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The truss drawing(s) listed below have been prepared by **Atlantic Building Components** under my direct supervision based on the parameters provided by the truss designers.

AST #: 56323

JOB: 25-0639-R01

JOB NAME: LOT 115 PROVIDENCE CREEK

Wind Code: ASCE7-16

Wind Speed: Vult= 120mph

Exposure Category: B

Mean Roof Height (feet): 35

These truss designs comply with IRC 2018 as well as IRC 2021.

19 Truss Design(s)

Trusses:

P01, R01, R02, R02A, R03, R04, R05, R06, R07, R09, R10, R11, R12, R13, V01, V02, V03,



1/27/2025

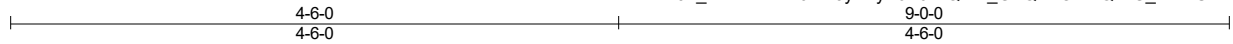
Mark Morris

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

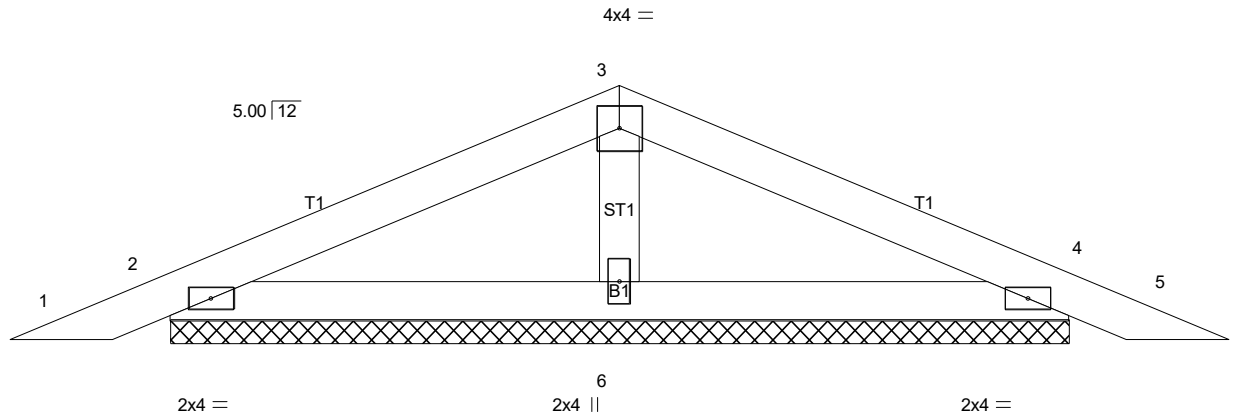
This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is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

Job	Truss	Truss Type	Qty	Ply	LOT 115 PROVIDENCE CREEK FUQUAY-VARINA, NC
25-0639-R01	P01	Piggyback	21	1	
Job Reference (optional)					# 56323

Run: 8.630 s Jul 12 2024 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Mon Jan 27 20:47:13 2025 Page 1
ID:av29u_vm2cwLxF0Wc5ybwyV6X0-SQmD_GXQuRObINQMIG_n?ImUckaJbumEV2gqOSzr2IS



Scale = 1:17.0



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	0.01 5 n/r 180	MT20		244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	0.01 5 n/r 80				
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00 4 n/a n/a				
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P							
BCDL	10.0										
								Weight: 26 lb FT = 20%			

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

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

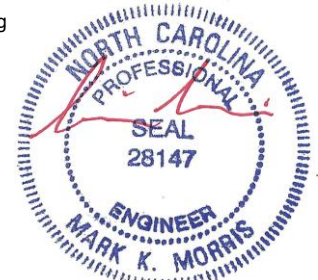
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=184/6-7-10 (min. 0-1-8), 4=184/6-7-10 (min. 0-1-8), 6=258/6-7-10 (min. 0-1-8)
Max Horz 2=26(LC 14)
Max Uplift 2=48(LC 14), 4=52(LC 15), 6=4(LC 14)
Max Grav 2=256(LC 21), 4=256(LC 22), 6=258(LC 1)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 2, 52 lb uplift at joint 4 and 4 lb uplift at joint 6.
 - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

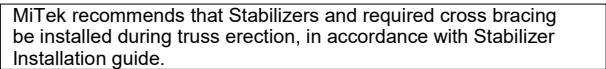


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Warning !—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation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

Run: 8.630 s Jul 12 2024 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Mon Jan 27 20:47:16 2025 Page 1
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Scale = 1:105.0



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Job	Truss	Truss Type	Qty	Ply	LOT 115 PROVIDENCE CREEK FUQUAY-VARINA, NC
25-0639-R01	R01	GABLE	1	1	Job Reference (optional) # 56323

Run: 8.630 s Jul 12 2024 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Mon Jan 27 20:47:17 2025 Page 2
ID:av29u_vm2cwLtXF0Wc5ybwV6X0-LB?jqebxygu0E?k7_62jA8wEsL_hXeTqQge2XDzr2tO

NOTES-

- 7) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 8) Provide adequate drainage to prevent water ponding.
- 9) All plates are 2x4 MT20 unless otherwise indicated.
- 10) Gable requires continuous bottom chord bearing.
- 11) Gable studs spaced at 2-0-0 oc.
- 12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 13) * 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.
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 57, 58, 61, 62, 63, 64, 65, 67, 68, 69, 70, 71, 72, 55, 52, 51, 50, 49, 48, 46, 45, 44, 43, 42, 41, 40 except (jt=lb) 73=105.

LOAD CASE(S) Standard



1/27/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 115 PROVIDENCE CREEK FUQUAY-VARINA, NC
25-0639-R01	R02	Piggyback Base	3	1	
Job Reference (optional)					# 56323

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-0-10-8 8-10-5 17-5-3 26-0-0 35-0-0 39-9-12 43-6-13 52-1-11 61-0-0 61-10-8
0-10-8 8-10-5 8-6-13 8-6-13 9-0-0 4-9-12 3-9-1 8-6-13 8-10-5 0-10-8

Scale = 1:104.1

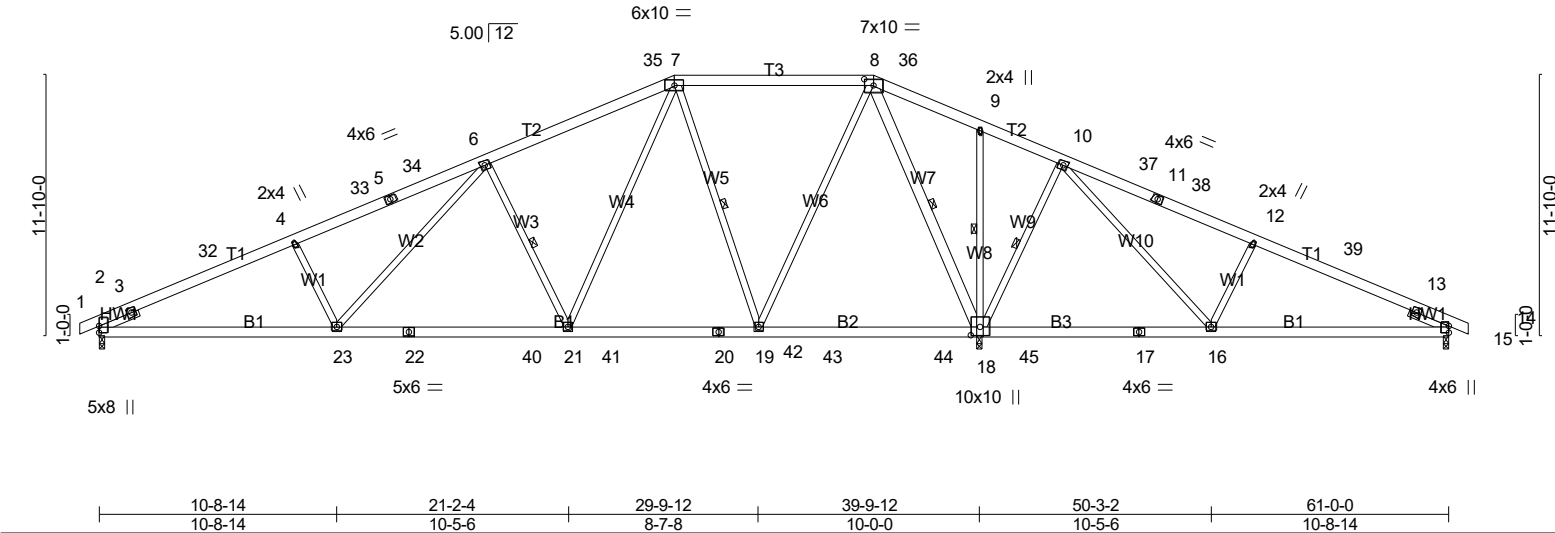


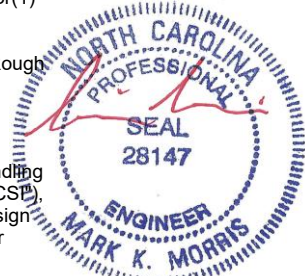
Plate Offsets (X,Y)-- [8:0-5-0,0-3-7], [18:0-4-8,0-5-0]		10-8-14 10-8-14 21-2-4 10-5-6 29-9-12 8-7-8 39-9-12 10-0-0 50-3-2 10-5-6 61-0-0 10-8-14	
LOADING (psf)		SPACING	
TCLL (roof) 20.0		2-0-0	
Snow (Pf) 20.0		Plate Grip DOL 1.15	
TCDL 10.0		Lumber DOL 1.15	
BCLL 0.0 *		Rep Stress Incr YES	
BCDL 10.0		Code IRC2021/TPI2014	
		CSI	
		TC 0.84	
		BC 0.83	
		WB 0.93	
		Matrix-MSH	
		DEFL.	
		in (loc) l/defl L/d	
		Vert(LL) -0.31 21-23 >999 240	
		Vert(CT) -0.47 21-23 >999 180	
		Horz(CT) 0.05 18 n/a n/a	
		PLATES	
		MT20	
		GRIP	
		244/190	
		Weight: 466 lb FT = 20%	

LUMBER-		BRACING-	
TOP CHORD 2x6 SP No.2		TOP CHORD	
BOT CHORD 2x6 SP No.2		BOT CHORD	
WEBS 2x4 SP No.3 *Except*		WEBS	
W7: 2x6 SP DSS		Structural wood sheathing directly applied or 2-10-2 oc purlins.	
SLIDER Left 2x4 SP No.3 1-11-0, Right 2x4 SP No.3 1-11-0		Rigid ceiling directly applied or 6-0-0 oc bracing.	
		1 Row at midpt 6-21, 7-19, 8-18, 10-18, 9-18	
		MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.	

