

RE: 2501456\_OFA - H&H/Prelude/

Trenco  
 818 Soundside Rd  
 Edenton, NC 27932

**Site Information:**

Project Customer: H AND H Project Name: 2501456  
 Lot/Block: Subdivision:  
 Model:  
 Address:  
 City: State: NC

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

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.2  
 Wind Code: ASCE 7-10 Wind Speed: 150 mph Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-10  
 Roof Load: 40.0 psf Floor Load: N/A psf  
 Mean Roof Height (feet): 25 Exposure Category: C

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I43258119	A02A	10/21/20	35	I43258153	H07	10/21/20
2	I43258120	A03	10/21/20	36	I43258154	H08	10/21/20
3	I43258121	A04	10/21/20	37	I43258155	H09	10/21/20
4	I43258122		10/21/20	38	I43258156	H10	10/21/20
5	I43258123	B01	10/21/20	39	I43258157	H11	10/21/20
6		B02	10/21/20	40	I43258158	H12	10/21/20
7	I43258125	B03	10/21/20	41	I43258159	H13	10/21/20
8	I43258126	C01	10/21/20		H14	10/21/20	
9	I43258127	CJ01	10/21/20	43	I43258161	H15	10/21/20
10	I43258128	D01	10/21/20	44	I43258162	H16	10/21/20
11	I43258129		10/21/20	45	I43258163	H17	10/21/20
12	I43258130	D03	10/21/20	46	I43258164	I01	10/21/20
13	I43258131	D04	10/21/20	47	I43258165	I02	10/21/20
14	I43258132	D05	10/21/20	48	I43258166	I03	10/21/20
		D06	10/21/20	49	I43258167	I04	10/21/20
16	I43258134	D07	10/21/20	50	I43258168	I05	10/21/20
17	I43258135	D08	10/21/20		I43258169	I06	10/21/20
18	I43258136	D09	10/21/20	52	I43258170	I07	10/21/20
19	I43258137		10/21/20	53	I43258171	I08	10/21/20
20	I43258138	E02	10/21/20	54	I43258172	I09	10/21/20
21	I43258139	E03	10/21/20	55	I43258173	I10	10/21/20
22	I43258140	E04	10/21/20	56	I43258174	J01	10/21/20
23	I43258141	E05	10/21/20	57	I43258175	J02	10/21/20
		E06	10/21/20	58	I43258176	J03	10/21/20
25	I43258143	G01	10/21/20	59	I43258177	J04	10/21/20
26	I43258144	G02	10/21/20		I43258178	J05	10/21/20
27	I43258145	G03	10/21/20	61	I43258179	J06	10/21/20
28	I43258146	G04	10/21/20	62	I43258180	J07	10/21/20
29	I43258147	H01	10/21/20	63	I43258181	J08	10/21/20
30	I43258148	H02	10/21/20	64	I43258182	J09	10/21/20
31	I43258149	H03	10/21/20	65	I43258183	J10	10/21/20
32	I43258150	H04	10/21/20	66	I43258184	JC01	10/21/20
		H05	10/21/20	67	I43258185	JC02	10/21/20
34	I43258152	H06	10/21/20	68	I43258186	K01	10/21/20

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

Truss Design Engineer's Name: Sevier, Scott

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

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



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RE: 2501456\_OFA - H&H/Prelude/

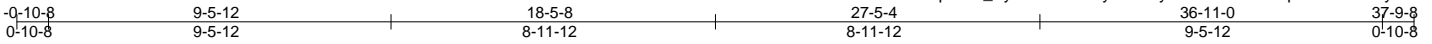
Trenco  
818 Soundside Rd  
Edenton, NC 27932

No.	Seal#	Truss Name	Date
69	I43258187	K02	10/21/20
70	I43258188	L01	10/21/20
71	I43258189	L02	10/21/20
72	I43258190	L03	10/21/20
73	I43258191	M01	10/21/20
74	I43258192	M02	10/21/20
75	I43258193	M03	10/21/20
76	I43258194	M04	10/21/20
77	I43258195	M05	10/21/20
78	I43258196	M06	10/21/20
79	I43258197	M07	10/21/20
80	I43258198	M08	10/21/20
81	I43258199	PB01	10/21/20
82	I43258200	PB02	10/21/20
83	I43258201	PB03	10/21/20

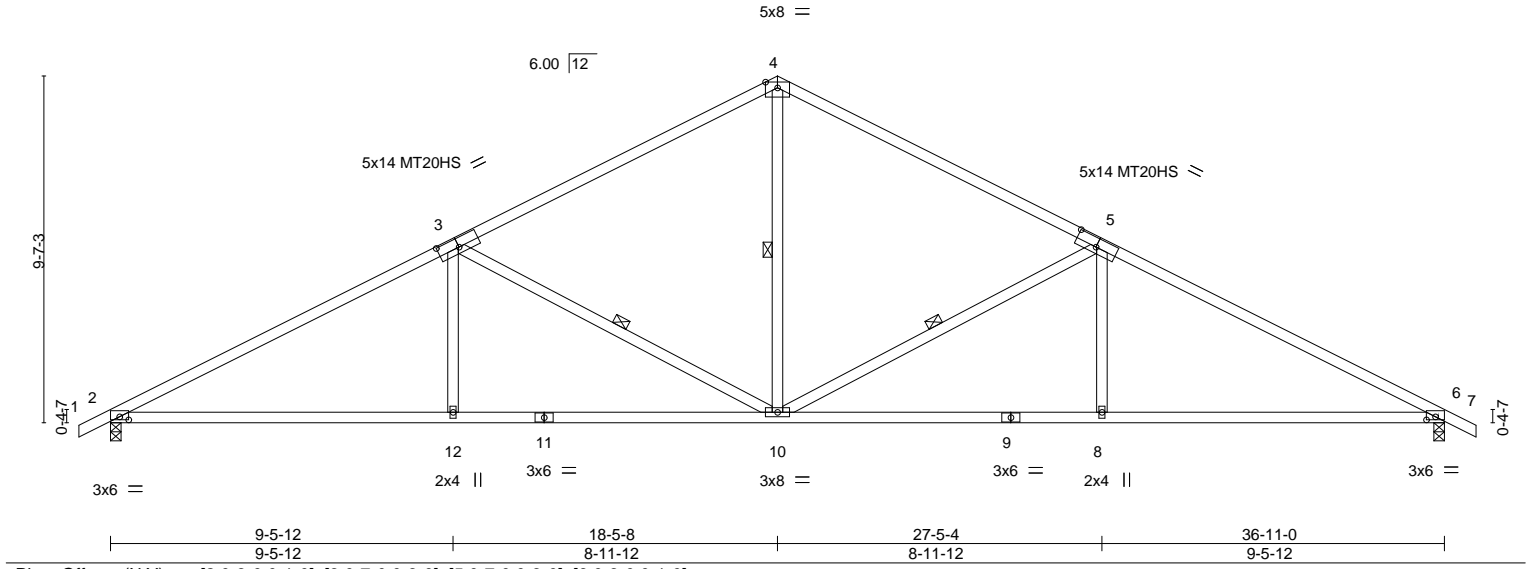
Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	143258119
2501456_OFA	A02A	COMMON	9	1		

Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:05:30 2020 Page 1  
 ID:?hrBCA8NTN1Es8op2ICn\_Py8kIV-L00NzyiX5EGyiU24GEIIX03fOepih5hxtlPo9yRuJ



Scale: 3/16"=1'



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.97	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.97	Vert(LL) -0.18 8-18 >999 360	MT20HS	187/143
BCLL 0.0 *	Lumber DOL 1.15	WB 0.50	Vert(CT) -0.44 8-18 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.13 6 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.28 8-18 >999 240	Weight: 176 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 1-3,5-7: 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 4-10, 5-10, 3-10

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8  
 Max Horz 2=-187(LC 10)  
 Max Uplift 2=-369(LC 12), 6=-369(LC 13)  
 Max Grav 2=1529(LC 1), 6=1529(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2646/1747, 3-4=-1813/1354, 4-5=-1813/1354, 5-6=-2646/1747  
 BOT CHORD 2-12=-1333/2298, 10-12=-1335/2293, 8-10=-1338/2293, 6-8=-1337/2298  
 WEBS 4-10=-670/1025, 5-10=-919/830, 5-8=0/388, 3-10=-919/831, 3-12=0/388

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=369, 6=369.
  - 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 2501456_OFA	Truss A03	Truss Type COMMON	Qty 9	Ply 1	H&H/Prelude/ Job Reference (optional)	143258120
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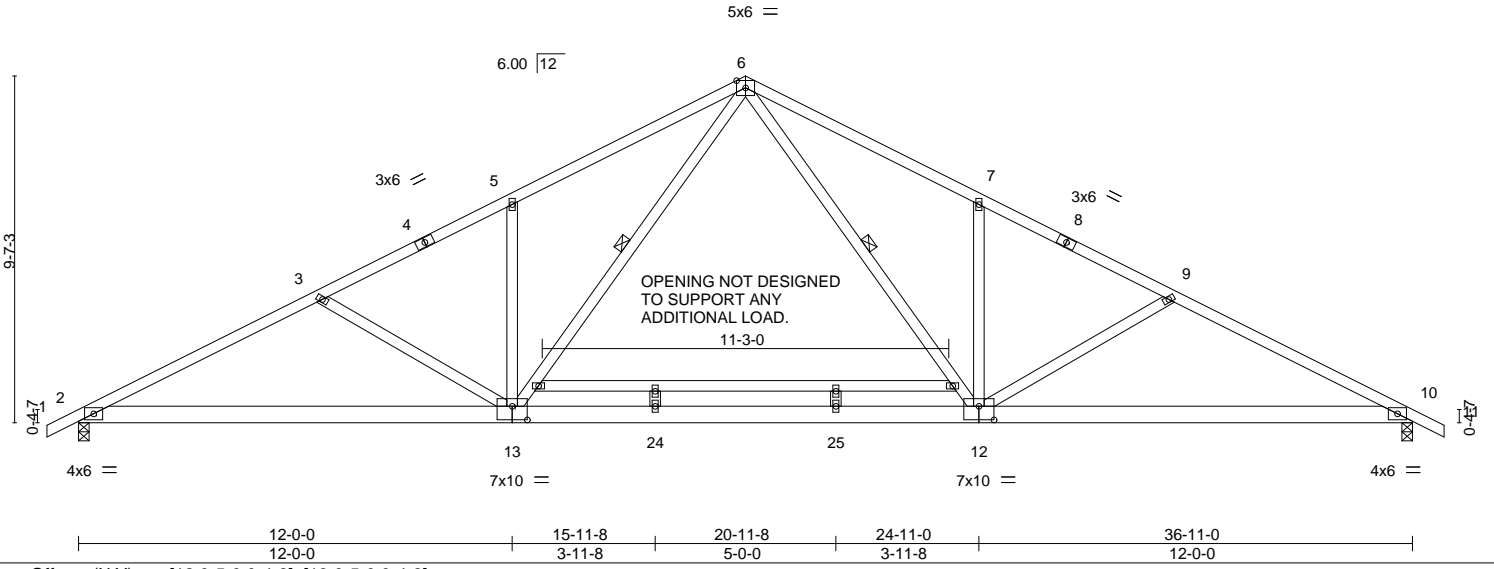
Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:05:31 2020 Page 1

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0-10-8	6-8-15	12-0-0	18-5-8	24-11-0	30-2-1	36-11-0	37-9-8
0-10-8	6-8-15	5-3-1	6-5-8	6-5-8	5-3-1	6-8-15	0-10-8

Scale: 3/16"=1'



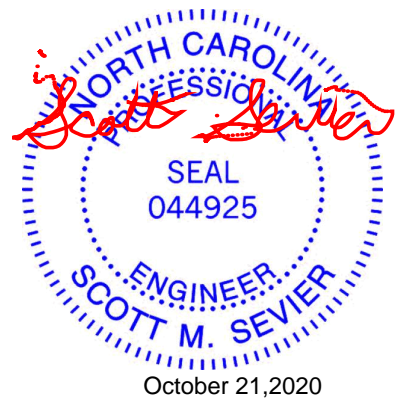
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.57	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.92	Vert(LL) -0.16 13-21 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.49	Vert(CT) -0.62 12-13 >719 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.09 10 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.22 12-23 >999 240	Weight: 236 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3 *Except* 14-15: 2x4 SP No.2	WEBS 1 Row at midpt 6-12, 6-13

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=187(LC 11)  
 Max Uplift 2=-270(LC 12), 10=-270(LC 13)  
 Max Grav 2=1629(LC 1), 10=1629(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2997/1629, 3-5=-2649/1381, 5-6=-2660/1638, 6-7=-2660/1638, 7-9=-2649/1381, 9-10=-2997/1629  
 BOT CHORD 2-13=-1277/2637, 12-13=-474/1634, 10-12=-1282/2637  
 WEBS 6-12=-632/1184, 7-12=-363/499, 9-12=-390/520, 6-13=-632/1184, 5-13=-363/499, 3-13=-390/520

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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, 18-5-8 from left end, supported at two points, 5-0-0 apart.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=270, 10=270.
  - 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/Prelude/	143258121
2501456_OFA	A04	COMMON	9	1		

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Scale = 1:63.3

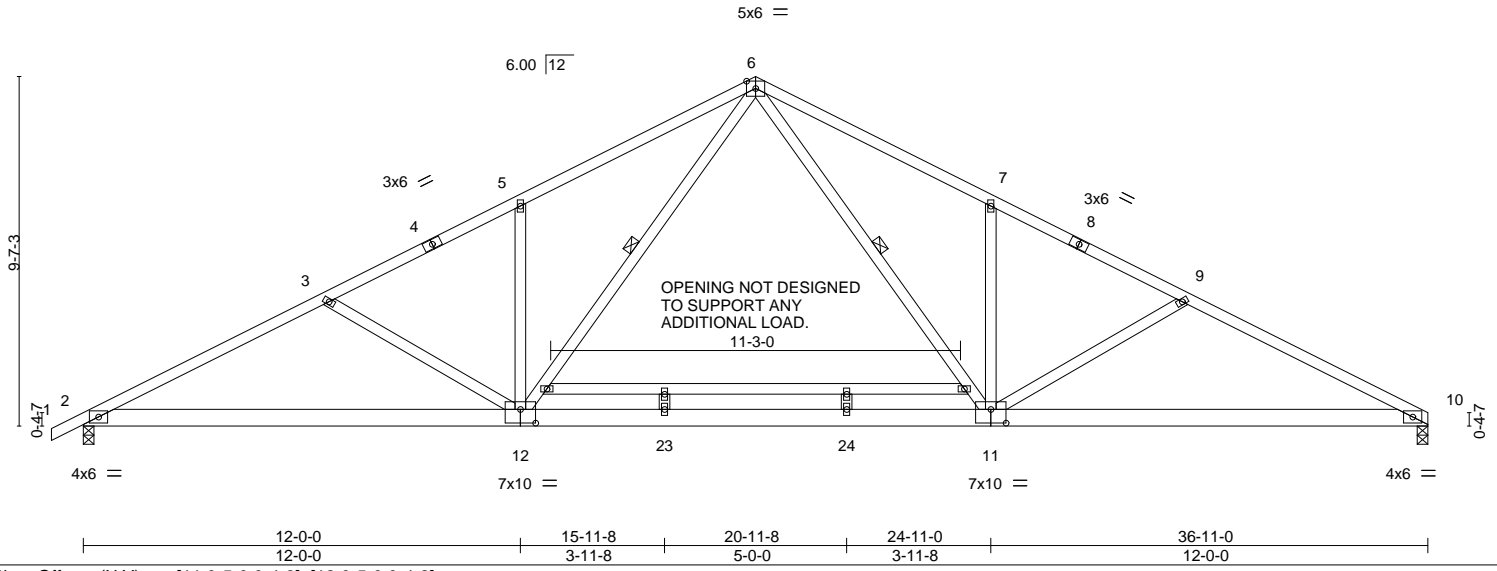


Plate Offsets (X,Y)--	[11:0-5-0,0-4-8], [12:0-5-0,0-4-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.67	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.95	Vert(LL) -0.15 11-12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.49	Vert(CT) -0.60 11-12 >738 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-AS	Horz(CT) 0.08 10 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.22 11-22 >999 240	Weight: 235 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x6 SP No.1 *Except* 11-12: 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3 *Except* 13-14: 2x4 SP No.2	WEBS 1 Row at midpt 6-11, 6-12

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=189(LC 9)  
 Max Uplift 2=-270(LC 12), 10=-246(LC 13)  
 Max Grav 2=1630(LC 1), 10=1576(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2997/1629, 3-5=-2651/1382, 5-6=-2662/1639, 6-7=-2665/1642, 7-9=-2654/1385,  
 9-10=-3000/1633  
 BOT CHORD 2-12=-1310/2636, 11-12=-506/1636, 10-11=-1315/2640  
 WEBS 6-11=-634/1187, 7-11=-363/498, 9-11=-388/520, 6-12=-630/1184, 5-12=-364/499,  
 3-12=-386/518

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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, 18-5-8 from left end, supported at two points, 5-0-0 apart.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=270, 10=246.
  - Load case(s) 2, 3, 19, 20, 21, 22, 25, 26 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-6=-60, 6-10=-60, 2-10=-20



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Continued on page 2

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

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

Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	
2501456_OFA	A04	COMMON	9	1		I43258121
					Job Reference (optional)	

Builders FirstSource, Sumter, SC - 29153,

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**LOAD CASE(S)** Standard

- Concentrated Loads (lb)  
Vert: 23=-100 24=-100
- 2) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-6=-50, 6-10=-50, 2-10=-20  
Concentrated Loads (lb)  
Vert: 23=-100 24=-100
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-6=-20, 6-10=-20, 2-10=-40  
Concentrated Loads (lb)  
Vert: 23=-100 24=-100
- 19) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-46, 2-6=-53, 6-10=-39, 2-10=-20  
Horz: 1-2=-4, 2-6=3, 6-10=11  
Concentrated Loads (lb)  
Vert: 23=-100 24=-100
- 20) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-31, 2-6=-39, 6-10=-53, 2-10=-20  
Horz: 1-2=-19, 2-6=-11, 6-10=-3  
Concentrated Loads (lb)  
Vert: 23=-100 24=-100
- 21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-21, 2-6=-29, 6-10=-42, 2-10=-20  
Horz: 1-2=-29, 2-6=-21, 6-10=8  
Concentrated Loads (lb)  
Vert: 23=-100 24=-100
- 22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-35, 2-6=-42, 6-10=-29, 2-10=-20  
Horz: 1-2=-15, 2-6=-8, 6-10=21  
Concentrated Loads (lb)  
Vert: 23=-100 24=-100
- 25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-6=-50, 6-10=-20, 2-10=-20  
Concentrated Loads (lb)  
Vert: 23=-100 24=-100
- 26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-6=-20, 6-10=-50, 2-10=-20  
Concentrated Loads (lb)  
Vert: 23=-100 24=-100

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

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818 Soundside Road  
Edenton, NC 27932

Job 2501456_OFA	Truss A05	Truss Type COMMON	Qty 3	Ply 1	H&H/Prelude/ Job Reference (optional)	143258122
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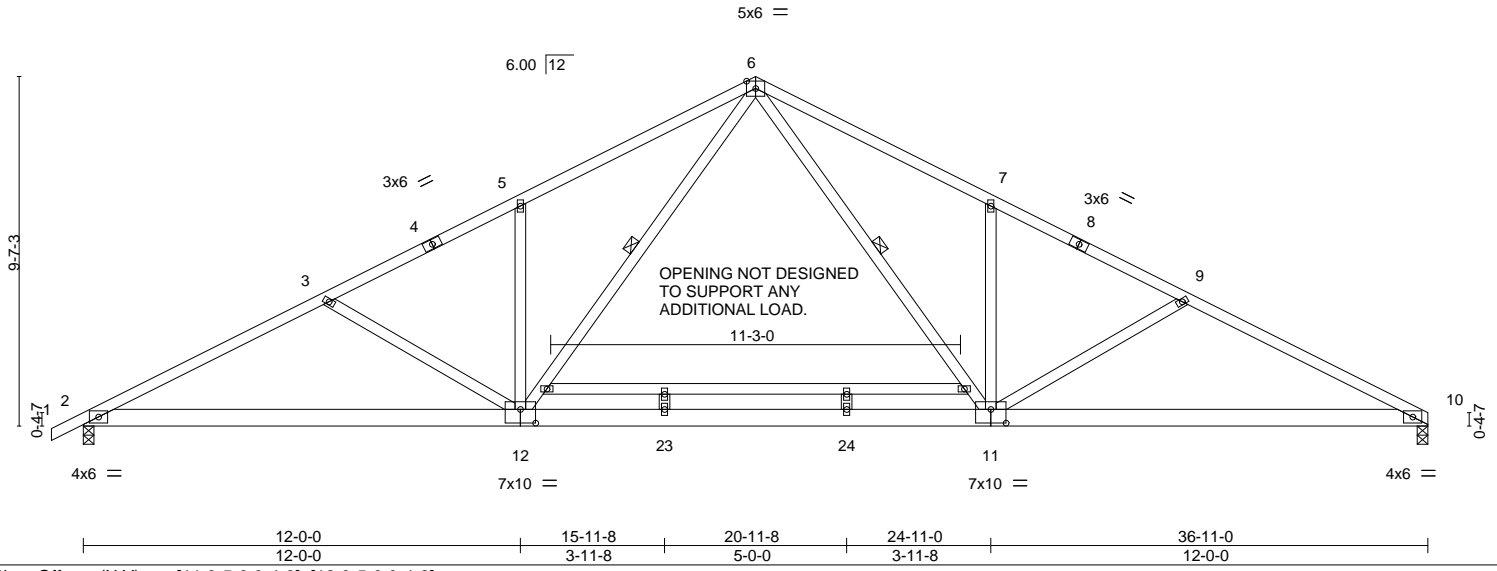
Builders FirstSource, Sumter, SC - 29153,

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Scale = 1:63.3



LOADING (psf)	SPACING-	2-1-8	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.86	Vert(LL)	-0.16 12-20	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.80	Vert(CT)	-0.56 11-12	>794	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.52	Horz(CT)	0.09 10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.23 11-22	>999	240	Weight: 235 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP SS *Except* 1-4,8-10: 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-4-8 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-4-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 13-14: 2x4 SP No.2	WEBS 1 Row at midpt 6-11, 6-12

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=201(LC 11)  
 Max Uplift 2=-293(LC 12), 10=-268(LC 13)  
 Max Grav 2=1725(LC 1), 10=1668(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3165/1745, 3-5=-2803/1489, 5-6=-2822/1772, 6-7=-2824/1775, 7-9=-2806/1493,  
 9-10=-3169/1749  
 BOT CHORD 2-12=-1402/2782, 11-12=-541/1724, 10-11=-1407/2786  
 WEBS 6-11=-705/1265, 7-11=-398/550, 9-11=-403/539, 6-12=-700/1261, 5-12=-398/551,  
 3-12=-401/537

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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, 18-5-8 from left end, supported at two points, 5-0-0 apart.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=293, 10=268.



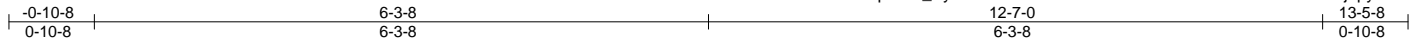
October 21, 2020

Job 2501456_OFA	Truss B01	Truss Type COMMON SUPPORTED GAB	Qty 5	Ply 1	H&H/Prelude/ Job Reference (optional)	143258123
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:05:36 2020 Page 1

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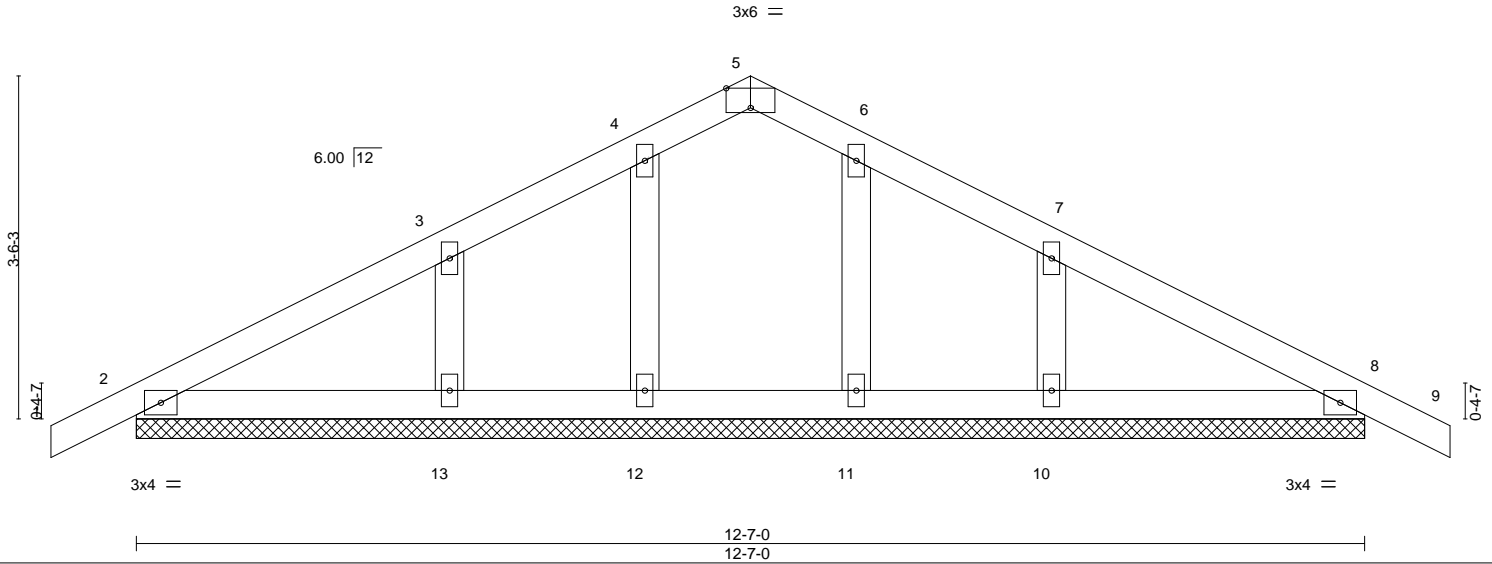


Plate Offsets (X,Y)--	[5:0-3-0,Edge]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.13	Vert(LL)	0.00	9	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	0.00	9	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 54 lb	FT = 20%

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

**REACTIONS.** All bearings 12-7-0.  
 (lb) - Max Horz 2=107(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 12, 11 except 13=205(LC 12), 10=-208(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 11, 10

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 3-13=185/291, 7-10=185/290

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) All plates are 2x4 MT20 unless otherwise indicated.
  - 5) Gable requires continuous bottom chord bearing.
  - 6) 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.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 12, 11 except (jt=lb) 13=205, 10=208.



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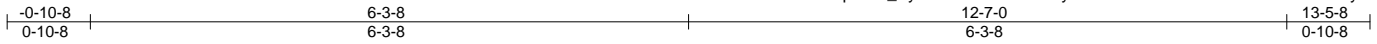


Job 2501456_OFA	Truss B02	Truss Type Common	Qty 5	Ply 1	H&H/Prelude/ Job Reference (optional)	143258124
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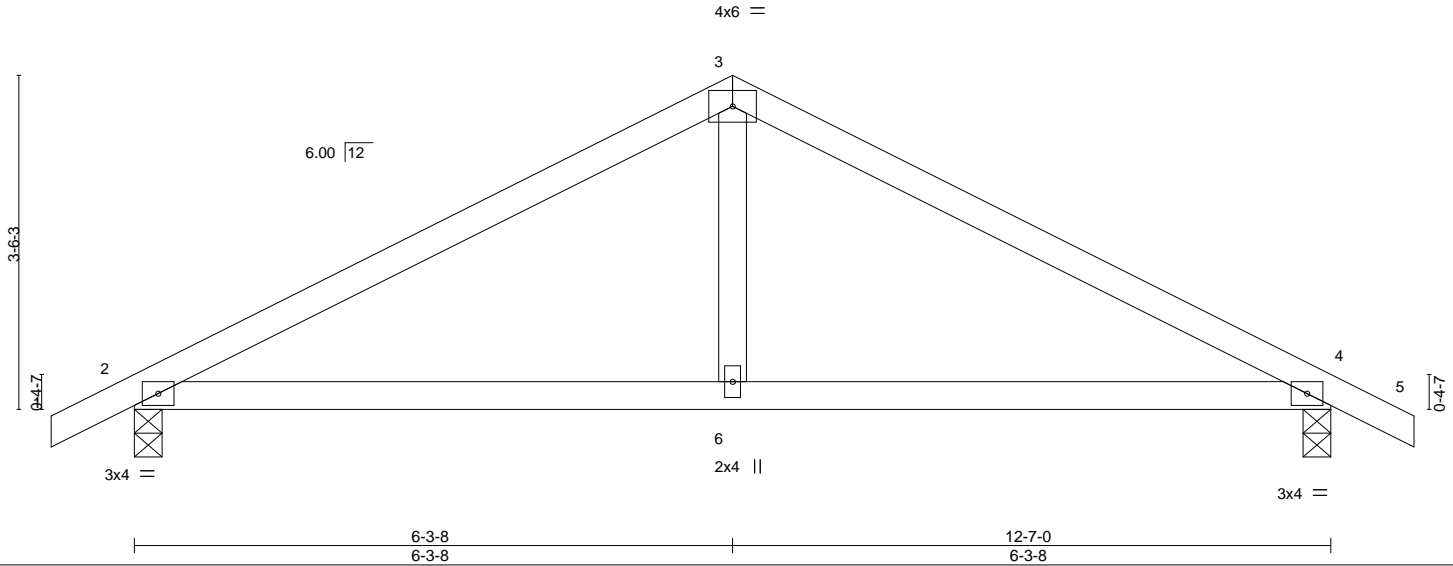
Builders FirstSource, Sumter, SC - 29153,

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Scale: 1/2"=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 0.42	Vert(LL)	-0.05 6-9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.41	Vert(CT)	-0.09 6-9	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.01 4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.06 6-12	>999	240		
								Weight: 47 lb	FT = 20%

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

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

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
 Max Horz 2=-69(LC 10)  
 Max Uplift 2=-141(LC 12), 4=-141(LC 13)  
 Max Grav 2=556(LC 1), 4=556(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-714/525, 3-4=-714/526  
 BOT CHORD 2-6=-287/578, 4-6=-287/578  
 WEBS 3-6=-7/286

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=141, 4=141.
- 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.



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Job 2501456_OFA	Truss B03	Truss Type Common Girder	Qty 3	Ply 2	H&H/Prelude/ Job Reference (optional)	143258125
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:05:38 2020 Page 1

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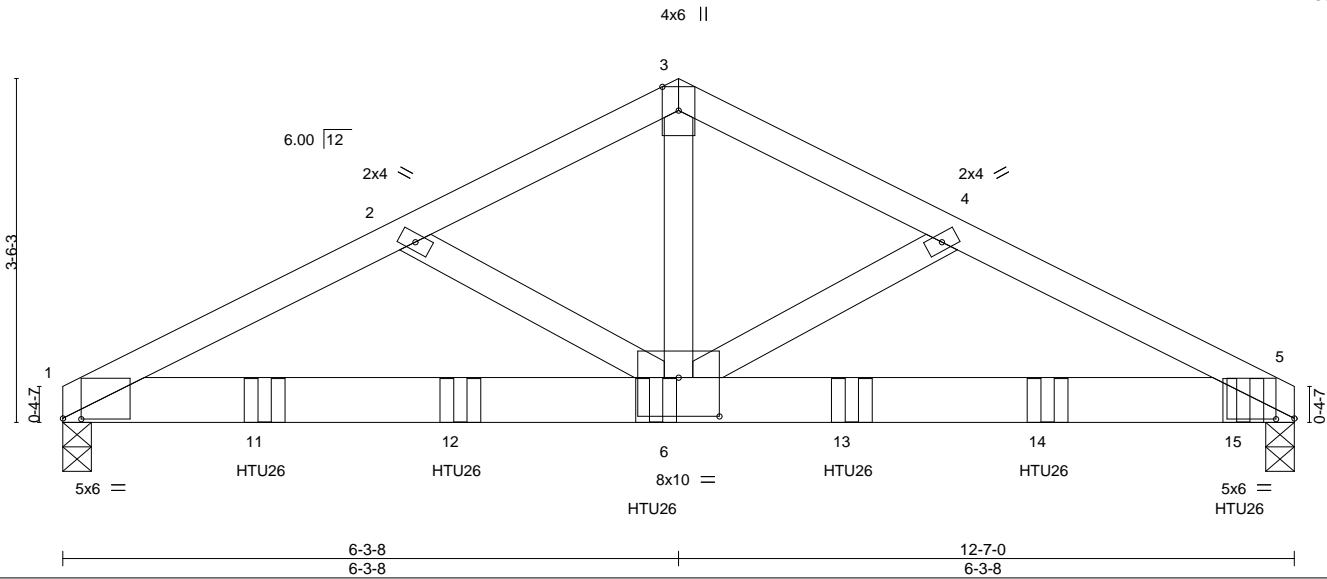


Plate Offsets (X,Y)-- [1:0-2-4,0-0-1], [5:0-2-4,0-0-1], [6:0-5-0,0-4-12]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.85	Vert(LL)	-0.11	6-10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.80	Vert(CT)	-0.21	6-10	>704		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.73	Horz(CT)	0.04	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.12	6-10	>999		
								Weight: 127 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x6 SP DSS  
WEBS 2x4 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-5-2 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

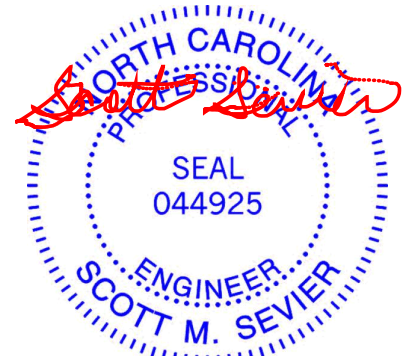
**REACTIONS.** (size) 1=0-3-8, 5=0-3-8  
Max Horz 1=61(LC 24)  
Max Uplift 1=-1054(LC 8), 5=-1327(LC 9)  
Max Grav 1=4310(LC 1), 5=5438(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-7120/1758, 2-3=-6771/1658, 3-4=-6779/1661, 4-5=-7183/1773  
BOT CHORD 1-6=-1598/6445, 5-6=-1563/6533  
WEBS 3-6=-1421/5952, 4-6=-627/258, 2-6=-525/233

- 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 0-4-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; TC DL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=1054, 5=1327.
  - Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 12-0-12 to connect truss(es) to back face of bottom chord.
  - Fill all nail holes where hanger is in contact with lumber.

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 3-5=-60, 1-5=-20  
Concentrated Loads (lb)  
Vert: 6=-1456(B) 11=-1456(B) 12=-1456(B) 13=-1456(B) 14=-1456(B) 15=-1461(B)



October 21, 2020

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

Job 2501456_OFA	Truss C01	Truss Type GABLE	Qty 3	Ply 1	H&H/Prelude/ Job Reference (optional)	143258126
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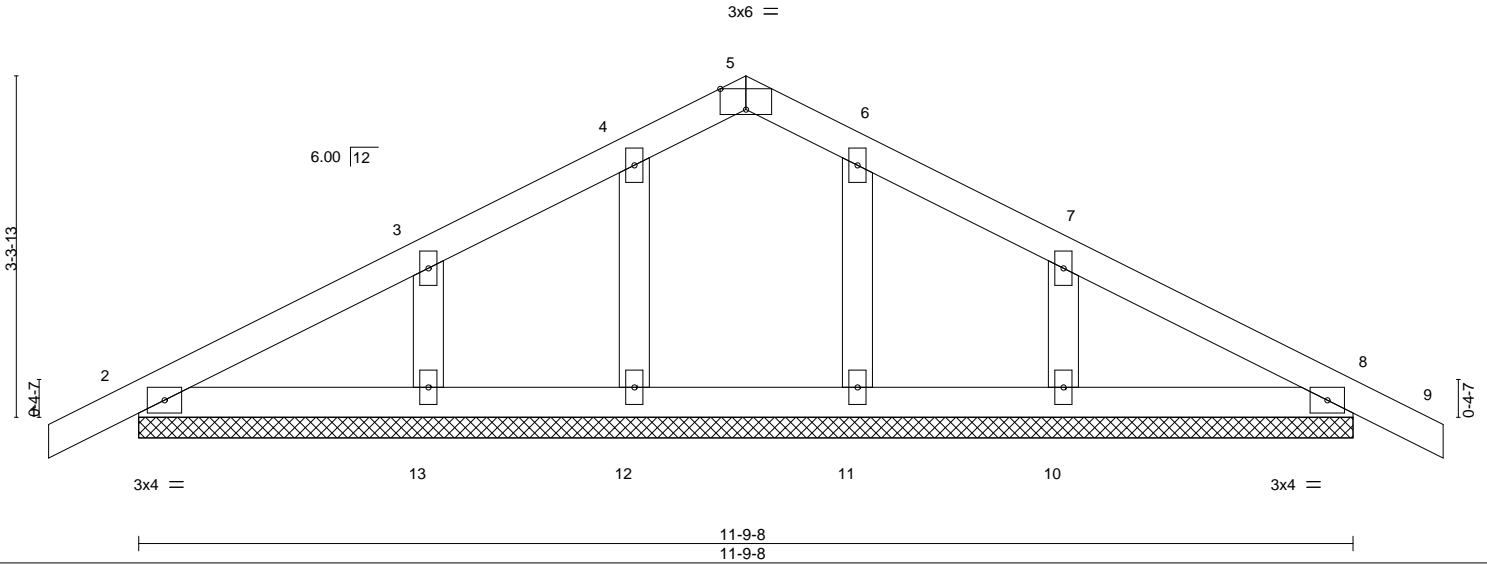
Builders FirstSource, Sumter, SC - 29153,

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Scale = 1:22.4



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.10	Vert(LL)	0.00	8	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	0.00	9	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: 51 lb	FT = 20%

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

**REACTIONS.** All bearings 11-9-8.  
 (lb) - Max Horz 2=-102(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 12, 11 except 13=-182(LC 12), 10=-184(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 11, 10

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 3-13=-169/266, 7-10=-168/265

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; 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
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) All plates are 2x4 MT20 unless otherwise indicated.
  - 5) Gable requires continuous bottom chord bearing.
  - 6) 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.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 12, 11 except (jt=lb) 13=182, 10=184.

