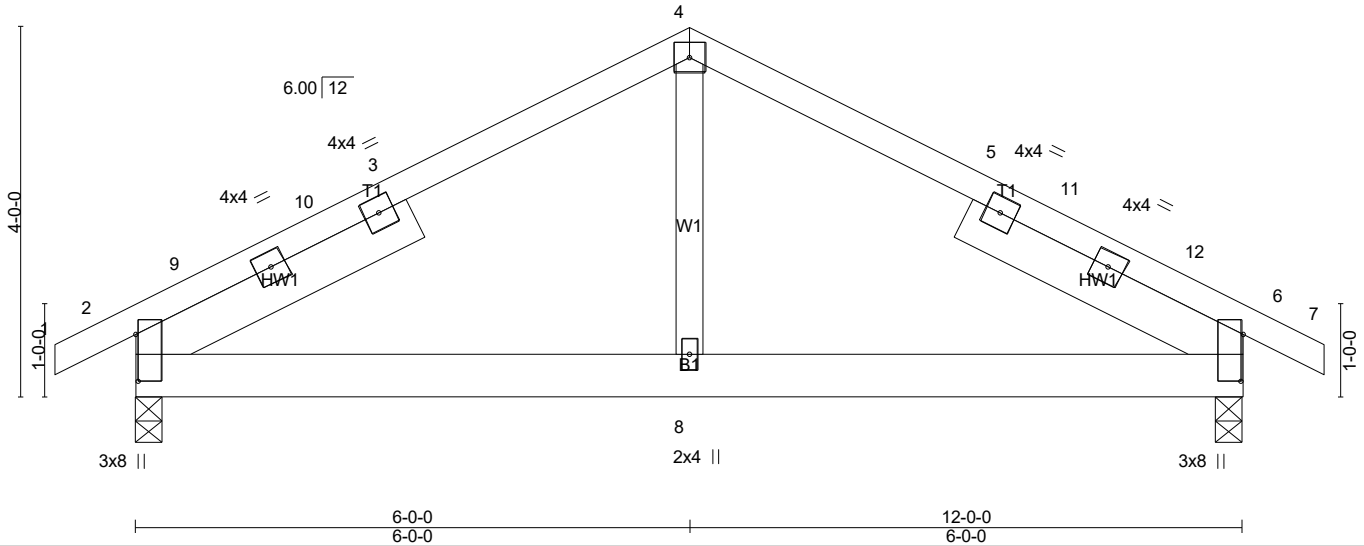


Plate Offsets (X,Y)-- [2:0-6-1,0-0-5], [6:0-6-1,0-0-5]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15		TC 0.38	Vert(LL) -0.02	6-8	>999	240		MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.15		BC 0.31	Vert(CT) -0.03	6-8	>999	180			
TCDL 10.0	Rep Stress Incr YES		WB 0.10	Horz(CT) 0.01	6	n/a	n/a			
BCLL 0.0 *	Code IRC2021/TPI2014		Matrix-SH							
BCDL 10.0									Weight: 72 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -° 3-4-7, Right 2x6 SP No.2 -° 3-4-7

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

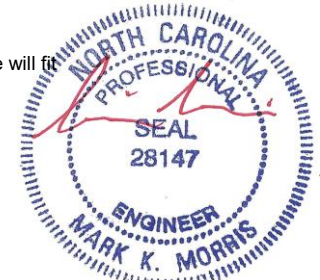
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=533/0-3-8 (min. 0-1-8), 6=532/0-3-8 (min. 0-1-8)
Max Horz2=37(LC 14)
Max Uplift2=-17(LC 14), 6=-17(LC 15)
Max Grav2=613(LC 21), 6=613(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-9=-698/119, 9-10=-600/121, 3-10=-565/133, 3-4=-514/144, 4-5=-514/144, 5-11=-565/133,
11-12=-600/121, 6-12=-698/119
BOT CHORD 2-8=-46/460, 6-8=-46/460
WEBS 4-8=0/264

- NOTES-** (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=5.0psf; BCCL=5.0psf; h=11ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-0-0, Exterior(2R) 3-0-0 to 9-0-0, Interior(1) 9-0-0 to 9-10-8, Exterior(2E) 9-10-8 to 12-10-8 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) 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, 6.

LOAD CASE(S) Standard

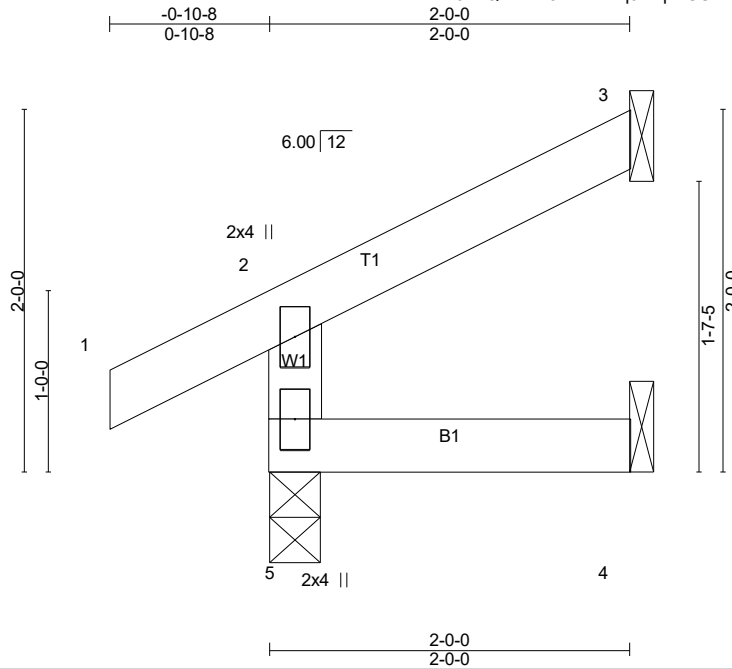


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Job 23-5652-R01	Truss SPJ01	Truss Type Jack-Open	Qty 2	Ply 1	LOT 39 PROVIDENCE CREEK 343 WINDSWEPT WAY FUQUAY-VARINA, NC Job Reference (optional) # 40537
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Scale = 1:12.7

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 0.05	Vert(LL) 0.00 5 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.00 4-5 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R	Horz(CT) -0.00 3 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 9 lb	FT = 20%

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

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

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

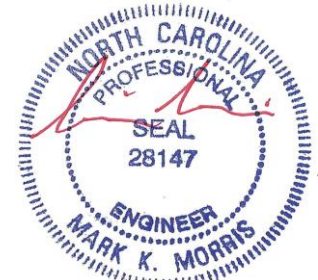
REACTIONS. (lb/size) 5=152/0-3-8 (min. 0-1-8), 3=41/Mechanical, 4=16/Mechanical
Max Horz 5=30(LC 11)
Max Uplift 5=-2(LC 14), 3=-20(LC 14), 4=-7(LC 11)
Max Grav 5=208(LC 21), 3=57(LC 21), 4=34(LC 7)

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

NOTES- (9)

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=10ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 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) 5, 3, 4.

