Mark Morris, P.E.

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

AST #: 40140
JOB: 23-4837-R01
JOB NAME: LOT 38 PROVIDENCE CREEK
Wind Code: 37
Wind Speed: Vult= 115mph
Exposure Category: B
Mean Roof Height (feet): 23
These truss designs comply with IRC 2015 as well as IRC 2018.
20 Truss Design(s)

Trusses:
M01, M02, M03, P01, R01, R02, R03, R04, R05, R06, R07, R08, R09, SP01, SP02, V01, V02,

7/24/2023
Mark Morris

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

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

Job	Truss	Truss Type	Qty	Ply	LOT 38 PROVIDENCE CREEK | 38 PROVIDENCE CREEK DRIVE FUQUAY-VARIN
23-4837-R01	M01	STR-GABLE	1	1	Job Reference (optional) **# 40140**

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Jul 24 16:17:08 2023 Page 1
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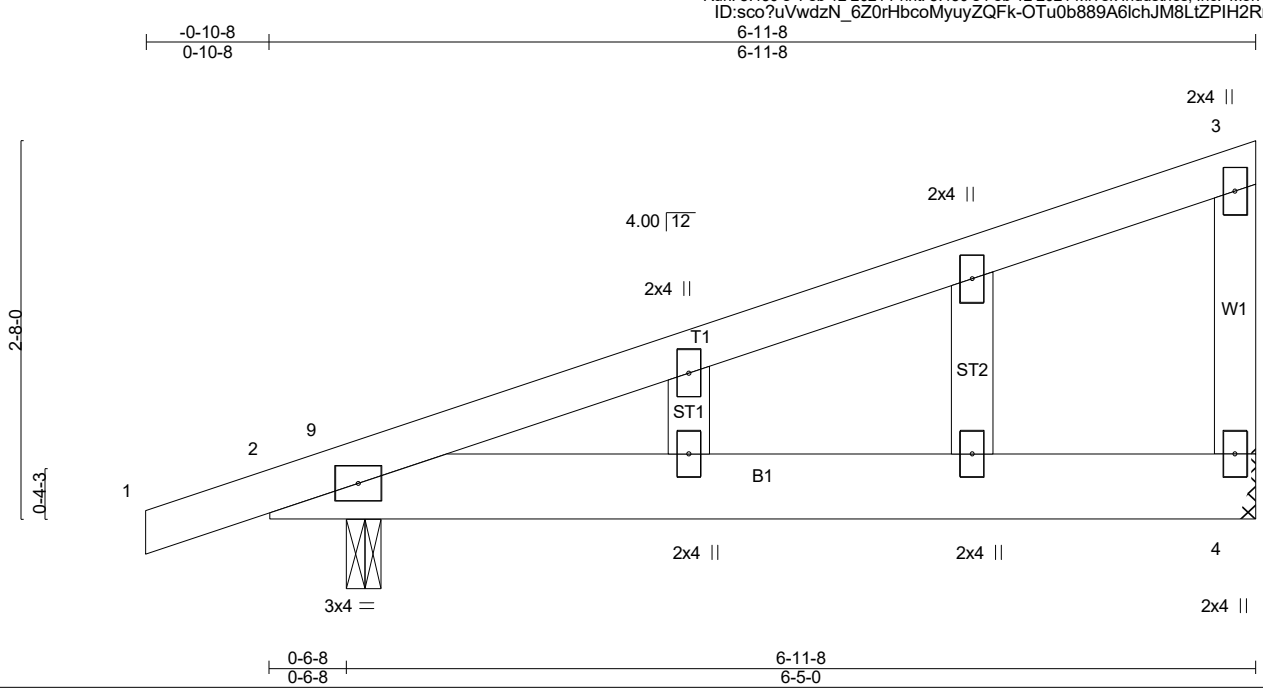


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	0.06	2-4	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.06	2-4	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P							Weight: 34 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-4-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

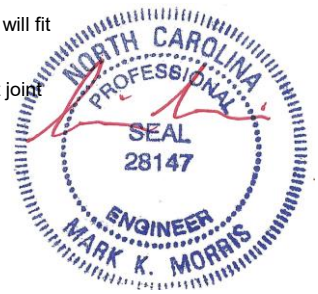
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 4=263/Mechanical, 2=332/0-3-0 (min. 0-1-8)
Max Horz 2=75(LC 10)
Max Uplift4=-80(LC 10), 2=-91(LC 10)
Max Grav 4=354(LC 21), 2=412(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-287/144

NOTES- (11)
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left exposed ; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Gable studs spaced at 2-0-0 oc.
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 80 lb uplift at joint 4 and 91 lb uplift at joint 2.

LOAD CASE(S) Standard



7/24/2023

Job	Truss	Truss Type	Qty	Ply	LOT 38 PROVIDENCE CREEK | 38 PROVIDENCE CREEK DRIVE FUQUAY-VARIN
23-4837-R01	M02	MONOPITCH	8	1	**# 40140** Job Reference (optional)

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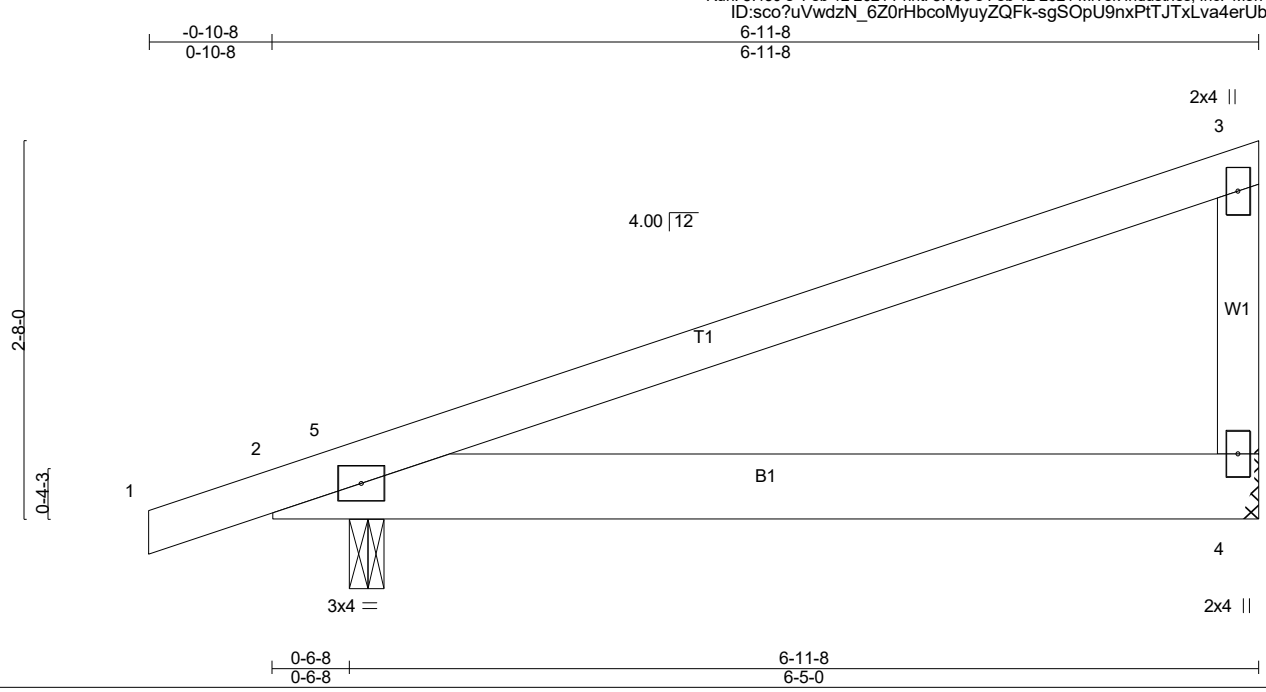

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	0.06	2-4	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.06	2-4	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P							Weight: 32 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-4-12 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=263/Mechanical, 2=332/0-3-0 (min. 0-1-8)
Max Horz 2=75(LC 10)
Max Uplift4=-80(LC 10), 2=-91(LC 10)
Max Grav 4=354(LC 21), 2=412(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-287/144

NOTES- (9)
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left 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 80 lb uplift at joint 4 and 91 lb uplift at joint 2.

LOAD CASE(S) Standard

7/24/2023

Job	Truss	Truss Type	Qty	Ply	LOT 38 PROVIDENCE CREEK | 38 PROVIDENCE CREEK DRIVE FUQUAY-VARIN
23-4837-R01	M03	MONOPITCH STRUCTURAL	1	1	Job Reference (optional) **# 40140**

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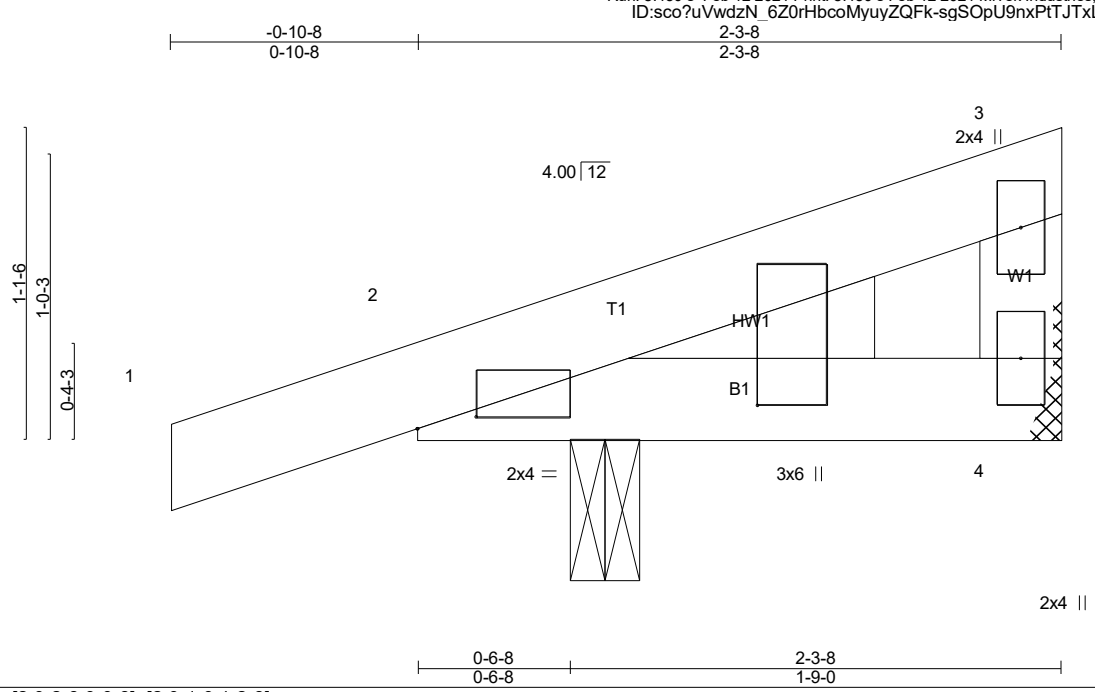


Plate Offsets (X,Y)-- [2:0-2-8,0-0-8], [2:0-1-0,1-2-8]

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	0.14	Vert(LL)	-0.00	2-4	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.00	2-4	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P							Weight: 11 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-3-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

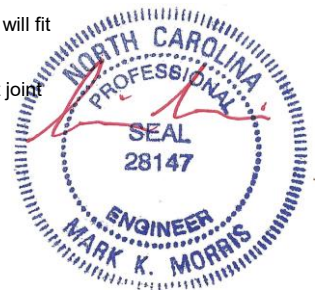
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=156/0-3-0 (min. 0-1-8), 4=66/Mechanical
Max Horz 2=30(LC 10)
Max Uplift 2=-52(LC 10), 4=-18(LC 10)
Max Grav 2=204(LC 21), 4=82(LC 21)

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

NOTES- (11)
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left exposed ; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Gable studs spaced at 2-0-0 oc.
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 52 lb uplift at joint 2 and 18 lb uplift at joint 4.

