

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: PC58  
MATTAMYHOMES/SHENANDOAH; LOT 58 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: I49772651 thru I49772668

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

North Carolina COA: C-0844



January 20,2022

Johnson, Andrew

**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 PC58	Truss A01G	Truss Type GABLE	Qty 2	Ply 1	MATTAMYHOMES/SHENANDOAH; LOT 58 PROVIDENCE CREEK 149772651
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Builders FirstSource (Apex, NC),

Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jan 18 19:37:09 2022 Page 1

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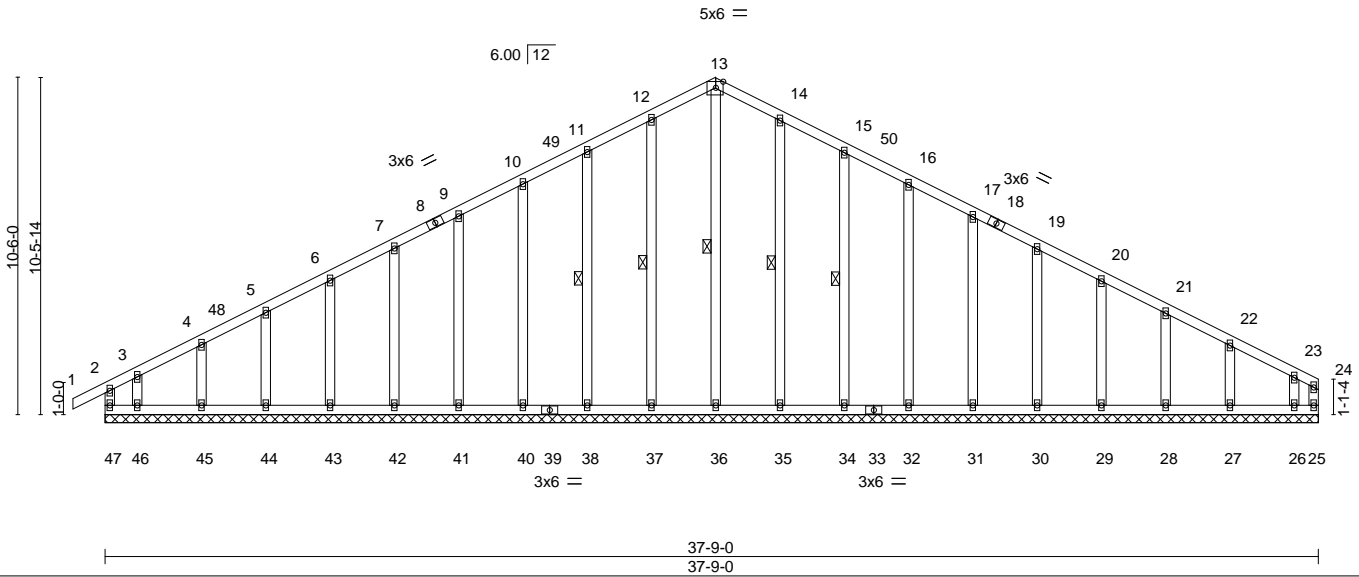


Plate Offsets (X,Y)--	[13:0-2-12,Edge]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.16	Vert(LL)	-0.00	1	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	-0.00	1	n/r		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.12	Horz(CT)	0.00	25	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-R						
								Weight: 270 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.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt
OTHERS	2x4 SP No.3		13-36, 12-37, 11-38, 14-35, 15-34

**REACTIONS.** All bearings 37-9-0.  
 (lb) - Max Horz 47=124(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 47, 25, 37, 38, 40, 41, 42, 43, 44, 45, 35, 34, 32, 31, 30, 29, 28, 27 except 46=149(LC 12), 26=161(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 47, 25, 36, 37, 38, 40, 41, 42, 43, 44, 45, 46, 35, 34, 32, 31, 30, 29, 28, 27, 26

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 11-12=-96/284, 12-13=-108/316, 13-14=-109/310, 14-15=-96/276

- 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 Corner(3) -1-0-0 to 3-9-10, Exterior(2) 3-9-10 to 19-0-0, Corner(3) 19-0-0 to 23-9-10, Exterior(2) 23-9-10 to 37-7-4 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
  - 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 requires continuous bottom chord bearing.
  - 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 7) Gable studs spaced at 2-0-0 oc.
  - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 9) \* This truss has been designed for a live load of 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.
  - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 47, 25, 37, 38, 40, 41, 42, 43, 44, 45, 35, 34, 32, 31, 30, 29, 28, 27 except (jt=lb) 46=149, 26=161.



Job PC58	Truss A02	Truss Type COMMON	Qty 10	Ply 1	MATTAMYHOMES/SHENANDOAH; LOT 58 PROVIDENCE CREEK I49772652
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Builders FirstSource (Apex, NC),

Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jan 18 19:37:10 2022 Page 1

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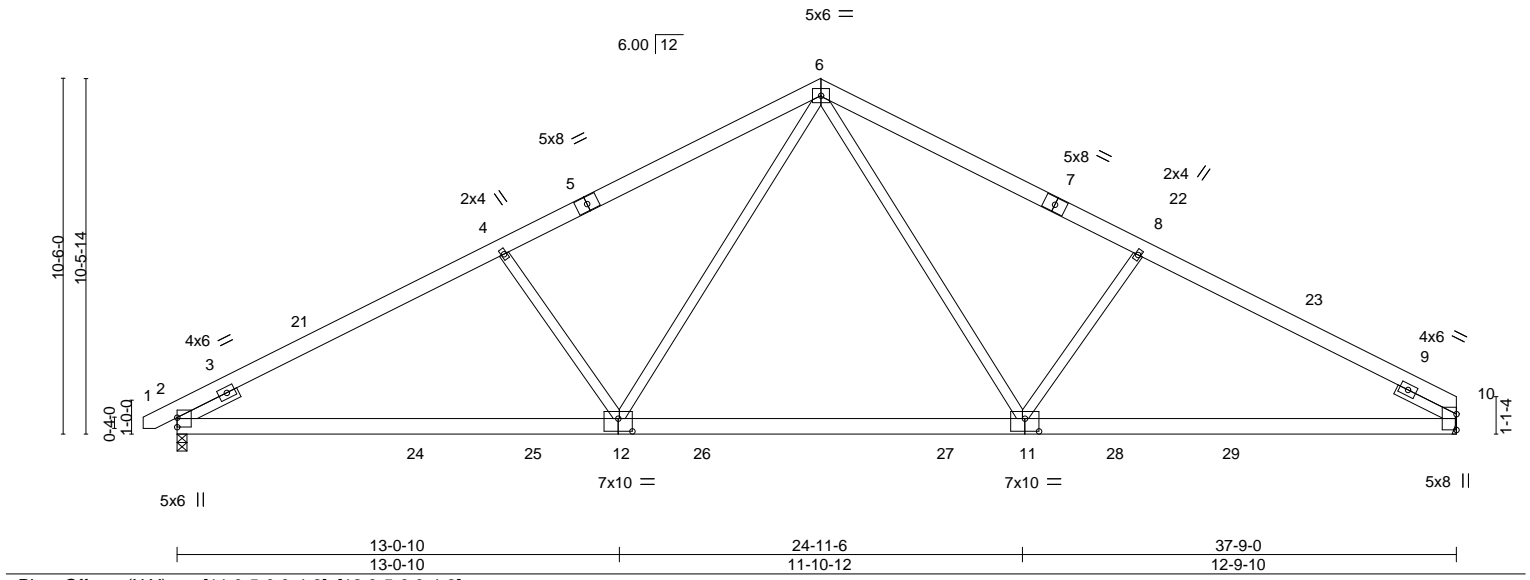


Plate Offsets (X,Y)--	[11:0-5-0,0-4-8], [12:0-5-0,0-4-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.63	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.82	Vert(LL) -0.28 11-12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.40	Vert(CT) -0.45 11-12 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.09 10 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.06 11-12 >999 240	Weight: 247 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-10-11 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.3 1-11-12, Right 2x4 SP No.3 1-11-12	

**REACTIONS.** (size) 2=0-3-8, 10=Mechanical  
 Max Horz 2=132(LC 12)  
 Max Grav 2=1573(LC 2), 10=1533(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-2528/161, 4-6=-2299/192, 6-8=-2275/199, 8-10=-2495/168  
 BOT CHORD 2-12=-73/2180, 11-12=0/1505, 10-11=-59/2145  
 WEBS 4-12=-523/190, 6-12=-22/913, 6-11=-27/872, 8-11=-503/194

- 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) -0-9-14 to 3-11-12, Interior(1) 3-11-12 to 19-0-0, Exterior(2) 19-0-0 to 25-9-7, Interior(1) 25-9-7 to 37-9-0 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
  - 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, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.