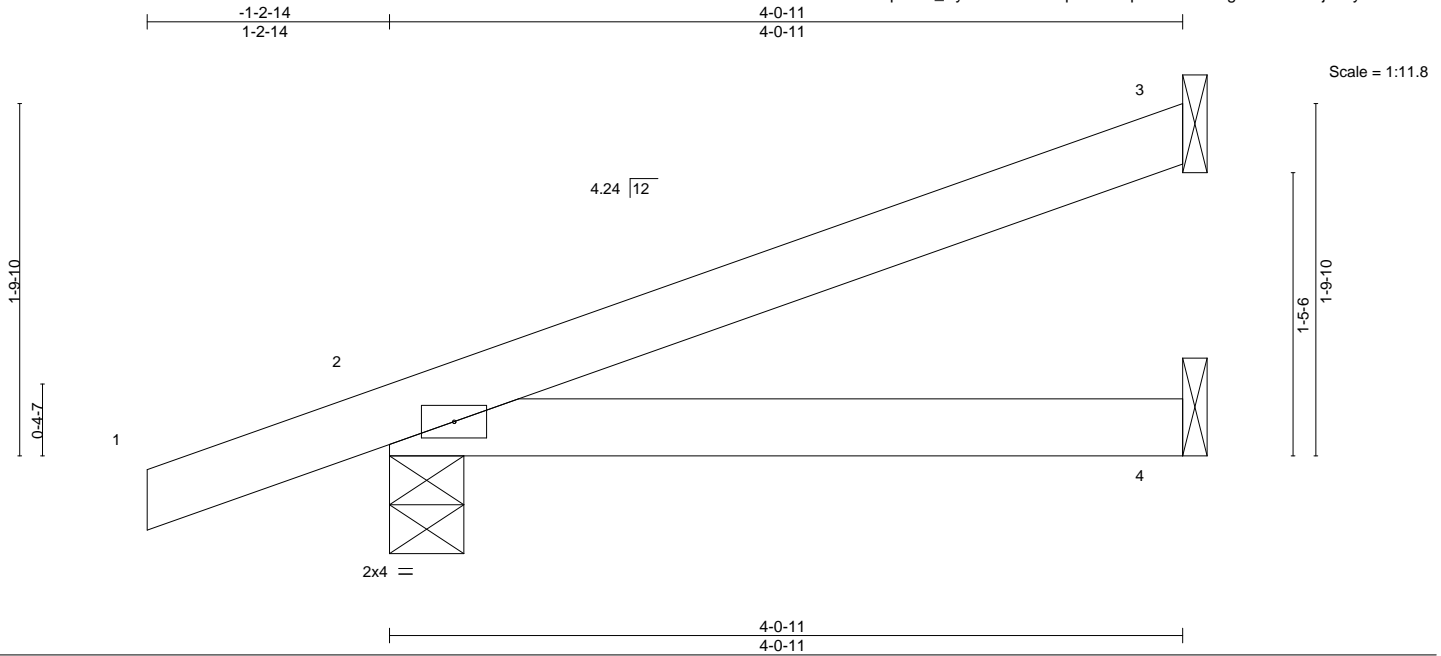


October 21, 2020

Job 2501456_OFA	Truss CJ01	Truss Type DIAGONAL HIP GIRDER	Qty 4	Ply 1	H&H/Prelude/ Job Reference (optional)	I43258127
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:05:40 2020 Page 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 0.24	Vert(LL)	-0.01 4-7	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	-0.02 4-7	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00 3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.02 4-7	>999	240	Weight: 15 lb	FT = 20%

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

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

**REACTIONS.** (size) 3=Mechanical, 2=0-4-9, 4=Mechanical  
Max Horz 2=100(LC 8)  
Max Uplift 3=-63(LC 12), 2=-122(LC 8)  
Max Grav 3=100(LC 1), 2=246(LC 1), 4=70(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 2=122.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 21, 2020

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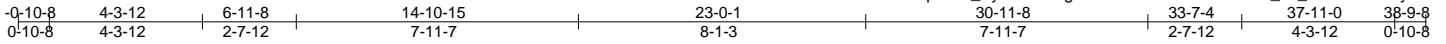


818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	143258128
2501456_OFA	D01	Hip Girder	2	2		

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8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:05:44 2020 Page 1  
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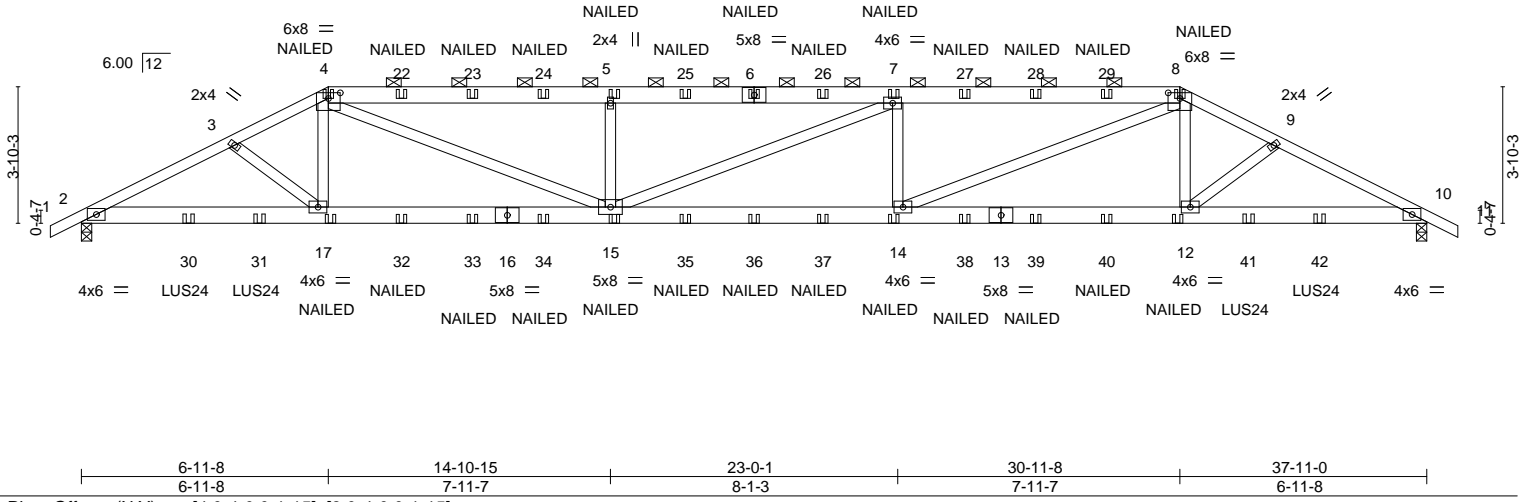


Plate Offsets (X, Y)--	[4:0-4-0,0-1-15], [8:0-4-0,0-1-15]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.58	Vert(LL) -0.32 14-15 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.92	Vert(CT) -0.65 14-15 >697 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.47	Horz(CT) 0.13 10 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Wind(LL) 0.45 14-15 >999 240	Weight: 470 lb	FT = 20%

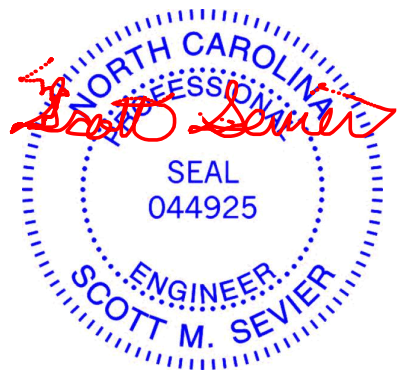
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except* 4-6,6-8: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-6-0 oc purlins, except 2-0-0 oc purlins (4-7-4 max.): 4-8.
BOT CHORD 2x6 SP No.2 *Except* 13-16: 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-11-3 oc bracing: 14-15.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=-76(LC 6)  
 Max Uplift 2=-1225(LC 5), 10=-1225(LC 4)  
 Max Grav 2=3373(LC 1), 10=3373(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-6729/2566, 3-4=-6570/2555, 4-5=-9259/3751, 5-7=-9256/3749, 7-8=-9269/3756,  
 8-9=-6568/2553, 9-10=-6728/2565  
 BOT CHORD 2-17=-2295/5997, 15-17=-2232/5819, 14-15=-3654/9266, 12-14=-2170/5818,  
 10-12=-2233/5996  
 WEBS 4-17=-320/1128, 8-12=-318/1125, 8-14=-1660/3818, 4-15=-1653/3805, 7-14=-667/491,  
 5-15=-644/476

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=1225, 10=1225.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 27-10-8 oc max. starting at 3-0-4 from the left end to 34-10-12 to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.



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Continued on page 2

**LOAD CASE(S)** Standard

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



Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	I43258128
2501456_OFA	D01	Hip Girder	2	<b>2</b>	Job Reference (optional)	

Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:05:44 2020 Page 2  
 ID:?hrBCA8NTN1Es8op2lCn\_Py8klV-x5sgvktJoY1zOe7m4B?1WzeA\_lbl\_Qbw92h8HLyRul5

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-4=-60, 4-8=-60, 8-11=-60, 2-10=-20

Concentrated Loads (lb)

Vert: 4=-17(B) 6=-17(B) 8=-17(B) 17=-175(B) 12=-175(B) 14=-175(B) 15=-175(B) 7=-17(B) 5=-17(B) 22=-17(B) 23=-17(B) 24=-17(B) 25=-17(B) 26=-17(B)  
 27=-17(B) 28=-17(B) 29=-17(B) 30=-298(B) 31=-255(B) 32=-175(B) 33=-175(B) 34=-175(B) 35=-175(B) 36=-175(B) 37=-175(B) 38=-175(B) 39=-175(B) 40=-175(B)  
 41=-255(B) 42=-298(B)

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

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	143258129
2501456_OFA	D02	Hip	2	1		
Builders FirstSource, Sumter, SC - 29153,						8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:05:47 2020 Page 1
						ID:?hrBCA8NTN1Es8op2lCn_Py8klV-LgYoXmvB5TPXF5sLmJZk7bGe2VfvBoOMr0vpugyRul2

-0-10-8	4-8-12	8-11-8	15-7-8	22-3-8	28-11-8	33-2-4	37-11-0	38-9-8
0-10-8	4-8-12	4-2-12	6-8-0	6-8-0	6-8-0	4-2-12	4-8-12	0-10-8

Scale = 1:67.5

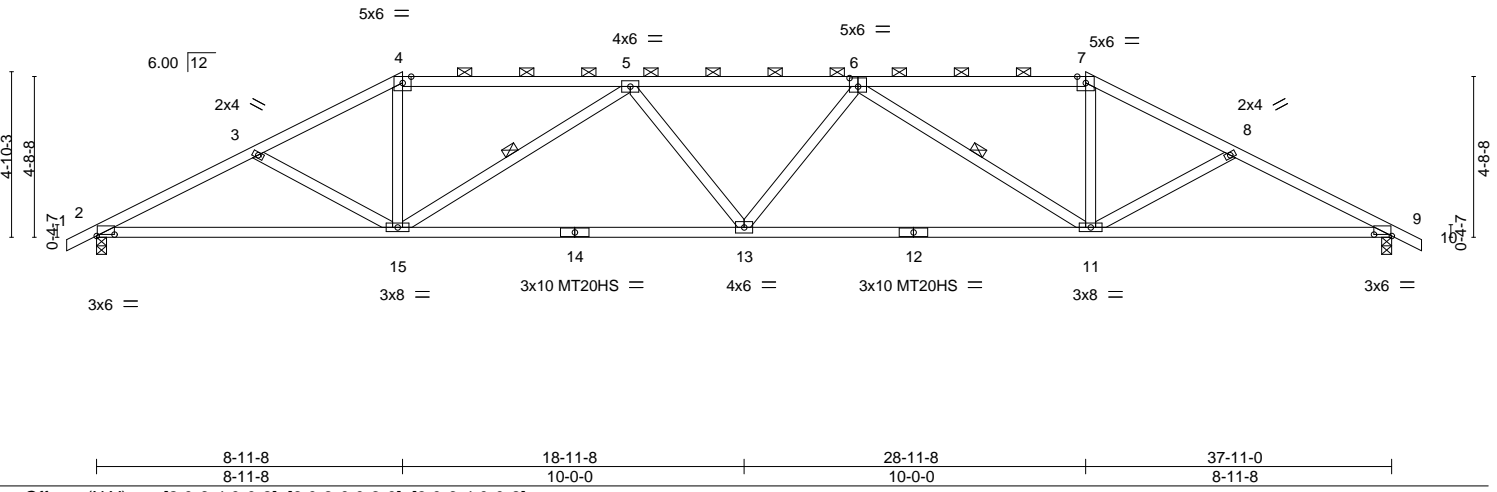


Plate Offsets (X,Y)--	[2:0-6-4,0-0-8], [6:0-3-0,0-3-0], [9:0-6-4,0-0-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.65	Vert(LL) -0.24 13 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.83	Vert(CT) -0.57 11-13 >793 240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr YES	WB 0.40	Horz(CT) 0.15 9 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.30 13 >999 240		Weight: 184 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.1	2-0-0 oc purlins (2-9-3 max.): 4-7.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied.
	WEBS 1 Row at midpt 5-15, 6-11

<b>REACTIONS.</b>	(size) 2=0-3-8, 9=0-3-8
	Max Horz 2=-94(LC 10)
	Max Uplift 2=-326(LC 9), 9=-326(LC 8)
	Max Grav 2=1569(LC 1), 9=1569(LC 1)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2938/1861, 3-4=-2701/1689, 4-5=-2361/1580, 5-6=-3263/2078, 6-7=-2361/1580, 7-8=-2701/1689, 8-9=-2937/1860
BOT CHORD	2-15=-1517/2581, 13-15=-1761/3185, 11-13=-1762/3185, 9-11=-1526/2581
WEBS	3-15=-243/341, 4-15=-409/839, 5-15=-1065/655, 5-13=0/260, 6-13=0/260, 6-11=-1065/655, 7-11=-409/839, 8-11=-243/341

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=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.



October 21, 2020

Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	143258130
2501456_OFA	D03	Hip	2	1		

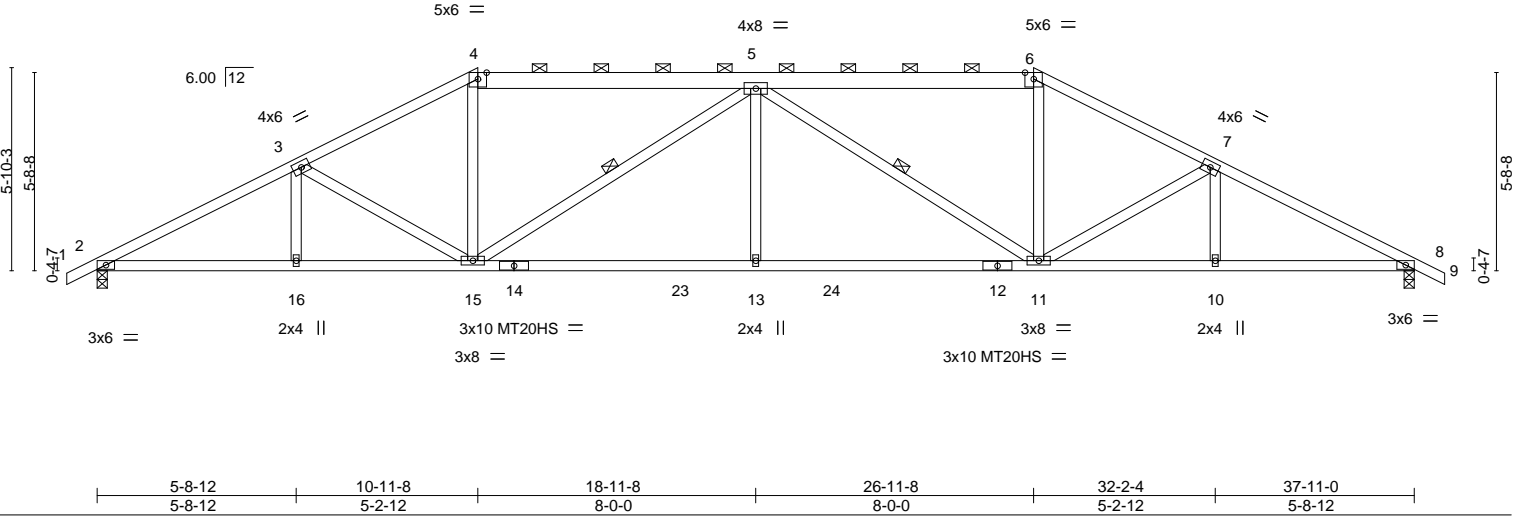
Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:05:48 2020 Page 1

ID:?hrBCA8NTN1Es8op2lCn\_Py8klV-qs5Bk6wpsmXOsFRXJ04zgppruv\_QwFZV4gfMQ6yRul1

0-10-8	5-8-12	10-11-8	18-11-8	26-11-8	32-2-4	37-11-0	38-9-8
0-10-8	5-8-12	5-2-12	8-0-0	8-0-0	5-2-12	5-8-12	0-10-8

Scale = 1:66.3



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)	-0.20	13	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.87	Vert(CT)	-0.44	13-15	>999	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.41	Horz(CT)	0.16	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.25	13	>999		
								Weight: 208 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 4-6: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-7-1 max.): 4-6.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-15, 5-11

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=-113(LC 10)  
 Max Uplift 2=-307(LC 12), 8=-307(LC 13)  
 Max Grav 2=1569(LC 1), 8=1569(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2929/1834, 3-4=-2520/1645, 4-5=-2192/1549, 5-6=-2192/1549, 6-7=-2520/1645,  
 7-8=-2929/1833  
 BOT CHORD 2-16=-1477/2560, 15-16=-1477/2560, 13-15=-1464/2776, 11-13=-1464/2776,  
 10-11=-1485/2560, 8-10=-1485/2560  
 WEBS 3-15=-415/423, 4-15=-364/733, 5-15=-823/427, 5-13=0/343, 5-11=-823/428,  
 6-11=-364/733, 7-11=-415/423

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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=307, 8=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.



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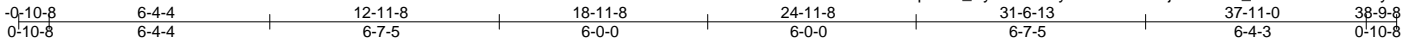
ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932



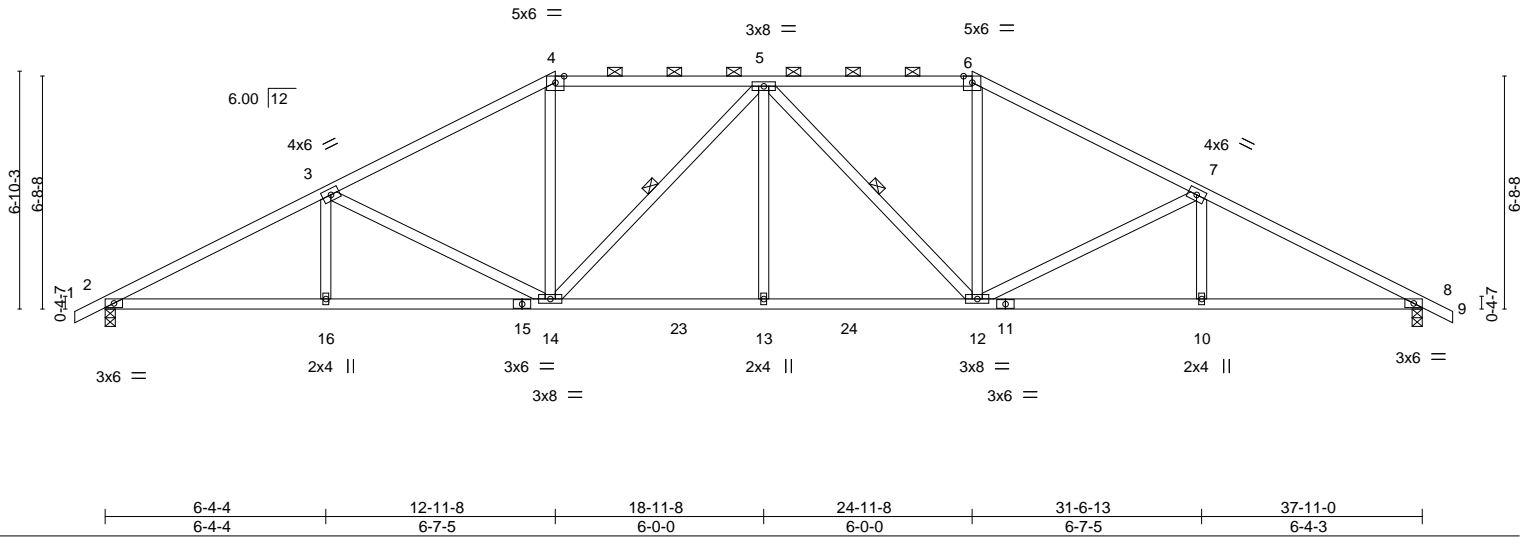
Job 2501456_OFA	Truss D04	Truss Type Hip	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	143258131
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:05:49 2020 Page 1  
ID:?hrBCA8NTN1Es8op2lCn\_Py8klV-l2fZySwRd4fFUP?jtkbCD0M\_QJNRff5fJKOvzYyRu10



Scale = 1:66.3



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)	-0.17	13	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.70	Horz(CT)	-0.36	13-14	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.58	Wind(LL)	0.15	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS		0.22	13	>999	Weight: 203 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x4 SP No.2	2-0-0 oc purlins (3-8-15 max.): 4-6.
WEBS 2x4 SP No.3	Rigid ceiling directly applied.
	BOT CHORD
	WEBS 1 Row at midpt 5-14, 5-12

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=-132(LC 10)  
 Max Uplift 2=-328(LC 12), 8=-328(LC 13)  
 Max Grav 2=1569(LC 1), 8=1569(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2921/1849, 3-4=-2359/1578, 4-5=-2025/1509, 5-6=-2025/1509, 6-7=-2359/1578, 7-8=-2921/1849  
 BOT CHORD 2-16=-1485/2551, 14-16=-1485/2551, 13-14=-1135/2273, 12-13=-1135/2273, 10-12=-1493/2551, 8-10=-1493/2551  
 WEBS 3-16=0/256, 3-14=-581/554, 4-14=-323/657, 5-14=-508/212, 5-13=0/294, 5-12=-508/212, 6-12=-323/657, 7-12=-581/554, 7-10=0/256

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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 BCCL = 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) 2=328, 8=328.
  - 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 21, 2020

Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	143258132
2501456_OFA	D05	Hip	2	1		

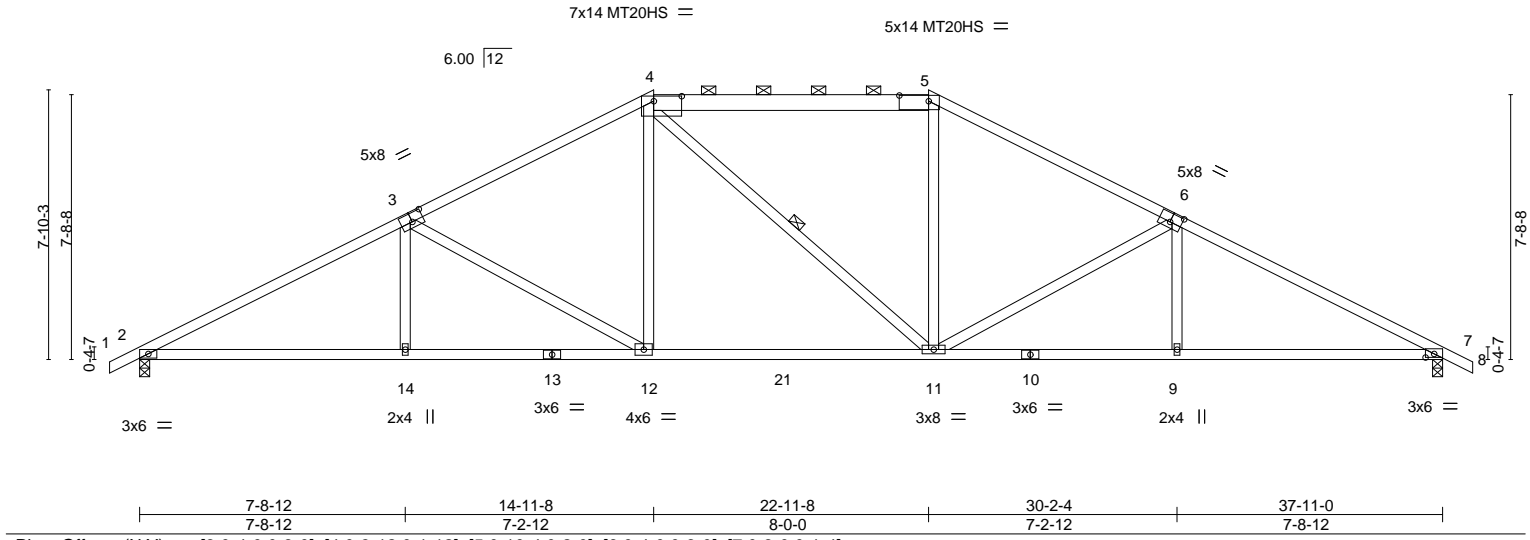
Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:05:50 2020 Page 1

ID:?hrBCA8NTN1Es8op2lCn\_Py8klV-mFDx9nx3Oo66ZawRR6RIEu7DiFVO2JoY\_8TV?yRul?

0-10-8	7-8-12	14-11-8	22-11-8	30-2-4	37-11-0	38-9-8
0-10-8	7-8-12	7-2-12	8-0-0	7-2-12	7-8-12	0-10-8

Scale = 1:67.0



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 0.78	Vert(LL)	-0.22	11-12	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.84	Vert(CT)	-0.46	11-12	>998	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.84	Horz(CT)	0.14	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.20	11-12	>999		Weight: 199 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 4-5: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-7-13 max.): 4-5.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 4-11

**REACTIONS.** (size) 2=0-3-8, 7=0-3-8  
 Max Horz 2=-151(LC 10)  
 Max Uplift 2=-348(LC 12), 7=-348(LC 13)  
 Max Grav 2=1569(LC 1), 7=1569(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2842/1815, 3-4=-2197/1525, 4-5=-1875/1471, 5-6=-2198/1525, 6-7=-2841/1815  
 BOT CHORD 2-14=-1424/2465, 12-14=-1426/2459, 11-12=-874/1874, 9-11=-1431/2459,  
 7-9=-1429/2464  
 WEBS 3-14=0/297, 3-12=-670/638, 4-12=-219/563, 5-11=-218/552, 6-11=-668/637, 6-9=0/297

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) All plates are MT20 plates unless otherwise indicated.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=348, 7=348.
  - 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.



Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	143258133
2501456_OFA	D06	Hip	2	1		

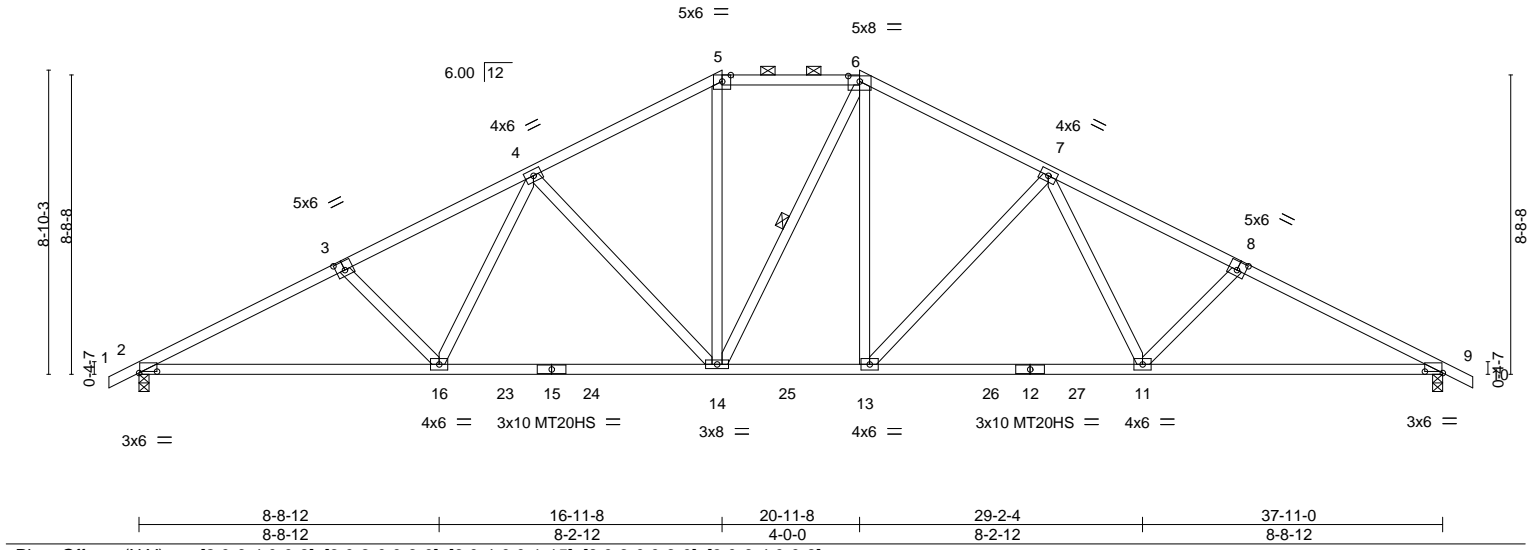
Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:05:52 2020 Page 1

ID:?hrBCA8NTN1Es8op2lCn\_Py8klV-idLhaTzKw?2qLsklYs9vqf\_XGWLQs\_a5?1daYtyRukz

0-10-8	5-11-13	11-5-11	16-11-8	20-11-8	26-5-5	31-11-3	37-11-0	38-9-8
0-10-8	5-11-13	5-5-13	5-5-13	4-0-0	5-5-13	5-5-13	5-11-13	0-10-8

Scale = 1:67.0



<b>LOADING (psf)</b>	<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 0.56	Vert(LL)	-0.23 11-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.87	Vert(CT)	-0.45 11-13	>999	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.72	Horz(CT)	0.13 9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.21 13	>999	240		Weight: 212 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	2-0-0 oc purlins (4-5-0 max.): 5-6.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied.
	WEBS 1 Row at midpt 6-14

**REACTIONS.** (size) 2=0-3-8, 9=0-3-8  
 Max Horz 2=-171(LC 10)  
 Max Uplift 2=-364(LC 12), 9=-364(LC 13)  
 Max Grav 2=1569(LC 1), 9=1569(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2878/1911, 3-4=-2655/1818, 4-5=-1973/1486, 5-6=-1694/1411, 6-7=-1972/1486,  
 7-8=-2656/1818, 8-9=-2879/1911  
 BOT CHORD 2-16=-1542/2532, 14-16=-1146/2110, 13-14=-736/1693, 11-13=-1147/2110,  
 9-11=-1549/2532  
 WEBS 3-16=-332/436, 4-16=-245/505, 4-14=-603/596, 5-14=-367/584, 6-13=-368/633,  
 7-13=-605/597, 7-11=-245/505, 8-11=-331/435

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=364, 9=364.
- 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.



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Job 2501456_OFA	Truss D07	Truss Type Common	Qty 6	Ply 1	H&H/Prelude/ Job Reference (optional)	143258134
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:05:53 2020 Page 1

ID:?hrBCA8NTN1Es8op2ICn\_Py8klV-Aqv4op\_yhJAhz0JU6ag8NsWh5wflbVKEEyM75KyRuky

0-10-8 0-10-8	6-7-13 6-7-13	12-9-11 6-1-13	18-11-8 6-1-13	25-1-5 6-1-13	31-3-3 6-1-13	37-11-0 6-7-13	38-9-8 0-10-8
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Scale = 1:65.4

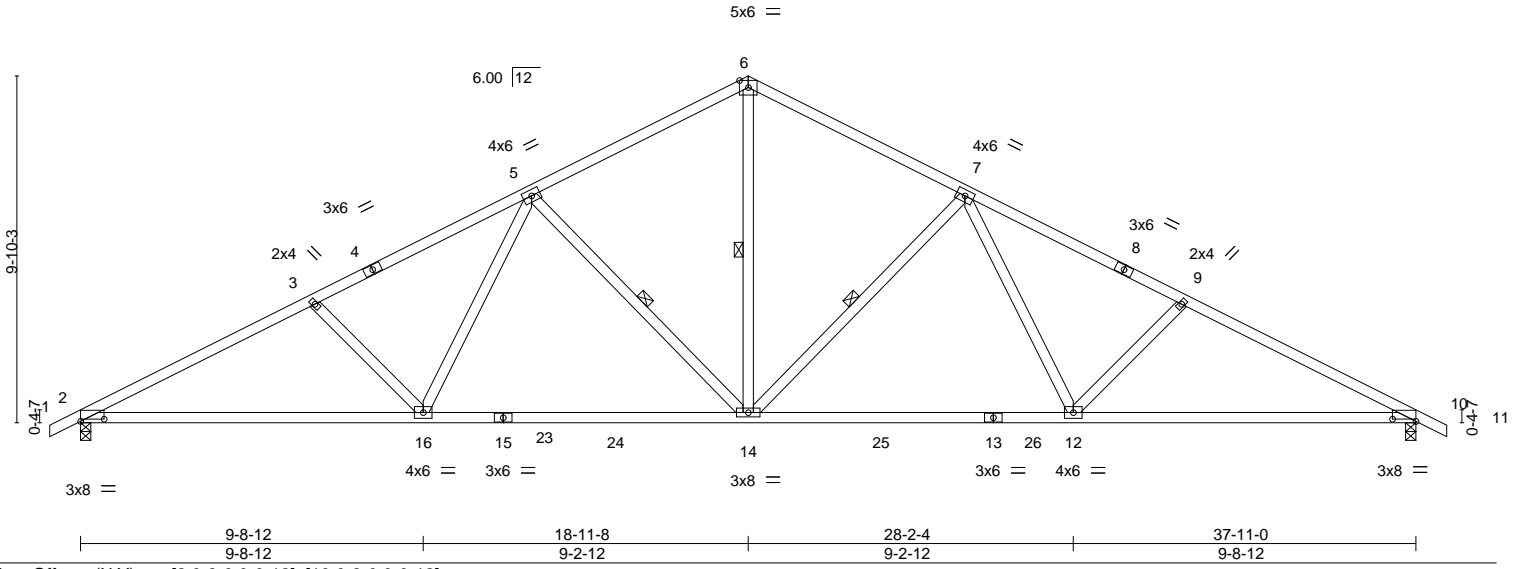


Plate Offsets (X,Y)--	[2:0-8-0,0-0-12], [10:0-8-0,0-0-12]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.61	Vert(LL) -0.28 12-14 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.99	Vert(CT) -0.51 12-14 >888 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.50	Horz(CT) 0.13 10 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.22 14 >999 240	Weight: 196 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 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	WEBS 1 Row at midpt 6-14, 7-14, 5-14

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=-191(LC 10)  
 Max Uplift 2=-379(LC 12), 10=-379(LC 13)  
 Max Grav 2=1569(LC 1), 10=1569(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2843/1920, 3-5=-2585/1807, 5-6=-1801/1416, 6-7=-1801/1416, 7-9=-2584/1807,  
 9-10=-2843/1920  
 BOT CHORD 2-16=-1540/2498, 14-16=-1078/2009, 12-14=-1079/2009, 10-12=-1546/2498  
 WEBS 6-14=-875/1209, 7-14=-701/682, 7-12=-284/564, 9-12=-382/499, 5-14=-701/682,  
 5-16=-284/564, 3-16=-382/499

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=379, 10=379.
  - 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.



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Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	143258135
2501456_OFA	D08	Common	14	1		

Builders FirstSource, Sumter, SC - 29153,

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ID:?hrBCA8NTN1Es8op2ICn\_Py8kIV-e0TS?9\_aSclYaAuhgHBNw43mHK0?KyzOSc6gdmyRukx

0-10-8	8-4-4	13-0-0	18-11-8	24-11-0	29-6-12	37-11-0	38-9-8
0-10-8	8-4-4	4-7-12	5-11-8	5-11-8	4-7-12	8-4-4	0-10-8

Scale = 1:66.0

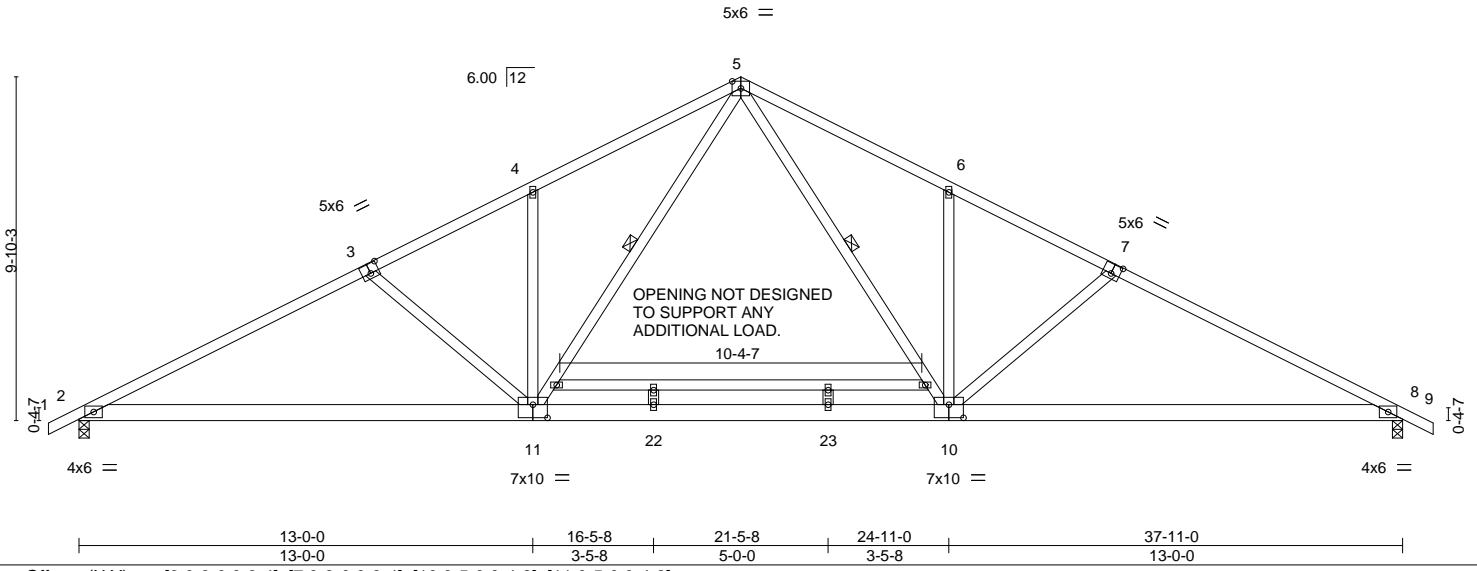


Plate Offsets (X,Y)--	[3:0-3-0,0-3-4], [7:0-3-0,0-3-4], [10:0-5-0,0-4-8], [11:0-5-0,0-4-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	BC 0.97	Vert(LL) -0.23 11-19 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.93	Vert(CT) -0.51 11-19 >894 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.47	Horz(CT) 0.10 8 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.30 10-21 >999 240	Weight: 240 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3 *Except*	WEBS 1 Row at midpt 5-10, 5-11
12-13: 2x4 SP No.2	

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=191(LC 11)  
 Max Uplift 2=-279(LC 12), 8=-279(LC 13)  
 Max Grav 2=1669(LC 1), 8=1669(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2972/1612, 3-4=-2634/1431, 4-5=-2628/1641, 5-6=-2628/1641, 6-7=-2634/1431, 7-8=-2972/1612  
 BOT CHORD 2-11=-1223/2599, 10-11=-485/1686, 8-10=-1226/2599  
 WEBS 5-10=-622/1145, 6-10=-285/399, 7-10=-417/544, 5-11=-622/1145, 4-11=-285/399, 3-11=-417/544

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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, 18-11-8 from left end, supported at two points, 5-0-0 apart.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=279, 8=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.

