

RE: 681099\_Master\_120 - H&H/Jackson/

Trenco  
 818 Soundside Rd  
 Edenton, NC 27932

**Site Information:**

Project Customer: H and H Project Name:  
 Lot/Block: B Subdivision: ALL  
 Model:  
 Address:  
 City: Fayetteville 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: 120 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	I37107172	A01	5/16/19	35	I37107206	C25	5/16/19
2	I37107173	A02	5/16/19	36	I37107207	C26	5/16/19
3	I37107174	A04	5/16/19	37	I37107208	D01	5/16/19
4	I37107175	A05	5/16/19	38	I37107209	D02	5/16/19
5	I37107176	A06	5/16/19	39	I37107210	D03	5/16/19
6	I37107177	A07	5/16/19	40	I37107211	E01	5/16/19
7	I37107178	A08	5/16/19	41	I37107212	E02	5/16/19
8	I37107179	A09	5/16/19	42	I37107213	FG01	5/16/19
9	I37107180	A10	5/16/19	43	I37107214	G01	5/16/19
10	I37107181	A11	5/16/19	44	I37107215	G02	5/16/19
11	I37107182	A20	5/16/19	45	I37107216	G03	5/16/19
12	I37107183	A21	5/16/19	46	I37107217	G04	5/16/19
13	I37107184	A22	5/16/19	47	I37107218	G05	5/16/19
14	I37107185	A23	5/16/19	48	I37107219	J01	5/16/19
15	I37107186	A24	5/16/19	49	I37107220	J02	5/16/19
16	I37107187	A25	5/16/19	50	I37107221	J03	5/16/19
17	I37107188	A26	5/16/19	51	I37107222	J04	5/16/19
18	I37107189	A27	5/16/19	52	I37107223	J05	5/16/19
19	I37107190	A28	5/16/19	53	I37107224	J06	5/16/19
20	I37107191	B01	5/16/19	54	I37107225	J07	5/16/19
21	I37107192	B02	5/16/19	55	I37107226	J22	5/16/19
22	I37107193	B03	5/16/19	56	I37107227	PB01	5/16/19
23	I37107194	B04	5/16/19	57	I37107228	PB02	5/16/19
24	I37107195	C01	5/16/19	58	I37107229	PB03	5/16/19
25	I37107196	C02	5/16/19	59	I37107230	PB04	5/16/19
26	I37107197	C03	5/16/19	60	I37107231	PB05	5/16/19
27	I37107198	C04	5/16/19	61	I37107232	PB06	5/16/19
28	I37107199	C05	5/16/19	62	I37107233	PB07	5/16/19
29	I37107200	C06	5/16/19	63	I37107234	PB08	5/16/19
30	I37107201	C07	5/16/19	64	I37107235	V01	5/16/19
31	I37107202	C21	5/16/19	65	I37107236	V02	5/16/19
32	I37107203	C22	5/16/19				
33	I37107204	C23	5/16/19				
34	I37107205	C24	5/16/19				

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. 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, 2019.

**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.



May 16, 2019

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107172
681099_Master_120	A01	GABLE	4	1		

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-0-10-8	19-3-4	23-7-12	42-11-0	43-9-8
0-10-8	19-3-4	4-4-9	19-3-4	0-10-8

Scale = 1:77.8

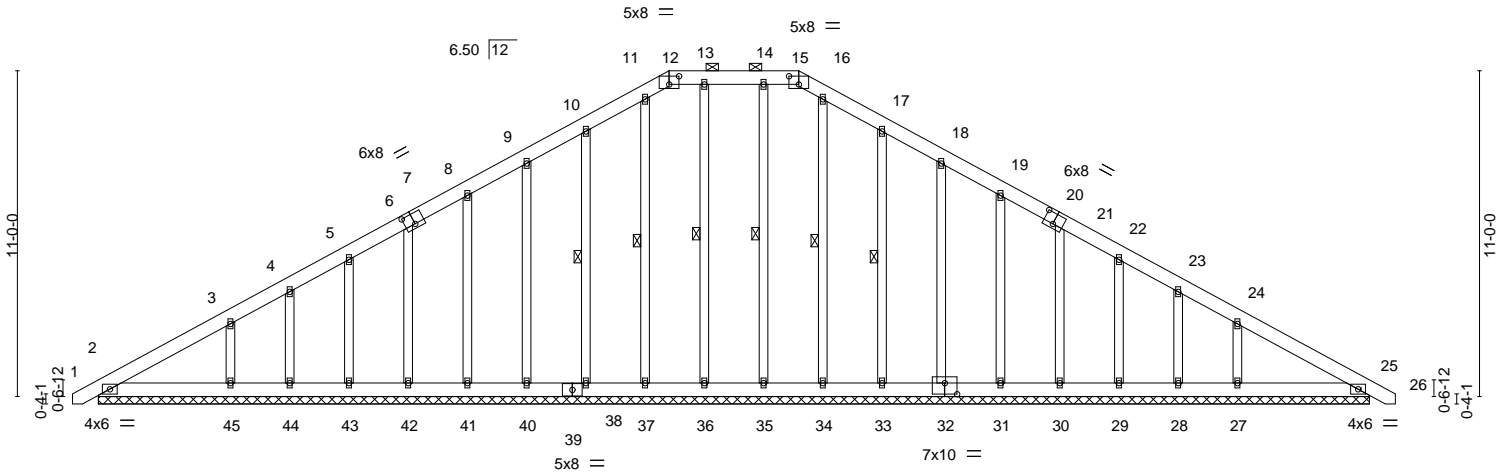


Plate Offsets (X,Y)--	[6:0-2-0,0-0-0], [7:0-4-0,0-4-4], [7:0-0-0,0-2-12], [12:0-4-0,0-3-5], [15:0-4-0,0-3-5], [20:0-4-0,0-4-4], [20:0-0-0,0-2-12], [21:0-2-0,0-0-0], [32:0-5-0,0-4-8]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	0.00	26	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	0.00	26	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.01	25	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 388 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except
BOT CHORD 2x6 SP No.2	2-0-0 oc purlins (6-0-0 max.): 12-15.
OTHERS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
	WEBS 1 Row at midpt 13-36, 11-37, 10-38, 14-35, 16-34, 17-33

**REACTIONS.** All bearings 42-11-0.  
 (lb) - Max Horz 2=238(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 36, 37, 38, 40, 41, 42, 43, 44, 35, 33, 32, 31, 30, 29, 28 except 45=150(LC 12), 27=149(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 25, 36, 37, 38, 40, 41, 42, 43, 44, 35, 34, 33, 32, 31, 30, 29, 28 except 45=354(LC 23), 27=354(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-260/185, 9-10=-209/261, 10-11=-255/294, 11-12=-252/292, 12-13=-247/293, 13-14=-247/293, 14-15=-247/293, 15-16=-252/292, 16-17=-255/294  
 WEBS 3-45=-276/185, 24-27=-276/184

- NOTES-** (12)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; 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.
  - 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) 2, 36, 37, 38, 40, 41, 42, 43, 44, 35, 33, 32, 31, 30, 29, 28 except (jt=lb) 45=150, 27=149.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107173
681099_Master_120	A02	PIGGYBACK BASE	38	1		

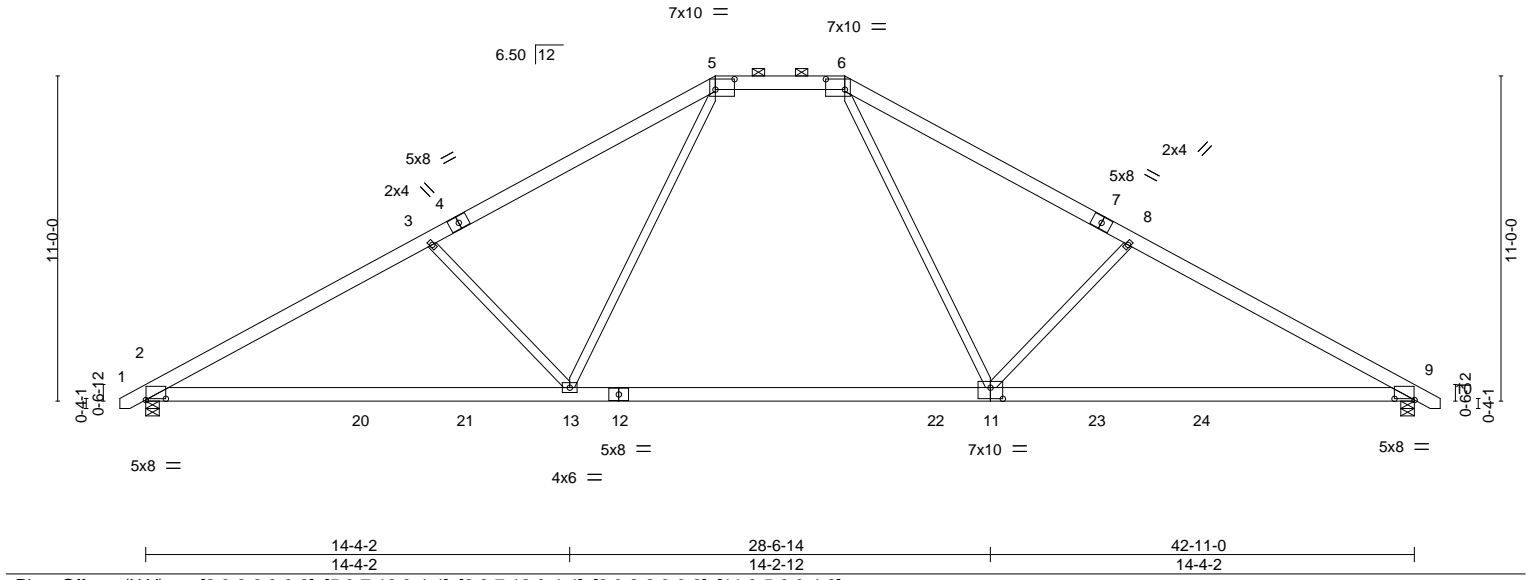
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0-10-8	9-8-4	19-3-4	23-7-12	33-2-12	42-11-0	43-9-8
0-10-8	9-8-4	9-6-15	4-4-9	9-6-15	9-8-4	0-10-8

Scale = 1:77.9



<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 0.58	Vert(LL)	-0.43 11-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.79	Vert(CT)	-0.62 11-13	>827	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.65	Horz(CT)	0.09 9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.23 13-16	>999	240	Weight: 272 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x6 SP No.1	2-0-0 oc purlins (5-2-7 max.): 5-6.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (lb/size) 2=1759/0-5-8, 9=1759/0-5-8  
 Max Horz 2=-238(LC 10)  
 Max Uplift 2=-307(LC 12), 9=-307(LC 13)  
 Max Grav 2=1805(LC 2), 9=1803(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3063/751, 3-5=-2750/711, 5-6=-1865/645, 6-8=-2746/711, 8-9=-3059/751  
 BOT CHORD 2-13=-521/2739, 11-13=-192/1865, 9-11=-517/2645  
 WEBS 3-13=-678/471, 5-13=-181/1113, 6-11=-181/1107, 8-11=-678/471

- NOTES-** (9)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; 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.
  - 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=307, 9=307.
  - 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.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



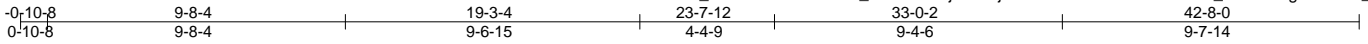
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Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107174
681099_Master_120	A04	PIGGYBACK BASE	10	1		

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Scale = 1:74.9

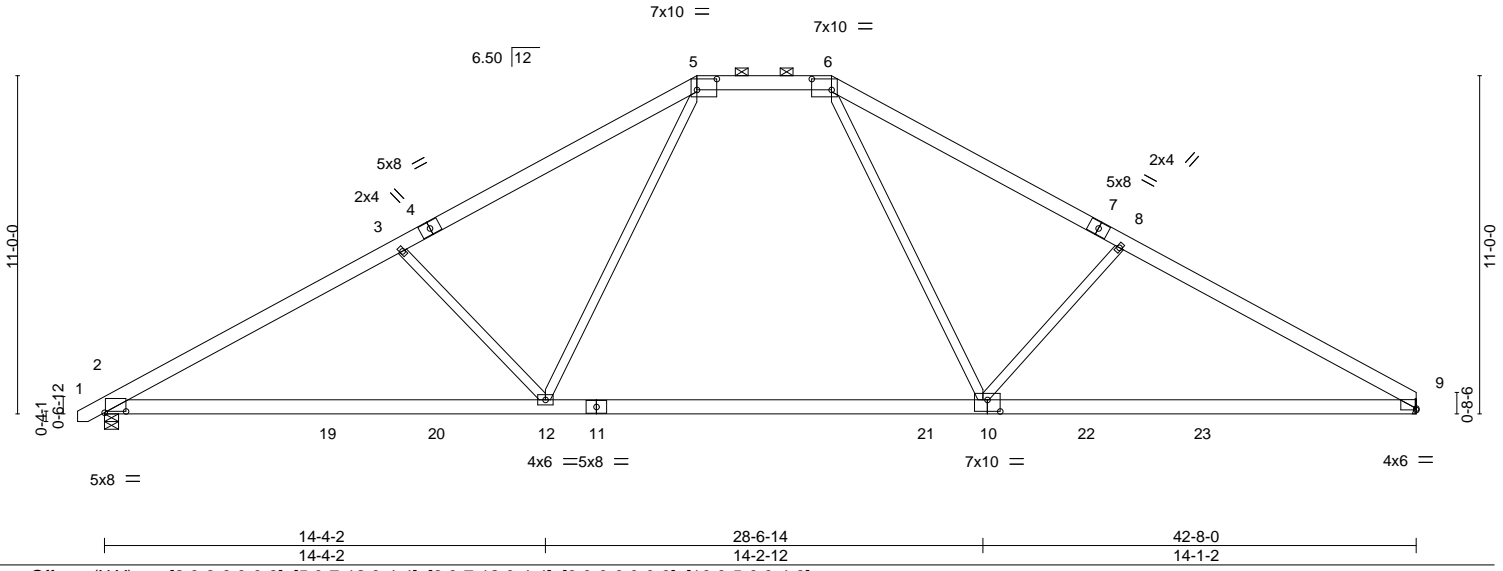


Plate Offsets (X,Y)--	[2:0-8-6,0-0-8], [5:0-7-12,0-4-4], [6:0-7-12,0-4-4], [9:0-0-0,0-0-9], [10:0-5-0,0-4-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.59	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.80	Vert(LL) -0.44 10-12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.65	Vert(CT) -0.65 10-12 >785 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.08 9 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.23 12-15 >999 240	Weight: 268 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x6 SP No.1	2-0-0 oc purlins (5-1-14 max.): 5-6.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (lb/size) 2=1749/0-5-8, 9=1706/Mechanical  
 Max Horz 2=237(LC 9)  
 Max Uplift 2=-306(LC 12), 9=-285(LC 13)  
 Max Grav 2=1797(LC 2), 9=1766(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3049/747, 3-5=-2734/706, 5-6=-1845/640, 6-8=-2714/710, 8-9=-3019/730  
 BOT CHORD 2-12=-532/2721, 10-12=-207/1845, 9-10=-511/2572  
 WEBS 3-12=-681/471, 5-12=-180/1123, 6-10=-189/1084, 8-10=-632/460

- NOTES-** (10)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=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 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.
  - 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 (it=lb) 2=306, 9=285.
  - 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.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 16, 2019

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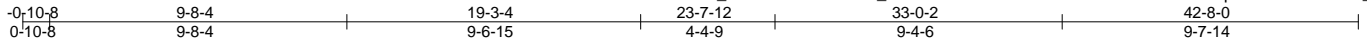
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107175
681099_Master_120	A05	PIGGYBACK BASE	10	1		

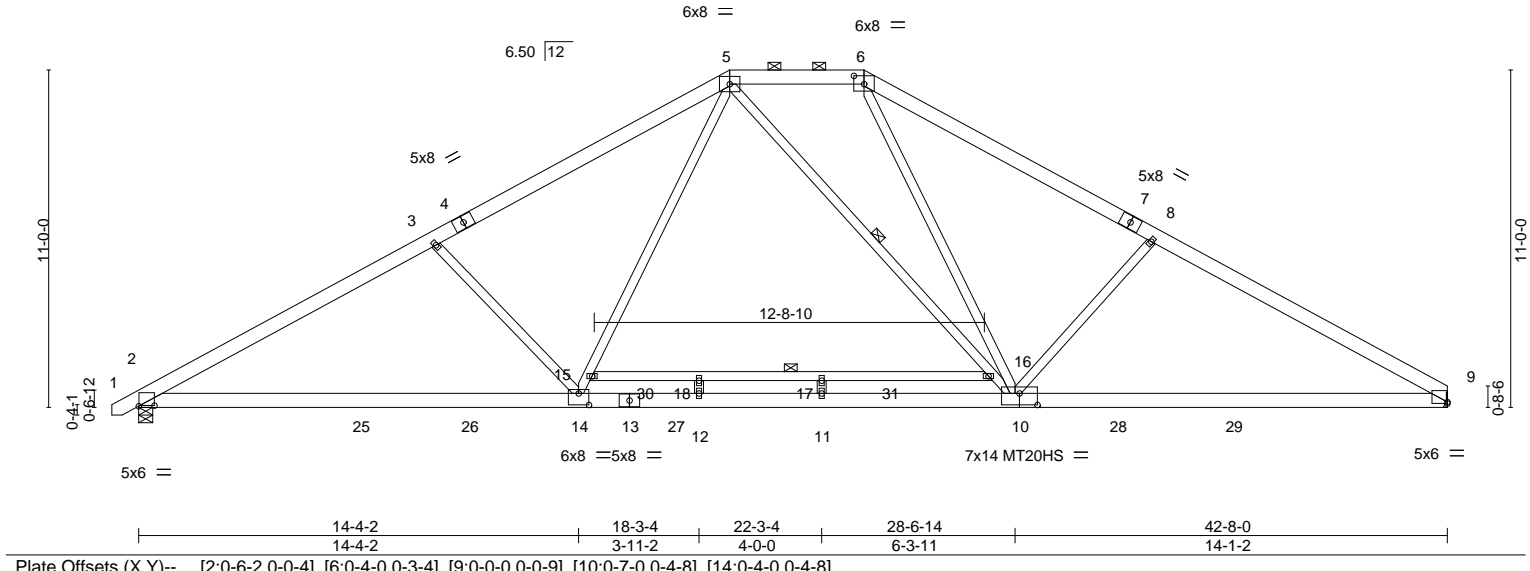
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Scale = 1:75.1



<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 0.51	Vert(LL)	-0.50	11-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.97	Vert(CT)	-0.90	11-12	>570	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.80	Horz(CT)	0.08	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.13	14-21	>999	240		Weight: 309 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x6 SP DSS *Except*	2-0-0 oc purlins (5-1-10 max.): 5-6.
9-10: 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3 *Except*	WEBS 1 Row at midpt 5-10, 15-16
5-10,15-16: 2x4 SP No.2	

**REACTIONS.** (lb/size) 2=1856/0-5-8, 9=1800/Mechanical  
 Max Horz 2=237(LC 9)  
 Max Uplift 2=-199(LC 12), 9=-192(LC 13)  
 Max Grav 2=1868(LC 2), 9=1814(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3209/503, 3-5=-2898/460, 5-6=-1907/501, 6-8=-2815/503, 8-9=-3119/525  
 BOT CHORD 2-14=-323/2850, 12-14=-43/2004, 11-12=-43/2004, 10-11=-43/2004, 9-10=-335/2659  
 WEBS 3-14=-652/439, 14-15=-28/1179, 5-15=-17/1237, 5-16=-309/243, 10-16=-365/219,  
 6-10=-36/1113, 8-10=-609/431

- NOTES-** (13)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=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 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, 20-0-0 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.
  - 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=199, 9=192.
  - 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.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

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/Jackson/	
681099_Master_120	A05	PIGGYBACK BASE	10	1		I37107175
						Job Reference (optional)

Builders FirstSource, Sumter, SC - 29153,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu May 16 07:33:40 2019 Page 2  
 ID:6U\_sNXmsGM6hZXeeE\_lIa6zQrSu-BZ6ef3kQViPJ2JRtmH5??ST9RtHpWaSelKWH2nzG\_vP

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
  - Vert: 1-5=-60, 5-6=-60, 6-9=-60, 19-22=-20
- Concentrated Loads (lb)
  - Vert: 11=-100 27=-100

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

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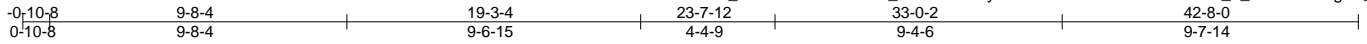
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107176
681099_Master_120	A06	PIGGYBACK BASE	5	1		

Builders FirstSource, Sumter, SC - 29153,

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ID:6U\_sNXmsGM6hZXeeE\_Ila6zQrSu-7yEO3lmh1Jf1HcaGth7T5tYVwh\_h\_Uvxme?O6gzG\_VN



Scale = 1:75.1

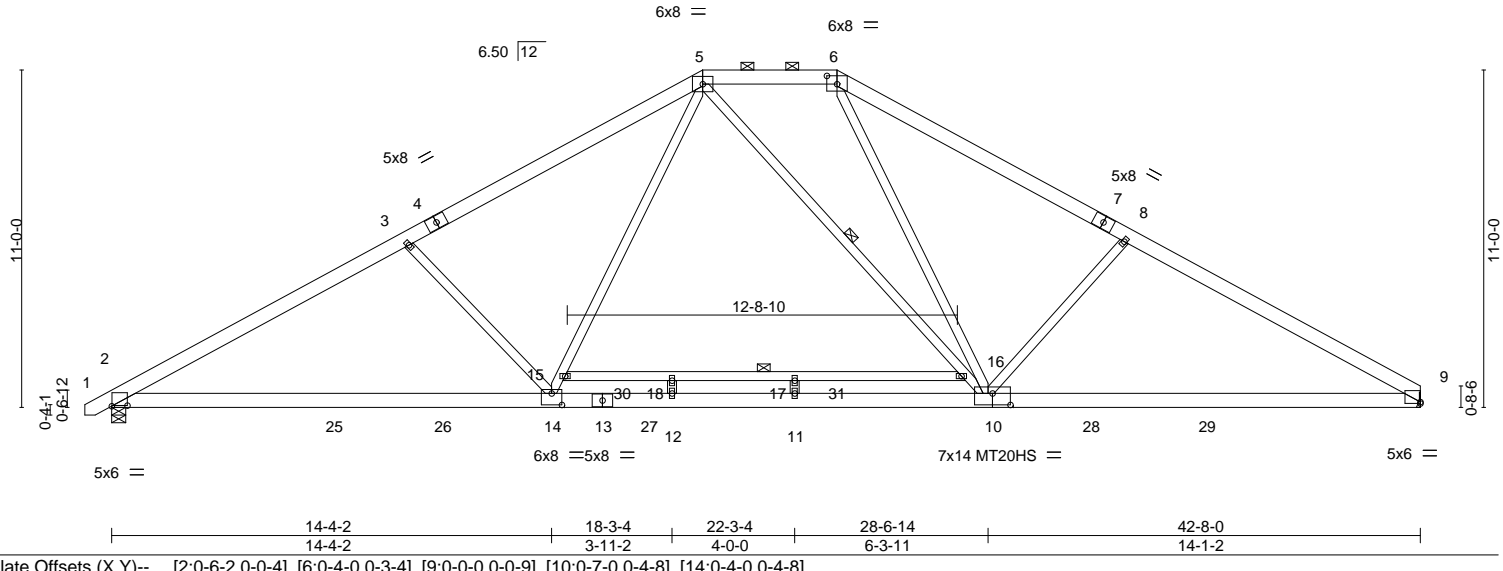


Plate Offsets (X,Y)--	[2:0-6-2,0-0-4], [6:0-4-0,0-3-4], [9:0-0-0,0-0-9], [10:0-7-0,0-4-8], [14:0-4-0,0-4-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.51	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.94	Vert(LL) -0.46 11-12 >999 360	MT20HS	187/143
BCLL 0.0 *	Lumber DOL 1.15	WB 0.80	Vert(CT) -0.86 11-12 >598 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-AS	Horz(CT) 0.08 9 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.13 14-21 >999 240	Weight: 309 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x6 SP DSS *Except*	2-0-0 oc purlins (5-1-15 max.): 5-6.
WEBS 2x4 SP No.3 *Except*	BOT CHORD Rigid ceiling directly applied.
5-10,15-16: 2x4 SP No.2	WEBS 1 Row at midpt 5-10, 15-16

**REACTIONS.** (lb/size) 2=1856/0-5-8, 9=1800/Mechanical  
 Max Horz 2=237(LC 9)  
 Max Uplift 2=-199(LC 12), 9=-192(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3178/503, 3-5=-2867/460, 5-6=-1883/501, 6-8=-2779/503, 8-9=-3084/525  
 BOT CHORD 2-14=-323/2823, 12-14=-43/1978, 11-12=-43/1978, 10-11=-43/1978, 9-10=-335/2629  
 WEBS 3-14=-652/439, 14-15=-28/1169, 5-15=-17/1219, 5-16=-309/243, 10-16=-365/219,  
 6-10=-36/1089, 8-10=-609/431

- NOTES-** (13)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; 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
  - 200.0lb AC unit load placed on the bottom chord, 20-0-0 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.
  - 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=199, 9=192.
  - 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.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard



May 16, 2019

Continued on page 2

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	
681099_Master_120	A06	PIGGYBACK BASE	5	1		I37107176
					Job Reference (optional)	

Builders FirstSource, Sumter, SC - 29153,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu May 16 07:33:42 2019 Page 2  
 ID:6U\_sNXmsGM6hZXeeE\_Ila6zQrSu-7yEO3lmh1Jf1HcaGth7T5tYVwh\_h\_Uvxme?O6gzG\_vN

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
  - Vert: 1-5=-60, 5-6=-60, 6-9=-60, 19-22=-20
- Concentrated Loads (lb)
  - Vert: 11=-100 27=-100

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Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107177
681099_Master_120	A07	PIGGYBACK BASE	15	1		

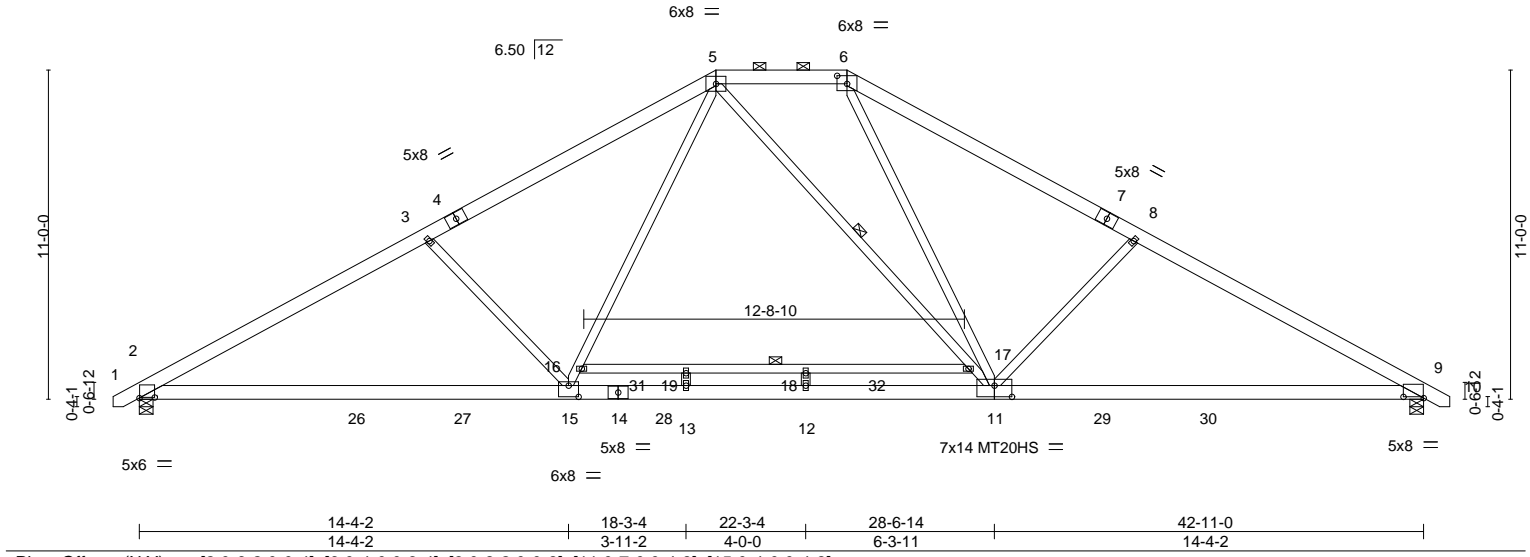
Builders FirstSource, Sumter, SC - 29153,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu May 16 07:33:44 2019 Page 1

ID:6U\_sNXmsGM6hZXeeE\_Ila6zQrSu-4KM8UQnxYwvKWwke?6AxAleqOUkxSO7DDyUVBYzG\_vL

0-10-8	9-8-4	19-3-4	23-7-12	33-2-12	42-11-0	43-9-8
0-10-8	9-8-4	9-6-15	4-4-9	9-6-15	9-8-4	0-10-8

