

Trenco  
818 Soundside Rd  
Edenton, NC 27932

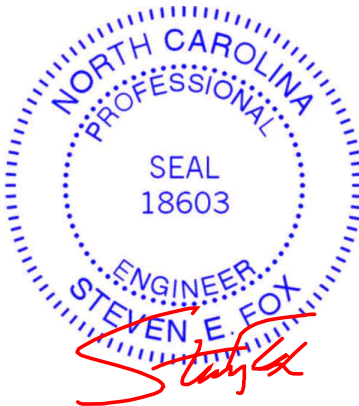
Re: MasterFarm  
Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Builders FirstSource-Apex,NC.

Pages or sheets covered by this seal: I49146816 thru I49146844

My license renewal date for the state of North Carolina is December 31, 2021.

North Carolina COA: C-0844



December 8,2021

Fox, Steve

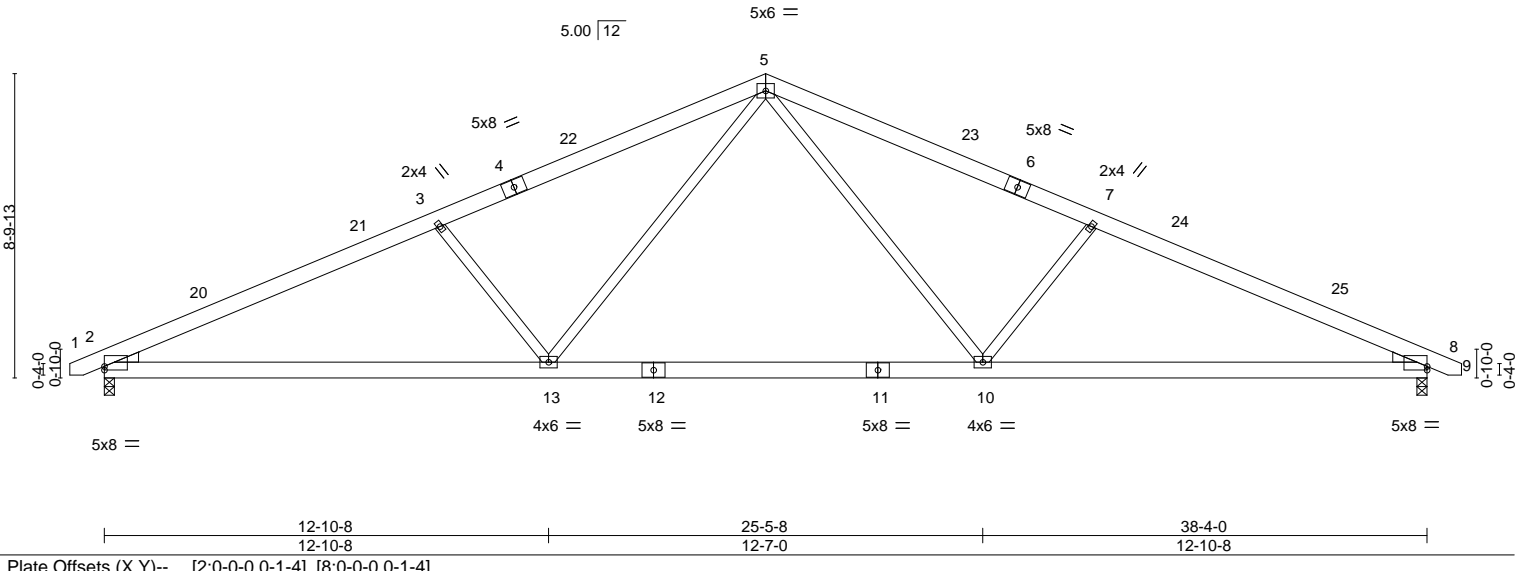
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job MASTERFARM	Truss A01	Truss Type COMMON	Qty 2	Ply 1	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek I49146816
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Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:50:43 2021 Page 1

ID:NOHDxMFxGtHiYullGv8Cp8zfMF4-nUMvFnO35W64WonTKbj4XjGqILK1?aHGS3hsR1yBGcQ  
28-7-4 9-5-4 38-4-0 9-8-12 39-4-0 1-0-0

Scale = 1:66.8



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.57	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.87	Vert(LL) -0.40 10-13 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.38	Vert(CT) -0.62 10-13 >746 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.09 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.09 10-13 >999 240	Weight: 239 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3  
WEDGE  
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

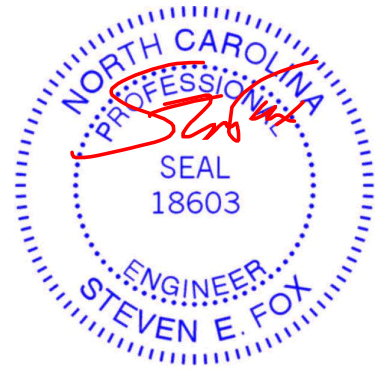
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-9-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
Max Horz 2=99(LC 12)  
Max Grav 2=1582(LC 1), 8=1582(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2940/144, 3-5=-2589/150, 5-7=-2589/150, 7-8=-2940/144  
BOT CHORD 2-13=-55/2612, 10-13=0/1771, 8-10=-57/2612  
WEBS 5-10=0/910, 7-10=-574/173, 5-13=0/910, 3-13=-574/173

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-9-10 to 3-0-6, Interior(1) 3-0-6 to 19-2-0, Exterior(2) 19-2-0 to 24-7-1, Interior(1) 24-7-1 to 39-1-10 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.



December 8, 2021

Job	Truss	Truss Type	Qty	Ply	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek
MASTERFARM	A01G	GABLE	1	1	149146817
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:50:45 2021 Page 1

ID:NOHDxMFxGtHiYulIGv8Cp8zfMF4-jtUfgTPKd8Mo5xrR0iYc8LIE8DhTXZZwNAzWwyBGcO

1-0-0	19-2-0	38-4-0	39-4-0
1-0-0	19-2-0	19-2-0	1-0-0

Scale = 1:67.7

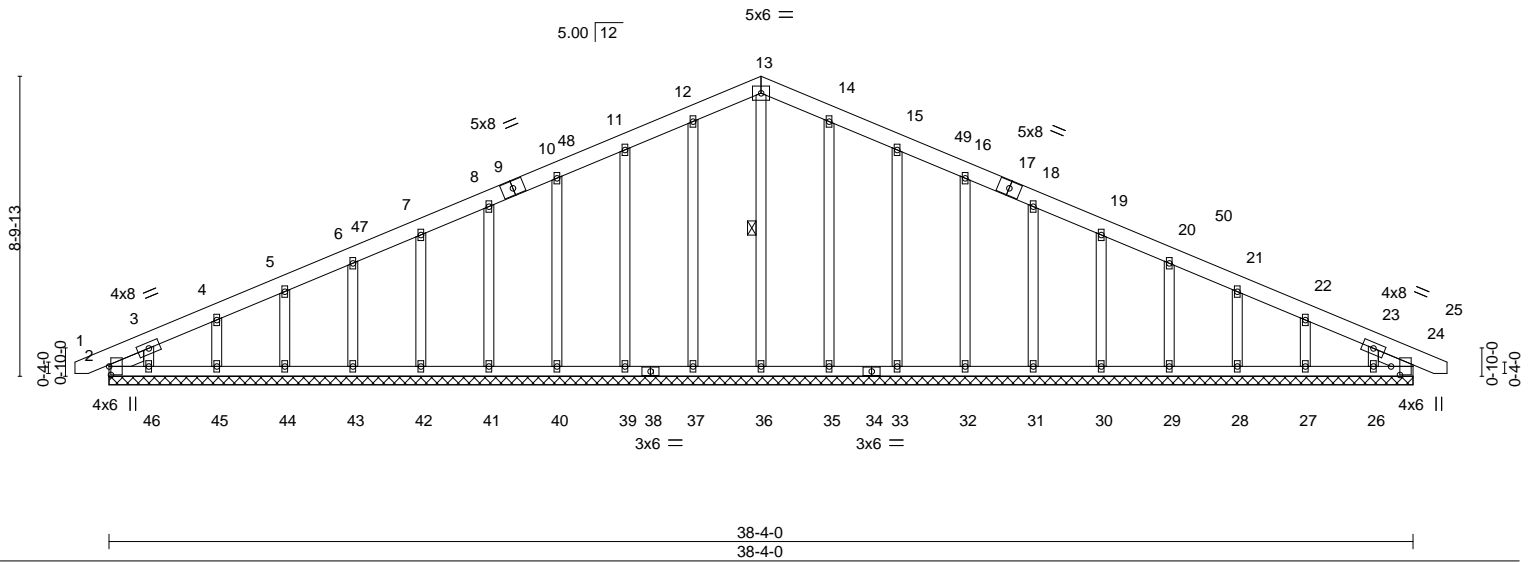


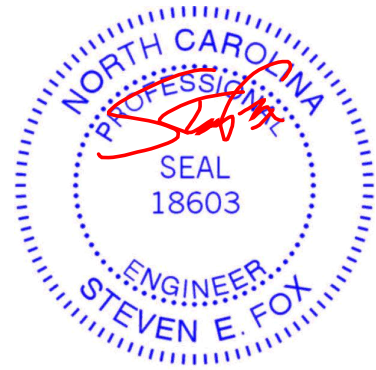
Plate Offsets (X,Y)--	[2:0-3-0,0-0-10], [24:0-3-0,0-3-2]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.03	Vert(LL) -0.00 24 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) -0.00 24 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.13	Horz(CT) 0.00 24 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 280 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	WEBS 1 Row at midpt 13-36
SLIDER Left 2x4 SP No.2 1-1-8, Right 2x4 SP No.2 1-1-8	

**REACTIONS.** All bearings 38-4-0.  
 (lb) - Max Horz 2=99(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 39, 40, 41, 42, 43, 44, 45, 46, 33, 32, 31, 30, 29, 28, 27, 26  
 Max Grav All reactions 250 lb or less at joint(s) 2, 24, 36, 37, 39, 40, 41, 42, 43, 44, 45, 46, 35, 33, 32, 31, 30, 29, 28, 27, 26

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-9-10 to 3-2-0, Interior(1) 3-2-0 to 19-2-0, Exterior(2) 19-2-0 to 24-7-1, Interior(1) 24-7-1 to 39-1-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 39, 40, 41, 42, 43, 44, 45, 46, 33, 32, 31, 30, 29, 28, 27, 26.



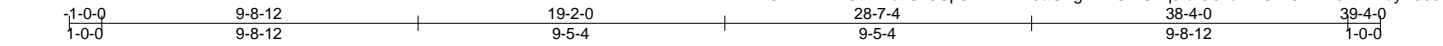
December 8, 2021

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek	149146818
MASTERFARM	A02	COMMON	3	1		

Builders firstsource, Apex . NC

8.430 s Oct 22 2021 MiTek Industries, Inc. Wed Dec 8 10:11:51 2021 Page 1  
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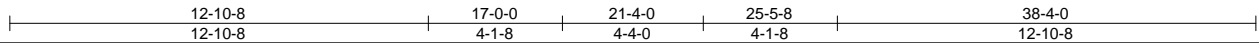
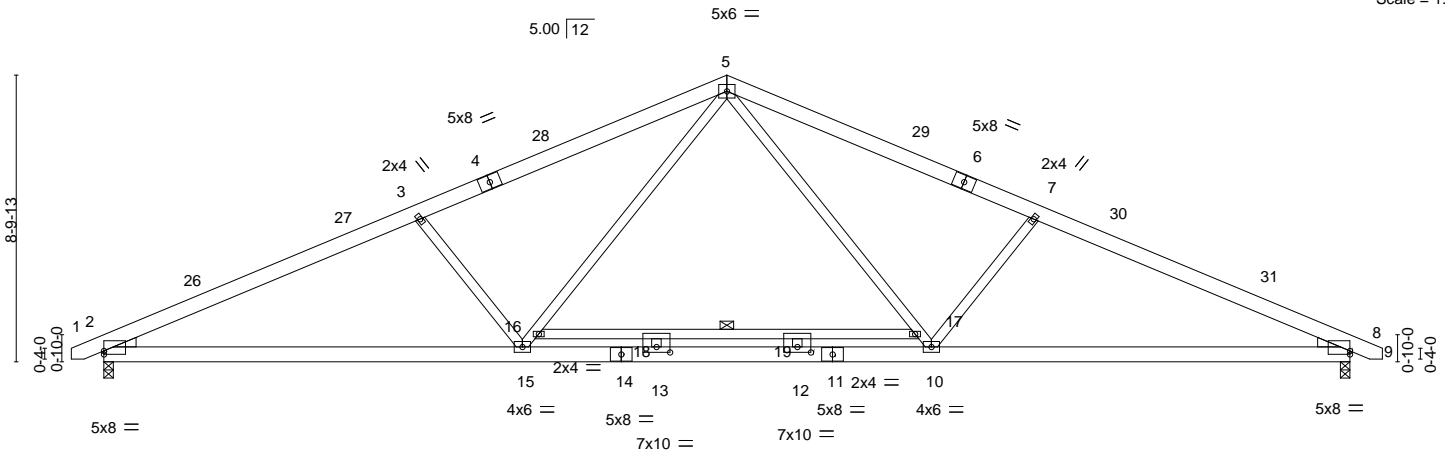


Plate Offsets (X,Y)--	[2:0-0-0,0-1-4], [8:0-0-0,0-1-4], [18:0-5-0,0-2-0], [19:0-5-0,0-2-0]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.72	Vert(LL) -0.46 12-13 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.53	Vert(CT) -0.64 12-13 >721 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.63	Horz(CT) 0.07 8 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Wind(LL) 0.08 12-13 >999 240		
				Weight: 258 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-7-5 oc purlins.
BOT CHORD 2x6 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except*	WEBS 1 Row at midpt 16-17
16-17: 2x4 SP No.2	

WEDGE  
 Left: 2x4 SP No.3 , Right: 2x4 SP No.3

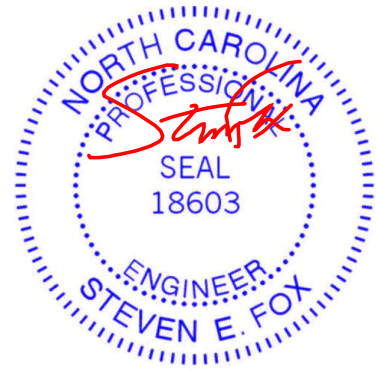
**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=99(LC 12)  
 Max Grav 2=1582(LC 1), 8=1582(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-26=-3018/106, 26-27=-2920/135, 3-27=-2857/145, 3-4=-2731/111, 4-28=-2651/126,  
 5-28=-2636/151, 5-29=-2636/151, 6-29=-2651/126, 6-7=-2731/111, 7-30=-2857/145,  
 30-31=-2920/135, 8-31=-3018/106  
 BOT CHORD 2-15=-56/2695, 14-15=0/2035, 13-14=0/2035, 12-13=0/2035, 11-12=0/2035, 10-11=0/2035,  
 8-10=-58/2695  
 WEBS 5-17=0/1117, 10-17=0/911, 7-10=-576/174, 15-16=0/911, 5-16=0/1117, 3-15=-576/174

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TC DL=6.0psf; BC DL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-9-10 to 3-0-6, Interior(1) 3-0-6 to 19-2-0, Exterior(2) 19-2-0 to 24-7-1, Interior(1) 24-7-1 to 39-1-10 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 6) N/A

**LOAD CASE(S)**

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-5=-60, 5-9=-60, 20-23=-20
- 2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-5=-50, 5-9=-50, 20-23=-20, 16-17=-30



December 8, 2021

Continued on page 2

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ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek	149146818
MASTERFARM	A02	COMMON	3	1	Job Reference (optional)	

Builders firstsource, Apex . NC

8.430 s Oct 22 2021 MITek Industries, Inc. Wed Dec 8 10:11:51 2021 Page 2  
 ID:NOHDxMFxGtHiYullGv8Cp8zMF4-A3aOZgT2NGMU7qJfoI0vdlhLCIZOVREJhhPFdyB36s

**LOAD CASE(S)**

- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert: 1-5=-20, 5-9=-20, 20-23=-40, 16-17=-40
- 4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=42, 2-26=22, 5-26=12, 5-29=22, 8-29=12, 8-9=8, 20-23=-12  
 Horz: 1-2=-54, 2-26=-34, 5-26=-24, 5-29=34, 8-29=24, 8-9=20
- 5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=8, 2-28=12, 5-28=22, 5-31=12, 8-31=22, 8-9=42, 20-23=-12  
 Horz: 1-2=-20, 2-28=-24, 5-28=-34, 5-31=24, 8-31=34, 8-9=54
- 6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-13, 2-5=-32, 5-8=-32, 8-9=-27, 20-23=-20  
 Horz: 1-2=-7, 2-5=12, 5-8=-12, 8-9=-7
- 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-27, 2-5=-32, 5-8=-32, 8-9=-13, 20-23=-20  
 Horz: 1-2=7, 2-5=12, 5-8=-12, 8-9=7
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=20, 2-5=10, 5-8=8, 8-9=4, 20-23=-12  
 Horz: 1-2=-32, 2-5=-22, 5-8=20, 8-9=16
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=4, 2-5=8, 5-8=10, 8-9=20, 20-23=-12  
 Horz: 1-2=-16, 2-5=-20, 5-8=22, 8-9=32
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-2, 2-5=-7, 5-8=-8, 8-9=-4, 20-23=-20  
 Horz: 1-2=-18, 2-5=-13, 5-8=12, 8-9=16
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-4, 2-5=8, 5-8=7, 8-9=-2, 20-23=-20  
 Horz: 1-2=-16, 2-5=12, 5-8=13, 8-9=18
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=14, 2-27=19, 5-27=9, 5-8=2, 8-9=-3, 20-23=-12  
 Horz: 1-2=-26, 2-27=-31, 5-27=-21, 5-8=14, 8-9=9
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-3, 2-5=2, 5-30=9, 8-30=19, 8-9=14, 20-23=-12  
 Horz: 1-2=-9, 2-5=-14, 5-30=21, 8-30=31, 8-9=26
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=5, 2-5=9, 5-8=2, 8-9=-3, 20-23=-12  
 Horz: 1-2=-17, 2-5=-21, 5-8=14, 8-9=9
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-3, 2-5=2, 5-8=9, 8-9=5, 20-23=-12  
 Horz: 1-2=-9, 2-5=-14, 5-8=21, 8-9=17
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=6, 2-27=2, 5-27=-7, 5-8=-15, 8-9=-11, 20-23=-20  
 Horz: 1-2=-26, 2-27=-22, 5-27=-13, 5-8=5, 8-9=9
- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-11, 2-5=-15, 5-30=-7, 8-30=2, 8-9=6, 20-23=-20  
 Horz: 1-2=-9, 2-5=-5, 5-30=13, 8-30=22, 8-9=26
- 18) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90  
 Uniform Loads (plf)  
 Vert: 1-5=-20, 5-9=-20, 20-23=-20, 16-17=-40
- 19) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-37, 2-5=-40, 5-8=-41, 8-9=-38, 20-23=-20, 16-17=-30  
 Horz: 1-2=-13, 2-5=-10, 5-8=9, 8-9=12
- 20) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-38, 2-5=-41, 5-8=-40, 8-9=-37, 20-23=-20, 16-17=-30  
 Horz: 1-2=-12, 2-5=-9, 5-8=10, 8-9=13
- 21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Continued on page 3