Job PC58	Truss A03	Truss Type COMMON	Qty 2	Ply 1	MATTAMYHOMES/SHENANDOAH; LOT 58 PROVIDENCE CREEK I49772653
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jan 18 19:37:11 2022 Page 1  
ID:3TtRaskrdZOKr4jVkpPWDepyhbi-clfaf?eBc8q7s?B\_3iZG1E\_Ayn9zYL9jEGF1aDzu0ss



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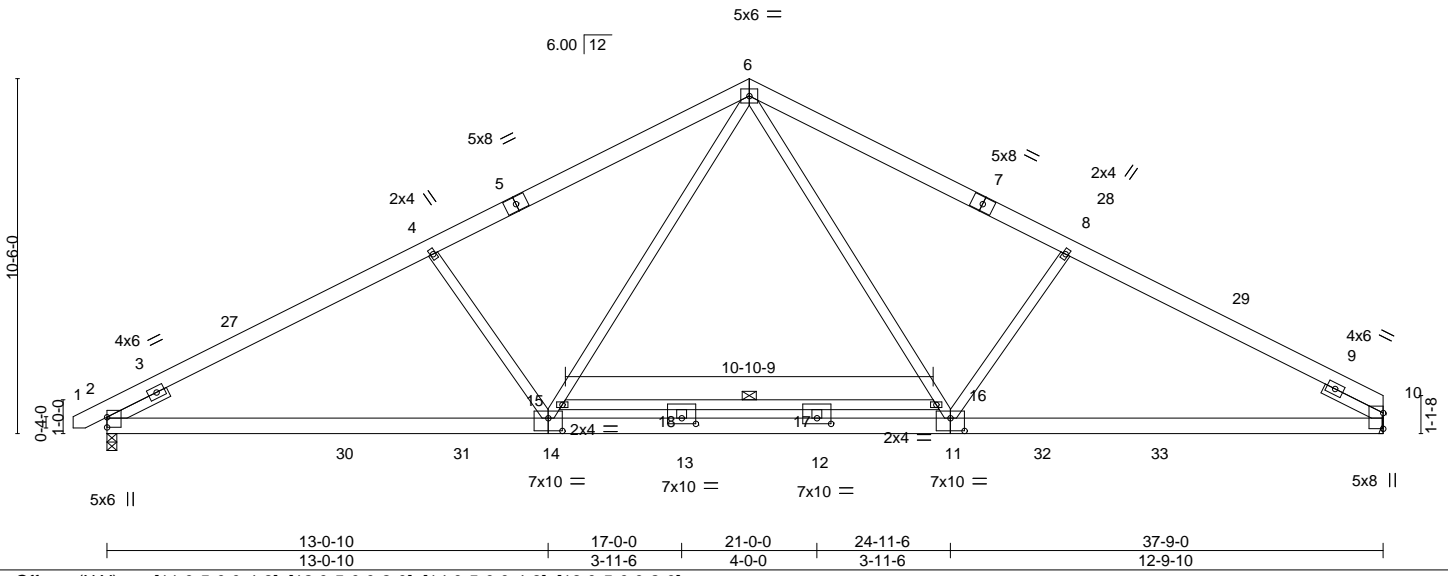


Plate Offsets (X, Y)--	[11:0-5-0,0-4-8], [12:0-5-0,0-2-0], [14:0-5-0,0-4-8], [18:0-5-0,0-2-0]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.82	Vert(LL) -0.39 12-13 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.98	Vert(CT) -0.53 12-13 >853 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.59	Horz(CT) 0.09 10 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Wind(LL) 0.06 12 >999 240	Weight: 265 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-1-9 oc purlins.
BOT CHORD 2x6 SP No.2 *Except* 11-14: 2x6 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 15-16
SLIDER Left 2x4 SP No.3 1-11-12, Right 2x4 SP No.3 1-11-12	

**REACTIONS.** (size) 2=0-3-8, 10=Mechanical  
 Max Horz 2=132(LC 12)  
 Max Grav 2=1636(LC 2), 10=1598(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-2654/161, 4-6=-2424/192, 6-8=-2387/199, 8-10=-2609/169  
 BOT CHORD 2-14=-74/2291, 13-14=0/1742, 12-13=0/1742, 11-12=0/1742, 10-11=-59/2243  
 WEBS 6-16=-27/939, 11-16=-31/807, 8-11=-499/194, 14-15=-27/860, 6-15=-22/990,  
 4-14=-525/191

- 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) -0-9-14 to 3-11-12, Interior(1) 3-11-12 to 19-0-0, Exterior(2) 19-0-0 to 25-9-7, Interior(1) 25-9-7 to 37-9-0 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
  - 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, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - N/A
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

- LOAD CASE(S)** Standard
- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-6=-60, 6-10=-60, 19-23=-20
  - Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-6=-50, 6-10=-50, 19-30=-20, 30-31=-50, 31-32=-20, 32-33=-50, 23-33=-20, 15-16=-30(F)
  - Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25



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	Truss	Truss Type	Qty	Ply	MATTAMYHOMES/SHENANDOAH; LOT 58 PROVIDENCE CREEK 149772653
PC58	A03	COMMON	2	1	Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jan 18 19:37:11 2022 Page 2  
ID:3TtRaskrdZOKr4jVkpWDepyhbi-clfaf?eBc8q7s?B\_3iZG1E\_Ayn9zYL9jEGF1aDzu0ss

**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-6=-20, 6-10=-20, 19-23=-40, 15-16=-40(F)

18) Dead + Uninhabitable Attic Storage: Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-6=-20, 6-10=-20, 19-30=-20, 30-31=-60, 31-32=-20, 32-33=-60, 23-33=-20, 15-16=-40(F)

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=-46, 2-6=-50, 6-10=-43, 19-30=-20, 30-31=-50, 31-32=-20, 32-33=-50, 23-33=-20, 15-16=-30(F)

Horz: 1-2=-4, 2-6=0, 6-10=7

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=-39, 2-6=-43, 6-10=-50, 19-30=-20, 30-31=-50, 31-32=-20, 32-33=-50, 23-33=-20, 15-16=-30(F)

Horz: 1-2=-11, 2-6=-7, 6-10=0

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: 1-2=-30, 2-4=-34, 4-6=-41, 6-10=-46, 19-30=-20, 30-31=-50, 31-32=-20, 32-33=-50, 23-33=-20, 15-16=-30(F)

Horz: 1-2=-20, 2-4=-16, 4-6=-9, 6-10=4

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, 2-6=-46, 6-28=-41, 10-28=-34, 19-30=-20, 30-31=-50, 31-32=-20, 32-33=-50, 23-33=-20, 15-16=-30(F)

Horz: 1-2=-7, 2-6=-4, 6-28=9, 10-28=16

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: 1-6=-50, 6-10=-20, 19-30=-20, 30-31=-50, 31-32=-20, 32-33=-50, 23-33=-20, 15-16=-30(F)

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: 1-6=-20, 6-10=-50, 19-30=-20, 30-31=-50, 31-32=-20, 32-33=-50, 23-33=-20, 15-16=-30(F)

**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 PC58	Truss A04	Truss Type COMMON	Qty 6	Ply 1	MATTAMYHOMES/SHENANDOAH; LOT 58 PROVIDENCE CREEK I49772654
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jan 18 19:37:13 2022 Page 1

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-1-0-0	9-7-12	19-0-0	28-4-4	38-0-0	39-0-0
1-0-0	9-7-12	9-4-4	9-4-4	9-7-12	1-0-0

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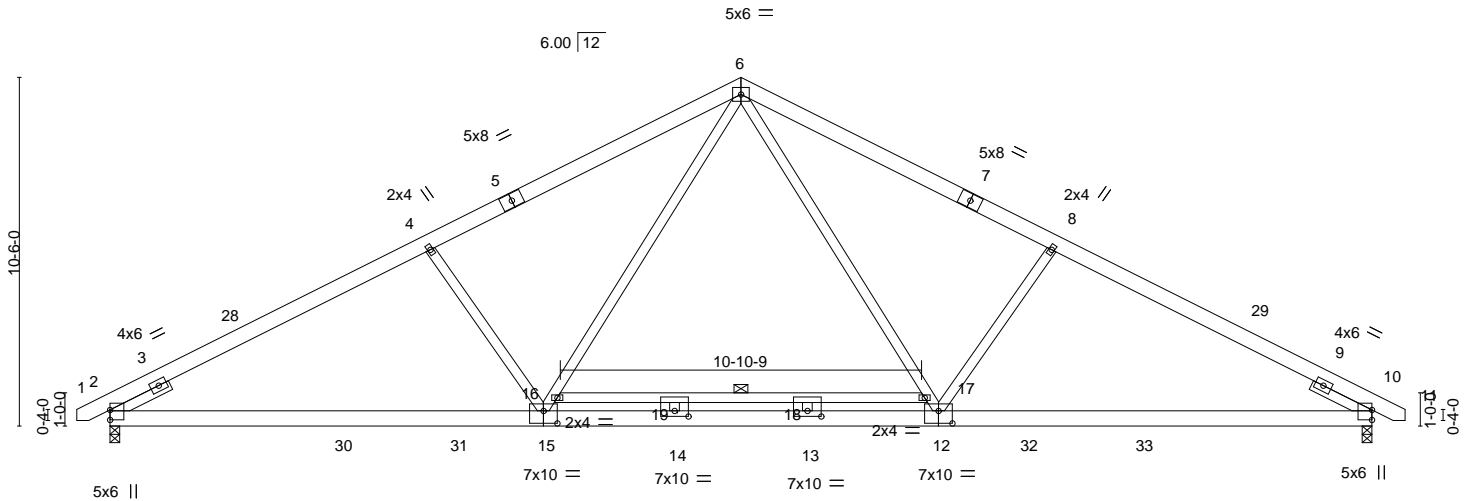