LOAD CASE(S) Standard



8/9/2023

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Job 23-5652-R01	Truss SPJ02	Truss Type Half Hip Girder	Qty 2	Ply 1	LOT 39 PROVIDENCE CREEK 343 WINDSWEEP WAY FUQUAY-VARINA, NC
					Job Reference (optional) # 40537

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Aug 9 11:05:55 2023 Page 1
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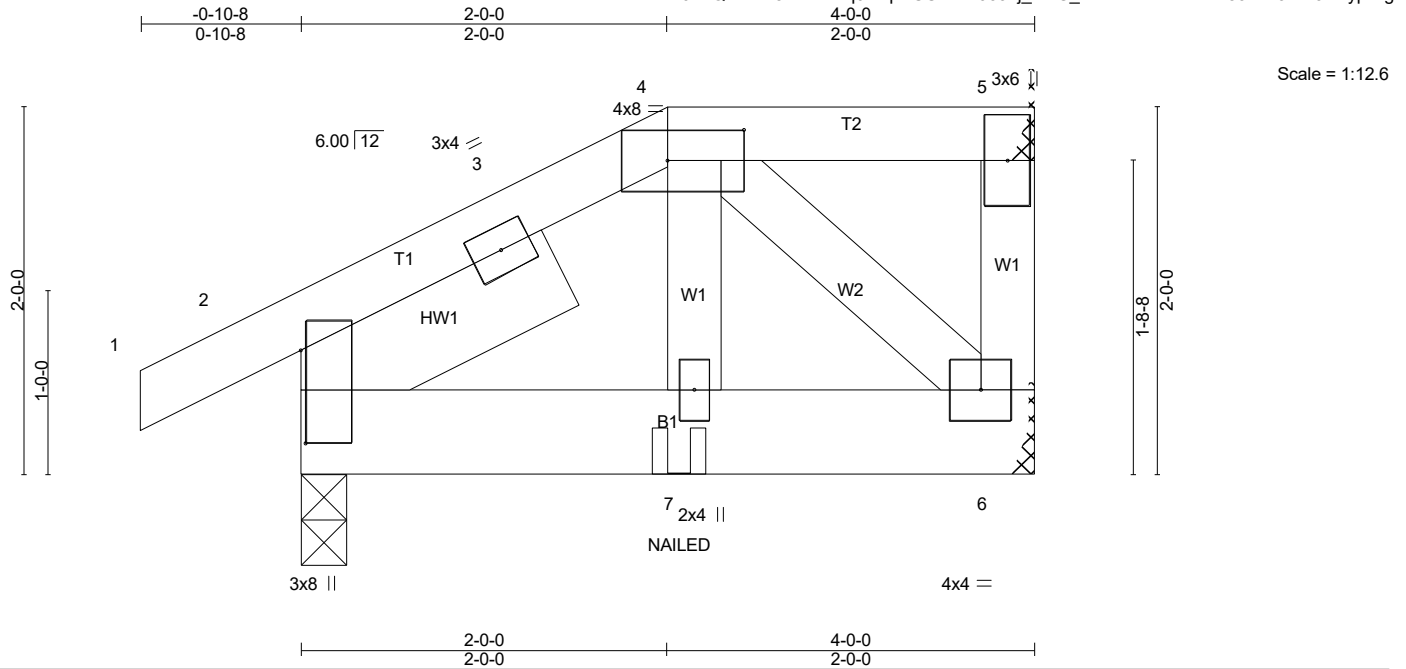


Plate Offsets (X,Y)-- [2:0-6-1,0-0-5], [4:0-5-0,0-2-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15		TC 0.11	Vert(LL) -0.00	2	>999	240		MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.15		BC 0.03	Vert(CT) -0.00	7	>999	180			
TCDL 10.0	Rep Stress Incr NO		WB 0.03	Horz(CT) 0.00	5	n/a	n/a			
BCLL 0.0 *	Code IRC2021/TPI2014		Matrix-P							
BCDL 10.0									Weight: 27 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -° 1-6-12

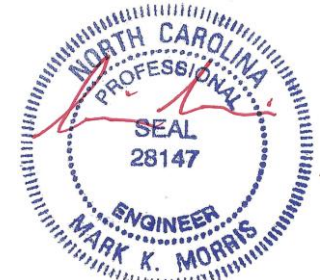
BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 5=56/Mechanical, 6=92/Mechanical, 2=213/0-3-0 (min. 0-1-8)
Max Horz 2=37(LC 12)
Max Uplift 5=-14(LC 8), 6=-6(LC 12), 2=-14(LC 12)
Max Grav 5=94(LC 33), 6=101(LC 33), 2=302(LC 34)

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

- NOTES-** (13)
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=5.0psf; BCDL=5.0psf; h=11ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) 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) Provide adequate drainage to prevent water ponding.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - 8) Refer to girder(s) for truss to truss connections.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6, 2.
 - 10) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
 - 11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - 12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-60, 4-5=-60, 2-6=-20
Concentrated Loads (lb)
Vert: 7=0(F)