REACTIONS. (lb/size) 2=1412/0-3-8 (min. 0-1-14), 14=461/0-3-8 (min. 0-1-8), 18=3112/0-3-8 (min. 0-2-13)
Max Horz2=-167(LC 15)
Max Uplift2=-222(LC 14), 14=-145(LC 15), 18=-232(LC 11)
Max Grav2=1577(LC 39), 14=583(LC 55), 18=4124(LC 45)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-975/1, 3-32=-2865/374, 4-32=-2774/390, 4-33=-2709/391, 5-33=-2628/394,
5-34=-2613/395, 6-34=-2510/412, 6-35=-1782/341, 7-35=-1533/343, 7-8=-646/242,
8-36=0/1500, 9-36=0/1429, 9-10=-26/1462, 10-37=-256/493, 11-37=-280/374,
11-38=-286/363, 12-38=-388/332, 12-39=-432/315, 13-39=-582/270, 13-14=-402/2
BOT CHORD 2-23=-433/2561, 22-23=-250/1951, 22-40=-250/1951, 21-40=-250/1951, 21-41=-26/1001,
20-41=-26/1001, 20-42=-26/1001, 19-42=-26/1001, 19-43=-256/220, 43-44=-256/220,
18-44=-256/220, 18-45=-905/158, 17-45=-905/158, 16-17=-905/158, 14-16=-249/483
WEBS 4-23=-421/229, 6-23=-131/727, 6-21=-1190/324, 7-21=-217/1520, 7-19=-1292/235,
8-19=-138/1835, 8-18=-2747/243, 10-18=-1061/267, 10-16=-158/1081, 12-16=-599/251,
9-18=-347/97

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 5-2-11, Interior(1) 5-2-11 to 17-4-8, Exterior(2R) 17-4-8 to 43-6-6, Interior(1) 43-6-6 to 55-9-5, Exterior(2E) 55-9-5 to 61-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.0; 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.
 - WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSP"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
 - Provide adequate drainage to prevent water ponding.
- Continued on page 2



1/27/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 115 PROVIDENCE CREEK FUQUAY-VARINA, NC
25-0639-R01	R02	Piggyback Base	3	1	Job Reference (optional) # 56323

Run: 8.630 s Jul 12 2024 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Mon Jan 27 20:47:18 2025 Page 2
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- NOTES-**
- 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 metal plate or equivalent at bearing(s) 18 to support reaction shown.
 - 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=222, 14=145, 18=232.

LOAD CASE(S) Standard



1/27/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 115 PROVIDENCE CREEK FUQUAY-VARINA, NC
25-0639-R01	R02A	Piggyback Base	6	1	
Job Reference (optional)					# 56323

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ID:av29u_vm2cwLtXF0Wc5ybwyV6X0-Ha7UEKcBUH8kTlIV5X5BFZ?Nx9S4?ND7t_79b6zr2tM

-0-10-8	8-10-5	17-5-3	26-0-0	35-0-0	39-9-12	43-6-13	52-1-11	61-0-0	61-10-8
0-10-8	8-10-5	8-6-13	8-6-13	9-0-0	4-9-12	3-9-1	8-6-13	8-10-5	0-10-8

Scale = 1:106.0

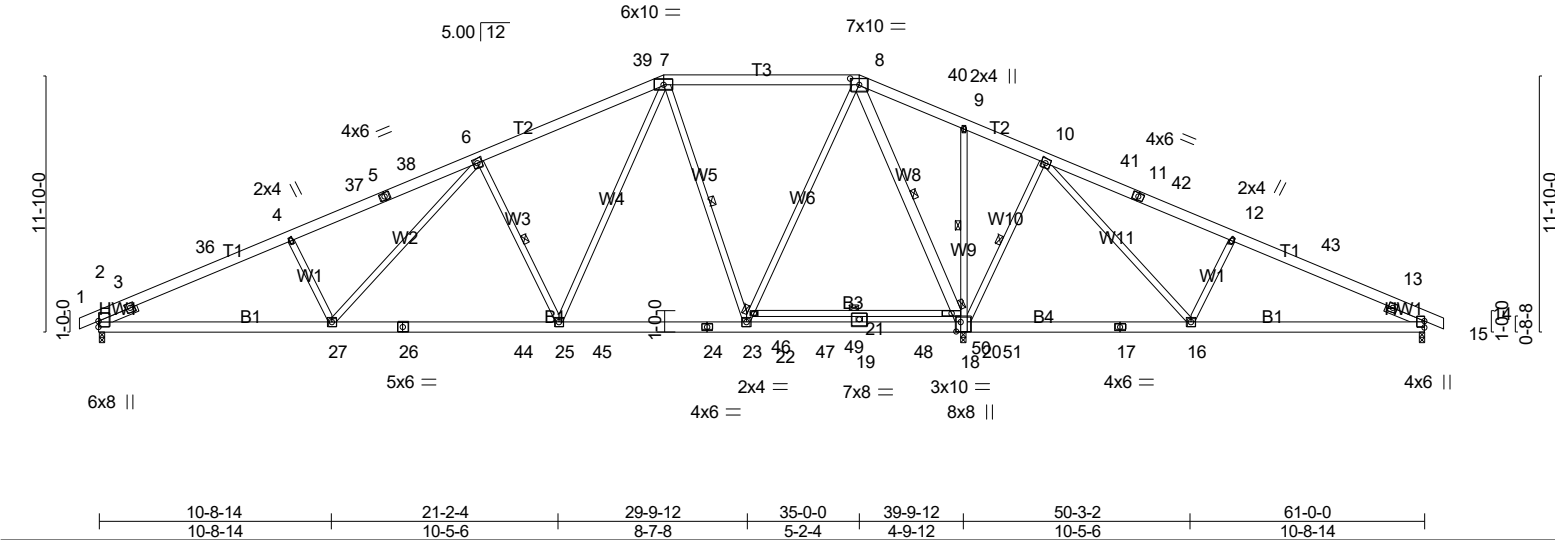


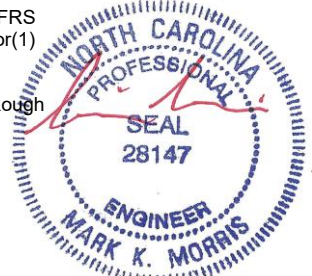
Plate Offsets (X,Y)-- [8:0-5-0,0-3-7], [18:0-5-4,0-2-8]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.85	in (loc)	l/defl	L/d	GRIP
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.87	Vert(LL)	-0.33 25-27	>999	240
TCDL	10.0	Rep Stress Incr	YES	WB	0.93	Vert(CT)	-0.50 25-27	>957	180
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-MSH		Horz(CT)	0.06 18	n/a	n/a
BCDL	10.0								
								Weight: 480 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 2-7-0 oc purlins.
BOT CHORD	2x6 SP No.2 *Except*	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
	B3: 2x4 SP No.2, B2: 2x6 SP No.1		6-0-0 oc bracing: 20-22
WEBS	2x4 SP No.3 *Except*	WEBS	1 Row at midpt 6-25, 7-23, 8-20, 10-18, 9-18
	W8: 2x6 SP DSS		
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=1429/0-3-8 (min. 0-1-14), 14=448/0-3-8 (min. 0-1-8), 18=3298/0-3-8 (min. 0-3-2)
Max Horz2=-167(LC 15)
Max Uplift2=-212(LC 14), 14=-148(LC 15), 18=-144(LC 11)
Max Grav2=1593(LC 39), 14=572(LC 55), 18=4541(LC 45)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-984/0, 3-36=-2959/350, 4-36=-2867/366, 4-37=-2803/367, 5-37=-2723/371, 5-38=-2707/372, 6-38=-2604/388, 6-39=-1877/316, 7-39=-1631/318, 7-8=-774/211, 8-40=0/1545, 9-40=0/1475, 9-10=-21/1508, 10-41=-228/556, 11-41=-252/438, 11-42=-258/426, 12-42=-360/394, 12-43=-404/377, 13-43=-554/330, 13-14=-402/0
BOT CHORD 2-27=-412/2646, 26-27=-227/2039, 26-44=-227/2039, 25-44=-227/2039, 25-45=-1/1105, 24-45=-1/1105, 24-46=-1/1105, 23-46=-1/1105, 23-47=-24/423, 19-47=-24/423, 19-48=-24/423, 18-48=-24/423, 22-49=-326/9, 21-49=-326/9, 21-50=-326/9, 20-50=-326/9, 18-51=-953/153, 17-51=-953/153, 16-17=-953/153, 14-16=-304/457
WEBS 4-27=-418/230, 6-27=-131/726, 6-25=-1190/323, 7-25=-224/1483, 7-23=-1264/251, 22-23=-117/1831, 8-22=-96/2043, 8-20=-2957/200, 18-20=-3174/181, 10-18=-1056/270, 10-16=-162/1061, 12-16=-602/250, 19-21=-323/0, 9-18=-348/96

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 5-2-11, Interior(1) 5-2-11 to 17-4-8, Exterior(2R) 17-4-8 to 43-6-6, Interior(1) 43-6-6 to 55-9-5, Exterior(2E) 55-9-5 to 61-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.



Continued on page 2

1/27/2025

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

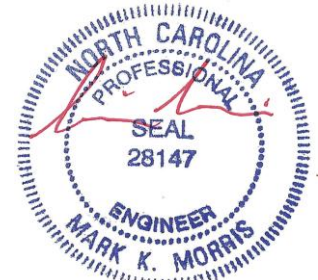
Job	Truss	Truss Type	Qty	Ply	LOT 115 PROVIDENCE CREEK FUQUAY-VARINA, NC
25-0639-R01	R02A	Piggyback Base	6	1	Job Reference (optional) # 56323

Run: 8.630 s Jul 12 2024 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Mon Jan 27 20:47:19 2025 Page 2
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NOTES-

- 6) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 7) Provide adequate drainage to prevent water ponding.
- 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 metal plate or equivalent at bearing(s) 18 to support reaction shown.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=212, 14=148, 18=144.

