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 #: 47556
JOB: 24-2852-R01
JOB NAME: LOT 48 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.
22 Truss Design(s)

Trusses:
M02, R01, R02, R03, R04, R05, R06, R07, R08, R09, R10, R11, R12, R13, SP01, SP02, VT01, VT02, VT03, VT04, VT05, VT06

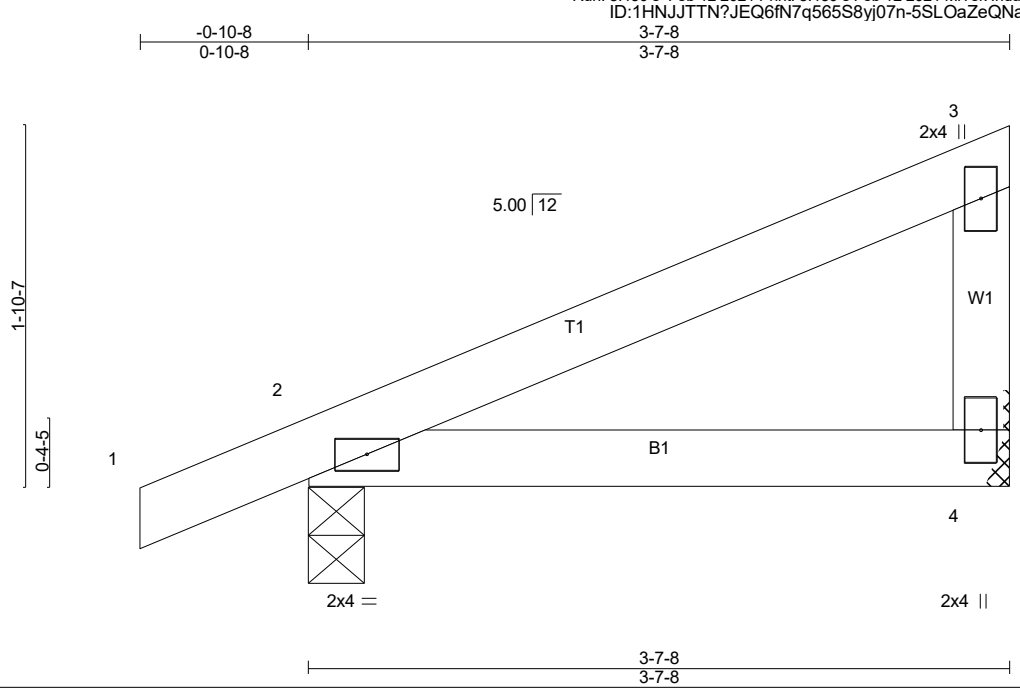
4/15/2024
Mark Morris

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 48 PROVIDENCE CREEK | 225 WINDSWEPT WAY FUQUAY-VARINA, NC
24-2852-R01	M02	MONOPITCH	10	1	# 47556
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Apr 15 15:29:03 2024 Page 1
ID:1HNJJTTN?JEQ6fN7q565S8yj07n-5SLOaZeQNaLcfU70J0rcwXZkIpONC9rjYtN2EjzQRq_



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)	-0.01	2-4	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.01	2-4	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P							Weight: 15 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 3-7-8 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) 4=124/Mechanical, 2=204/0-3-8 (min. 0-1-8)
Max Horz 2=61(LC 11)
Max Uplift4=-27(LC 14), 2=-41(LC 14)
Max Grav 4=167(LC 21), 2=285(LC 21)

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;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 100 lb uplift at joint(s) 4, 2.

LOAD CASE(S) Standard

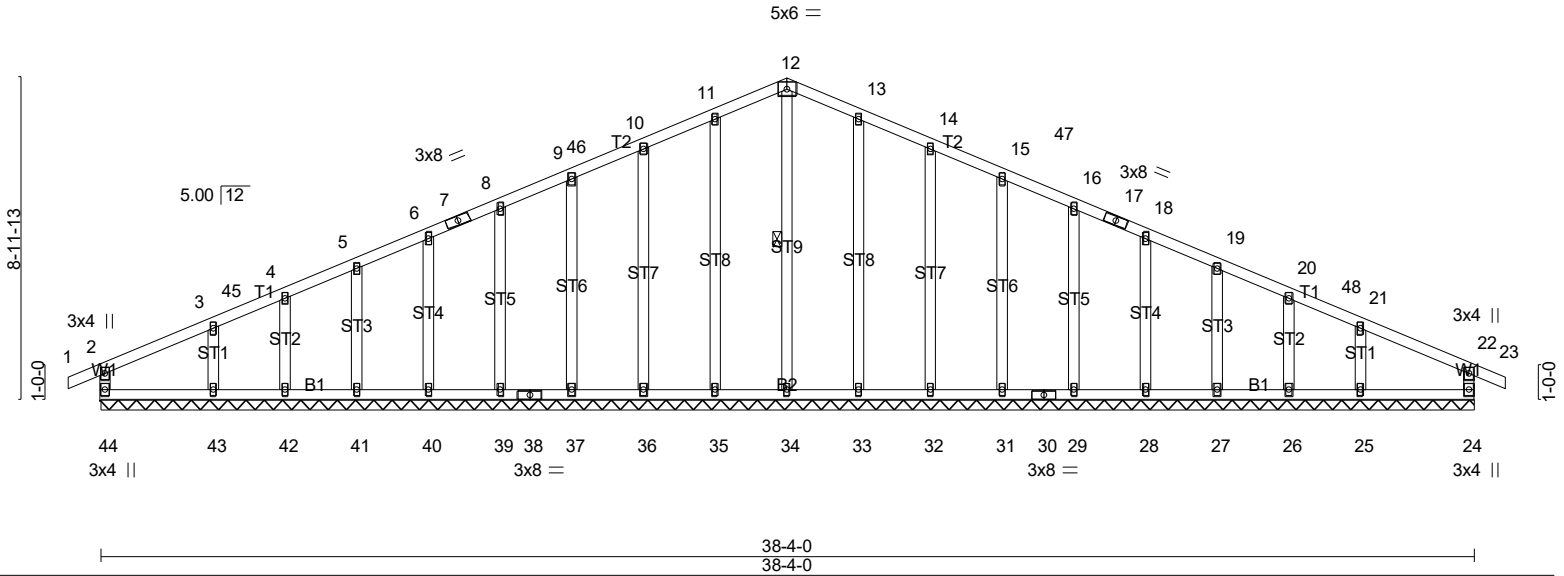
4/15/2024

Job	Truss	Truss Type	Qty	Ply	LOT 48 PROVIDENCE CREEK | 225 WINDSWEPT WAY FUQUAY-VARINA, NC
24-2852-R01	R01	Common Supported Gable	1	1	# 47556
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Apr 15 15:29:06 2024 Page 1
ID:1HNJJTTN?JEQ6fN7q565S8yj07n-V11WDbhJgVjBWyrb_8OJX9AHb0RQPT?9Frbiq2zQRpx

-0-10-8 19-2-0 38-4-0 39-2-8
0-10-8 19-2-0 19-2-0 0-10-8

Scale: 3/16"=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	22	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	0.00	22	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.00	24	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-R							Weight: 247 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.
WEBS	1 Row at midpt 12-34

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

REACTIONS. All bearings 38-4-0.
(lb) - Max Horz 44=102(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 44, 24, 35, 36, 37, 39, 40, 41, 42, 43, 33, 32, 31, 29, 28, 27, 26, 25
Max Grav All reactions 250 lb or less at joint(s) 44, 24, 37, 39, 40, 41, 42, 43, 31, 29, 28, 27, 26, 25 except 34=258(LC 27), 35=285(LC 5), 36=276(LC 5), 33=285(LC 6), 32=276(LC 6)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 9-46=-111/254, 10-46=-104/261, 10-11=-127/297, 11-12=-140/328, 12-13=-140/328, 13-14=-127/297, 14-47=-104/261, 15-47=-111/254

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 14-4-6, Corner(3R) 14-4-6 to 23-11-10, Exterior(2N) 23-11-10 to 34-4-14, Corner(3E) 34-4-14 to 39-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 44, 24, 35, 36, 37, 39, 40, 41, 42, 43, 33, 32, 31, 29, 28, 27, 26, 25.
14) Trusses designed with 2018 IRC also comply with 2015 IRC.

NORTH CAROLINA PROFESSIONAL SEAL 28147 ENGINEER MARK K. MORRIS

4/15/2024

LOAD CASE(S) Standard

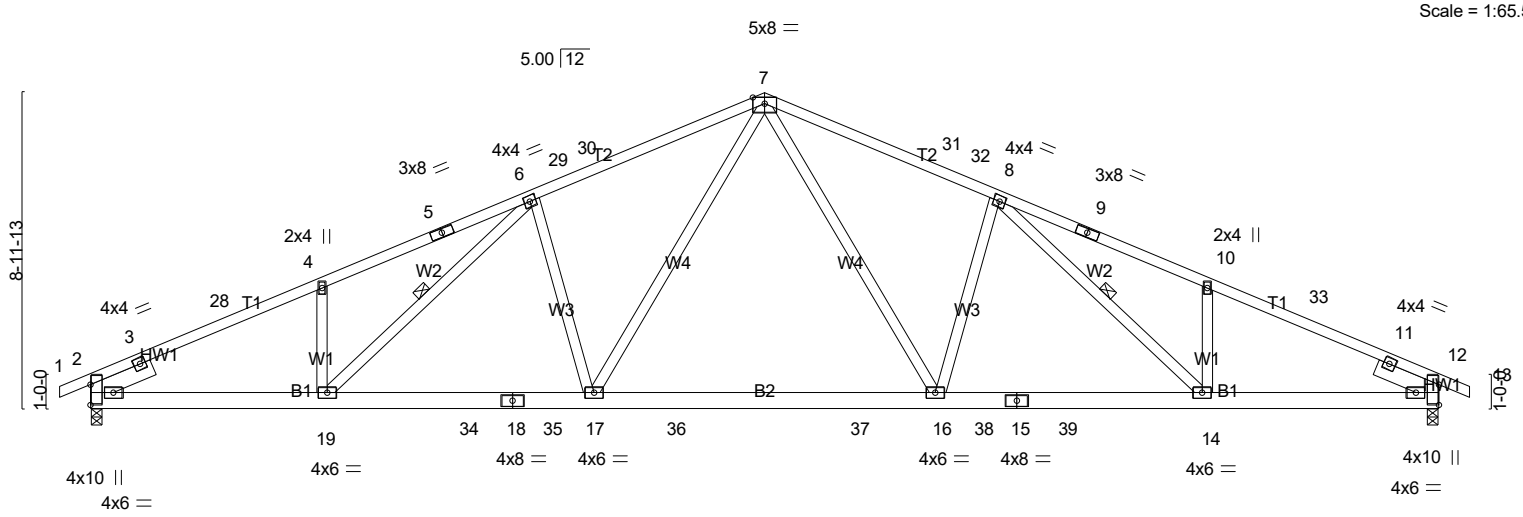
Warning - Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – 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 48 PROVIDENCE CREEK | 225 WINDSWEPT WAY FUQUAY-VARINA, NC
24-2852-R01	R02	Common	6	1	# 47556
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Apr 15 15:29:10 2024 Page 1
ID:1HNJJTTN?JEQ6fN7q565S8yj07n-OpG12ykpkkDc_Z9MD_TFi?LnJecSLE_l9TZvzpzQRpt

-0-10-8 6-7-0 12-7-8 19-2-0 25-8-7 31-9-0 38-4-0 39-2-8
0-10-8 6-7-0 6-0-8 6-6-7 6-6-8 6-0-9 6-7-0 0-10-8

Scale = 1:65.5



6-7-0 14-2-0 24-2-0 31-9-0 38-4-0
6-7-0 7-7-0 10-0-0 7-7-0 6-7-0

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	0.77	Vert(LL)	-0.26	16-17	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.45	16-17	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.09	12	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS							Weight: 241 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
T1: 2x4 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
B2: 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -° 1-11-0, Right 2x6 SP No.2 -° 1-11-0

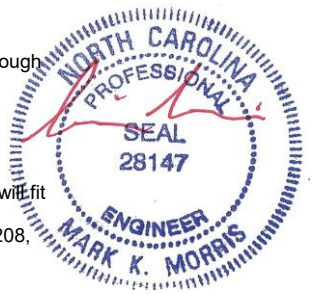
BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 8-14, 6-19

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

REACTIONS. (lb/size) 2=1586/0-3-8 (min. 0-1-14), 12=1586/0-3-8 (min. 0-1-14)
Max Horz 2=124(LC 18)
Max Uplift2=-208(LC 14), 12=-208(LC 15)
Max Grav 2=1610(LC 3), 12=1610(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-901/0, 3-28=-2823/363, 4-28=-2748/383, 4-5=-2780/436, 5-6=-2726/449, 6-29=-2601/428, 29-30=-2583/432, 7-30=-2534/451, 7-31=-2534/451, 31-32=-2583/432, 8-32=-2601/428, 8-9=-2726/449, 9-10=-2780/436, 10-33=-2748/383, 11-33=-2823/363, 11-12=-901/0
BOT CHORD 2-19=-361/2536, 19-34=-264/2443, 18-34=-264/2443, 18-35=-264/2443, 17-35=-264/2443, 17-36=-143/1867, 36-37=-143/1867, 16-37=-143/1867, 16-38=-236/2443, 15-38=-236/2443, 15-39=-236/2443, 14-39=-236/2443, 12-14=-270/2536
WEBS 7-16=-166/1019, 8-16=-577/244, 8-14=-136/324, 10-14=-253/166, 7-17=-166/1019, 6-17=-577/244, 6-19=-135/324, 4-19=-253/166

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 14-4-6, Exterior(2R) 14-4-6 to 23-11-10, Interior(1) 23-11-10 to 34-4-14, Exterior(2E) 34-4-14 to 39-2-8 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) 2=208, 12=208.
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.
10) Trusses designed with 2018 IRC also comply with 2015 IRC.

