

RE: 2502469\_master - H&H/Wayfare/

Trenco  
 818 Soundside Rd  
 Edenton, NC 27932

**Site Information:**

Project Customer: h and h Project Name: 2502469  
 Lot/Block: Subdivision:  
 Model:  
 Address:  
 City: State: nc

**General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):**

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.2  
 Wind Code: ASCE 7-10 Wind Speed: 150 mph Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-10  
 Roof Load: 40.0 psf Floor Load: N/A psf

Mean Roof Height (feet): 25 Exposure Category: C

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I43319770	A07	10/23/20	35	I43319804	G07	10/23/20
2	I43319771	A08	10/23/20	36	I43319805	G08	10/23/20
3	I43319772	A15	10/23/20	37	I43319806	G09	10/23/20
4	I43319773	A16	10/23/20	38	I43319807	G10	10/23/20
5	I43319774	A17	10/23/20	39	I43319808	G11	10/23/20
6	I43319775	A18	10/23/20	40	I43319809	G12	10/23/20
7	I43319776	A19	10/23/20	41		G13	10/23/20
8	I43319777	A20	10/23/20		I43319811	G14	10/23/20
9	I43319778	B01	10/23/20	43	I43319812	G15	10/23/20
10	I43319779	B02	10/23/20	44	I43319813	G16	10/23/20
11	I43319780	B03	10/23/20	45	I43319814	G17	10/23/20
12	I43319781	C01	10/23/20	46	I43319815	G18	10/23/20
13	I43319782	C02	10/23/20	47	I43319816	H01	10/23/20
14	I43319783		10/23/20	48	I43319817	H02	10/23/20
	I43319784	C04	10/23/20	49	I43319818	H03	10/23/20
16	I43319785	C05	10/23/20	50	I43319819	H04	10/23/20
17	I43319786	D01	10/23/20		I43319820	H05	10/23/20
18	I43319787		10/23/20	52	I43319821	H06	10/23/20
19	I43319788	D03	10/23/20	53	I43319822	J01	10/23/20
20	I43319789	D04	10/23/20	54	I43319823	J05	10/23/20
21	I43319790	D05	10/23/20	55	I43319824	M01	10/23/20
22	I43319791	D06	10/23/20	56	I43319825	M02	10/23/20
23	I43319792	D07	10/23/20	57	I43319826	PB01	10/23/20
	I43319793	D08	10/23/20	58	I43319827	PB02	10/23/20
25	I43319794	D09	10/23/20	59	I43319828	PB03	10/23/20
26	I43319795	E04	10/23/20				
27	I43319796	E05	10/23/20				
28	I43319797	G01	10/23/20				
29	I43319798	G02	10/23/20				
30	I43319799	G02A	10/23/20				
31	I43319800	G03	10/23/20				
32		G04	10/23/20				
	I43319802	G05	10/23/20				
34	I43319803	G06	10/23/20				

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

Truss Design Engineer's Name: Sevier, Scott

My license renewal date for the state of North Carolina is December 31, 2020.

**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.



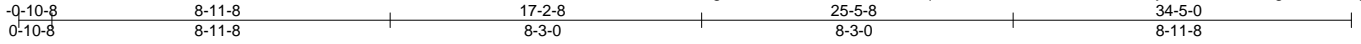
October 23,2020

Job 2502469_MASTER	Truss A07	Truss Type COMMON	Qty 9	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319770
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Builders FirstSource, Sumter, SC - 29153,

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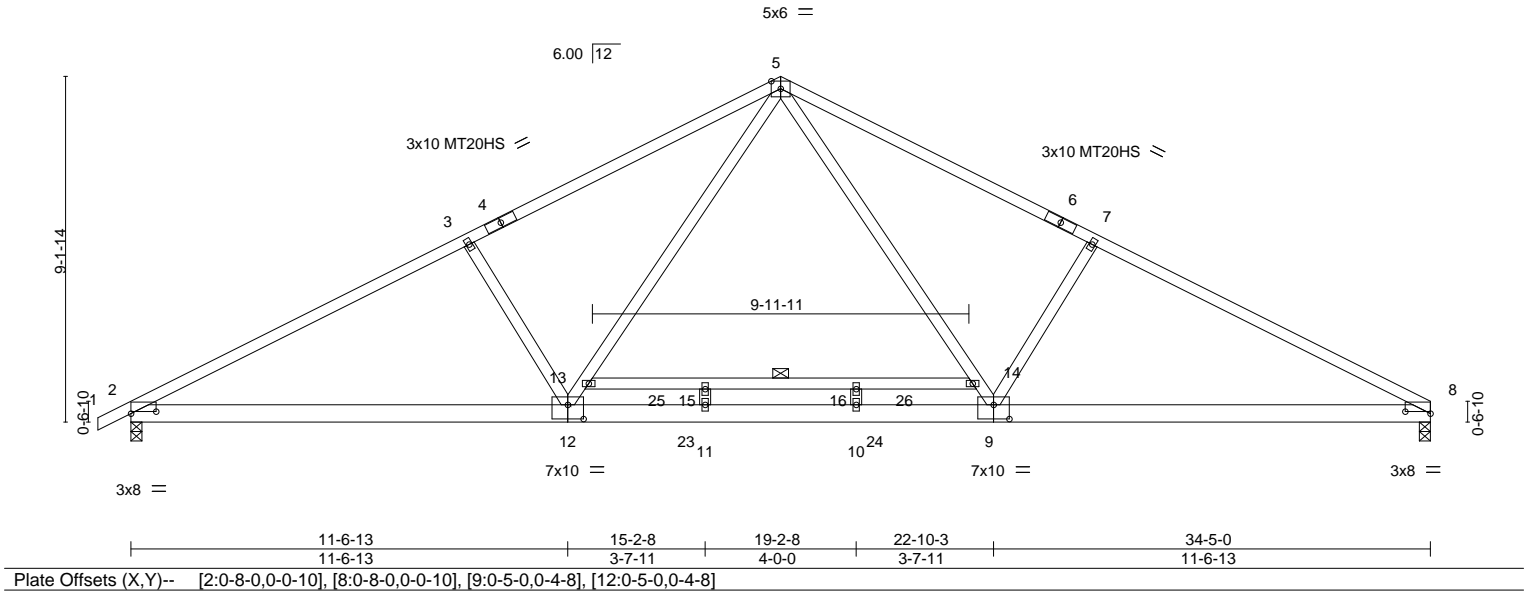


Plate Offsets (X,Y)--	[2:0-8-0,0-0-10], [8:0-8-0,0-0-10], [9:0-5-0,0-4-8], [12:0-5-0,0-4-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.97	Vert(LL) -0.30 10-11 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.99	Vert(CT) -0.58 10-11 >707 240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr NO	WB 0.93	Horz(CT) 0.06 8 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.16 9-22 >999 240		
				Weight: 201 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3 *Except*	WEBS 1 Row at midpt 13-14
13-14: 2x4 SP No.2	

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=177(LC 11)  
 Max Uplift 2=-246(LC 12), 8=-222(LC 13)  
 Max Grav 2=1530(LC 1), 8=1476(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2620/1369, 3-5=-2363/1370, 5-7=-2365/1373, 7-8=-2622/1372  
 BOT CHORD 2-12=-1035/2254, 11-12=-511/1627, 10-11=-511/1627, 9-10=-511/1627, 8-9=-1038/2250  
 WEBS 5-14=-428/1040, 9-14=-420/932, 7-9=-495/675, 12-13=-414/930, 5-13=-423/1039, 3-12=-494/674

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; 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
  - 200.0lb AC unit load placed on the bottom chord, 17-2-8 from left end, supported at two points, 5-0-0 apart.
  - All plates are MT20 plates unless otherwise indicated.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - 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) 2=246, 8=222.
  - Load case(s) 2, 3, 19, 20, 21, 22, 25, 26 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-5=-60, 5-8=-60, 17-20=-20



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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	H&H/Wayfare/
2502469_MASTER	A07	COMMON	9	1	I43319770

Builders FirstSource, Sumter, SC - 29153,

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**LOAD CASE(S)** Standard

- Concentrated Loads (lb)  
Vert: 23=-100 24=-100
- 2) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-50, 5-8=-50, 17-20=-20, 25-26=-30  
Concentrated Loads (lb)  
Vert: 23=-100 24=-100
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-5=-20, 5-8=-20, 17-20=-40, 25-26=-40  
Concentrated Loads (lb)  
Vert: 23=-100 24=-100
- 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, 2-5=-53, 5-8=-39, 17-20=-20, 25-26=-30  
Horz: 1-2=-4, 2-5=3, 5-8=11  
Concentrated Loads (lb)  
Vert: 23=-100 24=-100
- 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=-31, 2-5=-39, 5-8=-53, 17-20=-20, 25-26=-30  
Horz: 1-2=-19, 2-5=-11, 5-8=-3  
Concentrated Loads (lb)  
Vert: 23=-100 24=-100
- 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=-21, 2-5=-29, 5-8=-42, 17-20=-20, 25-26=-30  
Horz: 1-2=-29, 2-5=-21, 5-8=8  
Concentrated Loads (lb)  
Vert: 23=-100 24=-100
- 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=-35, 2-5=-42, 5-8=-29, 17-20=-20, 25-26=-30  
Horz: 1-2=-15, 2-5=-8, 5-8=21  
Concentrated Loads (lb)  
Vert: 23=-100 24=-100
- 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: 1-5=-50, 5-8=-20, 17-20=-20, 25-26=-30  
Concentrated Loads (lb)  
Vert: 23=-100 24=-100
- 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: 1-5=-20, 5-8=-50, 17-20=-20, 25-26=-30  
Concentrated Loads (lb)  
Vert: 23=-100 24=-100

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818 Soundside Road  
Edenton, NC 27932

Job 2502469_MASTER	Truss A08	Truss Type COMMON	Qty 6	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319771
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:34:41 2020 Page 1  
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0-10-8 8-11-8 17-2-8 25-5-8 34-5-0 35-3-8  
0-10-8 8-11-8 8-3-0 8-3-0 8-11-8 0-10-8

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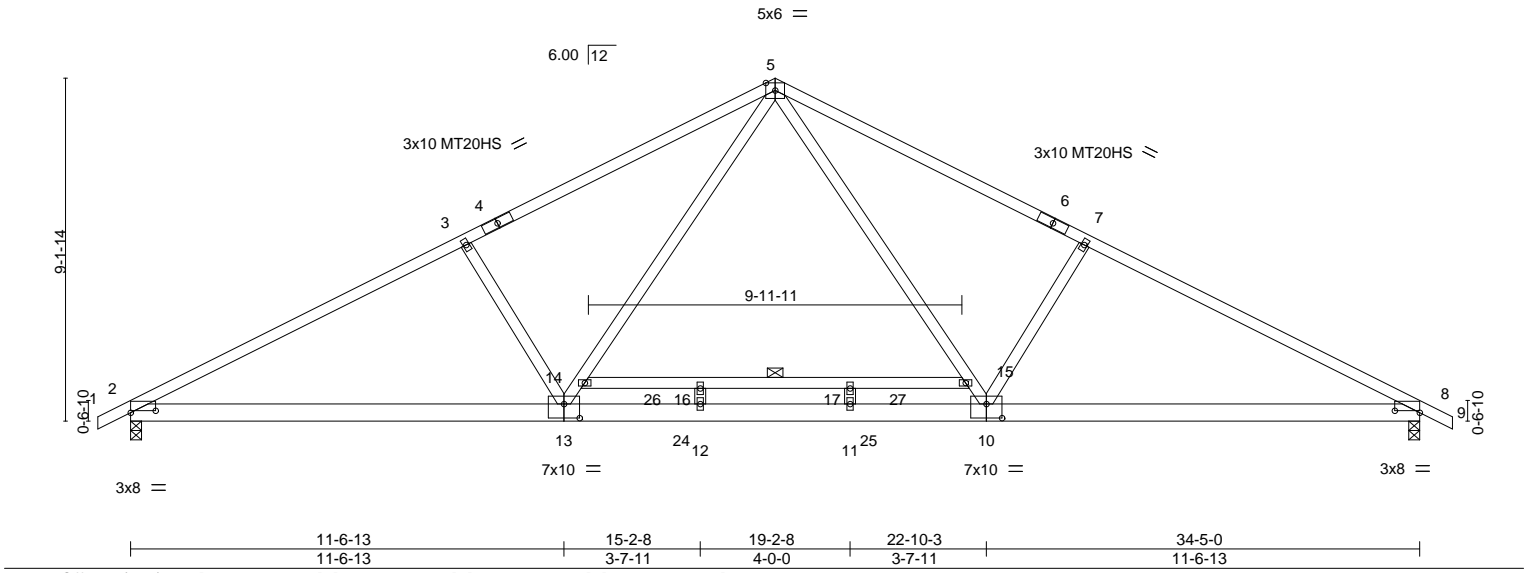


Plate Offsets (X,Y)--	[2:0-8-0,0-0-10], [8:0-8-0,0-0-10], [10:0-5-0,0-4-8], [13:0-5-0,0-4-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.96	Vert(LL) -0.30 11-12 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.99	Vert(CT) -0.58 11-12 >707 240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr NO	WB 0.91	Horz(CT) 0.06 8 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.16 10-23 >999 240		Weight: 202 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3 *Except*	WEBS 1 Row at midpt 14-15
14-15: 2x4 SP No.2	

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
Max Horz 2=175(LC 11)  
Max Uplift 2=-245(LC 12), 8=-245(LC 13)  
Max Grav 2=1529(LC 1), 8=1529(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2618/1367, 3-5=-2361/1368, 5-7=-2361/1368, 7-8=-2618/1367  
BOT CHORD 2-13=-1001/2261, 12-13=-479/1625, 11-12=-479/1625, 10-11=-479/1625,  
8-10=-1004/2246  
WEBS 5-15=-425/1039, 10-15=-416/931, 7-10=-494/673, 13-14=-416/931, 5-14=-425/1039,  
3-13=-494/673

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; 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
  - 200.0lb AC unit load placed on the bottom chord, 17-2-8 from left end, supported at two points, 5-0-0 apart.
  - All plates are MT20 plates unless otherwise indicated.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - 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) 2=245, 8=245.
  - Load case(s) 2, 3, 19, 20, 21, 22, 25, 26 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard  
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-60, 5-9=-60, 18-21=-20



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	H&H/Wayfare/
2502469_MASTER	A08	COMMON	6	1	I43319771
					Job Reference (optional)

Builders FirstSource, Sumter, SC - 29153,

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**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 24=-100 25=-100

2) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-5=-50, 5-9=-50, 18-21=-20, 26-27=-30

Concentrated Loads (lb)

Vert: 24=-100 25=-100

3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-5=-20, 5-9=-20, 18-21=-40, 26-27=-40

Concentrated Loads (lb)

Vert: 24=-100 25=-100

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, 2-5=-53, 5-8=-39, 8-9=-31, 18-21=-20, 26-27=-30

Horz: 1-2=-4, 2-5=3, 5-8=11, 8-9=19

Concentrated Loads (lb)

Vert: 24=-100 25=-100

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=-31, 2-5=-39, 5-8=-53, 8-9=-46, 18-21=-20, 26-27=-30

Horz: 1-2=-19, 2-5=-11, 5-8=-3, 8-9=4

Concentrated Loads (lb)

Vert: 24=-100 25=-100

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=-21, 2-5=-29, 5-8=-42, 8-9=-35, 18-21=-20, 26-27=-30

Horz: 1-2=-29, 2-5=-21, 5-8=8, 8-9=15

Concentrated Loads (lb)

Vert: 24=-100 25=-100

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=-35, 2-5=-42, 5-8=-29, 8-9=-21, 18-21=-20, 26-27=-30

Horz: 1-2=-15, 2-5=-8, 5-8=21, 8-9=29

Concentrated Loads (lb)

Vert: 24=-100 25=-100

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: 1-5=-50, 5-9=-20, 18-21=-20, 26-27=-30

Concentrated Loads (lb)

Vert: 24=-100 25=-100

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: 1-5=-20, 5-9=-50, 18-21=-20, 26-27=-30

Concentrated Loads (lb)

Vert: 24=-100 25=-100

**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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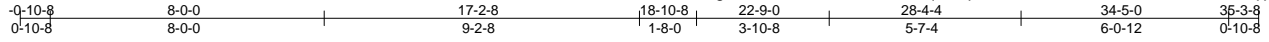
818 Soundside Road  
Edenton, NC 27932

Job 2502469_MASTER	Truss A15	Truss Type HIP	Qty 6	Ply 1	H&H/Wayfare/ Job Reference (optional)	143319772
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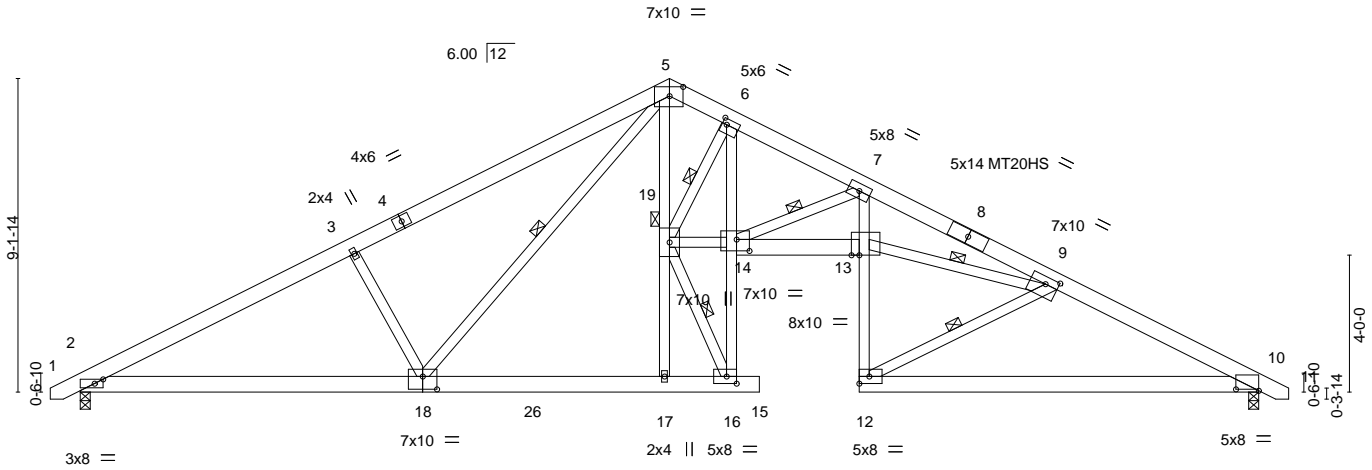


Plate Offsets (X,Y)--	[2:0-3-0,Edge], [5:0-4-12,0-3-4], [6:0-1-8,0-2-0], [9:0-4-8,0-2-8], [10:0-8-0,0-0-8], [13:0-2-12,0-0-0], [14:0-4-8,0-4-0], [16:0-3-8,0-2-8], [18:0-5-0,0-4-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.59	Vert(LL) -0.47	15	>883	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.85	Vert(CT) -0.94	15	>439	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr YES	WB 0.93	Horz(CT) 0.68	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.56	12	>742	240		
							Weight: 267 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x6 SP No.2 *Except* 6-16,7-12: 2x4 SP No.1, 13-14: 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied. Except: 5-9-0 oc bracing: 14-16
WEBS 2x4 SP No.3 *Except* 9-13: 2x4 SP No.1, 14-19: 2x4 SP No.2	WEBS 1 Row at midpt 5-18, 7-14, 9-13, 9-12, 6-19, 16-19
	JOINTS 1 Brace at Jt(s): 19

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=173(LC 11)  
 Max Uplift 2=-337(LC 12), 10=-335(LC 13)  
 Max Grav 2=1425(LC 1), 10=1427(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2486/1681, 3-5=-2305/1717, 5-6=-1531/1275, 6-7=-3517/2136, 7-9=-6414/3744, 9-10=-2532/1738  
 BOT CHORD 2-18=-1320/2181, 17-18=-581/1419, 16-17=-575/1404, 14-16=-1147/2866, 6-14=-1762/3846, 13-14=-2945/5666, 12-13=-733/1339, 7-13=-1219/2351, 10-12=-1386/2235  
 WEBS 3-18=-516/689, 5-18=-659/830, 7-14=-2786/1738, 9-13=-2961/5590, 9-12=-2439/1552, 6-19=-3504/1604, 16-19=-3121/1271, 17-19=0/263, 5-19=-299/678, 14-19=-1312/3019

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; 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
  - All plates are MT20 plates unless otherwise indicated.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=337, 10=335.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 23, 2020

Job 2502469_MASTER	Truss A16	Truss Type HIP	Qty 4	Ply 1	H&H/Wayfare/ Job Reference (optional)	143319773
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Builders FirstSource, Sumter, SC - 29153,

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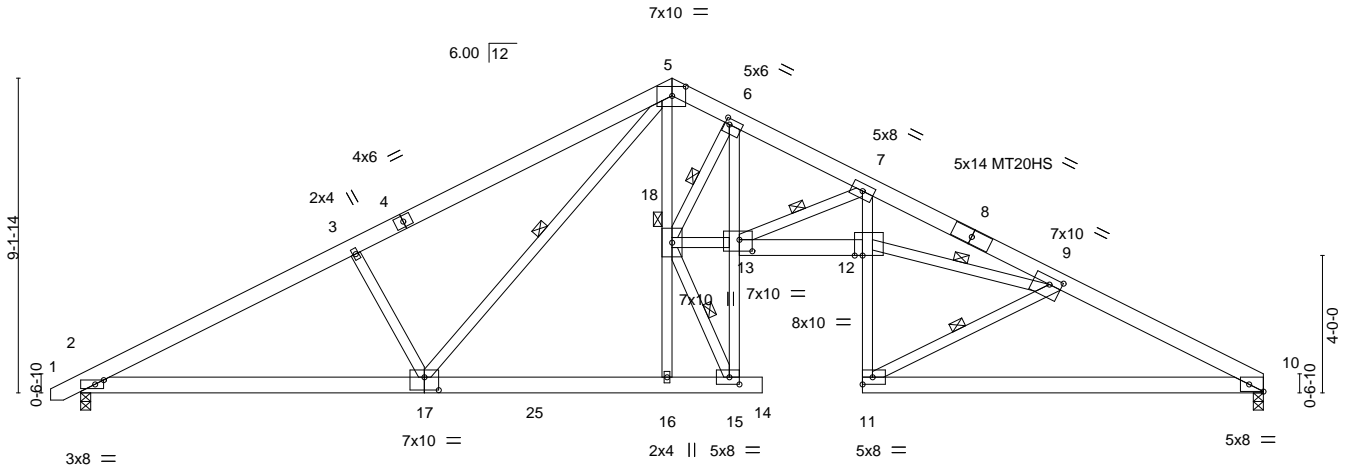


Plate Offsets (X,Y)--	[2:0-3-0,Edge], [5:0-4-12,0-3-4], [6:0-1-8,0-2-0], [9:0-4-4,0-2-8], [10:0-5-0,Edge], [12:0-2-12,0-0-0], [13:0-4-8,0-4-0], [15:0-3-8,0-2-8], [17:0-5-0,0-4-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.59	Vert(LL) -0.47	14	>882	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.85	Vert(CT) -0.94	14	>439	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr YES	WB 0.93	Horz(CT) 0.68	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.56	11	>731	240		
							Weight: 265 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x6 SP No.2 *Except* 6-15,7-11: 2x4 SP No.1, 12-13: 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied. Except: 5-8-0 oc bracing: 13-15
WEBS 2x4 SP No.3 *Except* 9-12: 2x4 SP No.1, 13-18: 2x4 SP No.2	WEBS 1 Row at midpt 5-17, 7-13, 9-12, 9-11, 6-18, 15-18
	JOINTS 1 Brace at Jt(s): 18

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=175(LC 9)  
 Max Uplift 2=-337(LC 12), 10=-317(LC 13)  
 Max Grav 2=1425(LC 1), 10=1385(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2487/1683, 3-5=-2306/1719, 5-6=-1532/1278, 6-7=-3520/2166, 7-9=-6419/3807, 9-10=-2535/1743  
 BOT CHORD 2-17=-1347/2182, 16-17=-605/1420, 15-16=-599/1405, 13-15=-1197/2868, 6-13=-1821/3849, 12-13=-3024/5670, 11-12=-749/1342, 7-12=-1249/2354, 10-11=-1414/2239  
 WEBS 3-17=-516/689, 5-17=-659/830, 7-13=-2789/1768, 9-12=-3038/5594, 9-11=-2444/1583, 6-18=-3507/1657, 15-18=-3122/1325, 16-18=0/263, 5-18=-300/679, 13-18=-1361/3021

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - All plates are MT20 plates unless otherwise indicated.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=337, 10=317.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 23, 2020

Job 2502469_MASTER	Truss A17	Truss Type Common Supported Gable	Qty 3	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319774
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Builders FirstSource, Sumter, SC - 29153,

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Scale = 1:59.9

Plate Offsets (X,Y)-- [15:0-0-0,0-0-0]

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 0.18	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.01	20	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S							
								Weight: 245 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 2x6 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 11-29

**REACTIONS.** All bearings 34-5-0.  
 (lb) - Max Horz 2=279(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 36, 22 except 30=123(LC 12), 31=129(LC 12), 33=125(LC 12), 34=124(LC 12), 35=132(LC 12), 37=214(LC 12), 28=119(LC 13), 27=131(LC 13), 25=125(LC 13), 24=124(LC 13), 23=133(LC 13), 21=222(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 29, 30, 31, 33, 34, 35, 36, 37, 28, 27, 25, 24, 23, 22, 20 except 21=262(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-344/106, 8-9=-99/303, 9-10=-130/392, 10-11=-159/470, 11-12=-159/472, 12-13=-130/394, 13-14=-99/305, 19-20=-268/91  
 BOT CHORD 2-37=-86/291, 36-37=-86/291, 35-36=-86/291, 34-35=-86/291, 33-34=-86/291, 31-33=-86/291, 30-31=-86/291, 29-30=-86/291, 28-29=-86/291, 27-28=-86/291, 25-27=-86/291, 24-25=-86/291, 23-24=-86/291, 22-23=-86/291, 21-22=-86/291, 20-21=-86/291  
 WEBS 10-30=-128/274, 3-37=-169/313, 12-28=-128/274, 19-21=-182/385

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-10-8 to 2-6-13, Exterior(2) 2-6-13 to 17-2-8, Corner(3) 17-2-8 to 20-7-13, Exterior(2) 20-7-13 to 34-5-0 zone; 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, 36, 22 except (jt=lb) 30=123, 31=129, 33=125, 34=124, 35=132, 37=214, 28=119, 27=131, 25=125, 24=124, 23=133, 21=222.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 20.