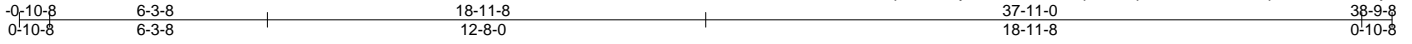


Job 2501456_OFA	Truss D09	Truss Type KINGPOST	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	143258136
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:05:56 2020 Page 1

ID:?hrBCA8NTN1Es8op2lCn\_Py8klV-bOaCQr0qzEYGqU23niDr?V8EE7qMorkhwwbnheyRukv



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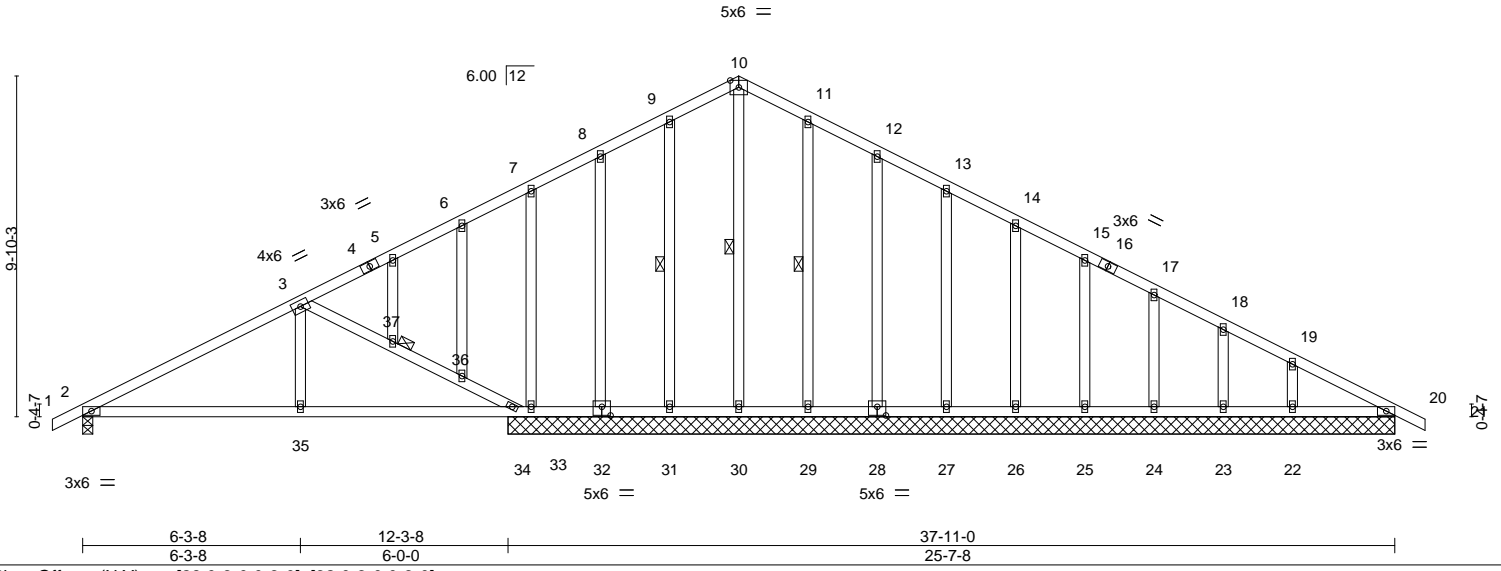


Plate Offsets (X,Y)--	[28:0-3-0,0-3-0], [32:0-3-0,0-3-0]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.49	Vert(LL) 0.07 35-40 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.36	Vert(CT) -0.08 35-40 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.52	Horz(CT) 0.02 20 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS			
				Weight: 251 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 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	WEBS 1 Row at midpt 10-30, 11-29, 9-31
	JOINTS 1 Brace at Jt(s): 37

**REACTIONS.** All bearings 25-7-8 except (jt=length) 2=0-3-8.  
 (lb) - Max Horz 2=-297(LC 17)  
 Max Uplift All uplift 100 lb or less at joint(s) 34, 32 except 2=-209(LC 12), 29=-110(LC 13), 31=-138(LC 12), 28=-133(LC 13), 27=-124(LC 13), 26=-126(LC 13), 25=-124(LC 13), 24=-131(LC 13), 23=-104(LC 13), 22=-187(LC 13), 33=-513(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 29, 31, 28, 27, 26, 25, 24, 23, 22, 32, 33, 20, 20 except 2=505(LC 1), 34=854(LC 3), 30=317(LC 22)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-587/376, 6-7=-95/283, 7-8=-49/324, 8-9=-48/351, 9-10=-84/409, 10-11=-83/408, 11-12=-54/331, 19-20=-310/193  
 BOT CHORD 2-35=-286/503, 34-35=-286/503, 33-34=-180/376, 32-33=-180/376, 31-32=-180/377, 30-31=-180/377, 29-30=-180/377, 28-29=-180/377, 27-28=-180/377, 26-27=-180/377, 25-26=-180/377, 24-25=-180/377, 23-24=-180/377, 22-23=-180/377, 20-22=-180/377  
 WEBS 3-37=-634/580, 36-37=-638/587, 34-36=-659/617, 10-30=-276/0, 3-35=0/270, 7-33=-274/380

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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.
  - 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) 34, 32 except (jt=lb) 2=209, 29=110, 31=138, 28=133, 27=124, 26=126, 25=124, 24=131, 23=104, 22=187, 33=513.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 21, 2020

Job 2501456_OFA	Truss E01	Truss Type Common Supported Gable	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	I43258137
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Builders FirstSource,

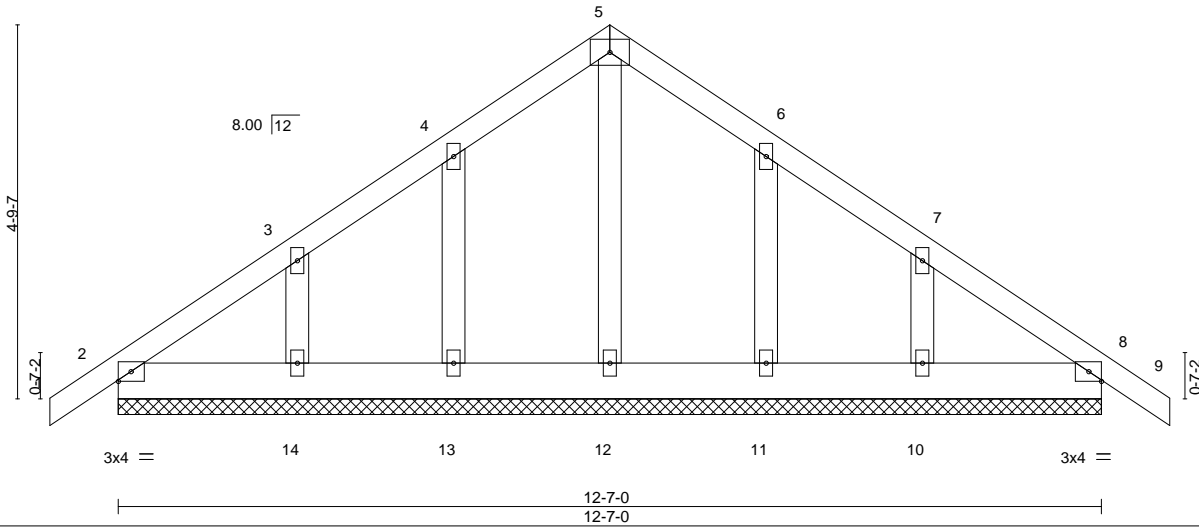
Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:05:57 2020 Page 1

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Scale = 1:29.5



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	-0.00	8	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	8	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 74 lb	FT = 20%

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

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

**REACTIONS.** All bearings 12-7-0.  
 (lb) - Max Horz 2=-212(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8 except 13=-153(LC 12), 14=-189(LC 12), 11=-152(LC 13), 10=-187(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8 except (jt=lb) 13=153, 14=189, 11=152, 10=187.



October 21, 2020

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

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



818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	I43258138
2501456_OFA	E02	Common	2	1		

Builders FirstSource,

Sumter, SC - 29153,

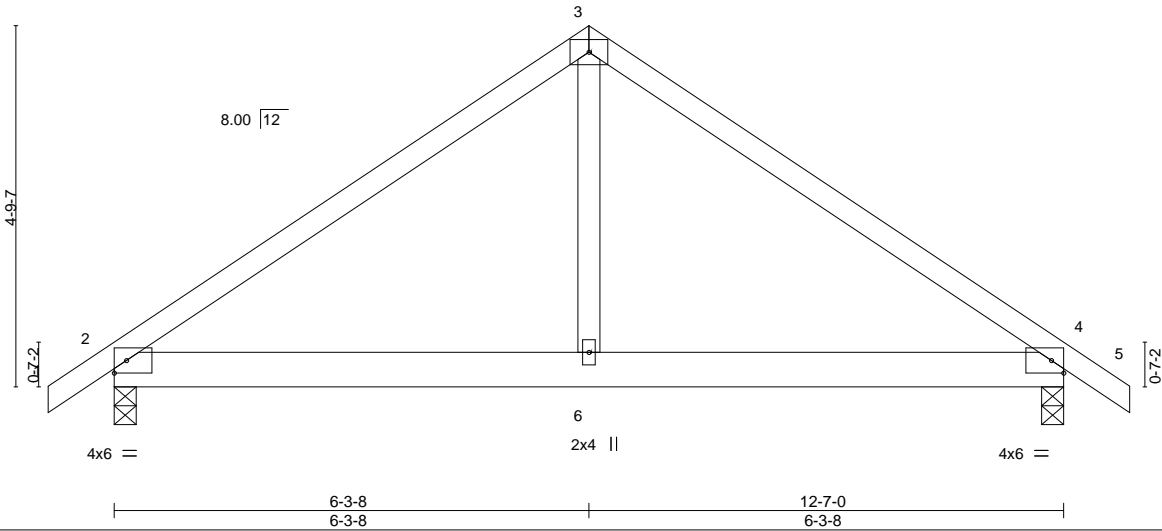
8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:05:58 2020 Page 1

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4x6 =

Scale = 1:30.5



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.35	Vert(LL)	0.04	6-9	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.27	Vert(CT)	-0.04	6-9	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	-0.01	2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS						Weight: 62 lb	FT = 20%

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

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

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
 Max Horz 2=212(LC 11)  
 Max Uplift 2=258(LC 12), 4=258(LC 13)  
 Max Grav 2=556(LC 1), 4=556(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-691/348, 3-4=-691/348  
 BOT CHORD 2-6=-117/460, 4-6=-117/460  
 WEBS 3-6=-31/302

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=258, 4=258.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 21, 2020

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818 Soundside Road  
 Edenton, NC 27932

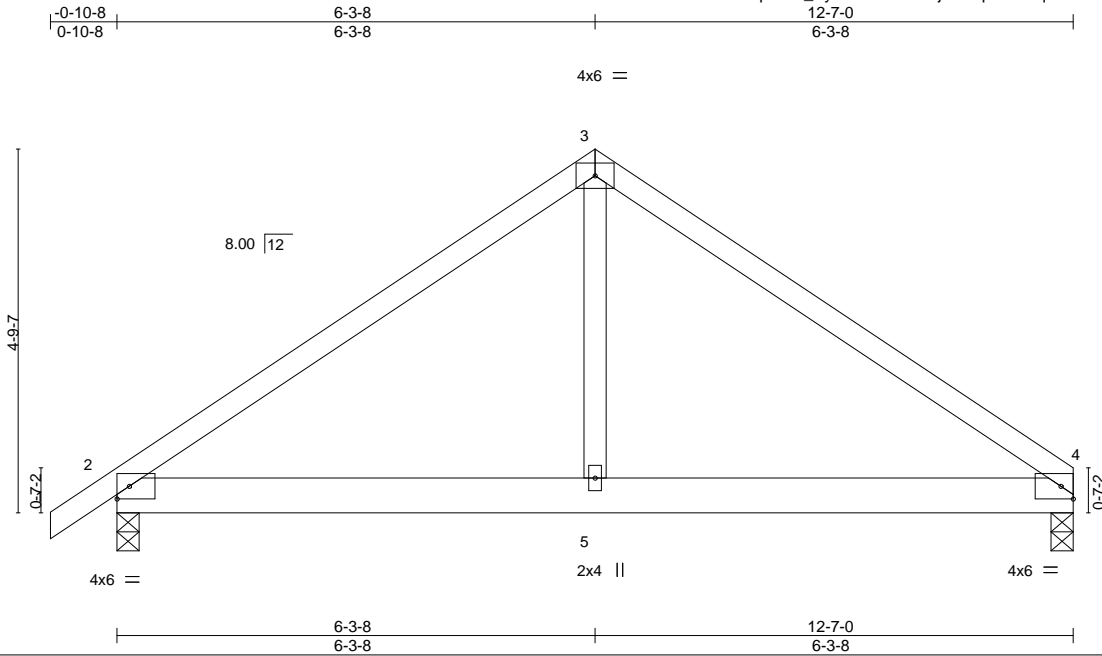


Job 2501456_OFA	Truss E03	Truss Type Common	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	I43258139
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:05:59 2020 Page 1

ID: ?hrBCA8NTN1Es8op2lCn\_Py8klV-?zGL2s2jG9wqhxmeTqnYd7mnfLlV?Jq7ctpRlzyRuks



Scale = 1:30.3

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 0.35	Vert(LL)	0.04	5-8	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.27	Vert(CT)	-0.03	5-8	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.12	Horz(CT)	-0.01	2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS						Weight: 60 lb	FT = 20%

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

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

**REACTIONS.** (size) 4=0-3-8, 2=0-3-8  
Max Horz 2=204(LC 11)  
Max Uplift 4=-215(LC 13), 2=-259(LC 12)  
Max Grav 4=502(LC 1), 2=558(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-696/355, 3-4=-696/355  
BOT CHORD 2-5=-135/448, 4-5=-135/448  
WEBS 3-5=-38/303

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=215, 2=259.
- 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.



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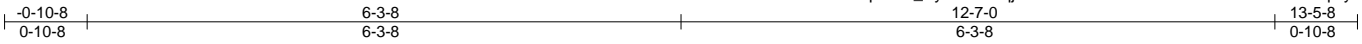


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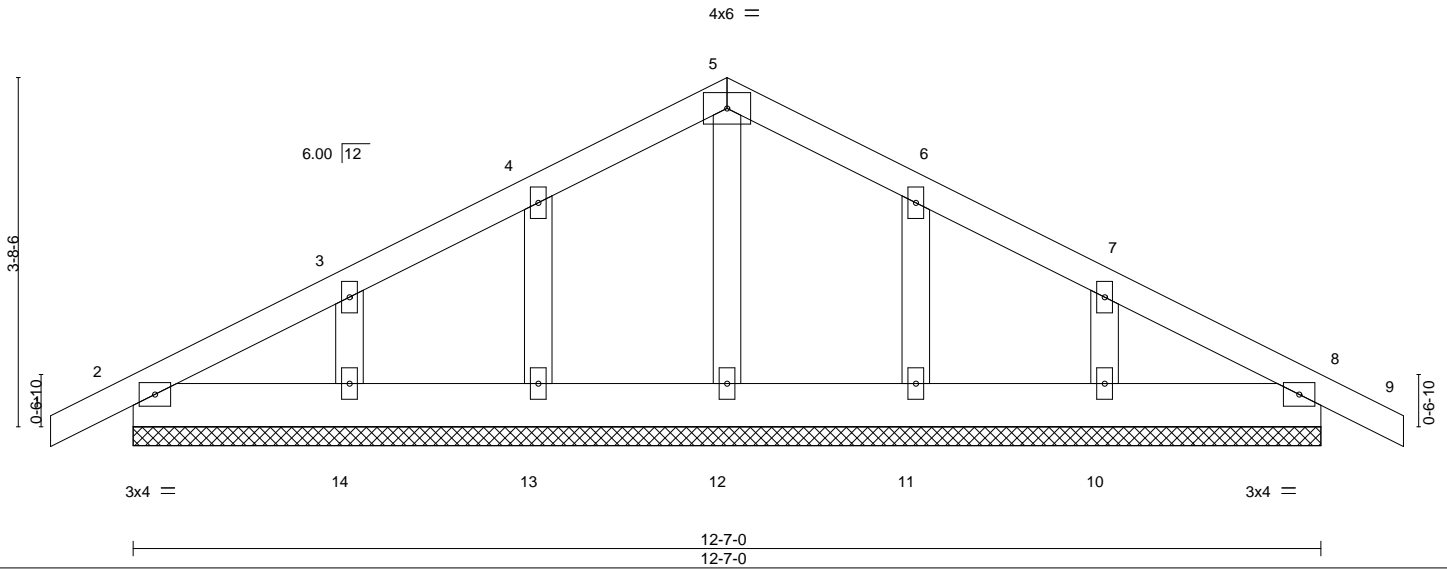
Job 2501456_OFA	Truss E04	Truss Type Common Supported Gable	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	143258140
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:00 2020 Page 1  
ID:?hrBCA8NTN1Es8op2lCn\_Py8klV-TAqjGC3L1S2hJ5Lr0YIn9LJ0okHVknwGrXZ?qQyRukr



Scale = 1:24.4



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	-0.00	8	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	8	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 67 lb	FT = 20%

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

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

**REACTIONS.** All bearings 12-7-0.  
(lb) - Max Horz 2=-107(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 8 except 13=-129(LC 12), 14=-150(LC 12), 11=-128(LC 13), 10=-148(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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, 8 except (jt=lb) 13=129, 14=150, 11=128, 10=148.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 8.



October 21, 2020

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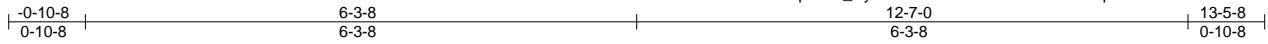
818 Soundside Road  
Edenton, NC 27932

Job 2501456_OFA	Truss E05	Truss Type Common	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	I43258141
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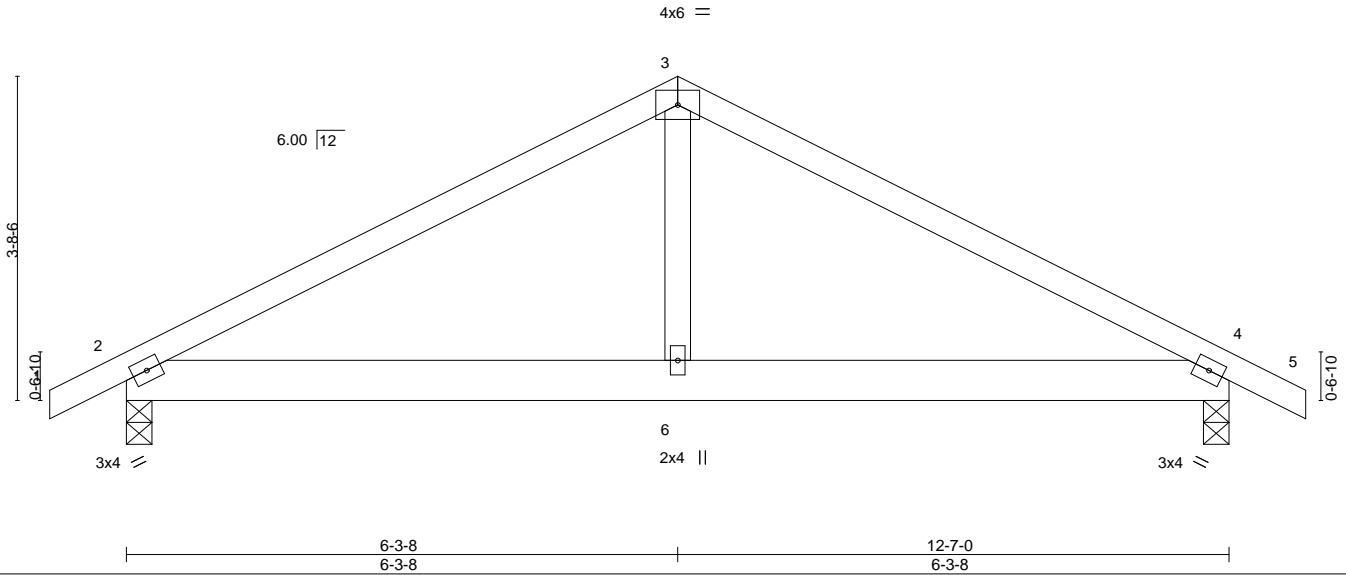
Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:01 2020 Page 1

ID: ?hrBCA8NTN1Es8op2ICn\_Py8klV-xMO5TY4zomAYwFw1aFp0iYr7m8aNTDLQ3BIYNsyRukq



Scale = 1:26.3



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 0.38	Vert(LL)	0.03	6-9	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.24	Vert(CT)	-0.04	6-9	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS						Weight: 58 lb	FT = 20%

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

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

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
 Max Horz 2=-107(LC 17)  
 Max Uplift 2=-268(LC 12), 4=-268(LC 13)  
 Max Grav 2=556(LC 1), 4=556(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-696/522, 3-4=-696/522  
 BOT CHORD 2-6=-277/552, 4-6=-277/552  
 WEBS 3-6=-36/298

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=268, 4=268.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 21, 2020

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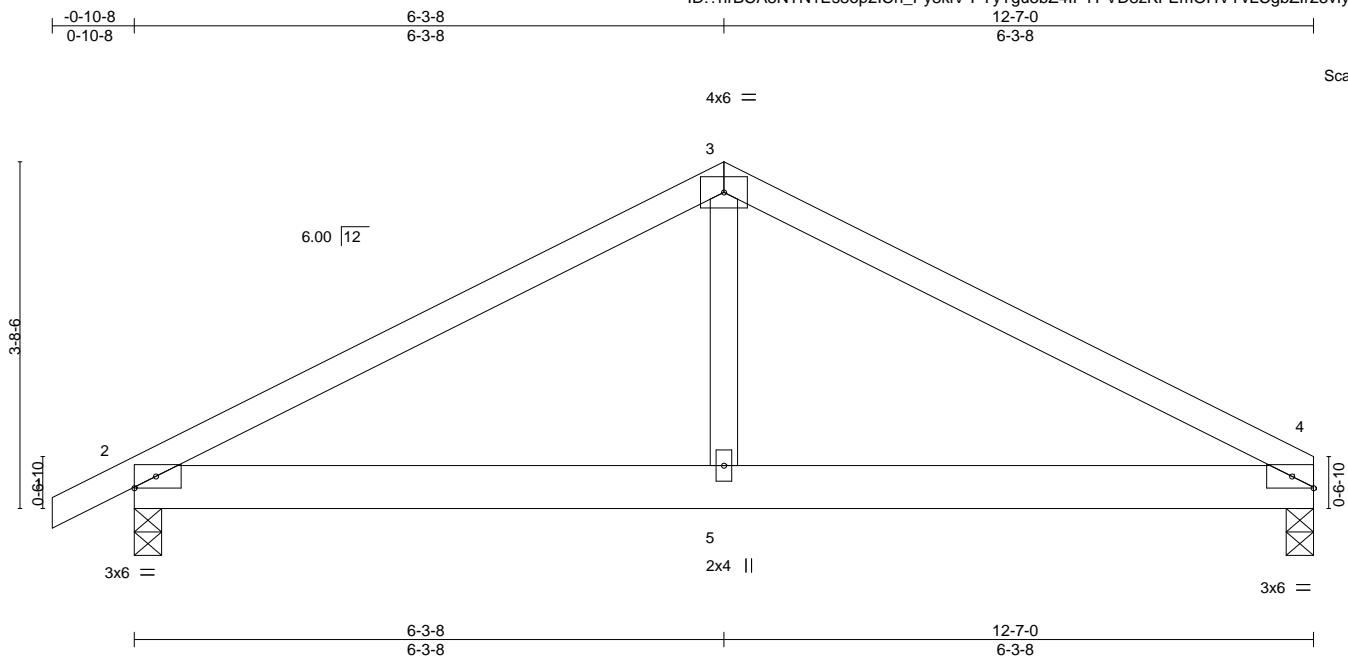
ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job 2501456_OFA	Truss E06	Truss Type Common	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	143258142
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:02 2020 Page 1

ID:?hrBCA8NTN1Es8op2ICn\_Py8kIV-PYyTgu5bZ4IPYPVD8zKFEmOHVYvLCgbZlr25vlyRukp



Scale = 1:24.6

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.38	Vert(LL)	0.04	5-8	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.26	Vert(CT)	-0.04	5-8	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS						Weight: 57 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3

**BRACING-**

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

**REACTIONS.**

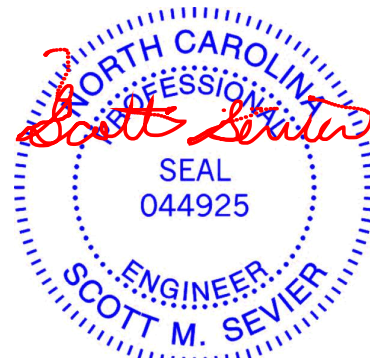
(size) 4=0-3-8, 2=0-3-8  
 Max Horz 2=120(LC 12)  
 Max Uplift 4=225(LC 13), 2=269(LC 12)  
 Max Grav 4=502(LC 1), 2=558(LC 1)

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

TOP CHORD 2-3=-701/532, 3-4=-701/532  
 BOT CHORD 2-5=-319/557, 4-5=-319/557  
 WEBS 3-5=-44/299

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=225, 2=269.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 21, 2020

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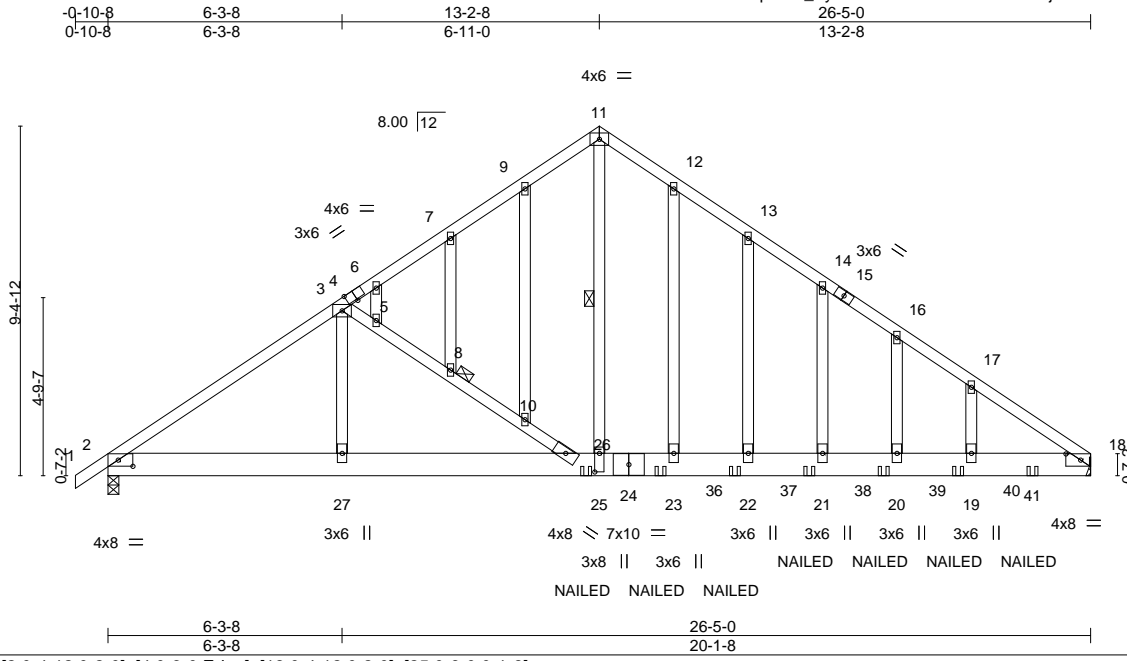
818 Soundside Road  
 Edenton, NC 27932

Job 2501456_OFA	Truss G01	Truss Type Common Girder	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	143258143
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:04 2020 Page 1

ID:?hrBCA8NTN1Es8op2/Cn\_Py8kIV-Mx3E5a6r5hY7nifcFNMjKBta0MYxfVKsm9XCzByRukn



Scale = 1:61.9

Plate Offsets (X, Y)--	[2:0-4-12,0-2-0], [4:0-3-0,Edge], [18:0-4-12,0-2-0], [25:0-6-0,0-1-8]
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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 0.57	Vert(LL) 0.58 20-21 >544 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.44	Vert(CT) -0.41 20-21 >765 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.35	Horz(CT) 0.01 18 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS		Weight: 210 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-3-13 oc purlins.
BOT CHORD 2x8 SP DSS	BOT CHORD Rigid ceiling directly applied or 9-6-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 11-25
OTHERS 2x4 SP No.2	JOINTS 1 Brace at Jt(s): 8

**REACTIONS.** (size) 2=0-3-8, 18=Mechanical  
 Max Horz 2=408(LC 7)  
 Max Uplift 2=628(LC 8), 18=774(LC 9)  
 Max Grav 2=1175(LC 1), 18=1209(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1612/841, 3-6=-1318/915, 6-7=-1304/941, 7-9=-1268/981, 9-11=-1261/1050,  
 11-12=-1250/1014, 12-13=-1263/918, 13-14=-1261/851, 14-16=-1269/794,  
 16-17=-1279/737, 17-18=-1311/670, 3-5=-554/449, 5-8=-565/467, 8-10=-594/511,  
 10-26=-692/633  
 BOT CHORD 2-27=-792/1467, 26-27=-792/1467, 25-26=-494/1070, 23-25=-494/1070, 22-23=-494/1070,  
 21-22=-494/1070, 20-21=-494/1070, 19-20=-494/1070, 18-19=-494/1070  
 WEBS 11-25=-1006/1180, 3-27=-147/321

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=628, 18=774.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard



October 21, 2020

Continued on page 2

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY  <b>TRENCO</b>  <small>A MiTek Affiliate</small></p> <p>818 Soundside Road        Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	I43258143
2501456_OFA	G01	Common Girder	2	1		
					Job Reference (optional)	

Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:04 2020 Page 2  
 ID:?hrBCA8NTN1Es8op2lCn\_Py8klV-Mx3E5a6r5hY7nifcFNMjKBTa0MYxfVKsm9XCzByRukn

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
  - Vert: 1-3=-60, 3-11=-60, 11-18=-60, 28-33=-20
- Concentrated Loads (lb)
  - Vert: 26=-40(F) 36=-30(F) 37=-30(F) 38=-30(F) 39=-30(F) 40=-30(F) 41=-30(F)

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 Edenton, NC 27932

Job 2501456_OFA	Truss G02	Truss Type Common	Qty 4	Ply 1	H&H/Prelude/ Job Reference (optional)	143258144
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:05 2020 Page 1

ID:?hrBCA8NTN1Es8op2lCn\_Py8klV-q7dcJw7Us\_g\_PsEop5tysO0lYlpB0sl0\_pGmWdyRukm



4x6 =

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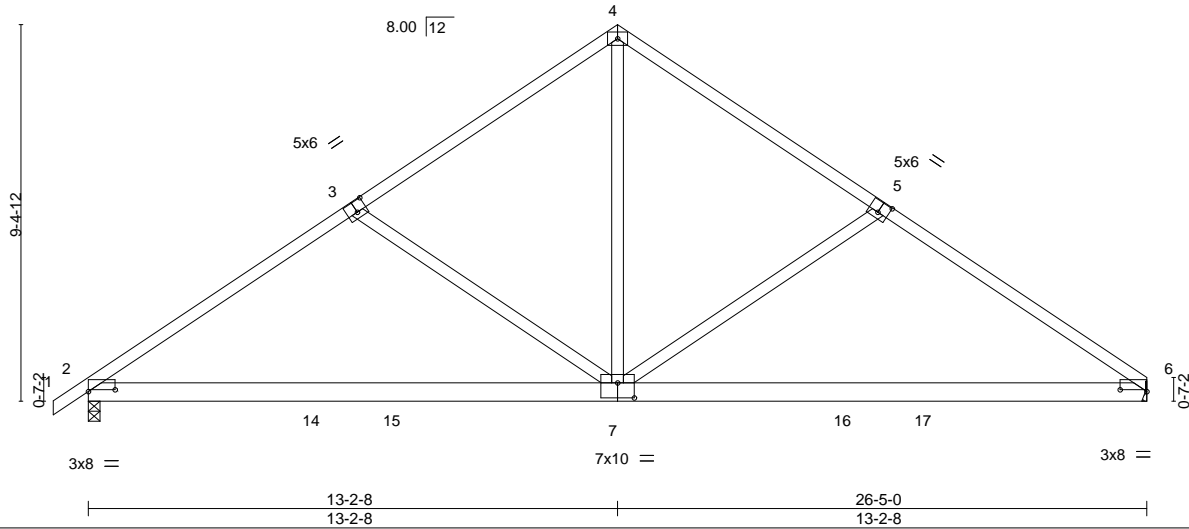


Plate Offsets (X,Y)--	[2:0-8-0,0-0-9], [3:0-3-0,0-3-4], [5:0-3-0,0-3-4], [6:0-8-0,0-0-9], [7:0-5-0,0-4-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.52	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.76	Vert(LL) -0.15 7-13 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.76	Vert(CT) -0.33 7-13 >961 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.02 6 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.11 7-13 >999 240	Weight: 147 lb	FT = 20%

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

**REACTIONS.** (size) 2=0-3-8, 6=Mechanical  
 Max Horz 2=408(LC 11)  
 Max Uplift 2=-497(LC 12), 6=-455(LC 13)  
 Max Grav 2=1126(LC 19), 6=1071(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1687/836, 3-4=-1390/700, 4-5=-1390/700, 5-6=-1686/837  
 BOT CHORD 2-7=-639/1369, 6-7=-532/1266  
 WEBS 4-7=-418/1044, 5-7=-624/549, 3-7=-625/547

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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
  - 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=497, 6=455.
  - 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 2501456_OFA	Truss G03	Truss Type Common Girder	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	143258145
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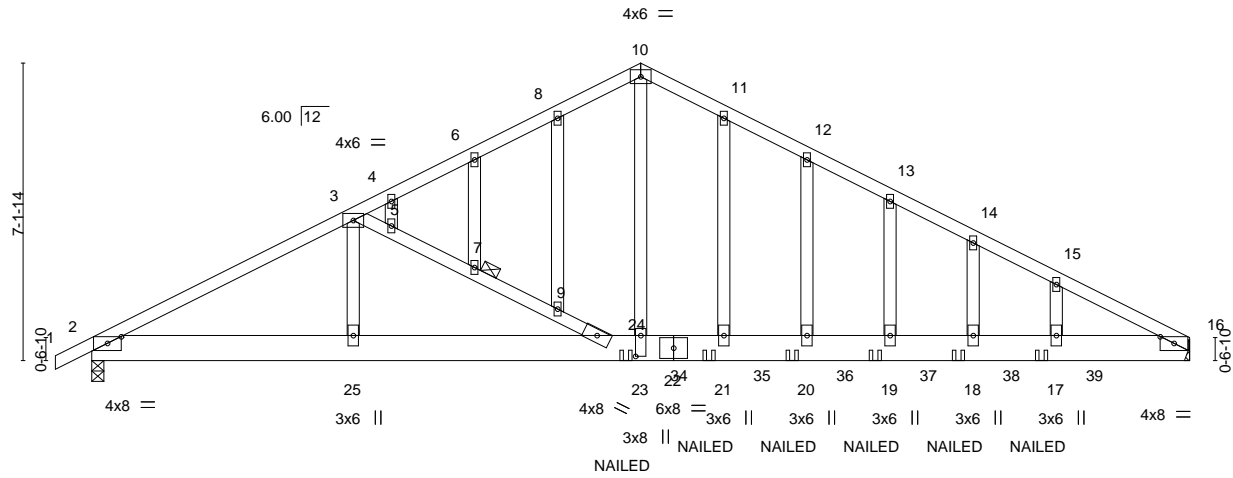


Plate Offsets (X,Y)--	[2:0-4-0,0-1-15], [16:0-4-0,0-1-15], [23:0-6-0,0-1-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.51	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.44	Vert(LL) 0.51 18-19 >621 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.62	Vert(CT) -0.41 18-19 >774 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.01 16 n/a n/a		
	Code IRC2015/TPI2014			Weight: 187 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-11-7 oc purlins.
BOT CHORD 2x8 SP DSS	BOT CHORD Rigid ceiling directly applied or 9-5-5 oc bracing.
WEBS 2x4 SP No.2	JOINTS 1 Brace at Jt(s): 7
OTHERS 2x4 SP No.2	

**REACTIONS.** (size) 16=Mechanical, 2=0-3-8  
 Max Horz 2=224(LC 8)  
 Max Uplift 16=-715(LC 9), 2=-634(LC 8)  
 Max Grav 16=1163(LC 1), 2=1166(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1921/1022, 3-4=-1558/992, 4-6=-1549/1012, 6-8=-1517/1040, 8-10=-1531/1094,  
 10-11=-1521/1067, 11-12=-1526/994, 12-13=-1526/924, 13-14=-1533/884,  
 14-15=-1540/844, 15-16=-1557/799, 3-5=-452/433, 5-7=-465/448, 7-9=-492/479,  
 9-24=-555/566  
 BOT CHORD 2-25=-978/1652, 24-25=-978/1652, 23-24=-665/1353, 21-23=-665/1353, 20-21=-665/1353,  
 19-20=-665/1353, 18-19=-665/1353, 17-18=-665/1353, 16-17=-665/1353  
 WEBS 10-23=-842/1171, 3-25=-87/279

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) All plates are 2x4 MT20 unless otherwise indicated.
  - 5) Gable studs spaced at 2-0-0 oc.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 8) Refer to girder(s) for truss to truss connections.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=715, 2=634.
  - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
  - 12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard



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Continued on page 2

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

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

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

818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/
2501456_OFA	G03	Common Girder	2	1	I43258145

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 ID:?hrBCA8NTN1Es8op2lCn\_Py8klV-IKB\_WG86dlpr10p\_NoPBPCzXV9EP7Le9DT0J23yRukl

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-60, 3-10=-60, 10-16=-60, 26-31=-20

Concentrated Loads (lb)

Vert: 34=-40(F) 35=-25(F) 36=-25(F) 37=-25(F) 38=-25(F) 39=-25(F)

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	143258146
2501456_OFA	G04	Common	4	1		

Builders FirstSource, Sumter, SC - 29153,

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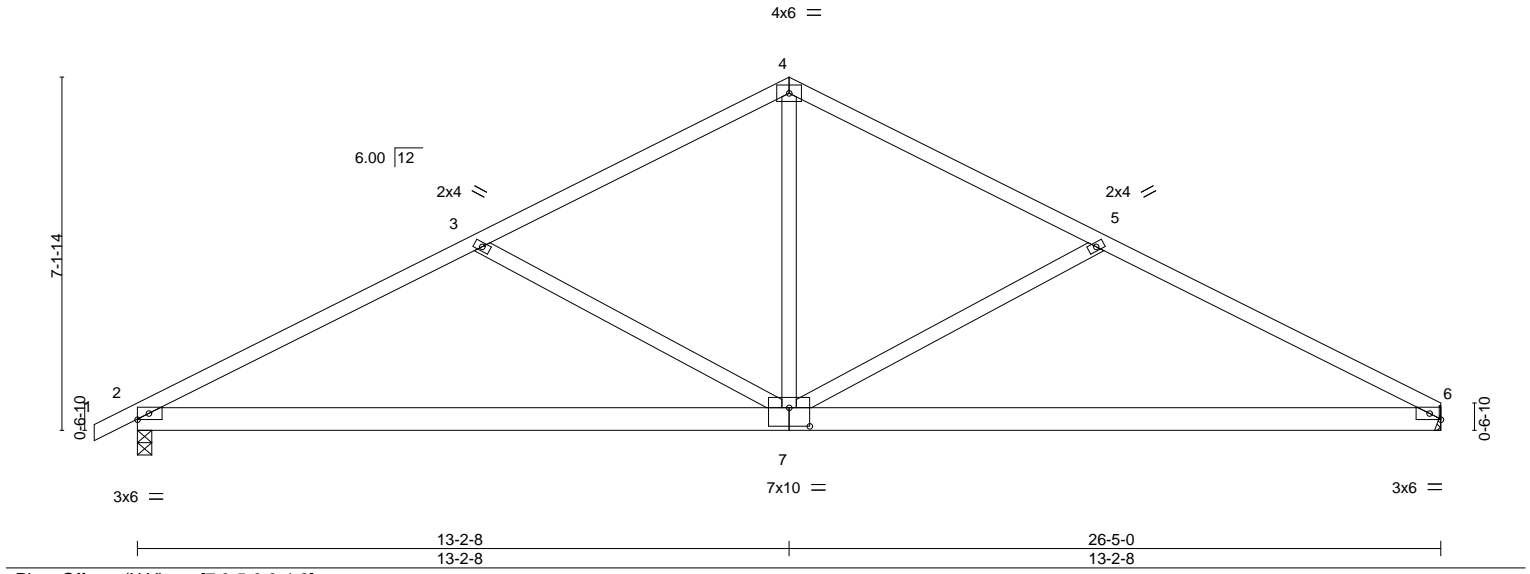


Plate Offsets (X,Y)--	[7:0-5-0,0-4-8]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.54	Vert(LL)	-0.16	7-10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.78	Vert(CT)	-0.34	7-10	>936		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.48	Horz(CT)	0.03	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.12	7-10	>999	Weight: 138 lb	FT = 20%

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

**REACTIONS.** (size) 6=Mechanical, 2=0-3-8  
 Max Horz 2=224(LC 12)  
 Max Uplift 6=475(LC 13), 2=517(LC 12)  
 Max Grav 6=1056(LC 1), 2=1110(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1753/1240, 3-4=-1325/939, 4-5=-1325/939, 5-6=-1755/1241  
 BOT CHORD 2-7=-956/1501, 6-7=-958/1503  
 WEBS 4-7=-433/783, 5-7=-476/599, 3-7=-474/597

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=475, 2=517.
- 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. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job 2501456_OFA	Truss H01	Truss Type Roof Special Girder	Qty 2	Ply 2	H&H/Prelude/ Job Reference (optional)	143258147
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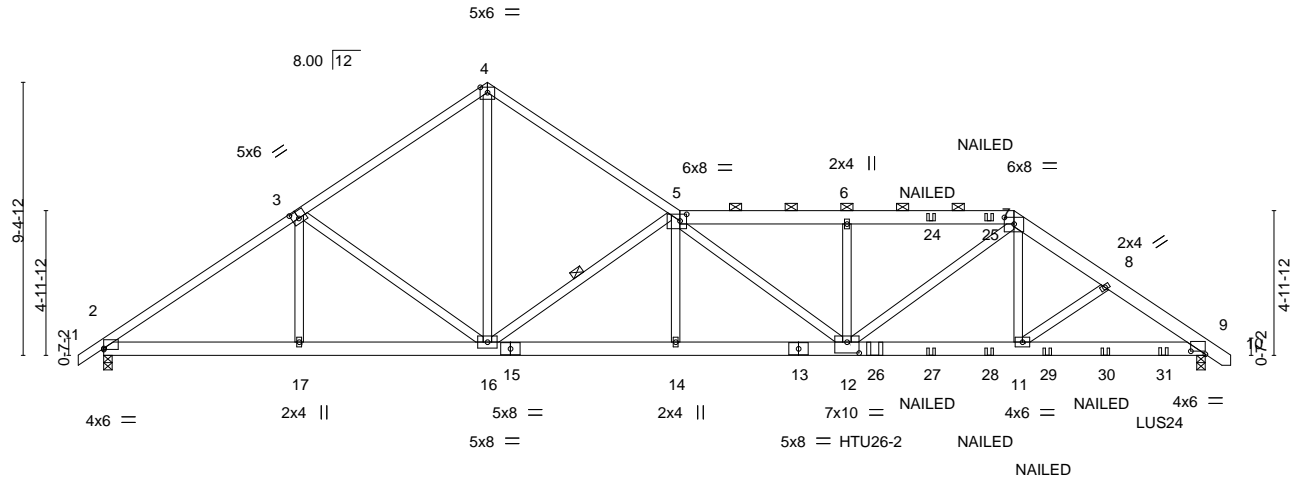
Builders FirstSource, Sumter, SC - 29153,

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ID:?hrBCA8NTN1Es8op2ICn\_Py8klV-ivt79HA\_wDBQuUXZ2xyu1EBRhNAJkK7bvREzfOyRuki

0-10-8	6-8-12	13-2-8	19-10-0	25-7-0	31-4-0	34-5-9	37-11-0	38-9-8
0-10-8	6-8-12	6-5-12	6-7-8	5-9-0	5-9-0	3-1-9	3-5-7	0-10-8

Scale = 1:79.3



6-8-12	13-2-8	19-10-0	25-7-0	31-4-0	37-11-0
6-8-12	6-5-12	6-7-8	5-9-0	5-9-0	6-7-0

Plate Offsets (X, Y)-- [2:0-0-0,0-0-7], [3:0-2-12,0-3-0], [5:0-2-12,0-2-12], [7:0-4-0,0-2-12], [9:0-6-0,0-1-4], [12:0-5-0,0-4-8]

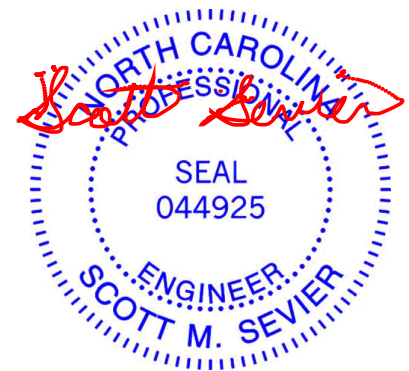
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.57	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.75	Vert(LL) 0.28 11-12 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.51	Vert(CT) -0.32 14-16 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.08 9 n/a n/a		
	Code IRC2015/TPI2014			Weight: 521 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 5-7,7-10: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (5-10-12 max.): 5-7.
BOT CHORD 2x6 SP No.1 *Except* 13-15: 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 8-11-2 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 5-16

**REACTIONS.** (size) 2=0-3-8, 9=0-3-8  
 Max Horz 2=-416(LC 6)  
 Max Uplift 2=-1091(LC 8), 9=-2252(LC 9)  
 Max Grav 2=2258(LC 1), 9=3673(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3485/1703, 3-4=-3111/1759, 4-5=-3105/1683, 5-6=-6841/4096, 6-7=-6839/4094,  
 7-8=-5631/3483, 8-9=-5741/3518  
 BOT CHORD 2-17=-1445/2811, 16-17=-1444/2812, 14-16=-3136/6094, 12-14=-3142/6096,  
 11-12=-2620/4623, 9-11=-2778/4697  
 WEBS 3-16=-617/555, 4-16=-1606/2932, 5-16=-4375/2734, 5-12=-1286/1298, 6-12=-402/466,  
 7-12=-1447/2820, 7-11=-660/1032, 8-11=-249/311

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=1091, 9=2252.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Use Simpson Strong-Tie HTU26-2 (20-10d Girder, 14-10d Truss, Single Ply Girder) or equivalent at 26-6-8 from the left end to connect truss(es) to front face of bottom chord.
  - Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 36-5-12 from the left end to connect truss(es) to front face of bottom chord.
  - Fill all nail holes where hanger is in contact with lumber.



