Mark Morris, P.E.
#126, 1317-M, Summerville, SC 29483
843 209-5784, Fax (866)-213-4614

Mark Morris
Mark Morris
2025.10.17
10:40:49
-04'00'

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 #: 64080
JOB: 25-8623-R01
JOB NAME: LOT 158 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.
23 Truss Design(s)

Trusses:
PB01, PB02, R01, R02, R03, R03A, R04, R05, R07, R08, R09, R10, R11, VT01, VT02, VT03, VT04, VT05, VT06, VT07, VT08, VT09, VT10

10/15/2025
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.

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 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	PB01	GABLE	2	1	# 64080 Job Reference (optional)

Run: 8.630 s Jul 12 2024 Print: 8.830 s Sep 3 2025 MiTek Industries, Inc. Thu Oct 16 00:45:42 2025 Page 1
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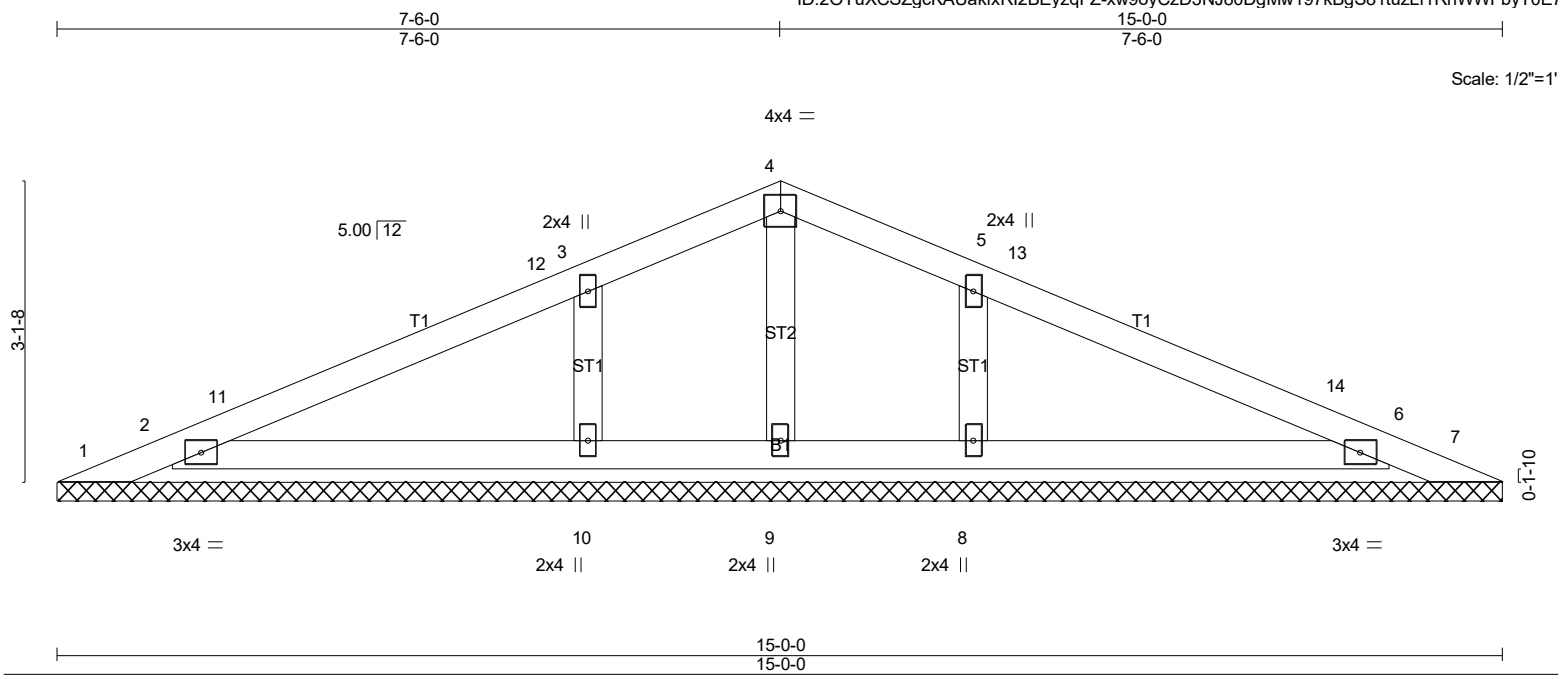

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-S							Weight: 51 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 15-0-0.
(lb) - Max Horz 1=-44(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 10, 8 except 1=-129(LC 21), 7=-129(LC 22)
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 9 except 2=410(LC 21), 6=410(LC 22), 10=429(LC 21), 8=429(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-10=-338/153, 5-8=-338/153

NOTES- (12-15)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) 0-4-9 to 5-2-2, Exterior(2R) 5-2-2 to 9-9-14, Exterior(2E) 9-9-14 to 14-7-7 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) 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) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 10, 8 except (jt=lb) 1=129, 7=129.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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Continued on page 2

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

10/15/2025

Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	PB02	Piggyback	19	1	# 64080 Job Reference (optional)

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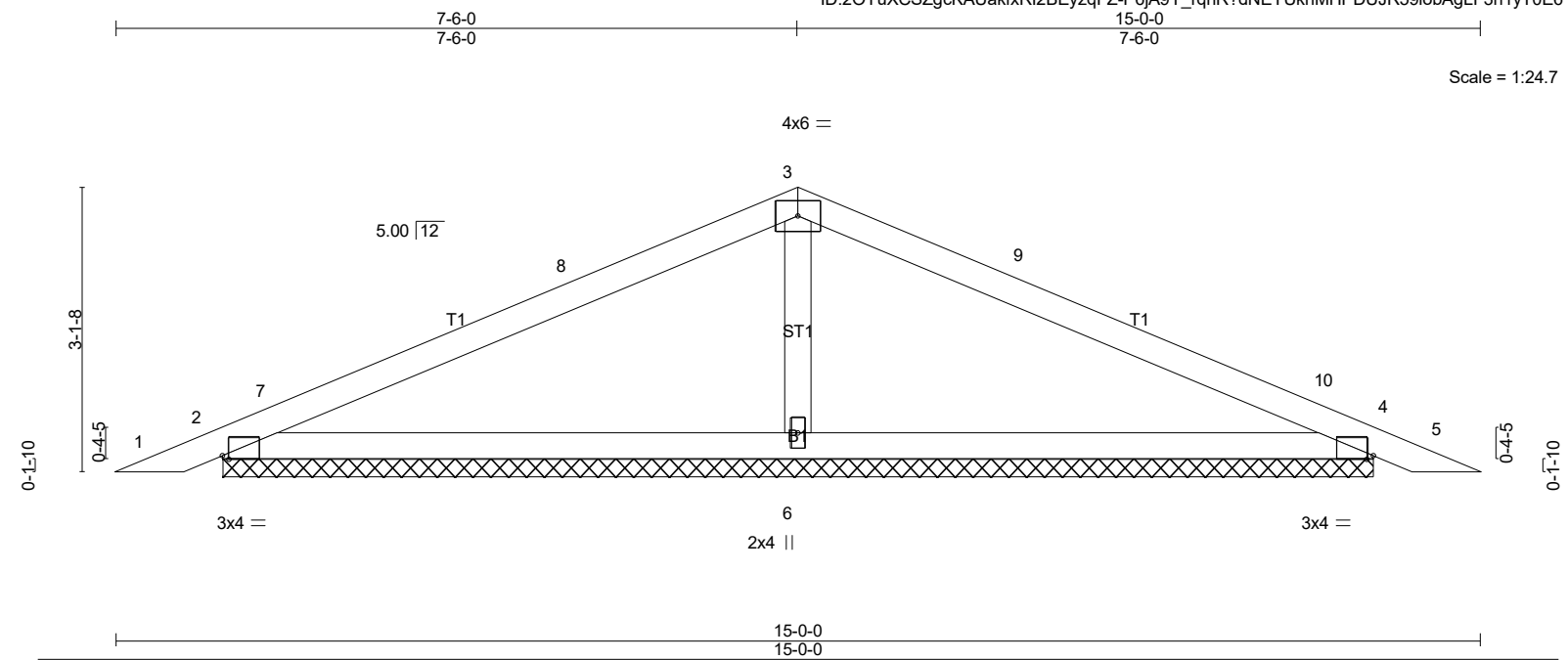

Plate Offsets (X,Y)-- [2:0-0-14,Edge], [4:0-0-14,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	0.03	5	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	0.06	5	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-S							Weight: 46 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. (lb/size) 2=274/12-7-10 (min. 0-1-8), 4=274/12-7-10 (min. 0-1-8), 6=560/12-7-10 (min. 0-1-8)
Max Horz 2=-44(LC 15)
Max Uplift2=-62(LC 14), 4=-70(LC 15), 6=-34(LC 14)
Max Grav 2=349(LC 21), 4=349(LC 22), 6=568(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-379/195

NOTES- (11-14)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) 0-4-9 to 5-2-2, Exterior(2R) 5-2-2 to 9-9-14, Exterior(2E) 9-9-14 to 14-7-7 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 6.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
11) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
13) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
14) SEE BCSI-B3 SUMMARY SHEET- PERMANENT 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.

10/15/2025

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	R01	GABLE	2	1	# 64080
					Job Reference (optional)

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-0-10-8 26-0-0 41-0-0 67-0-0
0-10-8 26-0-0 15-0-0 26-0-0

Scale = 1:114.9

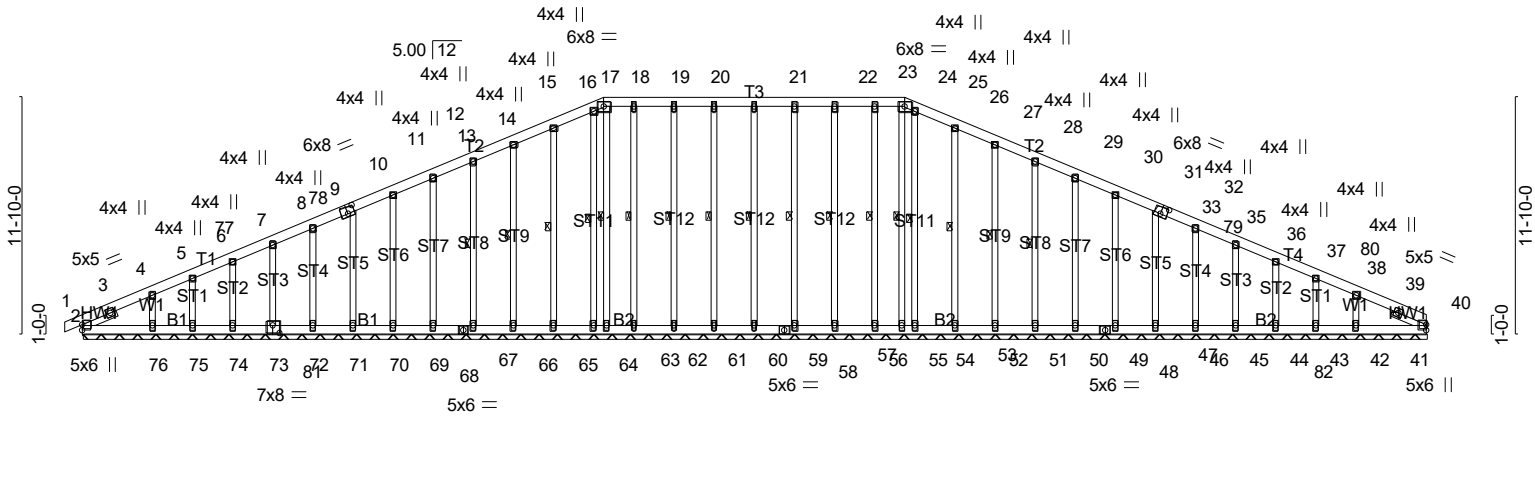

Plate Offsets (X,Y)-- [9:0-4-0,0-4-0], [33:0-4-0,0-4-0], [73:0-4-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	-0.00	1	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	1	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.01	40	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH								
BCDL	10.0										Weight: 697 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 1-10-0, Right 2x4 SP No.3 1-10-0

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.
WEBS 1 Row at midpt 21-59, 20-60, 19-61, 18-62, 16-64, 15-65, 14-66, 13-67, 17-63, 22-57, 23-56, 24-55, 26-53, 27-52, 28-51, 29-50, 25-54