LOAD CASE(S) Standard



7/24/2023

Job	Truss	Truss Type	Qty	Ply	LOT 38 PROVIDENCE CREEK | 38 PROVIDENCE CREEK DRIVE FUQUAY-VARIN
23-4837-R01	P01	GABLE	21	1	**# 40140** Job Reference (optional)

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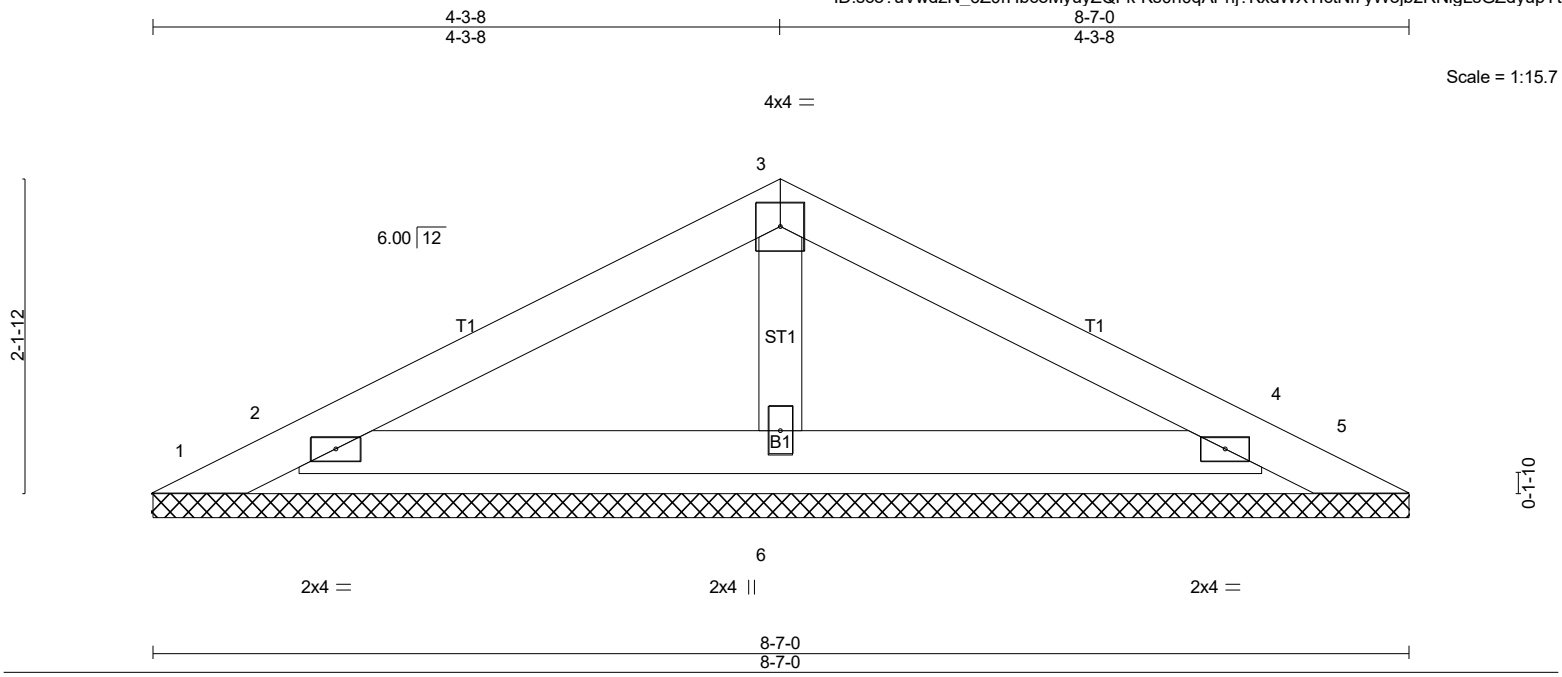

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P							Weight: 26 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 8-7-0.
(lb) - Max Horz 1=24(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 2, 4 except 1=-113(LC 21), 5=-113(LC 22)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 2=398(LC 21), 4=398(LC 22)

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

NOTES- (12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;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, 4 except (jt=lb) 1=113, 5=113.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

7/24/2023

Job	Truss	Truss Type	Qty	Ply	LOT 38 PROVIDENCE CREEK | 38 PROVIDENCE CREEK DRIVE FUQUAY-VARIN
23-4837-R01	R01	COMMON SUPPORTED GAB	1	1	**# 40140** Job Reference (optional)

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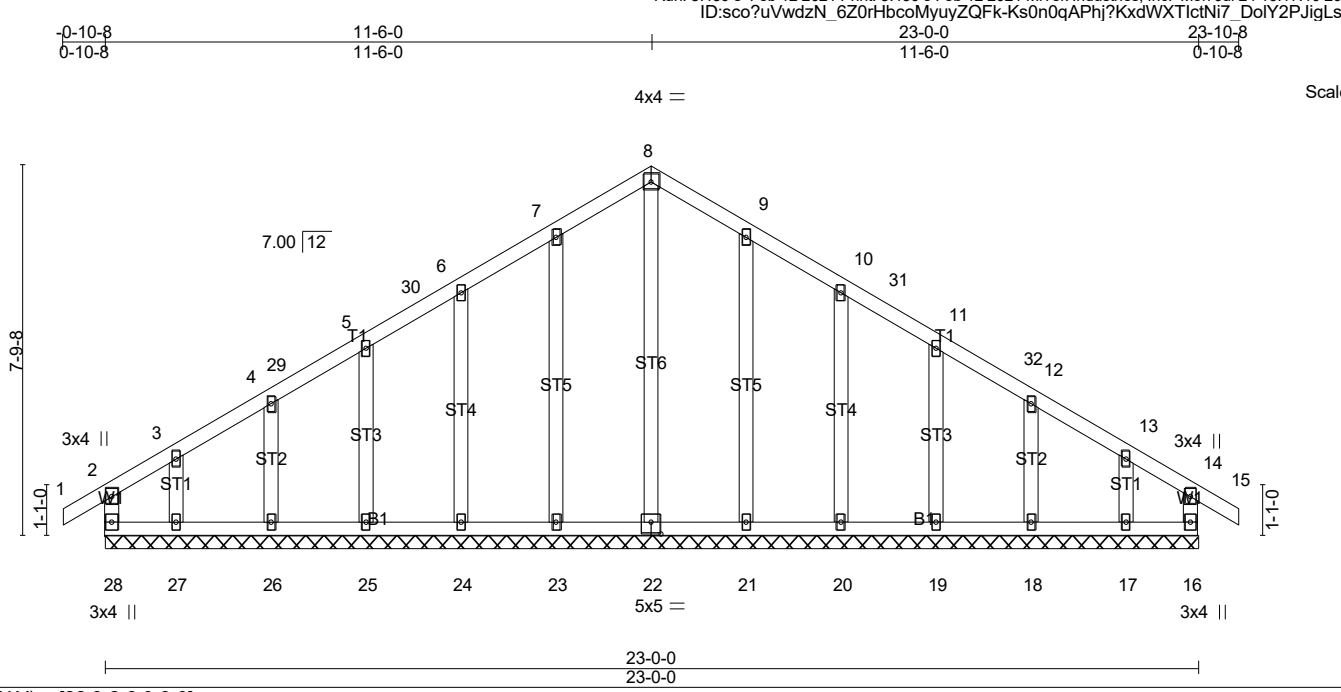

Plate Offsets (X,Y)-- [22:0-2-8,0-3-0]

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	15	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00	15	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.00	16	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-R							Weight: 146 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.

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

REACTIONS. All bearings 23-0-0.
(lb) - Max Horz 28=-130(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 28, 16, 23, 24, 25, 26, 27, 21, 20, 19, 18, 17
Max Grav All reactions 250 lb or less at joint(s) 28, 16, 25, 26, 27, 19, 18, 17 except 22=273(LC 27), 23=295(LC 5), 24=279(LC 5), 21=295(LC 6), 20=279(LC 6)

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=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; 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 6-8-6, Corner(3R) 6-8-6 to 16-3-10, Exterior(2N) 16-3-10 to 19-0-14, Corner(3E) 19-0-14 to 23-10-8 zone;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) 28, 16, 23, 24, 25, 26, 27, 21, 20, 19, 18, 17.

LOAD CASE(S) Standard

7/24/2023

Job	Truss	Truss Type	Qty	Ply	LOT 38 PROVIDENCE CREEK | 38 PROVIDENCE CREEK DRIVE FUQUAY-VARIN
23-4837-R01	R02	COMMON	2	1	**# 40140** Job Reference (optional)

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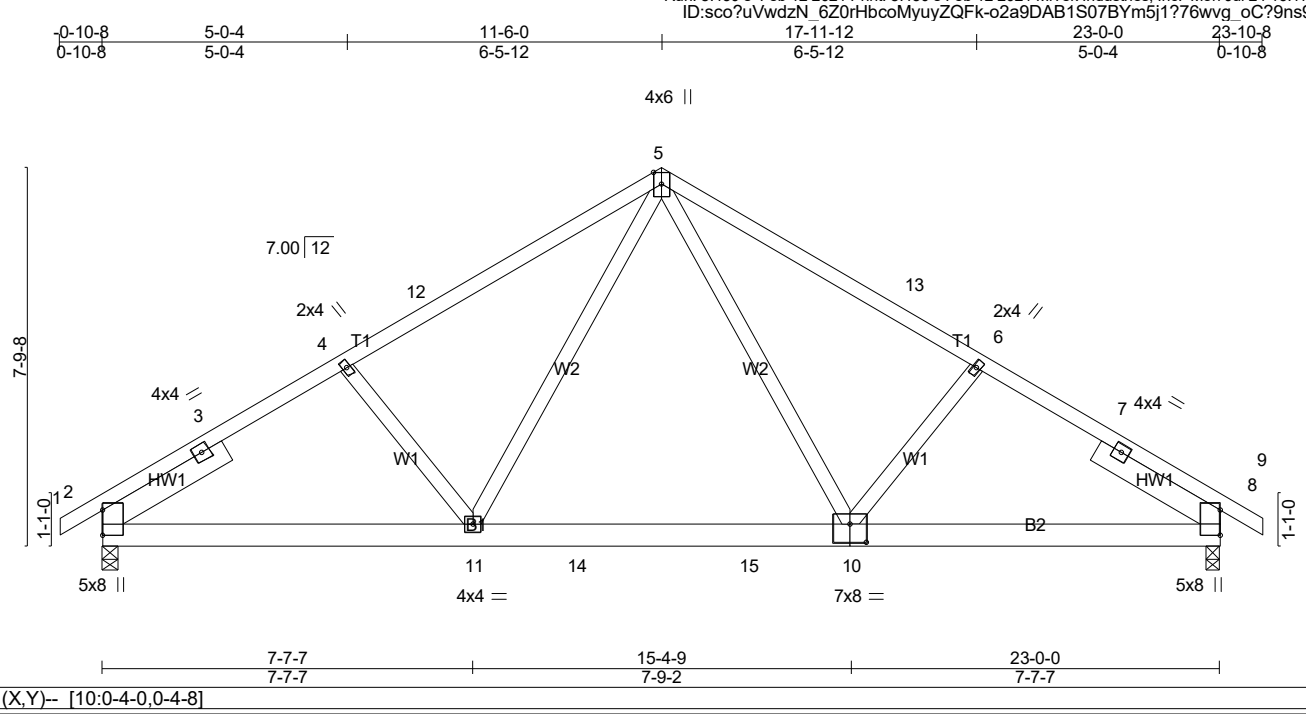