Scale = 1:77.0



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 0.52	Vert(LL)	-0.48 12-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.64	Vert(CT)	-0.85 12-13	>604	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.82	Horz(CT)	0.08 9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.13 15-22	>999	240		Weight: 313 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x6 SP DSS	2-0-0 oc purlins (5-1-1 max.): 5-6.
WEBS 2x4 SP No.3 *Except*	BOT CHORD Rigid ceiling directly applied.
5-11,16-17: 2x4 SP No.2	WEBS 1 Row at midpt 5-11, 16-17

**REACTIONS.** (lb/size) 2=1866/0-5-8, 9=1852/0-5-8  
 Max Horz 2=-238(LC 10)  
 Max Uplift 2=-200(LC 12), 9=-214(LC 13)  
 Max Grav 2=1876(LC 2), 9=1852(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3222/507, 3-5=-2911/464, 5-6=-1941/504, 6-8=-2854/499, 8-9=-3165/542  
 BOT CHORD 2-15=-306/2868, 13-15=-29/2013, 12-13=-29/2013, 11-12=-29/2013, 9-11=-336/2735  
 WEBS 3-15=-653/439, 15-16=-35/1172, 5-16=-21/1218, 5-17=-291/266, 11-17=-328/236,  
 6-11=-27/1135, 8-11=-651/438

- NOTES-** (12)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; 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
  - 200.0lb AC unit load placed on the bottom chord, 20-0-0 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=200, 9=214.
  - 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.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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



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/Jackson/	
681099_Master_120	A07	PIGGYBACK BASE	15	1		I37107177
						Job Reference (optional)

Builders FirstSource, Sumter, SC - 29153,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu May 16 07:33:44 2019 Page 2  
 ID:6U\_sNXmsGM6hZXeeE\_Ila6zQrSu-4KM8UQnxYwvKWwke?6AxAleqOUkxSO7DDyUVBYzG\_vL

**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-5=-60, 5-6=-60, 6-10=-60, 20-23=-20

Concentrated Loads (lb)

Vert: 12=-100 28=-100

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107178
681099_Master_120	A08	GABLE	4	1		

Builders FirstSource, Sumter, SC - 29153,

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ID:6U\_sNXmsGM6hZXeeE\_Ila6zQrSu-0jTvv6pB4X9SmEu16XCPfjBdlKlwKYWhGzcFRzG\_vJ

0-10-8	9-8-4	19-3-4	23-7-12	33-2-12	42-11-0	43-9-8
0-10-8	9-8-4	9-6-15	4-4-9	9-6-15	9-8-4	0-10-8

Scale = 1:77.7

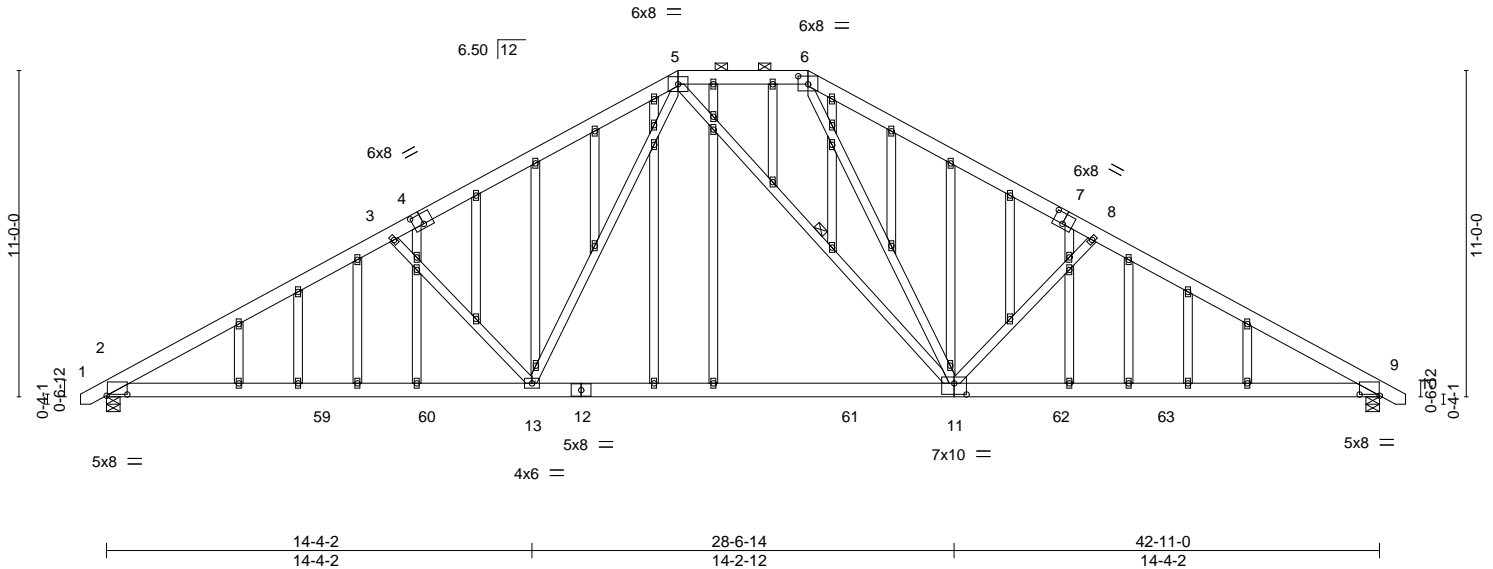


Plate Offsets (X,Y)--	[2:0-8-6,0-0-8], [4:0-4-0,0-4-4], [4:0-0-0,0-2-12], [6:0-4-0,0-3-4], [7:0-0-0,0-2-12], [7:0-4-0,0-4-4], [9:0-8-2,0-0-8], [11:0-5-0,0-4-8], [26:0-2-0,0-0-0], [44:0-2-0,0-0-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.47	Vert(LL)	-0.40 11-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.97	Vert(CT)	-0.61 11-13	>845	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.63	Horz(CT)	0.09 9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.14 13-55	>999	240	Weight: 425 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP No.1 \*Except\*  
11-12: 2x6 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
5-11: 2x4 SP No.2  
OTHERS 2x4 SP No.3

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

**REACTIONS.** (lb/size) 2=1759/0-5-8, 9=1759/0-5-8  
Max Horz 2=-238(LC 10)  
Max Uplift 2=-307(LC 12), 9=-307(LC 13)  
Max Grav 2=1785(LC 2), 9=1773(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3022/750, 3-5=-2708/710, 5-6=-1824/645, 6-8=-2678/711, 8-9=-2992/751  
BOT CHORD 2-13=-515/2697, 11-13=-191/1830, 9-11=-517/2587  
WEBS 3-13=-669/429, 5-13=-166/1095, 5-11=-271/285, 6-11=-135/995, 8-11=-665/429

- NOTES-** (12)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=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.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - 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, 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=307, 9=307.
  - 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.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 16, 2019

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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107179
681099_Master_120	A09	GABLE	1	1		

Builders FirstSource, Sumter, SC - 29153,

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ID:6U\_sNXmsGM6hZXeeE\_Ila6zQrSu-Ql91Y8r4NSY1dhdcngl6tLLonVa47omzNEBGsmzG\_vG

-0-10-8	16-10-2	26-0-14	42-11-0	43-9-8
0-10-8	16-10-2	9-2-12	16-10-2	0-10-8

Scale = 1:77.8

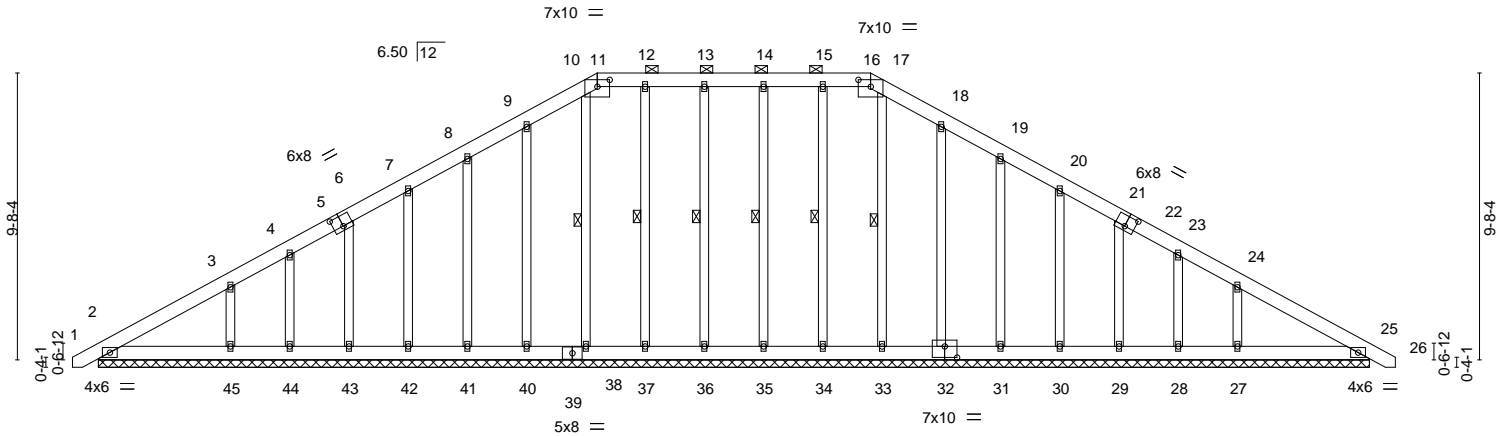


Plate Offsets (X,Y)--	[5:0-0-0,0-2-12], [5:0-4-0,0-4-4], [6:0-2-0,0-0-0], [10:0-1-12,0-0-15], [11:0-5-0,0-2-13], [11:0-0-0,0-2-12], [16:0-0-0,0-2-12], [16:0-5-0,0-2-13], [17:0-1-12,0-0-15], [21:0-2-0,0-0-0], [22:0-0-0,0-2-12], [22:0-4-0,0-4-4], [32:0-5-0,0-4-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	0.00	26	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	0.00	26	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.01	25	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 380 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 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.): 11-16.
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 13-36, 12-37, 10-38, 14-35, 15-34, 17-33

**REACTIONS.** All bearings 42-11-0.  
 (lb) - Max Horz 2=-209(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 36, 37, 38, 40, 41, 42, 43, 44, 35, 34, 32, 31, 30, 29, 28 except 45=-150(LC 12), 27=-148(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 36, 37, 38, 40, 41, 42, 43, 44, 35, 34, 33, 32, 31, 30, 29, 28, 25 except 45=354(LC 23), 27=354(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 9-10=-225/259, 11-12=-215/256, 12-13=-215/256, 13-14=-215/256, 14-15=-215/256, 15-16=-215/256, 17-18=-225/259  
 WEBS 3-45=-276/184, 24-27=-276/183

- NOTES-** (12)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=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.
  - 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) 2, 36, 37, 38, 40, 41, 42, 43, 44, 35, 34, 32, 31, 30, 29, 28 except (jt=lb) 45=150, 27=148.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107180
681099_Master_120	A10	HIP	2	1		

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0-10-8	9-8-4	20-6-7	22-4-9	33-2-12	42-11-0	43-9-8
0-10-8	9-8-4	10-10-3	1-10-1	10-10-3	9-8-4	0-10-8

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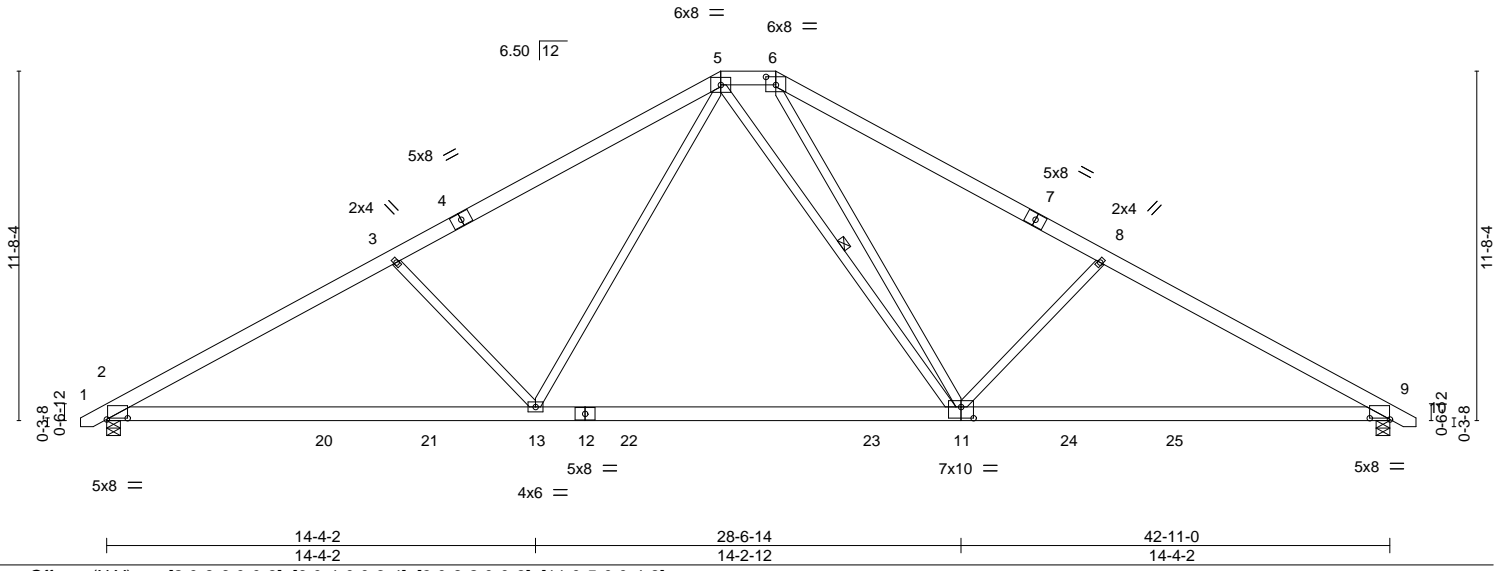


Plate Offsets (X,Y)--	[2:0-8-6,0-0-8], [6:0-4-0,0-3-4], [9:0-8-2,0-0-8], [11:0-5-0,0-4-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.53	Vert(LL) -0.41 11-13 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.97	Vert(CT) -0.62 11-13 >826 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.67	Horz(CT) 0.09 9 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.14 13-16 >999 240	Weight: 296 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x6 SP No.1 *Except* 11-12: 2x6 SP No.2	2-0-0 oc purlins (4-11-9 max.): 5-6.
WEBS 2x4 SP No.2 *Except* 3-13,8-11: 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied.
	WEBS 1 Row at midpt 5-11

**REACTIONS.** (lb/size) 2=1756/0-5-8, 9=1756/0-5-8  
 Max Horz 2=-252(LC 10)  
 Max Uplift 2=-316(LC 12), 9=-316(LC 13)  
 Max Grav 2=1786(LC 19), 9=1780(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3026/750, 3-5=-2704/711, 5-6=-1779/643, 6-8=-2689/711, 8-9=-3009/751  
 BOT CHORD 2-13=-556/2764, 11-13=-158/1776, 9-11=-520/2604  
 WEBS 3-13=-708/456, 5-11=-334/416, 5-13=-194/1148, 6-11=-177/1057, 8-11=-697/456

- NOTES-** (9)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=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.
  - 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=316, 9=316.
  - 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.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.







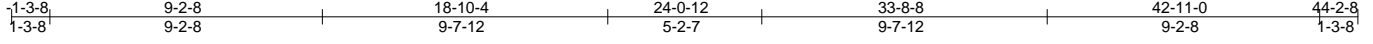


Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107182
681099_Master_120	A20	PIGGYBACK BASE	22	1		

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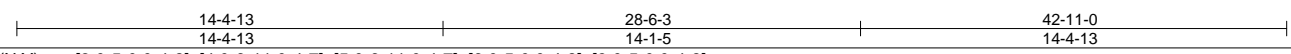
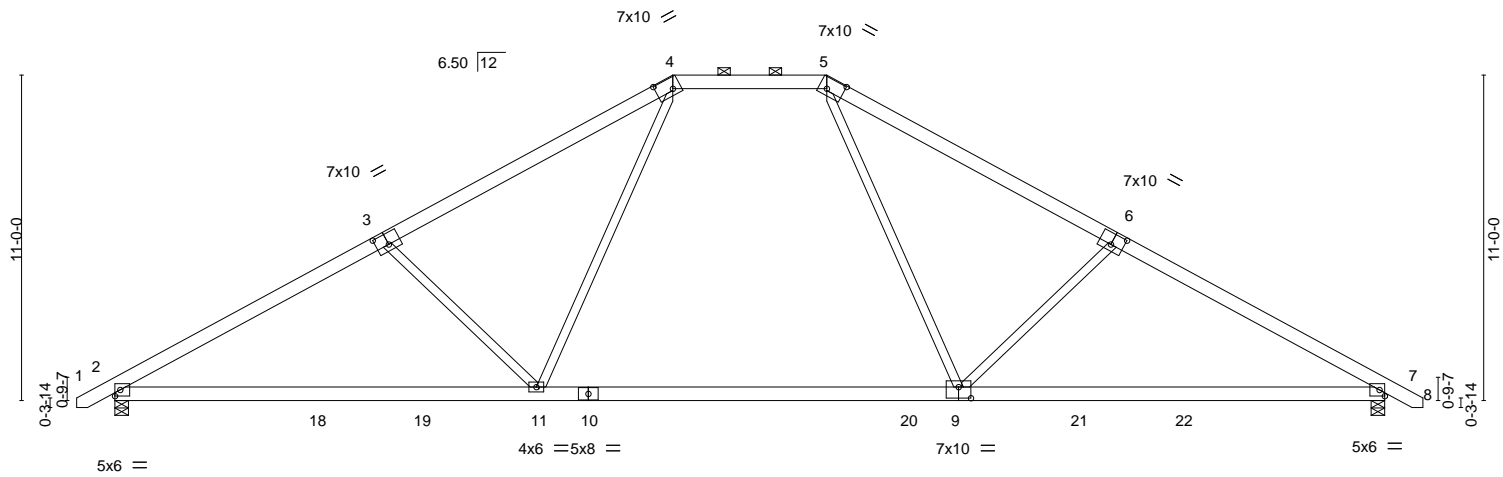


Plate Offsets (X,Y)--	[3:0-5-0,0-4-8], [4:0-6-11,0-4-7], [5:0-6-11,0-4-7], [6:0-5-0,0-4-8], [9:0-5-0,0-4-8]
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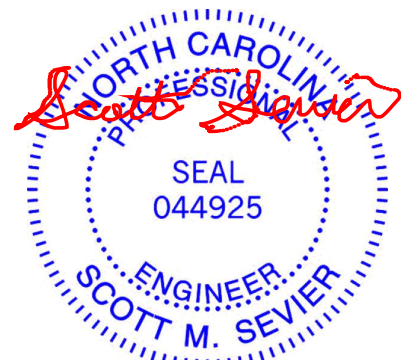
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.61	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.78	Vert(LL) -0.44 9-11 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.65	Vert(CT) -0.65 9-11 >796 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.08 7 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.24 11-14 >999 240	Weight: 274 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x6 SP No.1	2-0-0 oc purlins (5-2-8 max.): 4-5.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (lb/size) 2=1783/0-5-8, 7=1783/0-5-8  
 Max Horz 2=-237(LC 10)  
 Max Uplift 2=-313(LC 12), 7=-313(LC 13)  
 Max Grav 2=1826(LC 2), 7=1825(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2987/737, 3-4=-2654/688, 4-5=-1855/642, 5-6=-2645/686, 6-7=-2983/738  
 BOT CHORD 2-11=-504/2618, 9-11=-191/1855, 7-9=-499/2534  
 WEBS 3-11=-628/466, 4-11=-151/1008, 5-9=-147/1003, 6-9=-631/467

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; 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.
  - 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=313, 7=313.
  - 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.



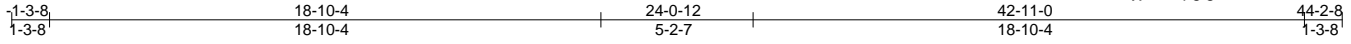
May 16, 2019

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107183
681099_Master_120	A21	GABLE	2	1		

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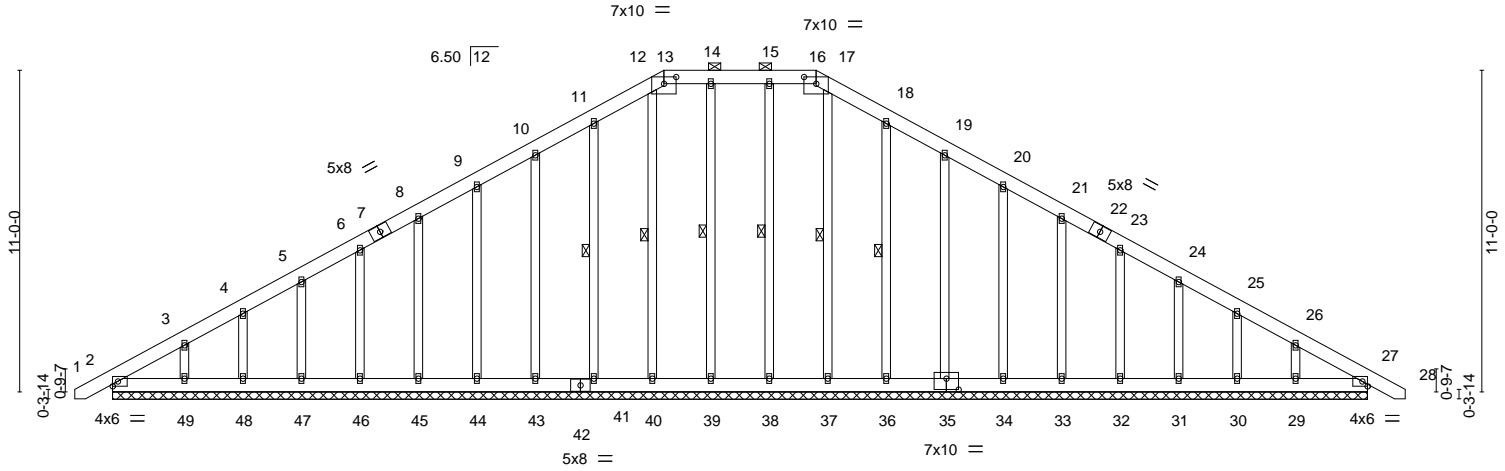


Plate Offsets (X,Y)--	[12:0-1-12,0-0-15], [13:0-5-0,0-2-13], [13:0-0-0,0-2-12], [16:0-5-0,0-2-13], [16:0-0-0,0-2-12], [17:0-1-12,0-0-15], [35:0-5-0,0-4-8]
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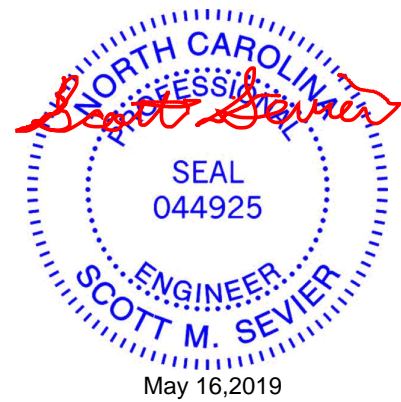
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	-0.00	27	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	27	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.16	Horz(CT)	0.01	27	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 399 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 13-16.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	WEBS 1 Row at midpt 14-39, 12-40, 11-41, 15-38, 17-37, 18-36

**REACTIONS.** All bearings 42-11-0.  
 (lb) - Max Horz 2=-237(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 27, 39, 40, 41, 43, 44, 45, 46, 47, 48, 38, 36, 35, 34, 33, 32, 31, 30, 29 except 49=-108(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 27, 39, 40, 41, 43, 44, 45, 46, 47, 48, 49, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-289/181, 10-11=-213/258, 11-12=-255/294, 12-13=-237/276, 13-14=-242/287, 14-15=-242/287, 15-16=-242/287, 16-17=-237/276, 17-18=-255/294

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=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.
  - 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) 2, 27, 39, 40, 41, 43, 44, 45, 46, 47, 48, 38, 36, 35, 34, 33, 32, 31, 30, 29 except (jt=lb) 49=108.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

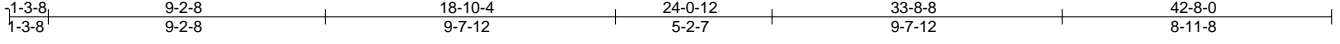


Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107184
681099_Master_120	A22	PIGGYBACK BASE	6	1		

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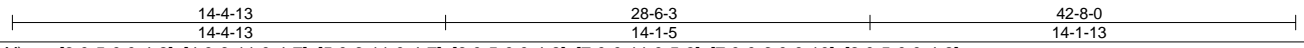
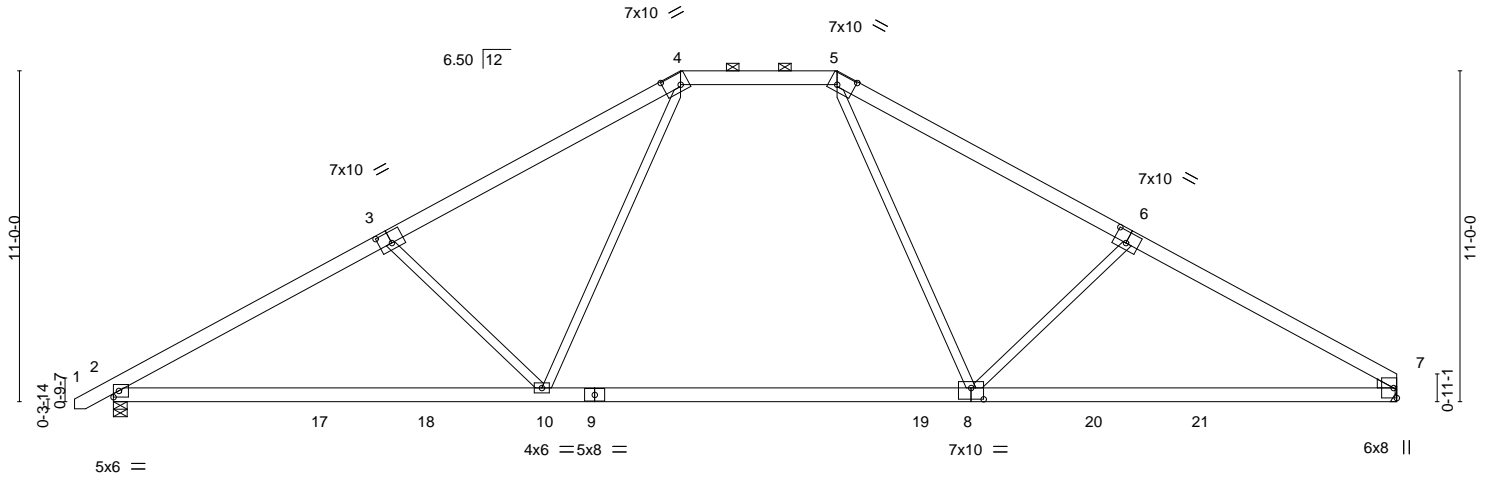


Plate Offsets (X,Y)--	[3:0-5-0,0-4-8], [4:0-6-11,0-4-7], [5:0-6-11,0-4-7], [6:0-5-0,0-4-8], [7:0-0-11,0-5-9], [7:0-0-6,0-0-10], [8:0-5-0,0-4-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.66	Vert(LL)	-0.44	8-10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.78	Vert(CT)	-0.66	8-10	>773		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.64	Horz(CT)	0.09	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.25	10-13	>999	Weight: 270 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x6 SP No.1	2-0-0 oc purlins (5-2-4 max.): 4-5.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied.
WEDGE	
Right: 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=1774/0-5-8, 7=1706/Mechanical  
 Max Horz 2=237(LC 9)  
 Max Uplift 2=-313(LC 12), 7=-281(LC 13)  
 Max Grav 2=1817(LC 2), 7=1762(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2969/734, 3-4=-2635/685, 4-5=-1834/639, 5-6=-2595/676, 6-7=-2908/724  
 BOT CHORD 2-10=-523/2594, 8-10=-215/1834, 7-8=-509/2466  
 WEBS 3-10=-631/466, 4-10=-150/1013, 5-8=-140/956, 6-8=-597/457

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; 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 exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=313, 7=281.
  - 8) 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.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



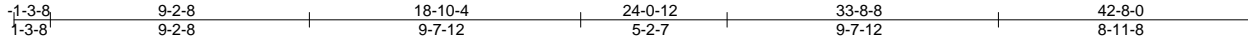
May 16, 2019

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107185
681099_Master_120	A23	PIGGYBACK BASE	9	1		

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7x10 =

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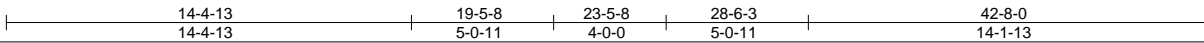
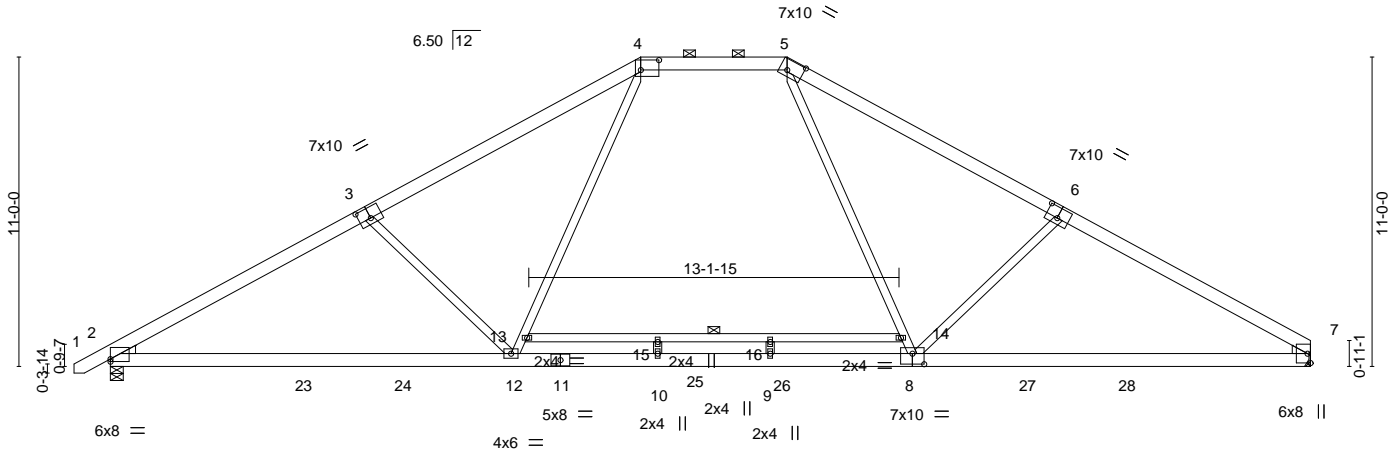


Plate Offsets (X, Y)--	[2:0-0-0,0-1-1], [3:0-5-0,0-4-8], [4:0-7-12,0-4-4], [5:0-6-11,0-4-7], [6:0-5-0,0-4-8], [7:0-0-11,0-5-9], [7:0-0-6,0-0-10], [8:0-5-0,0-4-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.67	Vert(LL)	-0.32 12-19	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.40	Vert(CT)	-0.54 9-10	>950	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.63	Horz(CT)	0.08 7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.24 12-19	>999	240		
								Weight: 292 lb	FT = 20%

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

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

REACTIONS. (lb/size) 2=1874/0-5-8, 7=1806/Mechanical  
Max Horz 2=237(LC 9)  
Max Uplift 2=-213(LC 12), 7=-181(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3053/515, 3-4=-2654/462, 4-5=-1860/487, 5-6=-2613/458, 6-7=-2989/512  
BOT CHORD 2-12=-337/2575, 10-12=-58/1884, 9-10=-58/1884, 8-9=-58/1884, 7-8=-330/2517  
WEBS 3-12=-616/481, 12-13=-46/922, 4-13=-32/941, 5-14=-28/883, 8-14=-37/859,  
6-8=-579/476

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=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 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, 21-4-0 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.
- 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=213, 7=181.
- 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.