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<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b>          Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY  <b>TRENCO</b>          A MiTek Affiliate</p> <p>818 Soundside Road          Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	I43258147
2501456_OFA	H01	Roof Special Girder	2	<b>2</b>	Job Reference (optional)	

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**NOTES-**

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

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-4=-60, 4-5=-60, 5-7=-60, 7-10=-60, 18-21=-20

Concentrated Loads (lb)

Vert: 24=-22(F) 25=-22(F) 26=-1863(F) 27=-155(F) 28=-155(F) 29=-203(F) 30=-143(F) 31=-239(F)

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	143258148
2501456_OFA	H02	Roof Special	2	1		

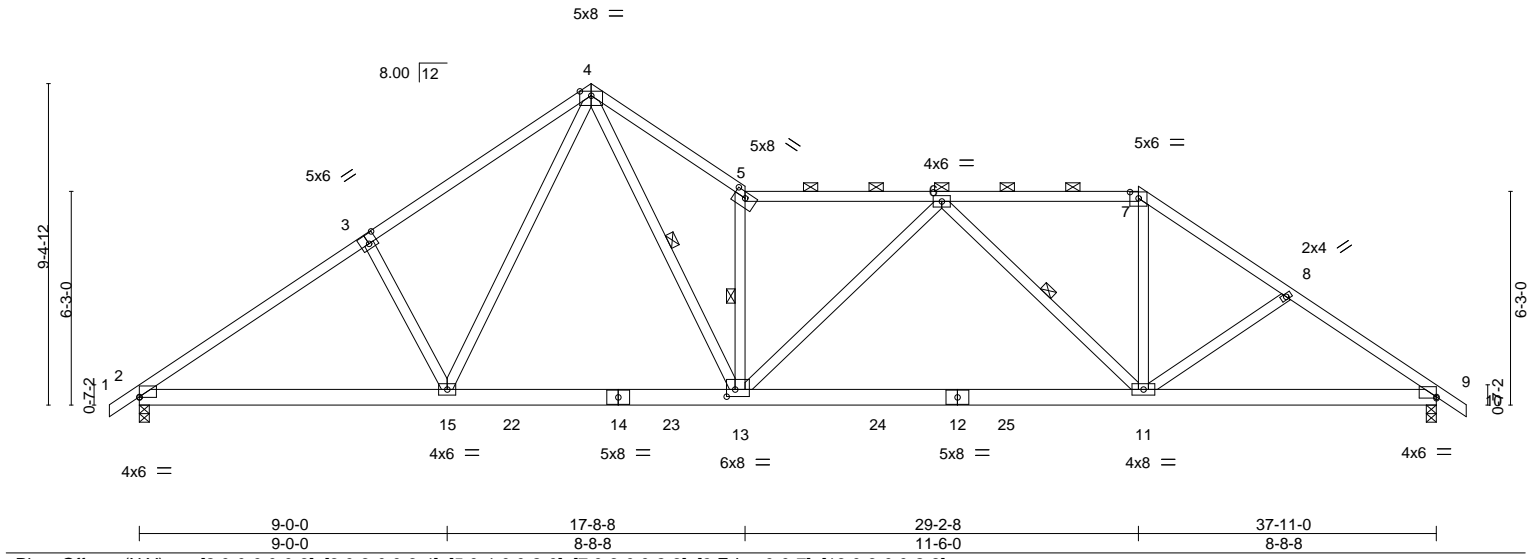
Builders FirstSource, Sumter, SC - 29153,

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0-10-8	6-8-9	13-2-8	17-8-8	23-5-8	29-2-8	33-6-5	37-11-0	38-9-8
0-10-8	6-8-9	6-5-15	4-6-0	5-9-0	5-9-0	4-3-13	4-4-11	0-10-8

Scale = 1:67.4



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.58	Vert(LL) -0.24 11-13 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.75	Vert(CT) -0.50 11-13 >911 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.93	Horz(CT) 0.07 9 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.28 11-13 >999 240	Weight: 240 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x6 SP No.2	2-0-0 oc purlins (3-3-3 max.): 5-7.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied.
	WEBS 1 Row at midpt 4-13, 5-13, 6-11

**REACTIONS.** (size) 2=0-3-8, 9=0-3-8  
 Max Horz 2=417(LC 11)  
 Max Uplift 2=630(LC 12), 9=802(LC 13)  
 Max Grav 2=1569(LC 1), 9=1569(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2419/1274, 3-4=-2413/1371, 4-5=-3208/1910, 5-6=-2613/1506, 6-7=-1874/1125, 7-8=-2195/1256, 8-9=-2363/1330  
 BOT CHORD 2-15=-860/2072, 13-15=-492/1575, 11-13=-1107/2308, 9-11=-959/1896  
 WEBS 3-15=-566/516, 4-15=-418/763, 4-13=-1319/2235, 5-13=-2021/1311, 6-13=-103/409, 6-11=-797/550, 7-11=-409/921, 8-11=-339/311

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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) 2=630, 9=802.
  - 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

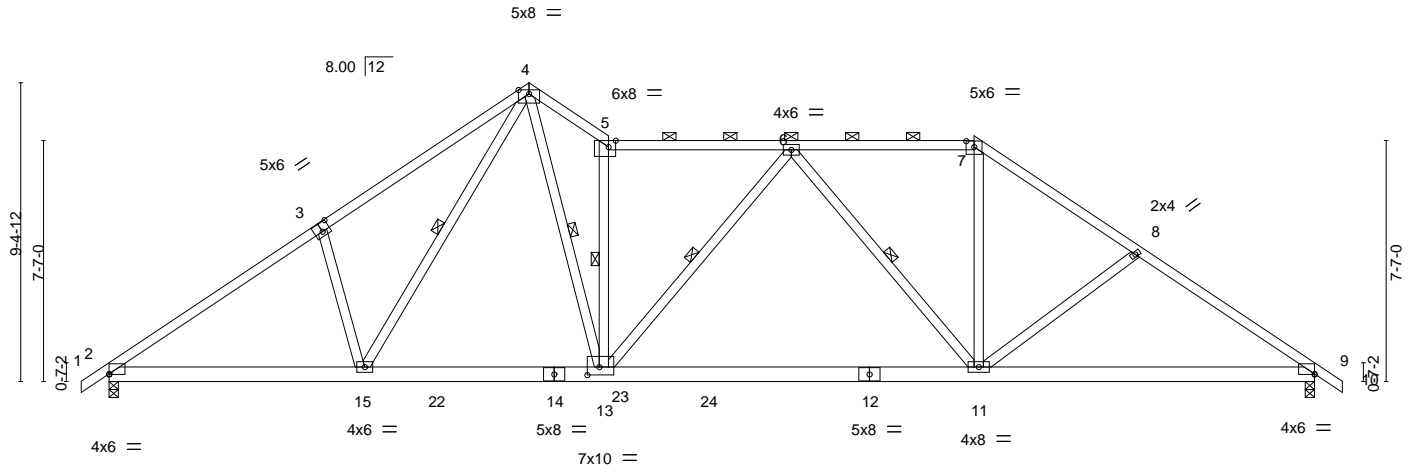


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Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	143258149
2501456_OFA	H03	Roof Special	2	1		
Builders FirstSource, Sumter, SC - 29153,						8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:11 2020 Page 1
ID:?hrBCA8NTN1Es8op2lCn_Py8klV-eH_tZzCERqR77nhyAM_M6fGmsAs_oZLuNlj4jHyRukg						
Job Reference (optional)						

0-10-8	6-8-9	13-2-8	15-8-8	21-5-8	27-2-8	32-3-5	37-11-0	38-9-8
0-10-8	6-8-9	6-5-15	2-6-0	5-9-0	5-9-0	5-0-13	5-7-11	0-10-8

Scale = 1:72.5



7-10-11	15-8-8	27-2-8	37-11-0
7-10-11	7-9-13	11-6-0	10-8-8

Plate Offsets (X,Y)-- [2:0-0,0-0-3], [3:0-3,0-0-3-4], [5:0-2-11,Edge], [7:0-3-0,0-2-3], [9:Edge,0-0-3], [13:0-4-8,0-3-0]

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 0.60	Vert(LL)	-0.25	11-13	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.74	Vert(CT)	-0.46	11-13	>987		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.78	Horz(CT)	0.07	9	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.21	11-13	>999	Weight: 248 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x6 SP No.2	2-0-0 oc purlins (3-8-5 max.): 5-7.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied.
	WEBS 1 Row at midpt 4-13, 5-13, 6-13, 6-11, 4-15

**REACTIONS.** (size) 2=0-3-8, 9=0-3-8  
 Max Horz 2=-417(LC 10)  
 Max Uplift 2=-630(LC 12), 9=-802(LC 13)  
 Max Grav 2=1582(LC 19), 9=1569(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2392/1272, 3-4=-2502/1466, 4-5=-2572/1582, 5-6=-2128/1280, 6-7=-1812/1111, 7-8=-2115/1228, 8-9=-2324/1316  
 BOT CHORD 2-15=-860/2092, 13-15=-492/1612, 11-13=-865/1963, 9-11=-919/1851  
 WEBS 3-15=-591/537, 4-13=-1072/1894, 5-13=-1575/1062, 7-11=-383/863, 6-13=-142/252, 6-11=-557/433, 8-11=-460/404, 4-15=-523/836

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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) 2=630, 9=802.
  - 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) 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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Job 2501456_OFA	Truss H04	Truss Type HIP	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	143258150
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ID:?hrBCA8NTN1Es8op2lCn\_Py8klV-bg6e\_fDVzShrM5rKHm1qB4L2X\_bkGSdBq3CB09yRuke

0-10-8	6-1-0	12-8-8	18-11-8	25-2-8	31-10-0	37-11-0	38-9-8
0-10-8	6-1-0	6-7-8	6-3-0	6-3-0	6-7-8	6-1-0	0-10-8

Scale = 1:67.0

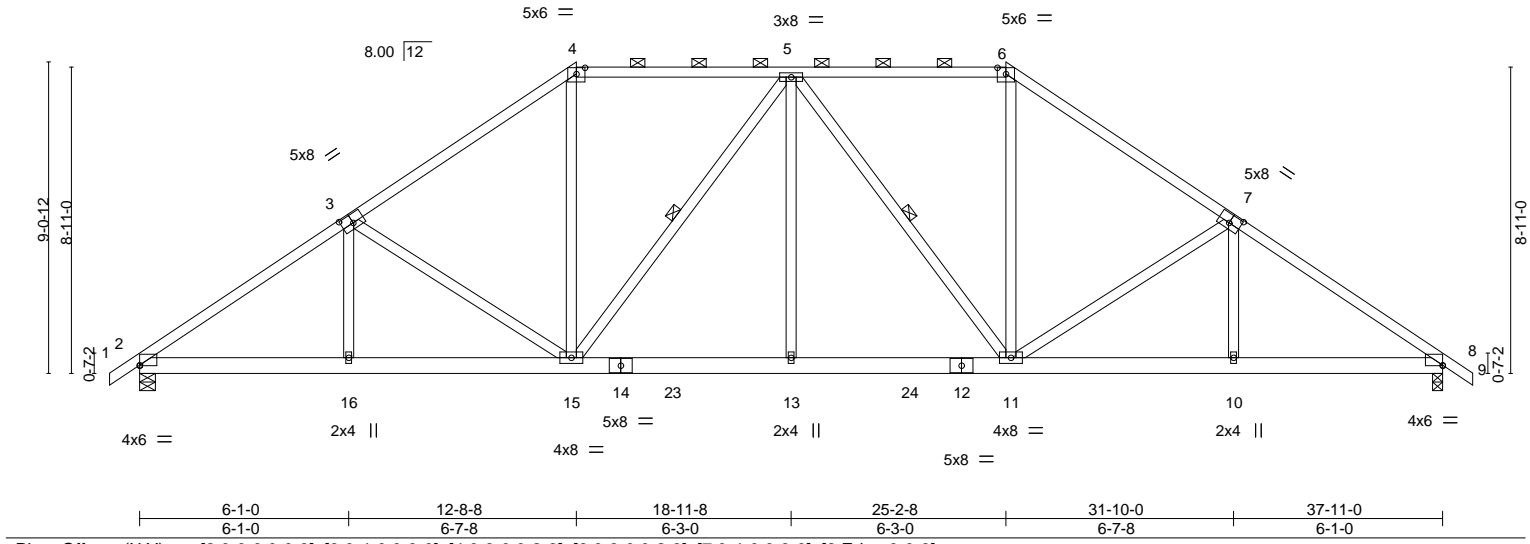


Plate Offsets (X,Y)--	[2:0-0,0-0-3], [3:0-4,0-0-3-0], [4:0-3-0,0-2-3], [6:0-3-0,0-2-3], [7:0-4-0,0-3-0], [8:Edge,0-0-3]
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LOADING (psf)	SPACING-	2-3-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.84	Vert(LL)	-0.10	13-15	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.53	Vert(CT)	-0.21	13-15	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.86	Horz(CT)	0.08	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.12	13	>999		
								Weight: 257 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 3-4,6-7: 2x4 SP SS	TOP CHORD Structural wood sheathing directly applied or 2-11-12 oc purlins, except
BOT CHORD 2x6 SP No.2	2-0-0 oc purlins (3-10-11 max.): 4-6.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 7-4-12 oc bracing.
	WEBS 1 Row at midpt 5-15, 5-11

**REACTIONS.** (size) 2=0-5-8, 8=0-3-8  
 Max Horz 2=449(LC 10)  
 Max Uplift 2=700(LC 12), 8=700(LC 13)  
 Max Grav 2=1765(LC 1), 8=1765(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2661/1441, 3-4=-2217/1355, 4-5=-1921/1251, 5-6=-1921/1251, 6-7=-2217/1355, 7-8=-2660/1441  
 BOT CHORD 2-16=-992/2093, 15-16=-993/2092, 13-15=-736/1929, 11-13=-736/1929, 10-11=-998/2093, 8-10=-996/2094  
 WEBS 3-15=-772/549, 4-15=-368/811, 5-15=-548/442, 5-13=0/384, 5-11=-548/440, 6-11=-368/811, 7-11=-772/550

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - 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=700, 8=700.
  - 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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Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	143258151
2501456_OFA	H05	HIP	2	1		

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Job Reference (optional)

0-10-8	7-7-11	14-11-8	18-11-8	22-11-8	30-3-5	37-11-0	38-9-8
0-10-8	7-7-11	7-3-13	4-0-0	4-0-0	7-3-13	7-7-11	0-10-8

6x8 =

Scale = 1:69.7

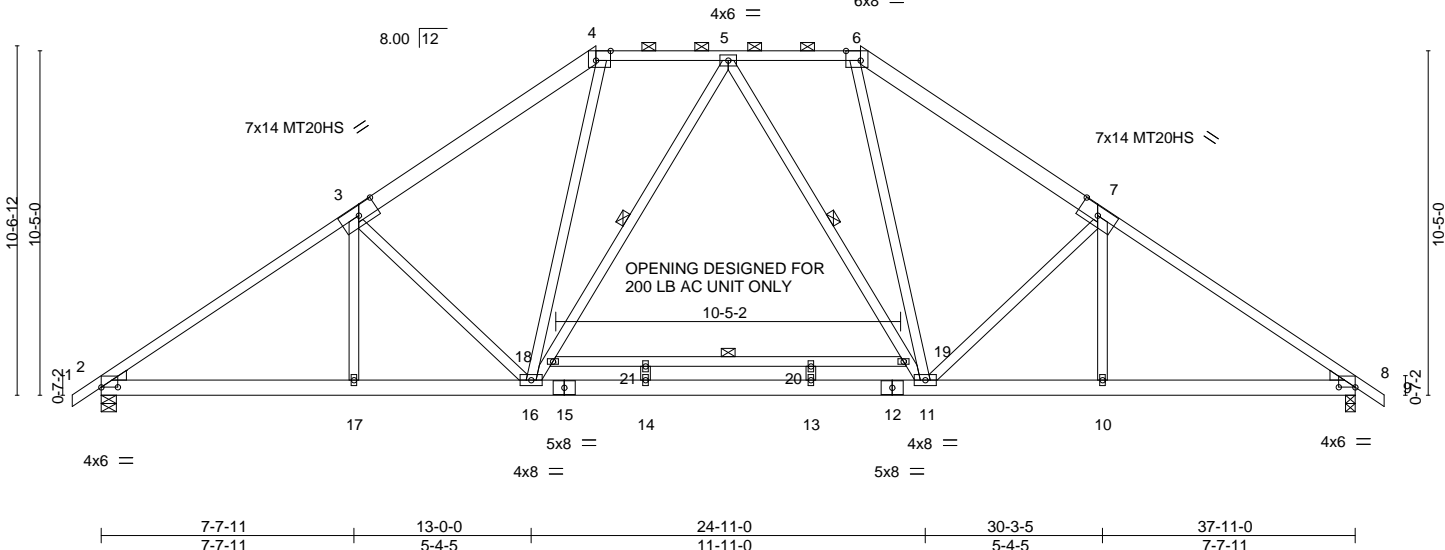


Plate Offsets (X,Y)--	[2:0-6-0,0-0-1], [3:0-7-0,0-3-4], [4:0-5-5,Edge], [6:0-5-5,Edge], [7:0-7-0,0-3-4], [8:0-6-0,0-0-1]
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LOADING (psf)	SPACING-	2-3-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.94	Vert(LL)	-0.15	13-14	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.84	Vert(CT)	-0.47	13-14	>965	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.82	Horz(CT)	0.07	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.11	14	>999		Weight: 291 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2 *Except* 4-6: 2x4 SP No.2, 1-3,7-9: 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 2-8-12 oc purlins, except
BOT CHORD 2x6 SP No.2	2-0-0 oc purlins (4-0-2 max.): 4-6.
WEBS 2x4 SP No.3 *Except* 18-19: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 7-7-12 oc bracing.
	WEBS 1 Row at midpt 5-16, 5-11, 18-19

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

**REACTIONS.** (size) 2=0-5-8, 8=0-3-8  
 Max Horz 2=-522(LC 10)  
 Max Uplift 2=-636(LC 12), 8=-636(LC 13)  
 Max Grav 2=1865(LC 1), 8=1865(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2886/1241, 3-4=-2583/1165, 4-5=-2042/1044, 5-6=-2042/1044, 6-7=-2583/1165, 7-8=-2885/1241  
 BOT CHORD 2-17=-789/2228, 16-17=-788/2225, 14-16=-349/1748, 13-14=-349/1748, 11-13=-349/1748, 10-11=-780/2233, 8-10=-780/2236  
 WEBS 3-16=-814/706, 4-16=-303/1026, 16-18=-339/407, 5-18=-316/423, 5-19=-316/423, 11-19=-339/403, 6-11=-303/1026, 7-11=-814/707

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) 200.0lb AC unit load placed on the bottom chord, 18-11-8 from left end, supported at two points, 5-0-0 apart.
  - 4) Provide adequate drainage to prevent water ponding.
  - 5) All plates are MT20 plates unless otherwise indicated.
  - 6) All plates are 2x4 MT20 unless otherwise indicated.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 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.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=636, 8=636.
  - 10) 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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Job 2501456_OFA	Truss H06	Truss Type Piggyback Base	Qty 10	Ply 1	H&H/Prelude/ Job Reference (optional)	143258152
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:16 2020 Page 1

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Scale = 1:69.0

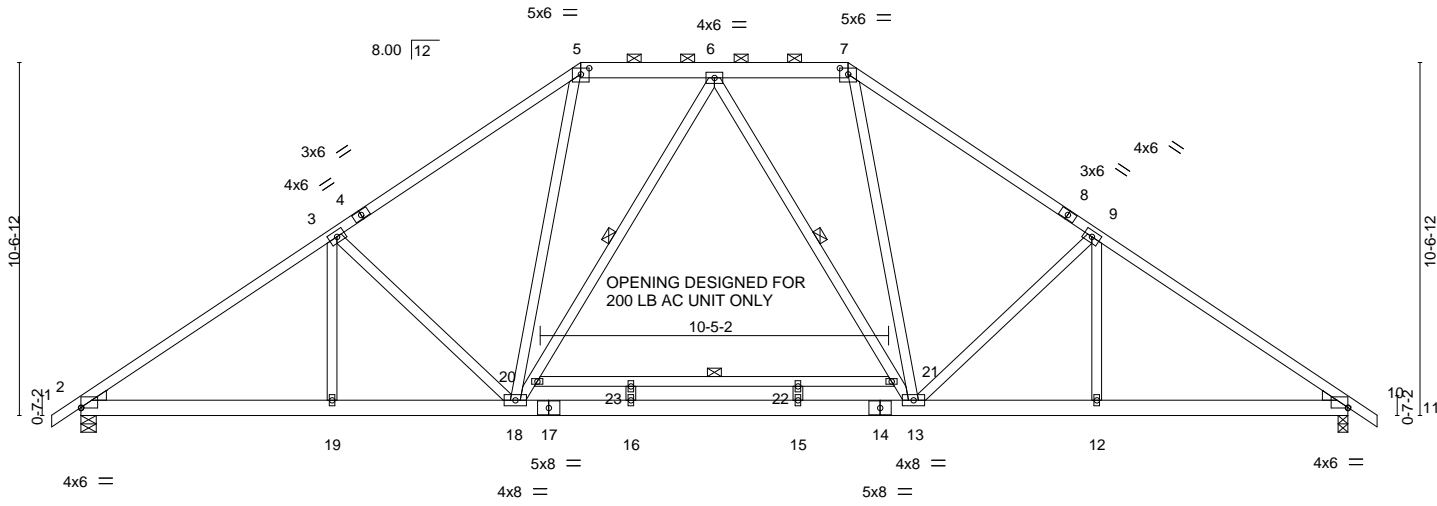


Plate Offsets (X,Y)--	[2:0-0-0,0-0-3], [5:0-3-0,0-2-3], [7:0-3-0,0-2-3], [10:Edge,0-0-3]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.64	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.69	Vert(LL) -0.14 15-16 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.77	Vert(CT) -0.45 15-16 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.07 10 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.11 16 >999 240	Weight: 282 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 5-7: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (5-2-5 max.): 5-7.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3 *Except* 20-21: 2x4 SP No.2	WEBS 1 Row at midpt 6-18, 6-13, 20-21
WEDGE Left: 2x4 SP No.3, Right: 2x4 SP No.3	

REACTIONS.
(size) 2=0-5-8, 10=0-3-8 Max Horz 2=469(LC 11) Max Uplift 2=554(LC 12), 10=554(LC 13) Max Grav 2=1669(LC 1), 10=1669(LC 1)

FORCES.
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2590/1088, 3-5=-2310/1008, 5-6=-1845/931, 6-7=-1845/931, 7-9=-2310/1008, 9-10=-2590/1088
BOT CHORD 2-19=-701/2010, 18-19=-701/2010, 16-18=-275/1548, 15-16=-275/1548, 13-15=-275/1548, 12-13=-690/2017, 10-12=-690/2017
WEBS 3-18=-723/619, 5-18=-192/851, 18-20=-291/375, 6-20=-269/391, 6-21=-269/390, 13-21=-291/370, 7-13=-191/851, 9-13=-723/620

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 200.0lb AC unit load placed on the bottom chord, 18-11-8 from left end, supported at two points, 5-0-0 apart.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=554, 10=554.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Job 2501456_OFA	Truss H07	Truss Type Piggyback Base	Qty 10	Ply 1	H&H/Prelude/ Job Reference (optional)	143258153
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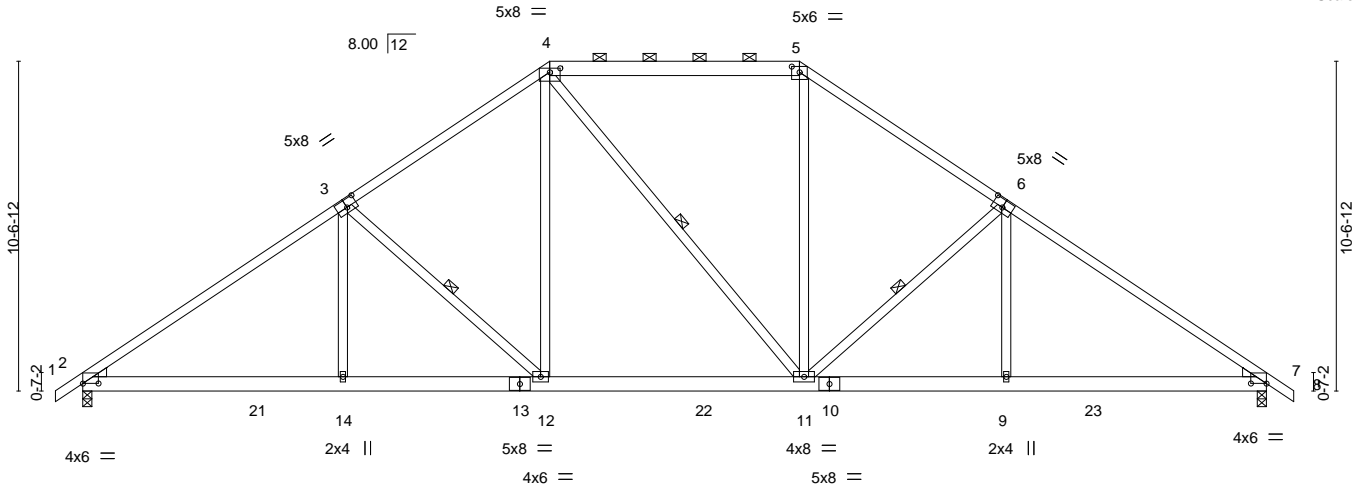
Builders FirstSource, Sumter, SC - 29153,

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ID: ?hrBCA8NTN1Es8op2lCn\_Py8klV-TRM8q0G?1gBHri86Wc5mLwWn3bzcCLInlhAOxxyRuka

0-10-8	8-4-0	14-11-8	22-11-8	29-7-0	37-11-0	38-9-8
0-10-8	8-4-0	6-7-8	8-0-0	6-7-8	8-4-0	0-10-8

Scale = 1:73.8



8-4-0	14-11-8	22-11-8	29-7-0	37-11-0
8-4-0	6-7-8	8-0-0	6-7-8	8-4-0

Plate Offsets (X,Y)--	[2:0-6-0,0-0-1], [3:0-4-0,0-3-0], [4:0-4-0,0-1-9], [5:0-3-0,0-2-3], [6:0-4-0,0-3-0], [7:0-6-0,0-0-1]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.68	Vert(LL)	-0.12 11-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.45	Vert(CT)	-0.22 11-12	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.53	Horz(CT)	0.06 7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.12 14-17	>999	240	Weight: 254 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except* 4-5: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (5-4-14 max.): 4-5.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3 *Except* 4-11: 2x4 SP No.2	WEBS 1 Row at midpt 3-12, 4-11, 6-11
<b>WEDGE</b> Left: 2x4 SP No.3, Right: 2x4 SP No.3	

<b>REACTIONS.</b>	(size) 2=0-3-8, 7=0-3-8
	Max Horz 2=469(LC 11)
	Max Uplift 2=654(LC 12), 7=654(LC 13)
	Max Grav 2=1569(LC 1), 7=1569(LC 1)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2388/1229, 3-4=-1975/1167, 4-5=-1703/1079, 5-6=-1977/1167, 6-7=-2387/1228
BOT CHORD	2-14=-785/1972, 12-14=-785/1970, 11-12=-403/1415, 9-11=-779/1819, 7-9=-779/1821
WEBS	3-14=0/295, 3-12=-841/578, 4-12=-279/743, 4-11=-257/259, 5-11=-244/697, 6-11=-838/579, 6-9=0/292

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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) 2=654, 7=654.
  - 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) 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. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job 2501456_OFA	Truss H08	Truss Type Piggyback Base Supported Gable	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	143258154
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:19 2020 Page 1  
ID:?hrBCA8NTN1Es8op2ICn\_Py8kIV-PqTvFilGZIR?40IUe18ERLbE0PIDgkJ3C?IV?pyRukY

0-10-8 14-11-8 22-11-8 37-11-0 38-9-8  
0-10-8 14-11-8 8-0-0 14-11-8 0-10-8

Scale = 1:66.7

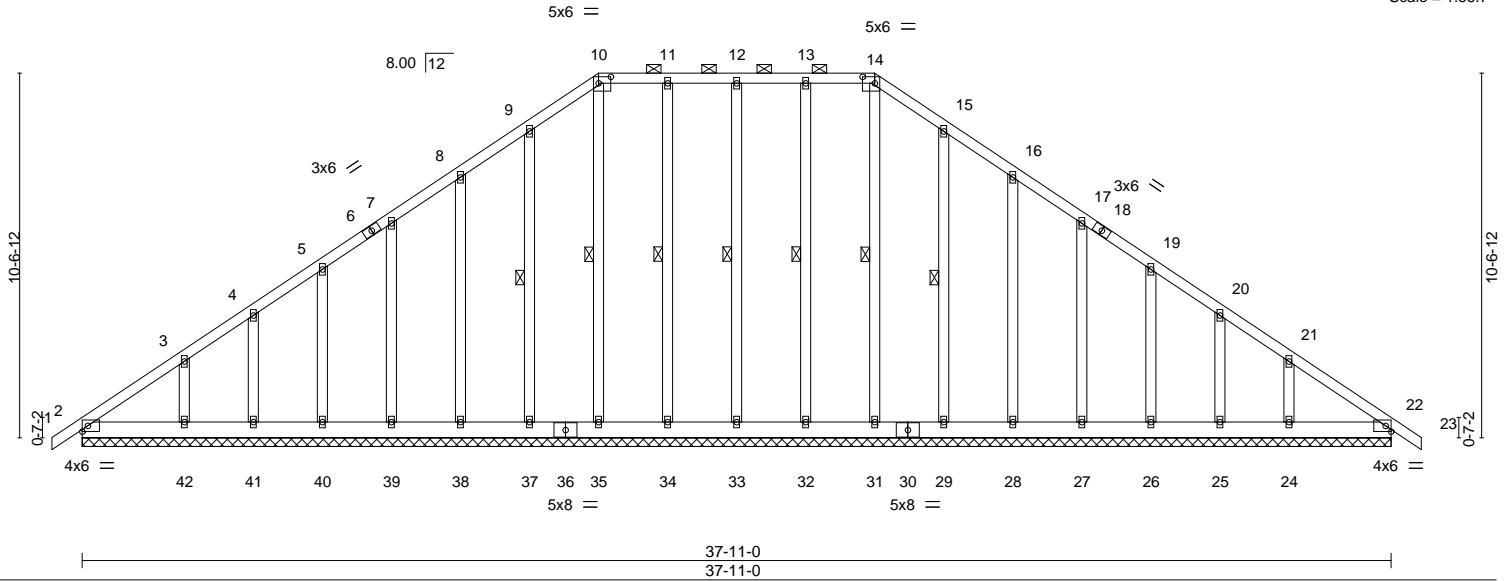


Plate Offsets (X,Y)--	[10:0-4-4,0-2-4], [14:0-4-4,0-2-4]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.14	Vert(LL) 0.00 22 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.07	Vert(CT) 0.00 22 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.21	Horz(CT) 0.01 22 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 323 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 10-14.
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 14-31, 13-32, 12-33, 11-34, 10-35, 9-37, 15-29

**REACTIONS.** All bearings 37-11-0.  
 (lb) - Max Horz 2=470(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 32, 33, 34, 35, 22 except 2=-126(LC 8), 37=-156(LC 12), 38=-155(LC 12), 39=-151(LC 12), 40=-159(LC 12), 41=-127(LC 12), 42=-248(LC 12), 29=-154(LC 13), 28=-157(LC 13), 27=-150(LC 13), 26=-159(LC 13), 25=-127(LC 13), 24=-243(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 31, 32, 33, 34, 35, 37, 38, 39, 40, 41, 29, 28, 27, 26, 25, 22 except 42=295(LC 19), 24=289(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-449/356, 3-4=-293/282, 7-8=-179/276, 8-9=-268/341, 9-10=-357/422, 10-11=-322/389, 11-12=-322/390, 12-13=-322/390, 13-14=-322/389, 14-15=-357/422, 15-16=-268/317, 21-22=-349/244  
 BOT CHORD 2-42=-249/374, 41-42=-249/374, 40-41=-249/374, 39-40=-249/374, 38-39=-249/374, 37-38=-249/374, 35-37=-249/374, 34-35=-249/374, 33-34=-249/374, 32-33=-249/374, 31-32=-249/374, 29-31=-249/374, 28-29=-249/374, 27-28=-249/374, 26-27=-249/374, 25-26=-249/374, 24-25=-249/374, 22-24=-249/374  
 WEBS 3-42=-281/257, 21-24=-282/252

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) 32, 33, 34, 35, 22 except (jt=lb) 2=126, 37=156, 38=155, 39=151, 40=159, 41=127, 42=248, 29=154, 28=157, 27=150, 26=159, 25=127, 24=243.
  - 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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Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	143258155
2501456_OFA	H09	Roof Special Girder	2	2		

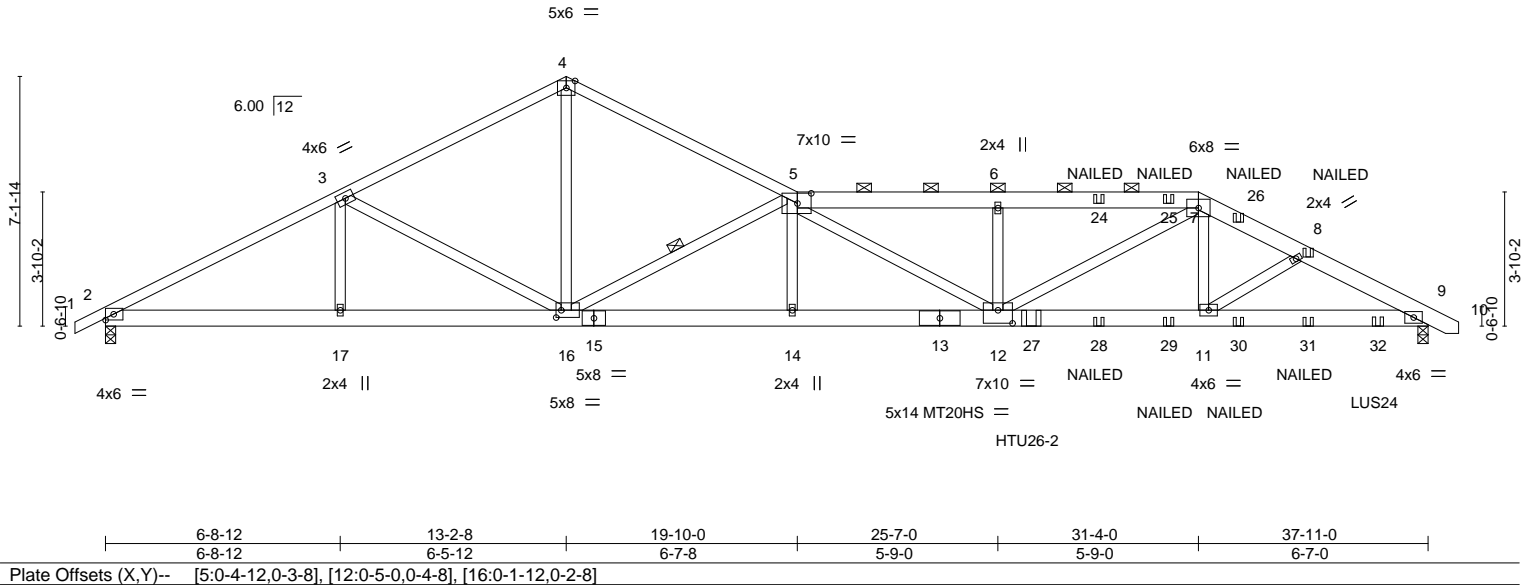
Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:21 2020 Page 1

ID:?hrBCA8NTN1Es8op2lCn\_Py8klV-MCbfgOJW5vhjKKStlSAiWmgTJCFu88OMgJ8c4iyRukW

0-10-8	6-8-12	13-2-8	19-10-0	25-7-0	31-4-0	34-1-9	37-11-0	38-9-8
0-10-8	6-8-12	6-5-12	6-7-8	5-9-0	5-9-0	2-9-9	3-9-7	0-10-8

Scale = 1:66.1



<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 0.63	Vert(LL)	0.41	14	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.89	Vert(CT)	-0.49	14	>922	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.56	Horz(CT)	0.10	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS							
										Weight: 484 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except* 5-7,7-10: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-4-3 oc purlins, except 2-0-0 oc purlins (4-11-11 max.): 5-7.
BOT CHORD 2x6 SP No.1 *Except* 13-15: 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 7-9-11 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 5-16

**REACTIONS.** (size) 2=0-3-8, 9=0-3-8  
 Max Horz 2=212(LC 31)  
 Max Uplift 2=-1079(LC 8), 9=-2152(LC 9)  
 Max Grav 2=2266(LC 1), 9=3711(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4238/1974, 3-4=-3819/2014, 4-5=-3815/1961, 5-6=-9148/5180, 6-7=-9146/5177,  
 7-8=-7011/4063, 8-9=-7090/4112  
 BOT CHORD 2-17=-1800/3713, 16-17=-1800/3713, 14-16=-4149/8097, 12-14=-4157/8101,  
 11-12=-3429/6225, 9-11=-3544/6257  
 WEBS 3-16=-507/541, 4-16=-1481/2941, 5-16=-5370/3138, 5-12=-1374/1383, 6-12=-414/434,  
 7-12=-1737/3391, 7-11=-555/1012

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=1079, 9=2152.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Use Simpson Strong-Tie HTU26-2 (20-10d Girder, 14-10d Truss, Single Ply Girder) or equivalent at 26-6-8 from the left end to connect truss(es) to front face of bottom chord.
  - Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 36-5-12 from the left end to connect truss(es) to front face of bottom chord.