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

REACTIONS. All bearings 67-0-0.
(lb) - Max Horz 2=-171(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 2, 59, 60, 61, 62, 65, 66, 67, 69, 70, 71, 72, 73, 74, 75, 57, 56, 55, 52, 51, 50, 49, 47, 46, 45, 44, 43, 42 except 41=-105(LC 15), 76=-119(LC 14)
Max Grav All reactions 250 lb or less at joint(s) 2, 40, 62, 64, 72, 73, 74, 75, 63, 55, 53, 45, 44, 43, 42, 54 except 59=287(LC 44), 60=287(LC 44), 61=295(LC 44), 65=293(LC 45), 66=289(LC 45), 67=287(LC 45), 69=286(LC 45), 70=288(LC 45), 71=284(LC 45), 57=287(LC 44), 56=295(LC 44), 52=293(LC 45), 51=289(LC 45), 50=287(LC 45), 49=286(LC 45), 47=288(LC 45), 46=284(LC 45), 41=274(LC 55), 76=261(LC 54)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 13-14=-106/261, 14-15=-122/297, 15-16=-136/329, 16-17=-134/329, 17-18=-132/326, 18-19=-132/326, 19-20=-132/326, 20-21=-132/326, 21-22=-132/326, 22-23=-132/326, 23-24=-132/326, 24-25=-132/326, 25-26=-134/329, 26-27=-136/329, 27-28=-122/297, 28-29=-106/261

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; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 5-9-14, Exterior(2N) 5-9-14 to 19-3-10, Corner(3R) 19-3-10 to 32-8-6, Exterior(2N) 32-8-6 to 34-3-10, Corner(3R) 34-3-10 to 47-6-0, Exterior(2N) 47-6-0 to 60-3-10, Corner(3E) 60-3-10 to 67-0-0 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

NORTH CAROLINA PROFESSIONAL SEAL 28147 ENGINEER MARK K. MORRIS

10/15/2025

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	R01	GABLE	2	1	Job Reference (optional) # 64080

NOTES- (15-18)

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 3x6 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, 59, 60, 61, 62, 65, 66, 67, 69, 70, 71, 72, 73, 74, 75, 57, 56, 55, 52, 51, 50, 49, 47, 46, 45, 44, 43, 42 except (jt=lb) 41=105, 76=119.
15) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
16) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
17) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
18) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

10/15/2025

Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	R02	Piggyback Base	8	1	# 64080
					Job Reference (optional)

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-0-10-8	8-10-5	17-5-3	26-0-0	33-6-0	41-0-0	47-6-12	57-1-10	67-0-0
0-10-8	8-10-5	8-6-13	8-6-13	7-6-0	7-6-0	6-6-12	9-6-14	9-10-6

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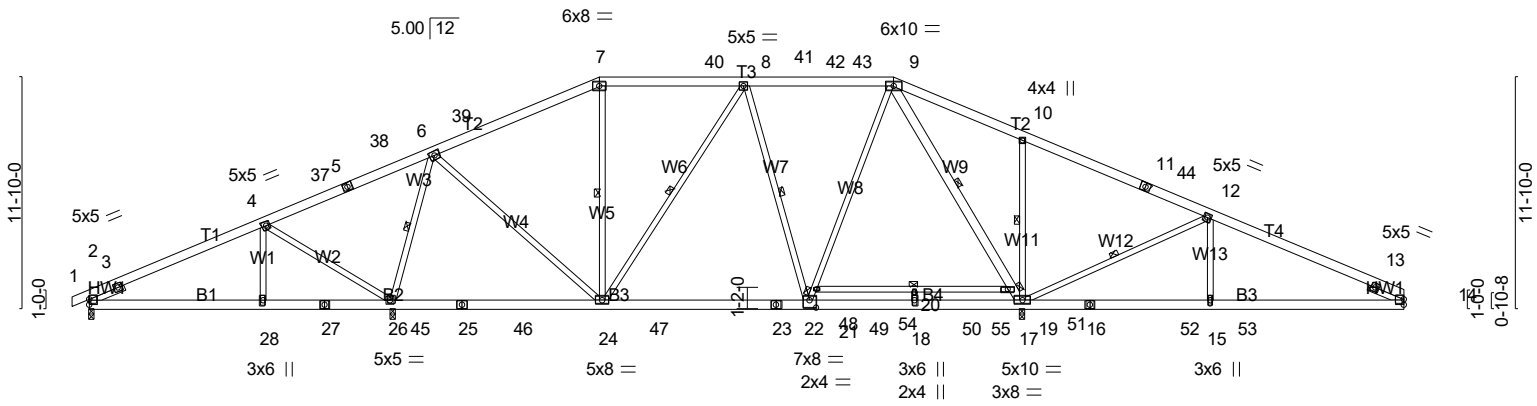


8-10-5	15-5-12	26-0-0	36-6-12	42-0-12	47-6-12	57-1-10	67-0-0
8-10-5	6-7-7	10-6-4	10-6-12	5-6-0	5-6-0	9-6-14	9-10-6

Plate Offsets (X,Y)-- [22:0-4-0,0-4-8]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.31	20-21	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.43	20-21	>893	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.03	17	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 525 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
B4: 2x6 SP DSS, B5: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
W9: 2x6 SP No.2
SLIDER Left 2x4 SP No.3 1-11-0, Right 2x4 SP No.3 1-11-0

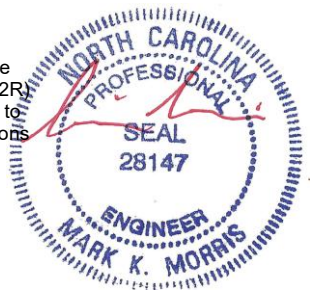
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-8-5 oc bracing. Except:
6-0-0 oc bracing: 19-21
WEBS 1 Row at midpt 6-26, 7-24, 8-24, 8-22, 9-19, 10-17, 12-17

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) 14=Mechanical.
(lb) - Max Horz 2=172(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) except 2=-102(LC 14), 26=-229(LC 14), 17=-146(LC 15), 14=-126(LC 15)
Max Grav All reactions 250 lb or less at joint(s) except 2=628(LC 41), 26=2357(LC 45), 17=3149(LC 45), 14=664(LC 43)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-394/0, 3-4=-694/117, 6-38=0/293, 6-39=-1177/275, 7-39=-1127/305, 7-40=-1040/327, 40-41=-1040/327, 8-41=-1040/327, 8-42=-1182/289, 42-43=-1182/289, 9-43=-1182/289, 9-10=-29/454, 10-11=0/479, 11-44=0/261, 12-13=-863/204, 13-14=-401/0
BOT CHORD 2-28=-191/580, 27-28=-191/580, 26-27=-191/580, 26-45=-42/415, 25-45=-42/415, 25-46=-42/415, 24-46=-42/415, 24-47=-19/1310, 23-47=-19/1310, 23-48=-19/1310, 22-48=-19/1310, 22-49=0/839, 18-49=0/839, 18-50=0/839, 50-51=0/839, 17-51=0/839, 16-17=-101/731, 16-52=-101/731, 15-52=-101/731, 15-53=-101/731, 14-53=-101/731
WEBS 4-28=0/286, 4-26=-816/239, 6-26=-1684/299, 6-24=-17/1003, 8-24=-455/59, 8-22=-553/197, 21-22=-54/1139, 9-21=-28/1256, 9-19=-1829/158, 17-19=-1920/133, 10-17=-865/263, 12-17=-1114/287, 12-15=0/280, 18-20=-360/0

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; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 5-9-14, Interior(1) 5-9-14 to 19-3-10, Exterior(2R) 19-3-10 to 32-8-6, Interior(1) 32-8-6 to 34-3-10, Exterior(2R) 34-3-10 to 47-6-12, Interior(1) 47-6-12 to 60-3-10, Exterior(2E) 60-3-10 to 67-0-0 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.



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Continued on page 2

Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	R02	Piggyback Base	8	1	Job Reference (optional) # 64080

NOTES- (13-16)

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 5x6 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 2, 229 lb uplift at joint 26, 146 lb uplift at joint 17 and 126 lb uplift at joint 14.
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

10/15/2025

Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	R03	PIGGYBACK BASE	1	1	# 64080
					Job Reference (optional)

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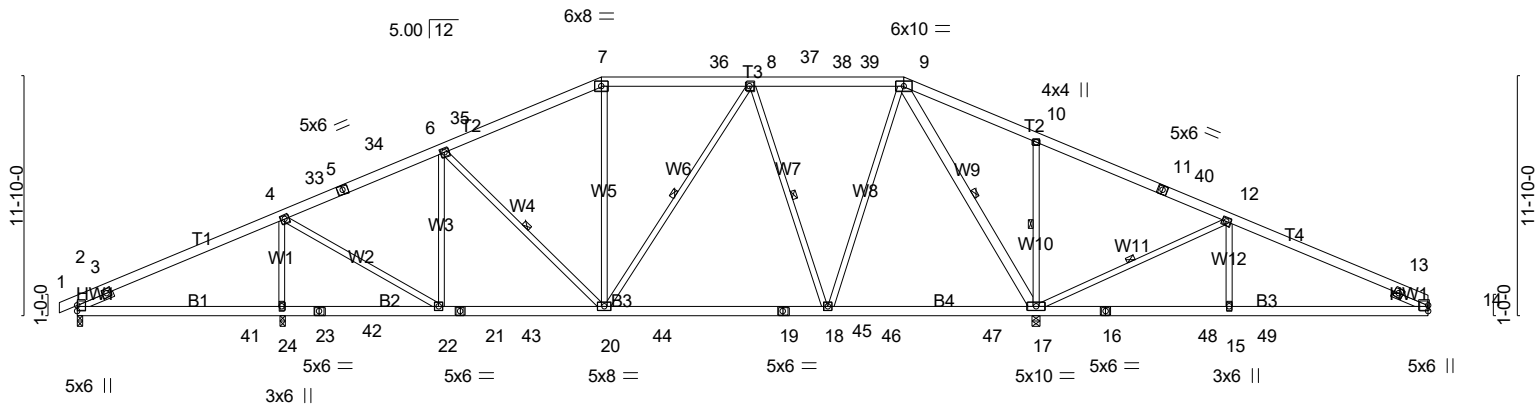
-0-10-8	10-1-12	18-0-14	26-0-0	33-6-0	41-0-0	47-6-12	57-1-10	67-0-0
0-10-8	10-1-12	7-11-2	7-11-2	7-6-0	7-6-0	6-6-12	9-6-14	9-10-6

Scale = 1:114.3



10-1-12	18-0-14	26-0-0	37-2-12	47-6-12	57-1-10	67-0-0
10-1-12	7-11-2	7-11-2	11-2-12	10-4-0	9-6-14	9-10-6

LOADING (psf)
TCLL (roof) 20.0
Snow (Pf) 20.0
TCDL 10.0
BCLL 0.0 *
BCDL 10.0

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

CSI.
TC 0.71
BC 0.64
WB 1.00
Matrix-MSH

DEFL.	in	(loc)	l/defl	L/d
Vert(LL)	-0.19	18-20	>999	240
Vert(CT)	-0.29	18-20	>999	180
Horz(CT)	0.04	17	n/a	n/a

PLATES MT20
GRIP 244/190

Weight: 512 lb FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
B4: 2x6 SP DSS
WEBS 2x4 SP No.3 *Except*
W9: 2x6 SP No.2
SLIDER Left 2x4 SP No.3 1-11-0, Right 2x4 SP No.3 1-11-0

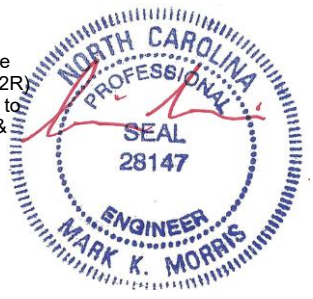
BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-1-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-20, 8-20, 8-18, 9-17, 10-17, 12-17

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) 14=Mechanical.
(lb) - Max Horz 2=172(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) except 2=-194(LC 10), 24=-187(LC 14), 17=-245(LC 11), 14=-125(LC 15)
Max Grav All reactions 250 lb or less at joint(s) except 2=594(LC 54), 24=2081(LC 45), 17=3134(LC 45), 14=646(LC 43)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-356/165, 3-4=-559/298, 4-33=-1719/386, 5-33=-1650/390, 5-34=-1638/394, 6-34=-1526/413, 6-35=-1632/417, 7-35=-1551/444, 7-36=-1433/455, 36-37=-1433/455, 8-37=-1433/455, 8-38=-1161/367, 38-39=-1161/367, 9-39=-1161/367, 9-10=0/576, 10-11=0/576, 11-40=0/384, 12-40=0/327, 12-13=-828/198, 13-14=-438/0
BOT CHORD 2-41=-204/443, 24-41=-204/443, 24-42=-204/443, 23-42=-204/443, 22-23=-204/443, 21-22=-208/1492, 21-43=-208/1492, 20-43=-208/1492, 20-44=-121/1412, 19-44=-121/1412, 19-45=-121/1412, 18-45=-121/1412, 18-46=-5/780, 46-47=-5/780, 17-47=-5/780, 16-17=-96/699, 16-48=-96/699, 15-48=-96/699, 15-49=-96/699, 14-49=-96/699
WEBS 4-24=-1706/255, 4-22=-5/1338, 6-22=-485/106, 6-20=-328/311, 7-20=0/281, 8-20=-80/485, 8-18=-871/242, 9-18=-123/1383, 9-17=-2048/264, 10-17=-865/262, 12-17=-1141/276, 12-15=0/397

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; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 5-9-14, Interior(1) 5-9-14 to 19-3-10, Exterior(2R) 19-3-10 to 32-8-6, Interior(1) 32-8-6 to 34-3-10, Exterior(2R) 34-3-10 to 47-6-12, Interior(1) 47-6-12 to 60-3-10, Exterior(2E) 60-3-10 to 67-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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.