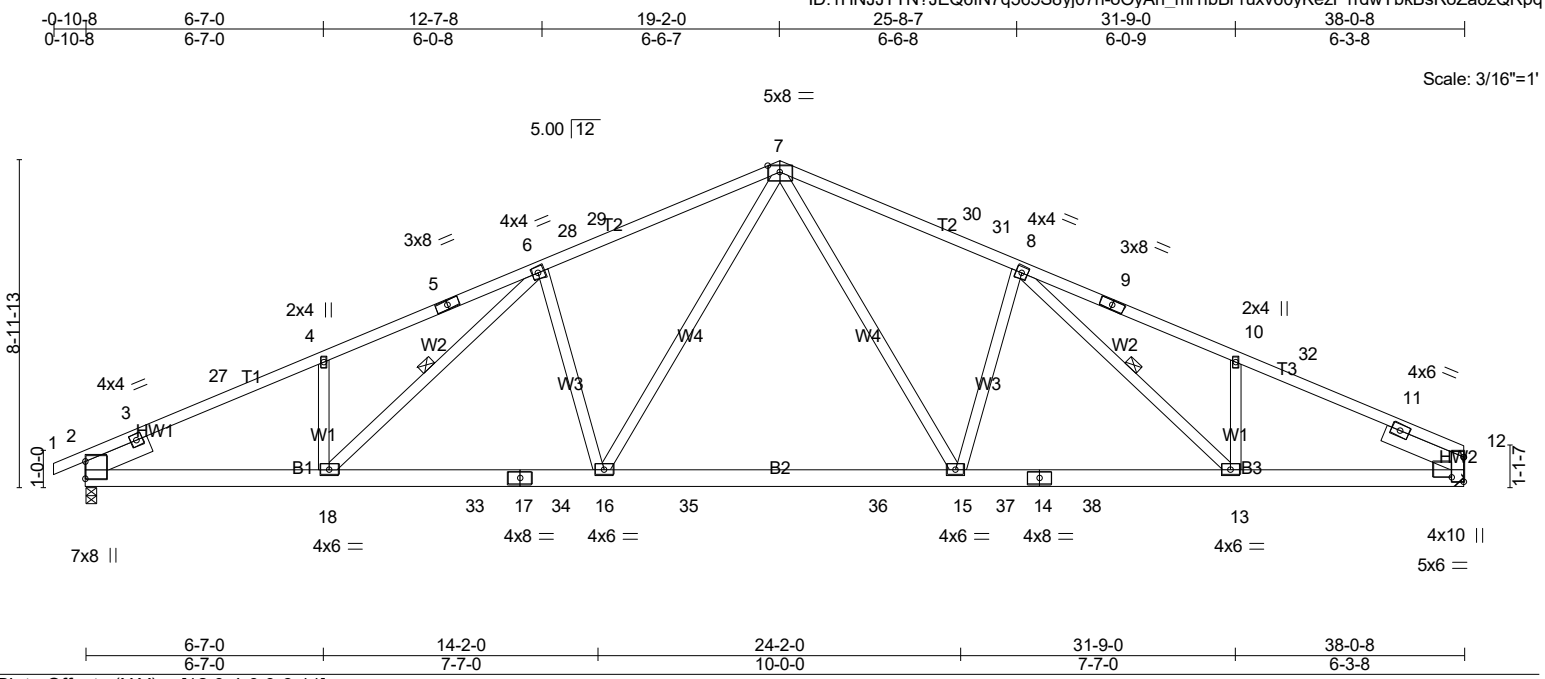


4/15/2024

LOAD CASE(S) Standard.

Job	Truss	Truss Type	Qty	Ply	LOT 48 PROVIDENCE CREEK | 225 WINDSWEPT WAY FUQUAY-VARINA, NC
24-2852-R01	R03	Common	5	1	# 47556
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Apr 15 15:29:13 2024 Page 1
ID:1HNJJTTN?JEQ6fN7q565S8yj07n-oOyAh_mi1fbBr1uxv60yKezF1rdwYbkBsRoZa8zQRpq



6-7-0 14-2-0 24-2-0 31-9-0 38-0-8
6-7-0 7-7-0 10-0-0 7-7-0 6-3-8

Plate Offsets (X,Y)-- [12:0-4-0,0-6-11]

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)	-0.26	15-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.46	15-16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.10	12	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-AS							Weight: 240 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
T3: 2x4 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
B2: 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -° 1-11-0, Right 2x6 SP No.2 -° 2-5-0

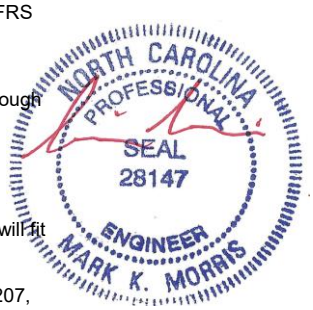
BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 8-13, 6-18

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

REACTIONS. (lb/size) 2=1575/0-3-8 (min. 0-1-14), 12=1521/Mechanical
Max Horz 2=132(LC 14)
Max Uplift2=-207(LC 14), 12=-188(LC 15)
Max Grav 2=1599(LC 3), 12=1557(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-920/0, 3-27=-2797/362, 4-27=-2723/381, 4-5=-2756/435, 5-6=-2702/448, 6-28=-2575/427, 28-29=-2556/431, 7-29=-2507/450, 7-30=-2490/449, 30-31=-2540/430, 8-31=-2559/426, 8-9=-2583/442, 9-10=-2637/429, 10-32=-2614/376, 11-32=-2687/360, 11-12=-416/0
BOT CHORD 2-18=-367/2513, 18-33=-270/2418, 17-33=-270/2418, 17-34=-270/2418, 16-34=-270/2418, 16-35=-163/1842, 35-36=-163/1842, 15-36=-163/1842, 15-37=-255/2394, 14-37=-255/2394, 14-38=-255/2394, 13-38=-255/2394, 12-13=-285/2407
WEBS 7-15=-162/990, 8-15=-547/240, 7-16=-166/1020, 6-16=-577/244, 6-18=-135/325, 4-18=-257/166

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 14-4-6, Exterior(2R) 14-4-6 to 23-11-10, Interior(1) 23-11-10 to 33-2-14, Exterior(2E) 33-2-14 to 38-0-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) 2=207, 12=188.
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.



4/15/2024

Continued on page 2

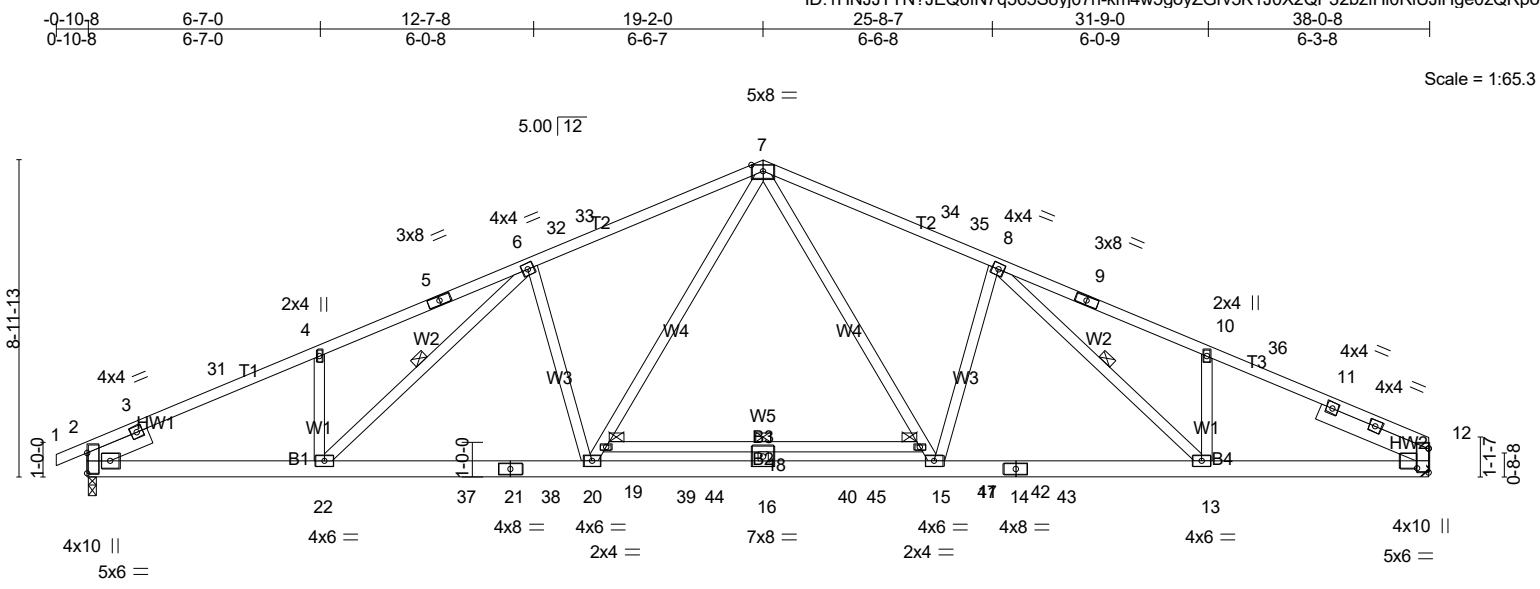
11) Trusses designed with 2018 IRC also comply with 2015 IRC.