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 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek	I49146818
MASTERFARM	A02	COMMON	3	1	Job Reference (optional)	

Builders firstsource, Apex . NC

8.430 s Oct 22 2021 MiTek Industries, Inc. Wed Dec 8 10:11:51 2021 Page 3  
 ID:NOHDxMFxGtHiYullGv8Cp8zfMF4-A3aOZgt2NGMU7qJfoI00vdihLCIZOVREJhhPFdyB36s

**LOAD CASE(S)**

Uniform Loads (plf)

Vert: 1-2=-30, 2-27=-34, 5-27=-41, 5-8=-46, 8-9=-43, 20-23=-20, 16-17=-30  
 Horz: 1-2=-20, 2-27=-16, 5-27=-9, 5-8=4, 8-9=7

22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-43, 2-5=-46, 5-30=-41, 8-30=-34, 8-9=-30, 20-23=-20, 16-17=-30  
 Horz: 1-2=-7, 2-5=-4, 5-30=9, 8-30=16, 8-9=20

23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-5=-60, 5-9=-20, 20-23=-20

24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-5=-20, 5-9=-60, 20-23=-20

25) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-5=-50, 5-9=-20, 20-23=-20, 16-17=-30

26) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-5=-20, 5-9=-50, 20-23=-20, 16-17=-30

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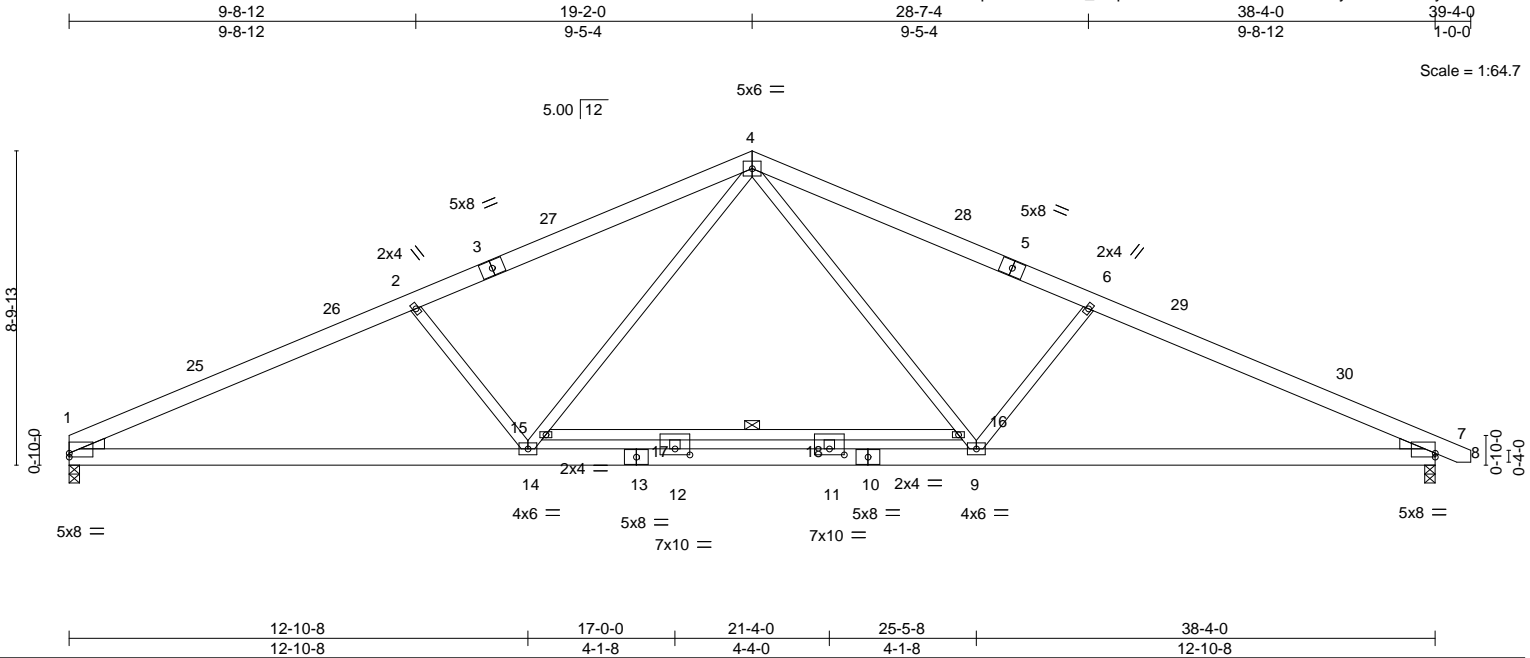


818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek	149146819
MASTERFARM	A03	COMMON	1	1	Job Reference (optional)	

Builders firstsource, Apex . NC

8.430 s Oct 22 2021 MiTek Industries, Inc. Wed Dec 8 10:12:19 2021 Page 1  
ID:NOHDxMFxGtHiYullIGv8Cp8zfMF4-LSG\_RFPcntuWU8S2Rdua2XSTGVs6yALM11TuE?yB36Q



Scale = 1:64.7

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.72	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.53	Vert(LL) -0.46 11-12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.64	Vert(CT) -0.64 11-12 >721 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.07 7 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.08 11-12 >999 240		
				Weight: 255 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-7-5 oc purlins.
BOT CHORD 2x6 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except*	WEBS 1 Row at midpt 15-16
15-16: 2x4 SP No.2	

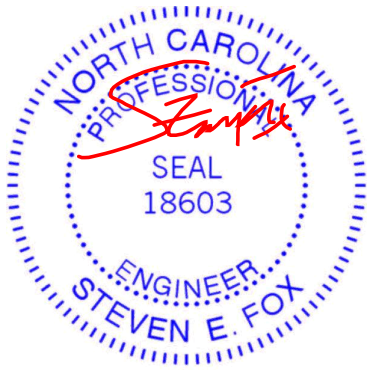
WEDGE  
Left: 2x4 SP No.3 , Right: 2x4 SP No.2

REACTIONS. (size) 1=0-3-8, 7=0-3-8  
Max Horz 1=-102(LC 17)  
Max Grav 1=1533(LC 1), 7=1582(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-25=-3021/115, 25-26=-2923/135, 2-26=-2861/153, 2-3=-2734/118, 3-27=-2654/133, 4-27=-2639/158, 4-28=-2637/151, 5-28=-2652/126, 5-6=-2732/111, 6-29=-2858/146, 29-30=-2921/137, 7-30=-3019/108  
BOT CHORD 1-14=-56/2698, 13-14=0/2036, 12-13=0/2036, 11-12=0/2036, 10-11=0/2036, 9-10=0/2036, 7-9=-60/2696  
WEBS 4-16=0/1117, 9-16=0/911, 6-9=-576/174, 14-15=0/912, 4-15=0/1118, 2-14=-577/174

- NOTES-
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TC DL=6.0psf; BC DL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-0-0 to 3-10-0, Interior(1) 3-10-0 to 19-2-0, Exterior(2) 19-2-0 to 24-7-1, Interior(1) 24-7-1 to 39-1-10 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 6) N/A

LOAD CASE(S)  
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-4=-60, 4-8=-60, 19-22=-20  
2) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-4=-50, 4-8=-50, 19-22=-20, 15-16=-30



December 8, 2021

Continued on page 2

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**ENGINEERING BY**  
**TRENCO**  
A MiTek Affiliate  
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek	149146819
MASTERFARM	A03	COMMON	1	1	Job Reference (optional)	

Builders firstsource, Apex . NC

8.430 s Oct 22 2021 MiTek Industries, Inc. Wed Dec 8 10:12:19 2021 Page 2  
ID:NOHDxMFxGtHiYullGv8Cp8zfmF4-LSG\_RFpcntuWU8S2Rdua2XSTGVs6yALM11TuE?yB36Q

**LOAD CASE(S)**

- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-4=-20, 4-8=-20, 19-22=-40, 15-16=-40
- 4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-25=22, 4-25=12, 4-28=22, 7-28=12, 7-8=8, 19-22=-12  
Horz: 1-25=-34, 4-25=-24, 4-28=34, 7-28=24, 7-8=20
- 5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-27=12, 4-27=22, 4-30=12, 7-30=22, 7-8=42, 19-22=-12  
Horz: 1-27=-24, 4-27=-34, 4-30=24, 7-30=34, 7-8=54
- 6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-4=-32, 4-7=-32, 7-8=-27, 19-22=-20  
Horz: 1-4=12, 4-7=-12, 7-8=-7
- 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-4=-32, 4-7=-32, 7-8=-13, 19-22=-20  
Horz: 1-4=12, 4-7=-12, 7-8=7
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-4=10, 4-7=8, 7-8=4, 19-22=-12  
Horz: 1-4=-22, 4-7=20, 7-8=16
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-4=8, 4-7=10, 7-8=20, 19-22=-12  
Horz: 1-4=-20, 4-7=22, 7-8=32
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-4=-7, 4-7=-8, 7-8=-4, 19-22=-20  
Horz: 1-4=-13, 4-7=12, 7-8=16
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-4=-8, 4-7=-7, 7-8=-2, 19-22=-20  
Horz: 1-4=-12, 4-7=13, 7-8=18
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-26=19, 4-26=9, 4-7=2, 7-8=-3, 19-22=-12  
Horz: 1-26=-31, 4-26=-21, 4-7=14, 7-8=9
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-4=2, 4-29=9, 7-29=19, 7-8=14, 19-22=-12  
Horz: 1-4=-14, 4-29=21, 7-29=31, 7-8=26
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-4=9, 4-7=2, 7-8=-3, 19-22=-12  
Horz: 1-4=-21, 4-7=14, 7-8=9
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-4=2, 4-7=9, 7-8=5, 19-22=-12  
Horz: 1-4=-14, 4-7=21, 7-8=17
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-26=2, 4-26=-7, 4-7=-15, 7-8=-11, 19-22=-20  
Horz: 1-26=-22, 4-26=-13, 4-7=5, 7-8=9
- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-4=-15, 4-29=-7, 7-29=2, 7-8=6, 19-22=-20  
Horz: 1-4=-5, 4-29=13, 7-29=22, 7-8=26
- 18) Dead + Uninhabitable Attic Storage: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90  
Uniform Loads (plf)  
Vert: 1-4=-20, 4-8=-20, 19-22=-20, 15-16=-40
- 19) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-4=-40, 4-7=-41, 7-8=-38, 19-22=-20, 15-16=-30  
Horz: 1-4=-10, 4-7=9, 7-8=12
- 20) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-4=-41, 4-7=-40, 7-8=-37, 19-22=-20, 15-16=-30  
Horz: 1-4=-9, 4-7=10, 7-8=13
- 21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Continued on page 3

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818 Soundside Road  
Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek	I49146819
MASTERFARM	A03	COMMON	1	1	Job Reference (optional)	

Builders firstsource, Apex . NC

8.430 s Oct 22 2021 MiTek Industries, Inc. Wed Dec 8 10:12:19 2021 Page 3  
 ID:NOHDxMFxGtHiYullGv8Cp8zfMF4-LSG\_RFPcntuWU8S2Rdua2XSTGVs6yALMI1TuE?yB36Q

**LOAD CASE(S)**

Uniform Loads (plf)

Vert: 1-26=-34, 4-26=-41, 4-7=-46, 7-8=-43, 19-22=-20, 15-16=-30

Horz: 1-26=-16, 4-26=-9, 4-7=4, 7-8=7

22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-4=-46, 4-29=-41, 7-29=-34, 7-8=-30, 19-22=-20, 15-16=-30

Horz: 1-4=-4, 4-29=9, 7-29=16, 7-8=20

23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-4=-60, 4-8=-20, 19-22=-20

24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-4=-20, 4-8=-60, 19-22=-20

25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-4=-50, 4-8=-20, 19-22=-20, 15-16=-30

26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-4=-20, 4-8=-50, 19-22=-20, 15-16=-30

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818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek	149146820
MASTERFARM	A04	COMMON	3	1	Job Reference (optional)	

Builders firstsource, Apex . NC

8.430 s Oct 22 2021 MiTek Industries, Inc. Wed Dec 8 10:12:49 2021 Page 2  
 ID:NOHDxMFxGtHiYUilGv8Cp8zMF4-TE4JkWAQj5gF4lpBwQcGsibib52\_jXnfilUHFyB35y

**LOAD CASE(S)**

- Uniform Loads (plf)  
 Vert: 1-4=-50, 4-8=-50, 19-22=-20, 15-16=-30
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert: 1-4=-20, 4-8=-20, 19-22=-40, 15-16=-40
- 4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-25=22, 4-25=12, 4-28=22, 7-28=12, 7-8=8, 19-22=-12  
 Horz: 1-25=-34, 4-25=-24, 4-28=34, 7-28=24, 7-8=20
- 5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-27=12, 4-27=22, 4-30=12, 7-30=22, 7-8=42, 19-22=-12  
 Horz: 1-27=-24, 4-27=-34, 4-30=24, 7-30=34, 7-8=54
- 6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-4=-32, 4-7=-32, 7-8=-27, 19-22=-20  
 Horz: 1-4=12, 4-7=-12, 7-8=-7
- 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-4=-32, 4-7=-32, 7-8=-13, 19-22=-20  
 Horz: 1-4=12, 4-7=-12, 7-8=7
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-4=10, 4-7=8, 7-8=4, 19-22=-12  
 Horz: 1-4=-22, 4-7=20, 7-8=16
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-4=8, 4-7=10, 7-8=20, 19-22=-12  
 Horz: 1-4=-20, 4-7=22, 7-8=32
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-4=-7, 4-7=-8, 7-8=-4, 19-22=-20  
 Horz: 1-4=-13, 4-7=12, 7-8=16
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-4=-8, 4-7=-7, 7-8=-2, 19-22=-20  
 Horz: 1-4=-12, 4-7=13, 7-8=18
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-26=19, 4-26=9, 4-7=2, 7-8=-3, 19-22=-12  
 Horz: 1-26=-31, 4-26=-21, 4-7=14, 7-8=9
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-4=2, 4-29=9, 7-29=19, 7-8=14, 19-22=-12  
 Horz: 1-4=-14, 4-29=21, 7-29=31, 7-8=26
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-4=9, 4-7=2, 7-8=-3, 19-22=-12  
 Horz: 1-4=-21, 4-7=14, 7-8=9
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-4=2, 4-7=9, 7-8=5, 19-22=-12  
 Horz: 1-4=-14, 4-7=21, 7-8=17
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-26=2, 4-26=-7, 4-7=-15, 7-8=-11, 19-22=-20  
 Horz: 1-26=-22, 4-26=-13, 4-7=5, 7-8=9
- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-4=-15, 4-29=-7, 7-29=2, 7-8=6, 19-22=-20  
 Horz: 1-4=-5, 4-29=13, 7-29=22, 7-8=26
- 18) Dead + Uninhabitable Attic Storage: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90  
 Uniform Loads (plf)  
 Vert: 1-4=-20, 4-8=-20, 19-22=-20, 15-16=-40
- 19) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-4=-40, 4-7=-41, 7-8=-38, 19-22=-20, 15-16=-30  
 Horz: 1-4=-10, 4-7=9, 7-8=12
- 20) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-4=-41, 4-7=-40, 7-8=-37, 19-22=-20, 15-16=-30  
 Horz: 1-4=-9, 4-7=10, 7-8=13

Continued on page 3

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek	I49146820
MASTERFARM	A04	COMMON	3	1	Job Reference (optional)	

Builders firstsource, Apex . NC

8.430 s Oct 22 2021 MiTek Industries, Inc. Wed Dec 8 10:12:49 2021 Page 3  
 ID:NOHDxMFxGtHiYullGv8Cp8zfMF4-TE4JkWAQj5gF4llpBwQcGsibib52\_jXnfilUHFyB35y

**LOAD CASE(S)**

- 21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-26=-34, 4-26=-41, 4-7=-46, 7-8=-43, 19-22=-20, 15-16=-30  
 Horz: 1-26=-16, 4-26=-9, 4-7=4, 7-8=7
- 22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-4=-46, 4-29=-41, 7-29=-34, 7-8=-30, 19-22=-20, 15-16=-30  
 Horz: 1-4=-4, 4-29=9, 7-29=16, 7-8=20
- 23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-4=-60, 4-8=-20, 19-22=-20
- 24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-4=-20, 4-8=-60, 19-22=-20
- 25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-4=-50, 4-8=-20, 19-22=-20, 15-16=-30
- 26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-4=-20, 4-8=-50, 19-22=-20, 15-16=-30

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek
MASTERFARM	A05	COMMON	4	1	I49146821
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:50:49 2021 Page 1