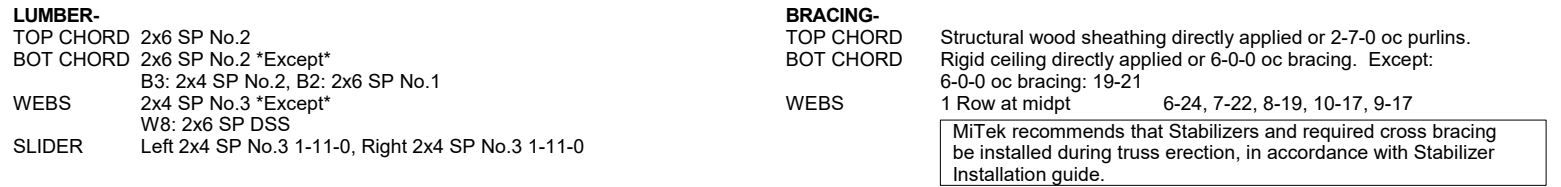
LOAD CASE(S) Standard



1/27/2025

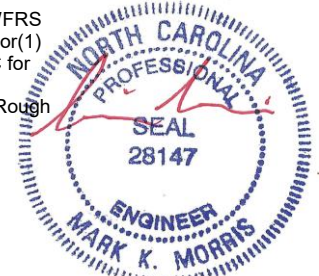
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Run: 8.630 s Jul 12 2024 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Mon Jan 27 20:47:20 2025 Page 1
ID:av29u_vm2cwLTXF0Wc5ybwvV6X0-lmhsSgdpFbGb5SSiffCQonYYhYolkqTG6esi7Yzr2tL



NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDF=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E)-0-10-8 to 5-2-11, Interior(1) 5-2-11 to 17-4-8, Exterior(2R) 17-4-8 to 43-6-6, Interior(1) 43-6-6 to 54-10-13, Exterior(2E) 54-10-13 to 61-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.



1/27/2025

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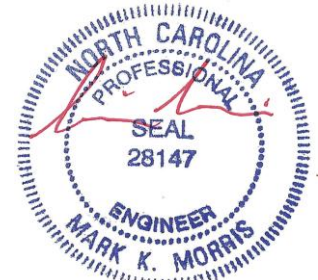
Job	Truss	Truss Type	Qty	Ply	LOT 115 PROVIDENCE CREEK FUQUAY-VARINA, NC
25-0639-R01	R03	PIGGYBACK BASE	1	1	Job Reference (optional) # 56323

Run: 8.630 s Jul 12 2024 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Mon Jan 27 20:47:20 2025 Page 2
ID:av29u_vm2cwLtxF0Wc5ybywV6X0-lmhsSgdpFbGb5SSiFcQonYYhYolkqTG6esi7Yzr2tL

NOTES-

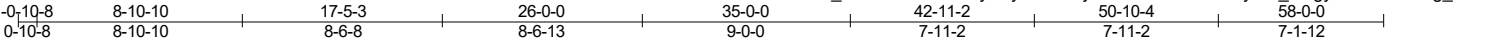
- 6) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 7) Provide adequate drainage to prevent water ponding.
- 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 metal plate or equivalent at bearing(s) 17 to support reaction shown.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=211, 14=129, 17=147.

LOAD CASE(S) Standard



1/27/2025

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Scale = 1:99.2

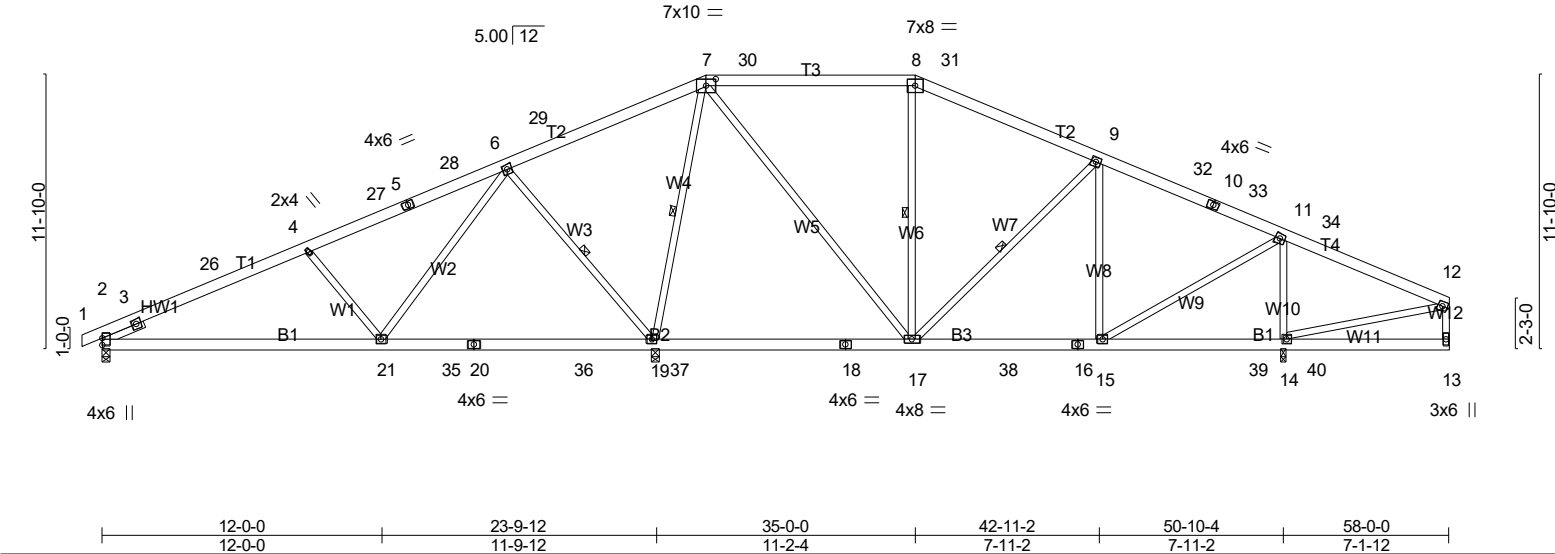


Plate Offsets (X,Y)-- [7:0-5-0,0-3-7]		12-0-0		23-9-12		35-0-0		42-11-2		50-10-4		58-0-0	
		12-0-0		11-9-12		11-2-4		7-11-2		7-11-2		7-1-12	
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)		20.0		2-0-0		in (loc)		l/defl		L/d			
Snow (Pf)		20.0		Plate Grip DOL 1.15		Vert(LL) -0.17 19-21		>999		240		MT20	
TCDL		10.0		Lumber DOL 1.15		Vert(CT) -0.22 19-21		>999		180			
BCLL		0.0 *		Rep Stress Incr YES		Horz(CT) 0.02 13		n/a		n/a			
BCDL		10.0		Code IRC2021/TPI2014		Matrix-AS						Weight: 435 lb FT = 20%	

LUMBER-		BRACING-	
TOP CHORD 2x6 SP No.2		TOP CHORD	
BOT CHORD 2x6 SP No.2 *Except*		BOT CHORD	
B2: 2x6 SP DSS		WEBS	
WEBS 2x4 SP No.3 *Except*			
W4: 2x4 SP No.2			
SLIDER Left 2x4 SP No.3 1-11-0			

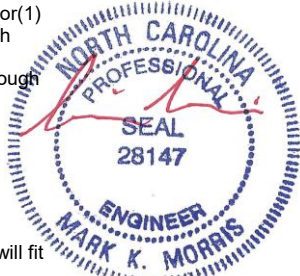
Structural wood sheathing directly applied, except end verticals.
Rigid ceiling directly applied.
1 Row at midpt 6-19, 7-19, 8-17, 9-17

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 2=172(LC 18)
Max Uplift All uplift 100 lb or less at joint(s) 13 except 2=-126(LC 14), 19=-276(LC 14), 14=-217(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 13 except 2=882(LC 39), 19=3049(LC 45), 14=1599(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-707/0, 3-26=-1232/168, 4-26=-1107/184, 4-27=-923/141, 5-27=-813/153, 5-28=-805/155, 6-28=-697/171, 6-29=-24/436, 7-29=-22/714, 7-30=-611/251, 8-30=-611/251, 8-31=-574/232, 9-31=-756/229, 9-32=-800/190, 10-32=-881/174, 10-33=-905/171, 11-33=-975/162
BOT CHORD 2-21=-246/1075, 21-35=-38/311, 20-35=-38/311, 20-36=-38/311, 19-36=-38/311, 17-38=-17/813, 16-38=-17/813, 15-16=-17/813
WEBS 4-21=-527/246, 6-21=-97/840, 6-19=-1309/325, 7-19=-1600/236, 7-17=-98/1109, 8-17=-401/111, 9-17=-483/154, 9-15=-350/115, 11-15=-49/993, 11-14=-1397/286

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 4-11-2, Interior(1) 4-11-2 to 17-9-9, Exterior(2R) 17-9-9 to 42-11-2, Interior(1) 42-11-2 to 52-0-10, Exterior(2E) 52-0-10 to 57-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 5x5 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Refer to page 2 for truss to truss connections.



1/27/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 115 PROVIDENCE CREEK FUQUAY-VARINA, NC
25-0639-R01	R04	Piggyback Base	3	1	Job Reference (optional) # 56323

Run: 8.630 s Jul 12 2024 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Mon Jan 27 20:47:21 2025 Page 2
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NOTES-

- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13 except (jt=lb) 2=126, 19=276, 14=217.
- 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.

