

# 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 #: 58537

JOB: 25-3296-R01

JOB NAME: LOT 145 PROVIDENCE CREEK

Wind Code: ASCE7-16

Wind Speed: Vult= 120mph

Exposure Category: B

Mean Roof Height (feet): 35

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

*19 Truss Design(s)*

Trusses:

MR01, MR02, R01, R02, R03, R04, R05, R06, R07, R08, R09, R10, R11, R12, R13, VT01,



**4/16/2025**

**Mark Morris**

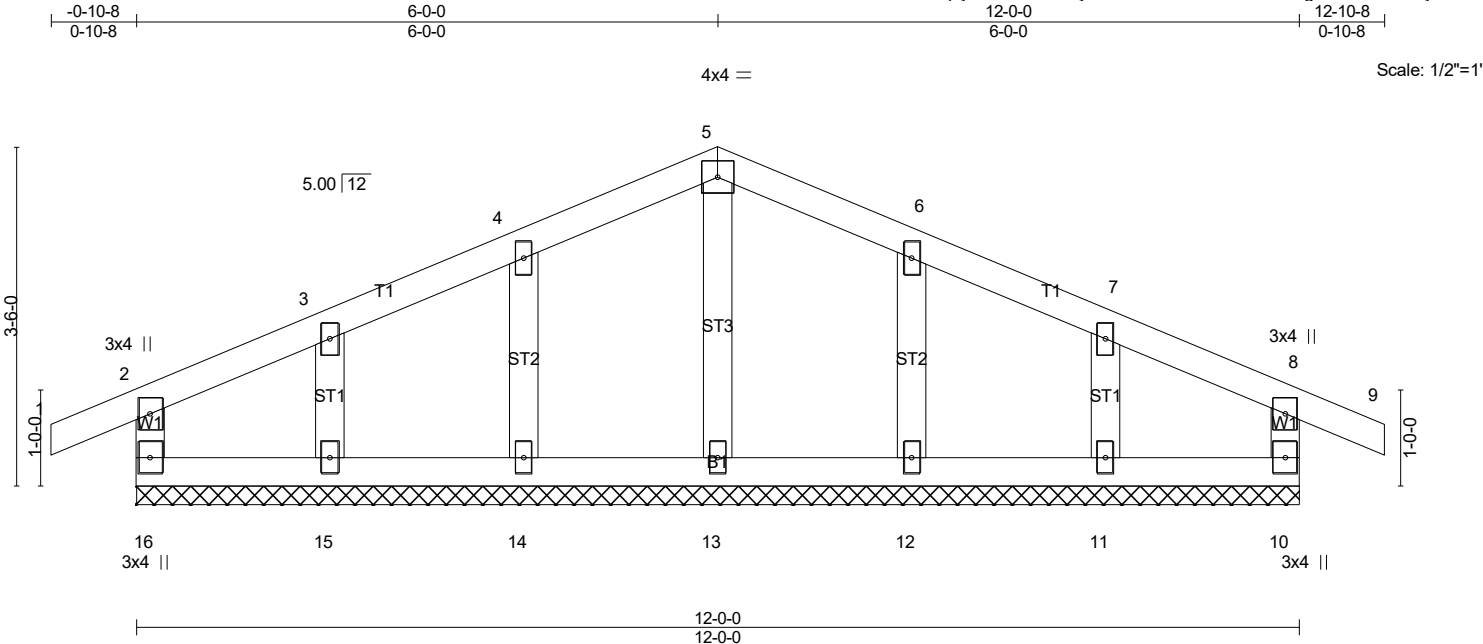
*My license renewal date for the state of North Carolina is 12/31/2025*

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

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Job	Truss	Truss Type	Qty	Ply	LOT 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	MR01	COMMON SUPPORTED GAB	1	1	
Job Reference (optional)					# 58537

Run: 85.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Apr 16 10:21:59 2025 Page 1  
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LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.00 9 n/r 180	MT20		244/190	
Snow (PF)	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00 9 n/r 80				
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00 10 n/a n/a				
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-R							
BCDL	10.0										
								Weight: 56 lb		FT = 20%	

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

**REACTIONS.** All bearings 12-0-0.  
(lb) - Max Horz 16=-21(LC 15)  
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)
- 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=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 4-0-0, Corner(3R) 4-0-0 to 8-0-0, Corner(3E) 8-0-0 to 12-10-8 zone; cantilever left and right exposed; 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.

**LOAD CASE(S)** Standard

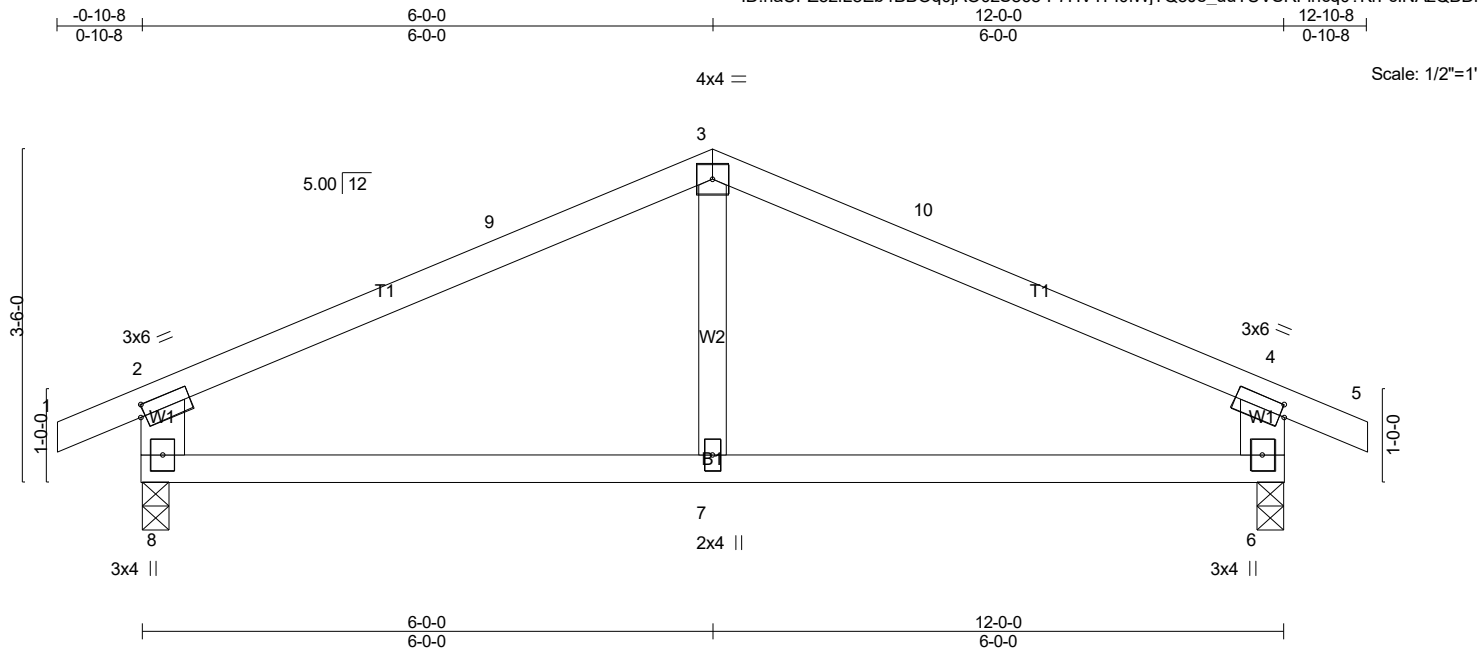


4/16/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	MR02	COMMON	5	1	
					Job Reference (optional) # 58537

Run: 85.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Apr 16 10:22:00 2025 Page 1  
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LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.03	6-7	>999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.07	6-7	>999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.01	6	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS							
BCDL	10.0									Weight: 47 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x6 SP No.2 \*Except\*  
W2: 2x4 SP No.3

**BRACING-**  
TOP CHORD  
BOT CHORD

Structural wood sheathing directly applied, except end verticals.  
Rigid ceiling directly applied.

