Mark Morris, P.E.

#126, 1317-M, Summerville, SC 29483
843 209-5784, Fax (866)-213-4614

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

AST #: 49177
JOB: 24-4510-R01
JOB NAME: LOT 1 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.
20 Truss Design(s)

Trusses:

J01, J03, J04, J05, J06, R01, R02, R02A, R03, R04, R05, R06, R07, R08, R09, SP01, SP02, V01, V02, V03
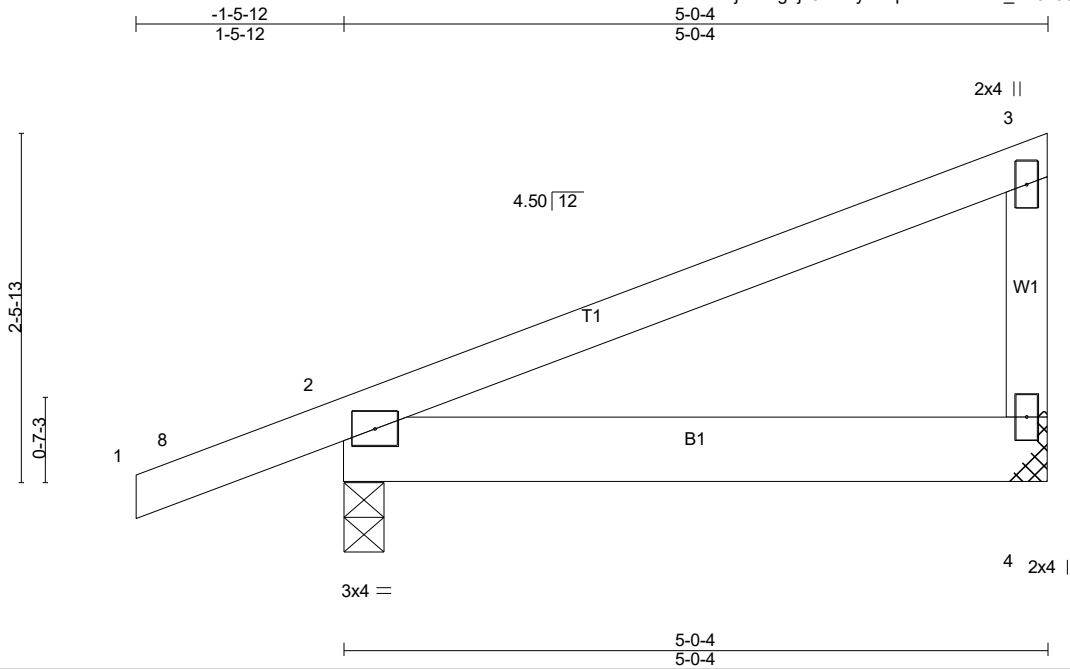
5/29/2024
Mark Morris

Job	Truss	Truss Type	Qty	Ply	LOT 1 PROVIDENCE CREEK	81 PROVIDENCE CREEK DRIVE FUQUAY-VARINA
24-4510-R01	J01	Jack-Closed	4	1	# 49177
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu May 30 07:47:48 2024 Page 1
ID:lHdIvk2jisLiwg7js8Xa1lyZn7p-oNai?HES7_1V5v08ADQ2foSxHey71Kf6avVD12zBOGP

-1-5-12   5-0-4
1-5-12   5-0-4

Scale = 1:16.4

2x4 ||

3

4.50 ⟍12

T1

W1

2

8

1

B1

5-0-4
5-0-4

3x4 =

4   2x4 ||

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	0.35	Vert(LL)	0.03	4-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.02	4-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS							Weight: 25 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 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)   4=182/Mechanical, 2=297/0-3-8 (min. 0-1-8)
Max Horz 2=85(LC 13)
Max Uplift4=-68(LC 10), 2=-122(LC 10)
Max Grav 4=249(LC 21), 2=401(LC 21)

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

NOTES-   (10)
1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 68 lb uplift at joint 4 and 122 lb uplift at joint 2.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
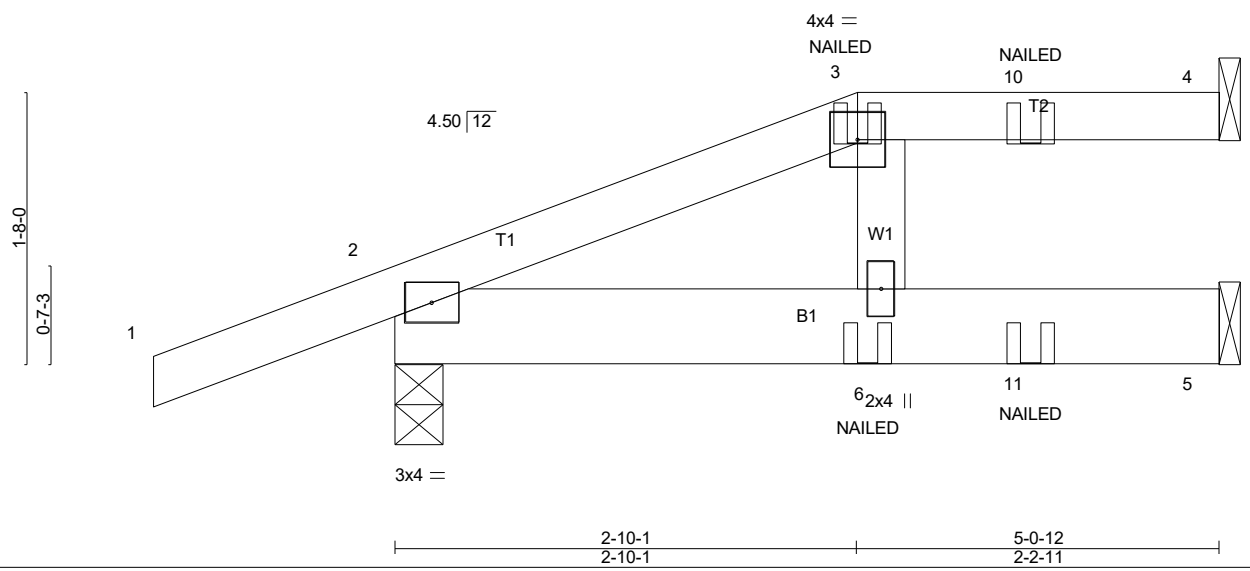
LOAD CASE(S) Standard

NORTH CAROLINA PROFESSIONAL SEAL 28147 ENGINEER MARK K. MORRIS

5/29/2024

Job	Truss	Truss Type	Qty	Ply	LOT 1 PROVIDENCE CREEK | 81 PROVIDENCE CREEK DRIVE FUQUAY-VARINA
24-4510-R01	J03	Jack-Open Girder	1	1	**# 49177**
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu May 30 07:47:51 2024 Page 1
ID:lHdIvk2jisLiwg7js8Xa1lyZn7p-DyFqdJGKQvQ4yNkjrLzlHQ4TarzbEhvYGtkteNzBOGM

Scale = 1:14.1

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)	-0.02	6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.03	6	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-MP							Weight: 24 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS   2x4 SP No.3

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 5-0-12 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.
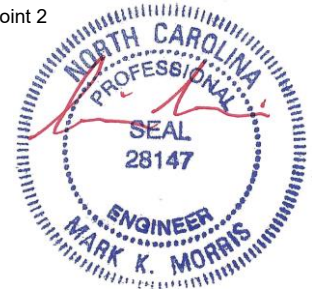
REACTIONS. (lb/size)   4=71/Mechanical, 2=309/0-3-8 (min. 0-1-8), 5=132/Mechanical
Max Horz 2=59(LC 8)
Max Uplift4=-26(LC 8), 2=-128(LC 8), 5=-53(LC 8)
Max Grav 4=103(LC 33), 2=435(LC 34), 5=143(LC 34)

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

NOTES- (13)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 4, 128 lb uplift at joint 2 and 53 lb uplift at joint 5.
11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
        Vert: 1-3=-60, 3-4=-60, 5-7=-20
   Concentrated Loads (lb)
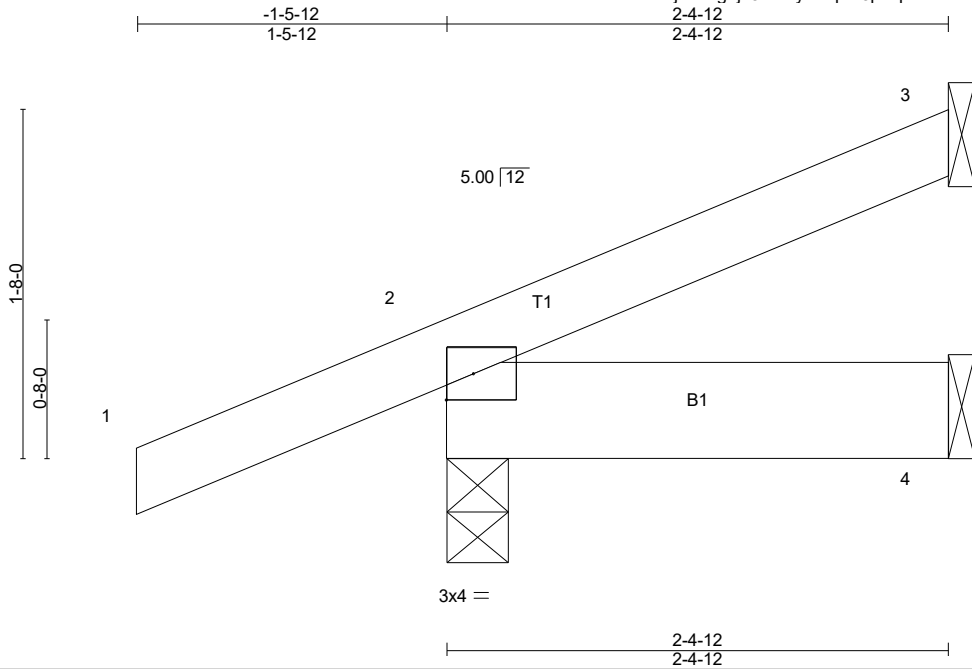   Vert: 3=-12(B) 6=0(B) 10=-12(B) 11=0(B)

(North Carolina Professional Engineer Seal — Mark K. Morris, Seal 28147)

5/29/2024

Job	Truss	Truss Type	Qty	Ply	LOT 1 PROVIDENCE CREEK	81 PROVIDENCE CREEK DRIVE FUQUAY-VARINA
24-4510-R01	J04	Jack-Open	2	1	# 49177
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu May 30 07:47:52 2024 Page 1
ID:lHdlvk2jisLiwg7js8Xa1lyZn7p-h8pDqeHzBDYwaXJvP3U_qedfsFNBz8ehVXTRApzBOGL

Scale = 1:11.0

-1-5-12
1-5-12
2-4-12
2-4-12

5.00 |12

3

2   T1

1   B1

4

3x4 =

2-4-12
2-4-12

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	0.25	Vert(LL)	0.00	7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	7	>999	180		
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-MP							Weight: 12 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 2-4-12 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) 3=48/Mechanical, 2=210/0-3-8 (min. 0-1-8), 4=17/Mechanical
Max Horz 2=52(LC 14)
Max Uplift3=-25(LC 14), 2=-68(LC 10), 4=-11(LC 11)
Max Grav 3=68(LC 21), 2=294(LC 21), 4=42(LC 7)

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

NOTES- (9)
1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS
   (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed; porch left
   exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough
   Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs
   non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit
   between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 3, 68 lb uplift at joint 2 and
   11 lb uplift at joint 4.

