

# Mark Morris, P.E.

#126, 1317-M, Summerville, SC 29483

843 209-5784, Fax (866)-213-4614

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 #: 59707

JOB: 25-4553-R01

JOB NAME: LOT 157 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.

*30 Truss Design(s)*

## Trusses:

PB01, PB02, PB03, R01, R02, R04, R05, R05A, R06, R07, R07A, R08, R09, R10, R11, R12, R13, SP01, SP02, SP03, SPJ01, SPV01, SPV02, VT01, VT02, VT03, VT04, VT05, VT06, VT07



**5/28/2025**

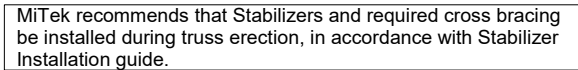
**Mark Morris**

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

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

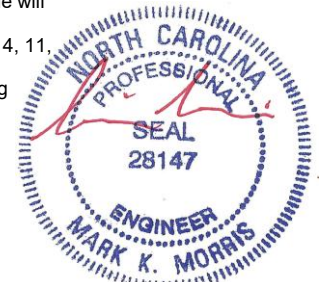
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**NOTES-** (13-16)

- 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) 0-3-15 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 2'-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" tall by 1'-0" wide will fit between the bottom chord and any other members.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 2, 8, 13, 14, 11, 10.
- 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	PB01	GABLE	2	1	Job Reference (optional) # 59707

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- 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.

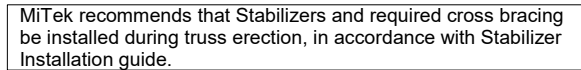
LOAD CASE(S) Standard



5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	PB02	GABLE	19	1	Job Reference (optional) # 59707

Run: 8.630 s Jul 12 2024 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed May 28 13:13:06 2025 Page 2  
ID:kHdPkcON9g3\_0lfrDBlgKRzexCS-ubSL6Lw2D4BEIM?PJJD29z\_9Nk1FogzKRDwvtVzBzhR

- 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.
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LOAD CASE(S) Standard

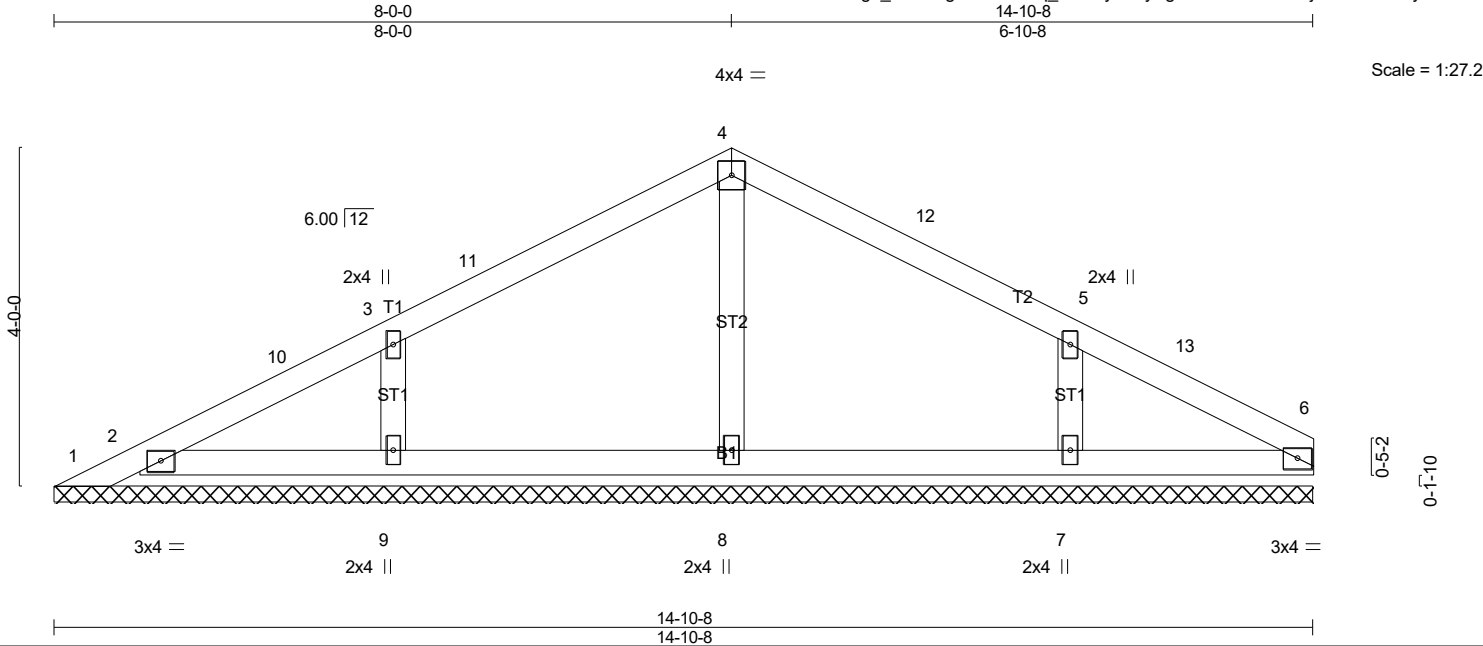


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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	PB03	GABLE	5	1	
Job Reference (optional)					# 59707

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LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	MT20	244/190
Snow (PF)	20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	6	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH						Weight: 54 lb	FT = 20%
BCDL	10.0										

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

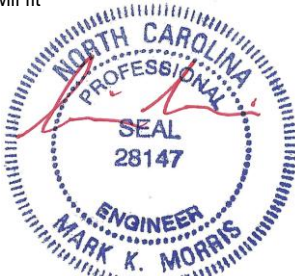
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6'-0'-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10'-0'-0 oc bracing.

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

**REACTIONS.** All bearings 14-10-8.  
(lb) - Max Horz 1=63(LC 14)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 6, 2, 9 except 7=-101(LC 15)  
Max Grav All reactions 250 lb or less at joint(s) 1, 6, 2 except 8=292(LC 21), 9=437(LC 21), 7=441(LC 22)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 3-9=-363/167, 5-7=-364/157

- 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; BC DL=5.0psf; h=35ft; 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 10-0-14, Exterior(2E) 10-0-14 to 14-10-8 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.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 4'-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) 1, 6, 2, 9 except (jt=lb) 7=101.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



Continued on page 2

5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	PB03	GABLE	5	1	Job Reference (optional) # 59707

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- 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	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R01	Piggyback Base Supported Gable	1	1	
Job Reference (optional)					# 59707

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-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 = 1:102.4

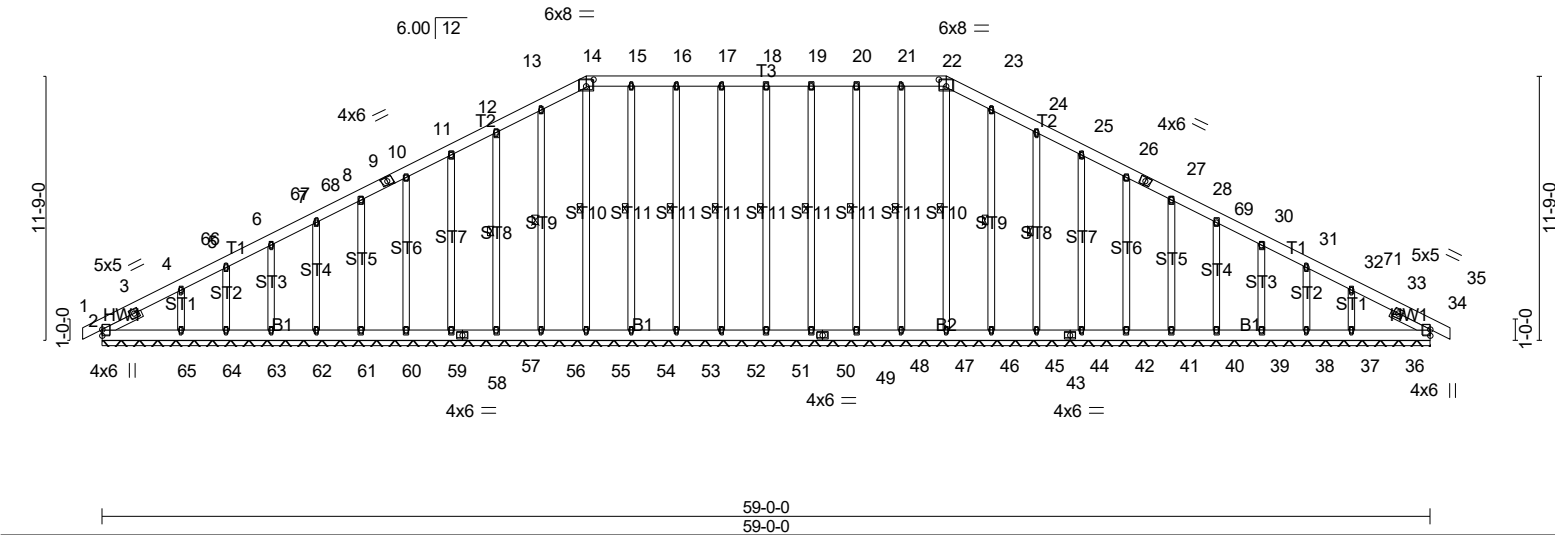


Plate Offsets (X,Y)-- [14:0-4-0,0-3-8], [22:0-4-0,0-3-8]		59-0-0 59-0-0	
<b>LOADING</b> (psf)		<b>CS.</b>	
TCLL (roof)	20.0	TC	0.06
Snow (Pf)	20.0	BC	0.04
TCDL	10.0	WB	0.26
BCLL	0.0 *	Matrix-S	
BCDL	10.0		
<b>SPACING-</b>		<b>DEFL.</b>	
Plate Grip DOL	1.15	in (loc)	L/d
Lumber DOL	1.15	Vert(LL)	0.00 34 n/r 180
Rep Stress Incr	YES	Vert(CT)	0.00 35 n/r 80
Code IRC2021/TPI2014		Horz(CT)	0.01 34 n/a n/a
		<b>PLATES</b>	
		MT20	
		<b>GRIP</b>	
		244/190	
		Weight: 600 lb FT = 20%	

<b>LUMBER-</b>		<b>BRACING-</b>	
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 18-51, 17-52, 16-53, 15-54, 14-55, 13-56, 12-57, 19-50, 20-48, 21-47, 22-46, 23-45, 24-44
SLIDER	Left 2x4 SP No.3 1-11-0, Right 2x4 SP No.3 1-11-0		

**REACTIONS.** All bearings 59-0-0.  
(lb) - Max Horz 2=167(LC 18)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 51, 52, 53, 54, 56, 57, 59, 60, 61, 62, 63, 64, 50, 48, 47, 45, 44, 42, 41, 40, 39, 38, 37 except 65=-127(LC 14), 36=-110(LC 15)  
Max Grav All reactions 250 lb or less at joint(s) 2, 63, 64, 46, 38, 37, 34 except 51=292(LC 44), 52=292(LC 44), 53=295(LC 44), 54=294(LC 44), 55=258(LC 52), 56=297(LC 47), 57=295(LC 45), 59=292(LC 45), 60=292(LC 45), 61=293(LC 45), 62=283(LC 45), 65=259(LC 54), 50=292(LC 44), 48=295(LC 44), 47=294(LC 44), 45=294(LC 49), 44=295(LC 45), 42=292(LC 45), 41=292(LC 45), 40=293(LC 45), 39=283(LC 45), 36=259(LC 55)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 12-13=-124/284, 13-14=-140/319, 14-15=-131/306, 15-16=-131/306, 16-17=-131/306, 17-18=-131/306, 18-19=-131/306, 19-20=-131/306, 20-21=-131/306, 21-22=-131/306, 22-23=-140/319, 23-24=-124/284

- 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 16-8-6, Corner(3R) 16-8-6 to 26-3-10, Exterior(2N) 26-3-10 to 32-8-6, Corner(3R) 32-8-6 to 42-3-10, Exterior(2N) 42-3-10 to 55-0-14, Corner(3E) 55-0-14 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.



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25-4553-R01	R01	Piggyback Base Supported Gable	1	1	Job Reference (optional) # 59707

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- NOTES-** (14-17)
- 12) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 51, 52, 53, 54, 56, 57, 59, 60, 61, 62, 63, 64, 50, 48, 47, 45, 44, 42, 41, 40, 39, 38, 37 except (jt=lb) 65=127, 36=110.
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**LOAD CASE(S)** Standard



5/28/2025

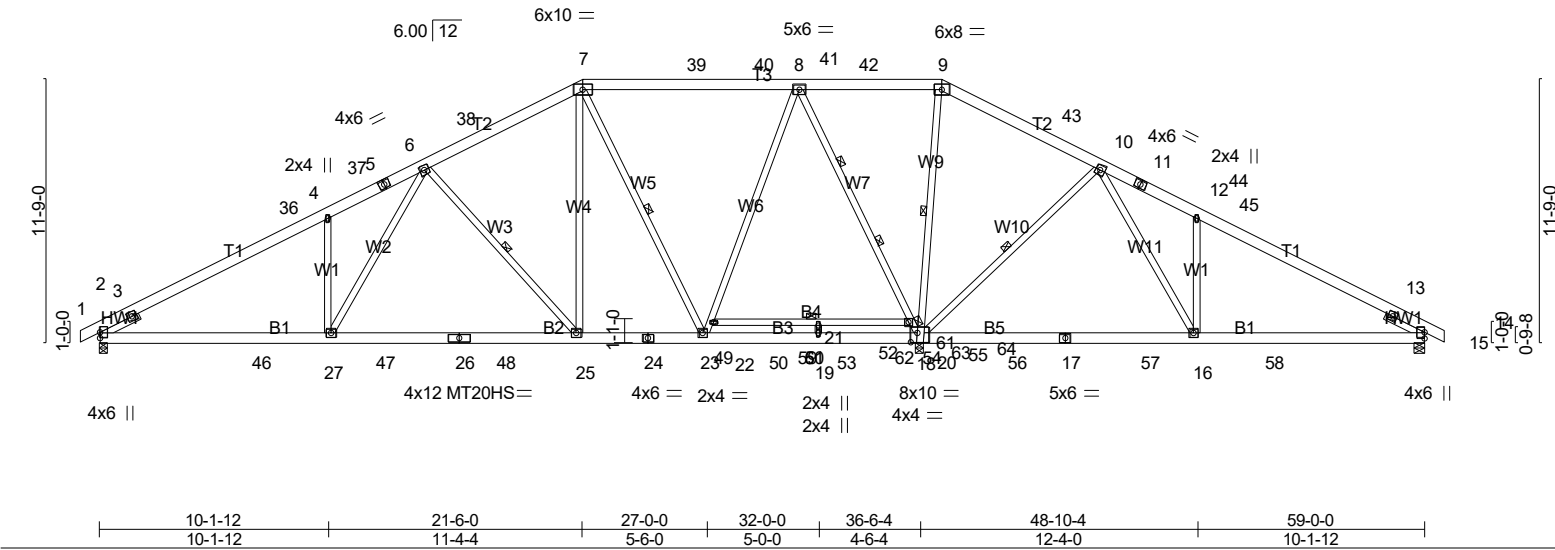
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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R02	Piggyback Base	9	1	
Job Reference (optional)					# 59707

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-0-10-8	10-1-12	14-5-5	21-6-0	31-0-0	37-6-0	44-6-11	48-10-4	59-0-0	59-10-8
0-10-8	10-1-12	4-3-9	7-0-11	9-6-0	6-6-0	7-0-11	4-3-9	10-1-12	0-10-8

Scale = 1:102.6



LOADING (psf)		SPACING		CSI		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.28 25-27 >999 240	MT20	244/190		
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.44 25-27 >998 180	MT20HS	187/143		
TCDL	10.0	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.05 18 n/a n/a				
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS							
BCDL	10.0										
										Weight: 469 lb	FT = 20%

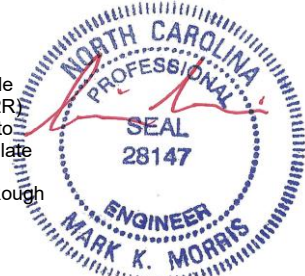
LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.2	TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	2x6 SP No.2 *Except*	BOT CHORD	Rigid ceiling directly applied. Except:
	B4: 2x4 SP No.2		6-0-0 oc bracing: 20-22
WEBS	2x4 SP No.3 *Except*	WEBS	1 Row at midpt 6-25, 7-23, 10-18, 9-18
	W5,W7: 2x4 SP SS		2 Rows at 1/3 pts 8-20
SLIDER	Left 2x4 SP No.3 1-11-0, Right 2x4 SP No.3 1-11-0		
		MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.	

