

RE: 654050\_130MPH - H&H/Hatteras/

Trenco  
 818 Soundside Rd  
 Edenton, NC 27932

**Site Information:**

Project Customer: H AND H Project Name: 654050 130MPH  
 Lot/Block: A Subdivision: All  
 Model:  
 Address:  
 City: Fayetteville State: NC

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

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.2  
 Wind Code: ASCE 7-10 Wind Speed: 130 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	I37191032	A01	5/24/19	35	I37191066	E05	5/24/19
2	I37191033	A02	5/24/19	36	I37191067	J01	5/24/19
3	I37191034	A03	5/24/19	37	I37191068	J02	5/24/19
4	I37191035	A04	5/24/19	38	I37191069	J03	5/24/19
5	I37191036	A05	5/24/19	39	I37191070	J04	5/24/19
6	I37191037	A06	5/24/19	40	I37191071	J05	5/24/19
7	I37191038	A07	5/24/19	41	I37191072	J06	5/24/19
8	I37191039	A08	5/24/19	42	I37191073	J07	5/24/19
9	I37191040	A09	5/24/19	43	I37191074	J08	5/24/19
10	I37191041	A10	5/24/19	44	I37191075	J09	5/24/19
11	I37191042	A11	5/24/19	45	I37191076	J10	5/24/19
12	I37191043	A12	5/24/19	46	I37191077	J11	5/24/19
13	I37191044	A14	5/24/19	47	I37191078	J12	5/24/19
14	I37191045	A15	5/24/19	48	I37191079	J17	5/24/19
15	I37191046	A16	5/24/19	49	I37191080	J18	5/24/19
16	I37191047	A17	5/24/19	50	I37191081	J19	5/24/19
17	I37191048	A18	5/24/19	51	I37191082	J20	5/24/19
18	I37191049	B01	5/24/19	52	I37191083	J21	5/24/19
19	I37191050	B02	5/24/19	53	I37191084	J22	5/24/19
20	I37191051	B03	5/24/19	54	I37191085	J23	5/24/19
21	I37191052	C01	5/24/19	55	I37191086	J24	5/24/19
22	I37191053	C02	5/24/19				
23	I37191054	C03	5/24/19				
24	I37191055	C04	5/24/19				
25	I37191056	C05	5/24/19				
26	I37191057	C07	5/24/19				
27	I37191058	CP01	5/24/19				
28	I37191059	CP02	5/24/19				
29	I37191060	D01	5/24/19				
30	I37191061	D02	5/24/19				
31	I37191062	D03	5/24/19				
32	I37191063	E01	5/24/19				
33	I37191064	E02	5/24/19				
34	I37191065	E04	5/24/19				

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

Truss Design Engineer's Name: Johnson, Andrew  
 My license renewal date for the state of North Carolina is December 31, 2019.

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



May 24, 2019

Job 654050_130MPH	Truss A01	Truss Type GABLE	Qty 5	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191032
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Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:22 2019 Page 1  
ID:Ox8smJ6gTzXhi9vcz7B9dzSnQN-jh2\_PfxfXc4pm94CfiExAs8SkXSgn6H8OArk20zDdmZ



Scale = 1:54.2

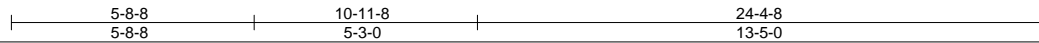
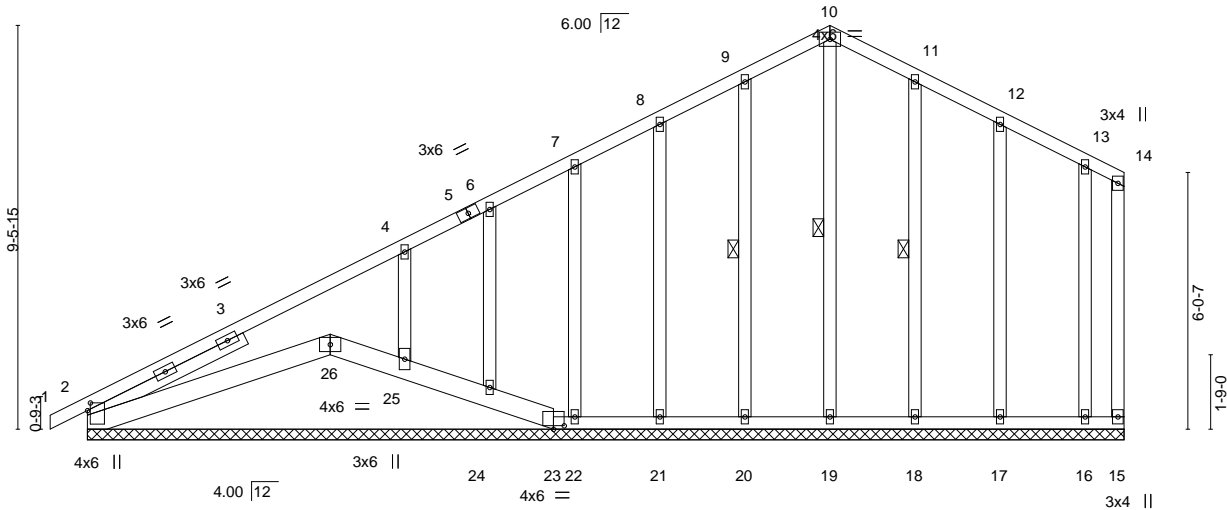


Plate Offsets (X,Y)-- [2:0-2-3,0-0-13], [23:0-3-0,0-1-0]

LOADING (psf)	SPACING-	1-9-8	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.51	Vert(LL)	-0.00	1	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	0.01	1	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.12	Horz(CT)	-0.00	15	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 190 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 SP No.2 \*Except\*  
 15-23: 2x4 SP No.2  
 WEBS 2x4 SP No.2  
 OTHERS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.2 4-1-10

**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, Except: 6-0-0 oc bracing: 24-25.  
 WEBS 1 Row at midpt 10-19, 9-20, 11-18

**REACTIONS.**

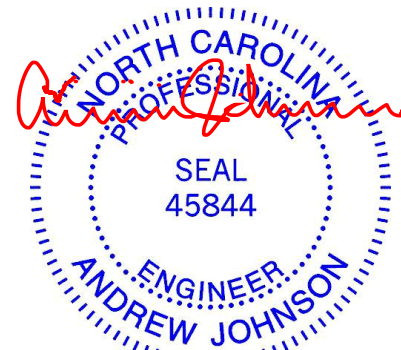
All bearings 24-4-8.  
 (lb) - Max Horz 2=326(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 26, 23, 15, 19, 20, 21, 18, 17, 16 except 22=-106(LC 12), 25=-302(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 26, 23, 15, 19, 20, 21, 22, 24, 18, 17, 16 except 2=289(LC 20), 25=343(LC 23)

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

TOP CHORD 2-4=-297/186, 9-10=-181/297, 10-11=-181/297  
 WEBS 4-25=-362/400

**NOTES-** (12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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.
- All bearings are assumed to be User Defined crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 26, 23, 15, 19, 20, 21, 18, 17, 16 except (jt=lb) 22=106, 25=302.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 26, 24, 25.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 24, 2019

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road  
 Edenton, NC 27932

Job 654050_130MPH	Truss A02	Truss Type Roof Special	Qty 30	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191033
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Builders FirstSource, Sumter, SC - 29153,

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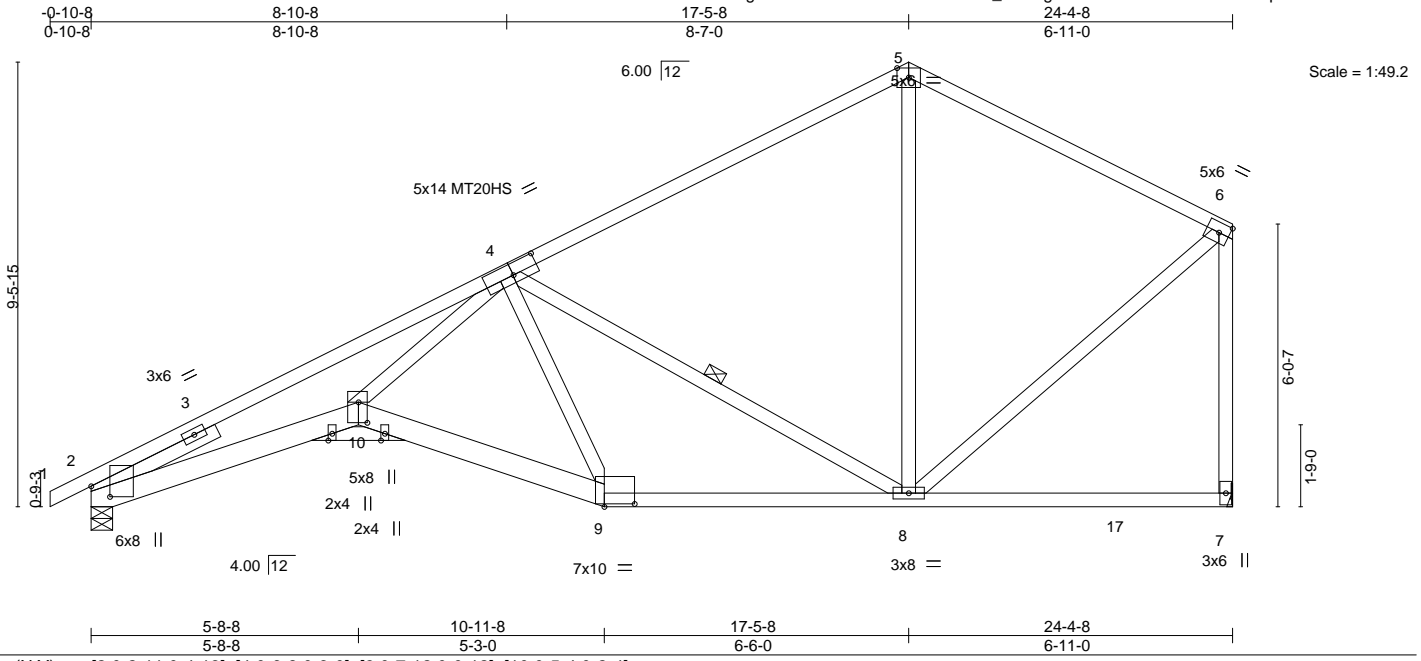


Plate Offsets (X,Y)--	[2:0-2-11,0-4-13], [4:0-6-8,0-3-0], [9:0-7-12,0-0-12], [10:0-5-4,0-2-4]
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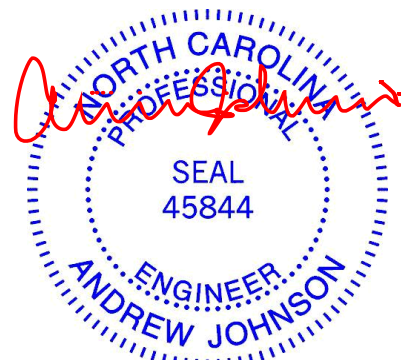
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.64	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.79	Vert(LL) -0.14 9-10 >999 360	MT20HS	187/143
BCLL 0.0 *	Lumber DOL 1.15	WB 0.74	Vert(CT) -0.30 9-10 >962 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.15 7 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.20 9-10 >999 240	Weight: 159 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SP No.2 *Except* 2-10,9-10: 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3 *Except* 6-7: 2x4 SP No.2	WEBS 1 Row at midpt 4-8
SLIDER Left 2x4 SP No.2 3-0-0	

**REACTIONS.** (lb/size) 2=1023/0-5-8, 7=968/Mechanical  
 Max Horz 2=374(LC 12)  
 Max Uplift 2=-288(LC 12), 7=-270(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-2848/1449, 4-5=-732/366, 5-6=-696/374, 6-7=-905/478  
 BOT CHORD 2-10=-1520/2726, 9-10=-810/1405, 8-9=-633/1213  
 WEBS 4-10=-941/1777, 4-9=-310/338, 4-8=-781/465, 5-8=0/251, 6-8=-284/693

- NOTES-** (11)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) 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, with BCCL = 10.0psf.
  - 6) All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - 7) Refer to girder(s) for truss to truss connections.
  - 8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=288, 7=270.
  - 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) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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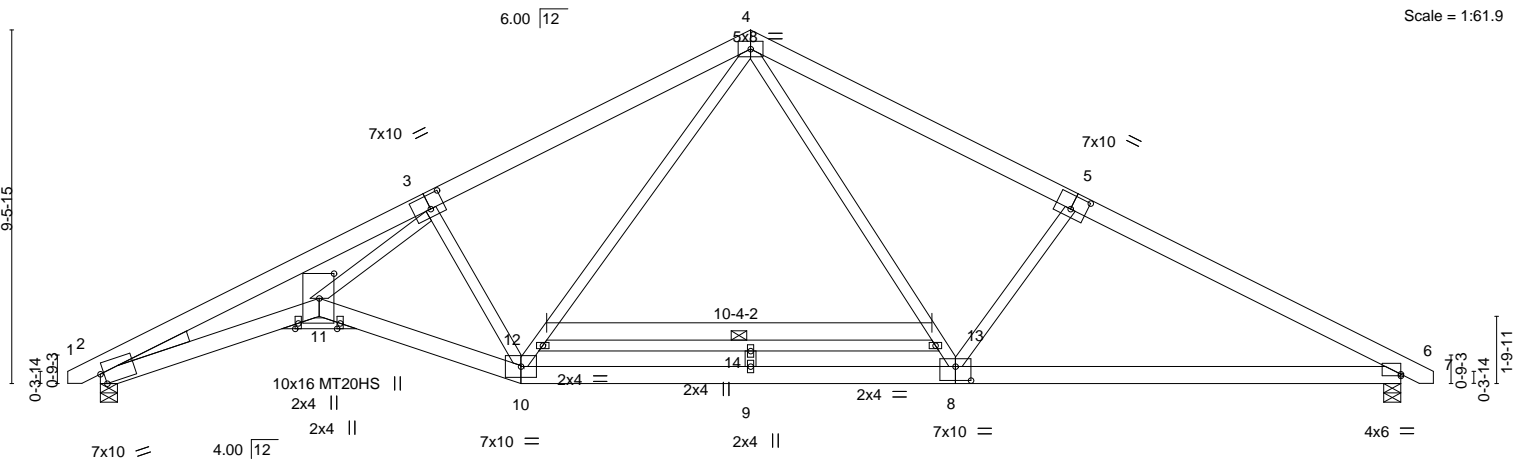
Job	Truss	Truss Type	Qty	Ply	H&H/Hatteras/	137191034
654050_130MPH	A03	ROOF SPECIAL	20	1		

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0-10-8	8-10-8	17-5-8	26-0-8	34-11-0	35-9-8
0-10-8	8-10-8	8-7-0	8-7-0	8-10-8	0-10-8



Scale = 1:61.9

	5-10-8	11-3-8	17-5-8	22-11-8	34-11-0
	5-10-8	5-5-0	6-2-0	5-6-0	11-11-8

Plate Offsets (X, Y)-- [2:0-1-2,Edge], [3:0-4-8,0-4-8], [5:0-5-0,0-4-8], [6:0-0-0,0-0-8], [8:0-5-0,0-4-8], [11:0-8-0,0-4-12]

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)	-0.46	9-10	>908	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.95	Vert(CT)	-0.71	9-10	>592	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.75	Horz(CT)	0.25	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.29	10-11	>999		
								Weight: 254 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x6 SP No.1 *Except*	BOT CHORD Rigid ceiling directly applied.
2-11: 2x6 SP DSS, 6-8: 2x6 SP No.2, 15-16: 2x4 SP No.2	WEBS 1 Row at midpt 12-13
WEBS 2x4 SP No.3 *Except*	
3-11,12-13: 2x4 SP No.2	
WEDGE	
Left: 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=1438/0-5-8, 6=1438/0-5-8  
 Max Horz 2=-204(LC 13)  
 Max Uplift 2=-389(LC 12), 6=-389(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-5081/1950, 3-4=-2224/1073, 4-5=-2209/1026, 5-6=-2446/1044  
 BOT CHORD 2-11=-1644/4597, 10-11=-949/2568, 9-10=-387/1556, 8-9=-387/1556, 6-8=-769/2100  
 WEBS 3-11=-946/2756, 3-10=-1226/741, 10-12=-328/857, 4-12=-346/951, 4-13=-287/1000,  
 8-13=-272/908, 5-8=-498/477

- NOTES-** (10)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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
  - 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.
  - All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=389, 6=389.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**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. 10/03/2015 BEFORE USE.**

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

818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Hatteras/	
654050_130MPH	A03	ROOF SPECIAL	20	1		I37191034
						Job Reference (optional)

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**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-4=-60, 4-7=-60, 11-17=-20, 10-11=-20, 10-20=-20

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

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818 Soundside Road  
 Edenton, NC 27932

Job 654050_130MPH	Truss A04	Truss Type ROOF SPECIAL	Qty 10	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191035
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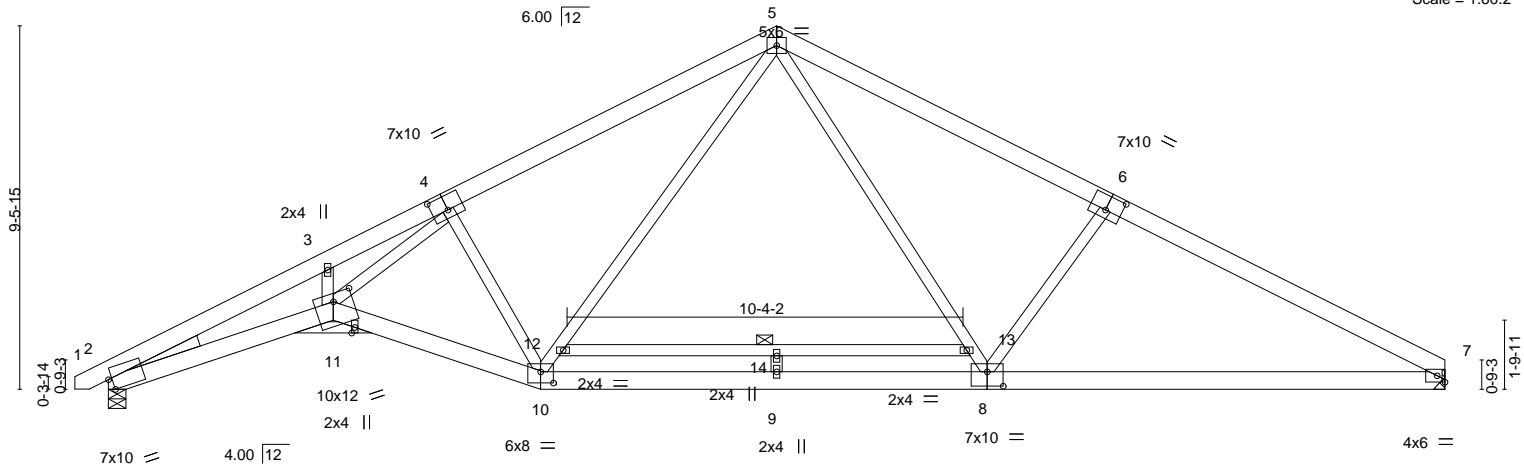
Builders FirstSource, Sumter, SC - 29153,

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ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-g4AkqKyw3DKX?TEbm7HPFHDhgLynFptRrTKR6uzDdmX



Scale = 1:60.2



	5-10-8	11-3-8	17-5-8	22-11-8	34-11-0
	5-10-8	5-5-0	6-2-0	5-6-0	11-11-8
Plate Offsets (X,Y)--	[2:0-1-2,Edge], [4:0-5-0,0-4-8], [6:0-5-0,0-4-8], [8:0-5-0,0-4-8], [10:0-4-0,0-3-8], [11:0-0-15,0-2-12], [11:0-6-0,0-2-8]				

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-1-0	<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 0.93	Vert(LL)	-0.48 9-10	>869	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.92	Vert(CT)	-0.74 9-10	>570	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.94	Horz(CT)	0.23 7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.27 10-11	>999	240	Weight: 253 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2 *Except* 1-4: 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 2-5-10 oc purlins.
BOT CHORD 2x6 SP No.1 *Except* 2-11: 2x6 SP DSS, 10-11: 2x6 SP No.2, 11-15: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-4-9 oc bracing.
WEBS 2x4 SP No.3 *Except* 4-11,12-13: 2x4 SP No.2	WEBS 1 Row at midpt 12-13
WEDGE Left: 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=1498/0-5-8, 7=1454/Mechanical  
 Max Horz 2=221(LC 12)  
 Max Uplift 2=-405(LC 12), 7=-381(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-5142/2058, 3-4=-4877/2056, 4-5=-2359/1135, 5-6=-2299/1073, 6-7=-2549/1095  
 BOT CHORD 2-11=-1773/4622, 10-11=-1049/2798, 9-10=-415/1598, 8-9=-415/1598, 7-8=-826/2192  
 WEBS 4-11=-991/2555, 4-10=-1464/833, 10-12=-369/917, 5-12=-390/1021, 5-13=-314/1077,  
 8-13=-297/975, 6-8=-535/513, 3-11=-63/431

- NOTES-** (9)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - Bearings are assumed to be: Joint 2 User Defined crushing capacity of 565 psi.
  - Refer to girder(s) for truss to truss connections.
  - Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=405, 7=381.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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



May 24, 2019

Continued on page 2

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	H&H/Hatteras/	
654050_130MPH	A04	ROOF SPECIAL	10	1		I37191035
						Job Reference (optional)

Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:24 2019 Page 2  
 ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-g4AkqKyw3DKX?TEbm7HPFHDhgLynFptRrTKR6uzDdmX

**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-5=-62, 5-7=-63, 11-16=-21, 10-11=-21, 10-19=-21

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



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Job	Truss	Truss Type	Qty	Ply	H&H/Hatteras/	137191036
654050_130MPH	A05	Roof Special	40	1		

Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:25 2019 Page 1

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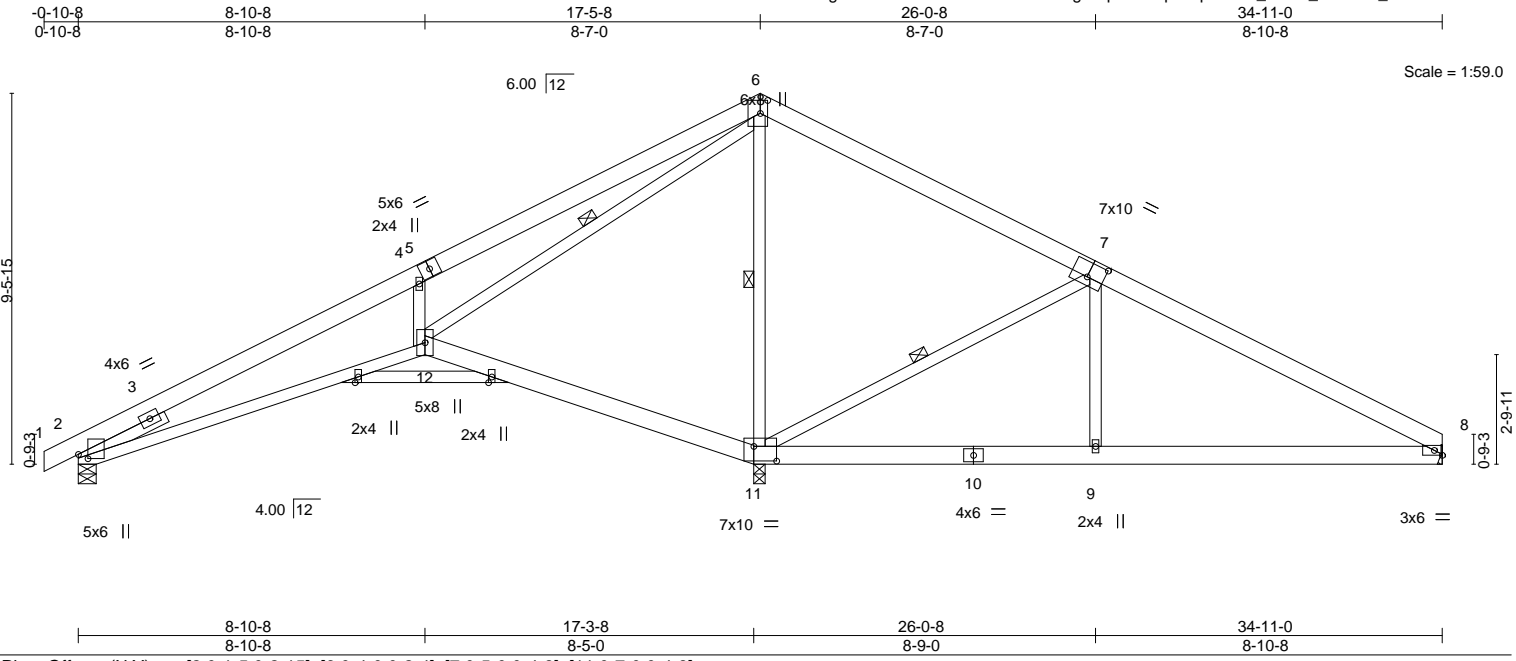


Plate Offsets (X,Y)--	[2:0-1-5,0-2-15], [6:0-4-0,0-2-4], [7:0-5-0,0-4-8], [11:0-7-0,0-4-8]
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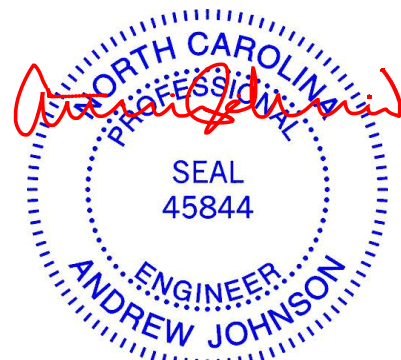
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.43	Vert(LL)	-0.08 12-17	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.45	Vert(CT)	-0.20 12-17	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.53	Horz(CT)	0.05 11	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.10 12-17	>999	240	Weight: 231 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x6 SP No.2 *Except* 2-12,13-14: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 6-11, 7-11, 6-12
SLIDER Left 2x4 SP No.2 2-6-0	

**REACTIONS.** (lb/size) 2=438/0-5-8, 11=2005/0-3-8, 8=403/Mechanical  
 Max Horz 2=216(LC 16)  
 Max Uplift 2=-124(LC 13), 11=-562(LC 12), 8=-259(LC 13)  
 Max Grav 2=444(LC 23), 11=2005(LC 1), 8=551(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-592/265, 4-6=-582/517, 6-7=-154/707, 7-8=-651/382  
 BOT CHORD 2-12=-261/498, 11-12=-619/462, 9-11=-211/492, 8-9=-209/497  
 WEBS 4-12=-575/542, 6-11=-1239/506, 7-11=-865/526, 7-9=0/385, 6-12=-641/1194

- NOTES-** (10)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCCL=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.
  - All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - Refer to girder(s) for truss to truss connections.
  - Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=124, 11=562, 8=259.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 24, 2019