Plate Offsets (X, Y)--	[12:0-5-0,0-4-8], [13:0-5-0,0-2-0], [15:0-5-0,0-4-8], [19:0-5-0,0-2-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.68	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 1.00	Vert(LL) -0.44 13-14 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.62	Vert(CT) -0.59 13-14 >774 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.08 10 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.05 14 >999 240	Weight: 268 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-10-10 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	WEBS 1 Row at midpt 16-17
SLIDER Left 2x4 SP No.3 1-11-12, Right 2x4 SP No.3 1-11-12	

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=127(LC 12)  
 Max Grav 2=1646(LC 2), 10=1646(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-2675/162, 4-6=-2444/193, 6-8=-2444/193, 8-10=-2675/162  
 BOT CHORD 2-15=-51/2309, 14-15=0/1760, 13-14=0/1760, 12-13=0/1760, 10-12=-51/2309  
 WEBS 6-17=-23/986, 12-17=-28/854, 8-12=-526/190, 15-16=-28/854, 6-16=-23/986, 4-15=-526/190

- 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) -0-9-14 to 3-11-12, Interior(1) 3-11-12 to 19-0-0, Exterior(2) 19-0-0 to 25-9-7, Interior(1) 25-9-7 to 38-9-14 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
  - 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, with BCDL = 10.0psf.
  - N/A
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-6=-60, 6-11=-60, 20-24=-20
- Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-6=-50, 6-11=-50, 20-30=-20, 30-31=-50, 31-32=-20, 32-33=-50, 24-33=-20, 16-17=-30(F)
- Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert: 1-6=-20, 6-11=-20, 20-24=-40, 16-17=-40(F)





Job	Truss	Truss Type	Qty	Ply	MATTAMYHOMES/SHENANDOAH; LOT 58 PROVIDENCE CREEK I49772654
PC58	A04	COMMON	6	1	Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jan 18 19:37:13 2022 Page 2  
ID:3TtRaskrdZOKr4jVkpWDePyhbii-ZhmL4hfR8m4r5IKMA7ck6f3Yaar00F3?hak8f6zu0sq

**LOAD CASE(S)** Standard

- 18) Dead + Uninhabitable Attic Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-6=-20, 6-11=-20, 20-30=-20, 30-31=-60, 31-32=-20, 32-33=-60, 24-33=-20, 16-17=-40(F)
- 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=-46, 2-6=-50, 6-10=-43, 10-11=-39, 20-30=-20, 30-31=-50, 31-32=-20, 32-33=-50, 24-33=-20, 16-17=-30(F)  
Horz: 1-2=-4, 2-6=0, 6-10=7, 10-11=11
- 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=-39, 2-6=-43, 6-10=-50, 10-11=-46, 20-30=-20, 30-31=-50, 31-32=-20, 32-33=-50, 24-33=-20, 16-17=-30(F)  
Horz: 1-2=-11, 2-6=-7, 6-10=0, 10-11=4
- 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: 1-2=-30, 2-4=-34, 4-6=-41, 6-10=-46, 10-11=-43, 20-30=-20, 30-31=-50, 31-32=-20, 32-33=-50, 24-33=-20, 16-17=-30(F)  
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 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, 2-6=-46, 6-8=-41, 8-10=-34, 10-11=-30, 20-30=-20, 30-31=-50, 31-32=-20, 32-33=-50, 24-33=-20, 16-17=-30(F)  
Horz: 1-2=-7, 2-6=-4, 6-8=9, 8-10=16, 10-11=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: 1-6=-50, 6-11=-20, 20-30=-20, 30-31=-50, 31-32=-20, 32-33=-50, 24-33=-20, 16-17=-30(F)
- 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: 1-6=-20, 6-11=-50, 20-30=-20, 30-31=-50, 31-32=-20, 32-33=-50, 24-33=-20, 16-17=-30(F)

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

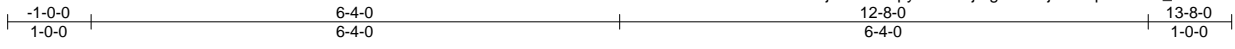
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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



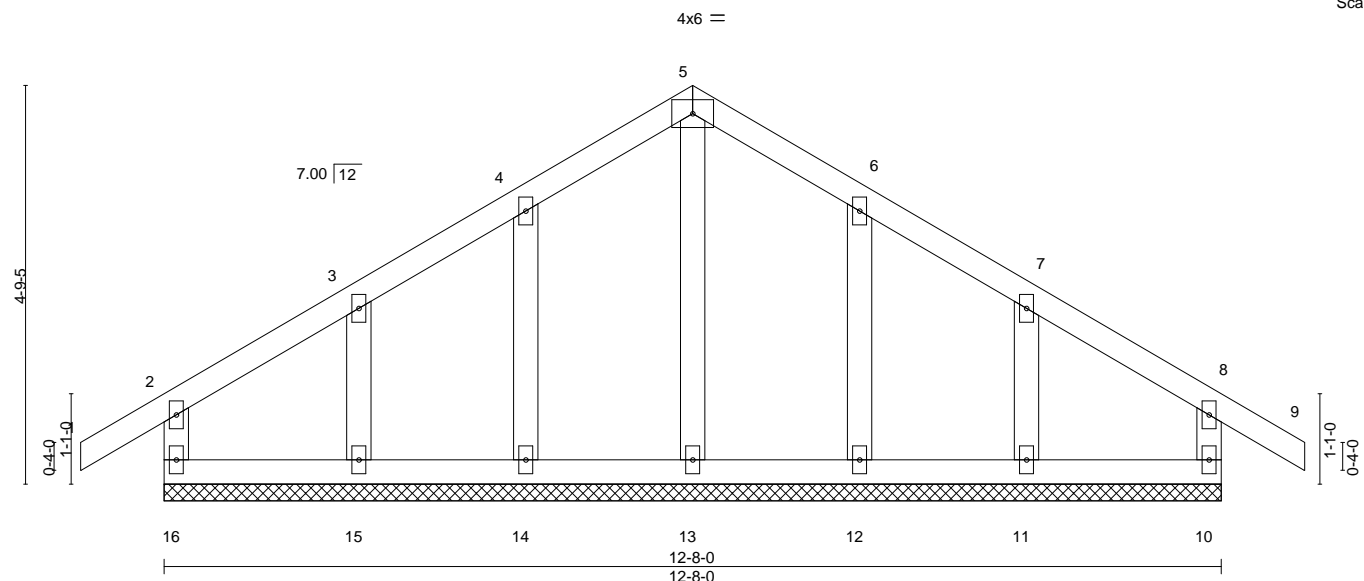
818 Soundside Road  
Edenton, NC 27932

Job PC58	Truss B01G	Truss Type GABLE	Qty 1	Ply 1	MATTAMYHOMES/SHENANDOAH; LOT 58 PROVIDENCE CREEK 149772655
Builders FirstSource (Apex, NC), Apex, NC - 27523,					Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jan 18 19:37:14 2022 Page 1  
ID:3TtRaskrdZOKr4jVvkPWDepyhbi-1tKj1g3v3ChjSvZkq7zescsN\_PGlrL9wEUibYzu0sp



Scale = 1:27.6



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 0.10	Vert(LL)	-0.00	9	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	9	n/r		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.05	Horz(CT)	0.00	10	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-R					Weight: 67 lb	FT = 20%

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

**REACTIONS.** All bearings 12-8-0.  
 (lb) - Max Horz 16--109(LC 10)  
 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-**
- 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 Corner(3) -0-11-15 to 3-9-10, Exterior(2) 3-9-10 to 6-4-0, Corner(3) 6-4-0 to 11-1-10, Exterior(2) 11-1-10 to 13-7-15 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 requires continuous bottom chord bearing.
  - 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 7) Gable studs spaced at 2-0-0 oc.
  - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 9) \* This truss has been designed for a live load of 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.
  - 10) 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.