LOAD CASE(S) Standard

North Carolina Professional Seal 28147 Engineer Mark K. Morris

5/29/2024

Job	Truss	Truss Type	Qty	Ply	LOT 1 PROVIDENCE CREEK | 81 PROVIDENCE CREEK DRIVE FUQUAY-VARINA
24-4510-R01	J05	Monopitch Girder	1	1	**# 49177**
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu May 30 07:47:53 2024 Page 1
ID:lHdIvk2jisLiwg7js8Xa1lyZn7p-9LNb2_IbyXgnChu6ym0DMrAoVfgbiburjBD_iFzBOGK

-1-5-12
1-5-12
4-4-4
4-4-4

Scale = 1:14.9

5.00 ⌐12

NAILED
8

2x4 ‖

3

2-5-12

0-8-0

T1

W1

2

1

B1

9
NAILED

4   2x4 ‖

3x4 =

4-4-4
4-4-4

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.01	4-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.02	4-7	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-MP							Weight: 22 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS   2x4 SP No.3

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 4-4-12 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size)   4=250/Mechanical, 2=342/0-3-8 (min. 0-1-8)
Max Horz 2=82(LC 11)
Max Uplift4=-77(LC 8), 2=-113(LC 8)
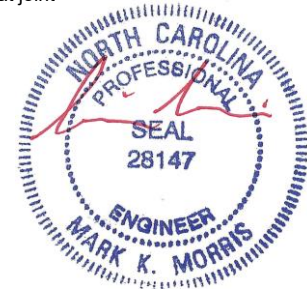Max Grav 4=288(LC 19), 2=446(LC 19)

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

NOTES-   (11)
1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 77 lb uplift at joint 4 and 113 lb uplift at joint 2.
9) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 4-5=-20
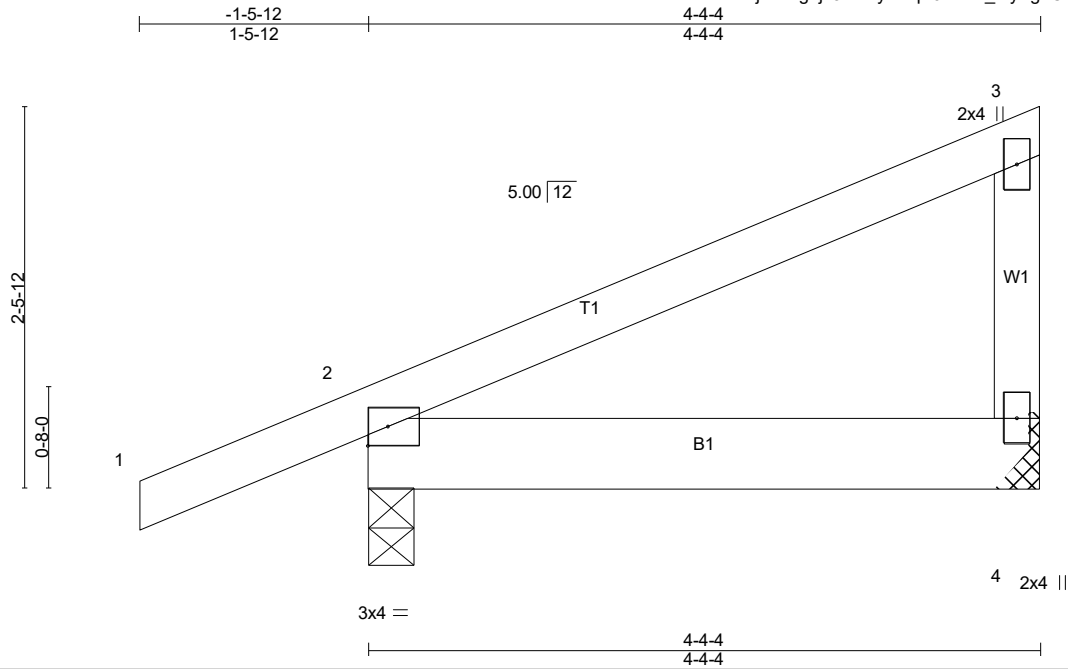Concentrated Loads (lb)
Vert: 8=-43(F) 9=-123(F)

NORTH CAROLINA
PROFESSIONAL
SEAL
28147
ENGINEER
MARK K. MORRIS

5/29/2024

Job	Truss	Truss Type	Qty	Ply	LOT 1 PROVIDENCE CREEK	81 PROVIDENCE CREEK DRIVE FUQUAY-VARINA
24-4510-R01	J06	Monopitch	7	1	**# 49177**
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu May 30 07:47:53 2024 Page 1
ID:lHdIvk2jisLiwg7js8Xa1lyZn7p-9LNb2_IbyXgnChu6ym0DMrApHfiOiburjBD_iFzBOGK

Scale = 1:14.9

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)	-0.01	4-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.01	4-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS							Weight: 22 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 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) 4=153/Mechanical, 2=273/0-3-8 (min. 0-1-8)
  Max Horz 2=82(LC 13)
  Max Uplift4=-41(LC 10), 2=-87(LC 10)
  Max Grav 4=209(LC 21), 2=390(LC 21)

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

NOTES- (10)
1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 4 and 87 lb uplift at joint 2.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

5/29/2024

Job	Truss	Truss Type	Qty	Ply	LOT 1 PROVIDENCE CREEK	81 PROVIDENCE CREEK DRIVE FUQUAY-VARINA
24-4510-R01	R01	GABLE	2	1	**# 49177**
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu May 30 07:47:55 2024 Page 1
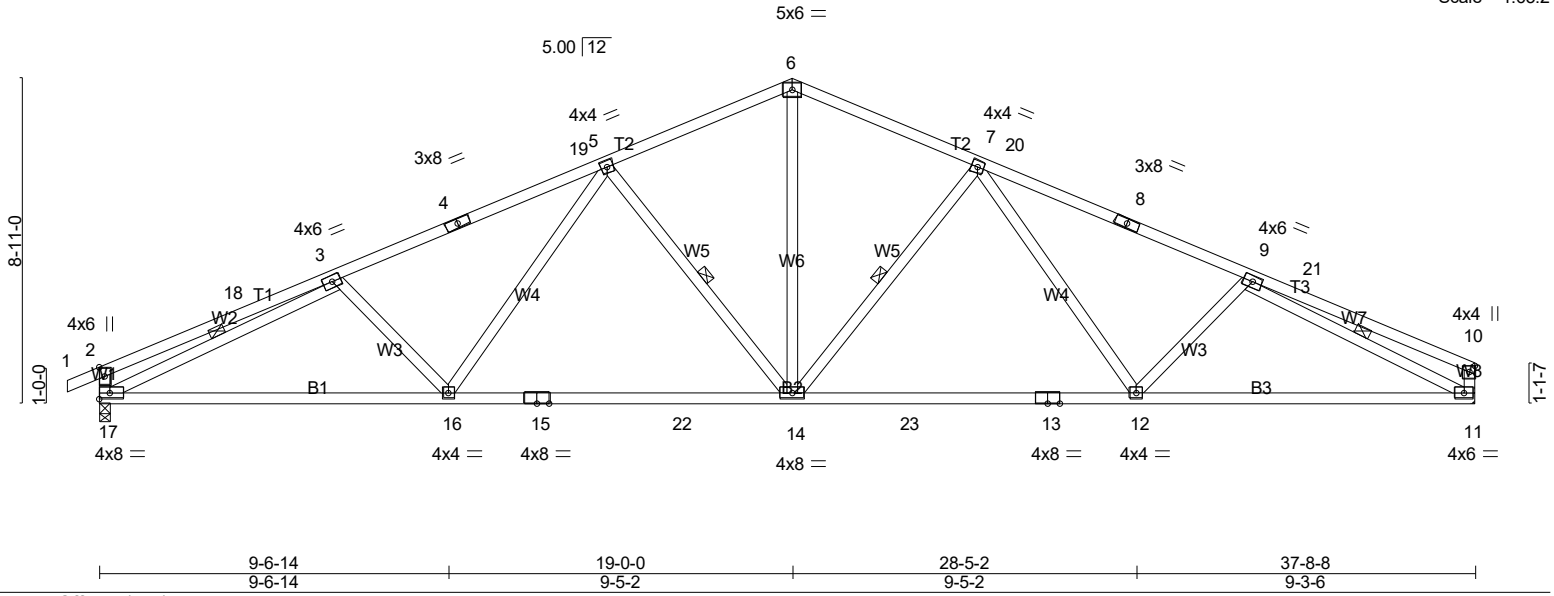ID:zSnl_VDJTy_hu?pmOjJgrKyZRJv-5jVLTgJrT8wVR_2U4B2hSGFC8SOvASs8BVi5n8zBOGl

Scale = 1:63.1

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	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	0.23	Horz(CT)	0.00	23	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-R							Weight: 243 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS   1 Row at midpt   12-33

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

REACTIONS.   All bearings 37-8-8.
  (lb) - Max Horz 43=108(LC 14)
          Max Uplift All uplift 100 lb or less at joint(s) 43, 23, 34, 35, 36, 38, 39, 40, 41, 32, 31, 30, 28, 27, 26, 25, 24 except 42=-101(LC 14)
          Max Grav All reactions 250 lb or less at joint(s) 43, 23, 36, 38, 39, 40, 41, 42, 30, 28, 27, 26, 25, 24 except 33=260(LC 27), 34=285(LC 5), 35=276(LC 5), 32=285(LC 6), 31=276(LC 6)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   10-45=-101/253, 10-11=-123/289, 11-12=-137/320, 12-13=-137/320, 13-14=-123/289, 14-46=-101/253

NOTES- (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; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Exterior(2N) 3-11-2 to 14-2-6, Corner(3R) 14-2-6 to 23-9-10, Exterior(2N) 23-9-10 to 32-9-2, Corner(3E) 32-9-2 to 37-6-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) 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) 43, 23, 34, 35, 36, 38 , 39, 40, 41, 32, 31, 30, 28, 27, 26, 25, 24 except (jt=lb) 42=101.