LOAD CASE(S) Standard

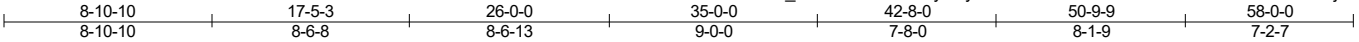


1/27/2025

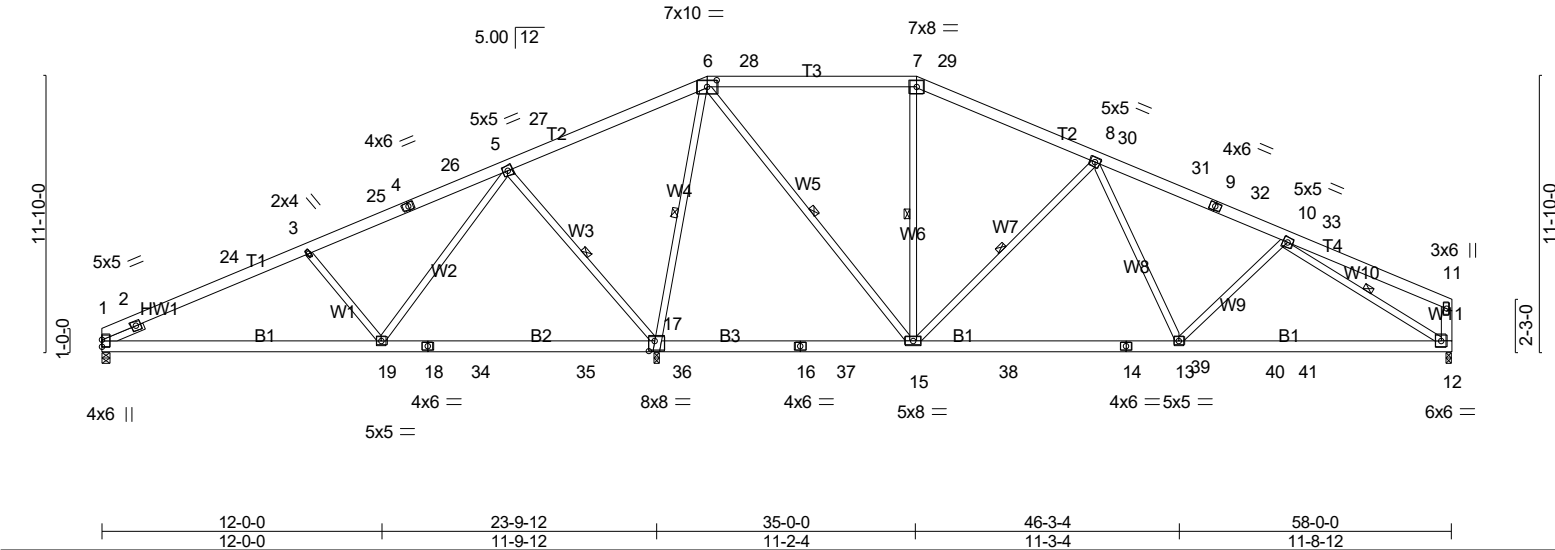
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Job	Truss	Truss Type	Qty	Ply	LOT 115 PROVIDENCE CREEK FUQUAY-VARINA, NC
25-0639-R01	R05	PIGGYBACK BASE	6	1	
Job Reference (optional)					# 56323

Run: 8.630 s Jul 12 2024 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Mon Jan 27 20:47:22 2025 Page 1
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Scale = 1:99.0



Job	Truss	Truss Type	Qty	Ply	LOT 115 PROVIDENCE CREEK FUQUAY-VARINA, NC
25-0639-R01	R05	PIGGYBACK BASE	6	1	Job Reference (optional) # 56323

Run: 8.630 s Jul 12 2024 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Mon Jan 27 20:47:22 2025 Page 2
ID:av29u_vm2cwLIXF0Wc5ybwyV6X0-h8octLe3nCWJKmc4nfeutCdwMMWeCjrZaxLpCQzr2tJ

NOTES-

11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

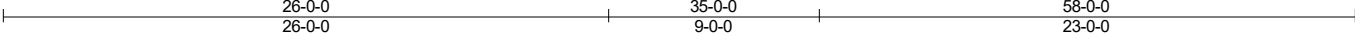


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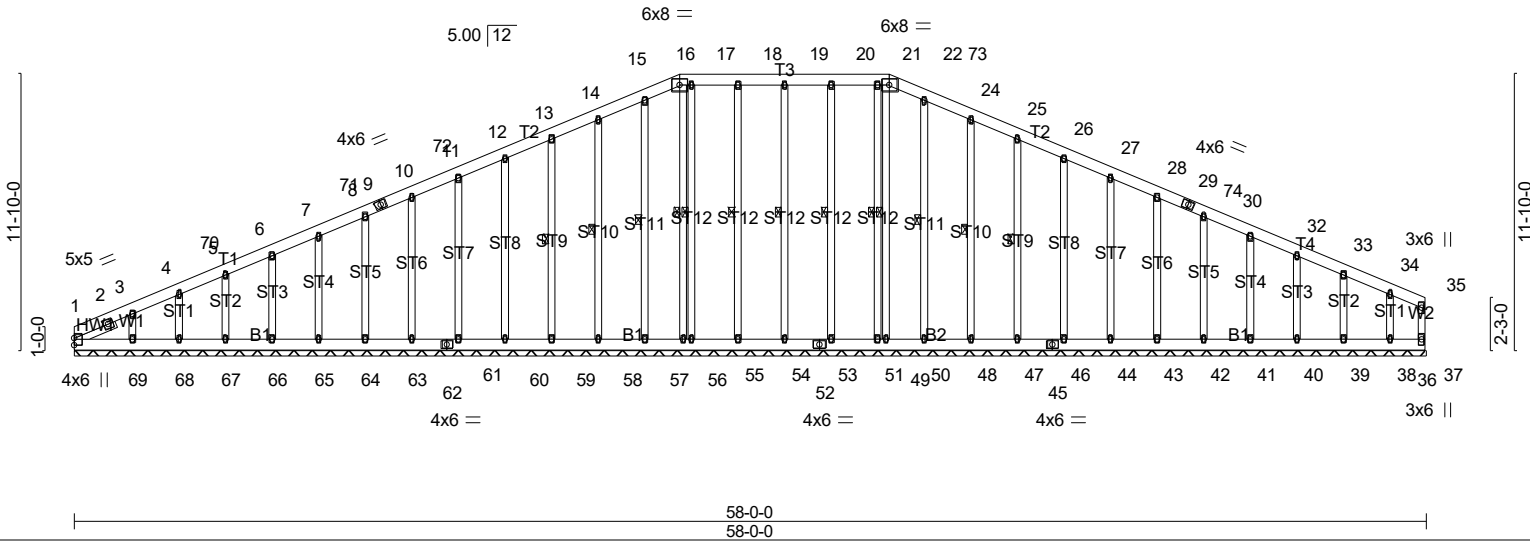
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Job	Truss	Truss Type	Qty	Ply	LOT 115 PROVIDENCE CREEK FUQUAY-VARINA, NC
25-0639-R01	R06	GABLE	1	1	
Job Reference (optional)					# 56323

Run: 8.630 s Jul 12 2024 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Mon Jan 27 20:47:24 2025 Page 1
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Scale = 1:98.9



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	MT20		244/190	
Snow (PF)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.00				
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							
BCDL	10.0										
Weight: 603 lb										FT = 20%	

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 1-11-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 19-53, 18-54, 17-55, 15-57, 14-58, 13-59, 16-56, 20-51, 21-50, 23-48, 24-47, 25-46, 22-49

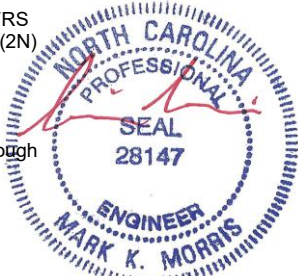
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 58-0-0.
(lb) - Max Horz 1=174(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 1, 53, 54, 57, 58, 59, 60, 61, 63, 64, 65, 66, 67, 68, 51, 48, 47, 46, 44, 43, 42, 41, 40, 39, 38, 37 except 69=103(LC 14)
Max Grav All reactions 250 lb or less at joint(s) 1, 55, 65, 66, 67, 68, 56, 50, 40, 39, 38, 37, 49, 36, 69 except 53=291(LC 43), 54=292(LC 43), 57=255(LC 44), 58=294(LC 44), 59=287(LC 44), 60=286(LC 44), 61=287(LC 44), 63=289(LC 44), 64=266(LC 44), 51=292(LC 43), 48=255(LC 44), 47=294(LC 44), 46=287(LC 44), 44=286(LC 44), 43=287(LC 44), 42=289(LC 44), 41=266(LC 44)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 10-72=-68/259, 11-72=-64/266, 11-12=-82/300, 12-13=-97/335, 13-14=-112/369, 14-15=-128/405, 15-16=-136/424, 16-17=-131/411, 17-18=-131/410, 18-19=-131/410, 19-20=-131/410, 20-21=-131/410, 21-22=-131/411, 22-73=-130/423, 23-73=-135/422, 23-24=-128/406, 24-25=-112/370, 25-26=-97/335, 26-27=-82/301, 27-28=-68/266

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-0-0 to 5-9-10, Exterior(2N) 5-9-10 to 20-2-6, Corner(3R) 20-2-6 to 40-6-0, Exterior(2N) 40-6-0 to 52-0-10, Corner(3E) 52-0-10 to 57-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - 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.

Continued on page 2



1/27/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 115 PROVIDENCE CREEK FUQUAY-VARINA, NC
25-0639-R01	R06	GABLE	1	1	Job Reference (optional) # 56323

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NOTES-

- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 53, 54, 57, 58, 59, 60, 61, 63, 64, 65, 66, 67, 68, 51, 48, 47, 46, 44, 43, 42, 41, 40, 39, 38, 37 except (jt=lb) 69=103.