ID:NOHDxMFxGtHiYullGv8Cp8zfMF4-bekAWrSggMtDEjFdgsqUm\_Wq4mNFPiI9q?8BfhyBGck



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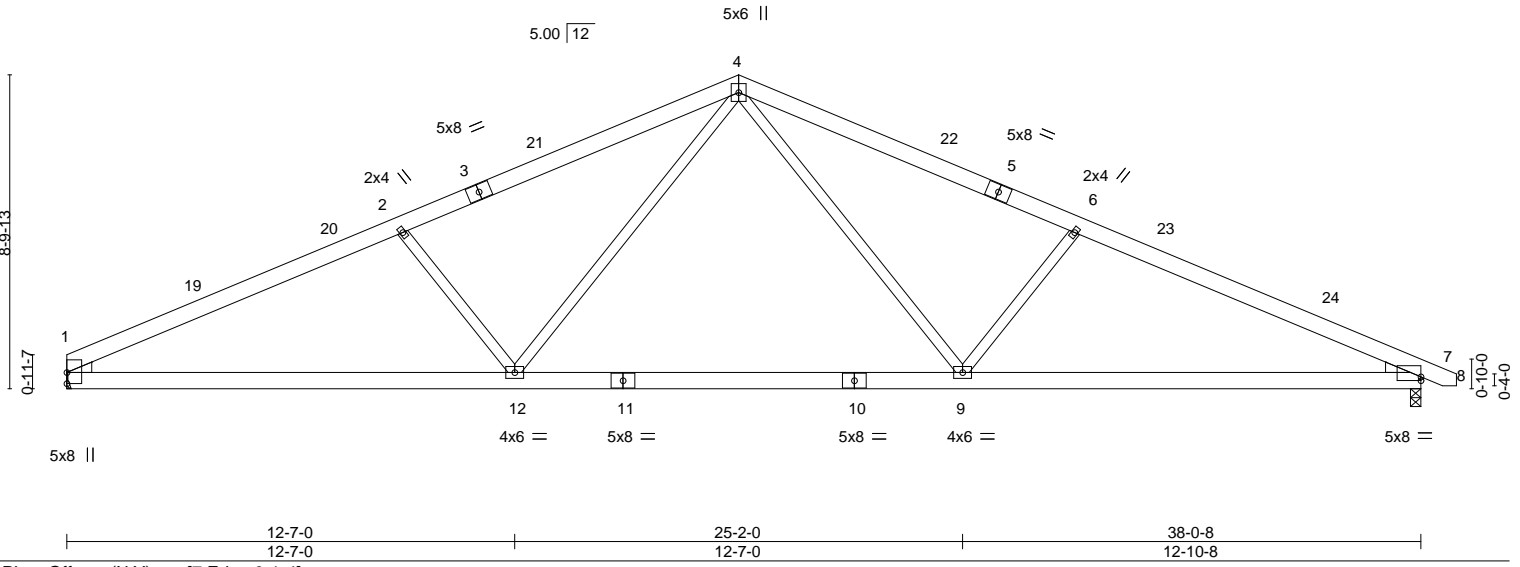


Plate Offsets (X, Y)--	[7:Edge,0-1-4]						
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>		
TCLL 20.0	Plate Grip DOL 1.15	TC 0.68	Vert(LL) -0.40 9-12 >999 360	MT20	244/190		
TCDL 10.0	Lumber DOL 1.15	BC 0.88	Vert(CT) -0.63 9-12 >724 240				
BCLL 0.0 *	Rep Stress Incr YES	WB 0.38	Horz(CT) 0.09 7 n/a n/a				
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Wind(LL) 0.09 9-12 >999 240			Weight: 236 lb	FT = 20%

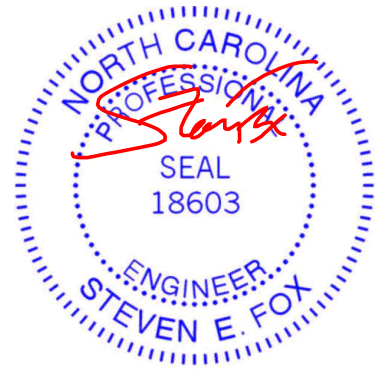
**LUMBER-**  
 TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3  
 WEDGE  
 Left: 2x4 SP No.3, Right: 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-5-8 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=Mechanical, 7=0-3-8  
 Max Horz 1=103(LC 13)  
 Max Grav 1=1521(LC 1), 7=1570(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-2844/150, 2-4=-2518/156, 4-6=-2564/149, 6-7=-2915/145  
 BOT CHORD 1-12=-51/2526, 9-12=0/1745, 7-9=-58/2588  
 WEBS 4-9=0/914, 6-9=-574/173, 4-12=0/859, 2-12=-542/168

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-3-8 to 4-1-8, Interior(1) 4-1-8 to 19-2-0, Exterior(2) 19-2-0 to 24-7-1, Interior(1) 24-7-1 to 39-1-10 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Refer to girder(s) for truss to truss connections.



December 8, 2021

Job	Truss	Truss Type	Qty	Ply	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek
MASTERFARM	A05G	GABLE	1	1	149146822
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:50:51 2021 Page 1  
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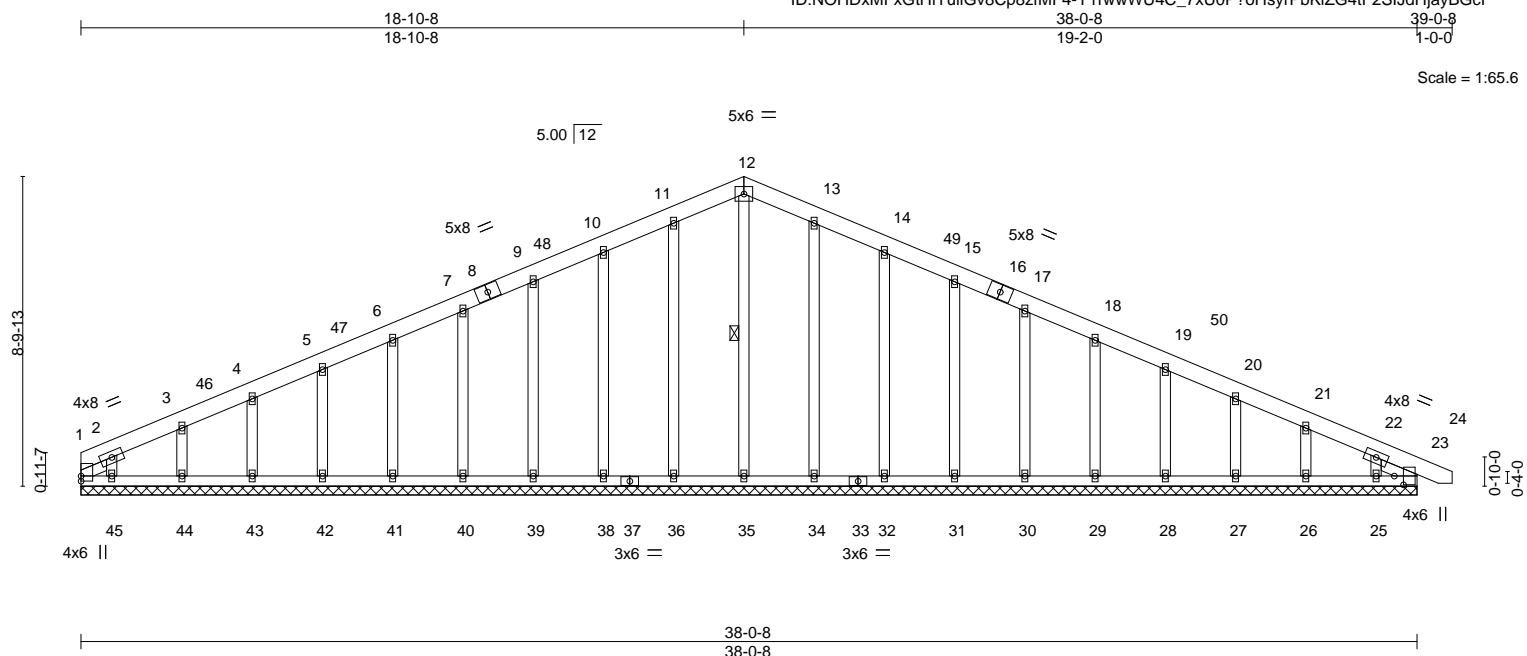


Plate Offsets (X,Y)--	[23:0-3-0,0-3-2]
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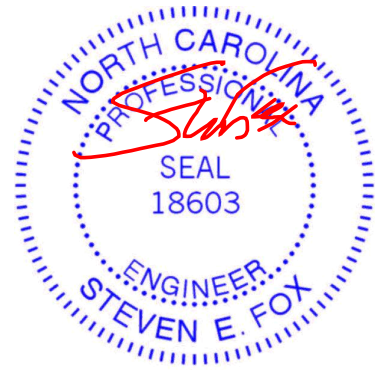
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.03	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) -0.00 23 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.13	Vert(CT) -0.00 23 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 23 n/a n/a		
	Code IRC2015/TPI2014			Weight: 276 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	WEBS 1 Row at midpt 12-35
SLIDER Left 2x4 SP No.2 0-10-4, Right 2x4 SP No.2 1-1-8	

**REACTIONS.** All bearings 38-0-8.  
 (lb) - Max Horz 1=103(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 38, 39, 40, 41, 42, 43, 44, 45, 32, 31, 30, 29, 28, 27, 26, 25  
 Max Grav All reactions 250 lb or less at joint(s) 1, 23, 35, 36, 38, 39, 40, 41, 42, 43, 44, 45, 34, 32, 31, 30, 29, 28, 27, 26, 25

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-3-8 to 4-1-8, Interior(1) 4-1-8 to 19-2-0, Exterior(2) 19-2-0 to 24-7-1, Interior(1) 24-7-1 to 39-1-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 38, 39, 40, 41, 42, 43, 44, 45, 32, 31, 30, 29, 28, 27, 26, 25.



December 8, 2021

Job	Truss	Truss Type	Qty	Ply	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek
MASTERFARM	A05T	COMMON	5	1	149146823

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:50:52 2021 Page 1

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9-5-4 18-10-8 28-3-12 35-9-0 38-0-8 39-0-8  
9-5-4 9-5-4 9-5-4 7-5-4 2-3-8 1-0-0

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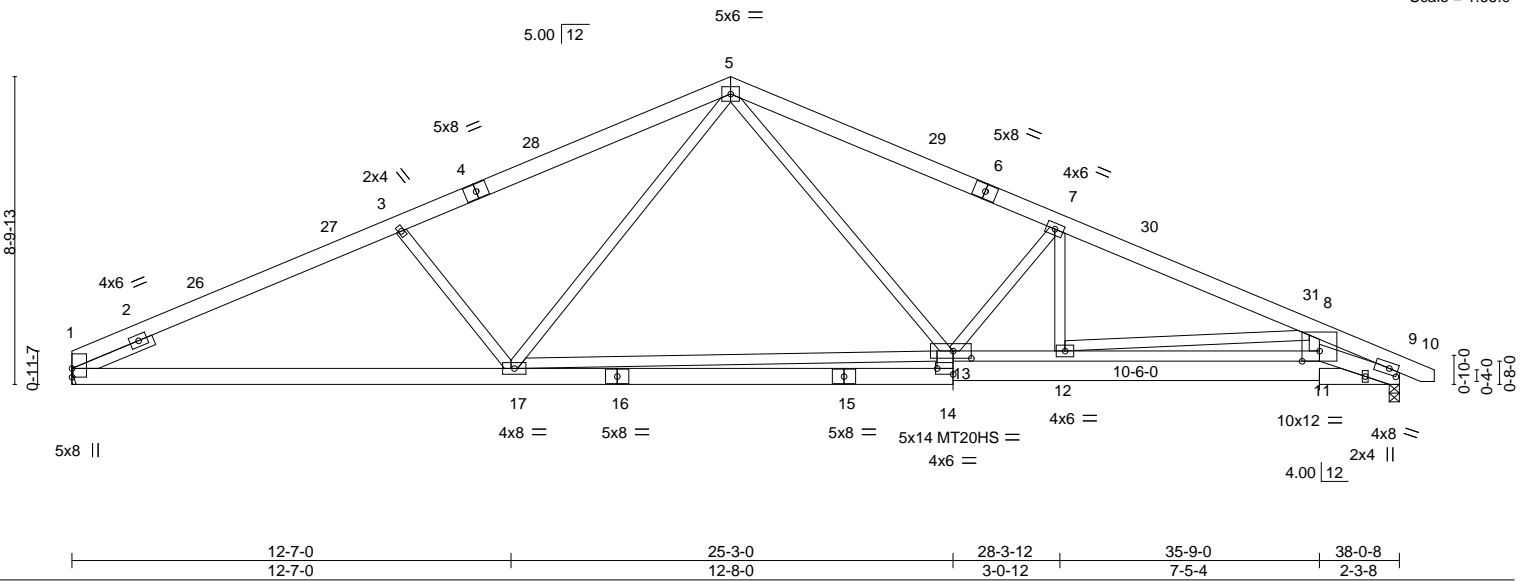


Plate Offsets (X,Y)--	[9:0-3-1,0-2-0], [13:0-6-4,0-2-8], [14:Edge,0-2-0]
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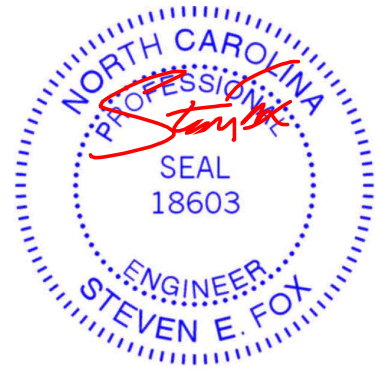
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.69	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.84	Vert(LL) -0.21 14-17 >999 360	MT20HS	187/143
BCLL 0.0 *	Lumber DOL 1.15	WB 0.74	Vert(CT) -0.50 14-17 >913 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.15 9 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.10 12-13 >999 240	Weight: 268 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-11-10 oc purlins.
BOT CHORD 2x6 SP No.2 *Except* 9-11: 2x6 SP DSS, 11-13: 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 13-17: 2x4 SP No.2	
SLIDER Left 2x4 SP No.2 2-5-12	

**REACTIONS.** (size) 1=Mechanical, 9=0-3-8  
Max Horz 1=-103(LC 13)  
Max Grav 1=1521(LC 1), 9=1570(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-3=-2814/148, 3-5=-2510/151, 5-7=-2772/176, 7-8=-3319/133, 8-9=-4421/112  
BOT CHORD 1-17=-50/2524, 14-17=0/614, 9-11=-62/3942, 12-13=-46/3044, 11-12=-77/3755  
WEBS 5-13=-9/1065, 7-12=0/380, 5-17=0/781, 3-17=-541/168, 13-17=-76/1217, 7-13=-913/100,  
8-11=0/766, 8-12=-715/120

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-3-8 to 4-1-8, Interior(1) 4-1-8 to 19-2-0, Exterior(2) 19-2-0 to 24-7-1, Interior(1) 24-7-1 to 39-1-10 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) All plates are MT20 plates unless otherwise indicated.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

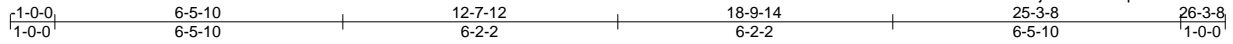


December 8, 2021

Job MASTERFARM	Truss B01	Truss Type COMMON	Qty 1	Ply 1	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek I49146824
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Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:50:53 2021 Page 1

ID:A9wiMK2uZZm?t?QxTI8OF5zotv-UQzhLCVlkbnfjKYOviuQxqhcNoCL5Lld6OoSyBGcG



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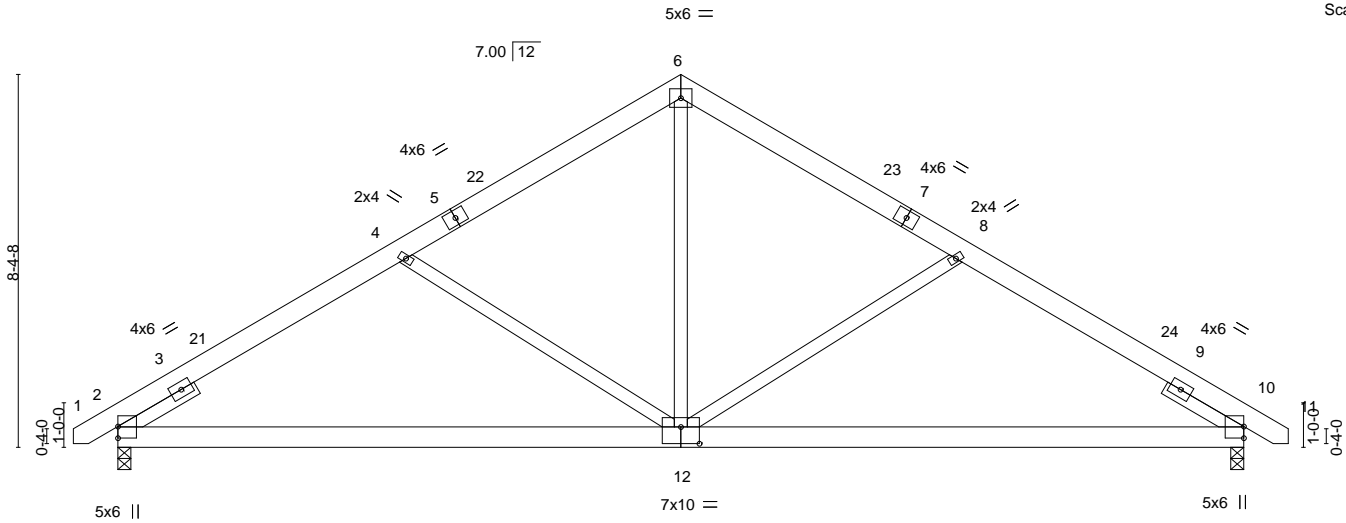


Plate Offsets (X,Y)--	[12:0-5-0,0-4-8]
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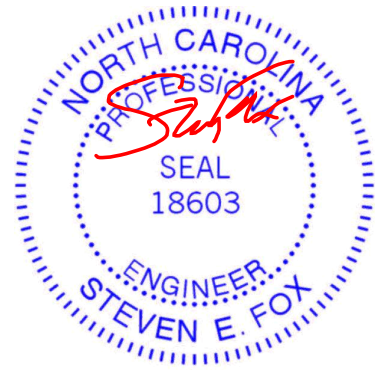
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	-0.09 12-15	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.60	Vert(CT)	-0.20 12-15	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.40	Horz(CT)	0.03 10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.02 12-15	>999	240	Weight: 172 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
SLIDER Left 2x4 SP No.2 1-11-12, Right 2x4 SP No.2 1-11-12	