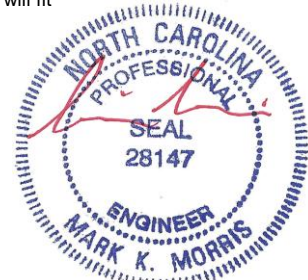
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 8=528/0-3-8 (min. 0-1-8), 6=528/0-3-8 (min. 0-1-8)  
Max Horz 8=-20(LC 15)  
Max Uplift 8=-78(LC 14), 6=-78(LC 15)  
Max Grav 8=621(LC 21), 6=621(LC 22)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-9=-593/203, 3-9=-465/213, 3-10=-465/213, 4-10=-593/203, 2-8=-555/248, 4-6=-555/246  
BOT CHORD 7-8=-72/439, 6-7=-72/439

- NOTES-** (10)
- 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=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Exterior(2R) 3-11-2 to 8-0-14, Exterior(2E) 8-0-14 to 12-10-8 zone; cantilever left and right exposed; 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.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

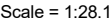
**LOAD CASE(S)** Standard



4/16/2025

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

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

4/16/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	R01	Common Supported Gable	1	1	Job Reference (optional) # 58537

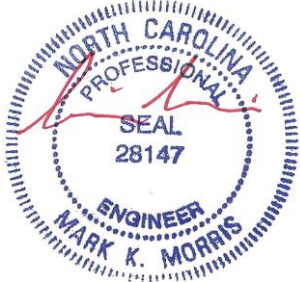
- Run: 85.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Apr 16 10:22:00 2025 Page 2  
ID:c\_P6kT8h891B1fTkFc0OgMyzUGu-F7HVTFI0iWJTQ5Je\_uuTUVSYNIlttq1SKrFclNAzQBDr
- 14) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. 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

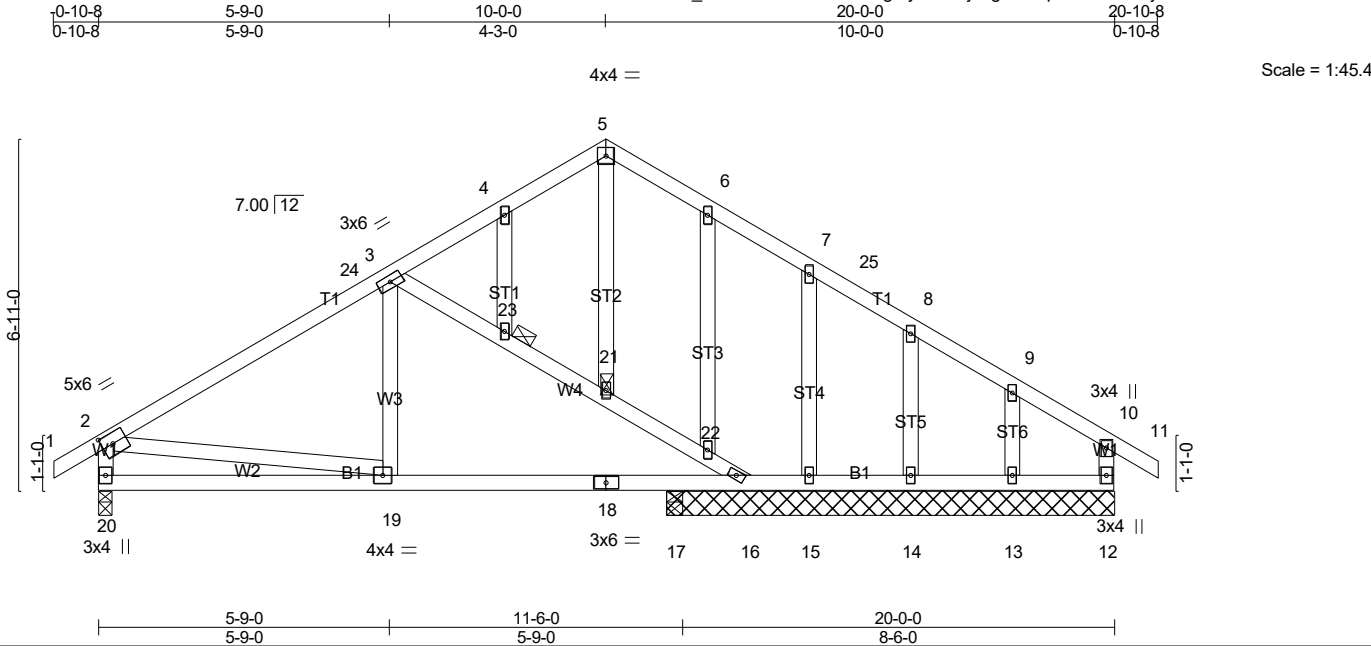


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Job	Truss	Truss Type	Qty	Ply	LOT 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	R02	DUAL RIDGE GABLE	1	1	
Job Reference (optional)					# 58537

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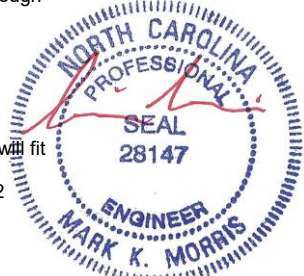
LOADING (psf)		SPACING		CSI		DEFL.				PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.02	19-20	>999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.05	19-20	>999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.01	12	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							
BCDL	10.0									Weight: 126 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3	JOINTS	1 Brace at Jt(s): 21, 23
		MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.	

**REACTIONS.** All bearings 8-9-8 except (jt=length) 20=0-3-8, 17=0-3-8.  
(lb) - Max Horz 20=-167(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 20, 16, 15, 14, 12 except 13=-127(LC 15)  
Max Grav All reactions 250 lb or less at joint(s) 16, 14, 13, 17 except 20=695(LC 21), 15=276(LC 22), 12=338(LC 22)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-24=-777/84, 3-24=-598/87, 3-4=-330/78, 6-7=-263/66, 9-10=-272/28, 2-20=-641/114, 10-12=-277/6  
BOT CHORD 19-20=-162/286, 18-19=-69/600, 17-18=-69/600, 16-17=-69/600  
WEBS 3-23=-456/134, 21-23=-488/144, 21-22=-460/131, 16-22=-487/142, 2-19=0/440

- NOTES-** (10-13)
- 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=35ft; 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 5-2-6, Exterior(2R) 5-2-6 to 14-9-10, Interior(1) 14-9-10 to 16-0-0, Exterior(2E) 16-0-0 to 20-10-8 zone; cantilever left and right exposed ; 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.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 16, 15, 14, 12 except (jt=lb) 13=127.





Job	Truss	Truss Type	Qty	Ply	LOT 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	R02	DUAL RIDGE GABLE	1	1	Job Reference (optional) # 58537

- Run: 85.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Apr 16 10:22:01 2025 Page 2  
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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



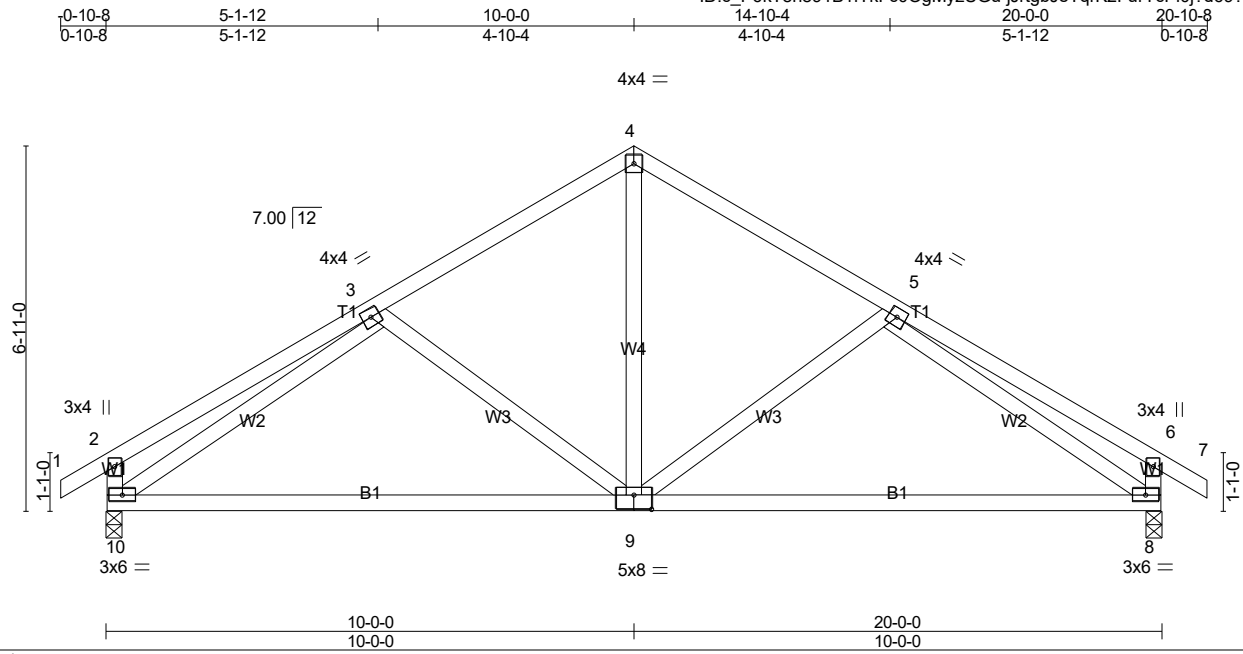
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Job	Truss	Truss Type	Qty	Ply	LOT 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	R03	Common	3	1	

# 58537

Job Reference (optional)

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Scale = 1:43.7

Plate Offsets (X,Y)-- [9:0-4-0,0-3-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.50	Vert(LL) -0.19	9-10	>999	240	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.96	Vert(CT) -0.38	9-10	>630	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.63	Horz(CT) 0.03	8	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH						
BCDL 10.0	Code IRC2021/TPI2014							

Weight: 114 lb FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD  
 BOT CHORD

Structural wood sheathing directly applied or 5-3-13 oc purlins, except end verticals.