May 16, 2019

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107186
681099_Master_120	A24	PIGGYBACK BASE	9	1		

Builders FirstSource, Sumter, SC - 29153,

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ID:6U\_sNXmsGM6hZXeeE\_lIa6zQrSu-UBZihG1Ur3Rvw?GUAJXd\_WTD6YcE8UyAp3KZuOzG\_v1

1-3-8	9-2-8	18-10-4	24-0-12	33-8-8	42-11-0	44-2-8
1-3-8	9-2-8	9-7-12	5-2-7	9-7-12	9-2-8	1-3-8

Scale = 1:88.6

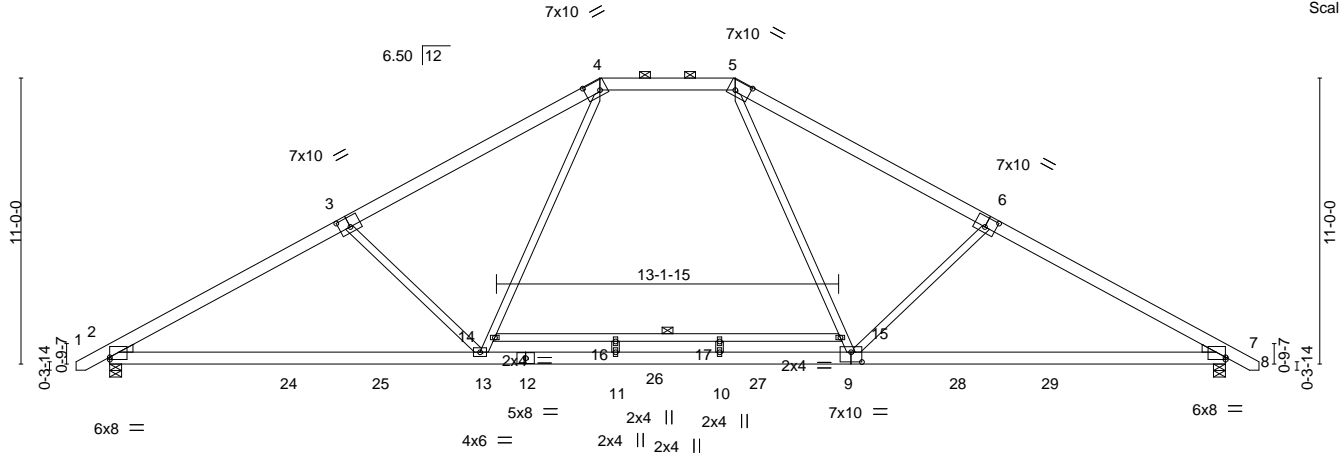


Plate Offsets (X,Y)--	[2:0-0,0-1-1], [3:0-5,0-4-8], [4:0-6-11,0-4-7], [5:0-6-11,0-4-7], [6:0-5-0,0-4-8], [7:Edge,0-1-1], [9:0-5-0,0-4-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.66	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.41	Vert(LL) -0.32 9-23 >999 360		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.63	Vert(CT) -0.52 10-11 >981 240		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Horz(CT) 0.07 7 n/a n/a	Weight: 297 lb	FT = 20%
			Wind(LL) 0.23 13-20 >999 240		

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

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

**REACTIONS.** (lb/size) 2=1884/0-5-8, 7=1883/0-5-8  
 Max Horz 2=-237(LC 10)  
 Max Uplift 2=-213(LC 12), 7=-214(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3071/517, 3-4=-2673/465, 4-5=-1880/489, 5-6=-2664/464, 6-7=-3067/521  
 BOT CHORD 2-13=-315/2591, 11-13=-33/1906, 10-11=-33/1906, 9-10=-33/1906, 7-9=-314/2587  
 WEBS 3-13=-613/481, 13-14=-47/916, 4-14=-32/936, 5-15=-32/929, 9-15=-40/905, 6-9=-616/482

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=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
  - 200.0lb AC unit load placed on the bottom chord, 21-4-0 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=213, 7=214.
  - 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.



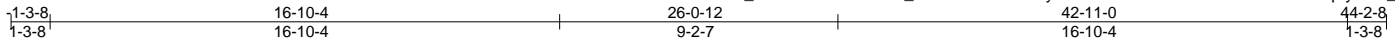


Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107187
681099_Master_120	A25	GABLE	1	1		

Builders FirstSource, Sumter, SC - 29153,

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Scale = 1:76.2

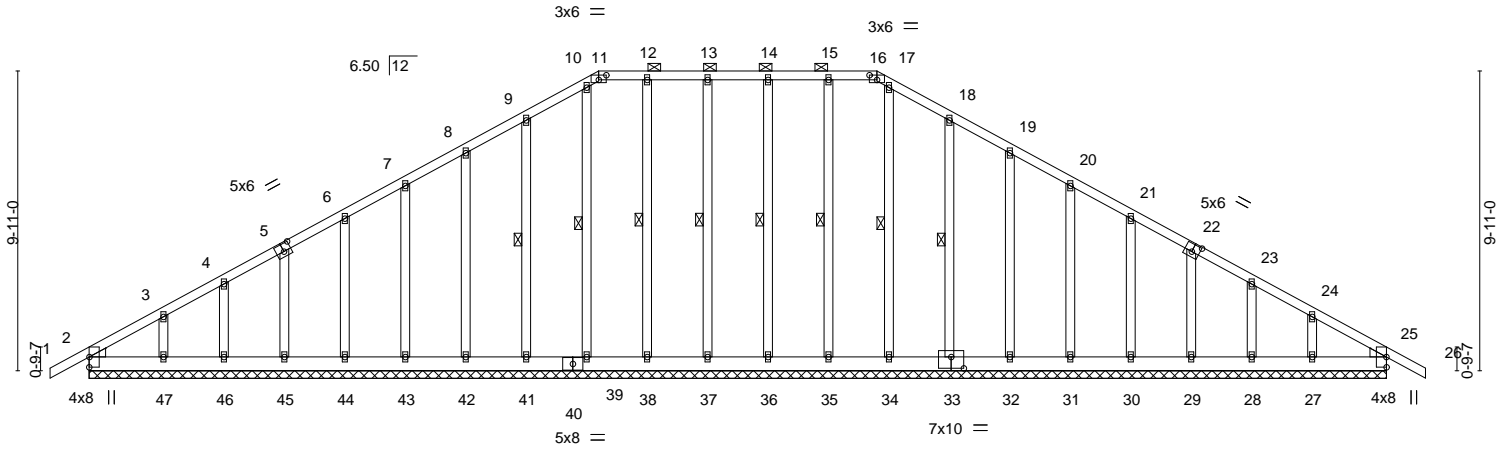


Plate Offsets (X,Y)--	[2:0-0-0,0-0-1], [2:0-0-1,0-4-6], [2:Edge,0-0-1], [5:0-3-0,0-3-0], [11:0-3-0,0-1-14], [16:0-3-0,0-1-14], [22:0-3-0,0-3-0], [25:0-0-1,0-4-6], [25:0-0-0,0-0-1], [25:Edge,0-0-1], [33:0-5-0,0-4-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15		TC 0.11	Vert(LL) -0.00	26	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.03	Vert(CT) -0.00	26	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES		WB 0.12	Horz(CT) 0.01	25	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 356 lb	FT = 20%

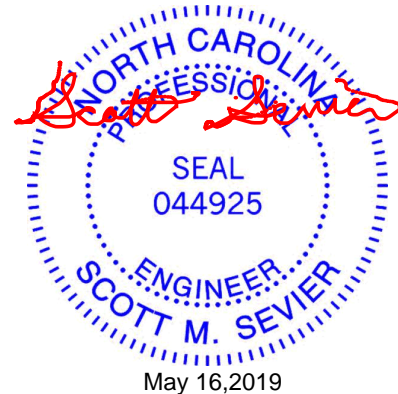
**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 SP No.2  
 OTHERS 2x4 SP No.3  
 WEDGE  
 Left: 2x4 SP No.2, Right: 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 11-16.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 13-37, 12-38, 10-39, 9-41, 14-36, 15-35, 17-34, 18-33

**REACTIONS.** All bearings 42-11-0.  
 (lb) - Max Horz 2=-216(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 37, 38, 41, 42, 43, 44, 45, 46, 36, 35, 33, 32, 31, 30, 29, 28, 25 except 47=-115(LC 12), 27=-107(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 37, 38, 39, 41, 42, 43, 44, 45, 46, 47, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 25

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-279/156

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=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.
  - 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) 2, 37, 38, 41, 42, 43, 44, 45, 46, 36, 35, 33, 32, 31, 30, 29, 28, 25 except (jt=lb) 47=115, 27=107.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

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818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107188
681099_Master_120	A26	HIP	2	1		

Builders FirstSource, Sumter, SC - 29153,

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ID:6U\_sNXmsGM6hZXeeE\_Ila6zQrSu-NypDXd4\_vlxLPcaFP9bZ8Mdx59r14HUmkhlm09zG\_uz

1-3-8	10-5-1	20-6-9	22-4-7	32-5-15	42-11-0	44-2-8
1-3-8	10-5-1	10-1-9	1-9-14	10-1-9	10-5-1	1-3-8

Scale = 1:78.6

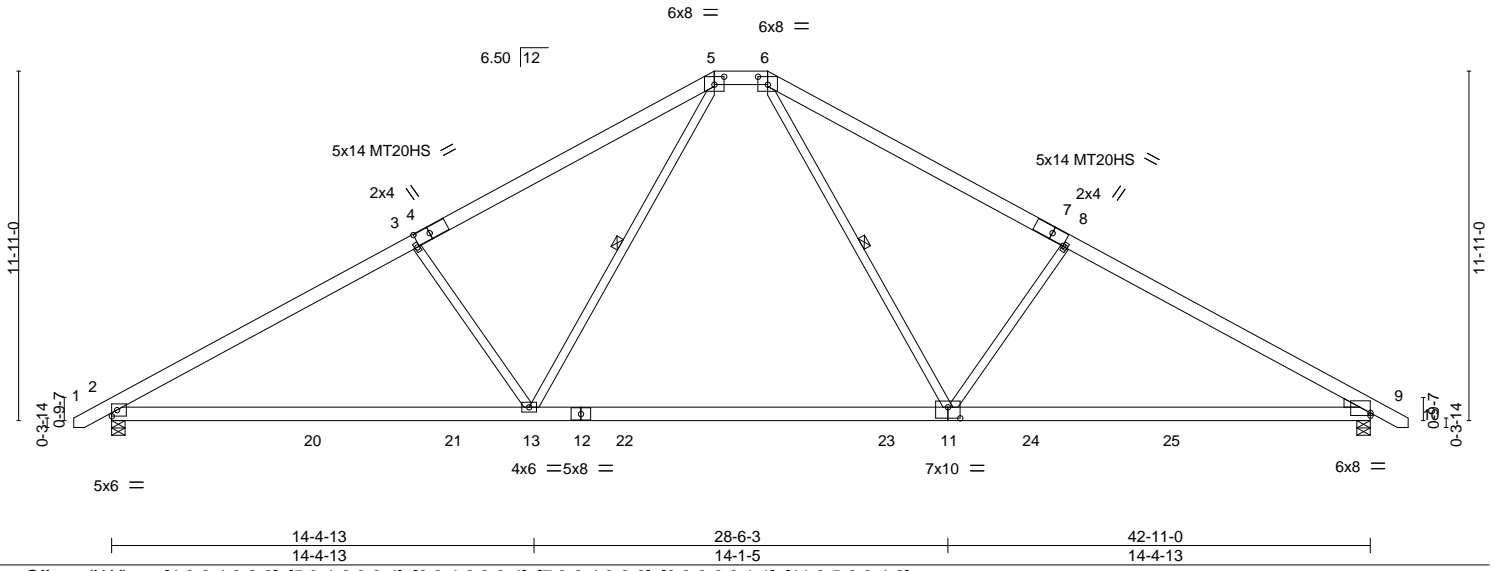


Plate Offsets (X, Y)--	[4:0-6-4,0-2-8], [5:0-4-0,0-3-4], [6:0-4-0,0-3-4], [7:0-6-4,0-2-8], [9:0-0-0,0-1-1], [11:0-5-0,0-4-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.53	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.99	Vert(LL) -0.41 11-13 >999 360	MT20HS	187/143
BCLL 0.0 *	Lumber DOL 1.15	WB 0.60	Vert(CT) -0.63 11-13 >817 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.08 9 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.13 13-16 >999 240	Weight: 279 lb	FT = 20%

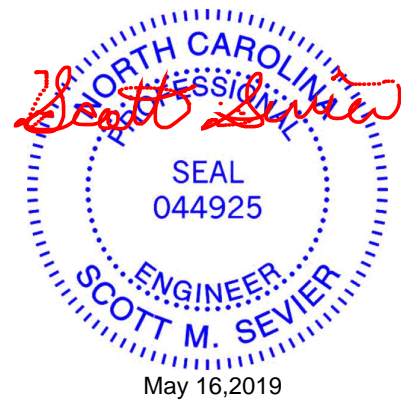
LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x6 SP No.1 *Except* 11-12: 2x6 SP No.2	2-0-0 oc purlins (5-1-12 max.): 5-6.
WEBS 2x4 SP No.3 *Except* 5-13,6-11: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied.
	WEBS 1 Row at midpt 5-13, 6-11

WEDGE  
Right: 2x4 SP No.3

**REACTIONS.** (lb/size) 2=1783/0-5-8, 9=1783/0-5-8  
 Max Horz 2=-257(LC 10)  
 Max Uplift 2=-326(LC 12), 9=-326(LC 13)  
 Max Grav 2=1855(LC 19), 9=1855(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2991/705, 3-5=-2706/724, 5-6=-1744/630, 6-8=-2694/720, 8-9=-2986/707  
 BOT CHORD 2-13=-507/2679, 11-13=-141/1782, 9-11=-458/2529  
 WEBS 3-13=-643/465, 5-13=-242/1179, 6-11=-237/1171, 8-11=-646/465

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=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.
  - 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=326, 9=326.
  - 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.

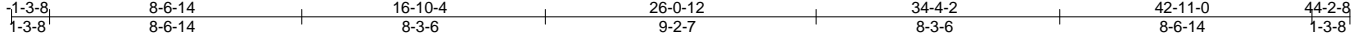


Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107189
681099_Master_120	A27	GABLE	1	1		

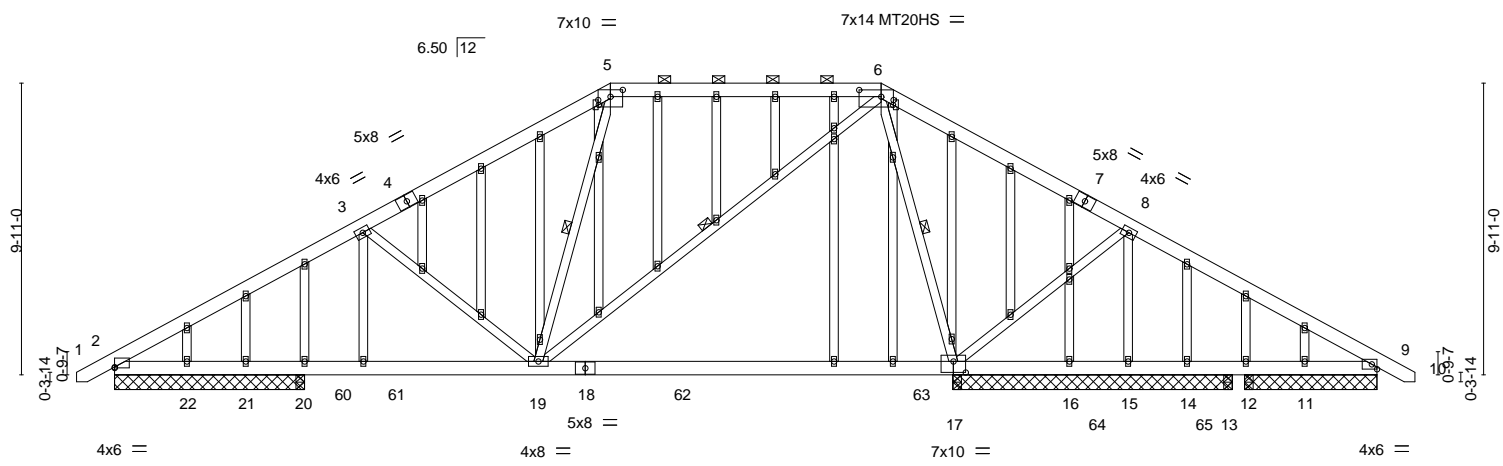
Builders FirstSource, Sumter, SC - 29153,

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Scale = 1:78.3



	6-2-0	14-4-14	28-6-0	28-6-3	33-3-0	38-0-0	38;5-0	42-11-0
Plate Offsets (X,Y)--	6-2-0	8-2-14	14-1-2	0-0-3	4-8-13	4-9-0	0-5-0	4-6-0
	[2:0-0-0,0-0-5], [5:0-0-7,0-0-4], [5:0-5-0,0-2-13], [5:0-0-0,0-2-12], [6:0-9-0,0-2-12], [6:0-0-7,0-0-2], [17:0-5-0,0-4-8], [27:0-2-0,0-0-4], [43:0-2-0,0-0-4]							

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.47	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.81	Vert(LL) -0.31 17-19 >846	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr YES	WB 0.62	Vert(CT) -0.53 17-19 >501		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Horz(CT) 0.02 57 n/a n/a		
			Wind(LL) 0.04 17-19 >999	Weight: 429 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x6 SP No.2	2-0-0 oc purlins (6-0-0 max.): 5-6.
WEBS 2x4 SP No.3 *Except*	BOT CHORD Rigid ceiling directly applied.
6-19: 2x4 SP No.2	WEBS 1 Row at midpt 5-19, 6-19, 6-17
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 9-6-0 except (jt=length) 2=6-5-8, 9=4-6-0, 21=6-5-8, 22=6-5-8, 11=4-6-0, 20=0-3-8, 20=0-3-8, 13=0-3-8, 12=0-3-8, 12=0-3-8, 2=6-5-8, 9=4-6-0.  
 (lb) - Max Horz 2=-214(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 21, 22, 14, 13, 12, 12 except 2=-234(LC 12), 17=-213(LC 13), 9=-144(LC 13), 16=-371(LC 18), 11=-104(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 21, 22, 14, 11, 20, 20, 13, 12 except 2=996(LC 23), 17=1960(LC 2), 17=1823(LC 1), 9=367(LC 24), 15=333(LC 18), 2=984(LC 1), 9=326(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1519/497, 3-5=-1111/412, 5-6=-887/457, 6-8=0/335, 8-9=-410/227  
 BOT CHORD 2-22=-386/1247, 21-22=-386/1247, 20-21=-386/1247, 19-20=-386/1247, 16-17=-59/267, 15-16=-59/267, 14-15=-59/267, 13-14=-59/267, 12-13=-59/267, 11-12=-59/267, 9-11=-59/267  
 WEBS 3-19=-541/391, 6-19=-241/944, 6-17=-1255/398, 8-17=-562/396

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; 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.
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - 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, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 21, 22, 14, 13, 12 except (jt=lb) 2=234, 17=213, 9=144, 16=371, 11=104, 2=234, 9=144.
  - 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.



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

818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107190
681099_Master_120	A28	GABLE L GABLE L GABLE L MON I I MON	2	1		

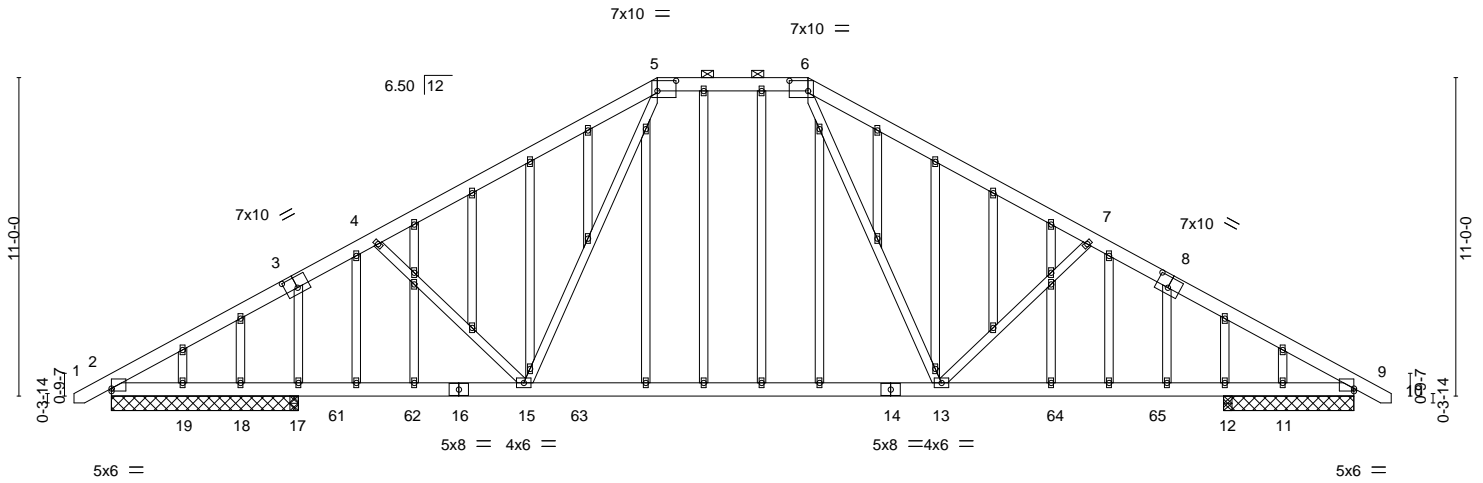
Builders FirstSource, Sumter, SC - 29153,

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ID:6U\_sNXmsGM6hZKeeE\_lIa6zQrSu-jvc6aL87jqZdVNSDBiBkrPKm7Ab9lYvVuz?XhNzG\_uu

-1-3-8	9-2-8	18-10-4	24-0-12	33-8-8	42-11-0	44-2-8
1-3-8	9-2-8	9-7-12	5-2-7	9-7-12	9-2-8	1-3-8

Scale = 1:79.6



6-2-0	14-4-13	28-6-3	38-5-0	42-11-0
6-2-0	8-2-13	14-1-5	9-10-13	4-6-0

Plate Offsets (X,Y)--	[2:0-0,0-0-1-1], [3:0-5-0,0-4-8], [5:0-7-12,0-4-4], [6:0-7-12,0-4-4], [8:0-5-0,0-4-8], [9:0-0-0,0-1-1]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.64	Vert(LL)	-0.47	13-15	>815	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.80	Vert(CT)	-0.79	13-15	>487		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.59	Horz(CT)	0.09	9	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.22	13-15	>999	Weight: 430 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x6 SP No.1 *Except* 2-16: 2x6 SP No.2	2-0-0 oc purlins (5-3-7 max.): 5-6.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied.
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 6-5-8 except (jt=length) 9=4-6-0, 11=4-6-0, 17=0-3-8, 17=0-3-8, 12=0-3-8, 12=0-3-8, 9=4-6-0.  
 (lb) - Max Horz 2=-237(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 12 except 2=-272(LC 12), 9=-302(LC 13), 18=-256(LC 23), 19=-138(LC 12), 11=-281(LC 26), 17=-120(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 18, 19, 17 except 2=1713(LC 2), 9=1750(LC 2), 17=383(LC 23), 12=404(LC 26), 12=262(LC 1), 2=1664(LC 1), 9=1699(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-2827/778, 4-5=-2499/721, 5-6=-1761/665, 6-7=-2516/721, 7-9=-2847/777  
 BOT CHORD 2-19=-539/2427, 18-19=-539/2427, 17-18=-539/2427, 15-17=-539/2427, 13-15=-214/1761, 12-13=-539/2405, 11-12=-539/2405, 9-11=-539/2405  
 WEBS 4-15=-577/453, 5-15=-121/857, 6-13=-122/900, 7-13=-582/454

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; 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
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) Provide adequate drainage to prevent water ponding.
  - 5) All plates are 2x4 MT20 unless otherwise indicated.
  - 6) Gable studs spaced at 2-0-0 oc.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 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.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12 except (jt=lb) 2=272, 9=302, 18=256, 19=138, 11=281, 17=120, 2=272, 9=302.
  - 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 16, 2019

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107191
681099_Master_120	B01	Roof Special	78	1		

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0-10-8	7-1-2	14-0-14	22-7-12	32-3-8
0-10-8	7-1-2	6-11-12	8-6-14	9-7-12

Scale = 1:56.6

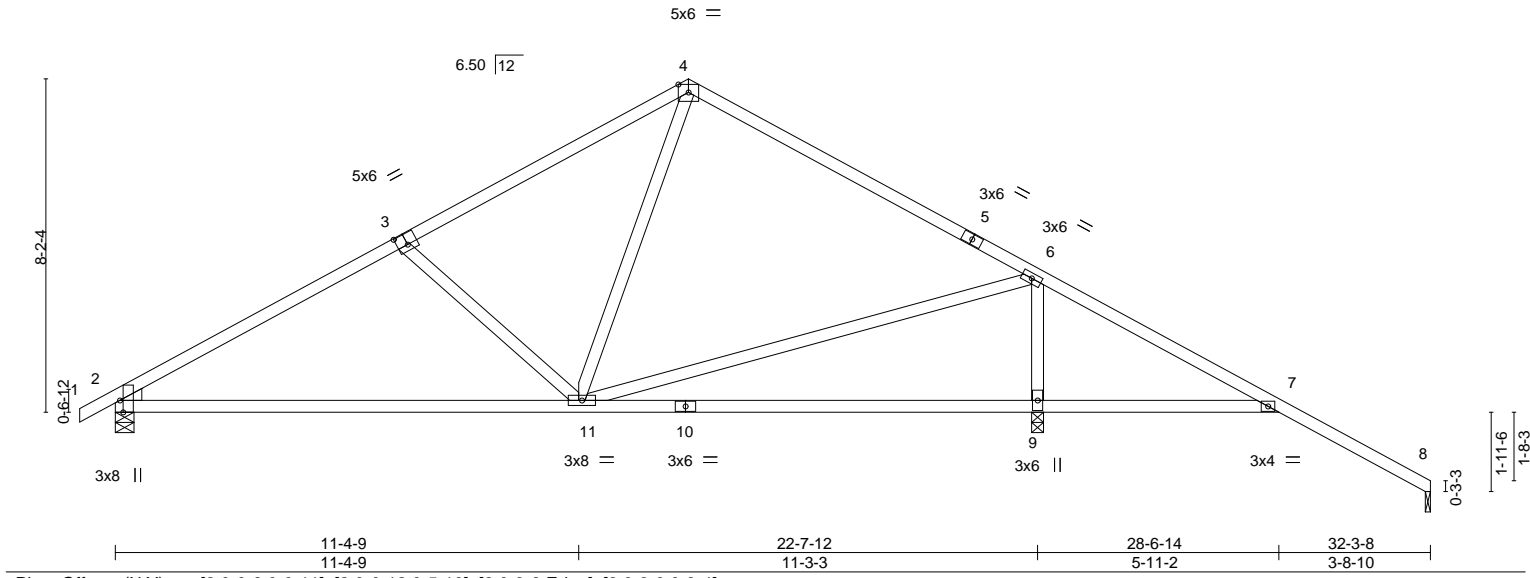


Plate Offsets (X,Y)--	[2:0-0-6,0-0-11], [2:0-0-12,0-5-10], [2:0-3-8,Edge], [3:0-3-0,0-3-4]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.82	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.83	Vert(LL) -0.24 11-14 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.49	Vert(CT) -0.50 11-14 >542 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.04 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.10 11-14 >999 240	Weight: 142 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SP No.2 *Except* 2-10: 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3	
WEDGE	
Left: 2x4 SP No.3	

REACTIONS.	(lb/size)
	2=852/0-5-8, 9=1652/0-3-8, 8=137/0-1-8
	Max Horz 2=-236(LC 13)
	Max Uplift 2=-198(LC 12), 9=-287(LC 13), 8=-47(LC 13)
	Max Grav 2=852(LC 1), 9=1652(LC 1), 8=138(LC 24)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1109/322, 3-4=-808/272, 4-6=-758/258, 6-7=-147/778
BOT CHORD	2-11=-245/978, 9-11=-640/265, 7-9=-640/265
WEBS	3-11=-469/307, 4-11=-47/399, 6-9=-1456/454, 6-11=-135/1187

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=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
  - 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.
  - Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 2=198, 9=287.
  - 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.