Job	Truss	Truss Type	Qty	Ply	H&H/Hatteras/	137191037
654050_130MPH	A06	GABLE	5	1		

Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:26 2019 Page 1  
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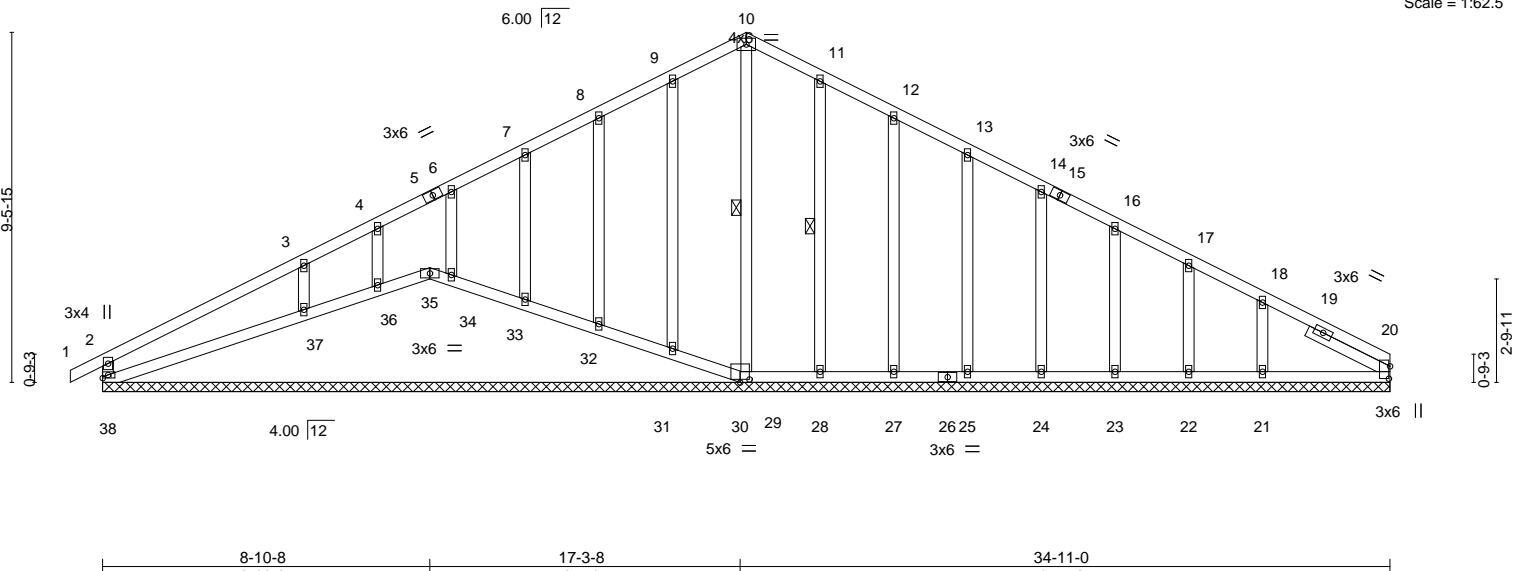


Plate Offsets (X,Y)--	[20:0-4-0,0-0-6], [29:0-1-12,0-0-0], [30:0-0-0,0-1-12], [30:0-3-0,0-1-0]
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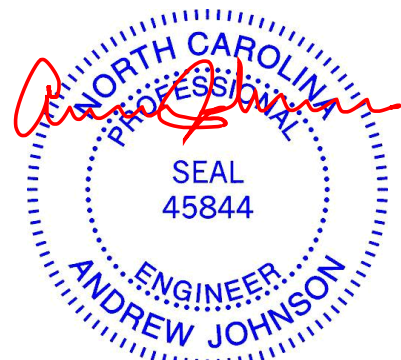
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.29	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.23	Vert(LL) -0.00 1 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.15	Vert(CT) 0.01 1 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 20 n/a n/a		
	Code IRC2015/TPI2014			Weight: 216 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 10-29, 11-28
OTHERS 2x4 SP No.3	
SLIDER Right 2x4 SP No.2 2-6-0	

**REACTIONS.** All bearings 34-11-0.  
 (lb) - Max Horz 38=197(LC 17)  
 Max Uplift All uplift 100 lb or less at joint(s) 35, 30, 20, 31, 32, 33, 36, 28, 27, 25, 24, 23, 22 except 38=129(LC 13), 34=111(LC 12), 37=252(LC 12), 21=164(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 35, 30, 20, 31, 32, 33, 34, 36, 28, 27, 25, 24, 23, 22 except 38=273(LC 1), 29=300(LC 12), 37=411(LC 23), 21=256(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 4-6=-156/259, 6-7=-188/334, 7-8=-208/395, 8-9=-233/464, 9-10=-252/520, 10-11=-252/520, 11-12=-233/464, 12-13=-209/395, 13-14=-187/332, 14-16=-164/269, 2-38=-263/219  
 WEBS 10-29=-352/132, 3-37=-295/311

- NOTES-** (12)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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.
  - 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.
  - All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 35, 30, 20, 31, 32, 33, 36, 28, 27, 25, 24, 23, 22 except (jt=lb) 38=129, 34=111, 37=252, 21=164.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 35, 31, 32, 33, 34, 36, 37.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



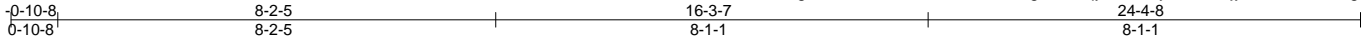
May 24, 2019

Job 654050_130MPH	Truss A07	Truss Type HALF HIP GIRDER	Qty 2	Ply 2	H&H/Hatteras/ Job Reference (optional)	137191038
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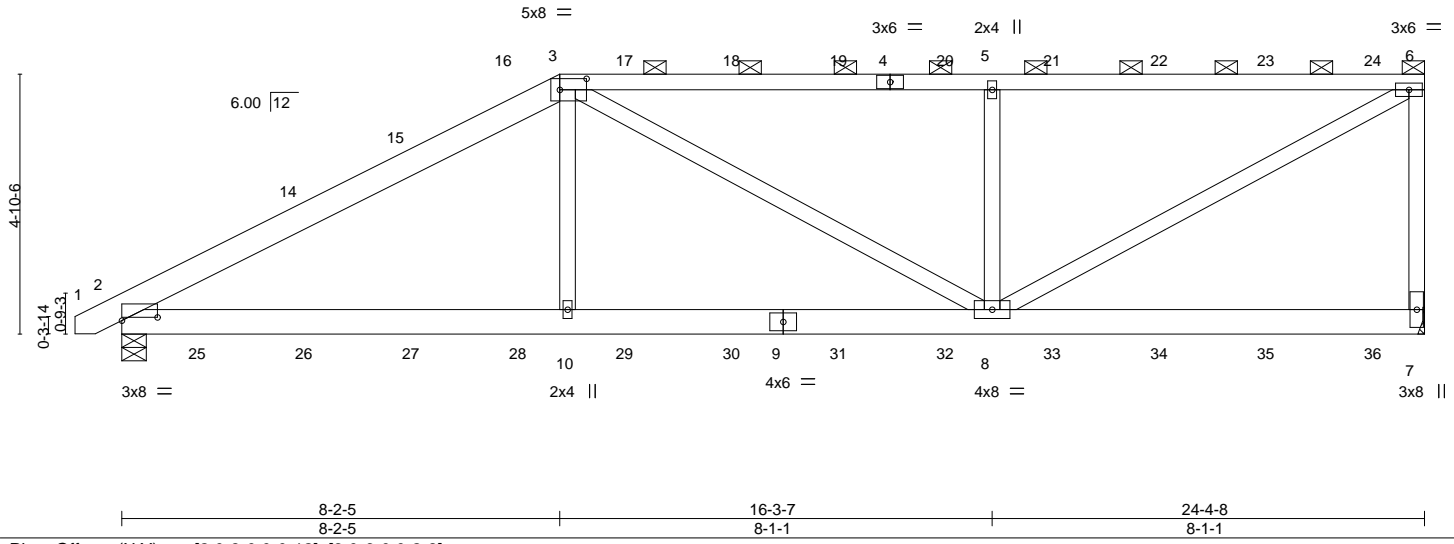
Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:28 2019 Page 1

ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-YrPFgi?Q7SqyU5XM?yLLP7OPjyQ?Bkv1m5leFgzDdmT



Scale = 1:43.1



<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 0.79	Vert(LL)	0.08	8-10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.45	Vert(CT)	-0.10	10-13	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.49	Horz(CT)	0.02	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 298 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2 *Except*	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.
3-4: 2x4 SP No.2, 4-6: 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
BOT CHORD 2x6 SP No.2	
WEBS 2x4 SP No.2	

**REACTIONS.** (lb/size) 7=1908/Mechanical, 2=1936/0-5-8  
 Max Horz 2=235(LC 23)  
 Max Uplift 7=-1153(LC 5), 2=-931(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2829/1476, 3-5=-2448/1469, 5-6=-2448/1469, 6-7=-1721/1147  
 BOT CHORD 2-10=-1365/2412, 8-10=-1367/2430  
 WEBS 3-10=-94/647, 3-8=-186/251, 5-8=-993/925, 6-8=-1634/2737

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; 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.
  - All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - 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) 7=1153, 2=931.
  - 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) 46 lb down and 91 lb up at 3-5-8, 24 lb down and 53 lb up at 5-5-8, 149 lb down and 137 lb up at 7-5-8, 167 lb down and 164 lb up at 9-5-8, 167 lb down and 164 lb up at 11-5-8, 167 lb down and 164 lb up at 13-5-8, 167 lb down and 164 lb up at 15-5-8, 167 lb down and 164 lb up at 17-5-8, 167 lb down and 164 lb up at 19-5-8, and 167 lb down and 163 lb up at 21-5-8, and 163 lb down and 163 lb up at 23-5-8 on top chord, and 210 lb down and 112 lb up at 1-5-8, 105 lb down and 33 lb up at 3-5-8, 138 lb down and 85 lb up at 5-5-8, 82 lb down and 61 lb up at 7-5-8, 68 lb down and 25 lb up at 9-5-8, 68 lb down and 25 lb up at 11-5-8, 68 lb down and 25 lb up at 13-5-8, 68 lb down and 25 lb up at 15-5-8, 68 lb down and 25 lb up at 17-5-8, 68 lb down and 25 lb up at 19-5-8, and 68 lb down and 25 lb up at 21-5-8, and 73 lb down and 23 lb up at 23-5-8 on bottom chord. The design/selection of such connection is the responsibility of others.



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

818 Soundside Road  
 Edenton, NC 27932

Job 654050_130MPH	Truss A07	Truss Type HALF HIP GIRDER	Qty 2	Ply <b>2</b>	H&H/Hatteras/ Job Reference (optional)	I37191038
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Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:28 2019 Page 2  
ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-YrPFgi?Q7SqyU5XM?yLLP7OPjyQ?Bkv1m5leFgzDdmT

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-60, 3-6=-60, 7-11=-20

Concentrated Loads (lb)

Vert: 14=-46(F) 15=-1(F) 16=-74(F) 17=-95(F) 18=-95(F) 19=-95(F) 20=-95(F) 21=-95(F) 22=-95(F) 23=-95(F) 24=-102(F) 25=-210(F) 26=-105(F) 27=-138(F)  
28=-77(F) 29=-55(F) 30=-55(F) 31=-55(F) 32=-55(F) 33=-55(F) 34=-55(F) 35=-55(F) 36=-57(F)

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road  
Edenton, NC 27932

Job 654050_130MPH	Truss A08	Truss Type Hip	Qty 2	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191039
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Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:29 2019 Page 1

ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-01zdt202umyp6E6YZgsayKxdJMilw7mA?11Co6zDdmS

0-10-8 0-10-8	5-6-15 5-6-15	10-10-5 5-3-7	17-5-11 6-7-5	24-0-11 6-7-0	24-4-8 0-3-13
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Scale = 1:43.2

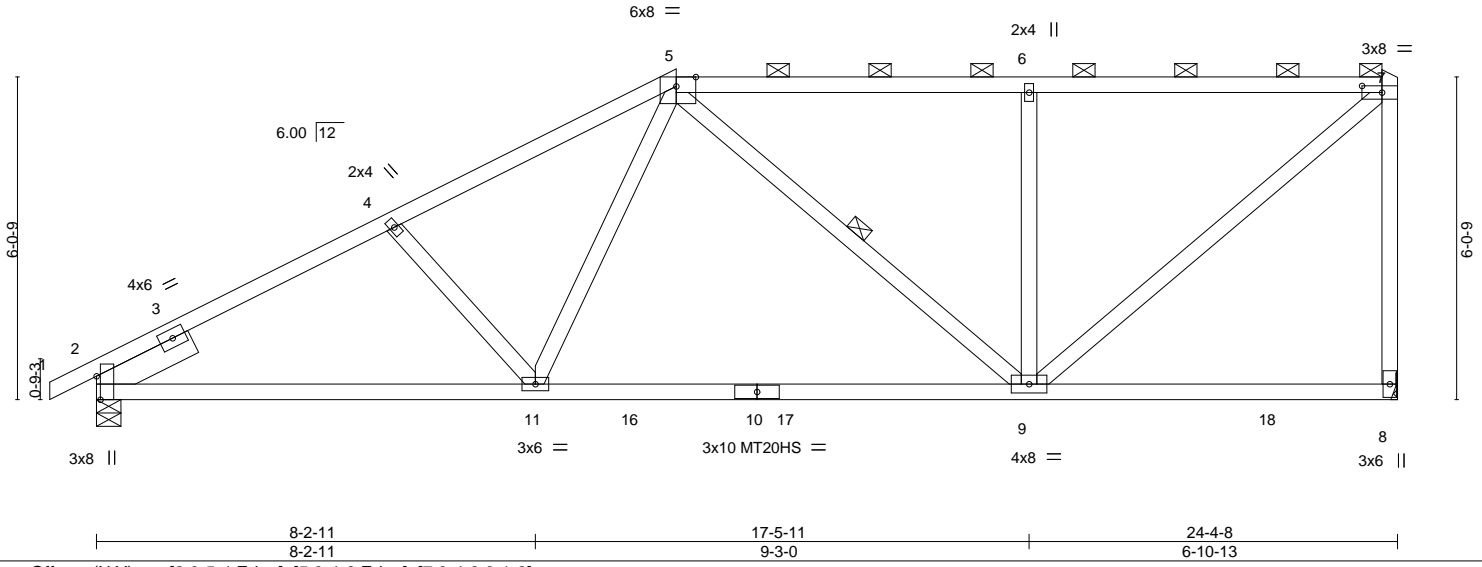


Plate Offsets (X,Y)--	[2:0-5-4,Edge], [5:0-4-6,Edge], [7:0-4-8,0-1-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.61	Vert(LL)	-0.18	9-11	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.74	Vert(CT)	-0.36	9-11	>807	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.71	Horz(CT)	0.03	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.07	9-11	>999		
								Weight: 137 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-4-12 max.): 5-7.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3 *Except*	WEBS 1 Row at midpt 5-9
SLIDER 7-8: 2x4 SP No.2 Left 2x6 SP No.2 1-11-12	

**REACTIONS.** (lb/size) 2=1023/0-5-8, 8=968/Mechanical  
 Max Horz 2=297(LC 12)  
 Max Uplift 2=-251(LC 12), 8=-313(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1511/582, 4-5=-1352/543, 5-6=-890/379, 6-7=-888/377, 7-8=-913/433  
 BOT CHORD 2-11=-723/1295, 9-11=-502/1011  
 WEBS 4-11=-210/271, 5-11=-109/425, 6-9=-461/311, 7-9=-481/1135

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - 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.
  - All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - 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=251, 8=313.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

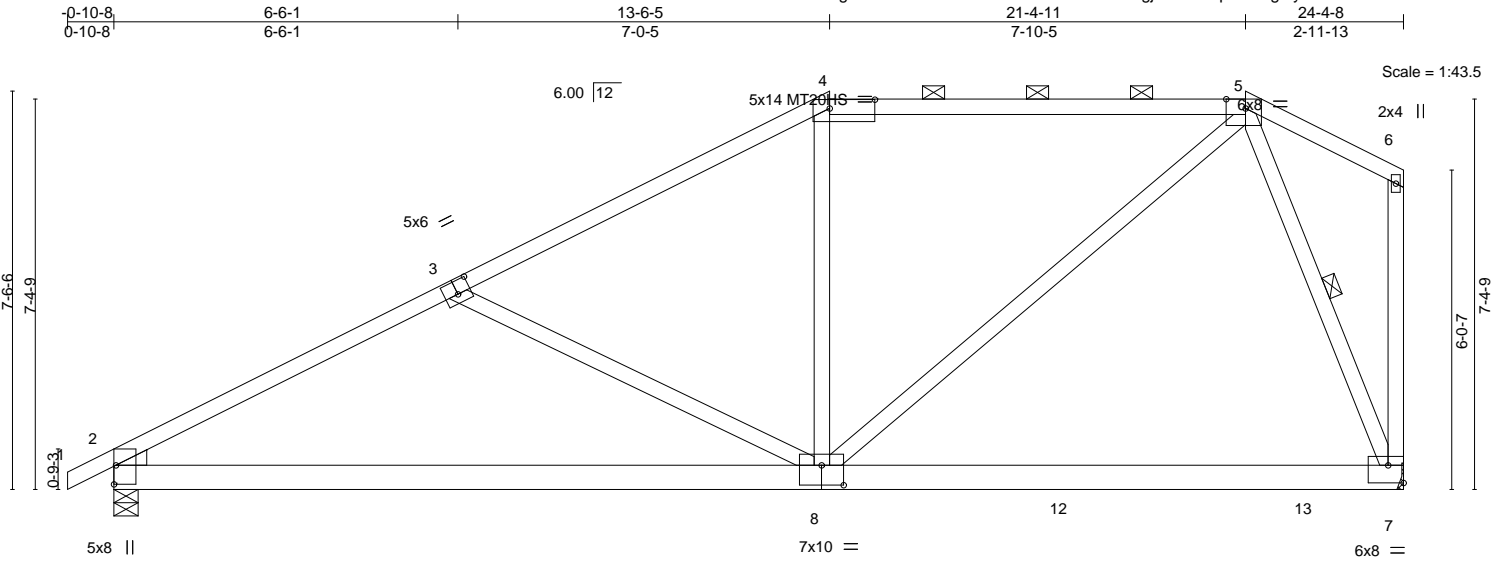


Job 654050_130MPH	Truss A09	Truss Type Hip	Qty 2	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191040
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Builders FirstSource, Sumter, SC - 29153,

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ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-UEX05O1hf34gjOhk7NOpUYTkgl3yfceKEPnlKyZDdmR



Scale = 1:43.5

Plate Offsets (X, Y)--	[2:Edge,0-0-7], [2:0-0-4,0-5-2], [2:0-0-2,0-0-4], [3:0-3-0,0-3-0], [4:0-10-4,0-2-0], [5:0-4-6,Edge], [7:Edge,0-4-0], [8:0-5-0,0-4-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.89	Vert(LL)	-0.16	7-8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.68	Vert(CT)	-0.32	8-11	>909	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.61	Horz(CT)	0.02	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.04	8-11	>999		
								Weight: 154 lb	FT = 20%

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

**REACTIONS.** (lb/size) 2=1023/0-5-8, 7=968/Mechanical  
 Max Horz 2=328(LC 12)  
 Max Uplift 2=-274(LC 12), 7=-196(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1505/632, 3-4=-1091/416, 4-5=-898/459  
 BOT CHORD 2-8=-759/1284, 7-8=-172/354  
 WEBS 3-8=-435/429, 5-8=-280/737, 5-7=-924/470

- NOTES-** (12)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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) All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - 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=274, 7=196.
  - 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.
  - 12) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 24, 2019

Job 654050_130MPH	Truss A10	Truss Type Hip	Qty 2	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191041
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ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-UEx05O1hf34gjOhk7NOpUYTo9l2Tfc1KEPnlKYzDdmR

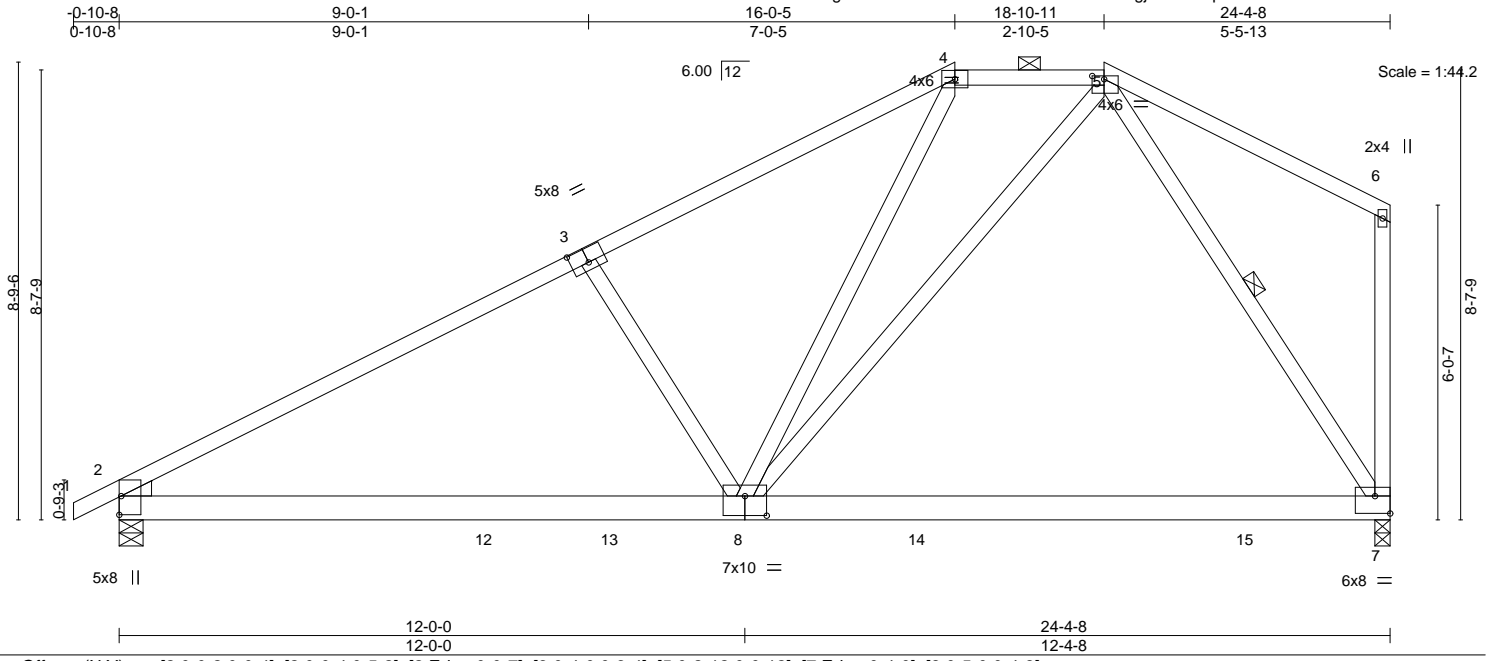


Plate Offsets (X,Y)-- [2:0-0-2,0-0-4], [2:0-0-4,0-5-2], [2:Edge,0-0-7], [3:0-4-0,0-3-4], [5:0-2-12,0-0-12], [7:Edge,0-4-0], [8:0-5-0,0-4-8]

<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 0.61	Vert(LL)	-0.28	7-8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.71	Vert(CT)	-0.43	7-8	>681		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.58	Horz(CT)	0.02	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.11	8-11	>999		
								Weight: 159 lb	FT = 20%

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

**REACTIONS.** (lb/size) 2=1023/0-5-8, 7=968/0-3-8  
Max Horz 2=357(LC 12)  
Max Uplift 2=-287(LC 12), 7=-239(LC 12)  
Max Grav 2=1023(LC 1), 7=1016(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1441/557, 3-4=-1215/547, 4-5=-881/543  
BOT CHORD 2-8=-652/1207, 7-8=-227/473  
WEBS 3-8=-449/451, 4-8=-39/331, 5-8=-265/688, 5-7=-822/409

- NOTES-** (10)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - Bearings are assumed to be: Joint 2 User Defined crushing capacity of 565 psi.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=287, 7=239.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



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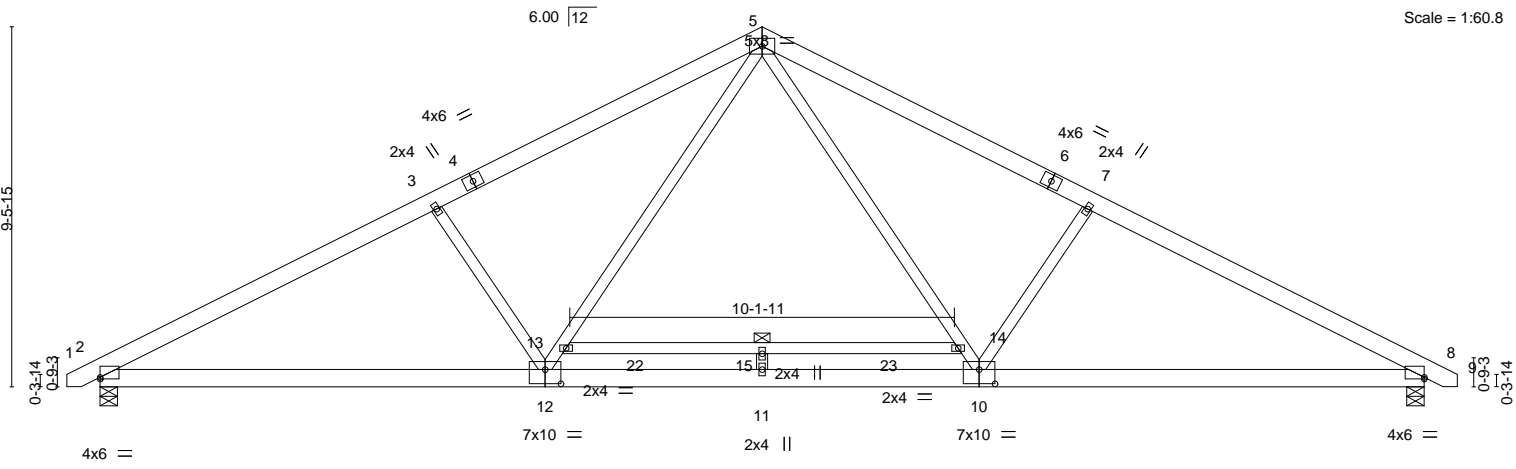
Job	Truss	Truss Type	Qty	Ply	H&H/Hatteras/	137191042
654050_130MPH	A11	COMMON	8	1		

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ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-yQ5Olj2JQNCXLYGxg5v21101Z9M5O4aTS3WJs\_zDdmQ

0-10-8	8-10-8	17-5-8	26-0-8	34-11-0	35-9-8
0-10-8	8-10-8	8-7-0	8-7-0	8-10-8	0-10-8



	11-8-13	17-5-8	23-2-3	34-11-0
	11-8-13	5-8-11	5-8-11	11-8-13

Plate Offsets (X,Y)-- [2:0-0-0,0-0-8], [6:0-0-0,0-0-0], [8:Edge,0-0-8], [10:0-5-0,0-4-8], [12:0-5-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.37	Vert(LL) -0.30 11 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.87	Vert(CT) -0.43 11 >973 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.56	Horz(CT) 0.06 8 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.09 12 >999 240	Weight: 240 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 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* 13-14: 2x4 SP No.2	WEBS 1 Row at midpt 13-14

**REACTIONS.** (lb/size) 2=1438/0-5-8, 8=1438/0-5-8  
 Max Horz 2=-204(LC 17)  
 Max Uplift 2=-389(LC 12), 8=-389(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2373/1047, 3-5=-2098/1043, 5-7=-2098/1043, 7-8=-2373/1047  
 BOT CHORD 2-12=-770/2027, 11-12=-381/1454, 10-11=-381/1454, 8-10=-772/2027  
 WEBS 5-14=-317/885, 10-14=-299/779, 7-10=-501/478, 12-13=-299/779, 5-13=-317/885,  
 3-12=-501/478

- NOTES-** (8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=389, 8=389.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-5=-60, 5-9=-60, 16-19=-20



Job	Truss	Truss Type	Qty	Ply	H&H/Hatteras/	137191043
654050_130MPH	A12	COMMON	4	1		