January 20, 2022

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

818 Soundside Road  
 Edenton, NC 27932



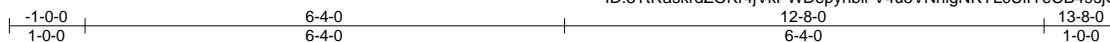
Job PC58	Truss B02	Truss Type COMMON	Qty 3	Ply 1	MATTAMYHOMES/SHENANDOAH; LOT 58 PROVIDENCE CREEK I49772656
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Builders FirstSource (Apex, NC),

Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jan 18 19:37:15 2022 Page 1

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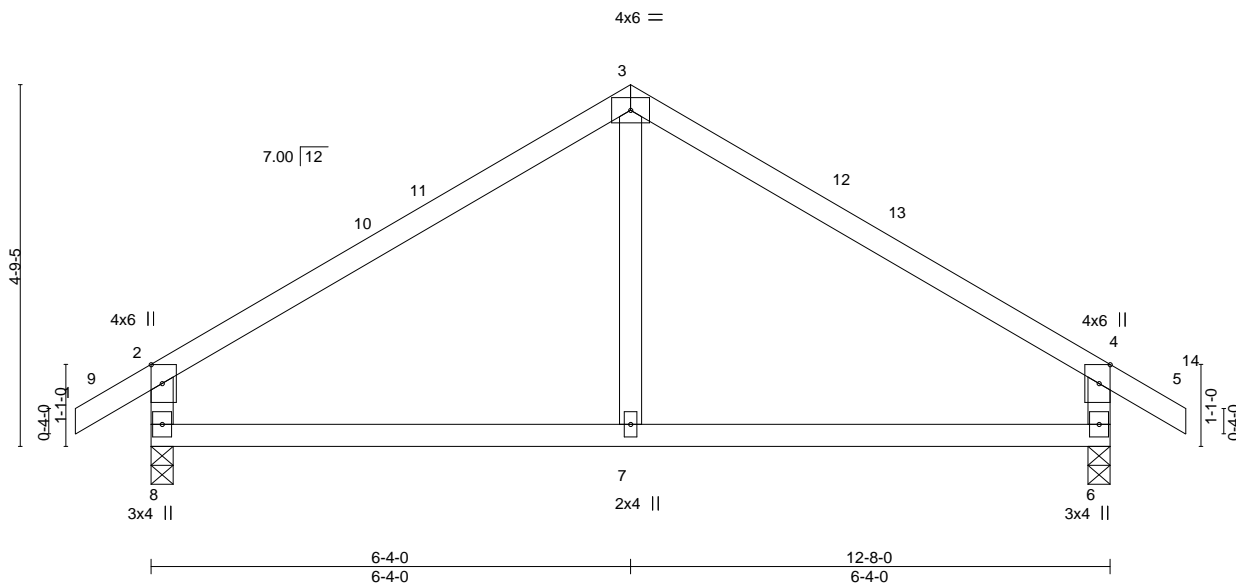


Plate Offsets (X, Y)-- [2:0-3-0,Edge], [4:0-3-0,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.83	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.29	Vert(LL) -0.04 6-7 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.09	Vert(CT) -0.08 6-7 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-MR	Horz(CT) 0.01 6 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) -0.02 7-8 >999 240	Weight: 53 lb	FT = 20%

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

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

**REACTIONS.** (size) 8=0-3-8, 6=0-3-8  
 Max Horz 8=-109(LC 10)  
 Max Uplift 8=-26(LC 12), 6=-26(LC 13)  
 Max Grav 8=564(LC 1), 6=564(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-8=-494/116, 2-3=-526/69, 3-4=-526/69, 4-6=-494/116  
 BOT CHORD 7-8=0/360, 6-7=0/360

- 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) -0-11-15 to 3-9-10, Interior(1) 3-9-10 to 6-4-0, Exterior(2) 6-4-0 to 13-1-7, Interior(1) 13-1-7 to 13-7-15 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.



January 20, 2022

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

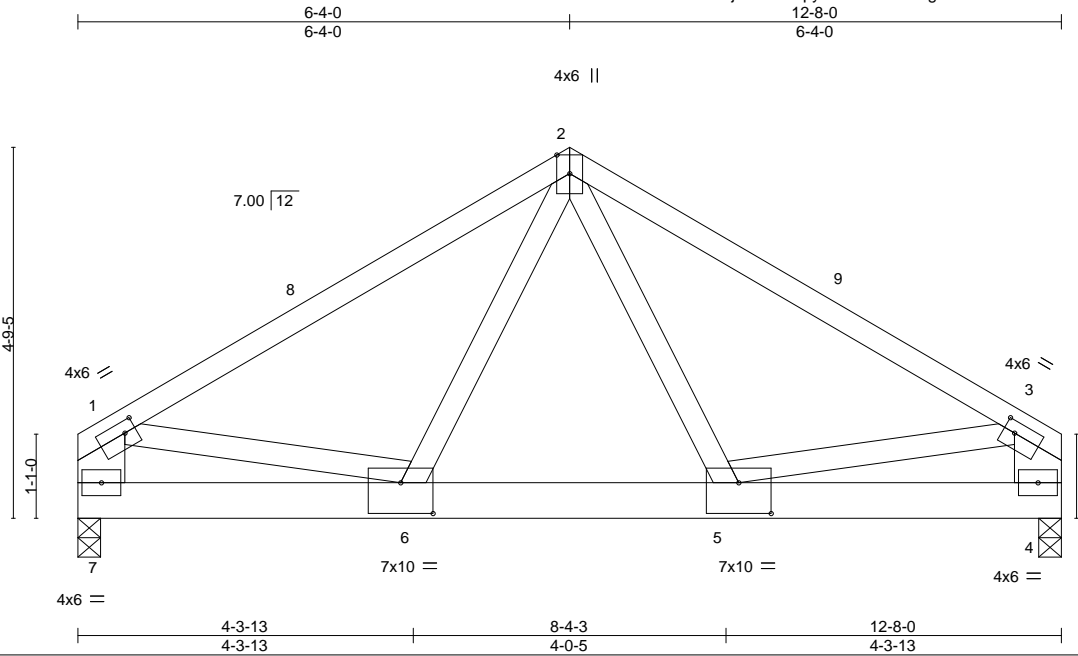
Job PC58	Truss B03GR	Truss Type COMMON	Qty 1	Ply 2	MATTAMYHOMES/SHENANDOAH; LOT 58 PROVIDENCE CREEK I49772657
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Builders FirstSource (Apex, NC),

Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jan 18 19:37:15 2022 Page 1

ID:3TtRaskrdZOKr4jVkpWDePyhbii-V4u5VNhigNKYLcUIIYeCB49uEOZhUBRI8uDFJ\_zu0so



Scale = 1:29.7

Plate Offsets (X,Y)--	[1:0-1-12,0-1-12], [3:0-1-12,0-1-12], [5:0-5-0,0-4-12], [6:0-5-0,0-4-12]				
<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 0.67	Vert(LL) -0.05 5-6 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.80	Vert(CT) -0.09 5-6 >999 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.44	Horz(CT) 0.01 4 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Wind(LL) 0.04 5-6 >999 240	Weight: 161 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-7-10 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 1-7,3-4: 2x8 SP DSS	

**REACTIONS.** (size) 7=0-3-8, 4=0-3-8  
 Max Horz 7=-94(LC 6)  
 Max Uplift 7=-403(LC 8), 4=-403(LC 9)  
 Max Grav 7=5416(LC 15), 4=5395(LC 15)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-7=-3769/301, 1-2=-5631/436, 2-3=-5643/436, 3-4=-3746/300  
 BOT CHORD 6-7=-165/1164, 5-6=-253/3611, 4-5=-133/1055  
 WEBS 2-5=-201/2905, 3-5=-262/3855, 2-6=-201/2934, 1-6=-260/3769

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - 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.
  - 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; cantilever left and right exposed; end vertical left and right exposed; 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=403, 4=403.

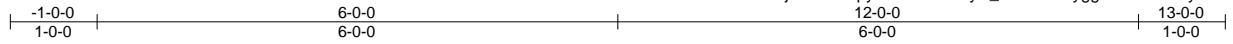
**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-2=-60, 2-3=-60, 4-7=-787(F=-767)



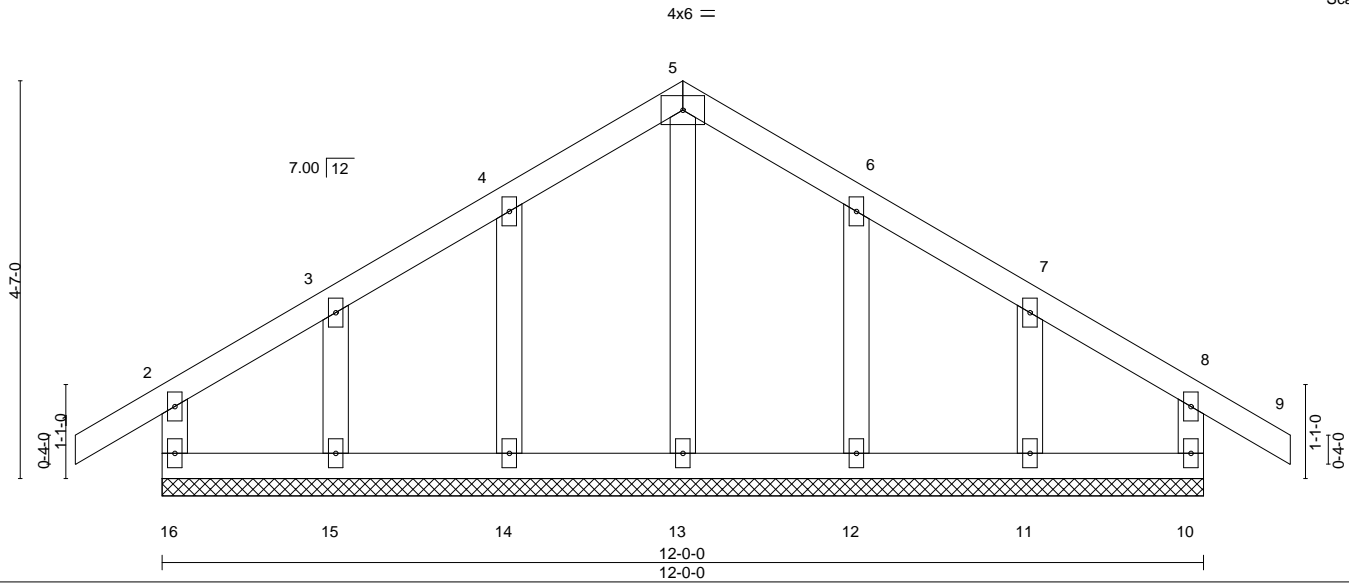
Job	Truss	Truss Type	Qty	Ply	MATTAMYHOMES/SHENANDOAH; LOT 58 PROVIDENCE CREEK I49772658
PC58	B04G	GABLE	1	1	Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jan 18 19:37:17 2022 Page 1  
ID:3TtRaskrdZOKr4jVkpWDepyhii-RS0rw3iyC\_aGawe8PyggGVENCBR1yB7bcCiMotzu0sm