Plate Offsets (X,Y)-- [10:0-4-0,0-4-8]

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	0.77	Vert(LL)	-0.09	10-11	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.14	10-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.02	8	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH								
BCDL	10.0										Weight: 147 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 - 2-11-12, Right 2x6 SP No.2 -˜ 2-11-12

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-4-5 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=973/0-3-8 (min. 0-1-8), 8=973/0-3-8 (min. 0-1-8)
Max Horz 2=-132(LC 10)
Max Uplift2=-56(LC 14), 8=-56(LC 15)
Max Grav 2=996(LC 21), 8=996(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1366/83, 3-4=-1284/110, 4-12=-1172/106, 5-12=-1081/130, 5-13=-1082/130, 6-13=-1172/106, 6-7=-1284/110, 7-8=-1366/83
BOT CHORD 2-11=-105/1127, 11-14=0/775, 14-15=0/775, 10-15=0/775, 8-10=-44/1082
WEBS 5-10=-46/463, 6-10=-311/152, 5-11=-46/463, 4-11=-311/152

NOTES- (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; 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 6-8-6, Exterior(2R) 6-8-6 to 16-3-10, Interior(1) 16-3-10 to 19-0-14, Exterior(2E) 19-0-14 to 23-10-8 zone;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) 2, 8.

LOAD CASE(S) Standard

7/24/2023

Job	Truss	Truss Type	Qty	Ply	LOT 38 PROVIDENCE CREEK | 38 PROVIDENCE CREEK DRIVE FUQUAY-VARIN
23-4837-R01	R03	COMMON GIRDER	1	3	Job Reference (optional) **# 40140**

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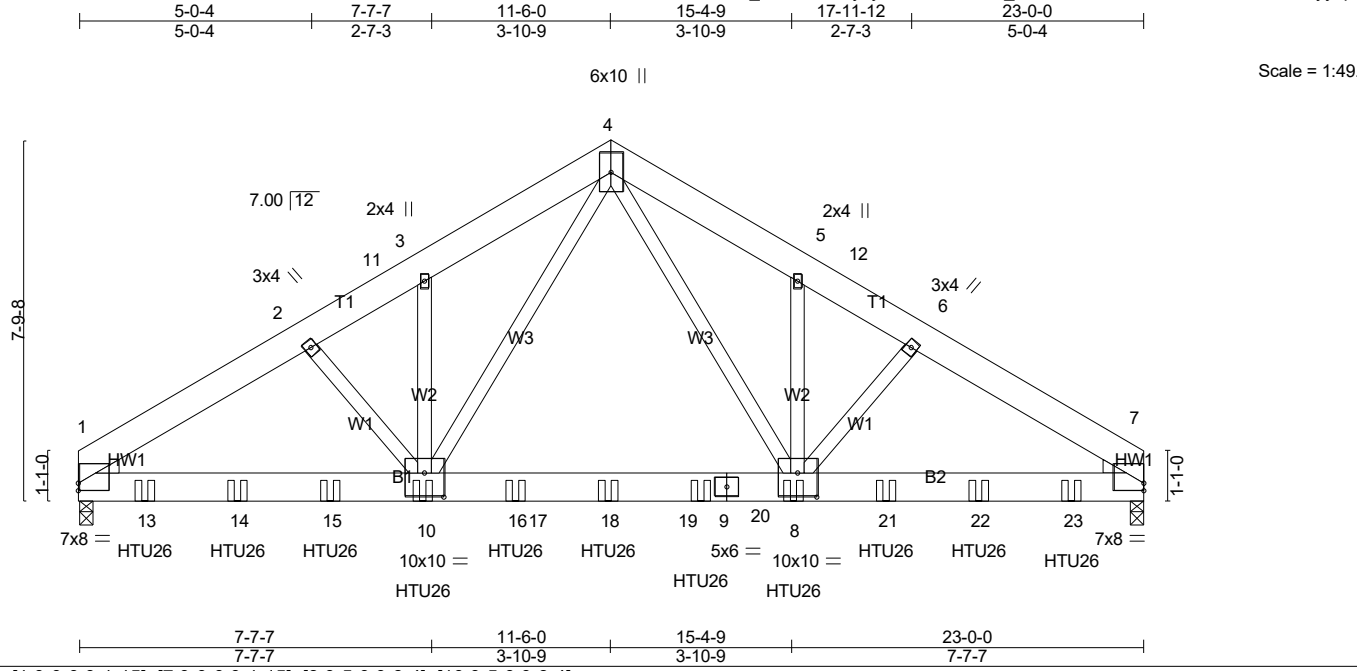


Plate Offsets (X,Y)-- [1:0-0-0,0-1-15], [7:0-0-0,0-1-15], [8:0-5-0,0-6-4], [10:0-5-0,0-6-4]

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	0.70	Vert(LL)	-0.16	8-10	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.27	8-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.06	7	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 607 lb	FT = 20%
BCDL	10.0											

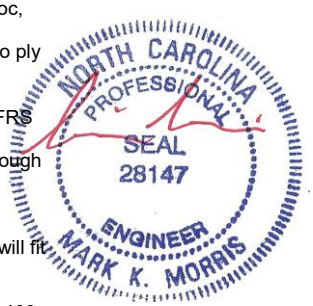
LUMBER-
TOP CHORD 2x8 SP DSS
BOT CHORD 2x8 SP DSS
WEBS 2x4 SP No.3 *Except*
W3: 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

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.

REACTIONS. (lb/size) 1=13129/0-3-8 (req. 0-4-7), 7=13206/0-3-8 (req. 0-4-7)
Max Horz 1=128(LC 38)
Max Uplift1=-400(LC 12), 7=-304(LC 13)
Max Grav 1=13153(LC 18), 7=13253(LC 6)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-17868/510, 2-11=-17704/499, 3-11=-17624/511, 3-4=-17020/548, 4-5=-17179/487, 5-12=-17833/441, 6-12=-17899/430, 6-7=-18038/439
BOT CHORD 1-13=-461/14921, 13-14=-461/14921, 14-15=-461/14921, 10-15=-461/14921, 10-16=-224/10492, 16-17=-224/10492, 17-18=-224/10492, 18-19=-224/10492, 19-20=-224/10492, 9-20=-224/10492, 8-9=-224/10492, 8-21=-309/15089, 21-22=-309/15089, 22-23=-309/15089, 7-23=-309/15089
WEBS 3-10=-112/1366, 4-10=-345/9052, 4-8=-234/9402, 5-8=-94/1422

NOTES- (14)
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 3 rows staggered at 0-5-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-6-0 oc, Except member 10-4 2x4 - 1 row at 0-9-0 oc, member 4-8 2x4 - 1 row at 0-9-0 oc, member 8-5 2x4 - 1 row at 0-9-0 oc, member 2-10 2x4 - 1 row at 0-9-0 oc, member 8-6 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=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; 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, with BCDL = 10.0psf.
9) WARNING: Required bearing size at joint(s) 1, 7 greater than input bearing size.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=400, 7=304.



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Continued on page 2

NOTES- (14)

11) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-5-4 from the left end to 7-5-4 to connect truss(es) R08 (1 ply 2x6 SP) to front face of bottom chord.
12) Use Simpson Strong-Tie HTU26 (20-16d Girder, 11-10dx1 1/2 Truss) or equivalent spaced at 2-0-0 oc max. starting at 9-5-4 from the left end to 21-5-4 to connect truss(es) R07 (1 ply 2x6 SP) to front face of bottom chord.
13) 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
   Uniform Loads (plf)
      Vert: 1-4=-60, 4-7=-60, 1-7=-20
   Concentrated Loads (lb)
      Vert: 10=-2181(F) 8=-2256(F) 13=-2181(F) 14=-2181(F) 15=-2181(F) 16=-2256(F) 18=-2256(F) 20=-2256(F) 21=-2256(F) 22=-2256(F) 23=-2256(F)

7/24/2023

Job	Truss	Truss Type	Qty	Ply	LOT 38 PROVIDENCE CREEK | 38 PROVIDENCE CREEK DRIVE FUQUAY-VARIN
23-4837-R01	R04	PIGGYBACK BASE SUPPO	1	1	Job Reference (optional) **# 40140**

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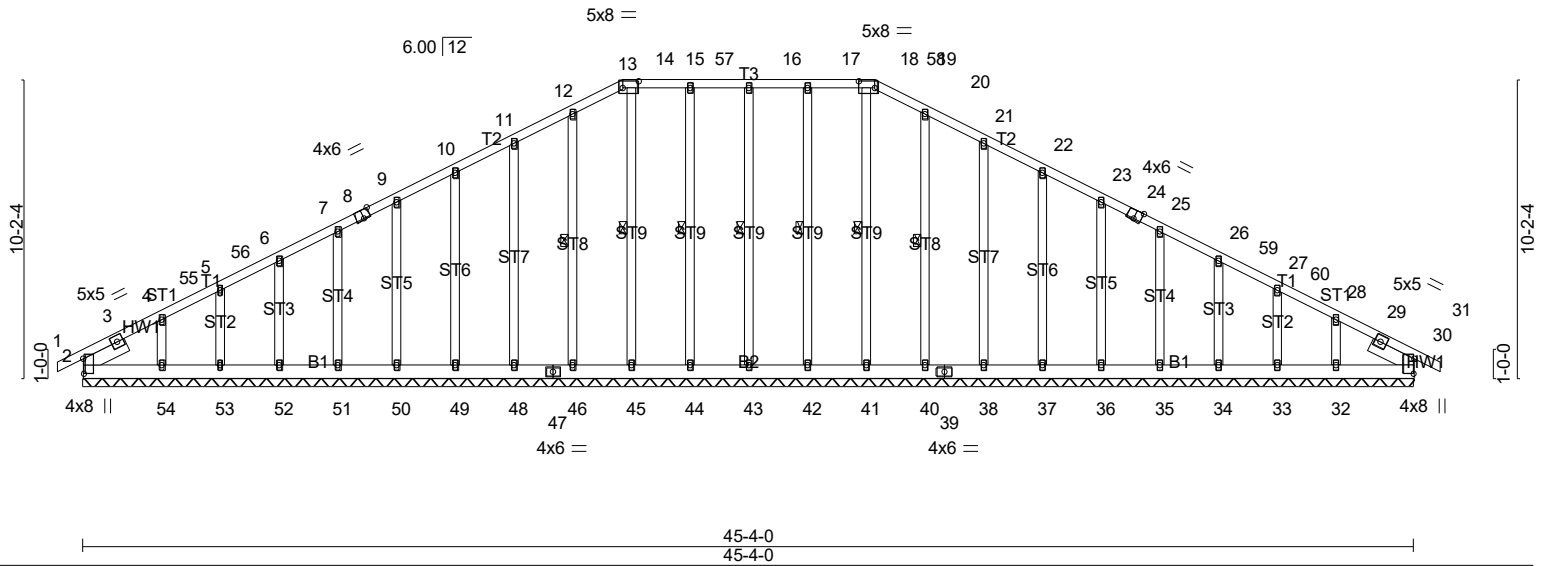
-0-10-8 | 18-4-8 | 26-11-8 | 45-4-0 | 46-2-8
0-10-8 | 18-4-8 | 8-7-0 | 18-4-8 | 0-10-8