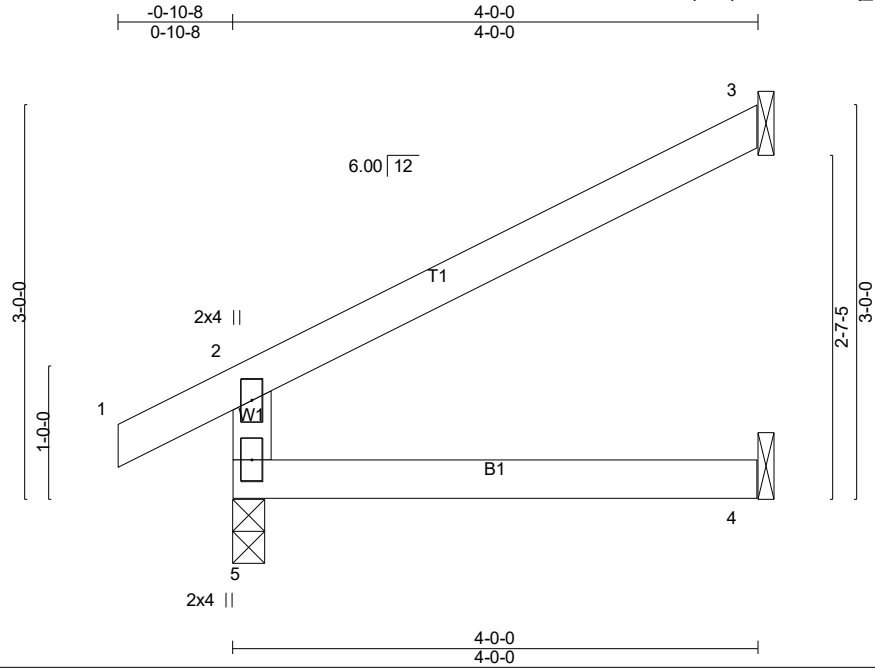


8/9/2023

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Job	Truss	Truss Type	Qty	Ply	LOT 39 PROVIDENCE CREEK 343 WINDSWEPT WAY FUQUAY-VARINA, NC
23-5652-R01	SPJ03	Jack-Open	3	1	Job Reference (optional) # 40537

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Scale = 1:17.6

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.32	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.17	Vert(LL) 0.03 4-5 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.02 4-5 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R	Horz(CT) -0.02 3 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 15 lb	FT = 20%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 5=221/0-3-0 (min. 0-1-8), 3=101/Mechanical, 4=43/Mechanical
 Max Horz 5=51(LC 14)
 Max Uplift 3=-38(LC 14), 4=-9(LC 11)
 Max Grav 5=322(LC 21), 3=154(LC 21), 4=72(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-5=-293/78

- NOTES-** (9)
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=11ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 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) 3, 4.

LOAD CASE(S) Standard

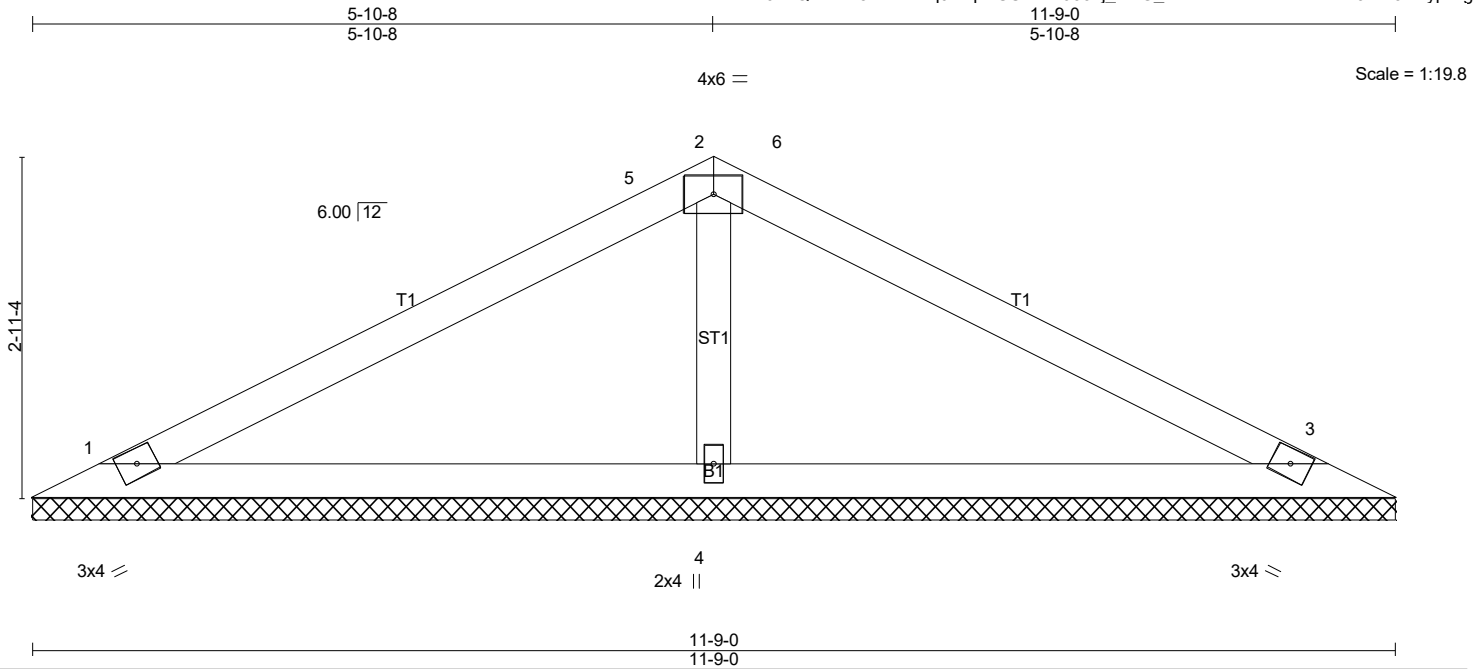


8/9/2023

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Job 23-5652-R01	Truss VS01	Truss Type Valley	Qty 1	Ply 1	LOT 39 PROVIDENCE CREEK 343 WINDSWEPT WAY FUQUAY-VARINA, NC Job Reference (optional) # 40537
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Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Aug 9 11:05:55 2023 Page 1
ID:97bQtTowZ8dTULxBq9ksq7zUUzD-R955?[_DYG_etwoZePERIk?nie?ocY25lYK5SYypccg



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 0.63	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.07	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 39 lb	FT = 20%

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

BRACING-
TOP CHORD
BOT CHORD

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

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

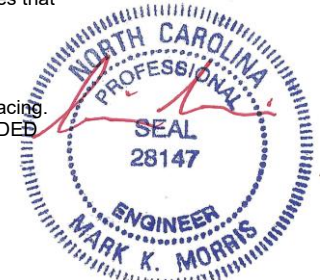
REACTIONS. (lb/size) 1=188/11-9-0 (min. 0-1-8), 3=188/11-9-0 (min. 0-1-8), 4=465/11-9-0 (min. 0-1-8)
Max Horz 1=-32(LC 19)
Max Uplift 1=-21(LC 14), 3=-27(LC 15), 4=-3(LC 14)
Max Grav 1=275(LC 20), 3=275(LC 21), 4=480(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-305/111