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<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107192
681099_Master_120	B02	GABLE	6	1		

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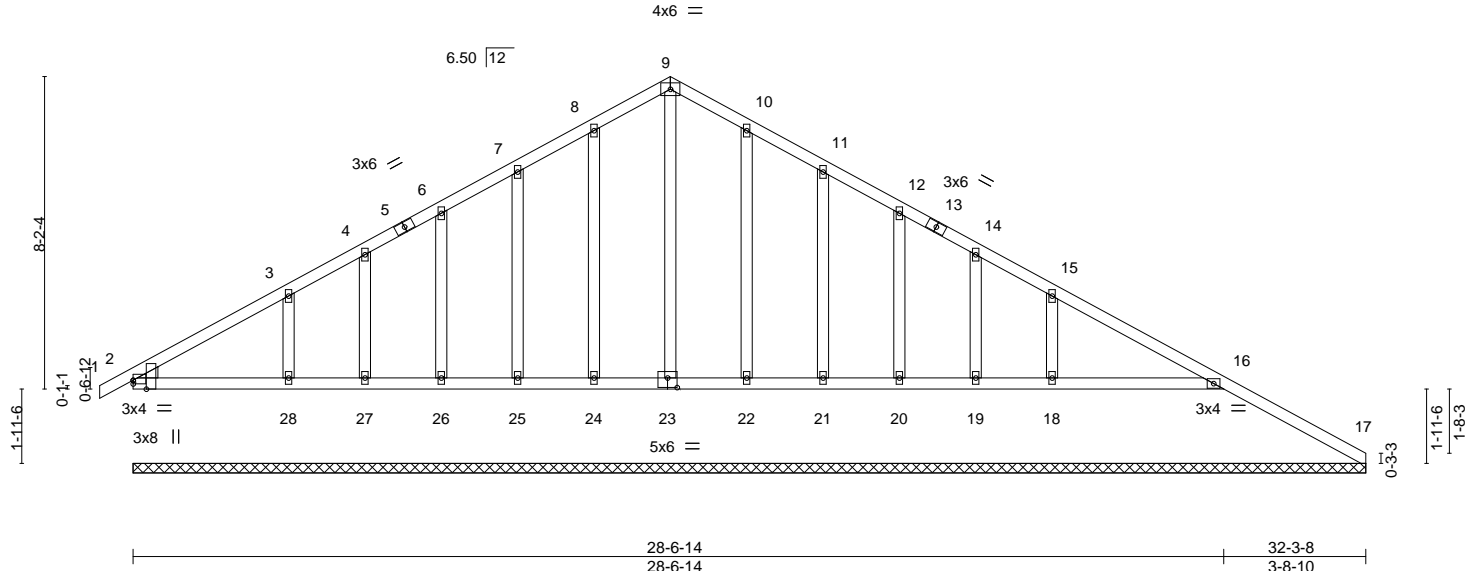


Plate Offsets (X,Y)--	[2:0-0-0,0-1-2], [2:0-2-12,Edge], [23:0-3-0,0-3-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.30	Vert(LL) -0.00 1 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.15	Vert(CT) 0.01 1 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.21	Horz(CT) 0.01 17 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 176 lb	FT = 20%

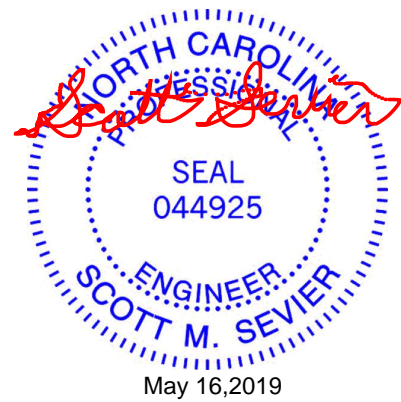
**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
OTHERS 2x4 SP No.3  
WEDGE  
Left: 2x4 SP No.3

**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 32-3-8.  
(lb) - Max Horz 2=234(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 17, 16, 24, 25, 26, 27, 22, 21, 20, 19 except 28=148(LC 12), 18=123(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 2, 17, 23, 24, 25, 26, 27, 22, 21, 20, 19 except 16=383(LC 1), 28=321(LC 19), 18=300(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 8-9=-224/254, 9-10=-223/252  
WEBS 3-28=-262/180

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=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, 17, 16, 24, 25, 26, 27, 22, 21, 20, 19 except (jt=lb) 28=148, 18=123.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 16, 23, 24, 25, 26, 27, 28, 22, 21, 20, 19, 18.
  - Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.





Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107193
681099_Master_120	B03	GABLE	2	1		

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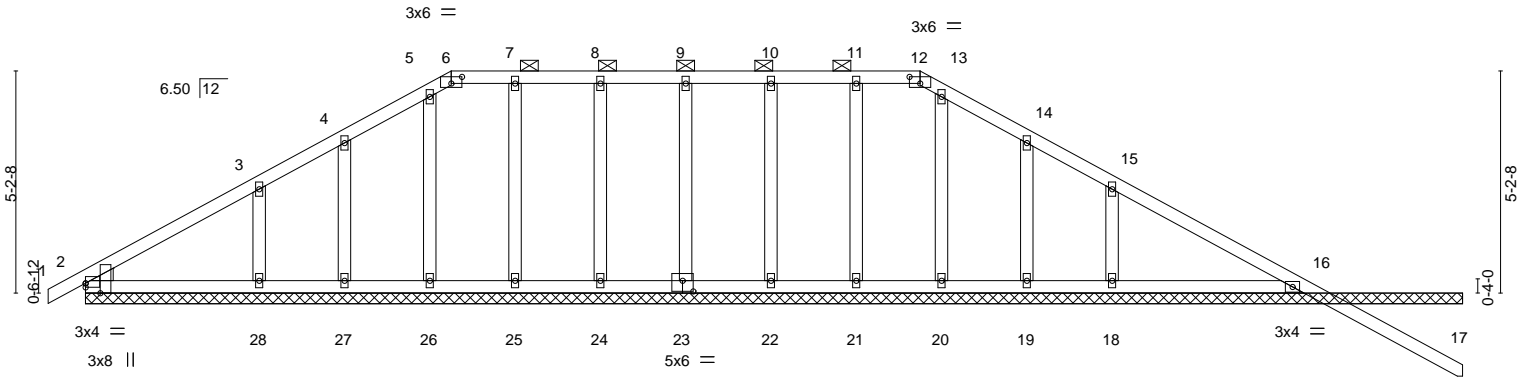


Plate Offsets (X,Y)--	[2:0-2-12,Edge], [2:0-0-0,0-1-2], [6:0-3-0,0-1-14], [12:0-3-0,0-1-14], [23:0-3-0,0-3-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.30	Vert(LL)	-0.00	1	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	0.01	1	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.01	17	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 161 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-12.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 32-3-8.  
 (lb) - Max Horz 2=-177(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 17, 2, 23, 24, 25, 26, 27, 22, 21, 19, 16 except 28=-142(LC 12), 18=-120(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 17, 2, 23, 24, 25, 26, 27, 22, 21, 20, 19 except 28=320(LC 1), 18=299(LC 24), 16=383(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 3-28=-258/175

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; 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.
  - 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) 17, 2, 23, 24, 25, 26, 27, 22, 21, 19, 16 except (jt=lb) 28=142, 18=120.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 17.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 16, 2019

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 Edenton, NC 27932

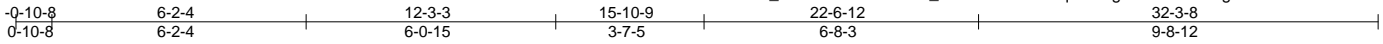


Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107194
681099_Master_120	B04	Hip	2	1		

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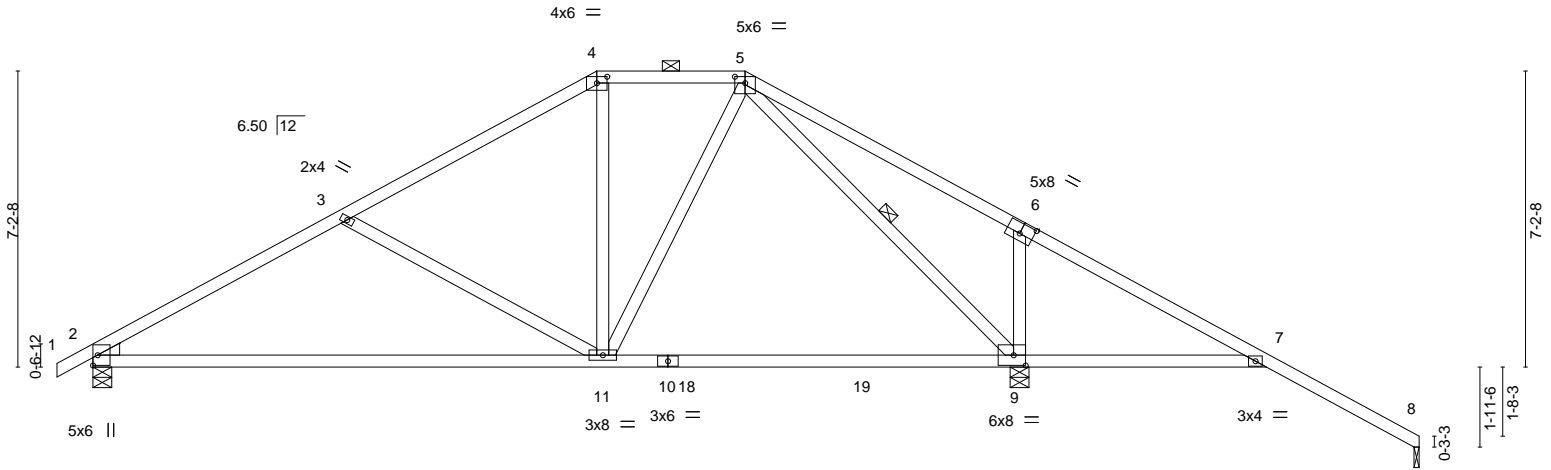


Plate Offsets (X,Y)--	[2:0-0-12,0-5-10], [2:0-0-6,0-0-11], [4:0-3-0,0-1-14], [5:0-3-0,0-1-14], [6:0-4-0,0-3-0], [9:0-3-8,0-3-0]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.65	Vert(LL)	-0.36	9-11	>757	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.85	Vert(CT)	-0.68	11-14	>400		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.72	Horz(CT)	0.06	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.06	11-14	>999	Weight: 149 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x4 SP No.2 *Except* 2-10: 2x4 SP No.1	2-0-0 oc purlins (6-0-0 max.): 4-5.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied.
WEDGE	WEBS 1 Row at midpt 5-9
Left: 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=842/0-5-8, 9=1669/0-5-8, 8=130/0-1-8  
 Max Horz 2=-217(LC 13)  
 Max Uplift 2=-188(LC 12), 9=-279(LC 13), 8=-41(LC 13)  
 Max Grav 2=859(LC 23), 9=1669(LC 1), 8=131(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1159/348, 3-4=-781/242, 4-5=-608/264, 5-6=-4/838, 6-7=-179/839  
 BOT CHORD 2-11=-241/1016, 9-11=-74/481, 7-9=-708/299  
 WEBS 3-11=-504/289, 5-11=-56/493, 5-9=-1472/227, 6-9=-463/314

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; 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.
  - 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.
  - Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 2=188, 9=279.
  - 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.



May 16, 2019

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

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

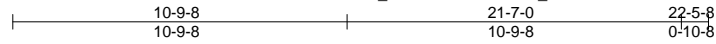
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107195
681099_Master_120	C01	GABLE	4	1		

Builders FirstSource, Sumter, SC - 29153,

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5x6 ||

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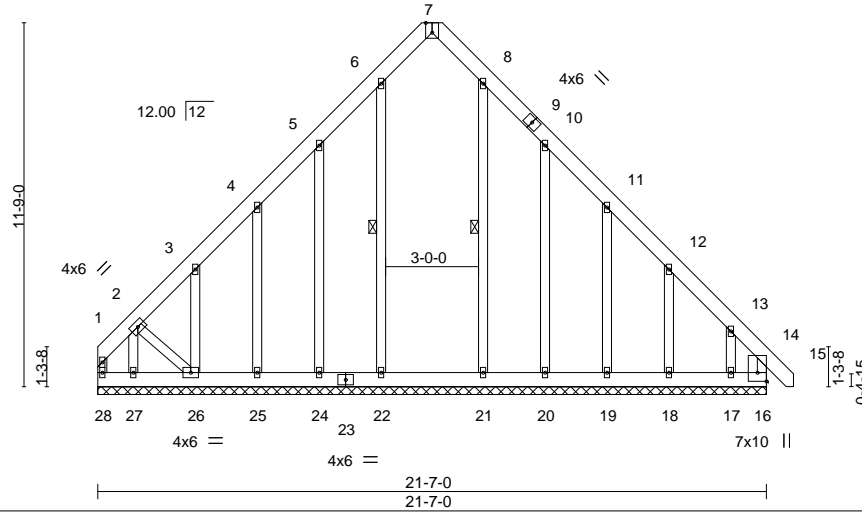


Plate Offsets (X, Y)--	[7:0-3-12,Edge], [14:0-1-12,0-1-12], [16:Edge,0-3-8], [16:0-0-0,0-1-12]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/def	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	0.00	14	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	0.00	14	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.24	Horz(CT)	0.01	16	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						

Weight: 211 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 2-26: 2x4 SP No.3	WEBS 1 Row at midpt 6-22, 8-21
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 21-7-0.  
 (lb) - Max Horz 28=-351(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 28, 22, 27 except 16=-189(LC 11), 24=-165(LC 12), 25=-138(LC 12), 26=-325(LC 12), 20=-175(LC 13), 19=-135(LC 13), 18=-110(LC 13), 17=-412(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 28, 24, 25, 27, 21, 20, 19, 18, 17 except 16=539(LC 13), 22=291(LC 20), 26=261(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-335/210, 12-13=-301/201, 13-14=-483/339, 14-16=-362/265  
 BOT CHORD 27-28=-277/302, 26-27=-278/303, 25-26=-244/316, 24-25=-244/316, 22-24=-245/316, 21-22=-245/316, 20-21=-245/316, 19-20=-244/316, 18-19=-244/316, 17-18=-243/315, 16-17=-241/313  
 WEBS 2-26=-229/333

- NOTES-** (12)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; 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.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 28, 22, 27 except (jt=lb) 16=189, 24=165, 25=138, 26=325, 20=175, 19=135, 18=110, 17=412.
  - Attic room checked for L/360 deflection.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 16, 2019

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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107196
681099_Master_120	C02	ROOF TRUSS	13	1		

Builders FirstSource, Sumter, SC - 29153,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu May 16 07:34:21 2019 Page 1

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5x6 ||

Scale = 1:75.3

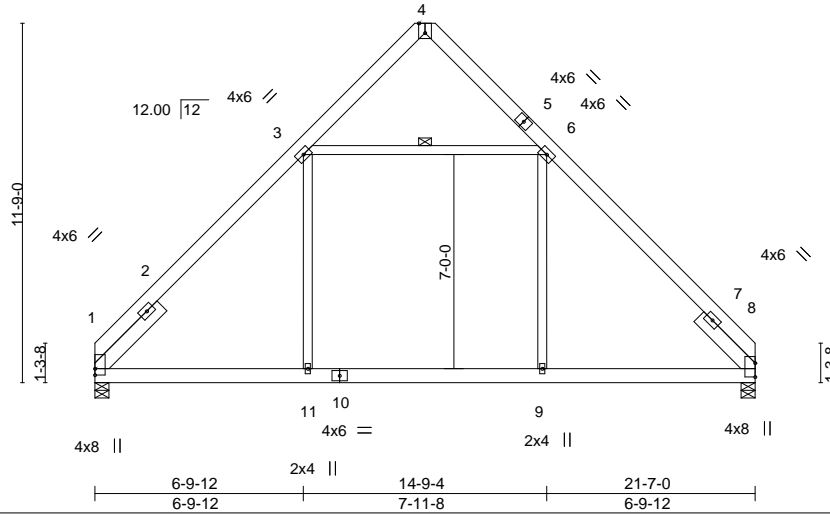


Plate Offsets (X,Y)-- [4:0-3-12,Edge]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.33	Vert(LL)	0.20	11-14	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.78	Vert(CT)	-0.19	9-11	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.71	Horz(CT)	0.06	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Attic	-0.11	9-11	811	Weight: 168 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3  
SLIDER Left 2x6 SP No.2 3-0-0, Right 2x6 SP No.2 2-6-0

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-7-2 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 3-6

**REACTIONS.** (lb/size) 1=1017/0-5-8, 8=1017/0-5-8  
Max Horz 1=-302(LC 8)  
Max Grav 1=1159(LC 21), 8=1159(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-3=-1429/104, 3-4=-262/78, 4-6=-264/78, 6-8=-1438/104  
BOT CHORD 1-11=0/974, 9-11=0/982, 8-9=0/970  
WEBS 6-9=0/586, 3-6=-824/278, 3-11=0/590

- NOTES-** (8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=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
  - 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.
  - Ceiling dead load (5.0 psf) on member(s). 3-6; Wall dead load (5.0psf) on member(s). 6-9, 3-11
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 9-11
  - Attic room checked for L/360 deflection.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 16, 2019

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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107197
681099_Master_120	C03	ROOF TRUSS	15	1		

Builders FirstSource, Sumter, SC - 29153,

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5x6 ||

Scale = 1:73.9

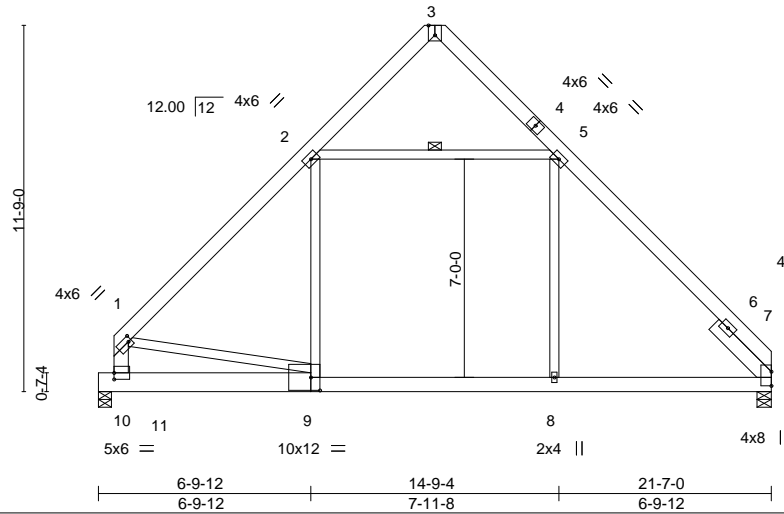


Plate Offsets (X,Y)-- [1:0-1-4,0-2-0], [3:0-3-12,Edge], [9:0-3-8,0-5-0], [10:0-0-0,0-2-8]

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 0.33	Vert(LL)	-0.13	8-9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.72	Vert(CT)	-0.17	8-9	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.72	Horz(CT)	0.05	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.16	8-14	>999		
								Weight: 176 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x6 SP No.2 \*Except\*  
 9-11: 2x8 SP DSS  
 WEBS 2x4 SP No.3 \*Except\*  
 1-10: 2x6 SP No.2  
 SLIDER Right 2x6 SP No.2 2-6-0

**BRACING-**

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

**REACTIONS.**

(lb/size) 11=981/0-5-0, 7=1007/0-5-8  
 Max Horz 11=-334(LC 10)  
 Max Grav 11=1144(LC 21), 7=1151(LC 20)

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

TOP CHORD 1-2=-1443/106, 3-5=-254/87, 5-7=-1423/92, 1-10=-1246/92  
 BOT CHORD 10-11=-316/334, 9-10=-353/596, 8-9=0/971, 7-8=0/960  
 WEBS 5-8=0/583, 2-5=-817/266, 2-9=-2/559, 1-9=-107/810

**NOTES-** (8)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BC DL=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
- 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.
- Ceiling dead load (5.0 psf) on member(s). 2-5; Wall dead load (5.0psf) on member(s).5-8, 2-9
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 8-9
- Attic room checked for L/360 deflection.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 16, 2019

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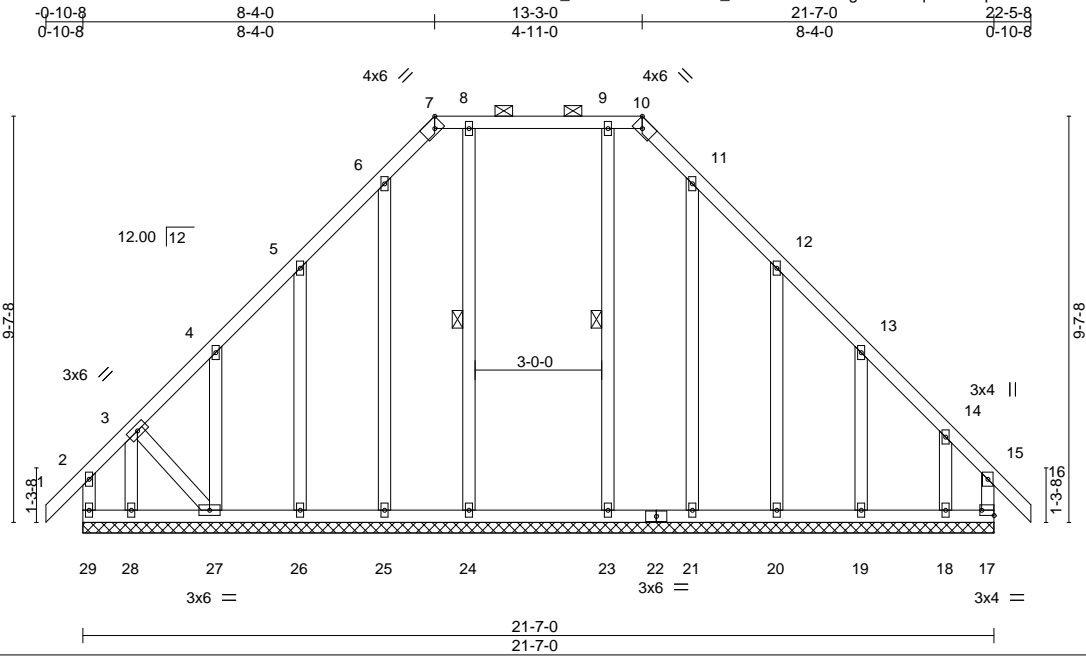
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107198
681099_Master_120	C04	GABLE	1	1		
Job Reference (optional)						

Builders FirstSource, Sumter, SC - 29153,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu May 16 07:34:23 2019 Page 1

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Scale = 1:54.6

Plate Offsets (X,Y)--	[7:0-2-8,Edge], [10:0-2-8,Edge], [17:Edge,0-1-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/def L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.17	Vert(LL) -0.00 16 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.17	Vert(CT) -0.00 16 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.19	Horz(CT) 0.01 17 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S			
				Weight: 170 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-10.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except*	WEBS 1 Row at midpt 8-24, 9-23
3-27: 2x4 SP No.3	
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 21-7-0.  
 (lb) - Max Horz 29=-309(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 29, 24, 25, 23, 21 except 17=-106(LC 11), 26=-153(LC 12), 27=-315(LC 12), 28=-144(LC 10), 20=-163(LC 13), 19=-108(LC 13), 18=-319(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 29, 25, 26, 21, 20, 19, 18 except 17=300(LC 13), 24=303(LC 22), 27=302(LC 19), 28=272(LC 11), 23=292(LC 22)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 14-15=-260/221  
 BOT CHORD 28-29=-258/251, 27-28=-258/251  
 WEBS 3-28=-274/205, 3-27=-225/273

- NOTES-** (13)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=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.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 29, 24, 25, 23, 21 except (jt=lb) 17=106, 26=153, 27=315, 28=144, 20=163, 19=108, 18=319.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



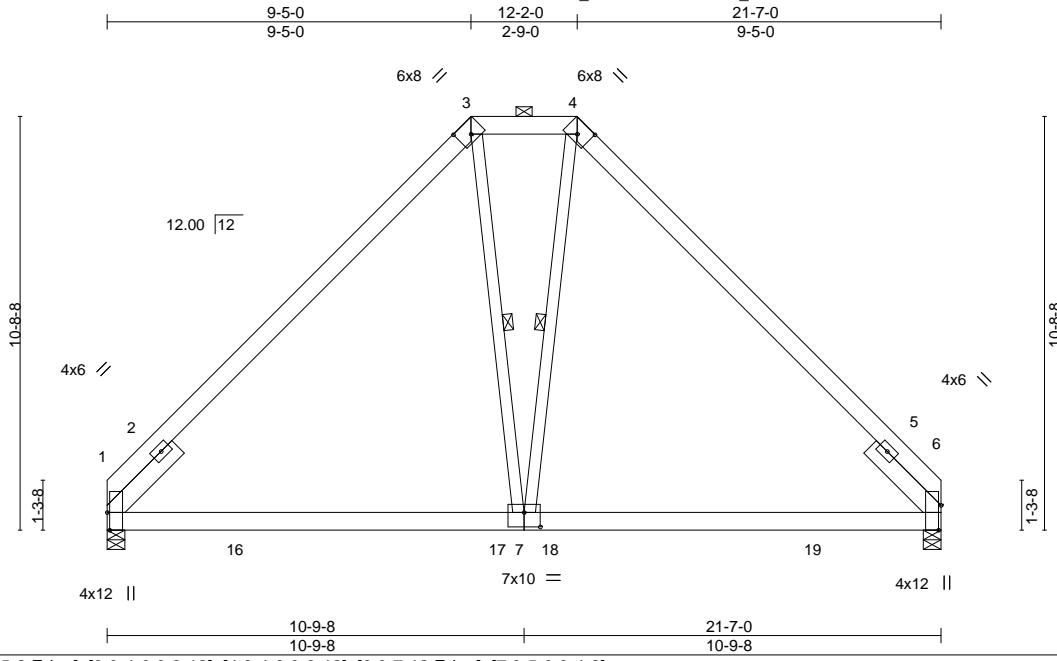


Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107199
681099_Master_120	C05	HIP	1	1		

Builders FirstSource, Sumter, SC - 29153,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu May 16 07:34:25 2019 Page 1

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Scale = 1:59.6

Plate Offsets (X,Y)-- [1:0-5-8,Edge], [3:0-4-0,0-3-12], [4:0-4-0,0-3-12], [6:0-7-12,Edge], [7:0-5-0,0-4-8]

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 0.41	Vert(LL)	-0.10	7-10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.63	Vert(CT)	-0.16	7-10	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.16	Horz(CT)	0.05	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.12	7-10	>999	Weight: 162 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x6 SP No.2	2-0-0 oc purlins (6-0-0 max.): 3-4.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied.
SLIDER Left 2x6 SP No.2 2-6-0, Right 2x6 SP No.2 2-6-0	WEBS 1 Row at midpt 3-7, 4-7

**REACTIONS.** (lb/size) 1=863/0-5-8, 6=863/0-5-8  
 Max Horz 1=-270(LC 8)  
 Max Uplift 1=-108(LC 12), 6=-108(LC 13)  
 Max Grav 1=959(LC 2), 6=959(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-943/274, 3-4=-655/357, 4-6=-943/274  
 BOT CHORD 1-7=-90/666, 6-7=-26/618  
 WEBS 3-7=-180/461, 4-7=-180/461

- NOTES-** (9)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=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.
  - 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 (it=lb) 1=108, 6=108.
  - 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.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 16, 2019