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=155(LC 11)  
 Max Grav 2=1062(LC 1), 10=1062(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1394/95, 4-6=-1090/85, 6-8=-1090/85, 8-10=-1394/95  
 BOT CHORD 2-12=-13/1148, 10-12=-3/1148  
 WEBS 4-12=-377/138, 6-12=0/685, 8-12=-377/139

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-0 to 2-2-0, Interior(1) 2-2-0 to 12-7-12, Exterior(2) 12-7-12 to 16-10-11, Interior(1) 16-10-11 to 26-1-8 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
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



December 8, 2021

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**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

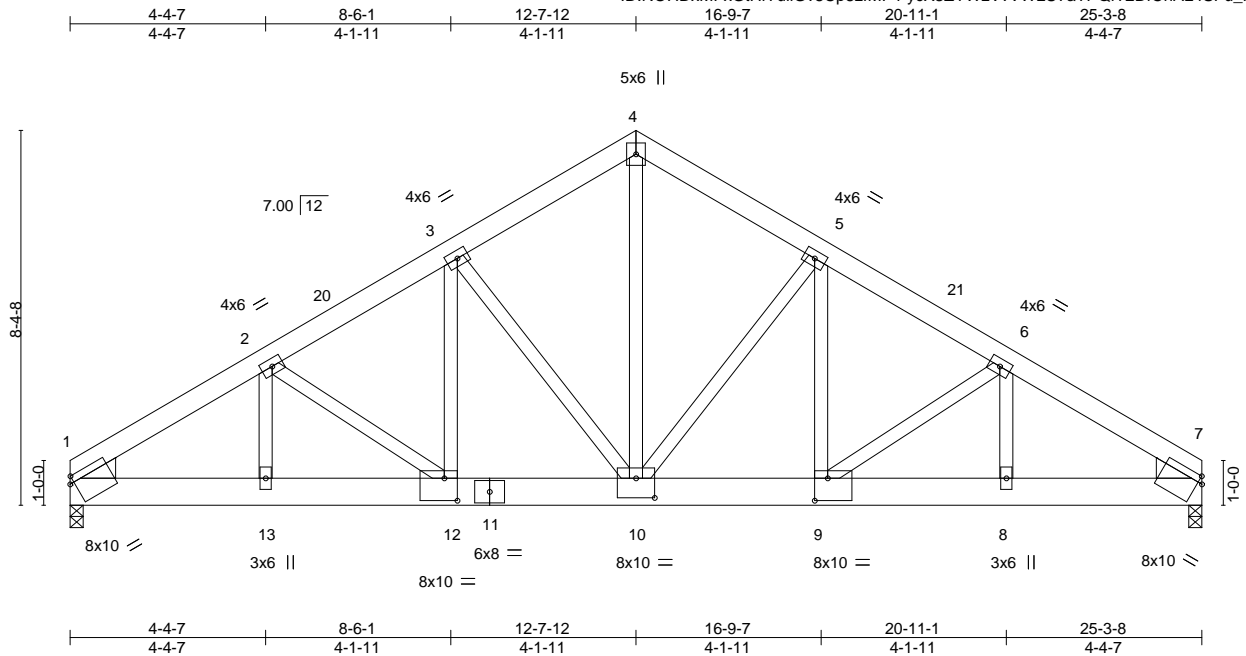


Job MASTERFARM	Truss B01-3PL	Truss Type COMMON	Qty 1	Ply 3	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek I49146825
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:50:54 2021 Page 1

ID:NOHDxMFxGtHiYullGv8Cp8zfMF4-ycX3ZYWzVvVWLU7aTPQfT2DfCnAL4SFu\_HryKuyBGcF



Scale = 1:51.5

Plate Offsets (X, Y)--	[1:0-1-2,0-1-14], [7:0-1-2,0-1-14], [9:0-3-8,0-6-0], [10:0-5-0,0-5-4], [12:0-3-8,0-6-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.72	Vert(LL) -0.12	9-10	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.50	Vert(CT) -0.24	9-10	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.81	Horz(CT) 0.06	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Wind(LL) 0.09	10-12	>999	240		
							Weight: 649 lb	FT = 20%

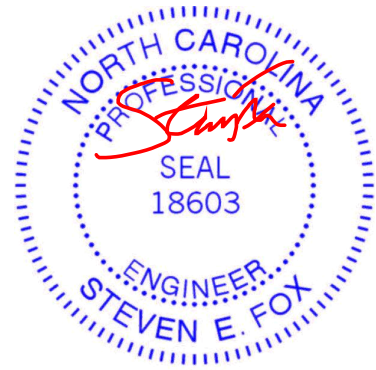
LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x8 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	
WEDGE	
Left: 2x6 SP No.2 , Right: 2x6 SP No.2	

**REACTIONS.** (size) 1=0-3-8 (req. 0-4-3), 7=0-3-8 (req. 0-4-3)  
 Max Horz 1=145(LC 5)  
 Max Uplift 1=800(LC 8), 7=800(LC 9)  
 Max Grav 1=10648(LC 1), 7=10648(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-14646/1094, 2-3=-13043/982, 3-4=-10231/796, 4-5=-10231/796, 5-6=-13043/982,  
 6-7=-14646/1095  
 BOT CHORD 1-13=-972/12374, 12-13=-972/12374, 10-12=-820/11279, 9-10=-767/11279,  
 8-9=-882/12374, 7-8=-882/12374  
 WEBS 4-10=-755/9899, 5-10=-4044/368, 5-9=-345/4312, 6-9=-1382/189, 6-8=-127/1893,  
 3-10=-4044/368, 3-12=-345/4312, 2-12=-1382/188, 2-13=-126/1893

- NOTES-**
- 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: 2x8 - 2 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 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; 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) 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 7) WARNING: Required bearing size at joint(s) 1, 7 greater than input bearing size.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=800, 7=800.

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



December 8, 2021

Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932

Job MASTERFARM	Truss B01-3PL	Truss Type COMMON	Qty 1	Ply <b>3</b>	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek I49146825 Job Reference (optional)
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:50:54 2021 Page 2  
ID:NOHDxMFxGtHiYullGv8Cp8zfMF4-ycX3ZYWzVvVWLU7aTPQfT2DfCnAL4SFu\_HryKuyBGcF

**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-4=-60, 4-7=-60, 14-17=-782(F=-762)

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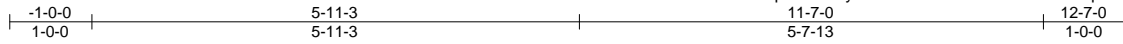
818 Soundside Road  
Edenton, NC 27932

Job MASTERFARM	Truss B01G	Truss Type GABLE	Qty 1	Ply 1	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek I49146826
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

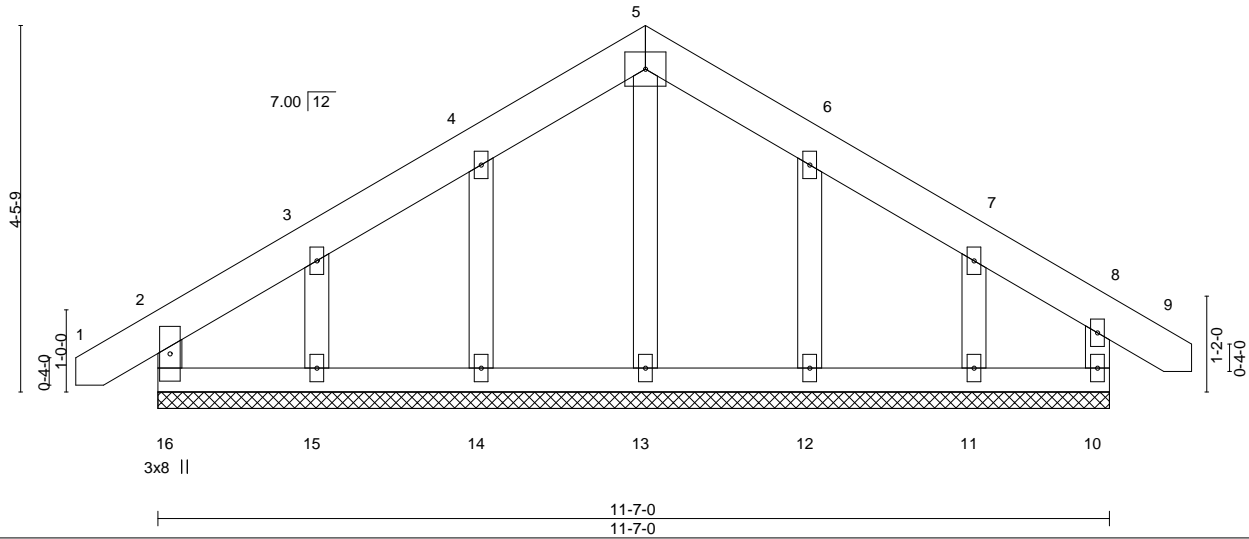
8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:50:54 2021 Page 1

ID:NOHDxMFxGtHiYullGv8Cp8zfMF4-ycX3ZYWzVvVWLU7aTPQfT2DqknHk4eLu\_HryKuyBGcF



5x6 =

Scale = 1:28.0



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	-0.00	8	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	8	n/r		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.04	Horz(CT)	0.00	10	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-R					Weight: 73 lb	FT = 20%

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

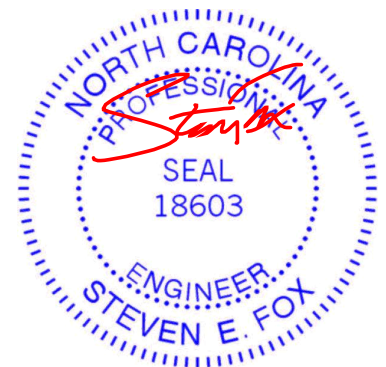
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 11-7-0.  
(lb) - Max Horz 16=99(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11  
Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-10-0 to 1-11-3, Exterior(2) 1-11-3 to 5-11-3, Corner(3) 5-11-3 to 8-11-3, Exterior(2) 8-11-3 to 12-5-0 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
- 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 11.



December 8, 2021

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

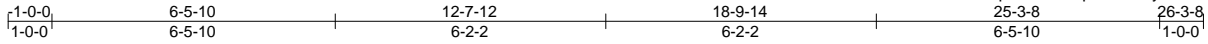


818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek	149146827
MASTERFARM	B01SG	GABLE	1	1	Job Reference (optional)	

Builders firstsource, Apex . NC

8.430 s Oct 22 2021 MiTek Industries, Inc. Wed Dec 8 10:17:27 2021 Page 1  
 ID:A9wiMK2uZZm?t?QxTl8OF5zotvv-KitQ4ZYoFWWhpRT?ETJQpXUDEhfy06WDhay4B28yB31c



5x6 =

Scale = 1:52.6

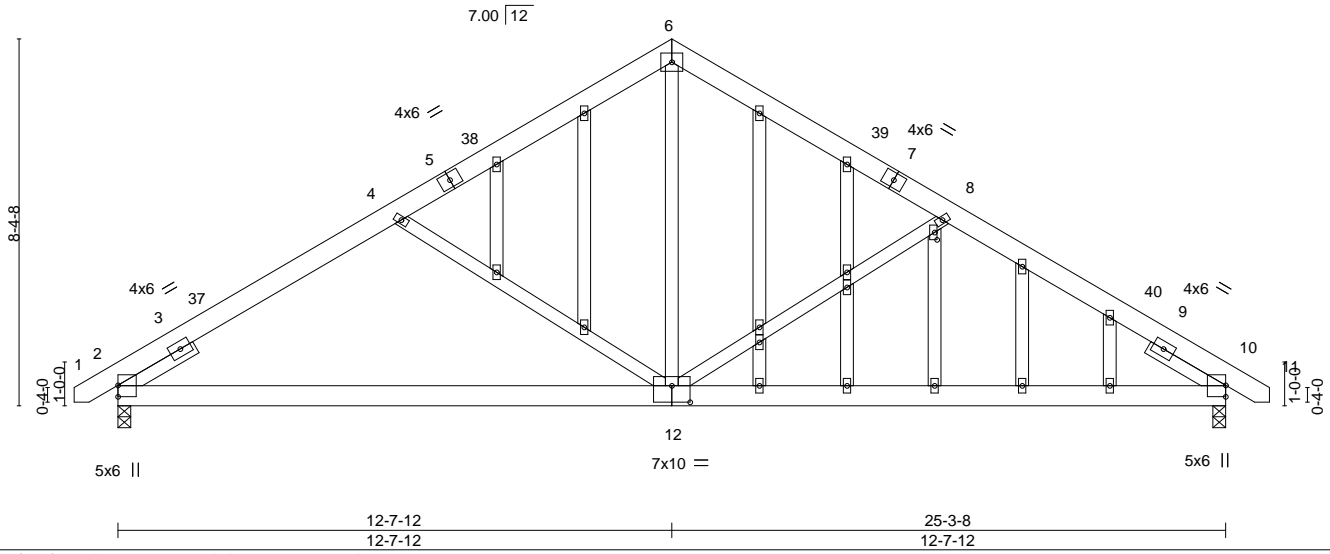


Plate Offsets (X,Y)--	[12:0-5-0,0-4-8], [24:0-2-0,0-0-11]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.20	Vert(LL) -0.09	12-31	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.60	Vert(CT) -0.20	12-31	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.40	Horz(CT) 0.03	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Wind(LL) 0.02	12-31	>999	240		
							Weight: 212 lb	FT = 20%

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

**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.

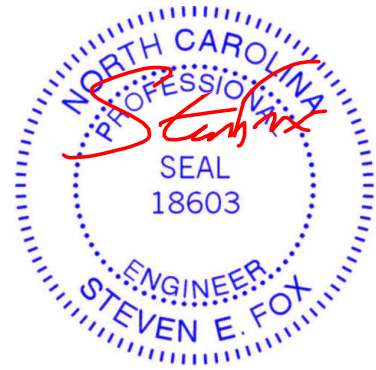
**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=155(LC 11)  
 Max Grav 2=1062(LC 1), 10=1062(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-885/0, 3-37=-1394/66, 4-37=-1264/95, 4-5=-1090/54, 5-38=-1024/59, 6-38=-990/85,  
 6-39=-990/85, 7-39=-1024/59, 7-8=-1090/54, 8-40=-1264/95, 9-40=-1394/66,  
 9-10=-885/0  
 BOT CHORD 2-12=-13/1148, 10-12=-3/1148  
 WEBS 4-12=-377/138, 6-12=0/685, 8-12=-377/139

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TC DL=6.0psf; BC DL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-0 to 2-2-0, Interior(1) 2-2-0 to 12-7-12, Exterior(2) 12-7-12 to 16-10-11, Interior(1) 16-10-11 to 26-1-8 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) All plates are 2x4 MT20 unless otherwise indicated.
  - 5) Gable studs spaced at 2-0-0 oc.
  - 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)**

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-6=-60, 6-11=-60, 29-33=-20
- 2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-6=-50, 6-11=-50, 29-33=-20



December 8, 2021

Continued on page 2

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek	149146827
MASTERFARM	B01SG	GABLE	1	1	Job Reference (optional)	

Builders firstsource, Apex . NC

8.430 s Oct 22 2021 MiTek Industries, Inc. Wed Dec 8 10:17:28 2021 Page 2  
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**LOAD CASE(S)**

- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert: 1-6=-20, 6-11=-20, 29-33=-40
- 4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=32, 2-37=17, 6-37=12, 6-39=17, 10-39=12, 10-11=8, 29-33=-12  
 Horz: 1-2=-44, 2-37=-29, 6-37=-24, 6-39=29, 10-39=24, 10-11=20
- 5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=8, 2-38=12, 6-38=17, 6-40=12, 10-40=17, 10-11=32, 29-33=-12  
 Horz: 1-2=-20, 2-38=-24, 6-38=-29, 6-40=24, 10-40=29, 10-11=44
- 6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-0, 2-6=-44, 6-10=-44, 10-11=-40, 29-33=-20  
 Horz: 1-2=-20, 2-6=24, 6-10=-24, 10-11=-20
- 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-40, 2-6=-44, 6-10=-44, 10-11=-0, 29-33=-20  
 Horz: 1-2=20, 2-6=24, 6-10=-24, 10-11=20
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-4, 2-6=-14, 6-10=5, 10-11=1, 29-33=-12  
 Horz: 1-2=-8, 2-6=2, 6-10=17, 10-11=13
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=1, 2-6=5, 6-10=-14, 10-11=-4, 29-33=-12  
 Horz: 1-2=-13, 2-6=-17, 6-10=-2, 10-11=8
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-27, 2-6=-31, 6-10=-11, 10-11=-7, 29-33=-20  
 Horz: 1-2=7, 2-6=11, 6-10=9, 10-11=13
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-7, 2-6=-11, 6-10=-31, 10-11=-27, 29-33=-20  
 Horz: 1-2=-13, 2-6=9, 6-10=-11, 10-11=-7
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=14, 2-4=19, 4-6=9, 6-10=2, 10-11=-3, 29-33=-12  
 Horz: 1-2=-26, 2-4=-31, 4-6=-21, 6-10=14, 10-11=9
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-3, 2-6=2, 6-8=9, 8-10=19, 10-11=14, 29-33=-12  
 Horz: 1-2=-9, 2-6=-14, 6-8=21, 8-10=31, 10-11=26
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=5, 2-6=9, 6-10=2, 10-11=-3, 29-33=-12  
 Horz: 1-2=-17, 2-6=-21, 6-10=14, 10-11=9
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-3, 2-6=2, 6-10=9, 10-11=5, 29-33=-12  
 Horz: 1-2=-9, 2-6=-14, 6-10=21, 10-11=17
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=6, 2-4=2, 4-6=-7, 6-10=-15, 10-11=-11, 29-33=-20  
 Horz: 1-2=-26, 2-4=-22, 4-6=-13, 6-10=5, 10-11=9
- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-11, 2-6=-15, 6-8=-7, 8-10=2, 10-11=6, 29-33=-20  
 Horz: 1-2=-9, 2-6=-5, 6-8=13, 8-10=22, 10-11=26
- 18) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90  
 Uniform Loads (plf)  
 Vert: 1-6=-20, 6-11=-20, 29-33=-20
- 19) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-55, 2-6=-58, 6-10=-44, 10-11=-40, 29-33=-20  
 Horz: 1-2=5, 2-6=8, 6-10=6, 10-11=10
- 20) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-40, 2-6=-44, 6-10=-58, 10-11=-55, 29-33=-20  
 Horz: 1-2=-10, 2-6=-6, 6-10=-8, 10-11=-5
- 21) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-30, 2-4=-34, 4-6=-41, 6-10=-46, 10-11=-43, 29-33=-20  
 Horz: 1-2=-20, 2-4=-16, 4-6=-9, 6-10=4, 10-11=7
- 22) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Continued on page 3