LOAD CASE(S) Standard

4/15/2024

Job	Truss	Truss Type	Qty	Ply	LOT 48 PROVIDENCE CREEK | 225 WINDSWEPT WAY FUQUAY-VARINA, NC
24-2852-R01	R04	Common	8	1	# 47556
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Apr 15 15:29:15 2024 Page 1
ID:1HNJJTTN?JEQ6fN7q565S8yj07n-km4w5goyZGrv5K1J0X2QP32bzfHi0RiUJlHge0zQRpo



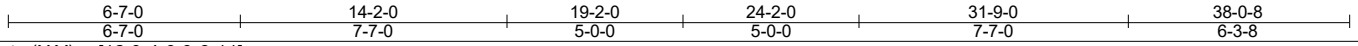


Plate Offsets (X,Y)-- [12:0-4-0,0-6-11]

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	0.97	Vert(LL)	-0.34	18	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.59	18	>770	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.11	12	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS							Weight: 256 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
T1: 2x4 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
B3: 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -° 1-11-0, Right 2x6 SP No.2 -° 3-5-0

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied. Except:
6-0-0 oc bracing: 17-19
WEBS 1 Row at midpt 8-13, 6-22

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

REACTIONS. (lb/size) 2=1666/0-3-8 (min. 0-2-2), 12=1614/Mechanical
Max Horz 2=132(LC 14)
Max Uplift 2=-161(LC 14), 12=-142(LC 15)
Max Grav 2=1778(LC 3), 12=1740(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1048/0, 3-31=-3149/272, 4-31=-3069/292, 4-5=-3101/347, 5-6=-3047/360, 6-32=-3031/312, 32-33=-3013/316, 7-33=-2963/335, 7-34=-2944/334, 34-35=-2994/316, 8-35=-3012/312, 8-9=-2926/359, 9-10=-2980/346, 10-36=-2973/292, 11-36=-3028/283, 11-12=-362/0
BOT CHORD 2-22=-286/2833, 22-37=-167/2828, 21-37=-167/2828, 21-38=-167/2828, 20-38=-167/2828, 20-39=-72/2225, 16-39=-72/2225, 16-40=-72/2225, 40-41=-72/2225, 15-41=-72/2225, 15-42=-153/2802, 14-42=-153/2802, 14-43=-153/2802, 13-43=-153/2802, 12-13=-208/2725
WEBS 7-17=-112/1190, 15-17=-136/1095, 8-15=-530/252, 19-20=-140/1131, 7-19=-115/1226, 6-20=-557/254, 6-22=-166/265, 16-18=-294/0

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 14-4-6, Exterior(2R) 14-4-6 to 23-11-10, Interior(1) 23-11-10 to 33-2-14, Exterior(2E) 33-2-14 to 38-0-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) 2=161, 12=142.
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.

4/15/2024

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.

Continued on page 2

11) Trusses designed with 2018 IRC also comply with 2015 IRC.

LOAD CASE(S) Standard

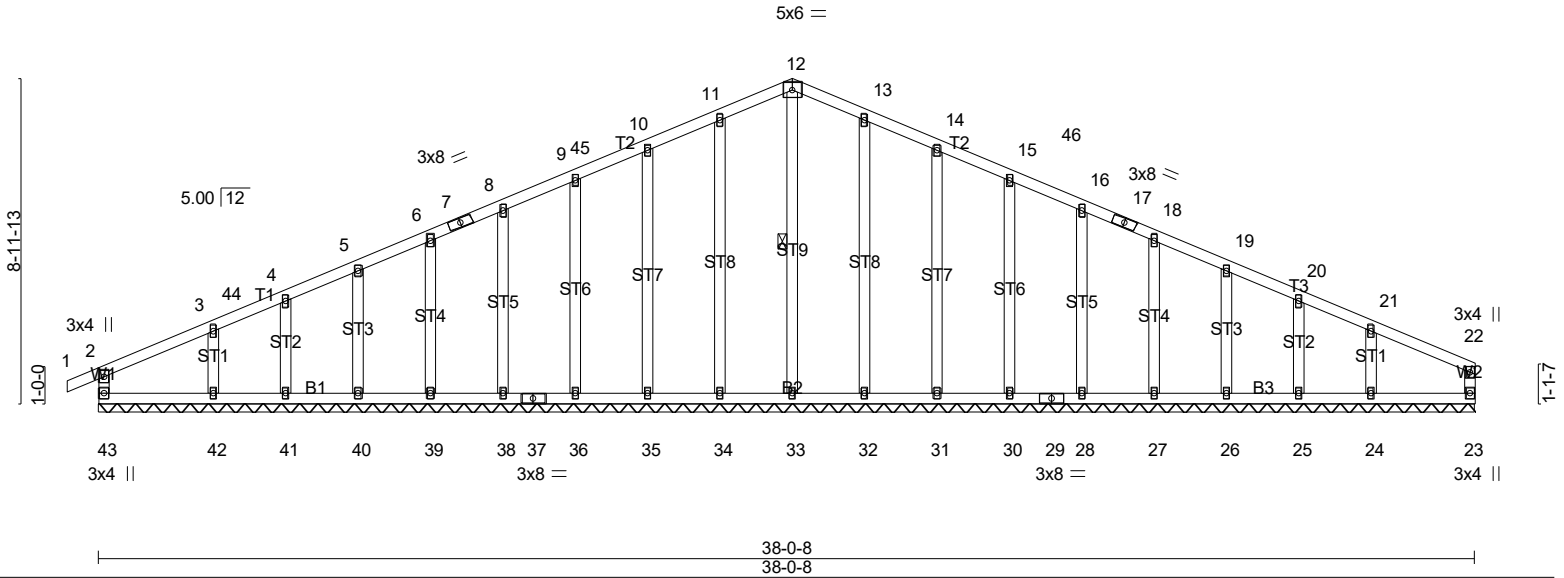
4/15/2024

Job	Truss	Truss Type	Qty	Ply	LOT 48 PROVIDENCE CREEK | 225 WINDSWEPT WAY FUQUAY-VARINA, NC
24-2852-R01	R05	Common Supported Gable	1	1	# 47556 Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Apr 15 15:29:18 2024 Page 1
ID:1HNJJTTN?JEQ6fN7q565S8yj07n-9Ll3khqqrBEUyomuhfc71hgKZsXEDu_w?jVKFLzQRpl

-0-10-8 / 0-10-8 | 19-2-0 / 19-2-0 | 38-0-8 / 18-10-8

Scale: 3/16"=1'



38-0-8
38-0-8

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	0.12	Vert(LL)	-0.00	1	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.11	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: 245 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

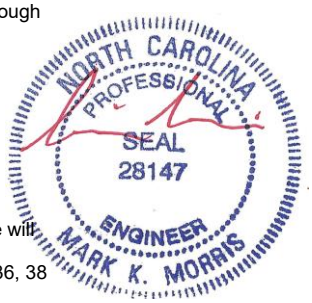
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 12-33

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

REACTIONS. All bearings 38-0-8.
(lb) - Max Horz 43=109(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=-103(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 9-45=-111/253, 10-45=-104/260, 10-11=-127/296, 11-12=-140/327, 12-13=-140/327, 13-14=-127/296, 14-46=-104/260, 15-46=-111/253

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 14-4-6, Corner(3R) 14-4-6 to 23-11-10, Exterior(2N) 23-11-10 to 33-1-2, Corner(3E) 33-1-2 to 37-10-12 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=103.



4/15/2024

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 48 PROVIDENCE CREEK | 225 WINDSWEPT WAY FUQUAY-VARINA, NC
24-2852-R01	R06	Common Girder	1	3	Job Reference (optional) # 47556

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Apr 15 15:29:24 2024 Page 1
ID:1HNJJTTN?JEQ6fN7q565S8yj07n-zV6K_kvbR1_dgjD22wjYGywEHHUFdRupNfyfS?zQRpf

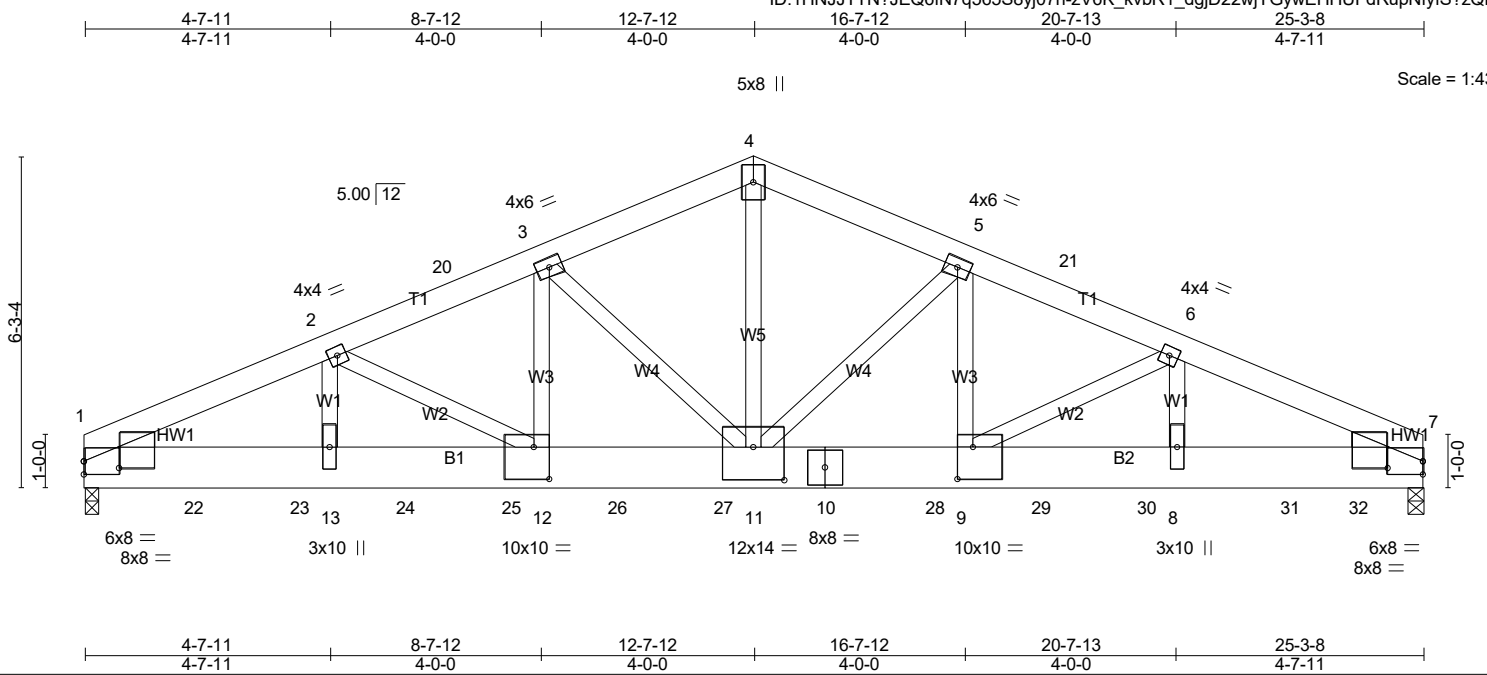


Plate Offsets (X,Y)-- [1:0-8-0,0-1-9], [7:0-8-0,0-1-9], [9:0-3-8,0-7-4], [11:0-7-0,0-7-8], [12:0-3-8,0-7-4]

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	0.61	Vert(LL)	-0.17	9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.32	9-11	>934	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.91	Horz(CT)	0.06	7	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 648 lb	FT = 20%
BCDL	10.0											

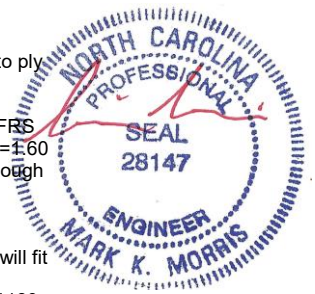
LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except*
W5: 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-3-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=10210/0-3-8 (min. 0-2-15), 7=12071/0-3-8 (min. 0-3-8)
Max Horz 1=-78(LC 13)
Max Uplift1=-1180(LC 12), 7=-1274(LC 13)
Max Grav 1=10554(LC 5), 7=12684(LC 6)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-18795/2062, 2-20=-18100/1896, 3-20=-18054/1906, 3-4=-14934/1527, 4-5=-14936/1527, 5-21=-18977/1883, 6-21=-19023/1873, 6-7=-21202/2078
BOT CHORD 1-22=-1926/17183, 22-23=-1926/17183, 13-23=-1926/17183, 13-24=-1926/17183, 24-25=-1926/17183, 12-25=-1926/17183, 12-26=-1741/16715, 26-27=-1741/16715, 11-27=-1741/16715, 10-11=-1641/17579, 10-28=-1641/17579, 9-28=-1641/17579, 9-29=-1862/19395, 29-30=-1862/19395, 8-30=-1862/19395, 8-31=-1862/19395, 31-32=-1862/19395, 7-32=-1862/19395
WEBS 4-11=-1084/11084, 5-11=-5393/562, 5-9=-430/5066, 6-9=-2133/256, 6-8=-203/2201, 3-11=-4177/592, 3-12=-460/3889, 2-12=-687/213, 2-13=-164/844

NOTES- (11)
1) 3-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: 2x10 - 3 rows staggered at 0-5-0 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=1180, 7=1274.