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 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	143258155
2501456_OFA	H09	Roof Special Girder	2	<b>2</b>	Job Reference (optional)	

Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:21 2020 Page 2  
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**NOTES-**

- 13) Fill all nail holes where hanger is in contact with lumber.
- 14) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
  - Vert: 1-4=-60, 4-5=-60, 5-7=-60, 7-10=-60, 18-21=-20
- Concentrated Loads (lb)
  - Vert: 8=-28(F) 24=-22(F) 25=-22(F) 27=-1877(F) 28=-155(F) 29=-155(F) 30=-206(F) 31=-146(F) 32=-238(F)

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

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



818 Soundside Road  
 Edenton, NC 27932

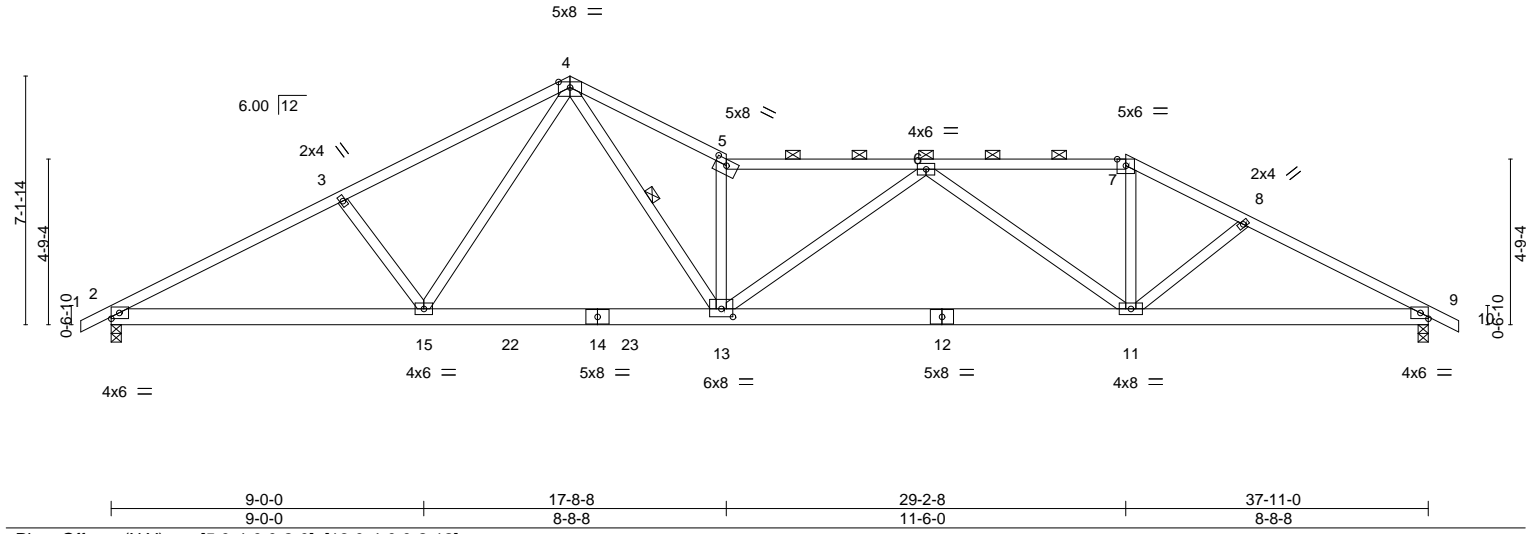
Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	143258156
2501456_OFA	H10	Roof Special	2	1		

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0-10-8 6-8-0 13-2-8 17-8-8 23-5-8 29-2-8 32-7-1 37-11-0 38-9-8  
 0-10-8 6-8-0 6-6-8 4-6-0 5-9-0 5-9-0 3-4-9 5-3-15 0-10-8

Scale = 1:66.3



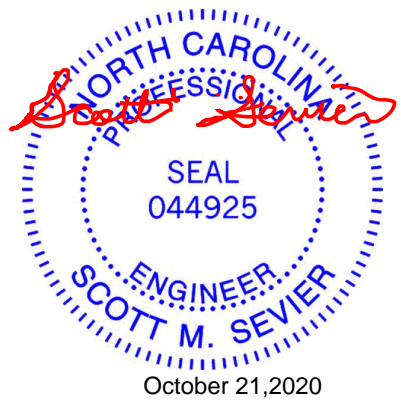
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.64	Vert(LL)	-0.24 11-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.71	Vert(CT)	-0.55 11-13	>824	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 1.00	Horz(CT)	0.09 9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.37 11-13	>999	240	Weight: 221 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 2x6 SP No.2	2-0-0 oc purlins (2-8-1 max.): 5-7.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied.
	WEBS 1 Row at midpt 4-13

**REACTIONS.** (size) 2=0-3-8, 9=0-3-8  
 Max Horz 2=211(LC 12)  
 Max Uplift 2=643(LC 12), 9=816(LC 13)  
 Max Grav 2=1569(LC 1), 9=1569(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2786/1824, 3-4=-2569/1785, 4-5=-3648/2489, 5-6=-3260/2168, 6-7=-2316/1566,  
 7-8=-2637/1694, 8-9=-2825/1794  
 BOT CHORD 2-15=-1453/2420, 13-15=-968/1937, 11-13=-1788/3083, 9-11=-1447/2456  
 WEBS 3-15=-372/506, 4-15=-374/558, 4-13=-1475/2328, 5-13=-1878/1389, 6-13=-93/335,  
 6-11=-958/722, 7-11=-478/870, 8-11=-162/286

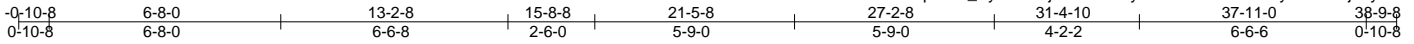
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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) 2=643, 9=816.
  - 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



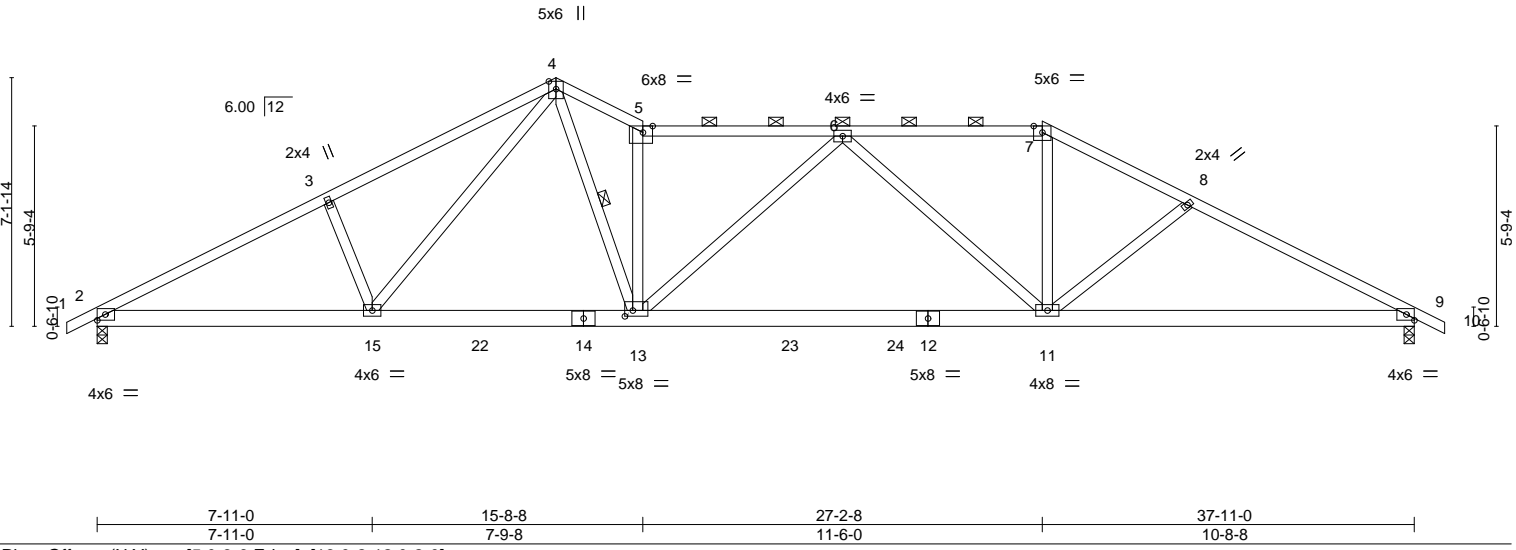
Job 2501456_OFA	Truss H11	Truss Type Roof Special	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	143258157
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:23 2020 Page 1  
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Scale = 1:66.3



LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.66	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.74	Vert(LL) -0.24 11-13 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.89	Vert(CT) -0.50 11-13 >917 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.09 9 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.27 11-13 >999 240	Weight: 226 lb	FT = 20%

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

**REACTIONS.** (size) 2=0-3-8, 9=0-3-8  
 Max Horz 2=-211(LC 17)  
 Max Uplift 2=-643(LC 12), 9=-816(LC 13)  
 Max Grav 2=1569(LC 1), 9=1569(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2787/1803, 3-4=-2659/1891, 4-5=-2897/2032, 5-6=-2591/1792, 6-7=-2175/1521, 7-8=-2497/1636, 8-9=-2765/1782  
 BOT CHORD 2-15=-1433/2420, 13-15=-955/1946, 11-13=-1451/2622, 9-11=-1413/2397  
 WEBS 3-15=-364/508, 4-15=-492/600, 4-13=-1137/1844, 5-13=-1494/1108, 6-13=-172/255, 6-11=-608/494, 7-11=-447/807, 8-11=-267/403

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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=643, 9=816.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 21, 2020

Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	143258158
2501456_OFA	H12	HIP	2	1		

Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:25 2020 Page 1

ID: ?hrBCA8NTN1Es8op2Cn\_Py8kIV-E\_rAVIM088C8oxme\_lEegcr50pfl4yoybw6pDTyRukS

0-10-8	6-7-0	12-8-8	18-11-8	25-2-8	31-4-0	37-11-0	38-9-8
0-10-8	6-7-0	6-1-8	6-3-0	6-3-0	6-1-8	6-7-0	0-10-8

Scale = 1:66.3

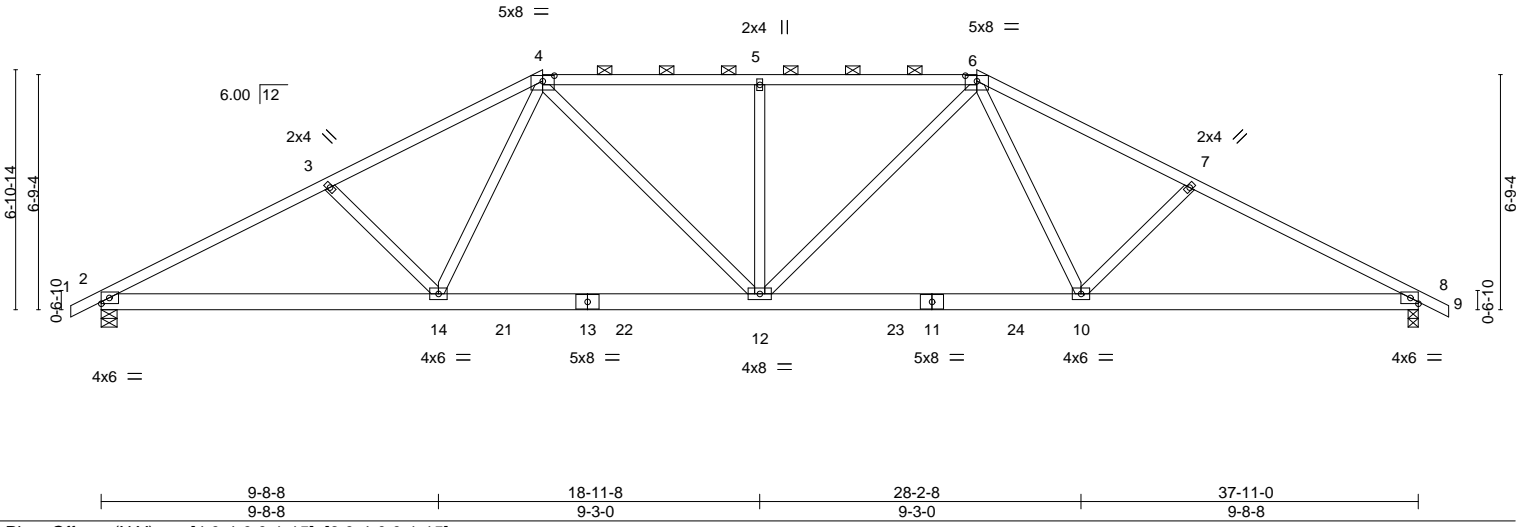


Plate Offsets (X, Y)--	[4:0-4-0,0-1-15], [6:0-4-0,0-1-15]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-3-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.87	Vert(LL) -0.18 12-14 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.70	Vert(CT) -0.35 12-14 >999 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.53	Horz(CT) 0.09 8 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Wind(LL) 0.20 12 >999 240	Weight: 221 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1 *Except* 4-6: 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-11-2 oc purlins, except 2-0-0 oc purlins (2-10-4 max.): 4-6.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 5-9-5 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** (size) 2=0-5-8, 8=0-3-8  
 Max Horz 2=227(LC 12)  
 Max Uplift 2=-715(LC 12), 8=-715(LC 13)  
 Max Grav 2=1765(LC 1), 8=1765(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3132/2033, 3-4=-2838/1904, 4-5=-2591/1864, 5-6=-2591/1864, 6-7=-2838/1904,  
 7-8=-3132/2033  
 BOT CHORD 2-14=-1619/2722, 12-14=-1113/2238, 10-12=-1115/2238, 8-10=-1624/2722  
 WEBS 3-14=-385/557, 4-14=-296/576, 4-12=-349/645, 5-12=-514/480, 6-12=-349/645,  
 6-10=-296/576, 7-10=-385/557

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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=715, 8=715.
  - 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. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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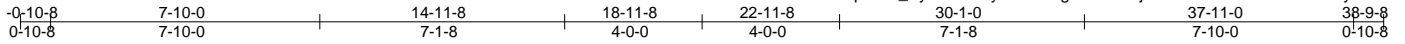


Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	143258159
2501456_OFA	H13	HIP	2	1		

Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:27 2020 Page 1

ID: ?hrBCA8NTN1Es8op2lCn\_Py8klV-AMywwROHglSs2Fv16jH6l1wR0dHVYtTF2EbwHLyRukQ



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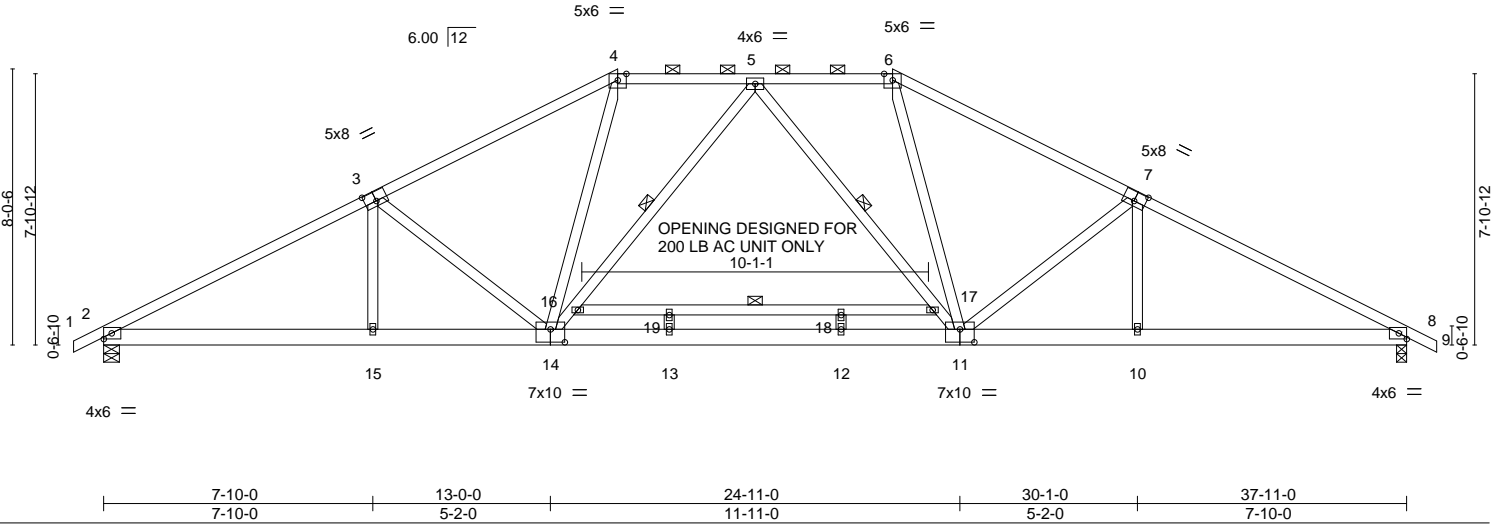


Plate Offsets (X, Y)--	[3:0-4-0,0-3-4], [7:0-4-0,0-3-4], [11:0-5-0,0-4-8], [14:0-5-0,0-4-8]
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LOADING (psf)	SPACING-	2-3-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.84	Vert(LL)	-0.17 12-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.94	Vert(CT)	-0.54 12-13	>849	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.45	Horz(CT)	0.10 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.17 12-13	>999	240	Weight: 250 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP SS *Except* 4-6: 2x4 SP No.2, 1-3,7-9: 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 2-9-1 oc purlins, except 2-0-0 oc purlins (3-9-9 max.): 4-6.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 5-11-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 16-17: 2x4 SP No.2	WEBS 1 Row at midpt 5-14, 5-11, 16-17

**REACTIONS.** (size) 2=0-5-8, 8=0-3-8  
 Max Horz 2=265(LC 12)  
 Max Uplift 2=656(LC 12), 8=656(LC 13)  
 Max Grav 2=1865(LC 1), 8=1865(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3295/1801, 3-4=-2820/1531, 4-5=-2206/1406, 5-6=-2206/1406, 6-7=-2820/1531, 7-8=-3295/1801  
 BOT CHORD 2-15=-1380/2851, 14-15=-1380/2851, 13-14=-810/2309, 12-13=-810/2309, 11-12=-810/2309, 10-11=-1385/2851, 8-10=-1385/2851  
 WEBS 3-14=-558/729, 4-14=-318/888, 14-16=-389/277, 5-16=-378/305, 5-17=-378/305, 11-17=-389/275, 6-11=-317/888, 7-11=-558/729

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) 200.0lb AC unit load placed on the bottom chord, 18-11-8 from left end, supported at two points, 5-0-0 apart.
  - 4) Provide adequate drainage to prevent water ponding.
  - 5) All plates are 2x4 MT20 unless otherwise indicated.
  - 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) except (jt=lb) 2=656, 8=656.
  - 9) 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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Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	143258160
2501456_OFA	H14	Hip	2	1		

Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:29 2020 Page 1

ID: ?hrBCA8NTN1Es8op2ICn\_Py8kIV-714hL7PXCmiaHY3PD8JaqS0n1R??0oLYWY41MEyRukO

-0-10-8	8-1-12	16-11-8	18-11-8	20-11-8	29-9-4	37-11-0	38-9-8
0-10-8	8-1-12	8-9-12	2-0-0	2-0-0	8-9-12	8-1-12	0-10-8

Scale = 1:67.3

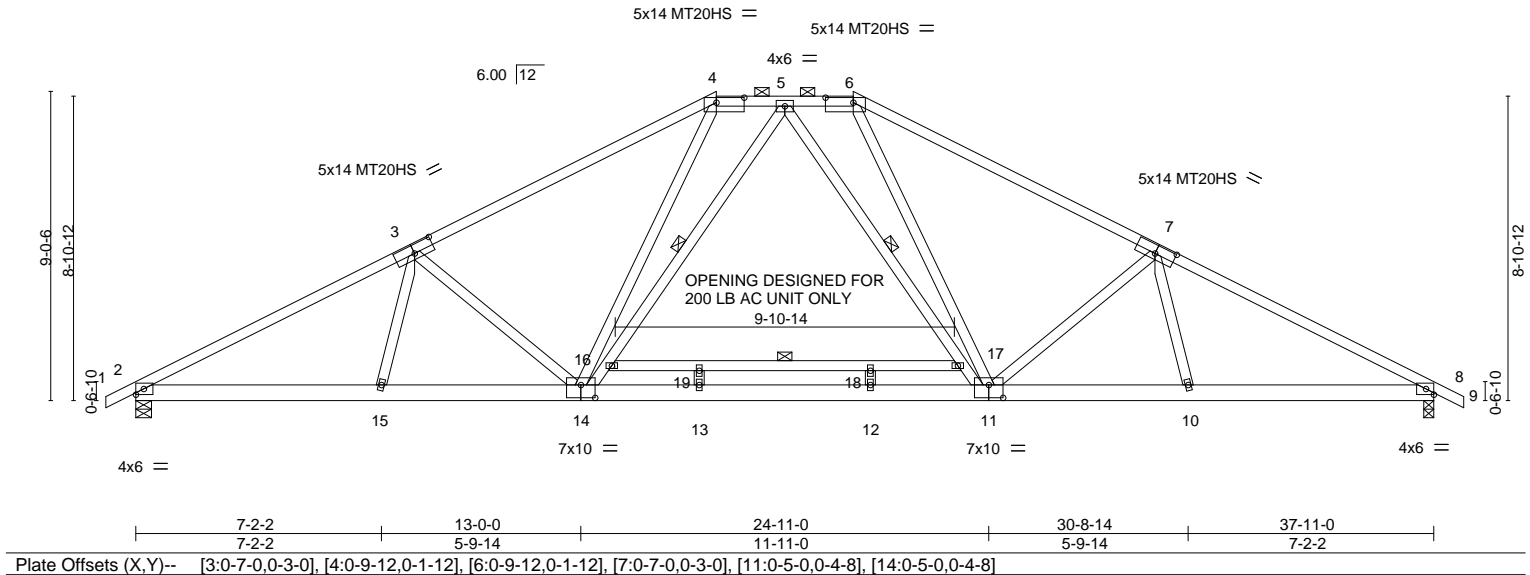


Plate Offsets (X,Y)--	[3:0-7-0,0-3-0], [4:0-9-12,0-1-12], [6:0-9-12,0-1-12], [7:0-7-0,0-3-0], [11:0-5-0,0-4-8], [14:0-5-0,0-4-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.87	Vert(LL) -0.16 12-13 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.75	Vert(CT) -0.50 12-13 >903 240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr YES	WB 0.43	Horz(CT) 0.08 8 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.17 14 >999 240	Weight: 258 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except* 3-4,6-7: 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-6-5 max.): 4-6.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3 *Except* 16-17: 2x4 SP No.2	WEBS 1 Row at midpt 5-14, 5-11, 16-17

**REACTIONS.** (size) 2=0-5-8, 8=0-3-8  
 Max Horz 2=265(LC 12)  
 Max Uplift 2=600(LC 12), 8=600(LC 13)  
 Max Grav 2=1669(LC 1), 8=1669(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2958/1606, 3-4=-2527/1372, 4-5=-1876/1325, 5-6=-1876/1326, 6-7=-2527/1372,  
 7-8=-2958/1606  
 BOT CHORD 2-15=-1233/2563, 14-15=-1235/2555, 13-14=-513/1802, 12-13=-513/1802,  
 11-12=-513/1802, 10-11=-1239/2555, 8-10=-1239/2563  
 WEBS 3-14=-542/716, 4-14=-84/757, 14-16=-370/242, 5-16=-330/263, 5-17=-328/263,  
 11-17=-365/242, 6-11=-84/757, 7-11=-542/716

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) 200.0lb AC unit load placed on the bottom chord, 18-11-8 from left end, supported at two points, 5-0-0 apart.
  - 4) Provide adequate drainage to prevent water ponding.
  - 5) All plates are MT20 plates unless otherwise indicated.
  - 6) All plates are 2x4 MT20 unless otherwise indicated.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 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.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=600, 8=600.
  - 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.



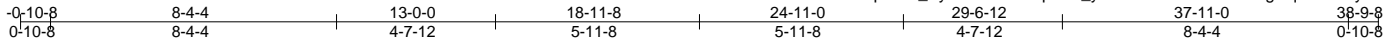
October 21, 2020

Job 2501456_OFA	Truss H15	Truss Type Common	Qty 8	Ply 1	H&H/Prelude/ Job Reference (optional)	143258161
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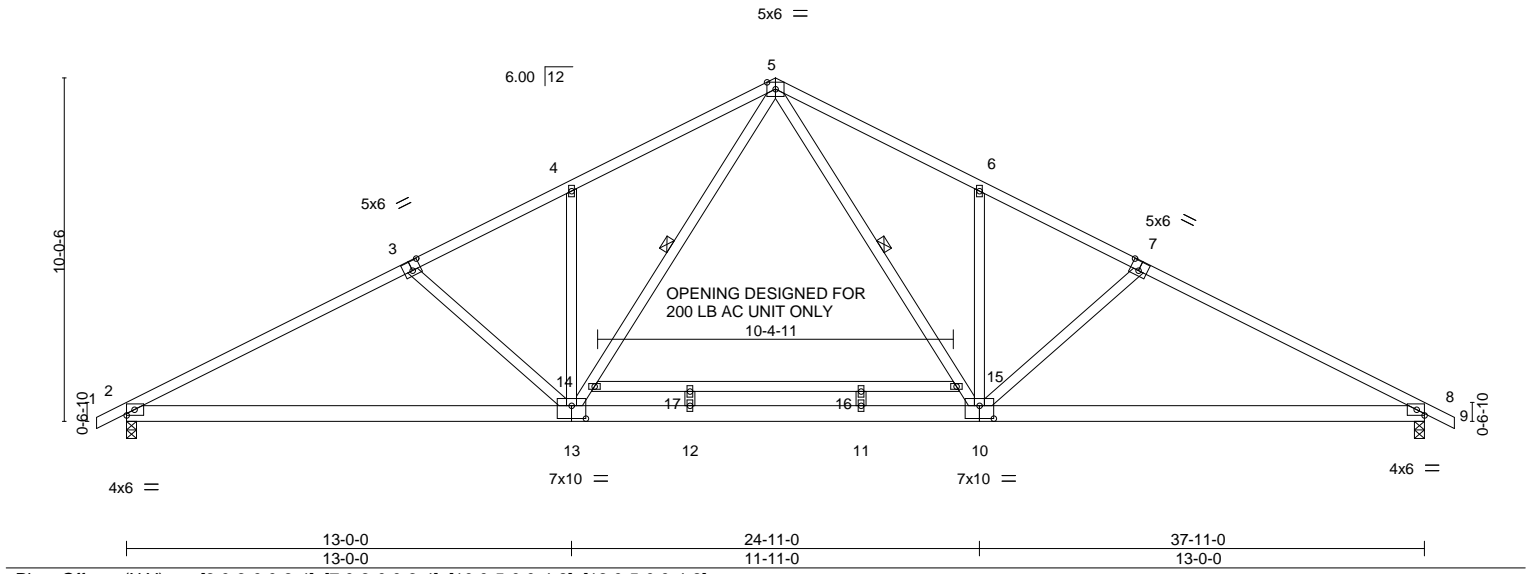
Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:31 2020 Page 1

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Scale = 1:67.3



<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 0.75	Vert(LL)	-0.19 13-20	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.84	Vert(CT)	-0.45 11-12	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.52	Horz(CT)	0.08 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.23 13-20	>999	240	Weight: 242 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3 *Except* 14-15: 2x4 SP No.2	WEBS 1 Row at midpt 5-10, 5-13

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

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2892/1568, 3-4=-2545/1404, 4-5=-2546/1616, 5-6=-2546/1616, 6-7=-2545/1404, 7-8=-2892/1568  
 BOT CHORD 2-13=-1181/2491, 12-13=-452/1627, 11-12=-452/1627, 10-11=-452/1627, 8-10=-1184/2491  
 WEBS 5-15=-606/1100, 10-15=-635/1093, 6-10=-296/404, 7-10=-383/528, 13-14=-635/1093, 5-14=-606/1100, 4-13=-296/404, 3-13=-383/528

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 200.0lb AC unit load placed on the bottom chord, 18-11-8 from left end, supported at two points, 5-0-0 apart.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=624, 8=624.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 21, 2020

Job 2501456_OFA	Truss H16	Truss Type Common	Qty 10	Ply 1	H&H/Prelude/ Job Reference (optional)	143258162
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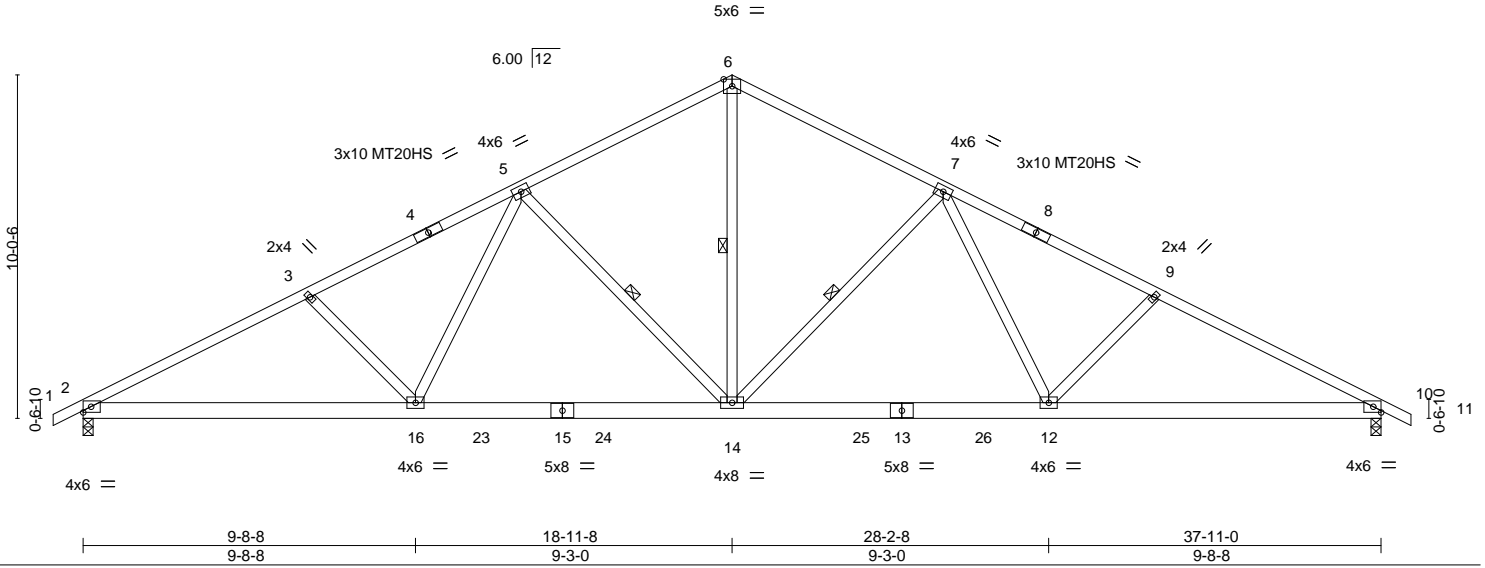
Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:32 2020 Page 1

ID:?hrBCA8NTN1Es8op2lCn\_Py8klV-XKmpz9SPVH4980o\_uGsHS5eMNe4lD81\_CWJhzZyRukL

0-10-8	6-7-8	12-9-8	18-11-8	25-1-8	31-3-8	37-11-0	38-9-8
0-10-8	6-7-8	6-2-0	6-2-0	6-2-0	6-2-0	6-7-8	0-10-8

Scale = 1:67.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.61	Vert(LL)	-0.17 14-16	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.55	Vert(CT)	-0.32 14-16	>999	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.50	Horz(CT)	0.08 10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.20 14-16	>999	240		
								Weight: 228 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 6-14, 7-14, 5-14

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=297(LC 12)  
 Max Uplift 2=-724(LC 12), 10=-724(LC 13)  
 Max Grav 2=1569(LC 1), 10=1569(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2772/1866, 3-5=-2513/1765, 5-6=-1786/1411, 6-7=-1786/1411, 7-9=-2513/1765,  
 9-10=-2772/1866  
 BOT CHORD 2-16=-1487/2406, 14-16=-1060/1975, 12-14=-1061/1975, 10-12=-1491/2406  
 WEBS 6-14=-872/1201, 7-14=-683/667, 7-12=-249/519, 9-12=-341/475, 5-14=-683/667,  
 5-16=-249/519, 3-16=-342/475

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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 (it=lb) 2=724, 10=724.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 21, 2020

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

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



818 Soundside Road  
 Edenton, NC 27932

Job 2501456_OFA	Truss H17	Truss Type Common Supported Gable	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	143258163
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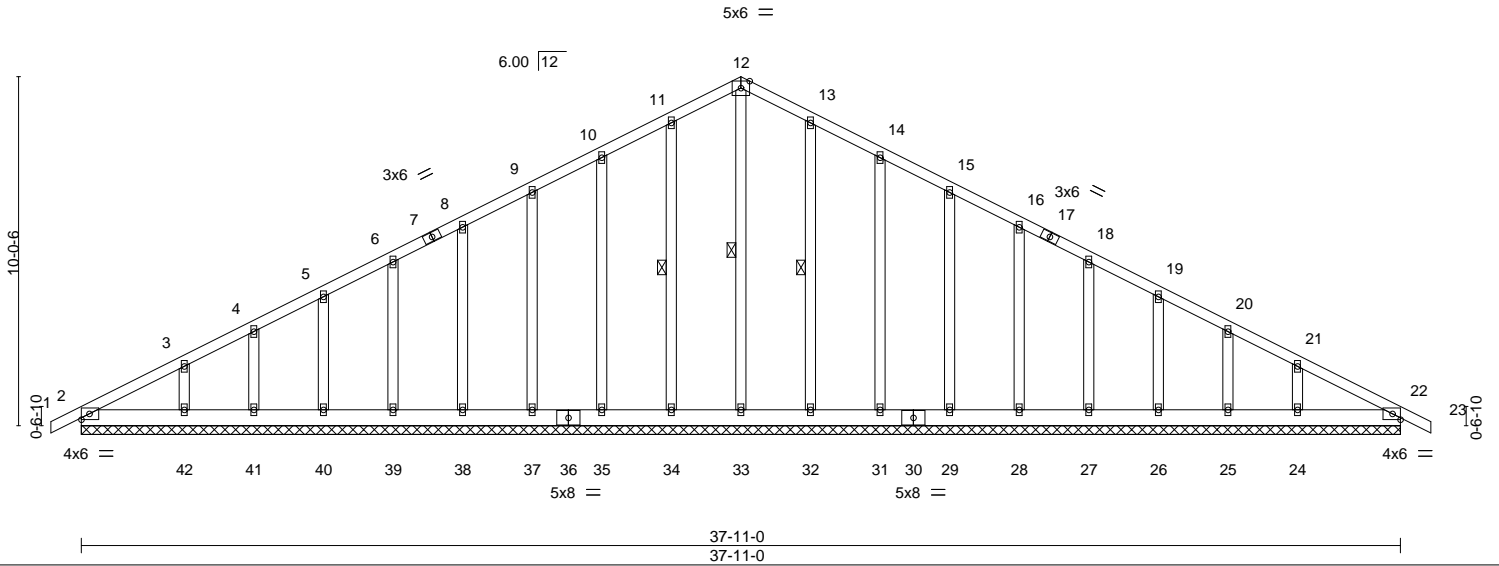
Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:36 2020 Page 1

ID:?hrBCA8NTN1Es8op2ICn\_Py8kIV-Q5?KpWVwZWaadd5I76xDdxo9wFZL91ka78Hv6KyRukH

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

Scale = 1:66.2



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 0.12	Vert(LL)	0.00	22	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	0.00	22	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13	Horz(CT)	0.01	22	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 283 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 12-33, 11-34, 13-32

**REACTIONS.** All bearings 37-11-0.  
(lb) - Max Horz 2=297(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 22 except 34=120(LC 12), 35=130(LC 12), 37=125(LC 12), 38=126(LC 12), 39=124(LC 12), 40=130(LC 12), 41=106(LC 12), 42=202(LC 12), 32=116(LC 13), 31=132(LC 13), 29=124(LC 13), 28=126(LC 13), 27=124(LC 13), 26=130(LC 13), 25=106(LC 13), 24=197(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 2, 34, 35, 37, 38, 39, 40, 41, 42, 32, 31, 29, 28, 27, 26, 25, 24, 22 except 33=259(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-388/117, 3-4=-269/117, 8-9=-86/255, 9-10=-116/301, 10-11=-147/391, 11-12=-175/470, 12-13=-175/470, 13-14=-147/391, 14-15=-116/301, 21-22=-294/101  
BOT CHORD 2-42=-99/324, 41-42=-99/324, 40-41=-99/324, 39-40=-99/324, 38-39=-99/324, 37-38=-99/324, 35-37=-99/324, 34-35=-99/324, 33-34=-99/324, 32-33=-99/324, 31-32=-99/324, 29-31=-99/324, 28-29=-99/324, 27-28=-99/324, 26-27=-99/324, 25-26=-99/324, 24-25=-99/324, 22-24=-99/324  
WEBS 12-33=-273/54

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 22 except (jt=lb) 34=120, 35=130, 37=125, 38=126, 39=124, 40=130, 41=106, 42=202, 32=116, 31=132, 29=124, 28=126, 27=124, 26=130, 25=106, 24=197.