October 23, 2020

**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

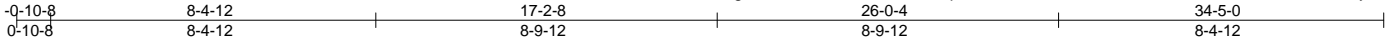


Job 2502469_MASTER	Truss A18	Truss Type Common	Qty 20	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319775
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:34:52 2020 Page 1

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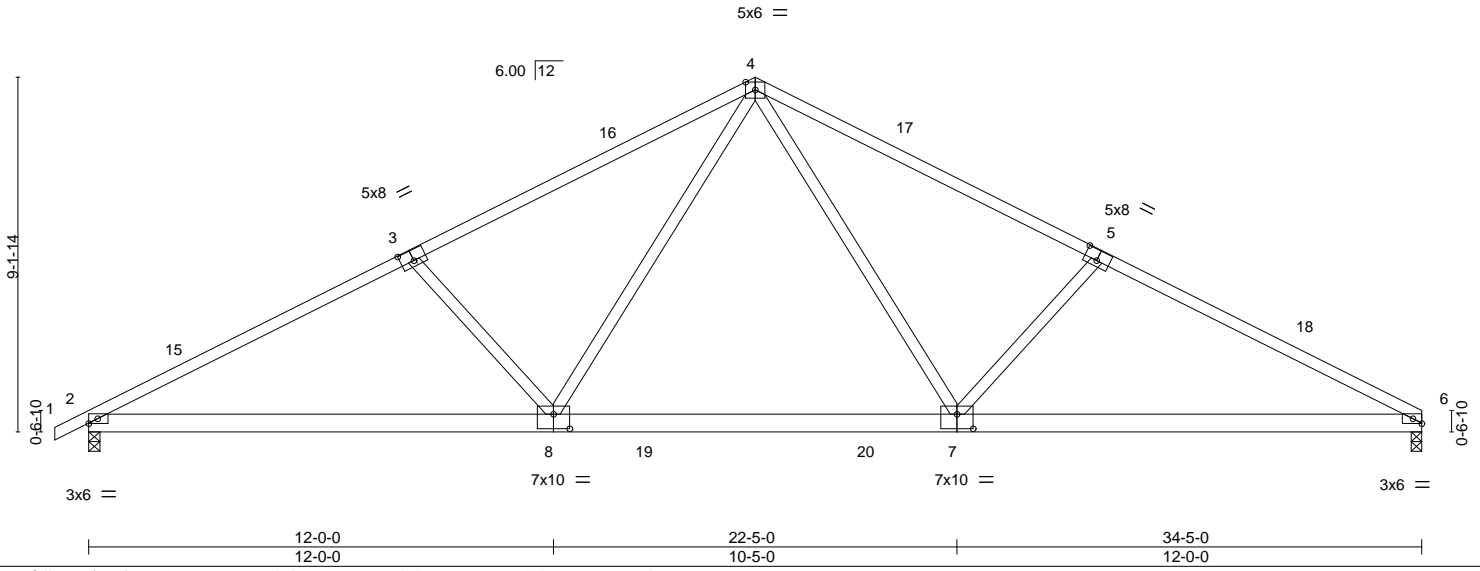


Plate Offsets (X,Y)-- [3:0-4-0,0-3-4], [5:0-4-0,0-3-4], [7:0-5-0,0-4-8], [8:0-5-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.88	Vert(LL) -0.22	7-8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.64	Vert(CT) -0.34	7-14	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.85	Horz(CT) 0.06	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.17	8-11	>999	240		
							Weight: 185 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.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (size) 2=0-3-8, 6=0-3-4  
Max Horz 2=284(LC 16)  
Max Uplift 2=661(LC 12), 6=619(LC 13)  
Max Grav 2=1430(LC 1), 6=1376(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2403/1085, 3-4=-2072/1022, 4-5=-2075/1040, 5-6=-2406/1104  
BOT CHORD 2-8=-1070/2067, 7-8=-445/1373, 6-7=-822/2070  
WEBS 4-7=-425/771, 5-7=-524/634, 4-8=-422/768, 3-8=-523/633

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-6-13, Interior(1) 2-6-13 to 17-2-8, Exterior(2) 17-2-8 to 20-7-13, Interior(1) 20-7-13 to 34-5-0 zone; end vertical left 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=661, 6=619.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 23, 2020

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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/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



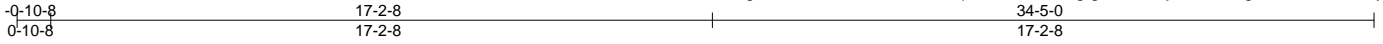
818 Soundside Road  
Edenton, NC 27932

Job 2502469_MASTER	Truss A19	Truss Type Common Supported Gable	Qty 4	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319776
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Builders FirstSource, Sumter, SC - 29153,

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Scale = 1:59.9

<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 0.18	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	YES	WB 0.15	Horz(CT)	0.01	20	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 245 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 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.  
WEBS 1 Row at midpt 11-29

**REACTIONS.**

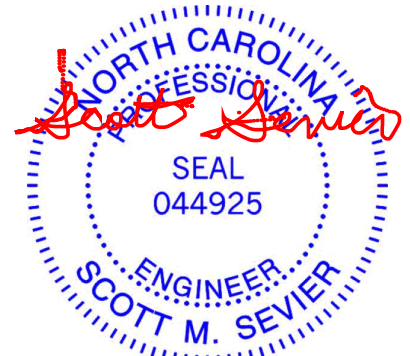
All bearings 34-5-0.  
(lb) - Max Horz 2=279(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 36, 22 except 30=123(LC 12), 31=129(LC 12), 33=125(LC 12), 34=124(LC 12), 35=132(LC 12), 37=214(LC 12), 28=119(LC 13), 27=131(LC 13), 25=125(LC 13), 24=124(LC 13), 23=133(LC 13), 21=222(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 2, 29, 30, 31, 33, 34, 35, 36, 37, 28, 27, 25, 24, 23, 22, 20 except 21=262(LC 24)

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

TOP CHORD 2-3=344/106, 8-9=99/303, 9-10=130/392, 10-11=159/470, 11-12=159/472, 12-13=130/394, 13-14=99/305, 19-20=268/91  
BOT CHORD 2-37=86/291, 36-37=86/291, 35-36=86/291, 34-35=86/291, 33-34=86/291, 31-33=86/291, 30-31=86/291, 29-30=86/291, 28-29=86/291, 27-28=86/291, 25-27=86/291, 24-25=86/291, 23-24=86/291, 22-23=86/291, 21-22=86/291, 20-21=86/291  
WEBS 10-30=128/274, 3-37=169/313, 12-28=128/274, 19-21=182/385

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-10-8 to 2-6-13, Exterior(2) 2-6-13 to 17-2-8, Corner(3) 17-2-8 to 20-7-13, Exterior(2) 20-7-13 to 34-5-0 zone; 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, 36, 22 except (jt=lb) 30=123, 31=129, 33=125, 34=124, 35=132, 37=214, 28=119, 27=131, 25=125, 24=124, 23=133, 21=222.



October 23, 2020

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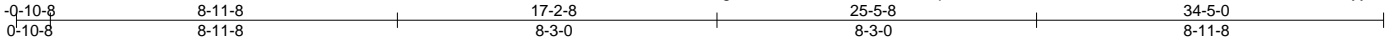


818 Soundside Road  
Edenton, NC 27932

Job 2502469_MASTER	Truss A20	Truss Type COMMON	Qty 15	Ply 1	H&H/Wayfare/ Job Reference (optional)	143319777
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:34:57 2020 Page 1  
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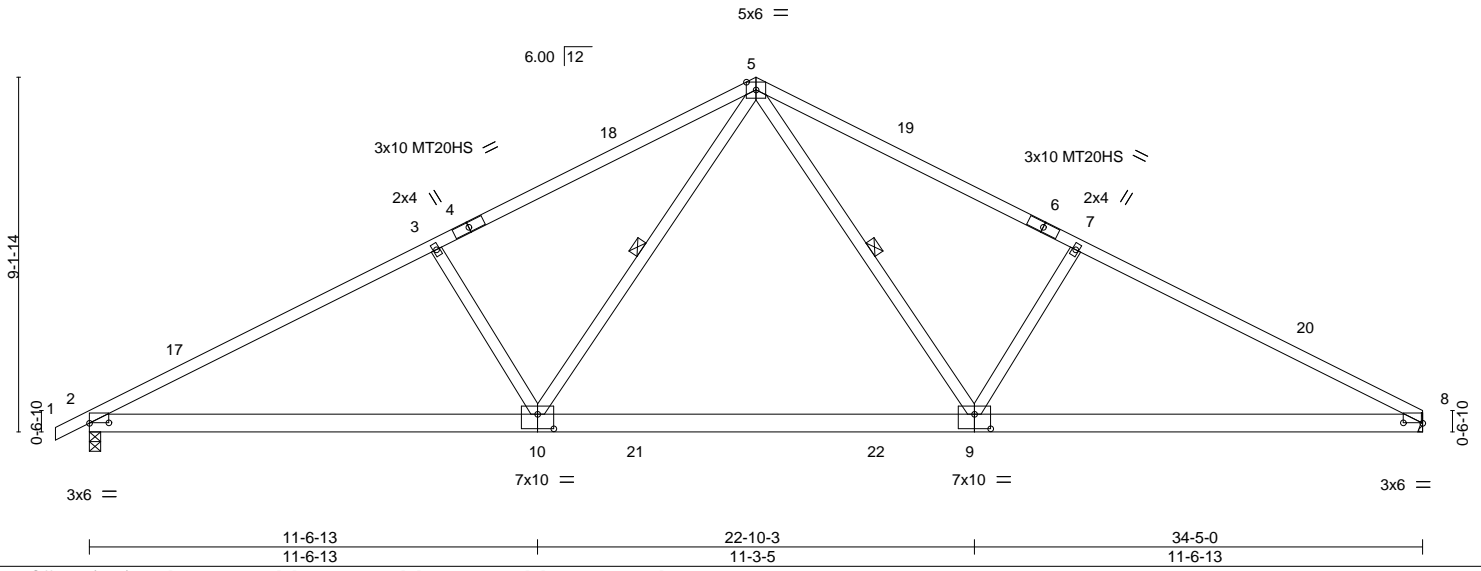


Plate Offsets (X,Y)-- [2:0-6-0,0-0-2], [8:0-6-0,0-0-2], [9:0-5-0,0-4-8], [10:0-5-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.76	Vert(LL) -0.26	9-10	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.64	Vert(CT) -0.39	9-10	>999	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr YES	WB 0.35	Horz(CT) 0.05	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.19	9-16	>999	240		Weight: 184 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.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 5-9, 5-10

**REACTIONS.** (size) 2=0-3-8, 8=Mechanical  
Max Horz 2=284(LC 12)  
Max Uplift 2=661(LC 12), 8=619(LC 13)  
Max Grav 2=1430(LC 1), 8=1376(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2385/1055, 3-5=-2128/1071, 5-7=-2131/1090, 7-8=-2388/1075  
BOT CHORD 2-10=-1022/2041, 9-10=-444/1366, 8-9=-785/2043  
WEBS 5-9=-499/850, 7-9=-504/615, 5-10=-495/846, 3-10=-503/614

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-6-13, Interior(1) 2-6-13 to 17-2-8, Exterior(2) 17-2-8 to 20-7-13, Interior(1) 20-7-13 to 34-5-0 zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - All plates are MT20 plates unless otherwise indicated.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=661, 8=619.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 23, 2020

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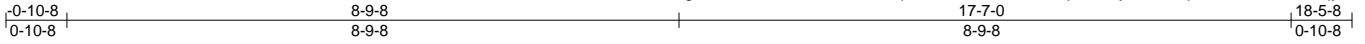


818 Soundside Road  
Edenton, NC 27932

Job 2502469_MASTER	Truss B01	Truss Type GABLE	Qty 2	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319778
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:34:59 2020 Page 1  
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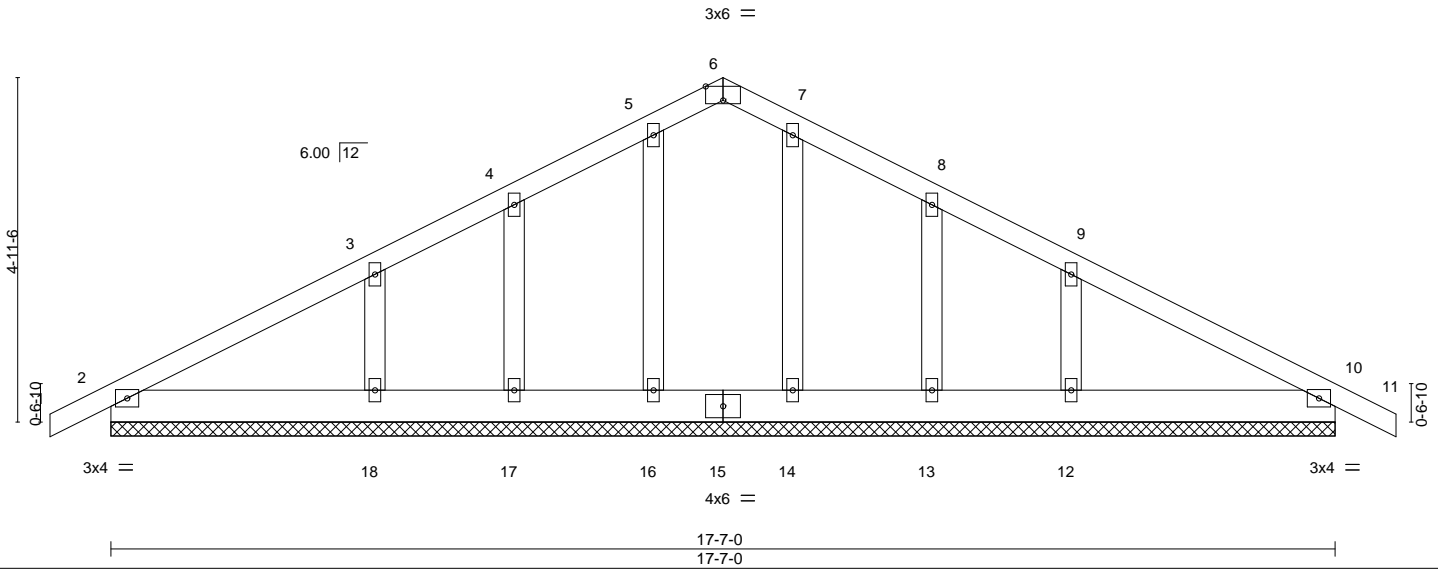


Plate Offsets (X,Y)-- [6:0-3-0,Edge]

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 0.15	Vert(LL)	0.00	11	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	0.00	11	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 98 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 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 17-7-0.  
(lb) - Max Horz 2=145(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 17, 14, 13, 10 except 18=240(LC 12), 12=238(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 2, 16, 17, 14, 13, 10 except 18=295(LC 23), 12=295(LC 24)

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

WEBS 3-18=196/277, 9-12=196/277

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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, 16, 17, 14, 13, 10 except (jt=lb) 18=240, 12=238.



October 23, 2020

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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



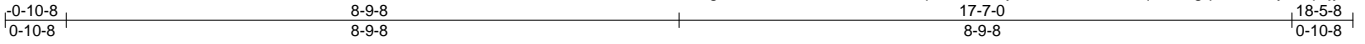
818 Soundside Road  
Edenton, NC 27932

Job 2502469_MASTER	Truss B02	Truss Type COMMON	Qty 2	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319779
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:01 2020 Page 1

ID:5gbe\_Q0JNoiH4zfeQirvLHzQqXF-IWw7cyYdFhQP2NQVfNqdKhl6gqb1dMdOyOxxGjyQu90



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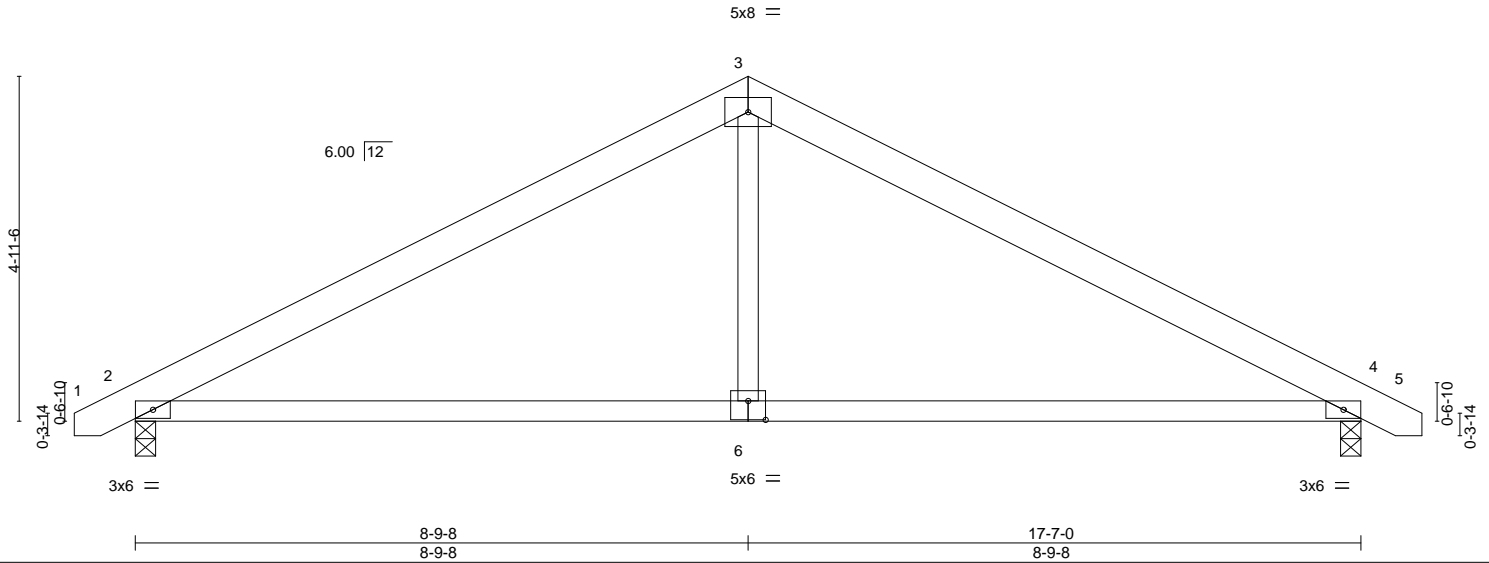


Plate Offsets (X,Y)-- [6:0-3-0,0-3-4]

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 0.43	Vert(LL)	-0.08 6-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.65	Vert(CT)	-0.17 6-12	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.14	Horz(CT)	0.01 4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.08 6-9	>999	240	Weight: 83 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied.  
 BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
 Max Horz 2=91(LC 11)  
 Max Uplift 2=-183(LC 12), 4=-183(LC 13)  
 Max Grav 2=744(LC 1), 4=744(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-957/633, 3-4=-957/633  
 BOT CHORD 2-6=-364/796, 4-6=-364/796  
 WEBS 3-6=0/359

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; 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) except (jt=lb) 2=183, 4=183.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 23,2020

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818 Soundside Road  
 Edenton, NC 27932

Job 2502469_MASTER	Truss B03	Truss Type COMMON GIRDER	Qty 2	Ply 2	H&H/Wayfare/ Job Reference (optional)	I43319780
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:03 2020 Page 1  
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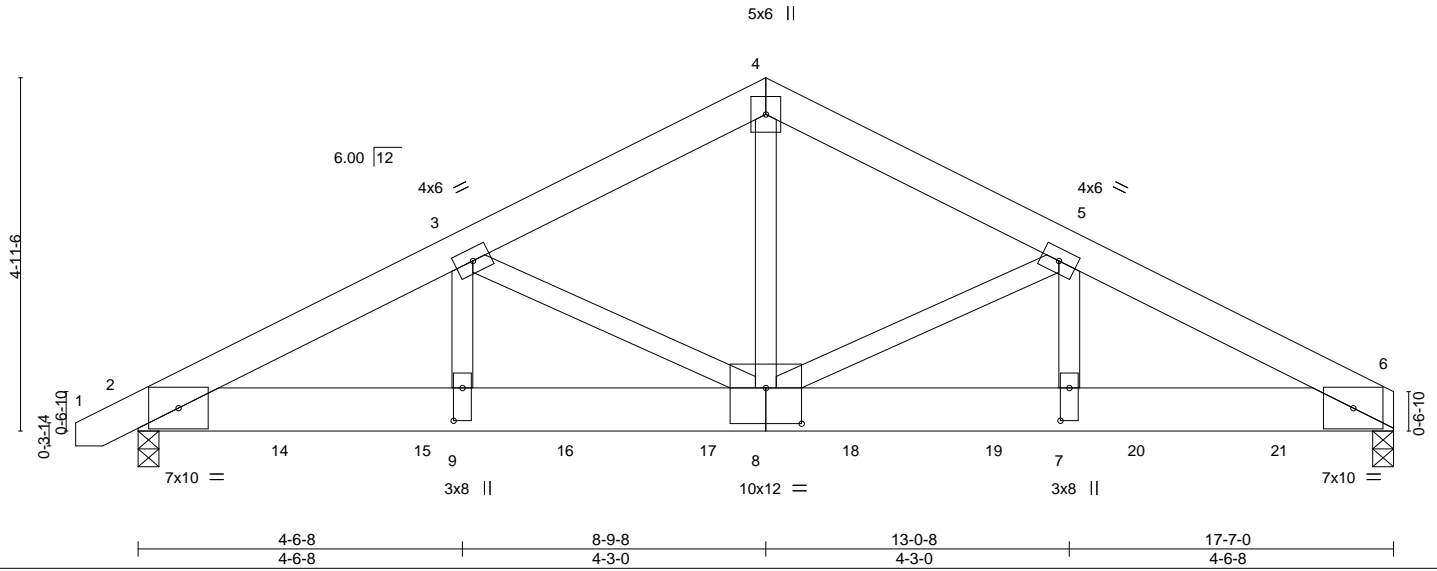


Plate Offsets (X,Y)-- [7:0-5-8,0-1-8], [8:0-6-0,0-6-0], [9:0-5-8,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.48	Vert(LL) -0.10	7-8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.51	Vert(CT) -0.19	7-8	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.82	Horz(CT) 0.05	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Wind(LL) 0.13	8-9	>999	240		
							Weight: 254 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.2  
BOT CHORD 2x8 SP DSS  
WEBS 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-1-15 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 6=0-3-8 (req. 0-3-14), 2=0-3-8 (req. 0-3-9)  
Max Horz 2=93(LC 24)  
Max Uplift 6=-1814(LC 9), 2=-2391(LC 8)  
Max Grav 6=6534(LC 1), 2=6062(LC 1)

SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.) ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER OR THE BUILDING DESIGNER.

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-11049/4300, 3-4=-7949/2911, 4-5=-7951/2911, 5-6=-11365/3449  
BOT CHORD 2-9=-3862/9866, 8-9=-3862/9866, 7-8=-3014/10161, 6-7=-3014/10161  
WEBS 4-8=-2422/6672, 5-8=-3480/664, 5-7=-435/2948, 3-8=-3146/1538, 3-9=-1210/2678

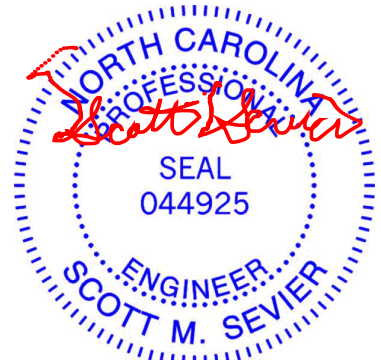
**NOTES-**

- 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.  
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.
- 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=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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.
- WARNING: Required bearing size at joint(s) 6, 2 greater than input bearing size.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=1814, 2=2391.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1356 lb down and 639 lb up at 2-0-12, 1356 lb down and 639 lb up at 4-0-12, 1356 lb down and 639 lb up at 6-0-12, 1356 lb down and 639 lb up at 8-0-12, 1356 lb down and 639 lb up at 10-0-12, 1456 lb down and 242 lb up at 12-0-12, and 1456 lb down and 242 lb up at 14-0-12, and 1456 lb down and 242 lb up at 16-0-12 on bottom chord. 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: 1-4=-60, 4-6=-60, 2-6=-20

Continued on page 2



October 23, 2020

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818 Soundside Road  
Edenton, NC 27932

Job 2502469_MASTER	Truss B03	Truss Type COMMON GIRDER	Qty 2	Ply <b>2</b>	H&H/Wayfare/ Job Reference (optional)	I43319780
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:03 2020 Page 2  
ID:5gbe\_Q0JNoiH4zfeQirvLHzQqXF-Fu2u1eZtnlg7Ihaumot5P6NRJdld56ShPiQxLbyQu9M

**LOAD CASE(S)** Standard  
Concentrated Loads (lb)

Vert: 14=-1356(B) 15=-1356(B) 16=-1356(B) 17=-1356(B) 18=-1356(B) 19=-1456(B) 20=-1456(B) 21=-1456(B)

**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





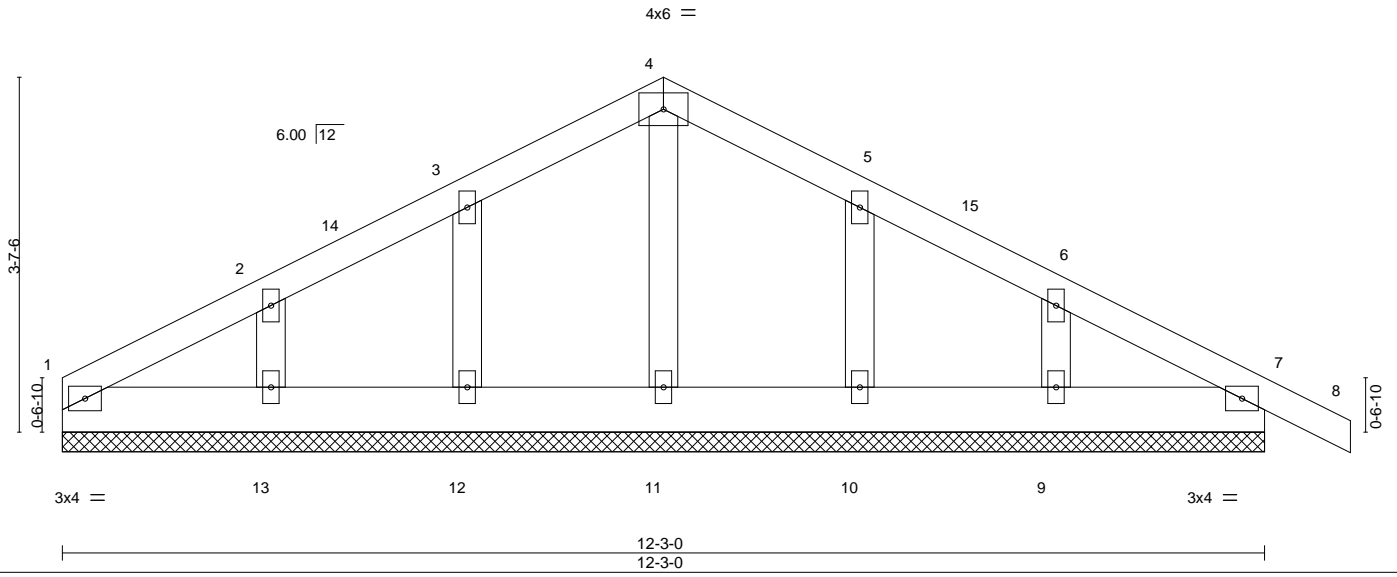
Job 2502469_MASTER	Truss C02	Truss Type Common Supported Gable	Qty 2	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319782
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:06 2020 Page 1  
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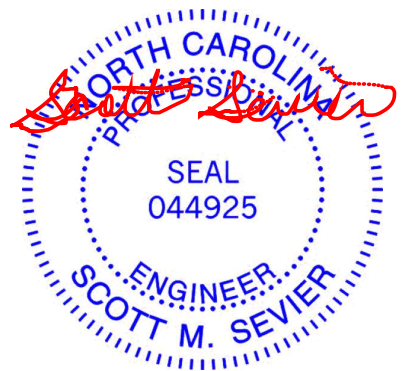
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.11	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.04	Vert(LL) -0.00 7 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.10	Vert(CT) -0.00 7 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 7 n/a n/a		
	Code IRC2015/TPI2014			Weight: 63 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.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 12-3-0.  
 (lb) - Max Horz 1=113(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 12=127(LC 12), 13=157(LC 12), 10=131(LC 13), 9=139(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7, 11, 12, 13, 10, 9

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-12=126/309, 2-13=131/333, 5-10=128/309, 6-9=125/259

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-0-0 to 3-0-0, Exterior(2) 3-0-0 to 6-1-8, Corner(3) 6-1-8 to 9-1-8, Exterior(2) 9-1-8 to 13-1-8 zone; 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, 7 except (jt=lb) 12=127, 13=157, 10=131, 9=139.