Scale = 1:78.5



45-4-0
45-4-0

Plate Offsets (X,Y)-- [2:0-6-1,0-0-5], [8:0-3-0,Edge], [13:0-6-8,0-2-12], [19:0-6-8,0-2-12], [24:0-3-0,Edge], [30:0-6-1,0-0-5]

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	0.08	Vert(LL)	-0.00	30	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	0.00	30	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.01	30	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-SH								
BCDL	10.0										Weight: 383 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
OTHERS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -˜ 1-7-12, Right 2x6 SP No.2 -˜ 1-7-12

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 16-43, 15-44, 14-45, 12-46, 17-42, 18-41, 20-40

REACTIONS. All bearings 45-4-0.
(lb) - Max Horz 2=117(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 2, 43, 44, 46, 48, 49, 50, 51, 52, 53, 54, 42, 40, 38, 37, 36, 35, 34, 33, 32
Max Grav All reactions 250 lb or less at joint(s) 2, 52, 53, 54, 34, 33, 32, 30 except 43=291(LC 44), 44=299(LC 44), 45=266(LC 52), 46=296(LC 47), 48=293(LC 45), 49=292(LC 45), 50=290(LC 45), 51=299(LC 45), 42=299(LC 44), 41=257(LC 52), 40=294(LC 49), 38=293(LC 45), 37=292(LC 45), 36=290(LC 45), 35=299(LC 45)

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=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; 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 13-6-14, Corner(3R) 13-6-14 to 31-9-2, Exterior(2N) 31-9-2 to 41-4-14, Corner(3E) 41-4-14 to 46-2-8 zone;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) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 MT20 unless otherwise indicated.
9) Gable requires continuous bottom chord bearing.
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) 2, 43, 44, 46, 48, 49, 50, 51, 52, 53, 54, 42, 40, 38, 37, 36, 35, 34, 33, 32.

LOAD CASE(S) Standard

7/24/2023

Job	Truss	Truss Type	Qty	Ply	LOT 38 PROVIDENCE CREEK | 38 PROVIDENCE CREEK DRIVE FUQUAY-VARIN
23-4837-R01	R05	PIGGYBACK BASE	7	1	Job Reference (optional) **# 40140**

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-0-10-8	6-1-0	12-2-8	18-4-8	22-8-0	26-11-8	33-1-8	39-3-0	45-4-0	46-2-8
0-10-8	6-1-0	6-1-8	6-2-0	4-3-8	4-3-8	6-2-0	6-1-8	6-1-0	0-10-8

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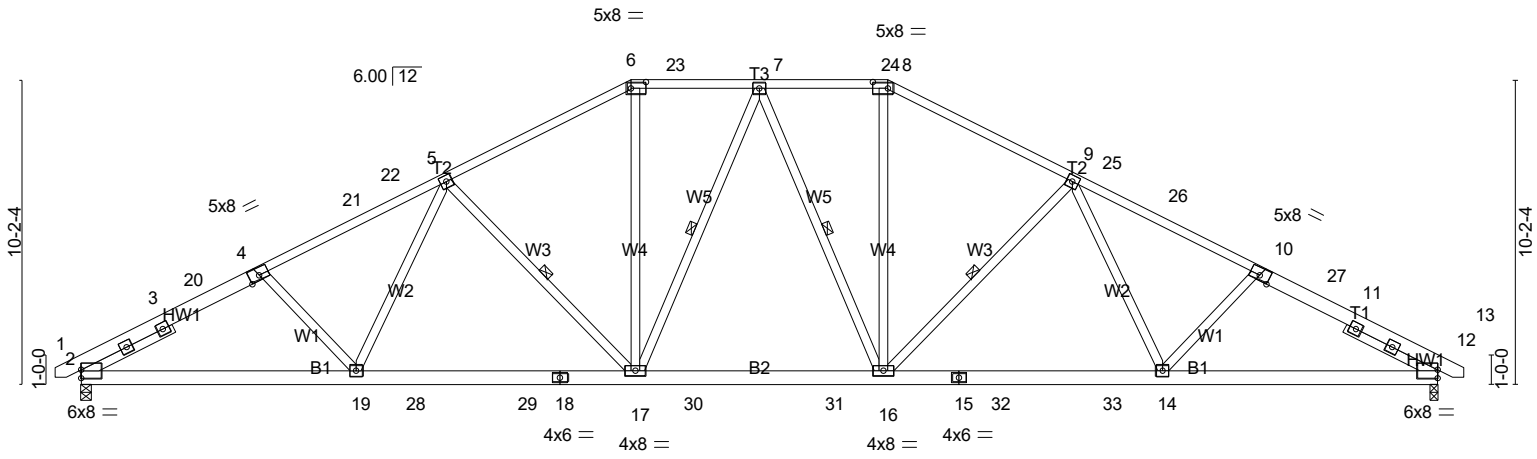


9-2-5	18-4-8	26-11-8	36-1-11	45-4-0
9-2-5	9-2-4	8-7-0	9-2-4	9-2-5

Plate Offsets (X,Y)-- [2:0-0-0,0-3-6], [6:0-6-0,0-2-8], [8:0-6-0,0-2-8], [12:0-0-0,0-3-6]

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	0.73	Vert(LL)	-0.28	14-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.44	14-16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.14	12	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-SH								
BCDL	10.0										Weight: 326 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1 *Except*
T3: 2x4 SP No.2, T1: 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 -˜ 3-4-14, Right 2x4 SP No.3 -˜ 3-4-14

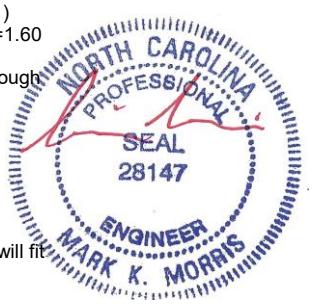
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-17, 7-17, 7-16, 9-16

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

REACTIONS. (lb/size) 2=1855/0-3-8 (min. 0-2-11), 12=1855/0-3-8 (min. 0-2-11)
Max Horz 2=-117(LC 15)
Max Uplift2=-82(LC 14), 12=-82(LC 15)
Max Grav 2=2251(LC 39), 12=2251(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3938/200, 3-20=-3846/216, 4-20=-3814/226, 4-21=-3706/215, 21-22=-3577/228, 5-22=-3474/231, 5-6=-2959/255, 6-23=-2544/254, 7-23=-2544/254, 7-24=-2544/254, 8-24=-2544/254, 8-9=-2959/255, 9-25=-3474/231, 25-26=-3577/228, 10-26=-3706/215, 10-27=-3814/226, 11-27=-3846/216, 11-12=-3938/200
BOT CHORD 2-19=-180/3338, 19-28=-94/3061, 28-29=-94/3061, 18-29=-94/3061, 17-18=-94/3061, 17-30=-33/2560, 30-31=-33/2560, 16-31=-33/2560, 15-16=-94/3061, 15-32=-94/3061, 32-33=-94/3061, 14-33=-94/3061, 12-14=-139/3338
WEBS 5-19=-3/391, 5-17=-879/162, 6-17=-26/970, 7-17=-311/149, 7-16=-311/149, 8-16=-26/970, 9-16=-879/162, 9-14=-3/391

NOTES- (11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-8-4 to 4-1-5, Interior(1) 4-1-5 to 11-7-1, Exterior(2R) 11-7-1 to 33-8-15, Interior(1) 33-8-15 to 41-2-11, Exterior(2E) 41-2-11 to 46-0-4 zone;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) Provide adequate drainage to prevent water ponding.
7) All plates are 5x5 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12.



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LOAD CASE(S) Standard

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 38 PROVIDENCE CREEK | 38 PROVIDENCE CREEK DRIVE FUQUAY-VARIN
23-4837-R01	R06	PIGGYBACK BASE	1	1	Job Reference (optional) **# 40140**

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-0-10-8 6-1-0 12-2-8 18-4-8 22-8-0 26-11-8 33-1-8 39-3-0 45-4-0
0-10-8 6-1-0 6-1-8 6-2-0 4-3-8 4-3-8 6-2-0 6-1-8 6-1-0

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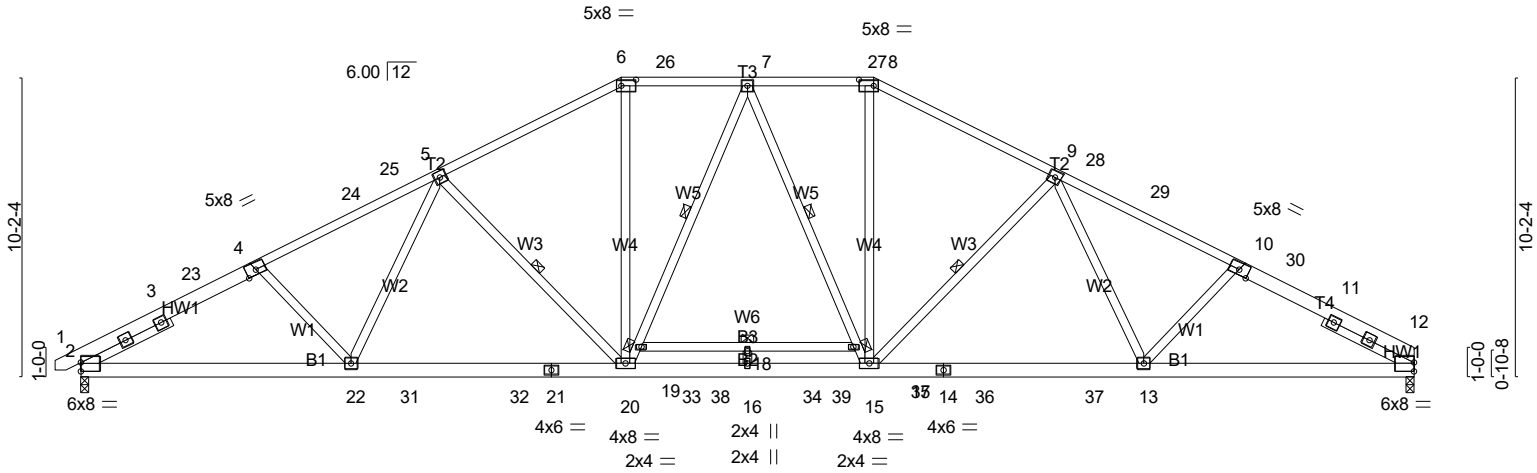

9-2-5 18-4-8 22-8-0 26-11-8 36-1-11 45-4-0
9-2-5 9-2-4 4-3-8 4-3-8 9-2-4 9-2-5

Plate Offsets (X,Y)-- [2:0-0-0,0-3-10], [6:0-6-0,0-2-8], [8:0-6-0,0-2-8], [12:0-0-0,0-3-10]

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	0.80	Vert(LL)	-0.31	18	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.51	18	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.16	12	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-SH							Weight: 335 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.1 *Except*
T3: 2x4 SP No.2, T1,T4: 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
B3: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
W6: 2x4 SP No.2
SLIDER Left 2x4 SP No.3 -˜ 3-4-14, Right 2x4 SP No.3 -˜ 3-4-14