**REACTIONS.** (lb/size) 2=1339/0-3-8 (min. 0-1-13), 18=3037/0-3-8 (min. 0-2-14), 14=628/0-5-8 (min. 0-1-8)  
Max Horz2=167(LC 14)  
Max Uplift2=-205(LC 14), 18=-7(LC 14), 14=-207(LC 15)  
Max Grav2=1551(LC 43), 18=4183(LC 43), 14=773(LC 41)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-835/0, 3-36=-2505/273, 4-36=-2339/293, 4-37=-2447/404, 5-37=-2432/406,  
5-6=-2308/423, 6-38=-1268/291, 7-38=-1142/312, 7-39=-754/267, 39-40=-754/267,  
40-41=-754/267, 8-41=-754/267, 8-42=0/1101, 9-42=0/1101, 9-43=0/1245, 10-43=0/1070,  
10-11=-689/425, 11-44=-835/408, 12-44=-846/406, 12-45=-651/292, 13-45=-861/271,  
13-14=-311/0  
BOT CHORD 2-46=-302/2136, 27-46=-302/2136, 27-47=-214/1674, 26-47=-214/1674, 26-48=-214/1674,  
25-48=-214/1674, 24-25=-63/1058, 24-49=-63/1058, 23-49=-63/1058, 23-50=-162/402,  
50-51=-162/402, 51-52=-162/402, 19-52=-162/402, 19-53=-162/402, 53-54=-162/402,  
54-55=-162/402, 18-55=-162/402, 18-56=-365/263, 17-56=-365/263, 17-57=-365/263,  
16-57=-365/263, 16-58=-138/678, 14-58=-138/678  
WEBS 6-25=-1053/259, 7-25=-109/1129, 7-23=-1169/162, 22-23=-56/1619, 8-22=-30/1740,  
8-20=-2306/217, 18-20=-2402/195, 10-18=-1148/266, 19-21=-301/0, 9-18=-864/120,  
6-27=-182/968, 10-16=-176/1177, 4-27=-476/255, 12-16=-587/254

- NOTES-** (18-21)
- 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; 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 32-8-6, Exterior(2R) 32-8-6 to 42-3-10, Interior(1) 42-3-10 to 55-0-14, Exterior(2E) 55-0-14 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.

Continued on page 2



5/28/2025

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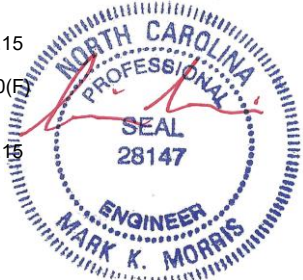
Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R02	Piggyback Base	9	1	
					Job Reference (optional) # 59707

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- NOTES-** (18-21)
- 6) Provide adequate drainage to prevent water ponding.
  - 7) All plates are MT20 plates unless otherwise indicated.
  - 8) All plates are 5x5 MT20 unless otherwise indicated.
  - 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 10) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 11) Bearing at joint(s) 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18 except (jt=lb) 2=205, 14=207.
  - 13) Load case(s) 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166 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) 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.
  - 17) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
  - 18) 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.
  - 19) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
  - 20) 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.
  - 21) 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:

- 109) Reversal: 1st User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 110) Reversal: 2nd User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 51=-150 52=-150
- 111) Reversal: 3rd User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 52=-150 53=-150
- 112) Reversal: 4th User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 53=-150 55=-150
- 113) Reversal: 5th User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 18=-150 54=-150
- 114) Reversal: 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), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 115) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 116) Reversal: 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), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 117) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 118) Reversal: 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), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150



Continued on page 3 5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R02	Piggyback Base	9	1	
					Job Reference (optional) # 59707

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LOAD CASE(S)

- 119) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 120) Reversal: 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), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 121) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 122) Reversal: 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), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
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Uniform Loads (plf)  
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 124) Reversal: 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), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
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Uniform Loads (plf)  
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 126) Reversal: 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), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
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Uniform Loads (plf)  
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
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Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
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Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
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Concentrated Loads (lb)  
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Uniform Loads (plf)  
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Concentrated Loads (lb)  
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Uniform Loads (plf)  
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150



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5/28/2025

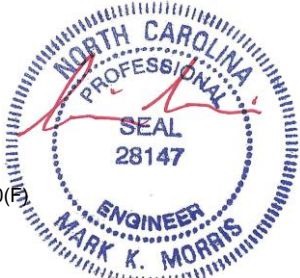
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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R02	Piggyback Base	9	1	
					Job Reference (optional) # 59707

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LOAD CASE(S)

- 134) Reversal: 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), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 135) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
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Uniform Loads (plf)  
Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 137) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 138) 1st User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 139) 2nd User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 51=-150 52=-150
- 140) 3rd User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 52=-150 53=-150
- 141) 4th User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 53=-150 55=-150
- 142) 5th User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 18=-150 54=-150
- 143) 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), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 144) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 145) 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), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 146) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 147) 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), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 148) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150



Continued on page 5

5/28/2025

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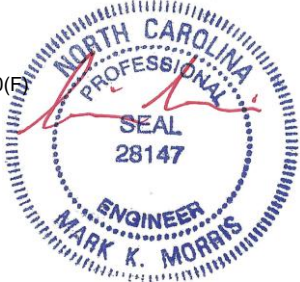


Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R02	Piggyback Base	9	1	
					Job Reference (optional) # 59707

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LOAD CASE(S)

- 149) 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), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 150) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 151) 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), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 152) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 153) 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), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 154) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 155) 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), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 156) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 157) 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), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 158) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 159) 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), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 160) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 161) 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), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 162) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 163) 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), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150



Continued on page 6

5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R02	Piggyback Base	9	1	Job Reference (optional) # 59707

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LOAD CASE(S)

- 164) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 165) 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), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150
- 166) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)  
Concentrated Loads (lb)  
Vert: 23=-150 51=-150



5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R04	PIGGYBACK BASE	1	1	
Job Reference (optional)					# 59707

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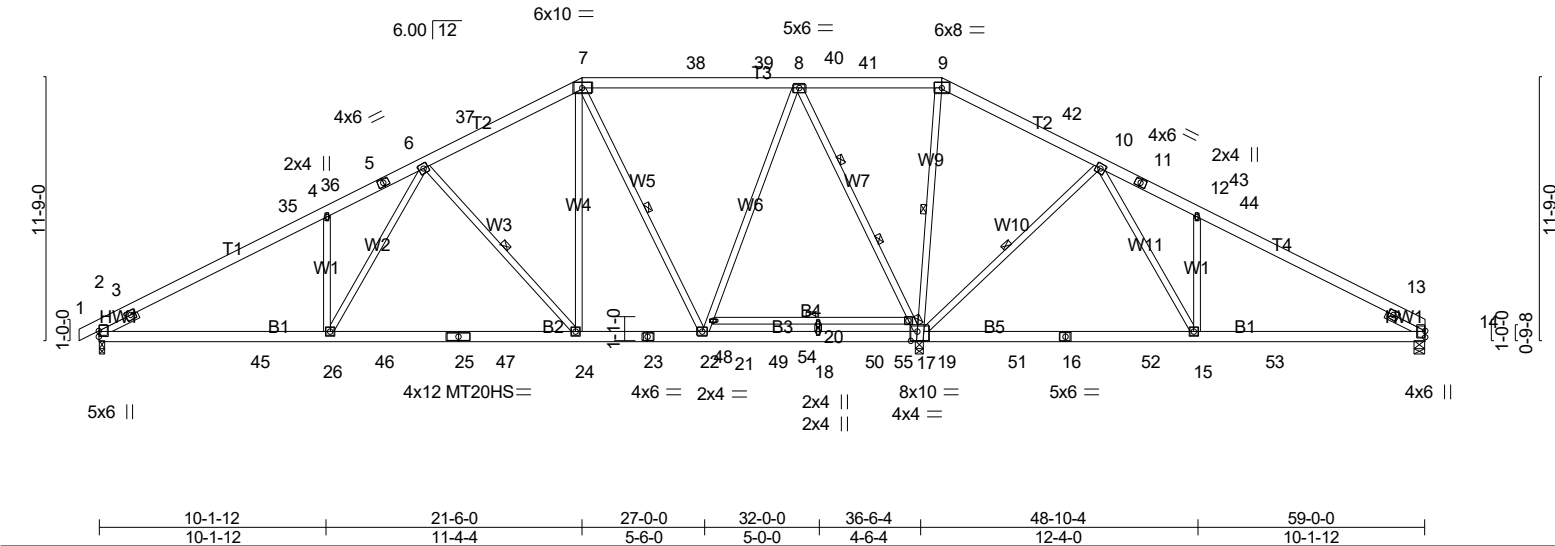


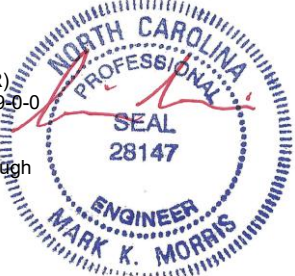
Plate Offsets (X,Y)-- [17:0-3-8,0-5-0]									
LOADING (psf)		SPACING		CSI		DEFL.		PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.71	in (loc)	l/defl	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.88	Vert(LL)	-0.28 24-26	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.91	Vert(CT)	-0.44 24-26	Weight: 467 lb FT = 20%	
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS		Horz(CT)	0.05 17		
BCDL	10.0								

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.2	TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	2x6 SP No.2 *Except*	BOT CHORD	Rigid ceiling directly applied. Except:
	B4: 2x4 SP No.2		6-0-0 oc bracing: 19-21
WEBS	2x4 SP No.3 *Except*	WEBS	1 Row at midpt 6-24, 7-22, 10-17, 9-17
	W5,W7: 2x4 SP SS		2 Rows at 1/3 pts 8-19
SLIDER	Left 2x4 SP No.3 1-11-0, Right 2x4 SP No.3 1-11-0		
		MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.	

**REACTIONS.** (lb/size) 2=1341/0-3-8 (min. 0-1-13), 17=3035/0-3-8 (min. 0-2-14), 14=577/0-5-8 (min. 0-1-8)  
Max Horz2=173(LC 14)  
Max Uplift2=-204(LC 14), 17=-9(LC 14), 14=-188(LC 15)  
Max Grav2=1552(LC 45), 17=4181(LC 45), 14=722(LC 43)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-836/0, 3-35=-2507/268, 4-35=-2342/289, 4-36=-2450/404, 5-36=-2429/405,  
5-6=-2310/421, 6-37=-1266/286, 7-37=-1141/308, 7-38=-650/261, 38-39=-650/261,  
39-40=-650/261, 8-40=-650/261, 8-41=0/1094, 9-41=0/1094, 9-42=0/1238, 10-42=0/1063,  
10-11=-697/421, 11-43=-844/404, 12-43=-855/402, 12-44=-659/288, 13-44=-868/267,  
13-14=-319/0  
BOT CHORD 2-45=-307/2138, 26-45=-307/2138, 26-46=-219/1672, 25-46=-219/1672, 25-47=-219/1672,  
24-47=-219/1672, 23-24=-71/1051, 23-48=-71/1051, 22-48=-71/1051, 22-49=-160/338,  
18-49=-160/338, 18-50=-160/338, 17-50=-160/338, 17-51=-363/268, 16-51=-363/268,  
16-52=-363/268, 15-52=-363/268, 15-53=-148/686, 14-53=-148/686  
WEBS 6-24=-1053/259, 7-24=-109/1129, 7-22=-1167/163, 21-22=-57/1618, 8-21=-30/1739,  
8-19=-2305/219, 17-19=-2401/197, 10-17=-1149/266, 18-20=-301/0, 9-17=-860/123,  
6-26=-182/967, 10-15=-177/1180, 4-26=-485/256, 12-15=-586/255

- 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; 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 32-8-6, Exterior(2R) 32-8-6 to 42-3-10, Interior(1) 42-3-10 to 54-2-6, Exterior(2E) 54-2-6 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.
- Continued on page 2



5/28/2025

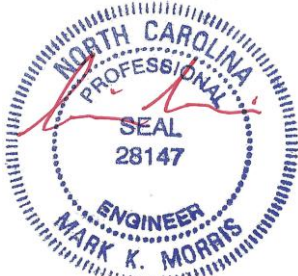
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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R04	PIGGYBACK BASE	1	1	Job Reference (optional) # 59707

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- NOTES-** (14-17)
- 7) All plates are MT20 plates unless otherwise indicated.
  - 8) All plates are 5x5 MT20 unless otherwise indicated.
  - 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 10) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 11) Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17 except (jt=lb) 2=204, 14=188.
  - 13) 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.
  - 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

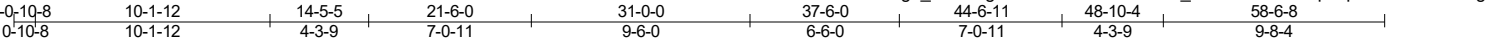


5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R05	PIGGYBACK BASE	4	1	
					# 59707
					Job Reference (optional)

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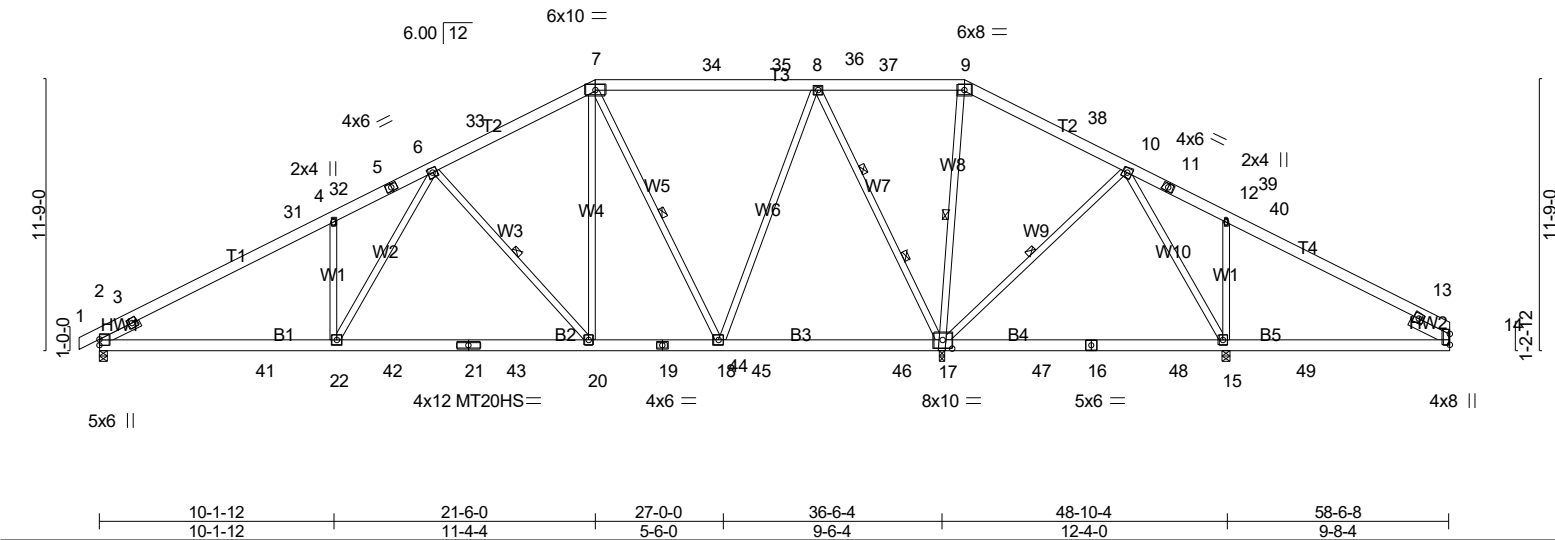