Scale = 1:26.5



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 0.10	Vert(LL)	-0.00	9	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	9	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: 64 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

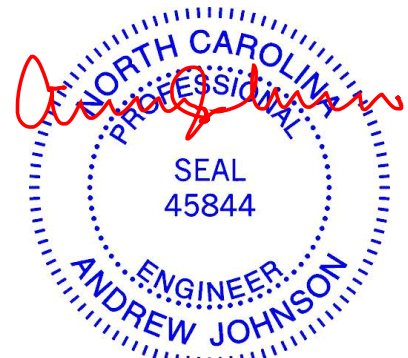
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** All bearings 12-0-0.  
(lb) - Max Horz 16=105(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) -0-11-15 to 4-0-0, Exterior(2) 4-0-0 to 6-0-0, Corner(3) 6-0-0 to 10-9-10, Exterior(2) 10-9-10 to 12-11-15 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.



January 20, 2022

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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



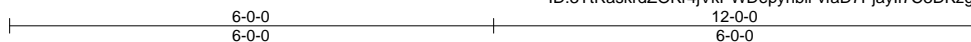
818 Soundside Road  
Edenton, NC 27932

Job PC58	Truss B05GR	Truss Type COMMON	Qty 1	Ply 2	MATTAMYHOMES/SHENANDOAH; LOT 58 PROVIDENCE CREEK I49772659
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Builders FirstSource (Apex, NC),

Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jan 18 19:37:18 2022 Page 1  
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4x6 ||

Scale = 1:28.6

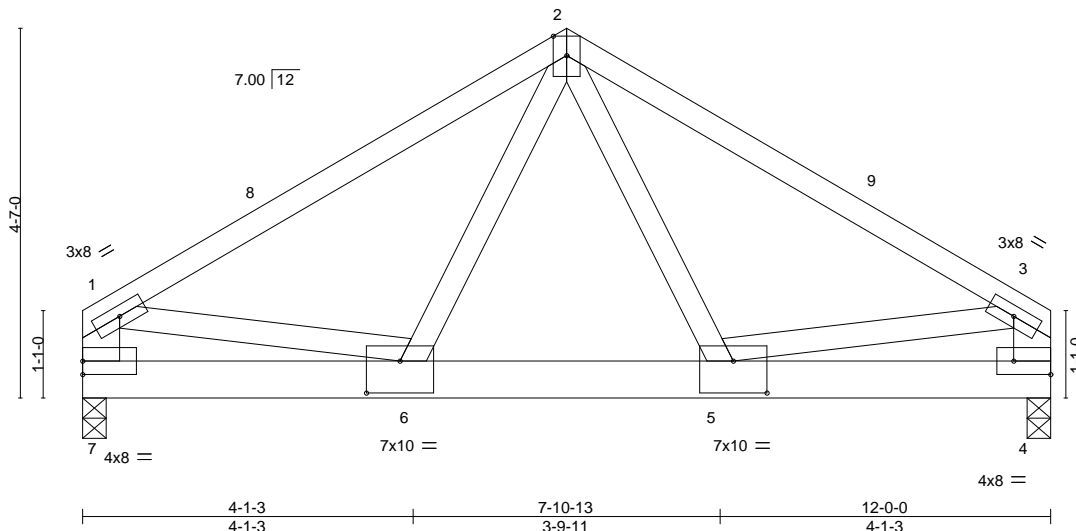


Plate Offsets (X, Y)--	[4:Edge,0-2-0], [5:0-5-0,0-4-12], [6:0-5-0,0-4-12]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.59	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.77	Vert(LL) -0.04 5-6 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.44	Vert(CT) -0.09 5-6 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.01 4 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.03 5-6 >999 240	Weight: 151 lb	FT = 20%

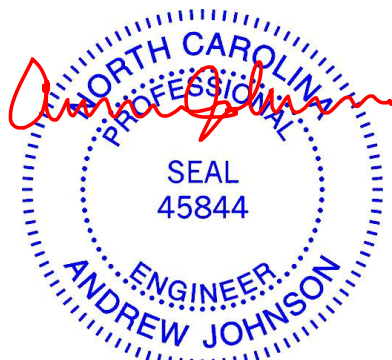
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-10-3 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 1-7,3-4: 2x6 SP No.2	

**REACTIONS.** (size) 7=0-3-8, 4=0-3-8  
 Max Horz 7=-90(LC 4)  
 Max Uplift 7=-402(LC 8), 4=-402(LC 9)  
 Max Grav 7=5387(LC 15), 4=5367(LC 15)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-7=-3744/299, 1-2=-5596/434, 2-3=-5609/434, 3-4=-3722/298  
 BOT CHORD 6-7=-158/1099, 5-6=-253/3599, 4-5=-128/994  
 WEBS 2-5=-201/2891, 3-5=-264/3887, 2-6=-201/2918, 1-6=-262/3800

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - 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.
  - 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; cantilever left and right exposed; end vertical left and right exposed; 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=402, 4=402.

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-2=-60, 2-3=-60, 4-7=-820(F=-800)



January 20,2022

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

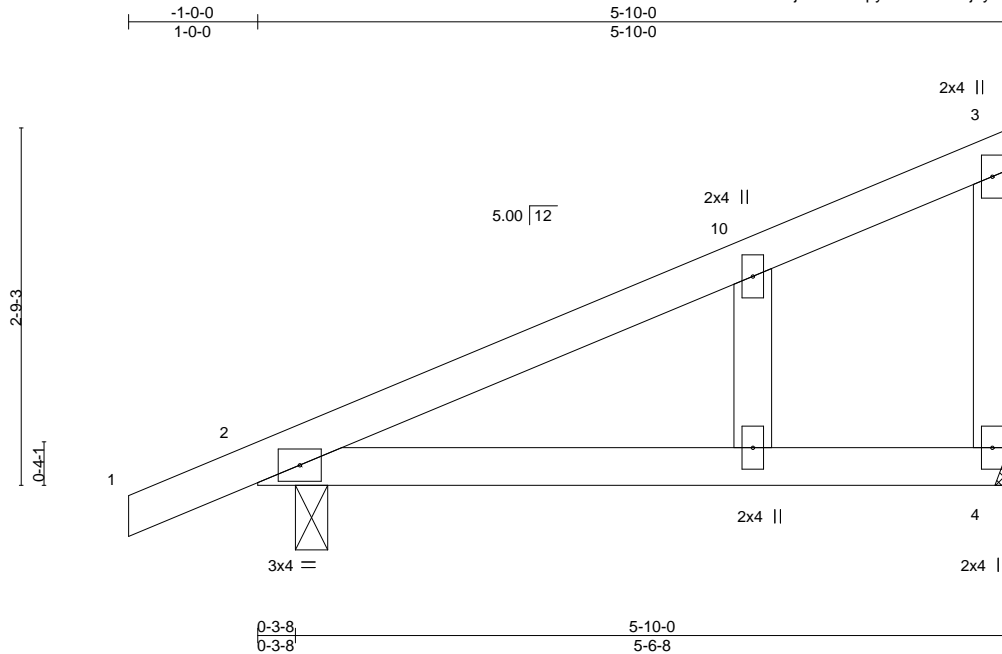
Job PC58	Truss P01G	Truss Type GABLE	Qty 1	Ply 1	MATTAMYHOMES/SHENANDOAH; LOT 58 PROVIDENCE CREEK I49772660
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Builders FirstSource (Apex, NC),

Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jan 18 19:37:18 2022 Page 1  
ID:3TtRaskrdZOKr4jVkpWDEpyhbii-vfaD7Pjayli7C3DKZgBvpinSSbi0he2IrsSvKJzu0sl

Job Reference (optional)



Scale = 1:17.8

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.48	Vert(LL)	-0.05 4-9	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.37	Vert(CT)	-0.11 4-9	>638	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00 2	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MP	Wind(LL)	0.04 4-9	>999	240		
	Code IRC2015/TPI2014						Weight: 25 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 5-10-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=Mechanical, 2=0-3-0  
 Max Horz 2=86(LC 11)  
 Max Uplift 4=-26(LC 12), 2=-27(LC 12)  
 Max Grav 4=222(LC 1), 2=293(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 3-9-10, Interior(1) 3-9-10 to 5-8-4 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) 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 studs spaced at 2-0-0 oc.
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.