October 21, 2020

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

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



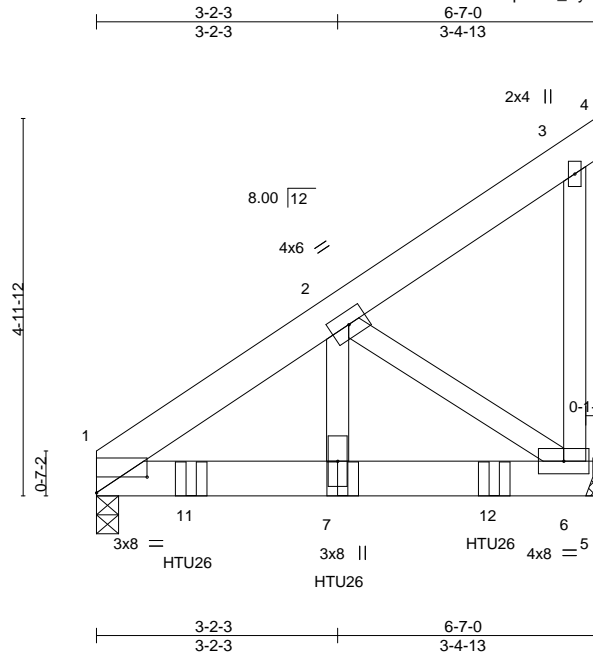
818 Soundside Road  
Edenton, NC 27932

Job 2501456_OFA	Truss I01	Truss Type Jack-Closed Girder	Qty 2	Ply 2	H&H/Prelude/ Job Reference (optional)	143258164
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:39 2020 Page 1

ID:?hrBCA8NTN1Es8op2ICn\_Py8klV-qghTRYXprRz9U5qKpEUwEzQfXTU1MMk0p6VZjyRukE



Scale = 1:30.4

Plate Offsets (X,Y)--	[1:0-8-0,0-2-8]				
<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 0.16	Vert(LL) 0.02 7-10 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.51	Vert(CT) -0.02 6-7 >999 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.24	Horz(CT) 0.01 6 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MP		Weight: 96 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 end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 1=0-3-8, 6=Mechanical  
 Max Horz 1=303(LC 8)  
 Max Uplift 1=-974(LC 8), 6=-1041(LC 8)  
 Max Grav 1=1893(LC 1), 6=1883(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1980/844  
 BOT CHORD 1-7=-965/1672, 6-7=-965/1672  
 WEBS 2-7=-922/1977, 2-6=-2047/1182

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 1=974, 6=1041.
  - Use Simpson Strong-Tie HTU26 (20-10d Girder, 14-10dx1 1/2 Truss, Single Ply Girder) or equivalent at 1-3-0 from the left end to connect truss(es) to back face of bottom chord.
  - Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 3-3-0 from the left end to 5-3-0 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  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 3-4=-20, 5-8=-20



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Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job 2501456_OFA	Truss I01	Truss Type Jack-Closed Girder	Qty 2	Ply <b>2</b>	H&H/Prelude/ Job Reference (optional)	I43258164
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:39 2020 Page 2  
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**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 7=-1036(B) 11=-1189(B) 12=-1036(B)

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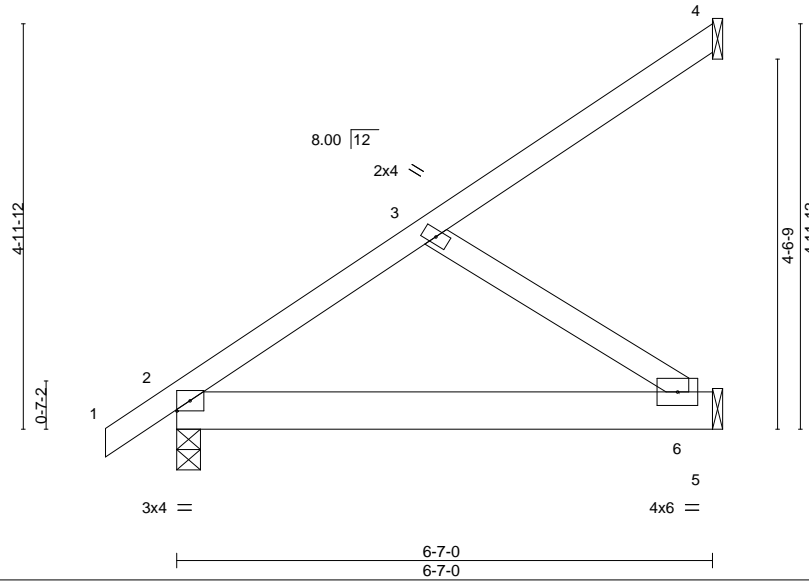
Job 2501456_OFA	Truss I02	Truss Type Jack-Partial	Qty 4	Ply 1	H&H/Prelude/ Job Reference (optional)	I43258165
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:40 2020 Page 1  
ID:?hrBCA8NTN1Es8op2lCn\_Py8klV-IsFrfuYRcl506FPXmx09nnzposuD5ru91mF6F5yRukD



Scale = 1:28.3



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 0.19	Vert(LL)	-0.02 6-9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	-0.04 6-9	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.12	Horz(CT)	0.00 2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.01 6-9	>999	240	Weight: 35 lb	FT = 20%

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

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

**REACTIONS.** (size) 4=Mechanical, 2=0-3-8, 5=Mechanical  
Max Horz 2=336(LC 12)  
Max Uplift 4=-125(LC 12), 2=-84(LC 12), 5=-129(LC 12)  
Max Grav 4=106(LC 19), 2=317(LC 19), 5=210(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
BOT CHORD 2-6=-265/320  
WEBS 3-6=-387/321

**NOTES-**

- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed; end vertical left exposed; 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 connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 4=125, 5=129.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 21, 2020

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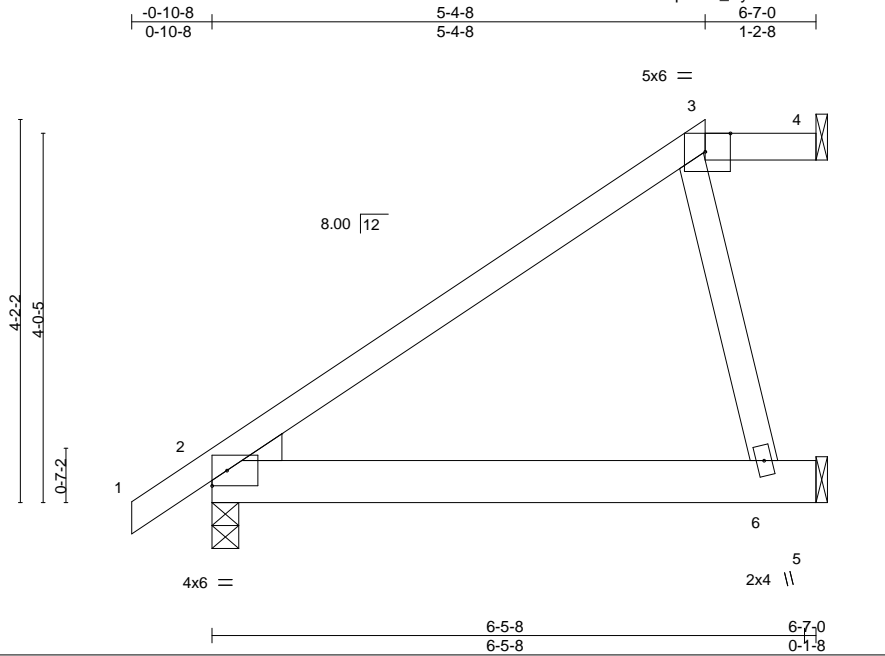


Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	143258166
2501456_OFA	I03	Half Hip	2	1		

Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:40 2020 Page 1

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Scale = 1:25.1

Plate Offsets (X,Y)--	[3:0-3-5,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 0.42	Vert(LL)	0.06	6-9	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	-0.06	6-9	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.02	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS						Weight: 34 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins: 3-4.  
 BOT CHORD Rigid ceiling directly applied.

**REACTIONS.**

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical  
 Max Horz 2=276(LC 12)  
 Max Uplift 4=-33(LC 8), 2=-118(LC 12), 5=-169(LC 12)  
 Max Grav 4=34(LC 1), 2=320(LC 19), 5=240(LC 19)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=118, 5=169.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 21, 2020

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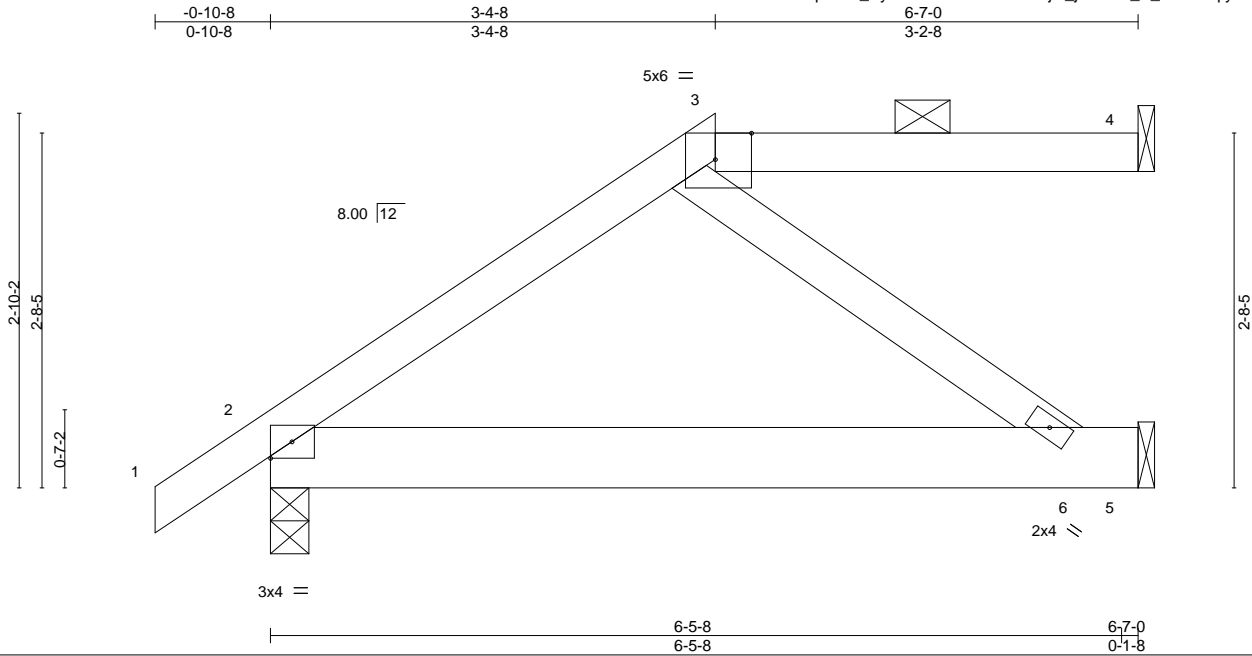
818 Soundside Road  
 Edenton, NC 27932

Job 2501456_OFA	Truss I04	Truss Type Half Hip	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	143258167
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:41 2020 Page 1

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Scale = 1:17.5

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.21	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.21	Vert(LL) -0.02 6-9 >999 360		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.07	Vert(CT) -0.05 6-9 >999 240		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Horz(CT) 0.01 4 n/a n/a	Weight: 33 lb	FT = 20%
			Wind(LL) 0.02 6-9 >999 240		

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

**REACTIONS.** (size) 4=Mechanical, 2=0-3-8, 5=Mechanical  
 Max Horz 2=184(LC 12)  
 Max Uplift 4=90(LC 8), 2=-141(LC 12), 5=-59(LC 12)  
 Max Grav 4=94(LC 1), 2=317(LC 1), 5=163(LC 3)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C 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
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5 except (jt=lb) 2=141.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



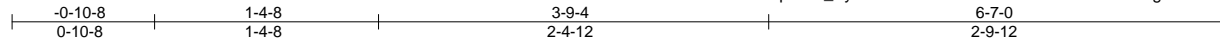
October 21, 2020

Job 2501456_OFA	Truss 105	Truss Type Half Hip Girder	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	143258168
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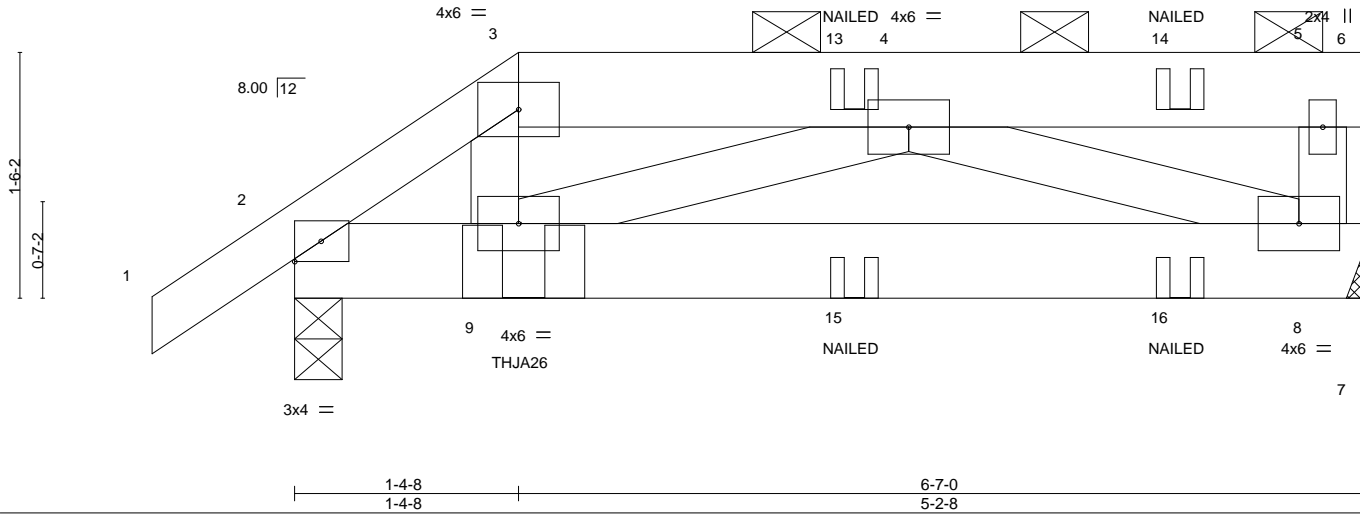
Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:42 2020 Page 1

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Scale = 1:14.1



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 0.06	Vert(LL)	-0.01	8-9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Horz(CT)	-0.01	8-9	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.06	Horz(CT)	-0.00	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP	Wind(LL)	0.01	8-9	>999	Weight: 41 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-6.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 8=Mechanical  
 Max Horz 2=96(LC 27)  
 Max Uplift 2=147(LC 8), 8=171(LC 5)  
 Max Grav 2=307(LC 1), 8=259(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-350/131, 3-4=-258/118  
 BOT CHORD 2-9=-115/271, 8-9=-244/313  
 WEBS 4-8=-338/264

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left exposed; end vertical left 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.
  - 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=147, 8=171.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Use Simpson Strong-Tie THJA26 (THJA26 on 1 ply, Left Hand Hip) or equivalent at 1-4-14 from the left end to connect truss(es) to front face of bottom chord.
  - Fill all nail holes where hanger is in contact with lumber.
  - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 96 lb down and 62 lb up at 1-4-8 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).

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 3-5=-60, 5-6=-20, 7-10=-20



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Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	
2501456_OFA	I05	Half Hip Girder	2	1		I43258168
						Job Reference (optional)

Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:42 2020 Page 2  
 ID:?hrBCA8NTN1Es8op2lCn\_Py8klV-EFMb4Zah8MLkLYZvUM2dsC2CNgacZmPSV4kJ\_yRukB

**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 9=2(F) 15=0(F) 16=0(F)

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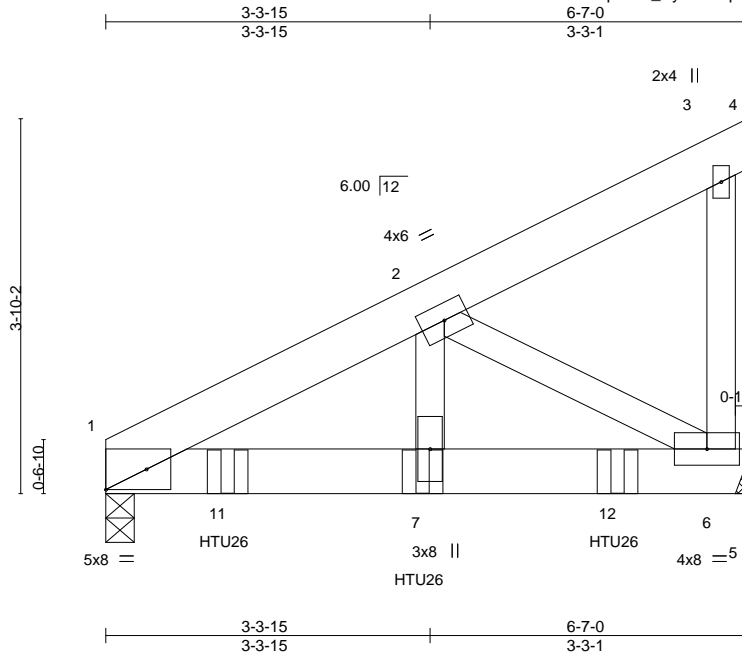
818 Soundside Road  
 Edenton, NC 27932

Job 2501456_OFA	Truss 106	Truss Type Jack-Closed Girder	Qty 2	Ply 2	H&H/Prelude/ Job Reference (optional)	143258169
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Builders FirstSource, Sumter, SC - 29153,

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ID:?hrBCA8NTN1Es8op2lCn\_Py8klV-fq2kibcZRHjJC0HU9VbKUqghdtW\_m4MuB1ytwJyRuk8



Scale = 1:23.6

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

<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 0.19	Vert(LL)	0.02	7-10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.54	Vert(CT)	-0.02	6-7	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.23	Horz(CT)	0.01	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP						
								Weight: 87 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 1=0-3-8, 6=Mechanical  
 Max Horz 1=227(LC 8)  
 Max Uplift 1=977(LC 8), 6=1020(LC 8)  
 Max Grav 1=1833(LC 1), 6=1897(LC 1)

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

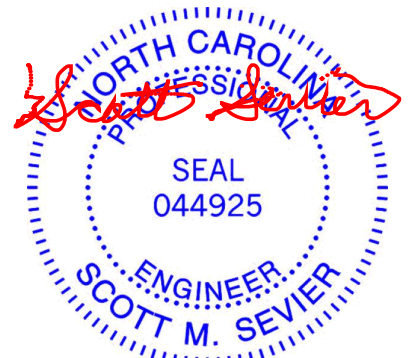
TOP CHORD 1-2=-2270/1063  
 BOT CHORD 1-7=-1145/2056, 6-7=-1145/2056  
 WEBS 2-7=-896/1911, 2-6=-2377/1324

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=977, 6=1020.
- Use Simpson Strong-Tie HTU26 (20-10d Girder, 14-10dx1 1/2 Truss, Single Ply Girder) or equivalent at 1-3-0 from the left end to connect truss(es) to back face of bottom chord.
- Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 3-3-0 from the left end to 5-3-0 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

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



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Continued on page 2

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

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Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	143258169
2501456_OFA	I06	Jack-Closed Girder	2	<b>2</b>	Job Reference (optional)	

Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:45 2020 Page 2  
 ID:?hrBCA8NTN1Es8op2ICn\_Py8klV-fq2kibcZRHjJC0HU9VbKUqghdtW\_m4MuB1ytwJyRuk8

**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 7=-1036(B) 11=-1143(B) 12=-1036(B)

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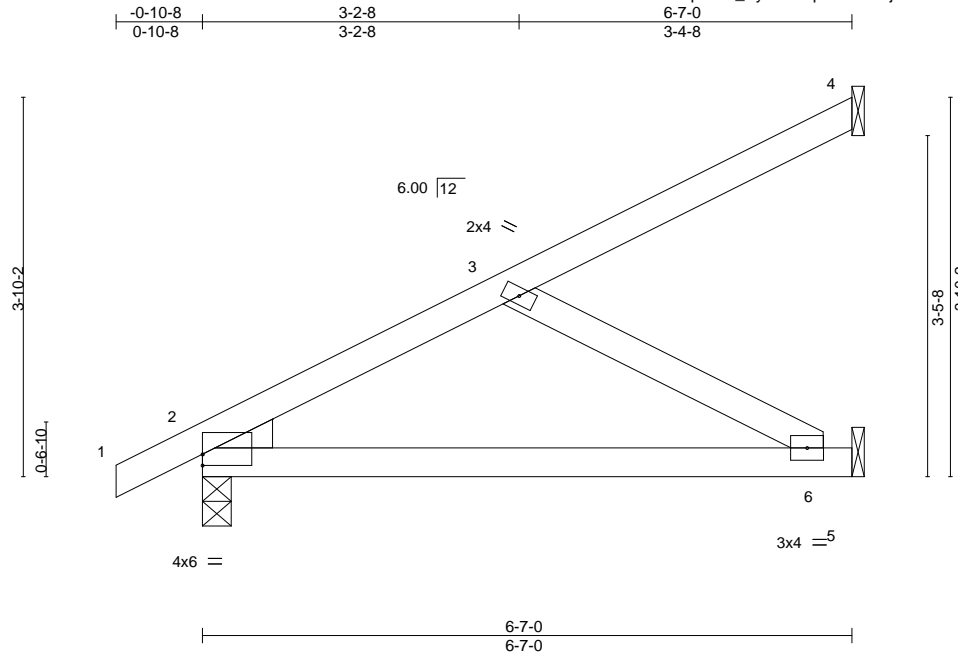
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Job 2501456_OFA	Truss 107	Truss Type Jack-Partial	Qty 4	Ply 1	H&H/Prelude/ Job Reference (optional)	143258170
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:45 2020 Page 1

ID:?hrBCA8NTN1Es8op2lCn\_Py8klV-fq2kibcZRHjJC0HU9VbKUqgfWtYAm5wuB1ytWJyRuk8



Scale = 1:23.4

Plate Offsets (X,Y)--	[2:0-0-0,0-1-6]				
<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 0.26	Vert(LL) -0.06 6-9 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.40	Vert(CT) -0.13 6-9 >619 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.13	Horz(CT) 0.01 2 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.02 6-9 >999 240	Weight: 29 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

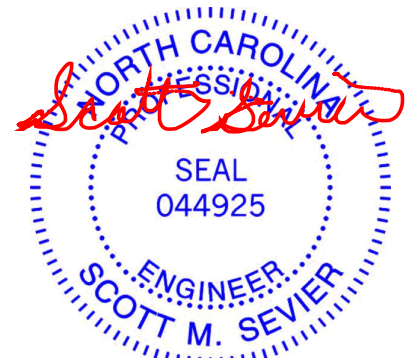
(size) 4=Mechanical, 2=0-3-8, 5=Mechanical  
 Max Horz 2=252(LC 12)  
 Max Uplift 4=-107(LC 12), 2=-127(LC 12), 5=-103(LC 12)  
 Max Grav 4=82(LC 1), 2=317(LC 1), 5=175(LC 1)

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

TOP CHORD 2-3=-281/168  
 BOT CHORD 2-6=-397/272  
 WEBS 3-6=-310/452

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 4=107, 2=127, 5=103.
- 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.



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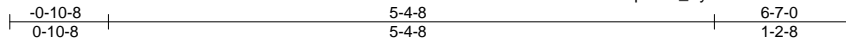
Job 2501456_OFA	Truss I08	Truss Type Half Hip	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	143258171
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Builders FirstSource,

Sumter, SC - 29153,

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ID:?hrBCA8NTN1Es8op2lCn\_Py8klV-70c6wxdCCbrAqAsgjC7Z11DnSHuJVZ\_2QhiQSlyRuk7



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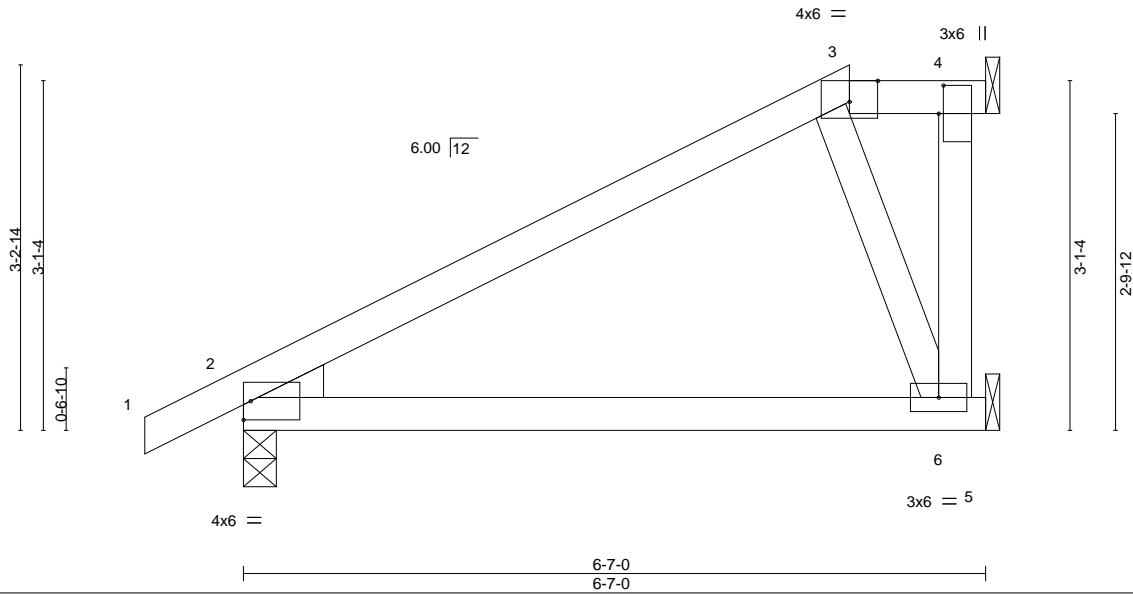


Plate Offsets (X,Y)--	[3:0-3-0,Edge], [4:0-3-0,0-0-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.50	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.41	Vert(LL) -0.06 6-9 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.08	Vert(CT) -0.14 6-9 >547 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) -0.02 2 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.08 6-9 >904 240	Weight: 31 lb	FT = 20%

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

**REACTIONS.** (size) 4=Mechanical, 2=0-3-8, 6=Mechanical  
 Max Horz 2=206(LC 12)  
 Max Uplift 4=-27(LC 8), 2=-142(LC 12), 6=-142(LC 12)  
 Max Grav 4=28(LC 1), 2=309(LC 1), 6=226(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-6=-170/274

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=142, 6=142.
  - 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.
  - Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



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Job 2501456_OFA	Truss 109	Truss Type Half Hip	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	143258172
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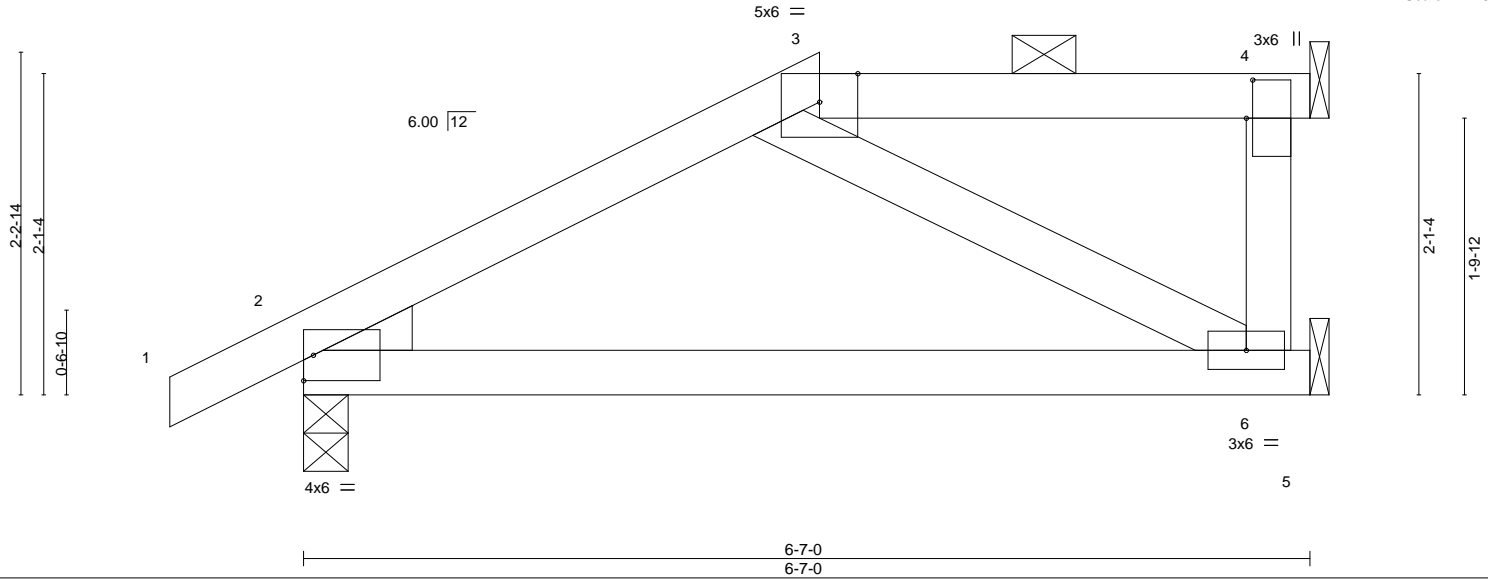


Plate Offsets (X,Y)--	[4:0-3-0,0-0-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.23	Vert(LL) -0.06 6-9 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.37	Vert(CT) -0.11 6-9 >674 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.09	Horz(CT) 0.01 2 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.02 6-9 >999 240	Weight: 30 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
BOT CHORD 2x4 SP No.2	2-0-0 oc purlins: 3-4.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied.
WEDGE	
Left: 2x4 SP No.3	

**REACTIONS.** (size) 4=Mechanical, 2=0-3-8, 6=Mechanical  
 Max Horz 2=136(LC 12)  
 Max Uplift 4=-84(LC 8), 2=-149(LC 12), 6=-48(LC 12)  
 Max Grav 4=88(LC 1), 2=309(LC 1), 6=170(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 BOT CHORD 2-6=-251/169  
 WEBS 3-6=-200/297

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 6 except (jt=lb) 2=149.
  - 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.
  - Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



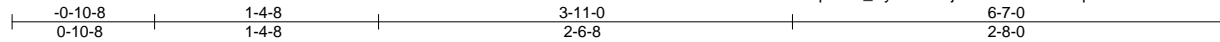
October 21, 2020

Job 2501456_OFA	Truss I110	Truss Type Half Hip Girder	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	143258173
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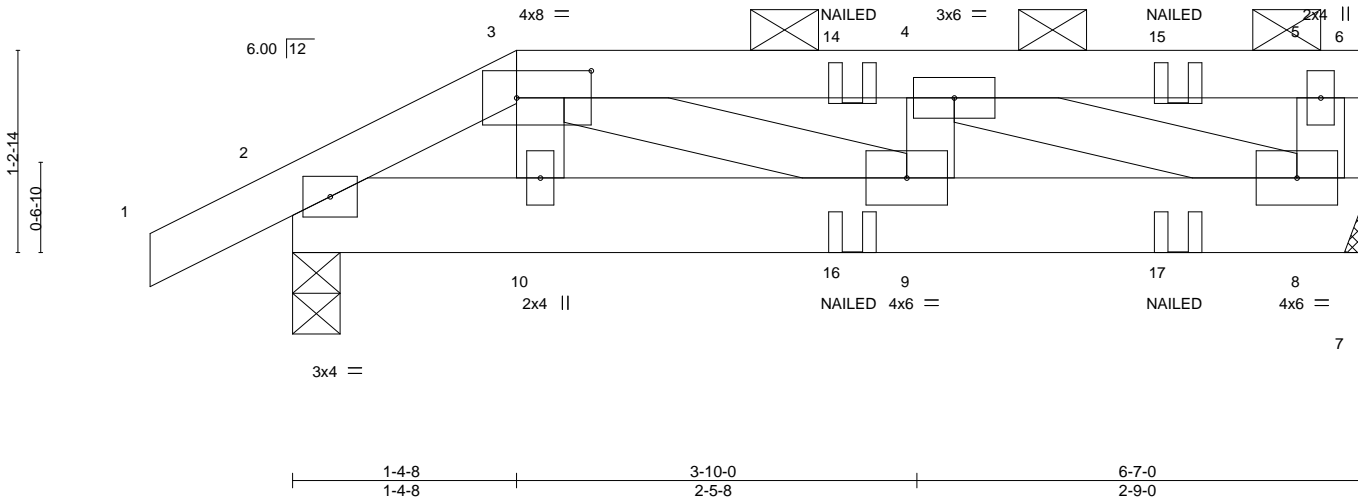


Plate Offsets (X,Y)-- [3:0-5-8,0-2-0]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.10	Vert(LL)	0.01	9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	-0.01	9	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.06	Horz(CT)	0.00	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP					Weight: 36 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-6.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 8=Mechanical  
Max Horz 2=75(LC 8)  
Max Uplift 2=-131(LC 8), 8=-150(LC 5)  
Max Grav 2=305(LC 1), 8=258(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-343/173, 3-4=-398/227  
BOT CHORD 2-10=-160/288, 9-10=-157/294, 8-9=-227/398  
WEBS 4-8=-424/242

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left exposed; end vertical left 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.
  - 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=131, 8=150.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 41 lb down and 50 lb up at 1-4-8 on top chord, and 15 lb down and 3 lb up at 1-4-8 on bottom 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).

**LOAD CASE(S)** Standard  
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 3-5=-60, 5-6=-20, 7-11=-20  
Concentrated Loads (lb)  
Vert: 10=3(F) 16=1(F) 17=1(F)



October 21, 2020

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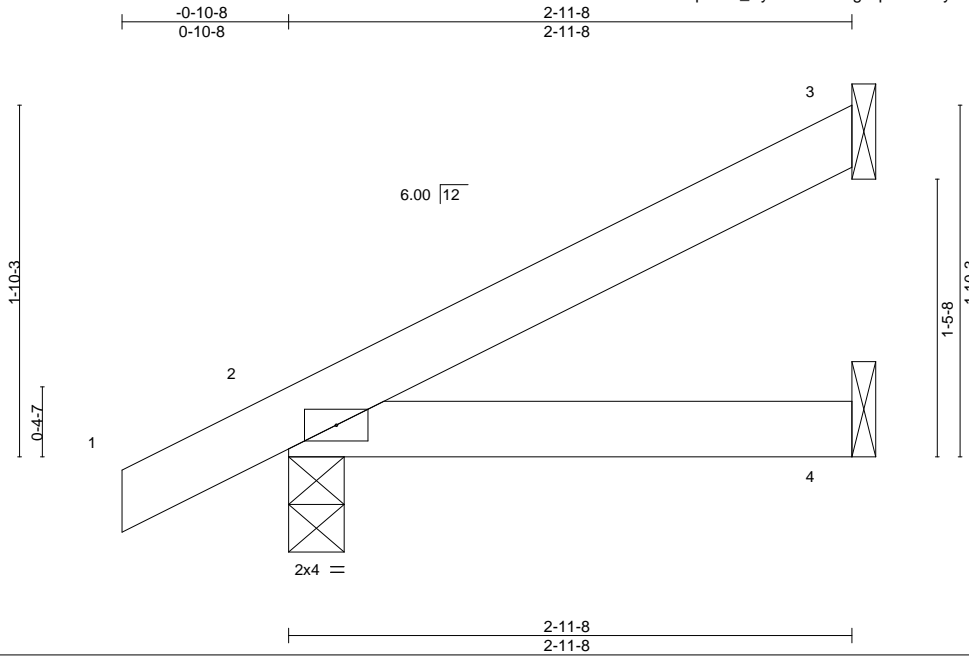
818 Soundside Road  
Edenton, NC 27932

Job 2501456_OFA	Truss J01	Truss Type JACK-OPEN	Qty 8	Ply 1	H&H/Prelude/ Job Reference (optional)	I43258174
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:50 2020 Page 1

ID:?hrBCA8NTN1Es8op2ICn\_Py8kIV-?nrdJgiGpLbInASy2BVbINYPuKpROFdLJgecWyRuk3



Scale: 1"=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 0.12	Vert(LL)	-0.00	4-7	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	-0.01	4-7	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP	Wind(LL)	0.01	4-7	>999	240		
								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 2-11-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=87(LC 12)  
Max Uplift 3=-52(LC 12), 2=-44(LC 12)  
Max Grav 3=71(LC 1), 2=176(LC 1), 4=52(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.



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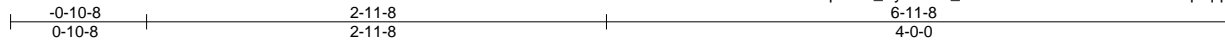


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Job 2501456_OFA	Truss J02	Truss Type HALF HIP GIRDER	Qty 4	Ply 1	H&H/Prelude/ Job Reference (optional)	143258175
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:51 2020 Page 1  
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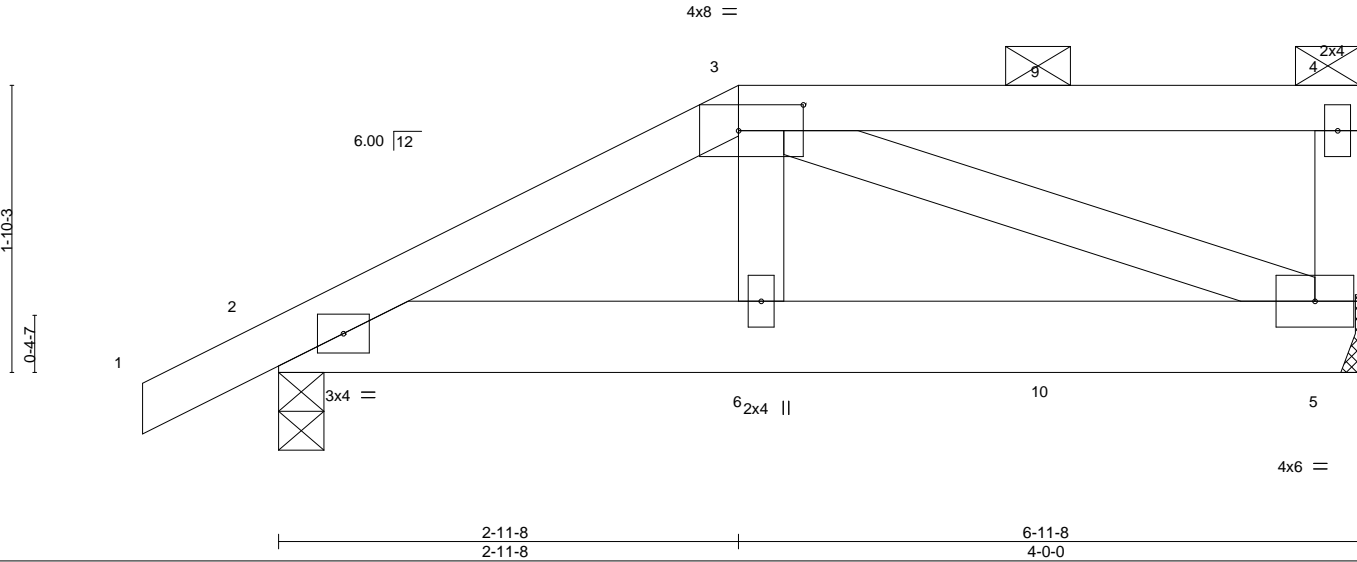


Plate Offsets (X,Y)--	[3:0-5-0,0-2-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	-0.00	6	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	-0.01	6	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.11	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.01	6	>999	Weight: 37 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.): 3-4.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 2=0-3-8, 5=Mechanical  
 Max Horz 2=89(LC 8)  
 Max Uplift 2=110(LC 8), 5=101(LC 5)  
 Max Grav 2=371(LC 1), 5=318(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-466/123  
 BOT CHORD 2-6=-131/403, 5-6=-126/414  
 WEBS 3-5=-392/118

- NOTES-**
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFERS (envelope); end vertical left 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.
  - 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=110, 5=101.
  - 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) 94 lb down and 129 lb up at 2-11-8, and 40 lb down and 58 lb up at 5-0-4 on top chord, and 41 lb down at 2-11-8, and 21 lb down at 5-0-4 on bottom 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).