Rigid ceiling directly applied or 2-2-0 oc bracing.

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

**REACTIONS.** (lb/size) 10=850/0-3-8 (min. 0-1-8), 8=850/0-3-8 (min. 0-1-8)

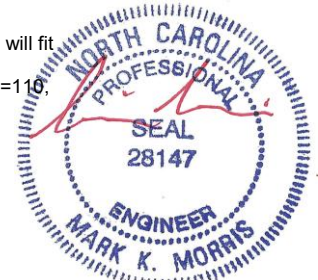
Max Horz 10=-167(LC 12)  
 Max Uplift 10=-110(LC 14), 8=-110(LC 15)  
 Max Grav 10=894(LC 21), 8=894(LC 22)

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

TOP CHORD 2-3=-308/79, 3-4=-853/128, 4-5=-853/128, 5-6=-307/78, 2-10=-322/107, 6-8=-321/107  
 BOT CHORD 9-10=-134/854, 8-9=-64/854  
 WEBS 4-9=-32/494, 5-9=-286/176, 3-9=-286/176, 3-10=-853/93, 5-8=-853/89

**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=35ft; 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 5-0-3, Exterior(2R) 5-0-3 to 14-11-13, Interior(1) 14-11-13 to 16-0-14, Exterior(2E) 16-0-14 to 20-10-8 zone; cantilever left and right exposed; 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.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=110, 8=110.



Continued on page 2

4/16/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	R03	Common	3	1	Job Reference (optional) # 58537

Run: 85.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Apr 16 10:22:01 2025 Page 2  
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- 9) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT 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



4/16/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	R04	COMMON GIRDER	1	3	
Job Reference (optional)					# 58537

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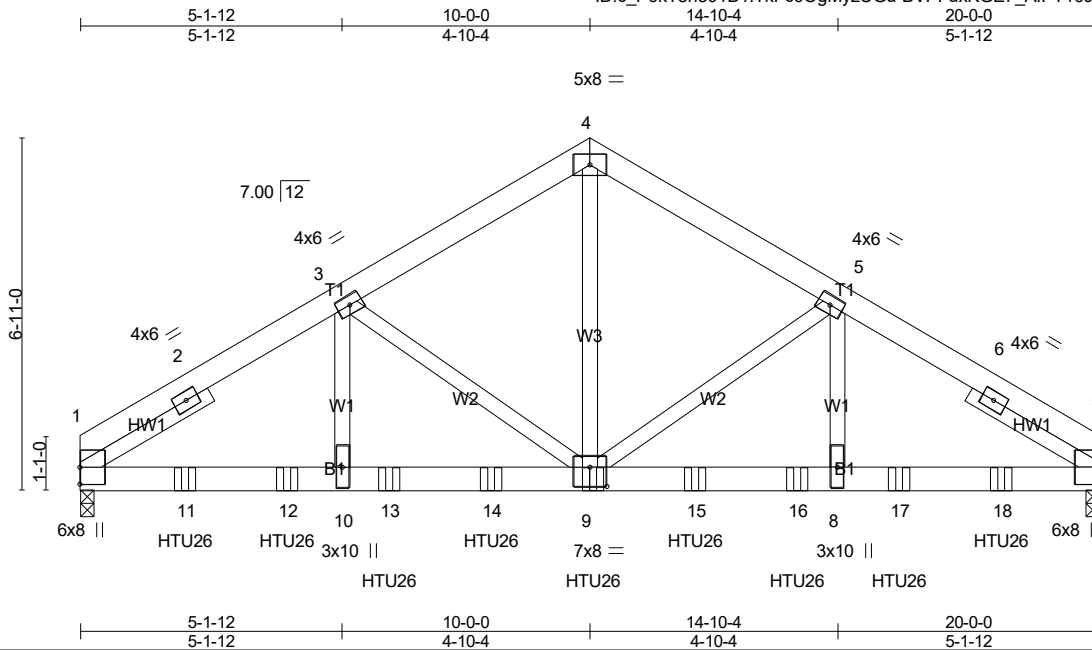


Plate Offsets (X,Y)-- [9:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.54	Vert(LL)	-0.07	9-10	>999	240	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.83	Vert(CT)	-0.15	9-10	>999	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.93	Horz(CT)	0.05	7	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-SH							
BCDL 10.0	Code IRC2021/TPI2014								
								Weight: 437 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 2-11-5, Right 2x4 SP No.3 2-11-5

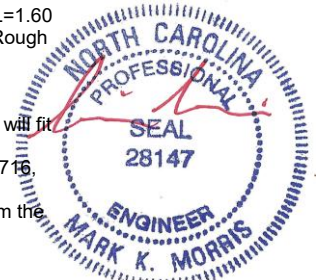
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 1=6789/0-3-8 (min. 0-2-12), 7=6976/0-3-8 (min. 0-2-14)  
Max Horz 1=-141(LC 37)  
Max Uplift 1=-716(LC 12), 7=-663(LC 13)  
Max Grav 1=6930(LC 5), 7=7269(LC 6)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-10051/965, 2-3=-9999/996, 3-4=-7390/739, 4-5=-7392/739, 5-6=-10207/948, 6-7=-10252/919  
BOT CHORD 1-11=-847/8297, 11-12=-847/8297, 10-12=-847/8297, 10-13=-847/8297, 13-14=-847/8297, 9-14=-847/8297, 9-15=-713/8486, 15-16=-713/8486, 8-16=-713/8486, 8-17=-713/8486, 17-18=-713/8486, 7-18=-713/8486  
WEBS 4-9=-620/6771, 5-9=-2595/333, 5-8=-244/3427, 3-9=-2406/385, 3-10=-297/3204

#### NOTES- (12-15)

- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 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=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=716, 7=663.
- Use Simpson Strong-Tie HTU26 (10-16d Girder, 14-10dx1 1/2 Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 18-0-12 to connect truss(es) R10 (1 ply 2x4 SP), R11 (1 ply 2x4 SP) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.



Continued on page 2

4/16/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	R04	COMMON GIRDER	1	3	Job Reference (optional) # 58537

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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 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

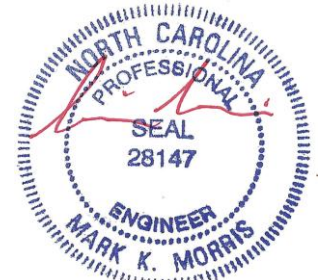
- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-4=-60, 4-7=-60, 1-7=-20

Concentrated Loads (lb)

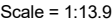
Vert: 9=-1371(B) 11=-1286(B) 12=-1286(B) 13=-1371(B) 14=-1371(B) 15=-1371(B) 16=-1371(B) 17=-1371(B) 18=-1371(B)



4/16/2025

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

A circular professional engineer seal for the State of North Carolina. The outer ring contains the text "NORTH CAROLINA" at the top and "ENGINEER" at the bottom. Inside the ring, the word "PROFESSIONAL" is at the top and "SEAL" is at the bottom. The license number "28147" is in the center. The name "MARK K. MORRIS" is written across the bottom of the seal. A red ink signature is written over the seal.

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Job	Truss	Truss Type	Qty	Ply	LOT 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	R06	Monopitch	5	1	
					Job Reference (optional) # 58537