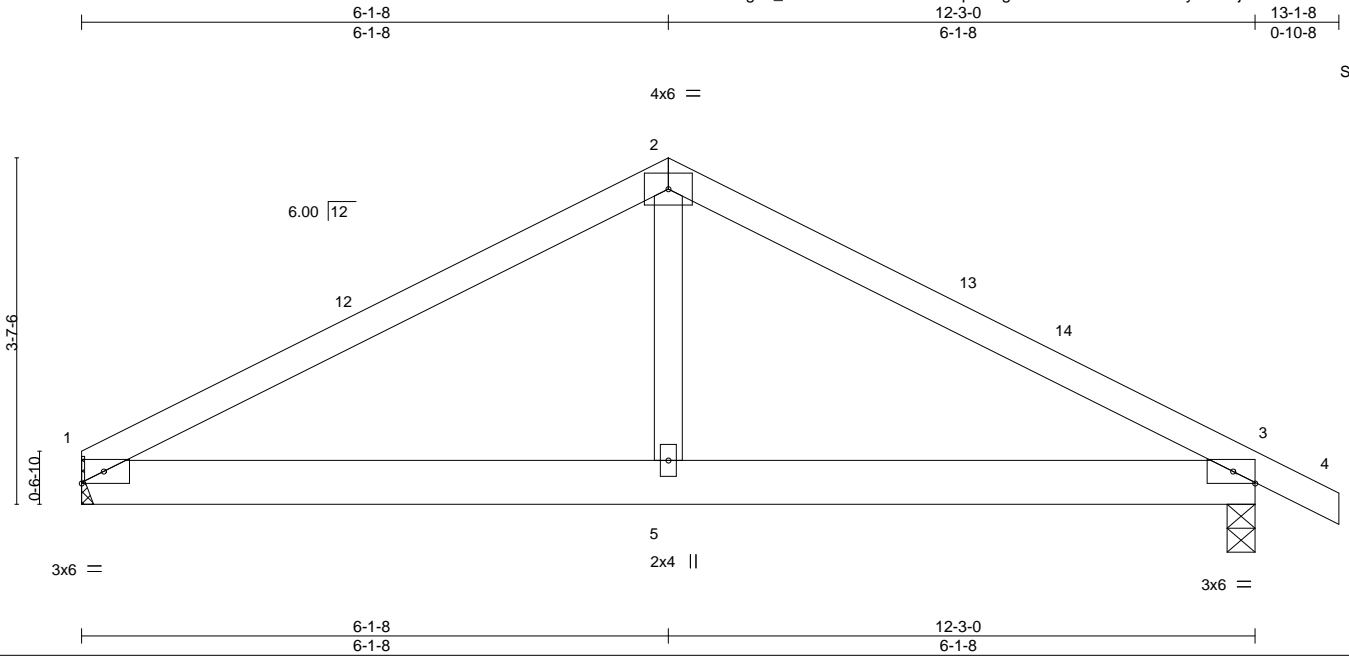


October 23, 2020

Job 2502469_MASTER	Truss C03	Truss Type Common	Qty 6	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319783
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:07 2020 Page 1  
ID:5gbe\_Q0JNoih4zfeQirvLHzQqXF-7gHPt?cOrXBZmluf?ex1ayY90Fij15WHKKO9UNyQu9l



Scale: 1/2"=1'

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.31	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.25	Vert(LL) 0.03 5-8 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.11	Vert(CT) -0.03 5-8 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 55 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.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS.**

(size) 1=Mechanical, 3=0-3-8  
Max Horz 1=-118(LC 17)  
Max Uplift 1=-219(LC 12), 3=-263(LC 13)  
Max Grav 1=488(LC 1), 3=544(LC 1)

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

TOP CHORD 1-2=-680/416, 2-3=-681/397  
BOT CHORD 1-5=-210/540, 3-5=-210/540  
WEBS 2-5=-23/291

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 6-1-8, Exterior(2) 6-1-8 to 9-1-8, Interior(1) 9-1-8 to 13-1-8 zone; end vertical 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.
- 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) 1=219, 3=263.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 23, 2020

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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/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

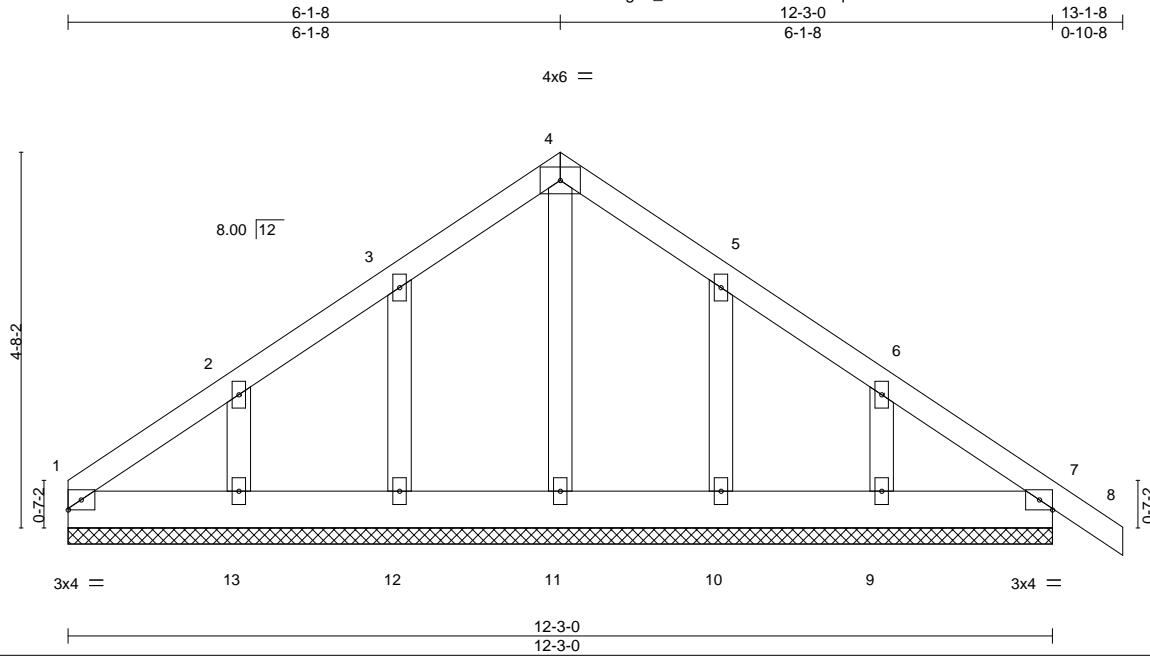


818 Soundside Road  
Edenton, NC 27932

Job 2502469_MASTER	Truss C04	Truss Type Common Supported Gable	Qty 2	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319784
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:08 2020 Page 1  
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<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.08	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) -0.00 7 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.06	Vert(CT) -0.00 7 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 7 n/a n/a		
	Code IRC2015/TPI2014			Weight: 70 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 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 12-3-0.  
(lb) - Max Horz 1=-201(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 12=-152(LC 12), 13=-196(LC 12), 10=-156(LC 13), 9=-176(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 11, 12, 13, 10, 9

**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=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-0-0 to 3-0-0, Exterior(2) 3-0-0 to 6-1-8, Corner(3) 6-1-8 to 9-1-8, Exterior(2) 9-1-8 to 13-1-8 zone; 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, 7 except (jt=lb) 12=152, 13=196, 10=156, 9=176.



October 23, 2020

**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 2502469_MASTER	Truss C05	Truss Type Common	Qty 6	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319785
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:09 2020 Page 1  
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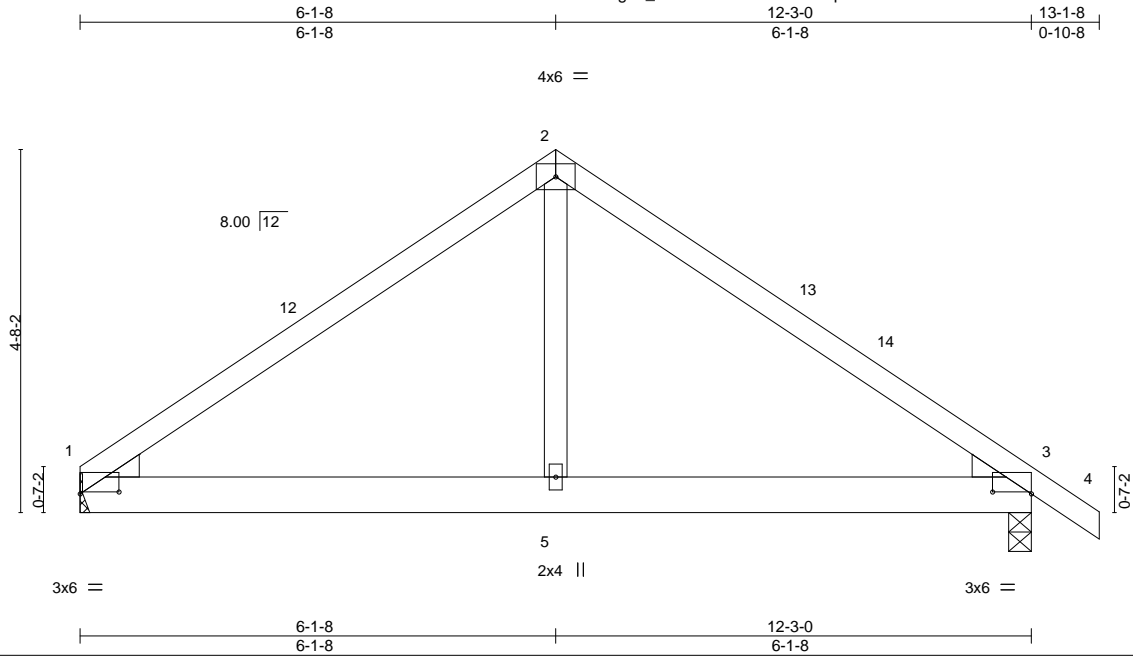


Plate Offsets (X,Y)-- [1:0-6-0,0-0-5], [3:0-6-0,0-0-5]					
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.34	Vert(LL) 0.04 5-8 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.26	Vert(CT) -0.03 5-8 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.11	Horz(CT) -0.01 1 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS		Weight: 60 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 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.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (size) 1=Mechanical, 3=0-3-8  
Max Horz 1=-199(LC 8)  
Max Uplift 1=-209(LC 12), 3=-253(LC 13)  
Max Grav 1=488(LC 1), 3=544(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-677/315, 2-3=-677/307  
BOT CHORD 1-5=-115/450, 3-5=-115/450  
WEBS 2-5=-30/295

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 6-1-8, Exterior(2) 6-1-8 to 9-1-8, Interior(1) 9-1-8 to 13-1-8 zone; end vertical 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.
  - 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) 1=209, 3=253.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 23, 2020

Job 2502469_MASTER	Truss D01	Truss Type GABLE	Qty 1	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319786
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:10 2020 Page 1  
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3x6 =

Scale = 1:41.9

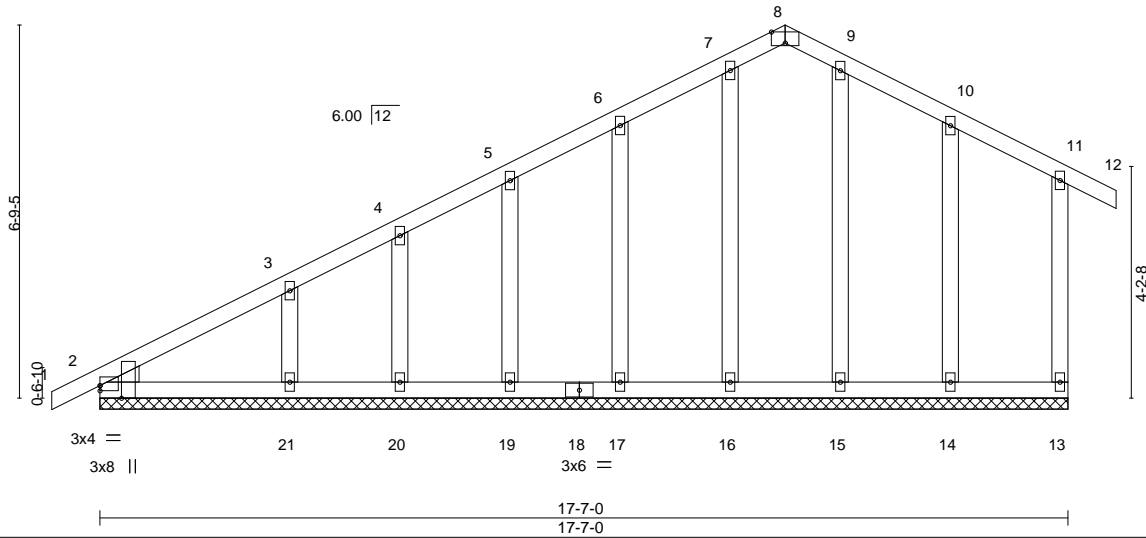


Plate Offsets (X,Y)-- [2:0-2-12,Edge], [2:0-0-0,0-1-2], [8:0-3-0,Edge]

<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 0.21	Vert(LL)	-0.00	12	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	-0.00	12	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00	13	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 108 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.2  
OTHERS 2x4 SP No.3  
WEDGE  
Left: 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 17-7-0.  
(lb) - Max Horz 2=272(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 13, 2, 16, 17, 19, 20, 14 except 21=136(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 13, 2, 16, 17, 19, 20, 15, 14 except 21=268(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-293/214, 6-7=-195/320, 7-8=-174/307, 8-9=-175/308, 9-10=-193/317  
WEBS 3-21=-191/287

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; 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) 13, 2, 16, 17, 19, 20, 14 except (jt=lb) 21=136.



October 23, 2020

**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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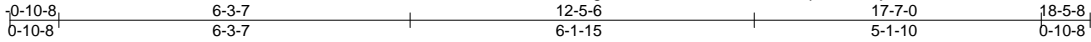
818 Soundside Road  
Edenton, NC 27932

Job 2502469_MASTER	Truss D02	Truss Type Common	Qty 1	Ply 1	H&H/Wayfare/ Job Reference (optional)	143319787
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:11 2020 Page 1

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5x6 =

Scale = 1:41.2

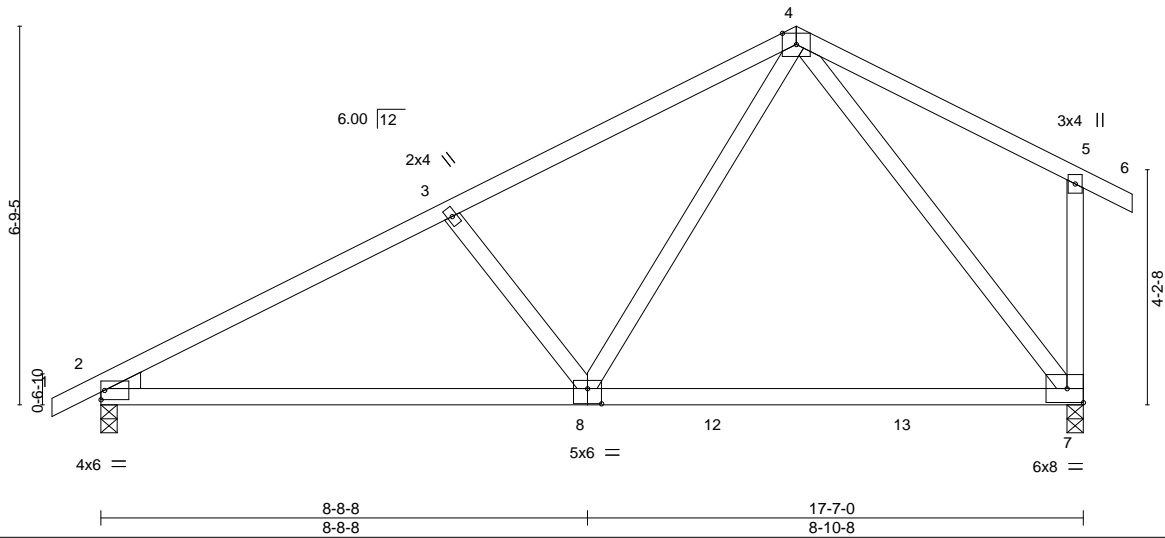


Plate Offsets (X,Y)-- [8:0-3-0,0-3-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.46	Vert(LL) -0.21	7-8	>987	360		MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.71	Vert(CT) -0.34	7-8	>620	240			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.72	Horz(CT) 0.02	7	n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.05	8-11	>999	240		Weight: 93 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 5-7: 2x4 SP No.2

**WEDGE**  
 Left: 2x4 SP No.3

**REACTIONS.** (size) 2=0-3-8, 7=0-3-8  
 Max Horz 2=275(LC 11)  
 Max Uplift 2=-202(LC 12), 7=-165(LC 12)  
 Max Grav 2=750(LC 1), 7=759(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1060/725, 3-4=-831/669, 4-5=-235/305, 5-7=-251/342  
 BOT CHORD 2-8=-812/914, 7-8=-345/456  
 WEBS 3-8=-371/501, 4-8=-333/595, 4-7=-576/449

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=202, 7=165.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 23,2020

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818 Soundside Road  
 Edenton, NC 27932

Job 2502469_MASTER	Truss D03	Truss Type Common Girder	Qty 1	Ply 2	H&H/Wayfare/ Job Reference (optional)	I43319788
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:13 2020 Page 1  
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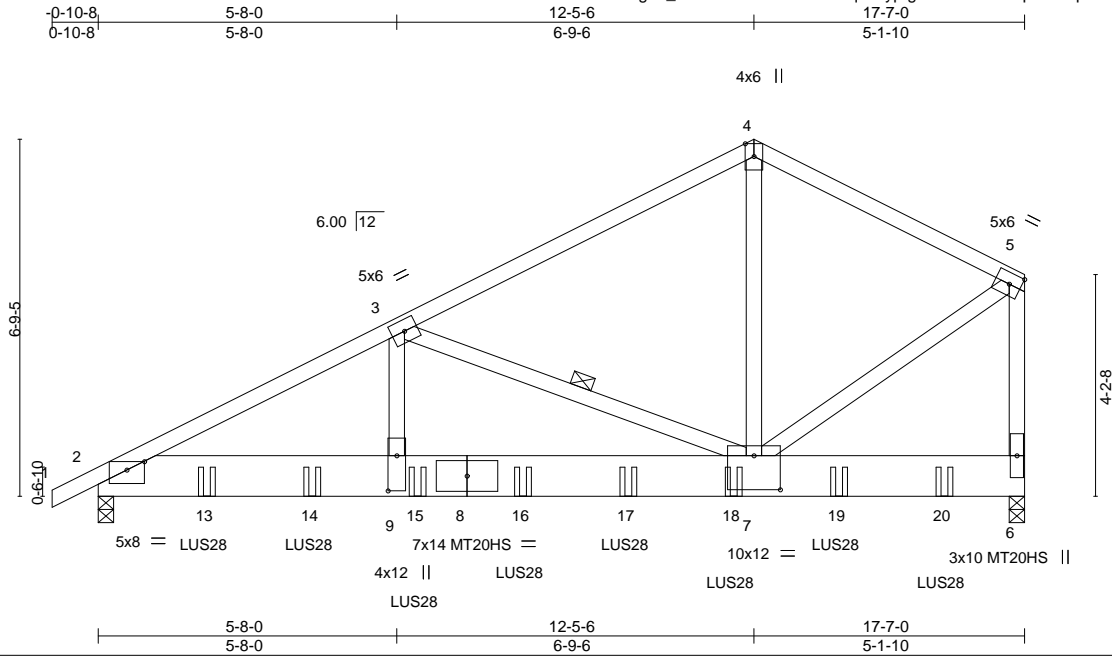


Plate Offsets (X,Y)-- [2:0-4-0,0-1-15], [7:0-6-0,0-7-12], [9:0-8-0,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.86	Vert(LL) 0.15	7-9	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.52	Vert(CT) -0.21	7-9	>986	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr NO	WB 0.65	Horz(CT) 0.03	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS						Weight: 272 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x10 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 3-7

**REACTIONS.** (size) 2=0-3-8 (req. 0-3-9), 6=0-3-8 (req. 0-3-14)  
 Max Horz 2=268(LC 26)  
 Max Uplift 2=-2396(LC 8), 6=-1819(LC 8)  
 Max Grav 2=6020(LC 1), 6=6575(LC 1)

SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.) ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER OR THE BUILDING DESIGNER.

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-10303/4023, 3-4=-4884/1584, 4-5=-4852/1618, 5-6=-5453/1762  
 BOT CHORD 2-9=-3647/9188, 7-9=-3647/9188  
 WEBS 3-9=-1836/4130, 3-7=-5321/2540, 4-7=-1249/3969, 5-7=-1682/5299

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.  
 Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-7-0 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=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- 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.
- WARNING: Required bearing size at joint(s) 2, 6 greater than input bearing size.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=2396, 6=1819.
- Use Simpson Strong-Tie LUS28 (6-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 10-0-12 to connect truss(es) to back face of bottom chord.
- Use Simpson Strong-Tie LUS28 (6-SD9112 Girder, 4-SD9212 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 12-0-12 from the left end to 16-0-12 to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard



October 23, 2020

Continued on page 2

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818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	H&H/Wayfare/
2502469_MASTER	D03	Common Girder	1	<b>2</b>	I43319788
					Job Reference (optional)

Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:13 2020 Page 2  
 ID:5gbe\_Q0JNoiH4zfeQirvLHzQqXF-yptg83h9RNxiVDLpMv2RpDo2sfjvRfZ9iGrTi0yQu9C

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-4=-60, 4-5=-60, 6-10=-20

Concentrated Loads (lb)

Vert: 13=-1356(B) 14=-1356(B) 15=-1356(B) 16=-1356(B) 17=-1356(B) 18=-1456(B) 19=-1456(B) 20=-1456(B)

**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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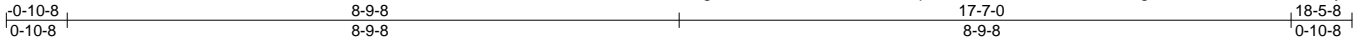


Job 2502469_MASTER	Truss D04	Truss Type Common Supported Gable	Qty 2	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319789
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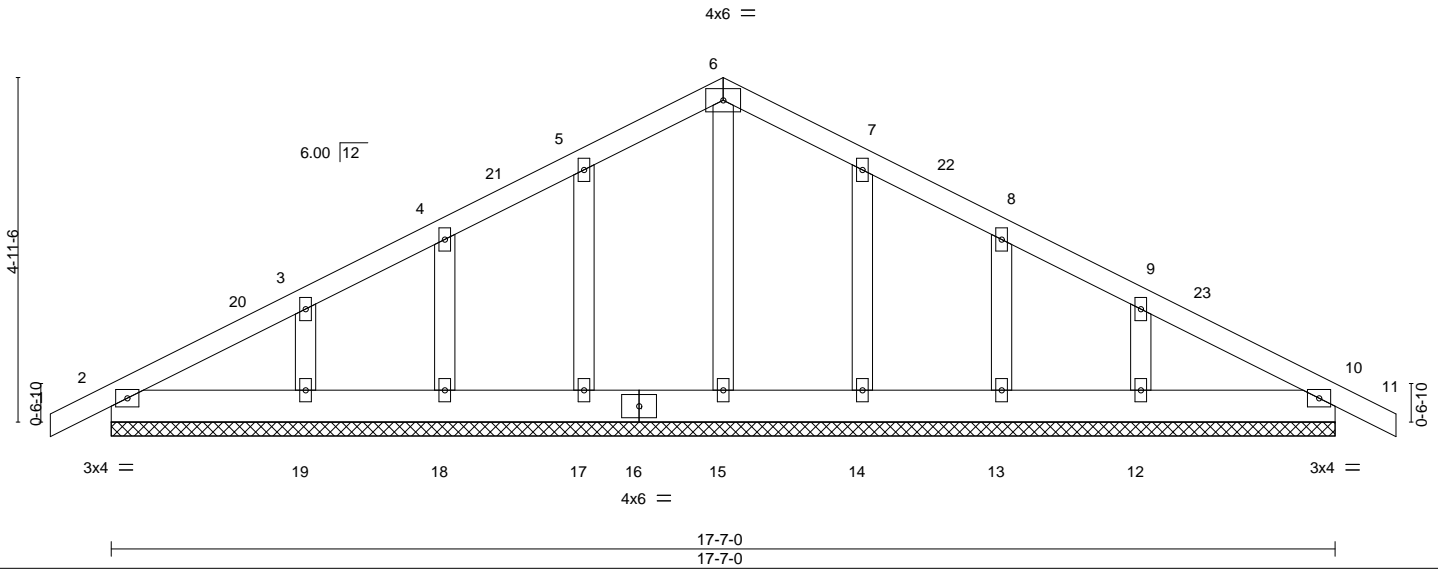
Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:14 2020 Page 1

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Scale = 1:33.1



<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 0.14	Vert(LL)	0.00	10	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	0.00	10	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	10	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S						
								Weight: 100 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 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 17-7-0.  
(lb) - Max Horz 2=145(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 10 except 17=-136(LC 12), 18=-109(LC 12), 19=-181(LC 12),  
14=-135(LC 13), 13=-109(LC 13), 12=-179(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 2, 15, 17, 18, 19, 14, 13, 12, 10

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 5-6=-88/262, 6-7=-88/264  
WEBS 5-17=-131/285, 3-19=-150/263, 7-14=-131/285, 9-12=-150/263

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-10-8 to 2-1-8, Exterior(2) 2-1-8 to 8-9-8, Corner(3) 8-9-8 to 11-9-8, Exterior(2) 11-9-8 to 18-5-8 zone; 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, 10 except (jt=lb) 17=136, 18=109, 19=181, 14=135, 13=109, 12=179.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 10.