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except:
6-0-0 oc bracing: 17-19
WEBS 1 Row at midpt 5-20, 7-19, 7-17, 9-15

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

REACTIONS. (lb/size) 2=1930/0-3-8 (min. 0-2-12), 12=1888/0-3-8 (min. 0-2-12)
Max Horz 2=-121(LC 15)
Max Uplift2=-44(LC 14), 12=-35(LC 15)
Max Grav 2=2347(LC 45), 12=2312(LC 45)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4177/130, 3-23=-4100/145, 4-23=-4073/156, 4-24=-4003/144, 24-25=-3794/156, 5-25=-3771/159, 5-6=-3297/175, 6-26=-2848/182, 7-26=-2848/182, 7-27=-2848/182, 8-27=-2848/182, 8-9=-3297/175, 9-28=-3773/163, 28-29=-3876/160, 10-29=-4005/147, 10-30=-4059/161, 11-30=-4102/150, 11-12=-4179/135
BOT CHORD 2-22=-116/3551, 22-31=-17/3344, 31-32=-17/3344, 21-32=-17/3344, 20-21=-17/3344, 20-33=0/2874, 16-33=0/2874, 16-34=0/2874, 34-35=0/2874, 15-35=0/2874, 14-15=-19/3344, 14-36=-19/3344, 36-37=-19/3344, 13-37=-19/3344, 12-13=-75/3554
WEBS 5-22=-12/361, 5-20=-867/168, 6-20=0/1120, 19-20=-347/112, 7-19=-311/147, 7-17=-310/150, 15-17=-347/115, 8-15=0/1120, 9-15=-868/169, 9-13=-13/351

NOTES- (11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-8-4 to 4-1-5, Interior(1) 4-1-5 to 11-7-1, Exterior(2R) 11-7-1 to 33-8-15, Interior(1) 33-8-15 to 40-6-6, Exterior(2E) 40-6-6 to 45-4-0 zone;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) Provide adequate drainage to prevent water ponding.
7) All plates are 5x5 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12.

NORTH CAROLINA PROFESSIONAL SEAL 28147 ENGINEER MARK K. MORRIS

7/24/2023

LOAD CASE(S) Standard.

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 38 PROVIDENCE CREEK | 38 PROVIDENCE CREEK DRIVE FUQUAY-VARIN
23-4837-R01	R07	PIGGYBACK BASE	7	1	**# 40140** Job Reference (optional)

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-0-10-8 6-1-0 12-2-8 18-4-8 22-8-0 26-11-8 33-1-8 39-3-0 45-0-8
0-10-8 6-1-0 6-1-8 6-2-0 4-3-8 4-3-8 6-2-0 6-1-8 5-9-8

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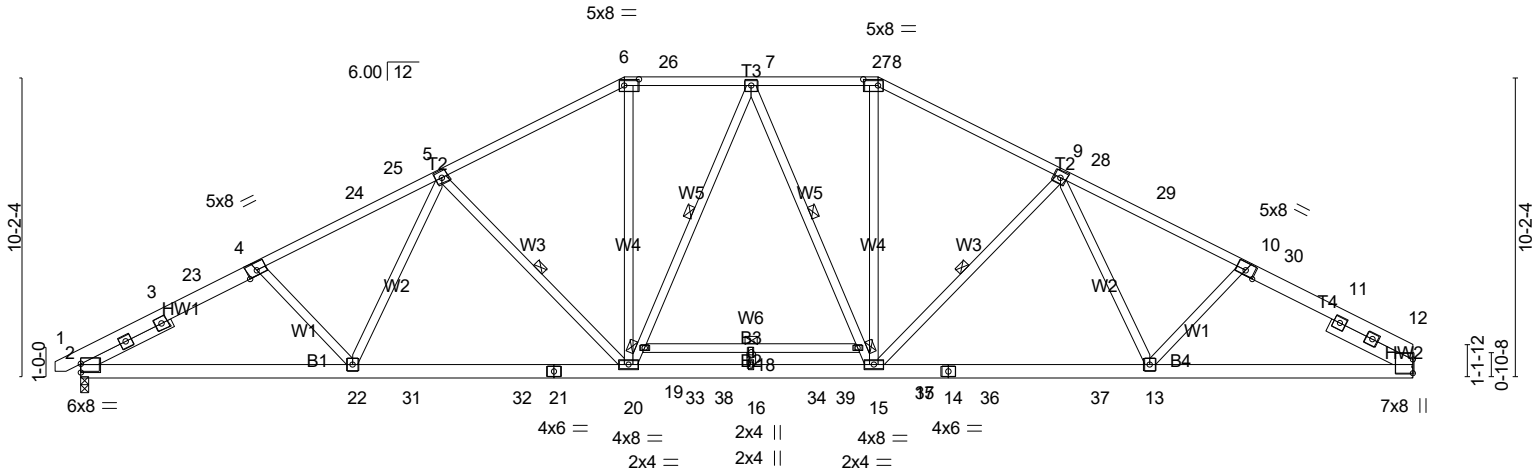


9-2-5 18-4-8 22-8-0 26-11-8 36-1-11 45-0-8
9-2-5 9-2-4 4-3-8 4-3-8 9-2-4 8-10-13

Plate Offsets (X,Y)-- [2:0-0-0,0-3-10], [6:0-6-0,0-2-8], [8:0-6-0,0-2-8]

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	0.81	Vert(LL)	-0.30	18	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.50	18	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.15	12	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-SH							Weight: 336 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.1 *Except*
T3: 2x4 SP No.2, T1: 2x6 SP No.2, T4: 2x6 SP No.1
BOT CHORD 2x6 SP No.2 *Except*
B3: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
W6: 2x4 SP No.2
SLIDER Left 2x4 SP No.3 -˜ 3-4-14, Right 2x6 SP No.2 -˜ 3-1-12

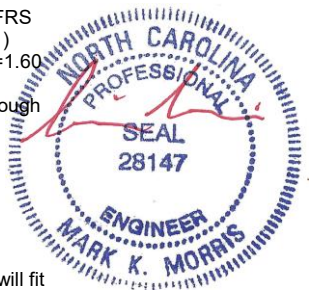
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except:
6-0-0 oc bracing: 17-19
WEBS 1 Row at midpt 5-20, 7-19, 7-17, 9-15

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

REACTIONS. (lb/size) 2=1918/0-3-8 (min. 0-2-12), 12=1877/Mechanical
Max Horz 2=-121(LC 19)
Max Uplift2=-45(LC 14), 12=-32(LC 15)
Max Grav 2=2332(LC 45), 12=2307(LC 45)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4149/129, 3-23=-4071/144, 4-23=-4044/156, 4-24=-3974/143, 24-25=-3765/156, 5-25=-3742/159, 5-6=-3265/174, 6-26=-2820/181, 7-26=-2820/181, 7-27=-2808/181, 8-27=-2808/181, 8-9=-3252/174, 9-28=-3651/161, 28-29=-3754/158, 10-29=-3884/145, 10-30=-3907/158, 11-30=-3956/147, 11-12=-4027/132
BOT CHORD 2-22=-117/3526, 22-31=-16/3317, 31-32=-16/3317, 21-32=-16/3317, 20-21=-16/3317, 20-33=0/2840, 16-33=0/2840, 16-34=0/2840, 34-35=0/2840, 15-35=0/2840, 14-15=-17/3270, 14-36=-17/3270, 36-37=-17/3270, 13-37=-17/3270, 12-13=-70/3386
WEBS 5-22=-12/362, 5-20=-868/168, 6-20=0/1106, 19-20=-336/120, 7-19=-299/155, 7-17=-319/137, 15-17=-356/102, 8-15=0/1101, 9-15=-819/168, 9-13=-12/274

NOTES- (12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-8-4 to 4-1-5, Interior(1) 4-1-5 to 11-7-1, Exterior(2R) 11-7-1 to 33-8-15, Interior(1) 33-8-15 to 40-2-14, Exterior(2E) 40-2-14 to 45-0-8 zone;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) Provide adequate drainage to prevent water ponding.
7) All plates are 5x5 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12.



7/24/2023

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	LOT 38 PROVIDENCE CREEK | 38 PROVIDENCE CREEK DRIVE FUQUAY-VARIN
23-4837-R01	R07	PIGGYBACK BASE	7	1	Job Reference (optional) **# 40140**

LOAD CASE(S) Standard

7/24/2023

Job	Truss	Truss Type	Qty	Ply	LOT 38 PROVIDENCE CREEK | 38 PROVIDENCE CREEK DRIVE FUQUAY-VARIN
23-4837-R01	R08	PIGGYBACK BASE	4	1	Job Reference (optional) **# 40140**

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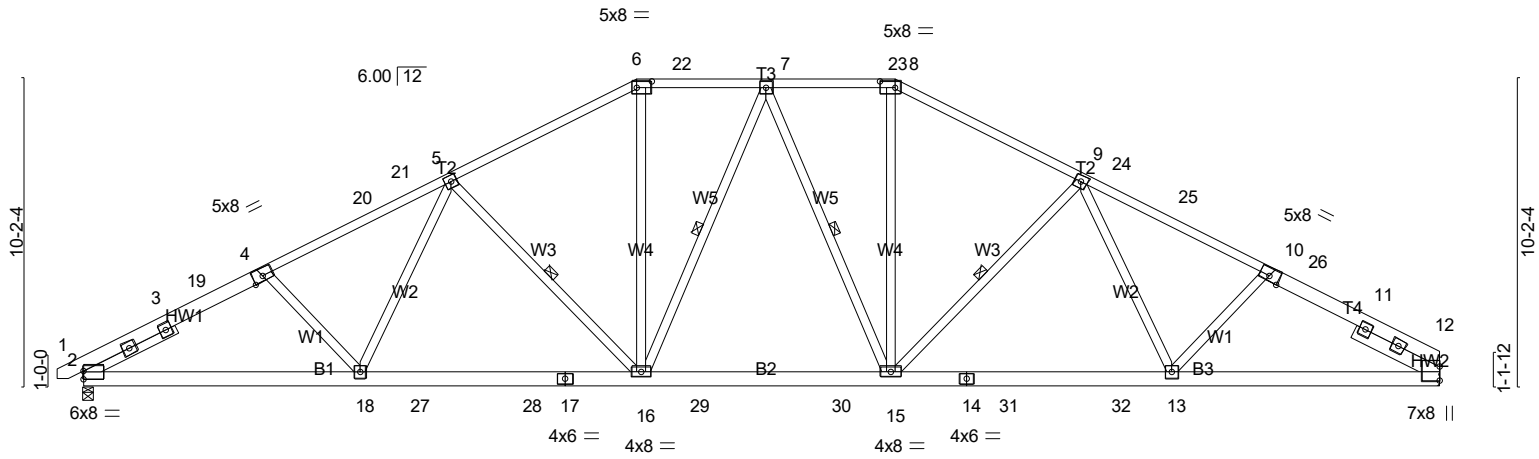
-0-10-8	6-1-0	12-2-8	18-4-8	22-8-0	26-11-8	33-1-8	39-3-0	45-0-8
0-10-8	6-1-0	6-1-8	6-2-0	4-3-8	4-3-8	6-2-0	6-1-8	5-9-8