LOAD CASE(S) Standard



1/27/2025

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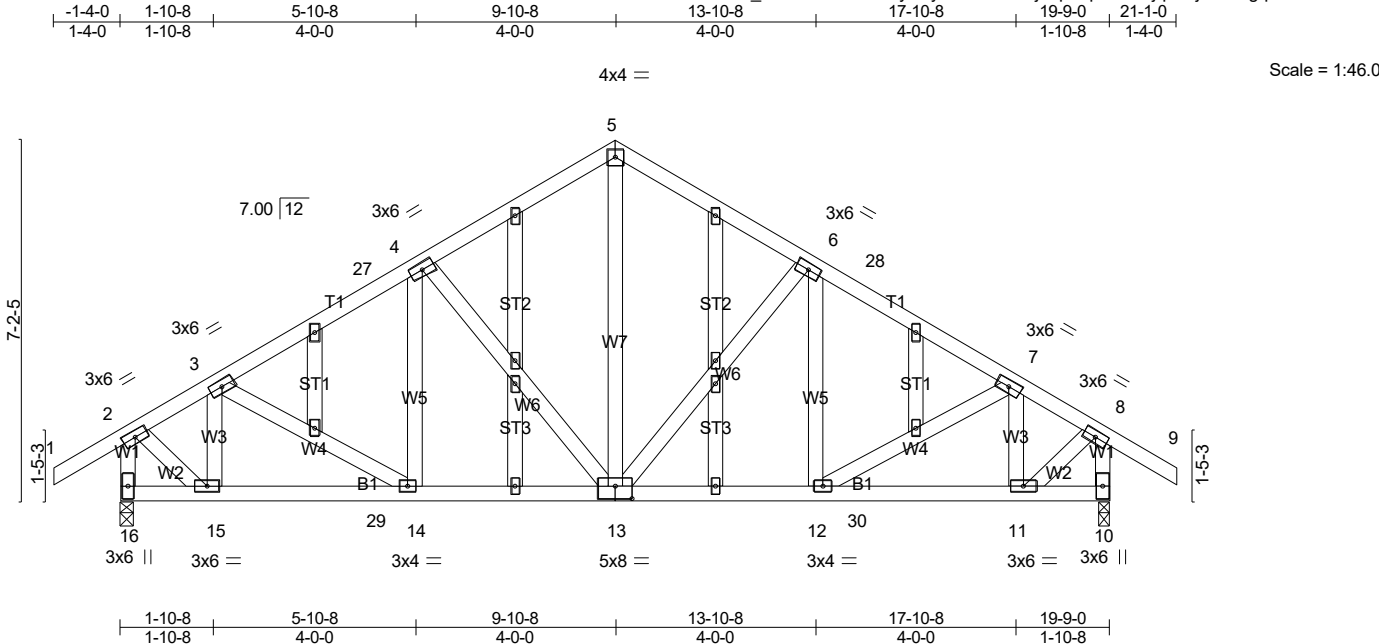


Plate Offsets (X,Y)-- [13:0-4-0,0-3-0]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	2-0-0	Plate Grip DOL	1.15	TC	0.25	in (loc)	MT20	GRIP
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.21	Vert(LL)	0.03 12-13 >999		244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.43	Vert(CT)	-0.04 13-14 >999		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS		Horz(CT)	0.02 10 n/a		
BCDL	10.0							Weight: 157 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.3

OTHERS 2x4 SP No.3

BRACING-

TOP CHORD

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) 16=867/0-3-0 (min. 0-1-8), 10=867/0-3-0 (min. 0-1-8)
Max Horz 16=-183(LC 12)
Max Uplift 16=-117(LC 14), 10=-117(LC 15)
Max Grav 16=907(LC 21), 10=907(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-697/486, 3-27=-928/632, 4-27=-813/643, 4-5=-743/571, 5-6=-743/571, 6-28=-813/647, 7-28=-928/636, 7-8=-697/505, 2-16=-891/585, 8-10=-891/583
BOT CHORD 15-29=-317/576, 14-29=-317/576, 13-14=-410/758, 12-13=-414/758, 12-30=-333/576, 11-30=-333/576
WEBS 5-13=-476/419, 6-13=-313/213, 7-11=-351/148, 4-13=-313/208, 3-15=-351/163, 2-15=-470/712, 8-11=-448/712

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-4-0 to 3-5-10, Interior(1) 3-5-10 to 5-0-14, Exterior(2R) 5-0-14 to 14-8-2, Interior(1) 14-8-2 to 16-3-6, Exterior(2E) 16-3-6 to 21-1-0 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=117, 10=117.
 - 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



1/27/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 115 PROVIDENCE CREEK FUQUAY-VARINA, NC
25-0639-R01	R07	Common Structural Gable	1	1	Job Reference (optional) # 56323

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LOAD CASE(S) Standard



1/27/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 115 PROVIDENCE CREEK FUQUAY-VARINA, NC
25-0639-R01	R09	Common	2	1	
Job Reference (optional)					# 56323

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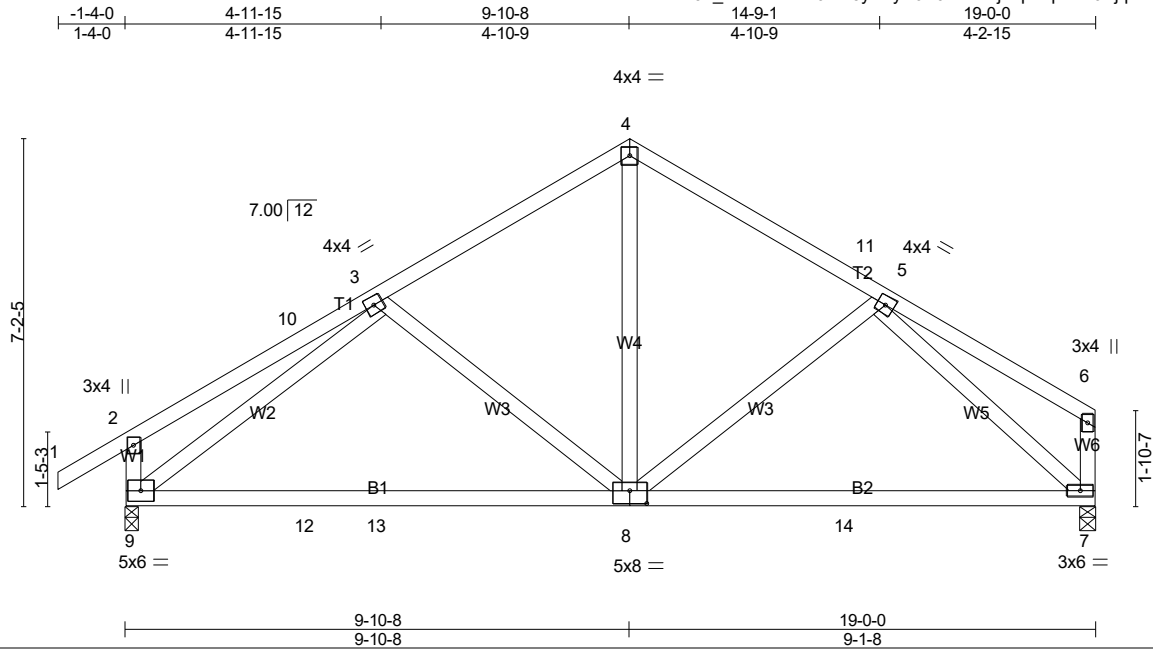


Plate Offsets (X,Y)-- [8:0-4-0,0-3-0]

LOADING (psf)	SPACING	CSI	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.68	Vert(LL) 0.28	8-9	>801	240	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.81	Vert(CT) -0.34	8-9	>661	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.59	Horz(CT) 0.02	7	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-AS						
BCDL 10.0	Code IRC2021/TPI2014							

Weight: 112 lb FT = 20%

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

BRACING-
TOP CHORD
BOT CHORD

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

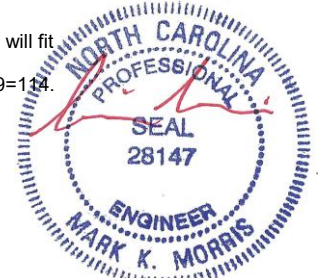
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 9=841/0-3-0 (min. 0-1-8), 7=745/0-3-8 (min. 0-1-8)
Max Horz9=181(LC 11)
Max Uplift9=114(LC 14), 7=82(LC 15)
Max Grav9=891(LC 21), 7=793(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-10=-257/254, 3-10=-214/276, 3-4=-763/577, 4-11=-628/577, 5-11=-754/555,
2-9=-313/228
BOT CHORD 9-12=-381/732, 12-13=-381/732, 8-13=-381/732, 8-14=-339/659, 7-14=-339/659
WEBS 4-8=-455/405, 3-9=-796/308, 5-7=-827/377

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-4-0 to 3-5-10, Interior(1) 3-5-10 to 4-10-9, Exterior(2R) 4-10-9 to 14-0-10, Exterior(2E) 14-0-10 to 18-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; porch 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) 7 except (jt=lb) 9=114.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



1/27/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 115 PROVIDENCE CREEK FUQUAY-VARINA, NC
25-0639-R01	R10	Common Girder	1	1	
					Job Reference (optional) # 56323

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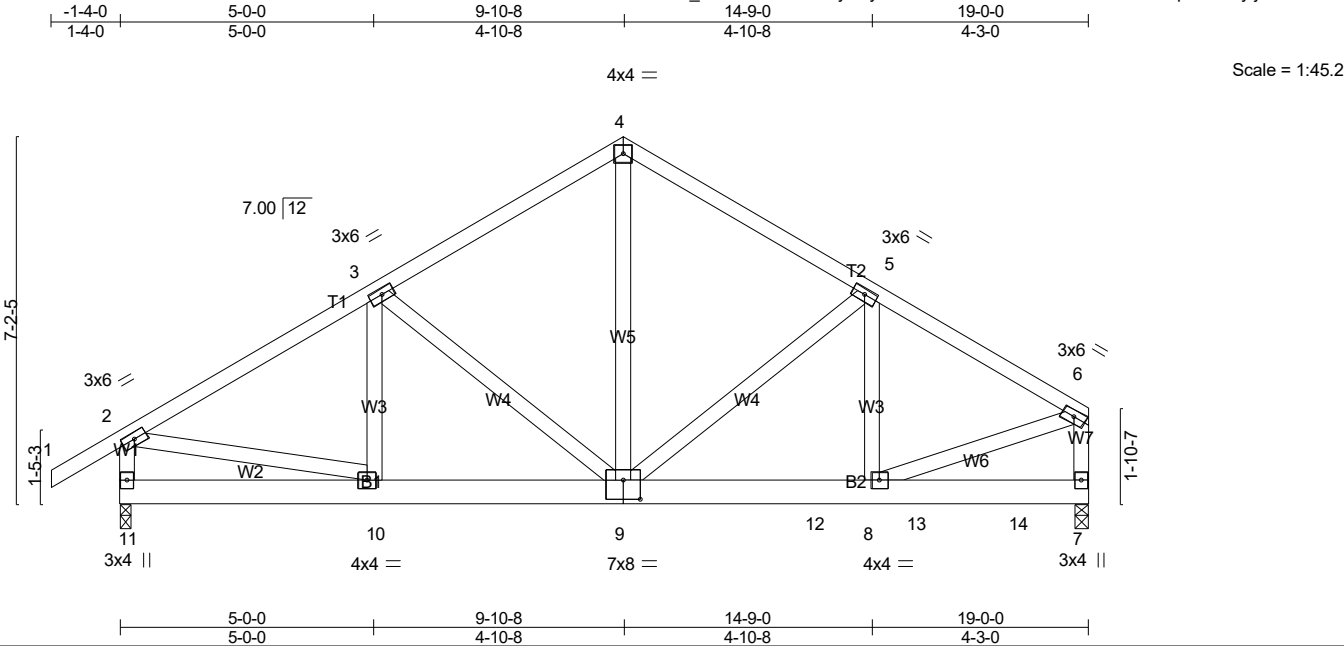