LOAD CASE(S) Standard

5/29/2024

Job	Truss	Truss Type	Qty	Ply	LOT 1 PROVIDENCE CREEK	81 PROVIDENCE CREEK DRIVE FUQUAY-VARINA
24-4510-R01	R02	Common	10	1	# 49177
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu May 30 07:47:57 2024 Page 1
ID:zSnI_VDJTy_hu?pmOjJgrKyZRJv-16d6uML5?lADgICtBc49XhKNUGsJeEoQepBBs1zBOGG

Scale = 1:63.2

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	0.77	Vert(LL)	-0.37	14-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.59	14-16	>755	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.13	11	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS							Weight: 212 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
　　　　　B2: 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-14, 7-14, 3-17, 9-11

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

REACTIONS. (lb/size) 17=1559/0-3-8 (min. 0-1-13), 11=1496/Mechanical
　　　　　Max Horz 17=108(LC 14)
　　　　　Max Uplift17=-207(LC 14), 11=-185(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-18=-571/93, 3-18=-457/105, 3-4=-2592/388, 4-19=-2521/402, 5-19=-2448/404,
　　　　　5-6=-1954/390, 6-7=-1954/390, 7-20=-2402/404, 8-20=-2474/402, 8-9=-2546/388,
　　　　　9-21=-334/82, 10-21=-415/70, 2-17=-446/148, 10-11=-305/88
BOT CHORD 16-17=-377/2390, 15-16=-225/2098, 15-22=-225/2098, 14-22=-225/2098, 14-23=-222/2080,
　　　　　13-23=-222/2080, 12-13=-222/2080, 11-12=-298/2312
WEBS 5-16=-45/441, 5-14=-712/225, 6-14=-165/1257, 7-14=-684/222, 7-12=-39/399,
　　　　　3-17=-2256/314, 9-11=-2339/337

NOTES- (11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 13-11-1, Exterior(2R) 13-11-1 to 24-0-15, Interior(1) 24-0-15 to 32-9-2, Exterior(2E) 32-9-2 to 37-6-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=207, 11=185.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
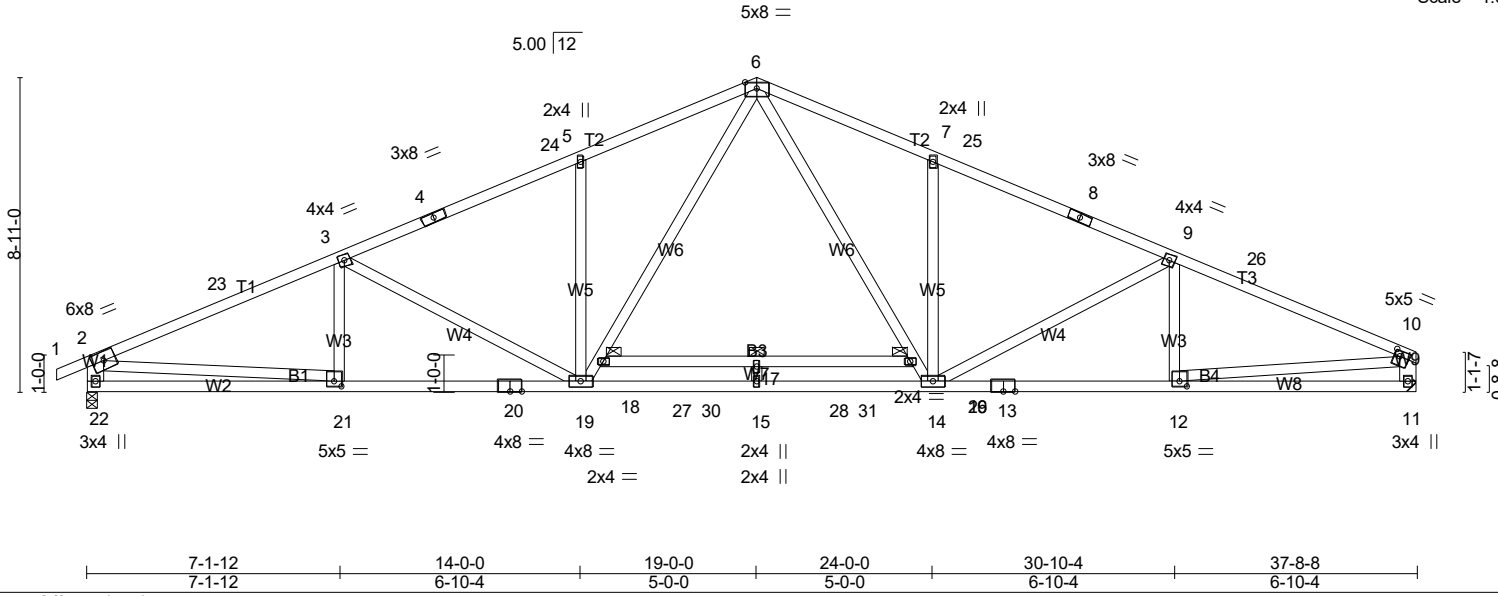
LOAD CASE(S) Standard
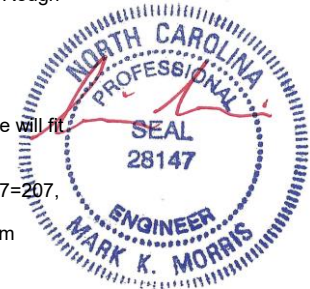
5/29/2024

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.
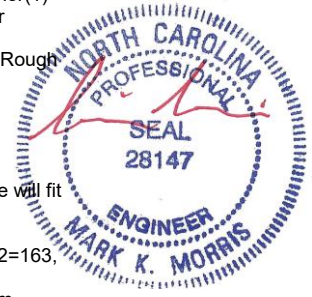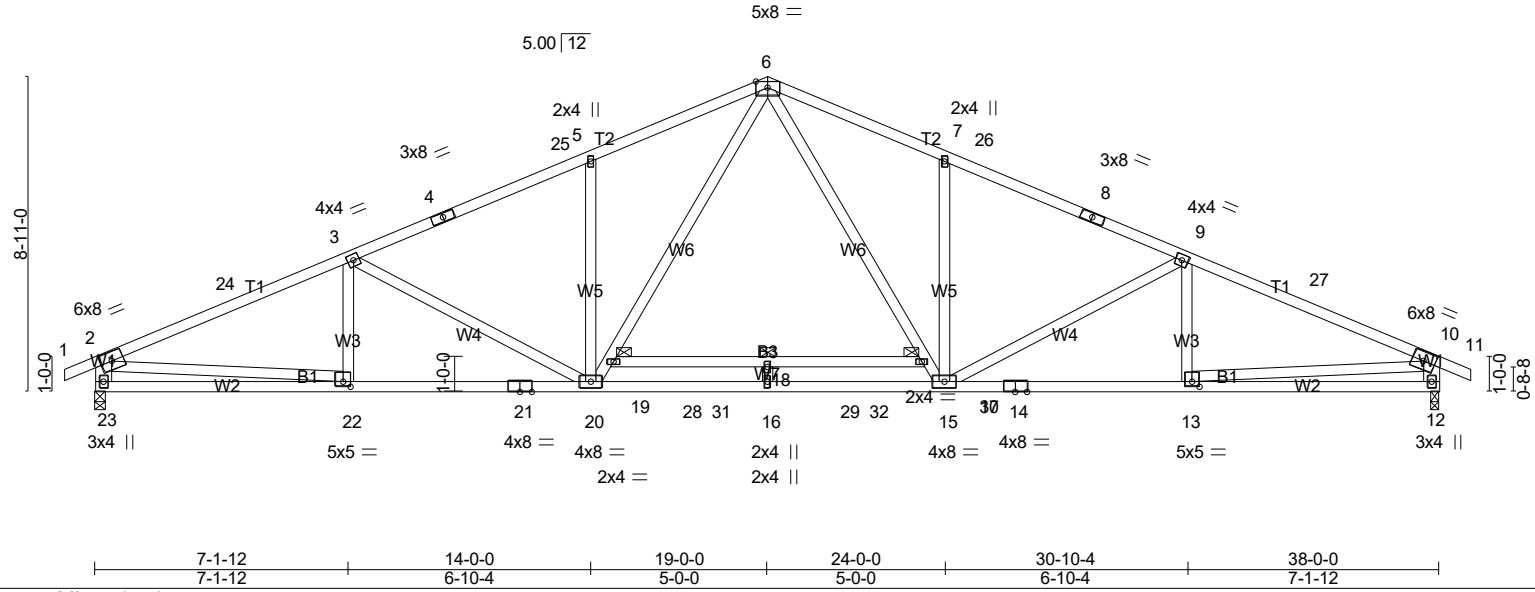
Job	Truss	Truss Type	Qty	Ply	LOT 1 PROVIDENCE CREEK	81 PROVIDENCE CREEK DRIVE FUQUAY-VARINA
24-4510-R01	R02A	Common	1	1	**# 49177**
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu May 30 07:47:58 2024 Page 1
ID:zSnl_VDJTy_hu?pmOjJgrKyZRJv-WIAU5iLjm3I4ISn3lJbO3vtbFgCUNeyatTwlOTzBOGF