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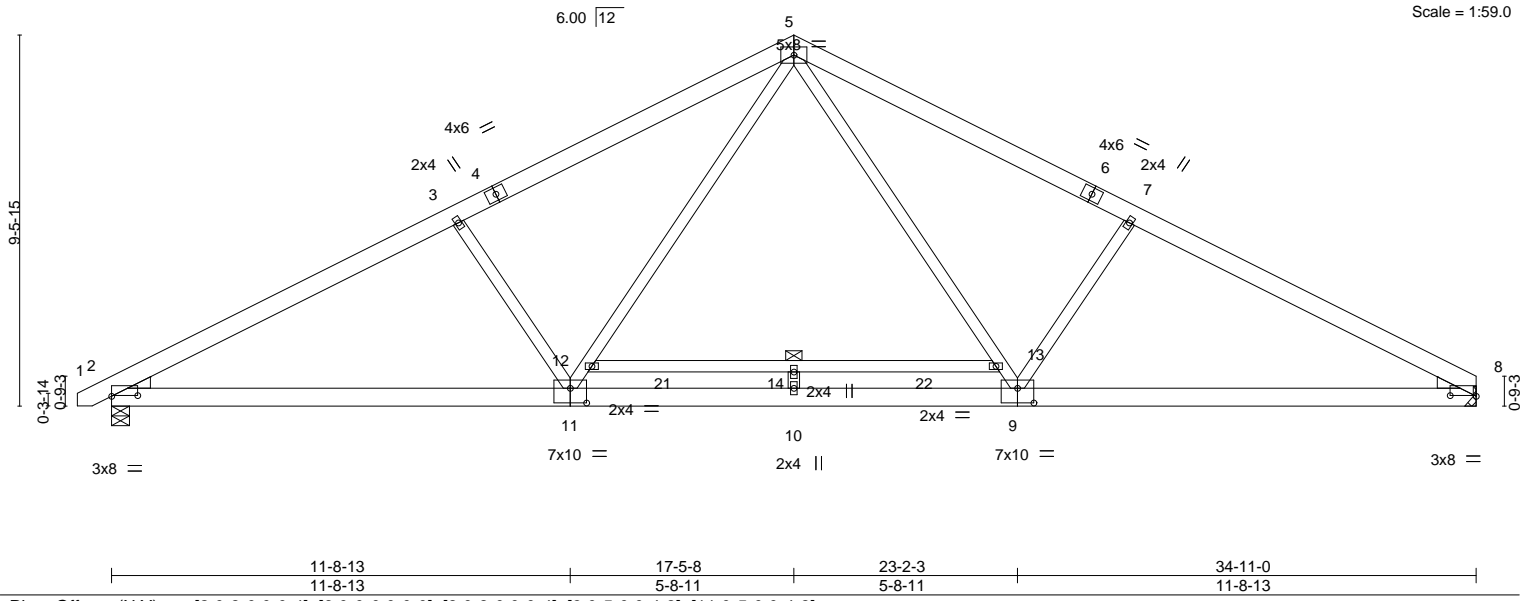


Plate Offsets (X,Y)--	[2:0-8-0,0-0-4], [6:0-0-0,0-0-0], [8:0-8-0,0-0-4], [9:0-5-0,0-4-8], [11:0-5-0,0-4-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.37	Vert(LL)	-0.30	10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.87	Vert(CT)	-0.43	10	>974		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.57	Horz(CT)	0.06	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.09	11	>999		
								Weight: 240 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 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* 12-13: 2x4 SP No.2	WEBS 1 Row at midpt 12-13

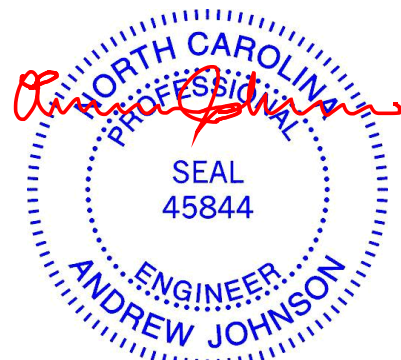
WEDGE  
Left: 2x4 SP No.3, Right: 2x4 SP No.3

REACTIONS. (lb/size) 2=1438/0-5-8, 8=1396/Mechanical  
Max Horz 2=212(LC 16)  
Max Uplift 2=-389(LC 12), 8=-367(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2374/1048, 3-5=-2099/1043, 5-7=-2101/1044, 7-8=-2375/1049  
BOT CHORD 2-11=-790/2027, 10-11=-399/1455, 9-10=-399/1455, 8-9=-791/2029  
WEBS 5-13=-318/885, 9-13=-300/779, 7-9=-503/478, 11-12=-299/779, 5-12=-317/885,  
3-11=-501/478

- NOTES- (9)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - 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=389, 8=367.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard  
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-60, 5-8=-60, 15-18=-20



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

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**ENGINEERING BY**  
**TRENCO**  
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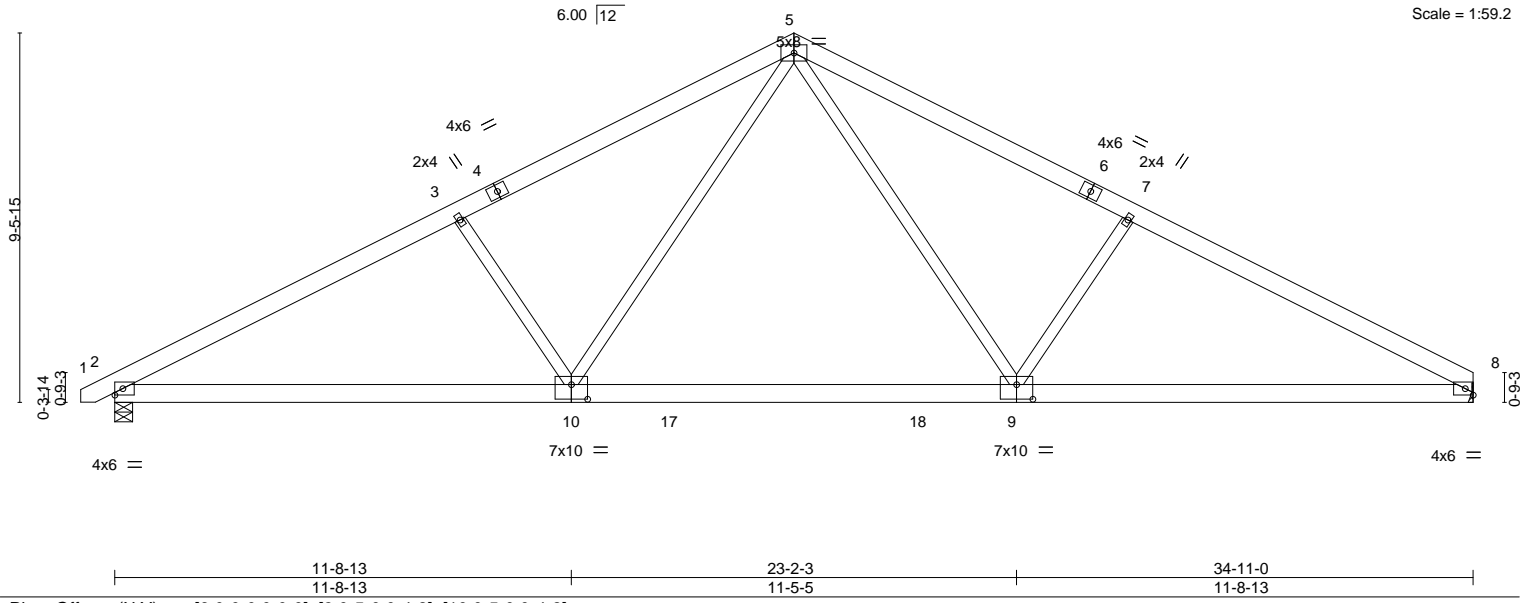
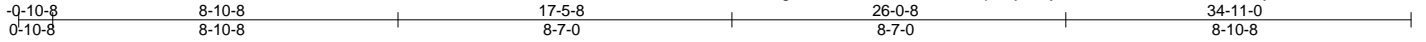


Job 654050_130MPH	Truss A14	Truss Type COMMON	Qty 4	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191044
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ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-vpD8jP3Zy\_SFasQJoWxW6A5Nnz4ssyCmwN?PxtzDdmO



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.32	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.66	Vert(LL) -0.25 9-10 >999 360	Weight: 222 lb	FT = 20%
BCLL 0.0 *	Lumber DOL 1.15	WB 0.68	Vert(CT) -0.39 9-10 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.06 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.09 9-10 >999 240		

LUMBER-	BRACING-
TOP CHORD 2x6 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.** (lb/size) 2=1438/0-5-8, 8=1396/Mechanical  
 Max Horz 2=212(LC 16)  
 Max Uplift 2=-389(LC 12), 8=-367(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2376/1048, 3-5=-2101/1043, 5-7=-2103/1044, 7-8=-2378/1048  
 BOT CHORD 2-10=-789/2029, 9-10=-362/1370, 8-9=-790/2031  
 WEBS 5-9=-316/810, 7-9=-503/479, 5-10=-314/808, 3-10=-501/478

- NOTES-** (9)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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
  - 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.
  - All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - 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=389, 8=367.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 24, 2019

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Job	Truss	Truss Type	Qty	Ply	H&H/Hatteras/	137191045
654050_130MPH	A15	Hip	2	1		

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8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:34 2019 Page 1

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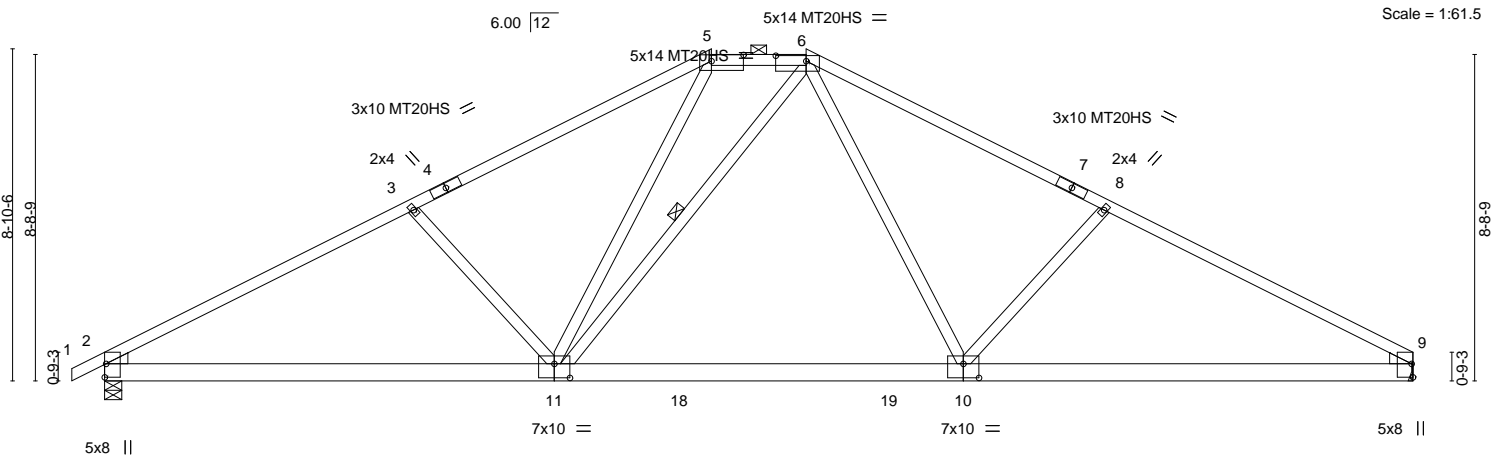
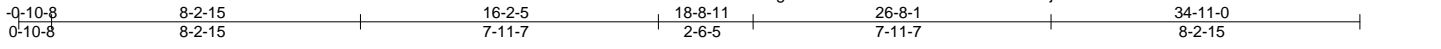


Plate Offsets (X,Y)--	[2:Edge,0-0-7], [2:0-0-4,0-5-2], [2:0-0-2,0-0-4], [5:0-10-4,0-2-0], [6:0-9-12,0-1-12], [9:Edge,0-0-7], [9:0-0-4,0-5-2], [9:0-0-2,0-0-4], [10:0-5-0,0-4-8], [11:0-5-0,0-4-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15		TC 0.73	Vert(LL) -0.27	10-11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.64	Vert(CT) -0.41	10-11	>999	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr YES		WB 0.38	Horz(CT) 0.06	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL) 0.12	10-11	>999	240		
								Weight: 202 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 (4-3-8 max.): 5-6.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied.
WEDGE	WEBS 1 Row at midpt 6-11
Left: 2x4 SP No.3, Right: 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=1450/0-5-8, 9=1396/Mechanical  
 Max Horz 2=200(LC 16)  
 Max Uplift 2=-384(LC 12), 9=-355(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2344/1041, 3-5=-2034/970, 5-6=-1451/858, 6-8=-2035/971, 8-9=-2347/1042  
 BOT CHORD 2-11=-790/2008, 10-11=-396/1448, 9-10=-792/2011  
 WEBS 3-11=-446/450, 5-11=-222/636, 6-11=-248/256, 6-10=-225/672, 8-10=-449/451

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- All bearings are assumed to be User Defined crushing capacity of 565 psi.
- 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=384, 9=355.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

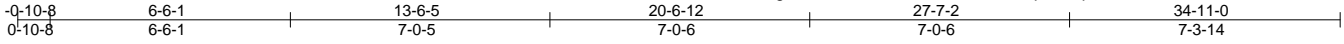


Job	Truss	Truss Type	Qty	Ply	H&H/Hatteras/	137191046
654050_130MPH	A16	Half Hip	2	1		

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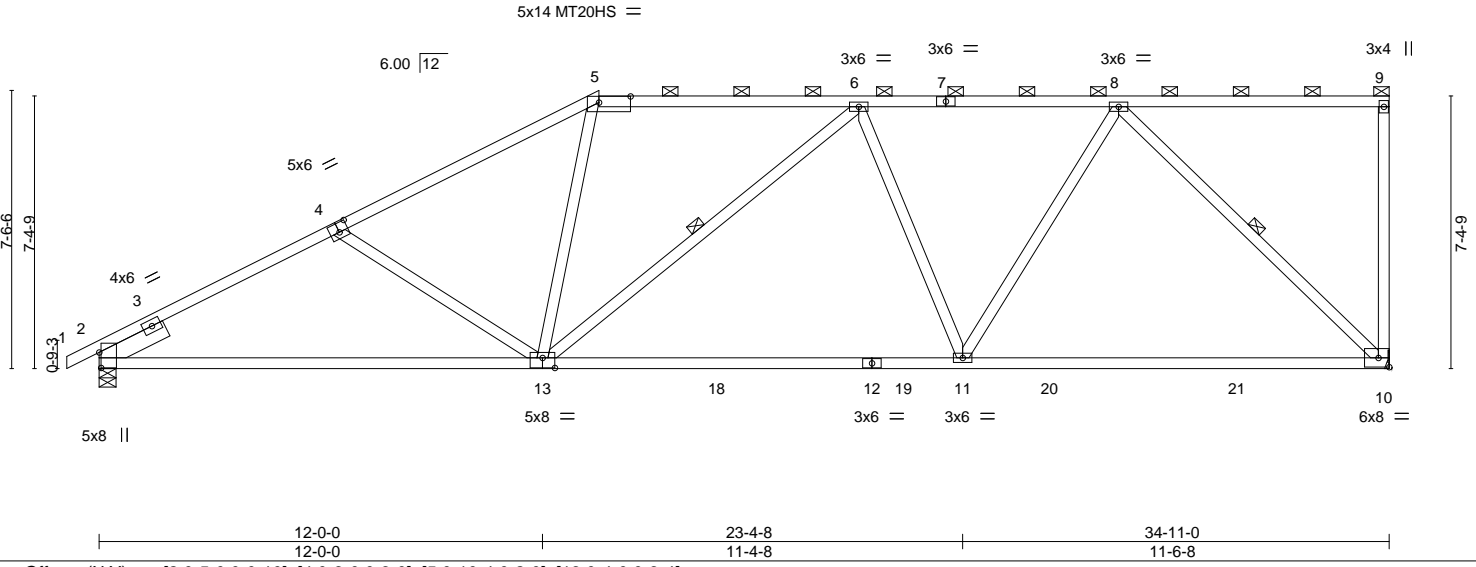


Plate Offsets (X, Y)--	[2:0-5-0,0-0-10], [4:0-3-0,0-3-0], [5:0-10-4,0-2-0], [13:0-4-0,0-3-4]
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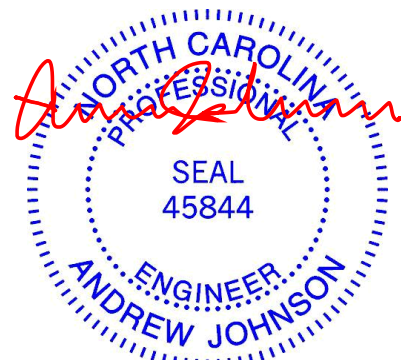
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	BC 0.88	Vert(LL)	-0.36	11-13	>999	360	360
TCDL 10.0	Lumber DOL	1.15	BC 0.82	Vert(CT)	-0.69	10-11	>607	240	240
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.85	Horz(CT)	0.08	10	n/a	n/a	n/a
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.15	11-13	>999	240	240
								Weight: 196 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-10-9 max.): 5-9.
BOT CHORD 2x4 SP No.1 *Except* 10-12: 2x4 SP SS	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 6-13, 8-10
SLIDER Left 2x6 SP No.2 1-11-12	

**REACTIONS.** (lb/size) 10=1390/Mechanical, 2=1444/0-5-8  
 Max Horz 2=367(LC 12)  
 Max Uplift 10=-459(LC 9), 2=-334(LC 12)  
 Max Grav 10=1424(LC 2), 2=1444(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-2301/923, 4-5=-2008/775, 5-6=-1634/771, 6-8=-1606/605  
 BOT CHORD 2-13=-1082/1991, 11-13=-732/1713, 10-11=-503/1167  
 WEBS 4-13=-320/367, 5-13=-32/539, 6-13=-280/184, 6-11=-424/344, 8-11=-200/858,  
 8-10=-1586/703

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - 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.
  - All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - 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) 10=459, 2=334.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 24, 2019

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

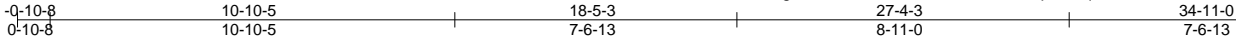
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Hatteras/	137191047
654050_130MPH	A17	HALF HIP	2	1		

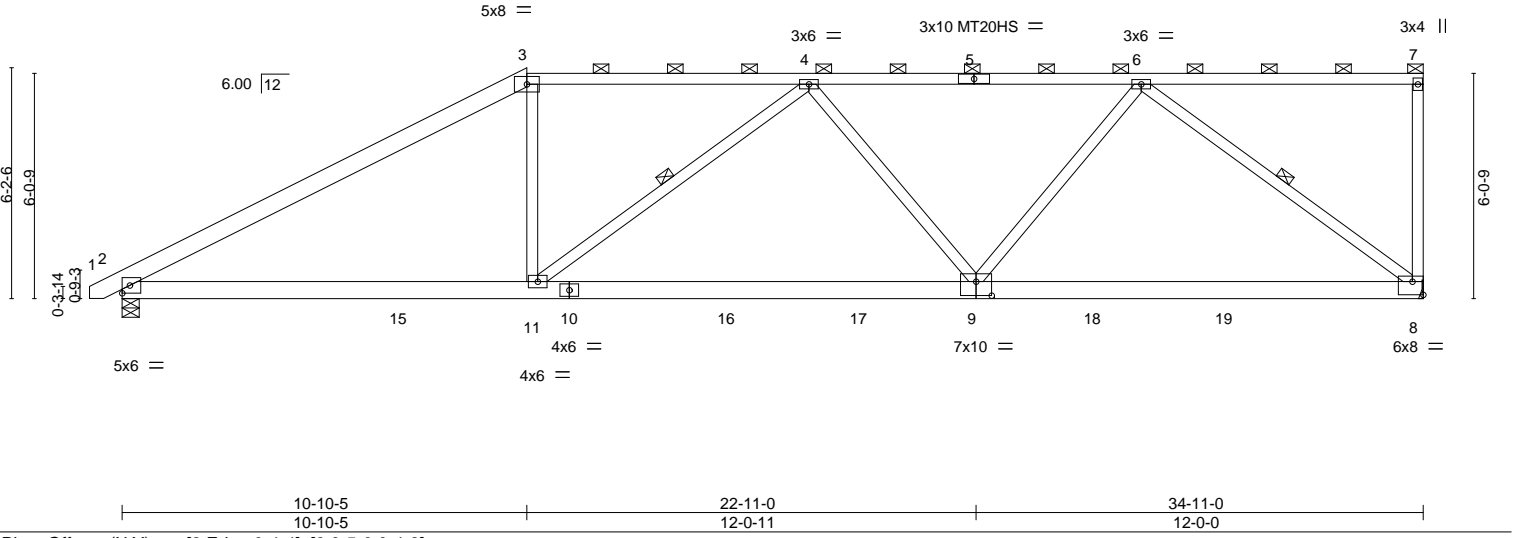
Builders FirstSource, Sumter, SC - 29153,

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Scale = 1:61.8



LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.91	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.74	Vert(LL) -0.15 8-9 >999 360	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr YES	WB 0.85	Vert(CT) -0.33 8-9 >999 240		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Horz(CT) 0.07 8 n/a n/a		
			Wind(LL) 0.15 11-14 >999 240	Weight: 211 lb	FT = 20%

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

**REACTIONS.** (lb/size) 8=1390/Mechanical, 2=1432/0-5-8  
 Max Horz 2=296(LC 12)  
 Max Uplift 8=470(LC 9), 2=303(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2301/809, 3-4=-1965/841, 4-6=-1980/710  
 BOT CHORD 2-11=-842/1951, 9-11=-926/2182, 8-9=-629/1473  
 WEBS 3-11=-34/585, 4-11=-452/293, 4-9=-405/349, 6-9=-130/829, 6-8=-1809/781

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - 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.
  - All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - 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) 8=470, 2=303.
  - 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 654050_130MPH	Truss A18	Truss Type HALF HIP GIRDER	Qty 2	Ply 2	H&H/Hatteras/ Job Reference (optional)	137191048
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8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:38 2019 Page 1

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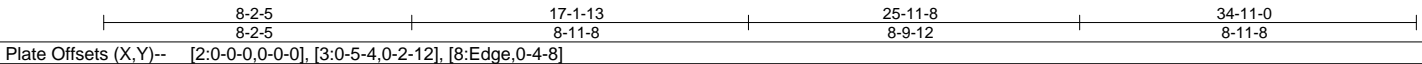
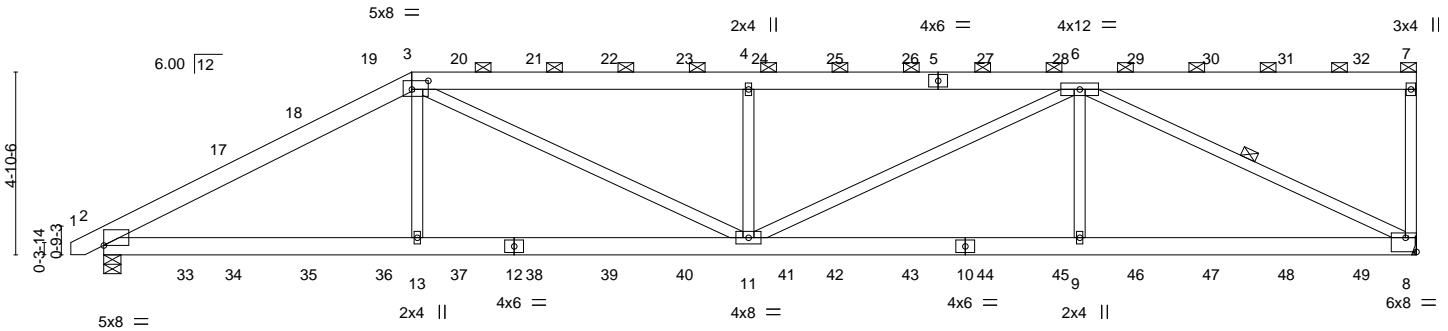


Plate Offsets (X,Y)-- [2:0-0-0,0-0-0], [3:0-5-4,0-2-12], [8:Edge,0-4-8]					
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.56	Vert(LL) 0.25 9-11 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.63	Vert(CT) -0.28 9-11 >999 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.78	Horz(CT) 0.07 8 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS			
				Weight: 467 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, and 2-0-0 oc purlins (5-10-4 max.): 3-7.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 6-8

**REACTIONS.** (lb/size) 8=2677/Mechanical, 2=2754/0-5-8  
 Max Horz 2=230(LC 8)  
 Max Uplift 8=-1627(LC 5), 2=-1389(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4574/2514, 3-4=-5536/3350, 4-6=-5536/3350, 7-8=-395/353  
 BOT CHORD 2-13=-2301/3974, 11-13=-2302/3991, 9-11=-2596/4270, 8-9=-2596/4270  
 WEBS 3-13=-56/659, 3-11=-1211/1824, 4-11=-1005/932, 6-11=-843/1416, 6-9=0/711, 6-8=-4699/2857

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; 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.
  - All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - 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) 8=1627, 2=1389.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Continued on page 2

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p><b>ENGINEERING BY</b>  <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/Hatteras/	137191048
654050_130MPH	A18	HALF HIP GIRDER	2	<b>2</b>	Job Reference (optional)	

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 ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-Fm01m77imX5YhdlHb3XhpEpAq\_pUXAtV3fjAc5zDdmJ

**NOTES-**

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 86 lb down and 91 lb up at 3-5-8, 41 lb down and 53 lb up at 5-5-8, 149 lb down and 137 lb up at 7-5-8, 167 lb down and 164 lb up at 9-5-8, 167 lb down and 164 lb up at 11-5-8, 167 lb down and 164 lb up at 13-5-8, 167 lb down and 164 lb up at 15-5-8, 167 lb down and 164 lb up at 17-5-8, 167 lb down and 164 lb up at 19-5-8, 167 lb down and 164 lb up at 21-5-8, 167 lb down and 164 lb up at 23-5-8, 167 lb down and 164 lb up at 25-5-8, 167 lb down and 164 lb up at 27-5-8, 167 lb down and 164 lb up at 29-5-8, and 167 lb down and 164 lb up at 31-5-8, and 167 lb down and 164 lb up at 33-5-8 on top chord, and 210 lb down and 112 lb up at 1-5-8, 105 lb down and 33 lb up at 3-5-8, 138 lb down and 85 lb up at 5-5-8, 82 lb down and 61 lb up at 7-5-8, 68 lb down and 25 lb up at 9-5-8, 68 lb down and 25 lb up at 11-5-8, 68 lb down and 25 lb up at 13-5-8, 68 lb down and 25 lb up at 15-5-8, 68 lb down and 25 lb up at 17-5-8, 68 lb down and 25 lb up at 19-5-8, 68 lb down and 25 lb up at 21-5-8, 68 lb down and 25 lb up at 23-5-8, 68 lb down and 25 lb up at 25-5-8, 68 lb down and 25 lb up at 27-5-8, 68 lb down and 25 lb up at 29-5-8, and 68 lb down and 25 lb up at 31-5-8, and 68 lb down and 25 lb up at 33-5-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-60, 3-7=-60, 8-14=-20

Concentrated Loads (lb)

Vert: 17=-46(B) 18=-1(B) 19=-74(B) 20=-95(B) 21=-95(B) 22=-95(B) 23=-95(B) 24=-95(B) 25=-95(B) 26=-95(B) 27=-95(B) 28=-95(B) 29=-95(B) 30=-95(B) 31=-95(B) 32=-95(B) 33=-210(B) 34=-105(B) 35=-138(B) 36=-77(B) 37=-55(B) 38=-55(B) 39=-55(B) 40=-55(B) 41=-55(B) 42=-55(B) 43=-55(B) 44=-55(B) 45=-55(B) 46=-55(B) 47=-55(B) 48=-55(B) 49=-55(B)

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

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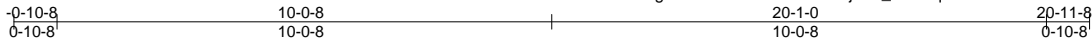
818 Soundside Road  
 Edenton, NC 27932

Job 654050_130MPH	Truss B01	Truss Type GABLE	Qty 7	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191049
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8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:39 2019 Page 1

ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-jzaP\_T8KXqDPIntT8m2wMRLrOHjGoSfIJSk8XzDdml



3x6 =

Scale = 1:46.8

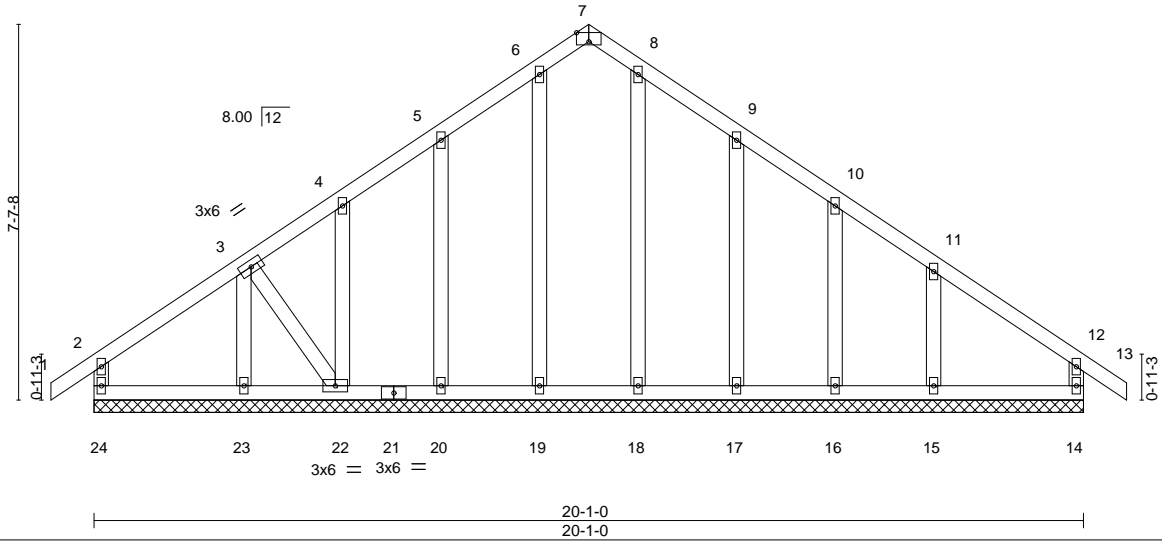


Plate Offsets (X,Y)--	[7:0-3-0,Edge]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.17	Vert(LL)	-0.00	12	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	-0.00	12	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.12	Horz(CT)	0.00	14	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 128 lb	FT = 20%

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

**REACTIONS.** All bearings 20-1-0.  
 (lb) - Max Horz 24=-277(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 24, 19, 23, 16 except 20=-138(LC 12), 22=-297(LC 12), 17=-151(LC 13), 15=-207(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 24, 14, 19, 20, 18, 17, 16 except 22=299(LC 19), 23=280(LC 20), 15=269(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-22=-233/279

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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.
  - Truss to be fully sheathed on one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 19, 23, 16 except (jt=lb) 20=138, 22=297, 17=151, 15=207.