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818 Soundside Road  
Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107200
681099_Master_120	C06	ROOF TRUSS	1	1		

Builders FirstSource, Sumter, SC - 29153,

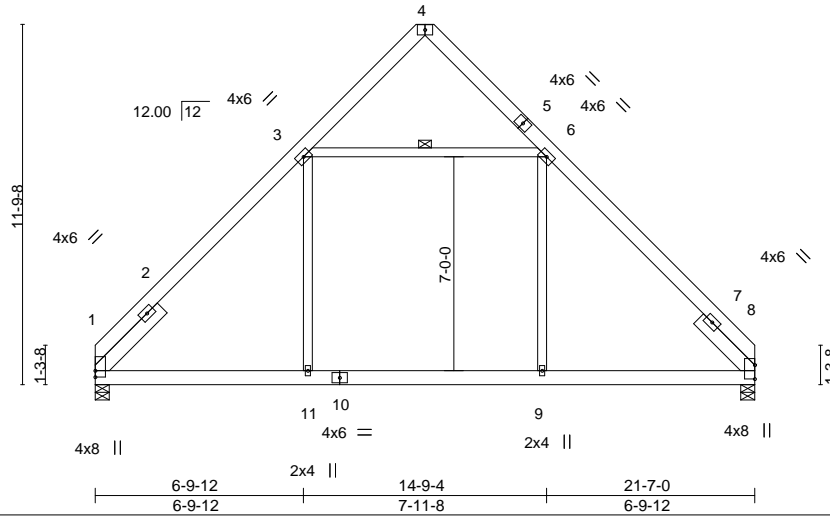
8.220 s Nov 16 2018 MiTek Industries, Inc. Thu May 16 07:34:26 2019 Page 1

ID:6U\_sNXmsGM6hZXeeE\_lla6zQrSu-rPu0JnHfqCnZNyJSxwnt9N3mQ1VHOEPtUjff7zG\_uh



4x6 =

Scale = 1:75.4



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.33	Vert(LL)	0.20 11-14	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.78	Vert(CT)	-0.19 9-11	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.71	Horz(CT)	0.06 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Attic	-0.11 9-11	811	360		
								Weight: 168 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x6 SP No.2 3-0-0, Right 2x6 SP No.2 2-6-0

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-7-2 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 3-6

**REACTIONS.** (lb/size) 1=1017/0-5-8, 8=1017/0-5-8  
 Max Horz 1=-303(LC 8)  
 Max Grav 1=1160(LC 21), 8=1160(LC 20)

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

TOP CHORD 1-3=-1429/105, 3-4=-262/79, 4-6=-264/79, 6-8=-1438/104  
 BOT CHORD 1-11=0/974, 9-11=0/982, 8-9=0/971  
 WEBS 6-9=0/586, 3-6=-825/278, 3-11=0/590

**NOTES-** (8)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; 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
- 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.
- Ceiling dead load (5.0 psf) on member(s). 3-6; Wall dead load (5.0psf) on member(s). 6-9, 3-11
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 9-11
- Attic room checked for L/360 deflection.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 16, 2019

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



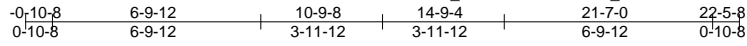
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107201
681099_Master_120	C07	ROOF TRUSS	5	1		

Builders FirstSource, Sumter, SC - 29153,

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5x6 ||

Scale = 1:75.3

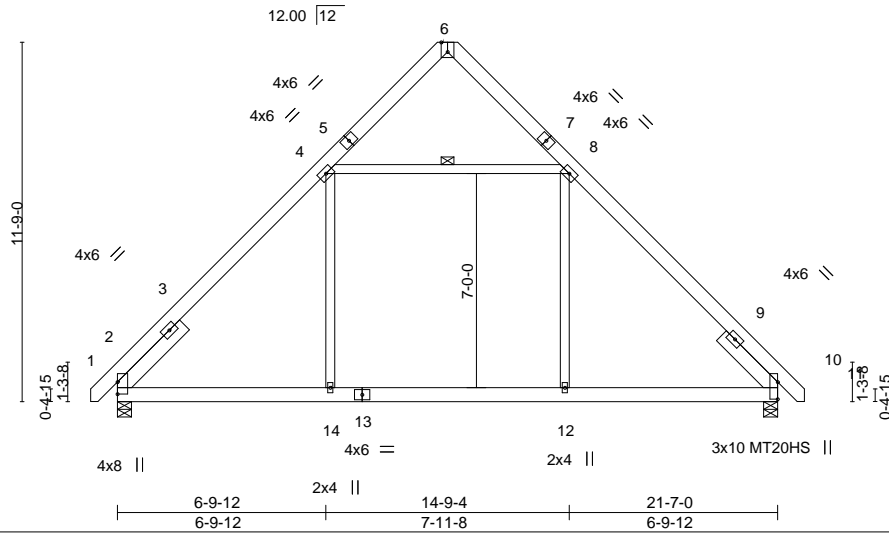


Plate Offsets (X,Y)--	[6:0-3-12,Edge], [10:Edge,0-0-0]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.33	Vert(LL)	0.20 14-17	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.78	Vert(CT)	-0.19 12-14	>999	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.71	Horz(CT)	0.06 10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Attic	-0.11 12-14	811	360		
								Weight: 173 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-7-0 oc purlins.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 4-8
SLIDER Left 2x6 SP No.2 3-0-0, Right 2x6 SP No.2 2-6-0	

**REACTIONS.** (lb/size) 2=1062/0-5-8, 10=1062/0-5-8  
 Max Horz 2=324(LC 11)  
 Max Uplift 2=-9(LC 12), 10=-9(LC 13)  
 Max Grav 2=1191(LC 20), 10=1191(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1427/105, 4-6=-264/78, 6-8=-265/78, 8-10=-1436/104  
 BOT CHORD 2-14=0/982, 12-14=0/990, 10-12=0/979  
 WEBS 8-12=0/585, 4-8=-823/279, 4-14=0/590

- NOTES-** (10)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; 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
  - 3) All plates are MT20 plates unless otherwise indicated.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Ceiling dead load (5.0 psf) on member(s). 4-8; Wall dead load (5.0psf) on member(s).8-12, 4-14
  - 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 12-14
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.
  - 9) Attic room checked for L/360 deflection.
  - 10) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

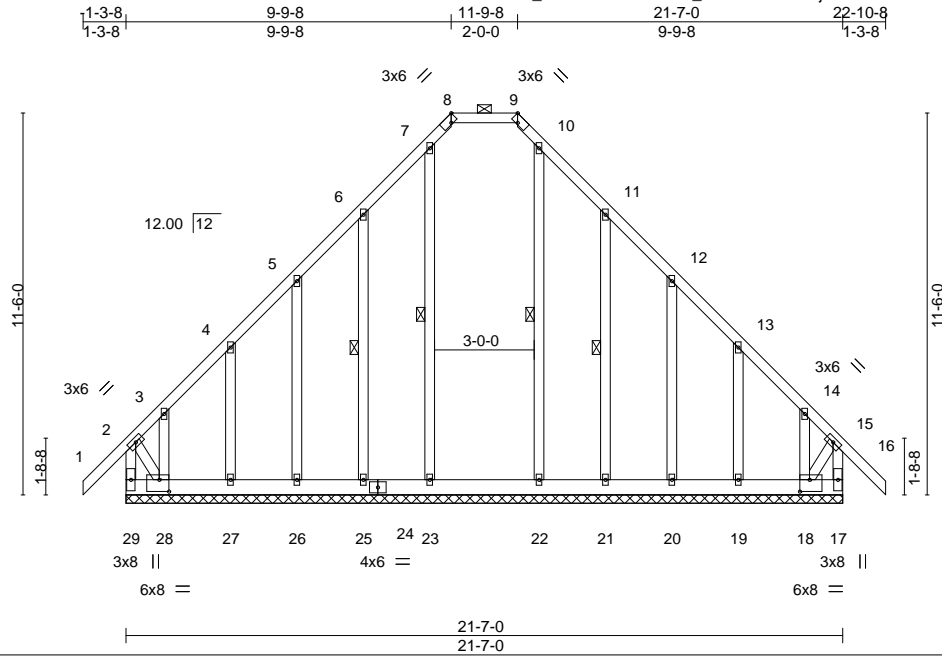


Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107202
681099_Master_120	C21	GABLE	2	1		

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Scale = 1:69.4

Plate Offsets (X,Y)--	[8:0-2-8,Edge], [9:0-2-8,Edge], [18:0-3-8,0-4-4], [28:0-3-8,0-4-4]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/def L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.19	Vert(LL) -0.01 16 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.05	Vert(CT) -0.01 16 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.17	Horz(CT) 0.01 17 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 199 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-9.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 28-29,17-18.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 7-23, 6-25, 10-22, 11-21
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 21-7-0.  
 (lb) - Max Horz 29=-376(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 23 except 29=-349(LC 10), 17=-299(LC 11), 25=-168(LC 12), 26=-121(LC 12), 27=-140(LC 12), 28=-542(LC 12), 21=-171(LC 13), 20=-121(LC 13), 19=-140(LC 13), 18=-530(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 25, 26, 27, 22, 21, 20, 19 except 29=698(LC 12), 17=677(LC 13), 23=256(LC 22), 28=363(LC 10), 18=334(LC 11)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-399/301, 3-4=-337/221, 13-14=-324/216, 14-15=-387/314, 2-29=-670/428, 15-17=-649/449  
 BOT CHORD 28-29=-352/331, 27-28=-291/354, 26-27=-291/354, 25-26=-291/354, 23-25=-291/354, 22-23=-291/354, 21-22=-291/354, 20-21=-291/354, 19-20=-291/354, 18-19=-291/354  
 WEBS 2-28=-415/560, 15-18=-401/547

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=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.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23 except (jt=lb) 29=349, 17=299, 25=168, 26=121, 27=140, 28=542, 21=171, 20=121, 19=140, 18=530.
  - 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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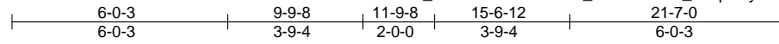
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107203
681099_Master_120	C22	Piggyback Base	7	1		

Builders FirstSource, Sumter, SC - 29153,

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Scale: 3/16"=1'

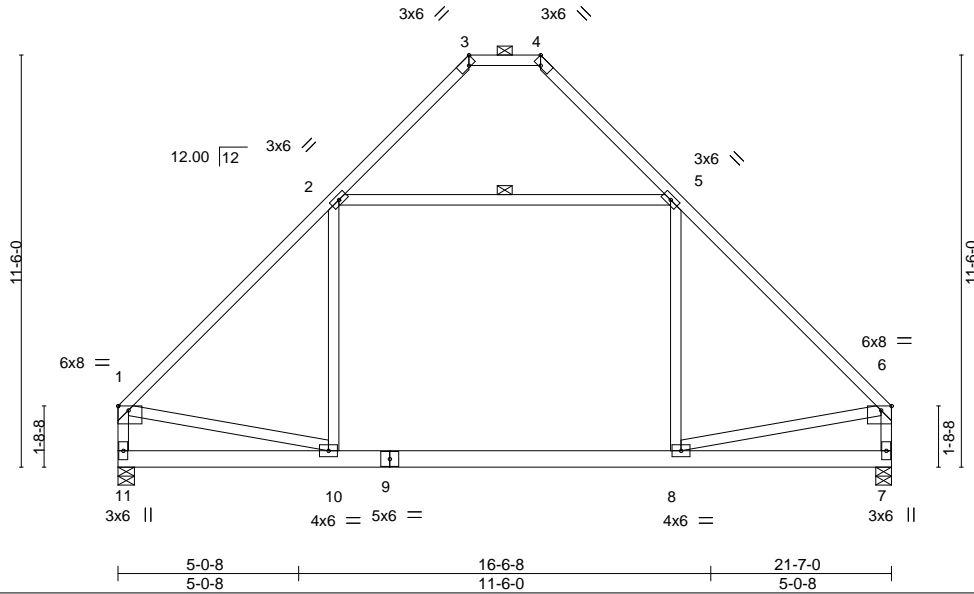


Plate Offsets (X,Y)-- [1:Edge,0-1-7], [3:0-2-8,Edge], [4:0-2-8,Edge], [6:0-3-8,Edge]

<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 0.48	Vert(LL)	0.27	10-11	>958	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.57	Vert(CT)	-0.27	10	>932		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.29	Horz(CT)	0.01	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 150 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-3-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 2-5

**REACTIONS.** (lb/size) 11=852/0-5-8, 7=852/0-5-4  
 Max Horz 11=-335(LC 8)  
 Max Uplift 11=-108(LC 13), 7=-108(LC 12)  
 Max Grav 11=888(LC 2), 7=888(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1039/233, 2-3=-296/108, 4-5=-296/108, 5-6=-1039/233, 1-11=-943/219, 6-7=-944/219  
 BOT CHORD 10-11=-415/438, 8-10=-78/710  
 WEBS 2-10=-57/320, 5-8=-56/320, 1-10=-152/734, 6-8=-156/737, 2-5=-615/321

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=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.
- 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 (it=lb) 11=108, 7=108.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



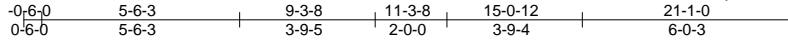
May 16, 2019

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107204
681099_Master_120	C23	Piggyback Base	9	1		

Builders FirstSource, Sumter, SC - 29153,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu May 16 07:34:30 2019 Page 1

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Scale: 3/16"=1'

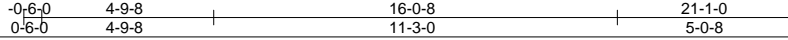
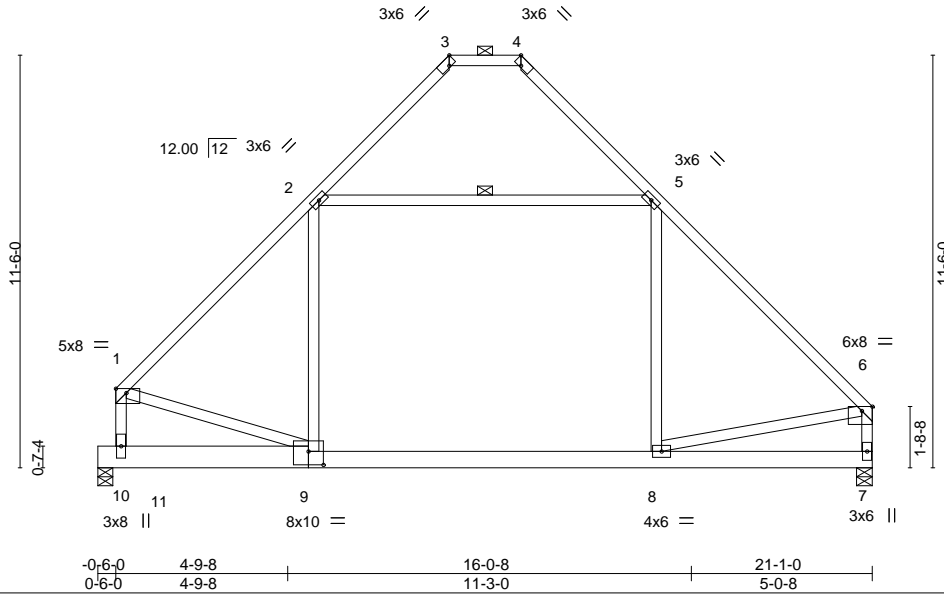


Plate Offsets (X,Y)-- [1:Edge,0-1-7], [3:0-2-8,Edge], [4:0-2-8,Edge], [6:0-3-8,Edge], [9:0-5-0,0-4-8]

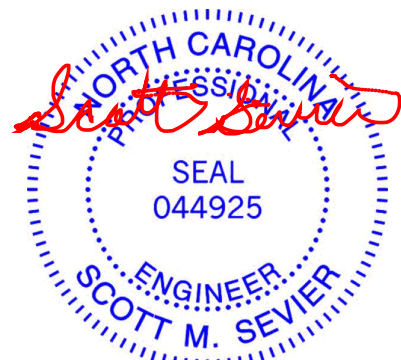
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.48	Vert(LL)	0.22	7-8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.67	Vert(CT)	-0.24	8-9	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.28	Horz(CT)	0.01	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 154 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-3-12 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD 2x8 SP DSS *Except* 7-9: 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 2-5

**REACTIONS.** (lb/size) 11=823/0-5-0, 7=849/0-5-4  
 Max Horz 11=-341(LC 8)  
 Max Uplift 11=-102(LC 13), 7=-105(LC 12)  
 Max Grav 11=868(LC 2), 7=887(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1047/243, 2-3=-297/106, 4-5=-300/112, 5-6=-1031/228, 1-10=-1025/222,  
 6-7=-937/215  
 BOT CHORD 10-11=-333/341, 9-10=-359/386, 8-9=-69/703  
 WEBS 2-9=-65/348, 5-8=-53/314, 1-9=-124/727, 6-8=-138/726, 2-5=-604/313

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=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
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=102, 7=105.
  - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 16, 2019

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

818 Soundside Road  
 Edenton, NC 27932

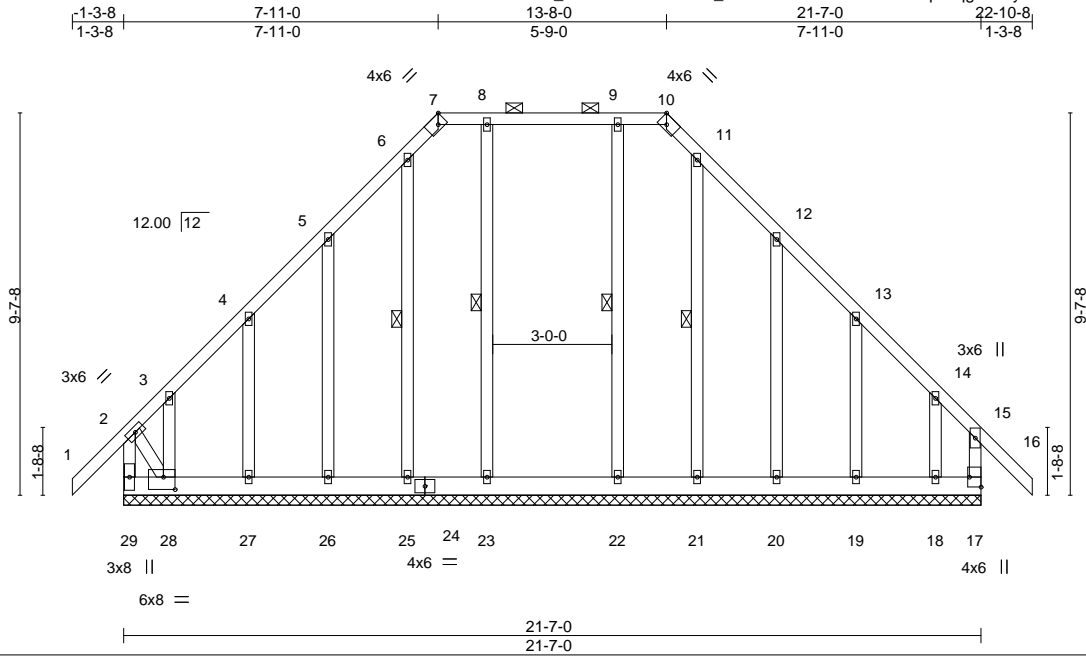


Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107205
681099_Master_120	C24	GABLE	1	1		

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Plate Offsets (X,Y)--	[7:0-2-8,Edge], [10:0-2-8,Edge], [17:Edge,0-3-8], [28:0-3-8,0-3-12]
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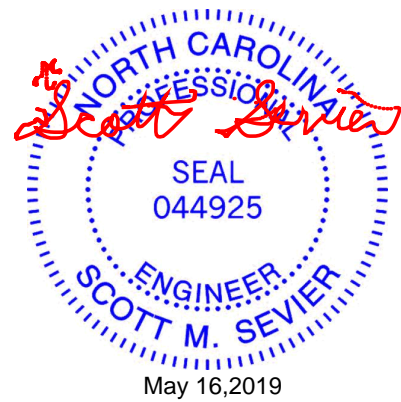
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/def	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	-0.01	16	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	-0.01	16	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.16	Horz(CT)	0.00	17	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 191 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 7-10.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except*	WEBS 1 Row at midpt 8-23, 6-25, 9-22, 11-21
OTHERS 2-28: 2x4 SP No.3	
2x4 SP No.3	

**REACTIONS.** All bearings 21-7-0.  
 (lb) - Max Horz 29=-323(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 17, 23, 25, 22 except 29=-390(LC 10), 26=-156(LC 12), 27=-133(LC 12), 28=-357(LC 12), 20=-172(LC 13), 19=-106(LC 13), 18=-316(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 25, 26, 27, 21, 20, 19, 18 except 29=480(LC 9), 17=250(LC 13), 23=282(LC 22), 28=388(LC 10), 22=279(LC 22)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-29=-456/373, 2-3=-250/243, 5-6=-239/291, 7-8=-207/252, 8-9=-207/252, 9-10=-207/252, 11-12=-239/280  
 BOT CHORD 28-29=-297/276  
 WEBS 2-28=-337/370

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; 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.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 23, 25, 22 except (jt=lb) 29=390, 26=156, 27=133, 28=357, 20=172, 19=106, 18=316.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



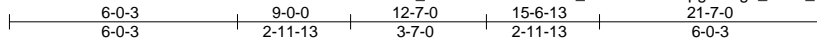


Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107206
681099_Master_120	C25	Hip	1	1		

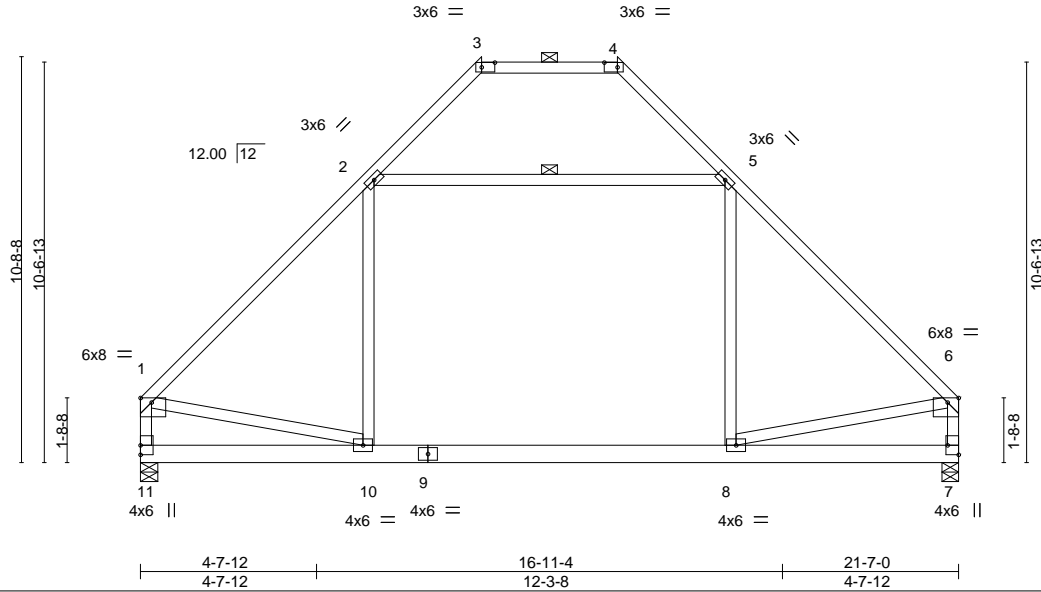
Builders FirstSource, Sumter, SC - 29153,

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Scale = 1:60.8



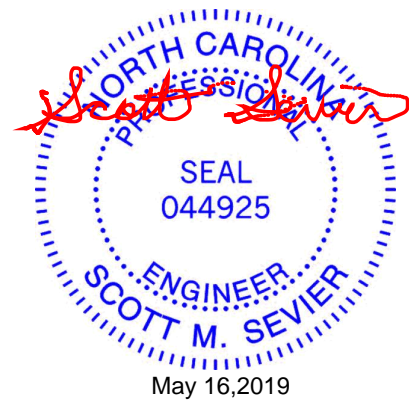
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.52	Vert(LL)	0.24	10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.55	Vert(CT)	-0.24	10	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.27	Horz(CT)	0.01	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS						
								Weight: 149 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 2-5

<b>REACTIONS.</b>	(lb/size) 11=852/0-5-8, 7=852/0-5-4
	Max Horz 11=309(LC 9)
	Max Uplift 11=-104(LC 12), 7=-104(LC 13)
	Max Grav 11=888(LC 2), 7=888(LC 2)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-1000/238, 2-3=-318/123, 4-5=-318/123, 5-6=-999/238, 1-11=-909/219, 6-7=-910/220
BOT CHORD	10-11=-419/451, 8-10=-85/681
WEBS	2-10=-32/314, 5-8=-32/314, 1-10=-183/701, 6-8=-188/705, 2-5=-576/286

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=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.
  - 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 (it=lb) 11=104, 7=104.
  - 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.



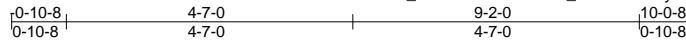


Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107208
681099_Master_120	D01	Common Supported Gable	8	1		

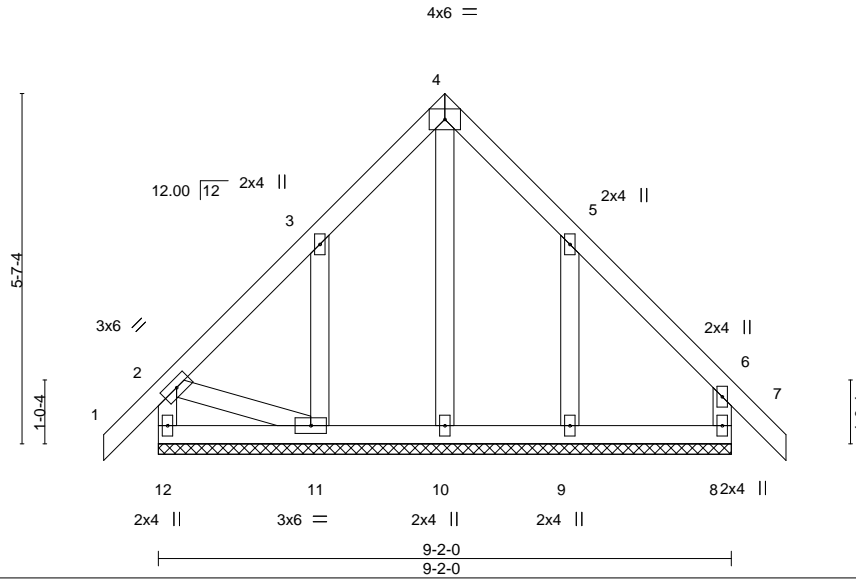
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ID:6U\_sNXmsGM6hZKeeE\_lIa6zQrSu-cyN2\_WOlnHCeWcFwc3fBriUHexj99Dajkb8xfzG\_uz



Scale = 1:36.9



<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 0.10	Vert(LL)	-0.00	7	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.00	7	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13	Horz(CT)	0.00	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 59 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 2-11: 2x4 SP No.3	
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 9-2-0.  
 (lb) - Max Horz 12=-189(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 8, 10 except 12=-114(LC 8), 11=-188(LC 12), 9=-182(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 12, 8, 9 except 10=256(LC 13), 11=261(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 4-10=-250/173

- NOTES-** (10)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; 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.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed on one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 10 except (jt=lb) 12=114, 11=188, 9=182.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



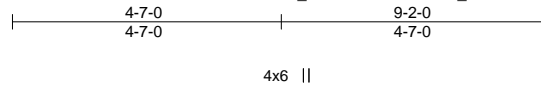
May 16, 2019

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107209
681099_Master_120	D02	Common Girder	5	2		

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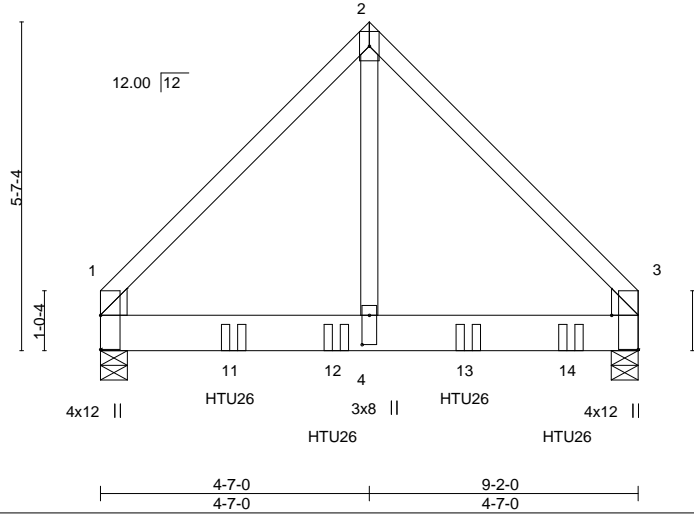


Plate Offsets (X,Y)-- [1:0-2-8,0-3-10], [3:0-2-8,0-3-10], [3:Edge,0-5-7], [4:0-6-0,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.22	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.28	Vert(LL) -0.02 4-10 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.51	Vert(CT) -0.05 4-10 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.00 1 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.02 4-10 >999 240	Weight: 115 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x8 SP DSS  
 WEBS 2x4 SP No.2  
 WEDGE  
 Left: 2x6 SP No.2, Right: 2x6 SP No.2