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Continued on page 2

Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	R03	PIGGYBACK BASE	1	1	Job Reference (optional) # 64080

NOTES- (13-16)

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) Refer to girder(s) for truss to truss connections.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 194 lb uplift at joint 2, 187 lb uplift at joint 24, 245 lb uplift at joint 17 and 125 lb uplift at joint 14.
13) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
14) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
15) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
16) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	R03A	Piggyback Base	1	1	Job Reference (optional) **# 64080**

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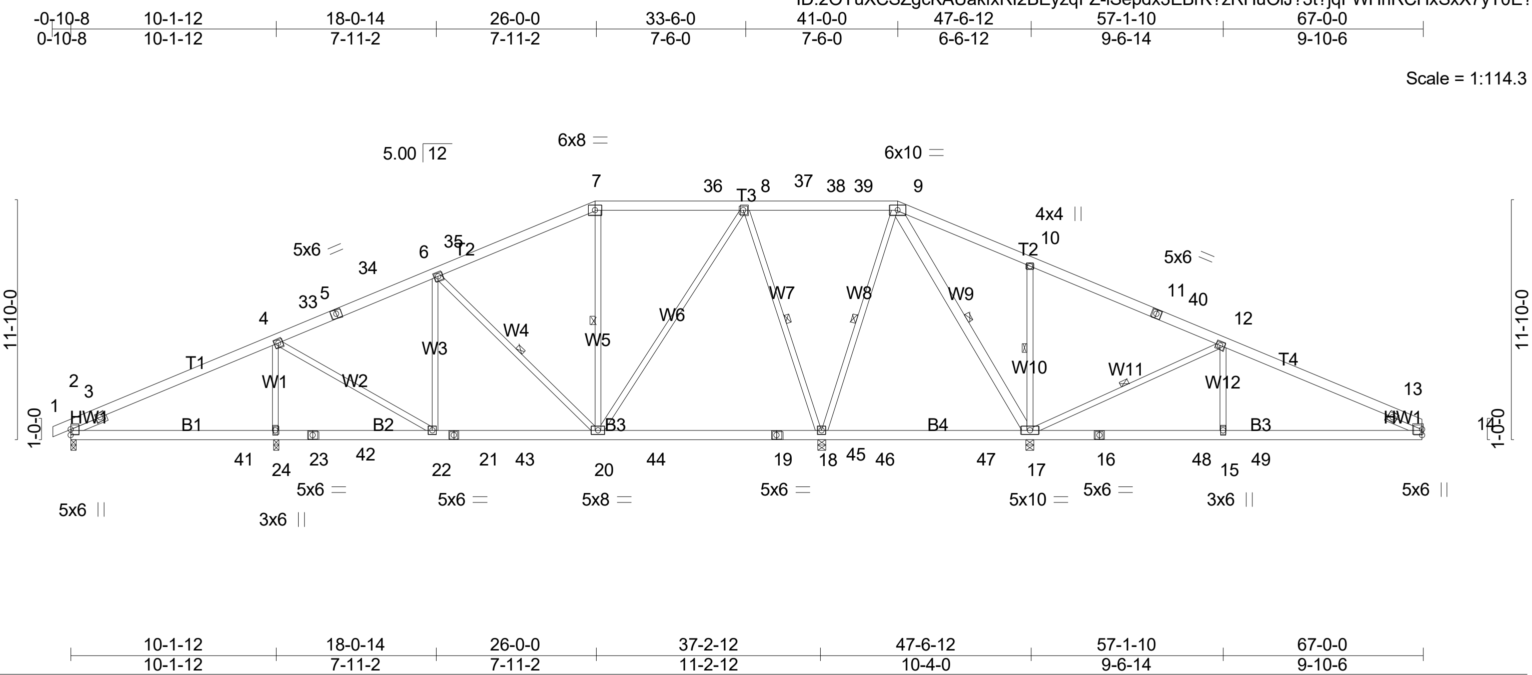

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.16	18-20	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.23	18-20	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.02	2	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-MSH							Weight: 512 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
B4: 2x6 SP DSS
WEBS 2x4 SP No.3 *Except*
W9: 2x6 SP No.2
SLIDER Left 2x4 SP No.3 1-11-0, Right 2x4 SP No.3 1-11-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-10-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 17-18.
WEBS 1 Row at midpt 6-20, 7-20, 8-18, 9-18, 9-17, 10-17, 12-17

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) 14=Mechanical.
(lb) - Max Horz 2=172(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) except 2=-197(LC 10), 24=-168(LC 14), 18=-162(LC 10), 17=-272(LC 15), 14=-124(LC 15)
Max Grav All reactions 250 lb or less at joint(s) except 2=619(LC 54), 24=1555(LC 45), 18=2078(LC 44), 17=1811(LC 39), 14=676(LC 55)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-373/169, 3-4=-612/307, 4-33=-1279/318, 5-33=-1194/323, 5-34=-1179/327, 6-34=-1042/346, 6-35=-892/316, 7-35=-762/343, 7-36=-701/361, 36-37=-701/361, 8-37=-701/361, 8-38=-39/300, 38-39=-39/300, 9-39=-39/300, 9-10=-29/465, 10-11=0/480, 11-40=0/271, 12-13=-896/195, 13-14=-464/0
BOT CHORD 2-41=-212/491, 24-41=-212/491, 24-42=-212/491, 23-42=-212/491, 22-23=-212/491, 21-22=-161/1067, 21-43=-161/1067, 20-43=-161/1067, 20-44=0/379, 19-44=0/379, 19-45=0/379, 18-45=0/379, 16-17=-93/761, 16-48=-93/761, 15-48=-93/761, 15-49=-93/761, 14-49=-93/761
WEBS 4-24=-1246/236, 4-22=0/755, 6-20=-576/193, 8-20=-101/1002, 8-18=-1365/315, 9-18=-253/77, 9-17=-319/38, 10-17=-863/262, 12-17=-1138/276, 12-15=0/397

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; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 5-9-14, Interior(1) 5-9-14 to 19-3-10, Exterior(2R) 19-3-10 to 32-8-6, Interior(1) 32-8-6 to 34-3-10, Exterior(2R) 34-3-10 to 47-6-12, Interior(1) 47-6-12 to 60-3-10, Exterior(2E) 60-3-10 to 67-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) 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.

NORTH CAROLINA PROFESSIONAL SEAL 28147 ENGINEER MARK K. MORRIS

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Continued on page 2

NOTES- (13-16)

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) Refer to girder(s) for truss to truss connections.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 197 lb uplift at joint 2, 168 lb uplift at joint 24, 162 lb uplift at joint 18, 272 lb uplift at joint 17 and 124 lb uplift at joint 14.
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

10/15/2025

Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	R04	PIGGYBACK BASE	2	1	Job Reference (optional) **# 64080**

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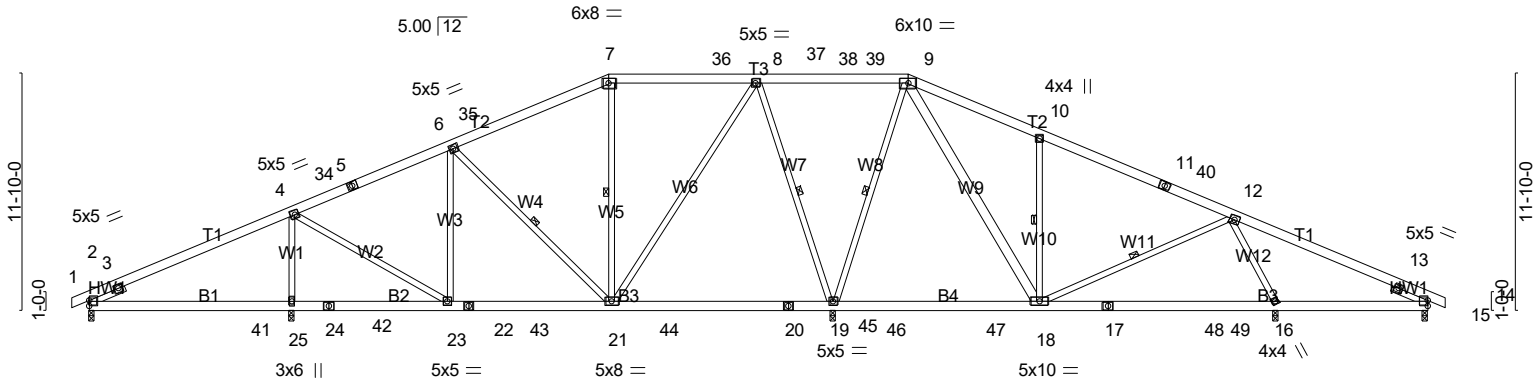
-0-10-8	10-1-12	18-0-14	26-0-0	33-6-0	41-0-0	47-6-12	57-1-10	67-0-0	67-10-8
0-10-8	10-1-12	7-11-2	7-11-2	7-6-0	7-6-0	6-6-12	9-6-14	9-10-6	0-10-8

Scale = 1:115.3



10-1-12	18-0-14	26-0-0	37-2-12	47-6-12	59-4-4	67-0-0
10-1-12	7-11-2	7-11-2	11-2-12	10-4-0	11-9-8	7-7-12

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.16	19-21	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.23	19-21	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.03	16	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-MSH							Weight: 515 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2 *Except* B4: 2x6 SP DSS
WEBS	2x4 SP No.3 *Except* W9: 2x6 SP No.2
SLIDER	Left 2x4 SP No.3 1-11-0, Right 2x4 SP No.3 1-11-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-11-14 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 6-21, 7-21, 8-19, 9-19, 10-18, 12-18

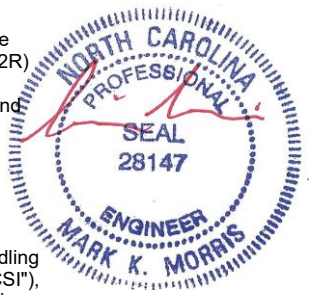
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 2=167(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) except 2=-197(LC 10), 25=-163(LC 14), 19=-246(LC 11), 14=-180(LC 11), 16=-110(LC 15)
Max Grav All reactions 250 lb or less at joint(s) except 2=617(LC 54), 25=1536(LC 45), 19=2712(LC 45), 14=452(LC 55), 16=1234(LC 39)

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

TOP CHORD	2-3=-372/171, 3-4=-608/311, 4-34=-1244/312, 5-34=-1174/316, 5-6=-1030/339, 6-35=-874/304, 7-35=-745/331, 7-36=-686/350, 36-37=-686/350, 8-37=-686/350, 8-38=0/335, 38-39=0/335, 9-39=0/335, 9-10=-941/369, 10-11=-793/243, 11-40=-854/219, 12-40=-933/210, 12-13=-362/246
BOT CHORD	2-41=-198/487, 25-41=-198/487, 25-42=-198/487, 24-42=-198/487, 23-24=-198/487, 22-23=-151/1052, 22-43=-151/1052, 21-43=-151/1052, 21-44=-6/375, 20-44=-6/375, 20-45=-6/375, 19-45=-6/375, 17-18=-189/664, 17-48=-189/664, 48-49=-189/664, 16-49=-189/664, 14-16=-140/266
WEBS	4-25=-1222/231, 4-23=0/737, 6-21=-592/197, 8-21=-109/1025, 8-19=-1383/322, 9-19=-1164/232, 9-18=-262/1203, 10-18=-858/263, 12-16=-1078/211

NOTES- (12-15)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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 5-9-14, Interior(1) 5-9-14 to 19-3-10, Exterior(2R) 19-3-10 to 32-8-6, Interior(1) 32-8-6 to 34-3-10, Exterior(2R) 34-3-10 to 47-6-12, Interior(1) 47-6-12 to 61-2-2, Exterior(2E) 61-2-2 to 67-10-8 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) 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.