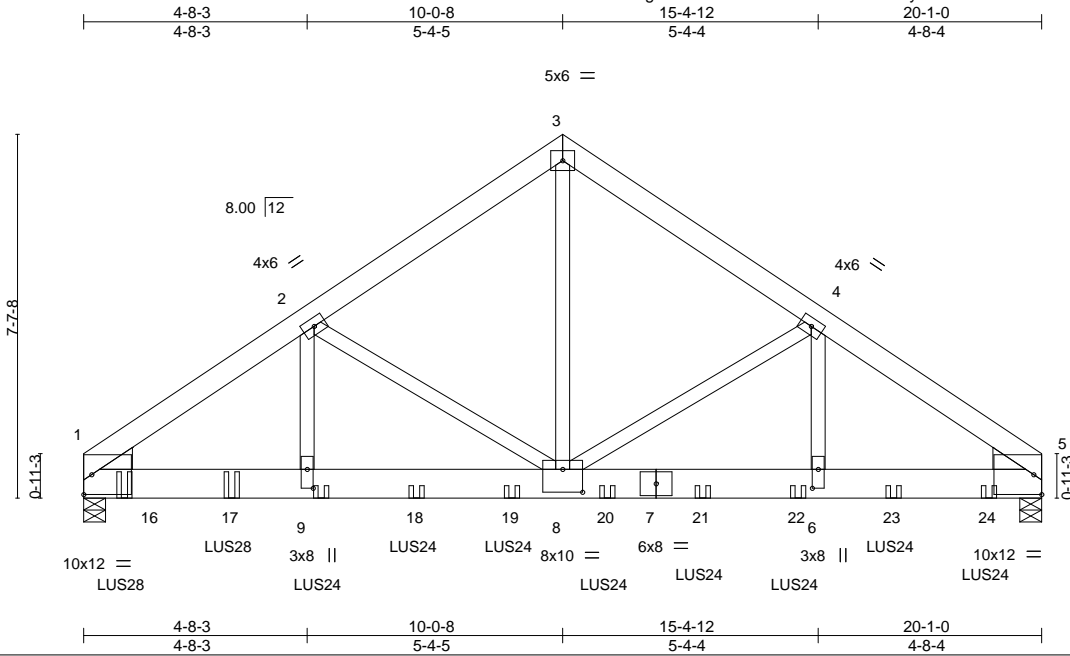


Job 654050_130MPH	Truss B02	Truss Type Common Girder	Qty 5	Ply 2	H&H/Hatteras/ Job Reference (optional)	137191050
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Builders FirstSource, Sumter, SC - 29153,

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ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-C98oBo9yI8LFwxSfiUz9ufucOnZ4?A2oXzCHgzDdmH



Scale: 1/4"=1'

Plate Offsets (X,Y)--	[6:0-4-12,0-1-8], [8:0-5-0,0-5-12], [9:0-4-12,0-1-8]
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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 0.17	Vert(LL)	-0.05	6-8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.31	Vert(CT)	-0.09	6-8	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.42	Horz(CT)	0.02	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.06	6-8	>999		
								Weight: 318 lb	FT = 20%

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

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

**REACTIONS.** (lb/size) 1=5111/0-5-8, 5=3611/0-5-8  
Max Horz 1=-223(LC 25)  
Max Uplift 1=-1787(LC 8), 5=-1566(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-5483/2124, 2-3=-3481/1542, 3-4=-3478/1542, 4-5=-4722/2025  
BOT CHORD 1-9=-1817/4490, 8-9=-1817/4490, 6-8=-1581/3837, 5-6=-1581/3837  
WEBS 3-8=-1500/3412, 4-8=-1201/716, 4-6=-518/1135, 2-8=-1980/817, 2-9=-623/1947

- NOTES-** (12)
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-5-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=1787, 5=1566.
  - Use Simpson Strong-Tie LUS28 (6-SD9112 Girder, 4-SD9212 Truss, Single Ply Girder) or equivalent spaced at 2-3-0 oc max. starting at 0-10-4 from the left end to 3-1-4 to connect truss(es) to back face of bottom chord.
  - Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 4-11-12 from the left end to 18-11-12 to connect truss(es) to back face of bottom chord.
  - Fill all nail holes where hanger is in contact with lumber.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



**LOAD CASE(S)** Standard  
Continued on page 2

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

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



Job	Truss	Truss Type	Qty	Ply	H&H/Hatteras/	137191050
654050_130MPH	B02	Common Girder	5	<b>2</b>	Job Reference (optional)	

Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:40 2019 Page 2  
 ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-C98oBo9y18LFwxSfiUZ9ufucOnZ4?A2oXzCHgzzDdmH

**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, 10-13=-20

Concentrated Loads (lb)

Vert: 9=-531(B) 16=-1435(B) 17=-1434(B) 18=-531(B) 19=-531(B) 20=-531(B) 21=-531(B) 22=-531(B) 23=-531(B) 24=-531(B)

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

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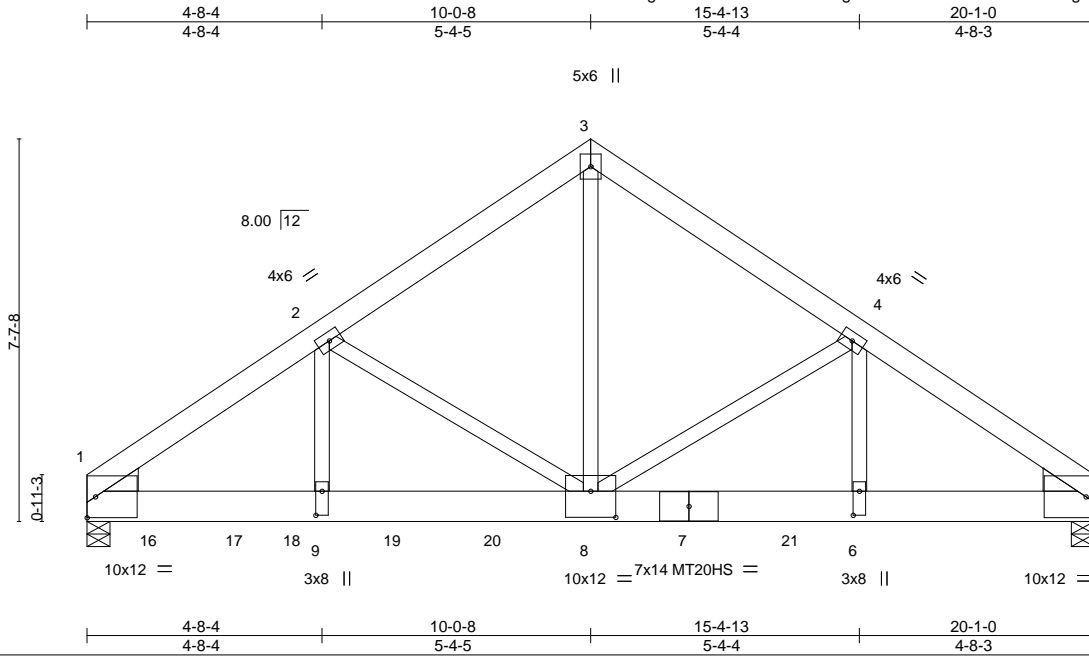
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Job 654050_130MPH	Truss B03	Truss Type Common Girder	Qty 2	Ply 2	H&H/Hatteras/ Job Reference (optional)	137191051
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ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-gLiAP89a3ST6Y41sGB4ORsRgNBqckVXmmdrDPzDdmG



Scale = 1:45.9

Plate Offsets (X,Y)--	[6:0-5-12,0-1-8], [8:0-6-0,0-6-4], [9:0-5-12,0-1-8]
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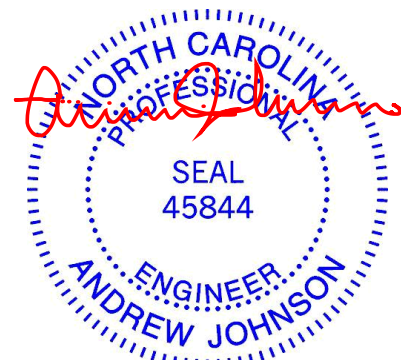
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.61	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.61	Vert(LL) 0.15 6-8 >999 240	MT20HS	187/143
BCLL 0.0 *	Lumber DOL 1.15	WB 0.92	Vert(CT) -0.21 6-8 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.05 5 n/a n/a		
	Code IRC2015/TPI2014			Weight: 318 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-6-1 oc purlins.
BOT CHORD 2x8 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	
WEDGE	
Left: 2x6 SP No.2, Right: 2x6 SP No.2	

<b>REACTIONS.</b>	(lb/size) 1=8207/0-5-8, 5=5681/0-5-8
	Max Horz 1=223(LC 26)
	Max Uplift 1=-2588(LC 8), 5=-2281(LC 9)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-10225/3312, 2-3=-7218/2705, 3-4=-7211/2698, 4-5=-9051/3728
BOT CHORD	1-9=-2792/8372, 8-9=-2792/8372, 6-8=-2962/7352, 5-6=-2962/7352
WEBS	3-8=-2755/7463, 4-8=-1650/1200, 4-6=-1162/1890, 2-8=-2867/816, 2-9=-673/3125

- NOTES-** (11)
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 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=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=2588, 5=2281.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1379 lb down and 384 lb up at 0-8-12, 1376 lb down and 387 lb up at 2-11-12, 1376 lb down and 387 lb up at 4-1-8, 1376 lb down and 387 lb up at 6-1-8, 1376 lb down and 375 lb up at 8-1-8, 1404 lb down and 479 lb up at 10-1-8, and 1370 lb down and 490 lb up at 12-1-8, and 2657 lb down and 1647 lb up at 14-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 24, 2019

**LOAD CASE(S)** Standard  
Continued on page 2

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

Job	Truss	Truss Type	Qty	Ply	H&H/Hatteras/	137191051
654050_130MPH	B03	Common Girder	2	<b>2</b>	Job Reference (optional)	

Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:41 2019 Page 2  
 ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-gLiAP89a3ST6Y41sGB4ORsRgNBqckVXxmdxrDPzDdmG

**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, 10-13=-20

Concentrated Loads (lb)

Vert: 7=-1370(B) 8=-1370(B) 16=-1379(B) 17=-1376(B) 18=-1376(B) 19=-1376(B) 20=-1376(B) 21=-2657(B)

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

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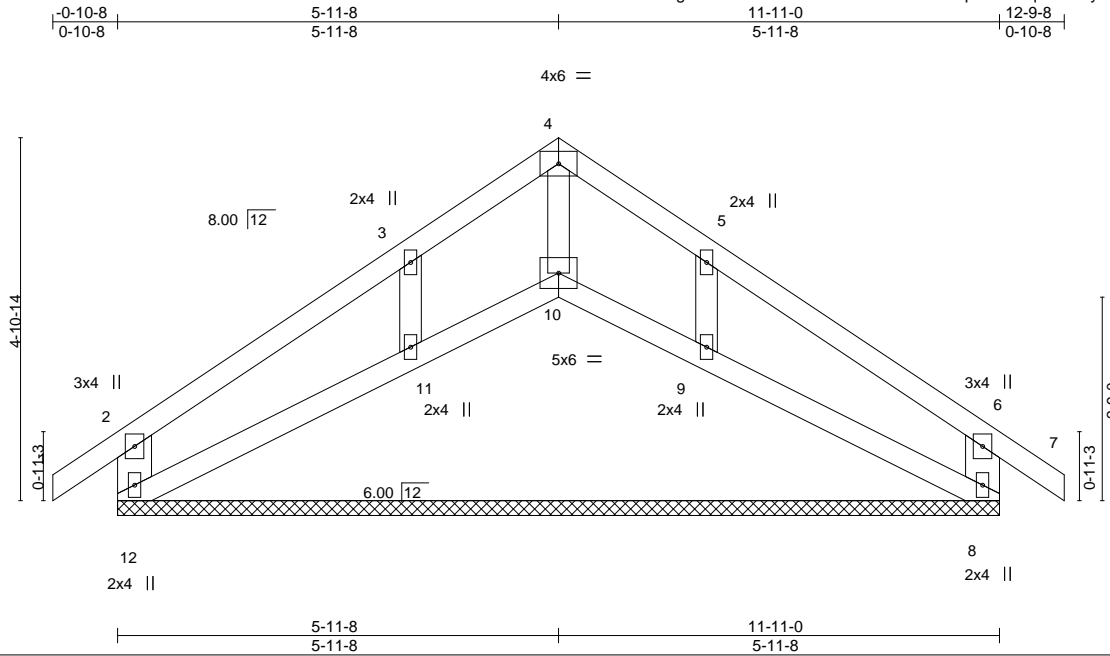


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Job 654050_130MPH	Truss C01	Truss Type Scissor Supported Gable	Qty 5	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191052
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8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:42 2019 Page 1  
ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-8YGYcUACqzb9Ec2qvbdz4zyMblfT9x5\_HhOlszDdmF



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	6	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	0.00	6	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-R						Weight: 55 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

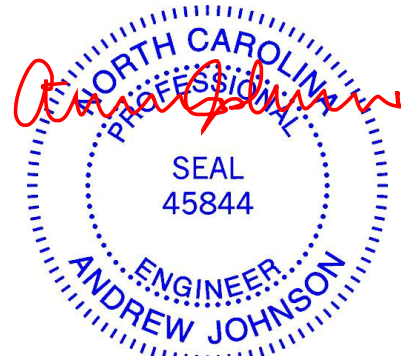
All bearings 11-11-0.  
 (lb) - Max Horz 12=-194(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 10 except 12=-129(LC 13), 8=-127(LC 13), 11=-192(LC 12), 9=-190(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 12, 8, 10 except 11=338(LC 19), 9=333(LC 20)

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

TOP CHORD 2-12=-266/235, 3-4=-301/286, 4-5=-301/288, 6-8=-274/233  
 WEBS 4-10=-268/246, 3-11=-270/222, 5-9=-267/220

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be User Defined crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10 except (jt=lb) 12=129, 8=127, 11=192, 9=190.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 10, 11, 9.



May 24, 2019

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



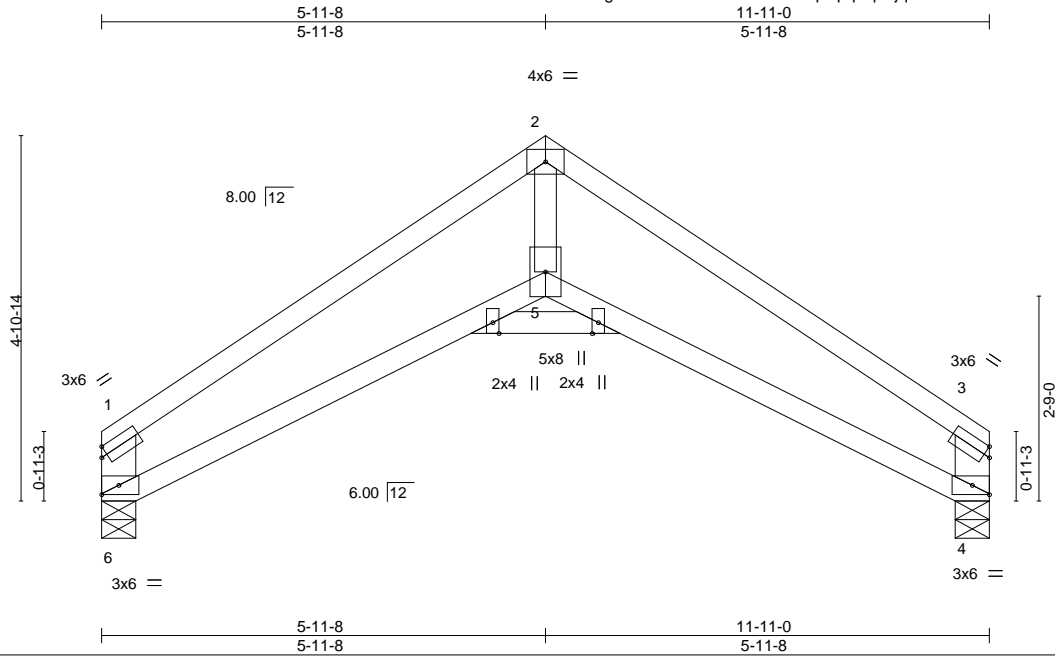
818 Soundside Road  
 Edenton, NC 27932

Job 654050_130MPH	Truss C02	Truss Type Scissor	Qty 25	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191053
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Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:43 2019 Page 1

ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-ckpwpqBqb3jqnOBENC7sWHW1X?T8CZAEDxQxHzDdmE



Scale = 1:30.9

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 0.56	Vert(LL)	-0.15	5	>911	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.79	Vert(CT)	-0.30	5	>455	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.27	Horz(CT)	0.32	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.09	5	>999	240		
									Weight: 51 lb	FT = 20%

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

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

**REACTIONS.** (lb/size) 6=458/0-5-8, 4=458/0-5-8  
Max Horz 6=169(LC 9)  
Max Uplift 6=110(LC 12), 4=110(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-907/308, 2-3=-922/309, 1-6=-684/274, 3-4=-687/276  
BOT CHORD 5-6=-201/784, 4-5=-200/779  
WEBS 2-5=-92/695

- NOTES-** (9)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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.
  - All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - Bearing at joint(s) 6, 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 capable of withstanding 100 lb uplift at joint(s) except (it=lb) 6=110, 4=110.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

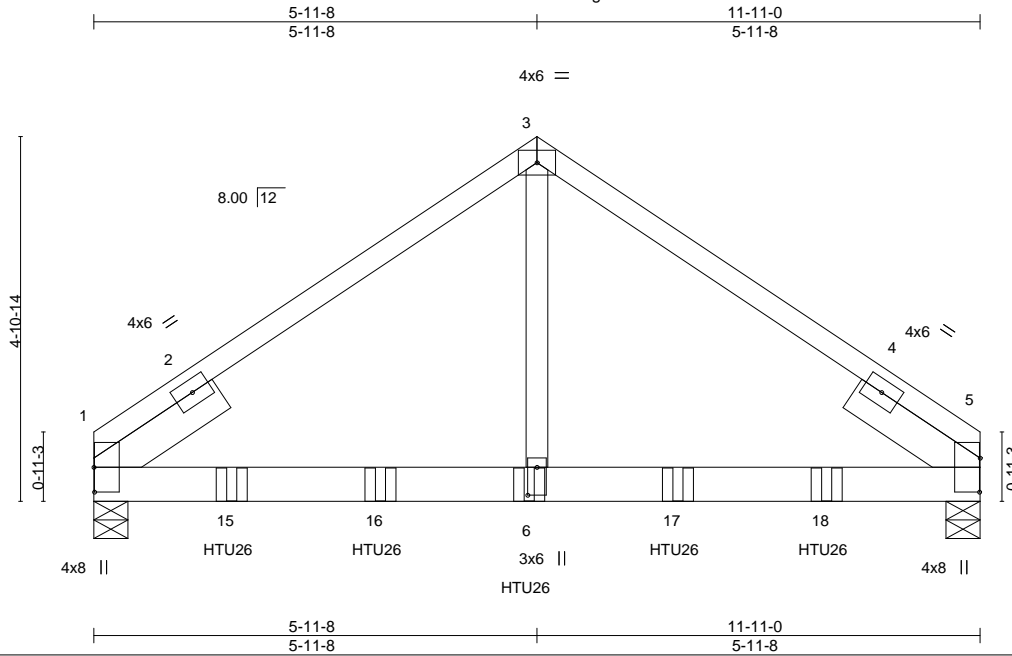
ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate  
818 Soundside Road  
Edenton, NC 27932

Job 654050_130MPH	Truss C03	Truss Type Common Girder	Qty 5	Ply 2	H&H/Hatteras/ Job Reference (optional)	137191054
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Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:44 2019 Page 1

ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-4wNI1ACTMnrhPYmRxJe53V2GTpNLx?IOSbAVpkzDdmD



Scale = 1:31.0

Plate Offsets (X,Y)--	[1:0-4-0,0-0-2], [5:0-5-8,0-0-2], [6:0-4-8,0-1-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.30	Vert(LL) -0.05 6-13 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.92	Vert(CT) -0.09 6-13 >999 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.37	Horz(CT) 0.01 1 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Wind(LL) 0.05 6-13 >999 240	Weight: 130 lb	FT = 20%

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

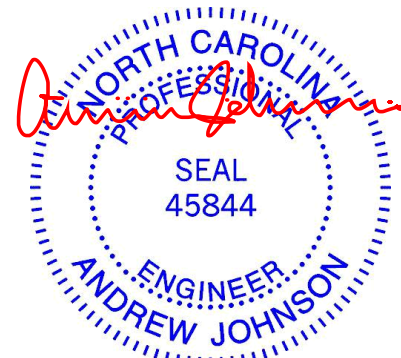
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 1=2880/0-5-8, 5=2814/0-5-8  
Max Horz 1=-133(LC 25)  
Max Uplift 1=-830(LC 8), 5=-810(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-3=-3011/942, 3-5=-3011/942  
BOT CHORD 1-6=-703/2505, 5-6=-703/2505  
WEBS 3-6=-860/3032

- NOTES-** (11)
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=830, 5=810.
  - 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 1-10-4 from the left end to 9-10-4 to connect truss(es) to back face of bottom chord.
  - Fill all nail holes where hanger is in contact with lumber.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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



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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. 10/03/2015 BEFORE USE.**  
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Job	Truss	Truss Type	Qty	Ply	H&H/Hatteras/	I37191054
654050_130MPH	C03	Common Girder	5	<b>2</b>	Job Reference (optional)	

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8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:44 2019 Page 2  
 ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-4wNI1ACTMnrhPYmRxJe53V2GTPnLx?IOSbAVpkzDdmD

**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-3=-60, 3-5=-60, 7-11=-20

Concentrated Loads (lb)

Vert: 6=-948(B) 15=-948(B) 16=-948(B) 17=-948(B) 18=-948(B)

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

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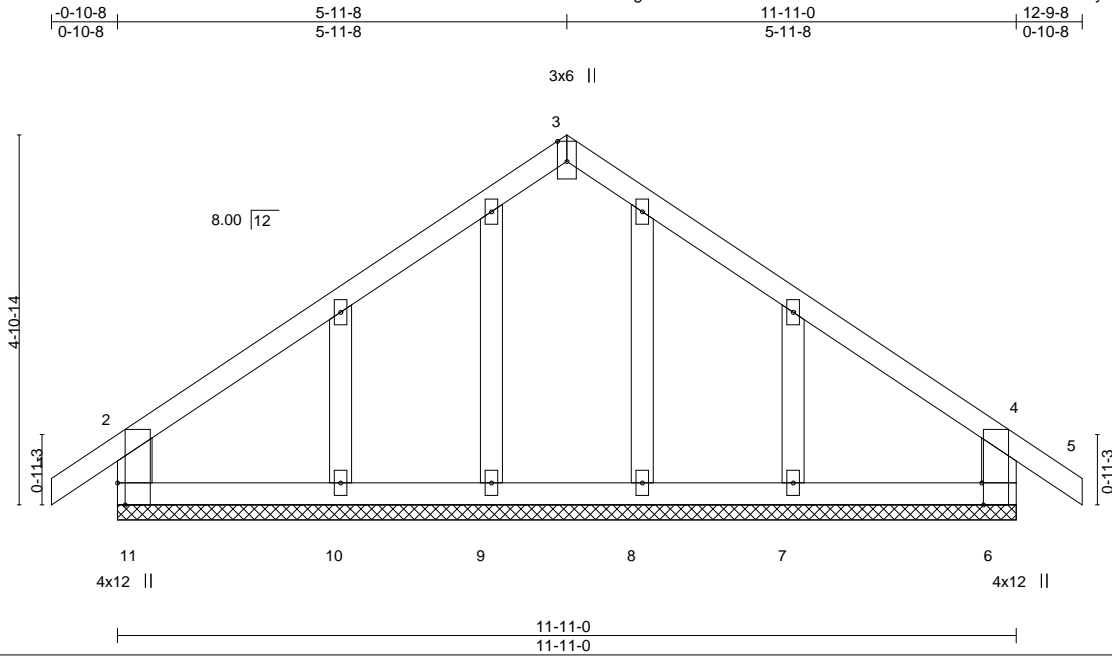
818 Soundside Road  
 Edenton, NC 27932