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek	I49146827
MASTERFARM	B01SG	GABLE	1	1	Job Reference (optional)	

Builders firstsource, Apex . NC

8.430 s Oct 22 2021 MiTek Industries, Inc. Wed Dec 8 10:17:28 2021 Page 3  
 ID:A9wiMK2uZZm?t?QxTi8OF5zotvv-ovRoHvYQ0ppqg2daQ10x23hmPR2IFrzTrpcqlaayB31b

**LOAD CASE(S)**

Uniform Loads (plf)

Vert: 1-2=-43, 2-6=-46, 6-8=-41, 8-10=-34, 10-11=-30, 29-33=-20  
 Horz: 1-2=-7, 2-6=-4, 6-8=9, 8-10=16, 10-11=20

23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-6=-60, 6-11=-20, 29-33=-20

24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-6=-20, 6-11=-60, 29-33=-20

25) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-6=-50, 6-11=-20, 29-33=-20

26) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-6=-20, 6-11=-50, 29-33=-20

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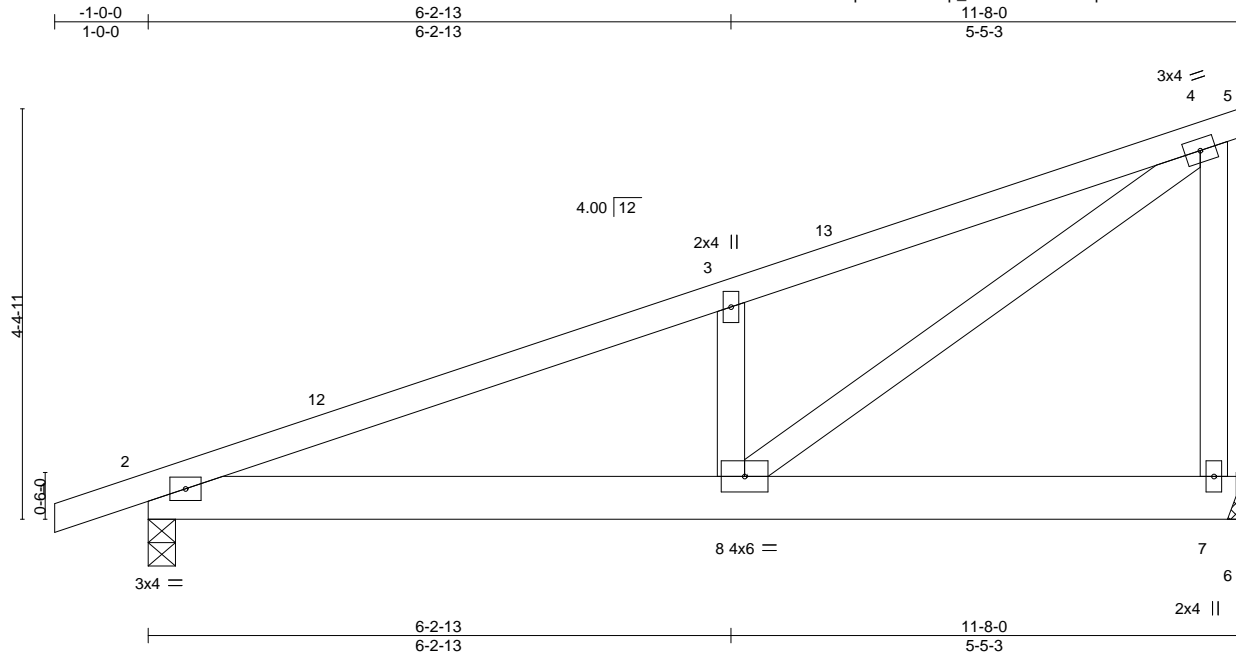


818 Soundside Road  
 Edenton, NC 27932

Job MASTERFARM	Truss C01	Truss Type MONO TRUSS	Qty 6	Ply 1	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek I49146828
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:50:56 2021 Page 1  
ID:NOHDxMFxGtHiYullGv8Cp8zfMF4-u?fp\_EYD1WIEaoHzbqS7YTJ5bavMYS3BRbK2PnyBGcD



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.34	Vert(LL)	-0.02 8-11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.28	Vert(CT)	-0.05 8-11	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.34	Horz(CT)	0.00 7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.02 8-11	>999	240		
								Weight: 64 lb	FT = 20%

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

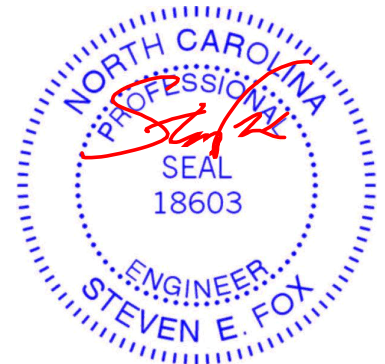
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 7=Mechanical  
 Max Horz 2=137(LC 11)  
 Max Uplift 2=-59(LC 8), 7=-49(LC 8)  
 Max Grav 2=518(LC 1), 7=464(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-761/46, 3-4=-769/106, 4-7=-412/109  
 BOT CHORD 2-8=-104/677  
 WEBS 3-8=-351/126, 4-8=-103/823

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 11-8-0 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.



December 8, 2021

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

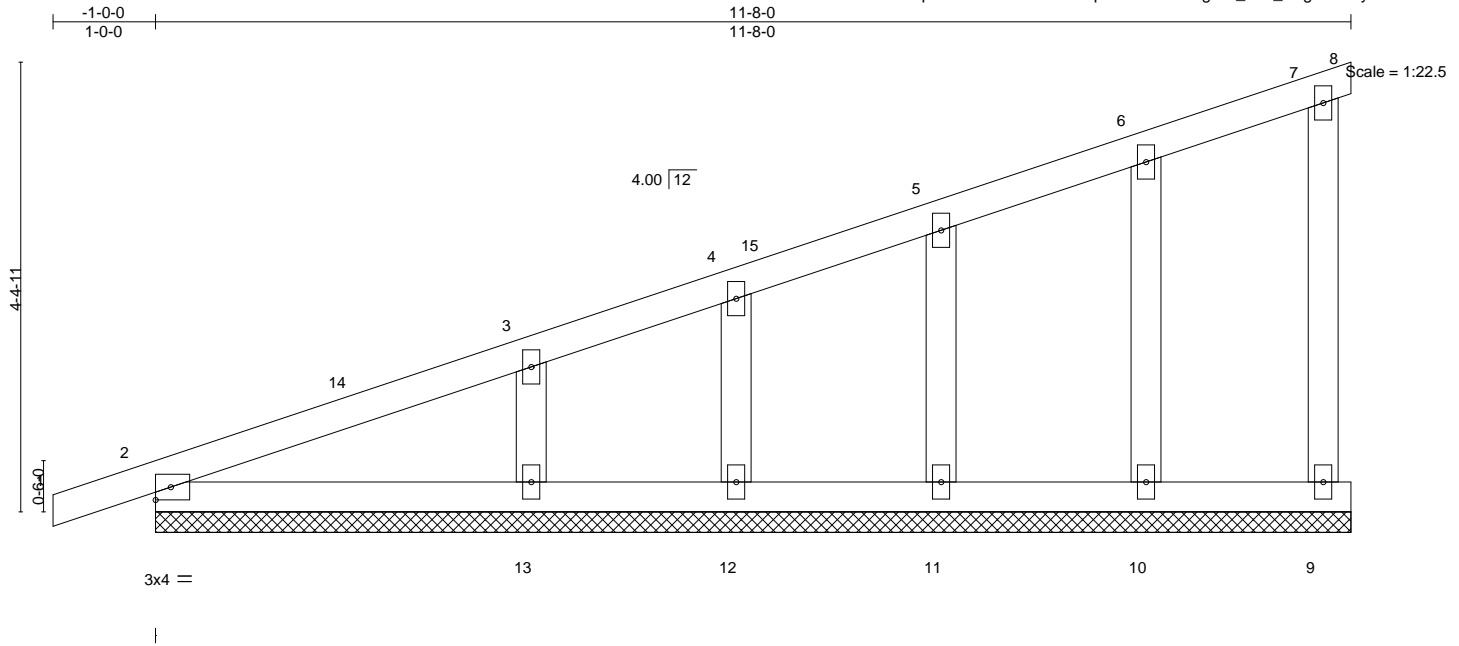


818 Soundside Road  
 Edenton, NC 27932

Job MASTERFARM	Truss C01G	Truss Type GABLE	Qty 1	Ply 1	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek I49146829
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:50:57 2021 Page 1  
ID:NOHDxMFxGtHiYullGv8Cp8zfMF4-MBCCBaYroqt5Cxs98YzM5grJV\_ISH\_?KgF4cxDyBGcC



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.14	Vert(LL)	-0.00	1	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.09	Vert(CT)	0.00	1	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.04	Horz(CT)	-0.00	8	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 56 lb	FT = 20%
	Code IRC2015/TPI2014							

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

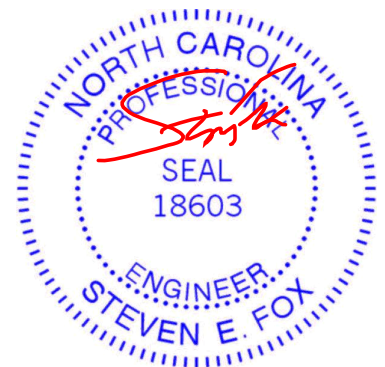
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 11-8-0.  
(lb) - Max Horz 2=138(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 9, 10, 11, 12, 13  
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 9, 10, 11, 12 except 13=282(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 11-8-0 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
- 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) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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, 8, 9, 10, 11, 12, 13.



December 8, 2021

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
Edenton, NC 27932

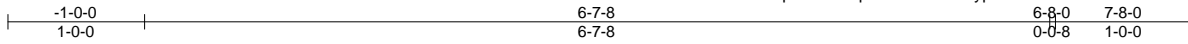


Job	Truss	Truss Type	Qty	Ply	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek
MASTERFARM	C02G	GABLE	1	1	I49146830
					Job Reference (optional)

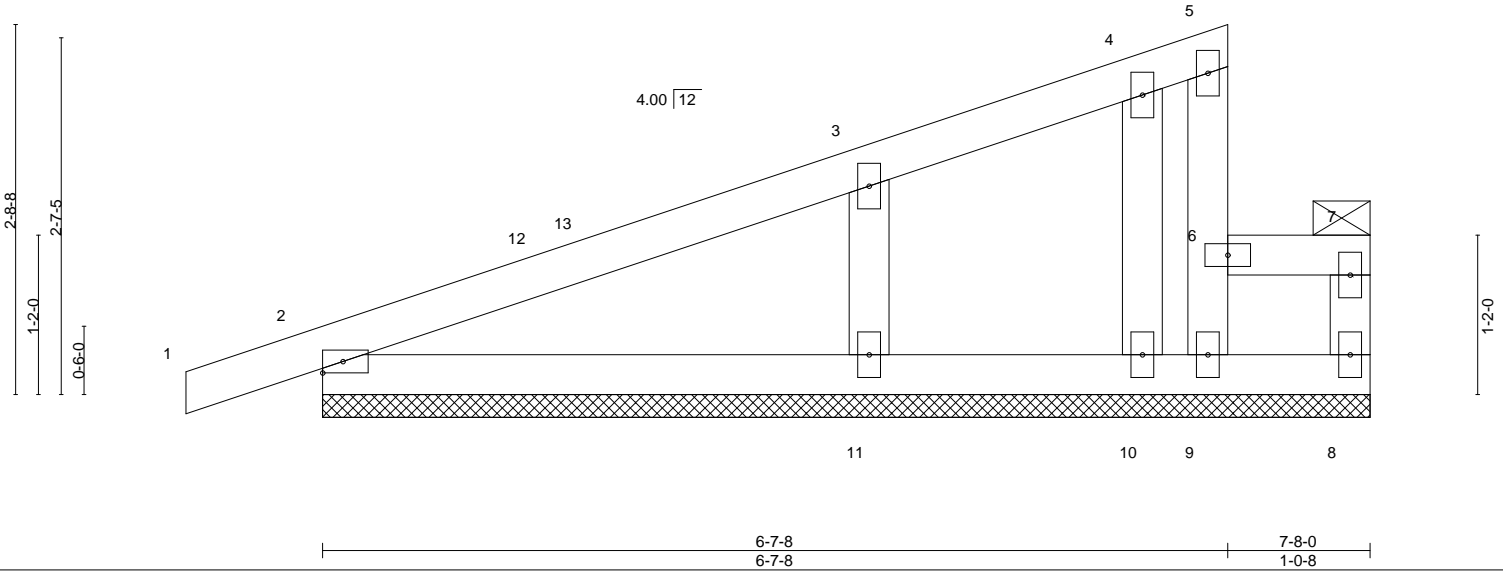
Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:50:58 2021 Page 1

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Scale = 1:16.9



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.20	Vert(LL)	0.00	1	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.13	Vert(CT)	0.01	1	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.04	Horz(CT)	-0.00	8	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-S						
	Code IRC2015/TPI2014						Weight: 34 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-9, 6-7.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 8-9.

**REACTIONS.** All bearings 7-8-0.  
 (lb) - Max Horz 2=103(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 9, 8, 2, 11, 10  
 Max Grav All reactions 250 lb or less at joint(s) 8, 2, 10 except 9=880(LC 19), 11=315(LC 23)

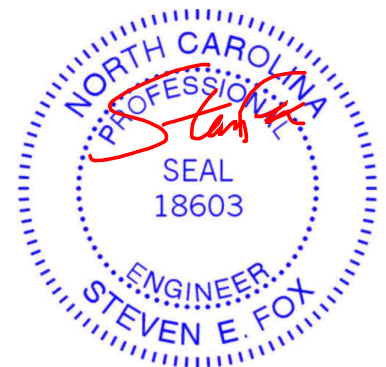
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 6-9=-848/203

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 7-6-4 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
- 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.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 8, 2, 11, 10.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s). The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-5=-60, 6-7=-60, 2-8=-20  
 Concentrated Loads (lb)  
 Vert: 6=-800



December 8, 2021

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818 Soundside Road  
 Edenton, NC 27932

Job MASTERFARM	Truss G01	Truss Type JACK	Qty 6	Ply 1	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek I49146831
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Builders FirstSource (Apex, NC),

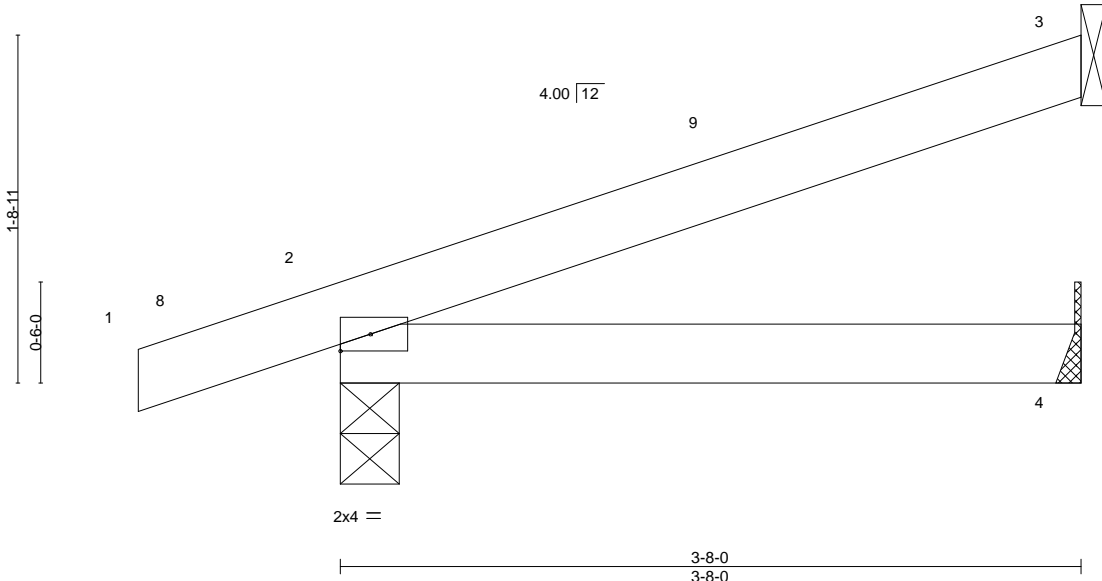
Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:50:58 2021 Page 1

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Scale = 1:11.4



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.17	Vert(LL)	-0.01 4-7	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	-0.02 4-7	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00 2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP	Wind(LL)	0.01 4-7	>999	240	Weight: 13 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

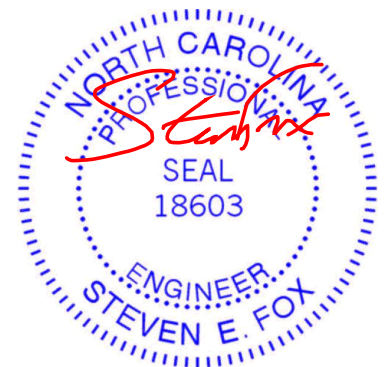
TOP CHORD Structural wood sheathing directly applied or 3-8-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=51(LC 8)  
Max Uplift 3=-31(LC 12), 2=-37(LC 8)  
Max Grav 3=93(LC 1), 2=212(LC 1), 4=66(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 3-7-4 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.