Scale = 1:76.5



9-2-5	18-4-8	22-8-0	26-11-8	36-1-11	45-0-8
9-2-5	9-2-4	4-3-8	4-3-8	9-2-4	8-10-13

Plate Offsets (X,Y)-- [2:0-0-0,0-3-6], [6:0-6-0,0-2-8], [8:0-6-0,0-2-8]

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 1.00	Vert(LL) -0.28 16-18 >999 240	MT20 244/190
Snow (Pf)	20.0	Lumber DOL 1.15	BC 0.85	Vert(CT) -0.46 16-18 >999 180	
TCDL	10.0	Rep Stress Incr YES	WB 0.40	Horz(CT) 0.14 12 n/a n/a	
BCLL	0.0 *	Code IRC2021/TPI2014	Matrix-SH		Weight: 325 lb FT = 20%
BCDL	10.0				

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
T1,T4: 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 -˜ 3-4-14, Right 2x6 SP No.2 -˜ 3-1-12

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-16, 7-16, 7-15, 9-15

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

REACTIONS. (lb/size) 2=1843/0-3-8 (min. 0-2-10), 12=1801/Mechanical
Max Horz 2=-121(LC 19)
Max Uplift2=-82(LC 14), 12=-70(LC 15)
Max Grav 2=2238(LC 39), 12=2201(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3914/200, 3-19=-3822/216, 4-19=-3790/227, 4-20=-3681/215, 20-21=-3472/228, 5-21=-3448/231, 5-6=-2930/255, 6-22=-2518/254, 7-22=-2518/254, 7-23=-2507/254, 8-23=-2507/254, 8-9=-2919/255, 9-24=-3361/231, 24-25=-3464/228, 10-25=-3593/215, 10-26=-3650/227, 11-26=-3710/223, 11-12=-3794/201
BOT CHORD 2-18=-178/3319, 18-27=-85/3035, 27-28=-85/3035, 17-28=-85/3035, 16-17=-85/3035, 16-29=-23/2528, 29-30=-23/2528, 15-30=-23/2528, 14-15=-84/2992, 14-31=-84/2992, 31-32=-84/2992, 13-32=-84/2992, 12-13=-129/3183
WEBS 5-18=-3/396, 5-16=-879/162, 6-16=-26/956, 7-16=-301/155, 7-15=-319/139, 8-15=-26/952, 9-15=-831/161, 9-13=-1/339

NOTES- (12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-8-4 to 4-1-5, Interior(1) 4-1-5 to 11-7-1, Exterior(2R) 11-7-1 to 33-8-15, Interior(1) 33-8-15 to 40-2-14, Exterior(2E) 40-2-14 to 45-0-8 zone;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) Provide adequate drainage to prevent water ponding.
7) All plates are 5x5 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12.

NORTH CAROLINA PROFESSIONAL SEAL 28147 ENGINEER MARK K. MORRIS

7/24/2023

LOAD CASE(S) Standard

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 38 PROVIDENCE CREEK | 38 PROVIDENCE CREEK DRIVE FUQUAY-VARIN
23-4837-R01	R09	GABLE	1	1	**# 40140** Job Reference (optional)

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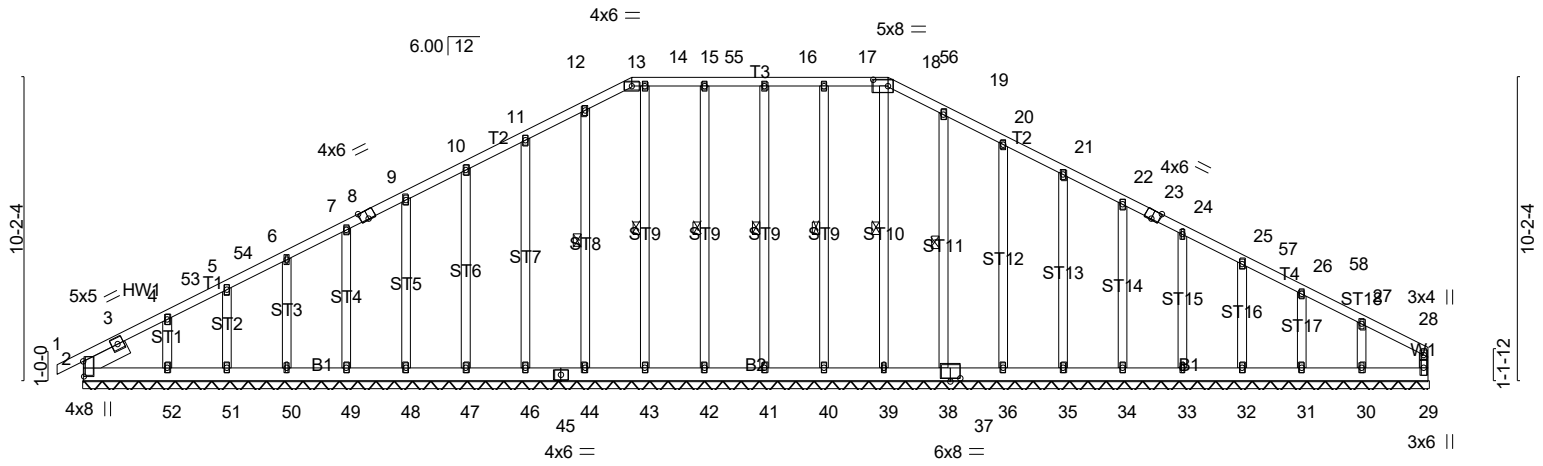
-0-10-8 0-10-8 | 18-4-8 18-4-8 | 26-11-8 8-7-0 | 45-0-8 18-1-0

Scale = 1:77.2



45-0-8
45-0-8

Plate Offsets (X,Y)-- [2:0-6-1,0-0-5], [8:0-3-0,Edge], [18:0-6-0,0-2-8], [23:0-3-0,Edge], [38:0-4-0,0-1-4]

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	0.13	Vert(LL)	-0.00	1	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	1	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.00	29	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-SH								
BCDL	10.0										Weight: 377 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3
SLIDER	Left 2x6 SP No.2 -˜ 1-7-11

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	
WEBS	1 Row at midpt	18-39, 17-40, 16-41, 15-42, 14-43, 12-44, 19-38

REACTIONS. All bearings 45-0-8.
(lb) - Max Horz 2=128(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 2, 40, 41, 42, 44, 46, 47, 48, 49, 50, 51, 52, 38, 36, 35, 34, 33, 32, 31, 30
Max Grav All reactions 250 lb or less at joint(s) 29, 2, 39, 50, 51, 52, 32, 31, 30 except 40=310(LC 44), 41=289(LC 44), 42=298(LC 44), 43=282(LC 52), 44=295(LC 47), 46=293(LC 45), 47=292(LC 45), 48=291(LC 45), 49=298(LC 45), 38=285(LC 49), 36=292(LC 45), 35=292(LC 45), 34=290(LC 45), 33=300(LC 45)

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=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; 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 13-6-14, Corner(3R) 13-6-14 to 31-9-2, Exterior(2N) 31-9-2 to 40-1-2, Corner(3E) 40-1-2 to 44-10-12 zone;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) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 MT20 unless otherwise indicated.
9) Gable requires continuous bottom chord bearing.
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) 2, 40, 41, 42, 44, 46, 47, 48, 49, 50, 51, 52, 38, 36, 35, 34, 33, 32, 31, 30.

LOAD CASE(S) Standard

7/24/2023

Job	Truss	Truss Type	Qty	Ply	LOT 38 PROVIDENCE CREEK | 38 PROVIDENCE CREEK DRIVE FUQUAY-VARIN
23-4837-R01	SP01	GABLE	1	1	**# 40140** Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Jul 24 16:17:30 2023 Page 1
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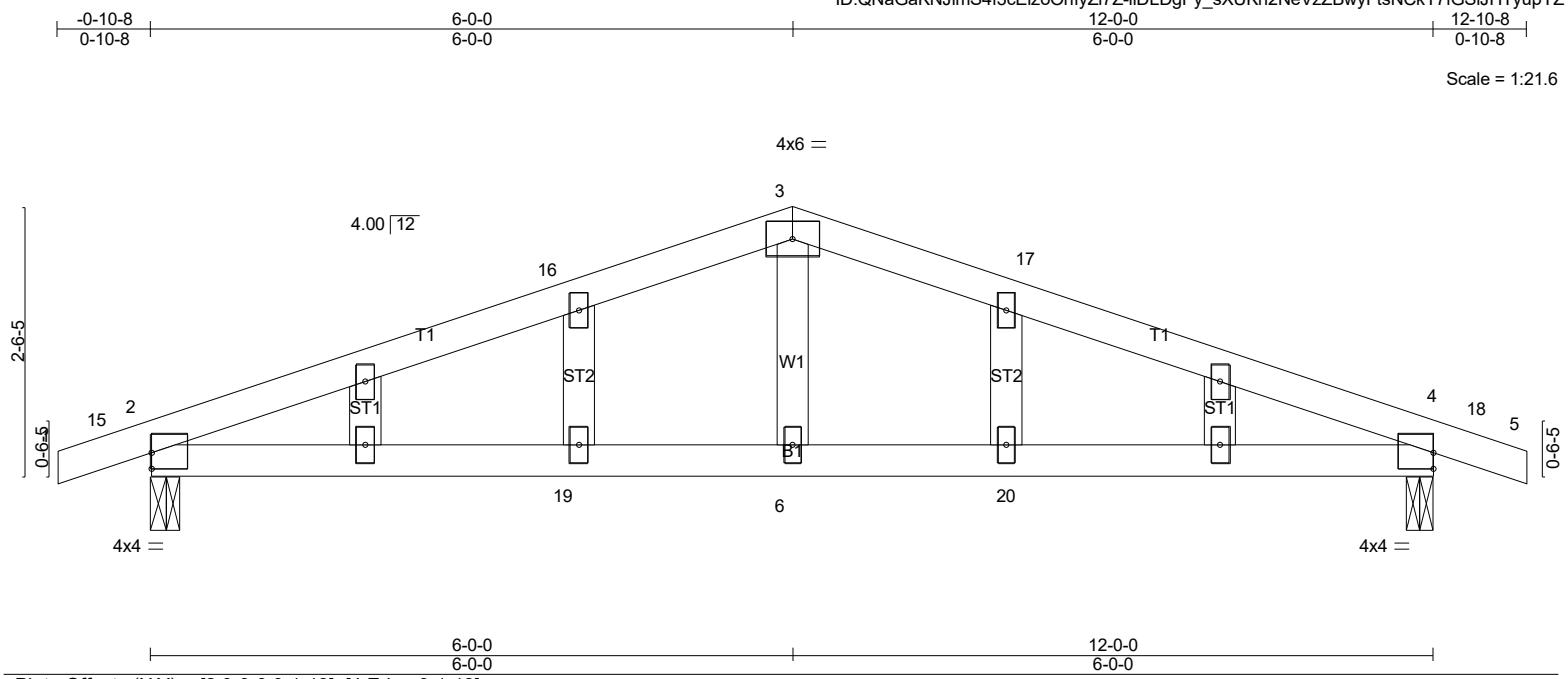

Plate Offsets (X,Y)-- [2:0-0-0,0-1-13], [4:Edge,0-1-13]

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	0.71	Vert(LL)	0.10	4-6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.89	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
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-11-11 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=530/0-3-0 (min. 0-1-8), 4=530/0-3-0 (min. 0-1-8)
Max Horz 2=-28(LC 19)
Max Uplift2=-139(LC 10), 4=-139(LC 11)
Max Grav 2=621(LC 21), 4=621(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-16=-849/973, 3-16=-735/984, 3-17=-735/984, 4-17=-849/973
BOT CHORD 2-19=-854/706, 6-19=-854/706, 6-20=-854/706, 4-20=-854/706
WEBS 3-6=-410/279

NOTES- (12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; 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; 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) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=139, 4=139.