Job 654050_130MPH	Truss C04	Truss Type GABLE	Qty 2	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191055
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Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:44 2019 Page 1

ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-4wNI1ACTMnrhPYmRxJe53V2EbPySx4ZOSbAVpkzDdmD



Scale = 1:30.5

Plate Offsets (X,Y)--	[2:0-1-13,0-2-12], [3:0-3-3,Edge], [4:0-1-13,0-2-12], [6:0-3-8,Edge], [6:0-0-0,0-2-12], [11:0-3-8,Edge], [11:0-0-0,0-2-12]
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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 0.42	Vert(LL)	0.01	5	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.21	Vert(CT)	0.01	5	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-R					Weight: 63 lb	FT = 20%

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

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

**REACTIONS.** All bearings 11-11-0.  
 (lb) - Max Horz 11=-189(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 9, 10, 8, 7 except 11=-157(LC 12), 6=-157(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 9, 10, 8, 7 except 11=437(LC 1), 6=437(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-11=-417/303, 2-3=-380/221, 3-4=-380/221, 4-6=-417/303  
 BOT CHORD 10-11=-52/261, 9-10=-52/261, 8-9=-52/261, 7-8=-52/261, 6-7=-52/261

- NOTES-** (11)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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, with BCDL = 10.0psf.
  - All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 10, 8, 7 except (jt=lb) 11=157, 6=157.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

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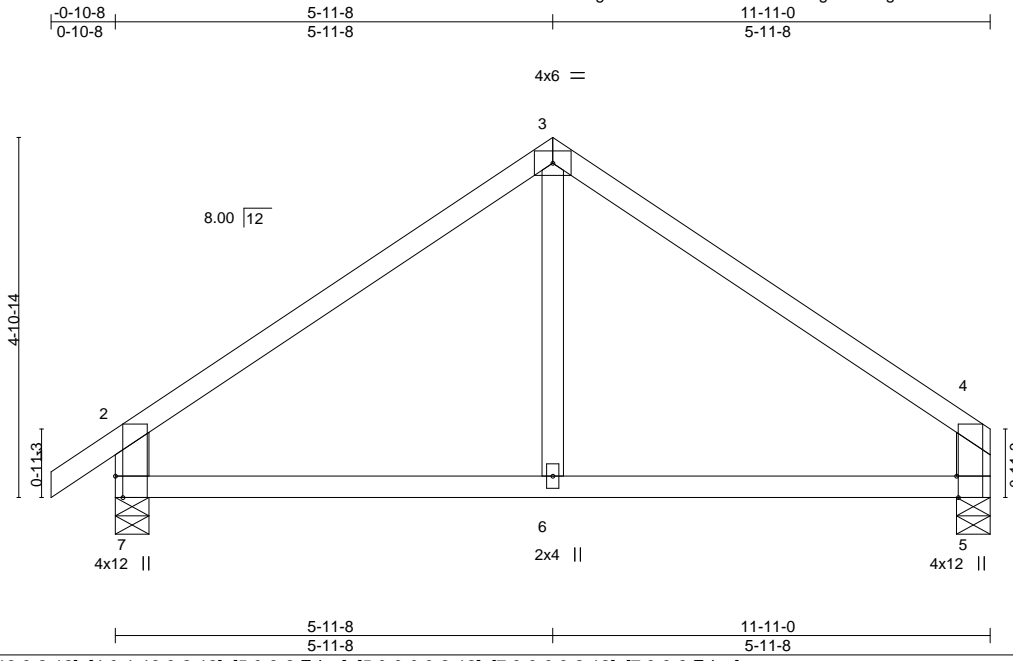


Job 654050_130MPH	Truss C05	Truss Type Common	Qty 10	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191056
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Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:45 2019 Page 1

ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-Y6xgEWC57gzY0iLdV19KbibQ8oHygWTXgFv2MBzDdmC



Scale = 1:31.4

Plate Offsets (X,Y)--	[2:0-1-13,0-2-12], [4:0-1-13,0-2-12], [5:0-3-8,Edge], [5:0-0-0,0-2-12], [7:0-0-0,0-2-12], [7:0-3-8,Edge]
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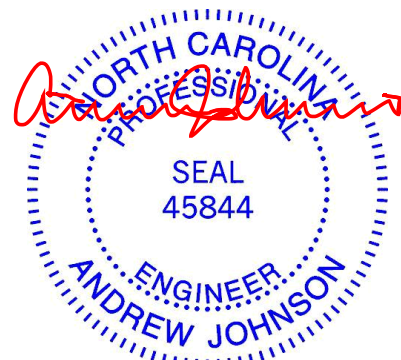
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.36	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.26	Vert(LL) 0.03 6-7 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.09	Vert(CT) -0.05 6-7 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.01 5 n/a n/a		
	Code IRC2015/TPI2014			Weight: 50 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x6 SP No.2 *Except* 3-6: 2x4 SP No.3	

**REACTIONS.** (lb/size) 7=528/0-5-8, 5=455/0-5-8  
 Max Horz 7=181(LC 11)  
 Max Uplift 7=-147(LC 12), 5=-110(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-482/194, 3-4=-477/193, 2-7=-482/280, 4-5=-418/204  
 BOT CHORD 6-7=-72/335, 5-6=-72/335

- NOTES-** (8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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
  - 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.
  - All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=147, 5=110.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 24, 2019

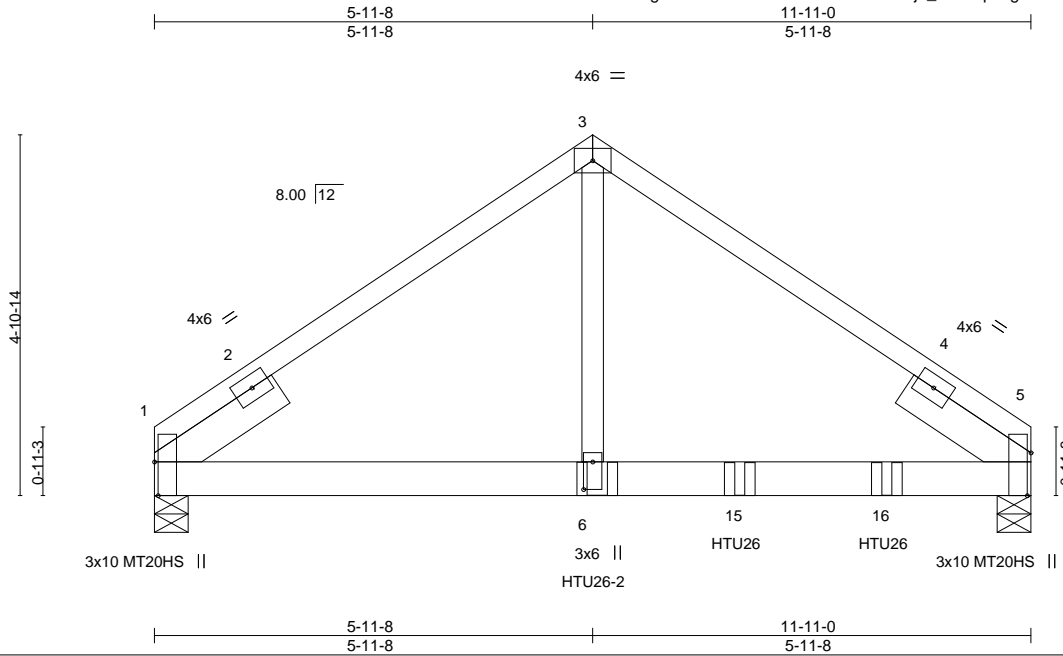
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-743 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job 654050_130MPH	Truss C07	Truss Type Common Girder	Qty 2	Ply 2	H&H/Hatteras/ Job Reference (optional)	137191057
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ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-0JV3SsDju\_5Pesvp3kgZ8w8XOCVfPvgvufbudzDdmB



Scale = 1:31.3

Plate Offsets (X,Y)--	[1:0-5-8,Edge], [5:0-7-0,Edge], [6:0-4-8,0-1-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.59	Vert(LL) -0.07 6-13 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.74	Vert(CT) -0.13 6-13 >999 240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr NO	WB 0.35	Horz(CT) -0.02 1 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Wind(LL) 0.08 6-13 >999 240		
				Weight: 130 lb	FT = 20%

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

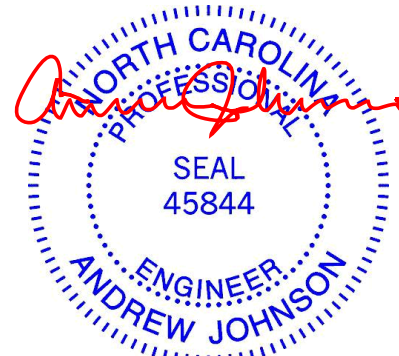
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 1=1891/0-5-8, 5=2846/0-5-8  
Max Horz 1=133(LC 24)  
Max Uplift 1=-840(LC 8), 5=-1088(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-3=-2874/1335, 3-5=-2770/1323  
BOT CHORD 1-6=-1017/2305, 5-6=-1017/2305  
WEBS 3-6=-1318/2825

- NOTES-** (13)
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 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=130mph (3-second gust) Vasd=103mph; 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
  - 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.
  - All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=840, 5=1088.
  - Use Simpson Strong-Tie HTU26-2 (20-10d Girder, 14-10d Truss, Single Ply Girder) or equivalent at 6-0-4 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 7-11-8 from the left end to 9-11-8 to connect truss(es) to back face of bottom chord.
  - Fill all nail holes where hanger is in contact with lumber.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard  
Continued on page 2



May 24, 2019

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**  
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Job	Truss	Truss Type	Qty	Ply	H&H/Hatteras/	137191057
654050_130MPH	C07	Common Girder	2	<b>2</b>	Job Reference (optional)	

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 ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-0JV3SsDju\_5Pesvp3kgZ8w8XOCVfPvfgvufbudzDdmB

**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, 7-11=-20
- Concentrated Loads (lb)
  - Vert: 6=-1888(B) 15=-948(B) 16=-948(B)

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

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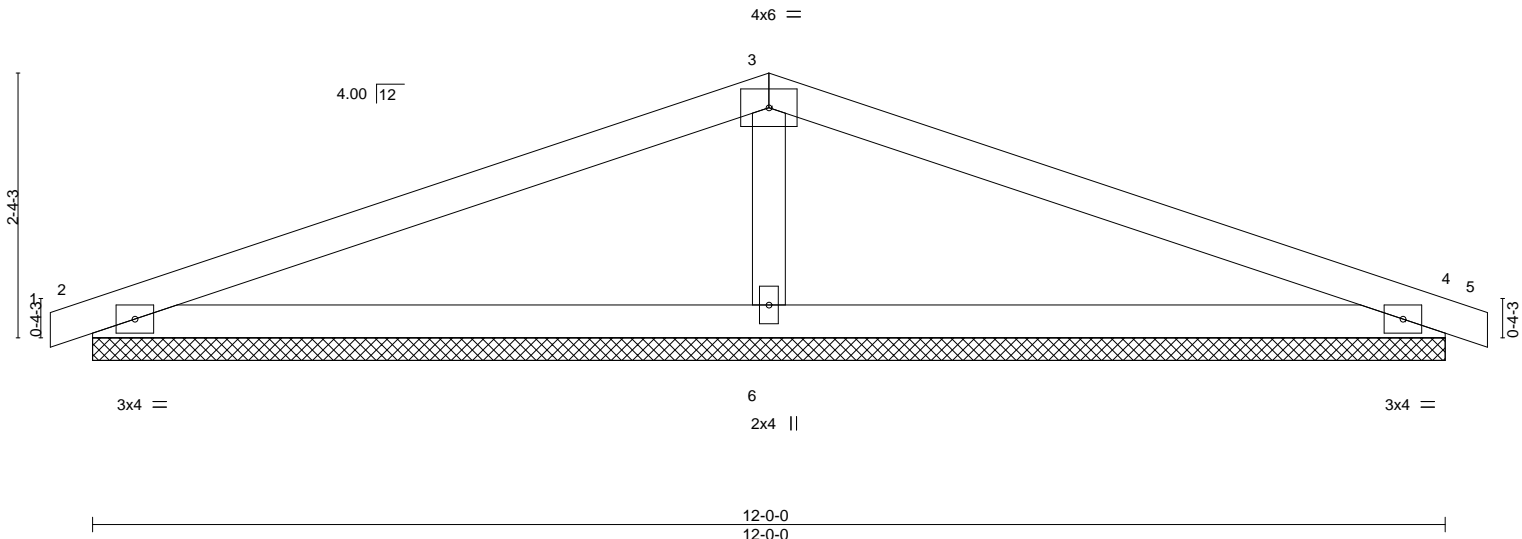
Job	Truss	Truss Type	Qty	Ply	H&H/Hatteras/	137191058
654050_130MPH	CP01	Common Girder	7	1		
Builders FirstSource, Sumter, SC - 29153,						Job Reference (optional)

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:47 2019 Page 1

ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-UV3RfCElfDGg?U?cSBog7giFcwS8Q\_q8YO9Q3zDdmA



Scale = 1:20.4



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 0.58	Vert(LL)	0.01	5	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.39	Vert(CT)	0.02	5	n/r	120		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.09	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 41 lb	FT = 20%

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

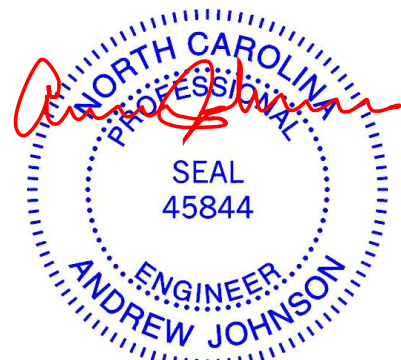
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=228/12-0-0, 4=228/12-0-0, 6=549/12-0-0  
 Max Horz 2=48(LC 12)  
 Max Uplift 2=-103(LC 8), 4=-109(LC 9), 6=-120(LC 8)  
 Max Grav 2=235(LC 23), 4=235(LC 24), 6=549(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 3-6=-366/288

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be User Defined crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=103, 4=109, 6=120.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 4.



May 24, 2019

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

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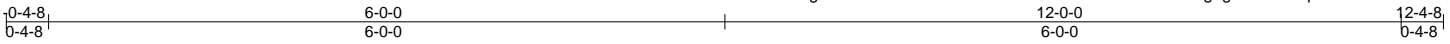
818 Soundside Road  
 Edenton, NC 27932

Job 654050_130MPH	Truss CP02	Truss Type Common	Qty 25	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191059
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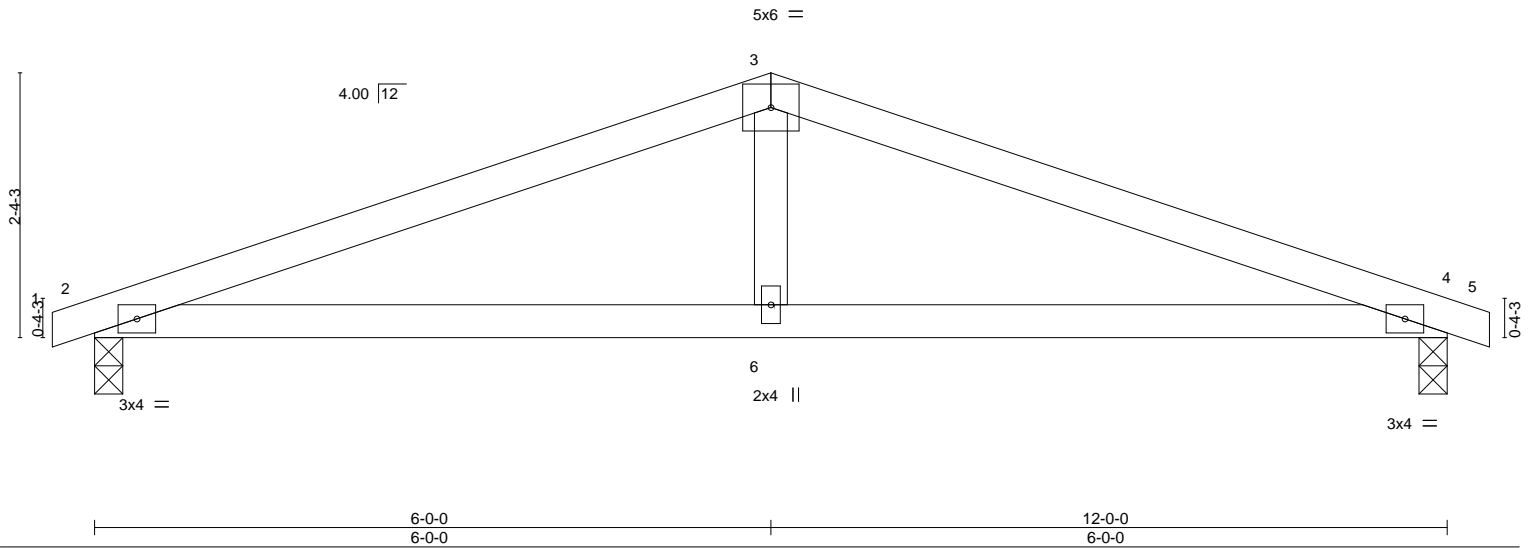
Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:47 2019 Page 1

ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-UV3RfCElfIDGG?U?cSBog7glPcwi8Qkq8YO9Q3zDdmA



Scale = 1:20.4



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.44	Vert(LL)	0.10	6-12	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.43	Vert(CT)	-0.09	6-9	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	-0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS						Weight: 41 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.** (lb/size) 2=503/0-3-0, 4=503/0-3-0  
 Max Horz 2=-48(LC 13)  
 Max Uplift 2=-312(LC 8), 4=-312(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-902/1210, 3-4=-902/1210  
 BOT CHORD 2-6=-1072/826, 4-6=-1072/826  
 WEBS 3-6=-407/267

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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; 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.
- All bearings are assumed to be User Defined crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=312, 4=312.
- 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.



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

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Job 654050_130MPH	Truss D01	Truss Type Common Supported Gable	Qty 7	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191060
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Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:48 2019 Page 1  
ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-zhdptXFzQbL7i93CA9i1DLd110Kqti7zNC8iyVzDdm9



3x6 =

Scale = 1:21.2

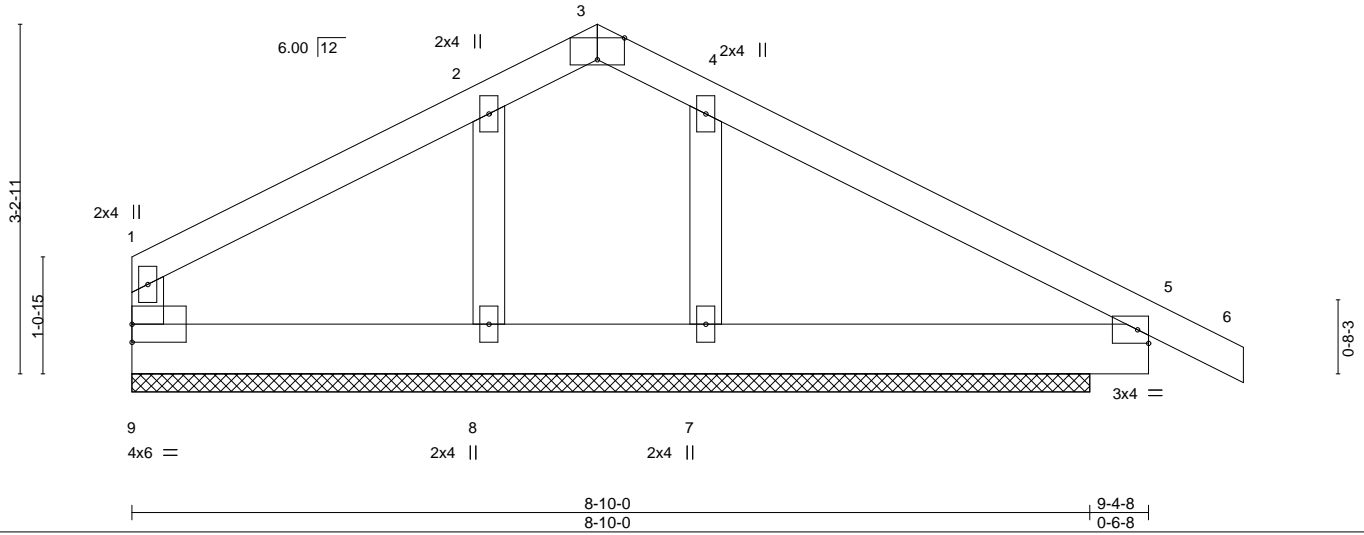


Plate Offsets (X,Y)-- [3:0-3-0,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.58	Vert(LL)	-0.01	5-6	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	-0.01	5-6	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	-0.00	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 46 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 9-4-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.**

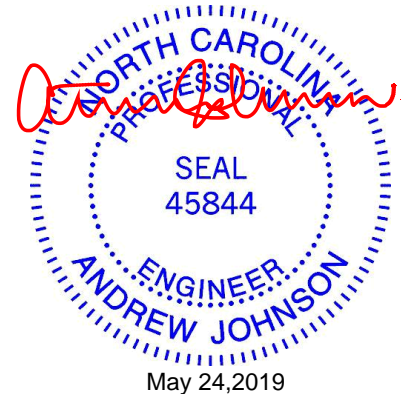
(lb/size) 9=106/8-10-0, 7=546/8-10-0, 8=351/8-10-0  
Max Horz 9=78(LC 8)  
Max Uplift 9=160(LC 24), 7=207(LC 13), 8=116(LC 12)  
Max Grav 9=52(LC 13), 7=551(LC 24), 8=351(LC 1)

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

TOP CHORD 1-2=-223/353, 4-5=-250/370  
BOT CHORD 8-9=-261/299, 7-8=-261/299, 5-7=-261/299  
WEBS 4-7=-371/311, 2-8=-312/251

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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 right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 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.
- All bearings are assumed to be User Defined crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=160, 7=207, 8=116.
- Non Standard bearing condition. Review required.



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

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Job 654050_130MPH	Truss D02	Truss Type Common	Qty 7	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191061
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Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:48 2019 Page 1  
ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-zhdptXFzQbL7l93CA9i1DLDzy0LNtuezNC8iyVzDdm9



4x6 =

Scale = 1:21.1

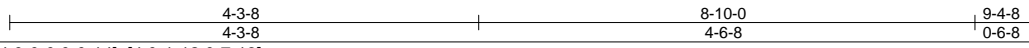
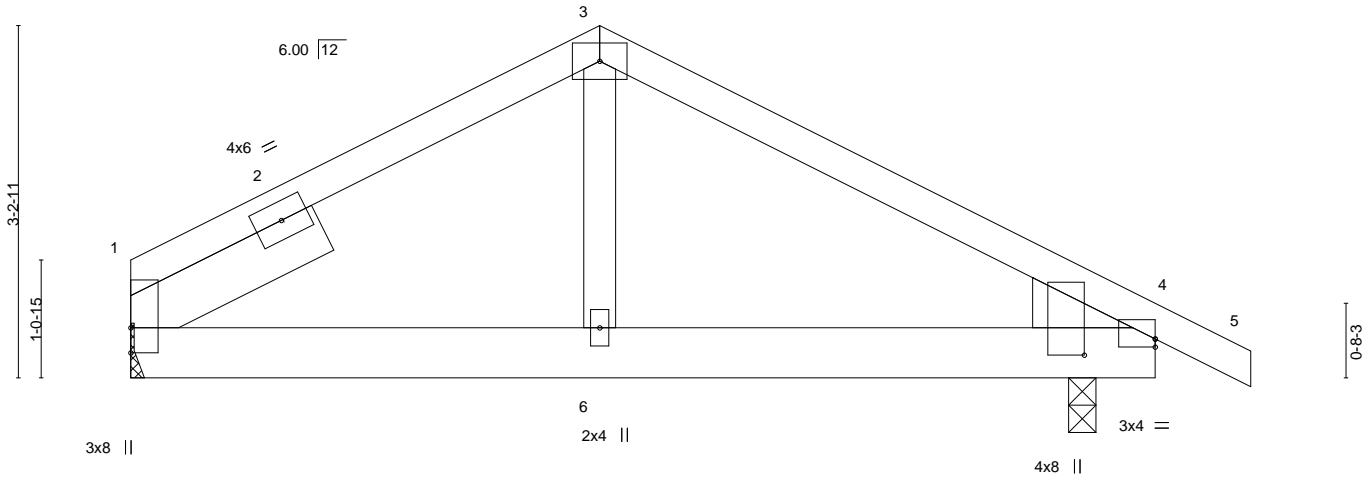


Plate Offsets (X,Y)--	[4:0-0-0,0-0-14], [4:0-1-12,0-7-13]
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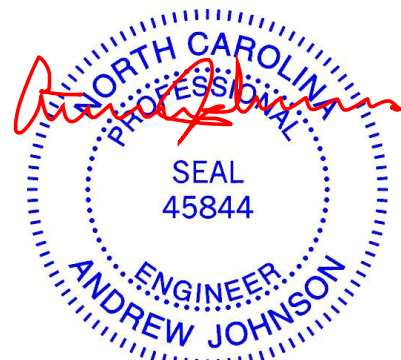
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	0.01	6-15	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	-0.01	6-15	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	-0.00	1	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS						
								Weight: 50 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	
WEDGE	
Right: 2x6 SP No.2	
SLIDER Left 2x6 SP No.2 1-11-12	

**REACTIONS.** (lb/size) 1=346/Mechanical, 4=456/0-3-0  
 Max Horz 1=-89(LC 13)  
 Max Uplift 1=-117(LC 9), 4=-150(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-321/538, 3-4=-379/531  
 BOT CHORD 1-6=-330/287, 4-6=-330/287  
 WEBS 3-6=-266/156

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCCL=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
  - 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) All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=117, 4=150.
  - 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.