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Continued on page 2

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.

NOTES- (12-15)

7) Provide adequate drainage to prevent water ponding.
8) All plates are 5x6 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 197 lb uplift at joint 2, 163 lb uplift at joint 25, 246 lb uplift at joint 19, 180 lb uplift at joint 14 and 110 lb uplift at joint 16.
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

10/15/2025

Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	R05	Piggyback Base	7	1	# 64080
					Job Reference (optional)

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-0-10-8	10-1-12	18-0-14	26-0-0	33-6-0	41-0-0	47-6-12	57-1-10	67-0-0
0-10-8	10-1-12	7-11-2	7-11-2	7-6-0	7-6-0	6-6-12	9-6-14	9-10-6

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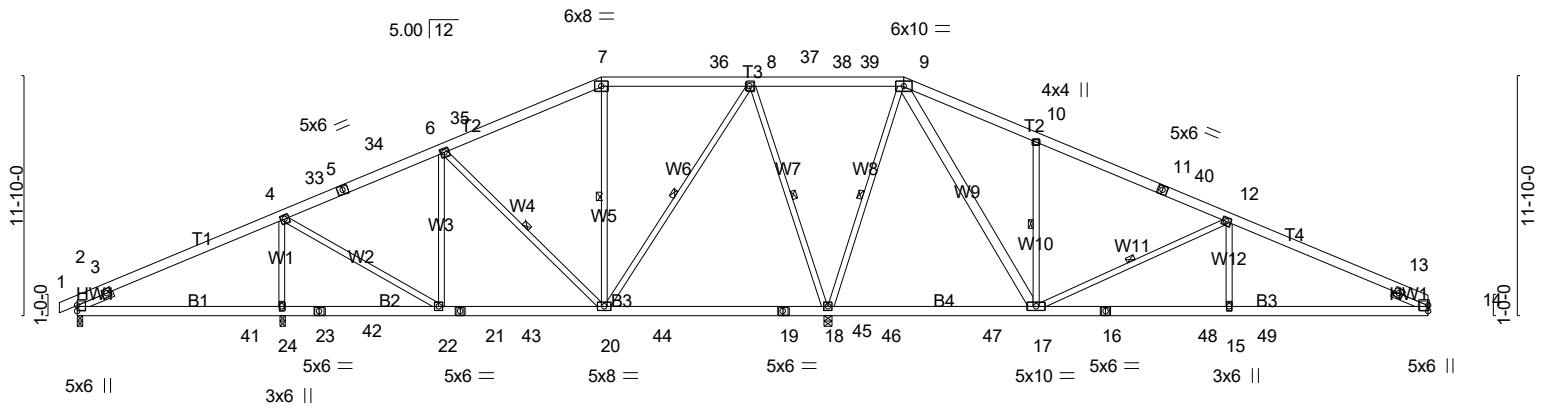

10-1-12	18-0-14	26-0-0	37-2-12	47-6-12	57-1-10	67-0-0
10-1-12	7-11-2	7-11-2	11-2-12	10-4-0	9-6-14	9-10-6

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.16	18-20	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.23	18-20	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.03	14	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-MSH							Weight: 512 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2 *Except* B4: 2x6 SP DSS
WEBS	2x4 SP No.3 *Except* W7: 2x4 SP No.2, W8: 2x4 SP No.1, W9: 2x6 SP No.2
SLIDER	Left 2x4 SP No.3 1-11-0, Right 2x4 SP No.3 1-11-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-1-9 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 18-20,17-18.
WEBS	1 Row at midpt 6-20, 7-20, 8-20, 8-18, 9-18, 10-17, 12-17

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) 18=0-4-0, 14=Mechanical.
(lb) - Max Horz 2=172(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) except 2=-195(LC 10), 24=-164(LC 14), 18=-277(LC 11), 14=-176(LC 15)
Max Grav All reactions 250 lb or less at joint(s) except 2=605(LC 54), 24=1360(LC 35), 18=3525(LC 45), 14=1016(LC 43)

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

TOP CHORD	2-3=-358/166, 3-4=-580/296, 4-33=-1082/271, 5-33=-1012/276, 5-34=-1003/280, 6-34=-868/299, 6-35=-665/253, 7-35=-517/281, 7-36=-474/303, 36-37=-474/303, 8-37=-474/303, 8-38=0/927, 38-39=0/927, 9-39=0/927, 9-10=-739/334, 10-11=-590/207, 11-40=-649/183, 12-40=-725/174, 12-13=-1664/313, 13-14=-631/0
BOT CHORD	2-41=-202/462, 24-41=-202/462, 24-42=-202/462, 23-42=-202/462, 22-23=-202/462, 21-22=-157/899, 21-43=-157/899, 20-43=-157/899, 20-44=-495/256, 19-44=-495/256, 19-45=-495/256, 18-45=-495/256, 18-46=-383/198, 46-47=-383/198, 17-47=-383/198, 16-17=-201/1461, 16-48=-201/1461, 15-48=-201/1461, 15-49=-201/1461, 14-49=-201/1461
WEBS	4-24=-1052/233, 4-22=0/561, 6-20=-731/195, 7-20=-368/95, 8-20=-146/1324, 8-18=-1531/355, 9-18=-1754/273, 9-17=-321/1759, 10-17=-869/263, 12-17=-1064/265, 12-15=0/382

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; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 5-9-14, Interior(1) 5-9-14 to 19-3-10, Exterior(2R) 19-3-10 to 32-8-6, Interior(1) 32-8-6 to 34-3-10, Exterior(2R) 34-3-10 to 47-6-12, Interior(1) 47-6-12 to 60-3-10, Exterior(2E) 60-3-10 to 67-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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.

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Continued on page 2

Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	R05	Piggyback Base	7	1	Job Reference (optional) # 64080

NOTES- (13-16)

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) Refer to girder(s) for truss to truss connections.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 195 lb uplift at joint 2, 164 lb uplift at joint 24, 277 lb uplift at joint 18 and 176 lb uplift at joint 14.
13) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
14) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
15) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
16) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	R07	Common Supported Gable	1	1	# 64080 Job Reference (optional)

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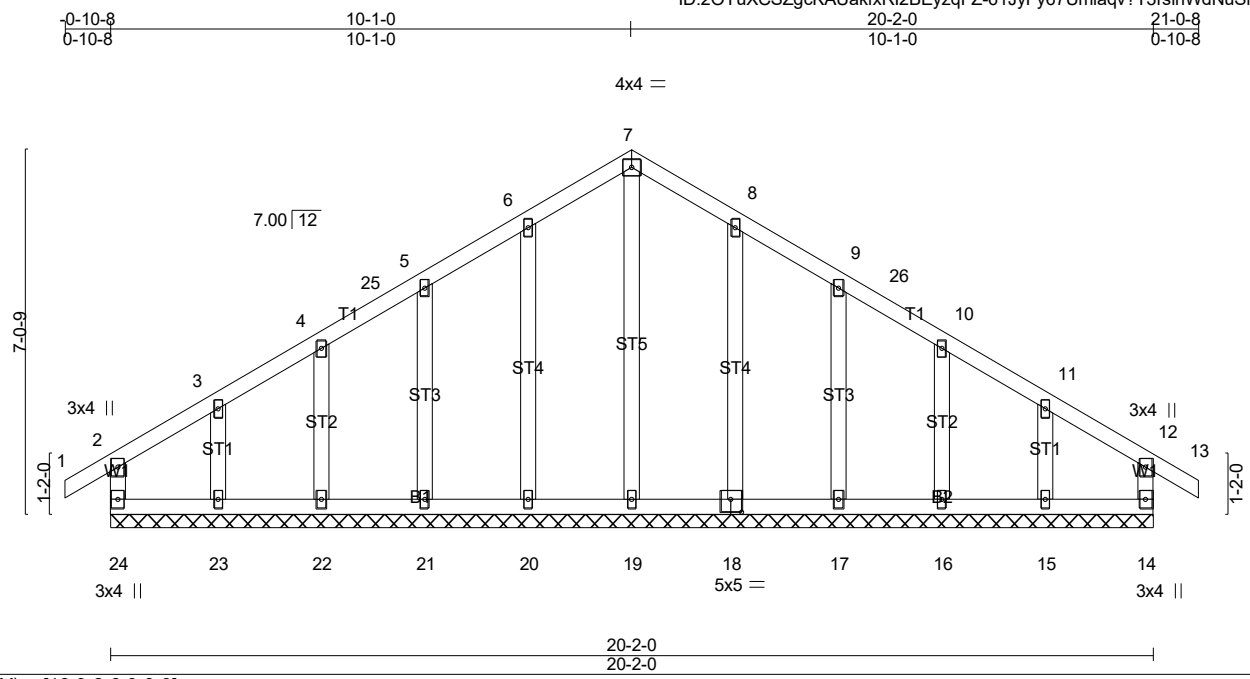

Plate Offsets (X,Y)-- [18:0-2-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.00	13	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.00	13	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.00	14	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-R							Weight: 123 lb	FT = 20%
BCDL	10.0											

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

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

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

REACTIONS. All bearings 20-2-0.
(lb) - Max Horz 24=-171(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 24, 14, 20, 21, 22, 23, 18, 17, 16, 15
Max Grav All reactions 250 lb or less at joint(s) 24, 14, 21, 22, 23, 17, 16, 15 except 19=262(LC 27), 20=305(LC 5), 18=302(LC 6)

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

NOTES- (14-17)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 4-1-0, Exterior(2N) 4-1-0 to 5-3-6, Corner(3R) 5-3-6 to 14-10-10, Exterior(2N) 14-10-10 to 16-1-0, Corner(3E) 16-1-0 to 21-0-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 14, 20, 21, 22, 23, 18, 17, 16, 15.

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Continued on page 2

Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	R07	Common Supported Gable	1	1	Job Reference (optional) # 64080

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

10/15/2025

Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	R08	Common	1	1	# 64080
					Job Reference (optional)

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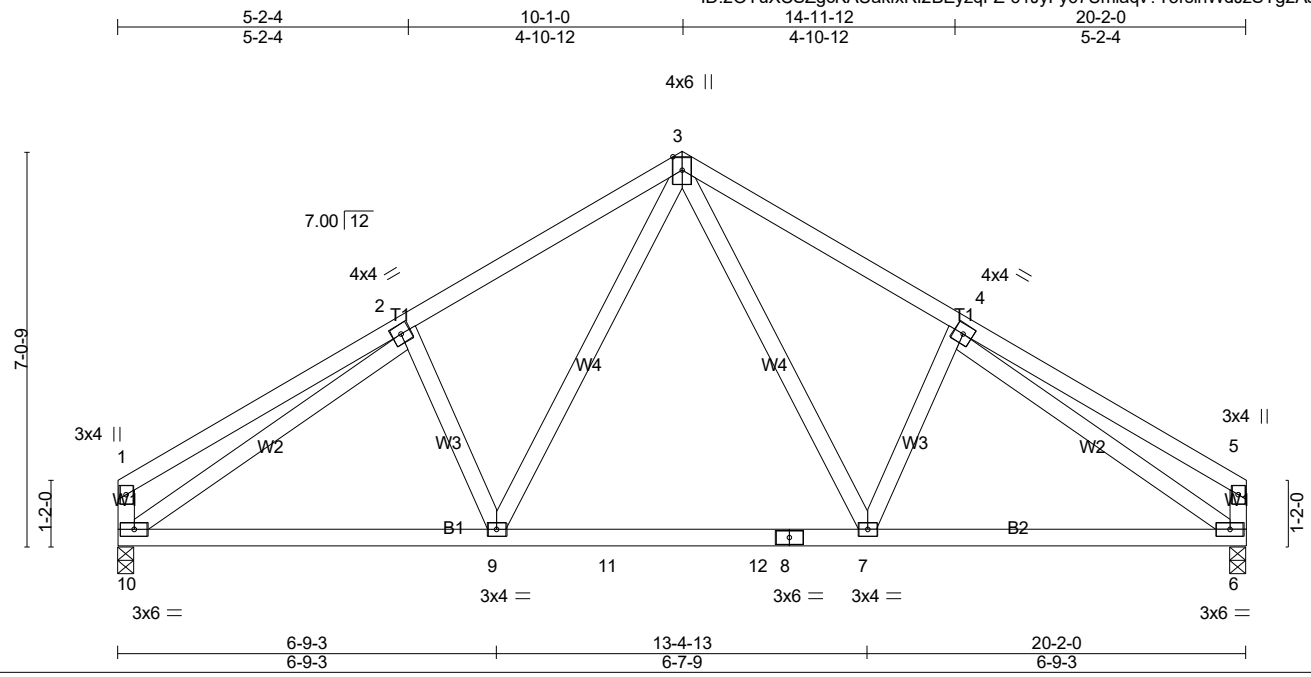