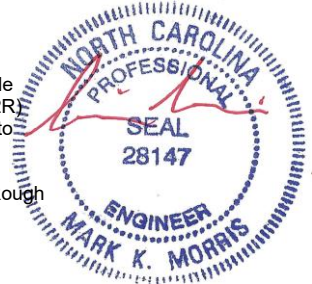
Plate Offsets (X,Y)-- [17:0-5-0,0-4-8]		10-1-12 21-6-0 27-0-0 36-6-4 48-10-4 58-6-8		10-1-12 11-4-4 5-6-0 9-6-4 12-4-0 9-8-4	
<b>LOADING</b> (psf)		<b>SPACING-</b>		<b>CSI.</b>	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.70
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.81
TCDL	10.0	Rep Stress Incr	YES	WB	0.95
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS	
BCDL	10.0				
		<b>DEFL.</b>		<b>PLATES</b>	
		in (loc) l/defl L/d		MT20	
		Vert(LL) 0.12 15-29 >993 240		MT20HS	
		Vert(CT) -0.43 20-22 >999 180		Weight: 452 lb	
		Horz(CT) 0.05 17 n/a n/a		FT = 20%	

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x6 SP No.2	TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SP No.3 *Except*	WEBS	1 Row at midpt 6-20, 7-18, 10-17, 9-17
	W5,W7: 2x4 SP No.1		2 Rows at 1/3 pts 8-17
SLIDER	Left 2x4 SP No.3 1-11-0, Right 2x6 SP No.2 1-11-0		
		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) 14=Mechanical.  
(lb) - Max Horz 2=178(LC 14)  
Max Uplift All uplift 100 lb or less at joint(s) 15 except 2=-207(LC 14), 17=-180(LC 11), 14=-180(LC 10)  
Max Grav All reactions 250 lb or less at joint(s) except 2=1591(LC 45), 17=3332(LC 45), 14=538(LC 43), 15=621(LC 37)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-868/0, 3-31=-2583/334, 4-31=-2417/355, 4-32=-2523/431, 5-32=-2501/432, 5-6=-2384/448, 6-33=-1314/355, 7-33=-1181/377, 7-34=-638/344, 34-35=-638/344, 35-36=-638/344, 8-36=-638/344, 8-37=0/845, 9-37=0/845, 9-38=0/970, 10-38=0/795, 10-11=-379/585, 11-39=-498/568, 12-39=-509/566, 12-40=-316/471, 13-40=-517/445, 13-14=-197/452  
BOT CHORD 2-41=-318/2205, 22-41=-318/2205, 22-42=-230/1746, 21-42=-230/1746, 21-43=-230/1746, 20-43=-230/1746, 19-20=-80/1054, 19-44=-80/1054, 18-44=-80/1054, 18-45=-58/335, 45-46=-58/335, 17-46=-58/335, 17-47=-312/255, 16-47=-312/255, 16-48=-312/255, 15-48=-312/255, 15-49=-345/376, 14-49=-345/376  
WEBS 6-20=-1047/259, 7-20=-101/1175, 7-18=-1175/150, 8-18=-76/1466, 8-17=-2061/240, 10-17=-842/343, 9-17=-726/93, 6-22=-182/956, 10-15=-362/676, 12-15=-571/243, 4-22=-478/255

**NOTES-** (15-18)  
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; 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 32-8-6, Exterior(2R) 32-8-6 to 42-3-10, Interior(1) 42-3-10 to 53-8-14, Exterior(2E) 53-8-14 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) 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.  
Continued on page 2



5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R05	PIGGYBACK BASE	4	1	Job Reference (optional) # 59707

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- NOTES-** (15-18)
- 6) Provide adequate drainage to prevent water ponding.
  - 7) All plates are MT20 plates unless otherwise indicated.
  - 8) All plates are 5x5 MT20 unless otherwise indicated.
  - 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) Refer to girder(s) for truss to truss connections.
  - 12) Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15 except (jt=lb) 2=207, 17=180, 14=180.
  - 14) 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.
  - 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



5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R05A	PIGGYBACK BASE	1	1	
					Job Reference (optional) # 59707

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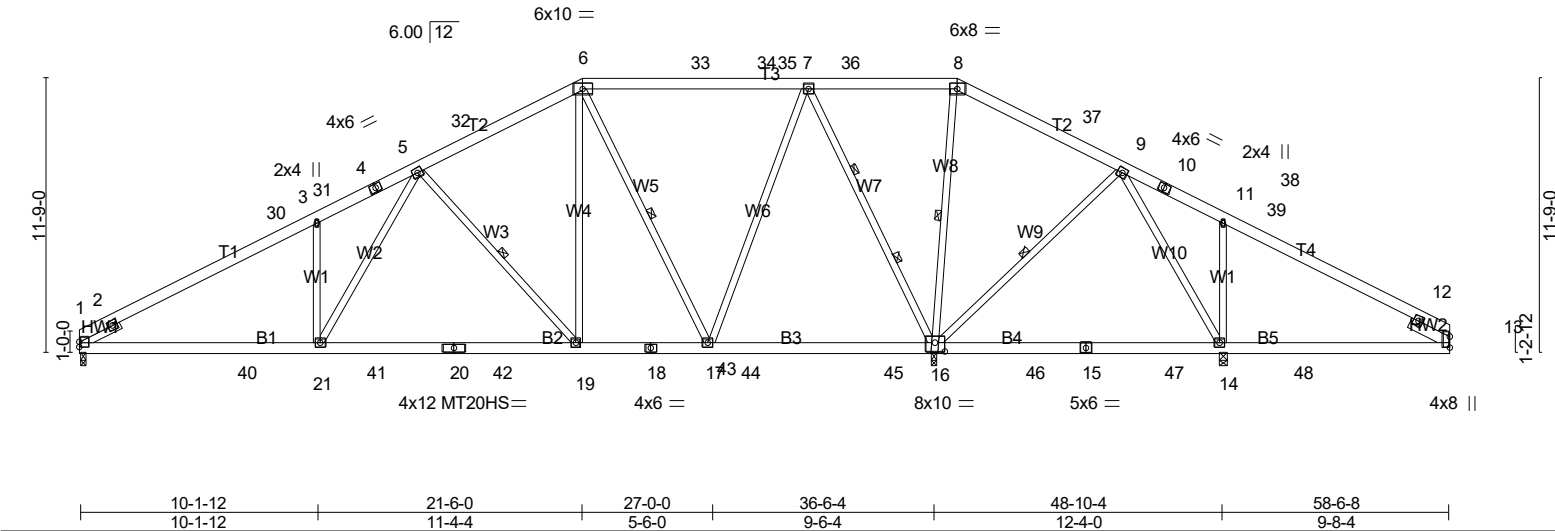


Plate Offsets (X,Y)-- [16:0-5-0,0-4-8]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.70	in (loc)	l/defl	MT20	GRIP
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.81	Vert(LL)	>993	MT20HS	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.95	Vert(CT)	-0.43 19-21		187/143
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS		Horz(CT)	0.05 16		
BCDL	10.0						n/a		
								Weight: 450 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
W5,W7: 2x4 SP No.1  
SLIDER Left 2x4 SP No.3 1-11-0, Right 2x6 SP No.2 1-11-0

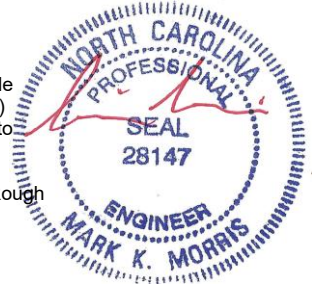
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 5-19, 6-17, 9-16, 8-16  
2 Rows at 1/3 pts 7-16

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) 13=Mechanical.  
(lb) - Max Horz 1=165(LC 14)  
Max Uplift All uplift 100 lb or less at joint(s) 14 except 1=-190(LC 14), 16=-180(LC 11), 13=-180(LC 10)  
Max Grav All reactions 250 lb or less at joint(s) except 1=1548(LC 44), 16=3330(LC 44), 13=538(LC 42), 14=616(LC 36)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-888/0, 2-30=-2588/336, 3-30=-2422/357, 3-31=-2529/433, 4-31=-2507/434, 4-5=-2390/451, 5-32=-1316/356, 6-32=-1183/378, 6-33=-639/345, 33-34=-639/345, 34-35=-639/345, 7-35=-639/345, 7-36=0/842, 8-36=0/842, 8-37=0/968, 9-37=0/793, 9-10=-379/585, 10-38=-493/568, 11-38=-508/568, 11-39=-317/471, 12-39=-517/446, 12-13=-197/452  
BOT CHORD 1-40=-319/2210, 21-40=-319/2210, 21-41=-230/1749, 20-41=-230/1749, 20-42=-230/1749, 19-42=-230/1749, 18-19=-80/1056, 18-43=-80/1056, 17-43=-80/1056, 17-44=-58/337, 44-45=-58/337, 16-45=-58/337, 16-46=-310/255, 15-46=-310/255, 15-47=-310/255, 14-47=-310/255, 14-48=-346/377, 13-48=-346/377  
WEBS 5-19=-1048/259, 6-19=-101/1176, 6-17=-1174/150, 7-17=-76/1466, 7-16=-2060/240, 9-16=-840/343, 8-16=-725/93, 5-21=-183/960, 9-14=-361/674, 11-14=-571/243, 3-21=-481/255

**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; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 4-9-10, Interior(1) 4-9-10 to 16-8-6, Exterior(2R) 16-8-6 to 26-3-10, Interior(1) 26-3-10 to 32-8-6, Exterior(2R) 32-8-6 to 42-3-10, Interior(1) 42-3-10 to 53-8-14, Exterior(2E) 53-8-14 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) 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) Provide adequate drainage to prevent water ponding.  
6) All plates are MT20 plates unless otherwise indicated.  
Continued on page 2



5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R05A	PIGGYBACK BASE	1	1	Job Reference (optional) # 59707

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- NOTES-** (14-17)
- 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) Refer to girder(s) for truss to truss connections.
  - 11) Bearing at joint(s) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 1=190, 16=180, 13=180.
  - 13) 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.
  - 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



5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R06	PIGGYBACK BASE	5	1	
Job Reference (optional)					# 59707

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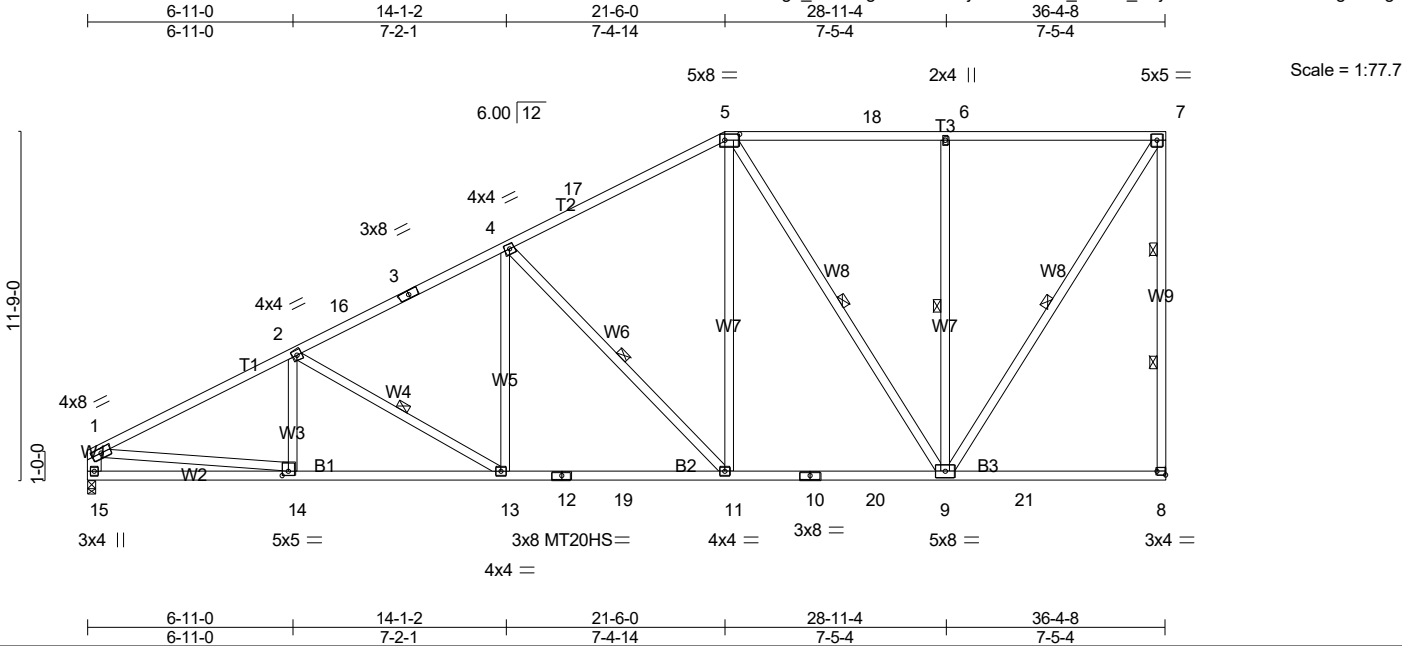


Plate Offsets (X,Y)-- [5:0-6-0,0-2-8], [8:Edge,0-1-8], [14:0-2-8,0-1-12]																	
<b>LOADING</b> (psf)		<b>SPACING-</b>		<b>2-0-0</b>		<b>CSI.</b>		<b>DEFL.</b>		<b>in (loc)</b>		<b>l/defl</b>	<b>L/d</b>	<b>PLATES</b>		<b>GRIP</b>	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.98	Vert(LL)	-0.21	11-13	>999	240	MT20	244/190					
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.34	11-13	>999	180	MT20HS	187/143					
TCDL	10.0	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.07	8	n/a	n/a	Weight: 256 lb    FT = 20%						
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH													
BCDL	10.0																

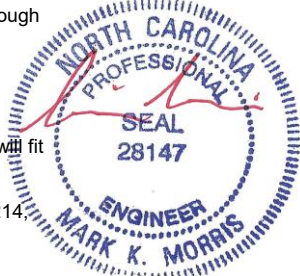
**LUMBER-**  
TOP CHORD 2x4 SP No.1 \*Except\*  
T1: 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
W9: 2x4 SP SS, W1: 2x6 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.  
WEBS 1 Row at midpt 2-13, 4-11, 5-9, 6-9, 7-9  
2 Rows at 1/3 pts 7-8  
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 8=1440/Mechanical, 15=1440/0-3-8 (min. 0-1-15)  
Max Horz 15=357(LC 14)  
Max Uplift8=-214(LC 11), 15=-152(LC 14)  
Max Grav8=1910(LC 36), 15=1663(LC 35)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-2685/234, 2-16=-2371/187, 3-16=-2276/198, 3-4=-2163/216, 4-17=-1638/190,  
5-17=-1486/212, 5-18=-954/145, 6-18=-953/145, 6-7=-953/145, 7-8=-1716/274,  
1-15=-1593/182  
BOT CHORD 14-15=-409/328, 13-14=-509/2330, 12-13=-369/2036, 12-19=-369/2036, 11-19=-369/2036,  
10-11=-240/1342, 10-20=-240/1342, 9-20=-240/1342  
WEBS 2-13=-389/162, 4-13=-7/441, 4-11=-1094/252, 5-11=-108/1067, 5-9=-913/183,  
6-9=-878/214, 7-9=-269/1748, 1-14=-101/2082

- 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; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 5-0-6 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) 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) Provide adequate drainage to prevent water ponding.
  - 5) All plates are MT20 plates unless otherwise indicated.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 8) Refer to girder(s) for truss to truss connections.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=214, 15=152.