May 24, 2019

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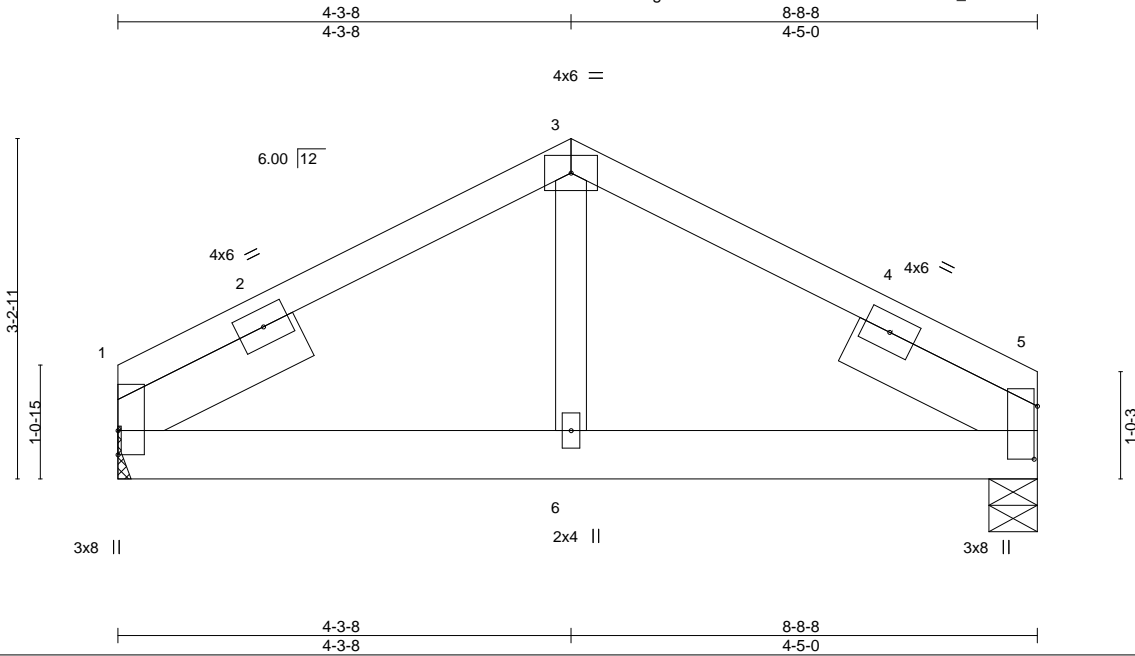
818 Soundside Road  
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Job 654050_130MPH	Truss D03	Truss Type Common	Qty 14	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191062
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Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:49 2019 Page 1

ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-RuBB4tGbBvT\_VJeOktDGmYm9FPhOclS7bstGVyzDdm8



Scale = 1:21.8

Plate Offsets (X,Y)--	[5:0-6-0,0-0-6]				
<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 0.16	Vert(LL) -0.01 6-13 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.10	Vert(CT) -0.01 6-13 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT) -0.00 1 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.01 6-13 >999 240	Weight: 48 lb	FT = 20%

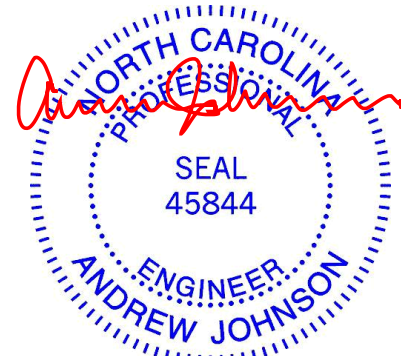
**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3  
SLIDER Left 2x6 SP No.2 1-11-12, Right 2x6 SP No.2 1-11-12

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

**REACTIONS.** (lb/size) 1=348/Mechanical, 5=348/0-5-8  
Max Horz 1=-52(LC 13)  
Max Uplift 1=-117(LC 9), 5=-118(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-3=-330/546, 3-5=-330/544  
BOT CHORD 1-6=-384/295, 5-6=-384/295  
WEBS 3-6=-284/162

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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.
  - All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - 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=117, 5=118.
  - 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.



May 24, 2019

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

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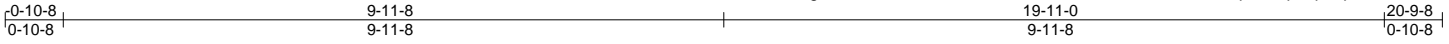


Job 654050_130MPH	Truss E01	Truss Type GABLE	Qty 2	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191063
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Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:50 2019 Page 1

ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-v4kZHDGDxDbr7TDalalVImIKZp0TLnpGqWdp1OzDdm7



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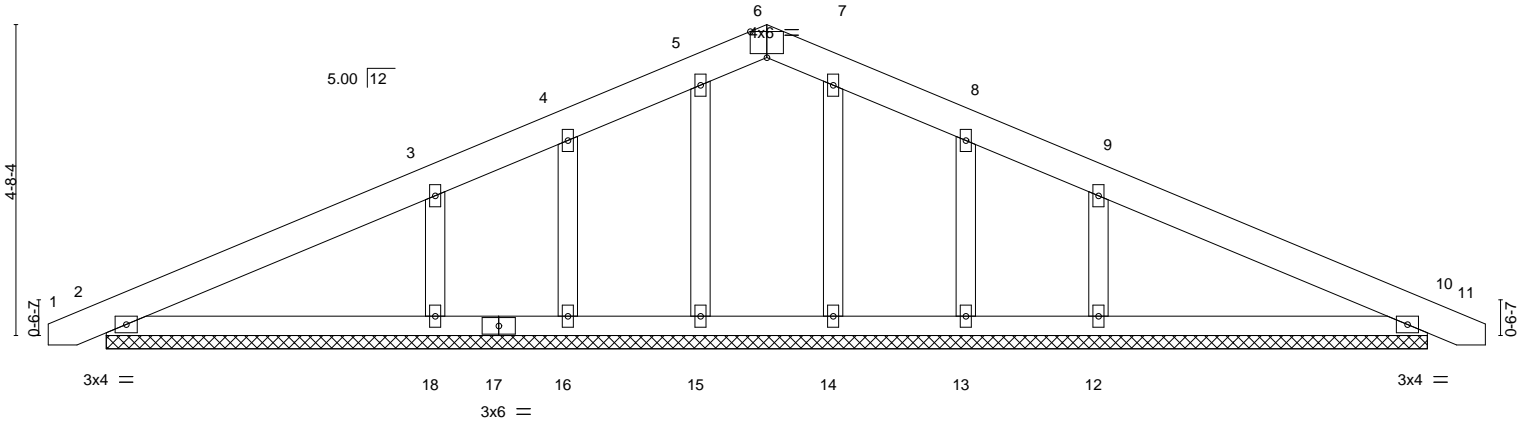


Plate Offsets (X,Y)--	[6:0-3-0,Edge]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15		TC 0.13	Vert(LL) 0.00	11	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.17	Vert(CT) 0.01	11	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES		WB 0.08	Horz(CT) 0.00	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 109 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 19-11-0.  
 (lb) - Max Horz 2=-100(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 15, 16, 13, 10 except 18=-188(LC 12), 12=-186(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 15, 16, 14, 13, 10 except 18=402(LC 1), 12=402(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 3-18=-299/266, 9-12=-299/266

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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) All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 15, 16, 13, 10 except (jt=lb) 18=188, 12=186.



May 24, 2019

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

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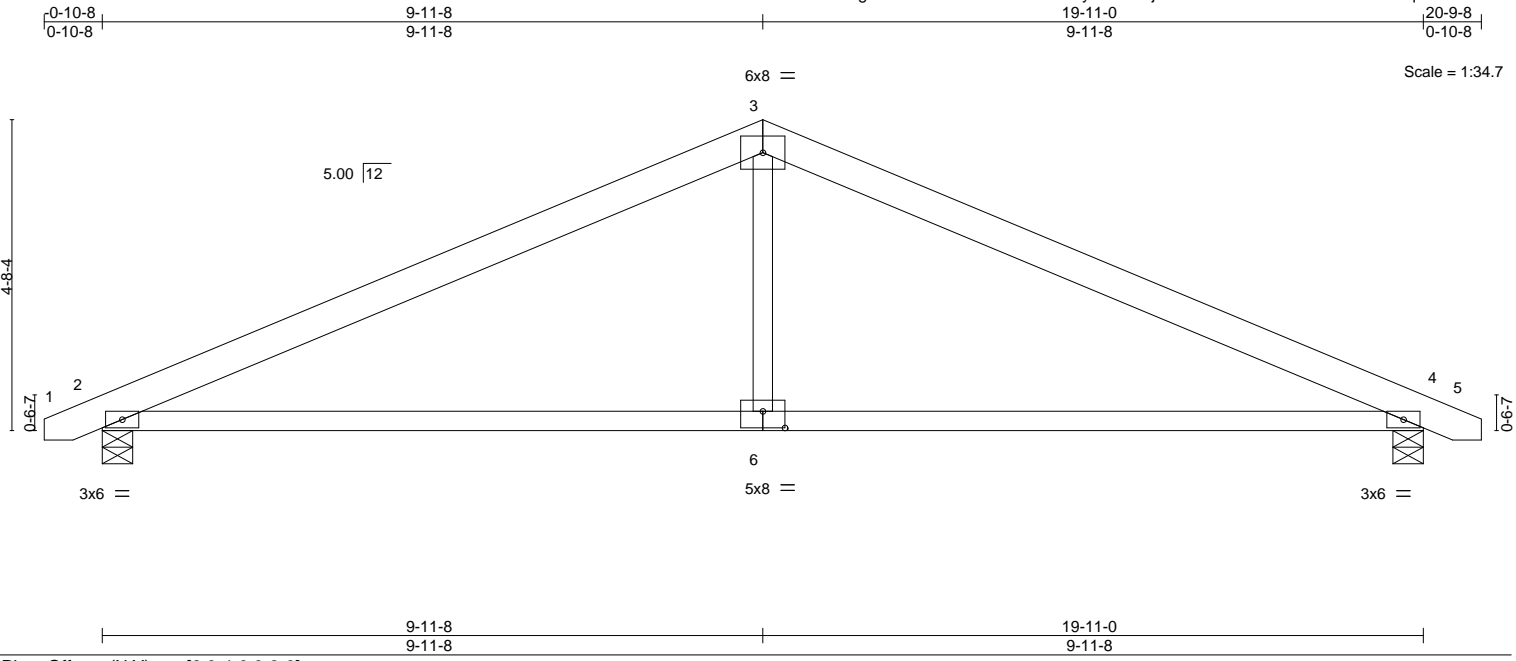
818 Soundside Road  
 Edenton, NC 27932

Job 654050_130MPH	Truss E02	Truss Type Common	Qty 16	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191064
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Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:51 2019 Page 1

ID:Ox8smJ6gTzXh90vcz7B9dzSnQN-NGlyVZHsiWjldonrlGkrzrPWDBC4DuQ3AMMZqzDdm6



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 0.56	Vert(LL)	-0.13	6-12	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.85	Vert(CT)	-0.28	6-12	>844		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.02	4	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.13	6-9	>999	Weight: 91 lb	FT = 20%

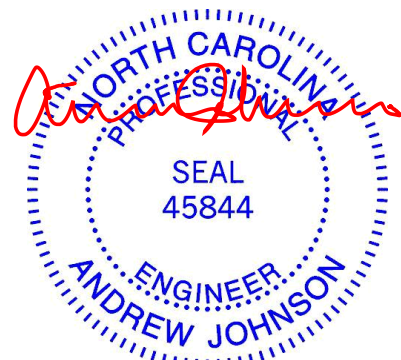
LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=836/0-5-8, 4=836/0-5-8  
 Max Horz 2=-100(LC 13)  
 Max Uplift 2=-235(LC 12), 4=-235(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1235/530, 3-4=-1235/530  
 BOT CHORD 2-6=-340/1080, 4-6=-340/1080  
 WEBS 3-6=0/404

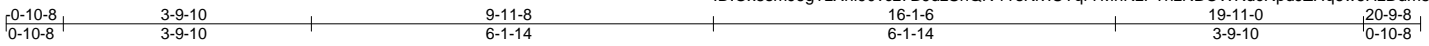
**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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) 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) All bearings are assumed to be User Defined crushing capacity of 565 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=235, 4=235.
- 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.

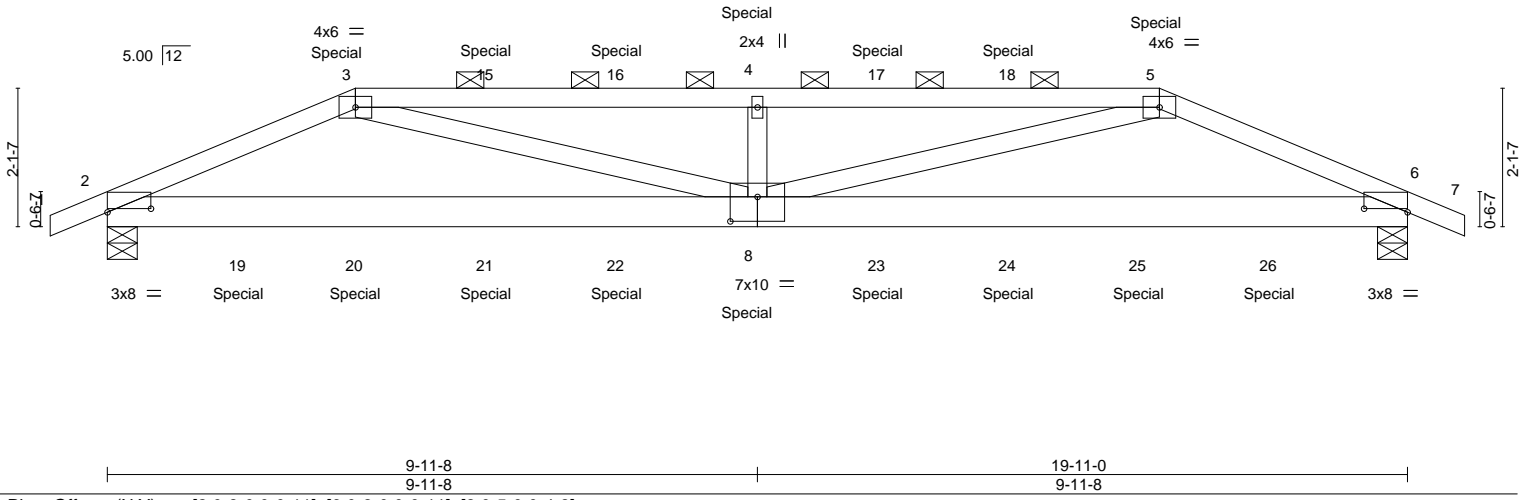


May 24, 2019

Job	Truss	Truss Type	Qty	Ply	H&H/Hatteras/	137191065
654050_130MPH	E04	Hip Girder	2	1		
Builders FirstSource, Sumter, SC - 29153,						8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:52 2019 Page 1
						ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-rTsKivlUTqrYMnNzP?nzNBOWRdcRpdJZHq6w6HzDdm5



Scale = 1:35.3



<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 0.81	Vert(LL)	-0.12	8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.46	Vert(CT)	-0.24	8-11	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.34	Horz(CT)	0.02	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.18	8	>999		
								Weight: 101 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-7-2 oc purlins, except
BOT CHORD 2x6 SP No.2	2-0-0 oc purlins (2-11-6 max.): 3-5.
WEBS 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 8-10-6 oc bracing.

**REACTIONS.** (lb/size) 2=883/0-5-8, 6=882/0-5-8  
Max Horz 2=-44(LC 32)  
Max Uplift 2=-384(LC 4), 6=-382(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1559/780, 3-4=-2488/1175, 4-5=-2488/1175, 5-6=-1558/777  
BOT CHORD 2-8=-673/1420, 6-8=-665/1420  
WEBS 3-8=-458/1146, 4-8=-409/322, 5-8=-462/1149

- NOTES-** (11)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFERS (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.
  - All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=384, 6=382.
  - 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) 76 lb down and 49 lb up at 3-9-10, 83 lb down and 49 lb up at 5-10-4, 83 lb down and 49 lb up at 7-10-4, 83 lb down and 49 lb up at 9-10-4, 83 lb down and 49 lb up at 11-10-4, and 83 lb down and 49 lb up at 13-10-4, and 77 lb down and 49 lb up at 16-1-6 on top chord, and 18 lb down and 24 lb up at 2-0-12, 15 lb down and 16 lb up at 3-10-4, 15 lb down and 16 lb up at 5-10-4, 15 lb down and 16 lb up at 7-10-4, 15 lb down and 16 lb up at 9-10-4, 15 lb down and 16 lb up at 11-10-4, 15 lb down and 16 lb up at 13-10-4, and 15 lb down and 16 lb up at 15-10-4, and 18 lb down and 24 lb up at 17-10-4 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).
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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



May 24, 2019

Continued on page 2

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

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

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Hatteras/	
654050_130MPH	E04	Hip Girder	2	1		I37191065
						Job Reference (optional)

Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:52 2019 Page 2  
 ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-rTsKivlUTqrYMnNzP?nzNBOWRdcRpdJZHq6w6HzDdm5

**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-3=-60, 3-5=-60, 5-7=-60, 9-12=-20

Concentrated Loads (lb)

Vert: 8=-4(B) 19=-18(B) 20=-4(B) 21=-4(B) 22=-4(B) 23=-4(B) 24=-4(B) 25=-4(B) 26=-18(B)

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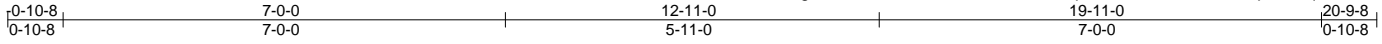
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Hatteras/	137191066
654050_130MPH	E05	HIP	2	1		

Builders FirstSource, Sumter, SC - 29153,

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ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-rTsKivUTqrYMnNzP?nzNBOc?dXrphxZHq6w6HzDdm5



Scale = 1:36.5

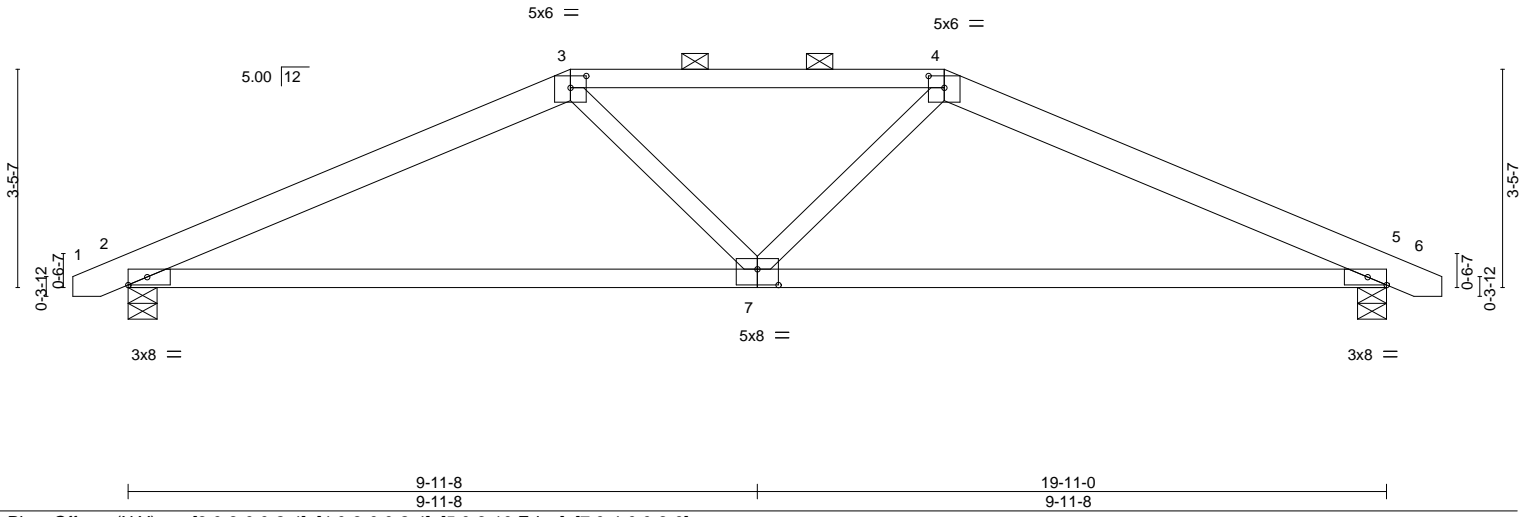


Plate Offsets (X,Y)-- [3:0-3-0,0-2-4], [4:0-3-0,0-2-4], [5:0-3-10,Edge], [7:0-4-0,0-3-0]

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 0.39	Vert(LL)	-0.13	7-13	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.82	Vert(CT)	-0.27	7-10	>872		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.03	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.07	7-10	>999	Weight: 91 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied, except  
 2-0-0 oc purlins (4-10-0 max.): 3-4.  
 BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (lb/size) 2=836/0-5-8, 5=836/0-5-8  
 Max Horz 2=-74(LC 17)  
 Max Uplift 2=-202(LC 8), 5=-202(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1326/562, 3-4=-1270/533, 4-5=-1326/562  
 BOT CHORD 2-7=-394/1174, 5-7=-395/1174  
 WEBS 3-7=0/271, 4-7=0/271

- NOTES-** (10)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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.
  - All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=202, 5=202.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 24, 2019

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818 Soundside Road  
 Edenton, NC 27932

Job 654050_130MPH	Truss J01	Truss Type GABLE	Qty 3	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191067
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Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:53 2019 Page 1

ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-JfQiwFJ6E8zP\_wy9zilCwOwpa12vY7PIWUrTejzDdm4

-0-4-8  
0-4-8

6-0-0  
6-0-0

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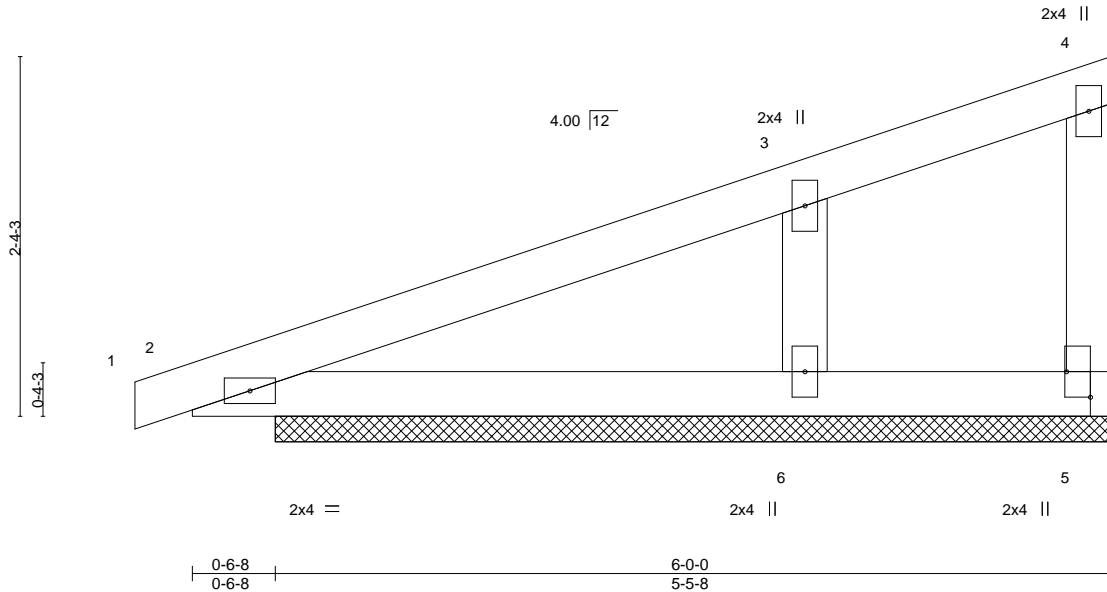


Plate Offsets (X,Y)-- [5:Edge,0-1-14]									
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.21	Vert(LL)	-0.00	1	n/r	120	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	0.00	1	n/r	120	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00	5	n/a	n/a	
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 23 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.** (lb/size) 5=11/5-5-8, 2=154/5-5-8, 6=326/5-5-8  
 Max Horz 2=116(LC 11)  
 Max Uplift 5=-10(LC 11), 2=-52(LC 8), 6=-139(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-6=-244/301

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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 studs spaced at 2-0-0 oc.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - 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=139.
  - 8) Non Standard bearing condition. Review required.



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**  
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ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job 654050_130MPH	Truss J02	Truss Type Monopitch	Qty 25	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191068
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Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:53 2019 Page 1

ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-JfQiwFJ6E8zP\_wy9zilCwOwmZ1zpY8oiWUrTejzDdm4

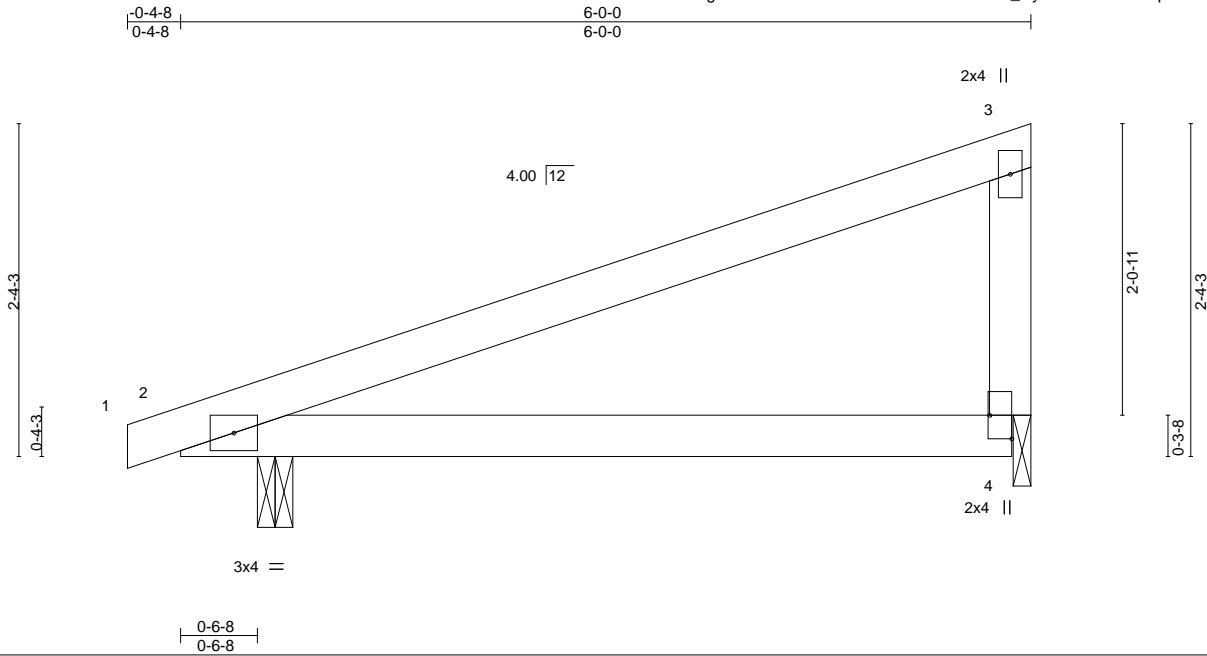


Plate Offsets (X,Y)-- [4:Edge,0-1-14]							
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>	
TCLL 20.0	Plate Grip DOL 1.15	TC 0.40	Vert(LL) 0.11 4-8 >661	240	MT20	244/190	
TCDL 10.0	Lumber DOL 1.15	BC 0.39	Vert(CT) -0.07 4-8 >999	240			
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: 21 lb	FT = 20%	

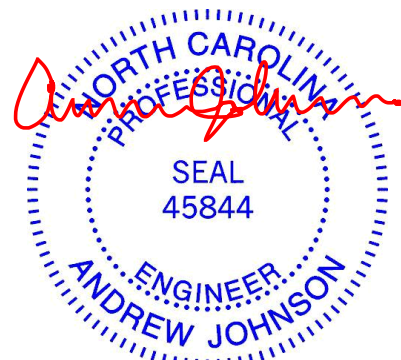
<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SP No.3		

**REACTIONS.** (lb/size) 2=290/0-3-0, 4=200/0-1-8  
 Max Horz 2=110(LC 8)  
 Max Uplift 2=-180(LC 8), 4=-152(LC 8)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed; end vertical left exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be User Defined crushing capacity of 565 psi.
- 5) 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=180, 4=152.
- 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.