4/15/2024

Continued on page 2

NOTES- (11)

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1537 lb down and 208 lb up at 2-0-12, 1537 lb down and 208 lb up at 4-0-12, 1537 lb down and 208 lb up at 6-0-12, 1537 lb down and 208 lb up at 8-0-12, 1720 lb down and 162 lb up at 10-0-12, 1720 lb down and 162 lb up at 12-0-12, 1720 lb down and 162 lb up at 14-0-12, 1720 lb down and 162 lb up at 16-0-12, 1720 lb down and 162 lb up at 18-0-12, 1720 lb down and 162 lb up at 20-0-12, 1720 lb down and 162 lb up at 20-9-4, and 1720 lb down and 162 lb up at 22-9-4, and 1537 lb down and 208 lb up at 24-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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, 14-17=-20
   Concentrated Loads (lb)
      Vert: 10=-1594(B) 8=-1594(B) 22=-1501(B) 23=-1501(B) 24=-1501(B) 25=-1501(B) 26=-1594(B) 27=-1594(B) 28=-1594(B) 29=-1594(B) 30=-1594(B) 31=-1594(B) 32=-1501(B)

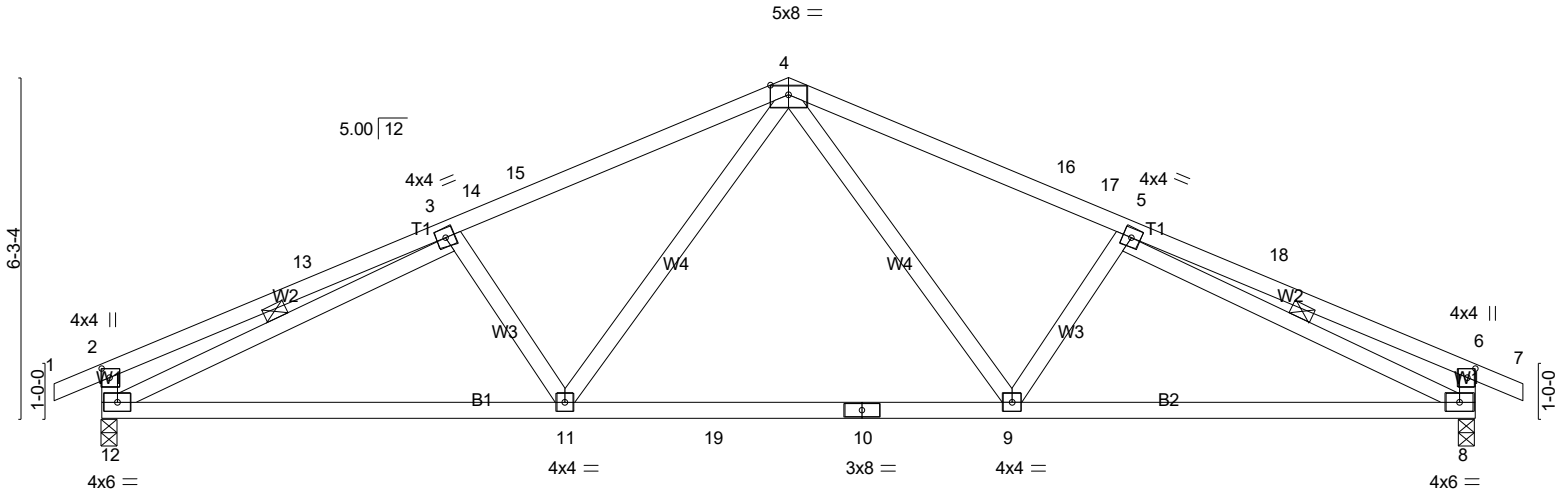
4/15/2024

Job	Truss	Truss Type	Qty	Ply	LOT 48 PROVIDENCE CREEK | 225 WINDSWEPT WAY FUQUAY-VARINA, NC
24-2852-R01	R07	Common	1	1	# 47556
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Apr 15 15:29:26 2024 Page 1
ID:1HNJJTTN?JEQ6fN7q565S8yj07n-wuE4PQwrzeELv0NR9LI0LN?Y745e5TE5rzRIXtzQRpd

0-10-8	6-5-10	12-7-12	18-9-14	25-3-8	26-2-0
0-10-8	6-5-10	6-2-2	6-2-2	6-5-10	0-10-8

Scale = 1:42.4



8-6-5	16-9-3	25-3-8
8-6-5	8-2-13	8-6-5

Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [6:0-2-0,0-1-12]

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	0.66	Vert(LL)	-0.24	9-11	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.34	9-11	>870	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.05	8	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS							Weight: 135 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-12, 5-8

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

REACTIONS. (lb/size) 12=1061/0-3-8 (min. 0-1-8), 8=1061/0-3-8 (min. 0-1-8)
Max Horz 12=-62(LC 19)
Max Uplift12=-144(LC 14), 8=-144(LC 15)
Max Grav 12=1079(LC 21), 8=1079(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-13=-475/95, 3-13=-388/108, 3-14=-1533/309, 14-15=-1517/310, 4-15=-1425/331, 4-16=-1425/331, 16-17=-1517/310, 5-17=-1533/309, 5-18=-388/108, 6-18=-475/95, 2-12=-406/147, 6-8=-406/147
BOT CHORD 11-12=-206/1488, 11-19=-95/1057, 10-19=-95/1057, 9-10=-95/1057, 8-9=-203/1488
WEBS 4-9=-80/530, 5-9=-319/182, 4-11=-80/531, 3-11=-319/182, 3-12=-1303/227, 5-8=-1303/227

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 7-10-2, Exterior(2R) 7-10-2 to 17-5-6, Interior(1) 17-5-6 to 21-4-6, Exterior(2E) 21-4-6 to 26-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) 12=144, 8=144.
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

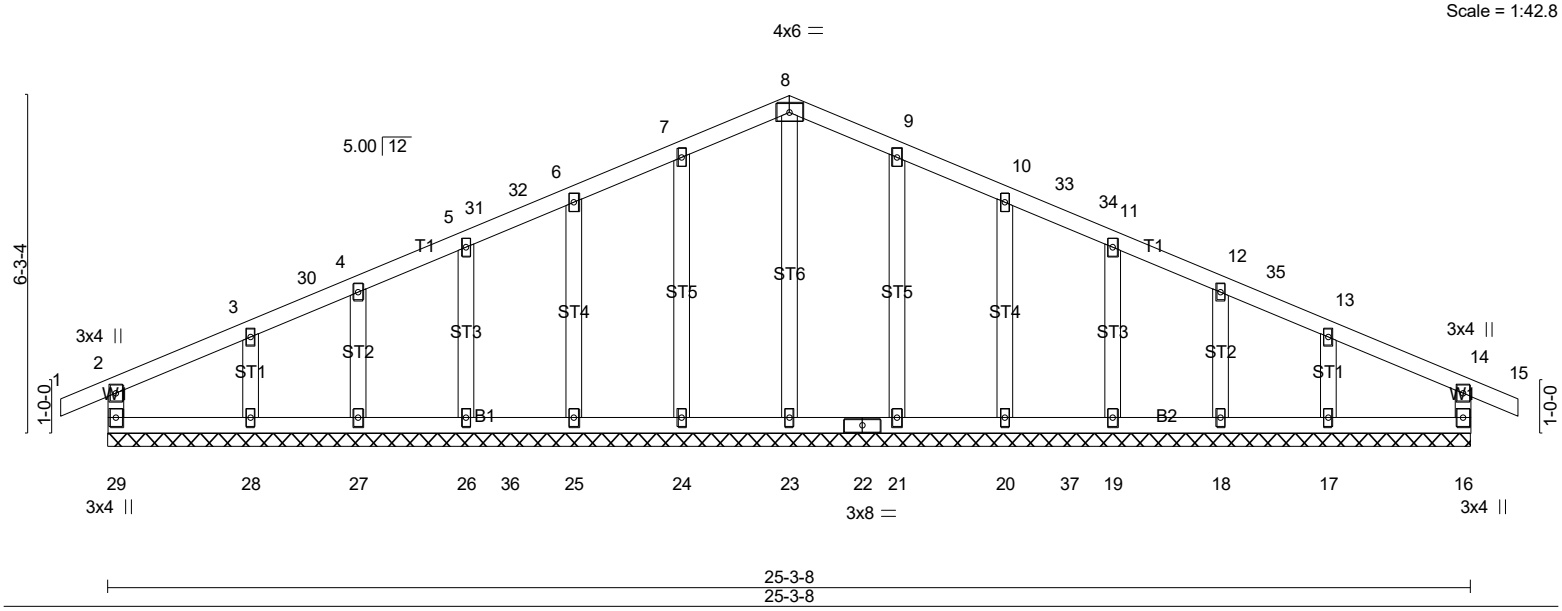
4/15/2024

Job	Truss	Truss Type	Qty	Ply	LOT 48 PROVIDENCE CREEK | 225 WINDSWEPT WAY FUQUAY-VARINA, NC
24-2852-R01	R08	GABLE	1	1	# 47556
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Apr 15 15:29:28 2024 Page 1
ID:1HNJJTTN?JEQ6fN7q565S8yj07n-sGMrq6y6VGU39KXpHmnURo512uxpZSSOIGwsbmzQRpb

0-10-8 12-7-12 25-3-8 26-2-0
0-10-8 12-7-12 12-7-12 0-10-8

Scale = 1:42.8



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	0.12	Vert(LL)	-0.00	14	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.00	15	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	16	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-R							Weight: 139 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 25-3-8.
(lb) - Max Horz 29=-62(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 29, 24, 25, 26, 27, 28, 21, 20, 19, 18, 16, 17
Max Grav All reactions 250 lb or less at joint(s) 29, 23, 26, 27, 28, 19, 18, 16, 17 except 24=286(LC 5), 25=273(LC 5), 21=286(LC 6), 20=273(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=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 7-10-2, Exterior(2R) 7-10-2 to 17-5-6, Interior(1) 17-5-6 to 21-4-6, Exterior(2E) 21-4-6 to 26-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) 29, 24, 25, 26, 27, 28, 21, 20, 19, 18, 16, 17.

LOAD CASE(S) Standard

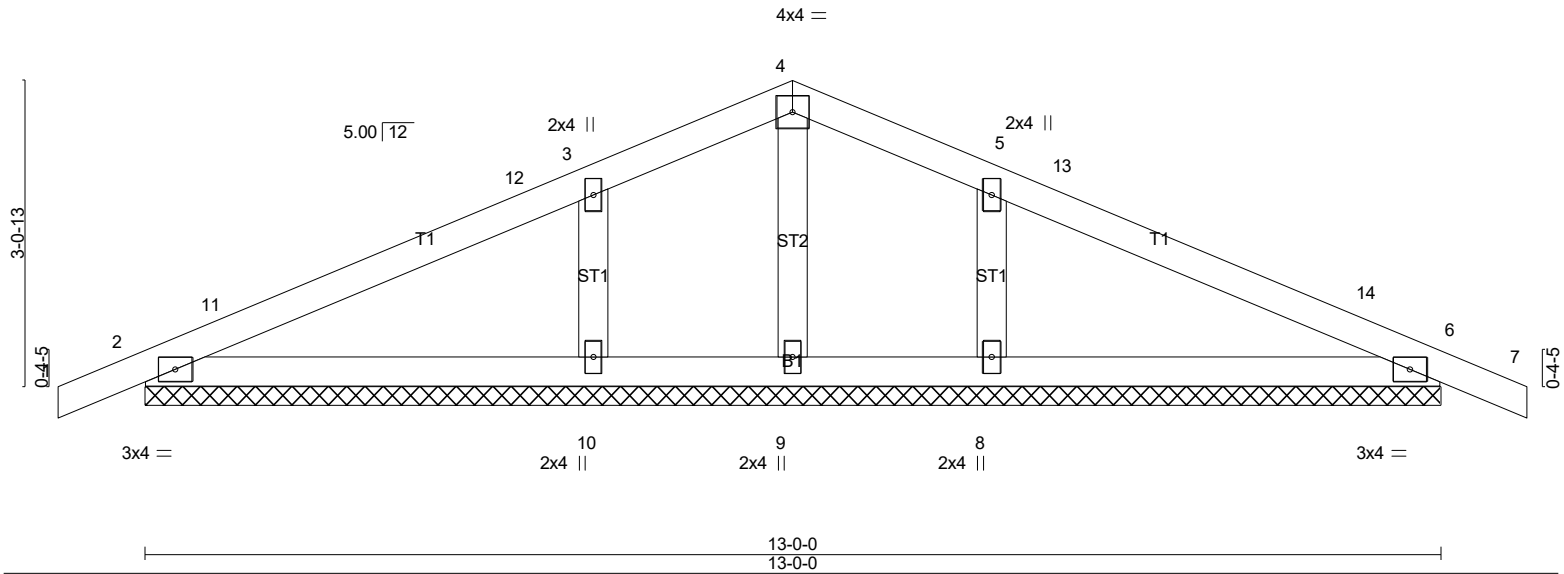
4/15/2024

Job	Truss	Truss Type	Qty	Ply	LOT 48 PROVIDENCE CREEK | 225 WINDSWEPT WAY FUQUAY-VARINA, NC
24-2852-R01	R09	Common Supported Gable	1	1	# 47556
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Apr 15 15:29:30 2024 Page 1
ID:1HNJJTTN?JEQ6fN7q565S8yj07n-ofUbFozM0tknOehCOBqyWDAJFiaI1MIhmaPzgfzQRpZ