Continued on page 2

5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R06	PIGGYBACK BASE	5	1	Job Reference (optional) # 59707

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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



5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R07	PIGGYBACK BASE	3	1	
Job Reference (optional)					# 59707

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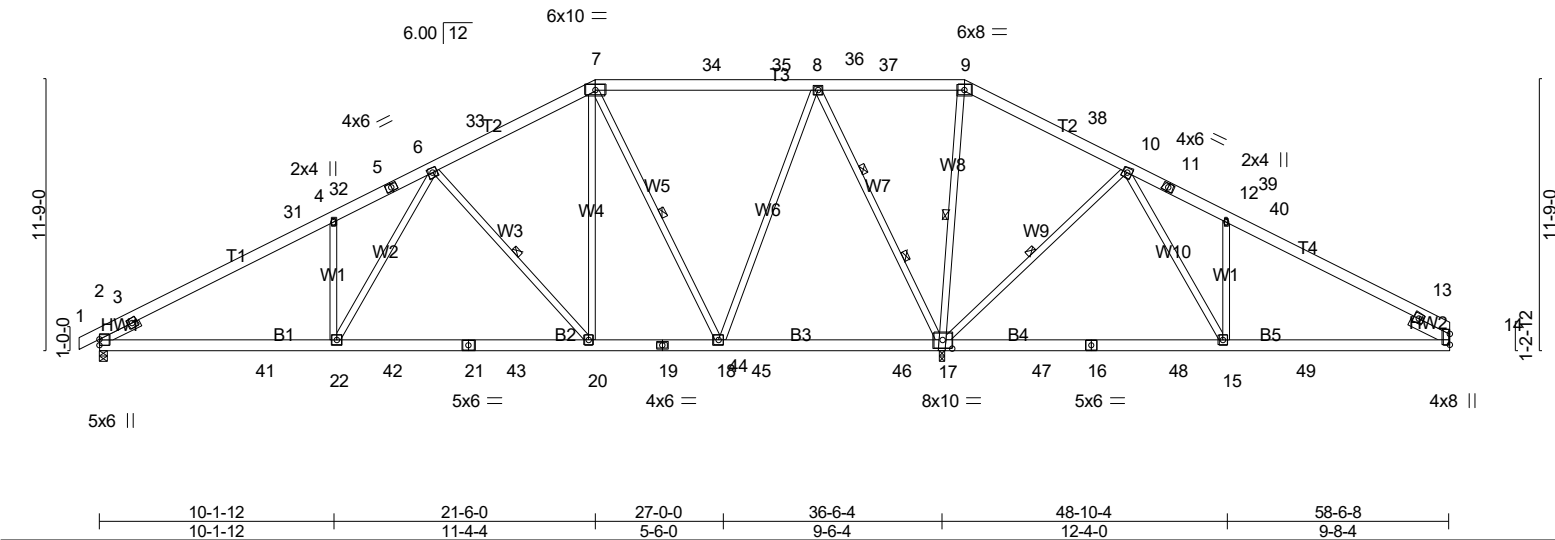


Plate Offsets (X,Y)-- [17:0-5-0,0-4-8]									
<b>LOADING</b> (psf)		<b>SPACING-</b>		<b>CSI.</b>		<b>DEFL.</b>		<b>PLATES</b>	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.70	in (loc)	l/defl	L/d	GRIP
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.78	Vert(LL)	-0.28 15-17	>941	240
TCDL	10.0	Rep Stress Incr	YES	WB	0.97	Vert(CT)	-0.42 20-22	>999	180
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS		Horz(CT)	0.04 17	n/a	n/a
BCDL	10.0								
								Weight: 452 lb FT = 20%	

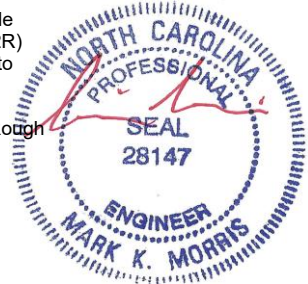
<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x6 SP No.2	TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SP No.3 *Except*	WEBS	1 Row at midpt 6-20, 7-18, 10-17, 9-17
	W5,W7: 2x4 SP No.1		2 Rows at 1/3 pts 8-17
SLIDER	Left 2x4 SP No.3 1-11-0, Right 2x6 SP No.2 1-11-0		
		MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.	

**REACTIONS.** (lb/size) 2=1336/0-3-8 (min. 0-1-13), 17=2816/0-3-8 (min. 0-2-9), 14=584/Mechanical  
Max Horz2=178(LC 14)  
Max Uplift2=-217(LC 14), 17=-83(LC 14), 14=-187(LC 15)  
Max Grav2=1520(LC 45), 17=3757(LC 45), 14=719(LC 43)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 2-3=-818/0, 3-31=-2441/298, 4-31=-2275/318, 4-32=-2386/430, 5-32=-2363/431, 5-6=-2246/447, 6-33=-1201/317, 7-33=-1077/338, 7-34=-591/300, 34-35=-591/300, 35-36=-591/300, 8-36=-591/300, 8-37=0/1042, 9-37=0/1042, 9-38=0/1181, 10-38=0/1006, 10-11=-672/406, 11-39=-819/389, 12-39=-830/387, 12-40=-656/281, 13-40=-856/260  
**BOT CHORD** 2-41=-335/2080, 22-41=-335/2080, 22-42=-248/1613, 21-42=-248/1613, 21-43=-248/1613, 20-43=-248/1613, 19-20=-96/982, 19-44=-96/982, 18-44=-96/982, 18-45=-252/313, 45-46=-252/313, 17-46=-252/313, 17-47=-301/287, 16-47=-301/287, 16-48=-301/287, 15-48=-301/287, 15-49=-145/671, 14-49=-145/671  
**WEBS** 6-20=-1051/258, 7-20=-100/1177, 7-18=-1253/139, 8-18=-66/1540, 8-17=-2099/254, 10-17=-1144/258, 9-17=-828/118, 6-22=-180/970, 10-15=-152/1137, 12-15=-537/239, 4-22=-486/254

- 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; 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 32-8-6, Exterior(2R) 32-8-6 to 42-3-10, Interior(1) 42-3-10 to 53-8-14, Exterior(2E) 53-8-14 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.

Continued on page 2



5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R07	PIGGYBACK BASE	3	1	Job Reference (optional) # 59707

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- NOTES-** (14-17)
- 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) Refer to girder(s) for truss to truss connections.
  - 11) Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17 except (jt=lb) 2=217, 14=187.
  - 13) 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.
  - 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



5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R07A	PIGGYBACK BASE	1	1	

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Job Reference (optional) # 59707



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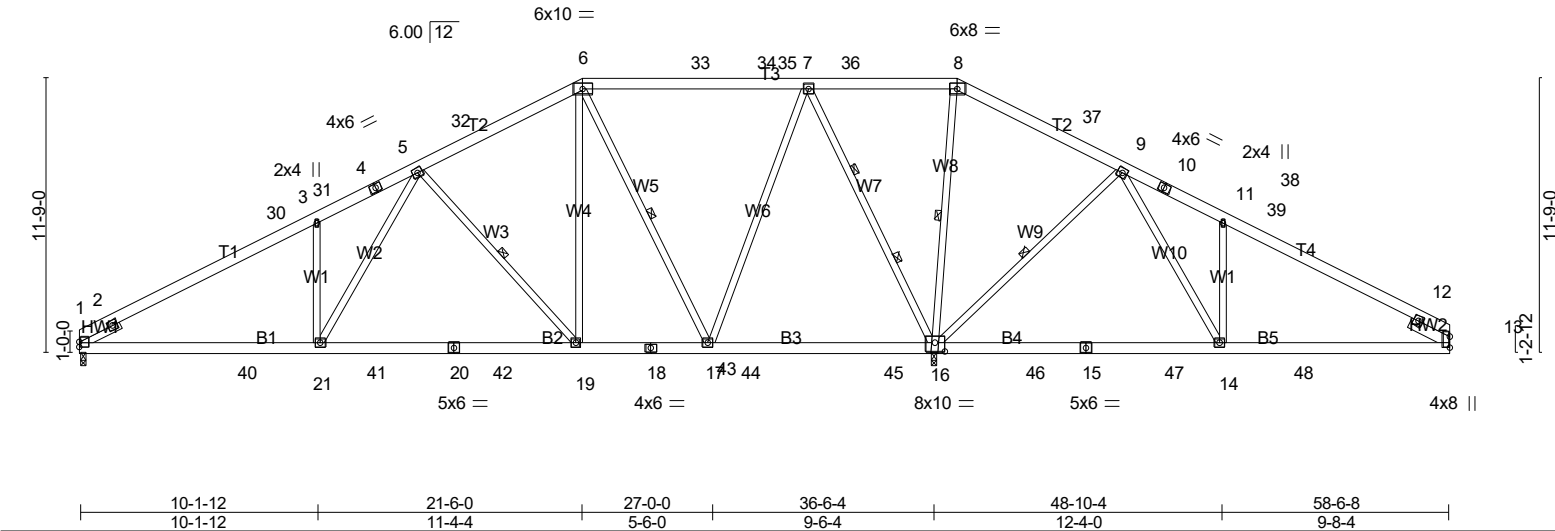


Plate Offsets (X,Y)-- [16:0-5,0-4-8]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.70	in (loc)	l/defl	MT20	GRIP
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.78	Vert(LL)	-0.28 14-16		244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.97	Vert(CT)	-0.42 19-21		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS		Horz(CT)	0.04 16		
BCDL	10.0							Weight: 450 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.2	TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SP No.3 *Except*	WEBS	1 Row at midpt 5-19, 6-17, 9-16, 8-16
	W5,W7: 2x4 SP No.1		2 Rows at 1/3 pts 7-16
SLIDER	Left 2x4 SP No.3 1-11-0, Right 2x6 SP No.2 1-11-0		

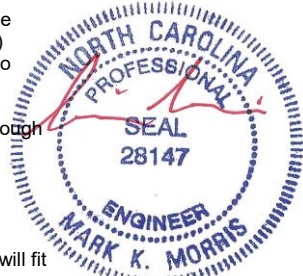
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 1=1284/0-3-8 (min. 0-1-12), 16=2814/0-3-8 (min. 0-2-9), 13=585/Mechanical  
Max Horz 1=165(LC 14)  
Max Uplift1=-200(LC 14), 16=-83(LC 14), 13=-187(LC 15)  
Max Grav 1=1476(LC 44), 16=3756(LC 44), 13=717(LC 42)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 1-2=-838/0, 2-30=-2446/300, 3-30=-2280/321, 3-31=-2391/431, 4-31=-2368/432, 4-5=-2252/448, 5-32=-1203/318, 6-32=-1079/339, 6-33=-592/301, 33-34=-592/301, 34-35=-592/301, 7-35=-592/301, 7-36=0/1040, 8-36=0/1040, 8-37=0/1180, 9-37=0/1005, 9-10=-670/406, 10-38=-809/390, 11-38=-824/389, 11-39=-653/281, 12-39=-853/260  
**BOT CHORD** 1-40=-336/2084, 21-40=-336/2084, 21-41=-249/1616, 20-41=-249/1616, 20-42=-249/1616, 19-42=-249/1616, 18-19=-96/983, 18-43=-96/983, 17-43=-96/983, 17-44=-250/314, 44-45=-250/314, 16-45=-250/314, 16-46=-299/286, 15-46=-299/286, 15-47=-299/286, 14-47=-299/286, 14-48=-145/668, 13-48=-145/668  
**WEBS** 5-19=-1052/259, 6-19=-100/1178, 6-17=-1253/139, 7-17=-66/1540, 7-16=-2099/254, 9-16=-1144/258, 8-16=-827/117, 5-21=-181/974, 9-14=-152/1136, 11-14=-537/239, 3-21=-489/254

- NOTES-** (13-16)
- 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; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 4-9-10, Interior(1) 4-9-10 to 16-8-6, Exterior(2R) 16-8-6 to 26-3-10, Interior(1) 26-3-10 to 32-8-6, Exterior(2R) 32-8-6 to 42-3-10, Interior(1) 42-3-10 to 53-8-14, Exterior(2E) 53-8-14 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.
  - 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 between the bottom chord and any other members, with BCDL = 10.0psf.

Continued on page 2



5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R07A	PIGGYBACK BASE	1	1	Job Reference (optional) # 59707

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- NOTES-** (13-16)
- 9) Refer to girder(s) for truss to truss connections.
  - 10) Bearing at joint(s) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16 except (jt=lb) 1=200, 13=187.
  - 12) 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.
  - 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 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



5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R08	Piggyback Base Supported Gable	1	1	
Job Reference (optional)					# 59707

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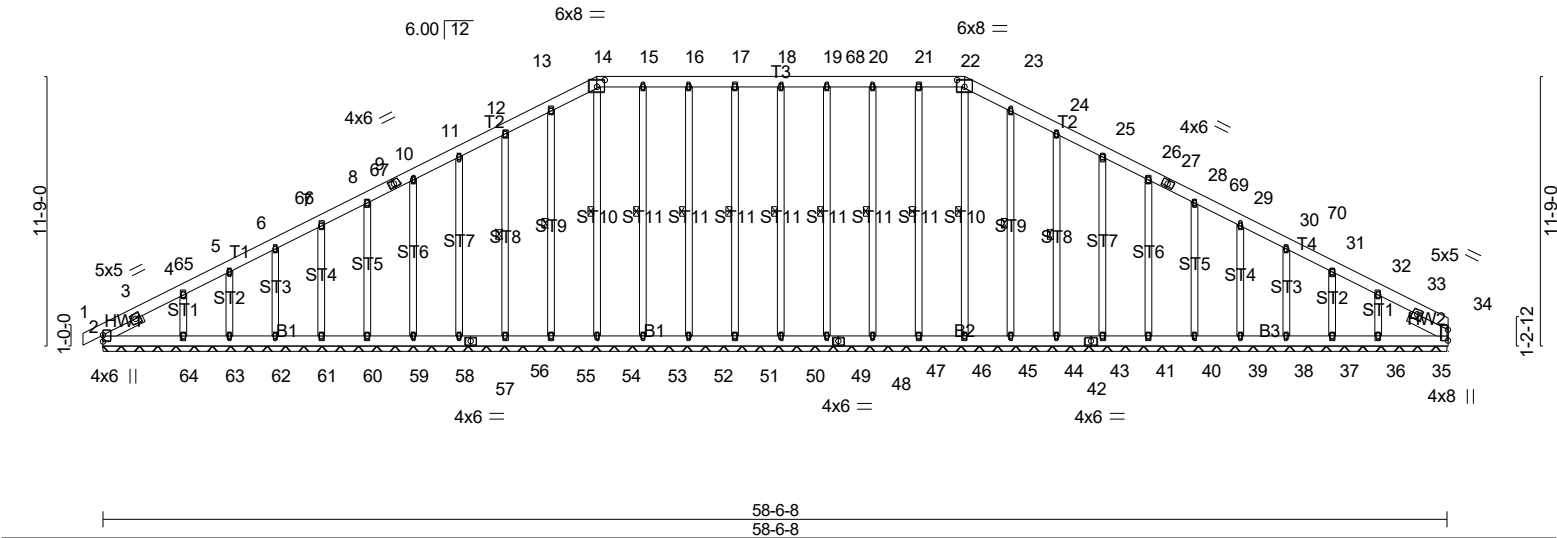
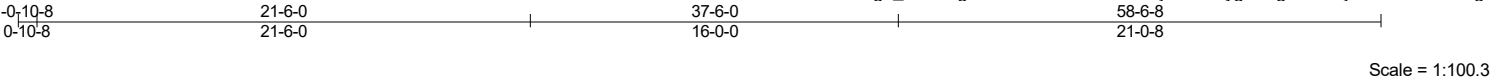


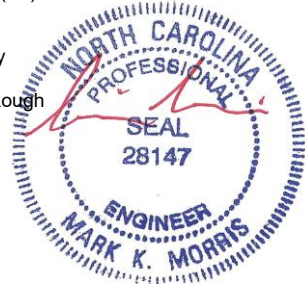
Plate Offsets (X,Y)-- [14:0-4-0,0-3-8], [22:0-4-0,0-3-8]												
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>	<b>DEFL.</b> in (loc)		<b>l/defl</b>	<b>L/d</b>	<b>PLATES</b>	<b>GRIP</b>		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	-0.00	1	n/r	180	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	0.00	1	n/r	80			
TCDL	10.0	Rep Stress Incr	YES	WB 0.26	Horz(CT)	0.01	34	n/a	n/a			
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-S						Weight: 598 lb	FT = 20%	
BCDL	10.0											

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 18-50, 17-51, 16-52, 15-53, 14-54, 13-55, 12-56, 19-49, 20-47, 21-46, 22-45, 23-44, 24-43
SLIDER	Left 2x4 SP No.3 1-11-0, Right 2x6 SP No.2 1-11-0		

**REACTIONS.** All bearings 58-6-8.  
(lb) - Max Horz 2=-169(LC 15)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 50, 51, 52, 53, 55, 56, 58, 59, 60, 61, 62, 63, 49, 47, 46, 44, 43, 41, 40, 39, 38, 37, 36 except 64=-126(LC 14), 35=-119(LC 15)  
Max Grav All reactions 250 lb or less at joint(s) 2, 62, 63, 45, 37, 36, 35, 34 except 50=292(LC 44), 51=292(LC 44), 52=295(LC 44), 53=294(LC 44), 54=258(LC 52), 55=297(LC 47), 56=295(LC 45), 58=292(LC 45), 59=292(LC 45), 60=293(LC 45), 61=283(LC 45), 64=259(LC 54), 49=292(LC 44), 47=295(LC 44), 46=294(LC 44), 44=294(LC 49), 43=295(LC 45), 41=292(LC 45), 40=292(LC 45), 39=293(LC 45), 38=284(LC 45)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 12-13=-123/293, 13-14=-138/328, 14-15=-130/314, 15-16=-130/314, 16-17=-130/314, 17-18=-130/314, 18-68=-130/314, 19-68=-130/314, 19-20=-130/314, 20-21=-130/314, 21-22=-130/314, 22-23=-138/328, 23-24=-123/293

- 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 16-8-6, Corner(3R) 16-8-6 to 26-3-10, Exterior(2N) 26-3-10 to 32-8-6, Corner(3R) 32-8-6 to 42-3-10, Exterior(2N) 42-3-10 to 53-6-0, Corner(3E) 53-6-0 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.