December 8, 2021

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**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
Edenton, NC 27932

Job MASTERFARM	Truss G01G	Truss Type GABLE	Qty 1	Ply 1	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek I49146832
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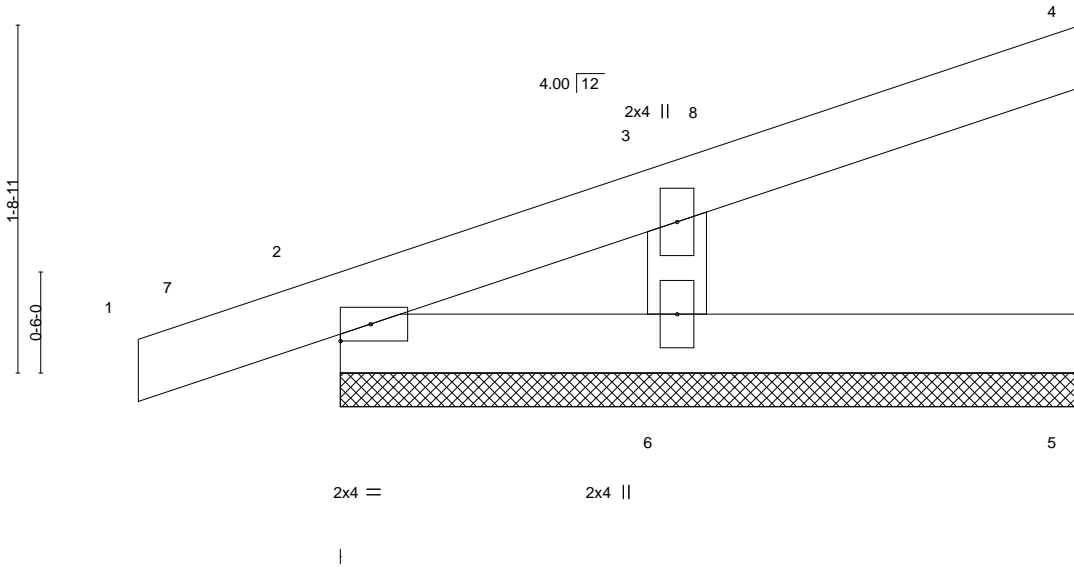
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Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:50:59 2021 Page 1  
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Scale = 1:11.4



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	0.00	1	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	1	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	-0.00	4	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 14 lb	FT = 20%

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

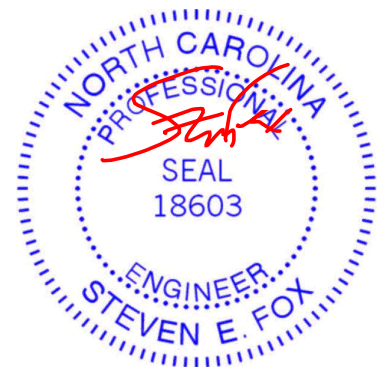
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-8-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 3-8-0.  
 (lb) - Max Horz 2=49(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 4, 2, 6  
 Max Grav All reactions 250 lb or less at joint(s) 4, 2, 5, 6

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 3-8-0 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
- 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) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 2-0-0 oc.
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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) 4, 2, 6.



December 8, 2021

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**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

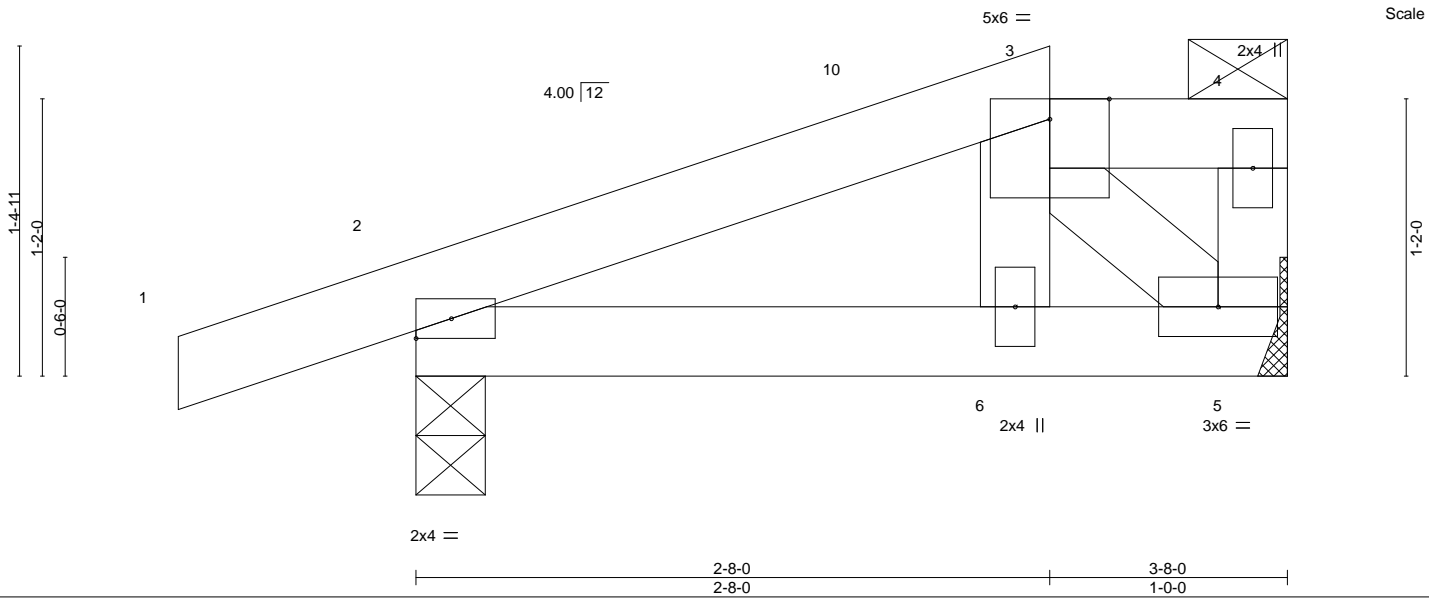
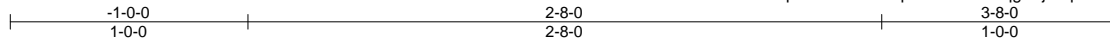


818 Soundside Road  
 Edenton, NC 27932

Job MASTERFARM	Truss G02	Truss Type SPECIAL	Qty 3	Ply 1	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek 149146833
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Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:51:00 2021 Page 1

ID:NOHDxMFxGtHiYullGv8Cp8zfMF4-nmuKpbbk4lFf3PbkqgX3jJTqwBGEUJgnMDIGYYyBGc9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.13	Vert(LL)	-0.00	6	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.28	Vert(CT)	-0.01	6	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.17	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP	Wind(LL)	0.00	6	>999		
								Weight: 16 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-8-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

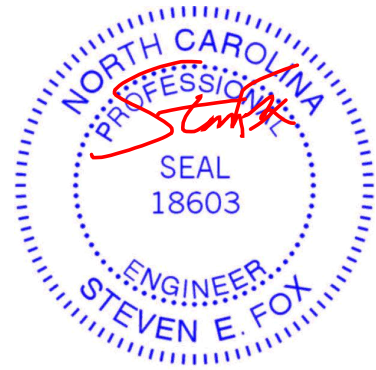
**REACTIONS.** (size) 2=0-3-8, 5=Mechanical  
 Max Horz 2=31(LC 11)  
 Max Uplift 2=60(LC 8), 5=61(LC 8)  
 Max Grav 2=403(LC 1), 5=738(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-615/152  
 BOT CHORD 2-6=-162/566, 5-6=-170/574  
 WEBS 3-5=-873/245

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 3-6-4 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
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s). The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 3-4=-60, 5-7=-20  
 Concentrated Loads (lb)  
 Vert: 3=-800



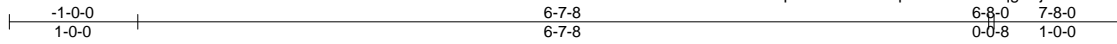
December 8, 2021

Job MASTERFARM	Truss P01	Truss Type SPECIAL	Qty 2	Ply 1	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek I49146834
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:51:00 2021 Page 1

ID:NOHDxMFxGtHiYullGv8Cp8zfMF4-nmuKpbk4fF3PbkqgX3jJTeYBFxUIOnMDIGYYyBGc9



Scale = 1:17.9

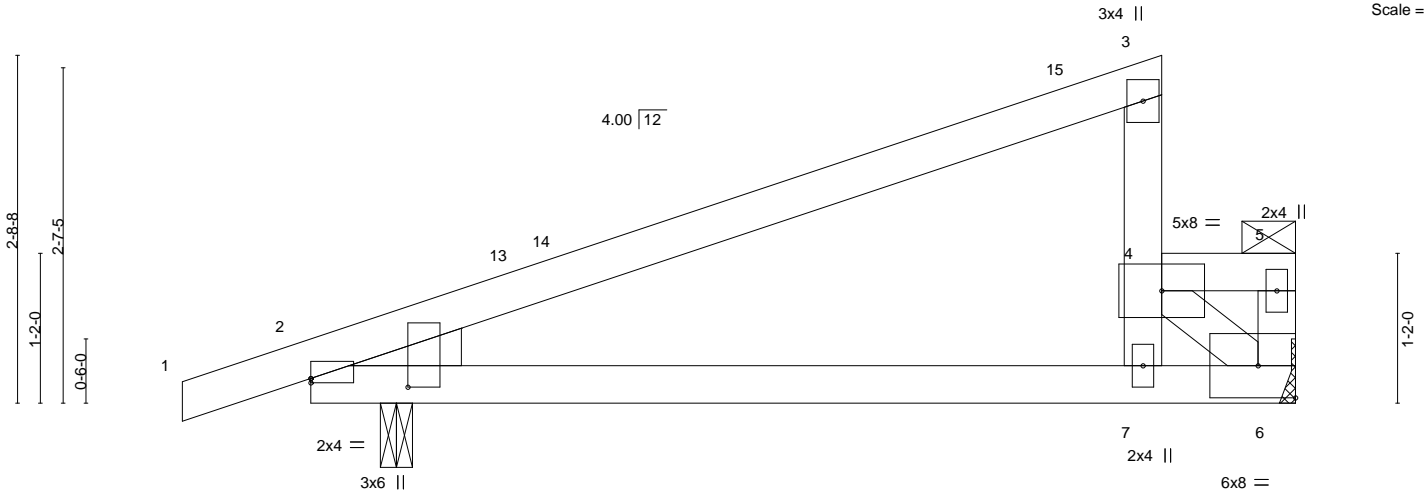


Plate Offsets (X, Y)--	[2:0-0-0,0-0-6], [2:0-0-13,0-9-1]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.92	Vert(LL)	-0.04	7-12	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.36	Vert(CT)	-0.09	7-12	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.26	Horz(CT)	0.01	2	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.09	7-12	>979		
								Weight: 32 lb	FT = 20%

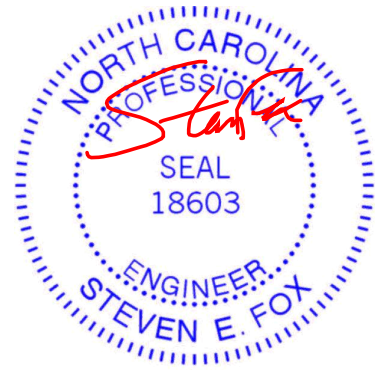
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-7, 4-5.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-11-9 oc bracing.
WEBS 2x4 SP No.3 *Except* 3-7: 2x4 SP No.1	
<b>WEDGE</b> Left: 2x4 SP No.3	

**REACTIONS.** (size) 6=Mechanical, 2=0-3-0  
 Max Horz 2=102(LC 12)  
 Max Uplift 6=-249(LC 8), 2=-143(LC 8)  
 Max Grav 6=949(LC 1), 2=513(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-511/325  
 BOT CHORD 2-7=-397/441, 6-7=-722/873  
 WEBS 4-6=-1044/858

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 7-6-4 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=249, 2=143.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s). The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 4-5=-60, 6-8=-20



December 8, 2021

Continued on page 2

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY  <b>TRENCO</b>  <small>A MiTek Affiliate</small></p> <p>818 Soundside Road        Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek I49146834
MASTERFARM	P01	SPECIAL	2	1	Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:51:00 2021 Page 2  
ID:NOHDxMFxGtHiYulIGv8Cp8zfMF4-nmuKpbk4IFf3PbkqgX3jJTeYBFxUIOnMDIGYyBGc9

**LOAD CASE(S)** Standard  
Concentrated Loads (lb)  
Vert: 4=-800

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

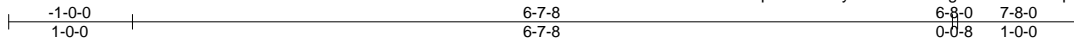
818 Soundside Road  
Edenton, NC 27932

Job MASTERFARM	Truss P01SG	Truss Type GABLE	Qty 1	Ply 1	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek 149146835
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:51:01 2021 Page 1

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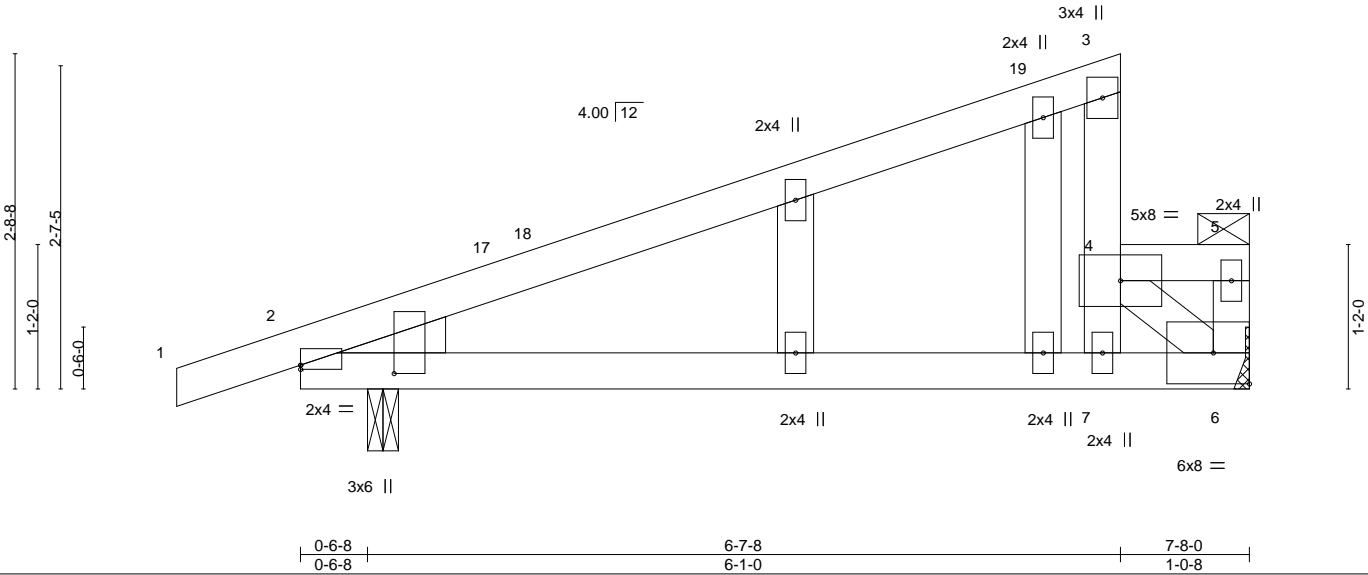


Plate Offsets (X, Y)--	[2:0-0-0,0-0-6], [2:0-0-13,0-9-1]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.92	Vert(LL) -0.04 7-16 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.36	Vert(CT) -0.09 7-16 >999 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.26	Horz(CT) 0.01 2 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Wind(LL) 0.09 7-16 >979 240	Weight: 37 lb	FT = 20%

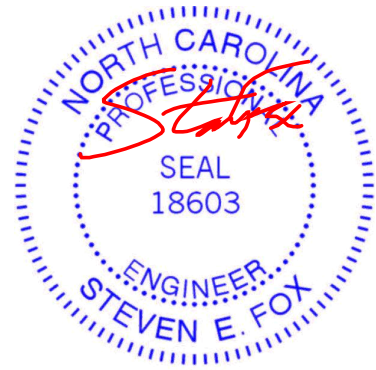
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-7, 4-5.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-11-9 oc bracing.
WEBS 2x4 SP No.3 *Except* 3-7: 2x4 SP No.1	
OTHERS 2x4 SP No.3	
WEDGE Left: 2x4 SP No.3	

**REACTIONS.** (size) 6=Mechanical, 2=0-3-0  
 Max Horz 2=102(LC 12)  
 Max Uplift 6=249(LC 8), 2=-143(LC 8)  
 Max Grav 6=949(LC 1), 2=513(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-511/325  
 BOT CHORD 2-7=-397/441, 6-7=-722/873  
 WEBS 4-6=-1044/858

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 7-6-4 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - Provide adequate drainage to prevent water ponding.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=249, 2=143.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s). The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard



December 8, 2021

Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932

Job MASTERFARM	Truss P01SG	Truss Type GABLE	Qty 1	Ply 1	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek I49146835 Job Reference (optional)
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:51:01 2021 Page 2  
ID:NOHDxMFxGHiYullGv8Cp8zfMF4-FySi1xcMr2NWgZ9wNN2IFW0plbbADlewb2p4\_yBGc8

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 4-5=-60, 6-12=-20  
Concentrated Loads (lb)  
Vert: 4=-800

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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818 Soundside Road  
Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek
MASTERFARM	SP01	COMMON	4	1	I49146836
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:51:02 2021 Page 1

ID:NOHDxMFxGtHiYullGv8Cp8zfMF4-j805EHc\_cMWNij7x5ZXokY6O?xdyEN3qXnNcRyBGc7



4x6 =

Scale = 1:23.2

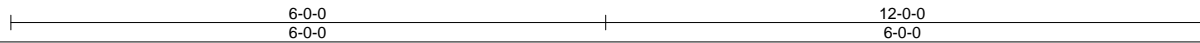
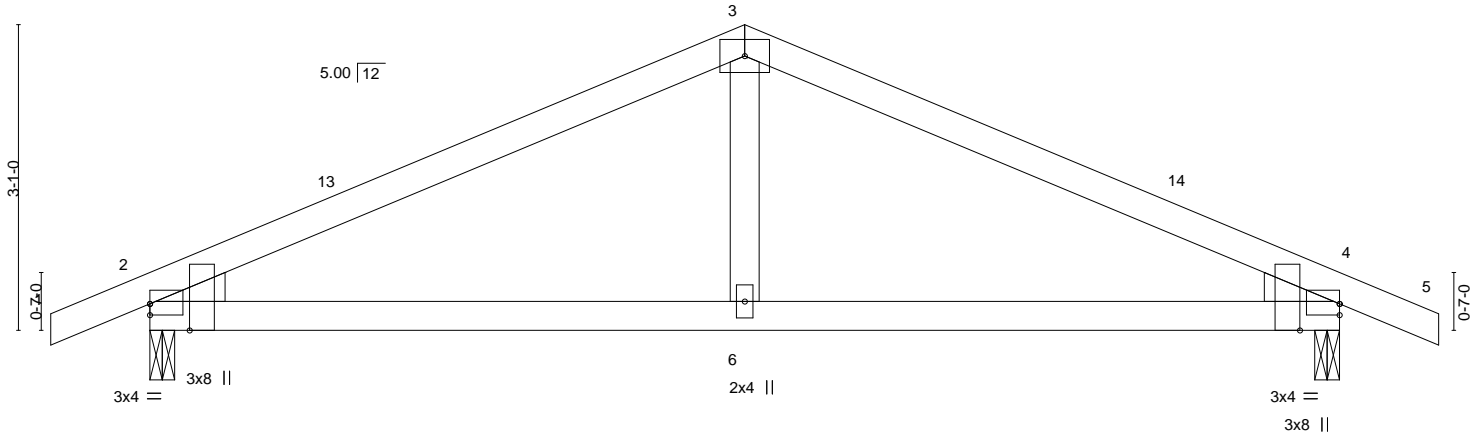