January 20, 2022

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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 PC58	Truss P02	Truss Type MONO TRUSS	Qty 3	Ply 1	MATTAMYHOMES/SHENANDOAH; LOT 58 PROVIDENCE CREEK I49772661
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Builders FirstSource (Apex, NC),

Apex, NC - 27523,

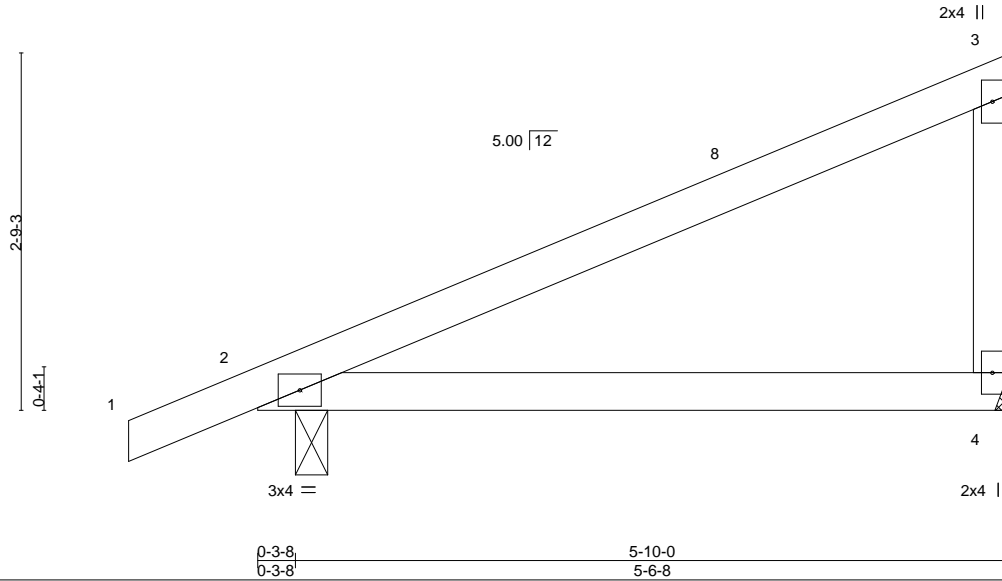
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Job Reference (optional)



Scale = 1:17.8



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 0.48	Vert(LL)	-0.05	4-7	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.37	Vert(CT)	-0.11	4-7	>638		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	2	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP	Wind(LL)	0.04	4-7	>999	Weight: 23 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-10-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=Mechanical, 2=0-3-0  
 Max Horz 2=86(LC 11)  
 Max Uplift 4=26(LC 12), 2=-27(LC 12)  
 Max Grav 4=222(LC 1), 2=293(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 3-9-10, Interior(1) 3-9-10 to 5-8-4 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.



January 20, 2022

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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



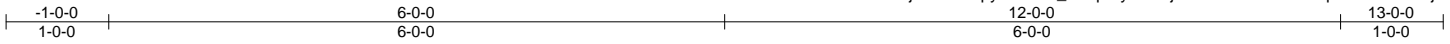
818 Soundside Road  
 Edenton, NC 27932



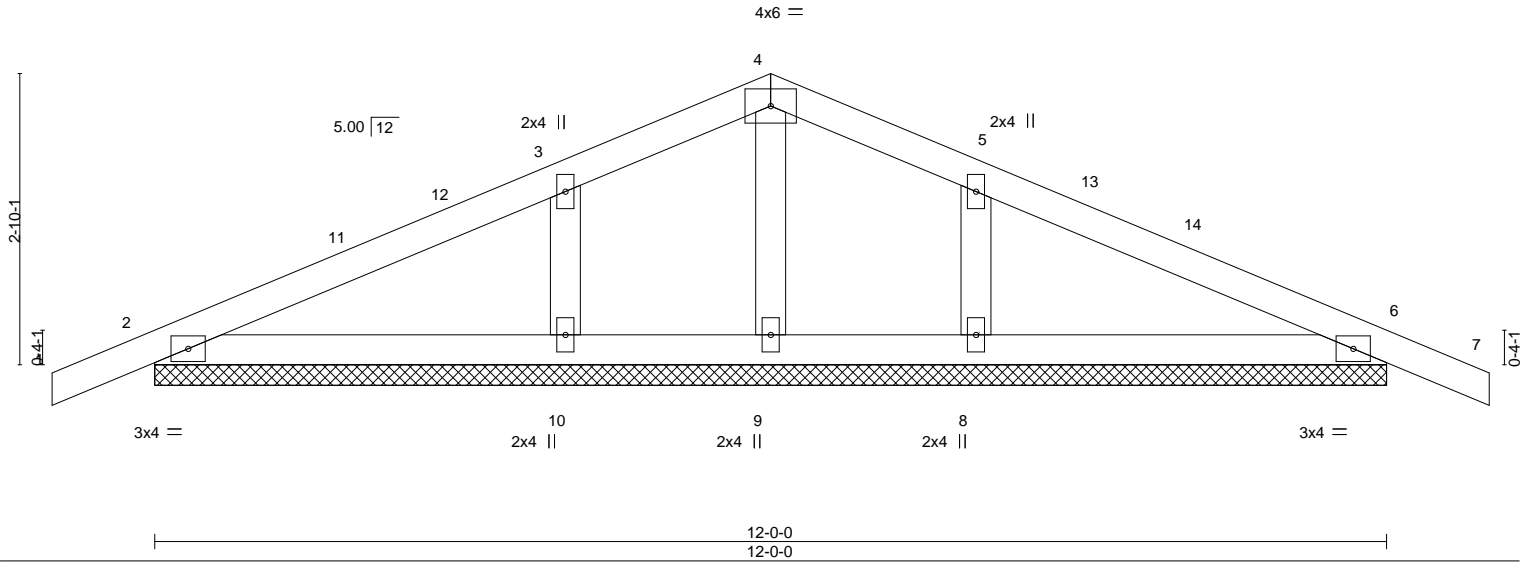
Job PC58	Truss SP01G	Truss Type GABLE	Qty 1	Ply 1	MATTAMYHOMES/SHENANDOAH; LOT 58 PROVIDENCE CREEK I49772662
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jan 18 19:37:20 2022 Page 1  
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Scale = 1:22.4



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)	0.00	7	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	0.01	7	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S						Weight: 48 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 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=-39(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 10, 8  
 Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 10=321(LC 1), 8=321(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; 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 9-0-0, Interior(1) 9-0-0 to 13-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) 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, 6, 10, 8.



**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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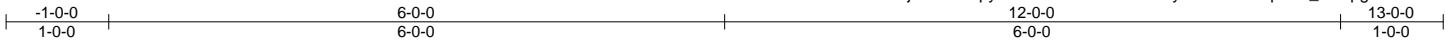


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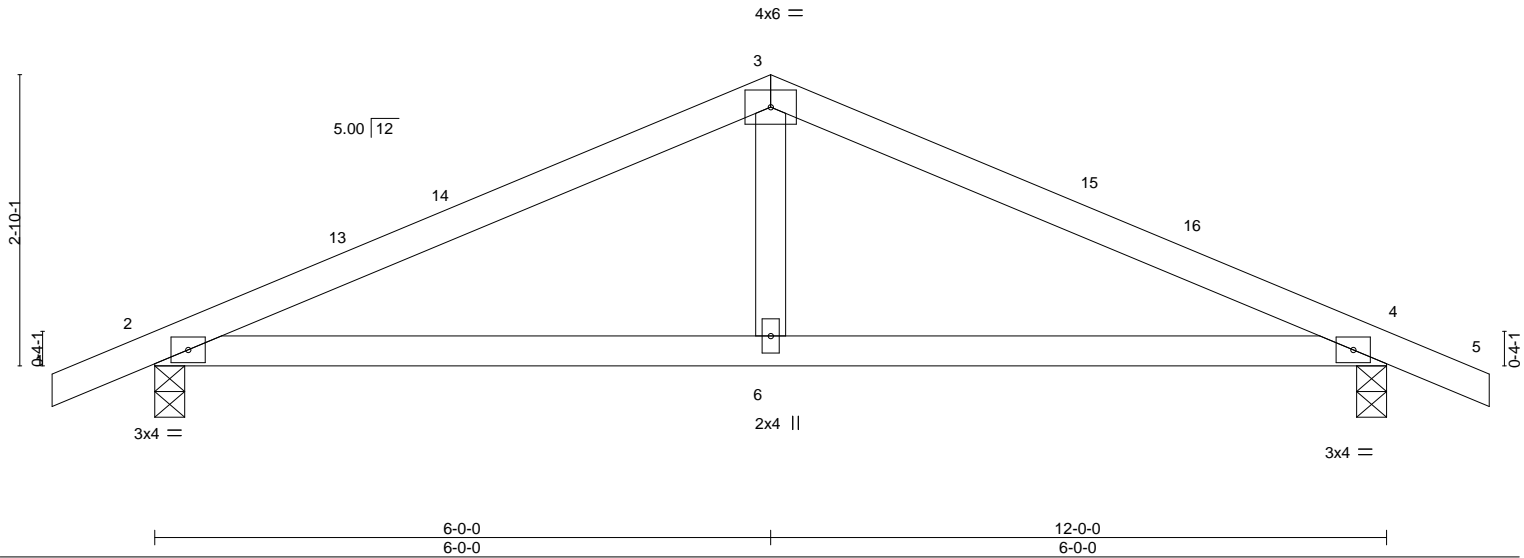
Job	Truss	Truss Type	Qty	Ply	MATTAMYHOMES/SHENANDOAH; LOT 58 PROVIDENCE CREEK 149772663
PC58	SP02	FINK	4	1	Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jan 18 19:37:21 2022 Page 1  
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Scale = 1:22.4