5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R08	Piggyback Base Supported Gable	1	1	Job Reference (optional) # 59707

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- NOTES-** (14-17)
- 12) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 50, 51, 52, 53, 55, 56, 58, 59, 60, 61, 62, 63, 49, 47, 46, 44, 43, 41, 40, 39, 38, 37, 36 except (jt=lb) 64=126, 35=119.
  - 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

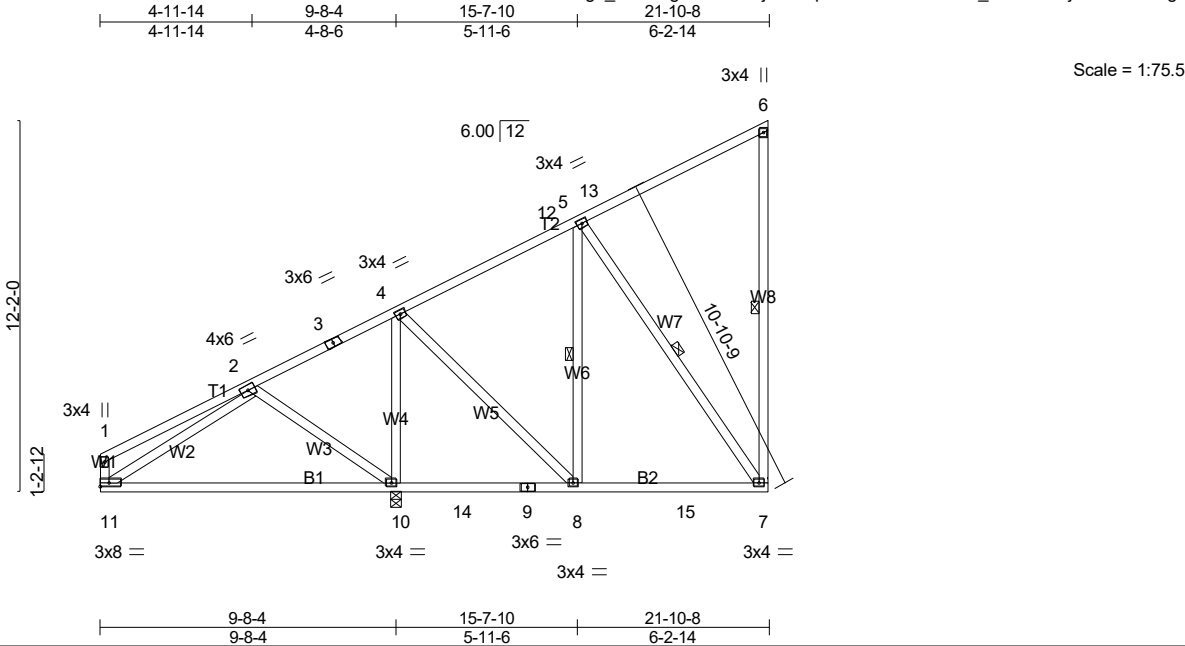


5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R09	Jack-Closed	3	1	
					Job Reference (optional) # 59707

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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) 0.41 10-11 >281 240		
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

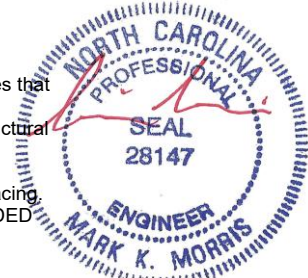
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 11=362/Mechanical, 7=466/Mechanical, 10=899/0-3-8 (min. 0-1-8)  
Max Horz 11=371(LC 14)  
Max Uplift 11=-2(LC 11), 7=-180(LC 14), 10=-192(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 1-2=-222/271, 4-12=-325/0  
BOT CHORD 10-11=-292/254  
WEBS 2-11=-330/91, 2-10=-286/209, 4-10=-593/170, 4-8=0/325, 5-7=-409/152

- NOTES-** (8-11)
- 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; 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
  - 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.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 7=180, 10=192.
  - 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.

Continued on page 2



5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R09	Jack-Closed	3	1	Job Reference (optional) # 59707

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LOAD CASE(S) Standard



5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R10	Jack-Closed	2	1	

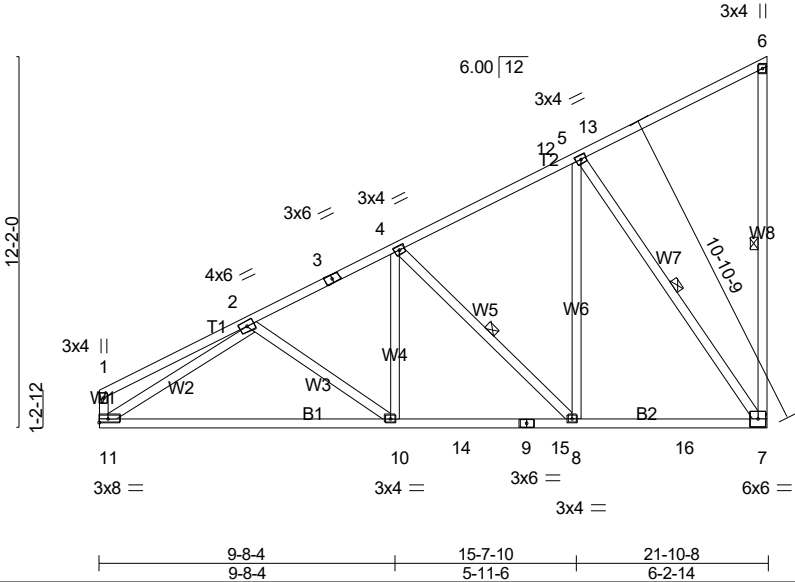
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# 59707

Job Reference (optional)



Scale = 1:75.5



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.72	Vert(LL)	0.40 10-11	>642	240	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.80	Vert(CT)	-0.44 10-11	>582	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.92	Horz(CT)	0.03 7	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH						
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

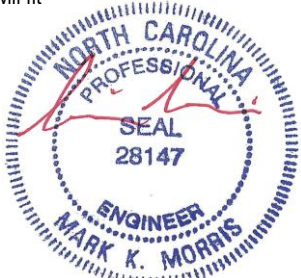
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-6-12 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 4-6-1 oc bracing.  
WEBS 1 Row at midpt 6-7, 4-8, 5-7

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

**REACTIONS.** (lb/size) 11=863/Mechanical, 7=863/Mechanical  
Max Horz 11=371(LC 14)  
Max Uplift 11=-46(LC 14), 7=-265(LC 14)  
Max Grav 11=887(LC 20), 7=1046(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-245/282, 2-3=-1055/640, 3-4=-993/651, 4-12=-657/328, 5-12=-538/331  
BOT CHORD 10-11=-886/982, 10-14=-823/895, 9-14=-823/895, 9-15=-823/895, 8-15=-823/895,  
8-16=-453/539, 7-16=-453/539  
WEBS 2-11=-1009/389, 4-10=-395/348, 4-8=-527/515, 5-8=-630/617, 5-7=-929/782

- NOTES-** (8-11)
- 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; 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) 11 except (jt=lb) 7=265.



Continued on page 2

5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R10	Jack-Closed	2	1	Job Reference (optional) # 59707

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- 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 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

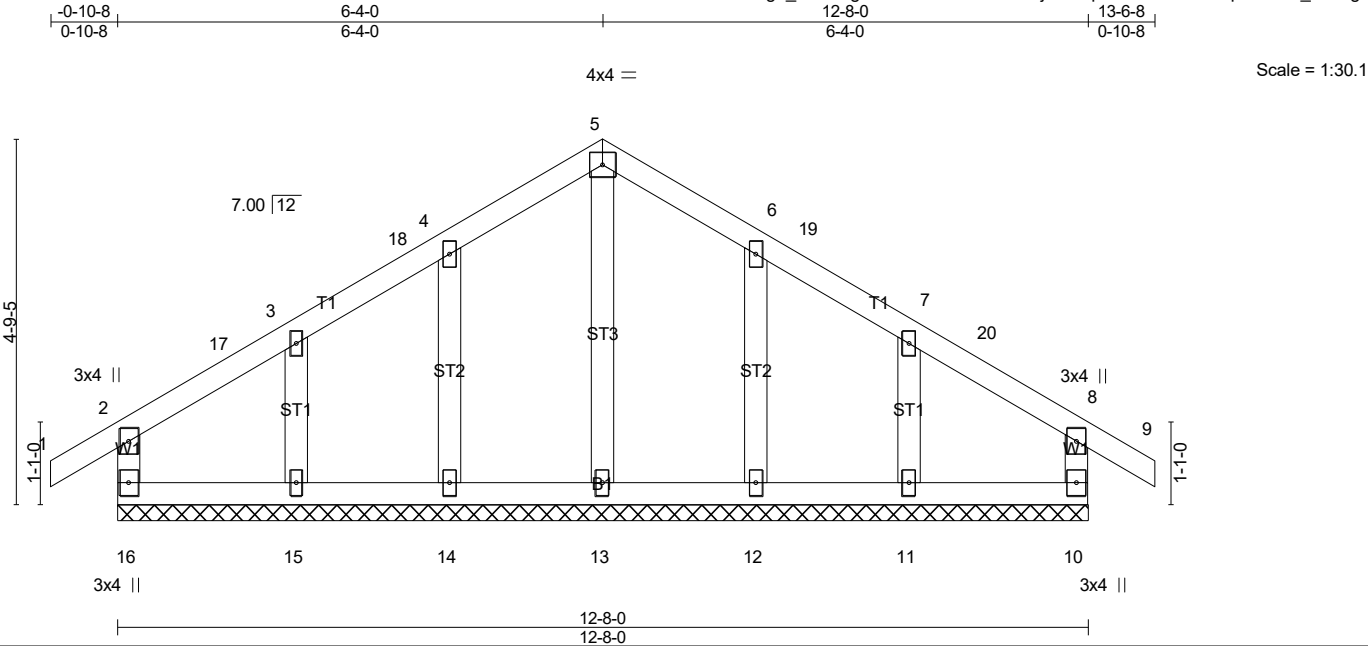


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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R11	Common Supported Gable	1	1	
					Job Reference (optional) # 59707

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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	0.07	Vert(CT)	-0.00 9 n/r 80				
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00 10 n/a n/a				
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-R							
BCDL	10.0										
								Weight: 67 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.	

<b>REACTIONS.</b>	
All bearings 12-8-0.	
(lb) - Max Horz 16=120(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	

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
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<b>NOTES-</b>	
(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; 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 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	
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) 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	
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.	
13) 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.	



Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R11	Common Supported Gable	1	1	Job Reference (optional) # 59707

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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.

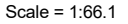
LOAD CASE(S) Standard



5/28/2025

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

5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R12	Common Structural Gable	1	1	Job Reference (optional) # 59707

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ID:kHdPkcON9g3\_0lfrDBlgKRzexCS-Yjm9KuhZOR7IM2JWV2rqCF5o37Ul3\_TcwXgkblzBzgS

- 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

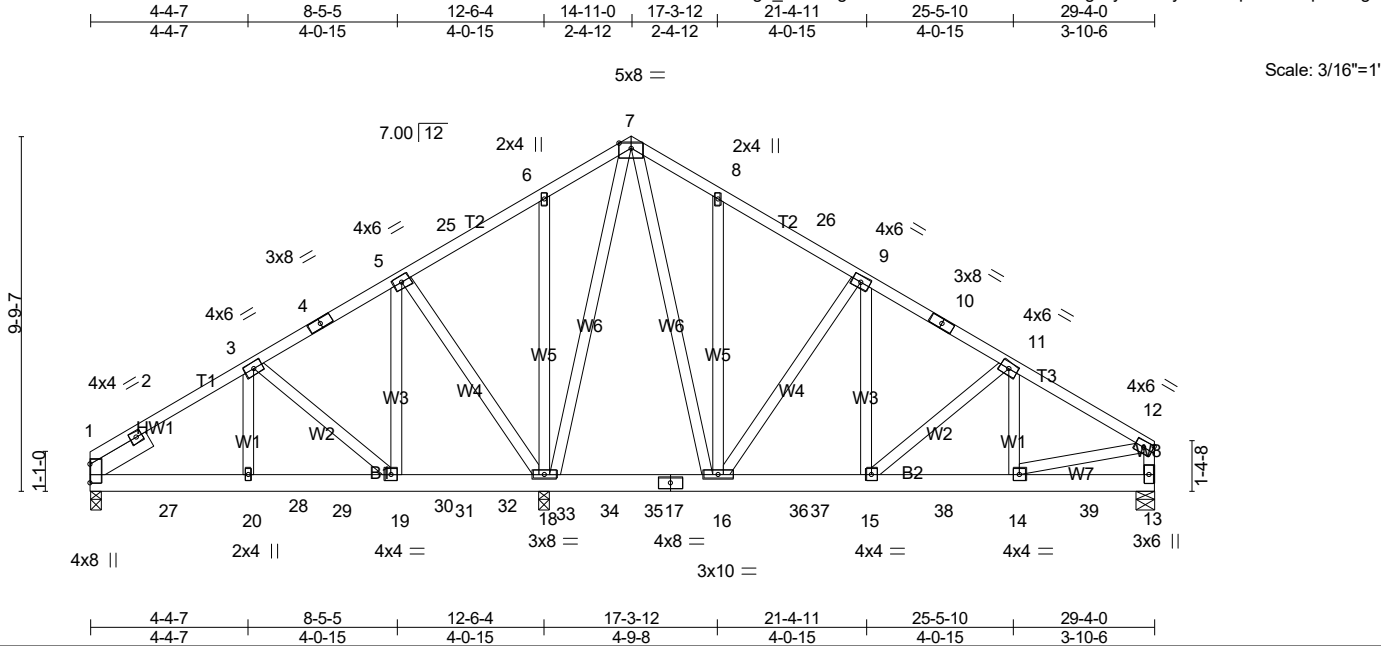


5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R13	Common Girder	1	3	
Job Reference (optional)					# 59707

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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.23	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.33	Vert(LL) -0.03 15-16 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.38	Vert(CT) -0.05 15-16 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-MSH	Horz(CT) 0.01 13 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 716 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 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 16-18.
WEBS 2x4 SP No.3	
SLIDER Left 2x6 SP No.2 1-11-0	

**REACTIONS.** (lb/size) 1=1715/0-3-8 (min. 0-1-8), 18=6794/0-3-8 (min. 0-2-11), 13=1986/0-5-14 (min. 0-1-8)  
Max Horz 1=212(LC 11)  
Max Uplift 1=-371(LC 12), 18=-1214(LC 12), 13=-598(LC 13)  
Max Grav 1=1732(LC 18), 18=6794(LC 1), 13=2053(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-1041/215, 2-3=-1954/429, 3-4=-643/92, 4-5=-595/104, 5-25=-286/1155, 6-25=-268/1279, 6-7=-233/1205, 7-8=-498/236, 8-26=-427/163, 9-26=-507/151, 9-10=-1534/490, 10-11=-1636/479, 11-12=-2316/679, 12-13=-1759/519  
BOT CHORD 1-27=-461/1630, 27-28=-461/1630, 20-28=-461/1630, 20-29=-461/1630, 29-30=-461/1630, 19-30=-461/1630, 19-31=-159/525, 31-32=-159/525, 32-33=-159/525, 18-33=-159/525, 18-34=-336/225, 34-35=-336/225, 17-35=-336/225, 16-17=-336/225, 16-36=-313/1367, 36-37=-313/1367, 15-37=-313/1367, 15-38=-555/1951, 14-38=-555/1951  
WEBS 3-20=-382/1386, 3-19=-1422/476, 5-19=-563/2744, 5-18=-2628/622, 6-18=-372/135, 7-16=-685/2518, 8-16=-311/128, 9-16=-1698/628, 9-15=-573/1673, 11-15=-771/309, 11-14=-282/676, 12-14=-508/1845, 7-18=-2987/668

- NOTES-** (11-14)
- 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 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - 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=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; end vertical left and right exposed; porch 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=371, 18=1214, 13=598.