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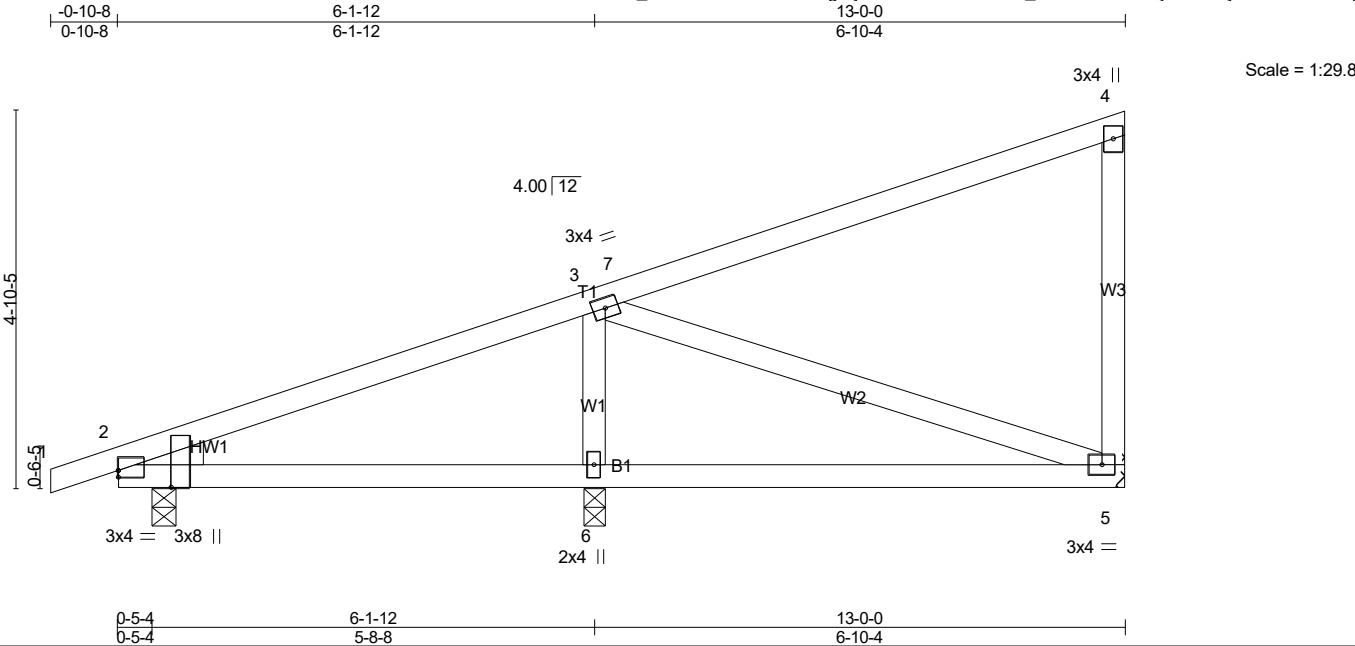


Plate Offsets (X,Y)-- [2:0-0-0,0-1-1], [2:0-2-10,Edge]							
<b>LOADING</b> (psf)		<b>SPACING-</b>		<b>CSI.</b>		<b>DEFL.</b>	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.78	in (loc)	l/defl
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.74	Vert(LL)	L/d
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Vert(CT)	
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH		Horz(CT)	
BCDL	10.0						
						<b>PLATES</b>	
						MT20	
						<b>GRIP</b>	
						244/190	
						Weight: 62 lb	
						FT = 20%	

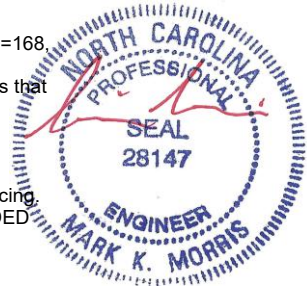
<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3		
WEDGE			
Left: 2x4 SP No.3			
		MiTek recommends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

**REACTIONS.** (lb/size) 5=225/Mechanical, 6=595/0-3-8 (min. 0-1-8), 2=258/0-3-8 (min. 0-1-8)  
Max Horz2=170(LC 11)  
Max Uplift5=-53(LC 14), 6=-168(LC 10), 2=-103(LC 10)  
Max Grav5=310(LC 21), 6=689(LC 21), 2=258(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 3-6=-534/180

- NOTES-** (9-12)
- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-0-8 to 3-11-2, Interior(1) 3-11-2 to 8-0-10, Exterior(2E) 8-0-10 to 12-10-4 zone; cantilever left and right exposed ; end vertical left and right 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 except (jt=lb) 6=168 2=103.
  - 9) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
  - 10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
  - 11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - 12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

Continued on page 2



4/16/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	R06	Monopitch	5	1	Job Reference (optional) # 58537

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LOAD CASE(S) Standard



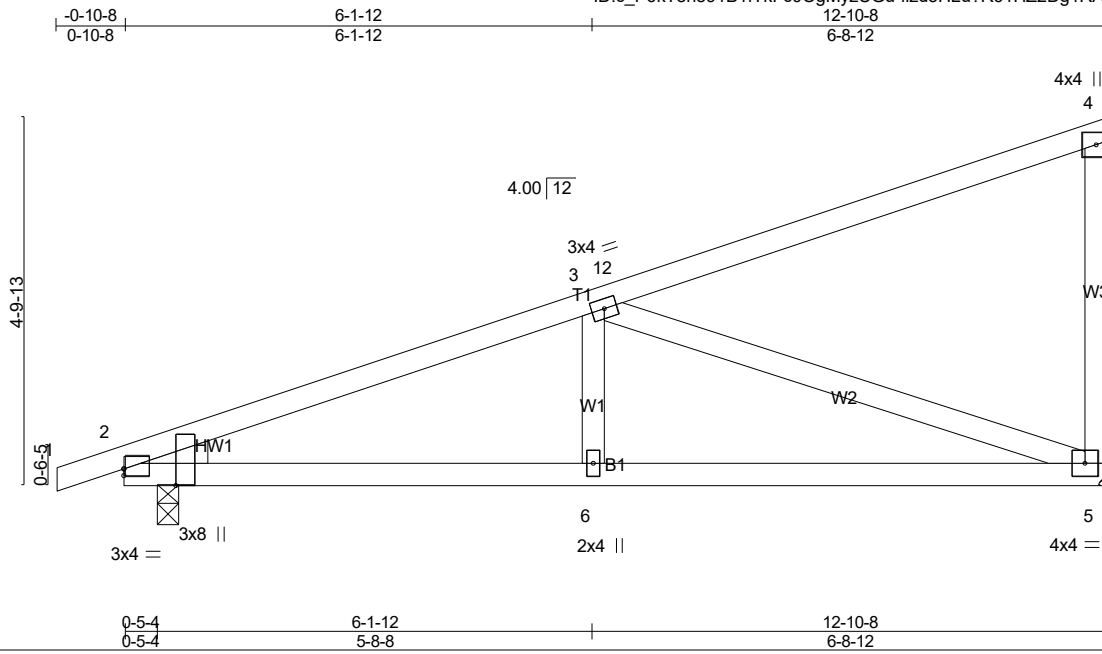
4/16/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	R07	Monopitch	2	1	
					Job Reference (optional) # 58537

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Scale = 1:30.2

Plate Offsets (X,Y)-- [2:0-0-0,0-1-1], [2:0-2-10,Edge]																			
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 0.78		Vert(LL)		0.11 5-6		>999		240		MT20		244/190	
Snow (Pf) 20.0		Lumber DOL		1.15		BC 0.41		Vert(CT)		-0.12 5-6		>999		180					
TCDL 10.0		Rep Stress Incr		YES		WB 0.81		Horz(CT)		0.02 5		n/a		n/a					
BCLL 0.0 *		Code IRC2021/TPI2014				Matrix-AS										Weight: 61 lb		FT = 20%	
BCDL 10.0																			

<b>LUMBER-</b>	<b>BRACING-</b>	Structural wood sheathing directly applied, except end verticals. Rigid ceiling directly applied.
TOP CHORD 2x4 SP No.2	TOP CHORD	
BOT CHORD 2x4 SP No.2	BOT CHORD	
WEBS 2x4 SP No.3		
WEDGE		
Left: 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) 5=487/Mechanical, 2=584/0-3-8 (min. 0-1-8)  
Max Horz 2=170(LC 13)  
Max Uplift 5=-200(LC 10), 2=-223(LC 10)  
Max Grav 5=615(LC 21), 2=627(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-963/676, 4-5=-257/71  
BOT CHORD 2-6=-580/875, 5-6=-580/875  
WEBS 3-6=-267/251, 3-5=-873/663

- NOTES-** (10-13)
- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; 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 7-11-2, Exterior(2E) 7-11-2 to 12-8-12 zone; cantilever left and right exposed ; end vertical left and right 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) except (jt=lb) 5=200, 2=223.
  - 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



Job	Truss	Truss Type	Qty	Ply	LOT 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	R07	Monopitch	2	1	Job Reference (optional) # 58537

Run: 85.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Apr 16 10:22:03 2025 Page 2  
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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