LOAD CASE(S) Standard

7/24/2023

Job	Truss	Truss Type	Qty	Ply	LOT 38 PROVIDENCE CREEK | 38 PROVIDENCE CREEK DRIVE FUQUAY-VARIN
23-4837-R01	SP02	COMMON	5	1	Job Reference (optional) **# 40140**

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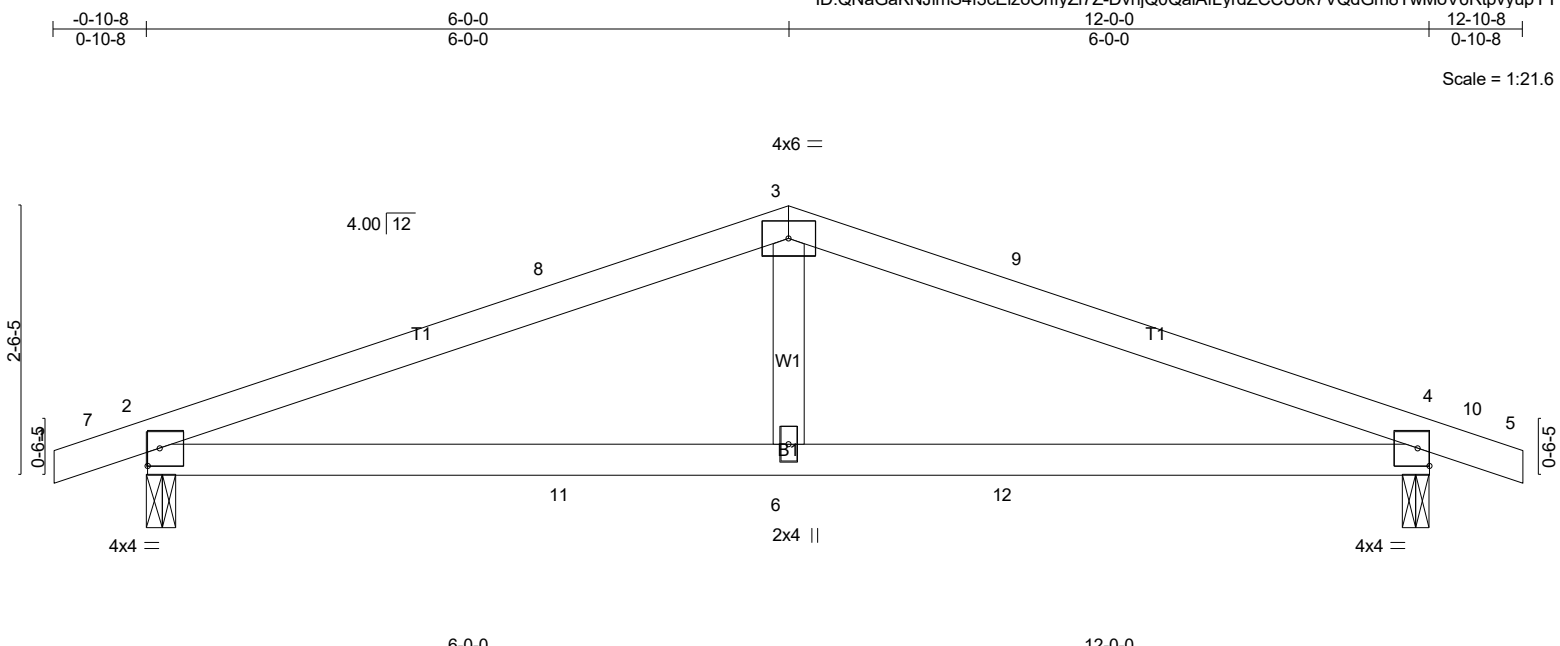


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	0.08	4-6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.10	4-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 43 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 3-11-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-10-0 oc bracing.

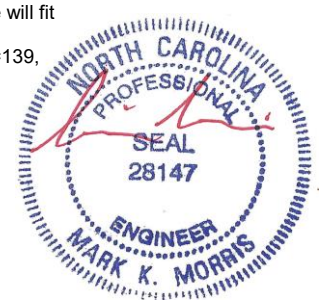
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=530/0-3-0 (min. 0-1-8), 4=530/0-3-0 (min. 0-1-8)
Max Horz 2=-28(LC 19)
Max Uplift2=-139(LC 10), 4=-139(LC 11)
Max Grav 2=621(LC 21), 4=621(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-849/775, 3-8=-735/786, 3-9=-735/786, 4-9=-849/775
BOT CHORD 2-11=-683/706, 6-11=-683/706, 6-12=-683/706, 4-12=-683/706
WEBS 3-6=-334/279

NOTES- (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; 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; 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=139, 4=139.

LOAD CASE(S) Standard



7/24/2023

Job	Truss	Truss Type	Qty	Ply	LOT 38 PROVIDENCE CREEK | 38 PROVIDENCE CREEK DRIVE FUQUAY-VARIN
23-4837-R01	V01	Valley	1	1	**# 40140**
					Job Reference (optional)

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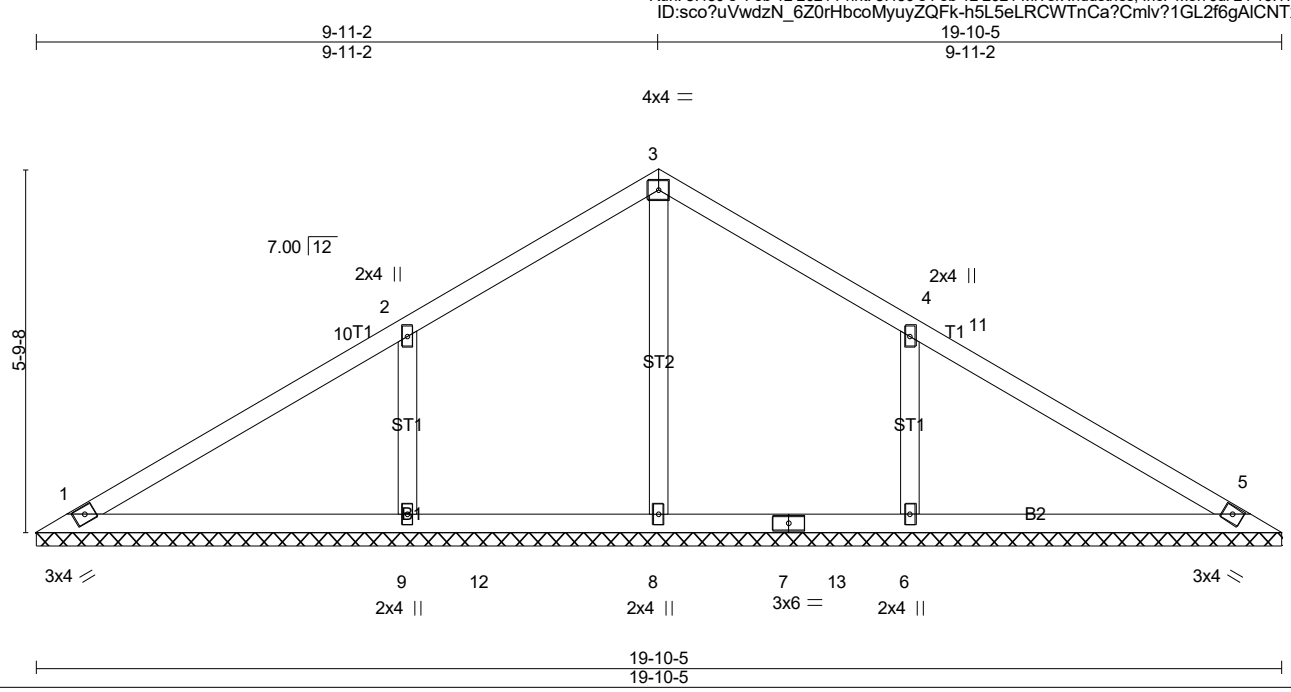

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 78 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 19-10-5.
(lb) - Max Horz 1=-98(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=-105(LC 14), 6=-105(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=388(LC 6), 9=576(LC 20), 6=576(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-444/145, 4-6=-444/145

NOTES- (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-1, Exterior(2R) 5-4-1 to 14-6-3, Exterior(2E) 14-6-3 to 19-3-13 zone;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=105, 6=105.

LOAD CASE(S) Standard

7/24/2023

Job	Truss	Truss Type	Qty	Ply	LOT 38 PROVIDENCE CREEK | 38 PROVIDENCE CREEK DRIVE FUQUAY-VARIN
23-4837-R01	V02	Valley	1	1	**# 40140** Job Reference (optional)

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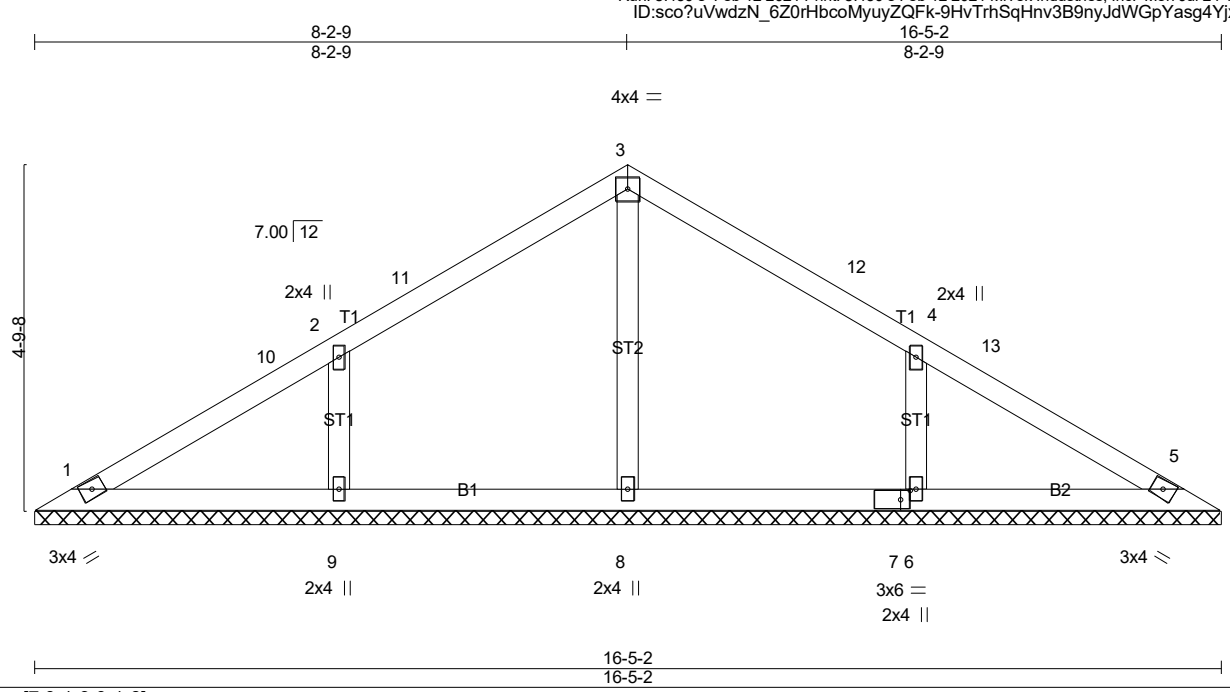

Plate Offsets (X,Y)-- [7:0-1-9,0-1-8]

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	0.29	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.20	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-SH								
BCDL	10.0										Weight: 63 lb	FT = 20%

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

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

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

REACTIONS. All bearings 16-5-2.
(lb) - Max Horz 1=-80(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=275(LC 20), 9=475(LC 20), 6=475(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-383/119, 4-6=-383/119

NOTES- (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-1, Exterior(2R) 5-4-1 to 11-1-1, Exterior(2E) 11-1-1 to 15-10-11 zone;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, 9, 6.