Continued on page 2

5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	R13	Common Girder	1	3	Job Reference (optional) # 59707

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- NOTES-** (11-14)
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 699 lb down and 207 lb up at 2-0-12, 699 lb down and 207 lb up at 4-0-12, 699 lb down and 207 lb up at 6-0-12, 697 lb down and 207 lb up at 8-0-12, 867 lb down and 66 lb up at 9-5-4, 867 lb down and 66 lb up at 11-5-4, 347 lb down and 22 lb up at 13-5-4, 347 lb down and 22 lb up at 15-5-4, 347 lb down and 22 lb up at 17-5-4, 518 lb down and 200 lb up at 19-5-4, 518 lb down and 200 lb up at 21-5-4, 518 lb down and 200 lb up at 23-5-4, and 518 lb down and 200 lb up at 25-5-4, and 518 lb down and 200 lb up at 27-5-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 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.
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- 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.

**LOAD CASE(S)** Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-7=-60, 7-12=-60, 13-21=-20
- Concentrated Loads (lb)
- Vert: 16=-347(F) 15=-518(F) 14=-518(F) 27=-699(F) 28=-699(F) 29=-699(F) 30=-697(F) 31=-867(F) 33=-867(F) 34=-347(F) 35=-347(F) 36=-518(F) 38=-518(F) 39=-518(F)



5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	SP01	Common	3	1	
Job Reference (optional)					# 59707

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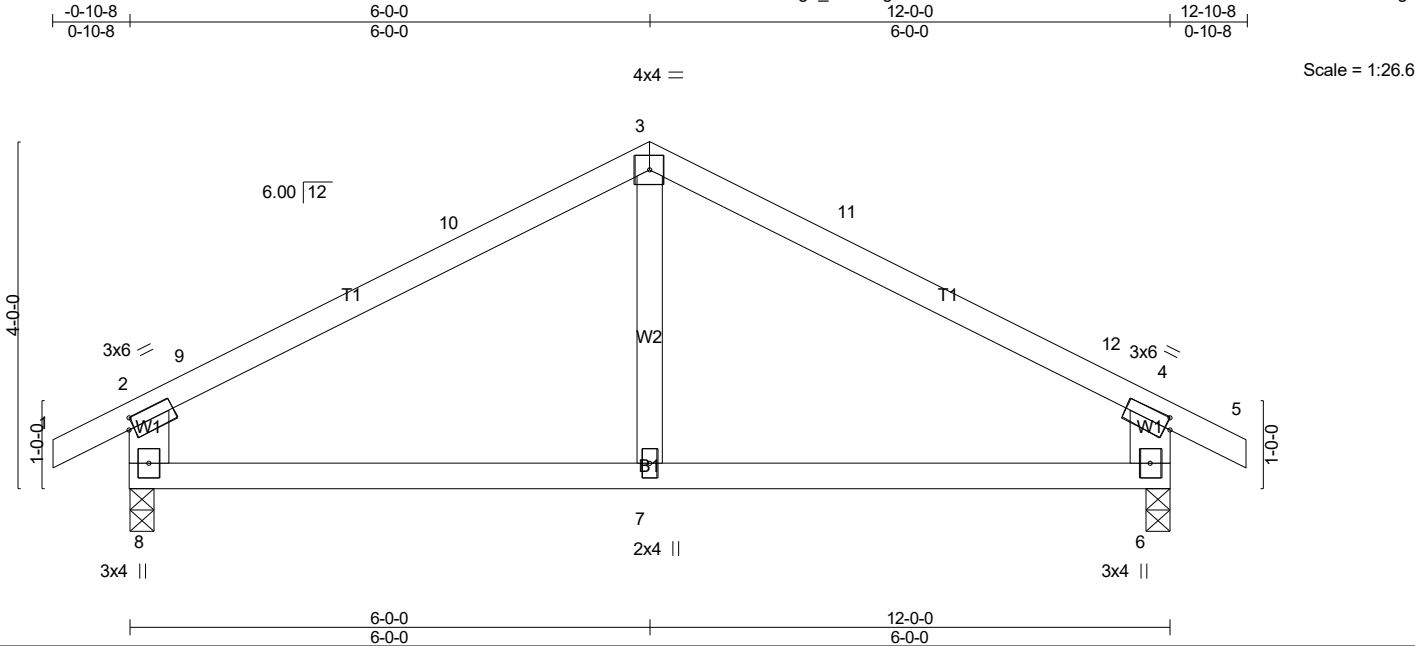


Plate Offsets (X,Y)-- [2:0-0-12,0-1-8], [4:0-0-12,0-1-8]									
<b>LOADING</b> (psf)		<b>SPACING-</b>		<b>CSI.</b>		<b>DEFL.</b>		<b>PLATES</b>	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.54	in (loc)	l/defl	L/d	GRIP
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.37	Vert(LL)	-0.03 7-8 >999	240	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Vert(CT)	-0.06 7-8 >999	180	
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS		Horz(CT)	0.01 6 n/a	n/a	
BCDL	10.0								
								Weight: 49 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=-63(LC 12)  
Max Uplift 8=-76(LC 14), 6=-76(LC 15)  
Max Grav 8=612(LC 21), 6=612(LC 22)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-9=-568/165, 9-10=-496/176, 3-10=-424/188, 3-11=-424/187, 11-12=-496/175,  
4-12=-568/164, 2-8=-551/221, 4-6=-551/219  
BOT CHORD 7-8=-37/393, 6-7=-37/393

- 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, Exterior(2R) 3-11-2 to 8-0-14, Exterior(2E) 8-0-14 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
  - 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.



Continued on page 2

5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	SP01	Common	3	1	Job Reference (optional) # 59707

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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.
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LOAD CASE(S) Standard



5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	SP02	Hip	1	1	
Job Reference (optional)					# 59707

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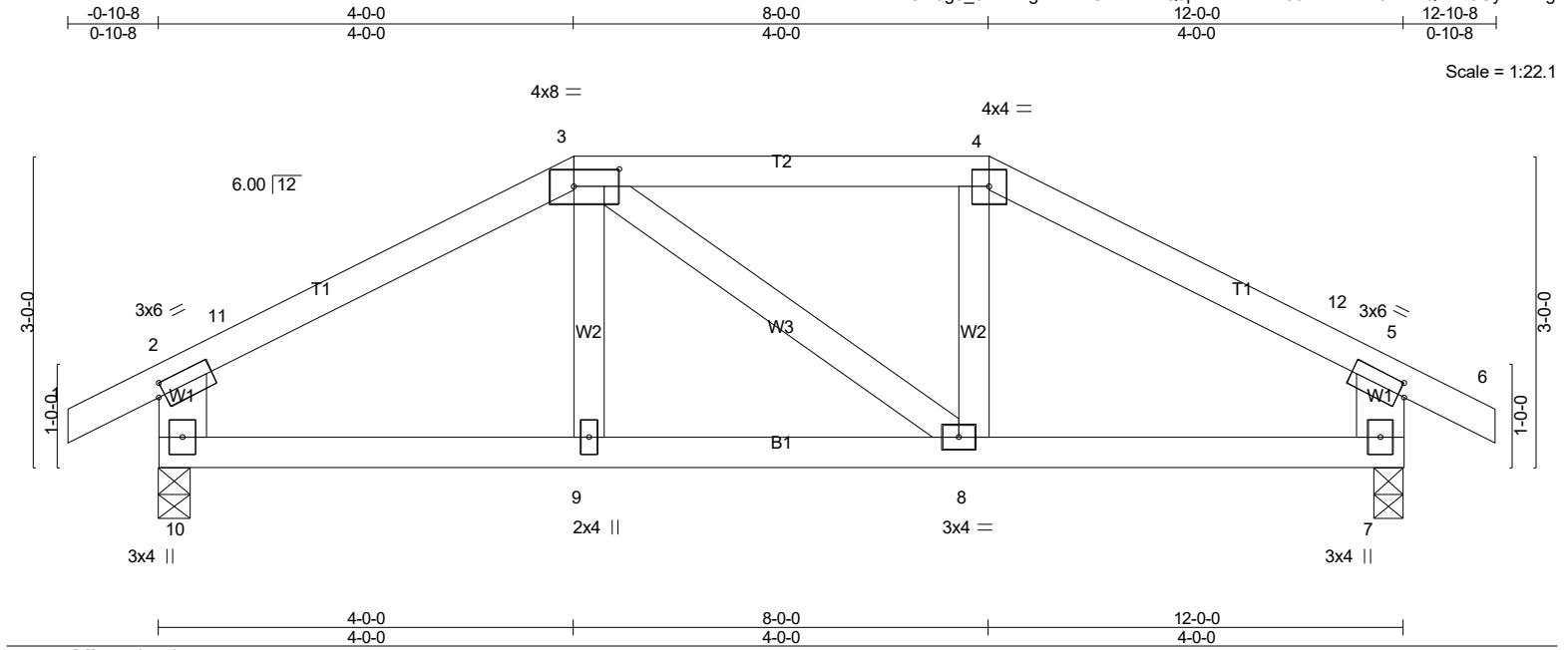


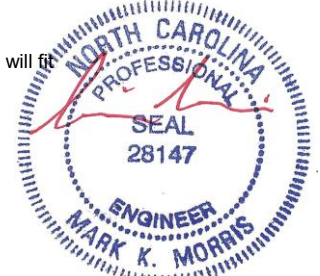
Plate Offsets (X,Y)-- [2:0-0-12,0-1-8], [3:0-5-4,0-2-0], [5:0-0-12,0-1-8]							
<b>LOADING</b> (psf)		<b>SPACING-</b>	2-0-0	<b>CSI.</b>		<b>DEFL.</b>	in (loc) l/defl L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.07 8-9 >999 240
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.11 8-9 >999 180
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.01 7 n/a n/a
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH			
BCDL	10.0						
						<b>PLATES</b>	<b>GRIP</b>
						MT20	244/190
						Weight: 57 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD
BOT CHORD 2x4 SP No.2	Structural wood sheathing directly applied or 5-11-3 oc purlins, except end verticals.
WEBS 2x4 SP No.3 *Except*	BOT CHORD
W1: 2x6 SP No.2	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) 10=528/0-3-8 (min. 0-1-8), 7=528/0-3-8 (min. 0-1-8)  
Max Horz 10=-52(LC 12)  
Max Uplift 10=-63(LC 14), 7=-63(LC 15)  
Max Grav 10=673(LC 39), 7=673(LC 39)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-11=-661/173, 3-11=-646/188, 3-4=-503/192, 4-12=-646/191, 5-12=-661/176,  
2-10=-601/199, 5-7=-601/198  
BOT CHORD 9-10=-57/503, 8-9=-55/505, 7-8=-62/503

- 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; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 4-0-0, Exterior(2R) 4-0-0 to 8-0-0, Exterior(2E) 8-0-0 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
  - 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.
  - 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) 10, 7.



Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	SP02	Hip	1	1	Job Reference (optional) # 59707

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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

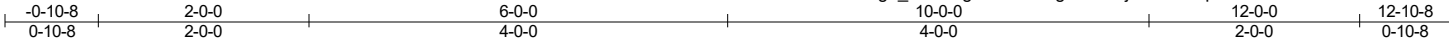


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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	SP03	Hip Girder	1	1	
Job Reference (optional)					# 59707

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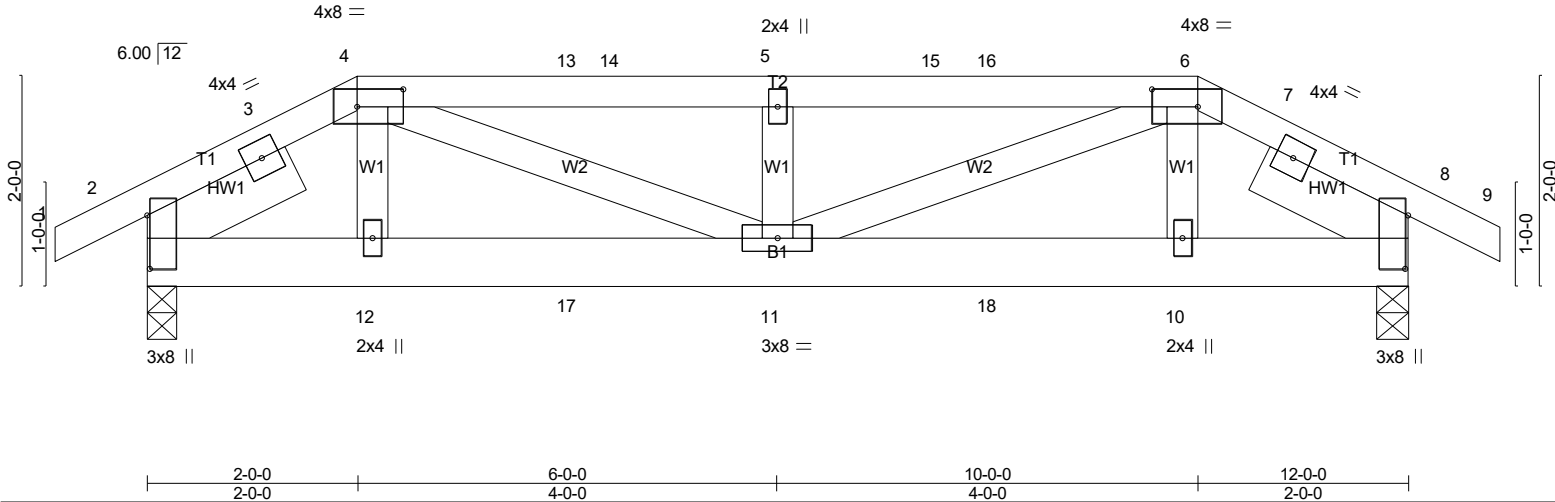


Plate Offsets (X,Y)-- [2:0-6-1,0-0-5], [4:0-5-4,0-2-0], [6:0-5-4,0-2-0], [8:0-6-1,0-0-5]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.40	in (loc)	l/defl	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.22	Vert(LL)	-0.04 11 >999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.27	Vert(CT)	-0.06 11 >999		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH		Horz(CT)	0.01 8 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 1-6-12, Right 2x6 SP No.2 1-6-12