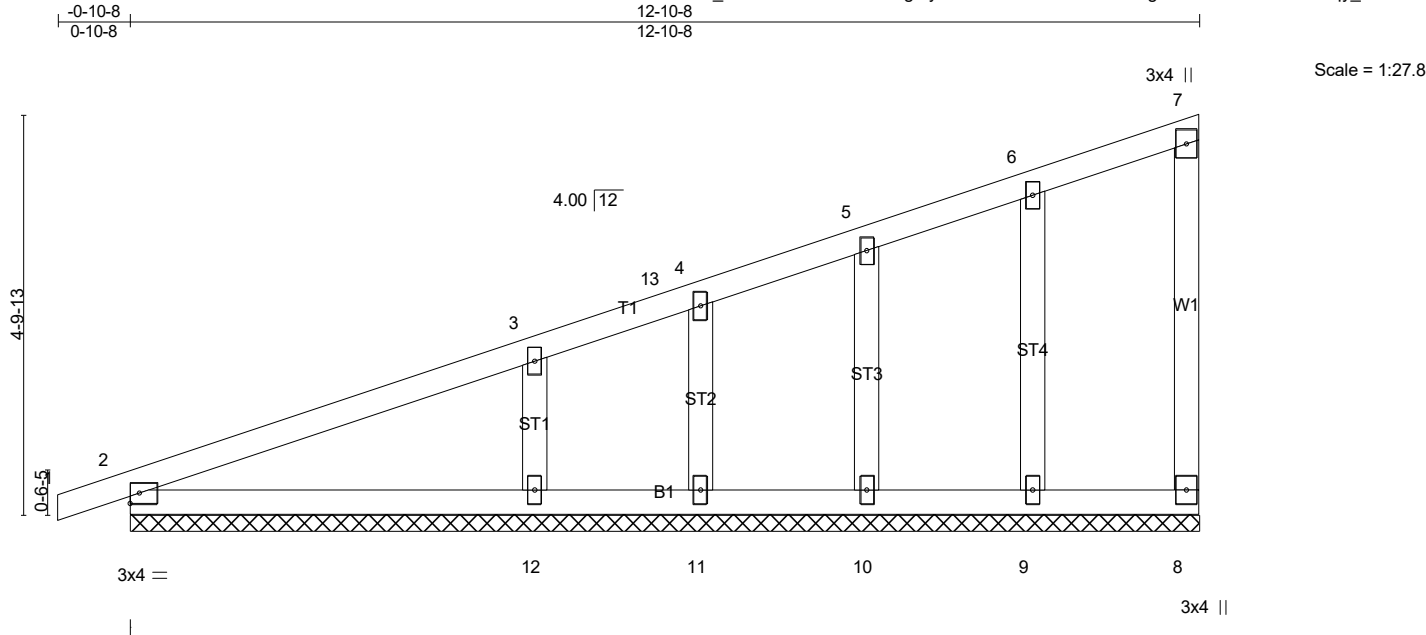


4/16/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	R08	GABLE	1	1	
					Job Reference (optional) # 58537

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LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.26	Vert(LL) -0.00	1	n/r	180		MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.30	Vert(CT) 0.01	1	n/r	80			
TCDL 10.0	Lumber DOL 1.15	WB 0.07	Horz(CT) 0.00	8	n/a	n/a			
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH							
BCDL 10.0	Code IRC2021/TPI2014								
									Weight: 63 lb FT = 20%

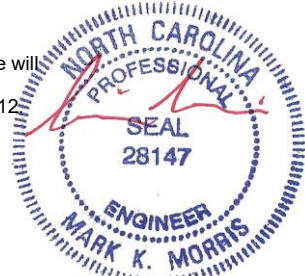
**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.3  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

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

**REACTIONS.** All bearings 12-10-8.  
(lb) - Max Horz 2=169(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 8, 2, 9, 10, 11, 12  
Max Grav All reactions 250 lb or less at joint(s) 8, 2, 9, 10, 11 except 12=397(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 3-12=-277/245

- NOTES-** (12-15)
- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; 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, Exterior(2N) 3-11-2 to 7-11-2, Corner(3E) 7-11-2 to 12-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - 4) Unbalanced snow loads have been considered for this design.
  - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
  - 6) All plates are 2x4 MT20 unless otherwise indicated.
  - 7) Gable requires continuous bottom chord bearing.
  - 8) Gable studs spaced at 2-0-0 oc.
  - 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 10) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 2, 9, 10, 11, 12



Continued on page 2

4/16/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	R08	GABLE	1	1	Job Reference (optional) # 58537

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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



4/16/2025

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Run: 85.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Apr 16 10:22:04 2025 Page 1  
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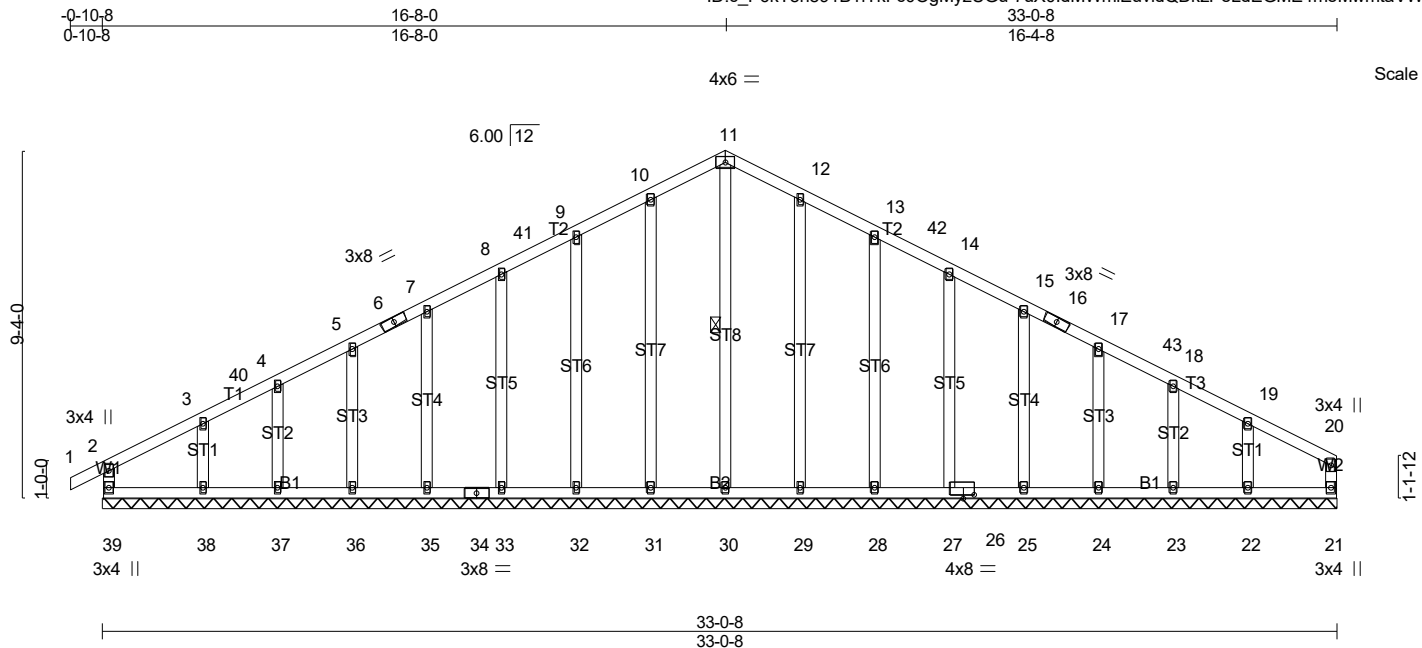


Plate Offsets (X,Y)-- [27:0-3-8,0-1-4]

[illegible]

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

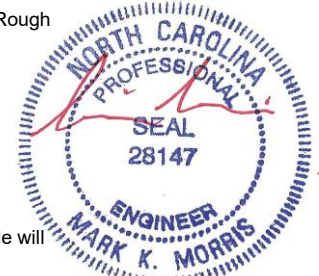
<b>BRACING-</b>	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt                      11-30

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

**REACTIONS.** All bearings 33-0-8.  
(lb) - Max Horz 39=126(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 39, 21, 31, 32, 33, 35, 36, 37, 29, 28,  
27, 25, 24, 23, 22 except 38=110(LC 14)  
Max Grav All reactions 250 lb or less at joint(s) 39, 21, 33, 35, 36, 37, 38, 27, 25,  
24, 23, 22 except 30=279(LC 27), 31=290(LC 5), 32=276(LC 5), 29=290(LC 6),  
28=276(LC 6)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 8-41=-95/253, 9-41=-87/261, 9-10=-114/306, 10-11=-131/343, 11-12=-131/343,  
12-13=-114/306, 13-42=-87/261, 14-42=-95/253

- NOTES-** (14-17)
- 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=35ft; 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, Exterior(2N) 3-11-2 to 11-10-6, Corner(3R) 11-10-6 to 21-5-10, Exterior(2N) 21-5-10 to 28-1-2, Corner(3E) 28-1-2 to 32-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) TCELL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - 5) Unbalanced snow loads have been considered for this design.
  - 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
  - 7) All plates are 2x4 MT20 unless otherwise indicated.
  - 8) Gable requires continuous bottom chord bearing.
  - 9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 10) Gable studs spaced at 2-0-0 oc.
  - 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 12) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.