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 3-4=-60, 2-5=-20  
 Concentrated Loads (lb)  
 Vert: 3=-26(F) 6=-37(F) 9=-11(F) 10=-17(F)



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Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	I43258176
2501456_OFA	J03	HALF HIP	4	1		
Builders FirstSource, Sumter, SC - 29153,						8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:52 2020 Page 1
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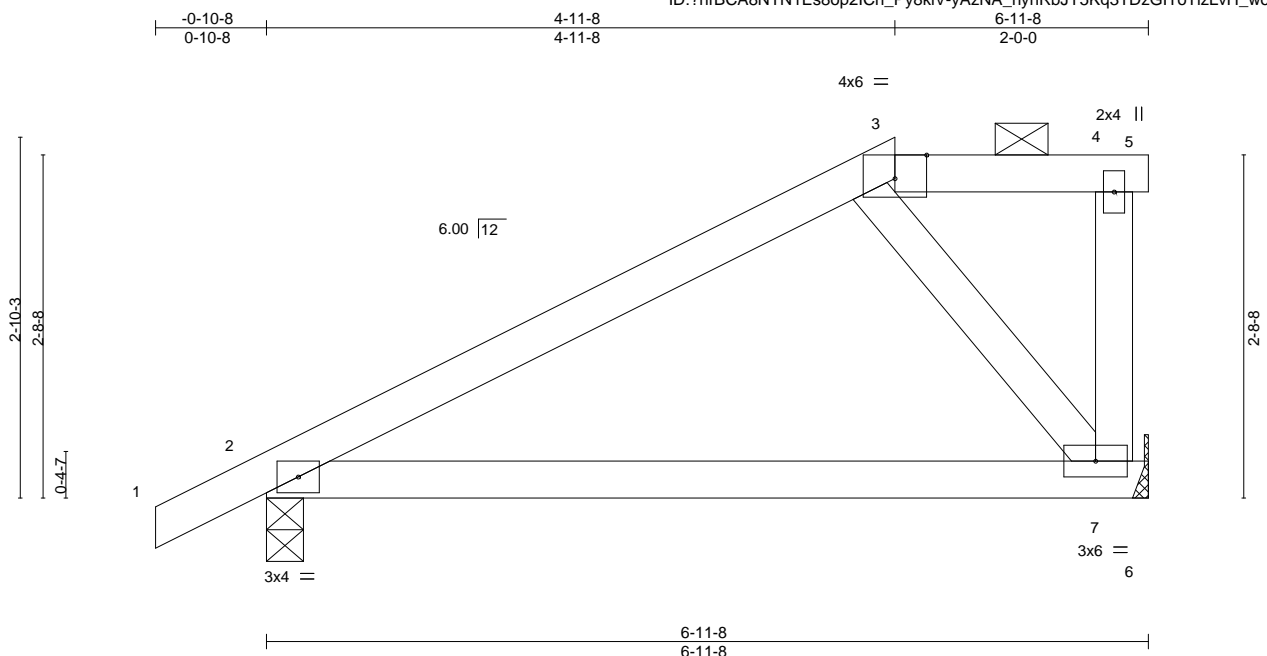


Plate Offsets (X,Y)--	[3:0-3-0,Edge]									
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.47	Vert(LL)	-0.04	7-10	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	-0.10	7-10	>837	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.05	7-10	>999	240	Weight: 31 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
BOT CHORD 2x4 SP No.2	2-0-0 oc purlins (6-0-0 max.): 3-5.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (size) 2=0-3-8, 7=Mechanical  
 Max Horz 2=132(LC 12)  
 Max Uplift 2=-81(LC 12), 7=-74(LC 9)  
 Max Grav 2=323(LC 1), 7=275(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-7=-226/377

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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
  - 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.
  - 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) 2, 7.
  - 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.

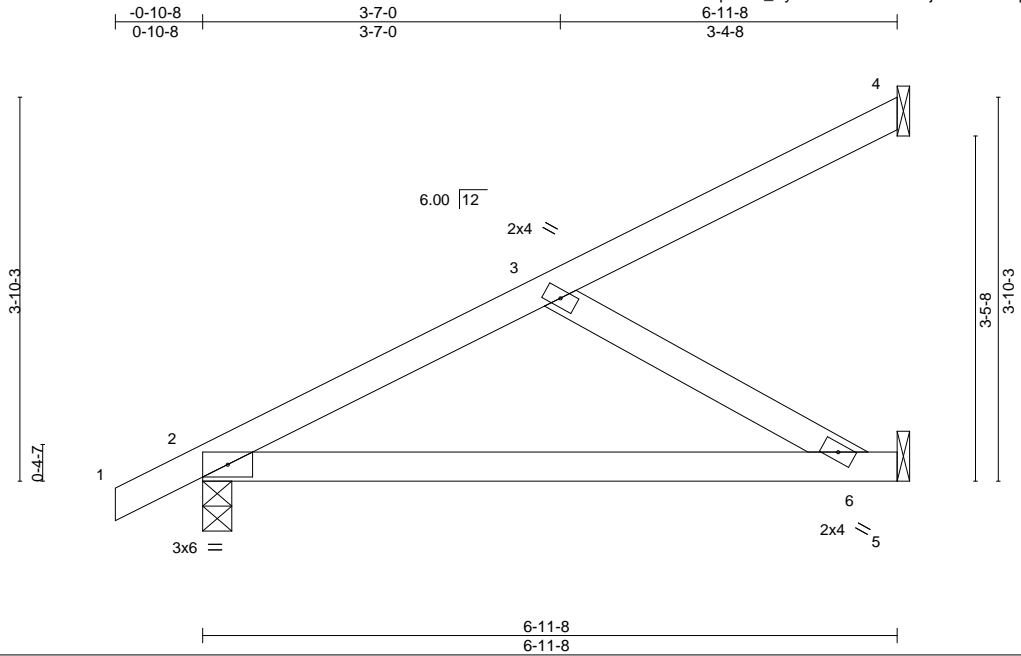


October 21, 2020

Job 2501456_OFA	Truss J04	Truss Type JACK-PARTIAL	Qty 26	Ply 1	H&H/Prelude/ Job Reference (optional)	I43258177
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:53 2020 Page 1  
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Scale = 1:23.1

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 0.36	Vert(LL)	-0.07 6-9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.44	Vert(CT)	-0.15 6-9	>560	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.14	Horz(CT)	-0.00 5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.04 6-9	>999	240	Weight: 29 lb	FT = 20%

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

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

**REACTIONS.** (size) 4=Mechanical, 2=0-3-8, 5=Mechanical  
Max Horz 2=183(LC 12)  
Max Uplift 4=-69(LC 12), 2=-66(LC 12), 5=-56(LC 12)  
Max Grav 4=77(LC 1), 2=332(LC 1), 5=195(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-301/175  
BOT CHORD 2-6=-407/293  
WEBS 3-6=-335/465

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 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.



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Job 2501456_OFA	Truss J05	Truss Type Jack-Open	Qty 6	Ply 1	H&H/Prelude/ Job Reference (optional)	143258178
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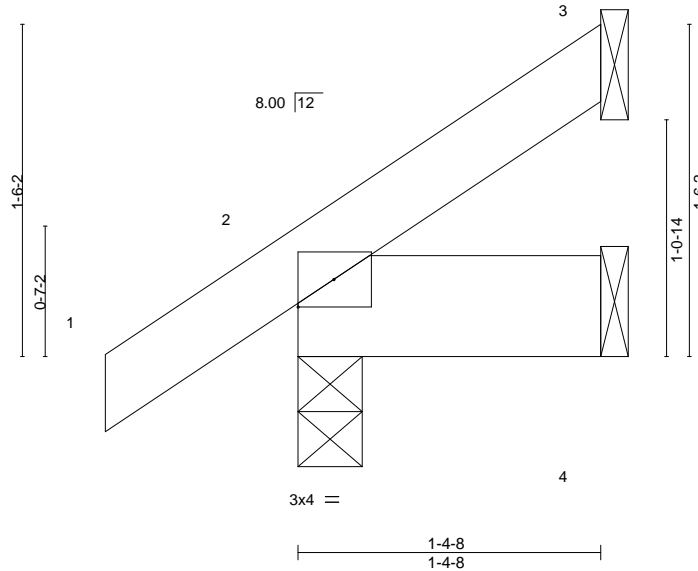
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8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:54 2020 Page 1

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Scale = 1:10.5



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	-0.00	7 >999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	7 >999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3 n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP	Wind(LL)	-0.00	7 >999	240	Weight: 8 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 1-4-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=98(LC 12)  
Max Uplift 3=-39(LC 12), 2=-59(LC 12), 4=-5(LC 12)  
Max Grav 3=34(LC 19), 2=124(LC 1), 4=25(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.



October 21, 2020

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Job 2501456_OFA	Truss J06	Truss Type Jack-Open	Qty 11	Ply 1	H&H/Prelude/ Job Reference (optional)	I43258179
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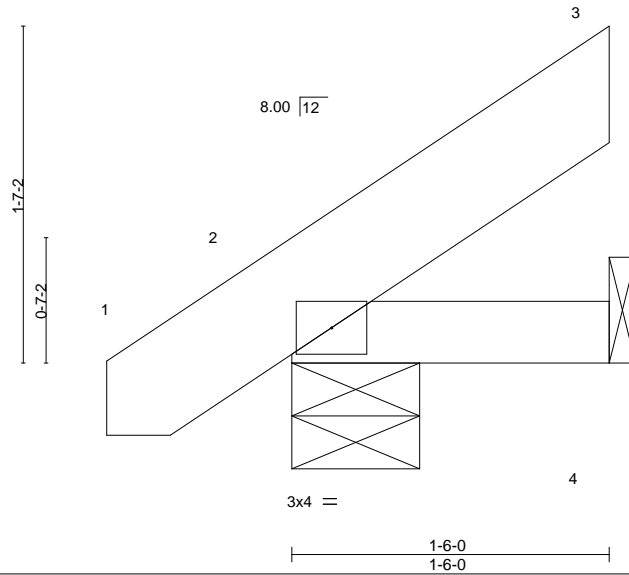
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8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:54 2020 Page 1

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Scale = 1:10.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	0.00	7 >999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.17	Vert(CT)	-0.00	7 >999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	2 n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP					Weight: 9 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 1-6-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 2=0-7-4, 4=Mechanical  
Max Horz 2=91(LC 12)  
Max Uplift 2=-46(LC 12), 4=-51(LC 9)  
Max Grav 2=114(LC 1), 4=56(LC 19)

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

**NOTES-**

- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed; end vertical left exposed; 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) 2, 4.



October 21, 2020

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

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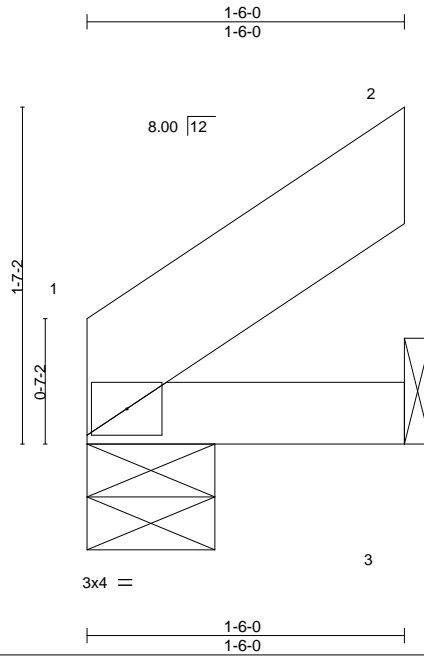
818 Soundside Road  
Edenton, NC 27932



Job 2501456_OFA	Truss J07	Truss Type Jack-Open	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	143258180
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:56 2020 Page 1  
ID:?hrBCA8NTN1Es8op2lCn\_Py8klV-qxCu0MkTrf6l1dblllvQ8dbqJLnr6kWjF7yoAyRujz



Scale = 1:10.9

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	0.00	6	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.21	Vert(CT)	-0.00	6	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	1	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP					Weight: 7 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 1-6-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=0-7-4, 3=Mechanical  
Max Horz 1=62(LC 12)  
Max Uplift 1=-2(LC 12), 3=-55(LC 9)  
Max Grav 1=59(LC 1), 3=67(LC 19)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



October 21, 2020

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818 Soundside Road  
Edenton, NC 27932

Job 2501456_OFA	Truss J08	Truss Type Jack-Open	Qty 6	Ply 1	H&H/Prelude/ Job Reference (optional)	143258181
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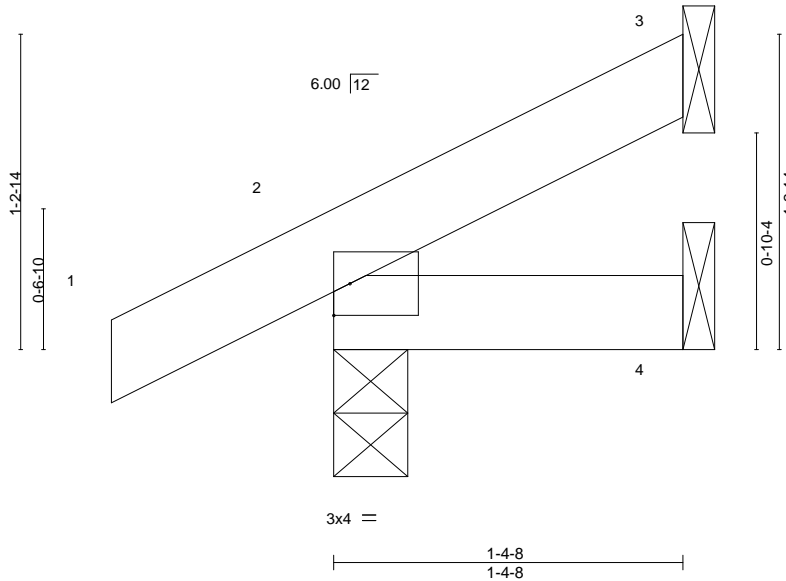
Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:57 2020 Page 1

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Scale = 1:9.1



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 0.08	Vert(LL)	-0.00	7 >999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	7 >999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3 n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP	Wind(LL)	-0.00	7 >999	240	Weight: 6 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 1-4-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=73(LC 12)  
Max Uplift 3=-40(LC 12), 2=-65(LC 12)  
Max Grav 3=28(LC 1), 2=124(LC 1), 4=23(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.



October 21, 2020

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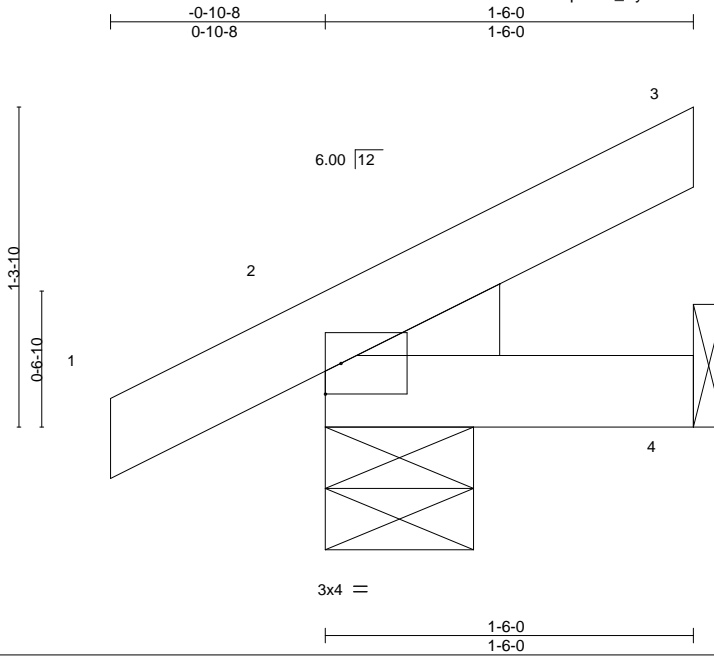
818 Soundside Road  
Edenton, NC 27932

Job 2501456_OFA	Truss J09	Truss Type Jack-Open	Qty 10	Ply 1	H&H/Prelude/ Job Reference (optional)	143258182
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:59 2020 Page 1

ID:?hrBCA8NTN1Es8op2ICn\_Py8kIV-EWu0eNnL8aUKu9MA\_Rrc2nF3tXNf2STyPDLcPVyRujw



Scale = 1:9.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	0.00	4-7	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	-0.00	4-7	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	2	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP					Weight: 7 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 1-6-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

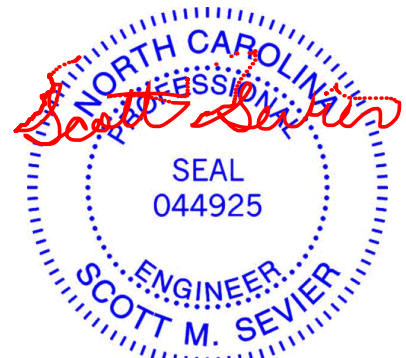
**REACTIONS.**

(size) 2=0-7-4, 4=Mechanical  
 Max Horz 2=71(LC 16)  
 Max Uplift 2=-61(LC 12), 4=-46(LC 9)  
 Max Grav 2=123(LC 1), 4=45(LC 1)

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

**NOTES-**

- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed; end vertical left exposed; 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) 2, 4.



October 21, 2020

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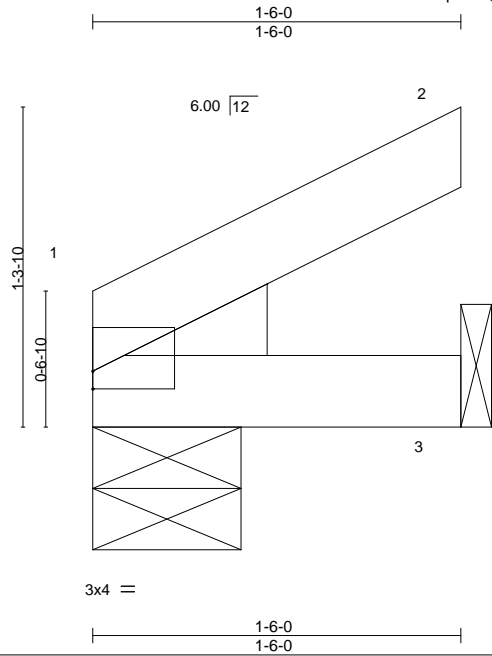
818 Soundside Road  
 Edenton, NC 27932

Job 2501456_OFA	Truss J10	Truss Type Jack-Open	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	I43258183
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:06:59 2020 Page 1

ID:?hrBCA8NTN1Es8op2ICn\_Py8kiV-EWu0eNnL8aUKu9MA\_Rrc2nF3tXNI2STyPDLcPVyRujw



Scale = 1:9.4

Plate Offsets (X,Y)--	[1:0-0-0,0-0-14]				
<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 0.20	Vert(LL) 0.00 3-6 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.25	Vert(CT) -0.00 3-6 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00 1 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MP		Weight: 6 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 1-6-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=0-7-4, 3=Mechanical  
 Max Horz 1=47(LC 9)  
 Max Uplift 1=8(LC 12), 3=51(LC 9)  
 Max Grav 1=55(LC 1), 3=60(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



October 21, 2020

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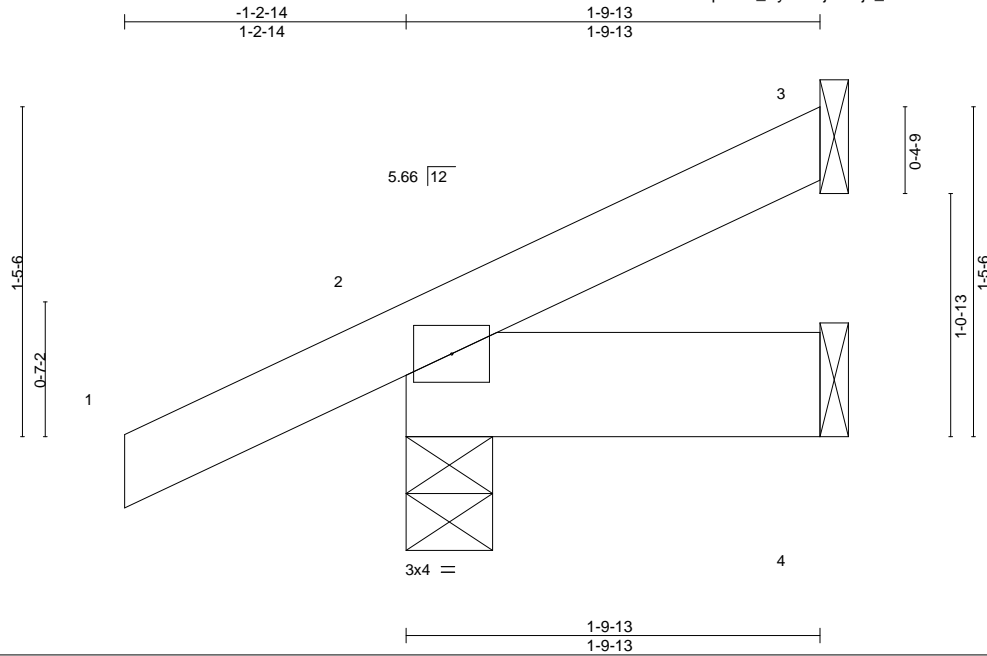


818 Soundside Road  
 Edenton, NC 27932

Job 2501456_OFA	Truss JC01	Truss Type Jack-Open	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	143258184
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:07:00 2020 Page 1  
ID:?hrBCA8NTN1Es8op2ICn\_Py8kiV-jisPSjn\_vucBVJxNX8Nrb\_oJwIwvWj6et5AxyRujv



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 0.16	Vert(LL)	-0.00	7 >999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	7 >999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3 n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP	Wind(LL)	-0.00	7 >999	240	Weight: 9 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 1-9-13 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

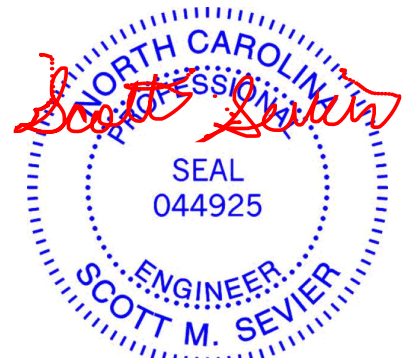
**REACTIONS.**

(size) 3=Mechanical, 2=0-4-9, 4=Mechanical  
Max Horz 2=94(LC 12)  
Max Uplift 3=-42(LC 12), 2=-101(LC 12)  
Max Grav 3=34(LC 1), 2=172(LC 1), 4=32(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 2=101.



October 21, 2020

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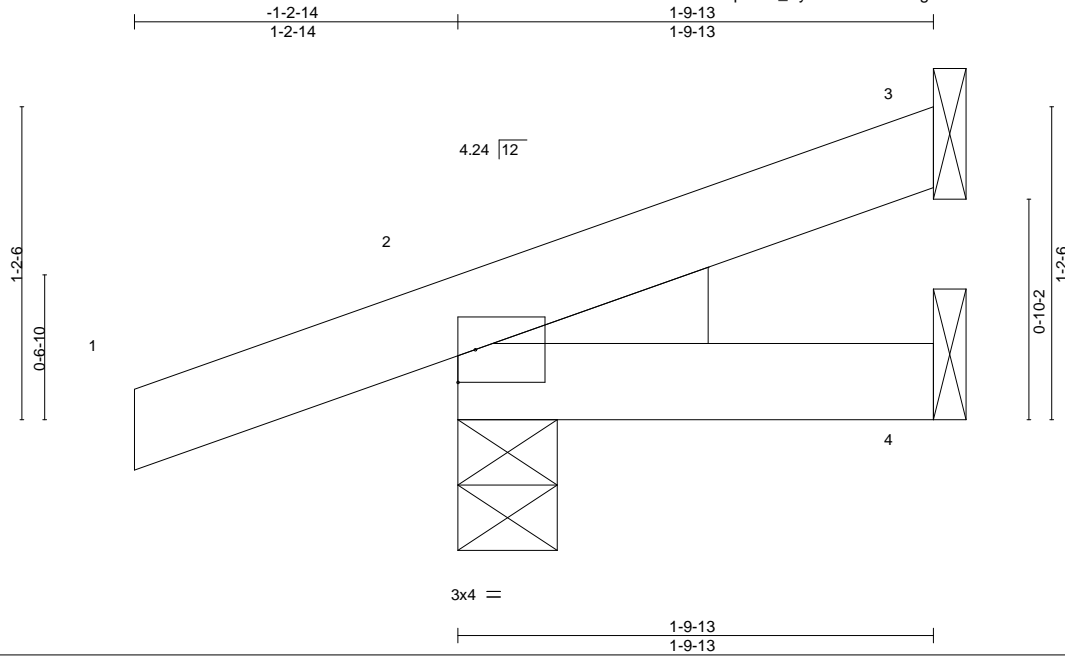
818 Soundside Road  
Edenton, NC 27932

Job 2501456_OFA	Truss JC02	Truss Type Jack-Open	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	I43258185
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:07:01 2020 Page 1

ID:?hrBCA8NTN1Es8op2ICn\_Py8kIV-Bv0n33ocgCk17TWZ5su47CKQIK5iWMzFsXqjTnyRuju



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	7 >999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	7 >999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3 n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP	Wind(LL)	-0.00	7 >999	240	Weight: 9 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 1-9-13 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-4-9, 4=Mechanical  
Max Horz 2=85(LC 8)  
Max Uplift 3=-43(LC 12), 2=-160(LC 8)  
Max Grav 3=36(LC 1), 2=172(LC 1), 4=30(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 2=160.



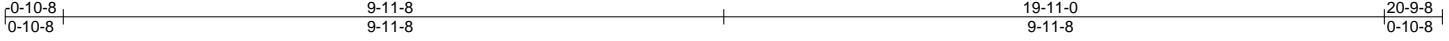
October 21, 2020

Job 2501456_OFA	Truss K01	Truss Type Common Supported Gable	Qty 4	Ply 1	H&H/Prelude/ Job Reference (optional)	143258186
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:07:02 2020 Page 1

ID:?hrBCA8NTN1Es8op2lCn\_Py8klV-f5a9GPpERVsuld5fZPjgPtbeKQdFo?O5BaH0qyRujt



Scale = 1:34.7

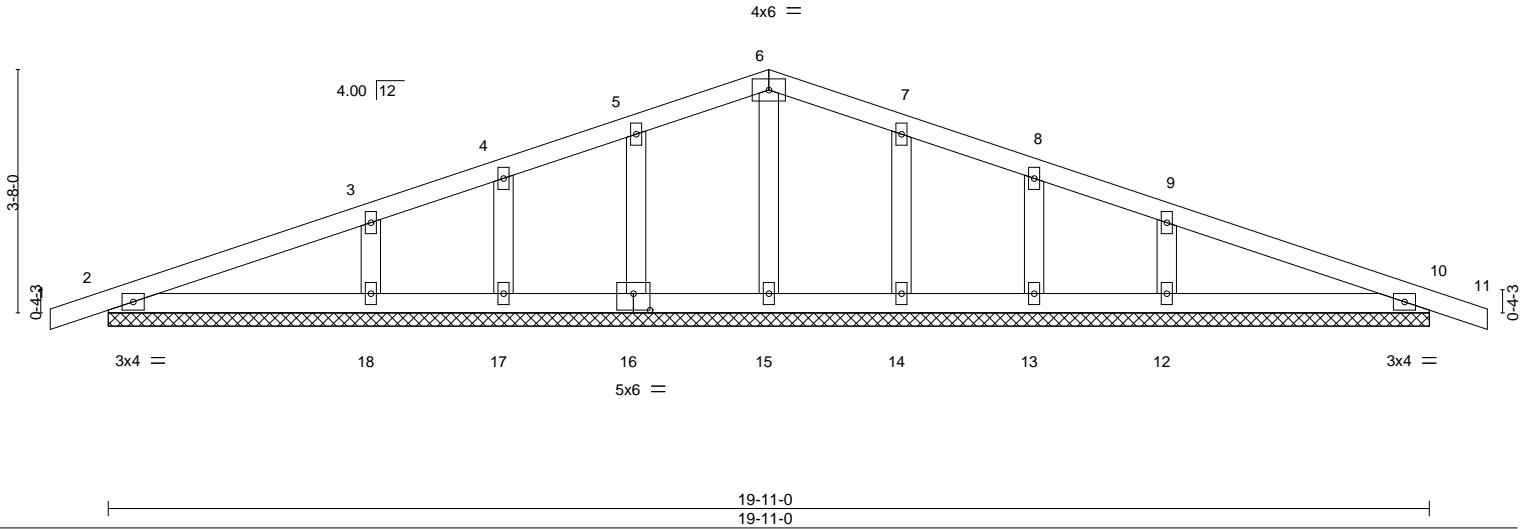


Plate Offsets (X,Y)--	[16:0-3-0,0-3-0]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.17	Vert(LL)	0.00	11	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	0.01	11	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	10	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 84 lb	FT = 20%

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

**REACTIONS.** All bearings 19-11-0.  
 (lb) - Max Horz 2=108(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 17, 13 except 2=132(LC 8), 16=125(LC 12), 18=206(LC 12), 14=123(LC 13), 12=205(LC 13), 10=146(LC 9)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 15, 16, 17, 14, 13, 10 except 18=312(LC 23), 12=311(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 3-18=222/264, 9-12=222/264

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 13 except (jt=lb) 2=132, 16=125, 18=206, 14=123, 12=205, 10=146.

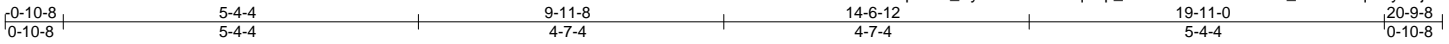


Job	Truss	Truss Type	Qty	Ply	H&H/Prelude/	143258187
2501456_OFA	K02	Common	20	1		

Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:07:03 2020 Page 1

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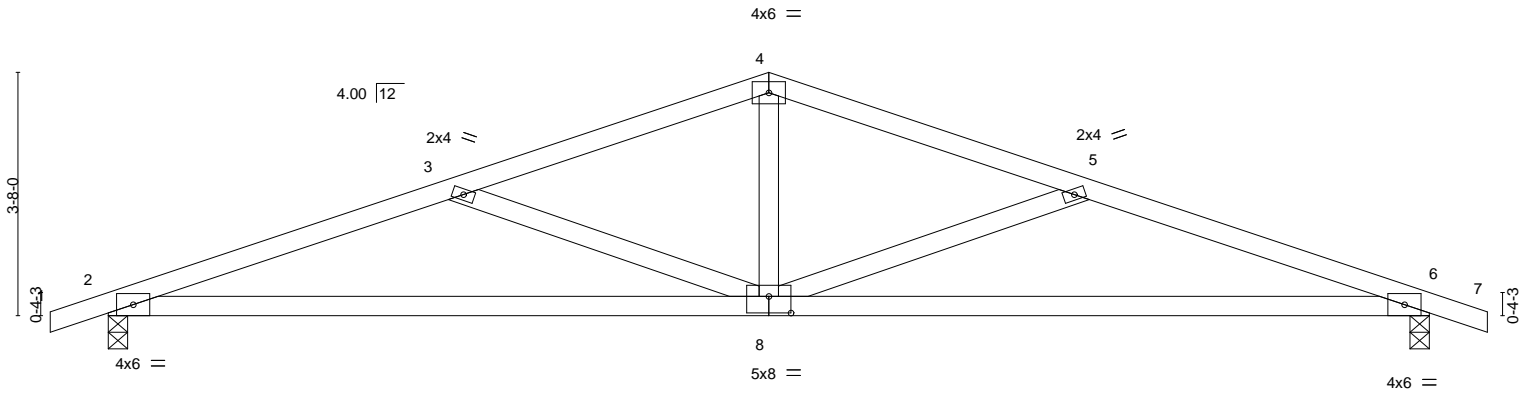


Plate Offsets (X,Y)--	[8:0-4-0,0-3-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.45	Vert(LL)	-0.15	8-11	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.93	Vert(CT)	-0.35	8-11	>688		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.27	Horz(CT)	0.05	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.13	8-11	>999	Weight: 83 lb	FT = 20%

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

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8  
 Max Horz 2=108(LC 12)  
 Max Uplift 2=-463(LC 8), 6=-463(LC 9)  
 Max Grav 2=849(LC 1), 6=849(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1837/1285, 3-4=-1363/894, 4-5=-1363/894, 5-6=-1837/1285  
 BOT CHORD 2-8=-1111/1725, 6-8=-1119/1725  
 WEBS 4-8=-246/593, 5-8=-533/522, 3-8=-533/523

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=463, 6=463.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 21, 2020



Job 2501456_OFA	Truss L01	Truss Type GABLE	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	I43258188
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:07:04 2020 Page 1  
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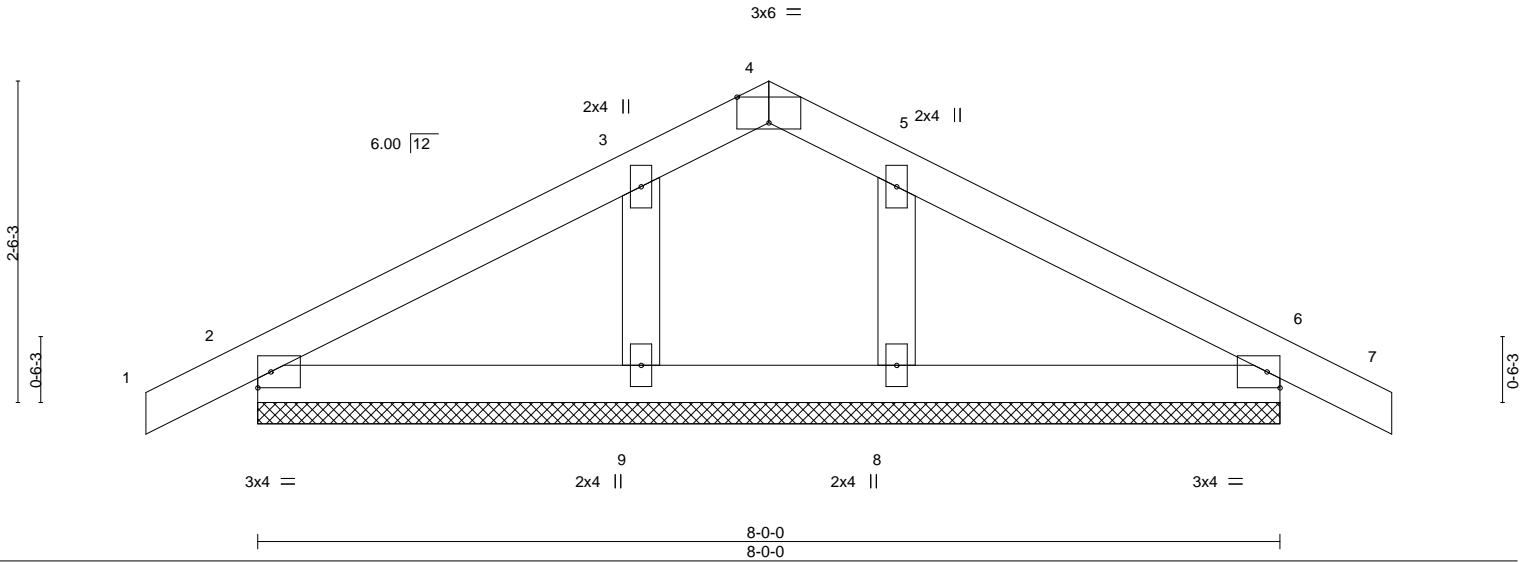


Plate Offsets (X,Y)-- [4:0-3-0,Edge]

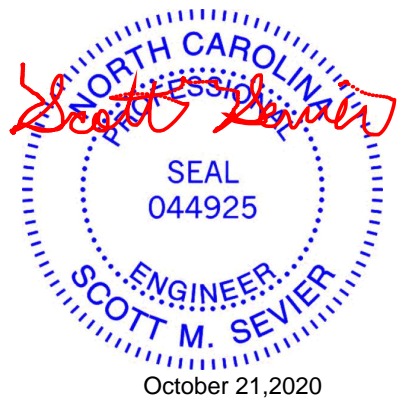
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.12	Vert(LL) 0.00 7 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.08	Vert(CT) 0.00 7 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.08	Horz(CT) 0.00 6 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 33 lb	FT = 20%

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

**REACTIONS.** All bearings 8-0-0.  
 (lb) - Max Horz 2=73(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 9=171(LC 12), 8=164(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 8

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 3-9=174/261, 5-8=175/262

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) 2, 6 except (jt=lb) 9=171, 8=164.