Plate Offsets (X, Y)-- [2:0-0-0,0-1-6], [2:0-3-3,Edge], [4:0-0-0,0-1-6], [4:0-3-3,Edge]

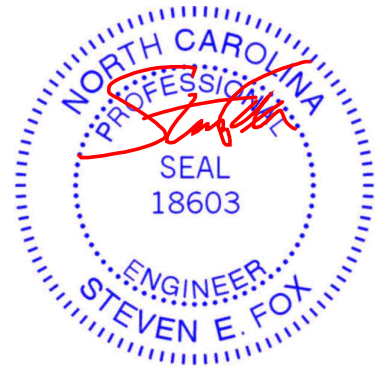
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.39	Vert(LL)	-0.04	6-9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.35	Vert(CT)	-0.07	6-9	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.01	2	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.04	6-12	>999	Weight: 47 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
WEDGE	
Left: 2x4 SP No.3 , Right: 2x4 SP No.3	

**REACTIONS.** (size) 2=0-3-0, 4=0-3-0  
 Max Horz 2=50(LC 13)  
 Max Uplift 2=95(LC 8), 4=95(LC 9)  
 Max Grav 2=540(LC 1), 4=540(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=686/417, 3-4=686/414  
 BOT CHORD 2-6=311/578, 4-6=311/578  
 WEBS 3-6=192/251

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 6-0-0, Exterior(2) 6-0-0 to 10-2-15, Interior(1) 10-2-15 to 13-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



December 8, 2021

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**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate

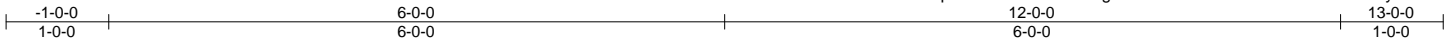
818 Soundside Road  
 Edenton, NC 27932

Job MASTERFARM	Truss SP01G	Truss Type GABLE	Qty 1	Ply 1	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek I49146837
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:51:03 2021 Page 1

ID:NOHDxMFxGtHiYulGv8Cp8zfMF4-BLaTSddcNgeEwsJJVo4mLx5NAPMrhD3BXw9tyBGc6



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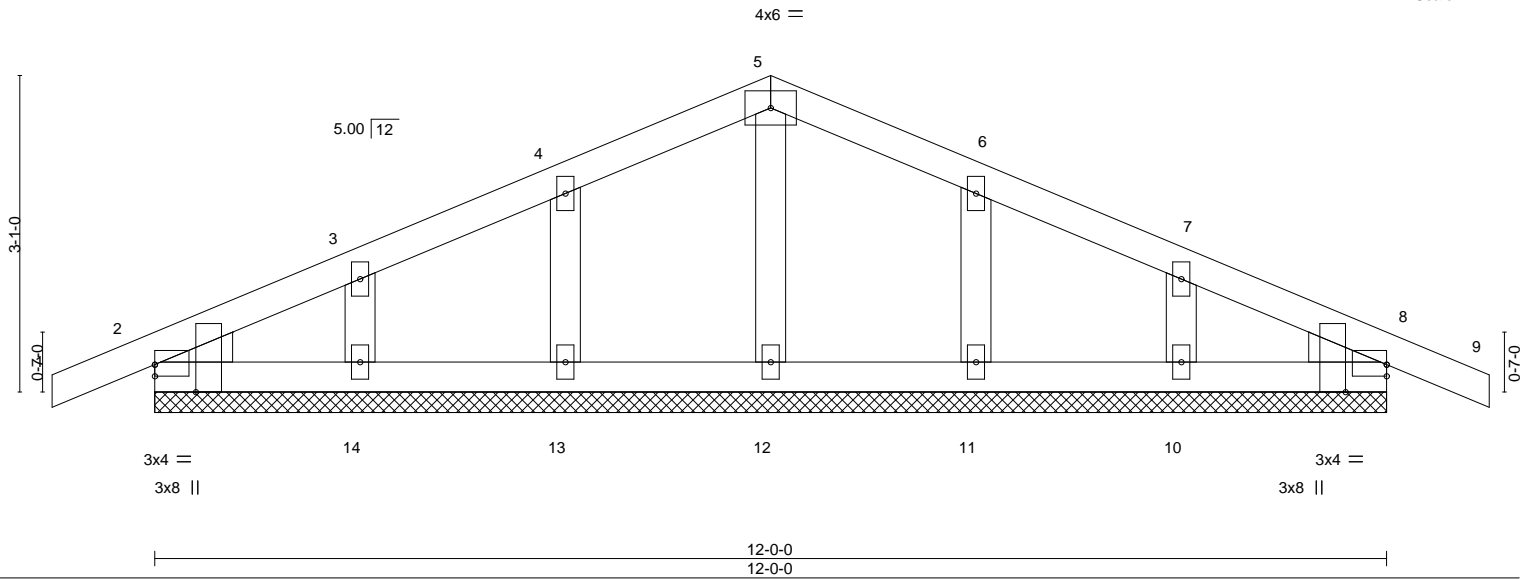


Plate Offsets (X, Y)-- [2:0-0-0,0-1-6], [2:0-3-3,Edge], [8:0-0-0,0-1-6], [8:0-3-3,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	-0.00	9	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	9	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 54 lb	FT = 20%

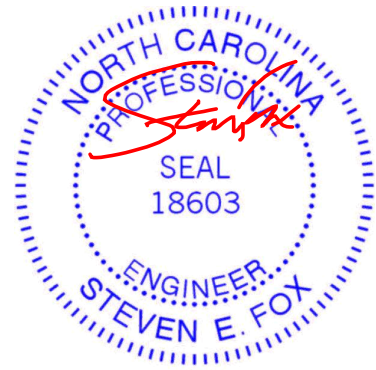
**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
OTHERS 2x4 SP No.3  
WEDGE  
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

**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.** All bearings 12-0-0.  
(lb) - Max Horz 2=50(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10  
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 6-0-0, Exterior(2) 6-0-0 to 10-0-0, Interior(1) 10-0-0 to 13-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 14, 11, 10.



December 8, 2021

Job MASTERFARM	Truss V01	Truss Type VALLEY	Qty 1	Ply 1	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek I49146838
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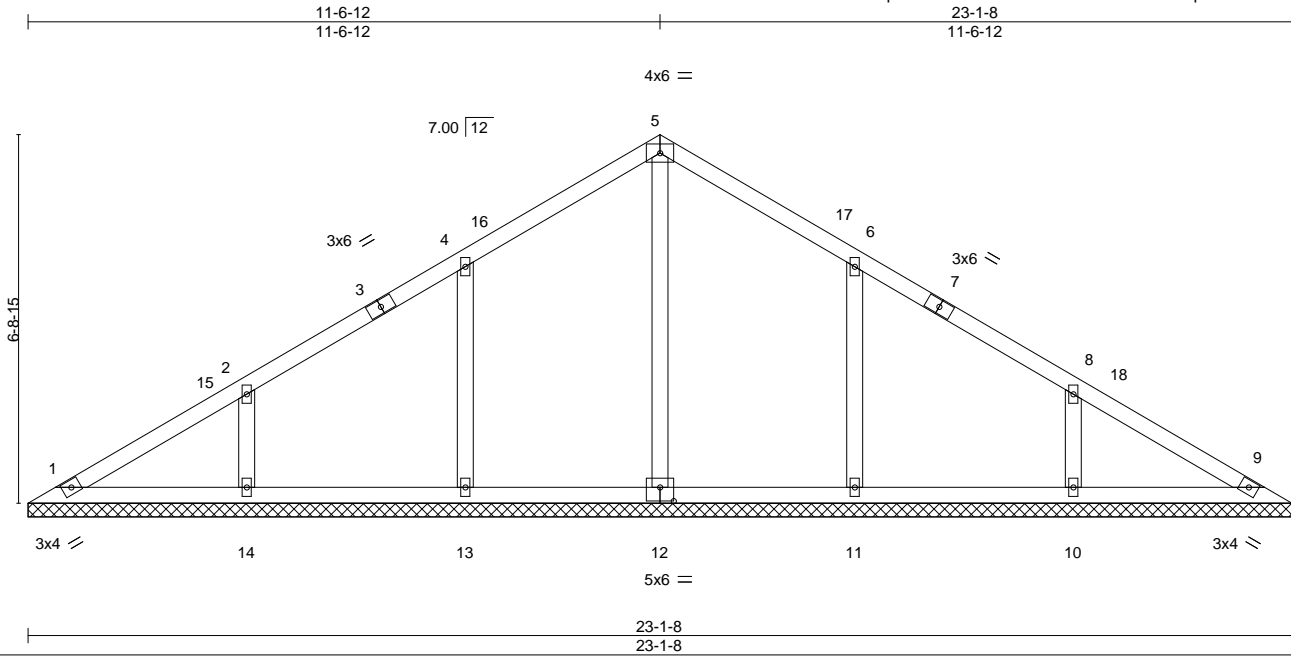
Builders FirstSource (Apex, NC),

Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:51:04 2021 Page 1

ID:NOHDxMFxGHiYullGv8Cp8zfMF4-fX8rfzeE8zm5X0uV3Wb?t9eUApfdQ7LMHrGThJyBGc5

Job Reference (optional)



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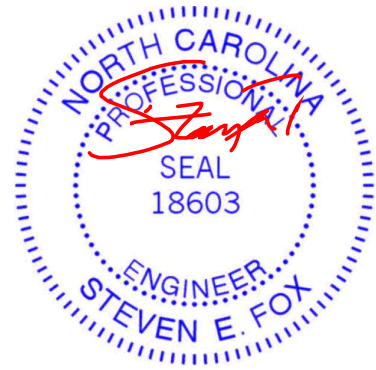
Plate Offsets (X,Y)--	[12:0-3-0-0-3-0]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.30	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.25	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.13	Horz(CT) 0.00 9 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 99 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.3	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 23-1-8.  
 (lb) - Max Horz 1=127(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 10, 11, 14, 13  
 Max Grav All reactions 250 lb or less at joint(s) 1, 9 except 12=349(LC 22), 10=334(LC 1), 11=370(LC 20), 14=334(LC 1), 13=370(LC 19)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 11-6-12, Exterior(2) 11-6-12 to 14-6-12, Interior(1) 14-6-12 to 22-7-0 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) All plates are 2x4 MT20 unless otherwise indicated.
  - 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 10, 11, 14, 13.



December 8, 2021

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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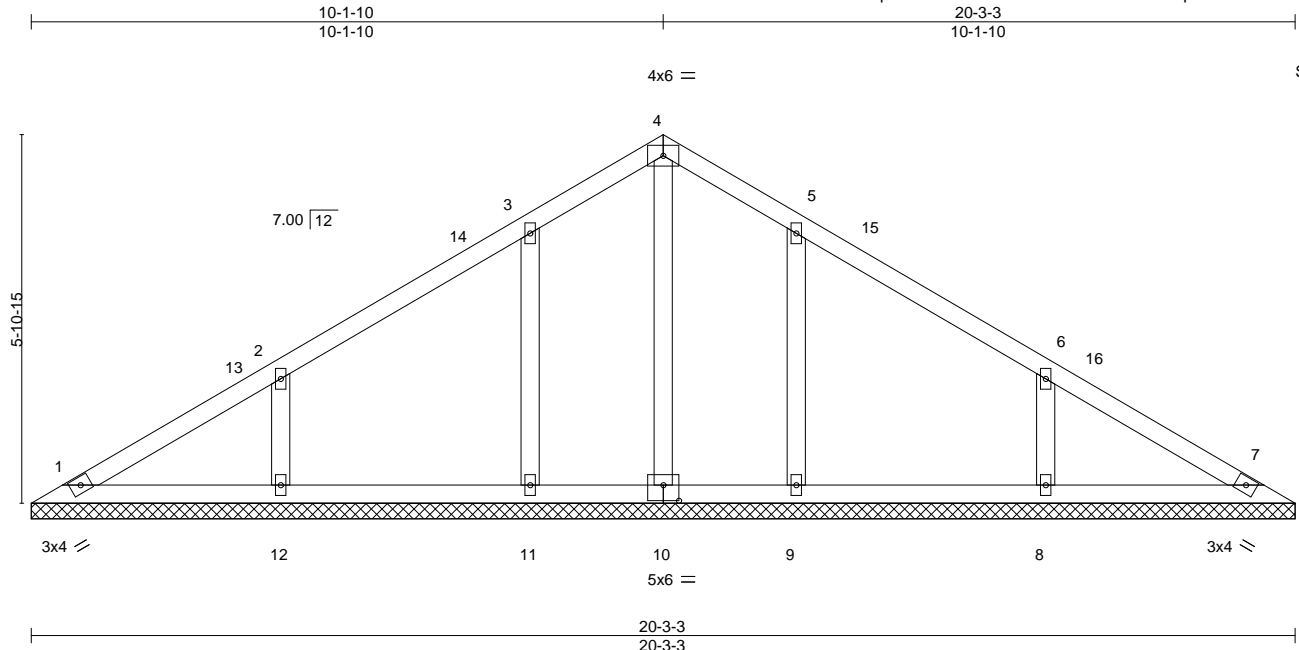
Job MASTERFARM	Truss V02	Truss Type VALLEY	Qty 1	Ply 1	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek I49146839
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Builders FirstSource (Apex, NC),

Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:51:04 2021 Page 1

ID:NOHDxMFxGtHiYullGv8Cp8zfMF4-fX8rfzeE8zm5X0uV3Wb?19eTopfRQ86MHRgThJyBgC5



Scale = 1:36.9

Plate Offsets (X,Y)--	[10'-0-3-0-0-3-0]
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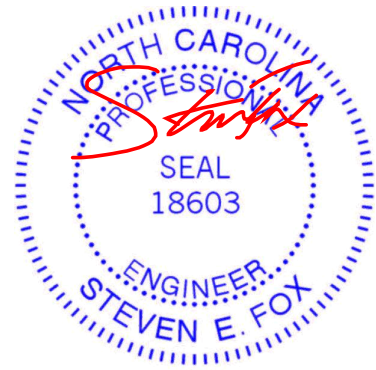
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.33	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 89 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.3	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 20-3-3.  
 (lb) - Max Horz 1=110(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 8, 9, 12, 11  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10 except 8=348(LC 20), 9=273(LC 20), 12=348(LC 19), 11=274(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 6-8=-258/122, 2-12=-257/122

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 10-1-10, Exterior(2) 10-1-10 to 13-1-10, Interior(1) 13-1-10 to 19-8-12 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) All plates are 2x4 MT20 unless otherwise indicated.
  - 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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) 8, 9, 12, 11.



December 8, 2021

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job MASTERFARM	Truss V03	Truss Type VALLEY	Qty 1	Ply 1	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek I49146840
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:51:05 2021 Page 1

ID:NOHDxMFxGtHiYullGv8Cp8zfMF4-7jhDtJftvHuy9AThcD6EQMAeCC?c9bTWWV01DmyBGc4

Job Reference (optional)

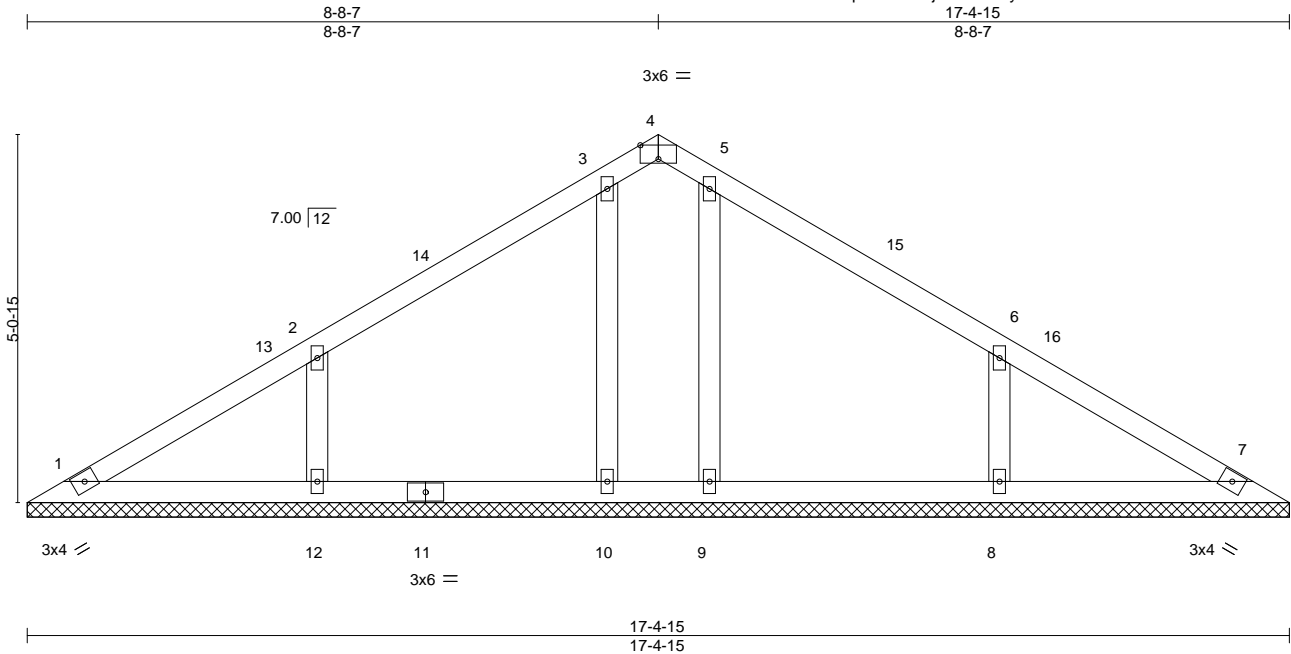


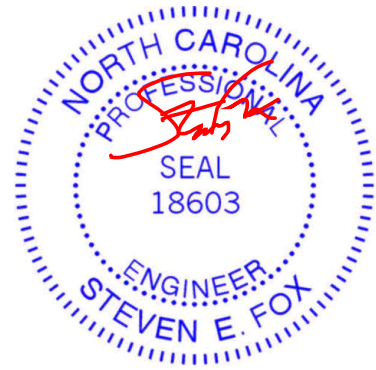
Plate Offsets (X,Y)--	[4:0-3-0,Edge]					PLATES	GRIP
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	
TCLL 20.0	Plate Grip DOL 1.15	TC 0.35	Vert(LL)	n/a	-	n/a	999
TCDL 10.0	Lumber DOL 1.15	BC 0.20	Vert(CT)	n/a	-	n/a	999
BCLL 0.0 *	Rep Stress Incr YES	WB 0.07	Horz(CT)	0.00	7	n/a	n/a
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 72 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.3	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 17-4-15.  
 (lb) - Max Horz 1=94(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 8, 9, 12, 10  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7, 9, 10 except 8=352(LC 20), 12=352(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 6-8=-261/125, 2-12=-260/124

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 8-8-7, Exterior(2) 8-8-7 to 11-8-7, Interior(1) 11-8-7 to 16-10-7 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) All plates are 2x4 MT20 unless otherwise indicated.
  - 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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) 8, 9, 12, 10.