Plate Offsets (X,Y)-- [9:0-4-0,0-4-8]					
LOADING (psf)		SPACING-		CSI.	
TCLL (roof)	20.0	2-0-0		in	(loc)
Snow (Pf)	20.0	Plate Grip DOL	1.15	l/defl	L/d
TCDL	10.0	Lumber DOL	1.15	Vert(LL)	-0.03 8-9 >999 240
BCLL	0.0 *	Rep Stress Incr	NO	Vert(CT)	-0.05 8-9 >999 180
BCDL	10.0	Code IRC2021/TPI2014		Horz(CT)	0.01 7 n/a n/a
				PLATES	
				GRIP	
				Weight: 134 lb FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-10-3 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: 10-11.
WEBS	2x4 SP No.3		MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

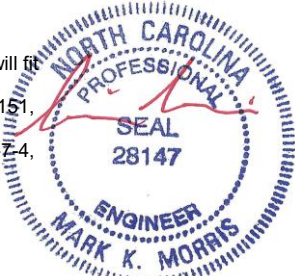
REACTIONS. (lb/size) 11=939/0-3-0 (min. 0-1-8), 7=1215/0-3-8 (min. 0-1-8)
Max Horz 11=179(LC 9)
Max Uplift 11=151(LC 12), 7=252(LC 13)
Max Grav 11=986(LC 19), 7=1260(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1097/161, 3-4=-910/195, 4-5=-901/198, 5-6=-1251/241, 2-11=-929/168, 6-7=-1070/213
BOT CHORD 9-10=-218/892, 9-12=-183/1043, 8-12=-183/1043
WEBS 3-9=-279/139, 4-9=-113/517, 5-9=-483/206, 2-10=-78/851, 6-8=-164/1055

- NOTES-**
- 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; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=151, 7=252.
 - 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 197 lb down and 79 lb up at 13-7-4, and 197 lb down and 79 lb up at 15-7-4, and 197 lb down and 79 lb up at 17-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

Continued on page 2



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Job	Truss	Truss Type	Qty	Ply	LOT 115 PROVIDENCE CREEK FUQUAY-VARINA, NC
25-0639-R01	R10	Common Girder	1	1	Job Reference (optional) # 56323

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LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-4=-60, 4-6=-60, 7-11=-20
Concentrated Loads (lb)
Vert: 12=-190(F) 13=-190(F) 14=-190(F)

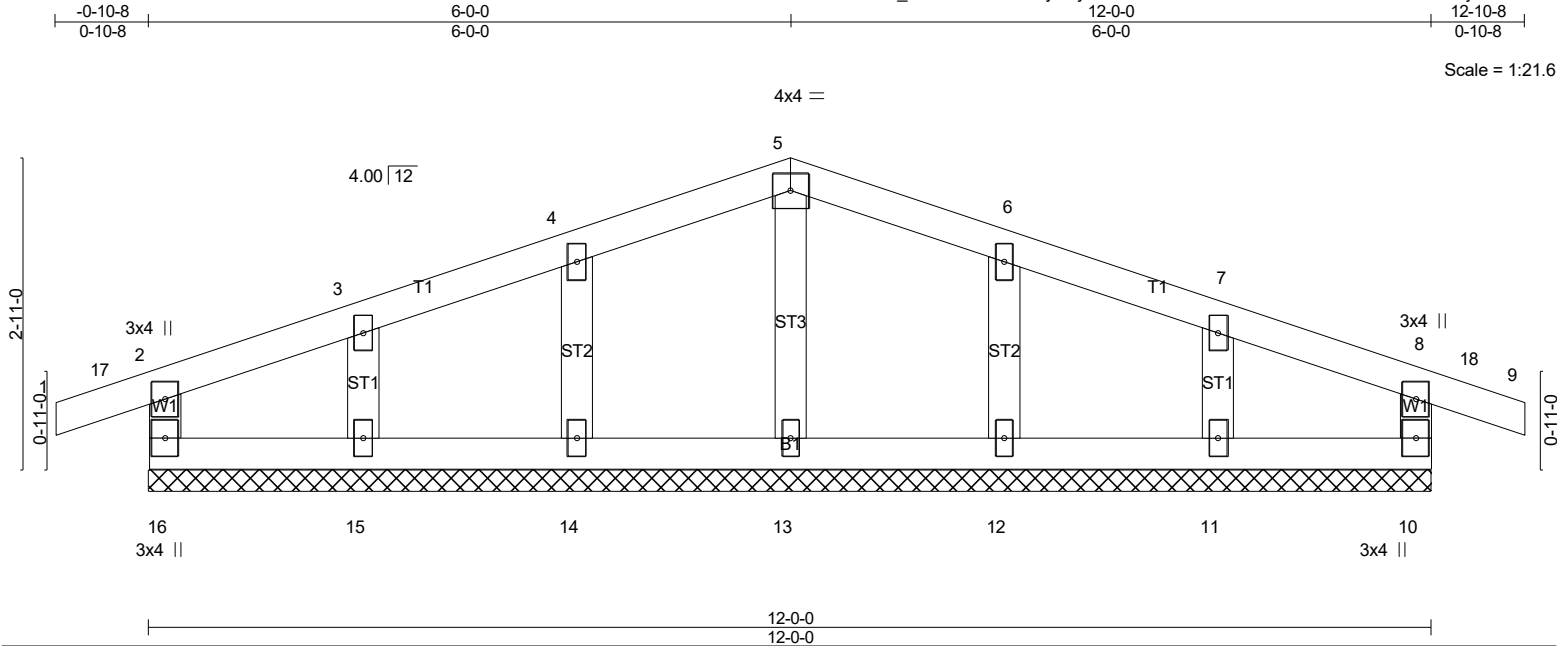


1/27/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 115 PROVIDENCE CREEK FUQUAY-VARINA, NC
25-0639-R01	R11	Common Supported Gable	1	1	Job Reference (optional) # 56323

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LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.00 9 n/r 180	MT20		244/190	
Snow (PF)	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00 9 n/r 80				
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00 10 n/a n/a				
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-R							
BCDL	10.0										
								Weight: 52 lb		FT = 20%	

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

REACTIONS. All bearings 12-0-0.
(lb) - Max Horz 16=15(LC 18)
Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11
Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCCL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 4-0-0, Corner(3R) 4-0-0 to 8-0-0, Corner(3E) 8-0-0 to 12-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); PF=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 11.

LOAD CASE(S) Standard



1/27/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 115 PROVIDENCE CREEK FUQUAY-VARINA, NC
25-0639-R01	R12	Common	4	1	
Job Reference (optional)					# 56323

Run: 8.630 s Jul 12 2024 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Mon Jan 27 20:47:28 2025 Page 1
ID:av29u_vm2cwLxXF0Wc5ybwyV6X0-WIAu7PjqM2HS2h3E7wl6Tt0WnfecfjSyto7P4zr2tD

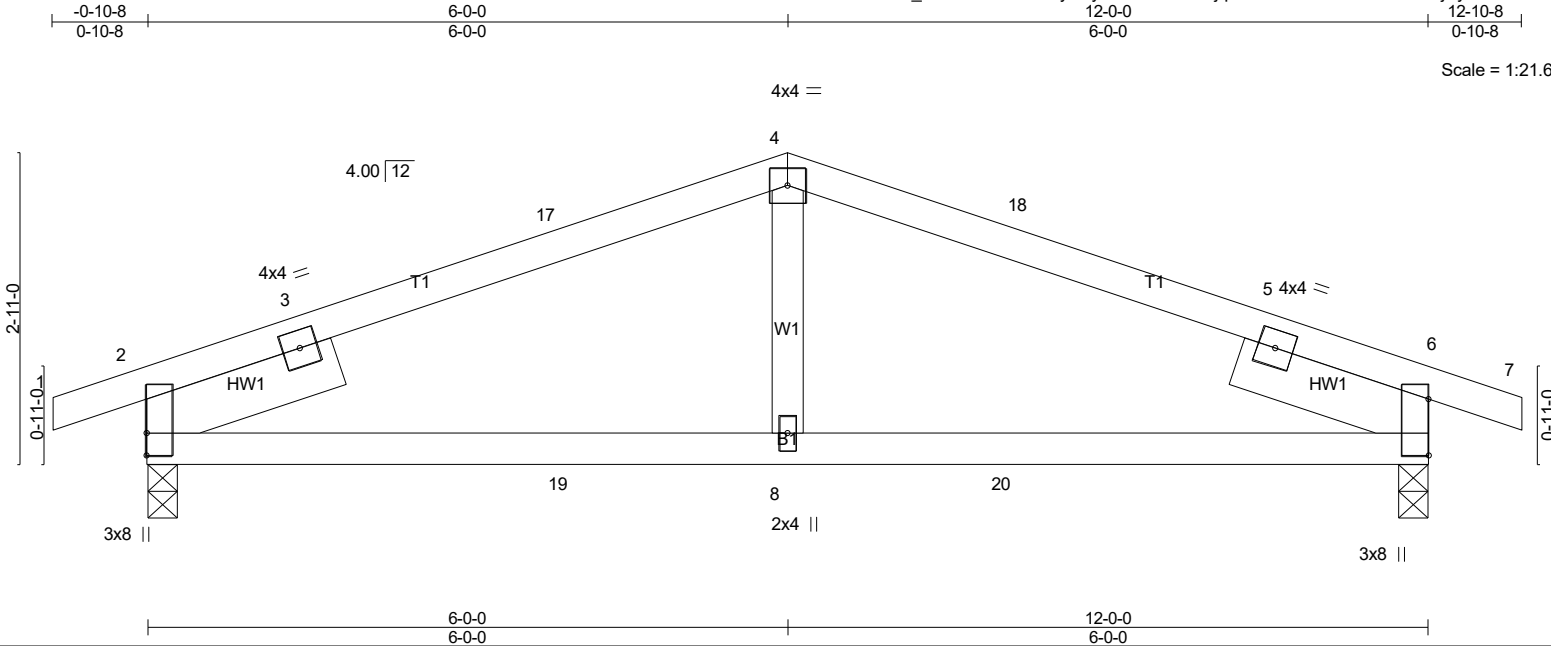


Plate Offsets (X,Y)-- [2:Edge,0-0-0], [6:Edge,0-0-0]		6-0-0		12-0-0		6-0-0	
LOADING (psf)		SPACING-		CSI.		DEFL.	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.41	in (loc)	l/defl
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.33	8-15	>999
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	8-15	>999
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS		6	n/a
BCDL	10.0						n/a
						PLATES	
						MT20	
						GRIP	
						244/190	
						Weight: 52 lb	
						FT = 20%	