**BRACING-**  
TOP CHORD  
BOT CHORD  
Structural wood sheathing directly applied or 4-9-8 oc purlins.  
Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) 2=539/0-3-8 (min. 0-1-8), 8=540/0-3-8 (min. 0-1-8)  
Max Horz2=21(LC 64)  
Max Uplift2=-102(LC 12), 8=-103(LC 13)  
Max Grav2=617(LC 36), 8=617(LC 36)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-865/149, 3-4=-839/154, 4-13=-1296/234, 13-14=-1295/234, 5-14=-1295/234, 5-15=-1295/234, 15-16=-1295/234, 6-16=-1296/234, 6-7=-839/155, 7-8=-865/150  
BOT CHORD 2-12=-123/691, 12-17=-121/696, 11-17=-121/696, 11-18=-109/696, 10-18=-109/696, 8-10=-111/691  
WEBS 4-11=-120/647, 5-11=-461/120, 6-11=-120/647

- NOTES-** (12-15)
- 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; 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 greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=102, 8=103.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 31 lb down and 33 lb up at 2-0-0, 31 lb down and 31 lb up at 4-0-12, 31 lb down and 31 lb up at 6-0-12, and 31 lb down and 31 lb up at 8-0-12, and 31 lb down and 33 lb up at 10-0-0 on top chord, and 9 lb down and 9 lb up at 2-0-12, 9 lb down and 9 lb up at 4-0-12, 9 lb down and 9 lb up at 6-0-12, and 9 lb down and 9 lb up at 8-0-12, and 9 lb down and 9 lb up at 9-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



Continued on page 2

5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	SP03	Hip Girder	1	1	Job Reference (optional) # 59707

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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

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-4=-60, 4-6=-60, 6-9=-60, 2-8=-20
  - Concentrated Loads (lb)
    - Vert: 4=-3(B) 6=-3(B) 12=0(B) 11=0(B) 5=-3(B) 10=0(B) 13=-3(B) 16=-3(B) 17=0(B) 18=0(B)

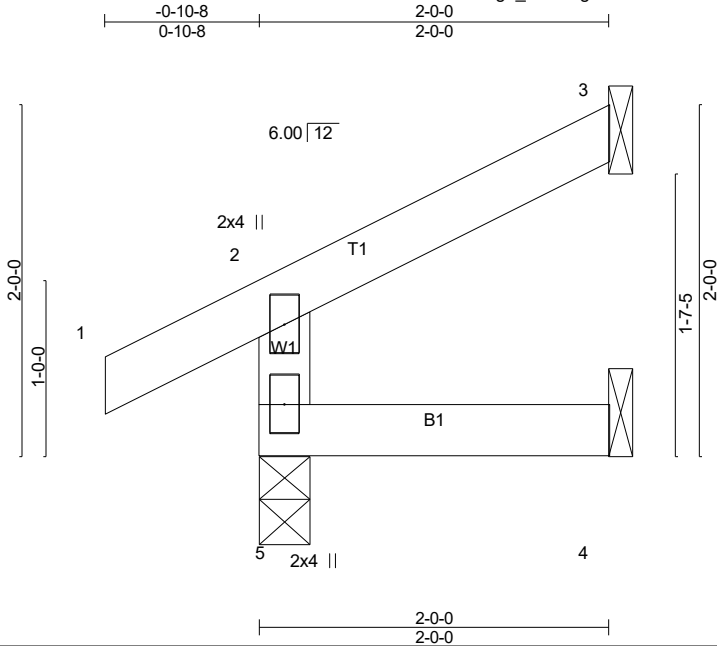


5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	SPJ01	Jack-Open	5	1	
					Job Reference (optional) # 59707

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Scale = 1:13.1

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.12	Vert(LL)	0.00	5	>999	240	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.04	Vert(CT)	-0.00	4-5	>999	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R							
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=41(LC 11)  
Max Uplift 5=-15(LC 14), 3=-31(LC 14)  
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-** (9-12)
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TC DL=5.0psf; BC DL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; End Jack 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.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 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.

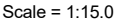
**LOAD CASE(S)** Standard



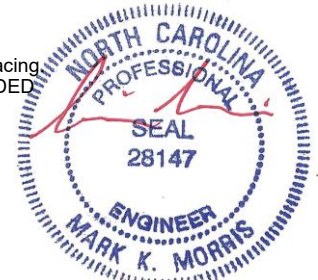
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MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.



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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	SPV02	Valley	1	1	
Job Reference (optional)					# 59707

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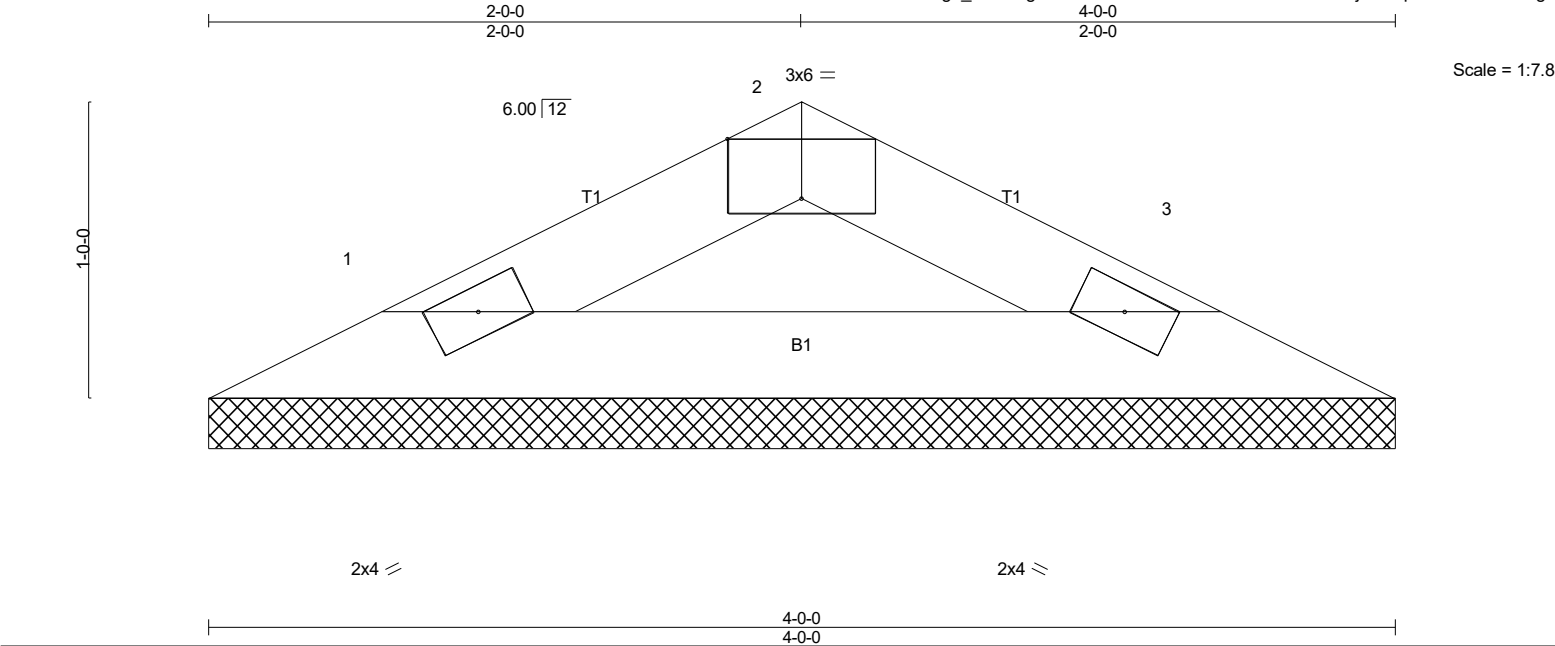


Plate Offsets (X,Y)-- [2:0-3:0,Edge]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.04	in (loc)	l/defl	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.16	n/a	n/a		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P		0.00	3		
BCDL	10.0							Weight: 11 lb	FT = 20%

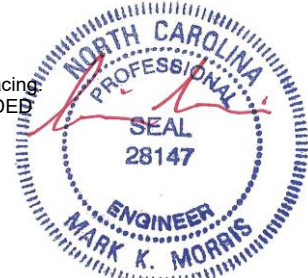
LUMBER-		BRACING-		Structural wood sheathing directly applied or 4-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.  MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.
TOP CHORD	2x4 SP No.2	TOP CHORD		
BOT CHORD	2x4 SP No.3	BOT CHORD		

**REACTIONS.** (lb/size) 1=111/4-0-0 (min. 0-1-8), 3=111/4-0-0 (min. 0-1-8)  
Max Horz 1=10(LC 18)  
Max Uplift 1=13(LC 14), 3=13(LC 15)  
Max Grav 1=119(LC 20), 3=119(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; 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) 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

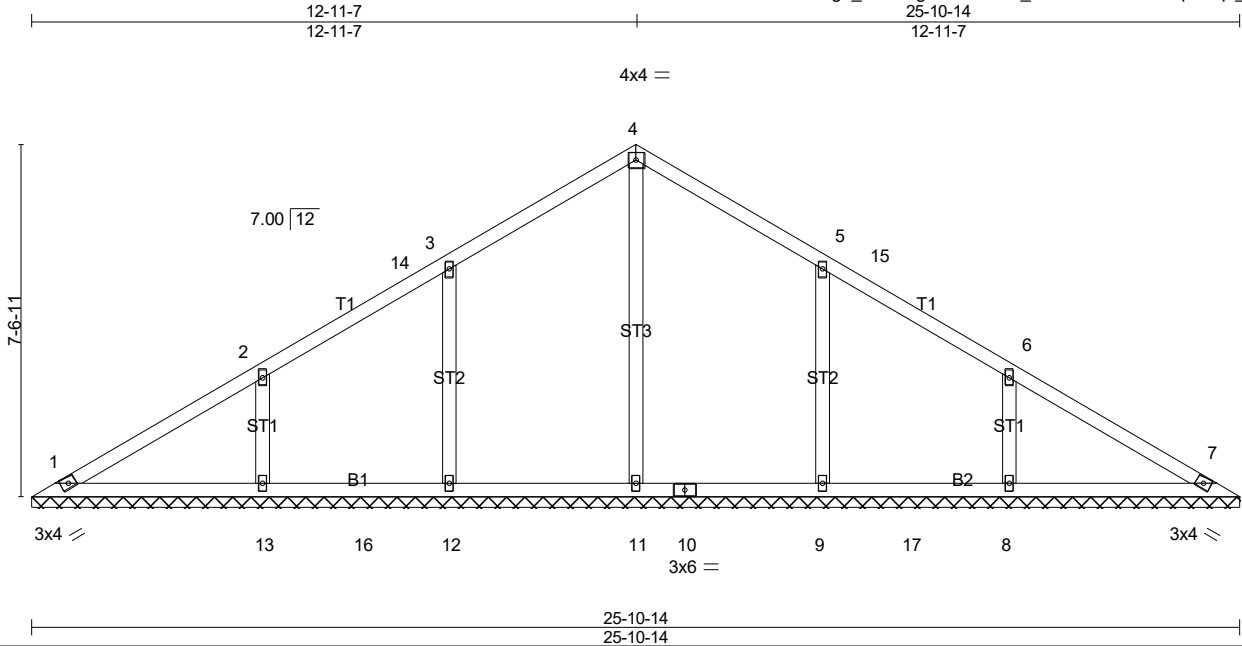


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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	VT01	Valley	1	1	
Job Reference (optional)					# 59707

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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 0.39	Vert(CT) n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.21	Horz(CT) 0.00	7	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH						
BCDL 10.0	Code IRC2021/TPI2014							
Weight: 113 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.

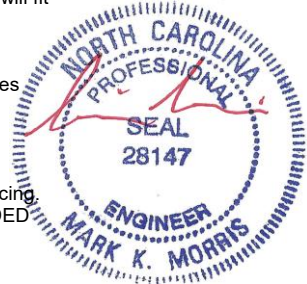
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 25-10-14.  
(lb) - Max Horz 1=-159(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 1 except 12=-109(LC 14), 13=-124(LC 14), 9=-109(LC 15), 8=-124(LC 15)  
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=456(LC 26), 12=525(LC 5), 13=404(LC 23), 9=525(LC 6), 8=404(LC 28)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 3-12=-361/151, 2-13=-282/157, 5-9=-361/151, 6-8=-283/157

- 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) 0-6-8 to 5-4-1, Interior(1) 5-4-1 to 8-1-13, Exterior(2R) 8-1-13 to 17-9-0, Interior(1) 17-9-0 to 20-6-13, Exterior(2E) 20-6-13 to 25-4-6 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.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - 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 except (jt=lb) 12=109, 13=124, 9=109, 8=124.
  - 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.

Continued on page 2



5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	VT01	Valley	1	1	Job Reference (optional) # 59707

Run: 8.630 s Jul 12 2024 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed May 28 13:14:26 2025 Page 2  
ID:kHdPkcON9g3\_0lfrDBlgKRzexCS-Y\_lbuuENfGuuf7n?7fpOrlq2\_lzYpd6qgl8hszBzgB

LOAD CASE(S) Standard



5/28/2025

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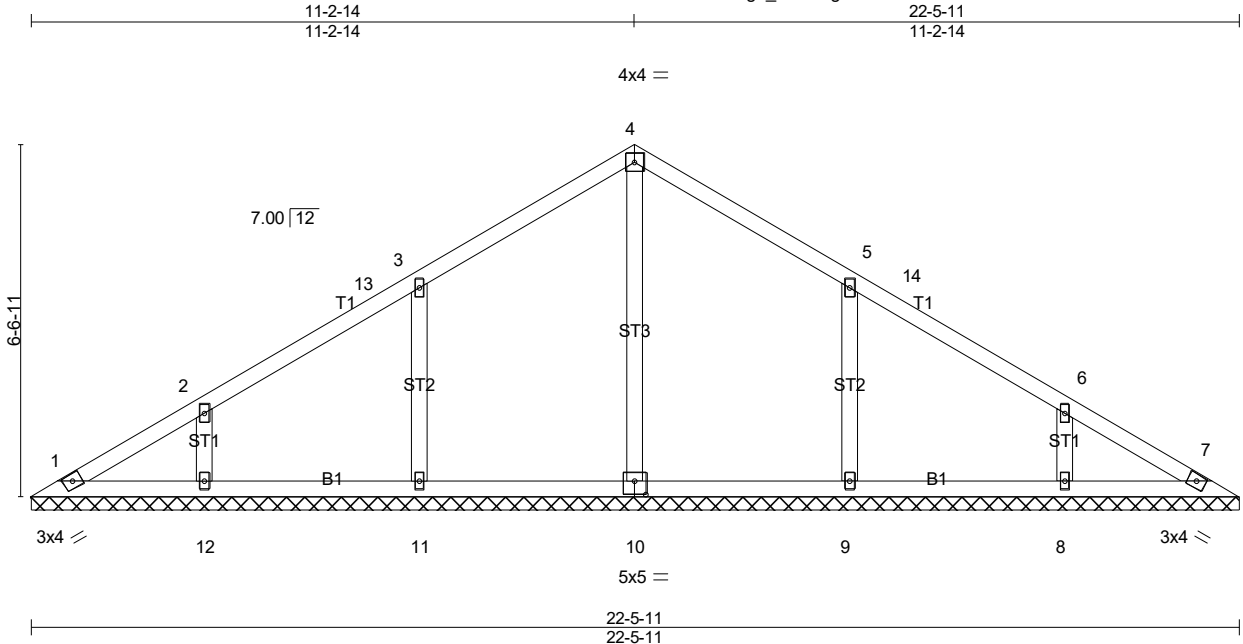


Plate Offsets (X,Y)-- [10'-0-2-8, 0-3-0]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	GRIP
TCLL (roof)	20.0	2-0-0		TC	0.29	in (loc)	l/defl	MT20	244/190
Snow (Pf)	20.0	Plate Grip DOL	1.15	BC	0.43	Vert(LL)	n/a		
TCDL	10.0	Lumber DOL	1.15	WB	0.15	Vert(CT)	n/a		
BCLL	0.0 *	Rep Stress Incr	YES	Matrix-SH		Horz(CT)	0.00		
BCDL	10.0	Code IRC2021/TPI2014						Weight: 94 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 22-5-11.  
(lb) - Max Horz 1=137(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 12, 8 except 11=-117(LC 14), 9=-117(LC 15)  
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=457(LC 23), 11=473(LC 5), 12=293(LC 1), 9=473(LC 6), 8=293(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 3-11=-378/159, 5-9=-378/159

- 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) 0-6-8 to 5-4-1, Interior(1) 5-4-1 to 6-5-4, Exterior(2R) 6-5-4 to 16-0-7, Interior(1) 16-0-7 to 17-1-10, Exterior(2E) 17-1-10 to 21-11-4 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - 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, 12, 8 except (jt=lb) 11=117, 9=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.

Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	VT02	Valley	1	1	Job Reference (optional) # 59707

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LOAD CASE(S) Standard



5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	VT03	Valley	1	1	
Job Reference (optional)					# 59707

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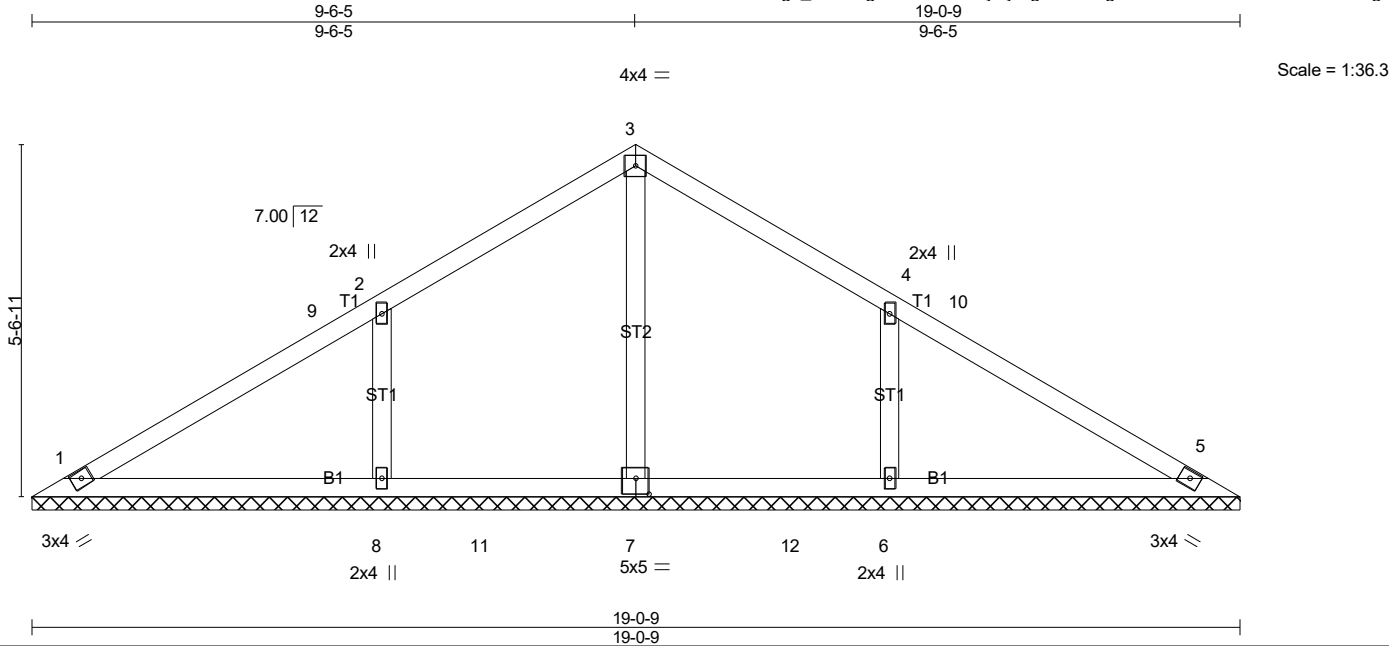


Plate Offsets (X,Y)-- [7:0-2-8,0-3-0]									
<b>LOADING</b> (psf)		<b>SPACING-</b>		<b>CSI.</b>		<b>DEFL.</b>		<b>PLATES</b>	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.38	in (loc)	l/defl	MT20	GRIP
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.32	n/a	n/a		244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH		0.00	5		
BCDL	10.0							Weight: 75 lb	FT = 20%

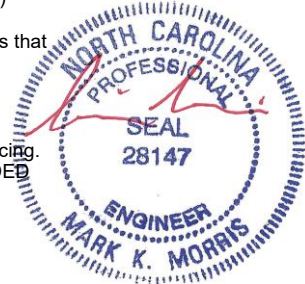
<b>LUMBER-</b>		<b>BRACING-</b>		Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.  MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.
TOP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

**REACTIONS.** All bearings 19-0-9.  
(lb) - Max Horz 1=115(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-147(LC 14), 6=-147(LC 15)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=386(LC 5), 8=549(LC 20), 6=549(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-8=-427/182, 4-6=-427/182

- 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) 0-6-8 to 5-6-5, Exterior(2R) 5-6-5 to 13-6-5, Exterior(2E) 13-6-5 to 18-6-2 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - 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) 8=147, 6=147.
  - 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



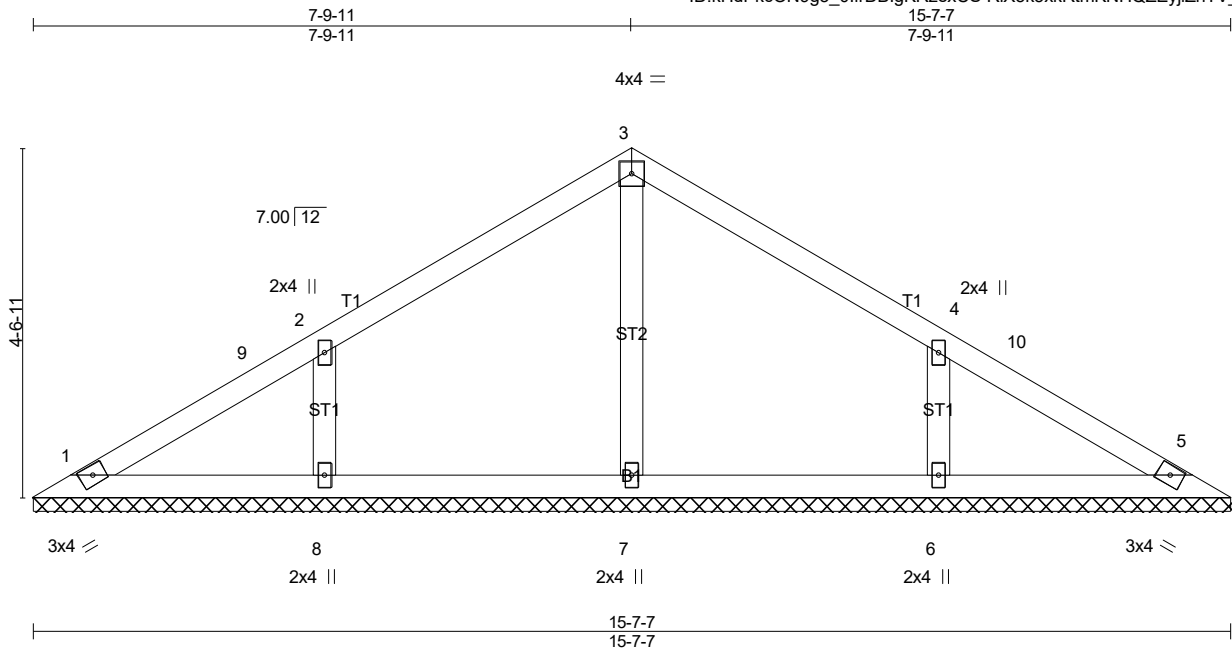
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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	VT04	Valley	1	1	

Run: 8.630 s Jul 12 2024 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed May 28 13:14:30 2025 Page 1  
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Job Reference (optional) # 59707



Scale = 1:30.0

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 0.19	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.08	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: 59 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.

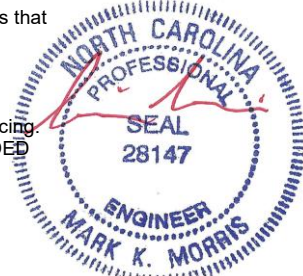
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 15-7-7.  
(lb) - Max Horz 1=93(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-117(LC 14), 6=-117(LC 15)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=282(LC 21), 8=456(LC 20), 6=456(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-8=-373/150, 4-6=-373/150

- 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 10-3-6, Exterior(2E) 10-3-6 to 15-0-15 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
  - 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=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.

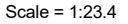
**LOAD CASE(S)** Standard



5/28/2025

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ID:kHdPkcON9g3\_0lfrDBlgKRzexCS-N8fs9lz?zV01caaxLnmDe6YrWPOEyZF\_CclSvWzBzg5



Weight: 44 lb      FT = 20%

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

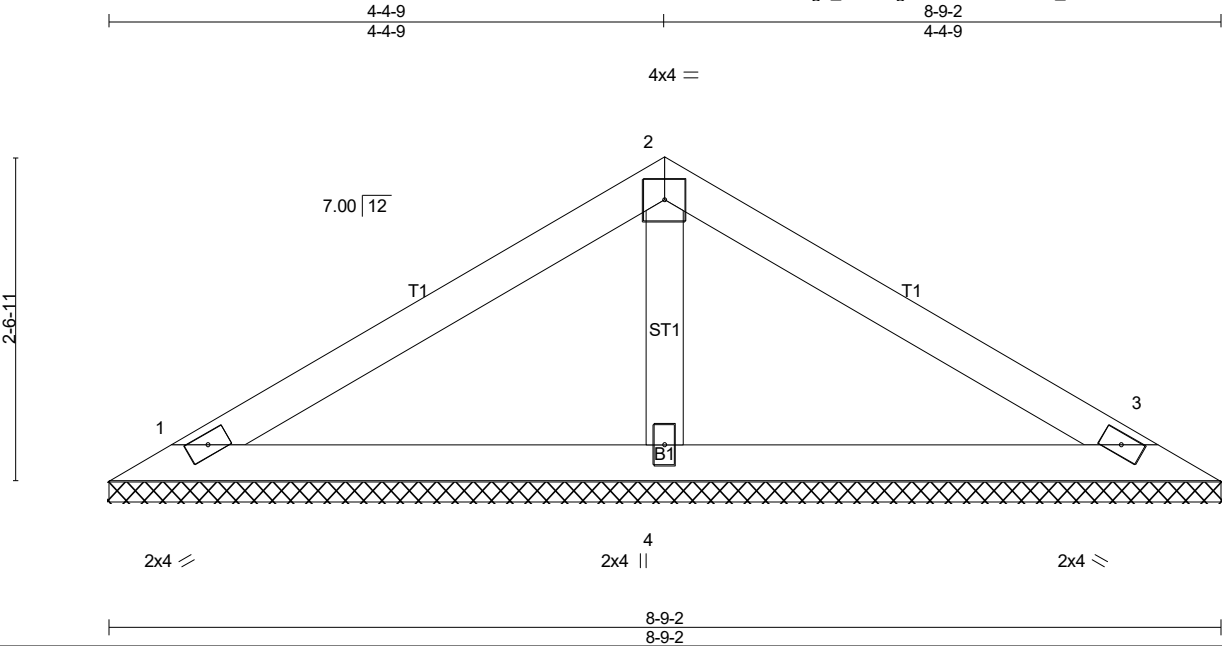
## A circular professional engineer seal for the State of North Carolina. The outer ring contains the text "NORTH CAROLINA" at the top and "ENGINEER" at the bottom. Inside the ring, the word "PROFESSIONAL" is at the top and "SEAL" is in the center. Below "SEAL" is the license number "28147". The name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

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	VT06	Valley	1	1	
Job Reference (optional)					# 59707

Run: 8.630 s Jul 12 2024 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed May 28 13:14:33 2025 Page 1  
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LOADING (psf)	SPACING-	CSL.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.43	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.25	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Horz(CT)	0.00	3	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P							
BCDL 10.0	Code IRC2021/TPI2014							Weight: 29 lb	FT = 20%

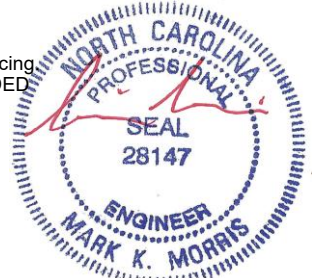
<b>LUMBER-</b>	<b>BRACING-</b>	
TOP CHORD 2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3		MiTek recommends that Stabilizers and required cross bracing be installed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

**REACTIONS.** (lb/size) 1=160/8-9-2 (min. 0-1-8), 3=160/8-9-2 (min. 0-1-8), 4=294/8-9-2 (min. 0-1-8)  
Max Horz 1=-49(LC 10)  
Max Uplift 1=-35(LC 14), 3=-42(LC 15), 4=-3(LC 14)  
Max Grav 1=222(LC 20), 3=222(LC 21), 4=301(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; TC DL=5.0psf; BC DL=5.0psf; h=35ft; 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, 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



5/28/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 157 PROVIDENCE CREEK   518 PROVIDENCE CREEK DRIVE FUQUAY-VAR
25-4553-R01	VT07	Valley	1	1	

Run: 8.630 s Jul 12 2024 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed May 28 13:14:34 2025 Page 1  
ID:kHdPkC0N9g3\_0lfrDBlgKRzexCS-JXncaR?FV6GlsukKT0ohjXdEeC0wQUuHgwEzZpZBzg3

Job Reference (optional) # 59707

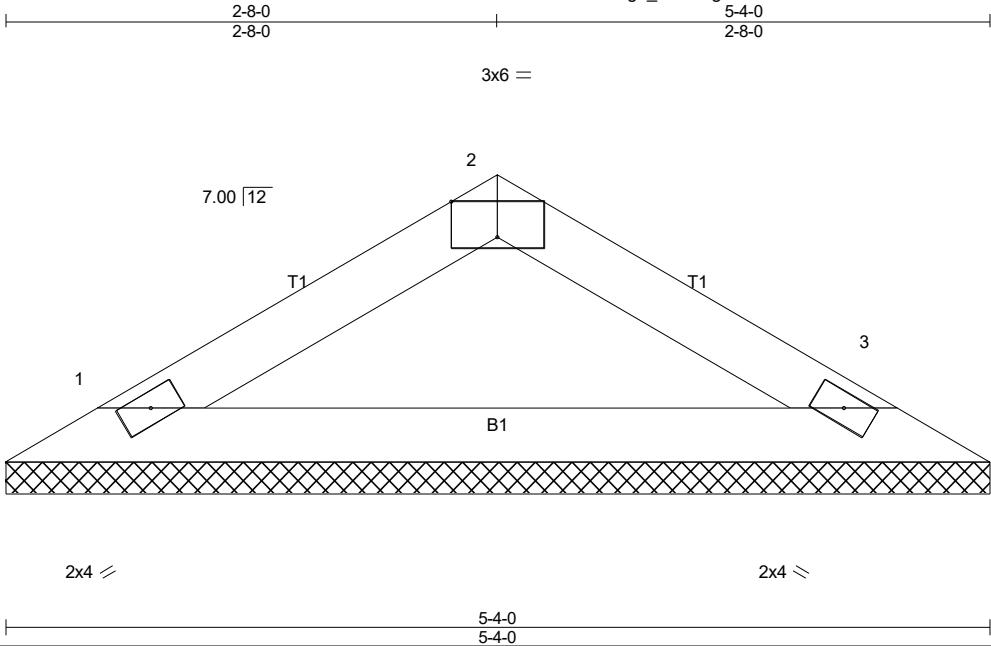


Plate Offsets (X,Y)-- [2:0-3-0,Edge]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	in (loc)	l/defl	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.38	Vert(LL)	n/a		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Vert(CT)	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P		Horz(CT)	0.00		
BCDL	10.0							Weight: 15 lb	FT = 20%

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

BRACING-  
TOP CHORD  
BOT CHORD

Structural wood sheathing directly applied or 5-4-0 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=170/5-4-0 (min. 0-1-8), 3=170/5-4-0 (min. 0-1-8)  
Max Horz 1=-27(LC 10)  
Max Uplift 1=-20(LC 14), 3=-20(LC 15)  
Max Grav 1=193(LC 20), 3=193(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; 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) 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.
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LOAD CASE(S) Standard



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