Continued on page 2

4/16/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	R09	GABLE	1	1	Job Reference (optional) # 58537

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- NOTES-** (14-17)
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 39, 21, 31, 32, 33, 35, 36, 37, 29, 28, 27, 25, 24, 23, 22 except (jt=lb) 38=110.
  - 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 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



4/16/2025

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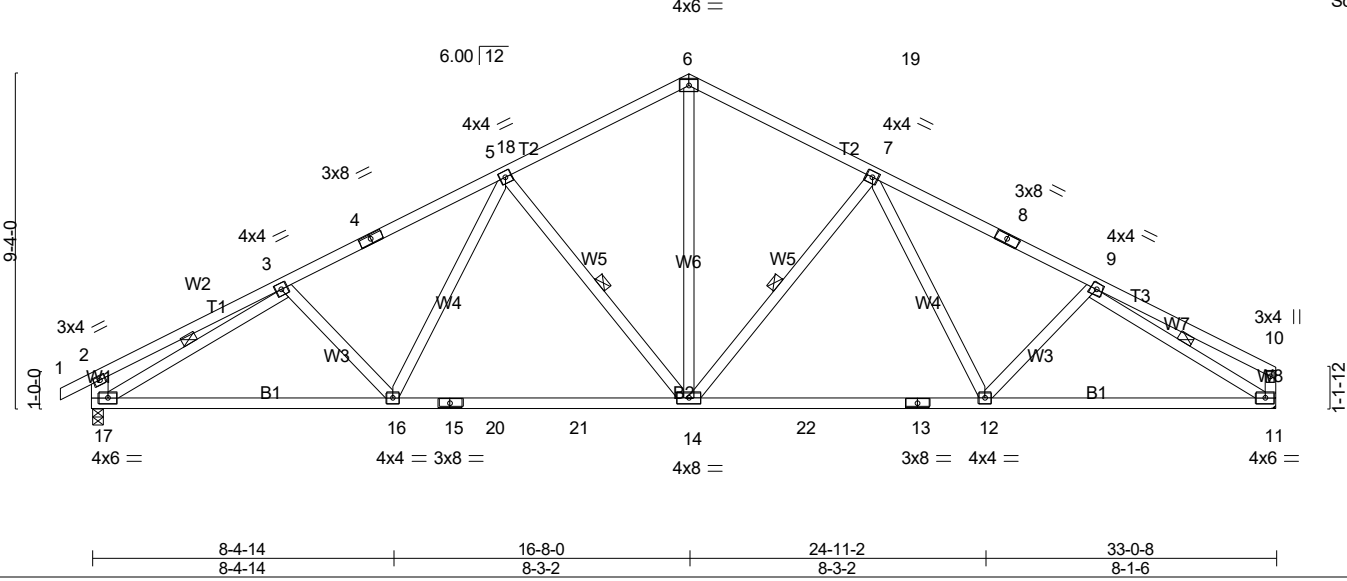


Job	Truss	Truss Type	Qty	Ply	LOT 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	R10	Common	2	1	
Job Reference (optional)					# 58537

Run: 85.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Apr 16 10:22:04 2025 Page 1  
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Scale: 3/16"=1'



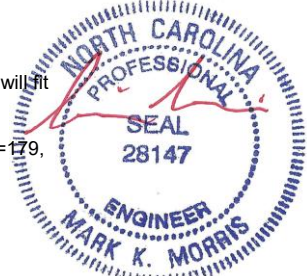
LOADING (psf)		SPACING		CSI		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.22 12-14 >999 240	MT20		244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.36 12-14 >999 180				
TCDL	10.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.09 11 n/a n/a				
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							
BCDL	10.0										
Weight: 195 lb FT = 20%											

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 3-9-9 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	2x4 SP No.3 *Except*	WEBS	1 Row at midpt 5-14, 7-14, 3-17, 9-11
	W1: 2x6 SP No.2		MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 17=1374/0-3-8 (min. 0-1-10), 11=1306/Mechanical  
Max Horz 17=127(LC 13)  
Max Uplift 17=-179(LC 14), 11=-156(LC 15)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-376/96, 3-4=-1942/298, 4-5=-1876/315, 5-18=-1467/304, 6-18=-1460/327, 6-19=-1459/327, 7-19=-1467/304, 7-8=-1852/315, 8-9=-1920/299, 2-17=-364/117  
BOT CHORD 16-17=-292/1703, 15-16=-175/1546, 15-20=-175/1546, 20-21=-175/1546, 14-21=-175/1546, 14-22=-142/1535, 13-22=-142/1535, 12-13=-142/1535, 11-12=-193/1657  
WEBS 5-16=-28/341, 5-14=-593/205, 6-14=-153/1035, 7-14=-574/203, 7-12=-26/318, 3-17=-1758/250, 9-11=-1844/253

- NOTES-** (10-13)
- 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=35ft; 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 11-10-6, Exterior(2R) 11-10-6 to 21-5-10, Interior(1) 21-5-10 to 28-0-2, Exterior(2E) 28-0-2 to 32-10-12 zone; cantilever left and right exposed ; 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.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=179, 11=156.



Continued on page 2

4/16/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	R10	Common	2	1	Job Reference (optional) # 58537

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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 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.

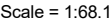
**LOAD CASE(S)** Standard



4/16/2025

**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.

Run: 85.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Apr 16 10:22:05 2025 Page 1  
ID:c P6kT8h891B1fTkFc0OgMyzUGu-b44OWzM8X2MIWsBcnRUeBZ9HPmNVVA84 XJ32NzQBDm



<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 3-3-4 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2 *Except*	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
	B2: 2x4 SP SS		6-0-0 oc bracing: 16-18
WEBS	2x4 SP No.3 *Except*	WEBS	1 Row at midpt 3-22, 9-11
	W1: 2x6 SP No.2		MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

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

**TOP CHORD** 2-3=-418/90, 3-4=-2270/224, 4-5=-2209/239, 5-23=-2230/285, 23-24=-2222/288, 6-24=-2155/310, 6-25=-2135/310, 25-26=-2199/287, 7-26=-2207/285, 7-8=-2168/241, 8-9=-2230/226, 9-10=-277/54, 2-22=-389/116

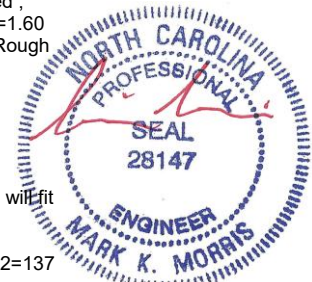
**BOT CHORD** 21-22=-229/1970, 20-21=-97/1968, 20-27=-97/1968, 19-27=-97/1968, 19-28=0/1476, 15-28=0/1476, 15-29=0/1476, 29-30=0/1476, 14-30=0/1476, 14-31=-61/1946, 13-31=-61/1946, 12-13=-61/1946, 11-12=-132/1906

**WEBS** 5-19=-539/239, 18-19=-174/933, 6-18=-136/1033, 6-16=-134/993, 14-16=-171/893, 7-14=-517/237, 3-22=-1989/185, 9-11=-2077/189

Continued on page 2

4/16/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	R11	Common	7	1	Job Reference (optional) # 58537

- Run: 85.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Apr 16 10:22:05 2025 Page 2  
ID:c\_P6kT8h891B1fTkFc0OgMyzUGu-b44OWzM8X2MIWsBcnRUeBZ9HPmNVVA84\_XJ32NzQBDm
- 11) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
  - 12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
  - 13) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - 14) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



4/16/2025

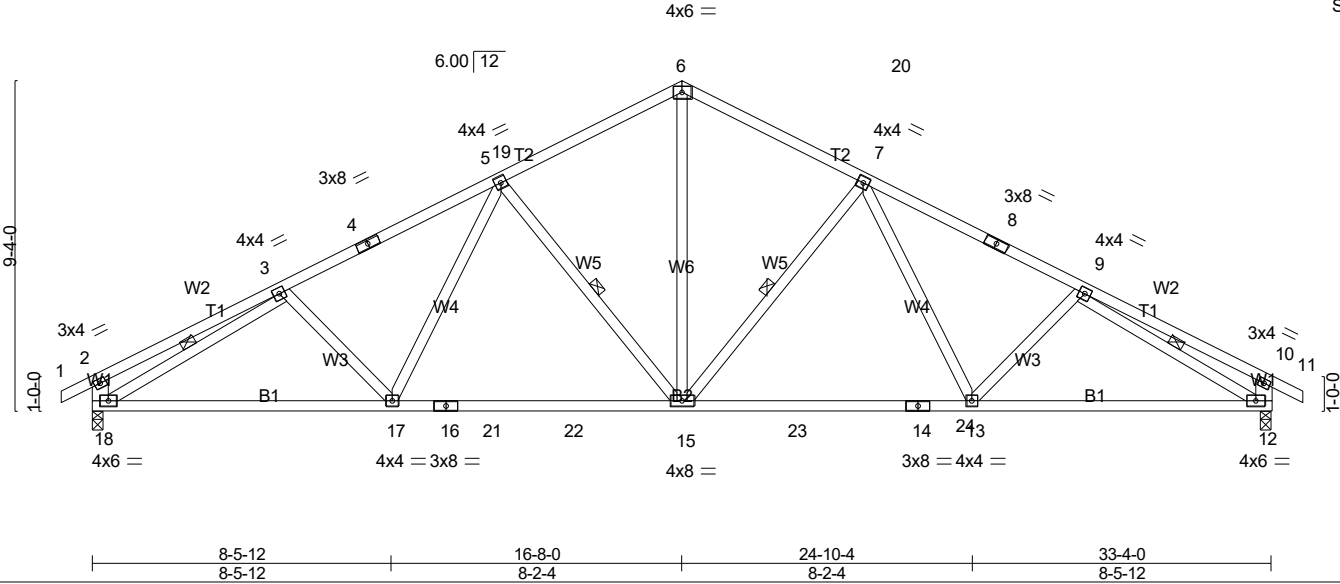
**Warning !—Verify design parameters and read notes before use.** This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building 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 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	R12	COMMON	8	1	
Job Reference (optional)					# 58537