Scale = 1:65.4

5.00 ⎯12

Plate Offsets (X,Y)--	[10:0-1-12,0-2-0], [12:0-2-8,0-1-12], [21:0-2-8,0-1-12]

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	0.57	Vert(LL)	-0.61	17	>730	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-1.00	17	>445	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.09	11	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS							Weight: 234 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2 *Except*
        B3: 2x4 SP No.1, B2: 2x4 SP SS
WEBS   2x4 SP No.3 *Except*
        W1,W9: 2x6 SP No.2

BRACING-
TOP CHORD   Structural wood sheathing directly applied, except end verticals.
BOT CHORD   Rigid ceiling directly applied. Except:
        6-0-0 oc bracing: 16-18

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

REACTIONS. (lb/size) 22=1647/0-3-8 (min. 0-1-15), 11=1580/Mechanical
        Max Horz 22=107(LC 14)
        Max Uplift22=-163(LC 14), 11=-138(LC 15)
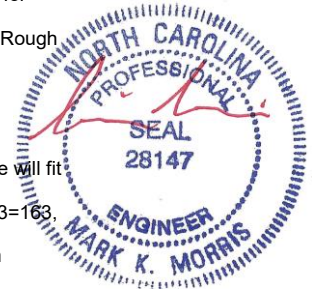   Max Grav 22=1648(LC 3), 11=1596(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-23=-2858/276, 3-23=-2786/289, 3-4=-2689/261, 4-24=-2622/282, 5-24=-2557/284,
        5-6=-2676/367, 6-7=-2656/367, 7-25=-2538/285, 8-25=-2603/282, 8-9=-2670/261,
        9-26=-2656/290, 10-26=-2770/277, 2-22=-1564/245, 10-11=-1505/197
BOT CHORD   21-22=-190/481, 20-21=-260/2571, 19-20=-260/2571, 19-27=-30/1881, 15-27=-30/1881,
        15-28=-30/1881, 28-29=-30/1881, 14-29=-30/1881, 13-14=-189/2499, 12-13=-189/2499,
        11-12=-55/329
WEBS   6-16=-152/1106, 14-16=-195/990, 7-14=-478/189, 9-14=-322/171, 9-12=-251/80,
        18-19=-200/1026, 6-18=-156/1141, 5-19=-481/190, 3-19=-374/176, 2-21=-119/2113,
        10-12=-151/2191

NOTES-   (11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS
   (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 14-0-0, Exterior(2R) 14-0-0 to 24-0-0, Interior(1)
   24-0-0 to 32-8-2, Exterior(2E) 32-8-2 to 37-5-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for
   members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough
   Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs
   non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit
   between the bottom chord and any other members, with BCDL = 10.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 22=163,
   11=138.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum
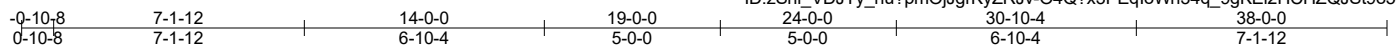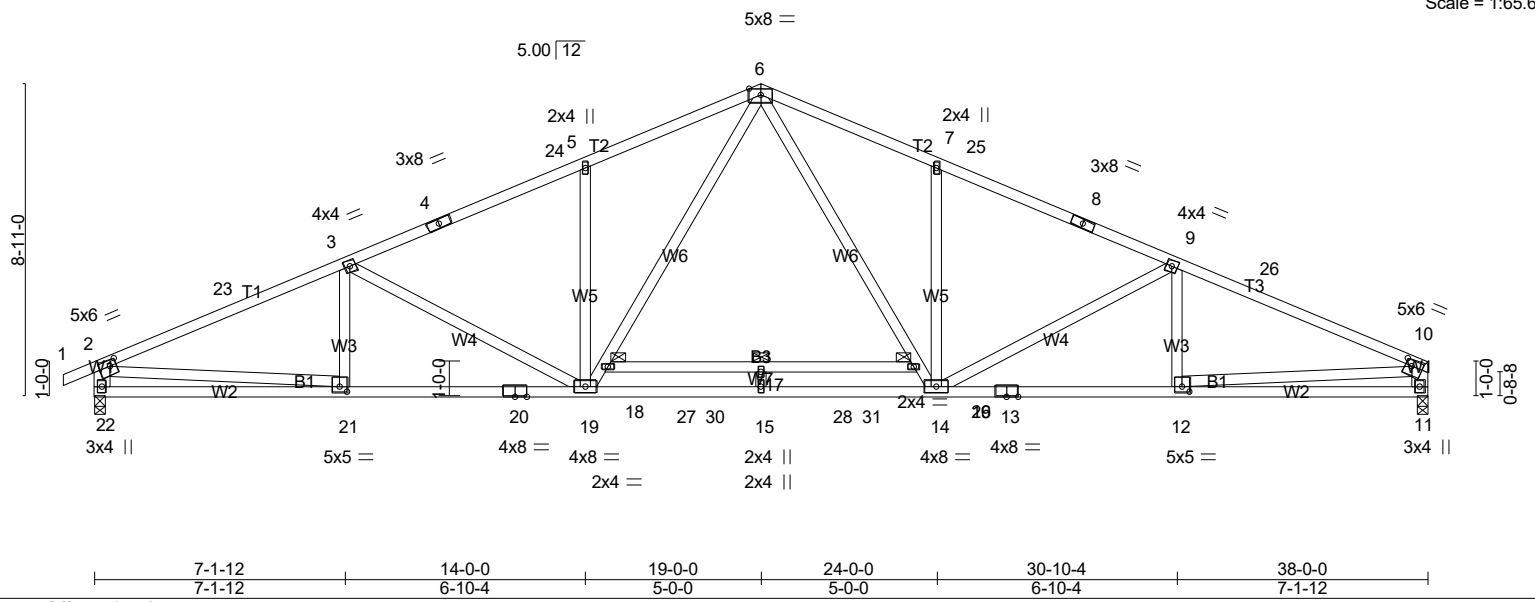   sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

5/29/2024

Job	Truss	Truss Type	Qty	Ply	LOT 1 PROVIDENCE CREEK	81 PROVIDENCE CREEK DRIVE FUQUAY-VARINA
24-4510-R01	R03	Common	6	1	**# 49177**

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu May 30 07:48:00 2024 Page 1
ID:zSnl_VDJTy_hu?pmOjJgrKyZRJv-ShIEWON_IgYoYmwStkes9KyxjTtyrZqtKnPsSLzBOGD

Scale = 1:65.1

Plate Offsets (X,Y)-- [13:0-2-8,0-1-12], [22:0-2-8,0-1-12]

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.61	18	>733	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-1.01	18	>445	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.09	12	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS							Weight: 236 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
 B3: 2x4 SP No.1, B2: 2x4 SP SS
WEBS 2x4 SP No.3 *Except*
 W1: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied. Except:
 6-0-0 oc bracing: 17-19

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

REACTIONS. (lb/size) 23=1658/0-3-8 (min. 0-1-15), 12=1658/0-3-8 (min. 0-1-15)
 Max Horz 23=100(LC 14)
 Max Uplift23=-163(LC 14), 12=-163(LC 15)
 Max Grav 23=1660(LC 3), 12=1660(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-24=-2882/276, 3-24=-2809/289, 3-4=-2716/260, 4-25=-2649/282, 5-25=-2584/284,
 5-6=-2703/367, 6-7=-2703/367, 7-26=-2584/284, 8-26=-2649/282, 8-9=-2716/260,
 9-27=-2809/289, 10-27=-2882/276, 2-23=-1575/245, 10-12=-1575/245
BOT CHORD 22-23=-183/495, 21-22=-253/2593, 20-21=-253/2593, 16-28=-7/1904,
 16-29=-7/1904, 29-30=-7/1904, 15-30=-7/1904, 14-15=-162/2593, 13-14=-162/2593,
 12-13=-89/482
WEBS 6-17=-156/1140, 15-17=-199/1025, 7-15=-482/190, 9-15=-371/175, 19-20=-200/1025,
 6-19=-156/1140, 5-20=-482/190, 3-20=-371/175, 2-22=-117/2133, 10-13=-117/2133

NOTES- (10)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 14-0-0, Exterior(2R) 14-0-0 to 24-0-0, Interior(1) 24-0-0 to 34-0-14, Exterior(2E) 34-0-14 to 38-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 23=163, 12=163.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

5/29/2024

Job	Truss	Truss Type	Qty	Ply	LOT 1 PROVIDENCE CREEK	81 PROVIDENCE CREEK DRIVE FUQUAY-VARINA
24-4510-R01	R04	COMMON	1	1	# 49177
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu May 30 07:48:02 2024 Page 1
ID:zSnl_VDJTy_hu?pmOjJgrKyZRJv-O4Q?x3PEqIoWn34q_9gKEl2HCHZQJSt9o5uyXEzBOGB

Scale = 1:65.6

Plate Offsets (X,Y)-- [2:0-2-4,0-2-0], [10:0-2-4,0-2-0], [12:0-2-8,0-1-12], [21:0-2-8,0-1-12]

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	0.58	Vert(LL)	-0.61	17	>733	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-1.01	17	>445	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.09	11	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS							Weight: 235 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
     B3: 2x4 SP No.1, B2: 2x4 SP SS
WEBS 2x4 SP No.3 *Except*
     W1: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied. Except:
6-0-0 oc bracing: 16-18