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 0.44	Vert(LL)	-0.05 6-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.46	Vert(CT)	-0.09 6-12	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.01 4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.04 6-9	>999	240		
								Weight: 44 lb	FT = 20%

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

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

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
Max Horz 2=-39(LC 13)  
Max Uplift 2=-32(LC 12), 4=-32(LC 13)  
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=-763/75, 3-4=-763/76  
BOT CHORD 2-6=0/652, 4-6=0/652  
WEBS 3-6=0/280

- 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 9-0-0, Interior(1) 9-0-0 to 13-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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, 4.



**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 PC58	Truss V01	Truss Type VALLEY	Qty 1	Ply 1	MATTAMYHOMES/SHENANDOAH; LOT 58 PROVIDENCE CREEK 149772664
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Builders FirstSource (Apex, NC),

Apex, NC - 27523,

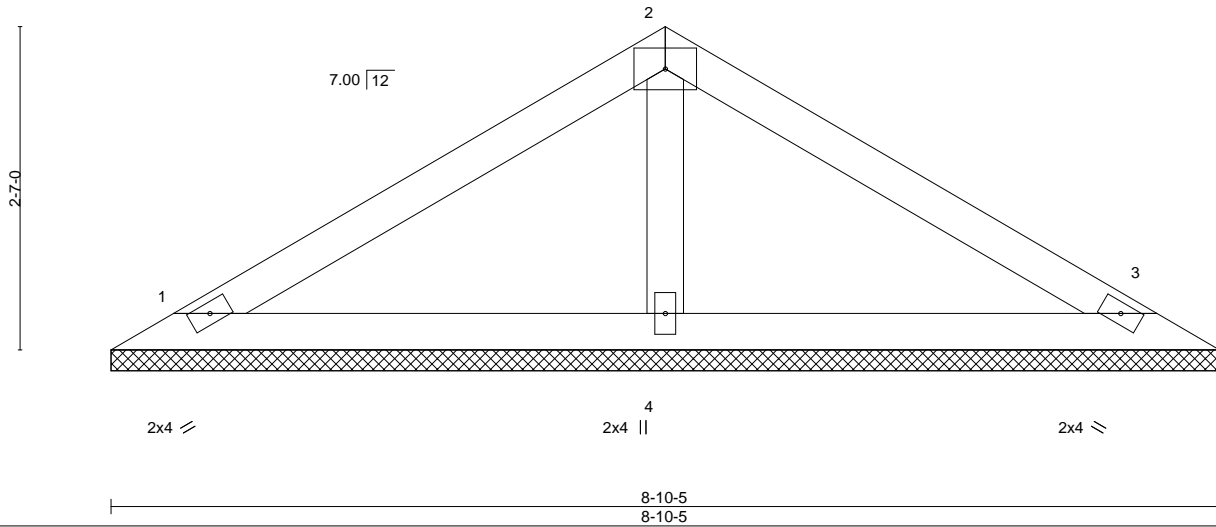
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4x6 =

Scale = 1:18.4



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.35	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.26	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2015/TPI2014						Weight: 30 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.** (size) 1=8-10-5, 3=8-10-5, 4=8-10-5  
 Max Horz 1=45(LC 9)  
 Max Uplift 1=-14(LC 12), 3=-20(LC 13)  
 Max Grav 1=146(LC 23), 3=146(LC 24), 4=330(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; TCDL=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.



January 20,2022

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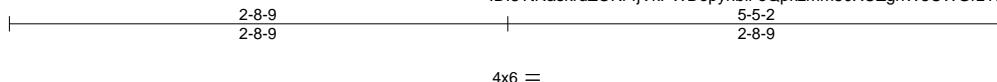
Job PC58	Truss V02	Truss Type VALLEY	Qty 1	Ply 1	MATTAMYHOMES/SHENANDOAH; LOT 58 PROVIDENCE CREEK 149772665
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Builders FirstSource (Apex, NC),

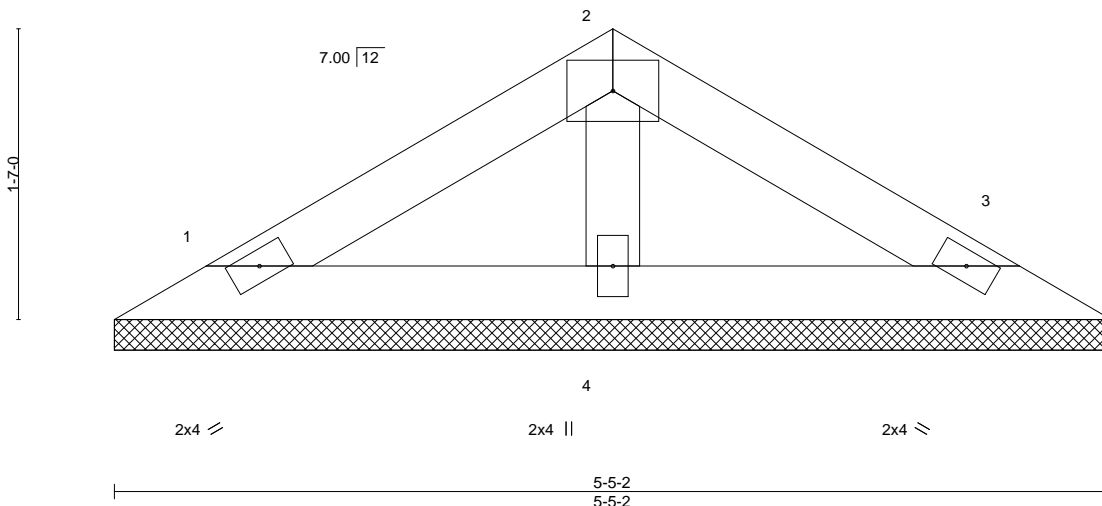
Apex, NC - 27523,

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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.14	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.08	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 17 lb	FT = 20%
	Code IRC2015/TPI2014							

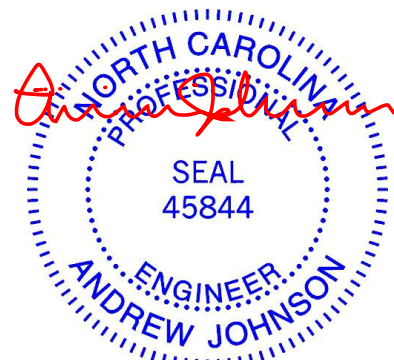
**LUMBER-**  
 TOP CHORD 2x4 SP No.3  
 BOT CHORD 2x4 SP No.3  
 OTHERS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-5-2 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=5-5-2, 3=5-5-2, 4=5-5-2  
 Max Horz 1=-25(LC 8)  
 Max Uplift 1=-11(LC 12), 3=-15(LC 13)  
 Max Grav 1=90(LC 1), 3=90(LC 1), 4=167(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.