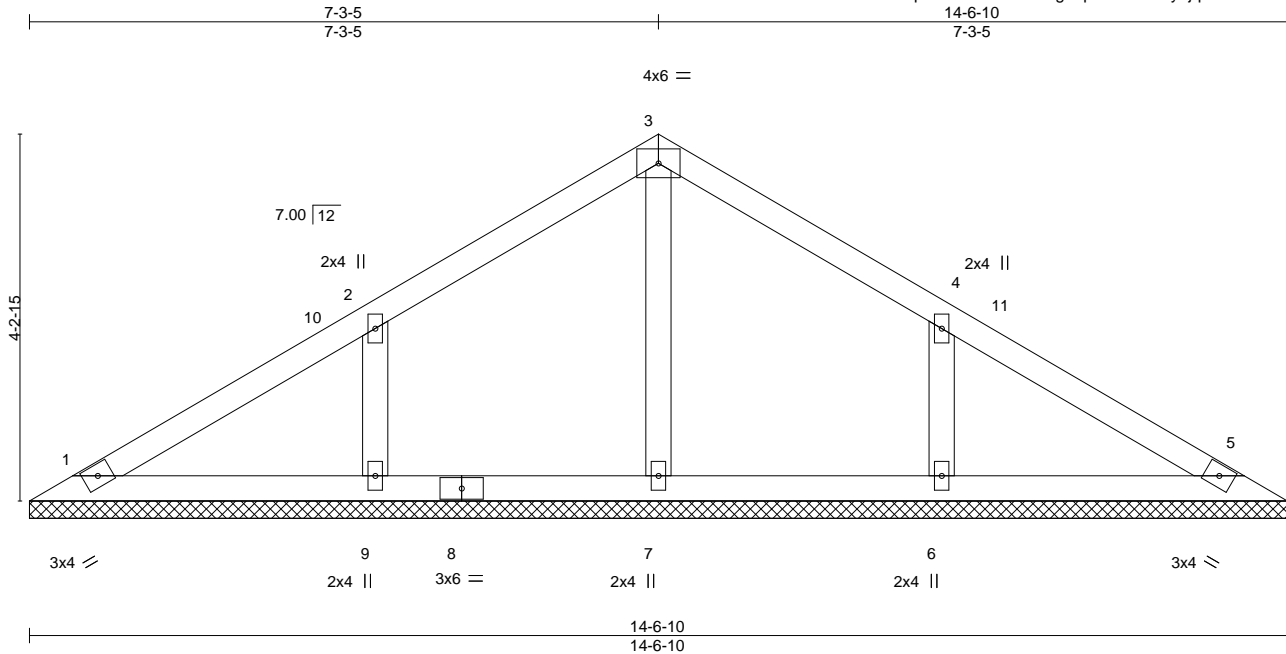
December 8, 2021

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job MASTERFARM	Truss V04	Truss Type VALLEY	Qty 1	Ply 1	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek I49146841
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:51:06 2021 Page 1  
ID:NOHDxMFxGtHiYullGv8Cp8zfMF4-bwFb4ffVgb0pnK2uAxdTyajqtCLRu34f181alCyBGc3



Scale = 1:26.7

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.29	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.17	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2015/TPI2014						Weight: 56 lb	FT = 20%

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

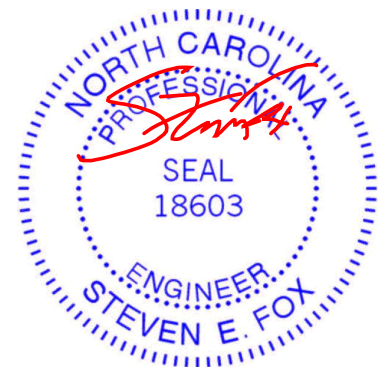
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 14-6-10.  
(lb) - Max Horz 1=77(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 6, 9  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 6=326(LC 20), 9=327(LC 19)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 7-3-5, Exterior(2) 7-3-5 to 10-6-10, Interior(1) 10-6-10 to 14-0-3 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) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6, 9.



December 8, 2021

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
Edenton, NC 27932

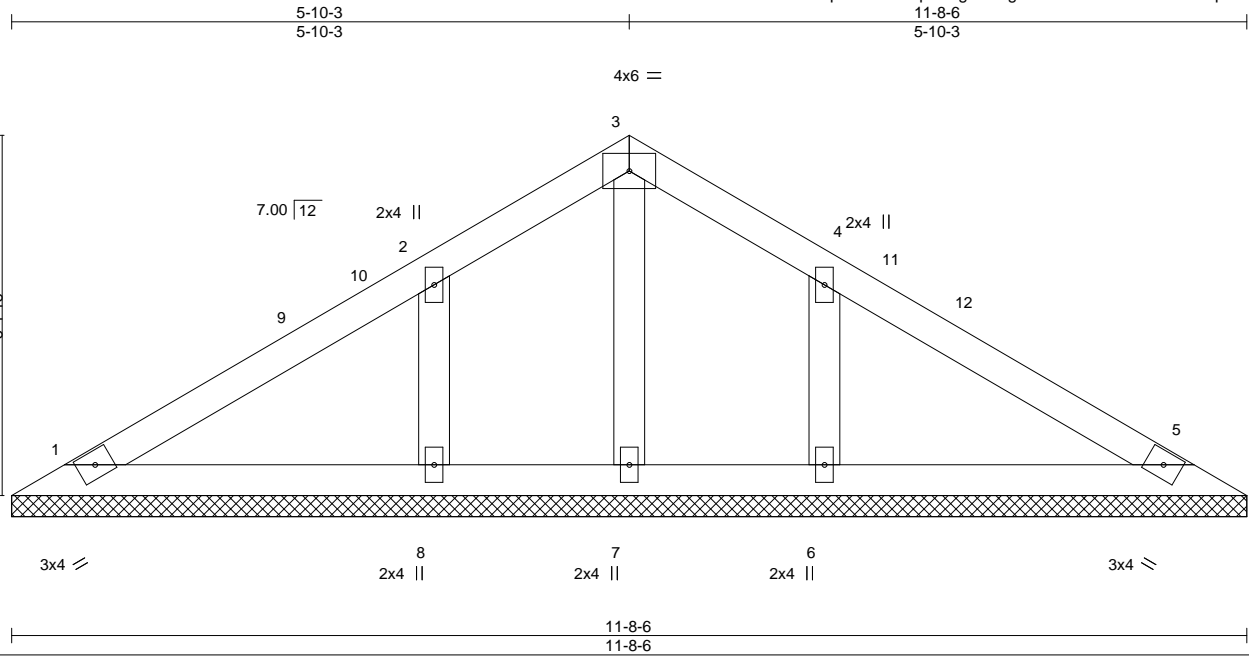
Job MASTERFARM	Truss V05	Truss Type VALLEY	Qty 1	Ply 1	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek I49146842
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Builders FirstSource (Apex, NC),

Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:51:07 2021 Page 1

ID:NOHDxMFxGtHiYullGv8Cp8zfMF4-46pzH?g7Ru8gOUd4ke9iVnG0G0hwdWRpzoV8leyBGc2



Scale = 1:21.8

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.25	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.15	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.04	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 45 lb	FT = 20%
	Code IRC2015/TPI2014							

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

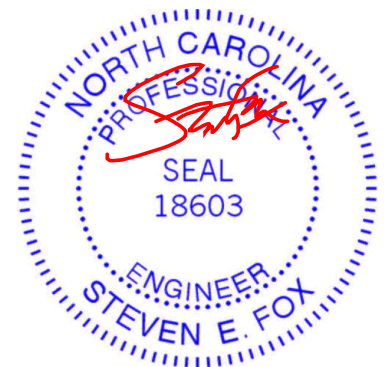
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 11-8-6.  
 (lb) - Max Horz 1=61(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 6, 8  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 6=295(LC 20), 8=295(LC 19)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 5-10-3, Exterior(2) 5-10-3 to 8-10-3, Interior(1) 8-10-3 to 11-1-14 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) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 8.



December 8, 2021

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
 Edenton, NC 27932

Job MASTERFARM	Truss V06	Truss Type VALLEY	Qty 1	Ply 1	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek I49146843
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Builders FirstSource (Apex, NC),

Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:51:08 2021 Page 1

ID:NOHDxMFxGtHiYullGv8Cp8zfMF4-YINMVKhICCGX0eCGILgx2?o9kQ19MzhyCSEhq5yBGc1



Scale = 1:17.9

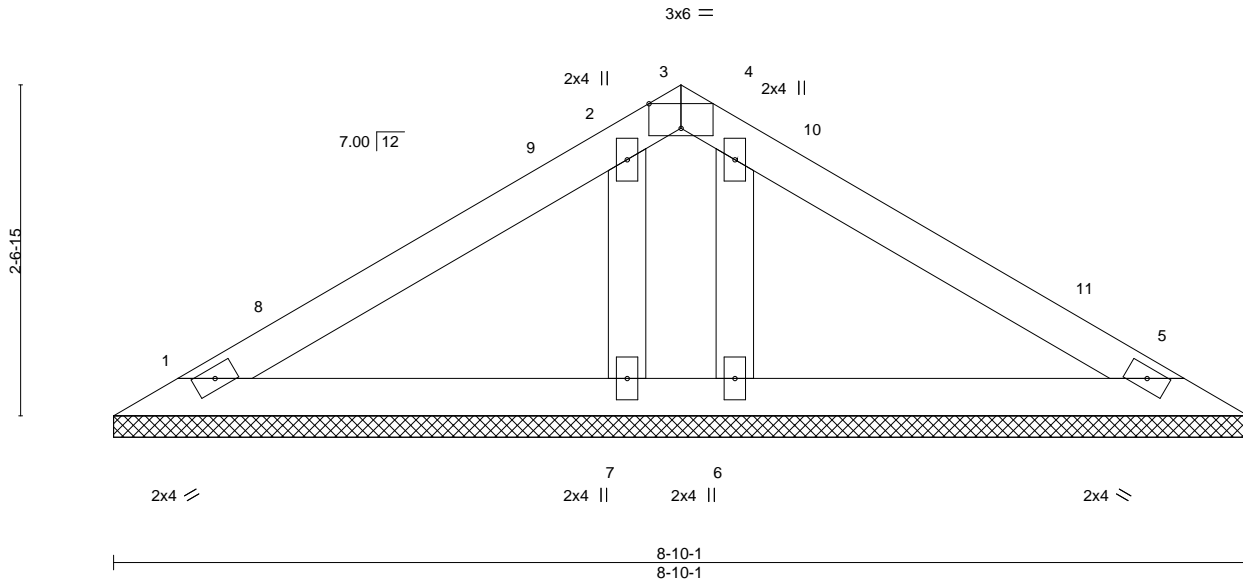


Plate Offsets (X,Y)--	[3:0-3:0,Edge]						
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	n/a	-	n/a 999
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	n/a	-	n/a 999
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	5	n/a n/a
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S				
							<b>PLATES</b>
							MT20
							<b>GRIP</b>
							244/190
							Weight: 32 lb
							FT = 20%

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

**REACTIONS.** All bearings 8-10-1.  
(lb) - Max Horz 1=45(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 6, 7  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=267(LC 24), 7=267(LC 23)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 4-5-1, Exterior(2) 4-5-1 to 7-5-1, Interior(1) 7-5-1 to 8-3-10 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 7.



December 8, 2021

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
Edenton, NC 27932



Job MASTERFARM	Truss V07	Truss Type VALLEY	Qty 1	Ply 1	Mattamy - Sequoia - Farmhouse - Lot 98 Providence creek I49146844
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Builders FirstSource (Apex, NC),

Apex, NC - 27523,

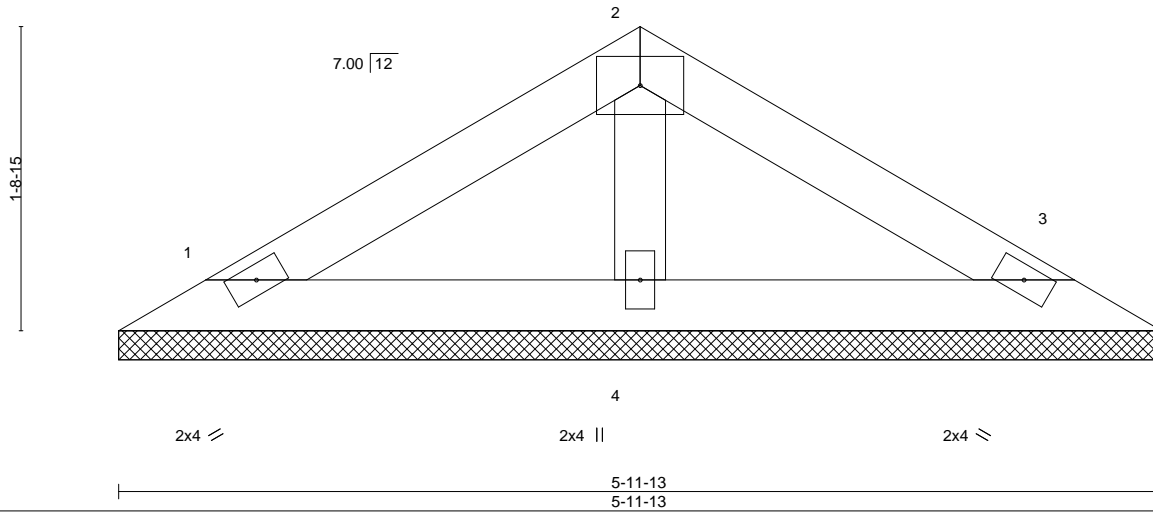
8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 7 18:51:08 2021 Page 1

ID:NOHDxMFxGtHiYullGv8Cp8zfMF4-YINMVKhICCGX0eCGILGx2?oB6Q2uMzzyCSEhq5yBGc1



4x6 =

Scale = 1:13.2



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.18	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 19 lb	FT = 20%
	Code IRC2015/TPI2014							

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

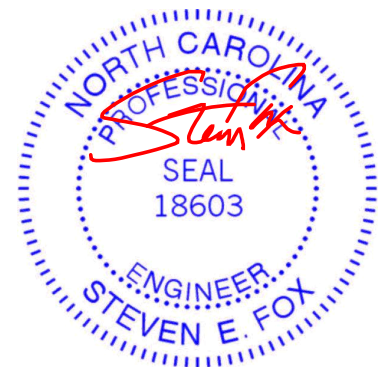
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-11-13 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=5-11-13, 3=5-11-13, 4=5-11-13  
 Max Horz 1=28(LC 9)  
 Max Uplift 1=-13(LC 12), 3=-17(LC 13)  
 Max Grav 1=102(LC 1), 3=102(LC 1), 4=189(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



December 8, 2021

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

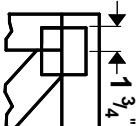
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



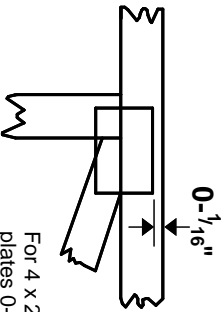
818 Soundside Road  
 Edenton, NC 27932

# Symbols

## PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.



This symbol indicates the required direction of slots in connector plates.

\* Plate location details available in **MITek 20/20 software or upon request.**

## PLATE SIZE

**4 X 4**

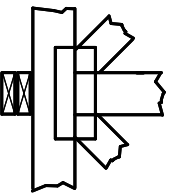
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

## BEARING



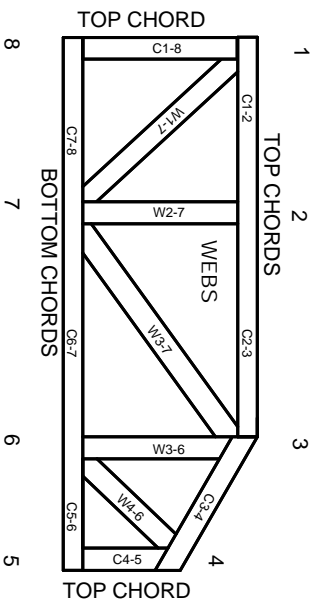
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

### Industry Standards:

ANSI/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing, Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate  
Connected Wood Trusses.

# Numbering System

6-4-8  
dimensions shown in ft-in-sixteenths  
(Drawings not to scale)



**JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.**

**CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.**

## PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988  
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: MII-7473 rev. 5/19/2020



# General Safety Notes

## Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.