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

REACTIONS. (lb/size) 22=1659/0-3-8 (min. 0-1-15), 11=1591/0-3-8 (min. 0-1-14)
  Max Horz 22=107(LC 14)
  Max Uplift22=-163(LC 14), 11=-141(LC 15)
  Max Grav 22=1661(LC 3), 11=1604(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-23=-2883/278, 3-23=-2811/292, 3-4=-2717/263, 4-24=-2651/284, 5-24=-2586/287,
  5-6=-2705/369, 6-7=-2705/370, 7-25=-2588/289, 8-25=-2651/287, 8-9=-2719/265,
  9-26=-2769/300, 10-26=-2889/286, 2-22=-1576/246, 10-11=-1510/200
BOT CHORD 21-22=-189/485, 20-21=-260/2595, 19-20=-260/2595, 15-27=-32/1906,
  15-28=-32/1906, 28-29=-32/1906, 14-29=-32/1906, 13-14=-198/2605, 12-13=-198/2605,
  11-12=-68/420
WEBS 6-16=-155/1141, 14-16=-198/1026, 7-14=-476/188, 9-14=-384/179, 18-19=-200/1025,
  6-18=-156/1140, 5-19=-481/190, 3-19=-371/176, 2-21=-121/2135, 10-12=-146/2203
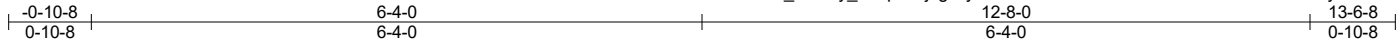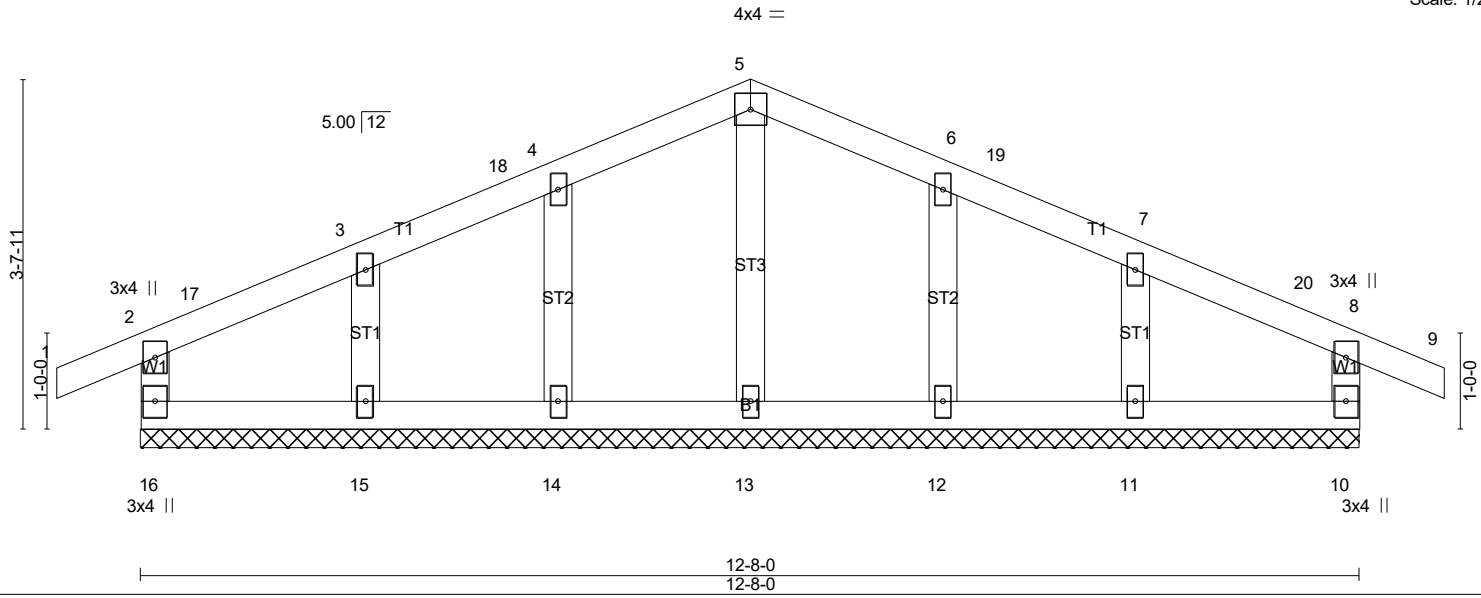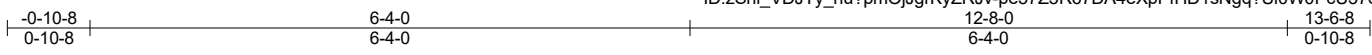
NOTES- (10)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 14-0-0, Exterior(2R) 14-0-0 to 24-0-0, Interior(1) 24-0-0 to 32-11-10, Exterior(2E) 32-11-10 to 37-9-4 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 greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 22=163, 11=141.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

5/29/2024

Job	Truss	Truss Type	Qty	Ply	LOT 1 PROVIDENCE CREEK	81 PROVIDENCE CREEK DRIVE FUQUAY-VARINA
24-4510-R01	R05	Common Supported Gable	1	1	# 49177
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu May 30 07:48:04 2024 Page 1
ID:zSnl_VDJTy_hu?pmOjJgrKyZRJv-KSYlMIQUMv2E0NED6aioJA7kt5TznaySFPN3b7zBOG9

Scale: 1/2"=1'

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	9	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00	9	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	-0.00	10	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-R							Weight: 59 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 12-8-0.
(lb) - Max Horz 16=-23(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11
Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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

NOTES- (14)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Corner(3R) 3-11-2 to 8-8-14, Corner(3E) 8-8-14 to 13-6-8 zone; 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.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 11.

LOAD CASE(S) Standard

5/29/2024

Job	Truss	Truss Type	Qty	Ply	LOT 1 PROVIDENCE CREEK | 81 PROVIDENCE CREEK DRIVE FUQUAY-VARINA
24-4510-R01	R06	Common	3	1	**# 49177**
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu May 30 07:48:05 2024 Page 1
ID:zSnl_VDJTy_hu?pmOjJgrKyZRJv-pe57Z5R67DA4eXpPfHD1sNgq?Ul0W0PcU37d8ZzBOG8

Scale = 1:24.4

Plate Offsets (X,Y)-- [2:0-3-4,0-0-2], [6:0-5-15,0-0-2]

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	0.41	Vert(LL)	-0.03	8-11	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.04	8-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS							Weight: 66 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied.
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) 2=559/0-3-8 (min. 0-1-8), 6=559/0-3-8 (min. 0-1-8)
Max Horz 2=-45(LC 15)
Max Uplift2=-79(LC 14), 6=-79(LC 15)
Max Grav 2=641(LC 21), 6=641(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   3-17=-625/249, 4-17=-597/258, 4-18=-597/258, 5-18=-625/249
BOT CHORD   2-8=-136/552, 6-8=-136/552

NOTES-   (10)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Exterior(2R) 3-11-2 to 8-8-14, Exterior(2E) 8-8-14 to 13-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

5/29/2024

Job	Truss	Truss Type	Qty	Ply	LOT 1 PROVIDENCE CREEK	81 PROVIDENCE CREEK DRIVE FUQUAY-VARINA
24-4510-R01	R07	Common Girder	1	**2**	Job Reference (optional) **# 49177**

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu May 30 07:48:07 2024 Page 1
ID:zSnl_VDJTy_hu?pmOjJgrKyZRJv-I1Du_nSNfqRotqzoniGVxolA0IJ1_k1vxMcjCRzBOG6
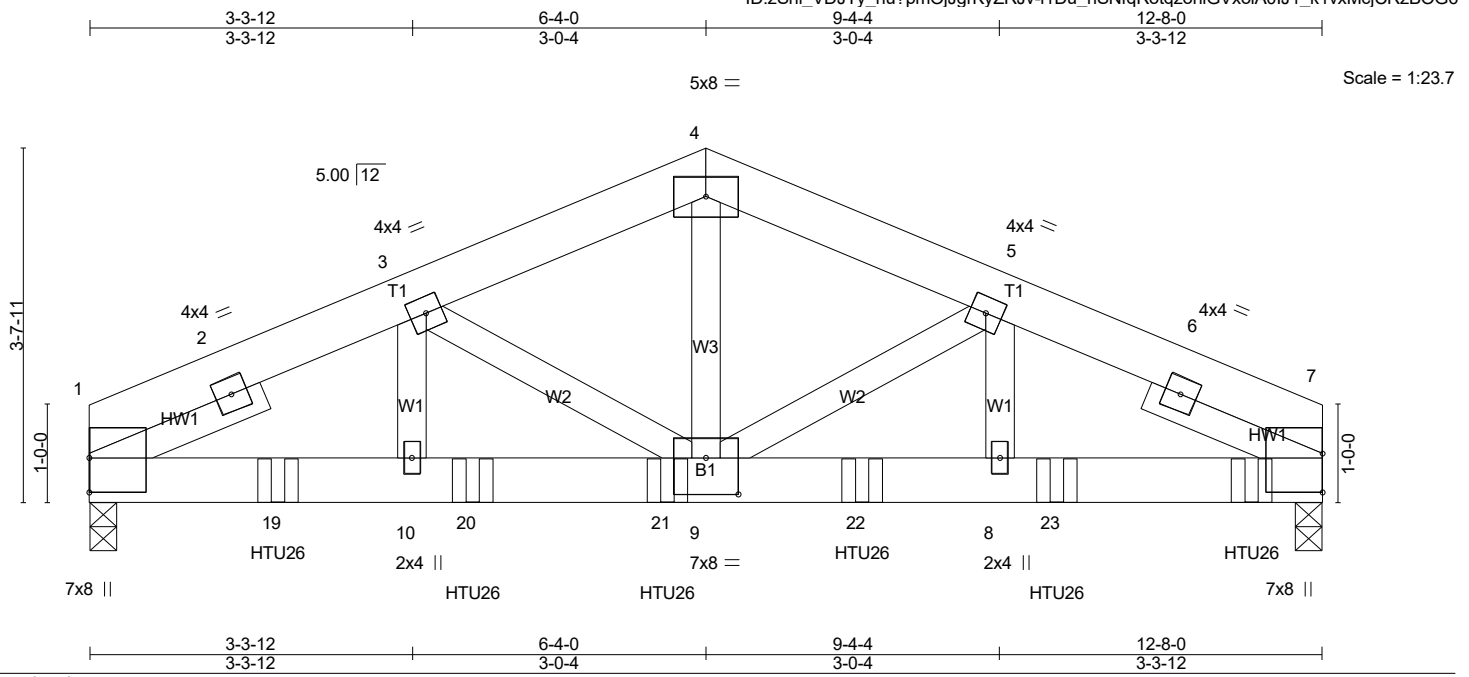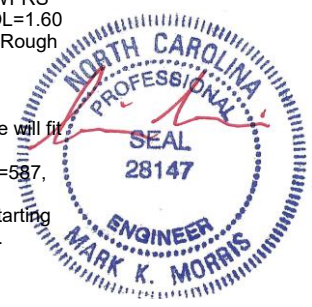
Scale = 1:23.7