NOTES- (9-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=5.0psf; BC DL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-7 to 5-5-0, Exterior(2R) 5-5-0 to 6-4-0, Exterior(2E) 6-4-0 to 11-1-9 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
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

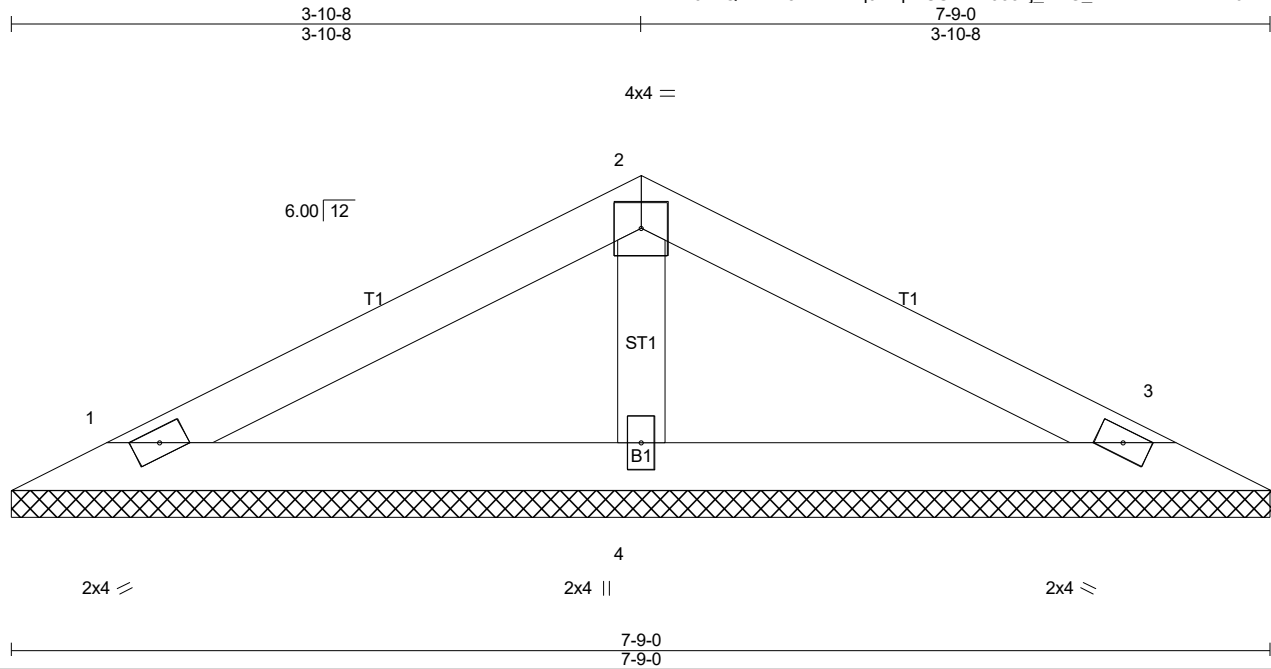


8/9/2023

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Job 23-5652-R01	Truss VS02	Truss Type Valley	Qty 1	Ply 1	LOT 39 PROVIDENCE CREEK 343 WINDSWEEP WAY FUQUAY-VARINA, NC Job Reference (optional) # 40537
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Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Aug 9 11:05:55 2023 Page 1
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Scale = 1:14.2

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.28	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.18	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 24 lb	FT = 20%

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

BRACING-
TOP CHORD
BOT CHORD

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

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

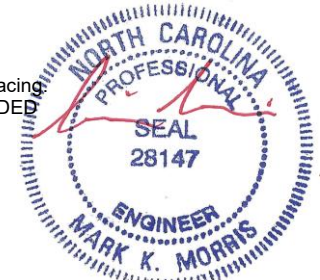
REACTIONS. (lb/size) 1=132/7-9-0 (min. 0-1-8), 3=132/7-9-0 (min. 0-1-8), 4=258/7-9-0 (min. 0-1-8)
Max Horz 1=20(LC 18)
Max Uplift 1=-18(LC 14), 3=-22(LC 15)
Max Grav 1=176(LC 20), 3=176(LC 21), 4=258(LC 1)

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

NOTES- (9-12)

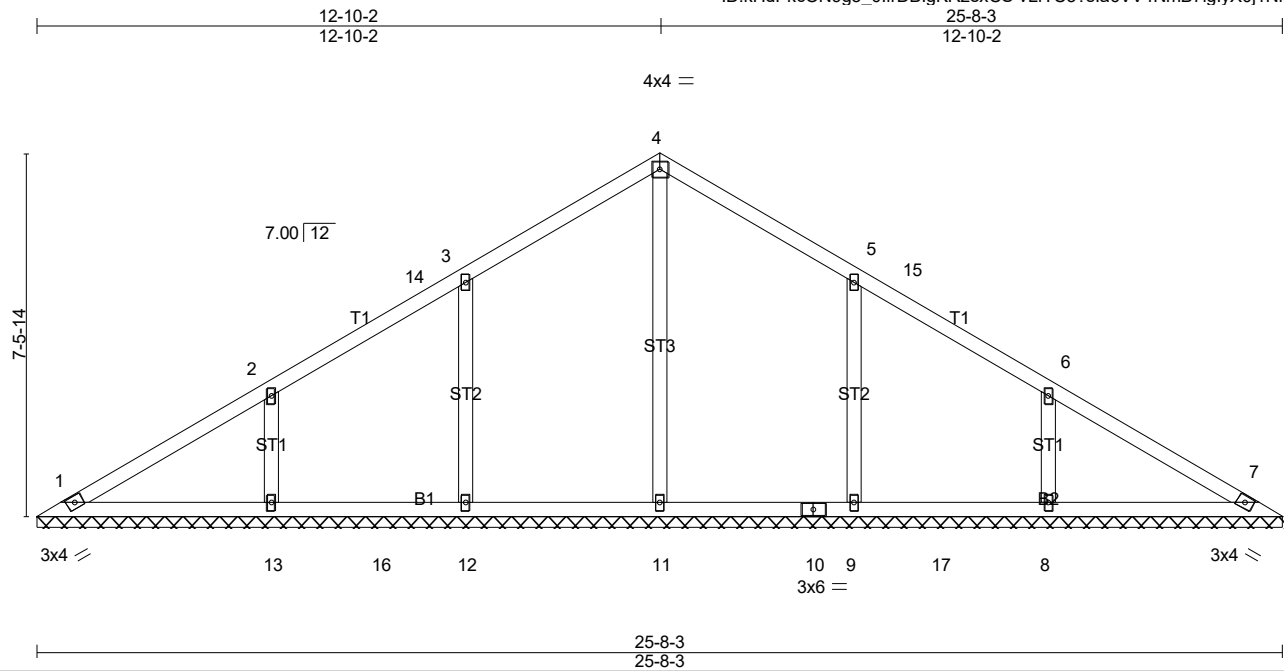
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=5.0psf; BCCL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