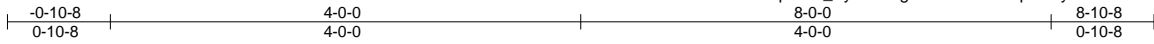


Job 2501456_OFA	Truss L02	Truss Type Common	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	I43258189
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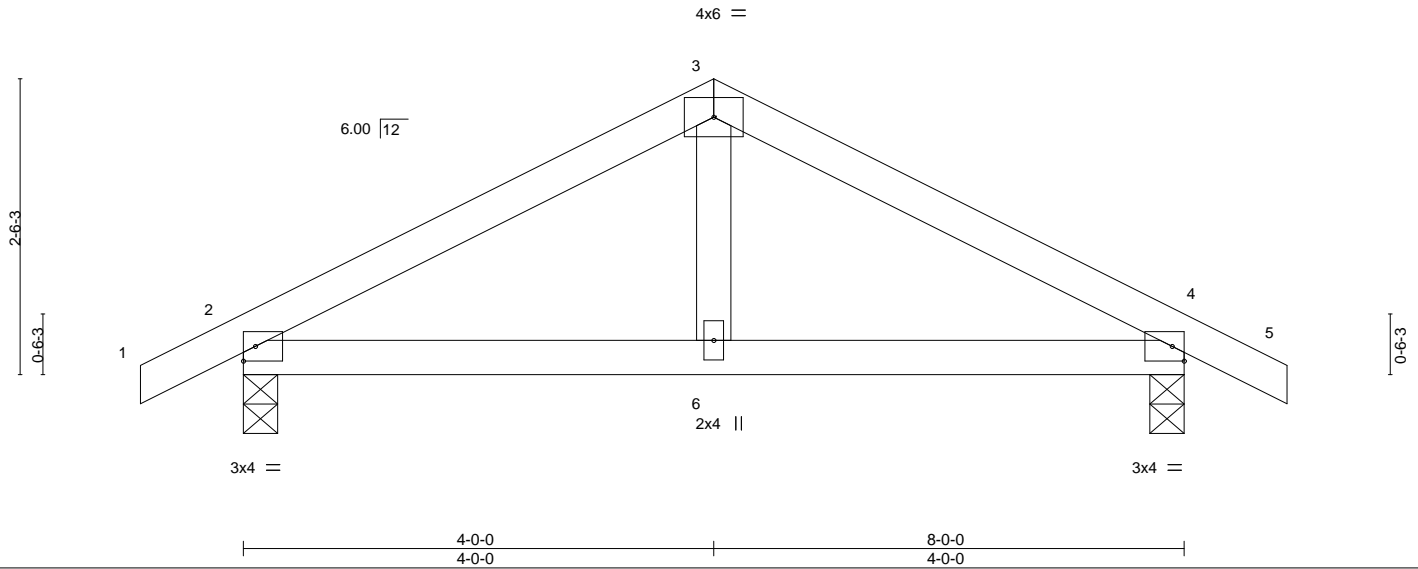
Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:07:05 2020 Page 1

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Scale = 1:19.6



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	0.02 6-12	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	-0.01 6-9	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	-0.00 2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS					Weight: 31 lb	FT = 20%

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

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

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
Max Horz 2=73(LC 12)  
Max Uplift 2=-195(LC 9), 4=-195(LC 8)  
Max Grav 2=373(LC 1), 4=373(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-407/789, 3-4=-407/789  
BOT CHORD 2-6=-564/319, 4-6=-564/319  
WEBS 3-6=-361/165

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=195, 4=195.
  - 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 21, 2020

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



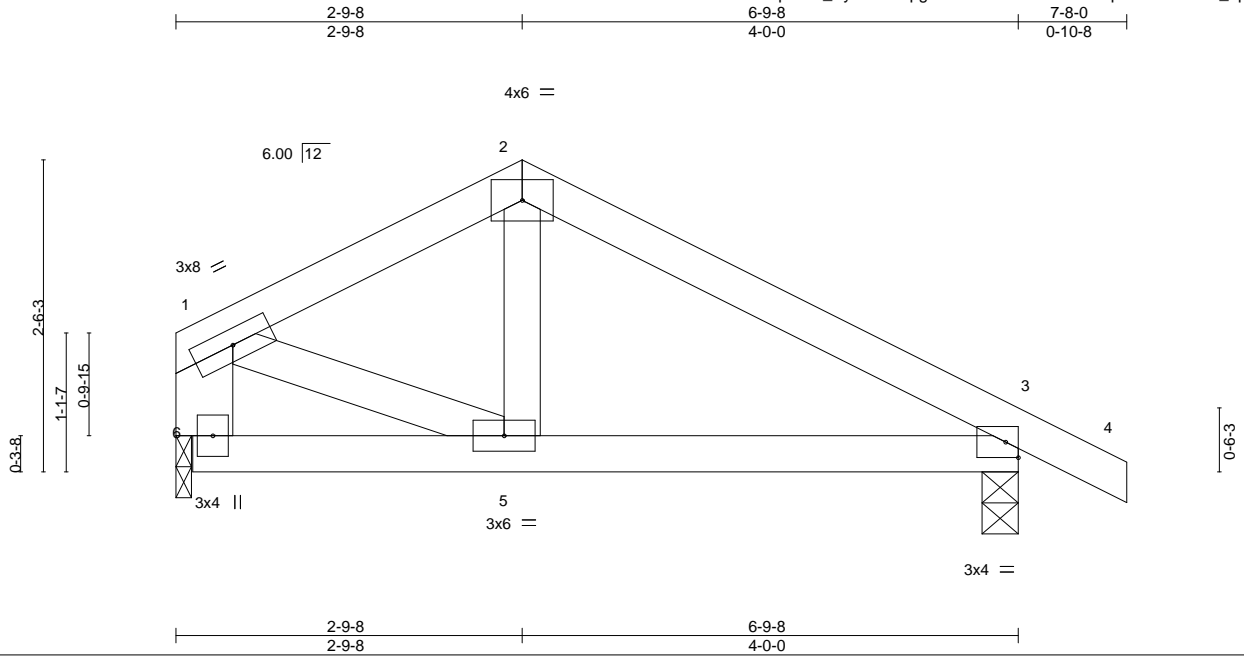
818 Soundside Road  
Edenton, NC 27932

Job 2501456_OFA	Truss L03	Truss Type Common	Qty 4	Ply 1	H&H/Prelude/ Job Reference (optional)	I43258190
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:07:06 2020 Page 1

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Scale = 1:18.6

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.35	Vert(LL)	0.03 5-9	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.22	Vert(CT)	-0.01 5-9	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00 3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS					Weight: 31 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 1-6: 2x6 SP No.2

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

**REACTIONS.** (size) 3=0-3-8, 6=0-1-8  
 Max Horz 6=-114(LC 13)  
 Max Uplift 3=-168(LC 8), 6=-135(LC 9)  
 Max Grav 3=318(LC 1), 6=259(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-248/539, 2-3=-279/516, 1-6=-247/500  
 BOT CHORD 3-5=-303/197  
 WEBS 1-5=-440/210

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever right exposed; end vertical right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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) 6 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) 6.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 3=168, 6=135.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 21, 2020

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



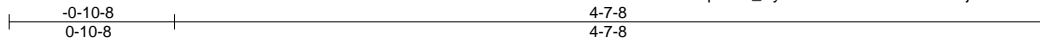
818 Soundside Road  
 Edenton, NC 27932

Job 2501456_OFA	Truss M01	Truss Type GABLE	Qty 3	Ply 1	H&H/Prelude/ Job Reference (optional)	I43258191
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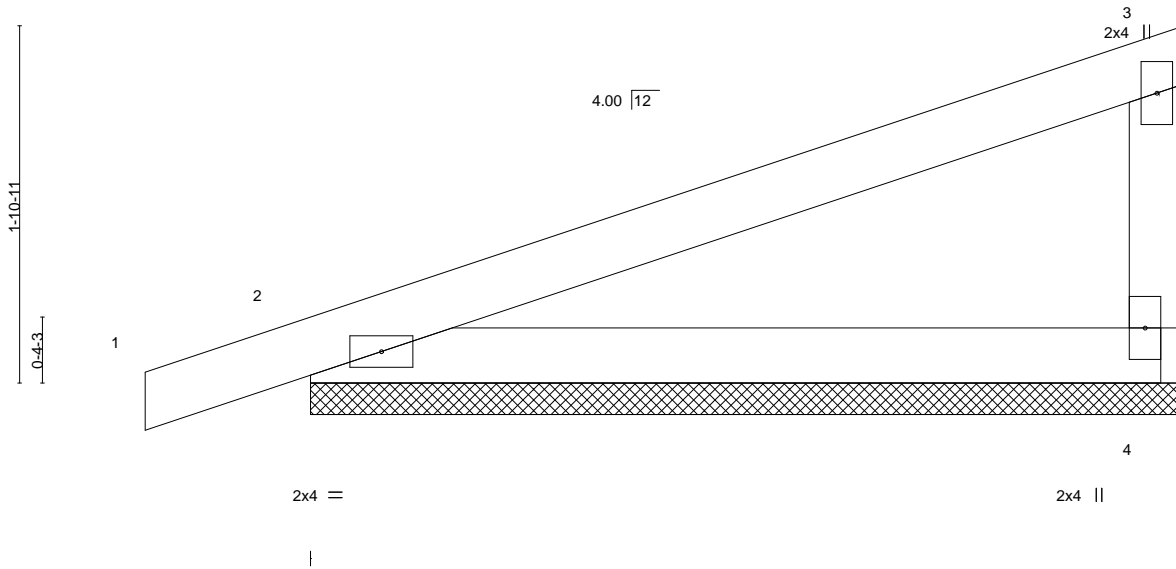
Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:07:07 2020 Page 1

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Scale = 1:12.2



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 0.45	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.25	Vert(CT)	0.01	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00		n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 17 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-7-8 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=4-7-8, 2=4-7-8  
 Max Horz 2=92(LC 8)  
 Max Uplift 4=65(LC 12), 2=99(LC 8)  
 Max Grav 4=174(LC 1), 2=237(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.



October 21, 2020

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

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



818 Soundside Road  
 Edenton, NC 27932

Job 2501456_OFA	Truss M02	Truss Type MONOPITCH	Qty 9	Ply 1	H&H/Prelude/ Job Reference (optional)	I43258192
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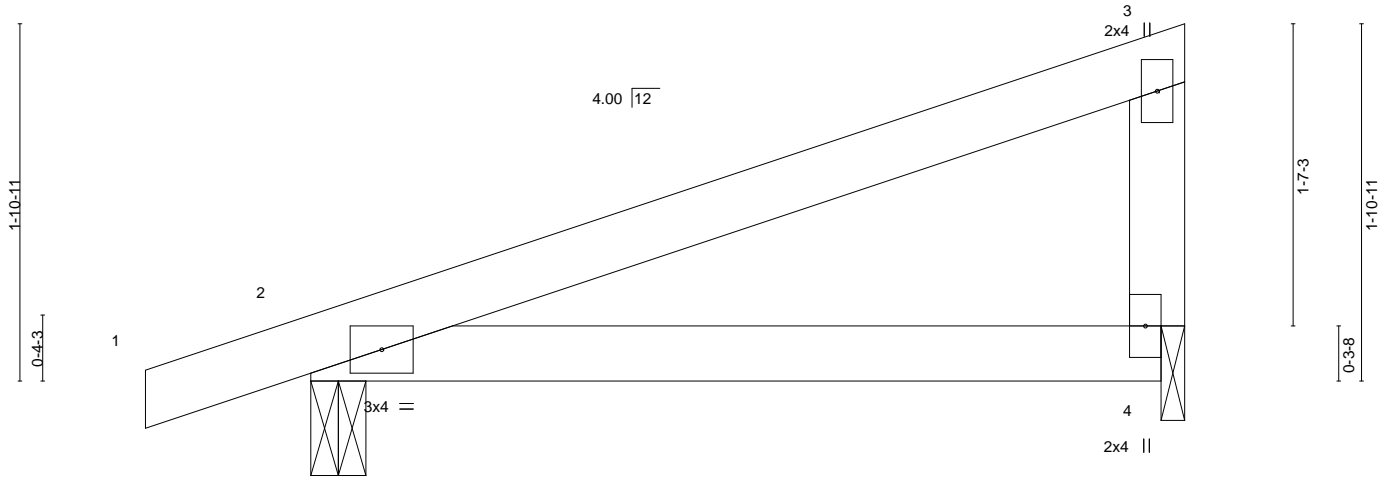
Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:07:07 2020 Page 1

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Scale = 1:12.2



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 0.40	Vert(LL)	0.08	4-7	>664	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.40	Vert(CT)	-0.04	4-7	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS						Weight: 17 lb	FT = 20%

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

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

**REACTIONS.** (size) 2=0-3-8, 4=0-1-8  
 Max Horz 2=93(LC 8)  
 Max Uplift 2=-173(LC 8), 4=-136(LC 8)  
 Max Grav 2=237(LC 1), 4=174(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; end vertical left exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 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=173, 4=136.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 21, 2020

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

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818 Soundside Road  
 Edenton, NC 27932

Job 2501456_OFA	Truss M03	Truss Type GABLE	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	I43258193
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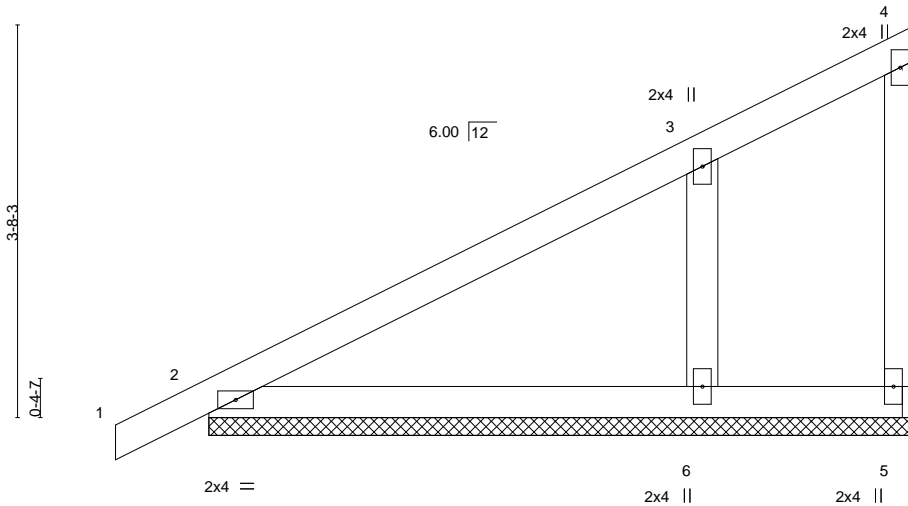
Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:07:08 2020 Page 1

ID:?hrBCA8NTN1Es8op2ICn\_Py8klV-UFXQXSu?0Lc2TYyv?qWkwg7ZH9S4fVGHt61bDTyRujn



Scale = 1:21.6



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.35	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.17	Vert(CT)	0.01	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.16	Horz(CT)	0.00		n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P							
									Weight: 30 lb	FT = 20%

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

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

**REACTIONS.** (size) 5=6-7-8, 2=6-7-8, 6=6-7-8  
 Max Horz 2=174(LC 12)  
 Max Uplift 5=-8(LC 19), 2=-15(LC 12), 6=-169(LC 12)  
 Max Grav 5=4(LC 12), 2=209(LC 1), 6=370(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-265/120  
 WEBS 3-6=-313/524

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; end vertical left exposed; 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) 5, 2 except (jt=lb) 6=169.



October 21, 2020

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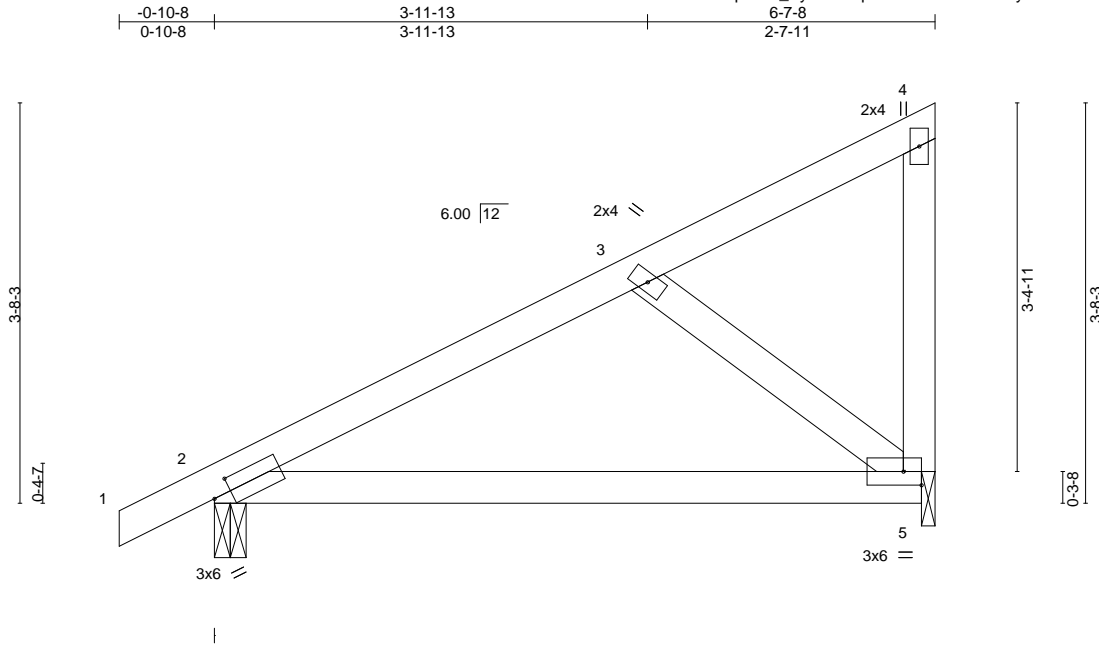


818 Soundside Road  
 Edenton, NC 27932

Job 2501456_OFA	Truss M04	Truss Type MONOPITCH	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	143258194
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:07:11 2020 Page 1  
ID:?hrBCA8NTN1Es8op2ICn\_Py8klV-uqz9UwtJG?dK?HUhy3RXJl1nMNCsskjA4FFqoyRujk



Scale = 1:21.2

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.53	Vert(LL)	0.20	5-8	>395	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.60	Vert(CT)	-0.11	5-8	>702	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.17	Horz(CT)	-0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS						Weight: 31 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 2=0-3-8, 5=0-1-8  
Max Horz 2=173(LC 12)  
Max Uplift 2=-92(LC 8), 5=-117(LC 12)  
Max Grav 2=315(LC 1), 5=256(LC 1)

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

BOT CHORD 2-5=-466/208  
WEBS 3-5=-260/584

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; end vertical left exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 5=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.



October 21, 2020

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818 Soundside Road  
Edenton, NC 27932

Job 2501456_OFA	Truss M05	Truss Type GABLE	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	I43258195
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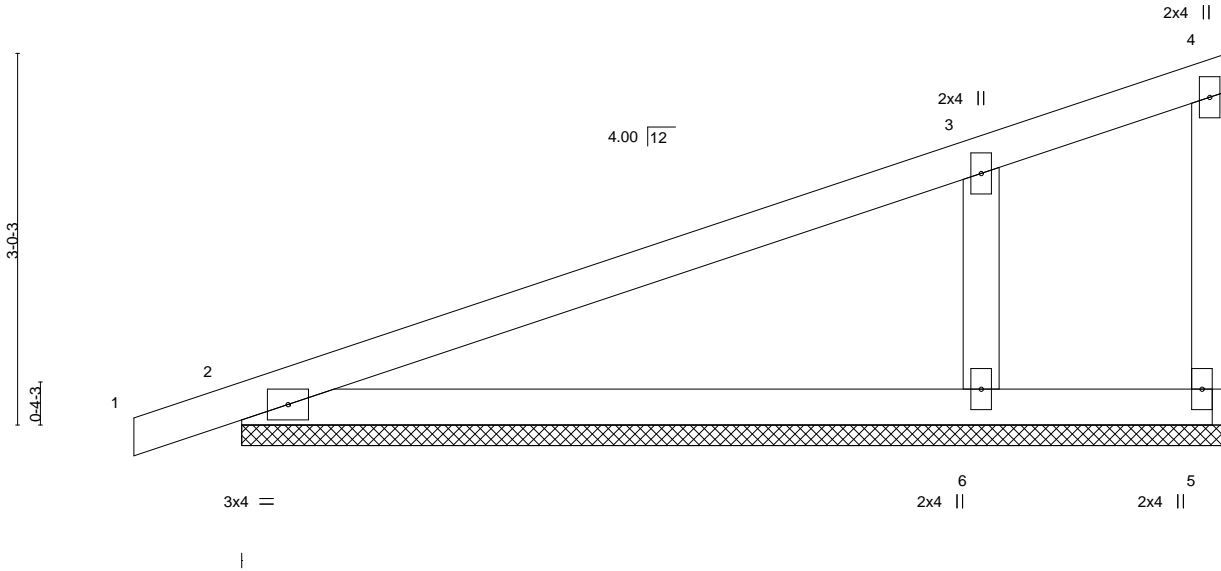
Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:07:12 2020 Page 1

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Scale = 1:18.7



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.44	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.28	Vert(CT)	0.02	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.16	Horz(CT)	-0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 32 lb	FT = 20%

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

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

**REACTIONS.** (size) 5=8-0-0, 2=8-0-0, 6=8-0-0  
 Max Horz 2=146(LC 8)  
 Max Uplift 5=-86(LC 1), 2=-85(LC 8), 6=-192(LC 12)  
 Max Grav 5=31(LC 12), 2=247(LC 1), 6=520(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-6=-366/553

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; end vertical left exposed;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) 1, 2 except (jt=lb) 6=192.



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818 Soundside Road  
 Edenton, NC 27932



Job 2501456_OFA	Truss M06	Truss Type MONOPITCH	Qty 4	Ply 1	H&H/Prelude/ Job Reference (optional)	143258196
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:07:14 2020 Page 1

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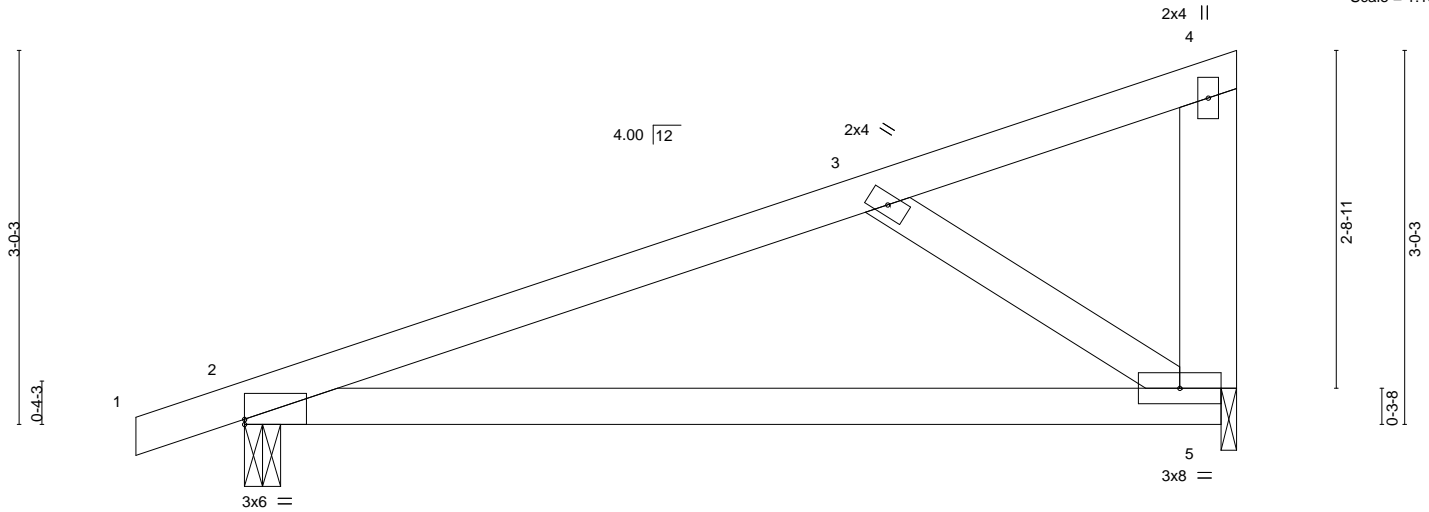


Plate Offsets (X,Y)-- [2:Edge,0-0-8]

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 0.66	Vert(LL)	0.27	5-8	>349	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.60	Vert(CT)	-0.15	5-8	>628		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.21	Horz(CT)	-0.01	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS						
								Weight: 36 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

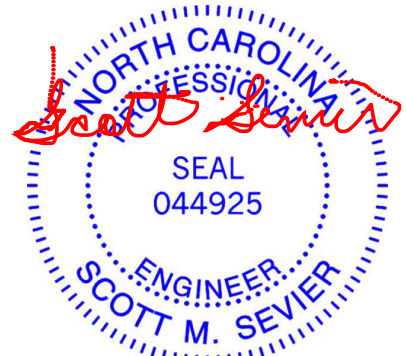
(size) 2=0-3-8, 5=0-1-8  
 Max Horz 2=146(LC 8)  
 Max Uplift 2=-256(LC 8), 5=-241(LC 8)  
 Max Grav 2=366(LC 1), 5=308(LC 1)

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

TOP CHORD 2-3=-390/560  
 BOT CHORD 2-5=-722/354  
 WEBS 3-5=-376/712

**NOTES-**

- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; end vertical left exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 5 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) 5.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=256, 5=241.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 21, 2020

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818 Soundside Road  
 Edenton, NC 27932

Job 2501456_OFA	Truss M07	Truss Type Half Hip Supported	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	143258197
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:07:15 2020 Page 1  
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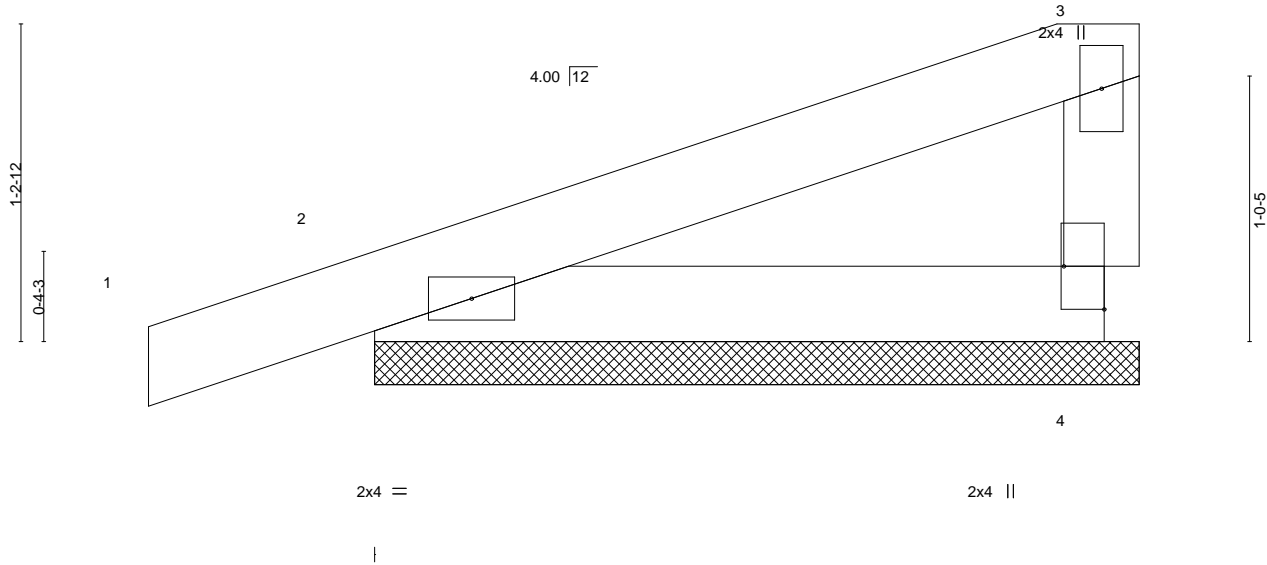


Plate Offsets (X,Y)-- [4:Edge,0-1-14]		CSI.		DEFL.				PLATES	GRIP
LOADING (psf)	SPACING- 2-0-0	TC	0.15	in	(loc)	l/defl	L/d	MT20	244/190
TCLL 20.0	Plate Grip DOL 1.15	BC	0.09	Vert(LL)	-0.00	1	n/r		
TCDL 10.0	Lumber DOL 1.15	WB	0.00	Vert(CT)	0.00	1	n/r		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P		Horz(CT)	0.00	4	n/a		
BCDL 10.0	Code IRC2015/TPI2014							Weight: 11 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-11-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=2-11-8, 2=2-11-8  
Max Horz 2=84(LC 9)  
Max Uplift 4=63(LC 12), 2=141(LC 8)  
Max Grav 4=104(LC 1), 2=173(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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=141.



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Edenton, NC 27932

Job 2501456_OFA	Truss M08	Truss Type Half Hip	Qty 6	Ply 1	H&H/Prelude/ Job Reference (optional)	143258198
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8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:07:16 2020 Page 1

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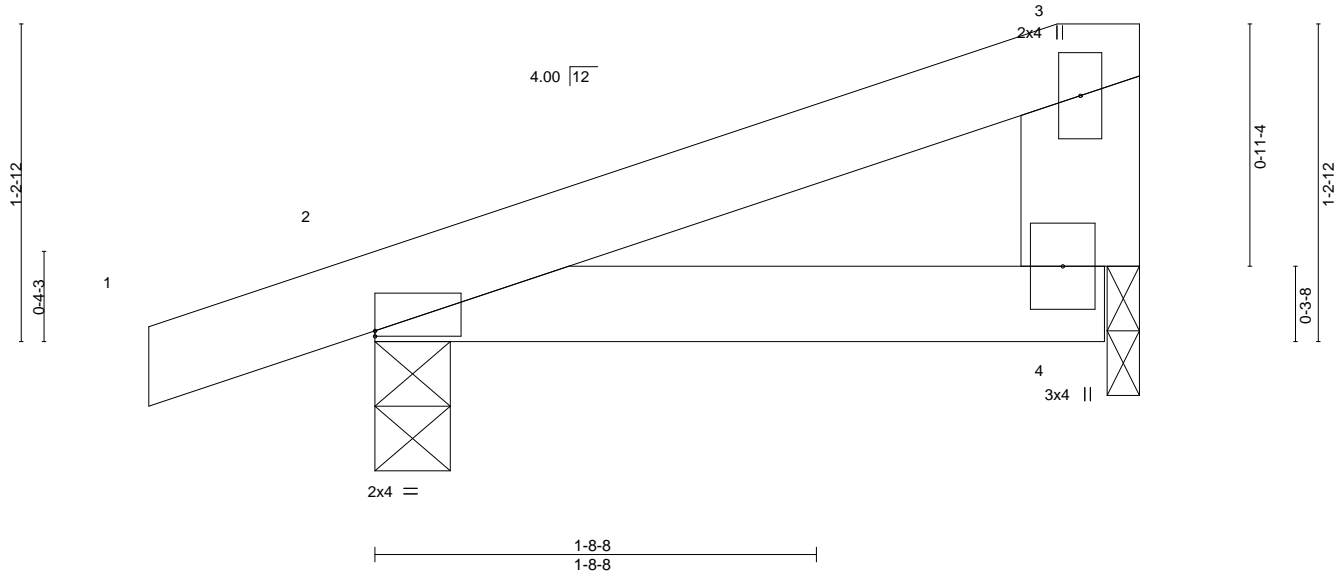


Plate Offsets (X,Y)--	[2:Edge,0-0-4]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.13	Vert(LL) 0.01 4-7 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.13	Vert(CT) -0.00 4-7 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00 2 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MP		Weight: 12 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-11-8 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 4=0-1-8  
 Max Horz 2=90(LC 8)  
 Max Uplift 2=-178(LC 8), 4=-107(LC 8)  
 Max Grav 2=170(LC 1), 4=101(LC 1)

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

**NOTES-**

- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed; end vertical left exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) except (jt=lb) 2=178, 4=107.



October 21, 2020

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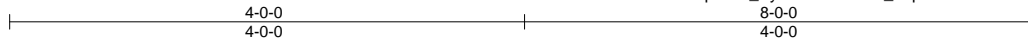
818 Soundside Road  
 Edenton, NC 27932

Job 2501456_OFA	Truss PB01	Truss Type GABLE	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	143258199
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:07:16 2020 Page 1

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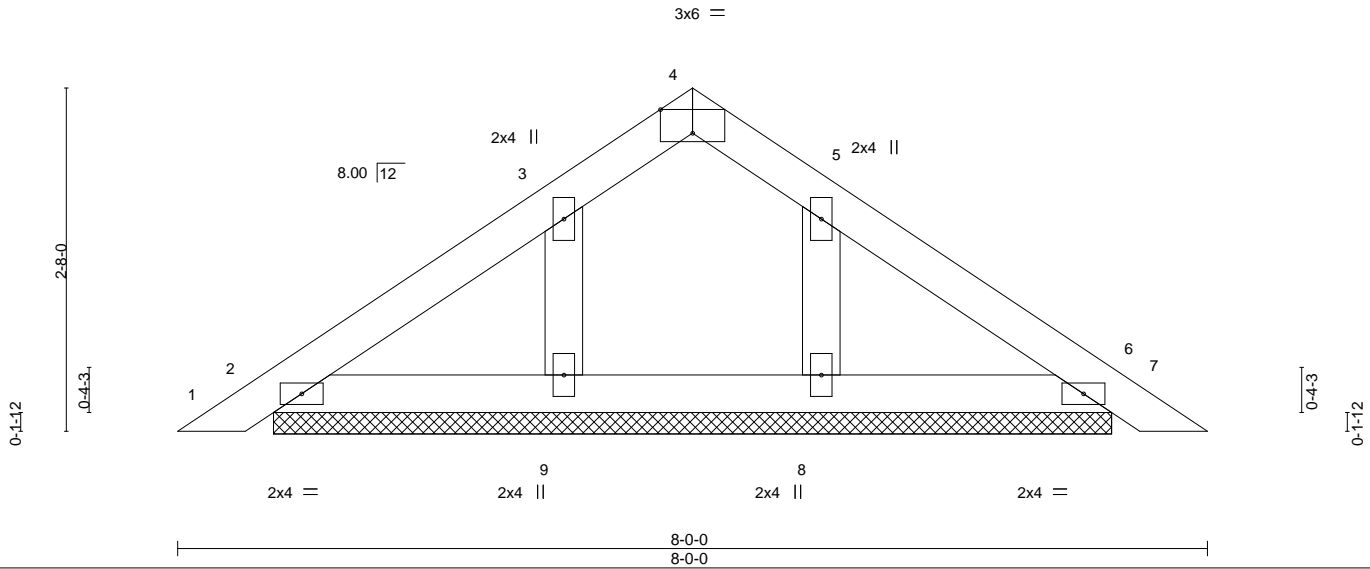


Plate Offsets (X,Y)--	[4:0-3-0,Edge]						
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL 1.15		TC 0.10	Vert(LL) 0.00	6	n/r	120
TCDL 10.0	Lumber DOL 1.15		BC 0.04	Vert(CT) 0.00	7	n/r	120
BCLL 0.0 *	Rep Stress Incr YES		WB 0.06	Horz(CT) 0.00	6	n/a	n/a
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P				
							<b>PLATES</b>
							MT20
							<b>GRIP</b>
							244/190
							Weight: 28 lb
							FT = 20%

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

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

**REACTIONS.** All bearings 6-6-2.  
(lb) - Max Horz 2=-111(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 9=-161(LC 12), 8=-159(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 8

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; 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.
- 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, 6 except (jt=lb) 9=161, 8=159.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



October 21, 2020

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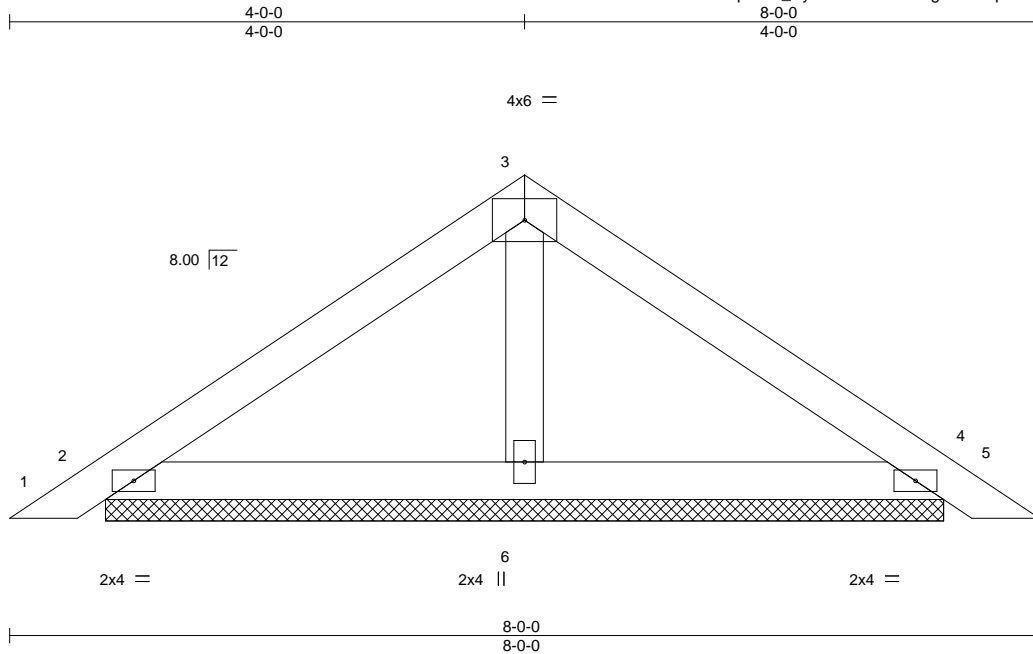


818 Soundside Road  
Edenton, NC 27932

Job 2501456_OFA	Truss PB02	Truss Type Piggyback	Qty 18	Ply 1	H&H/Prelude/ Job Reference (optional)	143258200
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Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:07:18 2020 Page 1  
ID:?hrBCA8NTN1Es8op2lCn\_Py8klV-BAYCdt?GgQtdf4Jqbwh4KnXIEBul?2dlngS7auyRujd



Scale = 1:17.9

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 0.26	Vert(LL)	0.01	5	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	0.01	5	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 27 lb	FT = 20%

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

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

**REACTIONS.** (size) 2=6-6-2, 4=6-6-2, 6=6-6-2  
 Max Horz 2=111(LC 11)  
 Max Uplift 2=-113(LC 12), 4=-128(LC 13), 6=-46(LC 12)  
 Max Grav 2=171(LC 1), 4=180(LC 20), 6=236(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (it=lb) 2=113, 4=128.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



October 21, 2020

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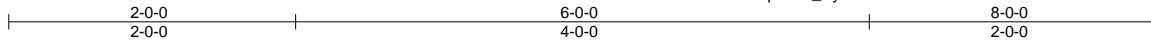
818 Soundside Road  
Edenton, NC 27932

Job 2501456_OFA	Truss PB03	Truss Type Piggyback	Qty 2	Ply 1	H&H/Prelude/ Job Reference (optional)	143258201
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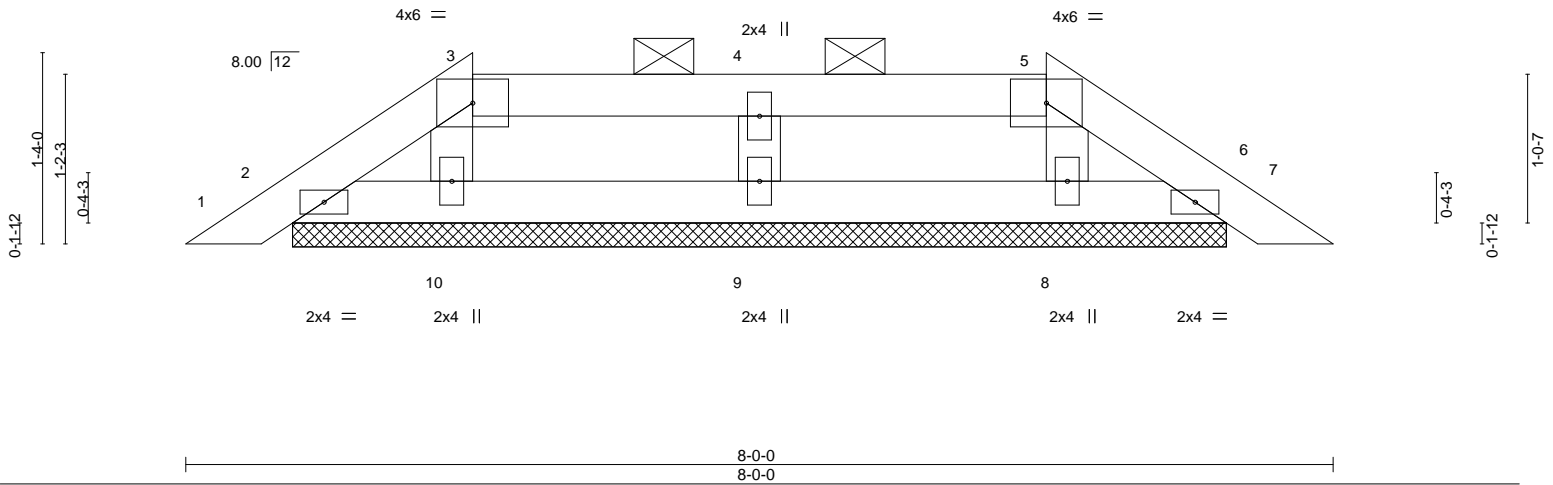
Builders FirstSource, Sumter, SC - 29153,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 09:07:19 2020 Page 1

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Scale: 3/4"=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 0.08	Vert(LL)	0.00	6	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	0.00	6	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 25 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-5.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 6-6-2.  
(lb) - Max Horz 2=49(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 10, 8 except 9=117(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 10, 8, 9

**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=150mph (3-second gust) Vasd=119mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 10, 8 except (jt=lb) 9=117.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 21, 2020

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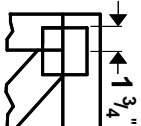
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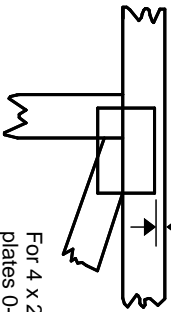
818 Soundside Road  
Edenton, NC 27932

# Symbols

## PLATE LOCATION AND ORIENTATION



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



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



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

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

## PLATE SIZE

4 X 4

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

## LATERAL BRACING LOCATION



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

## BEARING



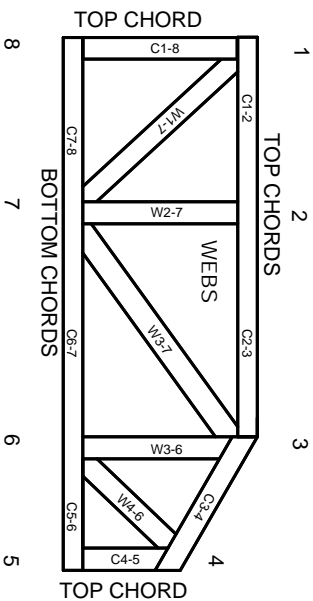
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

### Industry Standards:

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

# Numbering System

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



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.  
Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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



# General Safety Notes

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

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