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.12	7-9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.16	7-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.02	6	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS							Weight: 118 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 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) 10=795/0-3-8 (min. 0-1-8), 6=795/0-3-8 (min. 0-1-8)
Max Horz 10=-158(LC 10)
Max Uplift10=-90(LC 14), 6=-90(LC 15)
Max Grav 10=839(LC 20), 6=839(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-265/79, 2-3=-1021/178, 3-4=-1021/178, 4-5=-265/80
BOT CHORD 9-10=-128/902, 9-11=-19/647, 11-12=-19/647, 8-12=-19/647, 7-8=-19/647, 6-7=-69/873
WEBS 3-7=-92/411, 3-9=-91/411, 2-10=-908/72, 4-6=-908/64

NOTES- (9-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 5-0-11, Exterior(2R) 5-0-11 to 15-1-5, Exterior(2E) 15-1-5 to 20-0-4 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
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 a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 6.
8) 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.
9) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

10/15/2025

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	R09	Common Girder	1	3	Job Reference (optional) # 64080

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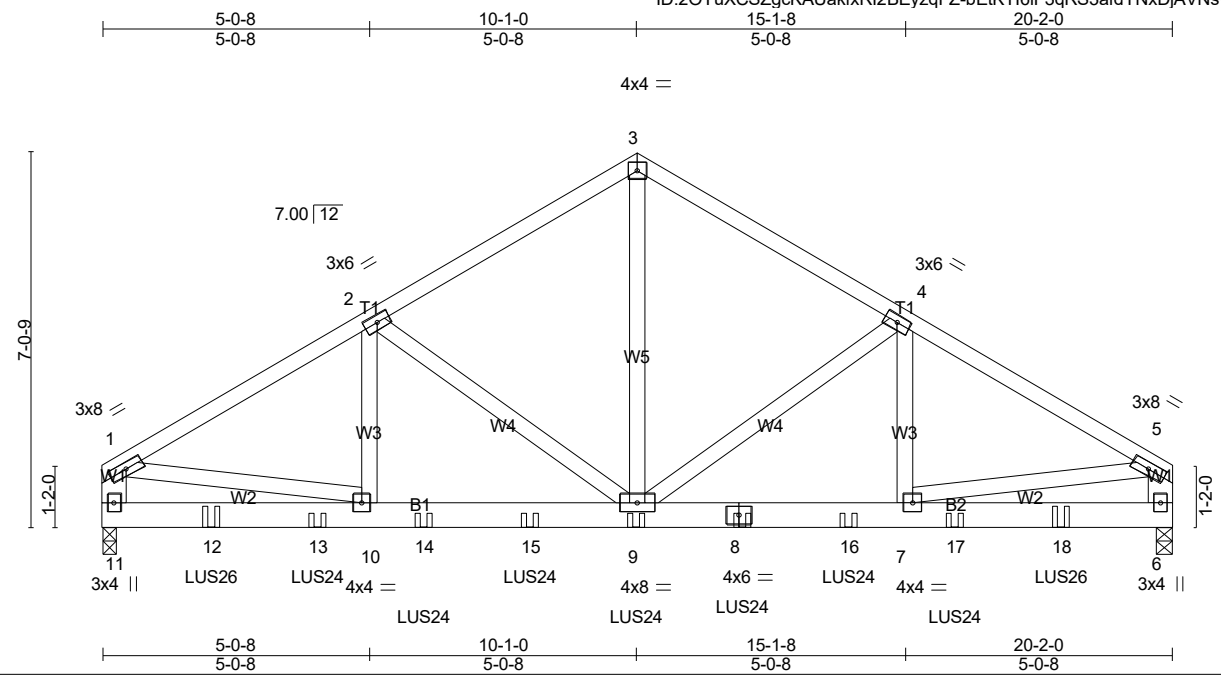


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.04	7-9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.08	7-9	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.49	Horz(CT)	0.02	6	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-MSH							Weight: 406 lb	FT = 20%
BCDL	10.0											

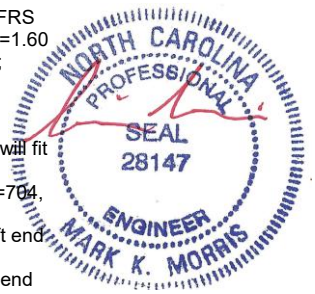
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
W1: 2x6 SP No.2

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.

REACTIONS. (lb/size) 11=3690/0-3-8 (min. 0-1-8), 6=3661/0-3-8 (min. 0-1-8)
Max Horz 11=-156(LC 8)
Max Uplift11=-704(LC 12), 6=-700(LC 13)
Max Grav 11=3735(LC 18), 6=3706(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-4821/913, 2-3=-3661/743, 3-4=-3661/743, 4-5=-4807/911, 1-11=-3179/619, 5-6=-3171/618
BOT CHORD 11-12=-245/646, 12-13=-245/646, 10-13=-245/646, 10-14=-804/4106, 14-15=-804/4106, 9-15=-804/4106, 8-9=-743/4094, 8-16=-743/4094, 7-16=-743/4094, 7-17=-141/634, 17-18=-141/634, 6-18=-141/634
WEBS 3-9=-647/3260, 4-9=-1293/335, 4-7=-213/1032, 2-9=-1308/337, 2-10=-215/1050, 1-10=-615/3532, 5-7=-615/3531

NOTES- (13-16)
1) 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, 2x6 - 2 rows staggered 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.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) 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
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=704, 6=700.
10) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss) or equivalent spaced at 16-0-0 oc max. starting at 2-0-12 from the left end to 18-0-12 to connect truss(es) R02 (1 ply 2x6 SP), R03 (1 ply 2x6 SP) to front face of bottom chord.
11) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 4-0-12 from the left end to 16-0-12 to connect truss(es) R02 (1 ply 2x6 SP) to front face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.



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Continued on page 2

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
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-5=-60, 6-11=-20
Concentrated Loads (lb)
Vert: 8=-644(F) 9=-644(F) 12=-644(F) 13=-644(F) 14=-644(F) 15=-644(F) 16=-644(F) 17=-644(F) 18=-626(F)

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Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	R10	Common Supported Gable	1	1	# 64080 Job Reference (optional)

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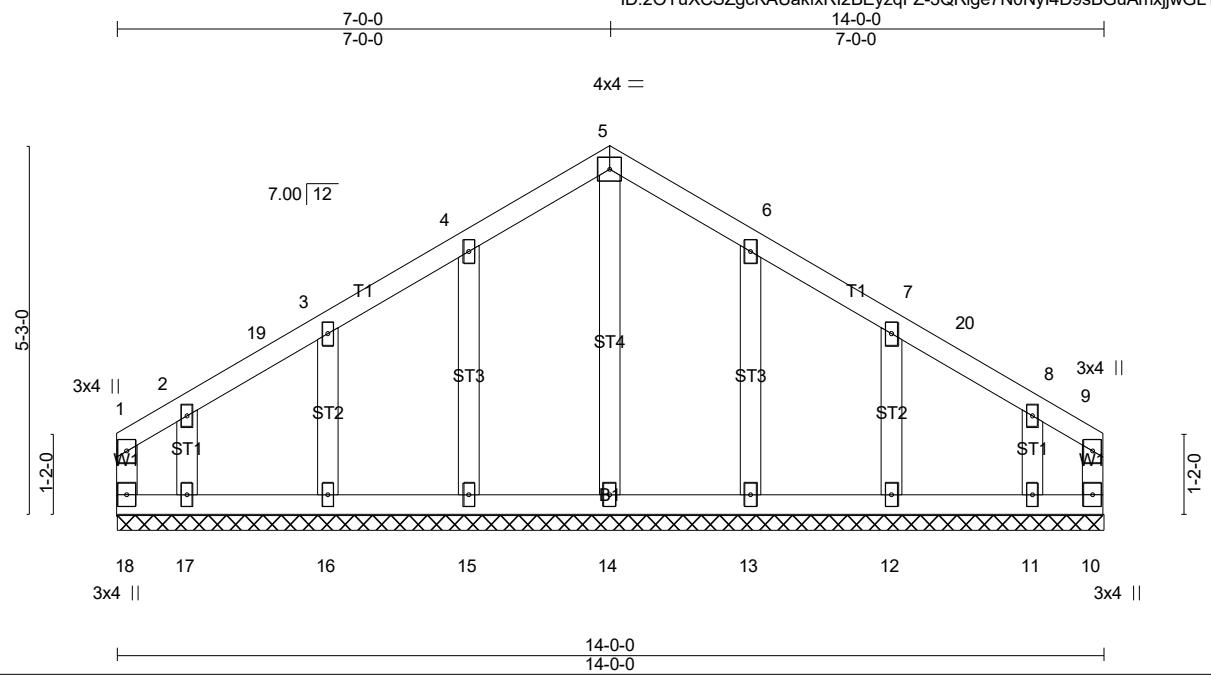

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	-0.00	10	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-R							Weight: 76 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

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

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

REACTIONS. All bearings 14-0-0.
(lb) - Max Horz 18=-118(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 18, 10, 15, 16, 17, 13, 12, 11
Max Grav All reactions 250 lb or less at joint(s) 18, 10, 14, 15, 16, 17, 13, 12, 11

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

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 Corner(3E) 0-1-12 to 5-0-0, Corner(3R) 5-0-0 to 9-0-0, Corner(3E) 9-0-0 to 13-10-4 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
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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 10, 15, 16, 17, 13, 12, 11.
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.

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

Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	R10	Common Supported Gable	1	1	Job Reference (optional) # 64080

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	R11	Common Girder	1	3	Job Reference (optional) # 64080

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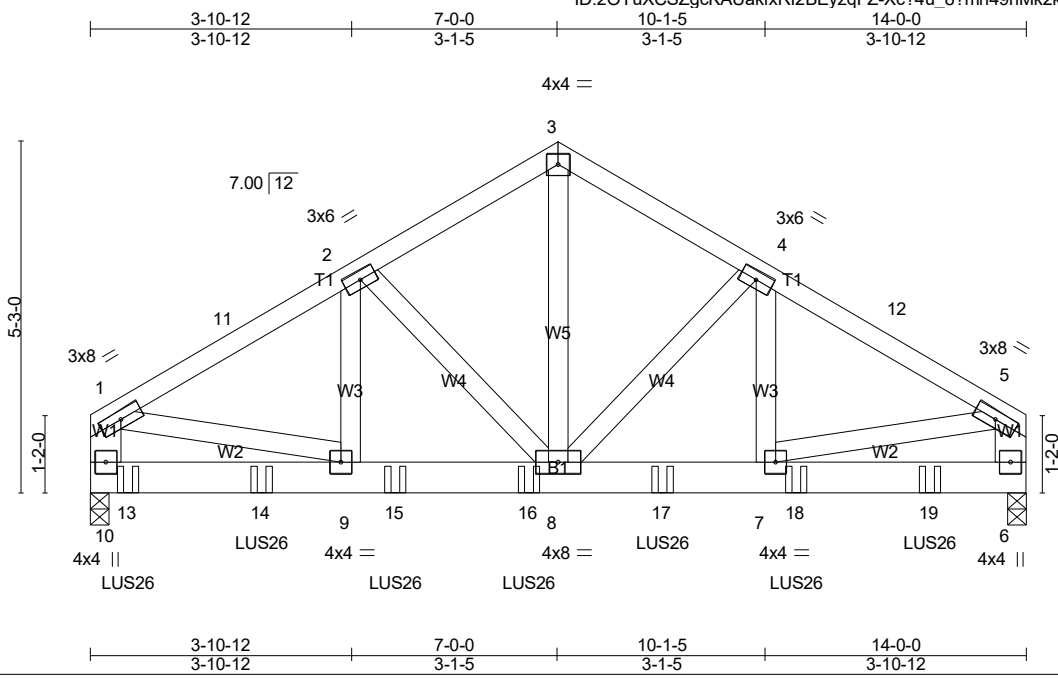


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.03	7-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.05	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.43	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-MSH							Weight: 290 lb	FT = 20%
BCDL	10.0											

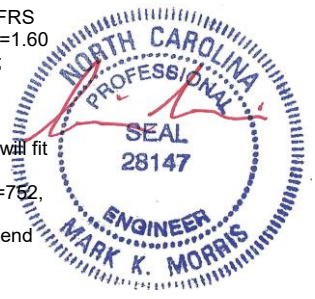
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
W1: 2x6 SP No.2

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.