October 23, 2020

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Job 2502469_MASTER	Truss D06	Truss Type Common	Qty 6	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319791
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:16 2020 Page 1  
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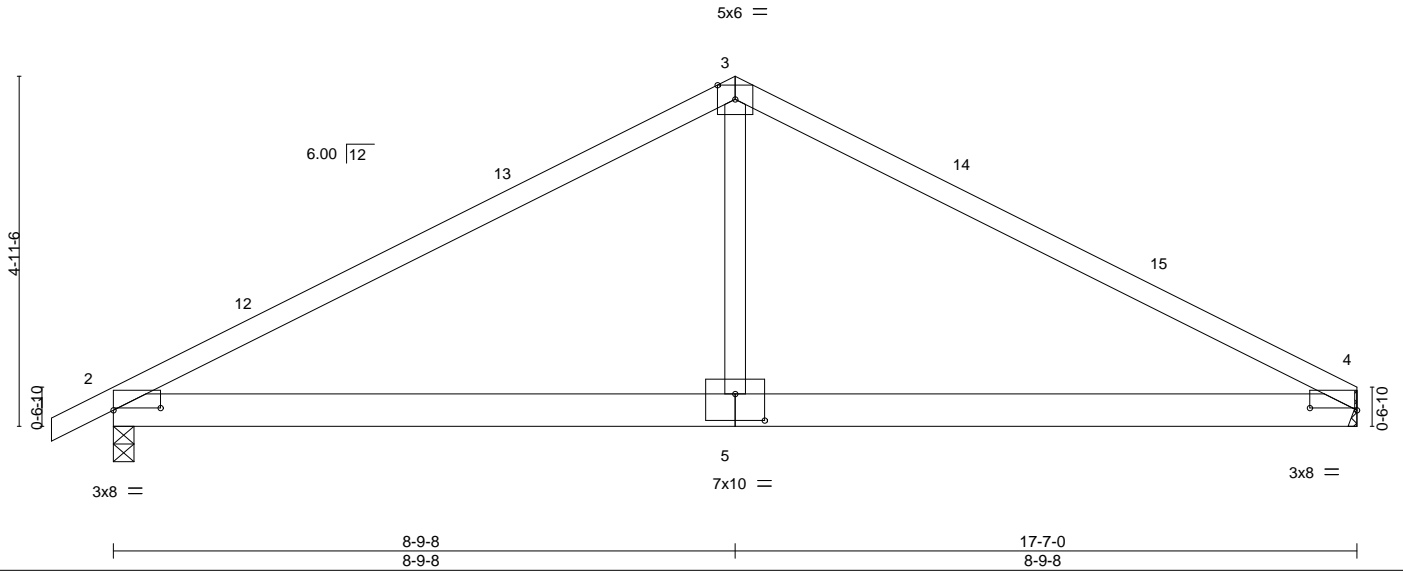


Plate Offsets (X,Y)-- [2:0-8-0,0-0-6], [4:0-8-0,0-0-6], [5:0-5-0,0-4-8]

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 0.71	Vert(LL)	0.12	5-8	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.49	Vert(CT)	-0.13	5-8	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.16	Horz(CT)	-0.01	2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	YES	Matrix-AS						Weight: 78 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3	

**REACTIONS.** (size) 4=Mechanical, 2=0-3-8  
 Max Horz 2=158(LC 16)  
 Max Uplift 4=-315(LC 13), 2=-358(LC 12)  
 Max Grav 4=702(LC 1), 2=757(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1006/482, 3-4=-1006/496  
 BOT CHORD 2-5=-271/799, 4-5=-271/799  
 WEBS 3-5=-6/430

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-9-8, Exterior(2) 8-9-8 to 11-9-8, Interior(1) 11-9-8 to 17-7-0 zone; end vertical left 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.
  - 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) 4=315, 2=358.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

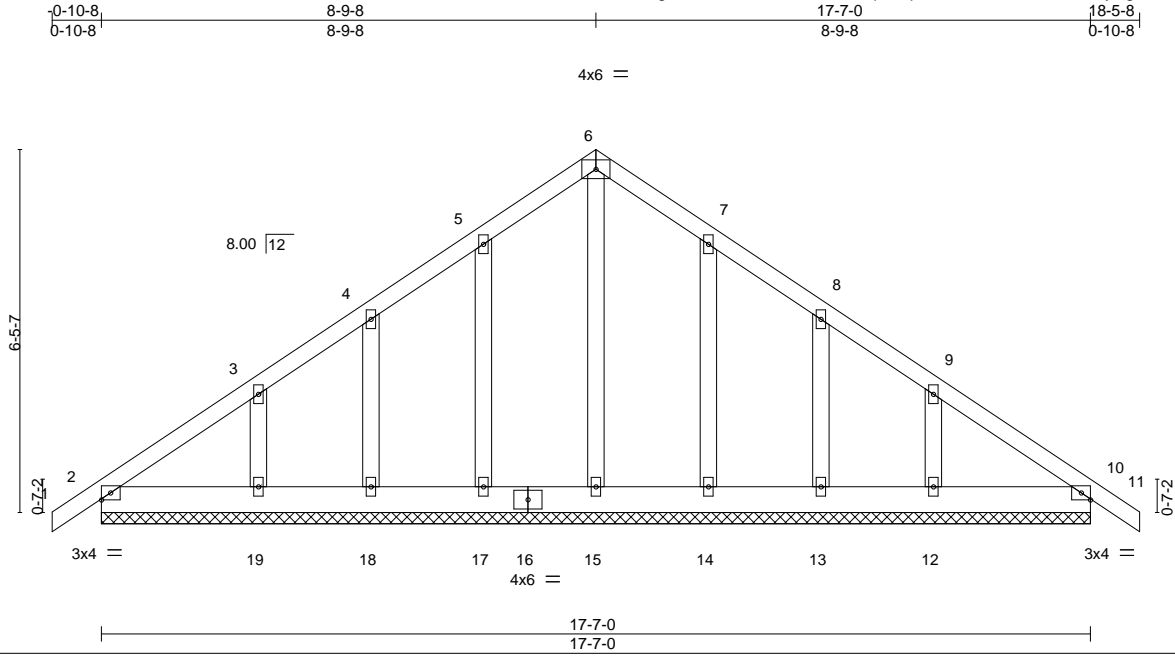


October 23,2020

Job 2502469_MASTER	Truss D07	Truss Type Common Supported Gable	Qty 2	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319792
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:17 2020 Page 1  
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<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.11	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.05	Vert(LL) 0.00 10 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.10	Vert(CT) 0.00 10 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 10 n/a n/a		
	Code IRC2015/TPI2014			Weight: 112 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 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 17-7-0.  
(lb) - Max Horz 2=-286(LC 20)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 10 except 17=-162(LC 12), 18=-133(LC 12), 19=-226(LC 12), 14=-160(LC 13), 13=-134(LC 13), 12=-223(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 2, 15, 17, 18, 14, 13, 10 except 19=274(LC 19), 12=271(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 3-19=-264/236, 9-12=-264/234

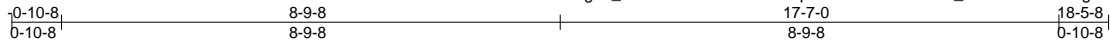
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-10-8 to 2-1-8, Exterior(2) 2-1-8 to 8-9-8, Corner(3) 8-9-8 to 11-9-8, Exterior(2) 11-9-8 to 18-5-8 zone; 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, 10 except (jt=lb) 17=162, 18=133, 19=226, 14=160, 13=134, 12=223.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 10.



October 23, 2020

Job 2502469_MASTER	Truss D08	Truss Type Common	Qty 2	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319793
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Builders FirstSource, Sumter, SC - 29153, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:18 2020 Page 1  
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6x8 =

Scale = 1:40.6

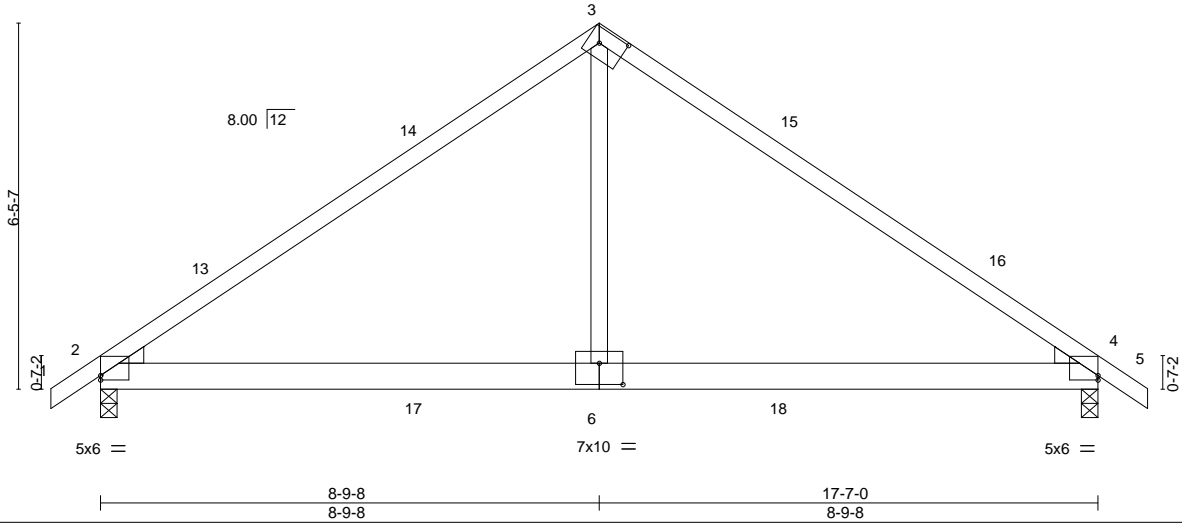


Plate Offsets (X,Y)-- [2:0-0-0,0-0-15], [3:0-5-7,0-3-0], [4:Edge,0-0-15], [6:0-5-0,0-4-8]

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) 0.13	6-9	>999	240	MT20	244/190	
TCDL 10.0	Lumber DOL 1.15	BC 0.52	Vert(CT) -0.12	6-9	>999	240			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.19	Horz(CT) -0.02	2	n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS							
								Weight: 86 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 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.  
 BOT CHORD Rigid ceiling directly applied.

**REACTIONS.**

(size) 2=0-3-8, 4=0-3-8  
 Max Horz 2=-286(LC 10)  
 Max Uplift 2=-344(LC 12), 4=-344(LC 13)  
 Max Grav 2=823(LC 19), 4=823(LC 20)

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

TOP CHORD 2-3=-976/395, 3-4=-975/395  
 BOT CHORD 2-6=-171/778, 4-6=-171/778  
 WEBS 3-6=-16/463

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-9-8, Exterior(2) 8-9-8 to 11-9-8, Interior(1) 11-9-8 to 18-5-8 zone; 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=344, 4=344.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 23, 2020

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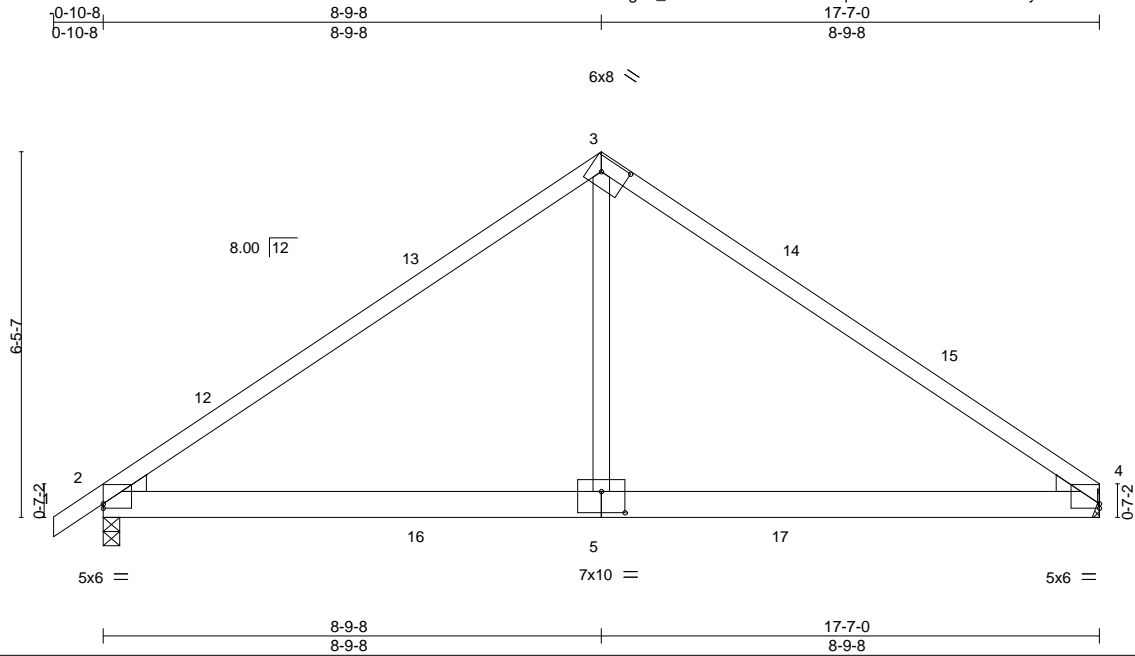
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Job 2502469_MASTER	Truss D09	Truss Type Common	Qty 6	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319794
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Builders FirstSource, Sumter, SC - 29153, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:19 2020 Page 1  
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Scale = 1:40.7

Plate Offsets (X,Y)-- [2:Edge,0-0-15], [3:0-5-7,0-3-0], [4:0-0-0,0-0-15], [5:0-5-0,0-4-8]

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 0.72	Vert(LL)	0.13	5-8	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.52	Vert(CT)	-0.12	5-8	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.19	Horz(CT)	-0.02	2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS						Weight: 84 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 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.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS.**

(size) 4=Mechanical, 2=0-3-8  
Max Horz 2=278(LC 9)  
Max Uplift 4=302(LC 13), 2=345(LC 12)  
Max Grav 4=768(LC 20), 2=824(LC 19)

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

TOP CHORD 2-3=-979/398, 3-4=-977/400  
BOT CHORD 2-5=-189/766, 4-5=-189/766  
WEBS 3-5=-23/466

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-9-8, Exterior(2) 8-9-8 to 11-9-8, Interior(1) 11-9-8 to 17-7-0 zone; end vertical left 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=302, 2=345.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 23,2020

**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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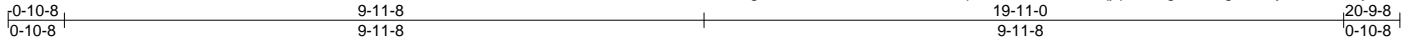
818 Soundside Road  
Edenton, NC 27932

Job 2502469_MASTER	Truss E04	Truss Type COMMON	Qty 5	Ply 1	H&H/Wayfare/ Job Reference (optional)	143319795
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:20 2020 Page 1

ID:5gbe\_Q0JN0iH4zfeQirvLHzQqXF-FAaJcSmYnXqjqlN9Gtg4bhaKgU1Eay5Bjs1LR6yQu95



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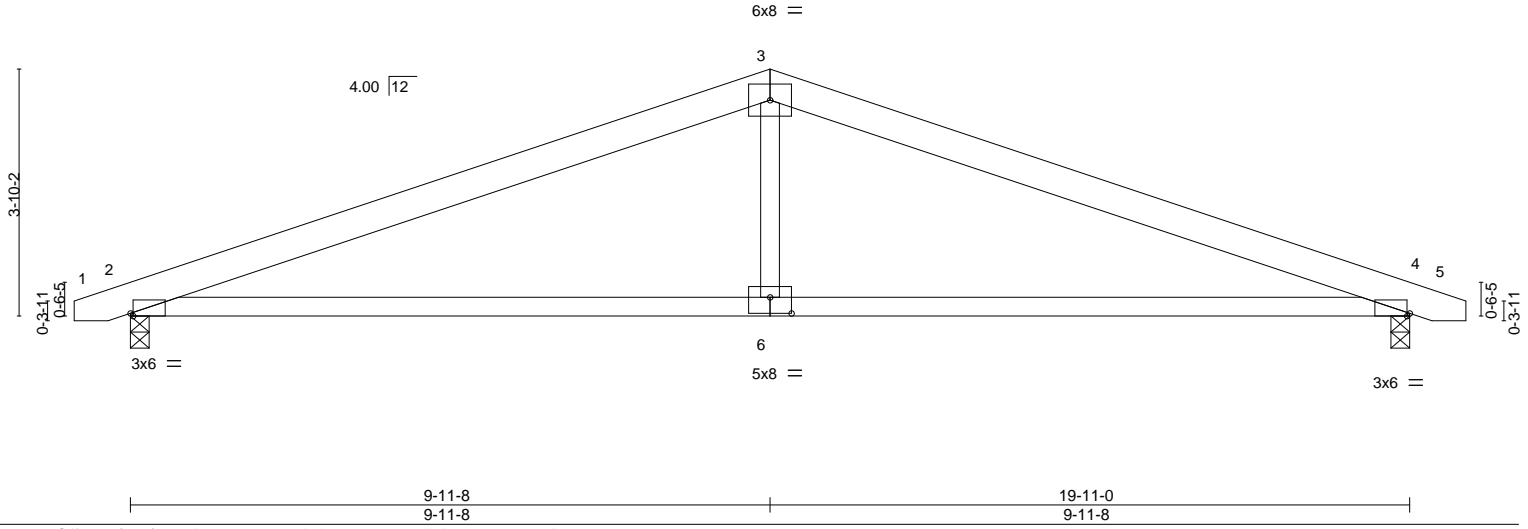


Plate Offsets (X,Y)--	[2:0-0-8,Edge], [4:0-0-8,Edge], [6:0-4-0,0-3-0]									
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15		TC 0.57	Vert(LL) -0.12	-0.12	6-9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.86	Vert(CT) -0.29	-0.29	6-9	>834	240		
BCLL 0.0 *	Rep Stress Incr YES		WB 0.15	Horz(CT) 0.03	0.03	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL) 0.12	0.12	6-9	>999	240	Weight: 88 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3	

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
 Max Horz 2=-63(LC 13)  
 Max Uplift 2=-245(LC 8), 4=-245(LC 9)  
 Max Grav 2=833(LC 1), 4=833(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1459/961, 3-4=-1459/961  
 BOT CHORD 2-6=-758/1335, 4-6=-758/1335  
 WEBS 3-6=0/398

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; 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) except (jt=lb) 2=245, 4=245.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

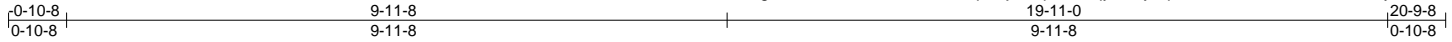


October 23,2020

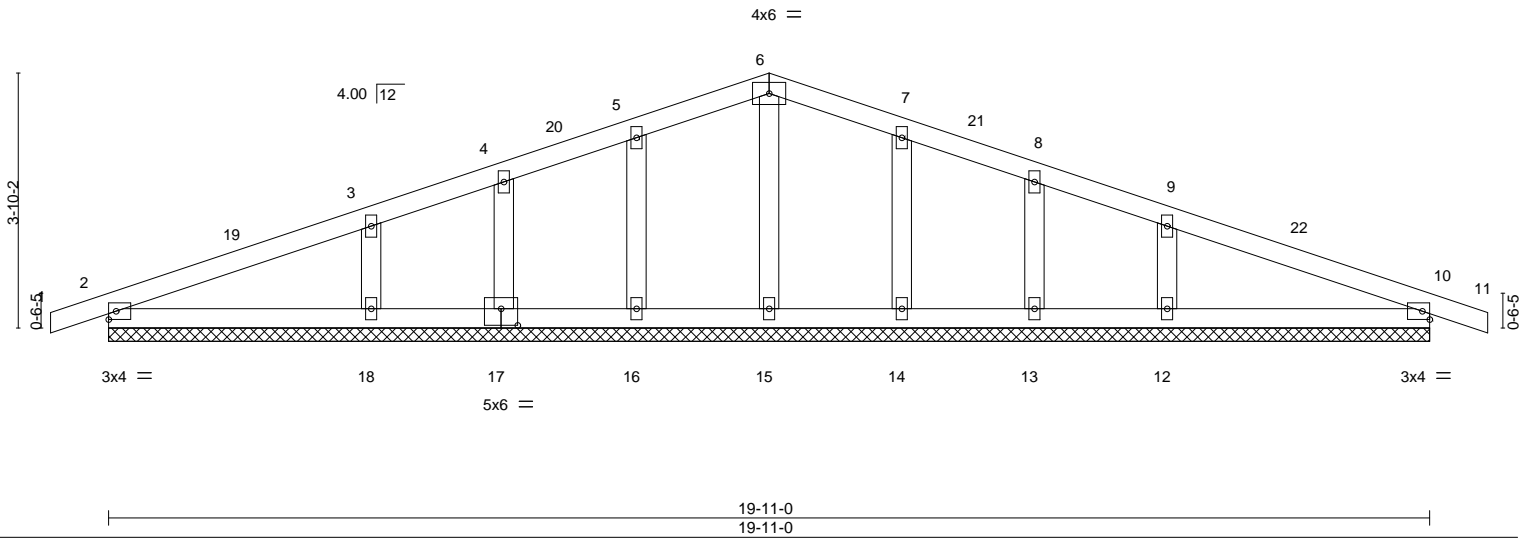
Job 2502469_MASTER	Truss E05	Truss Type Common Supported Gable	Qty 1	Ply 1	H&H/Wayfare/ Job Reference (optional)	143319796
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:21 2020 Page 1  
ID:5gbe\_Q0JNohH4zfeQirvLHzQqXF-jM8hponAYqyZSSyLqaBJ8v7bLuY4JQGLYWnu\_ZyQu94



Scale = 1:34.7



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP			
TCLL	20.0	Plate Grip DOL	2-0-0	TC	0.19	Vert(LL)	0.00	in (loc)	11	l/defl	n/r	L/d	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	0.01	11	n/r	120					
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	10	n/a	n/a					
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S										Weight: 86 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.
OTHERS	2x4 SP No.3		

**REACTIONS.** All bearings 19-11-0.  
 (lb) - Max Horz 2=108(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 17, 13 except 2=127(LC 8), 16=124(LC 12), 18=215(LC 12), 14=124(LC 13), 12=212(LC 13), 10=141(LC 9)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 15, 16, 17, 14, 13, 10 except 18=311(LC 23), 12=311(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 5-16=139/263, 3-18=222/306, 7-14=139/263, 9-12=222/306

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-1-8, Exterior(2) 2-1-8 to 9-11-8, Corner(3) 9-11-8 to 12-11-8, Exterior(2) 12-11-8 to 20-9-8 zone; 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) 17, 13 except (jt=lb) 2=127, 16=124, 18=215, 14=124, 12=212, 10=141.



October 23, 2020



Job 2502469_MASTER	Truss G01	Truss Type Common Supported Gable	Qty 2	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319797
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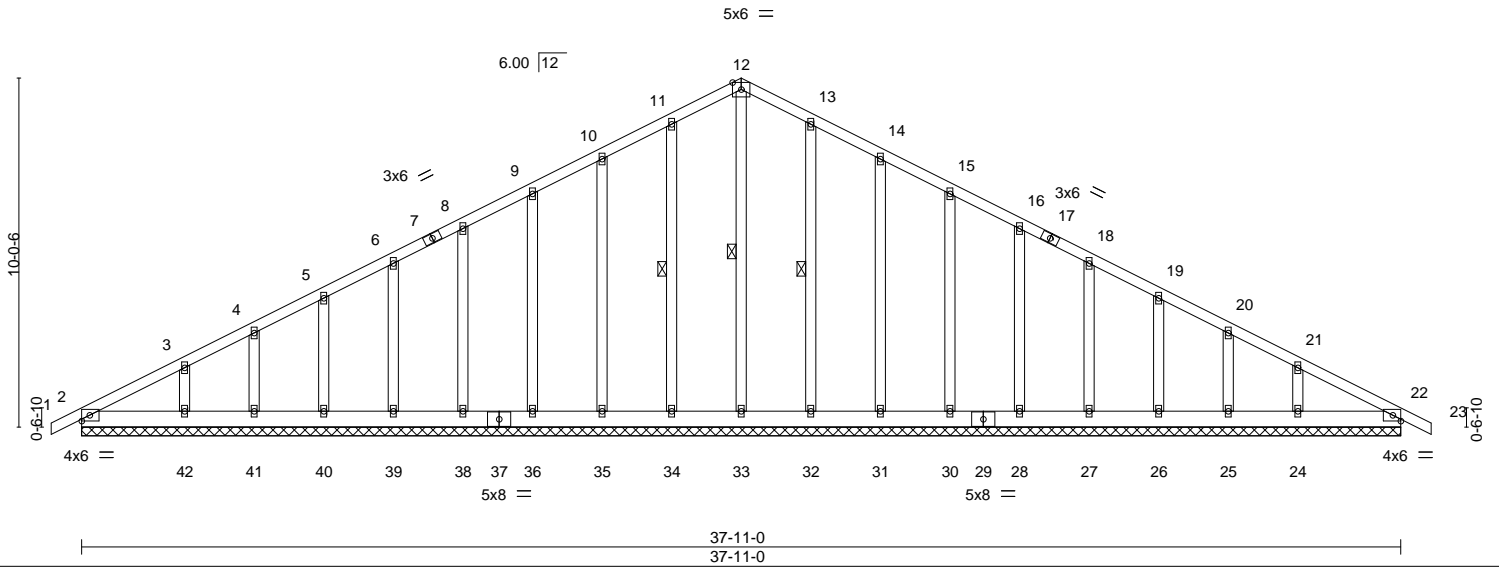
Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:23 2020 Page 1

ID:5gbe\_Q0JNoiH4zfeQirvLHzQqXF-IFSEUpQ4SCHhm6kx?EnDKCwKhE5nJ8d0pG?2RyQu92

0-10-8 18-11-8 37-11-0 38-9-8  
0-10-8 18-11-8 18-11-8 0-10-8

Scale = 1:66.2



<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 0.16	Vert(LL)	0.00	22	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	0.00	22	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13	Horz(CT)	0.01	22	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 283 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 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.  
WEBS 1 Row at midpt 12-33, 11-34, 13-32

**REACTIONS.**

All bearings 37-11-0.

(lb) - Max Horz 2=297(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 2, 22 except 34=120(LC 12), 35=130(LC 12), 36=125(LC 12), 38=126(LC 12), 39=124(LC 12), 40=130(LC 12), 41=106(LC 12), 42=202(LC 12), 32=116(LC 13), 31=132(LC 13), 30=124(LC 13), 28=126(LC 13), 27=124(LC 13), 26=130(LC 13), 25=106(LC 13), 24=197(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 34, 35, 36, 38, 39, 40, 41, 42, 32, 31, 30, 28, 27, 26, 25, 24, 22 except 33=259(LC 13)

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

TOP CHORD 2-3=-388/117, 3-4=-269/117, 8-9=-86/275, 9-10=-116/360, 10-11=-147/450, 11-12=-175/527, 12-13=-175/528, 13-14=-147/451, 14-15=-116/361, 15-16=-86/276, 21-22=-299/101

BOT CHORD 2-42=-99/340, 41-42=-99/340, 40-41=-99/340, 39-40=-99/340, 38-39=-99/340, 36-38=-99/340, 35-36=-99/340, 34-35=-99/340, 33-34=-99/340, 32-33=-99/340, 31-32=-99/340, 30-31=-99/340, 28-30=-99/340, 27-28=-99/340, 26-27=-99/340, 25-26=-99/340, 24-25=-99/340, 22-24=-99/340

WEBS 12-33=-273/54, 11-34=-128/274, 3-42=-157/325, 13-32=-128/274, 21-24=-157/325

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-10-8 to 2-11-8, Exterior(2) 2-11-8 to 18-11-8, Corner(3) 18-11-8 to 22-11-8, Exterior(2) 22-11-8 to 38-9-8 zone; 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, 22 except (jt=lb) 34=120, 35=130, 36=125, 38=126, 39=124, 40=130, 41=106, 42=202, 32=116, 31=132, 30=124, 28=126, 27=124, 26=130, 25=106, 24=197.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 22.



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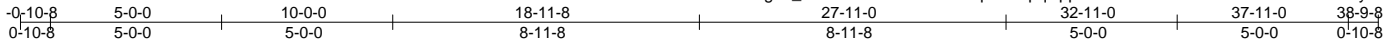


818 Soundside Road  
Edenton, NC 27932

Job 2502469_MASTER	Truss G02	Truss Type Common	Qty 12	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319798
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:24 2020 Page 1  
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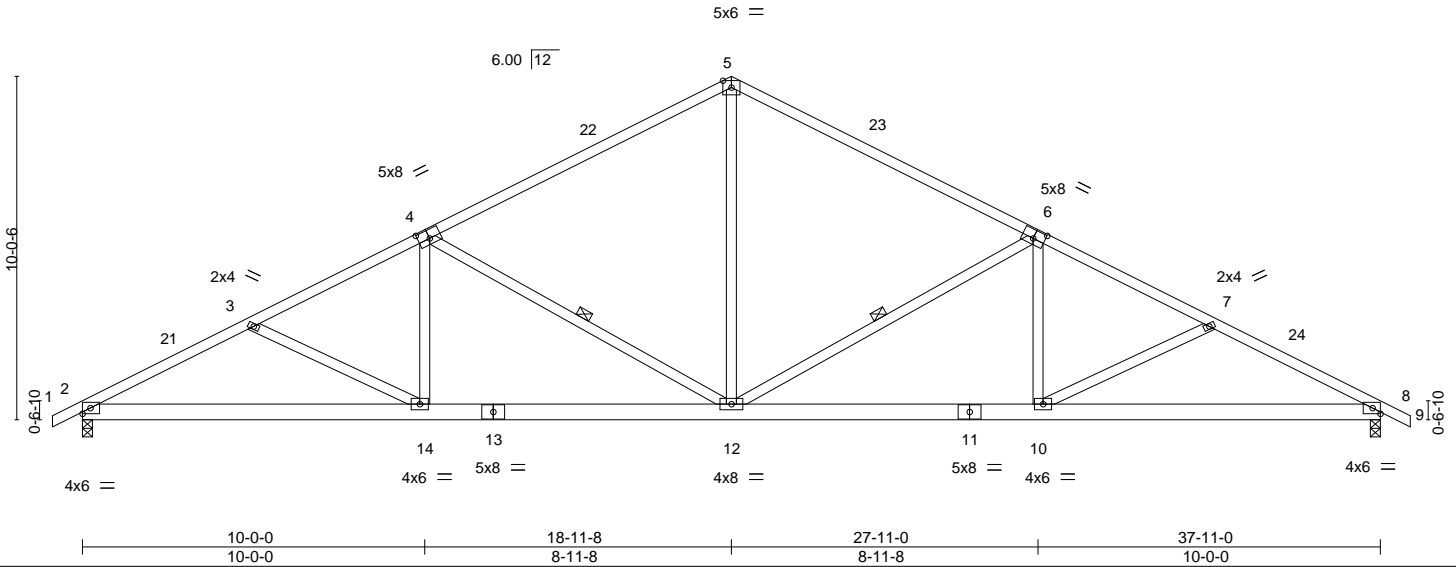


Plate Offsets (X,Y)-- [4:0-4-0,0-3-0], [6:0-4-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.93	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.50	Vert(LL) -0.14 12-14 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.66	Vert(CT) -0.29 12-14 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.09 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.20 12-14 >999 240	Weight: 229 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.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 6-12, 4-12

**REACTIONS.**

(size) 2=0-3-8, 8=0-3-8  
Max Horz 2=-297(LC 13)  
Max Uplift 2=-724(LC 12), 8=-724(LC 13)  
Max Grav 2=1569(LC 1), 8=1569(LC 1)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2799/1270, 3-4=-2542/1140, 4-5=-1836/952, 5-6=-1837/952, 6-7=-2542/1140, 7-8=-2799/1272  
BOT CHORD 2-14=-1294/2440, 12-14=-1037/2230, 10-12=-785/2230, 8-10=-998/2440  
WEBS 5-12=-375/1009, 6-12=-835/666, 6-10=-3/423, 4-12=-835/665, 4-14=-1/423, 3-14=-231/286, 7-10=-231/288

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-11-0, Interior(1) 2-11-0 to 18-11-8, Exterior(2) 18-11-8 to 22-9-0, Interior(1) 22-9-0 to 38-9-8 zone; 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=724, 8=724.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 23, 2020

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818 Soundside Road  
Edenton, NC 27932

Job 2502469_MASTER	Truss G02A	Truss Type Common	Qty 4	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319799
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:26 2020 Page 1

ID:5gbe\_Q0JNoiH4zfeQirvLHzQqXF-3KxasVrJNNasYDrJd7nUryqMOv4u\_aQ4inUffmyQu9?