8/9/2023

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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.28	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.39	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.21	Vert(CT) n/a - n/a 999		
BCDL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 7 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014				
				Weight: 111 lb	FT = 20%

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

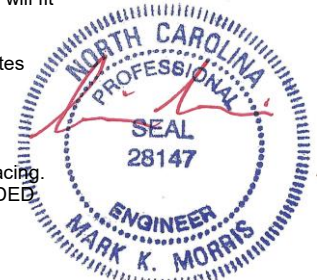
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. All bearings 25-8-3.
(lb) - Max Horz 1=-140(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 1, 12, 13, 9, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=453(LC 26), 12=523(LC 5), 13=388(LC 23), 9=523(LC 6), 8=389(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-12=-362/130, 2-13=-272/132, 5-9=-362/130, 6-8=-272/132

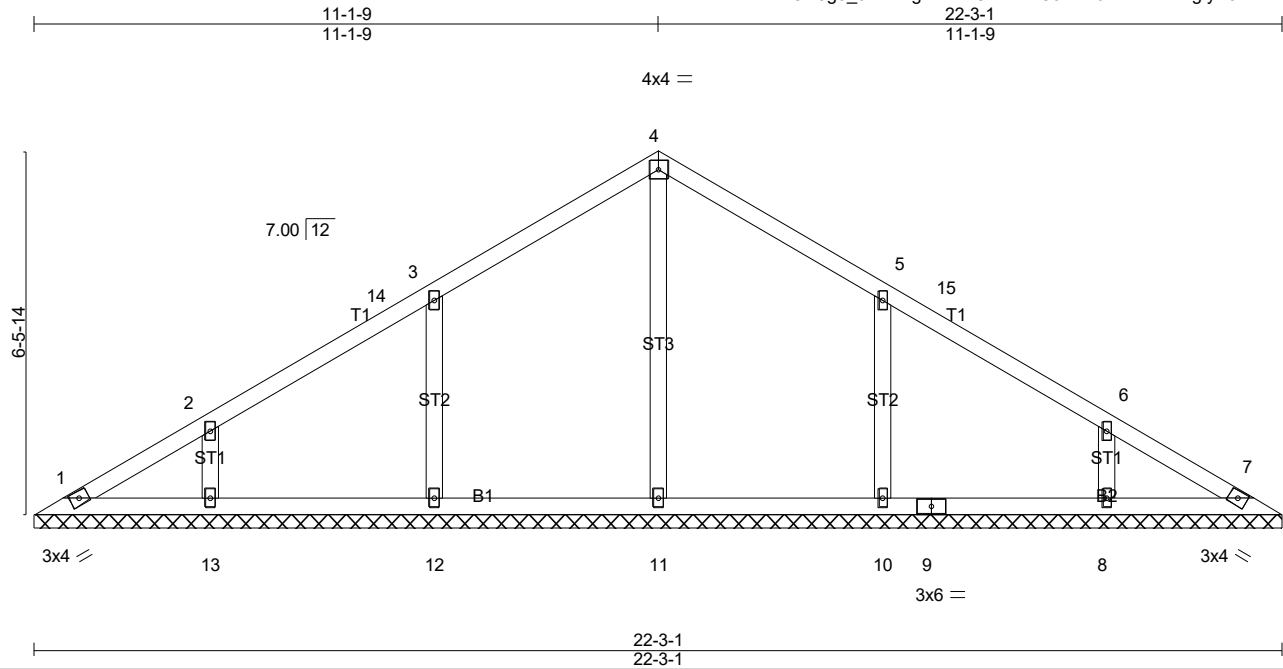
- NOTES-** (10-13)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-1, Interior(1) 5-4-1 to 8-0-8, Exterior(2R) 8-0-8 to 17-7-11, Interior(1) 17-7-11 to 20-4-2, Exterior(2E) 20-4-2 to 25-1-12 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) All plates are 2x4 MT20 unless otherwise indicated.
 - 6) Gable requires continuous bottom chord bearing.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 12, 13, 9, 8.
 - 10) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - 11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
 - 12) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
 - 13) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



LOAD CASE(S) Standard

8/9/2023

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LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	n/a - n/a	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	n/a - n/a		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00 7 n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH					
BCDL	10.0							Weight: 93 lb	FT = 20%

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

BRACING-
TOP CHORD
BOT CHORD

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

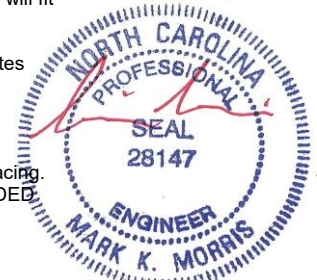
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 22-3-1.
(lb) - Max Horz 1=121(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 1, 12, 13, 10, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=454(LC 23), 12=474(LC 5), 13=289(LC 1), 10=474(LC 6), 8=289(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-12=-378/136, 5-10=-378/136

NOTES- (10-13)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCCL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-1, Interior(1) 5-4-1 to 6-3-15, Exterior(2R) 6-3-15 to 15-11-2, Interior(1) 15-11-2 to 16-11-0, Exterior(2E) 16-11-0 to 21-8-10 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) Unbalanced snow loads have been considered for this design.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCCL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 12, 13, 10, 8.
- 10) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 12) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 13) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