REACTIONS. (lb/size) 10=4258/0-3-8 (min. 0-1-11), 6=3802/0-3-8 (min. 0-1-8)
Max Horz 10=116(LC 11)
Max Uplift10=-752(LC 12), 6=-670(LC 13)
Max Grav 10=4326(LC 18), 6=3870(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-11=-4261/729, 2-11=-4190/739, 2-3=-3359/627, 3-4=-3359/627, 4-12=-4216/744, 5-12=-4287/735, 1-10=-2990/531, 5-6=-3003/533
BOT CHORD 10-13=-199/620, 13-14=-199/620, 9-14=-199/620, 9-15=-637/3620, 15-16=-637/3620, 8-16=-637/3620, 8-17=-609/3642, 7-17=-609/3642, 7-18=-127/642, 18-19=-127/642, 6-19=-127/642
WEBS 3-8=-567/3077, 4-8=-1121/253, 4-7=-203/1005, 2-8=-1090/246, 2-9=-195/970, 1-9=-503/3090, 5-7=-504/3090

NOTES- (12-15)
1) 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, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) 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
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=752, 6=670.
10) Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-6-12 from the left end to 12-6-12 to connect truss(es) R05 (1 ply 2x6 SP) to front face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.



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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: 1-3=-60, 3-5=-60, 6-10=-20
Concentrated Loads (lb)
Vert: 13=-1002(F) 14=-996(F) 15=-996(F) 16=-996(F) 17=-996(F) 18=-996(F) 19=-996(F)

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Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	VT01	Valley	1	1	# 64080
					Job Reference (optional)

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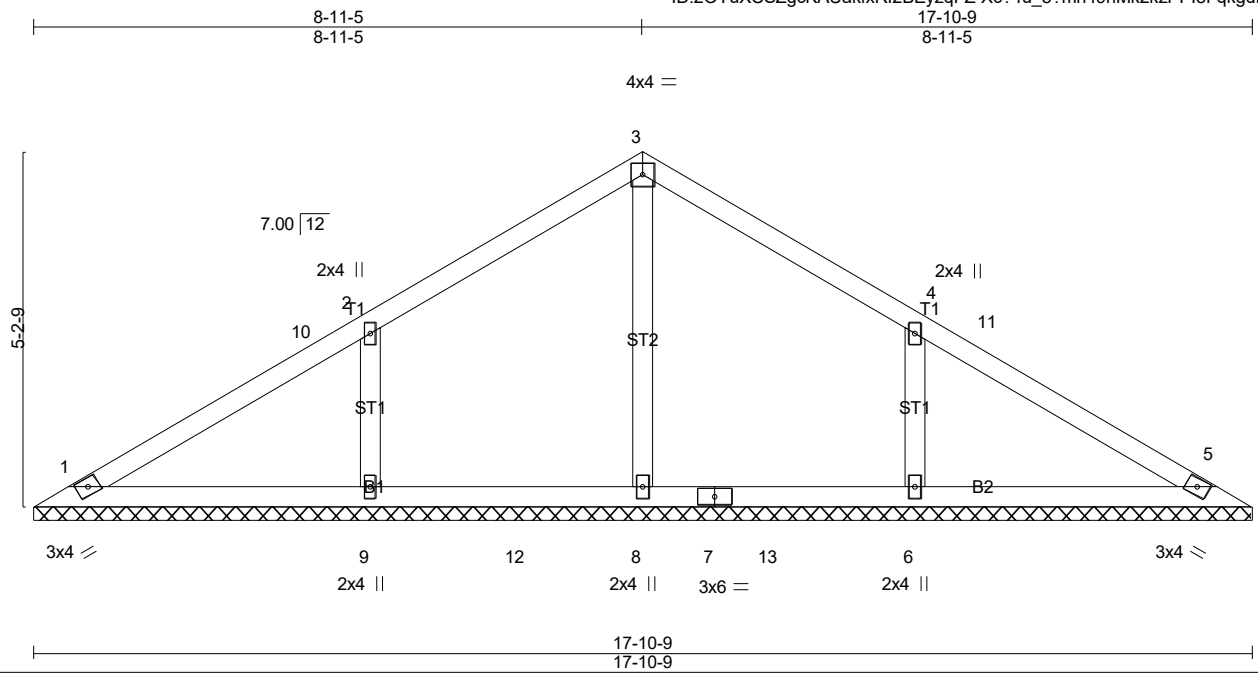


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-S							Weight: 69 lb	FT = 20%
BCDL	10.0											

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

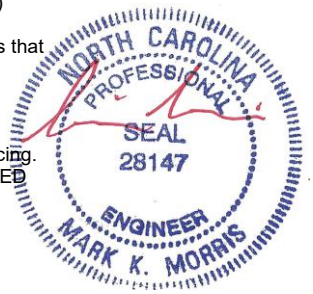
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. All bearings 17-10-9.
(lb) - Max Horz 1=-108(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=-136(LC 14), 6=-136(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=372(LC 5), 9=514(LC 20), 6=514(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-410/177, 4-6=-410/177

NOTES- (9-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-1, Exterior(2R) 5-4-1 to 12-6-8, Exterior(2E) 12-6-8 to 17-4-2 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, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 9=136, 6=136.
9) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	VT02	Valley	1	1	# 64080
					Job Reference (optional)

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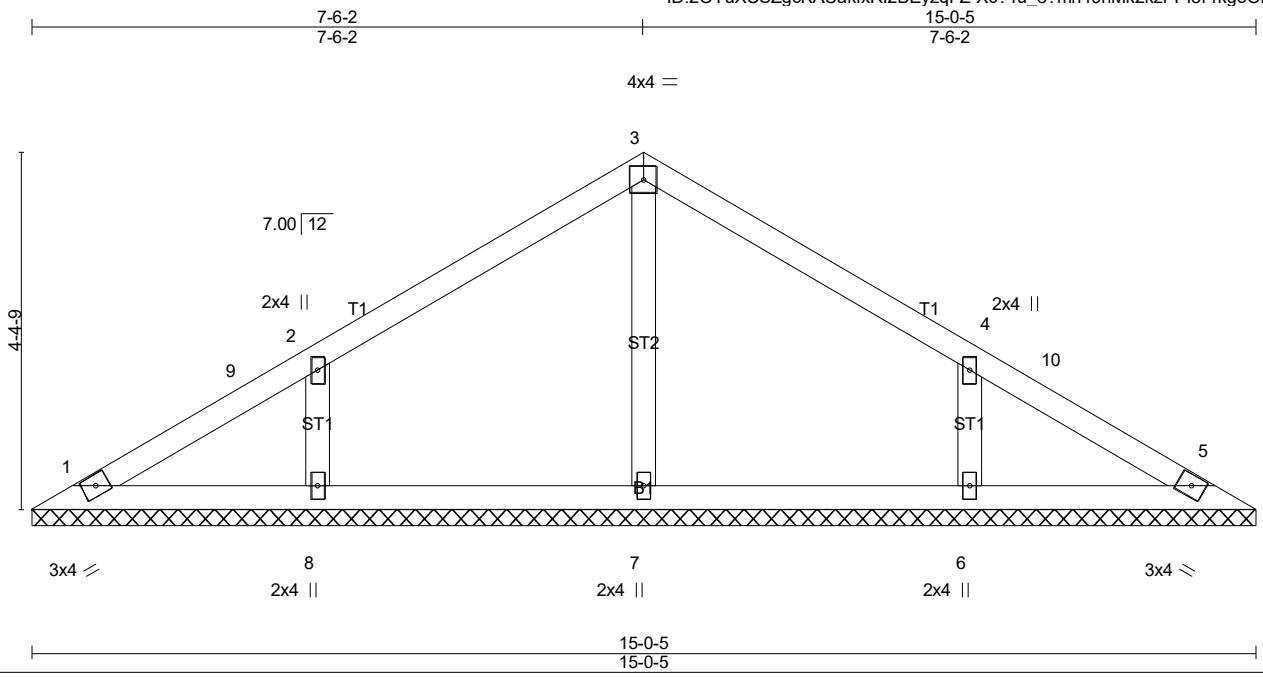


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-S							Weight: 57 lb	FT = 20%
BCDL	10.0											

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

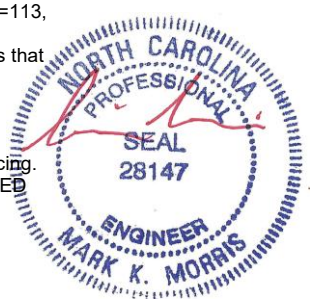
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. All bearings 15-0-5.
(lb) - Max Horz 1=90(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-113(LC 14), 6=-113(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=286(LC 20), 8=444(LC 20), 6=444(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-367/149, 4-6=-367/149

NOTES- (9-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-1, Exterior(2R) 5-4-1 to 9-8-3, Exterior(2E) 9-8-3 to 14-5-13 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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 except (jt=lb) 8=113, 6=113.
9) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



LOAD CASE(S) Standard

10/15/2025

Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	VT03	GABLE	1	1	# 64080
					Job Reference (optional)

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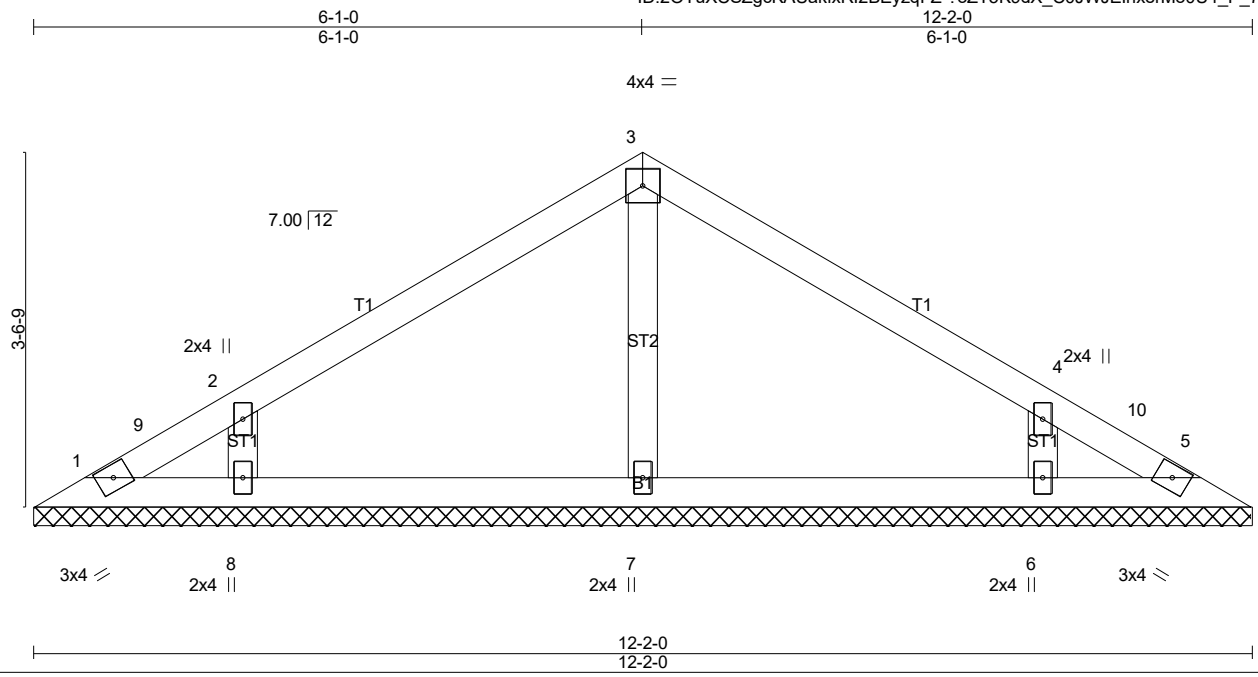