-0-10-8	6-4-14	12-8-3	18-11-8	25-2-13	31-6-2	37-11-0	38-9-8
0-10-8	6-4-14	6-3-5	6-3-5	6-3-5	6-3-5	6-4-14	0-10-8

Scale = 1:66.2

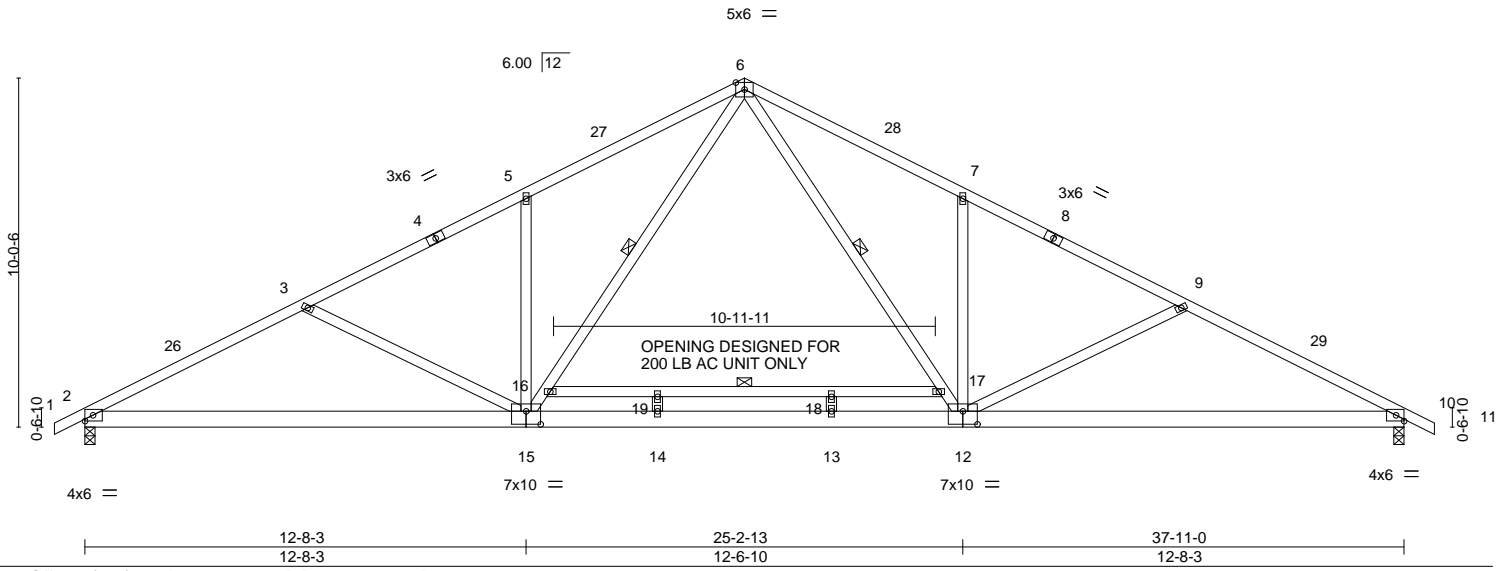


Plate Offsets (X,Y)-- [12:0-5-0,0-4-8], [15:0-5-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.49	Vert(LL) -0.17	12-25	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.84	Vert(CT) -0.56	13-14	>816	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.55	Horz(CT) 0.08	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.22	13-14	>999	240		
							Weight: 245 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 16-17: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 6-12, 6-15, 16-17

**REACTIONS.**

(size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=-297(LC 13)  
 Max Uplift 2=-624(LC 12), 10=-624(LC 13)  
 Max Grav 2=1669(LC 1), 10=1669(LC 1)

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

TOP CHORD 2-3=-2989/1041, 3-5=-2596/827, 5-6=-2601/1035, 6-7=-2601/1035, 7-9=-2596/827,  
 9-10=-2989/1042  
 BOT CHORD 2-15=-1076/2604, 14-15=-300/1626, 13-14=-300/1626, 12-13=-300/1626,  
 10-12=-779/2604  
 WEBS 6-17=-565/1145, 12-17=-585/1129, 7-12=-407/507, 9-12=-405/508, 15-16=-587/1129,  
 6-16=-565/1145, 5-15=-407/508, 3-15=-405/507

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-11-0, Interior(1) 2-11-0 to 18-11-8, Exterior(2) 18-11-8 to 22-9-0, Interior(1) 22-9-0 to 38-9-8 zone; 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
- 200.0lb AC unit load placed on the bottom chord, 18-11-8 from left end, supported at two points, 5-0-0 apart.
- All plates are 2x4 MT20 unless otherwise indicated.
- 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) 2=624, 10=624.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 23, 2020

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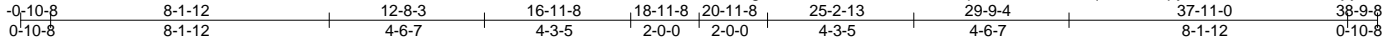
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Wayfare/	143319800
2502469_MASTER	G03	Hip	2	1		

Builders FirstSource, Sumter, SC - 29153,

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ID:5gbe\_Q0JNoiH4zfeQirvLHzQqXF-0i3LHBSzu\_qaoX\_hkYpywNwfKIEUxM95zmjfyQu8z



Scale = 1:67.4

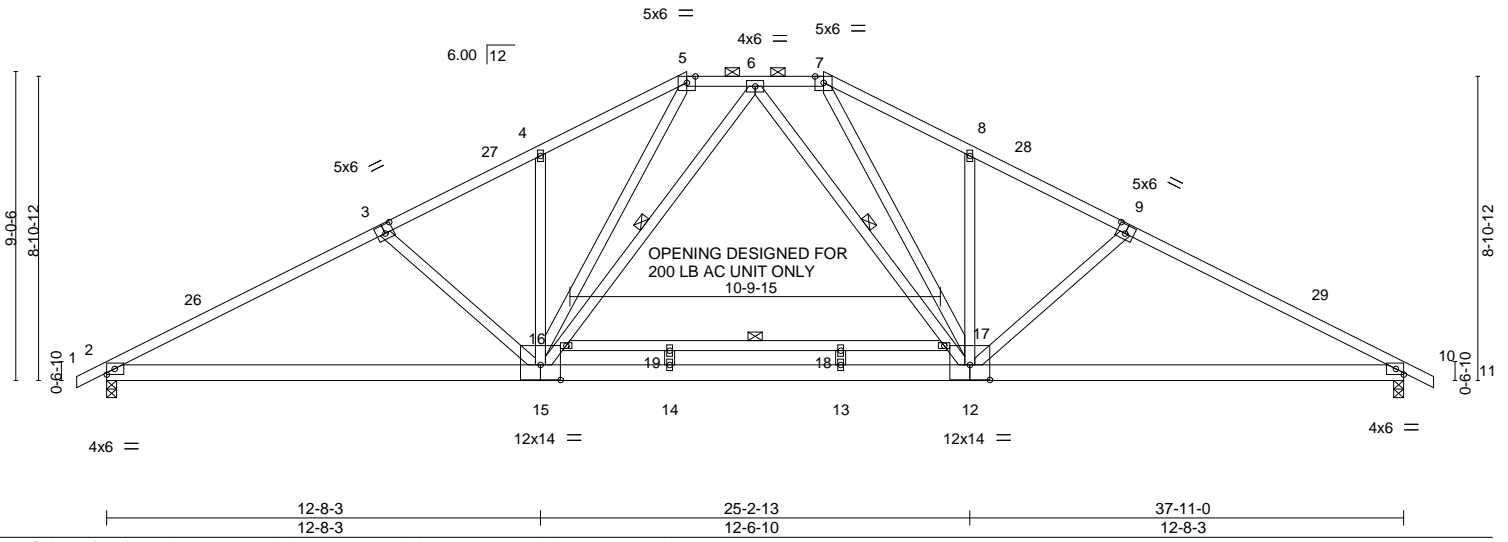


Plate Offsets (X,Y)-- [3:0-3-0,0-3-0], [9:0-3-0,0-3-0], [12:0-7-0,0-5-4], [15:0-7-0,0-5-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.65	Vert(LL) -0.17	12-25	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.85	Vert(CT) -0.50	13-14	>912	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.48	Horz(CT) 0.08	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.21	15-22	>999	240		
							Weight: 265 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 16-17: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied, except  
 2-0-0 oc purlins (4-2-5 max.): 5-7.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 6-15, 6-12, 16-17

**REACTIONS.**

(size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=-265(LC 13)  
 Max Uplift 2=-600(LC 12), 10=-600(LC 13)  
 Max Grav 2=1669(LC 1), 10=1669(LC 1)

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

TOP CHORD 2-3=-2911/1049, 3-4=-2570/948, 4-5=-2527/1099, 5-6=-1809/935, 6-7=-1809/935,  
 7-8=-2527/1099, 8-9=-2570/948, 9-10=-2911/1049  
 BOT CHORD 2-15=-878/2511, 14-15=-364/1818, 13-14=-364/1818, 12-13=-364/1818, 10-12=-782/2511  
 WEBS 3-15=-385/481, 4-15=-191/293, 15-16=-255/181, 12-17=-255/179, 8-12=-191/293,  
 9-12=-385/482, 5-15=-305/941, 7-12=-305/941

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-10-8 to 2-11-0, Interior(1) 2-11-0 to 16-11-8, Exterior(2) 16-11-8 to 26-3-14, Interior(1) 26-3-14 to 38-9-8 zone; 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
- 200.0lb AC unit load placed on the bottom chord, 18-11-8 from left end, supported at two points, 5-0-0 apart.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- 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) 2=600, 10=600.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 23, 2020

**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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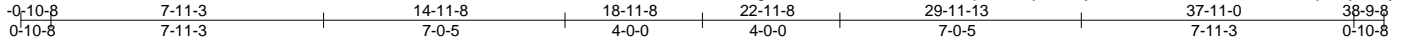
818 Soundside Road  
 Edenton, NC 27932

Job 2502469_MASTER	Truss G04	Truss Type Hip	Qty 2	Ply 1	H&H/Wayfare/ Job Reference (optional)	143319801
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Builders FirstSource, Sumter, SC - 29153,

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ID:5gbe\_Q0JNoiH4zfeQirvLHzQqXF-UucjVxtBflyRPhZtlGKBtbSr5659BzSWOIJf5yQu8y



Scale = 1:67.0

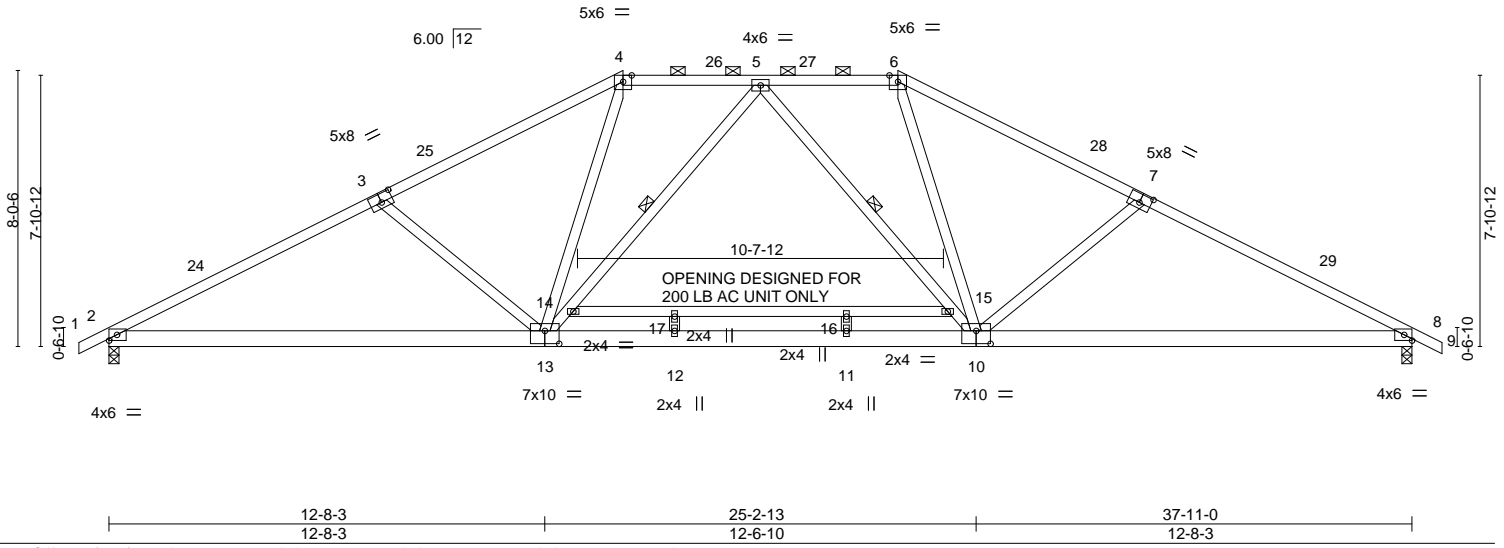


Plate Offsets (X,Y)-- [3:0-4-0,0-3-0], [7:0-4-0,0-3-0], [10:0-5-0,0-4-8], [13:0-5-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.59	Vert(LL) -0.17	10-23	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.87	Vert(CT) -0.50	11-12	>904	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.33	Horz(CT) 0.08	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.17	13-20	>999	240		
							Weight: 240 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 14-15: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied, except  
 2-0-0 oc purlins (3-11-7 max.): 4-6.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 5-13, 5-10

**REACTIONS.**

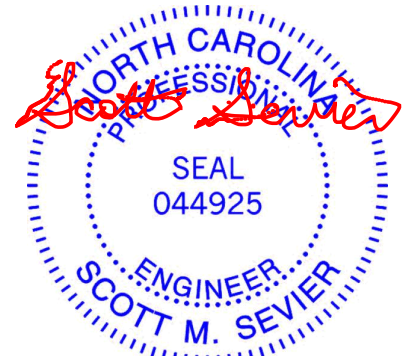
(size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=-235(LC 13)  
 Max Uplift 2=-572(LC 12), 8=-572(LC 13)  
 Max Grav 2=1669(LC 1), 8=1669(LC 1)

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

TOP CHORD 2-3=-2936/1138, 3-4=-2567/986, 4-5=-1982/959, 5-6=-1982/959, 6-7=-2567/986,  
 7-8=-2936/1138  
 BOT CHORD 2-13=-867/2541, 12-13=-501/2069, 11-12=-501/2069, 10-11=-501/2069, 8-10=-875/2541  
 WEBS 3-13=-437/574, 4-13=-165/816, 13-14=-347/246, 5-14=-337/273, 5-15=-337/273,  
 10-15=-347/245, 6-10=-165/816, 7-10=-437/574

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-11-0, Interior(1) 2-11-0 to 14-11-8, Exterior(2) 14-11-8 to 20-3-14, Interior(1) 20-3-14 to 22-11-8, Exterior(2) 22-11-8 to 28-3-14, Interior(1) 28-3-14 to 38-9-8 zone; 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
- 200.0lb AC unit load placed on the bottom chord, 18-11-8 from left end, supported at two points, 5-0-0 apart.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=572, 8=572.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 23, 2020

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818 Soundside Road  
 Edenton, NC 27932

Job 2502469_MASTER	Truss G05	Truss Type Hip	Qty 2	Ply 1	H&H/Wayfare/ Job Reference (optional)	143319802
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Builders FirstSource, Sumter, SC - 29153,

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ID:5gbe\_Q0JnoiH4zfeQirvLHzQqXF-QHkTvDvRBvC9f\_jGPhNfY0XBownYftRpr3CQJ\_yQu8w

0-10-8 7-2-11 14-3-0 18-11-8 23-8-0 30-8-5 37-11-0 38-9-8  
 0-10-8 7-2-11 7-0-5 4-8-8 4-8-8 7-0-5 7-2-11 0-10-8

Scale = 1:67.0

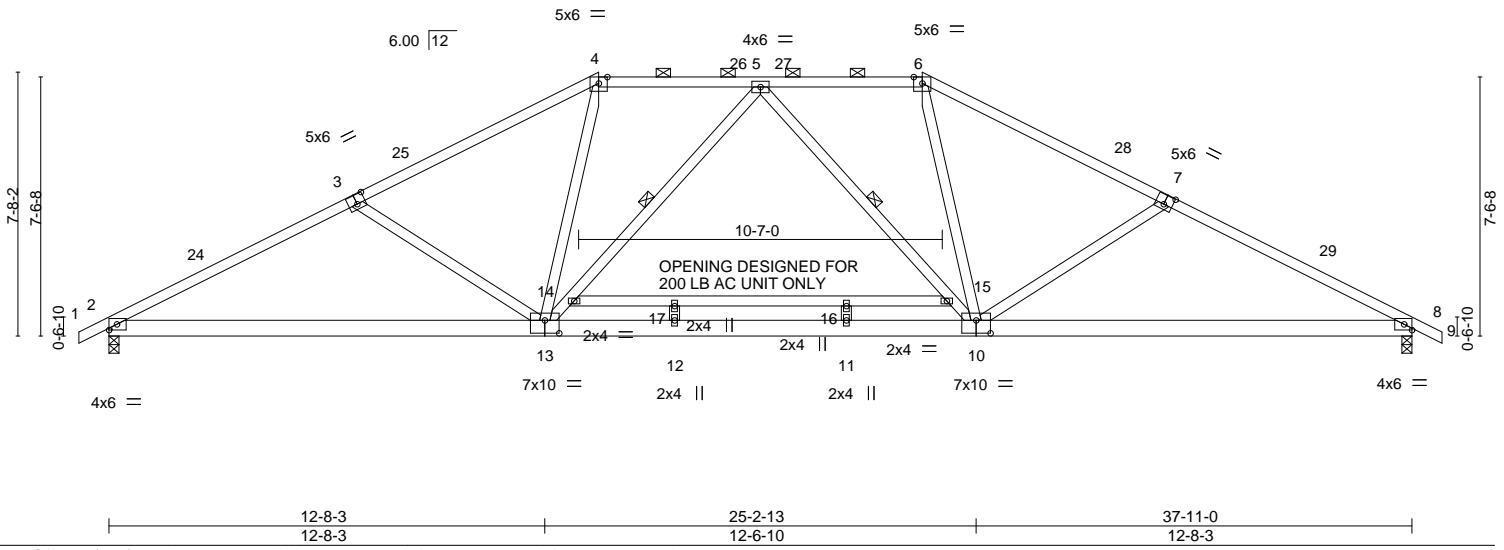


Plate Offsets (X,Y)-- [3:0-3-0,0-3-4], [7:0-3-0,0-3-4], [10:0-5-0,0-4-8], [13:0-5-0,0-4-8]

<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 0.64	Vert(LL)	-0.17 10-23	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.87	Vert(CT)	-0.52 11-12	>880	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.37	Horz(CT)	0.09 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.17 12	>999	240		
								Weight: 238 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 14-15: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied, except  
 2-0-0 oc purlins (3-10-8 max.): 4-6.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 5-13, 5-10

**REACTIONS.**

(size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=225(LC 16)  
 Max Uplift 2=-561(LC 12), 8=-561(LC 13)  
 Max Grav 2=1669(LC 1), 8=1669(LC 1)

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

TOP CHORD 2-3=-2965/1176, 3-4=-2575/974, 4-5=-2059/962, 5-6=-2059/962, 6-7=-2575/974,  
 7-8=-2965/1176  
 BOT CHORD 2-13=-914/2575, 12-13=-549/2173, 11-12=-549/2173, 10-11=-549/2173, 8-10=-921/2575  
 WEBS 3-13=-433/576, 4-13=-137/795, 13-14=-372/272, 5-14=-365/302, 5-15=-365/302,  
 10-15=-372/270, 6-10=-137/795, 7-10=-433/576

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-10-8 to 2-11-0, Interior(1) 2-11-0 to 14-3-0, Exterior(2) 14-3-0 to 19-7-6, Interior(1) 19-7-6 to 23-8-0, Exterior(2) 23-8-0 to 29-0-6, Interior(1) 29-0-6 to 38-9-8 zone; 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
- 200.0lb AC unit load placed on the bottom chord, 18-11-8 from left end, supported at two points, 5-0-0 apart.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=561, 8=561.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 23, 2020

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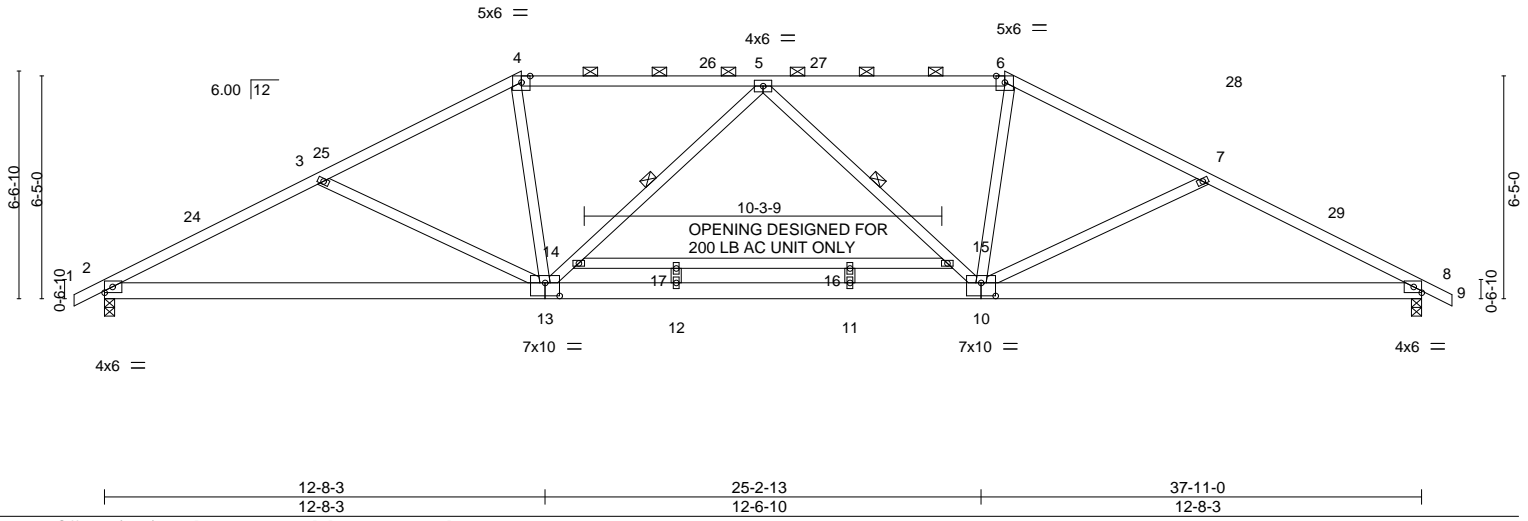
Job 2502469_MASTER	Truss G06	Truss Type Hip	Qty 2	Ply 1	H&H/Wayfare/ Job Reference (optional)	143319803
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Builders FirstSource, Sumter, SC - 29153,

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ID:5gbe\_Q0JNoiH4zfeQirvLHzQqXF-MgsEKuwijWSsultfX5P7dRdWqjST7n56JNhXOsyQu8u

0-10-8	6-3-10	12-0-0	18-11-8	25-11-0	31-7-6	37-11-0	38-9-8
0-10-8	6-3-10	5-8-6	6-11-8	6-11-8	5-8-6	6-3-10	0-10-8

Scale = 1:66.3



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.67	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.91	Vert(LL) -0.16 10-23 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.36	Vert(CT) -0.54 11-12 >840 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.10 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.20 11-12 >999 240	Weight: 233 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x6 SP No.2	2-0-0 oc purlins (3-0-1 max.): 4-6.
WEBS 2x4 SP No.3 *Except*	BOT CHORD Rigid ceiling directly applied.
14-15: 2x4 SP No.2	WEBS 1 Row at midpt 5-13, 5-10

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=191(LC 16)  
 Max Uplift 2=-523(LC 12), 8=-523(LC 13)  
 Max Grav 2=1669(LC 1), 8=1669(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2987/1232, 3-4=-2622/993, 4-5=-2375/995, 5-6=-2375/995, 6-7=-2622/993,  
 7-8=-2987/1232  
 BOT CHORD 2-13=-974/2602, 12-13=-736/2594, 11-12=-736/2594, 10-11=-736/2594, 8-10=-982/2602  
 WEBS 3-13=-357/513, 4-13=-114/782, 13-14=-465/365, 5-14=-474/411, 5-15=-474/411,  
 10-15=-465/364, 6-10=-114/782, 7-10=-357/514

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-11-0, Interior(1) 2-11-0 to 12-0-0, Exterior(2) 12-0-0 to 17-4-6, Interior(1) 17-4-6 to 25-11-0, Exterior(2) 25-11-0 to 31-3-6, Interior(1) 31-3-6 to 38-9-8 zone; 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
  - 200.0lb AC unit load placed on the bottom chord, 18-11-8 from left end, supported at two points, 5-0-0 apart.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - 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) 2=523, 8=523.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 23, 2020

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





Job 2502469_MASTER	Truss G08	Truss Type Roof Special	Qty 2	Ply 1	H&H/Wayfare/ Job Reference (optional)	143319805
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8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:35 2020 Page 1

ID:5gbe\_Q0JNoiH4zfeQirvLHzQqXF-J2\_layvF8ja7c11eWRbisisXCUBzOmhaeSlyQu8s

-0-10-8	4-6-13	8-9-8	9-7-0	16-3-12	23-2-4	29-11-0	37-11-0	38-9-8
0-10-8	4-6-13	4-2-11	0-9-8	6-8-12	6-10-8	6-8-12	8-0-0	0-10-8