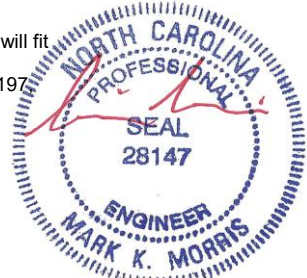
LUMBER-		BRACING-		Structural wood sheathing directly applied. Rigid ceiling directly applied. MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.
TOP CHORD	2x4 SP No.2	TOP CHORD		
BOT CHORD	2x4 SP No.2	BOT CHORD		
WEBS	2x4 SP No.3			
SLIDER	Left 2x6 SP No.2 1-11-0, Right 2x6 SP No.2 1-11-0			

REACTIONS. (lb/size) 2=532/0-3-8 (min. 0-1-8), 6=533/0-3-8 (min. 0-1-8)
Max Horz 2=-34(LC 19)
Max Uplift 2=-197(LC 10), 6=-197(LC 11)
Max Grav 2=614(LC 21), 6=614(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-187/278, 3-17=-648/918, 4-17=-620/925, 4-18=-620/925, 5-18=-648/918,
5-6=-187/278
BOT CHORD 2-19=-783/593, 8-19=-783/593, 8-20=-783/593, 6-20=-783/593
WEBS 4-8=-359/219

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Exterior(2R) 3-11-2 to 8-0-14, Exterior(2E) 8-0-14 to 12-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=197, 6=197.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



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Job	Truss	Truss Type	Qty	Ply	LOT 115 PROVIDENCE CREEK FUQUAY-VARINA, NC
25-0639-R01	R13	Common	1	1	
					Job Reference (optional) # 56323

Run: 8.630 s Jul 12 2024 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Mon Jan 27 20:47:28 2025 Page 1
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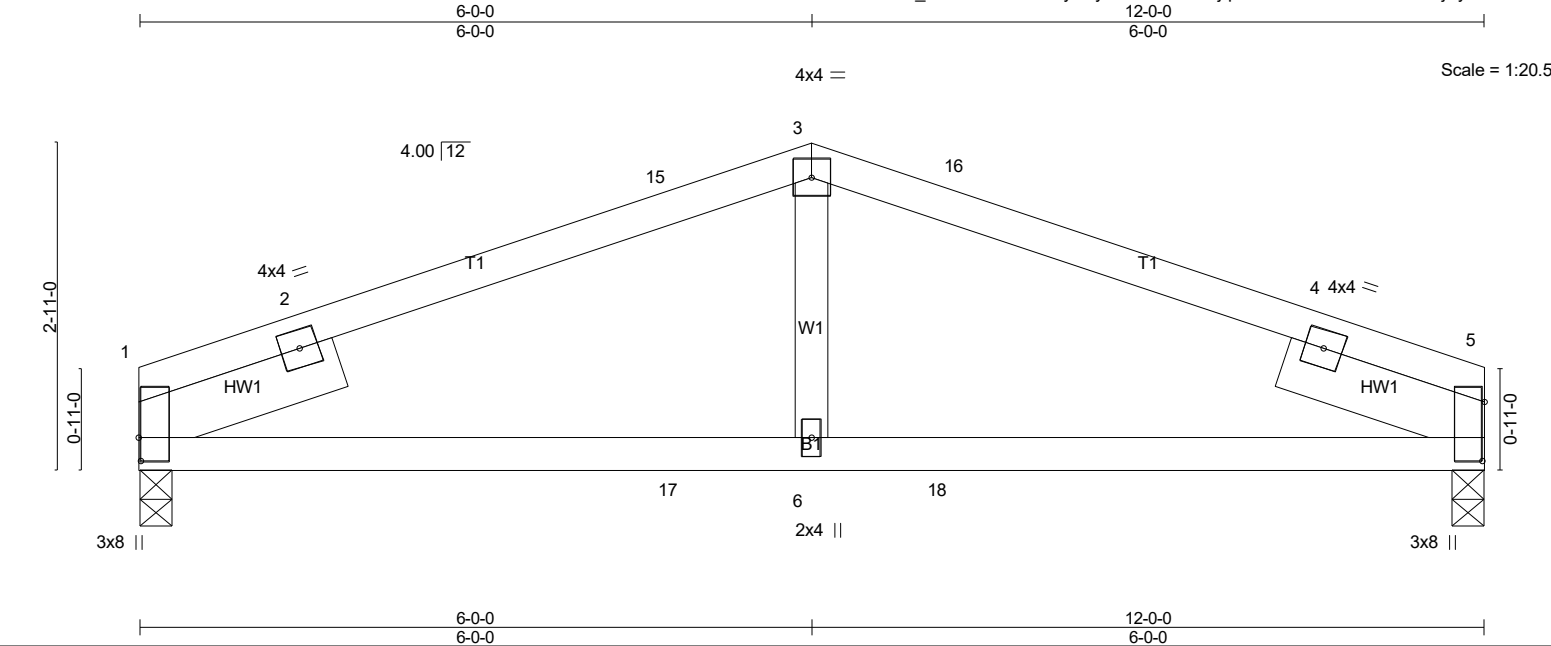


Plate Offsets (X,Y)-- [1:0-2-8,0-0-4], [5:0-6-5,0-0-4]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.42	in (loc)	l/defl	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.32	0.05 6-13	>999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	-0.06 6-13	>999		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS		0.02 1	n/a		
BCDL	10.0							Weight: 49 lb	FT = 20%

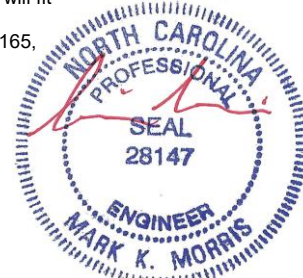
LUMBER-	BRACING-	
TOP CHORD 2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD 2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS 2x4 SP No.3		
SLIDER Left 2x6 SP No.2 1-11-0, Right 2x6 SP No.2 1-11-0		
		MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=480/0-3-8 (min. 0-1-8), 5=480/0-3-8 (min. 0-1-8)
Max Horz 1=-30(LC 15)
Max Uplift1=-165(LC 10), 5=-165(LC 11)
Max Grav 1=561(LC 20), 5=561(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-200/301, 2-15=-657/901, 3-15=-618/908, 3-16=-618/908, 4-16=-657/901,
4-5=-200/301
BOT CHORD 1-17=-788/604, 6-17=-788/604, 6-18=-788/604, 5-18=-788/604
WEBS 3-6=-353/220

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 4-9-10, Exterior(2R) 4-9-10 to 7-2-6, Exterior(2E) 7-2-6 to 12-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; porch 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 a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=165, 5=165.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

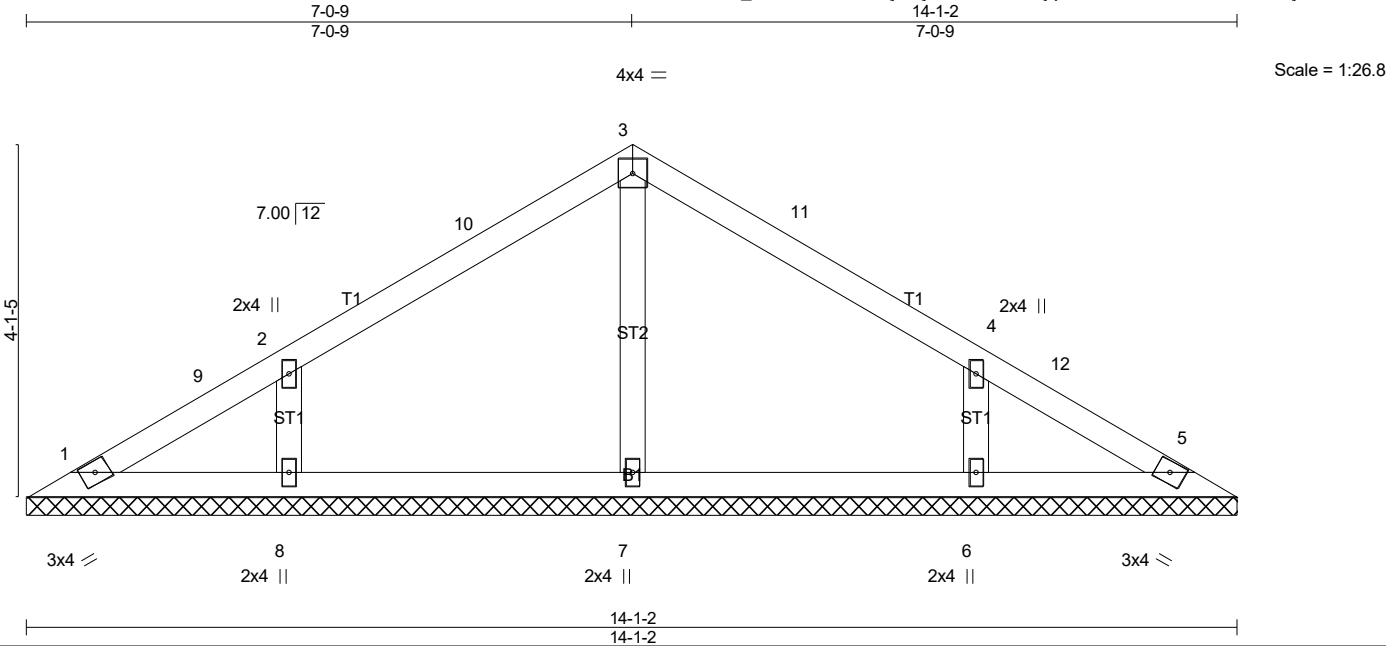


1/27/2025

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Job	Truss	Truss Type	Qty	Ply	LOT 115 PROVIDENCE CREEK FUQUAY-VARINA, NC
25-0639-R01	V01	Valley	1	1	Job Reference (optional) # 56323

Run: 8.630 s Jul 12 2024 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Mon Jan 27 20:47:28 2025 Page 1
ID:av29u_vm2cwLxXF0Wc5ybwyV6X0-WIAu7PjqM2HS2h3E7wI6Tt2dnhdcfuSyto7P4zr2tD



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.28	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.20	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.07	Horz(CT)	0.00	5	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						Weight: 52 lb	FT = 20%
BCDL 10.0	Code IRC2021/TPI2014								

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

REACTIONS. All bearings 14-1-2.
(lb) - Max Horz 1=84(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-108(LC 14), 6=-108(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=290(LC 21), 8=429(LC 20), 6=429(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-359/143, 4-6=-359/143

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-1, Exterior(2R) 5-4-1 to 8-9-1, Exterior(2E) 8-9-1 to 13-6-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=108, 6=108.