**BRACING-**

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

**REACTIONS.** (lb/size) 1=3419/0-5-8, 3=4340/0-5-8  
 Max Horz 1=-130(LC 4)  
 Max Uplift 1=-482(LC 9), 3=-535(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-3235/498, 2-3=-3228/498  
 BOT CHORD 1-4=-280/2224, 3-4=-280/2224  
 WEBS 2-4=-560/4195

**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.  
 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=120mph (3-second gust) Vasd=95mph; TC DL=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
- 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) 1=482, 3=535.
- Use Simpson Strong-Tie HTU26 (20-10d Girder, 14-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-3-0 oc max. starting at 2-3-4 from the left end to 8-0-4 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: 1-2=-60, 2-3=-60, 5-8=-20



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Continued on page 2

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ENGINEERING BY  
**TRENCO**  
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 818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107209
681099_Master_120	D02	Common Girder	5	<b>2</b>	Job Reference (optional)	

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**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 11=-1686(B) 12=-1780(B) 13=-1780(B) 14=-1780(B)

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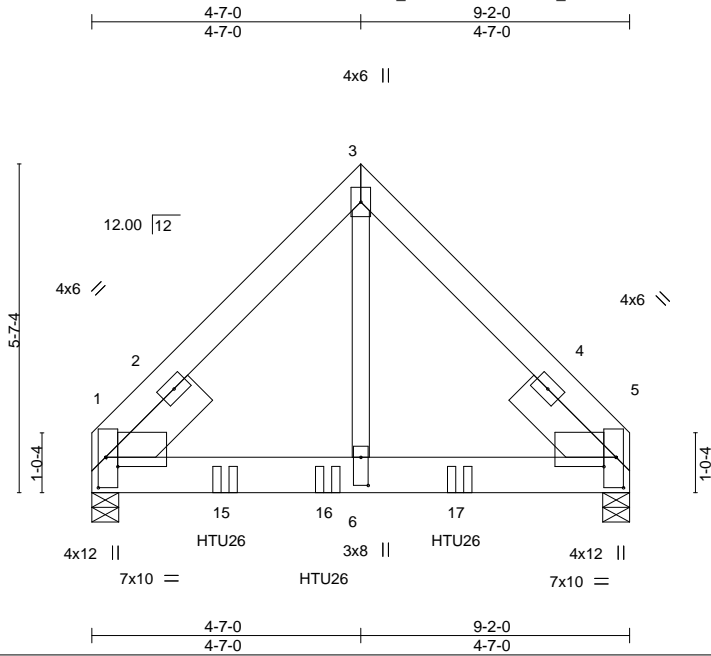


Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107210
681099_Master_120	D03	Common Girder	3	2		

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Scale = 1:39.3

Plate Offsets (X,Y)-- [1:0-6-4,0-1-8], [1:0-2-8,0-1-14], [5:0-6-4,0-1-8], [5:0-2-8,0-1-14], [6:0-5-12,0-1-8]

<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 0.11	Vert(LL)	0.03	6-9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.25	Vert(CT)	-0.04	6-9	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.43	Horz(CT)	0.01	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 159 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x8 SP DSS  
WEBS 2x4 SP No.2  
SLIDER Left 2x8 SP DSS 1-11-12, Right 2x8 SP DSS 1-11-12

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

**REACTIONS.** (lb/size) 1=3194/0-5-8, 5=2760/0-5-8  
Max Horz 1=124(LC 5)  
Max Uplift 1=-1174(LC 9), 5=-947(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-3=-2606/1012, 3-5=-2685/1025  
BOT CHORD 1-6=-651/1842, 5-6=-651/1842  
WEBS 3-6=-1299/3479

**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=120mph (3-second gust) Vasd=95mph; 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
- 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) 1=1174, 5=947.
- Use Simpson Strong-Tie HTU26 (20-10d Girder, 14-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-3-0 oc max. starting at 2-3-4 from the left end to 6-3-4 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, 3-5=-60, 7-11=-20  
Concentrated Loads (lb)  
Vert: 15=-1686(B) 16=-1786(B) 17=-1786(B)



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818 Soundside Road  
Edenton, NC 27932

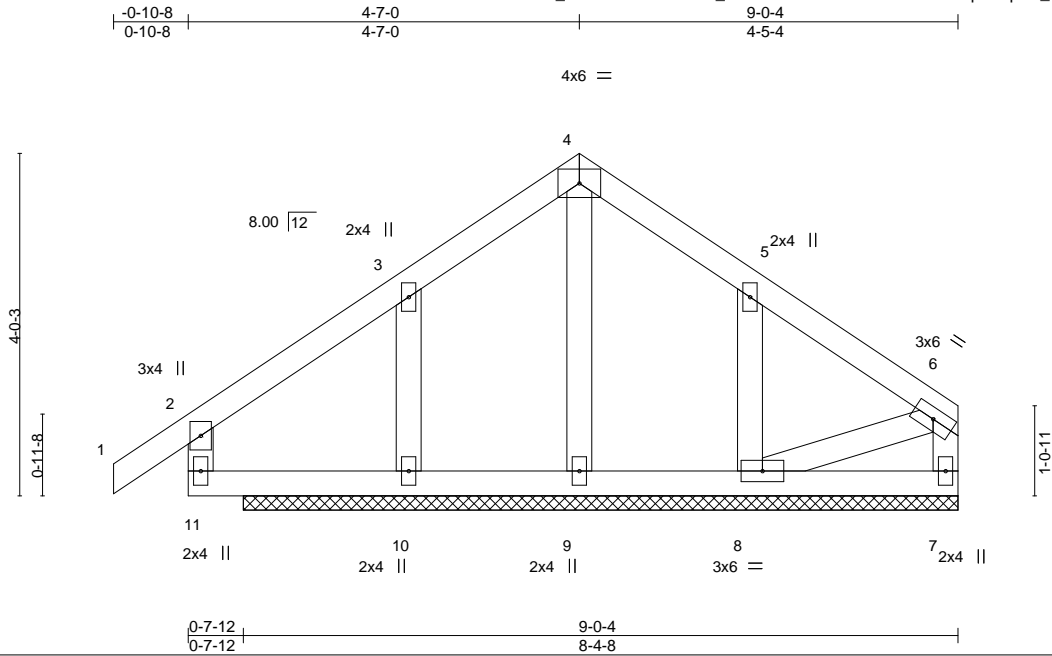
Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107211
681099_Master_120	E01	Common Supported Gable	3	1		

Builders FirstSource,

Sumter, SC - 29153,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu May 16 07:34:37 2019 Page 1

ID:6U\_sNXmsGM6hZxeeE\_lIa6zQrSu-0X3BcYRB4CbDN3HqblcMpTK\_GsyZMXp1PiqoX\_zG\_uW



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	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	-0.00	1-2	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	-0.00	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 48 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 9-0-4 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except: 10-0-0 oc bracing: 7-8.
WEBS 2x4 SP No.3 *Except* 2-11: 2x4 SP No.2	
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 8-4-8.  
 (lb) - Max Horz 10=114(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 7 except 10=149(LC 12), 8=128(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 7 except 9=254(LC 1), 10=331(LC 19), 8=286(LC 20)

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

- NOTES-** (10)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; 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; 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.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 10=149, 8=128.
  - Non Standard bearing condition. Review required.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 16, 2019

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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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

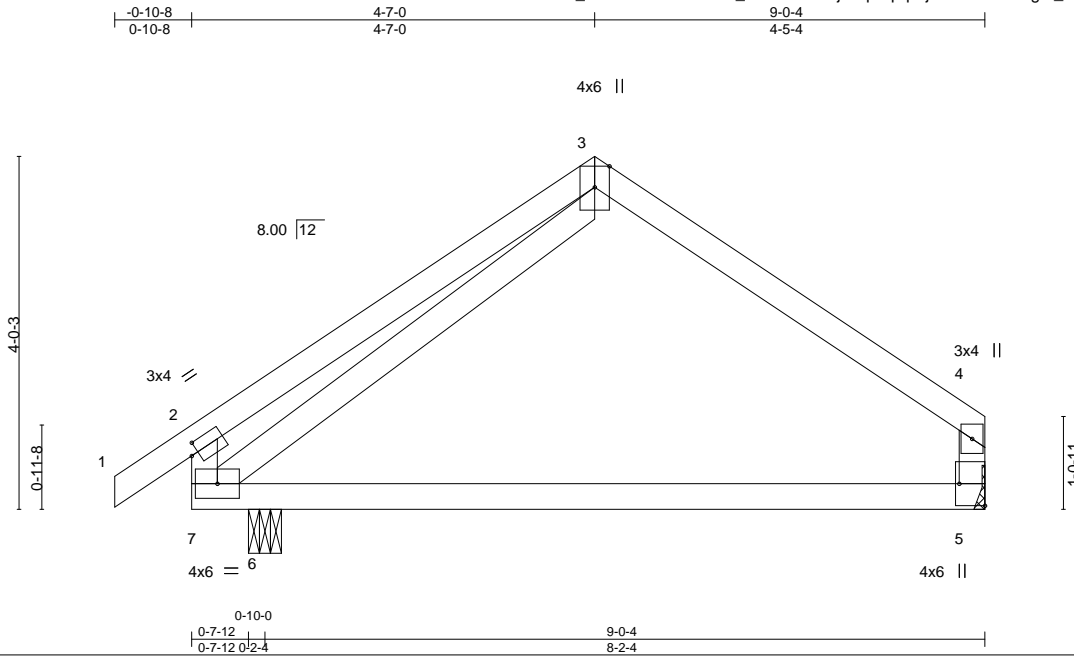
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107212
681099_Master_120	E02	Common	6	1		

Builders FirstSource, Sumter, SC - 29153,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu May 16 07:34:38 2019 Page 1

ID:6U\_sNXmsGM6hZXeeE\_Ila6zQrSu-UjdZquRpqWj4?Ds09S8bMgt8\_FC75zgAeMZM4QzG\_uV



Scale = 1:26.2

Plate Offsets (X,Y)--	[2:0-1-0,0-1-8], [5:Edge,0-3-8]
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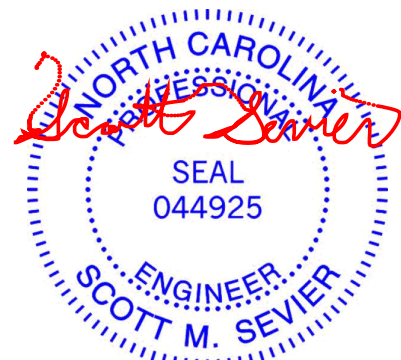
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.25	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.47	Vert(LL) -0.11 5-6 >869 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.17	Vert(CT) -0.20 5-6 >475 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.00 5 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.21 5-6 >461 240	Weight: 41 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 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 *Except*	
3-7: 2x4 SP No.3	

**REACTIONS.** (lb/size) 5=310/Mechanical, 6=449/0-4-8  
 Max Horz 6=114(LC 9)  
 Max Uplift 5=-50(LC 13), 6=-89(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-225/380, 3-4=-271/194, 2-7=-211/298  
 WEBS 3-7=-255/151

- NOTES-** (8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=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 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) 5, 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.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 16, 2019

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job 681099_Master_120	Truss FG01	Truss Type Flat Girder	Qty 8	Ply 1	H&H/Jackson/ Job Reference (optional)	137107213
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Builders FirstSource, Sumter, SC - 29153,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu May 16 07:34:39 2019 Page 1

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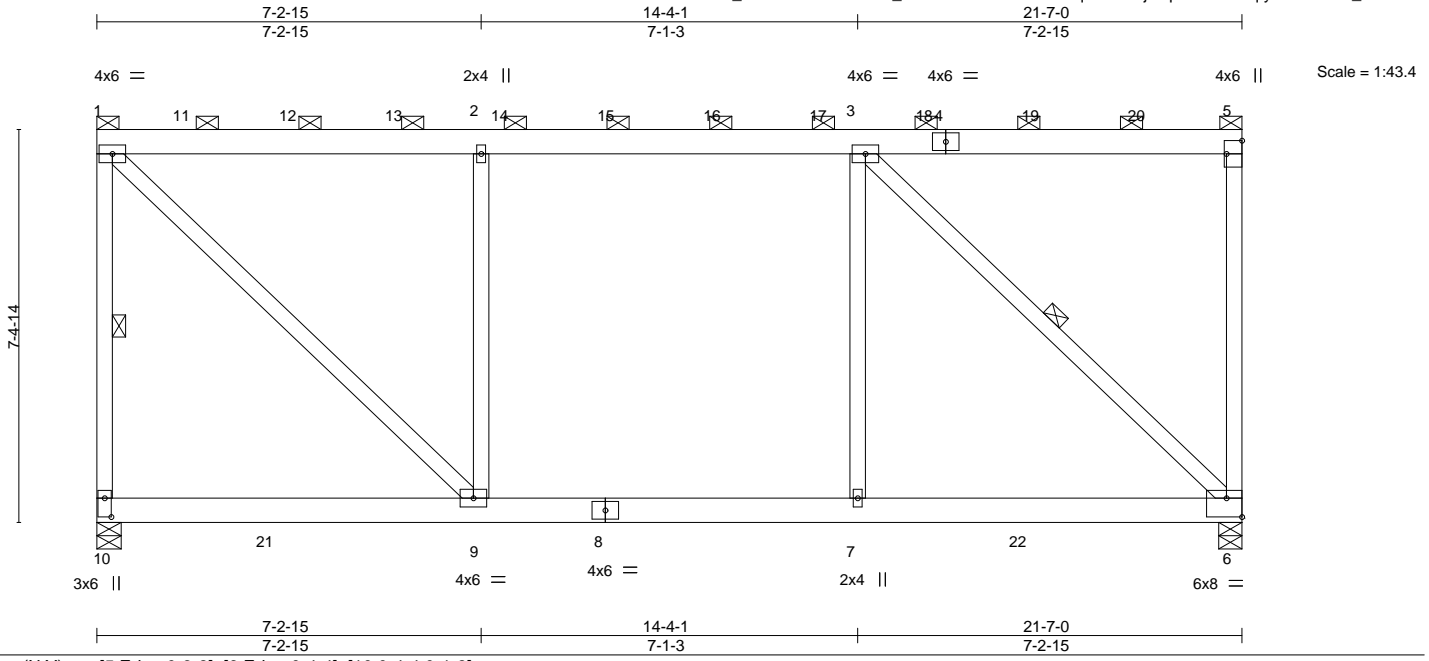


Plate Offsets (X,Y)--	[5:Edge,0-3-8], [6:Edge,0-4-4], [10:0-4-4,0-1-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.52	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.40	Vert(LL) -0.05 7-9 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.68	Vert(CT) -0.09 7-9 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.01 6 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.07 6-7 >999 240	Weight: 167 lb	FT = 20%

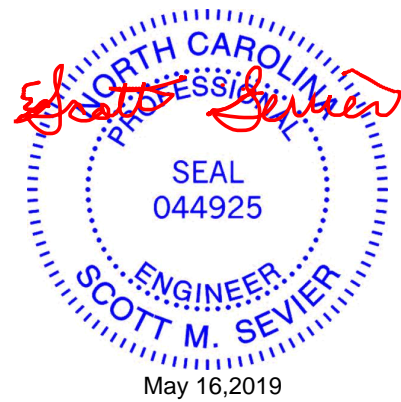
LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-5, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 1-10, 3-6

REACTIONS.	(lb/size)
Max Horz	10=1247/0-5-8, 6=1323/0-5-4
Max Uplift	10=-289(LC 4), 6=-362(LC 5)
Max Grav	10=1324(LC 2), 6=1356(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-10=-1206/377, 1-2=-1006/230, 2-3=-1006/230, 5-6=-349/159
BOT CHORD	9-10=-255/232, 7-9=-354/1006, 6-7=-354/1006
WEBS	1-9=-406/1391, 2-9=-759/354, 3-7=0/391, 3-6=-1391/406

- NOTES-** (9)
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=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.
  - 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) 10=338, 6=362.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 122 lb down and 35 lb up at 1-7-12, 122 lb down and 35 lb up at 3-7-12, 122 lb down and 35 lb up at 5-7-12, 122 lb down and 35 lb up at 7-7-12, 122 lb down and 35 lb up at 9-7-12, 122 lb down and 35 lb up at 11-7-12, 122 lb down and 35 lb up at 13-7-12, 122 lb down and 35 lb up at 15-7-12, 122 lb down and 35 lb up at 17-7-12, and 122 lb down and 35 lb up at 19-7-12, and 90 lb down and 35 lb up at 21-5-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S)	Standard
1) Dead + Roof Live (balanced):	Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)	Vert: 1-5=-60, 6-10=-20
Concentrated Loads (lb)	Vert: 5=-86 11=-78(B) 12=-78(B) 13=-78(B) 14=-78(B) 15=-78(B) 16=-78(B) 17=-78(B) 18=-78(B) 19=-78(B) 20=-78(B)



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

818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107214
681099_Master_120	G01	GABLE	4	1		

Builders FirstSource, Sumter, SC - 29153,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu May 16 07:34:40 2019 Page 1

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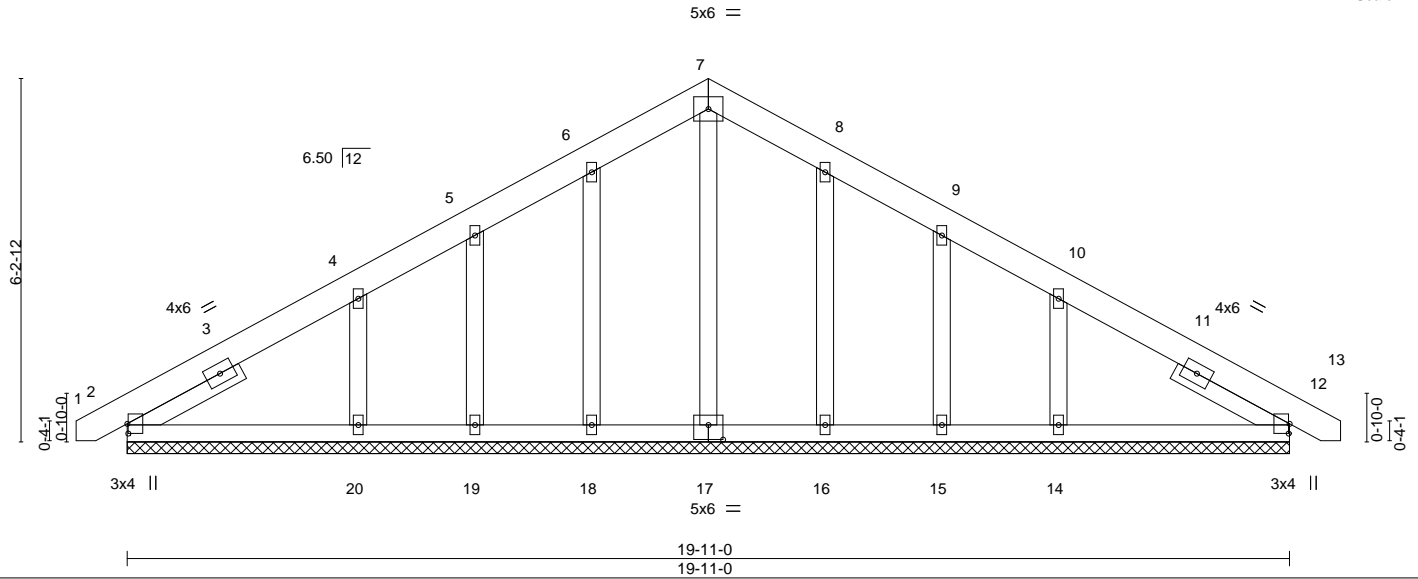


Plate Offsets (X,Y)--	[2:0-2-0,0-0-3], [12:0-2-0,0-0-3], [17:0-3-0,0-3-0]
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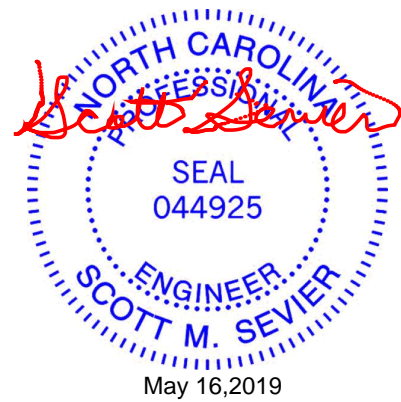
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	0.00	13	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	0.00	13	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	12	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 132 lb	FT = 20%

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

**REACTIONS.** All bearings 19-11-0.  
 (lb) - Max Horz 2=127(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 12, 18, 19, 16, 15 except 20=143(LC 12), 14=135(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 12, 17, 18, 19, 16, 15 except 20=300(LC 19), 14=295(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 4-20=-251/183, 10-14=-250/174

- NOTES-** (10)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=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, 12, 18, 19, 16, 15 except (jt=lb) 20=143, 14=135.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



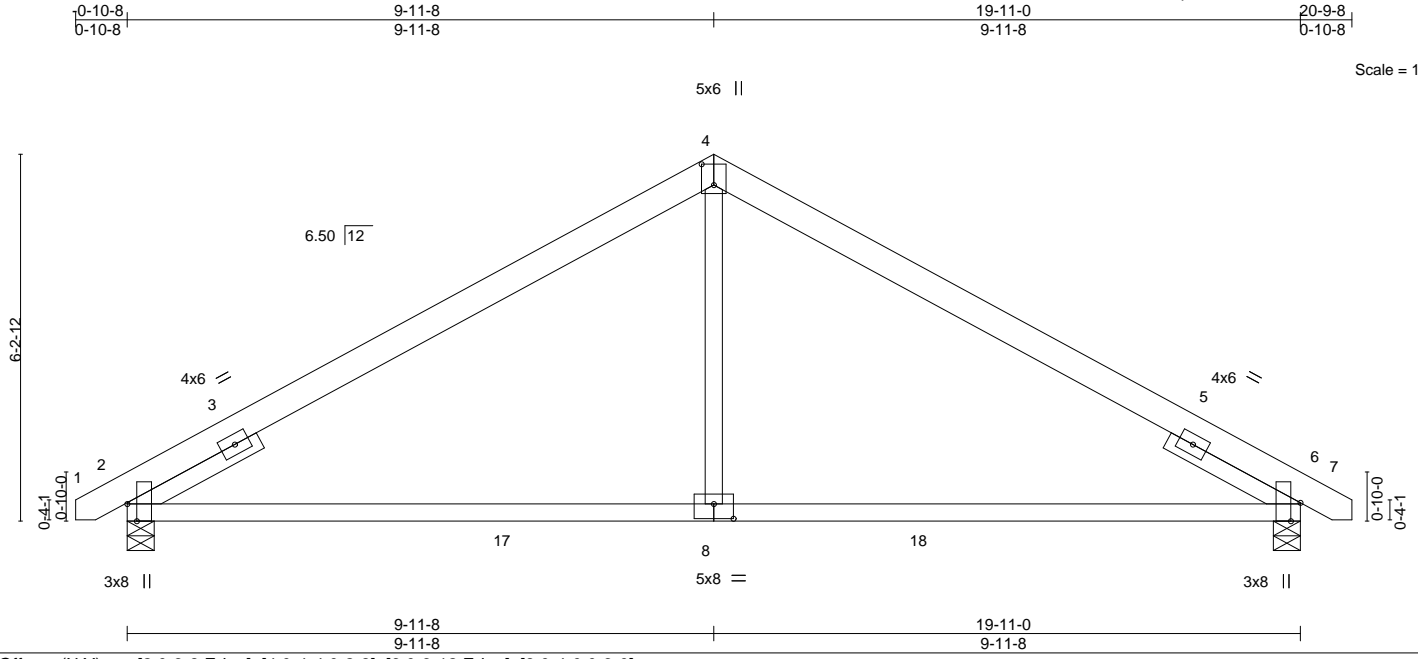


Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107215
681099_Master_120	G02	COMMON	25	1		

Builders FirstSource, Sumter, SC - 29153,

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Scale = 1:39.1

<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 0.51	Vert(LL)	-0.11	8-11	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.82	Vert(CT)	-0.25	8-11	>959		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.17	Horz(CT)	0.03	2	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.11	8-11	>999	Weight: 103 lb	FT = 20%

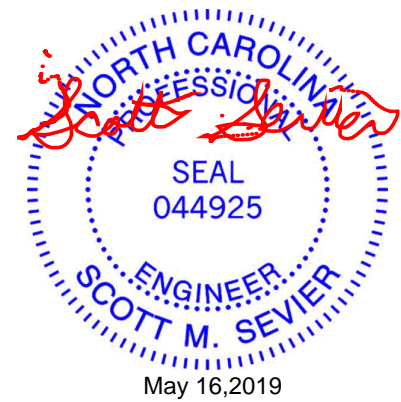
**LUMBER-**  
 TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.2 2-6-0, Right 2x4 SP No.2 2-6-0

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

**REACTIONS.** (lb/size) 2=839/0-5-8, 6=839/0-5-8  
 Max Horz 2=126(LC 11)  
 Max Uplift 2=-158(LC 12), 6=-158(LC 13)  
 Max Grav 2=849(LC 19), 6=849(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-976/256, 4-6=-982/256  
 BOT CHORD 2-8=-80/894, 6-8=-80/894  
 WEBS 4-8=0/452

- NOTES-** (7)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=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
  - 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=158, 6=158.
  - 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.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 16, 2019

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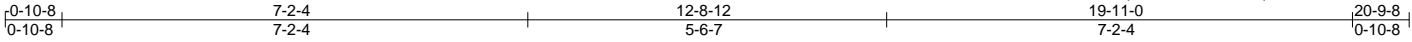
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107216
681099_Master_120	G03	GABLE	1	1		

Builders FirstSource, Sumter, SC - 29153,

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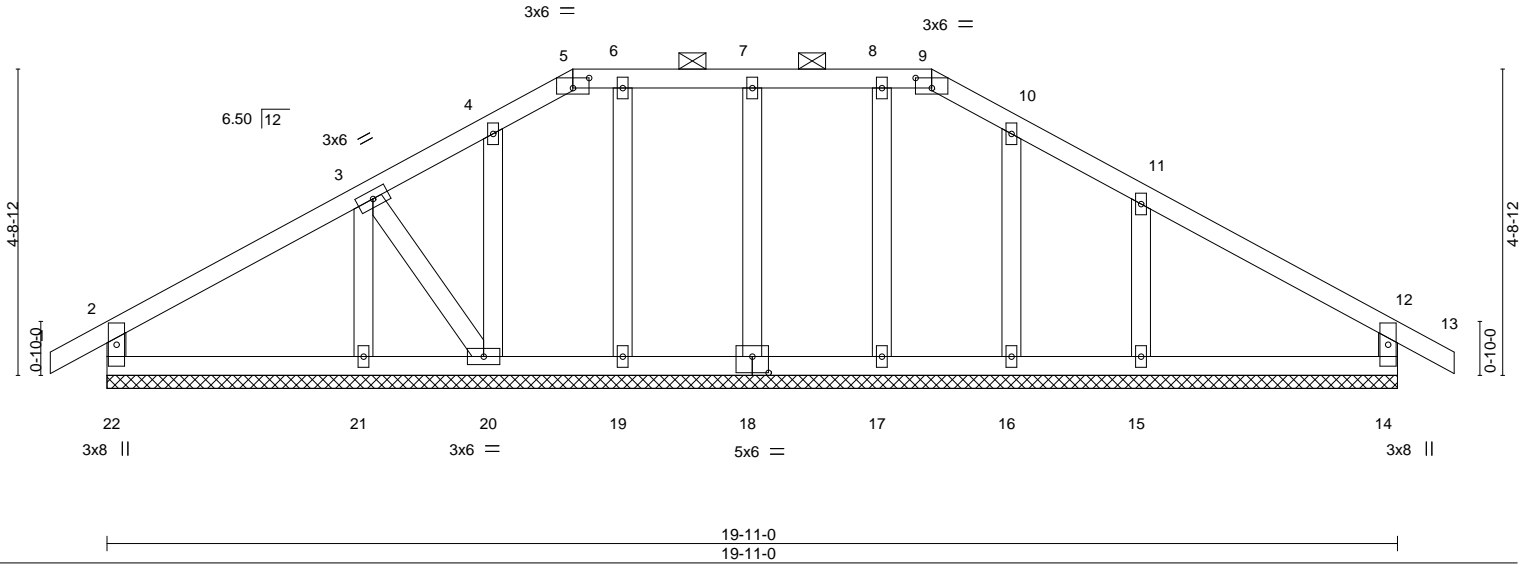


Plate Offsets (X,Y)--	[5:0-3-0,0-1-14], [9:0-3-0,0-1-14], [18:0-3-0,0-3-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	0.00	13	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	0.00	13	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	14	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 107 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-9.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 3-20: 2x4 SP No.3	
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 19-11-0.  
 (lb) - Max Horz 22=-121(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 22, 18, 19, 21, 17, 16, 14 except 20=-136(LC 12), 15=-138(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 18, 19, 20, 21, 17, 16, 14 except 22=257(LC 1), 15=281(LC 20)

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

- NOTES-** (13)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=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.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22, 18, 19, 21, 17, 16, 14 except (jt=lb) 20=136, 15=138.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

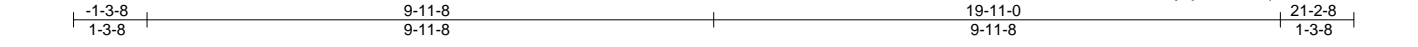


Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107217
681099_Master_120	G04	COMMON	5	1		