Scale = 1:67.5

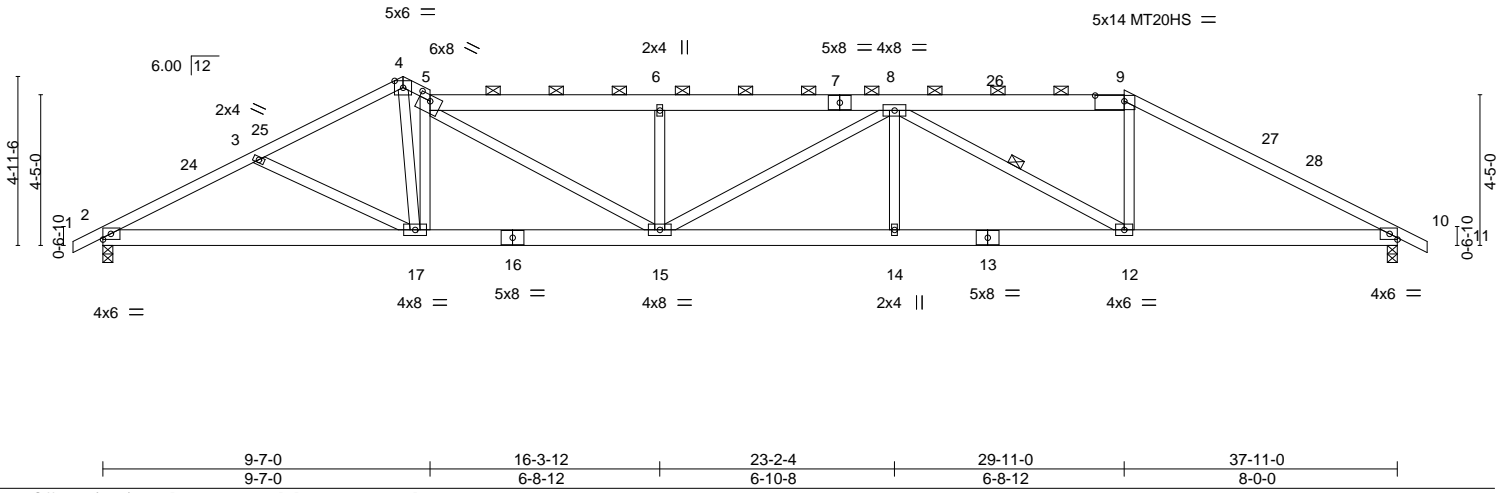


Plate Offsets (X,Y)-- [5:0-4-0,0-2-0], [9:0-10-4,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.64	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.62	Vert(LL) -0.23 14-15 >999 360	MT20HS	187/143
BCLL 0.0 *	Lumber DOL 1.15	WB 0.87	Vert(CT) -0.46 14-15 >986 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.10 10 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.37 14-15 >999 240	Weight: 238 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 \*Except\*  
5-7,7-9; 2x6 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied, except  
2-0-0 oc purlins (3-4-7 max.): 5-9.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 8-12

**REACTIONS.**

(size) 2=0-3-8, 10=0-3-8  
Max Horz 2=-145(LC 13)  
Max Uplift 2=-651(LC 13), 10=-864(LC 13)  
Max Grav 2=1569(LC 1), 10=1569(LC 1)

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

TOP CHORD 2-3=-2818/1423, 3-4=-2576/1284, 4-5=-2700/1410, 5-6=-3634/1997, 6-8=-3629/1990,  
8-9=-2377/1428, 9-10=-2781/1490  
BOT CHORD 2-17=-1147/2461, 15-17=-1118/2635, 14-15=-1686/3498, 12-14=-1686/3498,  
10-12=-1143/2402  
WEBS 3-17=-258/336, 4-17=-1093/2100, 5-17=-1862/1163, 5-15=-754/1224, 6-15=-541/475,  
8-14=0/270, 8-12=-1298/812, 9-12=-294/810

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-11-0, Interior(1) 2-11-0 to 8-9-8, Exterior(2) 8-9-8 to 9-7-0, Interior(1) 9-7-0 to 29-11-0, Exterior(2) 29-11-0 to 33-8-8, Interior(1) 33-8-8 to 38-9-8 zone; 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.
- All plates are MT20 plates unless otherwise indicated.
- 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) 2=651, 10=864.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 23, 2020

**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/TP1 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	H&H/Wayfare/
2502469_MASTER	G09	Roof Special Girder	2	<b>2</b>	I43319806
					Job Reference (optional)

Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:37 2020 Page 2  
 ID:5gbe\_Q0JNoiH4zfeQirvLHzQqXF-FR5kAGzCnlzINvAQmxU3oHnEqLpy3WOHE?fkXdyQu8q

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-4=-60, 4-5=-60, 5-9=-60, 9-12=-60, 19-22=-20

Concentrated Loads (lb)

Vert: 25=-77(F) 26=-77(F) 27=-77(F) 28=-77(F) 29=-1220(F) 30=-72(F) 31=-72(F) 32=-72(F) 33=-72(F) 34=-908(F)

**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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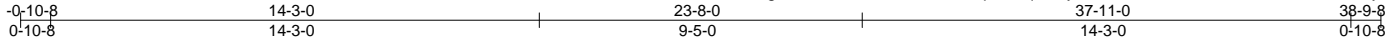
818 Soundside Road  
 Edenton, NC 27932

Job 2502469_MASTER	Truss G10	Truss Type GABLE	Qty 2	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319807
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:39 2020 Page 1

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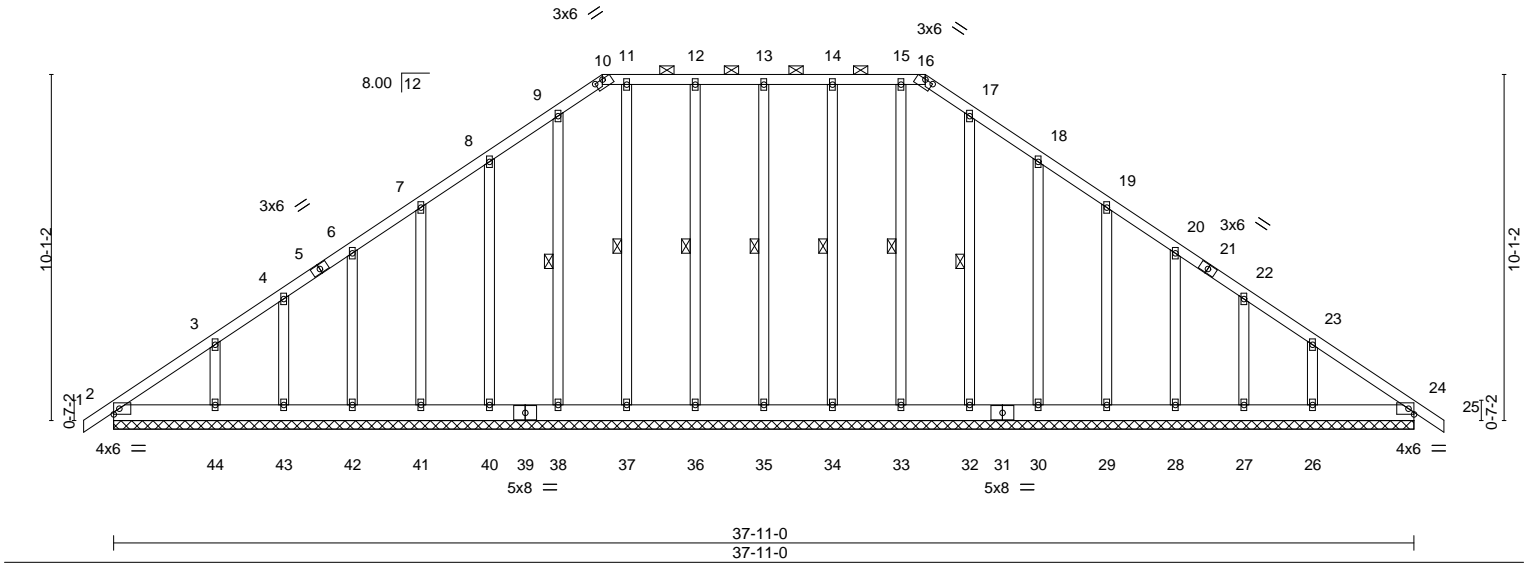


Plate Offsets (X,Y)-- [10:0-3-0,0-0-2], [16:0-3-0,0-0-2]									
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	0.00	24	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	0.00	24	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.23	Horz(CT)	0.02	24	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 319 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 2-0-0 oc purlins (6-0-0 max.): 10-16.
BOT CHORD 2x6 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 13-35, 12-36, 11-37, 9-38, 14-34, 15-33, 17-32

**REACTIONS.** All bearings 37-11-0.  
 (lb) - Max Horz 2=449(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 35, 37, 38, 33, 32, 24 except 2=105(LC 8), 36=109(LC 8), 40=170(LC 12), 41=148(LC 12), 42=159(LC 12), 43=127(LC 12), 44=249(LC 12), 34=103(LC 8), 30=174(LC 13), 29=148(LC 13), 28=159(LC 13), 27=127(LC 13), 26=245(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 35, 36, 37, 38, 40, 41, 42, 43, 34, 33, 32, 30, 29, 28, 27, 24 except 44=294(LC 19), 26=289(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-465/330, 3-4=-296/257, 8-9=-247/299, 9-10=-293/339, 10-11=-273/326, 11-12=-273/326, 12-13=-273/326, 13-14=-273/326, 14-15=-273/326, 15-16=-273/326, 16-17=-293/339, 17-18=-247/285, 23-24=-382/272  
 BOT CHORD 2-44=-273/400, 43-44=-273/400, 42-43=-273/400, 41-42=-273/400, 40-41=-273/400, 38-40=-273/400, 37-38=-273/400, 36-37=-273/400, 35-36=-273/400, 34-35=-273/400, 33-34=-273/400, 32-33=-273/400, 30-32=-273/400, 29-30=-273/400, 28-29=-273/400, 27-28=-273/400, 26-27=-273/400, 24-26=-273/400  
 WEBS 3-44=-282/258, 23-26=-283/254

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-10-8 to 2-11-8, Exterior(2) 2-11-8 to 14-3-0, Corner(3) 14-3-0 to 18-0-8, Exterior(2) 18-0-8 to 23-8-0, Corner(3) 23-8-0 to 27-5-8, Exterior(2) 27-5-8 to 38-9-8 zone; 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) 35, 37, 38, 33, 32, 24 except (it=lb) 2=105, 36=109, 40=170, 41=148, 42=159, 43=127, 44=249, 34=103, 30=174, 29=148, 28=159, 27=127,



Job	Truss	Truss Type	Qty	Ply	H&H/Wayfare/ Job Reference (optional)
2502469_MASTER	G10	GABLE	2	1	I43319807

Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:40 2020 Page 2  
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**NOTES-**

11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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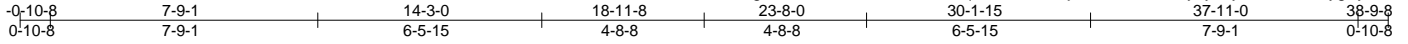


818 Soundside Road  
 Edenton, NC 27932

Job 2502469_MASTER	Truss G11	Truss Type Piggyback Base	Qty 12	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319808
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:41 2020 Page 1  
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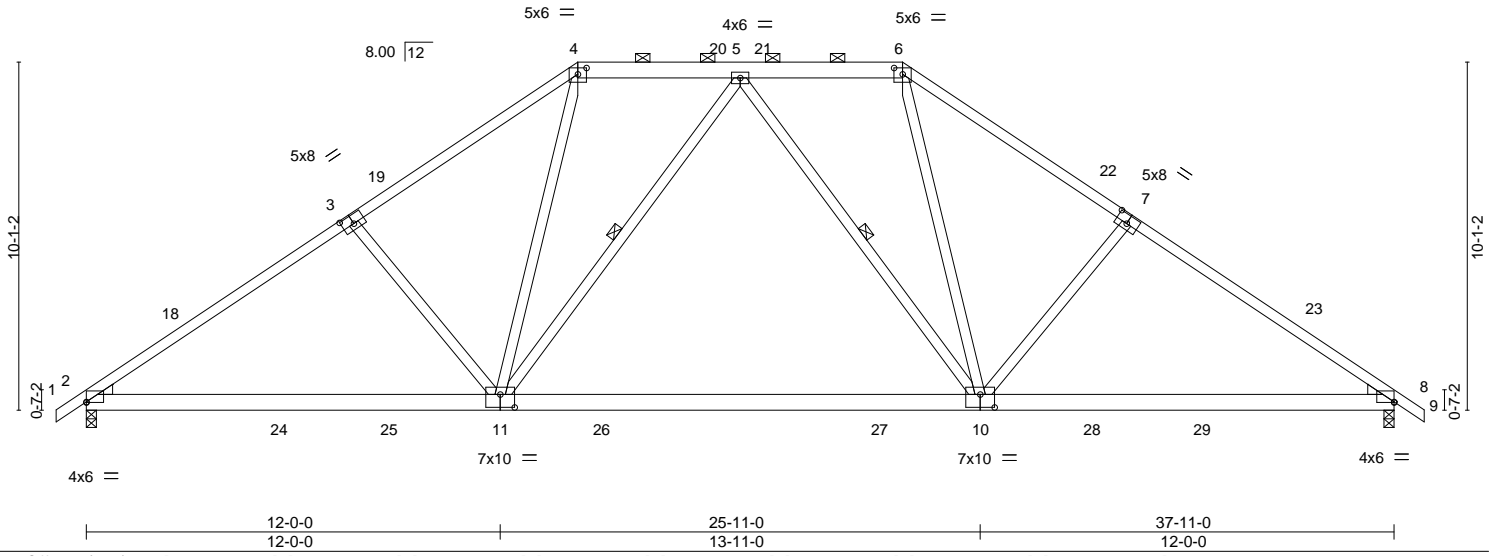


Plate Offsets (X,Y)-- [2:0-0-0,0-0-3], [3:0-4-0,0-3-0], [4:0-3-0,0-2-3], [6:0-3-0,0-2-3], [7:0-4-0,0-3-0], [8:Edge,0-0-3], [10:0-5-0,0-4-8], [11:0-5-0,0-4-8]

<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 0.62	Vert(LL) -0.38 10-11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.89	Vert(CT) -0.60 10-11	>762	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.58	Horz(CT) 0.06 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL) 0.15 11-14	>999	240		
							Weight: 248 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except* 4-6: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (5-7-0 max.): 4-6.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-11, 5-10
WEDGE	
Left: 2x4 SP No.3, Right: 2x4 SP No.3	

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
Max Horz 2=448(LC 11)  
Max Uplift 2=644(LC 12), 8=644(LC 13)  
Max Grav 2=1588(LC 2), 8=1588(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2323/1058, 3-4=-2181/1062, 4-5=-1690/929, 5-6=-1690/929, 6-7=-2181/1062,  
7-8=-2323/1058  
BOT CHORD 2-11=-789/1993, 10-11=-440/1541, 8-10=-693/1846  
WEBS 3-11=-626/554, 4-11=-310/865, 5-11=-325/425, 5-10=-325/424, 6-10=-310/865,  
7-10=-626/555

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-11-0, Interior(1) 2-11-0 to 14-3-0, Exterior(2) 14-3-0 to 19-7-6, Interior(1) 19-7-6 to 23-8-0, Exterior(2) 23-8-0 to 29-0-6, Interior(1) 29-0-6 to 38-9-8 zone; 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, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=644, 8=644.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



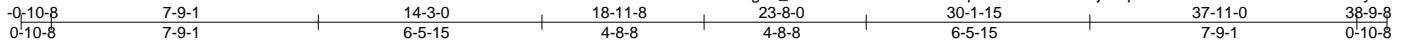
October 23, 2020

Job 2502469_MASTER	Truss G12	Truss Type Piggyback Base	Qty 6	Ply 1	H&H/Wayfare/ Job Reference (optional)	143319809
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:43 2020 Page 1

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Scale = 1:66.9

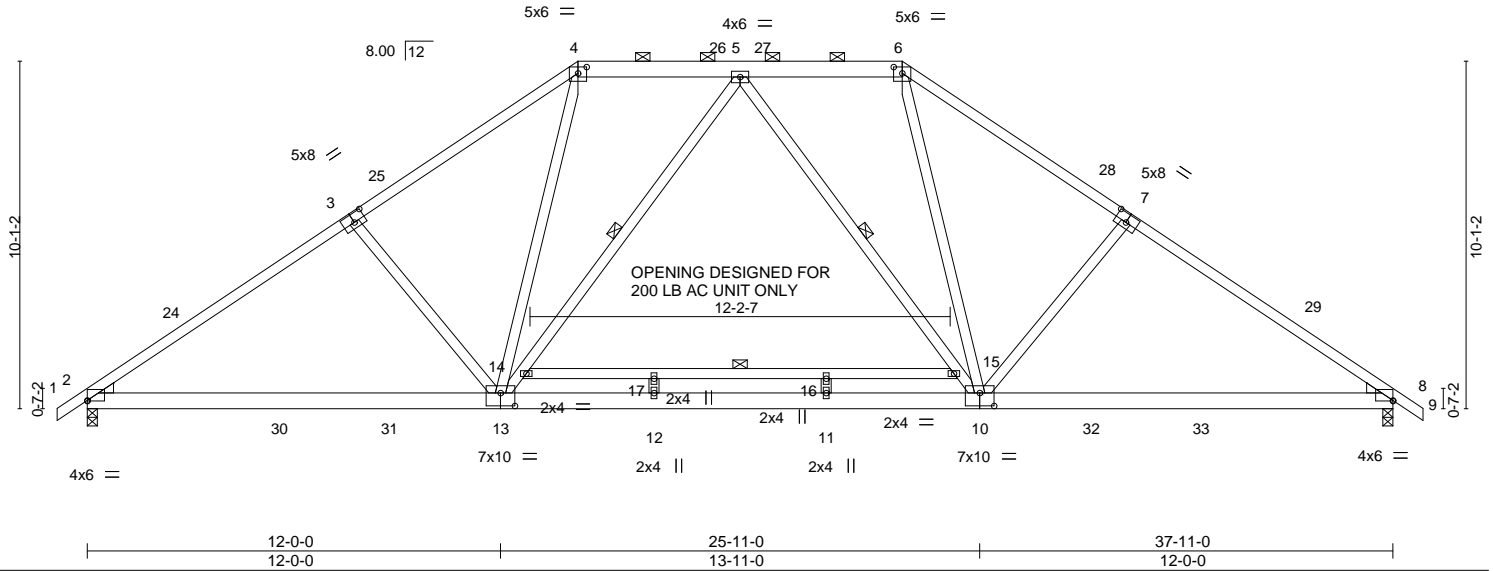


Plate Offsets (X,Y)-- [2:0-0-0,0-0-3], [3:0-4-0,0-3-0], [4:0-3-0,0-2-3], [6:0-3-0,0-2-3], [7:0-4-0,0-3-0], [8:Edge,0-0-3], [10:0-5-0,0-4-8], [13:0-5-0,0-4-8]

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 0.61	Vert(LL)	-0.16 10-23	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.92	Vert(CT)	-0.61 11-12	>746	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.53	Horz(CT)	0.06 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.15 13-20	>999	240	Weight: 268 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 \*Except\*  
4-6: 2x6 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
14-15: 2x4 SP No.2

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

**REACTIONS.**

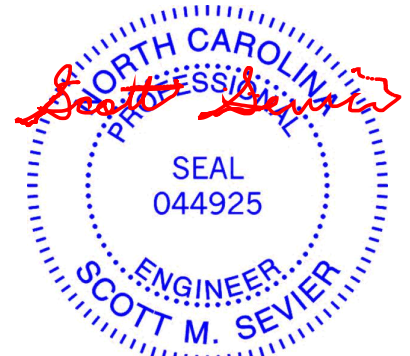
(size) 2=0-3-8, 8=0-3-8  
Max Horz 2=448(LC 11)  
Max Uplift 2=-544(LC 12), 8=-544(LC 13)  
Max Grav 2=1669(LC 1), 8=1669(LC 1)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2519/862, 3-4=-2378/865, 4-5=-1830/788, 5-6=-1830/788, 6-7=-2378/865,  
7-8=-2519/862  
BOT CHORD 2-13=-630/1955, 12-13=-283/1611, 11-12=-283/1611, 10-11=-283/1611, 8-10=-533/1950  
WEBS 3-13=-617/563, 4-13=-202/974, 13-14=-341/406, 5-14=-325/427, 5-15=-325/426,  
10-15=-341/402, 6-10=-202/973, 7-10=-617/564

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-11-0, Interior(1) 2-11-0 to 14-3-0, Exterior(2) 14-3-0 to 19-7-6, Interior(1) 19-7-6 to 23-8-0, Exterior(2) 23-8-0 to 29-0-6, Interior(1) 29-0-6 to 38-9-8 zone; 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
- 200.0lb AC unit load placed on the bottom chord, 18-11-8 from left end, supported at two points, 5-0-0 apart.
- 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=544, 8=544.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 23, 2020

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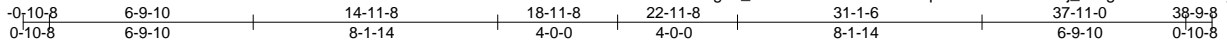
818 Soundside Road  
Edenton, NC 27932

Job 2502469_MASTER	Truss G13	Truss Type Hip	Qty 2	Ply 1	H&H/Wayfare/ Job Reference (optional)	143319810
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:44 2020 Page 1

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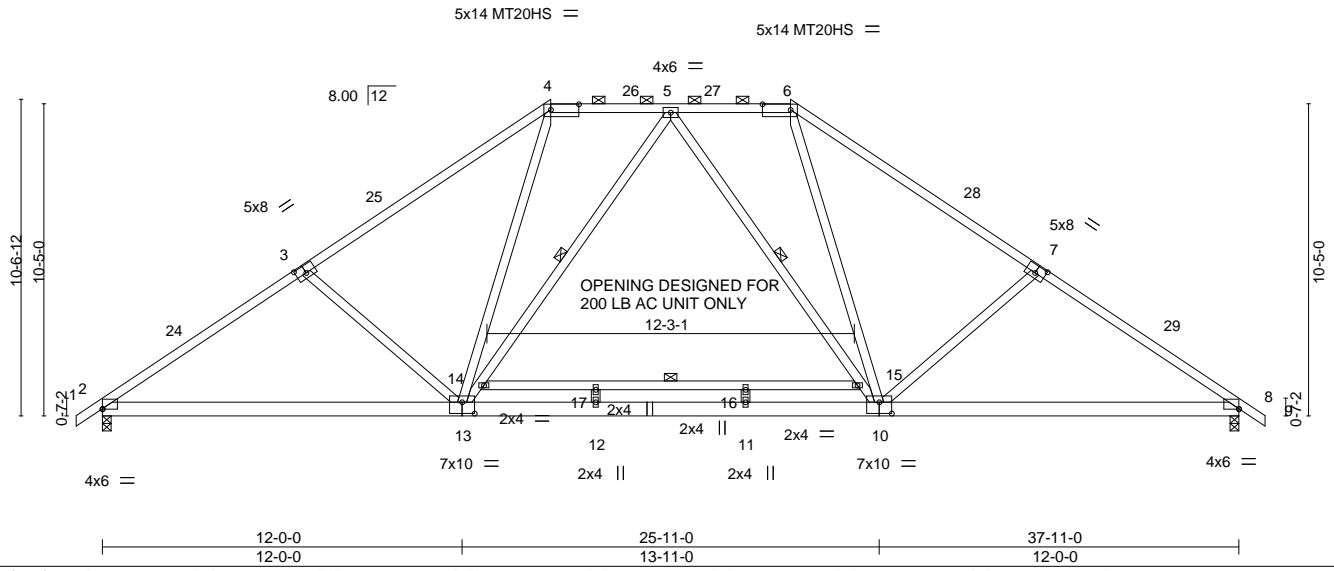


Plate Offsets (X,Y)-- [2:0-0-0,0-0-3], [3:0-4-0,0-3-0], [4:0-11-4,0-2-4], [6:0-11-4,0-2-4], [7:0-4-0,0-3-0], [8:Edge,0-0-3], [10:0-5-0,0-4-8], [13:0-5-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.87	Vert(LL) -0.16	11-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.91	Vert(CT) -0.62	11-12	>733	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr YES	WB 0.62	Horz(CT) 0.07	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.12	12	>999	240		
							Weight: 263 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 3-4,6-7; 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-9-14 max.): 4-6.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3 *Except* 14-15: 2x4 SP No.2	WEBS 1 Row at midpt 5-13, 5-10, 14-15

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=466(LC 11)  
 Max Uplift 2=554(LC 12), 8=554(LC 13)  
 Max Grav 2=1669(LC 1), 8=1669(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2630/898, 3-4=-2385/831, 4-5=-1840/803, 5-6=-1840/803, 6-7=-2385/831,  
 7-8=-2630/898  
 BOT CHORD 2-13=-743/2075, 12-13=-225/1543, 11-12=-225/1543, 10-11=-225/1543, 8-10=-595/2080  
 WEBS 3-13=-672/623, 4-13=-127/883, 13-14=-307/387, 5-14=-289/407, 5-15=-289/406,  
 10-15=-307/384, 6-10=-127/883, 7-10=-672/623

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-11-0, Interior(1) 2-11-0 to 14-11-8, Exterior(2) 14-11-8 to 20-3-14, Interior(1) 20-3-14 to 22-11-8, Exterior(2) 22-11-8 to 28-3-14, Interior(1) 28-3-14 to 38-9-8 zone; 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
  - 200.0lb AC unit load placed on the bottom chord, 18-11-8 from left end, supported at two points, 5-0-0 apart.
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - 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) 2=554, 8=554.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 23, 2020

**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 2502469_MASTER	Truss G14	Truss Type Hip	Qty 2	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319811
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:46 2020 Page 1  
ID:5gbe\_Q0JNnoiH4zfeQirvLHzQqXF-UA883L4rfW50yIM9oK8AFAfjrtMgcE0luKjLcyQu8h

0-10-8 7-1-15 14-3-0 18-11-8 23-8-0 30-9-1 37-11-0 38-9-8  
0-10-8 7-1-15 7-1-1 4-8-8 4-8-8 7-1-1 7-1-15 0-10-8

Scale = 1:67.4

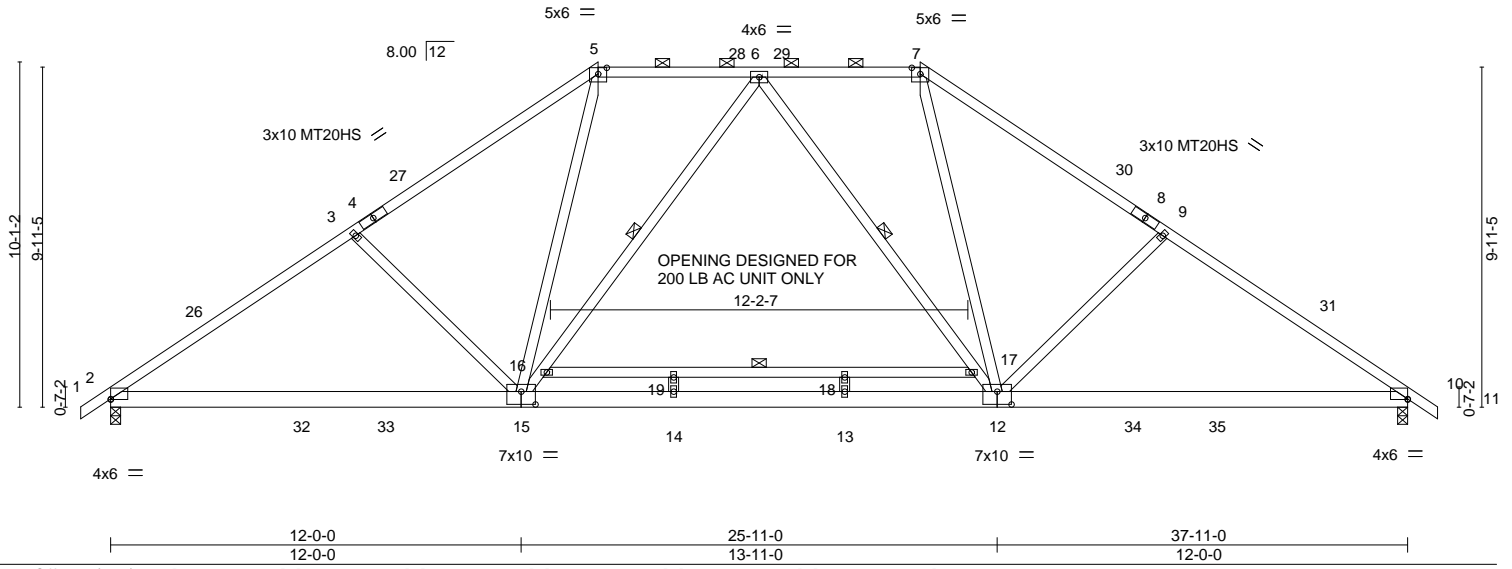


Plate Offsets (X,Y)-- [2:0-0-0,0-0-3], [5:0-3-0,0-2-3], [7:0-3-0,0-2-3], [10:Edge,0-0-3], [12:0-5-0,0-4-8], [15:0-5-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.71	Vert(LL) -0.16	13-14	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.92	Vert(CT) -0.62	13-14	>734	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr YES	WB 0.55	Horz(CT) 0.07	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.12	15-22	>999	240		
							Weight: 259 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
16-17: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied, except  
2-0-0 oc purlins (4-0-9 max.): 5-7.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 6-15, 6-12, 16-17