LOAD CASE(S) Standard

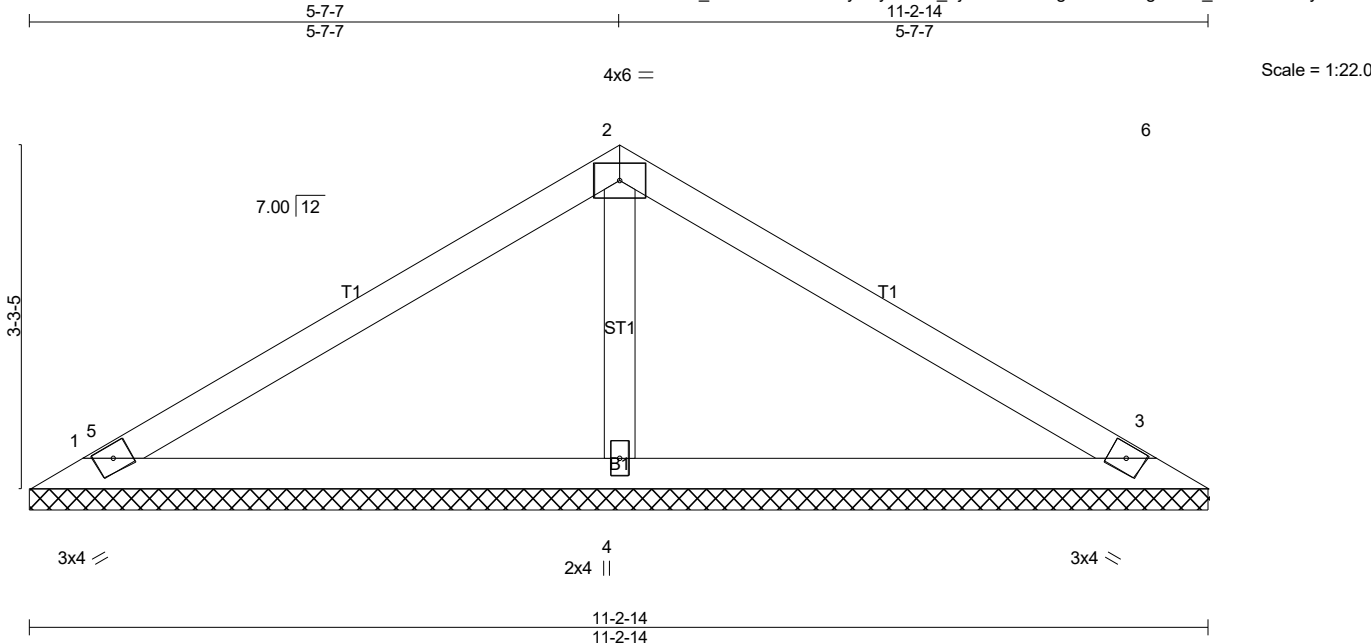


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Job	Truss	Truss Type	Qty	Ply	LOT 115 PROVIDENCE CREEK FUQUAY-VARINA, NC
25-0639-R01	V02	Valley	1	1	
Job Reference (optional)					# 56323

Run: 8.630 s Jul 12 2024 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Mon Jan 27 20:47:29 2025 Page 1
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LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	n/a	MT20		244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00				
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-S							
BCDL	10.0										
										Weight: 38 lb	FT = 20%

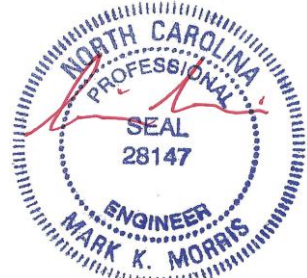
LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x4 SP No.3		MiTek recommends that Stabilizers and required cross bracing be installed during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

REACTIONS. (lb/size) 1=192/11-2-14 (min. 0-1-8), 3=192/11-2-14 (min. 0-1-8), 4=429/11-2-14 (min. 0-1-8)
Max Horz 1=-65(LC 10)
Max Uplift 1=-37(LC 14), 3=-46(LC 15), 4=-23(LC 14)
Max Grav 1=272(LC 20), 3=272(LC 21), 4=449(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-299/105

- NOTES-**
- 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; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.

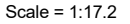
LOAD CASE(S) Standard



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Weight: 28 lb FT = 20%

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

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Job	Truss	Truss Type	Qty	Ply	LOT 115 PROVIDENCE CREEK FUQUAY-VARINA, NC
25-0639-R01	V04	Valley	1	1	
Job Reference (optional)					# 56323

Run: 8.630 s Jul 12 2024 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Mon Jan 27 20:47:29 2025 Page 1
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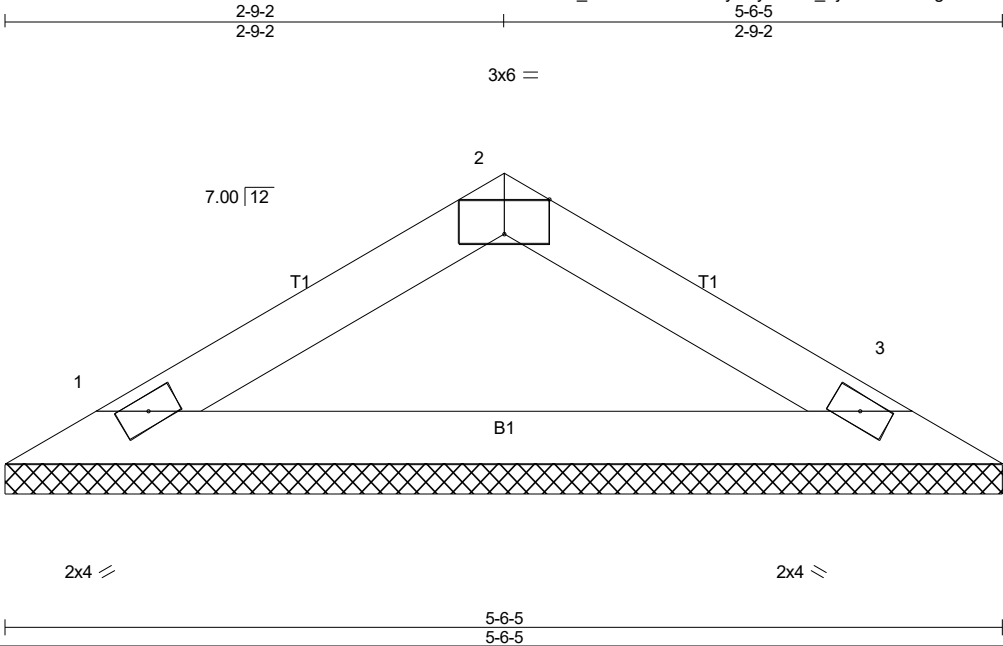


Plate Offsets (X,Y)-- [2:0-3-0,Edge]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	in (loc)	l/defl	MT20	GRIP
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.42	n/a	n/a		244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P		0.00	3		
BCDL	10.0							Weight: 16 lb	FT = 20%

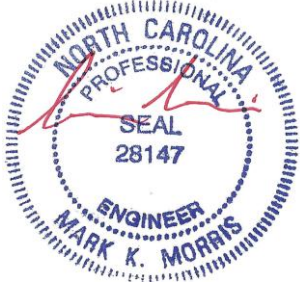
LUMBER-		BRACING-		<div> MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide. </div>
TOP CHORD	2x4 SP No.2	TOP CHORD		
BOT CHORD	2x4 SP No.3	BOT CHORD		

REACTIONS. (lb/size) 1=178/5-6-5 (min. 0-1-8), 3=178/5-6-5 (min. 0-1-8)
Max Horz 1=29(LC 13)
Max Uplift1=-21(LC 14), 3=-21(LC 15)
Max Grav 1=203(LC 20), 3=203(LC 21)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

LOAD CASE(S) Standard



1/27/2025

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Run: 8.630 s Jul 12 2024 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Mon Jan 27 20:47:29 2025 Page 1
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[illegible]

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

SPACING-	2-0-0
Plate Grip DOL	1.15
Lumber DOL	1.15
Rep Stress Incr	YES
Code IRC2021/TPI2014	

CSI.
TC 0.13
BC 0.09
WB 0.03
Matrix-P

DEFL.	in	(loc)	l/defl	L/d
Vert(LL)	n/a	-	n/a	999
Vert(CT)	n/a	-	n/a	999
Horz(CT)	0.00	3	n/a	n/a

PLATES	GRIP
MT20	244/190

Weight: 18 lb FT = 20%

BRACING-

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

TOP CHORD
BOT CHORD

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

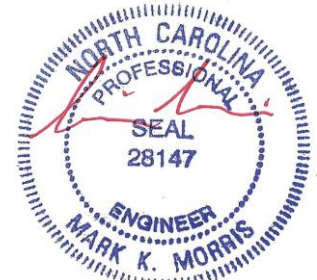
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=91/6-6-0 (min. 0-1-8), 3=91/6-6-0 (min. 0-1-8), 4=195/6-6-0 (min. 0-1-8)
 Max Horz 1=12(LC 14)
 Max Uplift 1=-21(LC 10), 3=-22(LC 11), 4=-11(LC 10)
 Max Grav 1=113(LC 20), 3=113(LC 21), 4=195(LC 1)

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

- 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; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.

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