5.00 12

5x8

4x4 / 4x4 / 4x4 /
4x4 /

5x8

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

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	0.44	Vert(LL)	-0.05	8-9	>999	240		MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.11	8-9	>999	180			
TCDL	10.0	Rep Stress Incr	NO	WB	0.79	Horz(CT)	0.03	7	n/a	n/a			
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-MSH								Weight: 172 lb	FT = 20%
BCDL	10.0												

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 5-6-11 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=4507/0-3-8 (min. 0-2-11), 7=5449/0-3-8 (min. 0-3-4)
    Max Horz 1=-39(LC 13)
    Max Uplift1=-587(LC 12), 7=-658(LC 13)
    Max Grav 1=4588(LC 18), 7=5530(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-2=-4032/522, 2-3=-6984/910, 3-4=-5903/775, 4-5=-5908/776, 5-6=-7056/908,
            6-7=-4238/527
BOT CHORD   1-19=-819/6252, 10-19=-819/6252, 10-20=-819/6252, 20-21=-819/6252, 9-21=-819/6252,
            9-22=-779/6341, 8-22=-779/6341, 8-23=-779/6341, 7-23=-779/6341
WEBS   4-9=-477/3814, 5-9=-988/159, 5-8=-166/1508, 3-9=-884/159, 3-10=-171/1490

NOTES-   (12)
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
   Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 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) 1=587,
   7=658.
10) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting
    at 1-11-4 from the left end to 11-11-4 to connect truss(es) R02 (1 ply 2x4 SP), R02A (1 ply 2x4 SP) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

5/29/2024

Job	Truss	Truss Type	Qty	Ply	LOT 1 PROVIDENCE CREEK | 81 PROVIDENCE CREEK DRIVE FUQUAY-VARINA
24-4510-R01	R07	Common Girder	1	**2**	# *49177*
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu May 30 07:48:07 2024 Page 2
ID:zSnl_VDJTy_hu?pmOjJgrKyZRJv-l1Du_nSNfqRotqzoniGVxolA0IJ1_k1vxMcjCRzBOG6

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
      Vert: 1-4=-60, 4-7=-60, 11-15=-20
   Concentrated Loads (lb)
      Vert: 17=-1563(B) 19=-1476(B) 20=-1476(B) 21=-1476(B) 22=-1476(B) 23=-1476(B)

5/29/2024

Job	Truss	Truss Type	Qty	Ply	LOT 1 PROVIDENCE CREEK	81 PROVIDENCE CREEK DRIVE FUQUAY-VARINA
24-4510-R01	R08	Common Supported Gable	1	1	**# 49177**
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu May 30 07:48:08 2024 Page 1
ID:zSnl_VDJTy_hu?pmOjJgrKyZRJv-DDnGB7T?Q8ZfV_Y_LQnkT0HQsiq5jNx2A0LHkuzBOG5

Scale = 1:23.0

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	9	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	9	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	10	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-R								
BCDL	10.0										Weight: 56 lb	FT = 20%

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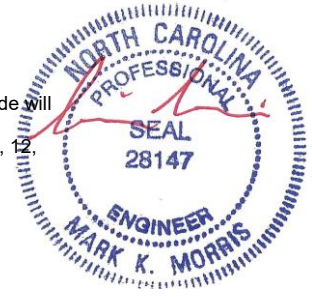WEBS   2x4 SP No.3
OTHERS   2x4 SP No.3

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

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

REACTIONS.   All bearings 12-0-0.
  (lb) - Max Horz 16=-21(LC 15)
          Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11
          Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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

NOTES- (14)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 4-0-0, Corner(3R) 4-0-0 to 8-0-0, Corner(3E) 8-0-0 to 12-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 11.
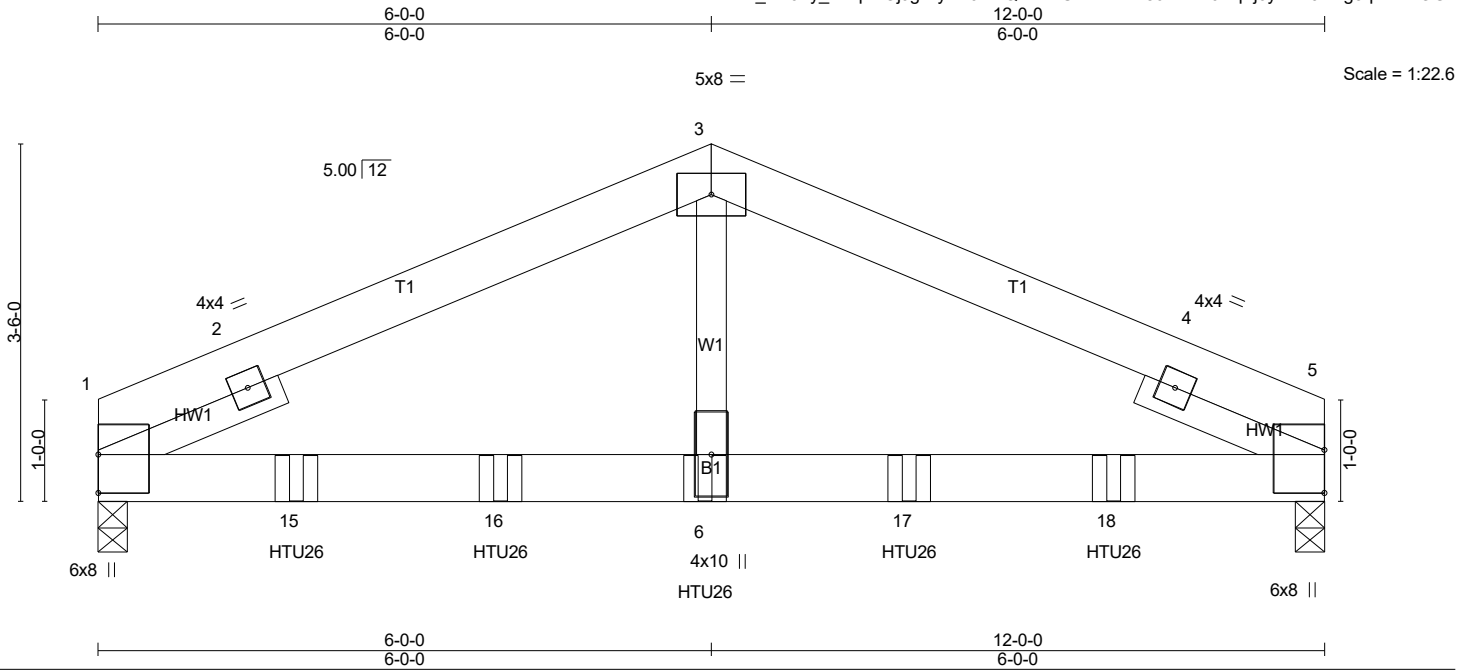
LOAD CASE(S) Standard

5/29/2024

Job	Truss	Truss Type	Qty	Ply	LOT 1 PROVIDENCE CREEK	81 PROVIDENCE CREEK DRIVE FUQUAY-VARINA
24-4510-R01	R09	Common Girder	1	**2**	Job Reference (optional) **# 49177**

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu May 30 07:48:09 2024 Page 1
ID:zSnl_VDJTy_hu?pmOjJgrKyZRJv-hQLePSUdARhW786Au7Iz0DqZj6ySSd9BPg5qHKzBOG4

6-0-0
6-0-0

12-0-0
6-0-0

Scale = 1:22.6

LOADING (psf)

TCLL (roof)	20.0	**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
Snow (Pf)	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.06	6-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.12	6-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.88	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-MSH							Weight: 138 lb	FT = 20%

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

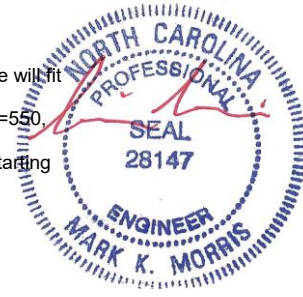**BRACING-**
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=4200/0-3-8 (min. 0-2-8), 5=4139/0-3-8 (min. 0-2-8)
Max Horz 1=37(LC 12)
Max Uplift1=-550(LC 12), 5=-542(LC 13)
Max Grav 1=4276(LC 18), 5=4215(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-2=-4228/525, 2-3=-5873/780, 3-4=-5874/780, 4-5=-4210/523
BOT CHORD   1-15=-682/5389, 15-16=-682/5389, 6-16=-682/5389, 6-17=-682/5389, 17-18=-682/5389,
             5-18=-682/5389
WEBS   3-6=-502/4236

NOTES- (12)
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
   Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 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) 1=550,
   5=542.
10) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting
    at 1-11-4 from the left end to 9-11-4 to connect truss(es) R02 (1 ply 2x4 SP) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

5/29/2024

Job	Truss	Truss Type	Qty	Ply	LOT 1 PROVIDENCE CREEK	81 PROVIDENCE CREEK DRIVE FUQUAY-VARINA
24-4510-R01	R09	Common Girder	1	**2**	# *49177*

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu May 30 07:48:09 2024 Page 2
ID:zSnl_VDJTy_hu?pmOjJgrKyZRJv-hQLePSUdARhW786Au7Iz0DqZj6ySSd9BPg5qHKzBOG4