-0-10-8 / 0-10-8 | 6-6-0 / 6-6-0 | 13-0-0 / 6-6-0 | 13-10-8 / 0-10-8

Scale = 1:23.1



13-0-0
13-0-0

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	0.33	Vert(LL)	0.01	7	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	0.01	7	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 52 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 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 13-0-0.
(lb) - Max Horz 2=-46(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 9, 10, 8
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 10=509(LC 21), 8=509(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-10=-382/211, 5-8=-382/211

NOTES- (12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Corner(3R) 3-11-2 to 9-0-14, Corner(3E) 9-0-14 to 13-10-8 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) Gable requires continuous bottom chord bearing.
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) 2, 6, 9, 10, 8.

LOAD CASE(S) Standard

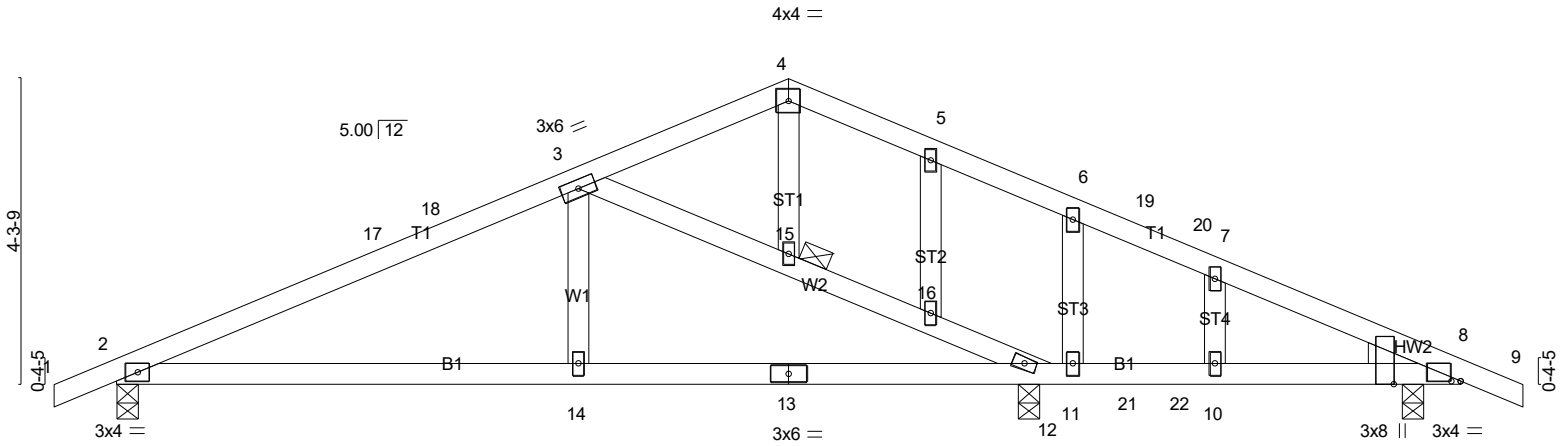
4/15/2024

Job	Truss	Truss Type	Qty	Ply	LOT 48 PROVIDENCE CREEK | 225 WINDSWEPT WAY FUQUAY-VARINA, NC
24-2852-R01	R10	DUAL RIDGE GABLE	1	1	# 47556 Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Apr 15 15:29:31 2024 Page 1
ID:1HNJJTTN?JEQ6fN7q565S8yj07n-Gr1zS8__nBte0oGOyuLB2RjRh5tzmnvr_E9WC5zQRpY

-0-10-8 | 6-6-0 | 9-5-8 | 18-11-0 | 19-9-8
0-10-8 | 6-6-0 | 2-11-8 | 9-5-8 | 0-10-8

Scale = 1:32.4



6-6-0 | 13-0-0 | 18-4-12 | 18-11-0
6-6-0 | 6-6-0 | 5-4-12 | 0-6-4

Plate Offsets (X,Y)-- [8:0-1-10,0-0-0], [8:0-0-8,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	0.54	Vert(LL)	0.07	8-10	>970	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.12	2-14	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.02	8	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH								
BCDL	10.0										Weight: 89 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-10-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 15

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

REACTIONS. (lb/size) 2=590/0-3-8 (min. 0-1-8), 8=308/0-3-8 (min. 0-1-8), 12=715/0-3-8 (min. 0-1-8)
Max Horz 2=64(LC 14)
Max Uplift 2=-97(LC 14), 8=-75(LC 11), 12=-100(LC 11)
Max Grav 2=660(LC 21), 8=340(LC 22), 12=736(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-17=-1009/136, 17-18=-921/138, 3-18=-891/148, 5-6=-280/71, 7-8=-267/0
BOT CHORD 2-14=-95/857, 13-14=-95/857, 12-13=-95/857
WEBS 3-15=-817/147, 15-16=-817/142, 12-16=-821/149, 3-14=0/278, 6-11=-404/252

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 4-7-14, Exterior(2R) 4-7-14 to 14-3-2, Interior(1) 14-3-2 to 14-11-14, Exterior(2E) 14-11-14 to 19-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) All plates are 2x4 MT20 unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8 except (jt=lb) 12=100.

LOAD CASE(S) Standard

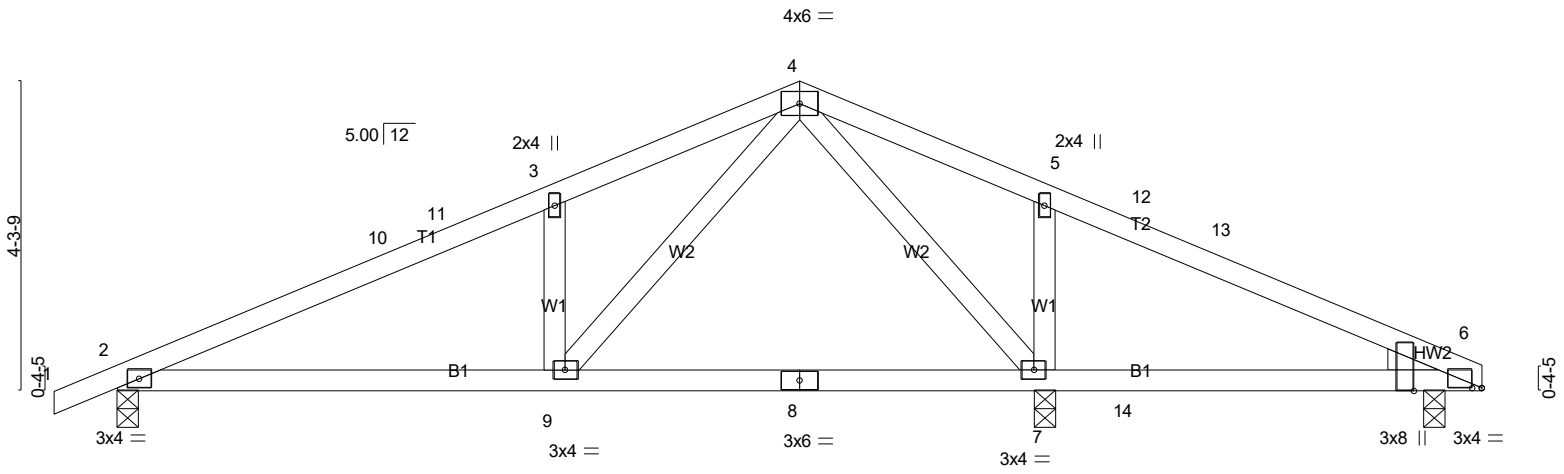
4/15/2024

Job	Truss	Truss Type	Qty	Ply	LOT 48 PROVIDENCE CREEK | 225 WINDSWEPT WAY FUQUAY-VARINA, NC
24-2852-R01	R11	Common	1	1	# 47556
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Apr 15 15:29:33 2024 Page 1
ID:1HNJJTTN?JEQ6fN7q565S8yj07n-CE9ktp0EJo7LF5Qn4JNf8sonVvY8Efi7SYedHzzQRpW

-0-10-8 | 6-0-12 | 9-5-8 | 12-10-4 | 18-11-0
0-10-8 | 6-0-12 | 3-4-12 | 3-4-12 | 6-0-12

Scale: 3/8"=1'



6-0-12 | 12-10-4 | 18-4-12 | 18-11-0
6-0-12 | 6-9-8 | 5-6-8 | 0-6-4

Plate Offsets (X,Y)-- [6:0-1-10,0-0-0], [6:0-0-8,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	0.52	Vert(LL)	0.10	6-7	>744	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	0.08	6-7	>905	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.01	7	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 83 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
Right: 2x4 SP No.3

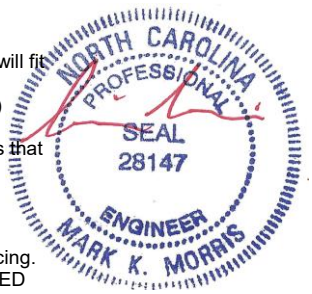
BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-6-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

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

REACTIONS. (lb/size) 2=516/0-3-8 (min. 0-1-8), 7=918/0-3-8 (min. 0-1-8), 6=117/0-3-8 (min. 0-1-8)
Max Horz 2=69(LC 14)
Max Uplift 2=-91(LC 14), 7=-100(LC 11), 6=-52(LC 11)
Max Grav 2=586(LC 21), 7=946(LC 22), 6=151(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-10=-861/116, 10-11=-772/119, 3-11=-713/128, 3-4=-866/216, 5-12=-33/267
BOT CHORD 2-9=-94/726
WEBS 4-7=-659/87, 5-7=-475/236, 3-9=-444/194, 4-9=-141/779

NOTES- (9-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 4-7-14, Exterior(2R) 4-7-14 to 13-11-10, Exterior(2E) 13-11-10 to 18-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 except (jt=lb) 7=100.
9) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



4/15/2024

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	LOT 48 PROVIDENCE CREEK | 225 WINDSWEPT WAY FUQUAY-VARINA, NC
24-2852-R01	R11	Common	1	1	Job Reference (optional) **# 47556**