**REACTIONS.**

(size) 2=0-3-8, 10=0-3-8  
Max Horz 2=445(LC 11)  
Max Uplift 2=-545(LC 12), 10=-545(LC 13)  
Max Grav 2=1669(LC 1), 10=1669(LC 1)

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

TOP CHORD 2-3=-2556/885, 3-5=-2356/843, 5-6=-1836/788, 6-7=-1836/788, 7-9=-2356/843,  
9-10=-2556/885  
BOT CHORD 2-15=-675/1996, 14-15=-282/1625, 13-14=-282/1625, 12-13=-282/1625, 10-12=-570/2001  
WEBS 3-15=-619/576, 5-15=-166/927, 15-16=-344/397, 6-16=-328/419, 6-17=-328/419,  
12-17=-344/394, 7-12=-166/927, 9-12=-619/577

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-10-8 to 2-11-0, Interior(1) 2-11-0 to 14-3-0, Exterior(2) 14-3-0 to 19-7-6, Interior(1) 19-7-6 to 23-8-0, Exterior(2) 23-8-0 to 29-0-6, Interior(1) 29-0-6 to 38-9-8 zone; 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
- 200.0lb AC unit load placed on the bottom chord, 18-11-8 from left end, supported at two points, 5-0-0 apart.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 2x4 MT20 unless otherwise indicated.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=545, 10=545.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 23, 2020

**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 2502469_MASTER	Truss G15	Truss Type Hip	Qty 2	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319812
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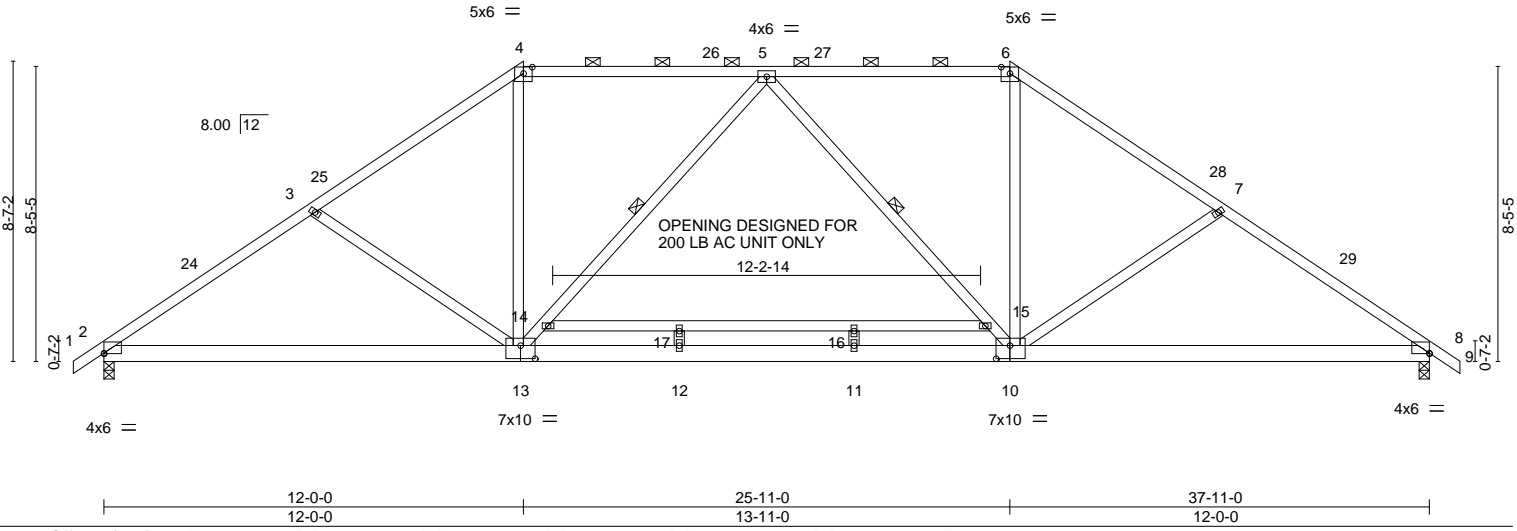
Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:47 2020 Page 1

ID:5gbe\_Q0JNoiH4zfeQirvLHzQqXF-yMiWGH5UqQDtaSxLL2fPCOCvcND4P3?9XY4Gu2yQu8g

-0-10-8	6-0-7	12-0-0	18-11-8	25-11-0	31-10-9	37-11-0	38-9-8
0-10-8	6-0-7	5-11-9	6-11-8	6-11-8	5-11-9	6-0-7	0-10-8

Scale = 1:65.9



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.65	Vert(LL) -0.16 11-12 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.95	Vert(CT) -0.64 11-12 >708 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.52	Horz(CT) 0.07 8 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.13 11-12 >999 240	Weight: 251 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x6 SP No.2	2-0-0 oc purlins (3-8-15 max.): 4-6.
WEBS 2x4 SP No.3 *Except*	BOT CHORD Rigid ceiling directly applied.
14-15: 2x4 SP No.2	WEBS 1 Row at midpt 5-13, 5-10

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=378(LC 11)  
 Max Uplift 2=-511(LC 12), 8=-511(LC 13)  
 Max Grav 2=1669(LC 1), 8=1669(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2491/928, 3-4=-2207/825, 4-5=-1909/789, 5-6=-1913/788, 6-7=-2202/823,  
 7-8=-2490/929  
 BOT CHORD 2-13=-634/1993, 12-13=-462/1906, 11-12=-462/1906, 10-11=-462/1906, 8-10=-627/1992  
 WEBS 3-13=-532/505, 4-13=-132/846, 13-14=-416/431, 5-14=-429/476, 5-15=-423/478,  
 10-15=-406/422, 6-10=-131/844, 7-10=-534/507

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-11-0, Interior(1) 2-11-0 to 12-0-0, Exterior(2) 12-0-0 to 17-4-6, Interior(1) 17-4-6 to 25-11-0, Exterior(2) 25-11-0 to 31-3-6, Interior(1) 31-3-6 to 38-9-8 zone; 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
  - 200.0lb AC unit load placed on the bottom chord, 18-11-8 from left end, supported at two points, 5-0-0 apart.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - 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) 2=511, 8=511.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 23, 2020

Job 2502469_MASTER	Truss G16	Truss Type Hip	Qty 2	Ply 1	H&H/Wayfare/ Job Reference (optional)	143319813
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:49 2020 Page 1

ID:5gbe\_Q0JNoiH4zfeQirvLHzQqXF-ulqHhN7kyRTbpl5jTShHhPIXA?ptz4S\_sZNyxyQu8e

0-10-8	5-1-15	10-0-0	18-11-8	27-11-0	32-9-1	37-11-0	38-9-8
0-10-8	5-1-15	4-10-1	8-11-8	8-11-8	4-10-1	5-1-15	0-10-8

Scale = 1:67.5

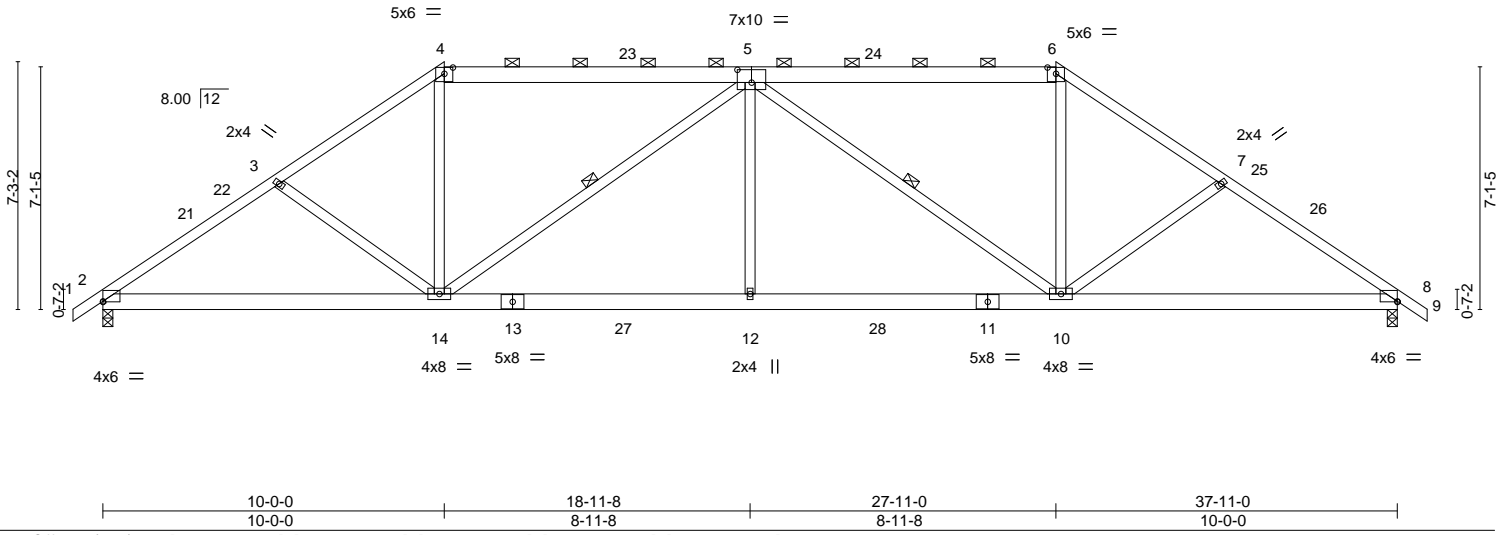


Plate Offsets (X,Y)-- [2:0-0-0,0-0-3], [4:0-3-0,0-2-3], [5:0-5-0,0-4-8], [6:0-3-0,0-2-3], [8:0-0-0,0-0-3]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.49	Vert(LL) -0.12	10-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.55	Vert(CT) -0.24	10-12	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.55	Horz(CT) 0.08	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.15	12	>999	240		
							Weight: 247 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 \*Except\*  
4-5-5-6; 2x6 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied, except  
2-0-0 oc purlins (5-1-8 max.): 4-6.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 5-14, 5-10

**REACTIONS.**

(size) 2=0-3-8, 8=0-3-8  
Max Horz 2=319(LC 11)  
Max Uplift 2=-577(LC 12), 8=-577(LC 13)  
Max Grav 2=1569(LC 1), 8=1569(LC 1)

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

TOP CHORD 2-3=-2319/1139, 3-4=-2090/1074, 4-5=-1727/982, 5-6=-1727/981, 6-7=-2090/1074,  
7-8=-2319/1140  
BOT CHORD 2-14=-872/1859, 12-14=-979/2271, 10-12=-980/2268, 8-10=-809/1860  
WEBS 3-14=-412/380, 4-14=-262/761, 5-14=-859/591, 5-12=0/443, 5-10=-859/592,  
6-10=-265/764, 7-10=-412/381

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-11-0, Interior(1) 2-11-0 to 10-0-0, Exterior(2) 10-0-0 to 15-4-6, Interior(1) 15-4-6 to 27-11-0, Exterior(2) 27-11-0 to 33-3-6, Interior(1) 33-3-6 to 38-9-8 zone; 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=577, 8=577.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 23, 2020

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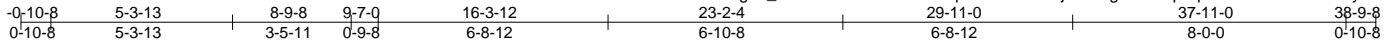
818 Soundside Road  
Edenton, NC 27932

Job 2502469_MASTER	Truss G17	Truss Type Roof Special	Qty 2	Ply 1	H&H/Wayfare/ Job Reference (optional)	143319814
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:50 2020 Page 1

ID:5gbe\_Q0JN0iH4zfeQirvLHzQqXF-MxOfv8MjlbSRvgw1AD6p0qPzaMlCLcDWIwUNyQu8d



Scale = 1:67.5

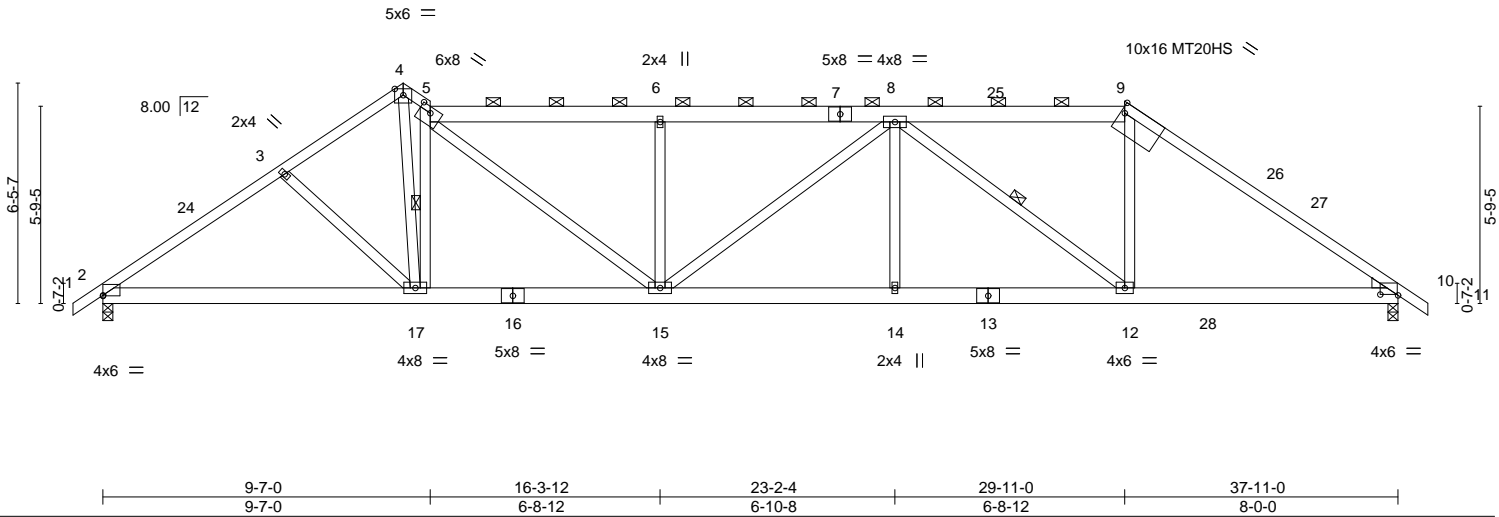


Plate Offsets (X,Y)-- [2:0-0-0,0-0-3], [5:0-4-0,0-2-0], [9:0-1-5,Edge], [10:0-6-4,0-0-5]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.71	Vert(LL) -0.15	15	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.47	Vert(CT) -0.31	14-15	>999	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr YES	WB 0.87	Horz(CT) 0.08	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.24	14-15	>999	240		
							Weight: 254 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 5-7,7-9; 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-11-1 max.): 5-9.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-17, 8-12
WEDGE	
Right: 2x4 SP No.3	

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=286(LC 11)  
 Max Uplift 2=657(LC 13), 10=858(LC 13)  
 Max Grav 2=1569(LC 1), 10=1569(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2305/1092, 3-4=-2103/1086, 4-5=-2116/1160, 5-6=-2714/1549, 6-8=-2708/1543,  
 8-9=-1793/1160, 9-10=-2299/1227  
 BOT CHORD 2-17=-859/1839, 15-17=-886/1977, 14-15=-1162/2608, 12-14=-1162/2608,  
 10-12=-771/1810  
 WEBS 3-17=-340/325, 4-17=-1114/2035, 5-17=-1765/1142, 5-15=-627/996, 6-15=-533/476,  
 8-14=0/269, 8-12=-1036/739, 9-12=-308/803

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-11-0, Interior(1) 2-11-0 to 8-9-8, Exterior(2) 8-9-8 to 9-7-0, Interior(1) 9-7-0 to 29-11-0, Exterior(2) 29-11-0 to 33-8-8, Interior(1) 33-8-8 to 38-9-8 zone; 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.
  - All plates are MT20 plates unless otherwise indicated.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=657, 10=858.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 23, 2020

Job 2502469_MASTER	Truss G18	Truss Type Roof Special Girder	Qty 2	Ply 2	H&H/Wayfare/ Job Reference (optional)	143319815
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:52 2020 Page 1

ID:5gbe\_Q0JN0iH4zfeQirvLHzQqXF-JKVPJJO9cFMsAgDql8bFauRvpMOxt4Ifvgqn1ZGyQu8b

-0-10-8	4-7-5	8-9-8	11-8-8	16-9-8	21-10-8	26-11-8	32-0-8	34-5-2	37-11-0	38-9-8
0-10-8	4-7-5	4-2-3	2-11-0	5-1-0	5-1-0	5-1-0	5-1-0	2-4-10	3-5-14	0-10-8

Scale = 1:67.5

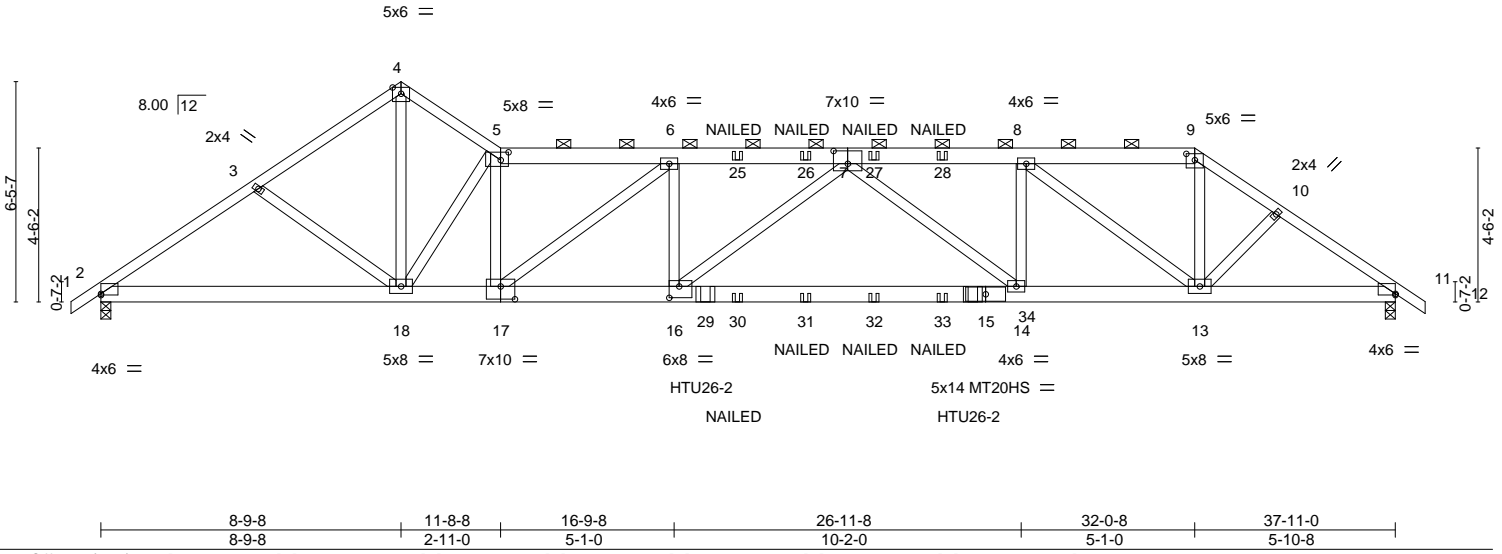


Plate Offsets (X,Y)--	[2:0-0-0,0-0-7], [5:0-2-12,0-2-12], [7:0-5-0,0-4-8], [9:0-3-0,0-2-3], [11:Edge,0-0-7], [16:0-3-8,0-4-0], [17:0-5-0,0-4-8]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.46	Vert(LL)	0.53 14-16	>856	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.91	Vert(CT)	-0.59 14-16	>771	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.69	Horz(CT)	0.10 11	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 514 lb	FT = 20%

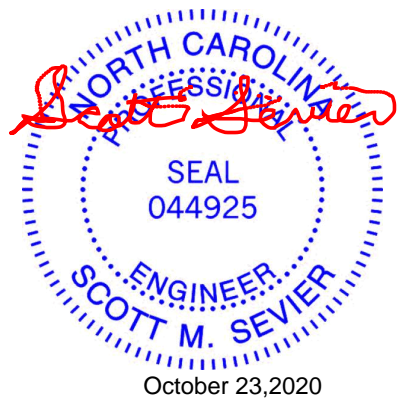
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except* 5-7,7-9; 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-4-14 oc purlins, except 2-0-0 oc purlins (5-2-1 max.): 5-9.
BOT CHORD 2x6 SP No.2 *Except* 11-15: 2x6 SP No.1, 15-17: 2x6 SP DSS	BOT CHORD Rigid ceiling directly applied or 7-4-5 oc bracing.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8  
 Max Horz 2=-286(LC 25)  
 Max Uplift 2=-1524(LC 9), 11=-1978(LC 9)  
 Max Grav 2=2750(LC 1), 11=3065(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4358/2584, 3-4=-4151/2577, 4-5=-4122/2556, 5-6=-6249/3968, 6-7=-8672/5625,  
 7-8=-7205/4832, 8-9=-3824/2617, 9-10=-4693/3129, 10-11=-4796/3131  
 BOT CHORD 2-18=-1987/3543, 17-18=-3663/6247, 16-17=-5322/8672, 14-16=-5361/8280,  
 13-14=-4529/7205, 11-13=-2446/3902  
 WEBS 3-18=-326/399, 4-18=-2666/4281, 5-18=-4890/3296, 5-17=-1124/1624, 6-17=-3157/2122,  
 6-16=-945/1539, 7-16=-25/542, 7-14=-1375/1075, 8-14=-1331/2257, 8-13=-4279/2824,  
 9-13=-1522/2335, 10-13=-222/253

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 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=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - 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) 2=1524, 11=1978.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Use Simpson Strong-Tie HTU26-2 (20-10d Girder, 14-10d Truss, Single Ply Girder) or equivalent spaced at 7-10-0 oc max. starting at 17-8-8 from the left end to 25-6-8 to connect truss(es) to front face of bottom chord.

Continued on page 2 where hanger is in contact with lumber.



Job	Truss	Truss Type	Qty	Ply	H&H/Wayfare/
2502469_MASTER	G18	Roof Special Girder	2	<b>2</b>	I43319815
					Job Reference (optional)

Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:52 2020 Page 2  
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**NOTES-**

13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-4=-60, 4-5=-60, 5-9=-60, 9-12=-60, 19-22=-20

Concentrated Loads (lb)

Vert: 25=-79(F) 26=-79(F) 27=-79(F) 28=-79(F) 29=-1191(F) 30=-70(F) 31=-70(F) 32=-70(F) 33=-70(F) 34=-891(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/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

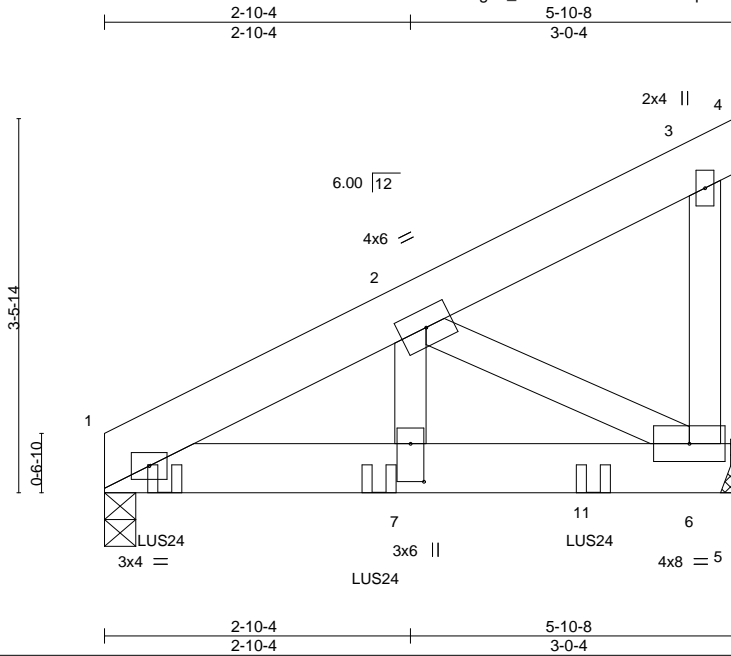


818 Soundside Road  
 Edenton, NC 27932

Job 2502469_MASTER	Truss H01	Truss Type Jack-Closed Girder	Qty 2	Ply 2	H&H/Wayfare/ Job Reference (optional)	I43319816
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:53 2020 Page 1  
ID:5gbe\_Q0JN0iH4zfeQirvLHzQqXF-nW3nXkAE0g\_1INPVilmpRfS4snPrptL2vUXb5iyQu8a



Scale = 1:21.5

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.09	Vert(LL) 0.01	7	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.35	Vert(CT) -0.01	6-7	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.15	Horz(CT) 0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MP					Weight: 78 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-10-8 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	

**REACTIONS.** (size) 1=0-3-8, 6=Mechanical  
 Max Horz 1=203(LC 8)  
 Max Uplift 1=570(LC 8), 6=674(LC 8)  
 Max Grav 1=1269(LC 1), 6=1240(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1489/632  
 BOT CHORD 1-7=-721/1336, 6-7=-721/1336  
 WEBS 2-7=-511/1185, 2-6=-1521/820

- 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 0-9-0 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.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left exposed; end vertical left 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.
  - 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) 1=570, 6=674.
  - Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 0-6-12 from the left end to 4-6-12 to connect truss(es) to back face of bottom chord.
  - Fill all nail holes where hanger is in contact with lumber.