LOAD CASE(S) Standard
   Uniform Loads (plf)
      Vert: 1-3=-60, 3-5=-60, 7-11=-20
   Concentrated Loads (lb)
      Vert: 6=-1476(B) 15=-1476(B) 16=-1476(B) 17=-1476(B) 18=-1476(B)
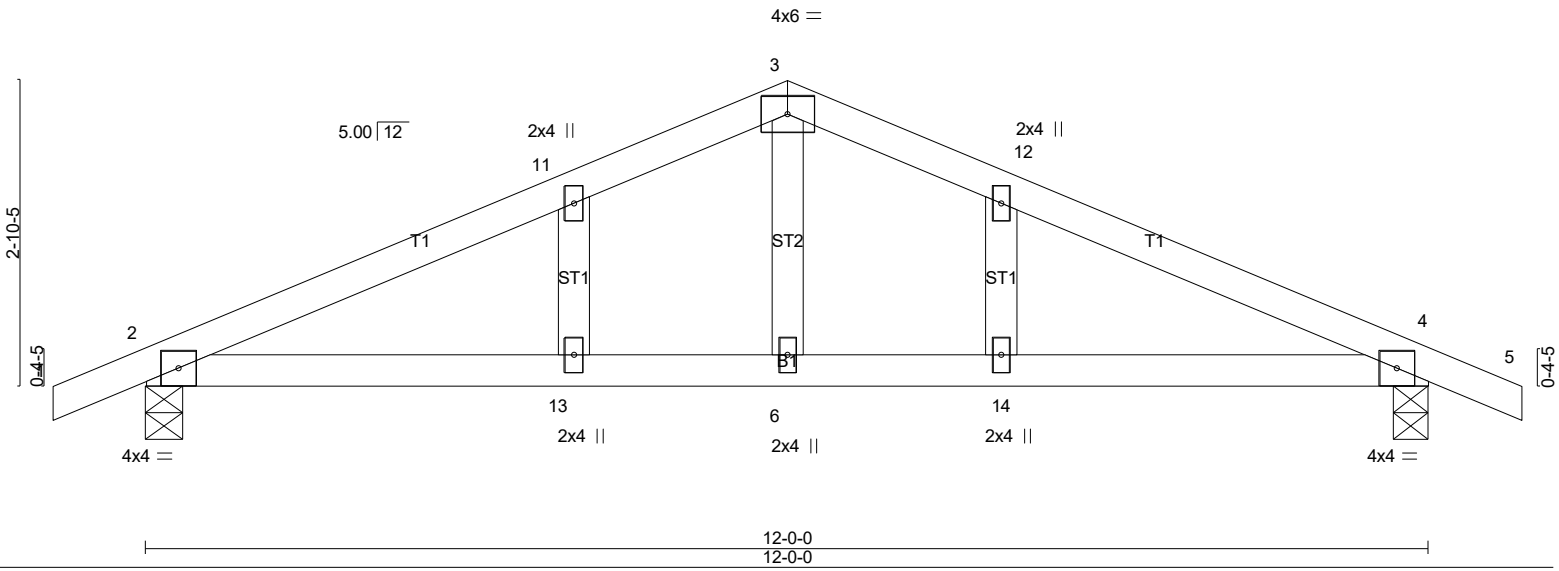
5/29/2024

Job	Truss	Truss Type	Qty	Ply	LOT 1 PROVIDENCE CREEK	81 PROVIDENCE CREEK DRIVE FUQUAY-VARINA
24-4510-R01	SP01	COMMON SUPPORTED GAB	1	1	# 49177
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu May 30 07:48:10 2024 Page 1
ID:l8799bTYYbxotYa75q2Yk9yieyH-9cv0coVFxlpNklhNSqpCZRNc?VOsBGSLdKqOpmzBOG3

-0-10-8   6-0-0   12-0-0   12-10-8
0-10-8   6-0-0   6-0-0   0-10-8

Scale = 1:21.6

4x6

5.00 ⌐12

2x4 || 2x4 ||

T1   T1

ST1   ST2   ST1

4x4   4x4

2x4 || 2x4 || 2x4 ||

12-0-0
12-0-0

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	0.72	Vert(LL)	0.09	2-6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.10	4-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 48 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 4-1-5 oc purlins.
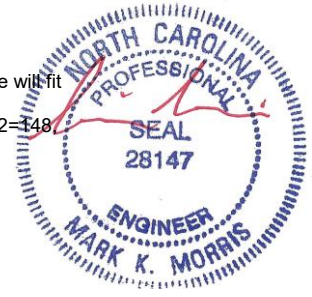BOT CHORD   Rigid ceiling directly applied or 6-6-12 oc bracing.

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

REACTIONS. (lb/size) 2=529/0-4-0 (min. 0-1-8), 4=529/0-4-0 (min. 0-1-8)
Max Horz 2=43(LC 18)
Max Uplift2=-148(LC 10), 4=-148(LC 11)
Max Grav 2=623(LC 21), 4=623(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-11=-786/862, 3-11=-650/874, 3-12=-650/874, 4-12=-786/862
BOT CHORD   2-13=-704/619, 6-13=-704/619, 6-14=-704/619, 4-14=-704/619
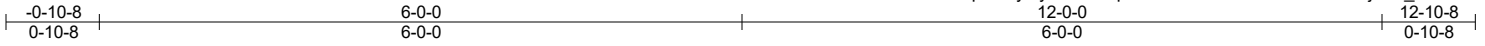WEBS   3-6=-418/278

NOTES- (11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS
   (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Corner(3R) 3-11-2 to 8-0-14, Corner(3E) 8-0-14 to 12-10-8 zone;
   cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces &
   MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) 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) except (jt=lb) 2=148,
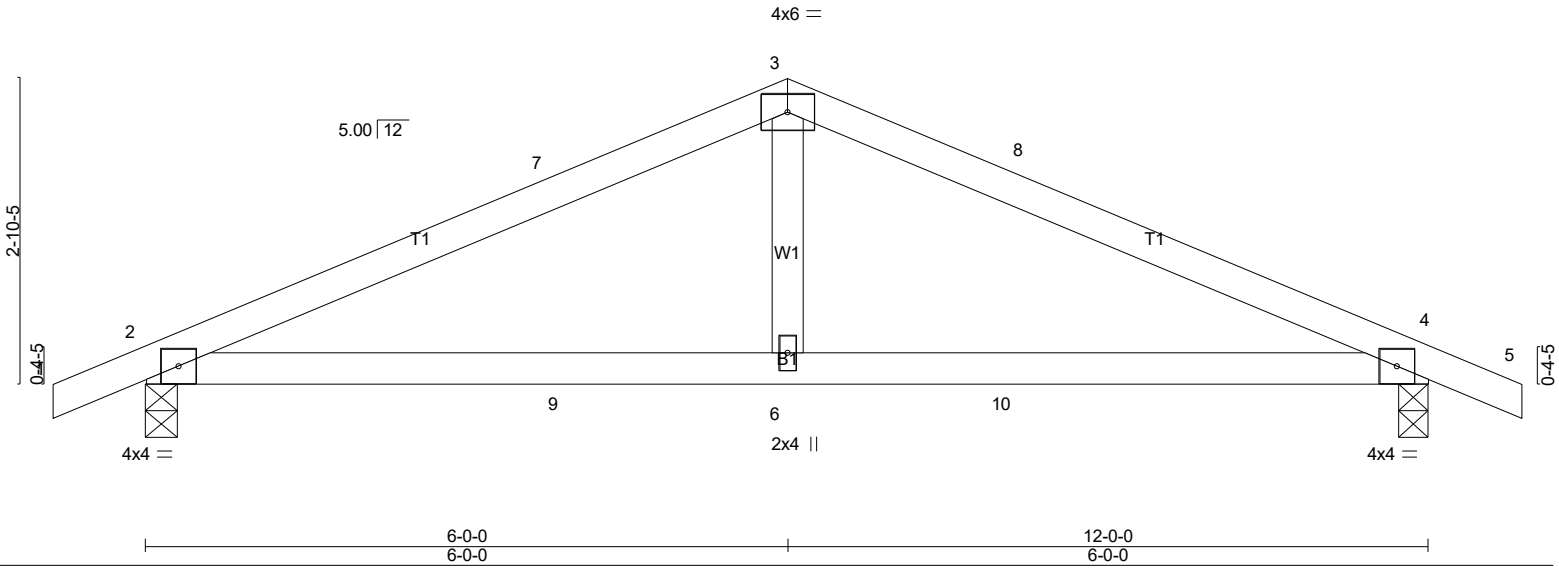   4=148.

LOAD CASE(S) Standard

5/29/2024

Job	Truss	Truss Type	Qty	Ply	LOT 1 PROVIDENCE CREEK	81 PROVIDENCE CREEK DRIVE FUQUAY-VARINA
24-4510-R01	SP02	COMMON	5	1	# 49177
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu May 30 07:48:11 2024 Page 1
ID:l8799bTYYbxotYa75q2Yk9yieyH-doTOq8Vti3xEMSGZ0YKR5evnevk?wjhUs_axLDzBOG2

-0-10-8 | 6-0-0 | 12-0-0 | 12-10-8
0-10-8 | 6-0-0 | 6-0-0 | 0-10-8

Scale = 1:21.6

4x6 =

5.00 [12

2-10-5

4x4 =   2x4 || 4x4 =

6-0-0 | 12-0-0
6-0-0 | 6-0-0

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	0.72	Vert(LL)	0.09	4-6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.10	4-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 44 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 or 4-0-8 oc purlins.
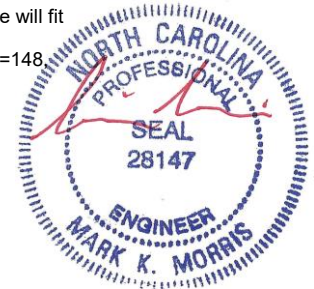BOT CHORD   Rigid ceiling directly applied or 6-8-9 oc bracing.