LOAD CASE(S) Standard

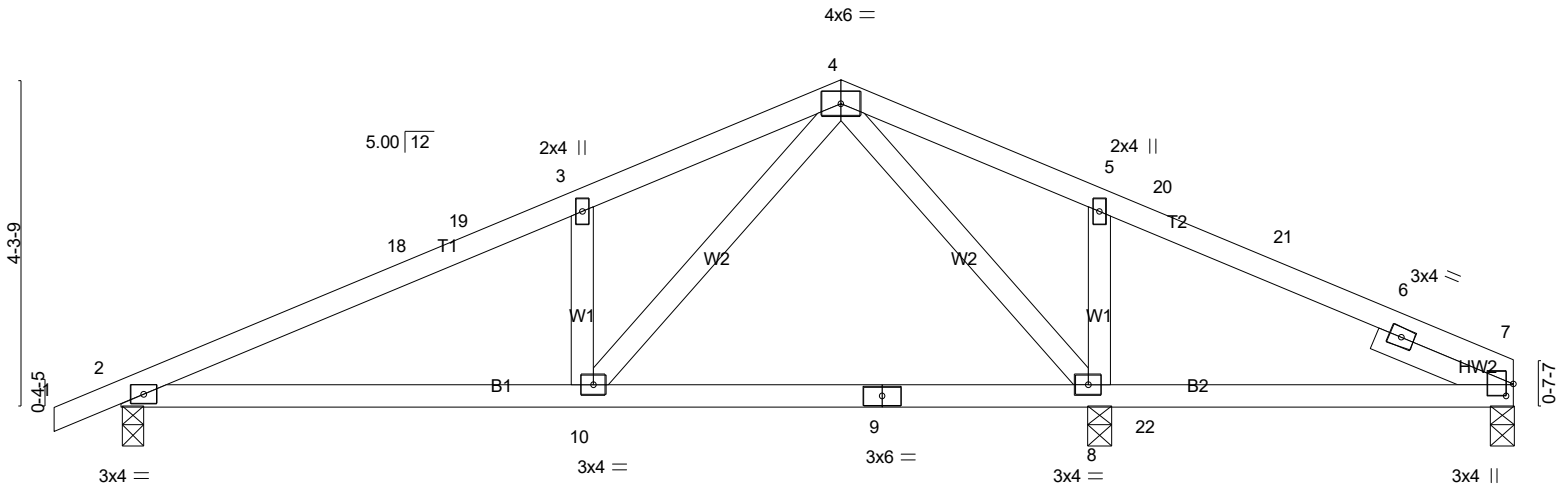
4/15/2024

Job	Truss	Truss Type	Qty	Ply	LOT 48 PROVIDENCE CREEK | 225 WINDSWEPT WAY FUQUAY-VARINA, NC
24-2852-R01	R12	Common	2	1	# 47556
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Apr 15 15:29:34 2024 Page 1
ID:1HNJJTTN?JEQ6fN7q565S8yj07n-hQj6590t46FCtF_zd0uug3L?aJvyz6PHhCNApQzQRpV

-0-10-8 | 6-0-12 | 9-5-8 | 12-10-4 | 18-3-8
0-10-8 | 6-0-12 | 3-4-12 | 3-4-12 | 5-5-4

Scale = 1:30.3



6-0-12 | 12-10-4 | 18-3-8
6-0-12 | 6-9-8 | 5-5-4

Plate Offsets (X,Y)-- [7:0-1-14,0-1-2]

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	0.37	Vert(LL)	-0.05	10-17	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.09	10-17	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.01	8	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS							Weight: 83 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Right 2x4 SP No.3 -° 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) 7=201/0-3-8 (min. 0-1-8), 2=561/0-3-8 (min. 0-1-8), 8=754/0-3-8 (min. 0-1-8)
Max Horz 2=74(LC 14)
Max Uplift7=-87(LC 11), 2=-95(LC 14), 8=-53(LC 14)
Max Grav 7=234(LC 22), 2=614(LC 21), 8=772(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-18=-929/257, 18-19=-867/260, 3-19=-839/269, 3-4=-963/356, 4-5=-201/316, 6-7=-182/423
BOT CHORD 2-10=-198/817, 9-10=-98/304, 8-9=-98/304
WEBS 4-10=-154/791, 4-8=-553/69, 5-8=-433/221, 3-10=-451/193

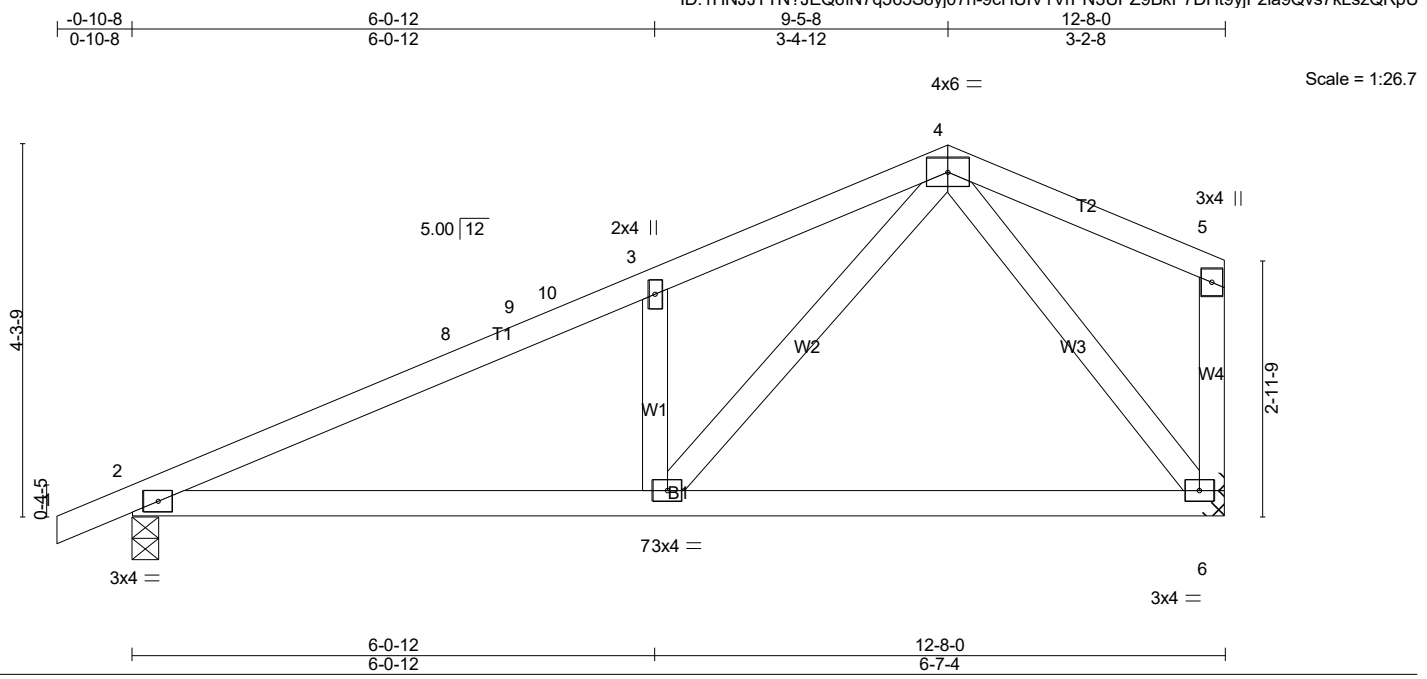
NOTES- (10)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 4-7-14, Exterior(2R) 4-7-14 to 13-5-14, Exterior(2E) 13-5-14 to 18-3-8 zone; cantilever left and right exposed ; end vertical left and right exposed; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) 7, 2, 8.
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

4/15/2024

Job	Truss	Truss Type	Qty	Ply	LOT 48 PROVIDENCE CREEK | 225 WINDSWEPT WAY FUQUAY-VARINA, NC
24-2852-R01	R13	Common	2	1	# 47556
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Apr 15 15:29:35 2024 Page 1
ID:1HNJJTTN?JEQ6fN7q565S8yj07n-9cHUlV1VrPN3UPZ9BkP7DHt9yjF2ia9Qvs7kLszQRpU



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	0.39	Vert(LL)	-0.05	6-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.09	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 62 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 5-6-2 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=559/0-3-8 (min. 0-1-8), 6=492/Mechanical
Max Horz 2=103(LC 13)
Max Uplift2=-94(LC 14), 6=-59(LC 14)
Max Grav 2=593(LC 21), 6=492(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-896/237, 8-9=-806/240, 9-10=-788/243, 3-10=-765/249, 3-4=-896/357
BOT CHORD 2-7=-208/761, 6-7=-50/299
WEBS 4-7=-243/713, 4-6=-466/153, 3-7=-384/243

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 4-7-14, Exterior(2R) 4-7-14 to 9-5-8, Exterior(2E) 9-5-8 to 12-6-4 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.
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) 2, 6.

LOAD CASE(S) Standard

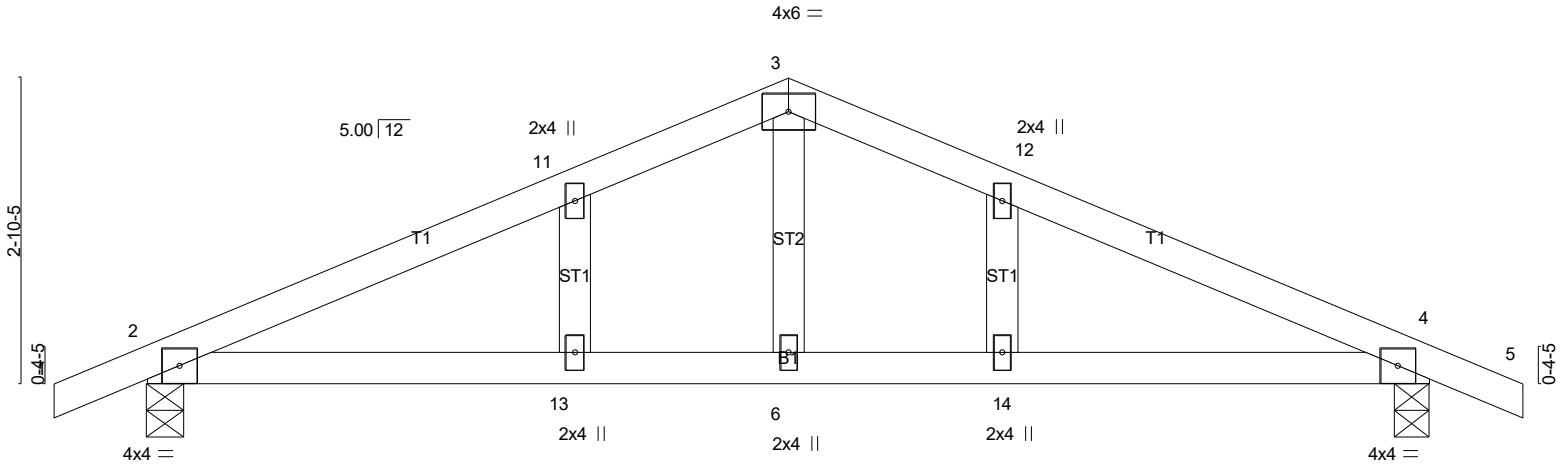
4/15/2024

Job	Truss	Truss Type	Qty	Ply	LOT 48 PROVIDENCE CREEK | 225 WINDSWEPT WAY FUQUAY-VARINA, NC
24-2852-R01	SP01	COMMON SUPPORTED GAB	1	1	# 47556
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Apr 15 15:29:36 2024 Page 1
ID:I8799bTYYbxotYa75q2Yk9yieyH-dprsVr27cjVw6Z8MlRxMlUQFg6ZeR3Ma8WsHuIzQRpT