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-S							Weight: 44 lb	FT = 20%
BCDL	10.0											

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

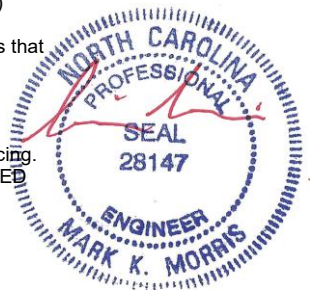
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. All bearings 12-2-0.
(lb) - Max Horz 1=71(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-104(LC 14), 6=-104(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=291(LC 20), 8=425(LC 20), 6=425(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-368/141, 4-6=-368/141

NOTES- (9-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-1, Exterior(2R) 5-4-1 to 6-9-15, Exterior(2E) 6-9-15 to 11-7-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) 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, 5 except (jt=lb) 8=104, 6=104.
9) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



LOAD CASE(S) Standard

10/15/2025

Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	VT04	Valley	1	1	# 64080
					Job Reference (optional)

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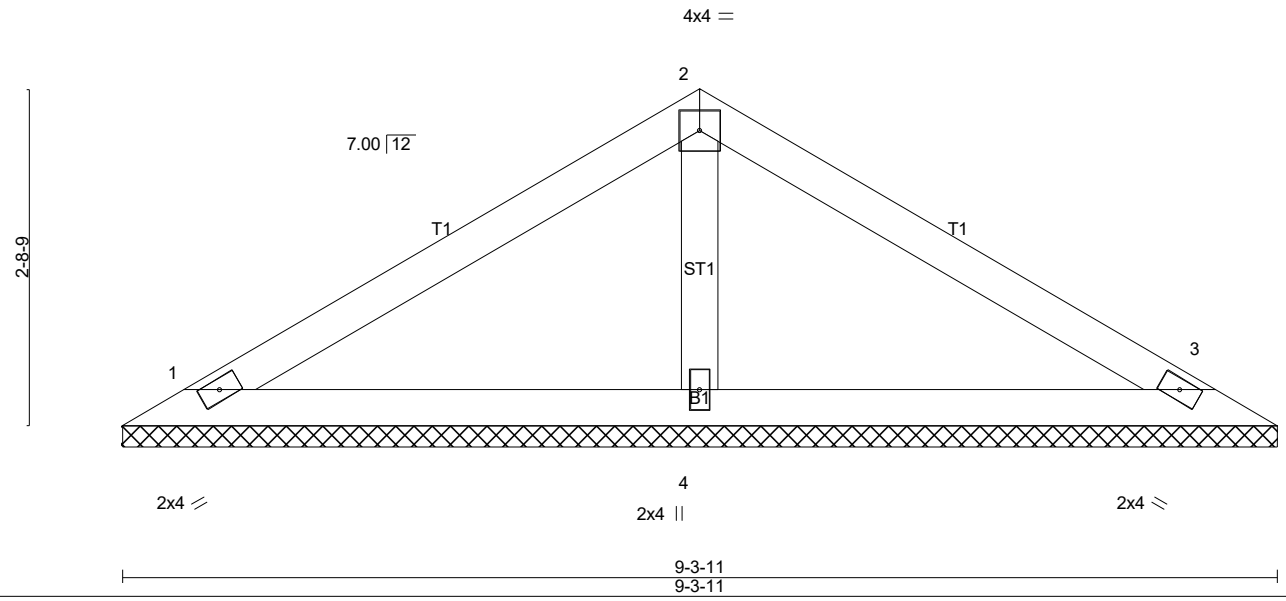
4-7-14 / 4-7-14 — 9-3-11 / 4-7-14

Scale = 1:18.6



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-S							Weight: 31 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. (lb/size) 1=156/9-3-11 (min. 0-1-8), 3=156/9-3-11 (min. 0-1-8), 4=347/9-3-11 (min. 0-1-8)
Max Horz 1=-53(LC 12)
Max Uplift1=-30(LC 14), 3=-37(LC 15), 4=-18(LC 14)
Max Grav 1=223(LC 20), 3=223(LC 21), 4=358(LC 20)

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

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

LOAD CASE(S) Standard

10/15/2025

Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	VT05	Valley	1	1	# 64080
					Job Reference (optional)

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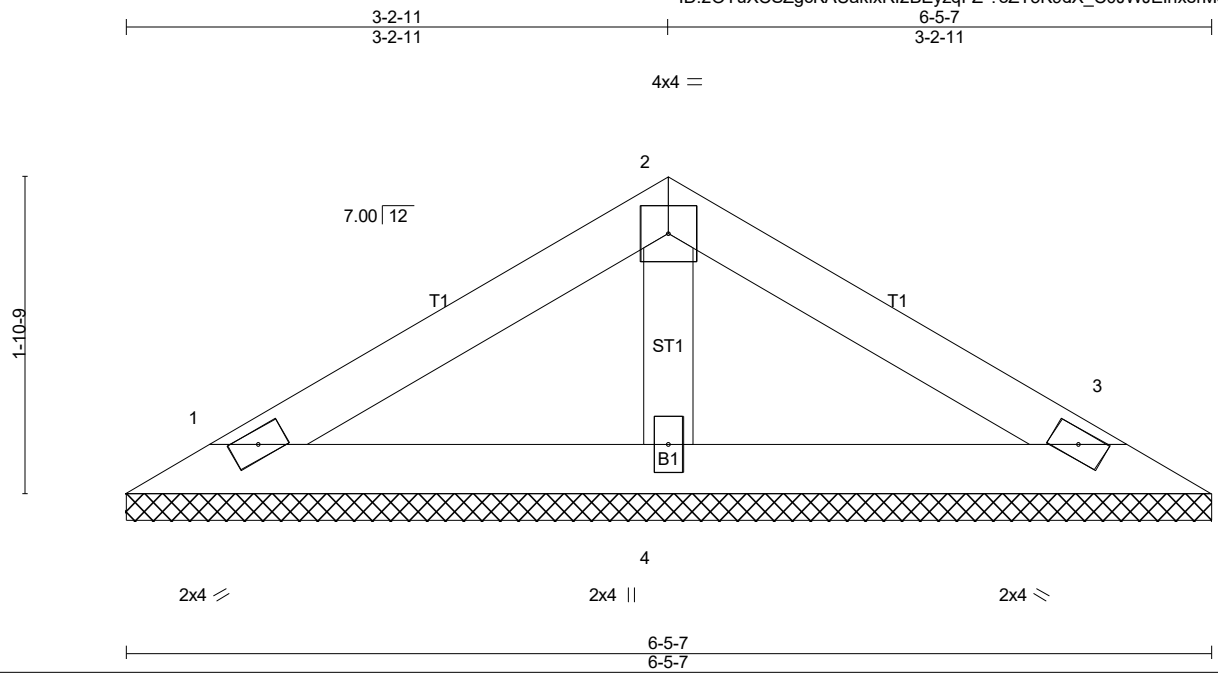

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P							Weight: 21 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. (lb/size) 1=112/6-5-7 (min. 0-1-8), 3=112/6-5-7 (min. 0-1-8), 4=206/6-5-7 (min. 0-1-8)
Max Horz 1=35(LC 11)
Max Uplift1=-24(LC 14), 3=-29(LC 15), 4=-2(LC 14)
Max Grav 1=148(LC 20), 3=148(LC 21), 4=206(LC 1)

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

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

LOAD CASE(S) Standard

10/15/2025

Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	VT06	Valley	1	1	# 64080
					Job Reference (optional)

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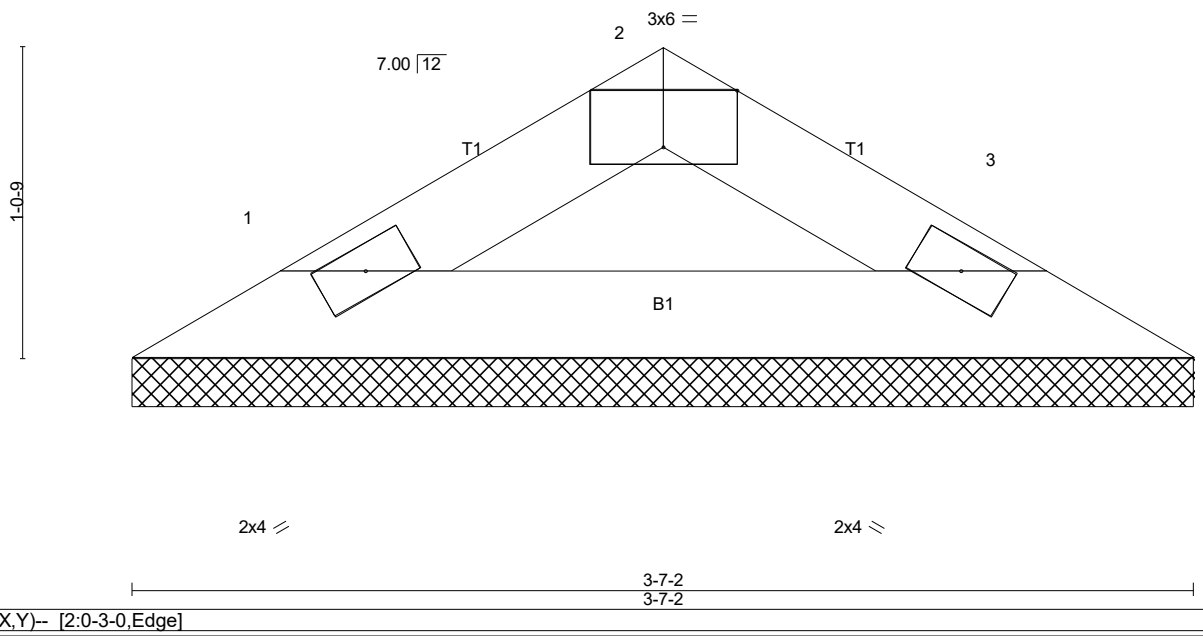


Plate Offsets (X,Y)-- [2:0-3-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P							Weight: 10 lb	FT = 20%
BCDL	10.0											

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

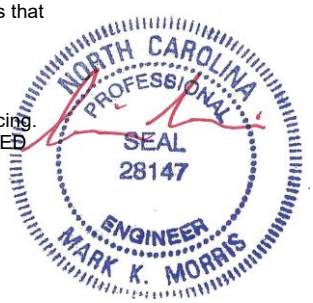
BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-7-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size) 1=101/3-7-2 (min. 0-1-8), 3=101/3-7-2 (min. 0-1-8)
Max Horz 1=-16(LC 12)
Max Uplift1=-12(LC 14), 3=-12(LC 15)
Max Grav 1=109(LC 20), 3=109(LC 21)

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

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



LOAD CASE(S) Standard

10/15/2025

Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	VT07	Valley	1	1	# 64080
					Job Reference (optional)

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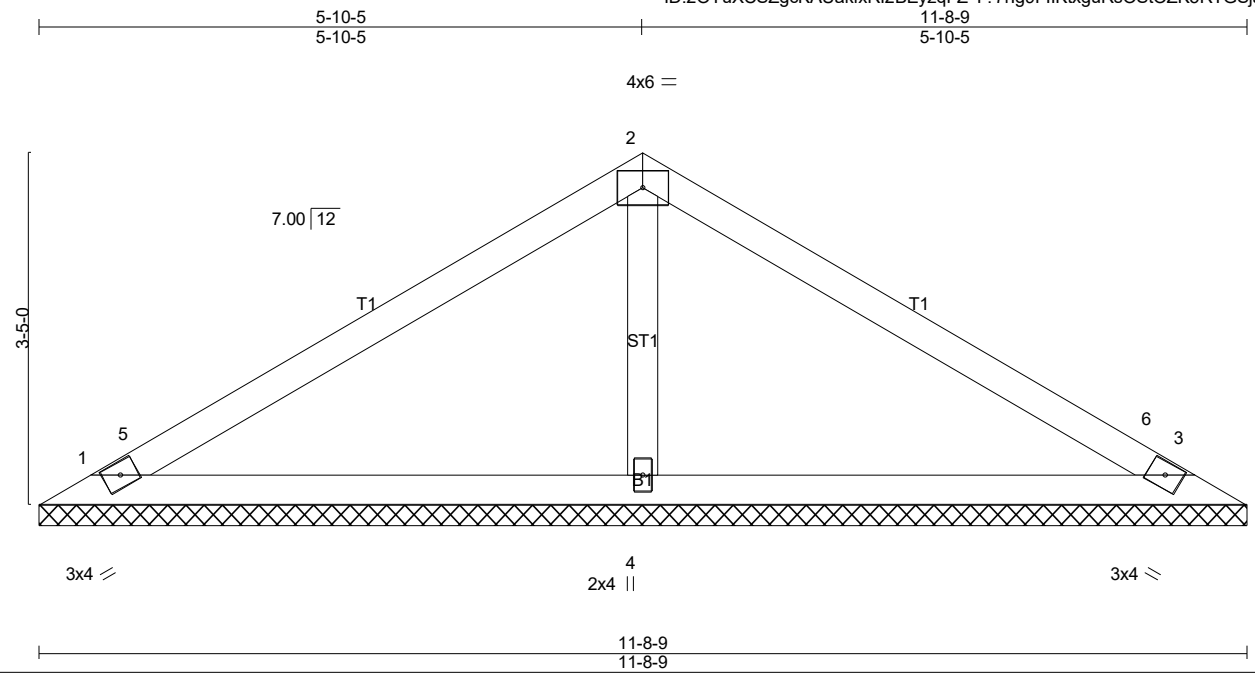