**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=-20, 5-8=-20  
 Concentrated Loads (lb)  
 Vert: 7=-682(B) 10=-686(B) 11=-682(B)



October 23, 2020

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 Edenton, NC 27932

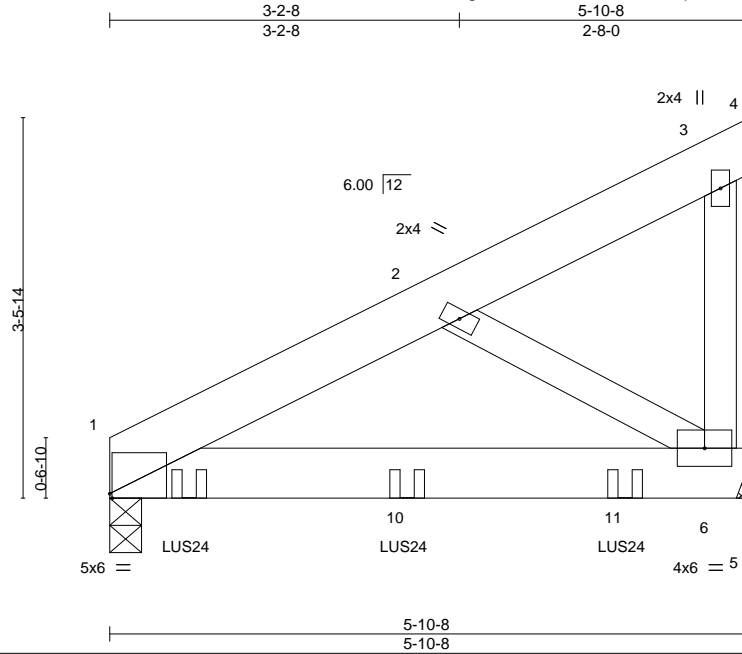




Job 2502469_MASTER	Truss H03	Truss Type Jack-Closed Girder	Qty 2	Ply 2	H&H/Wayfare/ Job Reference (optional)	I43319818
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:54 2020 Page 1  
ID:5gbe\_Q0JNoiH4zfeQirvLHzQqXF-FidAk4Btrnz6uvW\_hG0H2\_s\_B4BkzYM7B88G8d8yQu8Z



Scale = 1:21.1

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.38	Vert(LL) 0.03	6-9	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.42	Vert(CT) -0.05	6-9	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.05	Horz(CT) 0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MP					Weight: 74 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-10-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=0-3-8, 6=Mechanical  
Max Horz 1=203(LC 8)  
Max Uplift 1=422(LC 8), 6=534(LC 8)  
Max Grav 1=938(LC 1), 6=928(LC 1)

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

TOP CHORD 1-2=-536/214  
BOT CHORD 1-6=-408/632  
WEBS 2-6=-733/472

**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 0-9-0 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.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left exposed; end vertical left 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.
- 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) 1=422, 6=534.
- Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 0-8-12 from the left end to 4-8-12 to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

**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=-20, 5-7=-20  
Concentrated Loads (lb)  
Vert: 9=-471(F) 10=-468(F) 11=-468(F)



October 23, 2020

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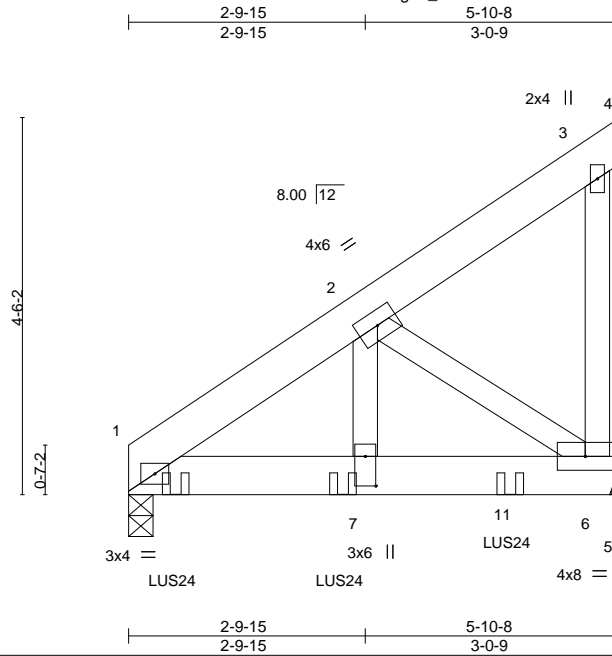
818 Soundside Road  
Edenton, NC 27932

Job 2502469_MASTER	Truss H04	Truss Type Jack-Closed Girder	Qty 2	Ply 2	H&H/Wayfare/ Job Reference (optional)	I43319819
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:55 2020 Page 1

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Scale = 1:27.5

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) 0.01	6-7	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.32	Vert(CT) -0.01	6-7	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.14	Horz(CT) 0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MP					Weight: 85 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-10-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=0-3-8, 6=Mechanical  
Max Horz 1=270(LC 8)  
Max Uplift 1=-519(LC 8), 6=-684(LC 8)  
Max Grav 1=1298(LC 1), 6=1234(LC 29)

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

TOP CHORD 1-2=-1206/427  
BOT CHORD 1-7=-563/1019, 6-7=-563/1019  
WEBS 2-7=-485/1182, 2-6=-1251/691

**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 0-9-0 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.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left exposed; end vertical left 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.
- 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) 1=519, 6=684.
- Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 0-6-12 from the left end to 4-6-12 to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

**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=-20, 5-8=-20  
Concentrated Loads (lb)  
Vert: 7=-682(B) 10=-686(B) 11=-682(B)



October 23, 2020

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818 Soundside Road  
Edenton, NC 27932

Job 2502469_MASTER	Truss H05	Truss Type Jack-Open	Qty 8	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319820
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Builders FirstSource, Sumter, SC - 29153,

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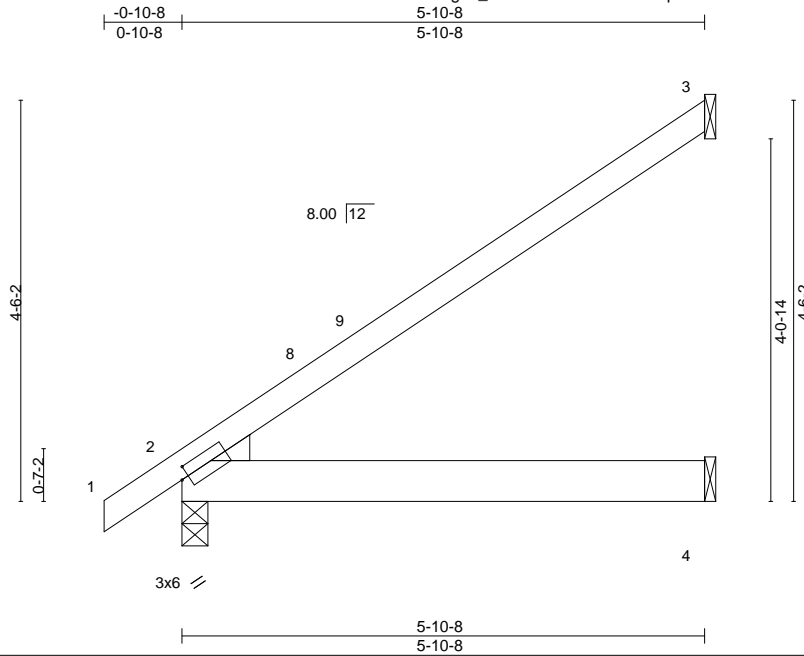


Plate Offsets (X,Y)-- [2:0-1-0,0-1-8]

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	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.34	Vert(CT)	-0.04	4-7	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS						Weight: 27 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEDGE  
 Left: 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied.  
 BOT CHORD Rigid ceiling directly applied.

**REACTIONS.**

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
 Max Horz 2=304(LC 12)  
 Max Uplift 3=-199(LC 12), 2=-79(LC 12), 4=-28(LC 12)  
 Max Grav 3=178(LC 19), 2=289(LC 19), 4=121(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-9-12 zone; cantilever left exposed; end vertical left 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, 4 except (jt=lb) 3=199.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 23, 2020

**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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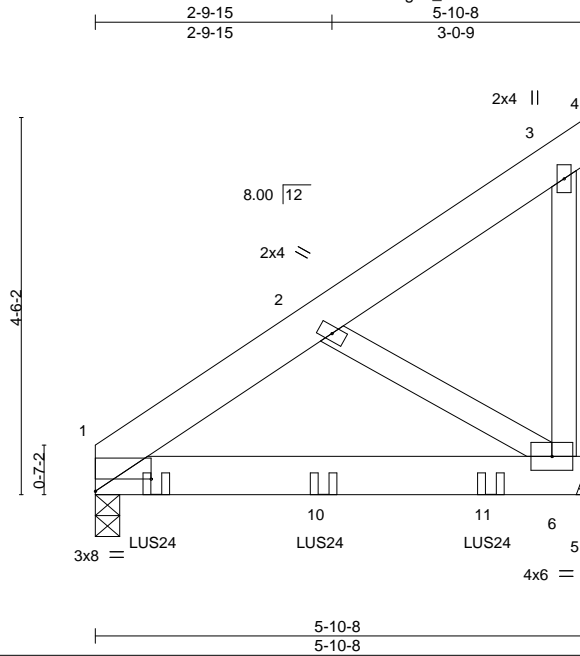


818 Soundside Road  
 Edenton, NC 27932

Job 2502469_MASTER	Truss H06	Truss Type Jack-Closed Girder	Qty 2	Ply 2	H&H/Wayfare/ Job Reference (optional)	I43319821
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:57 2020 Page 1  
ID:5gbe\_Q0JNoiH4zfeQirvLHzQqXF-fHJIN6DI3uUTm\_iGx8ribVchoPmdjzeq6VoETyQu8W



Scale = 1:27.5

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.35	Vert(LL) 0.03	6-9	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.43	Vert(CT) -0.05	6-9	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.04	Horz(CT) -0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MP					Weight: 81 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-10-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=0-3-8, 6=Mechanical  
Max Horz 1=270(LC 8)  
Max Uplift 1=372(LC 8), 6=554(LC 8)  
Max Grav 1=956(LC 1), 6=911(LC 1)

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

TOP CHORD 1-2=-412/103  
BOT CHORD 1-6=-371/516  
WEBS 2-6=-604/434

**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 0-9-0 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.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left exposed; end vertical left 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.
- 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) 1=372, 6=554.
- Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 0-8-12 from the left end to 4-8-12 to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

**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=-20, 5-7=-20  
Concentrated Loads (lb)  
Vert: 9=-471(F) 10=-468(F) 11=-468(F)



October 23, 2020

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818 Soundside Road  
Edenton, NC 27932

Job 2502469_MASTER	Truss J01	Truss Type MONOPITCH	Qty 10	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319822
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:58 2020 Page 1  
ID:5gbe\_Q0JNoiH4zfeQirvLHzQqXF-7UtgaSEnqCcJO8HSvrM\_8i9rRo5MUAsn3mELmvyQu8V

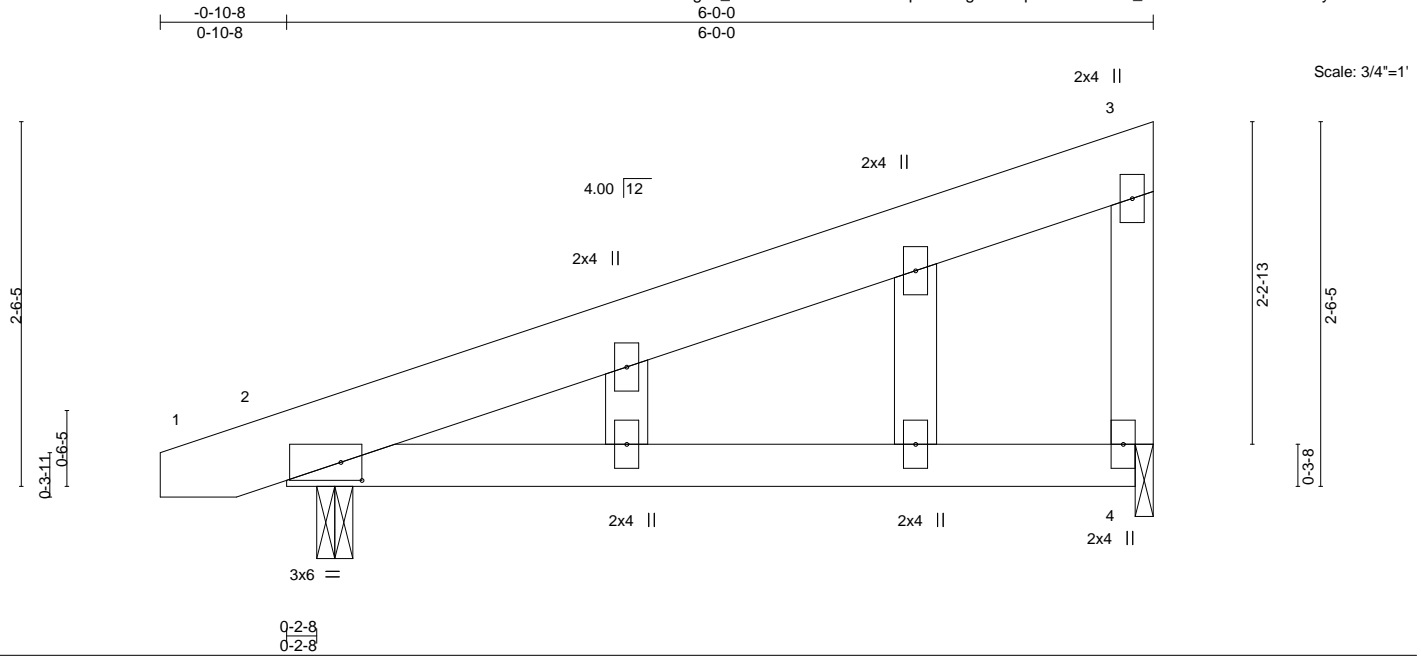


Plate Offsets (X,Y)-- [2-0-1-12,0-1-8]

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 0.42	Vert(LL)	0.13 4-11	>529	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.46	Vert(CT)	-0.07 4-11	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01 2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS					Weight: 31 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, except end verticals.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (size) 2=0-3-0, 4=0-1-8  
Max Horz 2=154(LC 8)  
Max Uplift 2=-256(LC 8), 4=-253(LC 8)  
Max Grav 2=273(LC 1), 4=232(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 3-4=-178/344

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ; end vertical left 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
  - 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) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=256, 4=253.
  - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



October 23,2020

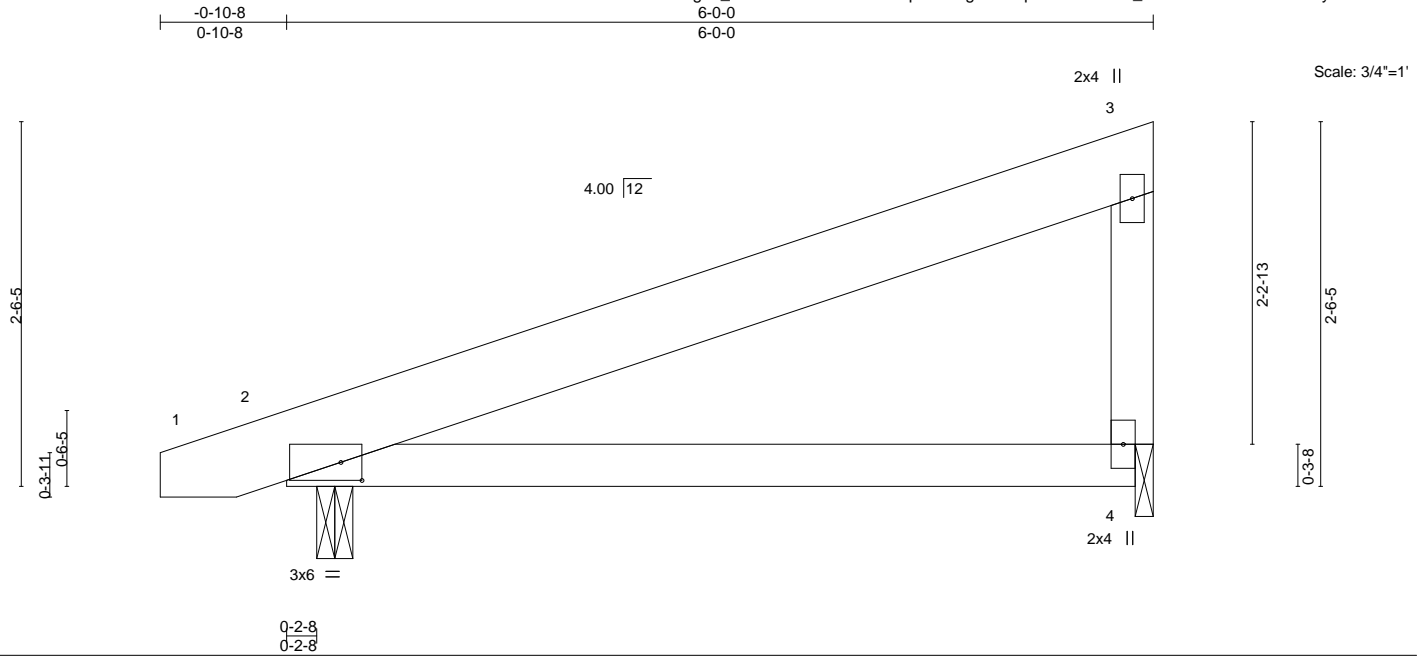
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before 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 2502469_MASTER	Truss J05	Truss Type MONOPITCH	Qty 24	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319823
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:58 2020 Page 1  
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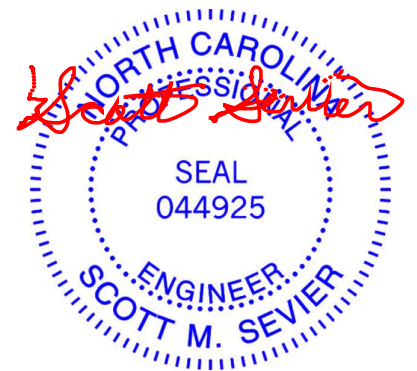
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.42	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.46	Vert(LL) 0.13 4-7 >529 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.07 4-7 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) -0.01 2 n/a n/a	Weight: 28 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 2=0-3-0, 4=0-1-8  
 Max Horz 2=154(LC 8)  
 Max Uplift 2=-256(LC 8), 4=-253(LC 8)  
 Max Grav 2=273(LC 1), 4=232(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-4=-178/344

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed; end vertical left 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
  - 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) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=256, 4=253.
  - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



October 23, 2020

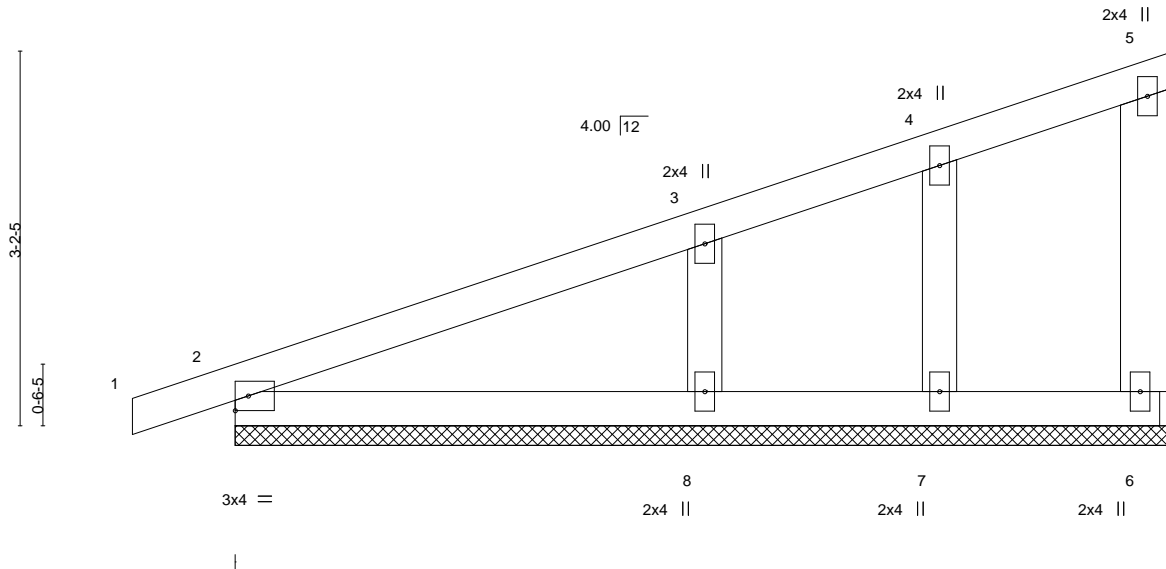
Job 2502469_MASTER	Truss M01	Truss Type GABLE	Qty 2	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319824
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:35:59 2020 Page 1  
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Scale = 1:19.6



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.18	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.12	Vert(LL) -0.00 1 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.11	Vert(CT) 0.00 1 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 6 n/a n/a		
	Code IRC2015/TPI2014			Weight: 37 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x6 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 8-0-0.  
(lb) - Max Horz 2=163(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 6, 2, 7 except 8=124(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 6, 2, 7 except 8=316(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-277/159  
WEBS 3-8=-229/363

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; 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) 6, 2, 7 except (jt=lb) 8=124.



October 23,2020

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818 Soundside Road  
Edenton, NC 27932

Job 2502469_MASTER	Truss M02	Truss Type Monopitch	Qty 4	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319825
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:36:00 2020 Page 1  
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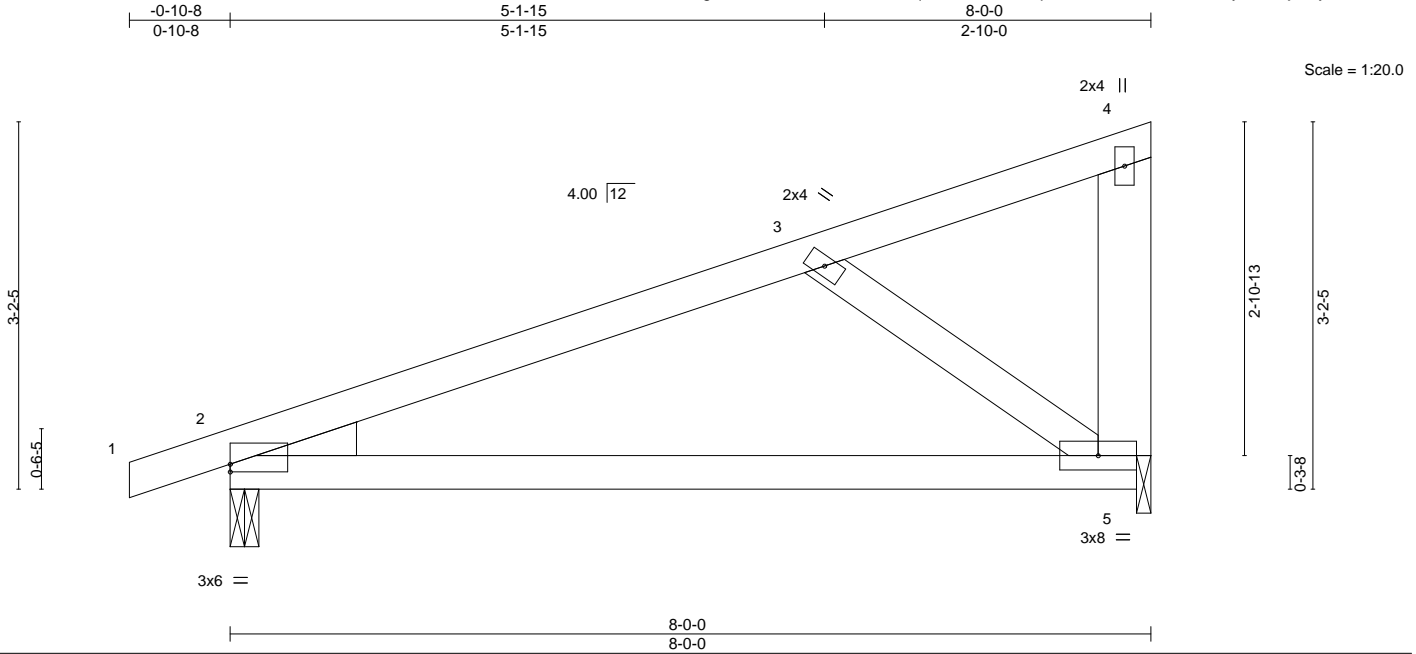


Plate Offsets (X,Y)-- [2:0-0-0,0-0-13]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.54	Vert(LL) 0.28	5-8	>336	240	MT20	244/190	
TCDL 10.0	Lumber DOL 1.15	BC 0.63	Vert(CT) -0.16	5-8	>586	240			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.20	Horz(CT) -0.02	2	n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS							
								Weight: 38 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x6 SP No.2 \*Except\*  
3-5: 2x4 SP No.3

**WEDGE**  
Left: 2x4 SP No.3

**REACTIONS.** (size) 2=0-3-0, 5=0-1-8  
Max Horz 2=146(LC 8)  
Max Uplift 2=-253(LC 8), 5=-245(LC 8)  
Max Grav 2=366(LC 1), 5=308(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-366/499  
BOT CHORD 2-5=-658/320  
WEBS 3-5=-349/657

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; end vertical left exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) 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) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=253, 5=245.
  - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 23, 2020

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932



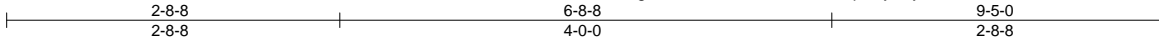




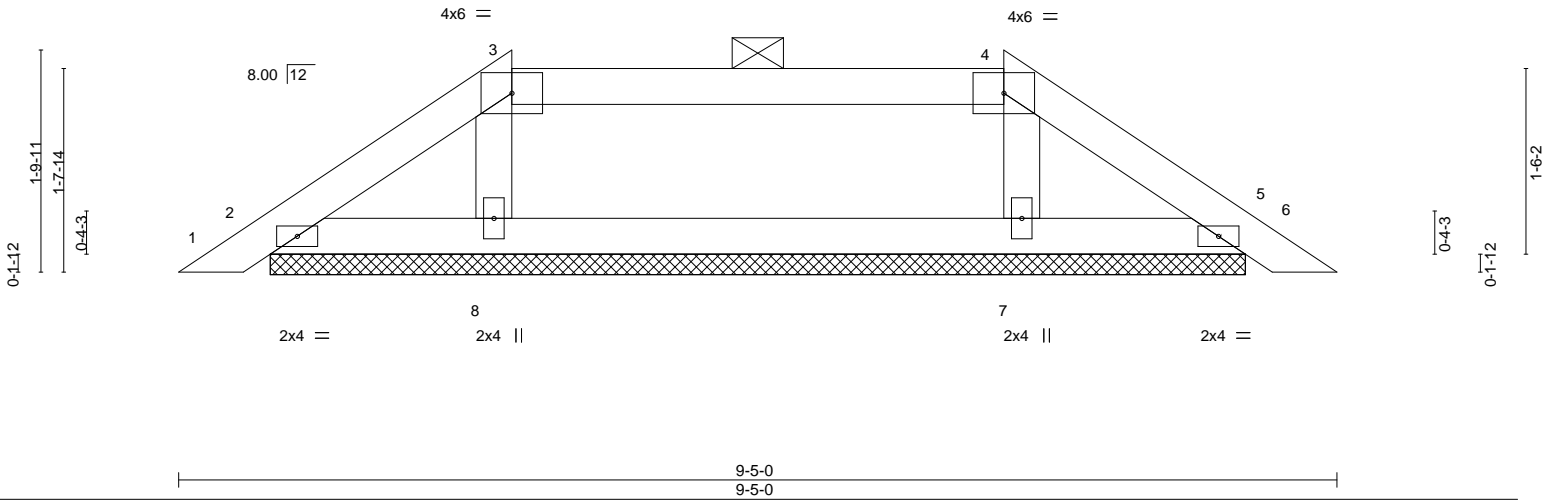
Job 2502469_MASTER	Truss PB03	Truss Type Piggyback	Qty 2	Ply 1	H&H/Wayfare/ Job Reference (optional)	I43319828
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 22 10:36:04 2020 Page 1  
ID:5gbe\_Q0JNoiH4zfeQirvLHzQqXF-ydEyrVI8Q2MT63kcr6TPOzPwuDEGusGgRihg\_ZyQu8P



Scale = 1:18.7



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.23	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.11	Vert(LL) 0.00 5 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.07	Vert(CT) 0.00 5 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 5 n/a n/a		
	Code IRC2015/TPI2014			Weight: 30 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 2-0-0 oc purlins (6-0-0 max.): 3-4.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 7-11-2.  
(lb) - Max Horz 2=70(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 5 except 8=127(LC 9), 7=111(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) 2, 5 except 8=267(LC 23), 7=267(LC 24)

**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=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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.
  - 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) 2, 5 except (jt=lb) 8=127, 7=111.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 23, 2020

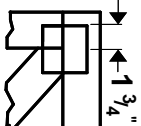
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before 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/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



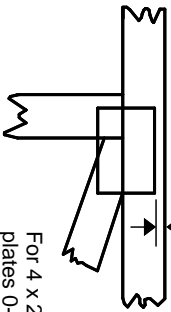
818 Soundside Road  
Edenton, NC 27932

# 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.

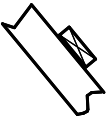
\* Plate location details available in **MITek 20/20 software or upon request.**

## PLATE SIZE

4 X 4

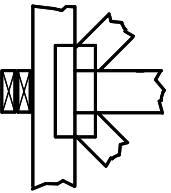
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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



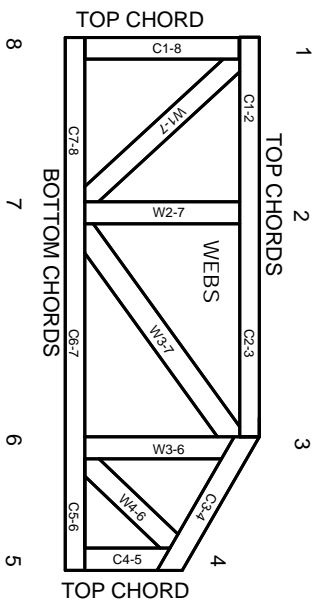
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

### Industry Standards:

ANSI/TP1: 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  
BCSI: 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/TP1 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 T or 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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.