-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



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

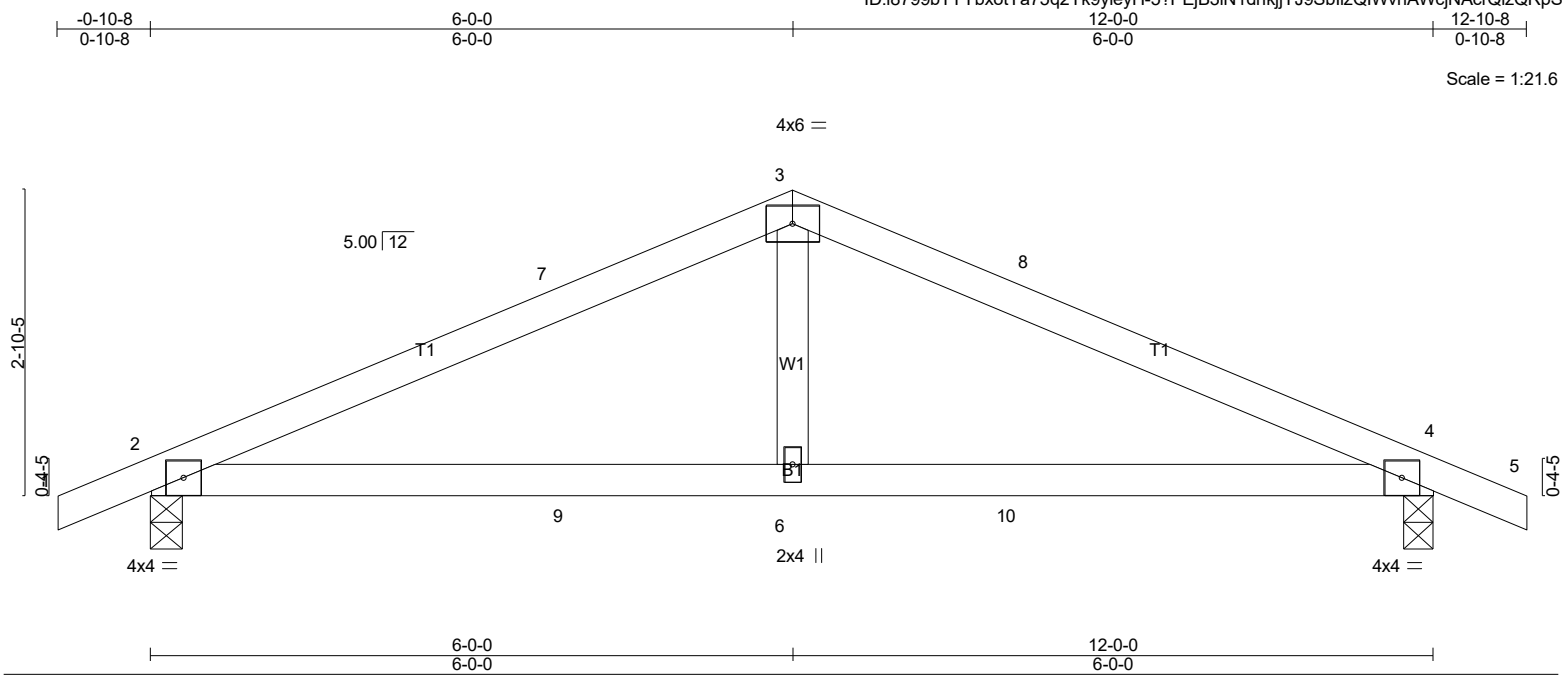
NOTES- (11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Corner(3R) 3-11-2 to 8-0-14, Corner(3E) 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

4/15/2024

Job	Truss	Truss Type	Qty	Ply	LOT 48 PROVIDENCE CREEK | 225 WINDSWEPT WAY FUQUAY-VARINA, NC
24-2852-R01	SP02	COMMON	5	1	# 47556
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Apr 15 15:29:37 2024 Page 1
ID:l8799bTYYbxotYa75q2Yk9yieyH-5?PEjB3lN1dnkjjYJ9SblizQlWvnAWcjNAcrQlzQRpS



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

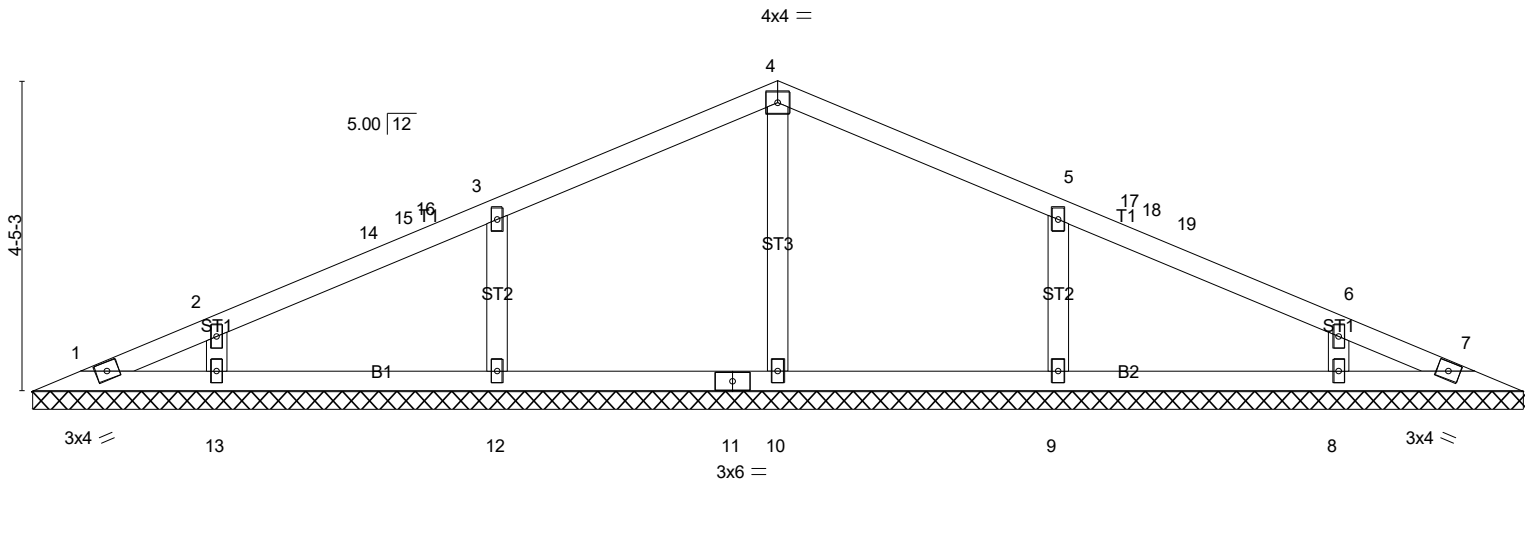
4/15/2024

Job	Truss	Truss Type	Qty	Ply	LOT 48 PROVIDENCE CREEK | 225 WINDSWEPT WAY FUQUAY-VARINA, NC
24-2852-R01	VT01	GABLE	1	1	# 47556
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Apr 15 15:29:39 2024 Page 1
ID:1HNJJTTN?JEQ6fN7q565S8yj07n-1OW?8t4?vetVz0txQaU3N72tSKgoeQR0qU5xUdzQRpQ

10-7-11 | 21-3-7
10-7-11 | 10-7-11

Scale = 1:32.9



21-3-7
21-3-7

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	0.30	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	0.09	Horz(CT)	0.00	7	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 21-3-7.
(lb) - Max Horz 1=-61(LC 19)
Max Uplift All uplift 100 lb or less at joint(s) 1, 12, 13, 9, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=285(LC 21), 12=467(LC 20), 13=266(LC 1), 9=467(LC 21), 8=266(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-12=-384/145, 5-9=-384/145

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) 0-8-12 to 5-6-6, Interior(1) 5-6-6 to 5-10-2, Exterior(2R) 5-10-2 to 15-5-5, Interior(1) 15-5-5 to 15-9-1, Exterior(2E) 15-9-1 to 20-6-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 12, 13, 9, 8.

LOAD CASE(S) Standard

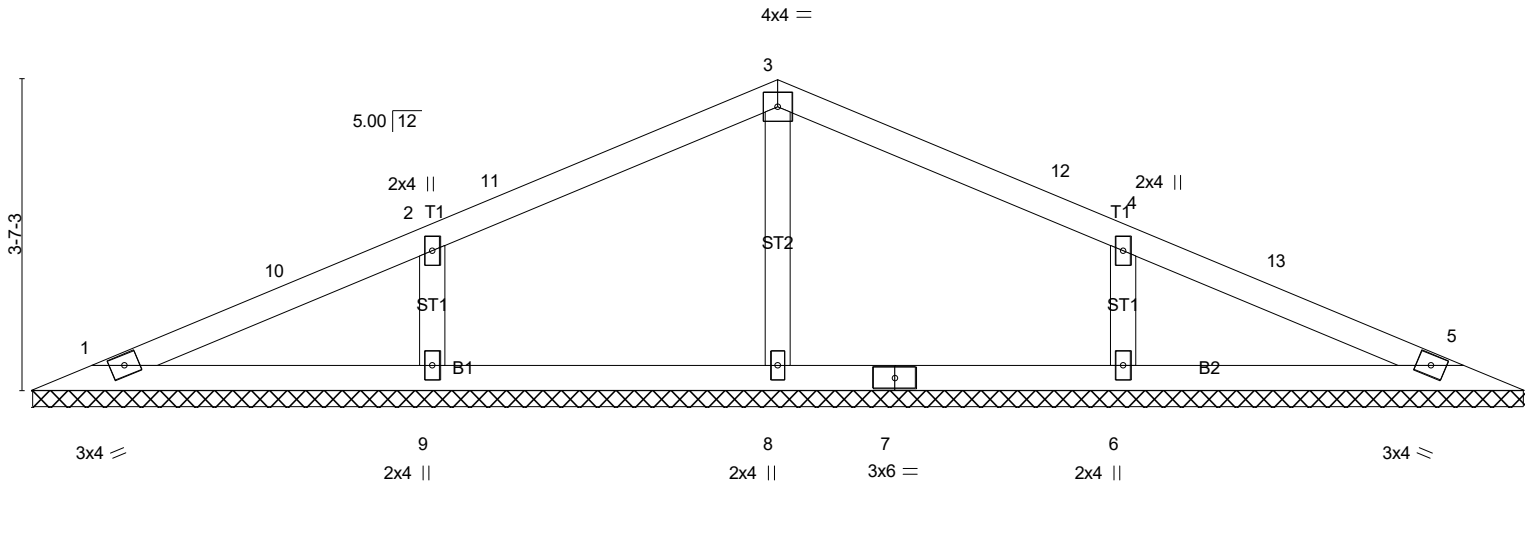
4/15/2024

Job	Truss	Truss Type	Qty	Ply	LOT 48 PROVIDENCE CREEK | 225 WINDSWEPT WAY FUQUAY-VARINA, NC
24-2852-R01	VT02	Valley	1	1	# 47556
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Apr 15 15:29:40 2024 Page 1
ID:1HNJJTTN?JEQ6fN7q565S8yj07n-Va4NLD5dgy?MbAS7_H?IwKb2_k0jNtl938qV13zQRpP

8-7-11 | 17-3-7
8-7-11 | 8-7-11

Scale = 1:26.7



17-3-7
17-3-7

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	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 60 lb	FT = 20%
BCDL	10.0											

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

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

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

REACTIONS. All bearings 17-3-7.
(lb) - Max Horz 1=49(LC 18)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=-100(LC 14), 6=-100(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=275(LC 21), 9=493(LC 20), 6=493(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-394/164, 4-6=-394/164

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) 0-8-12 to 5-6-6, Exterior(2R) 5-6-6 to 11-9-1, Exterior(2E) 11-9-1 to 16-6-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 9=100, 6=100.