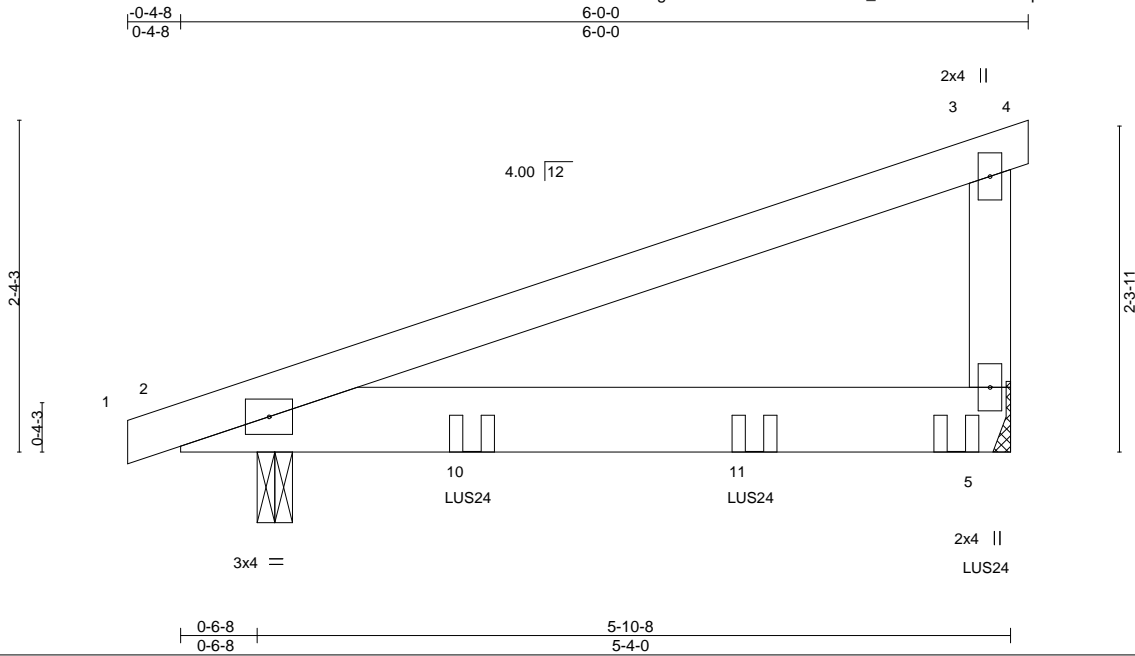


May 24, 2019

Job 654050_130MPH	Truss J03	Truss Type Monopitch Girder	Qty 5	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191069
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Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:54 2019 Page 1  
ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-nr\_47bJk?R6Gc4XMXQpRTcTwwQFBHb2sI8b1A9zDdm3



Scale = 1:16.3

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.49	Vert(LL)	0.07	5-9	>991	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.70	Vert(CT)	-0.09	5-9	>725		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-MP					Weight: 26 lb	FT = 20%
	Code IRC2015/TPI2014							

**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.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 5=848/Mechanical, 2=630/0-3-0  
Max Horz 2=113(LC 4)  
Max Uplift 5=-366(LC 4), 2=-286(LC 4)

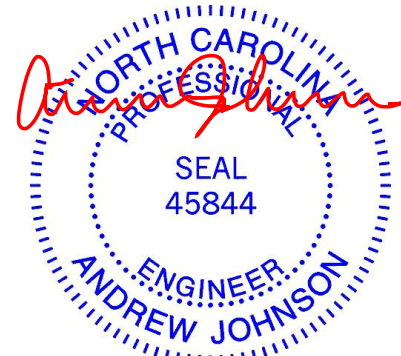
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-** (10)

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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; porch 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.
- All bearings are assumed to be User Defined crushing capacity of 565 psi.
- 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) 5=366, 2=286.
- Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 5-8-12 to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 3-4=-20, 2-5=-20  
Concentrated Loads (lb)  
Vert: 5=-337(F) 10=-326(F) 11=-328(F)



May 24, 2019

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

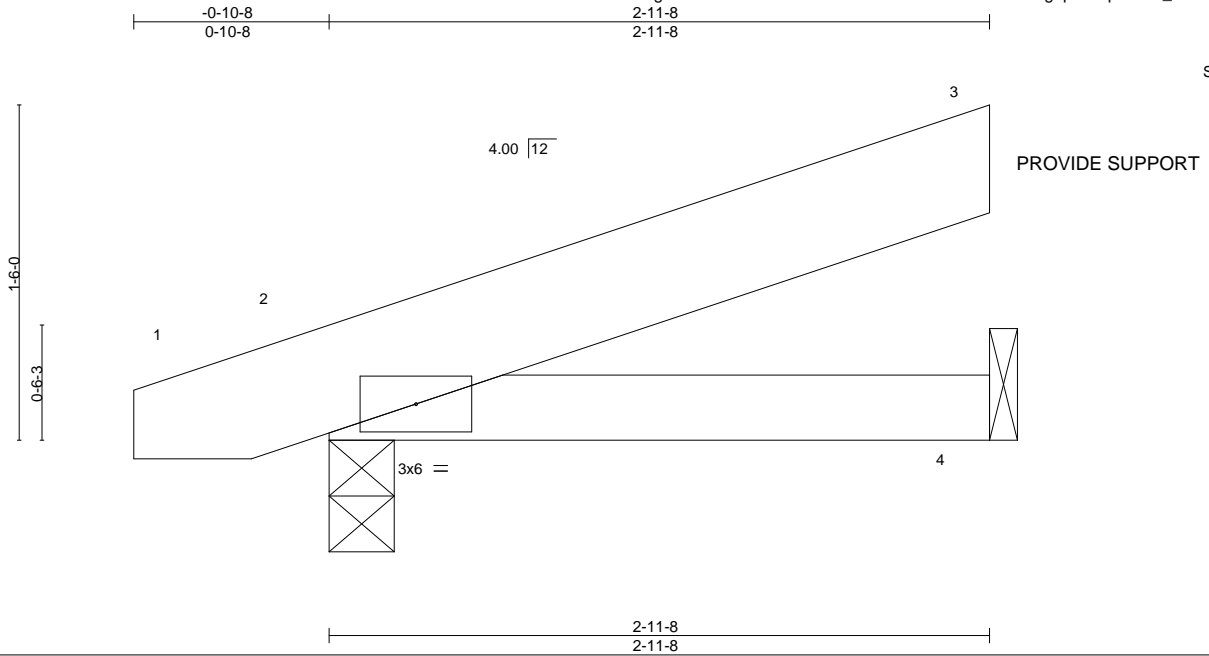


Job 654050_130MPH	Truss J04	Truss Type Monopitch	Qty 70	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191070
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ID:Ox8smJ6gTzXhi9vcz7B9dzSnQN-F2YSLxKMmIE7DE5Y47Kg?p0A2qe002I?\_oKaibzDdm2



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)	-0.02	4-7	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.47	Vert(CT)	-0.03	4-7	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP	Wind(LL)	0.03	4-7	>999	240		
									Weight: 14 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 2-11-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=156/0-3-8, 4=116/Mechanical  
Max Horz 2=60(LC 8)  
Max Uplift 2=-64(LC 8), 4=-52(LC 9)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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) All bearings are assumed to be User Defined crushing capacity of 565 psi.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



May 24, 2019

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



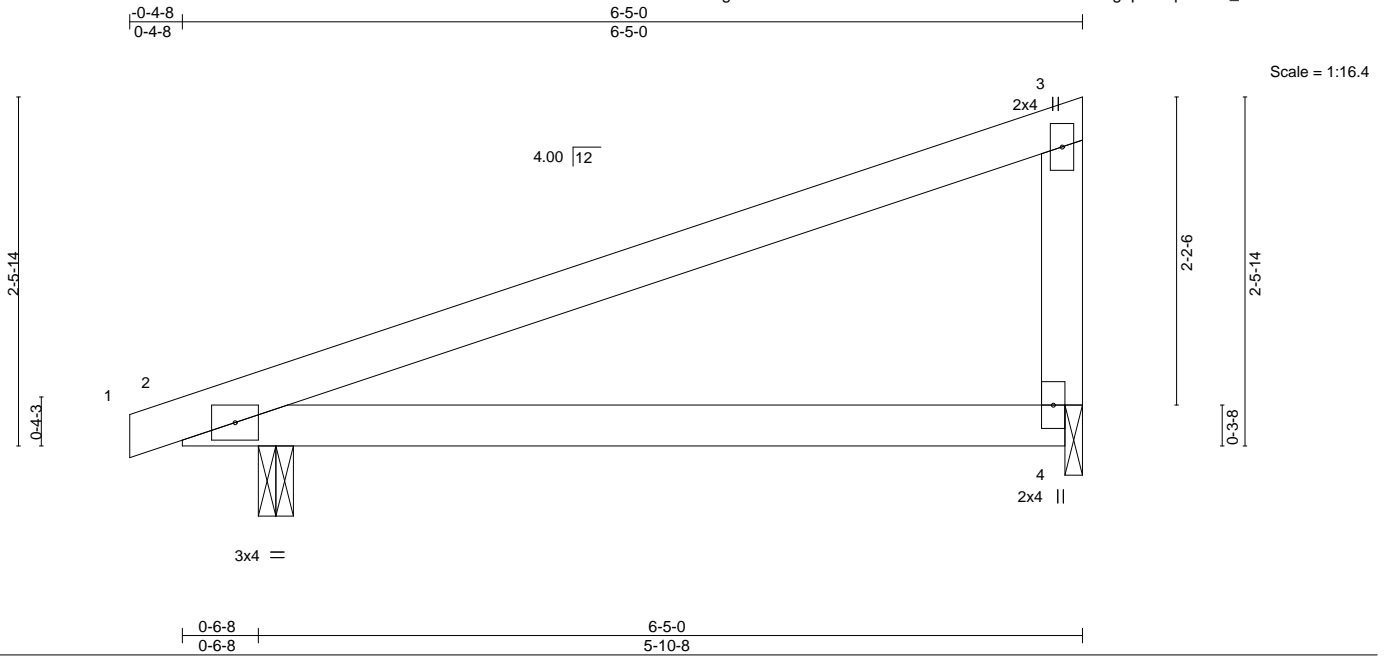
818 Soundside Road  
Edenton, NC 27932

Job 654050_130MPH	Truss J05	Truss Type Monopitch	Qty 12	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191071
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ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-F2YSLxKMmIE7DE5Y47Kg?p055qeF021?\_oKaibzDdm2



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 0.46	Vert(LL)	0.14 4-8	>524	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.46	Vert(CT)	-0.09 4-8	>801	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00 2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS					Weight: 23 lb	FT = 20%

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

**REACTIONS.** (lb/size) 2=307/0-3-0, 4=218/0-1-8  
 Max Horz 2=118(LC 8)  
 Max Uplift 2=-189(LC 8), 4=-164(LC 8)

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

- NOTES-** (8)
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed; end vertical left exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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=189, 4=164.
  - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 8) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



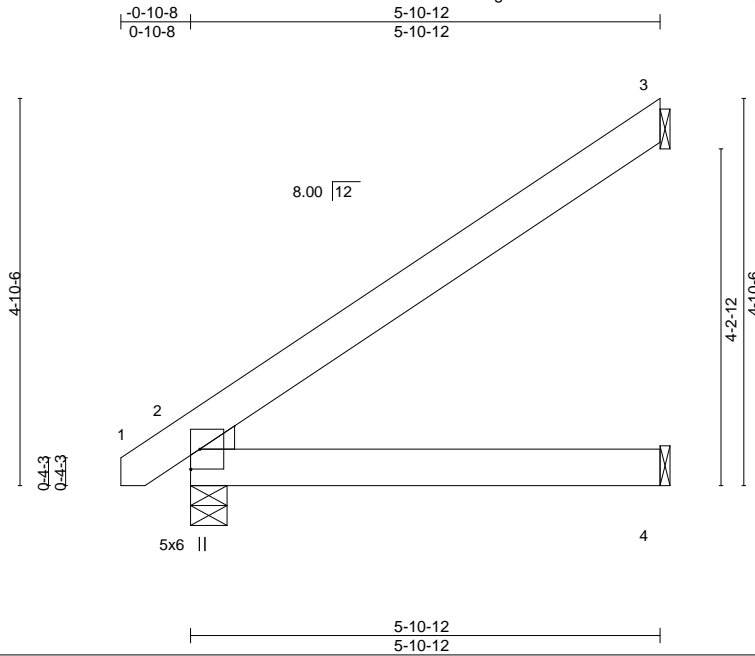


Job 654050_130MPH	Truss J07	Truss Type JACK-OPEN	Qty 42	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191073
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Scale = 1:28.9

Plate Offsets (X,Y)--	[2:0-0-7,0-0-11], [2:0-0-15,0-4-14]				
<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 0.22	Vert(LL) 0.03 4-7 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.18	Vert(CT) -0.03 4-7 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.01 3 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS		Weight: 34 lb	FT = 20%

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

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

**REACTIONS.** (lb/size) 3=155/Mechanical, 2=279/0-5-8, 4=75/Mechanical  
Max Horz 2=224(LC 12)  
Max Uplift 3=158(LC 12), 2=24(LC 12), 4=5(LC 12)  
Max Grav 3=183(LC 19), 2=279(LC 1), 4=108(LC 3)

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

- NOTES-** (7)
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) 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 connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4 except (jt=lb) 3=158.
  - 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.
  - 7) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

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

Job 654050_130MPH	Truss J08	Truss Type HALF HIP	Qty 4	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191074
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ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-CQgDlcMcIMUrTYFwCYN84E5WBeOTUyAIR6phnUzDdm0



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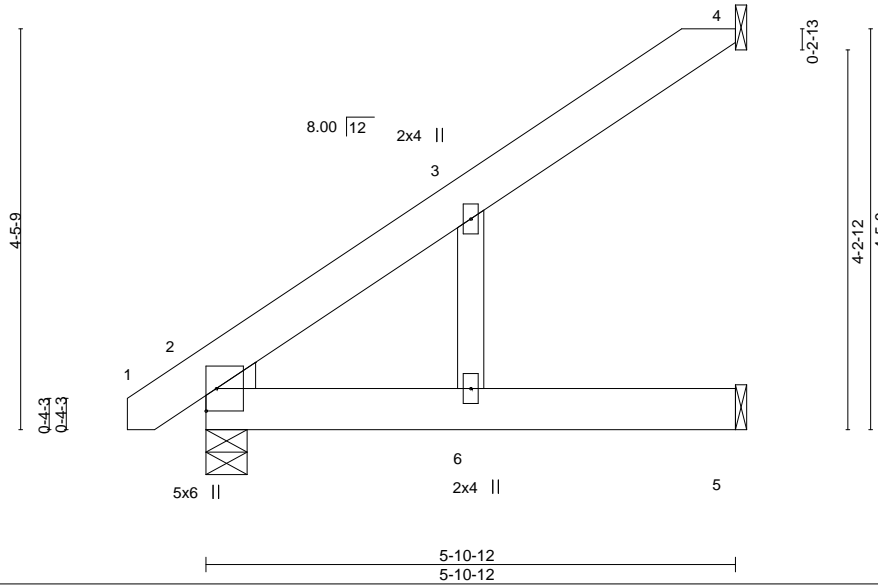


Plate Offsets (X,Y)--	[2:0-0-7,0-0-11], [2:0-0-15,0-4-14]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.17	Vert(LL)	0.04	6	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.22	Vert(CT)	-0.04	6	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.01	4	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS					Weight: 36 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 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	
WEDGE	
Left: 2x4 SP No.3	

**REACTIONS.** (lb/size) 4=134/Mechanical, 2=279/0-5-8, 5=97/Mechanical  
 Max Horz 2=224(LC 12)  
 Max Uplift 4=-123(LC 12), 2=-24(LC 12), 5=-41(LC 12)  
 Max Grav 4=157(LC 19), 2=279(LC 1), 5=108(LC 19)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) All bearings are assumed to be User Defined crushing capacity of 565 psi.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5 except (jt=lb) 4=123.
- 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.

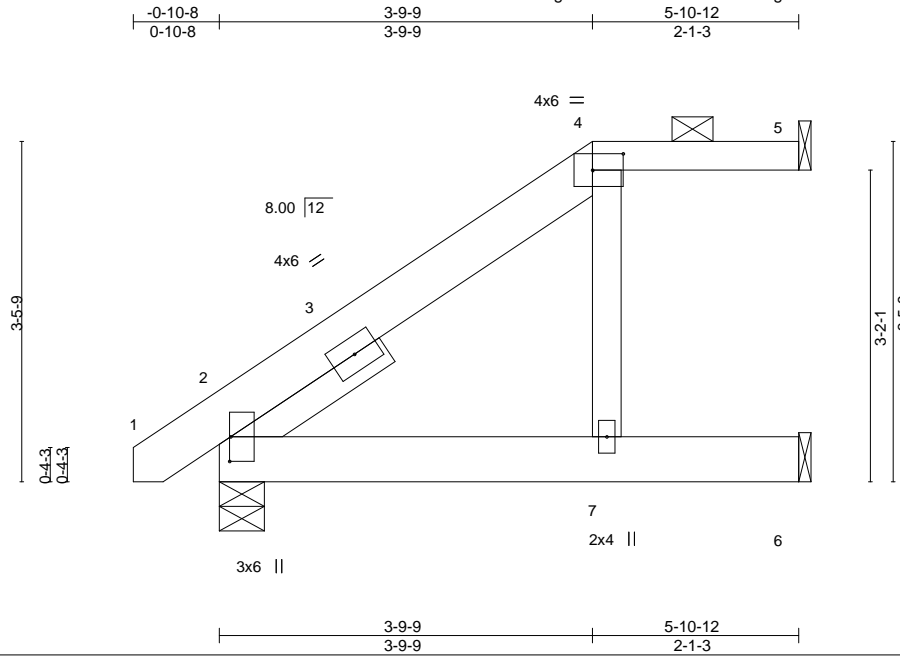


Job 654050_130MPH	Truss J09	Truss Type HALF HIP	Qty 4	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191075
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ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-CQgDlcMcIMURTYFwCYN84E5WoeNWUyIsIR6phnUzDdm0



Scale = 1:23.4

Plate Offsets (X,Y)--	[2:0-3-0,0-0-2], [4:0-3-12,0-2-0]
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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 0.13	Vert(LL)	-0.02	7-10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.28	Vert(CT)	-0.04	7-10	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.04	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.04	7-10	>999	Weight: 37 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2 *Except* 4-5: 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins: 4-5.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3	
SLIDER Left 2x4 SP No.3 1-9-13	

**REACTIONS.** (lb/size) 5=61/Mechanical, 2=286/0-5-8, 6=158/Mechanical  
 Max Horz 2=159(LC 12)  
 Max Uplift 5=-41(LC 8), 2=-60(LC 12), 6=-65(LC 12)

**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=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) All bearings are assumed to be User Defined crushing capacity of 565 psi.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 6.
- 9) 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.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

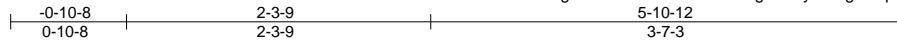


Job 654050_130MPH	Truss J10	Truss Type HALF HIP	Qty 4	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191076
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Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:58 2019 Page 1

ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-gdDbzyMF3gci4iq7mGuNdSegm2i1DO0RgmZEJwDdm?



Scale = 1:17.4

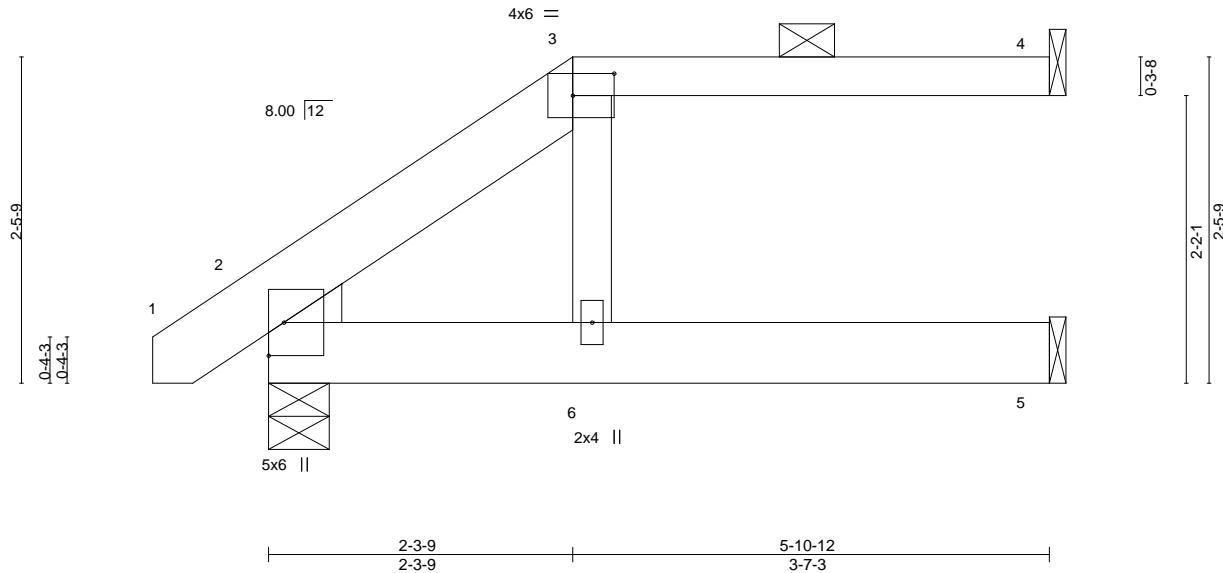


Plate Offsets (X,Y)--	[2:0-0-15,0-4-14], [2:0-0-7,0-0-11], [3:0-3-12,0-2-0]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.24	Vert(LL) -0.02 6 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.32	Vert(CT) -0.05 5-6 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.07	Horz(CT) 0.05 4 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.04 6 >999 240	Weight: 32 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.2 \*Except\*  
3-4: 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.** (lb/size) 4=106/Mechanical, 2=279/0-5-8, 5=125/Mechanical  
Max Horz 2=108(LC 12)  
Max Uplift 4=-71(LC 8), 2=-64(LC 12), 5=-13(LC 12)  
Max Grav 4=106(LC 1), 2=279(LC 1), 5=139(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=130mph (3-second gust) Vasd=103mph; 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.
- All bearings are assumed to be User Defined crushing capacity of 565 psi.
- 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, 2, 5.
- 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.



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

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818 Soundside Road  
Edenton, NC 27932

Job 654050_130MPH	Truss J11	Truss Type HALF HIP GIRDER	Qty 4	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191077
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Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:31:58 2019 Page 1  
ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-gdDbzyMF3gci4iq7mGuNdSebw2l2DOoRgmZEJwzDdm?



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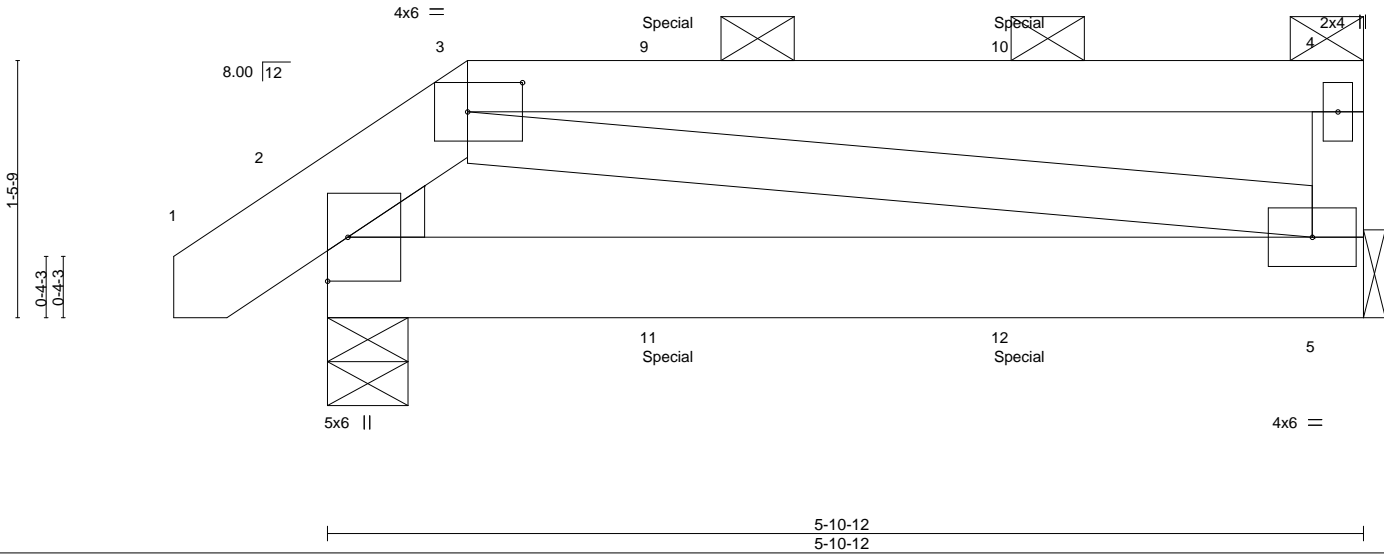


Plate Offsets (X,Y)--	[2:0-0-15,0-4-14], [2:0-0-7,0-0-11], [3:0-3-12,0-2-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.55	Vert(LL)	-0.01	5-8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	-0.01	5-8	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.08	Horz(CT)	0.00	2	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP	Wind(LL)	0.00	5-8	>999	Weight: 35 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.2 \*Except\*  
3-4: 2x4 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.2  
WEDGE  
Left: 2x4 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-10-12 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 5=230/Mechanical, 2=278/0-5-8  
Max Horz 2=56(LC 27)  
Max Uplift 5=-92(LC 5), 2=-79(LC 5)

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

- NOTES-** (12)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; end vertical left exposed; 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) Bearings are assumed to be: Joint 2 User Defined crushing capacity of 565 psi, Joint 5 User Defined crushing capacity of 425 psi.
  - 7) Refer to girder(s) for truss to truss connections.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 13 lb down and 21 lb up at 1-11-8, and 13 lb down and 21 lb up at 3-11-8 on top chord, and 3 lb down and 10 lb up at 1-11-8, and 3 lb down and 10 lb up at 3-11-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
  - 12) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard  
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 3-4=-60, 5-6=-20  
Concentrated Loads (lb)  
Vert: 11=-2(B) 12=-2(B)



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



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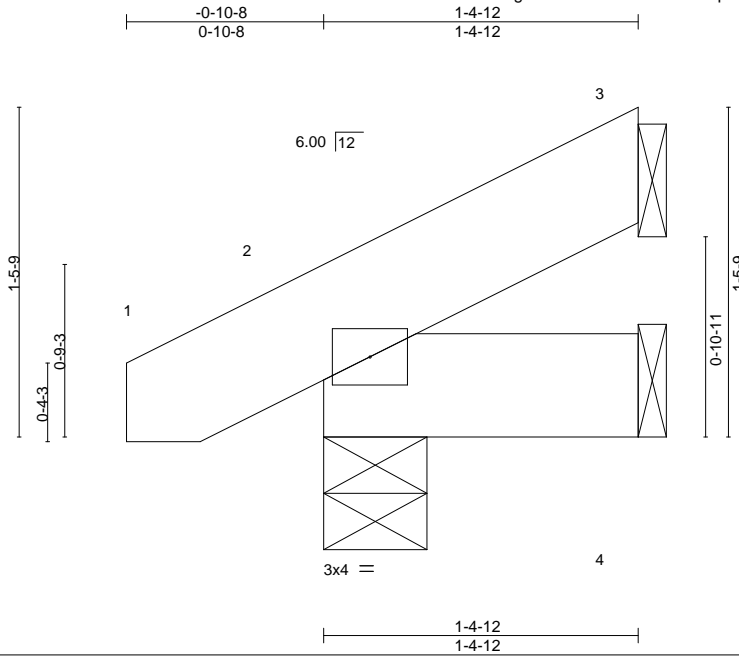


Job 654050_130MPH	Truss J12	Truss Type JACK-OPEN	Qty 8	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191078
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Builders FirstSource, Sumter, SC - 29153,

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ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-8pnzAINtq\_kZirPJzPc9fAu0R6AysHbuQlnrNzDdm\_



Scale = 1:10.2

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 0.02	Vert(LL)	0.00	7	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	-0.00	7	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP					Weight: 10 lb	FT = 20%