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-S							Weight: 40 lb	FT = 20%
BCDL	10.0											

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

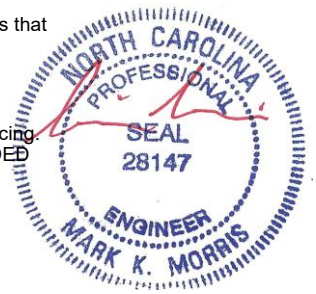
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size) 1=201/11-8-9 (min. 0-1-8), 3=201/11-8-9 (min. 0-1-8), 4=449/11-8-9 (min. 0-1-8)
Max Horz 1=68(LC 13)
Max Uplift1=-38(LC 14), 3=-48(LC 15), 4=-24(LC 14)
Max Grav 1=277(LC 20), 3=277(LC 21), 4=469(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-312/105

NOTES- (9-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-1, Exterior(2R) 5-4-1 to 6-4-8, Exterior(2E) 6-4-8 to 11-2-2 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.
9) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



LOAD CASE(S) Standard

10/15/2025

Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	VT08	Valley	1	1	# 64080
					Job Reference (optional)

Run: 8.630 s Jul 12 2024 Print: 8.830 s Sep 3 2025 MiTek Industries, Inc. Thu Oct 16 00:45:58 2025 Page 1
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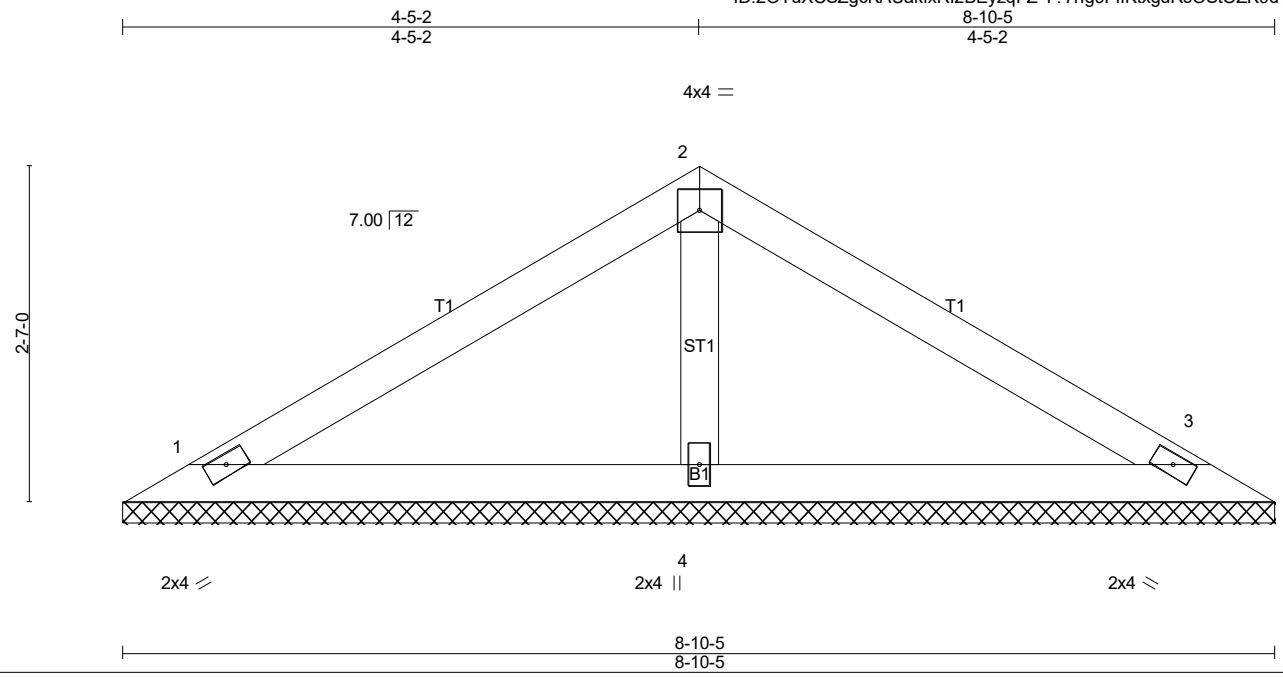

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P							Weight: 30 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. (lb/size) 1=162/8-10-5 (min. 0-1-8), 3=162/8-10-5 (min. 0-1-8), 4=298/8-10-5 (min. 0-1-8)
Max Horz 1=50(LC 13)
Max Uplift1=-35(LC 14), 3=-42(LC 15), 4=-3(LC 14)
Max Grav 1=225(LC 20), 3=225(LC 21), 4=305(LC 21)

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

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

LOAD CASE(S) Standard

10/15/2025

Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	VT09	Valley	1	1	# 64080
					Job Reference (optional)

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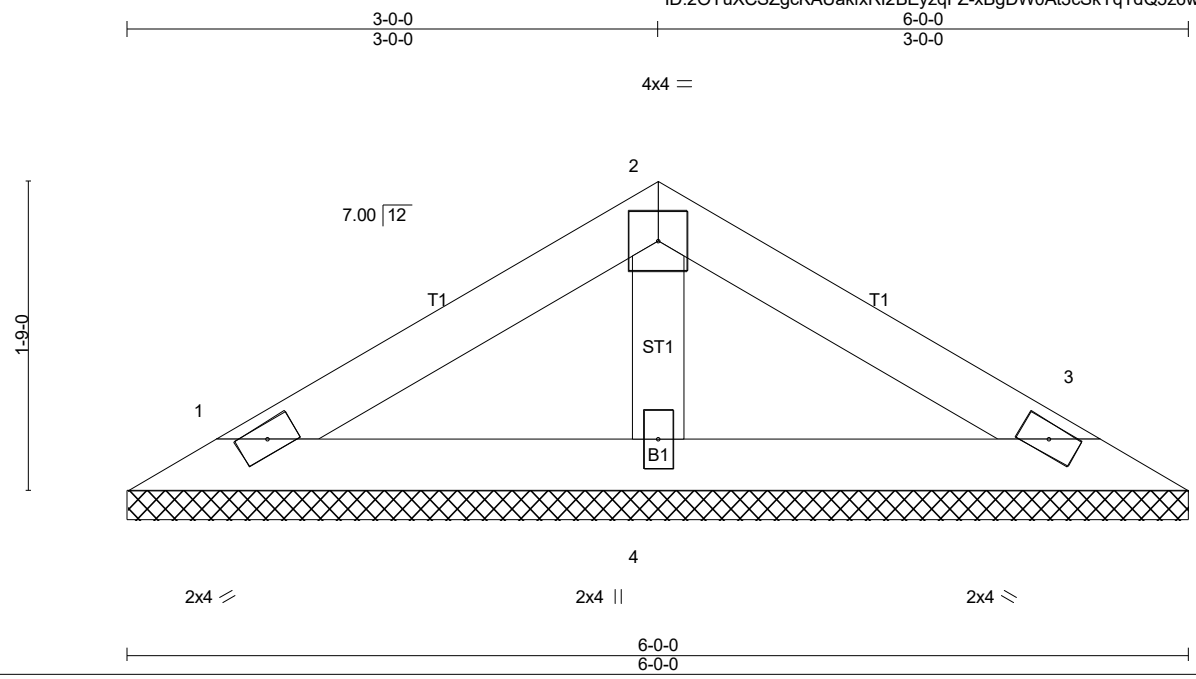

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P							Weight: 19 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. (lb/size) 1=103/6-0-0 (min. 0-1-8), 3=103/6-0-0 (min. 0-1-8), 4=188/6-0-0 (min. 0-1-8)
Max Horz 1=32(LC 11)
Max Uplift1=-22(LC 14), 3=-27(LC 15), 4=-2(LC 14)
Max Grav 1=134(LC 20), 3=134(LC 21), 4=188(LC 1)

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

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

LOAD CASE(S) Standard

10/15/2025

Job	Truss	Truss Type	Qty	Ply	LOT 158 PROVIDENCE CREEK | 532 PROVIDENCE CREEK FUQUAY-VARINA, N
25-8623-R01	VT10	Valley	1	1	# 64080
					Job Reference (optional)

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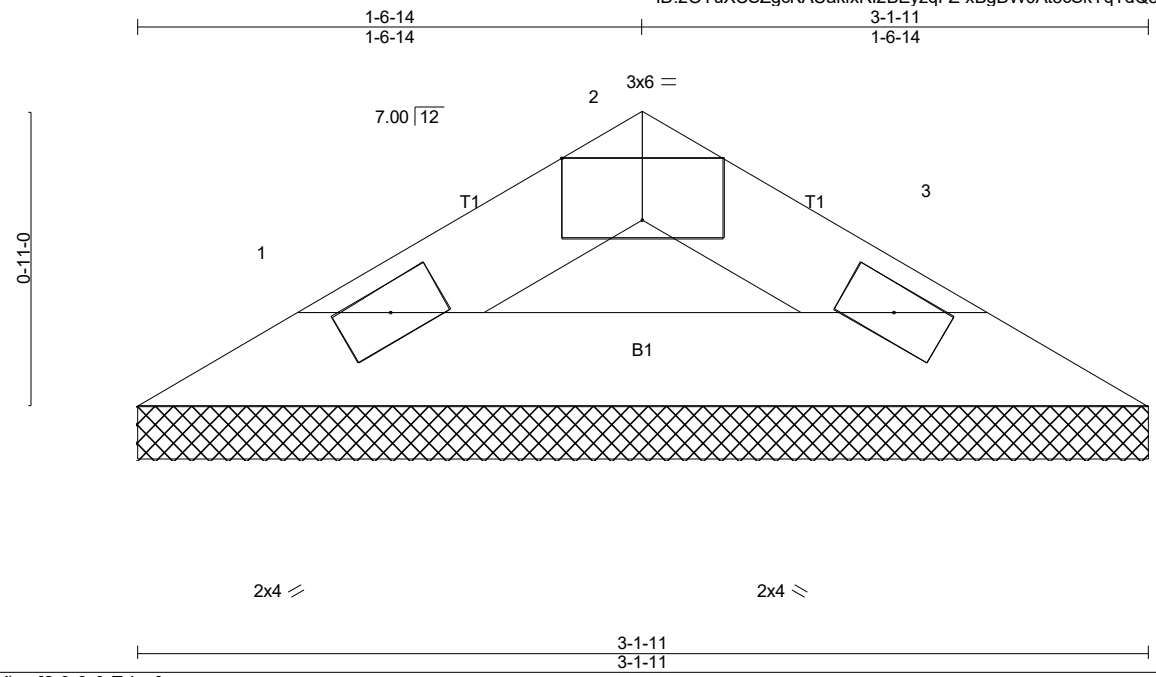

Plate Offsets (X,Y)-- [2:0-3-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P							Weight: 8 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-1-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size) 1=83/3-1-11 (min. 0-1-8), 3=83/3-1-11 (min. 0-1-8)
Max Horz 1=13(LC 13)
Max Uplift1=-10(LC 14), 3=-10(LC 15)
Max Grav 1=88(LC 20), 3=88(LC 21)

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

NOTES- (9-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 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.
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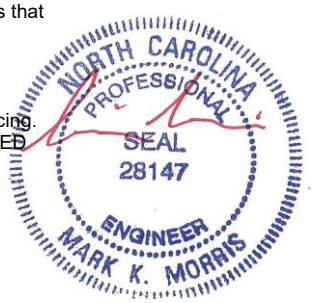

LOAD CASE(S) Standard

10/15/2025