LOAD CASE(S) Standard

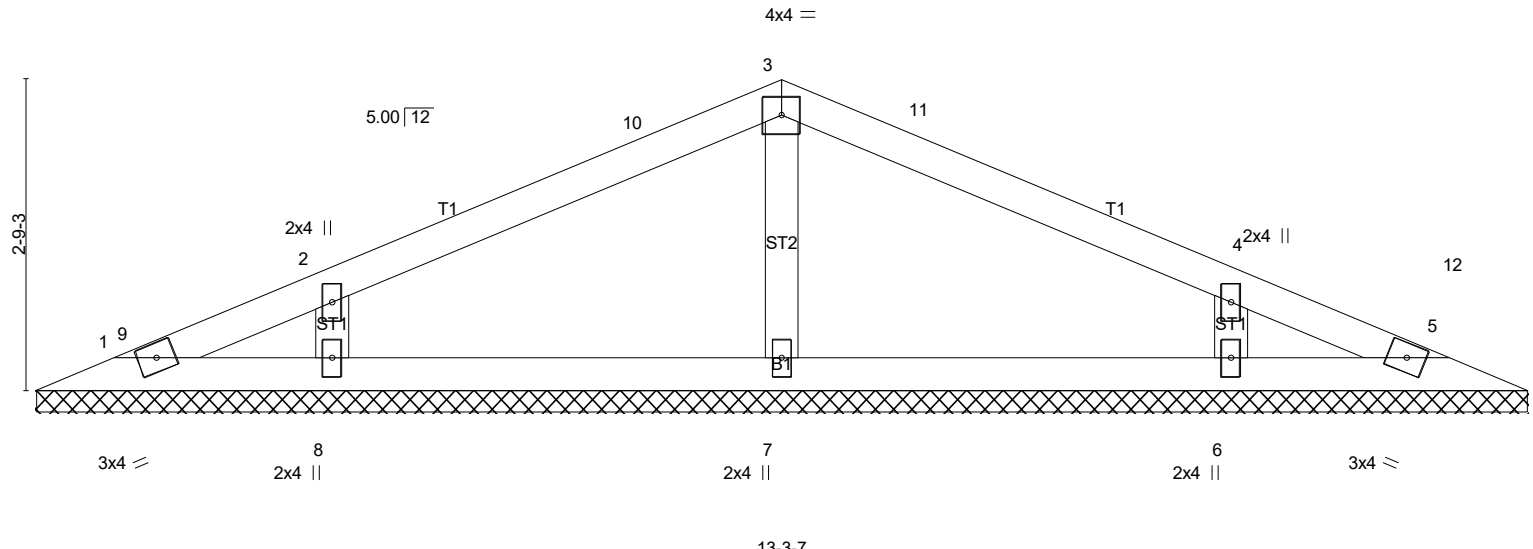
4/15/2024

Job	Truss	Truss Type	Qty	Ply	LOT 48 PROVIDENCE CREEK | 225 WINDSWEPT WAY FUQUAY-VARINA, NC
24-2852-R01	VT03	GABLE	1	1	# 47556
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Apr 15 15:29:41 2024 Page 1
ID:1HNJJTTN?JEQ6fN7q565S8yj07n-zmelZY6GRF7DCK1JY_WXSY7DY7L46KAJloa2ZWzQRpO

6-7-11 | 13-3-7
6-7-11 | 6-7-11

Scale = 1:20.5



13-3-7
13-3-7

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	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 44 lb	FT = 20%
BCDL	10.0											

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

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

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

REACTIONS. All bearings 13-3-7.
(lb) - Max Horz 1=-37(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 8, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=301(LC 21), 8=413(LC 20), 6=413(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-353/157, 4-6=-353/157

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) 0-8-12 to 5-6-6, Exterior(2R) 5-6-6 to 7-9-1, Exterior(2E) 7-9-1 to 12-6-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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, 7, 8, 6.

LOAD CASE(S) Standard

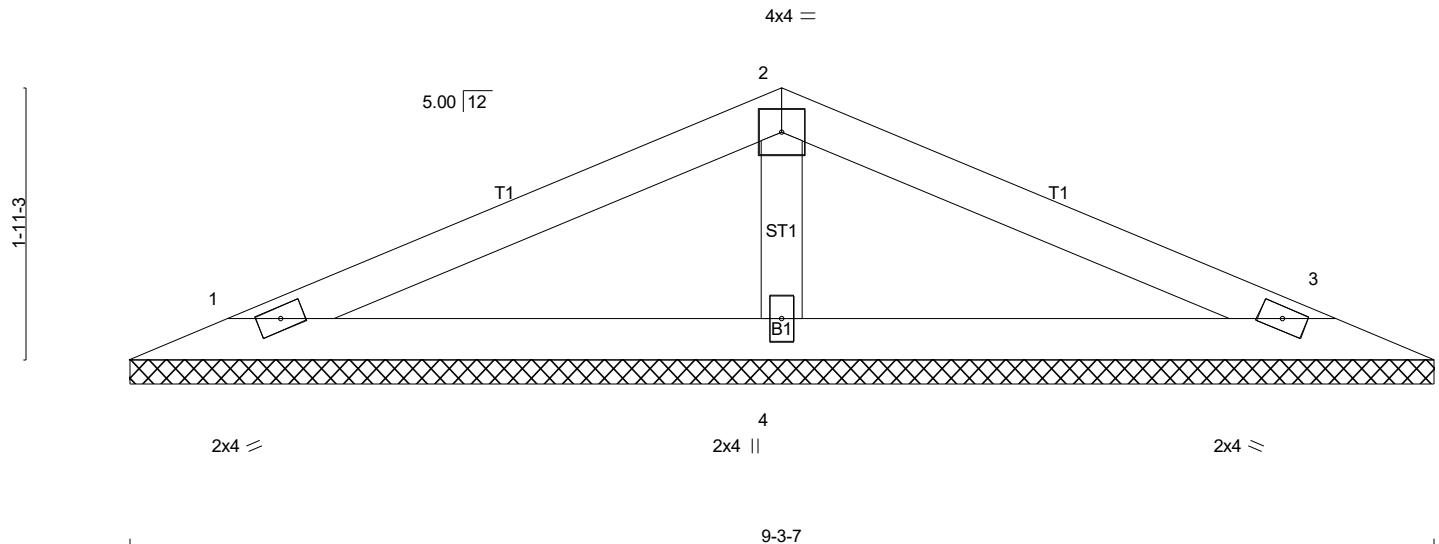
4/15/2024

Job	Truss	Truss Type	Qty	Ply	LOT 48 PROVIDENCE CREEK | 225 WINDSWEPT WAY FUQUAY-VARINA, NC
24-2852-R01	VT04	Valley	1	1	# 47556
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Apr 15 15:29:42 2024 Page 1
ID:1HNJJTTN?JEQ6fN7q565S8yj07n-SzC7mu7uCZF4qUcV5i1m?lgN6XgoronSWSJb5yzQRpN

4-7-11 | 9-3-7
4-7-11 | 4-7-11

Scale = 1:16.4



9-3-7
9-3-7

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)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.30	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							Weight: 28 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=136/9-3-7 (min. 0-1-8), 3=136/9-3-7 (min. 0-1-8), 4=355/9-3-7 (min. 0-1-8)
Max Horz 1=-24(LC 19)
Max Uplift1=-27(LC 14), 3=-31(LC 15), 4=-25(LC 14)
Max Grav 1=189(LC 20), 3=189(LC 21), 4=355(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

4/15/2024

Job	Truss	Truss Type	Qty	Ply	LOT 48 PROVIDENCE CREEK | 225 WINDSWEPT WAY FUQUAY-VARINA, NC
24-2852-R01	VT05	Valley	1	1	# 47556
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Apr 15 15:29:43 2024 Page 1
ID:1HNJJTTN?JEQ6fN7q565S8yj07n-w9mW_E7WztNxSeAifPZ?XzDbpx0uaFlcl639dOzQRpM

2-7-11 / 2-7-11 — 5-3-7 / 2-7-11

Scale = 1:9.9

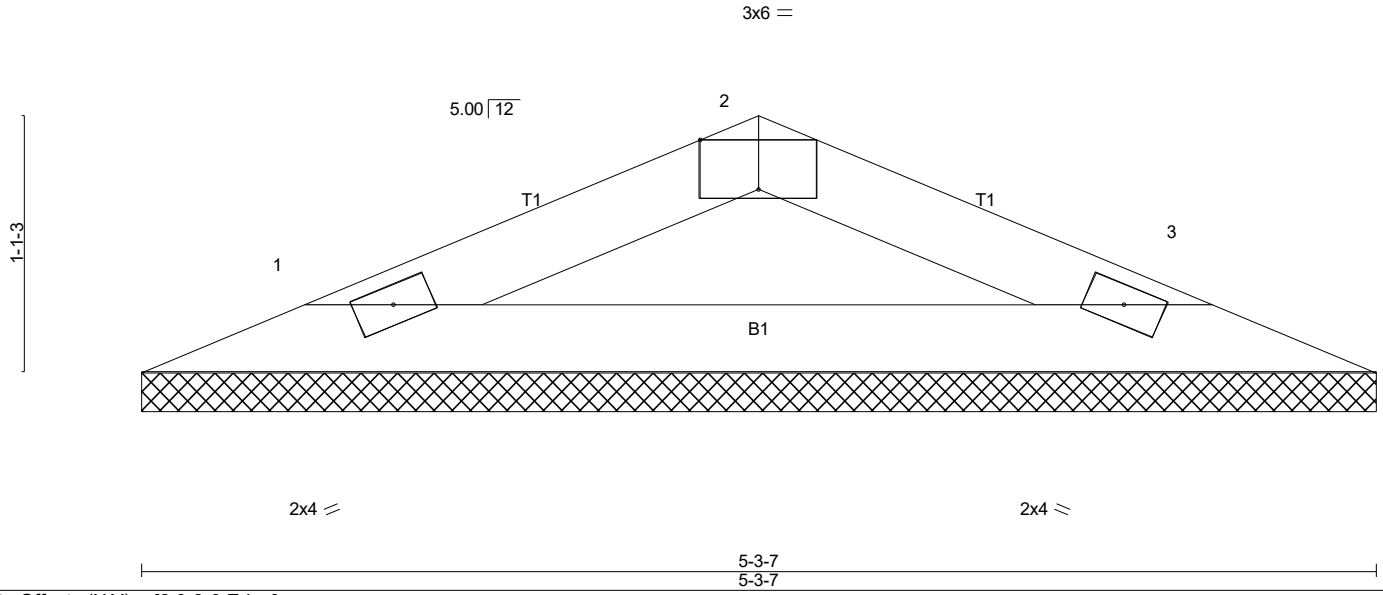


Plate Offsets (X,Y)-- [2:0-3-0,Edge]

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	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.31	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								
BCDL	10.0										Weight: 14 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-3-7 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=153/5-3-7 (min. 0-1-8), 3=153/5-3-7 (min. 0-1-8)
Max Horz 1=12(LC 14)
Max Uplift 1=-19(LC 14), 3=-19(LC 15)
Max Grav 1=167(LC 20), 3=167(LC 21)

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

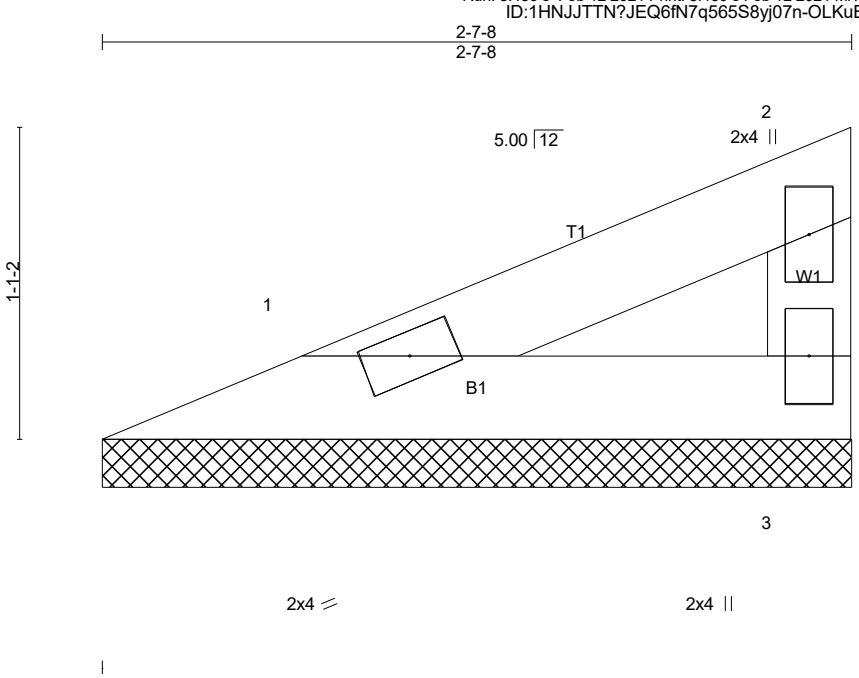
NOTES- (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical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

4/15/2024

Job	Truss	Truss Type	Qty	Ply	LOT 48 PROVIDENCE CREEK | 225 WINDSWEPT WAY FUQUAY-VARINA, NC
24-2852-R01	VT06	Valley	1	1	# 47556
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Mon Apr 15 15:29:44 2024 Page 1
ID:1HNJJTTN?JEQ6fN7q565S8yj07n-OLKuBa88jAVo3nluD74E4AlmoLQ8Ji?l_moiArzQRpL



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	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P							Weight: 8 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-7-8 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) 1=70/2-7-8 (min. 0-1-8), 3=70/2-7-8 (min. 0-1-8)
Max Horz 1=27(LC 11)
Max Uplift1=-10(LC 14), 3=-15(LC 14)
Max Grav 1=86(LC 20), 3=86(LC 20)

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

NOTES- (8)
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;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) Gable requires continuous bottom chord bearing.
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) 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

4/15/2024