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

REACTIONS. (lb/size) 2=530/0-3-8 (min. 0-1-8), 4=530/0-3-8 (min. 0-1-8)
Max Horz 2=43(LC 14)
Max Uplift2=-148(LC 10), 4=-148(LC 11)
Max Grav 2=624(LC 21), 4=624(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-7=-791/824, 3-7=-655/836, 3-8=-655/836, 4-8=-791/824
BOT CHORD   2-9=-681/625, 6-9=-681/625, 6-10=-681/625, 4-10=-681/625
WEBS   3-6=-407/280

NOTES-   (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Exterior(2R) 3-11-2 to 8-0-14, Exterior(2E) 8-0-14 to 12-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=148, 4=148.
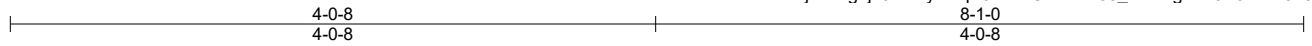
LOAD CASE(S) Standard

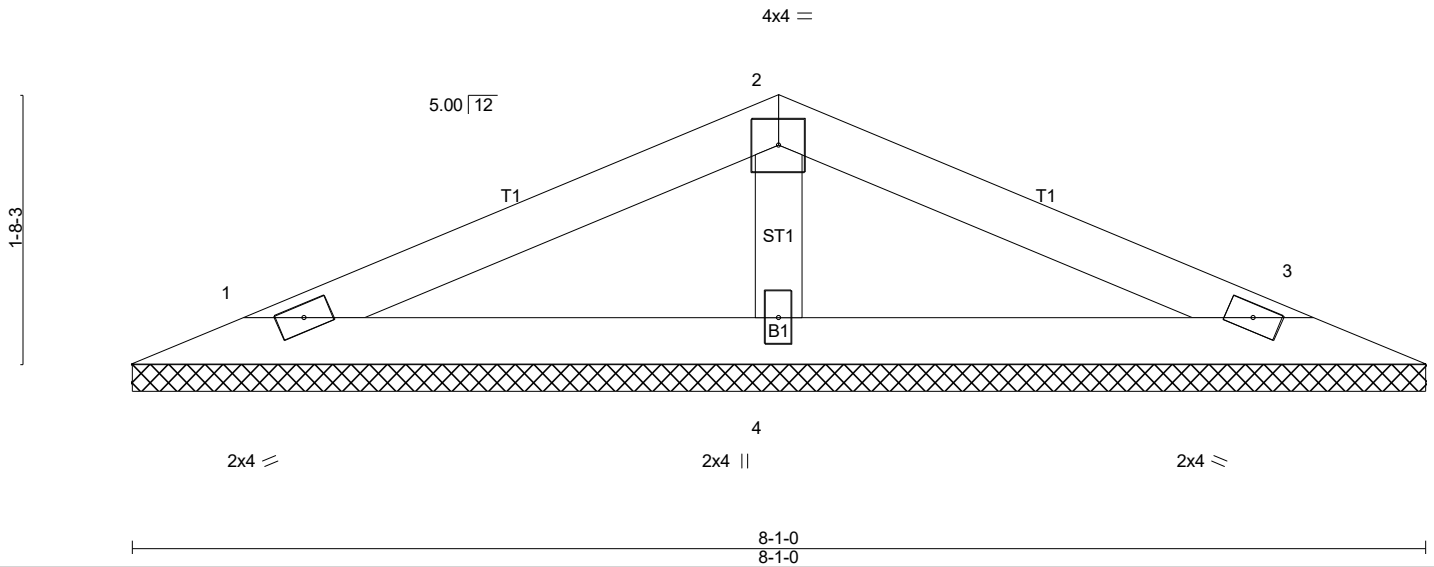NORTH CAROLINA
PROFESSIONAL
SEAL
28147
ENGINEER
MARK K. MORRIS

5/29/2024

Job	Truss	Truss Type	Qty	Ply	LOT 1 PROVIDENCE CREEK	81 PROVIDENCE CREEK DRIVE FUQUAY-VARINA
24-4510-R01	V01	Valley	1	1	**# 49177**
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu May 30 07:48:12 2024 Page 1
ID:lHdIvk2jisLiwg7js8Xa1lyZn7p-5?1n1UWVTM35_crlaFrgesS3DJAufB0e5eJUtfzBOG1

4-0-8 | 8-1-0
4-0-8 | 4-0-8

Scale = 1:14.4

4x4 =

5.00 [12

T1   T1

1-8-3

ST1

1   B1   3

4

2x4 ⟋   2x4 || 2x4 ⟍

8-1-0
8-1-0

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	0.29	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	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P							Weight: 24 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.
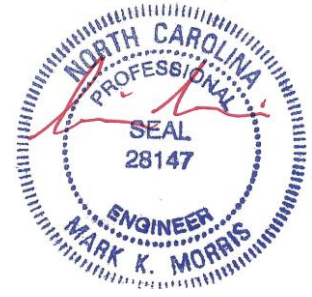BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size) 1=130/8-1-0 (min. 0-1-8), 3=130/8-1-0 (min. 0-1-8), 4=269/8-1-0 (min. 0-1-8)
Max Horz 1=-21(LC 19)
Max Uplift1=-29(LC 14), 3=-33(LC 15), 4=-8(LC 14)
Max Grav 1=172(LC 20), 3=172(LC 21), 4=269(LC 1)

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

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

LOAD CASE(S) Standard

5/29/2024

Job	Truss	Truss Type	Qty	Ply	LOT 1 PROVIDENCE CREEK	81 PROVIDENCE CREEK DRIVE FUQUAY-VARINA
24-4510-R01	V02	Valley	1	1	**# 49177**
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu May 30 07:48:12 2024 Page 1
ID:lHdIvk2jisLiwg7js8Xa1lyZn7p-5?1n1UWVTM35_crlaFrgesS78JAbfBbe5eJUtfzBOG1

2-0-8
2-0-8

4-1-0
2-0-8

3x6 =

Scale = 1:7.5

5.00 ⌐12

2x4 ⟋

2x4 ⟍

4-1-0
4-1-0

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	0.14	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 4-1-0 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=105/4-1-0 (min. 0-1-8), 3=105/4-1-0 (min. 0-1-8)
Max Horz 1=-8(LC 15)
Max Uplift1=-13(LC 14), 3=-13(LC 15)
Max Grav 1=111(LC 20), 3=111(LC 21)

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

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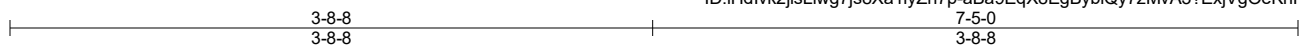
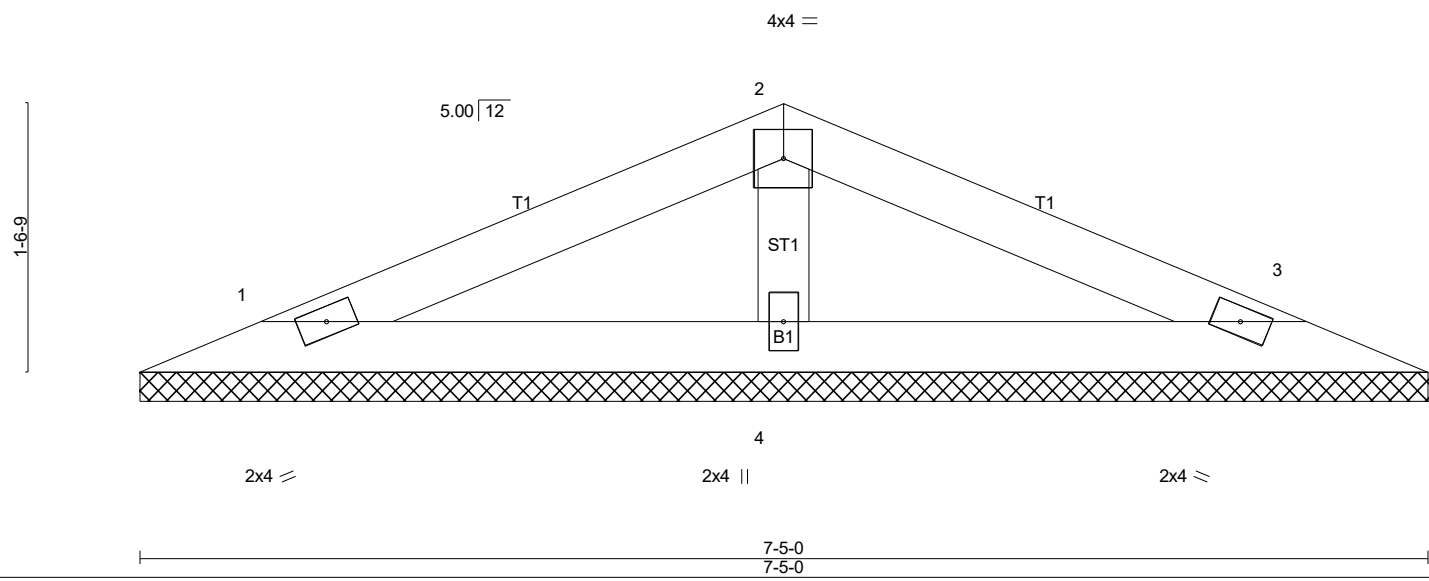**LOAD CASE(S)** Standard

5/29/2024

Job	Truss	Truss Type	Qty	Ply	LOT 1 PROVIDENCE CREEK	81 PROVIDENCE CREEK DRIVE FUQUAY-VARINA
24-4510-R01	V03	GABLE	1	1	# 49177

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu May 30 07:48:13 2024 Page 1
ID:lHdIvk2jisLiwg7js8Xa1lyZn7p-aBa9EqX8EgByblQy7zMvA3?ExjVgOeKnKI32Q5zBOG0

Scale = 1:13.3

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	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.15	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: 22 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=117/7-5-0 (min. 0-1-8), 3=117/7-5-0 (min. 0-1-8), 4=242/7-5-0 (min. 0-1-8)
Max Horz 1=-18(LC 15)
Max Uplift1=-26(LC 14), 3=-29(LC 15), 4=-8(LC 14)
Max Grav 1=152(LC 20), 3=152(LC 21), 4=242(LC 1)

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

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

LOAD CASE(S) Standard

5/29/2024