January 20, 2022

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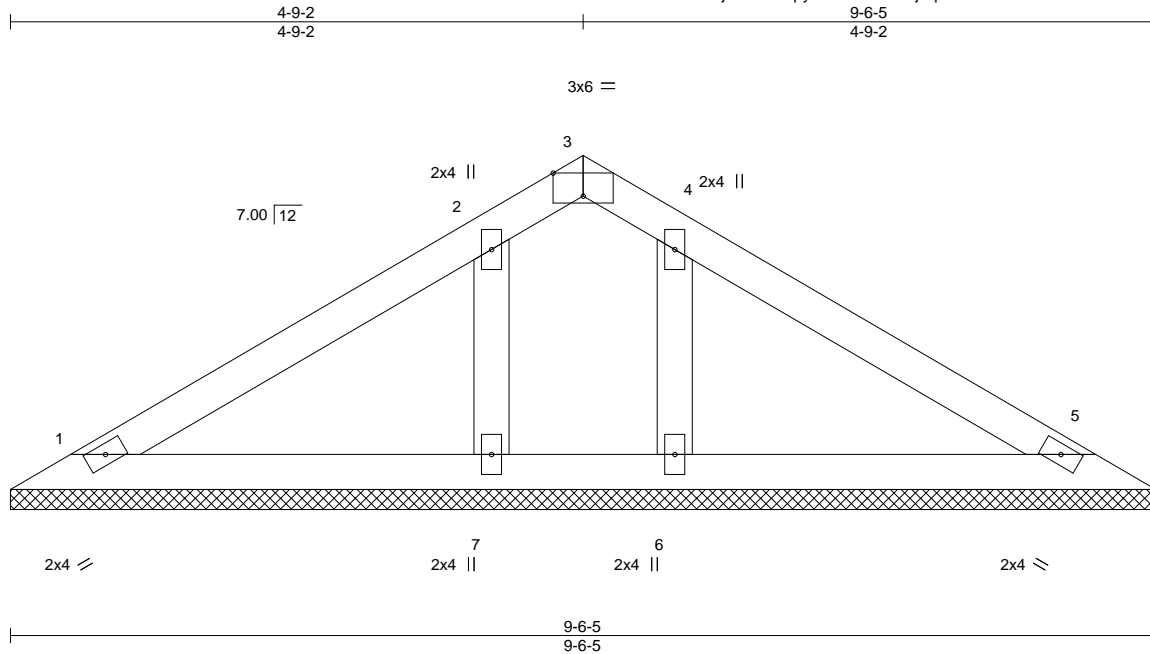


818 Soundside Road  
 Edenton, NC 27932

Job PC58	Truss V03	Truss Type VALLEY	Qty 1	Ply 1	MATTAMYHOMES/SHENANDOAH; LOT 58 PROVIDENCE CREEK I49772666
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jan 18 19:37:23 2022 Page 1  
ID:3TtRaskrdZOKr4jVkpWDepyhbi-GcN6B6njqKQlr5HmDn4WmULJcSaMvcU\_79g0Wzu0sg



Scale = 1:19.2

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	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 34 lb	FT = 20%

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

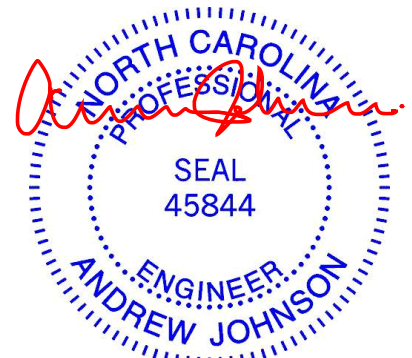
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 9-6-5 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** All bearings 9-6-5.  
(lb) - Max Horz 1=49(LC 10)  
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=272(LC 24), 7=272(LC 23)

**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) 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, 7.



January 20, 2022

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Edenton, NC 27932

Job PC58	Truss V04	Truss Type VALLEY	Qty 1	Ply 1	MATTAMYHOMES/SHENANDOAH; LOT 58 PROVIDENCE CREEK 149772667
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Builders FirstSource (Apex, NC),

Apex, NC - 27523,

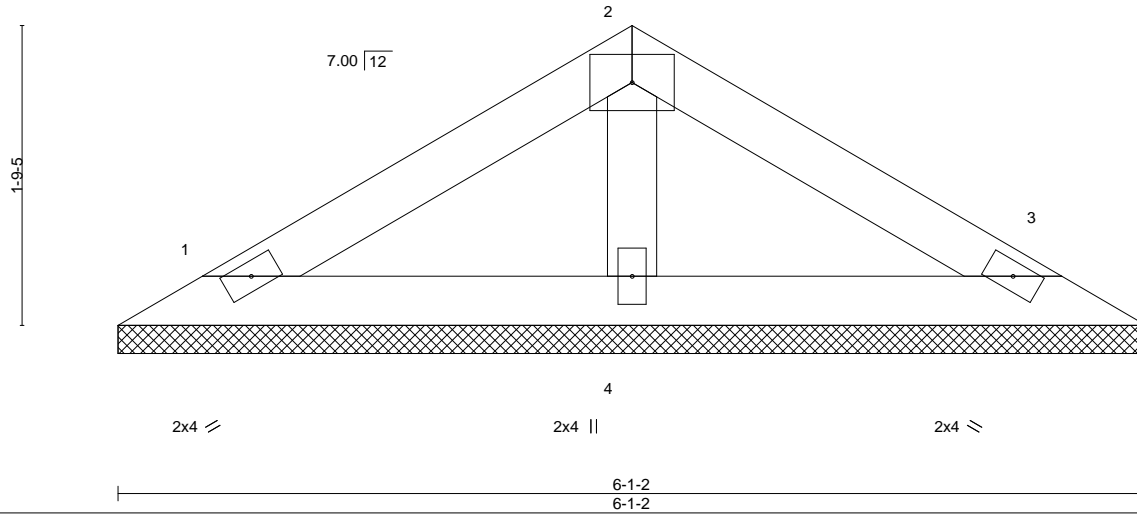
8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jan 18 19:37:24 2022 Page 1

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4x6 =

Scale = 1:13.7



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.19	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.11	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: 20 lb	FT = 20%
	Code IRC2015/TPI2014							

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

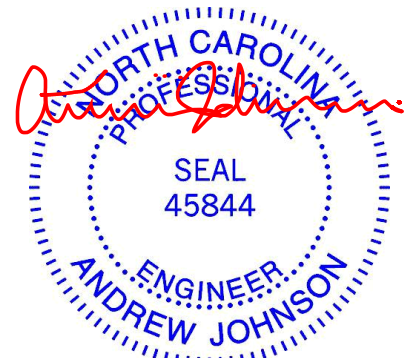
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=6-1-2, 3=6-1-2, 4=6-1-2  
 Max Horz 1=-29(LC 8)  
 Max Uplift 1=-13(LC 12), 3=-17(LC 13)  
 Max Grav 1=104(LC 1), 3=104(LC 1), 4=193(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; TCDL=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.



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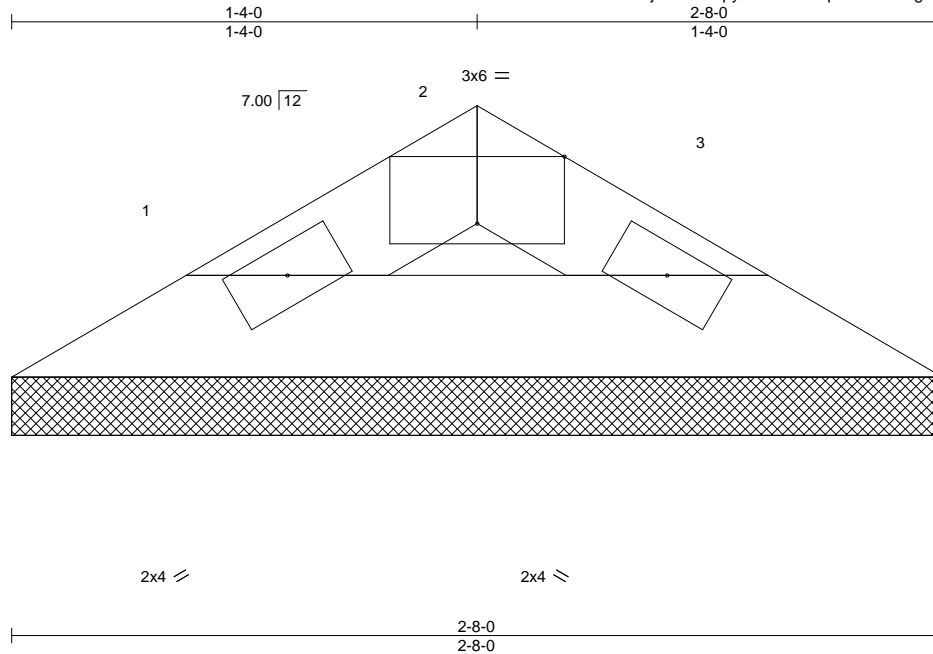


Job PC58	Truss V05	Truss Type VALLEY	Qty 1	Ply 1	MATTAMYHOMES/SHENANDOAH; LOT 58 PROVIDENCE CREEK 149772668
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Builders FirstSource (Apex, NC),

Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jan 18 19:37:25 2022 Page 1  
ID:3TtRaskrdZOKr4jVkpWDepyhii-C?VtbpzJSb8X8FgtepYbBZlwQAAlqpnnsRen4Pzu0se



Scale = 1:6.6

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.02	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.05	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 7 lb	FT = 20%

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

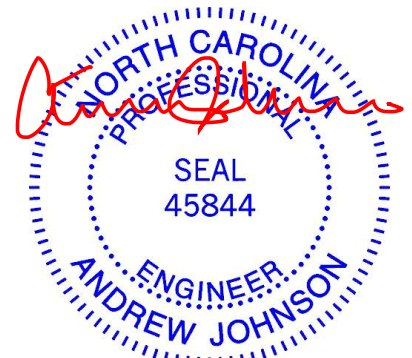
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-8-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=2-8-0, 3=2-8-0  
Max Horz 1=9(LC 8)  
Max Uplift 1=2(LC 12), 3=2(LC 13)  
Max Grav 1=64(LC 1), 3=64(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; TCDL=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.



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# 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/TFP 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/TFP 1 section 6.3 These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: Mill-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/TFP 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TFP 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. Rewriting pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TFP 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.