Builders FirstSource, Sumter, SC - 29153,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu May 16 07:34:43 2019 Page 1

ID:6U\_sNXmsGM6hZXeeE\_lla6zQrSu-rhQStbVxf2LN5\_L\_y?jm3kaxlGqrmDivneH7lezG\_uQ



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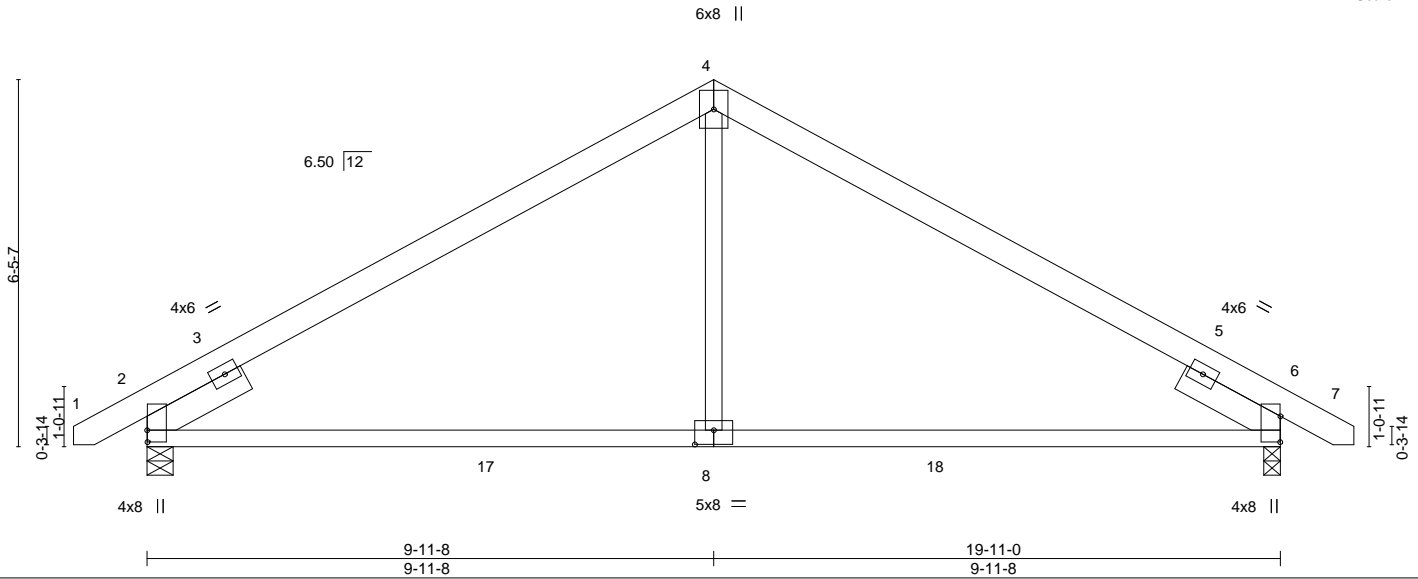


Plate Offsets (X,Y)--	[2:0-2-8,0-0-1], [6:0-5-7,0-0-1], [8:0-4-0,0-3-0]
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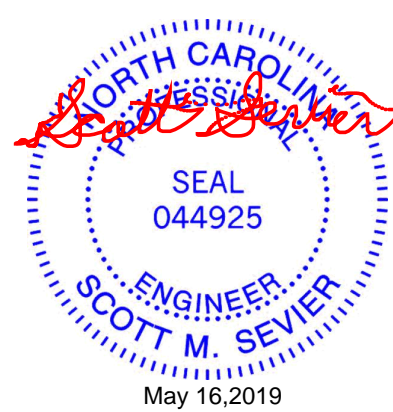
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.46	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.82	Vert(LL) -0.11 8-11 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.18	Vert(CT) -0.24 8-15 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.04 2 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.10 8-11 >999 240	Weight: 108 lb	FT = 20%

LUMBER-	BRACING-
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	
SLIDER Left 2x6 SP No.2 1-11-12, Right 2x6 SP No.2 1-11-12	

REACTIONS.	(lb/size)
	2=863/0-5-8, 6=863/0-3-8
	Max Horz 2=-131(LC 10)
	Max Uplift 2=-167(LC 12), 6=-167(LC 13)
	Max Grav 2=881(LC 19), 6=881(LC 20)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-4=-1036/251, 4-6=-1036/251
BOT CHORD	2-8=-74/868, 6-8=-74/868
WEBS	4-8=0/468

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=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
  - 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=167, 6=167.
  - 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.

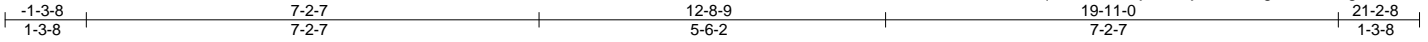


Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107218
681099_Master_120	G05	GABLE	1	1		

Builders FirstSource, Sumter, SC - 29153,

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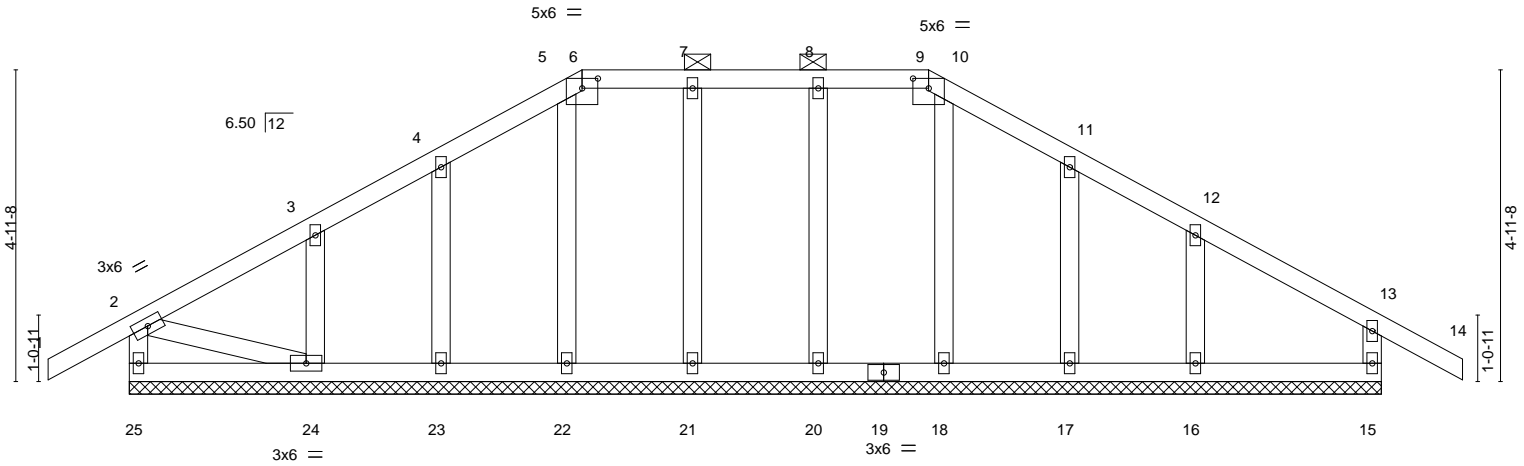


Plate Offsets (X, Y)--	[5:0-1-12,0-0-15], [6:0-3-0,0-1-14], [6:0-0-0,0-1-12], [9:0-3-0,0-1-14], [9:0-0-0,0-1-12], [10:0-1-12,0-0-15]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	-0.01	14	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.01	14	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	15	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 114 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-9.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 19-11-0.  
 (lb) - Max Horz 25=-135(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 25, 15, 21, 22, 23, 20, 17, 16 except 24=-100(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 25, 15, 21, 22, 23, 24, 20, 18, 17, 16

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; 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
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) Provide adequate drainage to prevent water ponding.
  - 5) All plates are 2x4 MT20 unless otherwise indicated.
  - 6) Gable requires continuous bottom chord bearing.
  - 7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 8) Gable studs spaced at 2-0-0 oc.
  - 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 10) \* This truss has been designed for a live load of 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.
  - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25, 15, 21, 22, 23, 20, 17, 16 except (jt=lb) 24=100.
  - 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



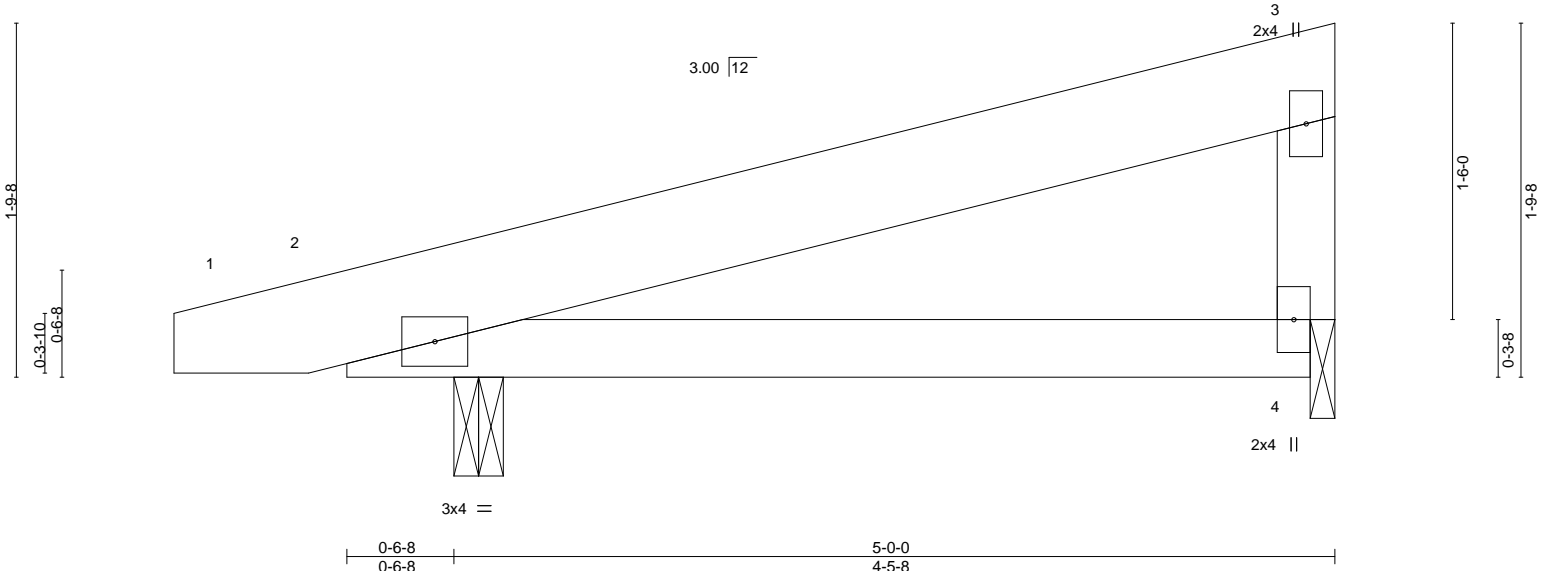
Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107219
681099_Master_120	J01	MONOPITCH	25	1		

Builders FirstSource, Sumter, SC - 29153,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu May 16 07:34:45 2019 Page 1  
 ID:6U\_sNXmsGM6hZXeeE\_lIa6zQrSu-n3YCIHXCBgb5LlvN3QmE89fM24gvE9\_CFymEqWzG\_uO



Scale = 1:11.7



<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 0.13	Vert(LL)	0.03 4-9	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	-0.02 4-9	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00 2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS					Weight: 23 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
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.3	

**REACTIONS.** (lb/size) 2=257/0-3-0, 4=164/0-1-8  
 Max Horz 2=62(LC 8)  
 Max Uplift 2=-134(LC 8), 4=-93(LC 8)

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

- NOTES-** (8)
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; 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 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.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (it=lb) 2=134.
  - 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.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.





Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107220
681099_Master_120	J02	MONOPITCH	28	1		

Builders FirstSource, Sumter, SC - 29153,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu May 16 07:34:45 2019 Page 1

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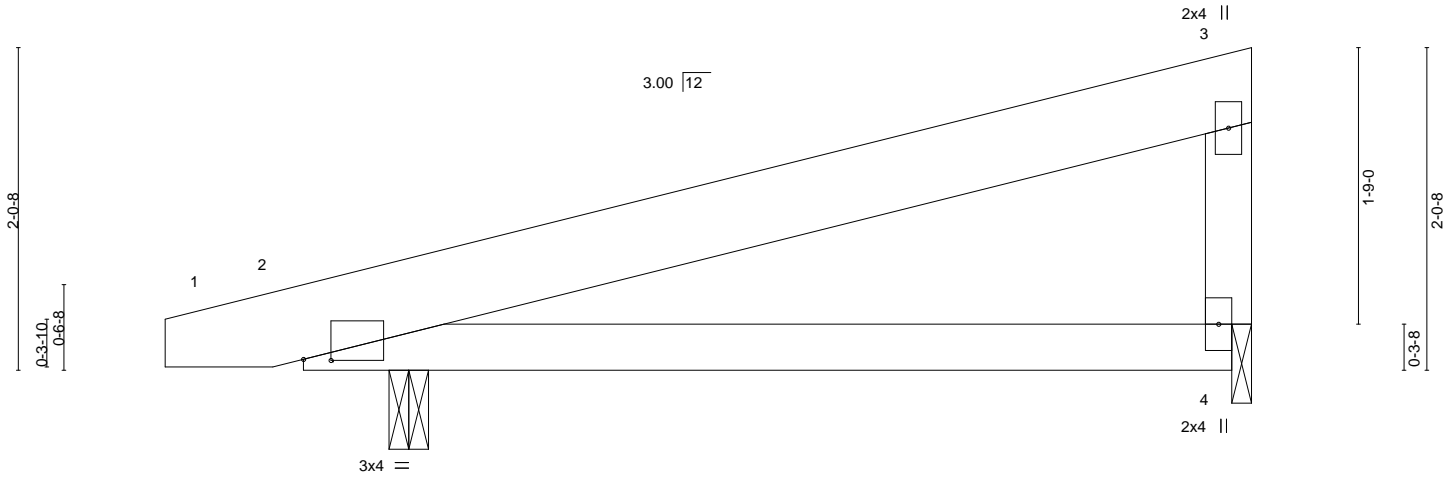


Plate Offsets (X,Y)-- [2:0-2-1,0-0-1]

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 0.21	Vert(LL)	0.06	4-9	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.23	Vert(CT)	-0.05	4-9	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS						Weight: 27 lb	FT = 20%

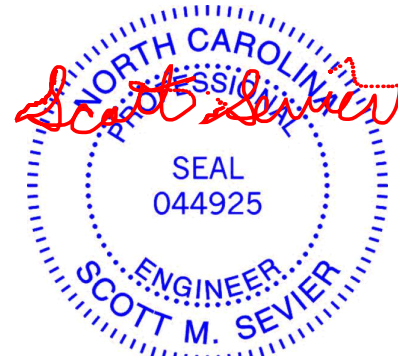
**LUMBER-**  
 TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (lb/size) 2=295/0-3-0, 4=205/0-1-8  
 Max Horz 2=73(LC 8)  
 Max Uplift 2=-152(LC 8), 4=-117(LC 8)

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

- NOTES-** (8)
- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; 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 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=152, 4=117.
  - 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) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 16, 2019

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107221
681099_Master_120	J03	GABLE	7	1		
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						ID:6U_sNXmsGM6hZXeeE_lIa6zQrSu-GG5aVdXqyzjxySTZd8HTMCM?UwUzcDLUcVnMzzG_uN



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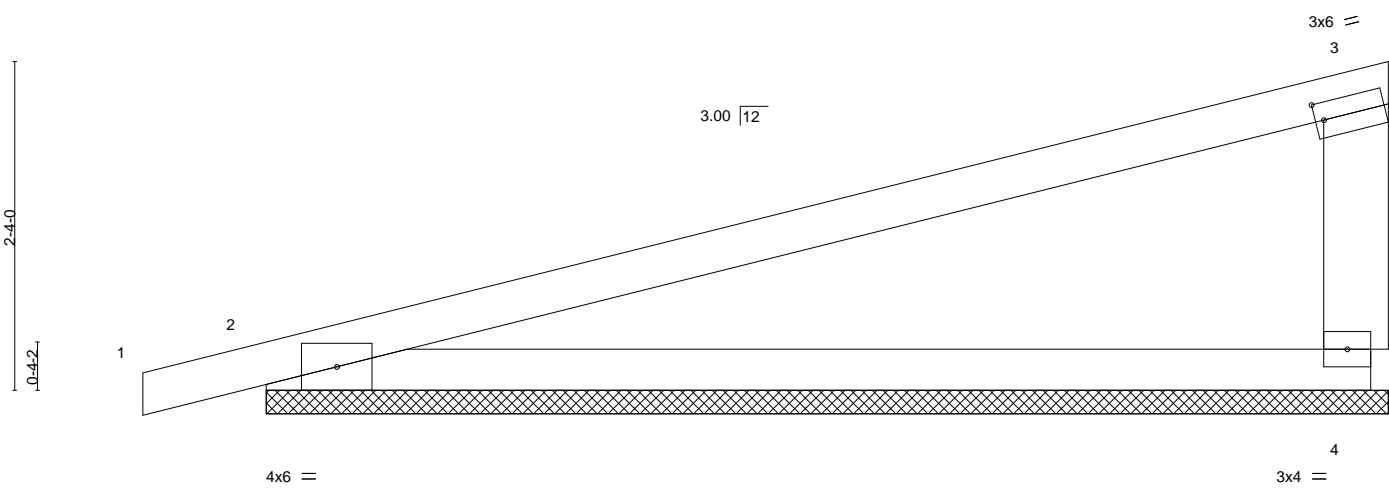


Plate Offsets (X,Y)--	[3:0-0-11,0-1-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.82	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.57	Vert(LL) -0.02 1 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Vert(CT) 0.04 1 n/r 120		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Horz(CT) 0.00 4 n/a n/a		
				Weight: 29 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-3-4 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.2	

**REACTIONS.** (lb/size) 4=306/7-11-8, 2=365/7-11-8  
 Max Horz 2=96(LC 11)  
 Max Uplift 4=83(LC 12), 2=117(LC 8)

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

- NOTES-** (8)
- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; 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
  - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 3) Gable requires continuous bottom chord bearing.
  - 4) Gable studs spaced at 2-0-0 oc.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=117.
  - 8) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

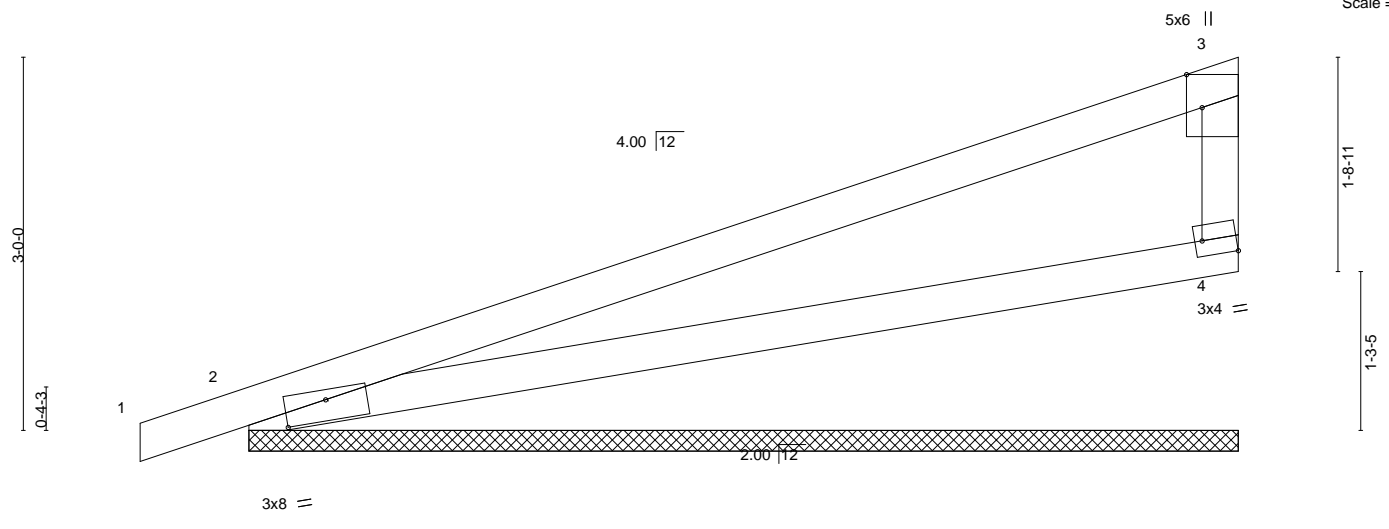


May 16, 2019

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY</p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107223
681099_Master_120	J05	GABLE	1	1		
Builders FirstSource, Sumter, SC - 29153,						8.220 s Nov 16 2018 MiTek Industries, Inc. Thu May 16 07:34:47 2019 Page 1
						ID:6U_sNXmsGM6hZXeeE_lIa6zQrSu-kSfzjzYSjHroac2lBroiDalWzuE5i3TViFFKuPzG_uM



Scale = 1:18.5

Plate Offsets (X,Y)--	[2:0-4-0-0-2-1], [3:0-3-3,Edge], [4:Edge,0-1-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.87	Vert(LL)	-0.02	1	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.61	Vert(CT)	0.04	1	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 28 lb	FT = 20%

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

**REACTIONS.** (lb/size) 4=310/7-11-8, 2=368/7-11-8  
 Max Horz 2=132(LC 8)  
 Max Uplift 4=99(LC 12), 2=103(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-297/53

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=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 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) Bearing at joint(s) 4, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=103.
  - 9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 4.



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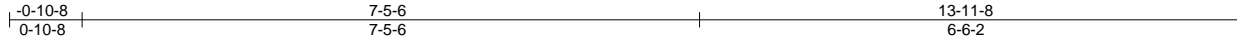
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY</p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107224
681099_Master_120	J06	Monopitch	10	1		

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ID:6U\_sNXmsGM6hZXeeE\_lla6zQrSu-CeDLwJZ4UbfCldxiZJxmnHmFHCmRQVexv\_uQrzG\_uL



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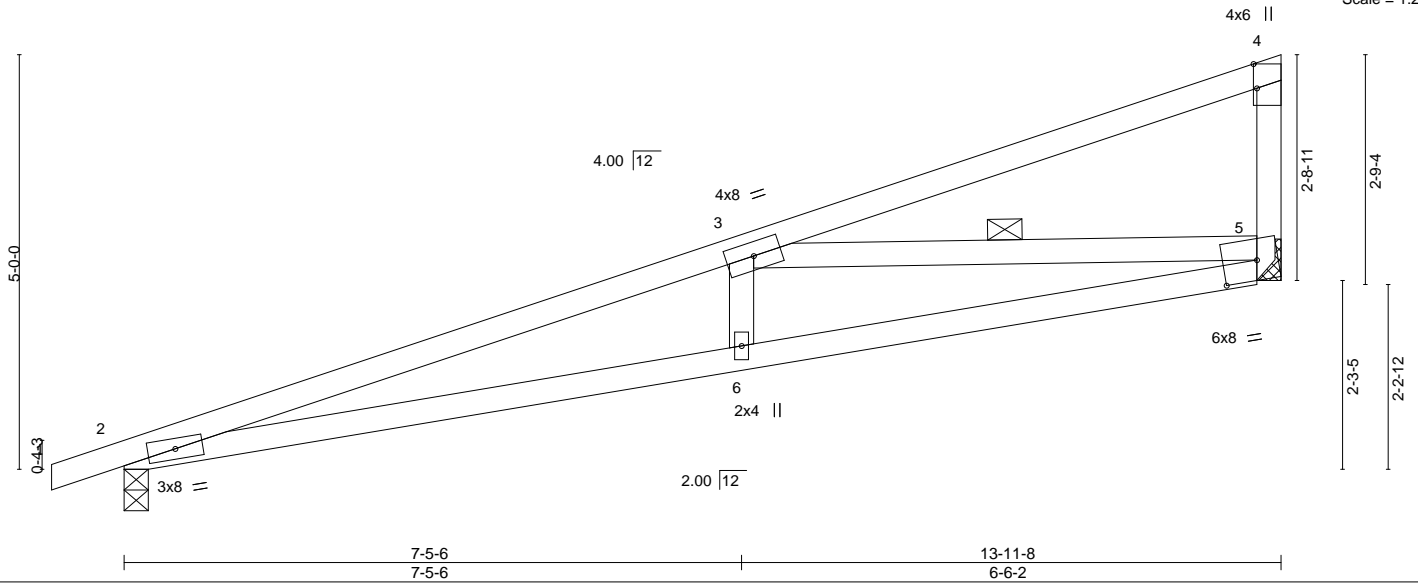


Plate Offsets (X,Y)--	[4:0-3-8,Edge], [5:0-4-15,0-2-15]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.51	Vert(LL)	0.29	6-9	>565	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.48	Vert(CT)	-0.22	6-9	>760		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.40	Horz(CT)	-0.04	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS						
								Weight: 58 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3 *Except*	WEBS 1 Row at midpt 3-5
3-5: 2x4 SP No.2	

**REACTIONS.** (lb/size) 2=607/0-3-8, 5=551/Mechanical  
 Max Horz 2=271(LC 8)  
 Max Uplift 2=290(LC 8), 5=-325(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1755/2306  
 BOT CHORD 2-6=-2528/1668, 5-6=-2436/1664  
 WEBS 3-6=-497/288, 3-5=-1564/2261

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; 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 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) Refer to girder(s) for truss to truss connections.
  - 5) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=290, 5=325.
  - 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.



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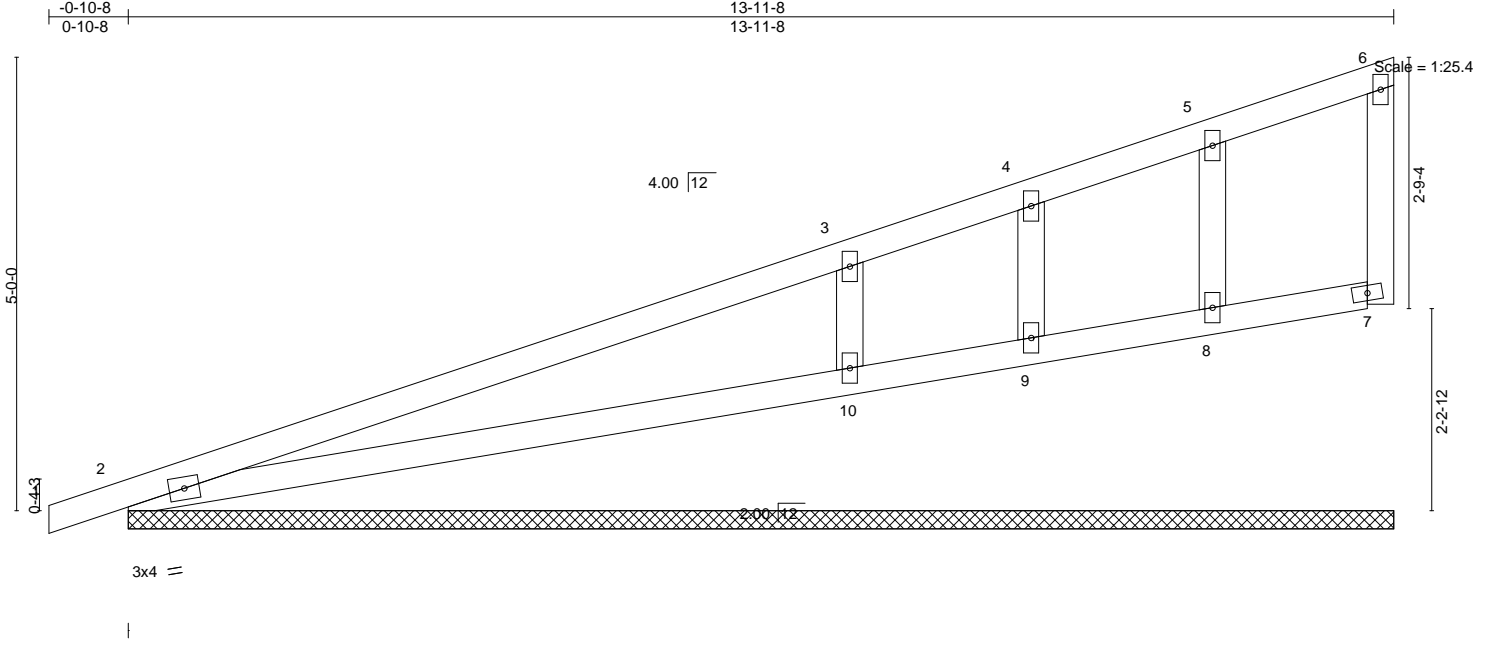


Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107225
681099_Master_120	J07	GABLE	1	1		

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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.60	Vert(LL)	-0.01	1	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.40	Vert(CT)	0.03	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.12	Horz(CT)	-0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 54 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 13-11-8.  
 (lb) - Max Horz 2=220(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 7, 8 except 9=224(LC 1), 10=244(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 7, 9 except 2=309(LC 1), 8=263(LC 1), 10=766(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-10=537/396

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; 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 exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Bearing at joint(s) 2, 7, 8, 9, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7, 8 except (jt=lb) 9=224, 10=244.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 7, 8, 9, 10.