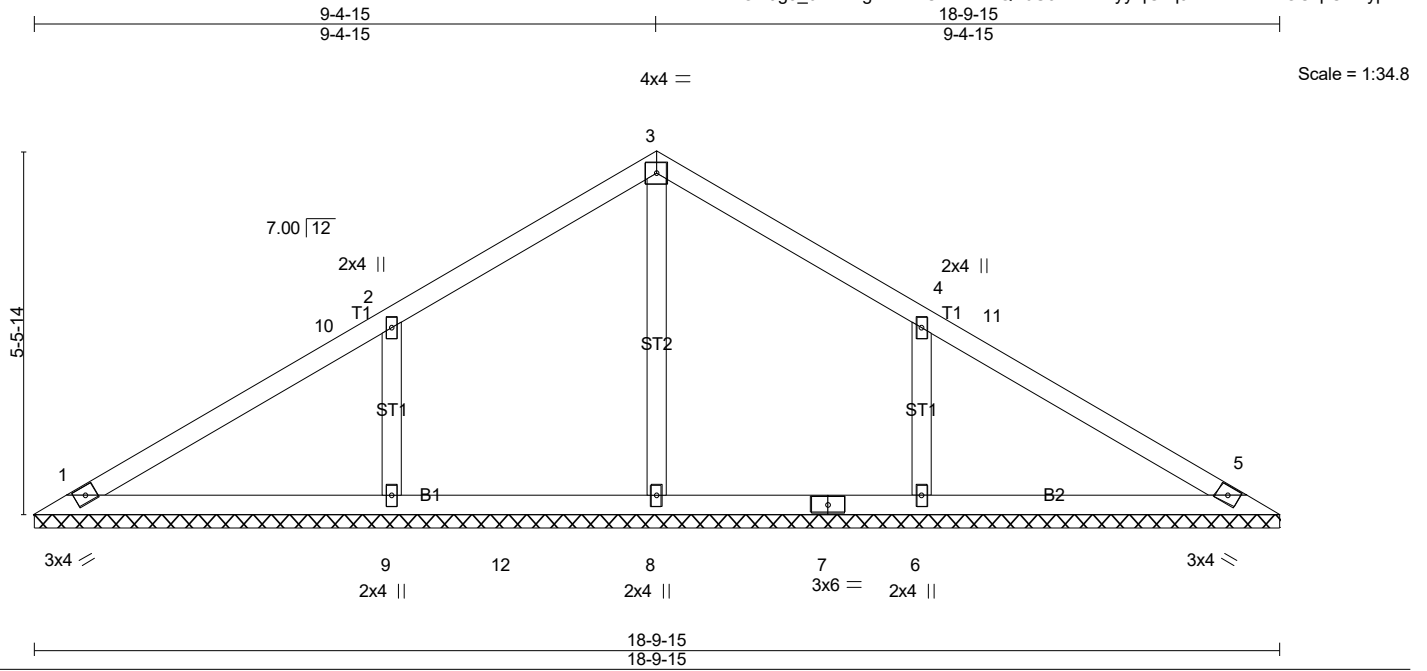
LOAD CASE(S) Standard

8/9/2023

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Job 23-5652-R01	Truss VT03	Truss Type Valley	Qty 1	Ply 1	LOT 39 PROVIDENCE CREEK 343 WINDSWEPT WAY FUQUAY-VARINA, NC Job Reference (optional) # 40537
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Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Aug 9 11:05:57 2023 Page 1
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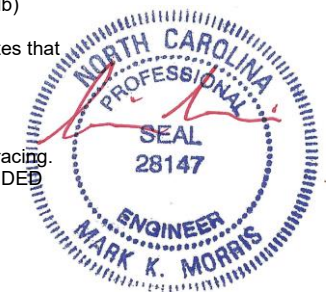
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.37	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.32	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.10	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 74 lb	FT = 20%

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

REACTIONS. All bearings 18-9-15.
(lb) - Max Horz 1=-101(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=-117(LC 14), 6=-117(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=389(LC 6), 9=542(LC 20), 6=542(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-423/154, 4-6=-423/153

- NOTES-** (9-12)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-15, Exterior(2R) 5-4-15 to 13-4-15, Exterior(2E) 13-4-15 to 18-3-7 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
 - Unbalanced snow loads have been considered for this design.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 9=117, 6=117.
 - Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
 - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
 - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