Run: 85.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Apr 16 10:22:05 2025 Page 1  
ID: c\_P6kT8h891B1fTkFc0OgMyzUGu-b44OWzMX2MIWsBcnRUeBZ9lomM7VBH4\_XJ32NzQBDm

-0-10-8	5-5-1	11-6-9	16-8-0	21-9-7	27-10-15	33-4-0	34-2-8
0-10-8	5-5-1	6-1-7	5-1-7	5-1-7	6-1-8	5-5-2	0-10-8

Scale = 1:65.1



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.22 13-15 >999 240	MT20		244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.35 13-15 >999 180				
TCDL	10.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.09 12 n/a n/a				
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							
BCDL	10.0										
Weight: 198 lb										FT = 20%	

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

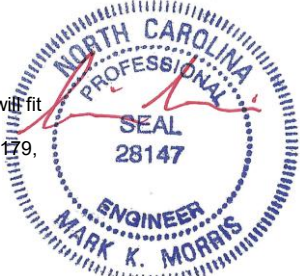
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-9-5 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.  
WEBS 1 Row at midpt 7-15, 5-15, 3-18, 9-12

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

**REACTIONS.** (lb/size) 18=1381/0-3-8 (min. 0-1-10), 12=1381/0-3-8 (min. 0-1-10)  
Max Horz 18=121(LC 13)  
Max Uplift 18=179(LC 14), 12=179(LC 15)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-377/95, 3-4=-1950/299, 4-5=-1883/316, 5-19=-1477/306, 6-19=-1470/329, 6-20=-1470/329, 7-20=-1477/306, 7-8=-1883/318, 8-9=-1950/301, 9-10=-377/95, 2-18=-365/117, 10-12=-365/119  
BOT CHORD 17-18=-285/1716, 16-17=-167/1556, 16-21=-167/1556, 21-22=-167/1556, 15-22=-167/1556, 15-23=-118/1556, 23-24=-118/1556, 14-24=-118/1556, 13-14=-118/1556, 12-13=-178/1706  
WEBS 6-15=-155/1046, 7-15=-594/205, 7-13=-27/340, 5-15=-594/205, 5-17=-27/340, 3-18=-1763/253, 9-12=-1763/233

- NOTES-** (9-12)
- 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=35ft; 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 11-10-6, Exterior(2R) 11-10-6 to 21-5-10, Interior(1) 21-5-10 to 29-4-14, Exterior(2E) 29-4-14 to 34-2-8 zone; cantilever left and right exposed ; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=179, 12=179.



Continued on page 2

4/16/2025

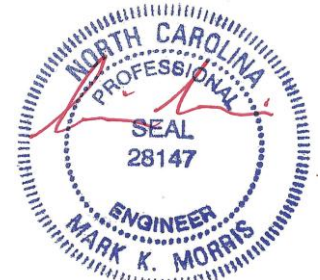
**Warning !—Verify design parameters and read notes before use.** This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building 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 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	R12	COMMON	8	1	Job Reference (optional) # 58537

Run: 85.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Apr 16 10:22:05 2025 Page 2  
ID:c\_P6kT8h891B1fTkFc0OgMyzUGu-b44OWzM8X2MIWsBcnRUeBZ9lomM7VBH4\_XJ32NzQBDm

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

**LOAD CASE(S)** Standard



4/16/2025

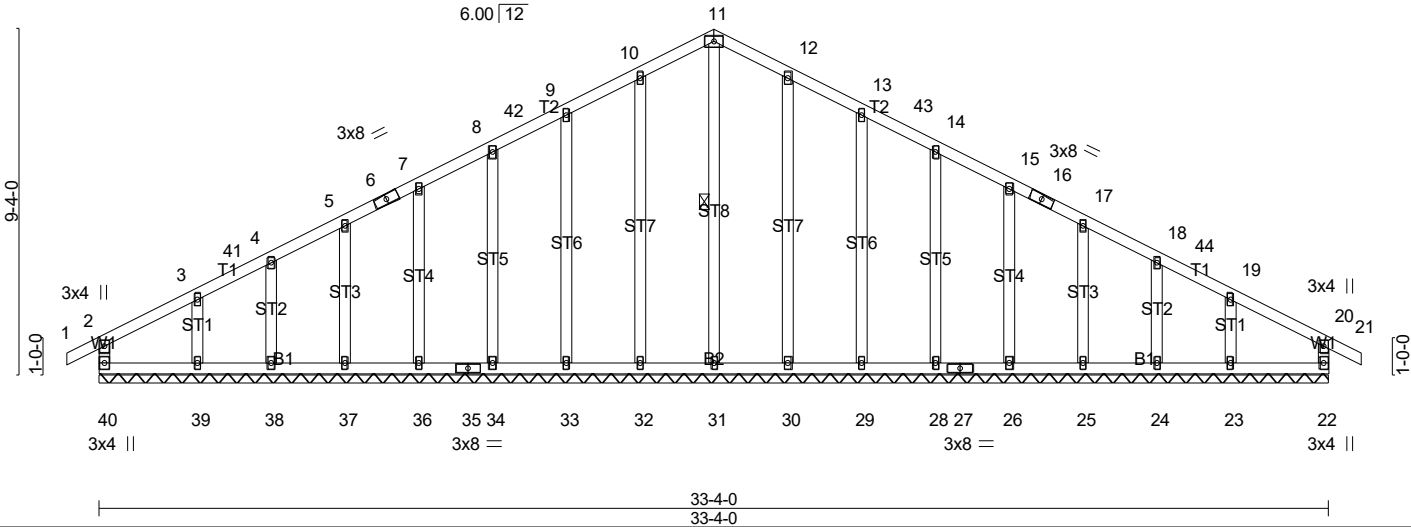
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Job	Truss	Truss Type	Qty	Ply	LOT 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	R13	Common Supported Gable	1	1	
					Job Reference (optional) # 58537

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ID: c\_P6kT8h891B1fTkFc0OgMyzUGu-3GemjJNmIMuc80moL9?tmiaatAvaEisDDB3cbpzQBdI

-0-10-8 16-8-0 33-4-0 16-8-0 34-2-8 0-10-8  
0-10-8 16-8-0 33-4-0 16-8-0 34-2-8 0-10-8  
4x6 = Scale = 1:62.4



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.00 20 n/r 180	MT20		244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.00 21 n/r 80				
TCDL	10.0	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.00 22 n/a n/a				
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-R							
BCDL	10.0										
										Weight: 223 lb	FT = 20%

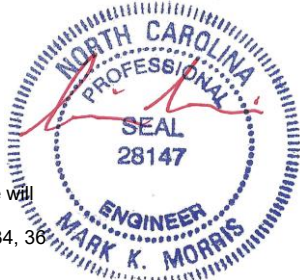
**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.3  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 11-31  
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 33-4-0.  
(lb) - Max Horz 40=120(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) 40, 22, 32, 33, 34, 36, 37, 38, 30, 29, 28, 26, 25, 24, 23 except 39=106(LC 14)  
Max Grav All reactions 250 lb or less at joint(s) 40, 22, 34, 36, 37, 38, 39, 28, 26, 25, 24, 23 except 31=278(LC 27), 32=290(LC 5), 33=276(LC 5), 30=290(LC 6), 29=276(LC 6)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 9-42=-87/256, 9-10=-114/301, 10-11=-131/339, 11-12=-131/339, 12-13=-114/301, 13-43=-87/256

- 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=35ft; 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, Exterior(2N) 3-11-2 to 11-10-6, Corner(3R) 11-10-6 to 21-5-10, Exterior(2N) 21-5-10 to 29-4-14, Corner(3E) 29-4-14 to 34-2-8 zone; cantilever left and right exposed; 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, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 40, 22, 32, 33, 34, 36, 37, 38, 30, 29, 28, 26, 25, 24, 23 except (jt=lb) 39=106.



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Job	Truss	Truss Type	Qty	Ply	LOT 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	R13	Common Supported Gable	1	1	Job Reference (optional) # 58537

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ID: c\_P6kT8h891B1fTkFc0OgMyzUGu-3GemjJNmIMUc80moL9?tmiaatAvaEisDDB3cbpzQBDI
- 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.