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Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107226
681099_Master_120	J22	MONOPITCH	6	1		

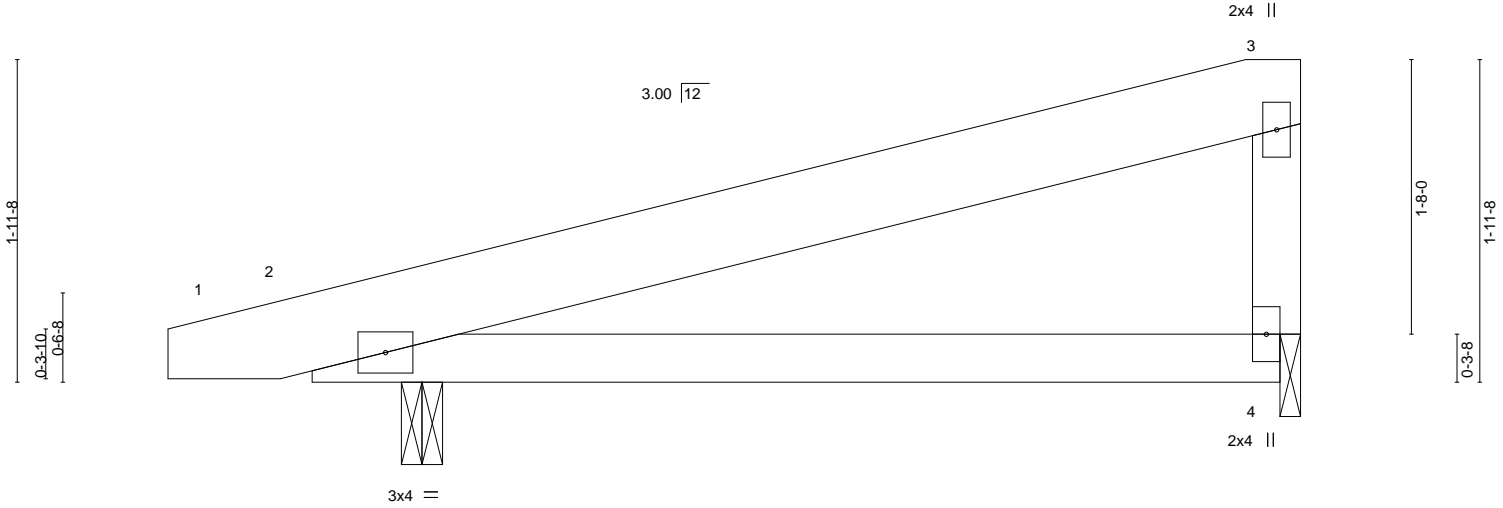
Builders FirstSource, Sumter, SC - 29153,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu May 16 07:34:49 2019 Page 1

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Scale = 1:14.0



<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 0.21	Vert(LL)	-0.02 4-9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.22	Vert(CT)	-0.05 4-9	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00 2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.02 4-9	>999	240	Weight: 27 lb	FT = 20%

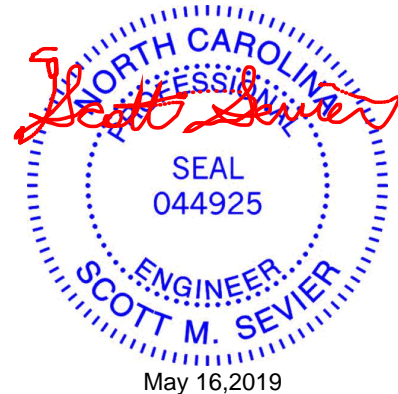
**LUMBER-**  
 TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (lb/size) 2=295/0-3-0, 4=205/0-1-8  
 Max Horz 2=76(LC 11)  
 Max Uplift 2=90(LC 8), 4=57(LC 12)

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

- NOTES-** (8)
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; 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
  - 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.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
  - 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.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

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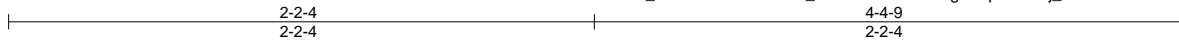


Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107229
681099_Master_120	PB03	GABLE	4	1		

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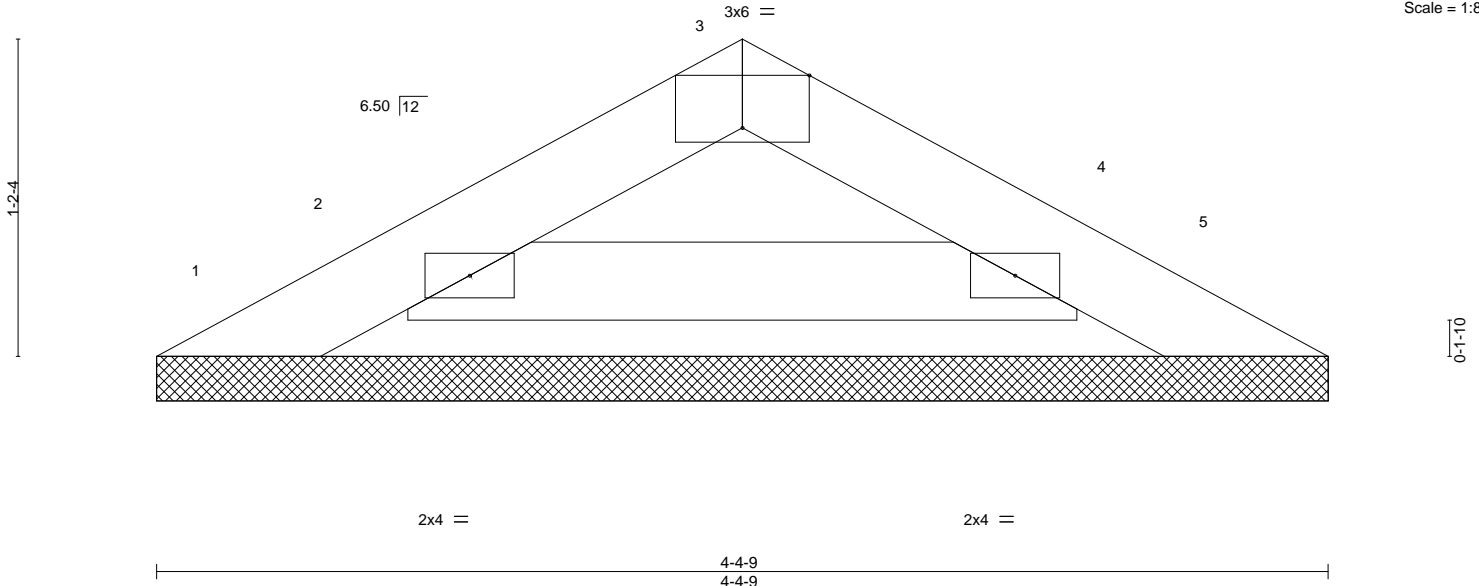


Plate Offsets (X,Y)--	[3:0-3-0,Edge]						
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.15	TC 0.03	Vert(LL)	n/a	-	n/a
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	n/a	-	999
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	5	n/a
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P				
							<b>PLATES</b>
							MT20
							<b>GRIP</b>
							244/190
							Weight: 11 lb
							FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-4-9 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 4-4-9.  
 (lb) - Max Horz 1=22(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 2, 4  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4

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

- NOTES-** (10)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=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
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) Gable studs spaced at 2-0-0 oc.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 2, 4.
  - 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - 10) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 16, 2019

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

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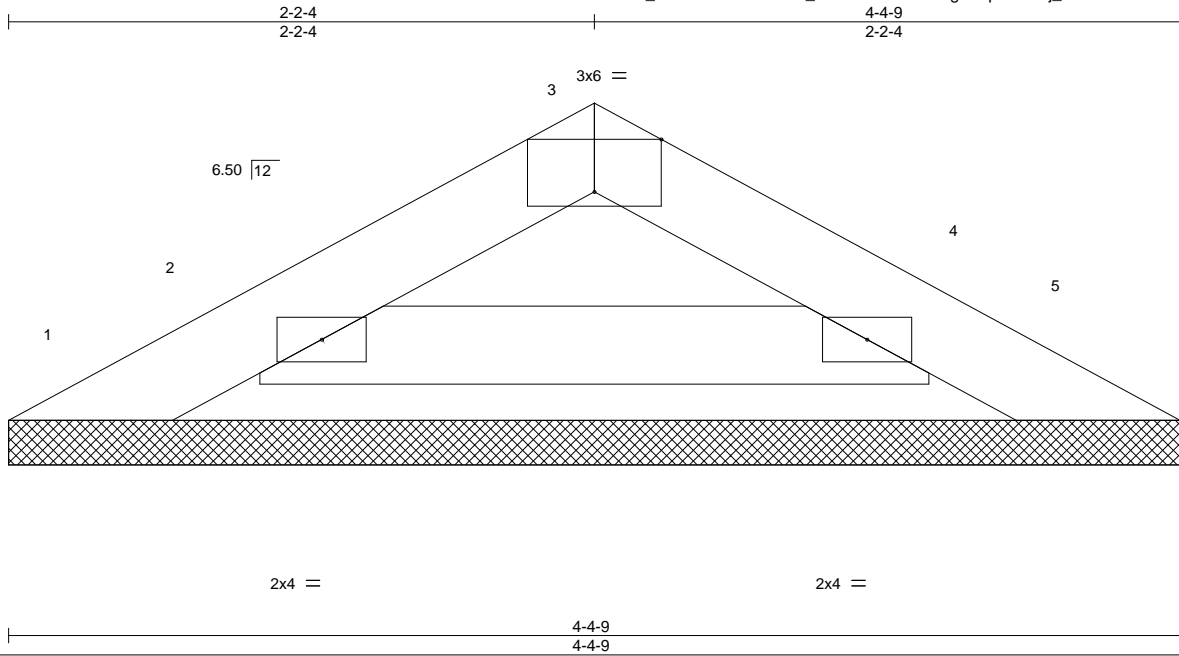
818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107230
681099_Master_120	PB04	GABLE	78	1		

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Scale = 1:8.6

Plate Offsets (X,Y)--	[3:0-3-0,Edge]							
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.15	TC 0.03	Vert(LL)	n/a	-	n/a	999
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	n/a	-	n/a	999
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	5	n/a	n/a
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					
								<b>PLATES</b>
								MT20
								<b>GRIP</b>
								244/190
								Weight: 11 lb
								FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-4-9 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 4-4-9.  
 (lb) - Max Horz 1=22(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 2, 4  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4

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

- NOTES-** (10)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=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
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) Gable studs spaced at 2-0-0 oc.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 2, 4.
  - 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - 10) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 16, 2019

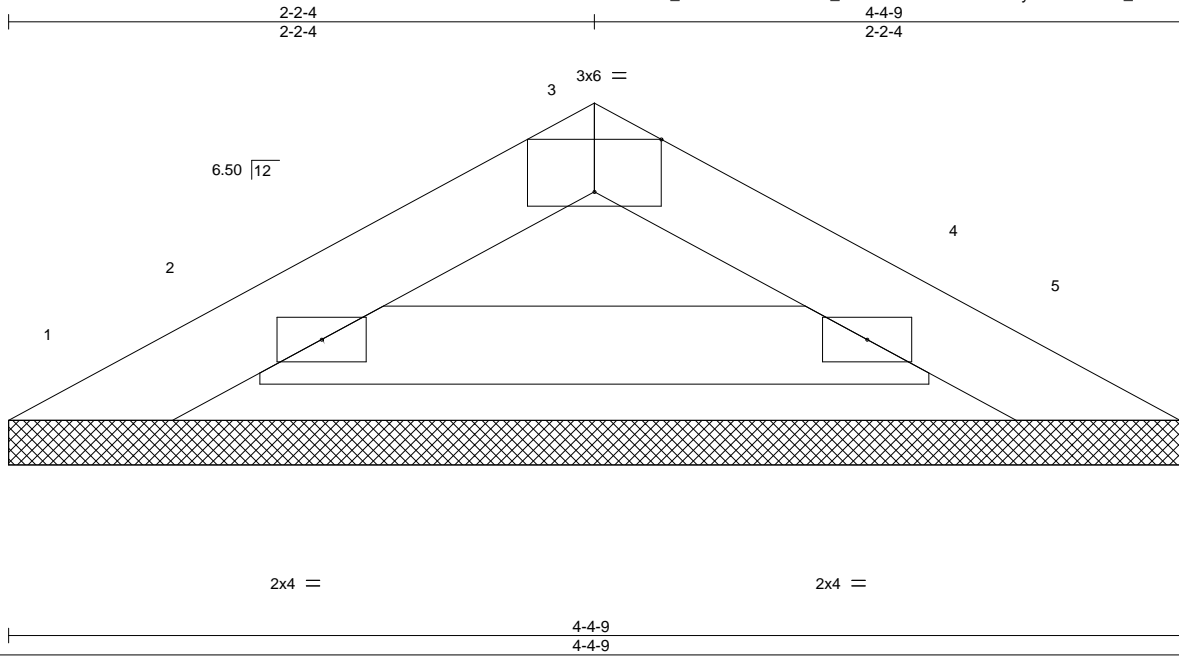
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ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107231
681099_Master_120	PB05	GABLE	4	1		

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8.220 s Nov 16 2018 MiTek Industries, Inc. Thu May 16 07:34:53 2019 Page 1  
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Scale = 1:8.6

Plate Offsets (X,Y)--	[3:0-3:0,Edge]							
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.15	TC 0.03	Vert(LL)	n/a	-	n/a	999
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	n/a	-	n/a	999
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	5	n/a	n/a
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					
								<b>PLATES</b>
								MT20
								<b>GRIP</b>
								244/190
								Weight: 11 lb
								FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-4-9 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 4-4-9.  
 (lb) - Max Horz 1=22(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 2, 4  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4

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

- NOTES-** (10)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=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
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) Gable studs spaced at 2-0-0 oc.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 2, 4.
  - 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - 10) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 16, 2019

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107232
681099_Master_120	PB06	GABLE	2	1		

Builders FirstSource, Sumter, SC - 29153,

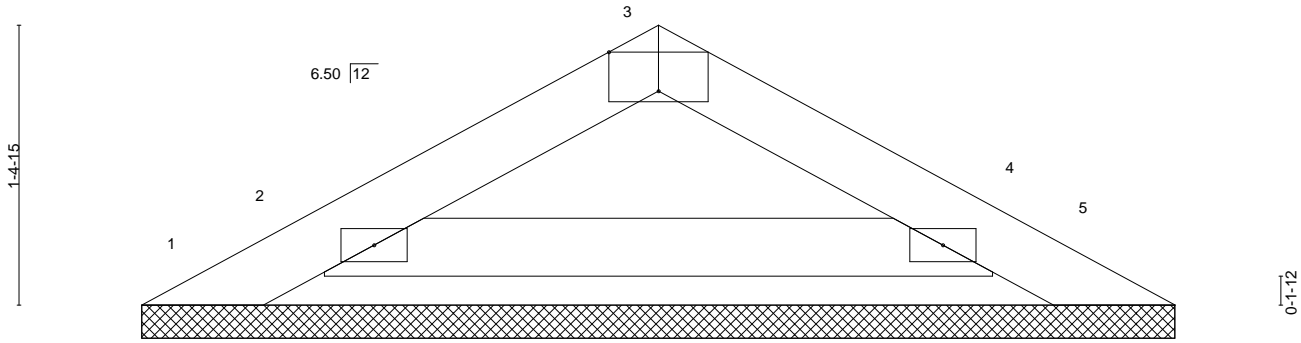
8.220 s Nov 16 2018 MiTek Industries, Inc. Thu May 16 07:34:54 2019 Page 1

ID:6U\_sNXmsGM6hZXeeE\_Ila6zQrSu-1oacBMer3Rkpwg555pQL?2Xw5ik9rECXJrRCeVzG\_uF



3x6 =

Scale = 1:11.6



2x4 =

2x4 =

5-2-7  
5-2-7

Plate Offsets (X,Y)--	[3:0-3-0,Edge]							
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.15	TC 0.04	Vert(LL)	n/a	-	n/a	999
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	n/a	-	n/a	999
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	5	n/a	n/a
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					
								<b>PLATES</b>
								MT20
								<b>GRIP</b>
								244/190
								Weight: 14 lb
								FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-2-7 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

All bearings 5-2-7.  
(lb) - Max Horz 1=27(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 2, 4  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4

**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=120mph (3-second gust) Vasd=95mph; 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.
- 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, 5, 2, 4.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



May 16, 2019

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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107233
681099_Master_120	PB07	GABLE	46	1		

Builders FirstSource, Sumter, SC - 29153,

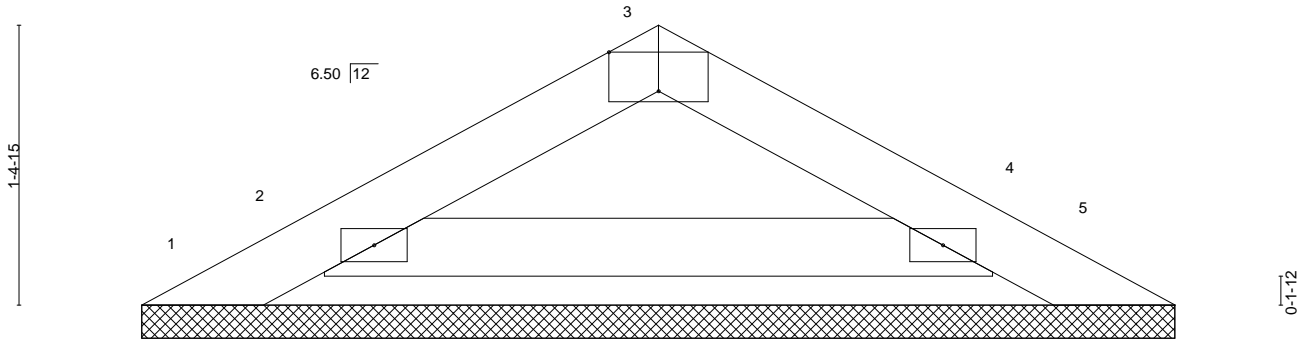
8.220 s Nov 16 2018 MiTek Industries, Inc. Thu May 16 07:34:55 2019 Page 1

ID:6U\_sNXmsGM6hZxeeE\_lIa6zQrSu-V?8\_OieTqksgYqglfXxaYG45q64OahSgYVBIaxzG\_uE



3x6 =

Scale = 1:11.6



2x4 =

2x4 =

5-2-7  
5-2-7

Plate Offsets (X,Y)--	[3:0-3:0,Edge]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.04	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 14 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-2-7 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

All bearings 5-2-7.  
(lb) - Max Horz 1=27(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 2, 4  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4

**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=120mph (3-second gust) Vasd=95mph; 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.
- 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, 5, 2, 4.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



May 16, 2019

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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107234
681099_Master_120	PB08	GABLE	2	1		

Builders FirstSource, Sumter, SC - 29153,

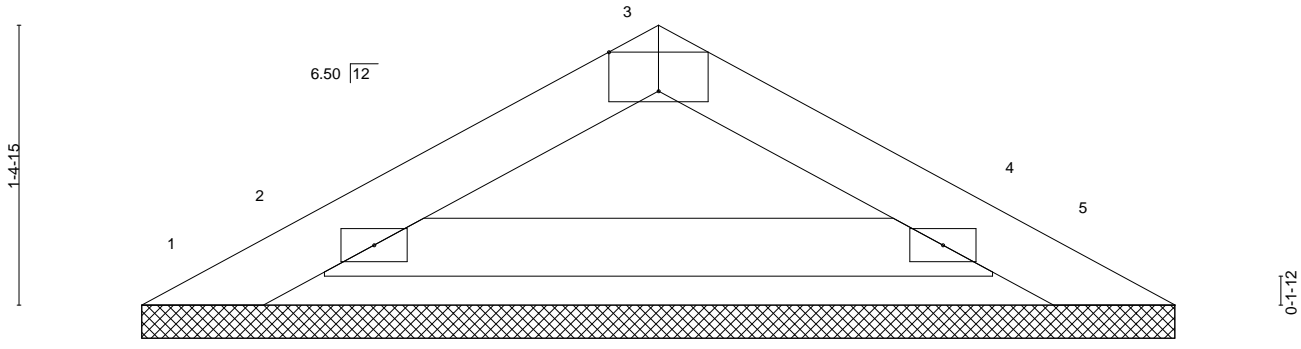
8.220 s Nov 16 2018 MiTek Industries, Inc. Thu May 16 07:34:56 2019 Page 1

ID:6U\_sNXmsGM6hZxeeE\_lIa6zQrSu-zBiMb2f5b2\_X9\_EUDESp5TcGaWQdJ8iqn9wJiNzG\_uD



3x6 =

Scale = 1:11.6



2x4 =

2x4 =

5-2-7  
5-2-7

Plate Offsets (X,Y)--	[3:0-3-0,Edge]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.04	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 14 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-2-7 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

All bearings 5-2-7.  
(lb) - Max Horz 1=27(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 2, 4  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4

**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=120mph (3-second gust) Vasd=95mph; 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.
- 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, 5, 2, 4.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



May 16, 2019

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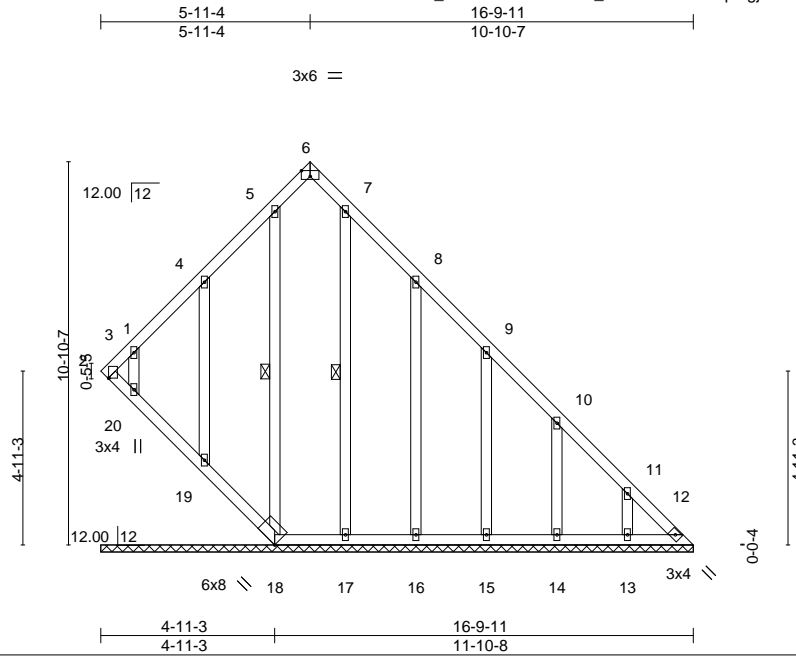
818 Soundside Road  
Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107235
681099_Master_120	V01	GABLE	6	1		

Builders FirstSource, Sumter, SC - 29153,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu May 16 07:34:57 2019 Page 1  
 ID:6U\_sNXmsGM6hZXeeE\_lla6zQrSu-RNGlpOgjMM6On8pgmyz2dh9QMwnc2YVz?pgsFqzG\_uC



Scale = 1:65.4

Plate Offsets (X,Y)--	[6:0-3-0,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 0.11	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.22	Horz(CT)	0.01	12	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 126 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-18, 7-17

**REACTIONS.** All bearings 16-9-11.  
 (lb) - Max Horz 1=320(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 12, 2 except 18=278(LC 13), 19=159(LC 12), 20=186(LC 12), 16=160(LC 13), 15=124(LC 13), 14=132(LC 13), 13=126(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 18, 19, 20, 17, 16, 15, 14, 13 except 12=319(LC 13), 2=382(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-248/344, 2-3=-320/199, 10-11=-353/258, 11-12=-468/350  
 BOT CHORD 2-20=-375/492, 19-20=-382/510, 18-19=-382/514, 17-18=-260/355, 16-17=-259/355, 15-16=-259/355, 14-15=-259/355, 13-14=-259/355, 12-13=-259/355

- NOTES-** (10)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; 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
  - All plates are 2x4 MT20 unless otherwise indicated.
  - 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.
  - Bearing at joint(s) 1, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 12, 2 except (jt=lb) 18=278, 19=159, 20=186, 16=160, 15=124, 14=132, 13=126.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 2, 19, 20.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 16, 2019

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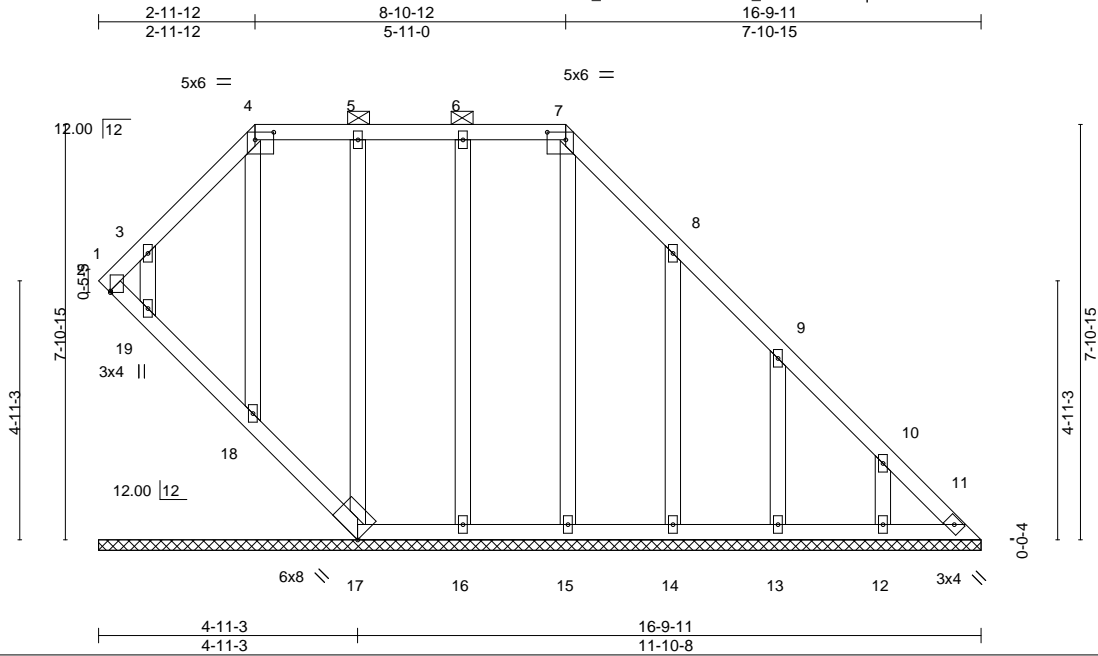
ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Jackson/	137107236
681099_Master_120	V02	GABLE	2	1		

Builders FirstSource, Sumter, SC - 29153,

8.220 s Nov 16 2018 MiTek Industries, Inc. Thu May 16 07:34:58 2019 Page 1

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Scale = 1:43.9

Plate Offsets (X,Y)--	[4:0-4-4,0-1-12], [7:0-4-4,0-1-12]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.07	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.05	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT) 0.01 11 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 116 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-7.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-19.

**REACTIONS.** All bearings 16-9-11.  
 (lb) - Max Horz 1=-264(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 18, 16 except 2=-122(LC 8), 17=-159(LC 13), 19=-127(LC 12), 14=-139(LC 13), 13=-131(LC 13), 12=-126(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 11, 2, 17, 18, 19, 16, 15, 14, 13, 12

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-170/272

- NOTES-** (11)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=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.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - 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) 1, 11, 18, 16 except (jt=lb) 2=122, 17=159, 19=127, 14=139, 13=131, 12=126.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 2, 18, 19.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



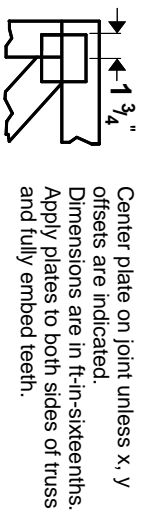
May 16, 2019

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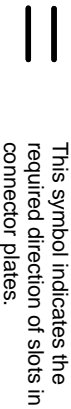
ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

# Symbols

## PLATE LOCATION AND ORIENTATION



For 4 x 2 orientation, locate plates 0-  $\frac{1}{16}$ " from outside edge of truss.



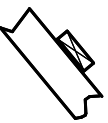
\* Plate location details available in **MITrak 20/20 software or upon request.**

## PLATE SIZE

4 X 4

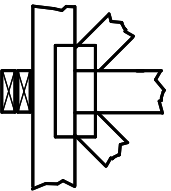
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING

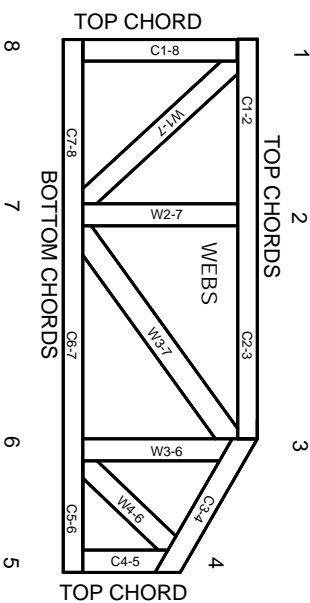


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

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

# Numbering System



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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MITek Engineering Reference Sheet: MII-7473 rev. 10/03/2015



# General Safety Notes

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

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