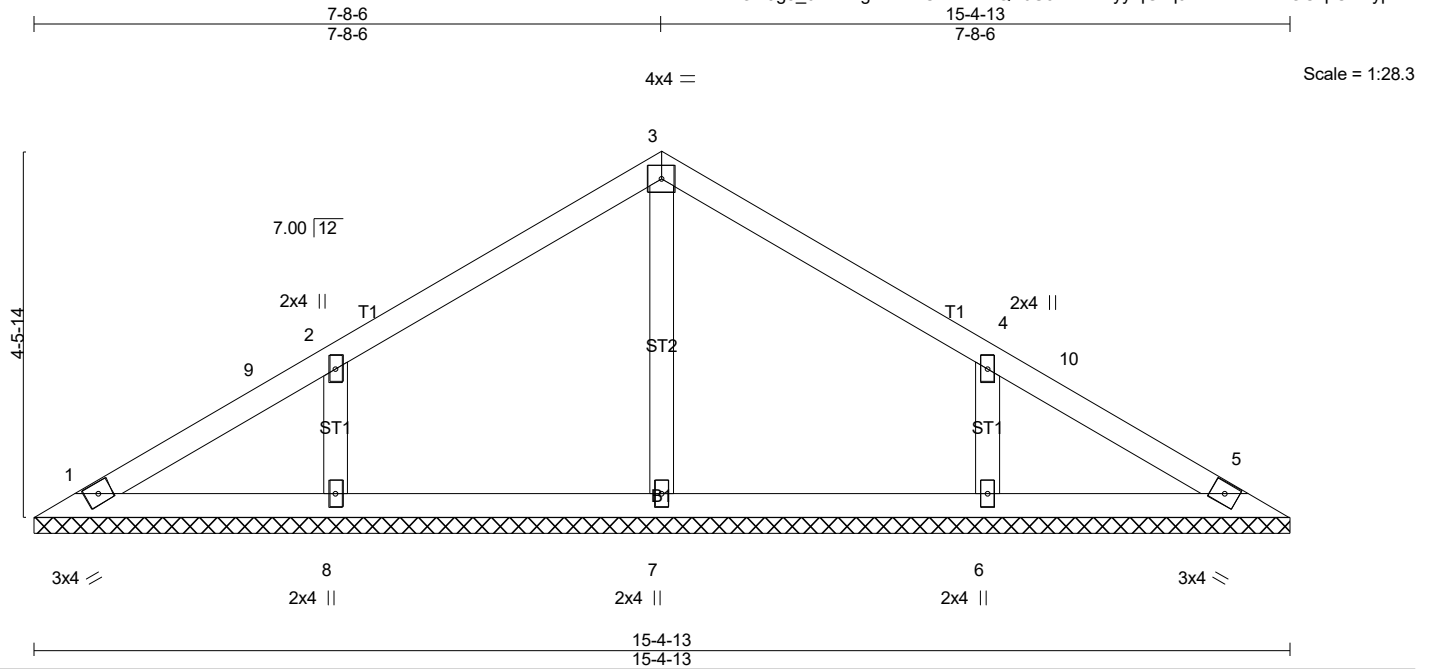


LOAD CASE(S) Standard
8/9/2023

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Job 23-5652-R01	Truss VT04	Truss Type Valley	Qty 1	Ply 1	LOT 39 PROVIDENCE CREEK 343 WINDSWEPT WAY FUQUAY-VARINA, NC Job Reference (optional) # 40537
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Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Aug 9 11:05:57 2023 Page 1
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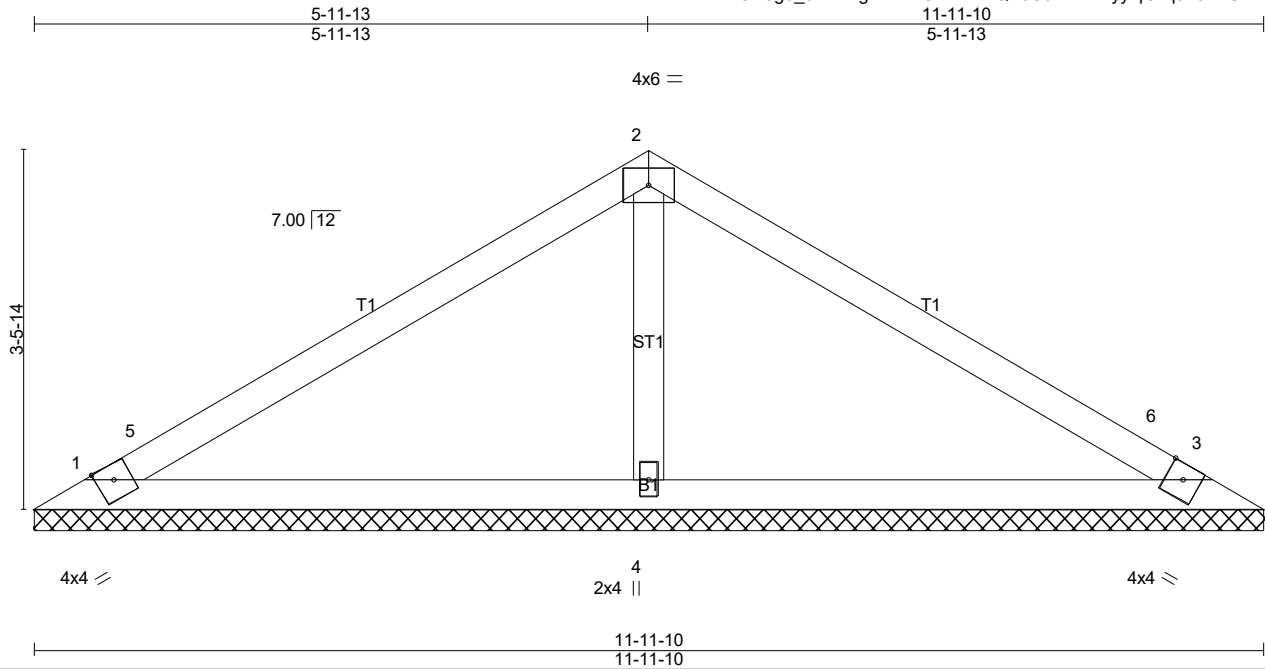


8/9/2023

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Job 23-5652-R01	Truss VT05	Truss Type Valley	Qty 1	Ply 1	LOT 39 PROVIDENCE CREEK 343 WINDSWEEP WAY FUQUAY-VARINA, NC Job Reference (optional) # 40537
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ID:kHdPkON9g3_0lfrDBlgKRzexCS-NYDrQP0U3uEM7EyyIqGvq946lRfC4SOOCspCXRypcpe



Scale = 1:22.4

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.61	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.69	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.08	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 41 lb	FT = 20%

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

BRACING-
TOP CHORD
BOT CHORD

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

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

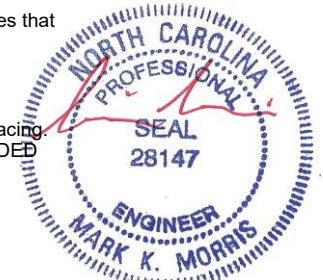
REACTIONS. (lb/size) 1=202/11-11-10 (min. 0-1-8), 3=202/11-11-10 (min. 0-1-8), 4=468/11-11-10 (min. 0-1-8)
Max Horz 1=-62(LC 10)
Max Uplift 1=-27(LC 14), 3=-35(LC 15), 4=-13(LC 14)
Max Grav 1=276(LC 20), 3=276(LC 21), 4=488(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-305/77

NOTES- (9-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-1, Exterior(2R) 5-4-1 to 6-7-9, Exterior(2E) 6-7-9 to 11-5-3 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
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