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

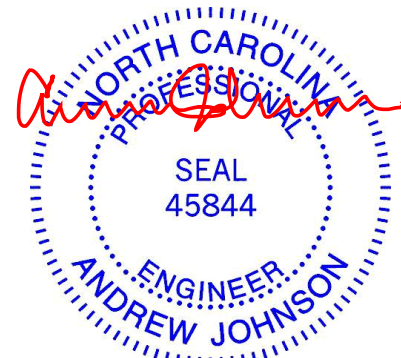
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 1-4-12 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=29/Mechanical, 2=109/0-5-8, 4=15/Mechanical  
Max Horz 2=52(LC 12)  
Max Uplift 3=29(LC 12), 2=31(LC 12), 4=-2(LC 12)  
Max Grav 3=29(LC 1), 2=109(LC 1), 4=24(LC 3)

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

**NOTES-** (7)

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) All bearings are assumed to be User Defined crushing capacity of 425 psi.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
- 7) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 24, 2019

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

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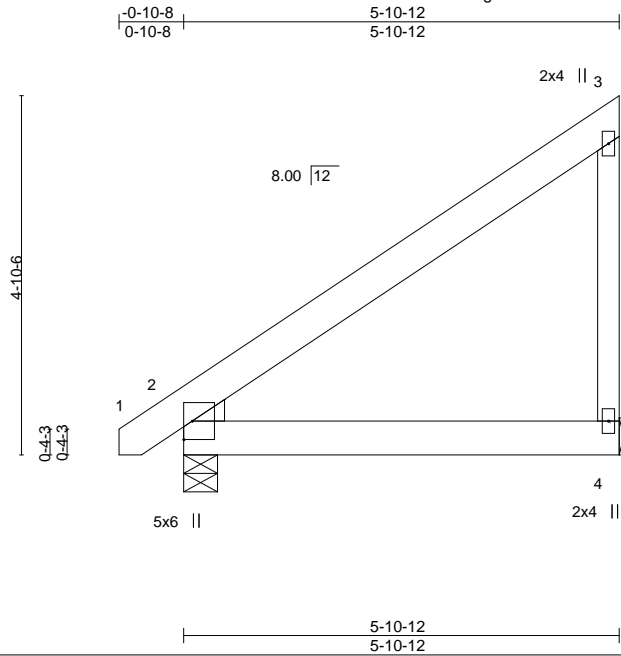
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Hatteras/	137191079
654050_130MPH	J17	JACK-CLOSED	4	1		

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ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-8pnzAlNtq\_kZirPJzPc9fAruR4ZysHbuQlnrNzDdm\_



Scale = 1:31.2

Plate Offsets (X,Y)--	[2:0-0-7,0-0-11], [2:0-0-15,0-4-14]				
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.22	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.18	Vert(LL) 0.03 4-7 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.03 4-7 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.01 2 n/a n/a		
	Code IRC2015/TPI2014			Weight: 40 lb	FT = 20%

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

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

**REACTIONS.** (lb/size) 4=227/Mechanical, 2=276/0-5-8  
 Max Horz 2=221(LC 12)  
 Max Uplift 4=-162(LC 12), 2=-24(LC 12)  
 Max Grav 4=261(LC 19), 2=276(LC 1)

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

- NOTES-** (8)
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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) All bearings are assumed to be User Defined crushing capacity of 425 psi.
  - 5) Refer to girder(s) for truss to truss connections.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 4=162.
  - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 8) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 24, 2019

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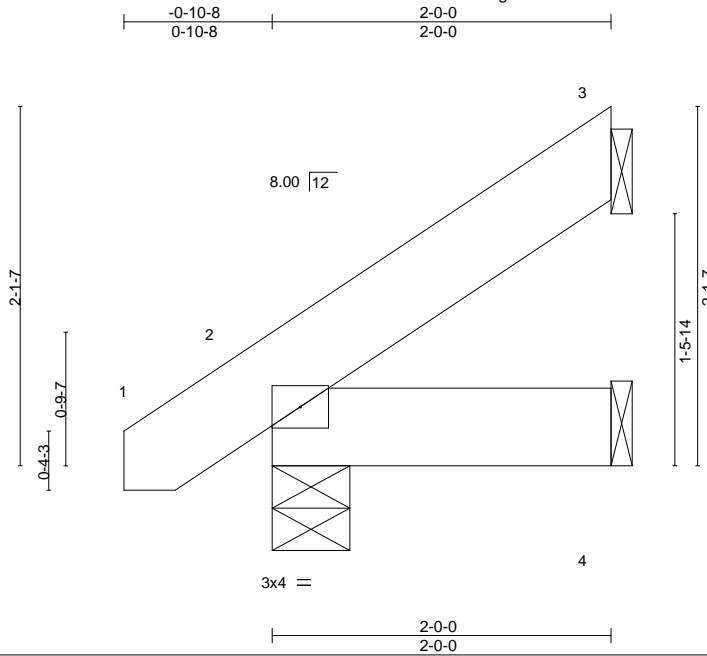
ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job 654050_130MPH	Truss J18	Truss Type JACK-OPEN	Qty 14	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191080
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8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:32:00 2019 Page 1

ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-c?LLOeOVbHsQK?\_Vthwritj3crSAhJXk742LNpzDdlz



Scale = 1:13.6

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 0.03	Vert(LL)	0.00	7	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	7	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP					Weight: 13 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

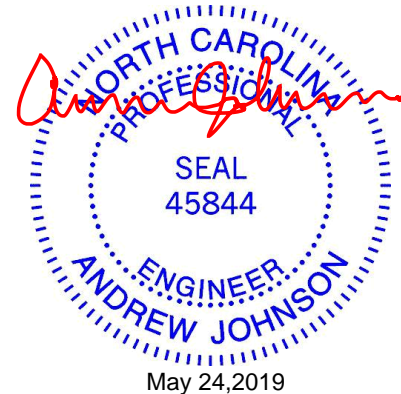
TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=48/Mechanical, 2=131/0-5-8, 4=24/Mechanical  
Max Horz 2=91(LC 12)  
Max Uplift 3=-53(LC 12), 2=-23(LC 12), 4=-4(LC 12)  
Max Grav 3=58(LC 19), 2=131(LC 1), 4=36(LC 3)

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

**NOTES-** (7)

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) All bearings are assumed to be User Defined crushing capacity of 425 psi.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
- 7) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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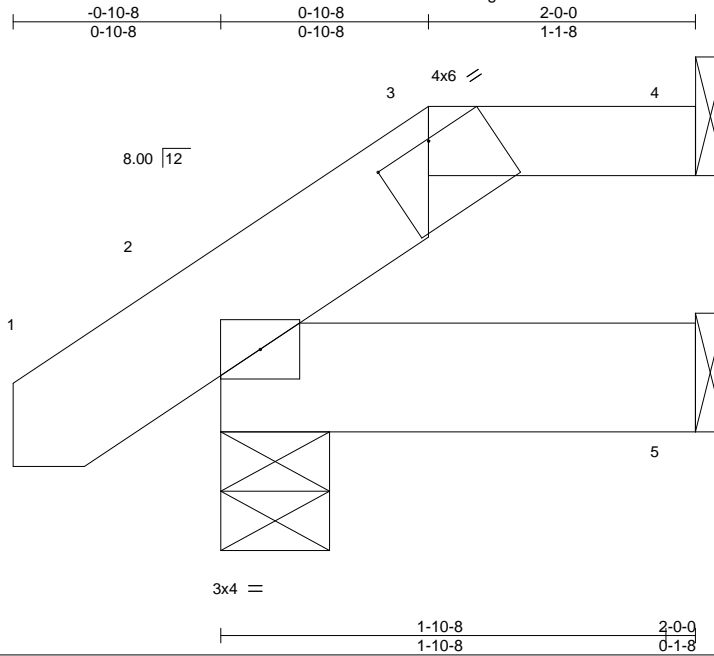
818 Soundside Road  
Edenton, NC 27932

Job 654050_130MPH	Truss J19	Truss Type Half Hip	Qty 4	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191081
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Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:32:00 2019 Page 1

ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-c?LL0eOVbHsQK?\_Vthwritj3erSshJXk742LNpzDdlz



Scale = 1:9.7

Plate Offsets (X,Y)--	[3:0-3-0,0-0-2]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.03	Vert(LL) -0.00 8 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) -0.00 8 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 4 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MP	Wind(LL) 0.00 8 >999 240	Weight: 12 lb	FT = 20%

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

**REACTIONS.** (lb/size) 4=33/Mechanical, 2=131/0-5-8, 5=38/Mechanical  
 Max Horz 2=59(LC 12)  
 Max Uplift 4=-22(LC 8), 2=-36(LC 12), 5=-8(LC 12)  
 Max Grav 4=33(LC 1), 2=131(LC 1), 5=46(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=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be User Defined crushing capacity of 565 psi.
- 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, 2, 5.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

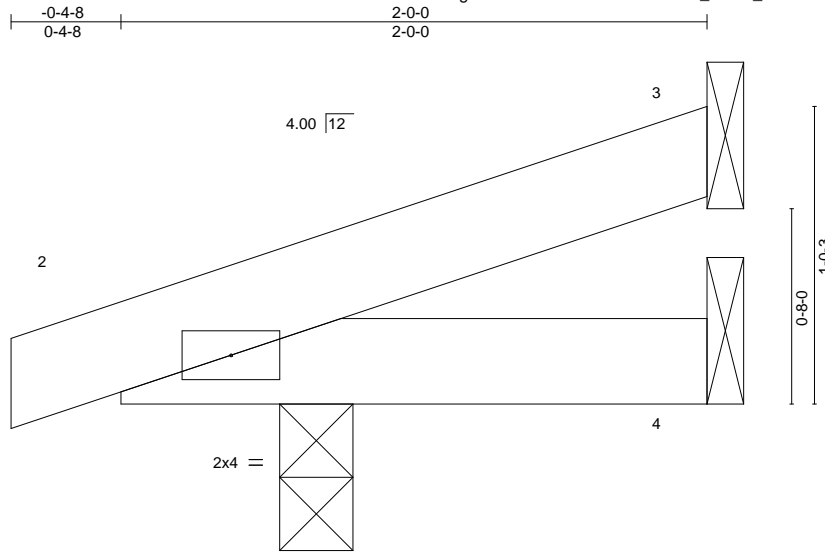


Job 654050_130MPH	Truss J20	Truss Type Jack-Open	Qty 4	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191082
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Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:32:01 2019 Page 1

ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-4Bvkb\_P7Mb\_Hx9ZiROR4F4GEKFoCQmnuMknvFzDdly



Scale = 1:7.9

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 0.03	Vert(LL)	-0.00	5	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	5	>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	9	>999	240		
									Weight: 7 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

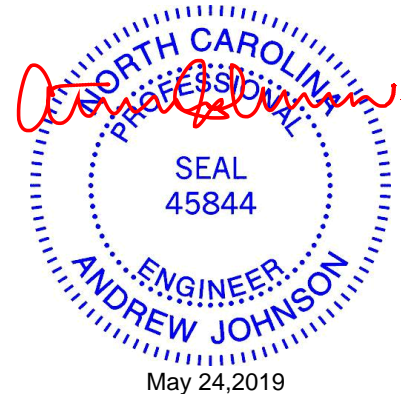
TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=29/Mechanical, 4=10/Mechanical, 2=143/0-3-0  
Max Horz 2=43(LC 8)  
Max Uplift 3=-24(LC 12), 4=-9(LC 9), 2=-96(LC 8)  
Max Grav 3=29(LC 1), 4=22(LC 3), 2=143(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed; end vertical left exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be User Defined crushing capacity of 565 psi.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4, 2.



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



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Edenton, NC 27932

Job 654050_130MPH	Truss J21	Truss Type Half Hip Girder	Qty 2	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191083
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Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:32:02 2019 Page 1  
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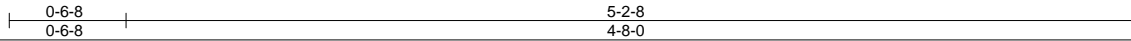
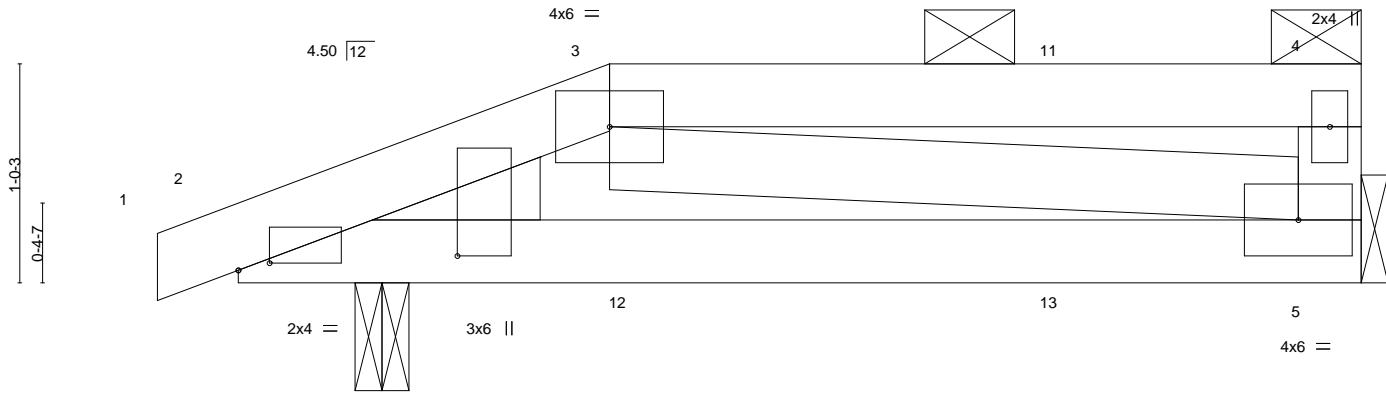


Plate Offsets (X,Y)-- [2:0-1-12,0-0-6], [2:0-0-13,1-0-3]

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 0.24	Vert(LL)	0.01	5-10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	-0.01	5-10	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.05	Horz(CT)	-0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP						
								Weight: 23 lb	FT = 20%

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

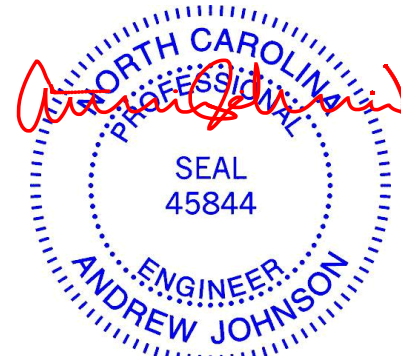
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-2-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 5=174/Mechanical, 2=252/0-3-0  
Max Horz 2=42(LC 23)  
Max Uplift 5=-118(LC 4), 2=-167(LC 4)

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

- NOTES-** (11)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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; porch 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) 5=118, 2=167.
  - 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) 12 lb down and 17 lb up at 1-8-11, and 12 lb down and 17 lb up at 3-10-12 on top chord, and 1 lb down and 16 lb up at 1-10-12, and 1 lb down and 16 lb up at 3-10-12 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).
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard  
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 3-4=-60, 5-6=-20  
Concentrated Loads (lb)  
Vert: 12=1(F) 13=1(F)



May 24, 2019

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

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

Job 654050_130MPH	Truss J22	Truss Type Half Hip	Qty 2	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191084
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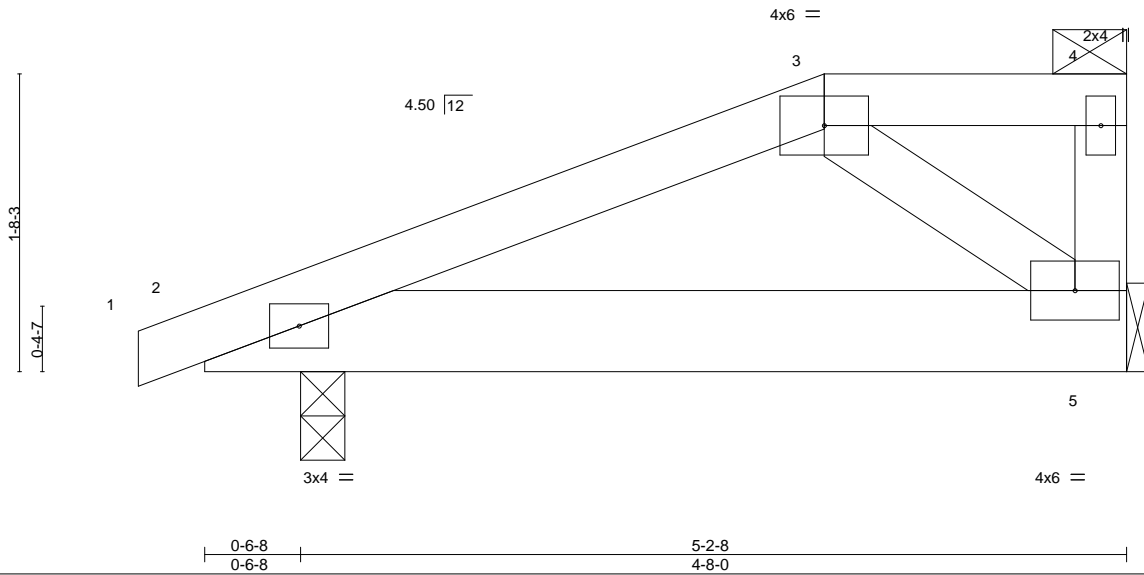
Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:32:02 2019 Page 1

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Scale = 1:13.0



<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 0.11	Vert(LL)	0.01	5-9	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	-0.01	5-9	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	-0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS						Weight: 25 lb	FT = 20%

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

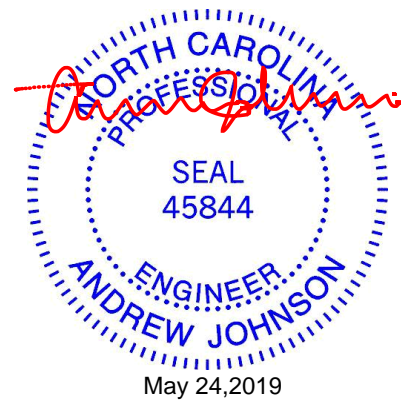
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins: 3-4.  
 BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (lb/size) 5=167/Mechanical, 2=260/0-3-0  
 Max Horz 2=75(LC 12)  
 Max Uplift 5=-117(LC 8), 2=-161(LC 8)

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

**NOTES-**

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed; end vertical left exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- All bearings are assumed to be User Defined crushing capacity of 565 psi.
- 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) 5=117, 2=161.
- 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 654050_130MPH	Truss J23	Truss Type Monopitch	Qty 6	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191085
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8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:32:03 2019 Page 1

ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-0a1U0gQNuCE?BTJ4YpUYKVLW03QsugGBp2G?z8zDdlw  
5-0-0  
5-0-0

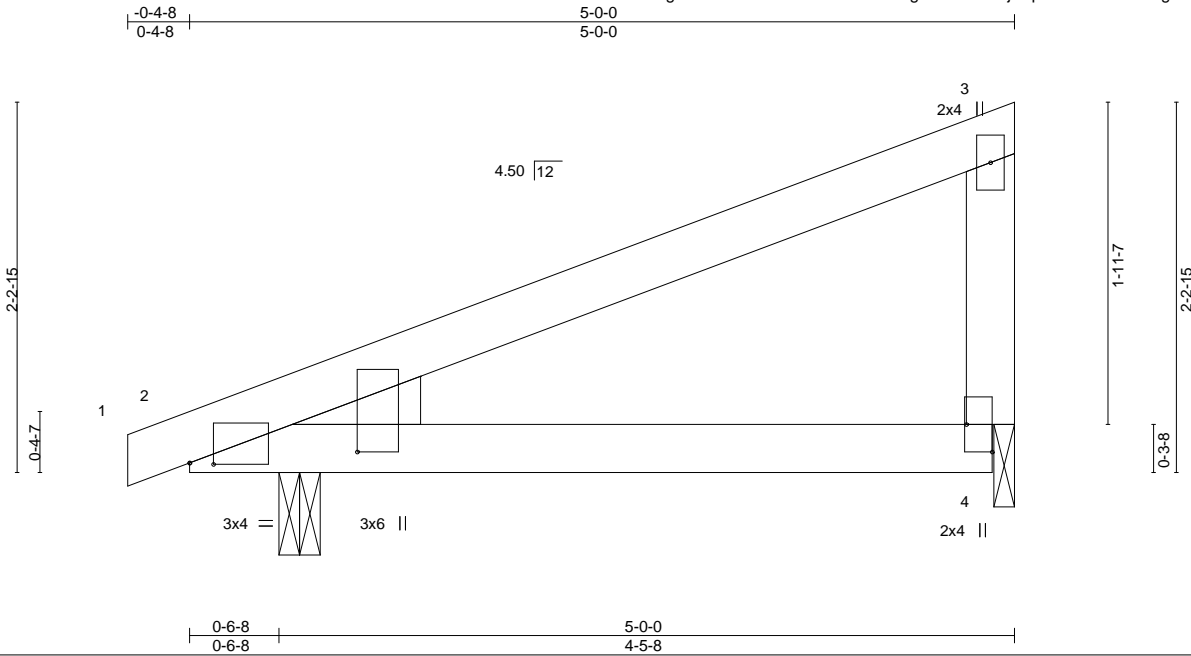


Plate Offsets (X,Y)--	[2:0-1-12,0-0-2], [2:0-0-13,1-0-3], [4:Edge,0-1-14]
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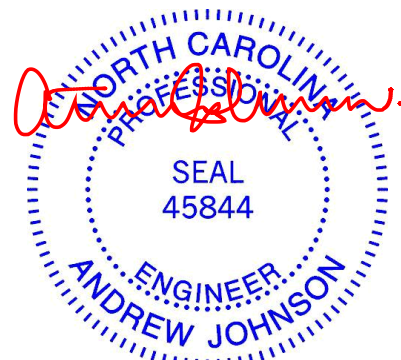
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.27	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.28	Vert(LL) 0.05 4-9 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Vert(CT) -0.03 4-9 >999 240		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Horz(CT) -0.00 2 n/a n/a		
				Weight: 20 lb	FT = 20%

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

**REACTIONS.** (lb/size) 2=245/0-3-0, 4=166/0-1-8  
 Max Horz 2=101(LC 12)  
 Max Uplift 2=-140(LC 8), 4=-123(LC 8)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed; end vertical left exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) All bearings are assumed to be User Defined crushing capacity of 565 psi.
  - 5) 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.
  - 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=140, 4=123.
  - 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.



May 24, 2019

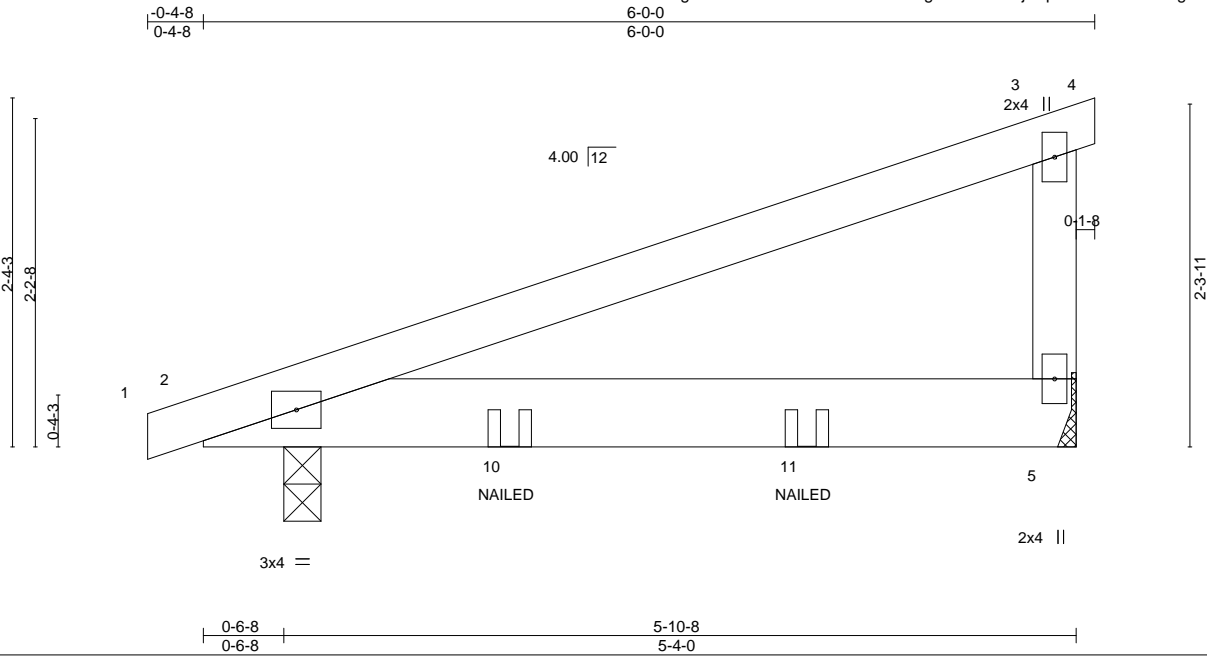


Job 654050_130MPH	Truss J24	Truss Type Monopitch Girder	Qty 2	Ply 1	H&H/Hatteras/ Job Reference (optional)	137191086
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Builders FirstSource, Sumter, SC - 29153,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 11:32:03 2019 Page 1

ID:Ox8smJ6gTzXhi90vcz7B9dzSnQN-0a1U0gQNuCE?BTj4YpUYKVLU93OmugGBp2G?z8zDdlw



Scale = 1:15.5

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 0.39	Vert(LL)	0.06	5-9	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.41	Vert(CT)	-0.06	5-9	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP						Weight: 26 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.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 5=342/Mechanical, 2=445/0-3-0  
 Max Horz 2=113(LC 4)  
 Max Uplift 5=-258(LC 4), 2=-289(LC 4)

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

**NOTES-**

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; end vertical left exposed; porch 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.
- All bearings are assumed to be User Defined crushing capacity of 565 psi.
- 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) 5=258, 2=289.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 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=-20, 2-5=-20  
 Concentrated Loads (lb)  
 Vert: 10=-154(B) 11=-147(B)



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

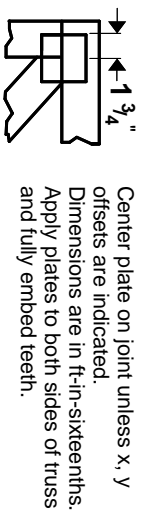
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



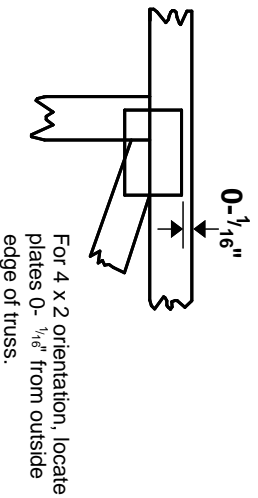
818 Soundside Road  
 Edenton, NC 27932

# Symbols

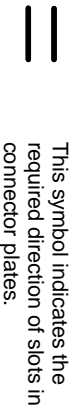
## PLATE LOCATION AND ORIENTATION



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- $\frac{1}{16}$ " from outside edge of truss.



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

## PLATE SIZE

4 X 4

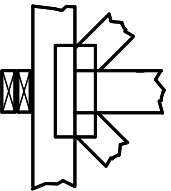
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING

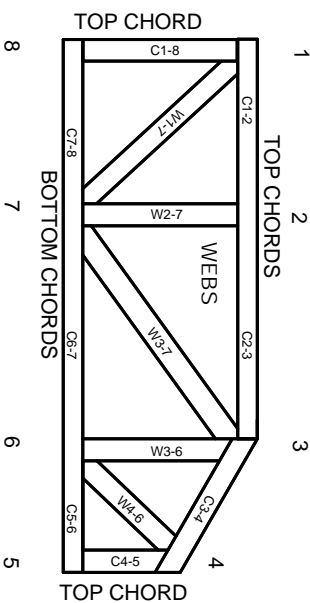


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

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

# Numbering System



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



# General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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