LOAD CASE(S) Standard

7/24/2023

Job	Truss	Truss Type	Qty	Ply	LOT 38 PROVIDENCE CREEK | 38 PROVIDENCE CREEK DRIVE FUQUAY-VARIN
23-4837-R01	V03	Valley	1	1	**# 40140**
					Job Reference (optional)

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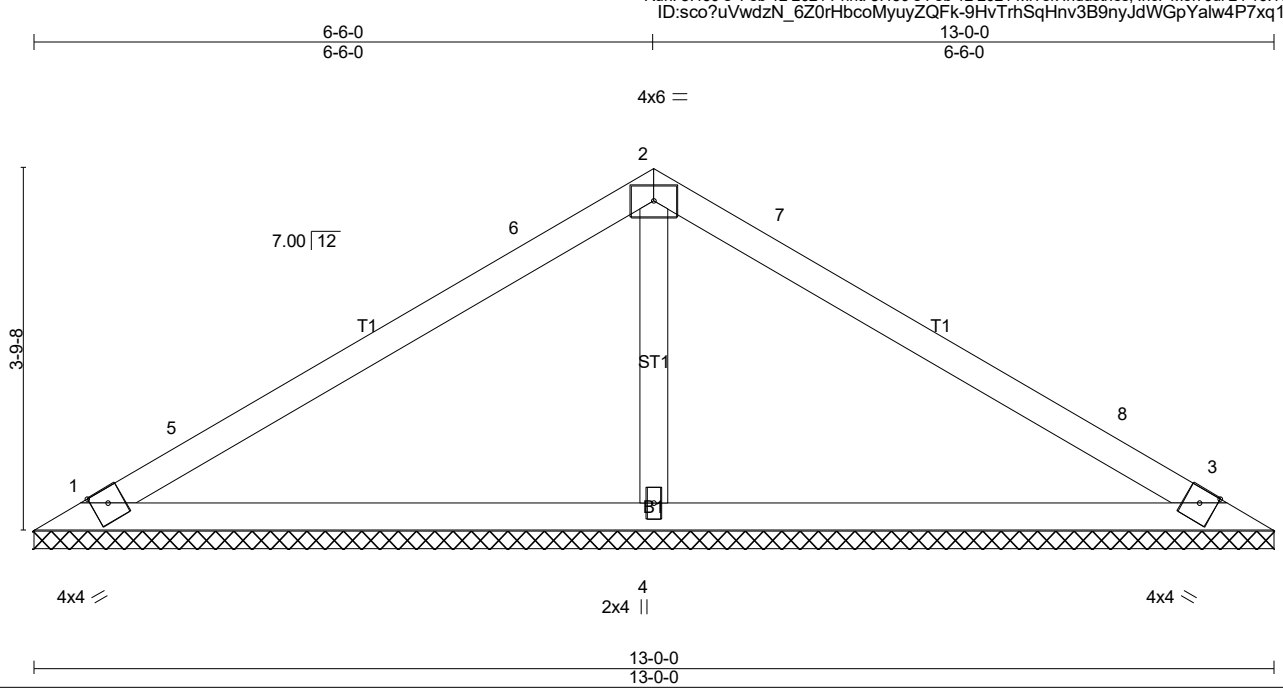

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 45 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=221/13-0-0 (min. 0-1-8), 3=221/13-0-0 (min. 0-1-8), 4=512/13-0-0 (min. 0-1-8)
Max Horz 1=-62(LC 10)
Max Uplift1=-23(LC 14), 3=-31(LC 15), 4=-2(LC 14)
Max Grav 1=289(LC 20), 3=289(LC 21), 4=531(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-332/67

NOTES- (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-1, Exterior(2R) 5-4-1 to 7-7-15, Exterior(2E) 7-7-15 to 12-5-8 zone;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

7/24/2023

Job	Truss	Truss Type	Qty	Ply	LOT 38 PROVIDENCE CREEK | 38 PROVIDENCE CREEK DRIVE FUQUAY-VARIN
23-4837-R01	V04	Valley	1	1	**# 40140**
					Job Reference (optional)

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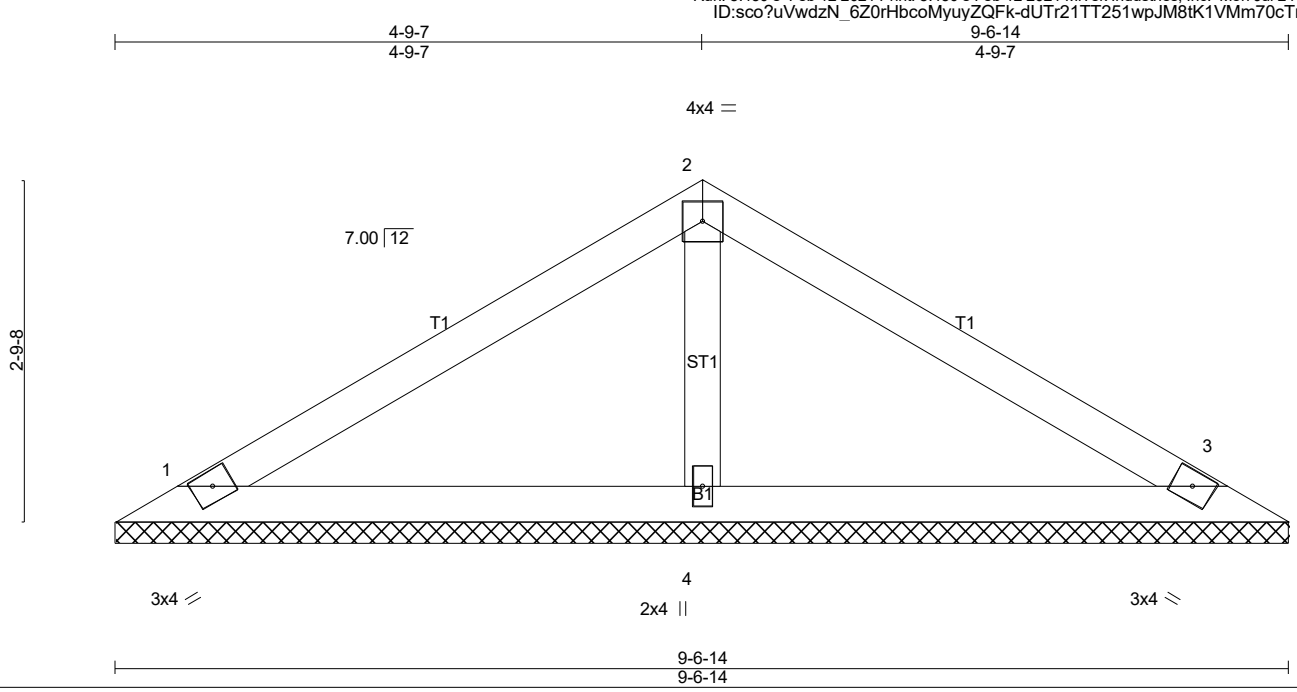

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH								
BCDL	10.0										Weight: 32 lb	FT = 20%

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

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

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

REACTIONS. (lb/size) 1=157/9-6-14 (min. 0-1-8), 3=157/9-6-14 (min. 0-1-8), 4=365/9-6-14 (min. 0-1-8)
Max Horz 1=44(LC 13)
Max Uplift1=-16(LC 14), 3=-22(LC 15), 4=-1(LC 14)
Max Grav 1=228(LC 20), 3=228(LC 21), 4=377(LC 20)

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=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;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

7/24/2023

Job	Truss	Truss Type	Qty	Ply	LOT 38 PROVIDENCE CREEK | 38 PROVIDENCE CREEK DRIVE FUQUAY-VARIN
23-4837-R01	V05	Valley	1	1	**# 40140**
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Jul 24 16:17:35 2023 Page 1
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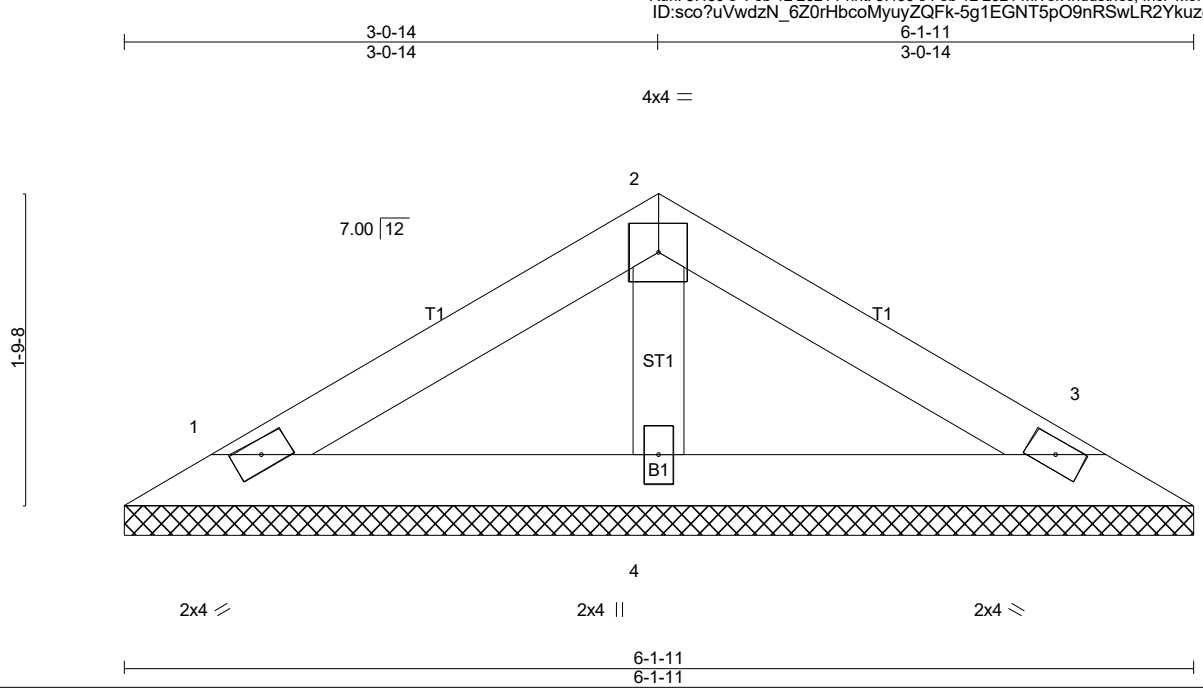

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P							Weight: 20 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=106/6-1-11 (min. 0-1-8), 3=106/6-1-11 (min. 0-1-8), 4=194/6-1-11 (min. 0-1-8)
Max Horz 1=26(LC 13)
Max Uplift1=-14(LC 14), 3=-18(LC 15)
Max Grav 1=138(LC 20), 3=138(LC 21), 4=194(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=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;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

7/24/2023