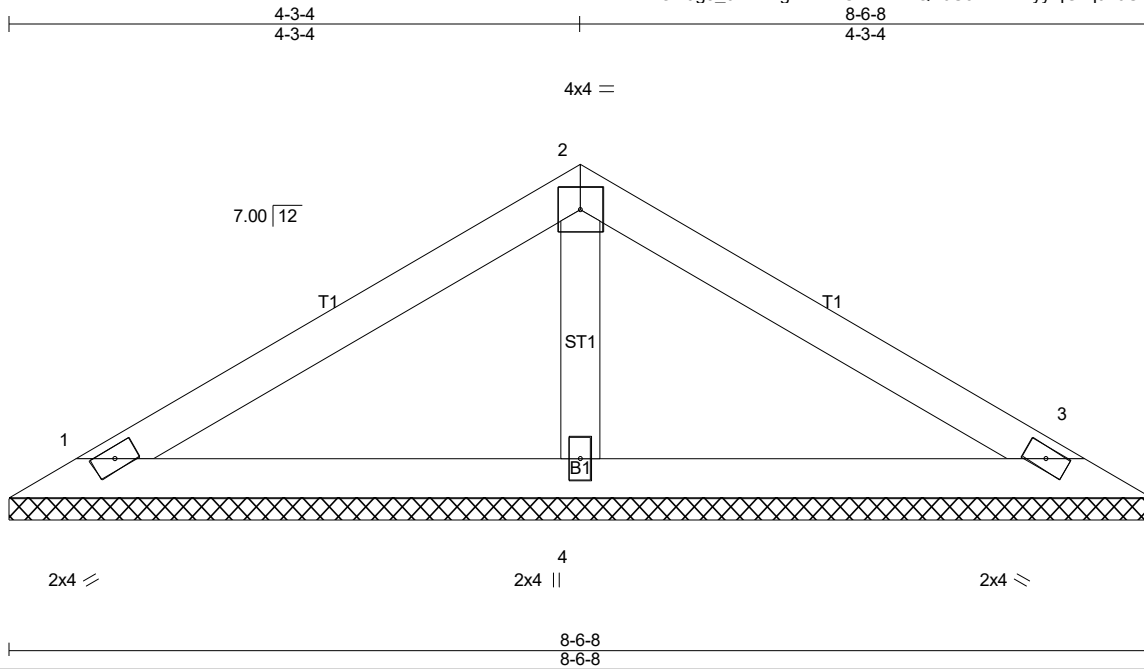


8/9/2023

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Job 23-5652-R01	Truss VT06	Truss Type Valley	Qty 1	Ply 1	LOT 39 PROVIDENCE CREEK 343 WINDSWEPT WAY FUQUAY-VARINA, NC Job Reference (optional) # 40537
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Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Aug 9 11:05:57 2023 Page 1
ID:kHdPkC0N9g3_0lfrDBlgKRzEXCS-NYDrQP0U3uEM7EyyIqGvq949URmK4TzOCspCXRypce



Scale = 1:17.2

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.40	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.24	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 28 lb	FT = 20%

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

BRACING-
TOP CHORD
BOT CHORD

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

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

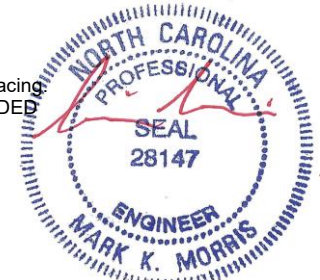
REACTIONS. (lb/size) 1=156/8-6-8 (min. 0-1-8), 3=156/8-6-8 (min. 0-1-8), 4=286/8-6-8 (min. 0-1-8)
Max Horz 1=-43(LC 10)
Max Uplift 1=-26(LC 14), 3=-32(LC 15)
Max Grav 1=215(LC 20), 3=215(LC 21), 4=291(LC 20)

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

NOTES- (9-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCCL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 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.
- 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.
- Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

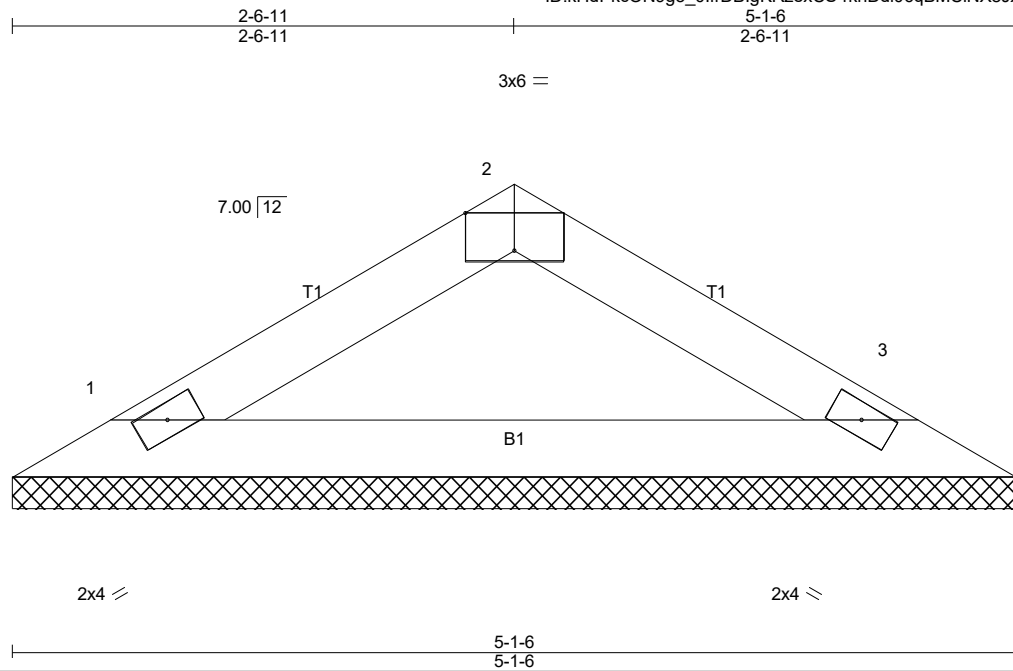


8/9/2023

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Job 23-5652-R01	Truss VT07	Truss Type Valley	Qty 1	Ply 1	LOT 39 PROVIDENCE CREEK 343 WINDSWEPT WAY FUQUAY-VARINA, NC Job Reference (optional) # 40537
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Scale = 1:11.7

LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	20.0	2-0-0		TC	0.10	in	(loc)	l/defl	L/d	MT20	244/190
Snow (Pf)	20.0	Plate Grip DOL	1.15	BC	0.34	Vert(LL)	n/a	-	n/a		
TCDL	10.0	Lumber DOL	1.15	WB	0.00	Vert(CT)	n/a	-	n/a		
BCLL	0.0 *	Rep Stress Incr	YES	Matrix-P		Horz(CT)	0.00	3	n/a		
BCDL	10.0	Code IRC2021/TPI2014									
										Weight: 15 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-1-6 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.

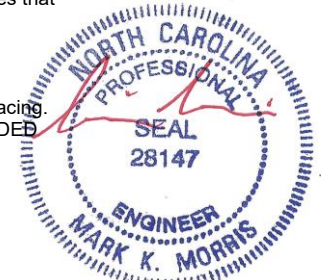
REACTIONS. (lb/size) 1=161/5-1-6 (min. 0-1-8), 3=161/5-1-6 (min. 0-1-8)
Max Horz 1=-23(LC 10)
Max Uplift 1=-12(LC 14), 3=-12(LC 15)
Max Grav 1=182(LC 20), 3=182(LC 21)

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

NOTES- (9-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
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LOAD CASE(S) Standard



8/9/2023

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