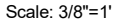
LOAD CASE(S) Standard



4/16/2025

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Run: 85.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Apr 16 10:22:06 2025 Page 1  
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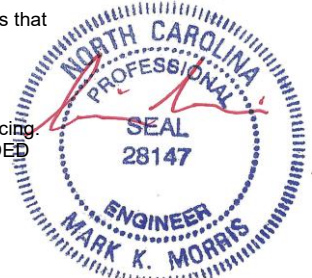
Weight: 65 lb      FT = 20%

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

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=358(LC 23), 9=486(LC 20), 6=486(LC 21)

$$2-9=-389/160, 4-6=-389/160$$

- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; 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 11-6-3, Exterior(2E) 11-6-3 to 16-3-13 zone; cantilever left and right exposed; 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) TCELL: 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) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) 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=127, 6=127.
- 9) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT 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.

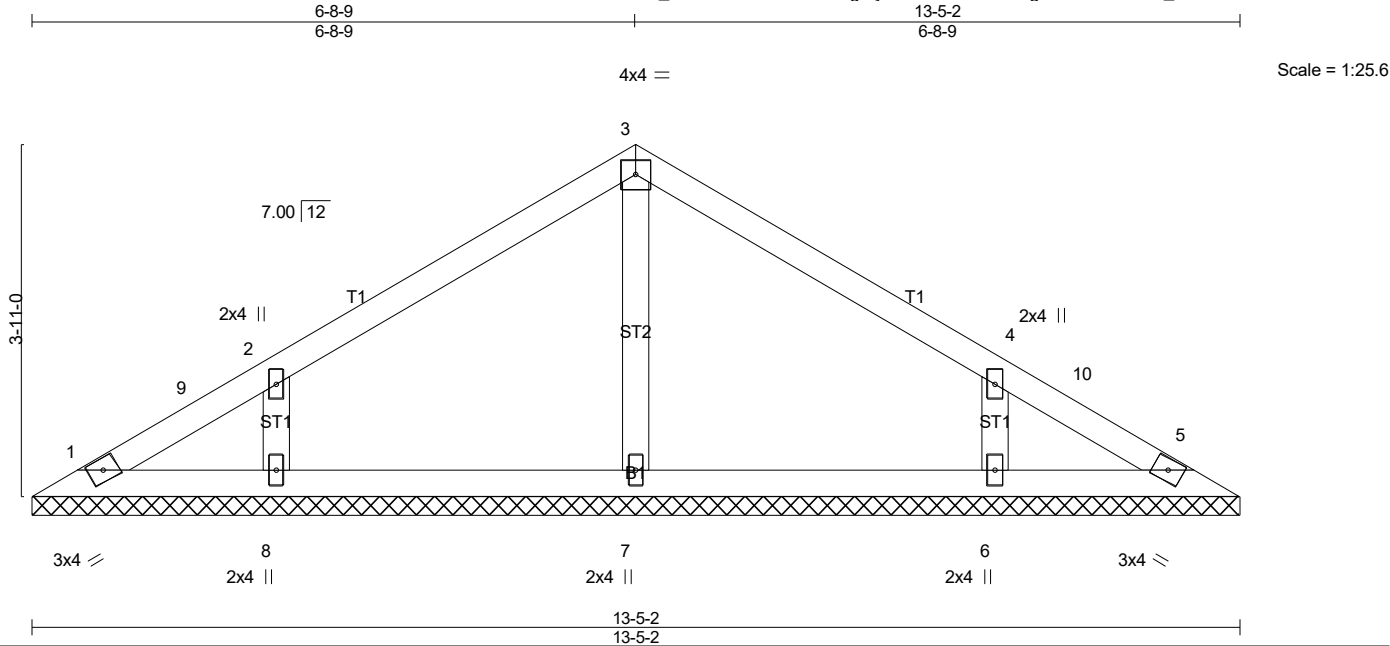


4/16/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	VT02	Valley	1	1	
Job Reference (optional)					# 58537

Run: 85.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Apr 16 10:22:07 2025 Page 1  
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LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.28	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.20	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.07	Horz(CT)	0.00	5	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH							
BCDL 10.0	Code IRC2021/TPI2014							Weight: 49 lb	FT = 20%

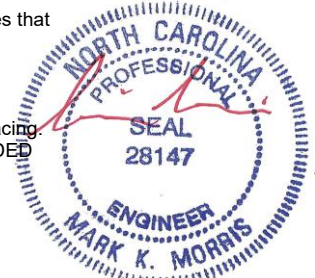
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	MiTek recommends that Stabilizers and required cross bracing be installed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

**REACTIONS.** All bearings 13-5-2.  
(lb) - Max Horz 1=-79(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-105(LC 14), 6=-105(LC 15)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=292(LC 20), 8=422(LC 20), 6=422(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-8=-361/140, 4-6=-361/140

- 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=35ft; 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 8-1-1, Exterior(2E) 8-1-1 to 12-10-11 zone; cantilever left and right exposed; 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 except (jt=lb) 8=105, 6=105.
  - 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

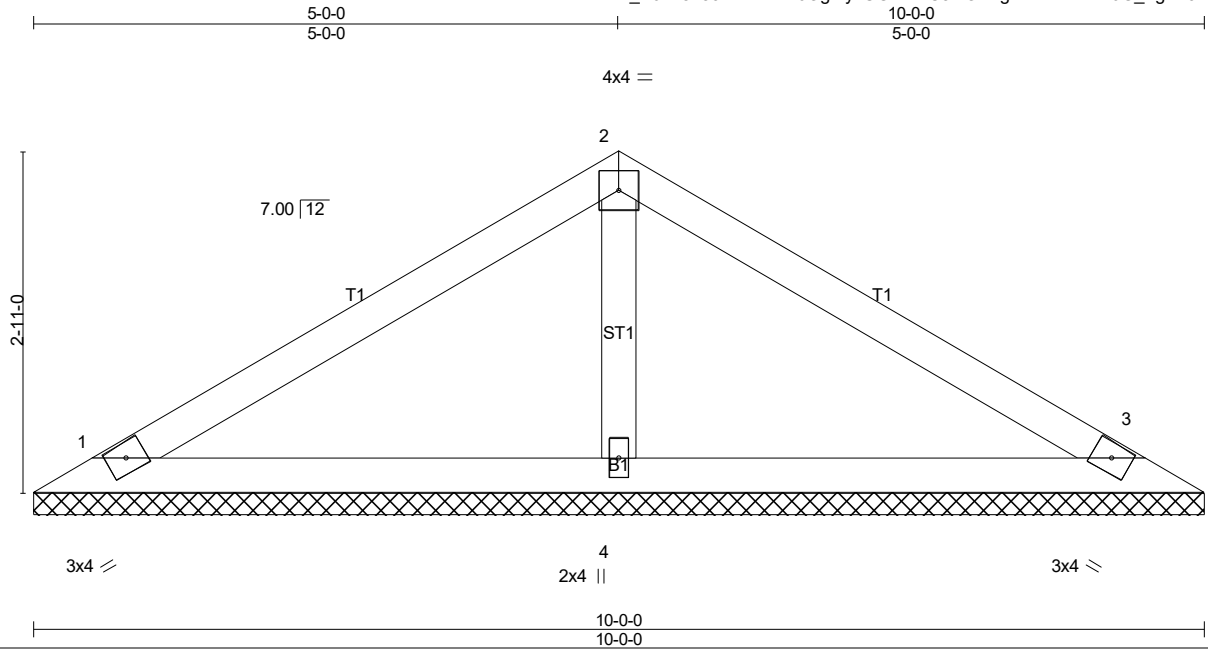


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Job	Truss	Truss Type	Qty	Ply	LOT 145 PROVIDENCE CREEK   40 RENSHAW LANE FUQUAY-VARINA, NC
25-3296-R01	VT03	Valley	1	1	Job Reference (optional) # 58537

Run: 85.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Apr 16 10:22:07 2025 Page 1  
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Scale = 1:19.7

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.39	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.46	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.06	Horz(CT)	0.00	3	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH							
BCDL 10.0	Code IRC2021/TPI2014							Weight: 34 lb	FT = 20%

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

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

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

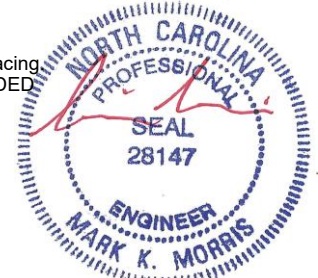
**REACTIONS.** (lb/size) 1=165/10-0-0 (min. 0-1-8), 3=165/10-0-0 (min. 0-1-8), 4=383/10-0-0 (min. 0-1-8)  
Max Horz 1=57(LC 11)  
Max Uplift 1=-30(LC 14), 3=-38(LC 15), 4=-24(LC 14)  
Max Grav 1=241(LC 20), 3=241(LC 21), 4=398(LC 21)

**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=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; 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

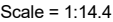


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Weight: 21 lb      FT = 20%

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

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