

RE: 140.1445.C  
 20 MASON POINTE - ROOF

Trenco  
 818 Soundside Rd  
 Edenton, NC 27932

**Site Information:**

Customer: Project Name: 140.1445.C  
 Lot/Block: Model:  
 Address: Subdivision:  
 City: State:

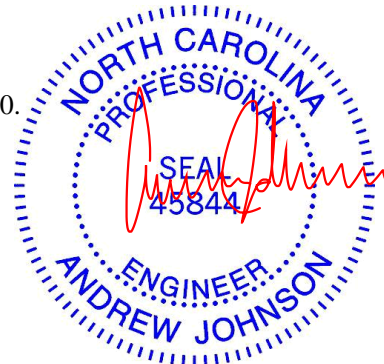
**General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):**

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.3  
 Wind Code: ASCE 7-10 Wind Speed: 130 mph  
 Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 37 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I37903319	ae	7/24/2019	21	I37903339	p	7/24/2019
2	I37903320	ag	7/24/2019	22	I37903340	p1	7/24/2019
3	I37903321	c1	7/24/2019	23	I37903341	p2	7/24/2019
4	I37903322	c2	7/24/2019	24	I37903342	p3	7/24/2019
5	I37903323	c3	7/24/2019	25	I37903343	pj1	7/24/2019
6	I37903324	h1	7/24/2019	26	I37903344	pj2	7/24/2019
7	I37903325	h2	7/24/2019	27	I37903345	pj3	7/24/2019
8	I37903326	h3	7/24/2019	28	I37903346	t5	7/24/2019
9	I37903327	h4	7/24/2019	29	I37903347	t6	7/24/2019
10	I37903328	h5	7/24/2019	30	I37903348	t7	7/24/2019
11	I37903329	h8	7/24/2019	31	I37903349	t7a	7/24/2019
12	I37903330	h9	7/24/2019	32	I37903350	v1	7/24/2019
13	I37903331	h10	7/24/2019	33	I37903351	v2	7/24/2019
14	I37903332	h11	7/24/2019	34	I37903352	v3	7/24/2019
15	I37903333	h12	7/24/2019	35	I37903353	vp1	7/24/2019
16	I37903334	hg1	7/24/2019	36	I37903354	vp2	7/24/2019
17	I37903335	hg2	7/24/2019	37	I37903355	vp3	7/24/2019
18	I37903336	j1	7/24/2019				
19	I37903337	j2	7/24/2019				
20	I37903338	j3	7/24/2019				

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by 84 Components - #2383. Truss Design Engineer's Name: Johnson, Andrew My license renewal date for the state of North Carolina is December 31, 2020. North Carolina COA: C-0844



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 TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. 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.

July 24, 2019

Job	Truss	Truss Type	Qty	Ply	20 MASON POINTE - ROOF	137903319
140.1445.C	AE	Common Supported Gable	1	1		
84 Components (Dunn), Dunn, NC - 28334,						Job Reference (optional)

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:20:54 2019 Page 1  
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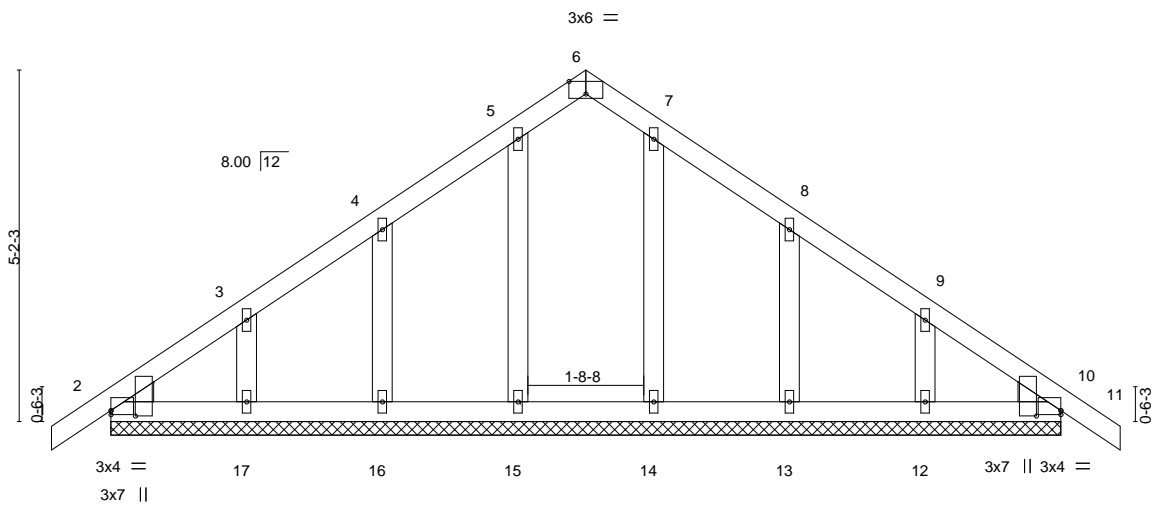


Plate Offsets (X,Y)--	[2:0-0-15,0-4-5], [2:0-0-0,0-0-12], [6:0-3-0,Edge], [10:Edge,0-0-12], [10:0-0-15,0-4-5]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	-0.00	10	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	10	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	10	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 74 lb	FT = 20%

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

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

**REACTIONS.** All bearings 14-0-0.  
 (lb) - Max Horz 2=130(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 12, 13, 14, 17, 16, 15  
 Max Grav All reactions 250 lb or less at joint(s) 2, 10, 12, 13, 14, 17, 16, 15

**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; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-0-0, Exterior(2) 2-0-0 to 7-0-0, Corner(3) 7-0-0 to 10-0-0, Exterior(2) 10-0-0 to 14-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 1.5x4 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.
  - n/a



July 24, 2019

Job 140.1445.C	Truss AG	Truss Type Common Girder	Qty 1	Ply 2	20 MASON POINTE - ROOF	137903320
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84 Components (Dunn),

Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:20:57 2019 Page 1

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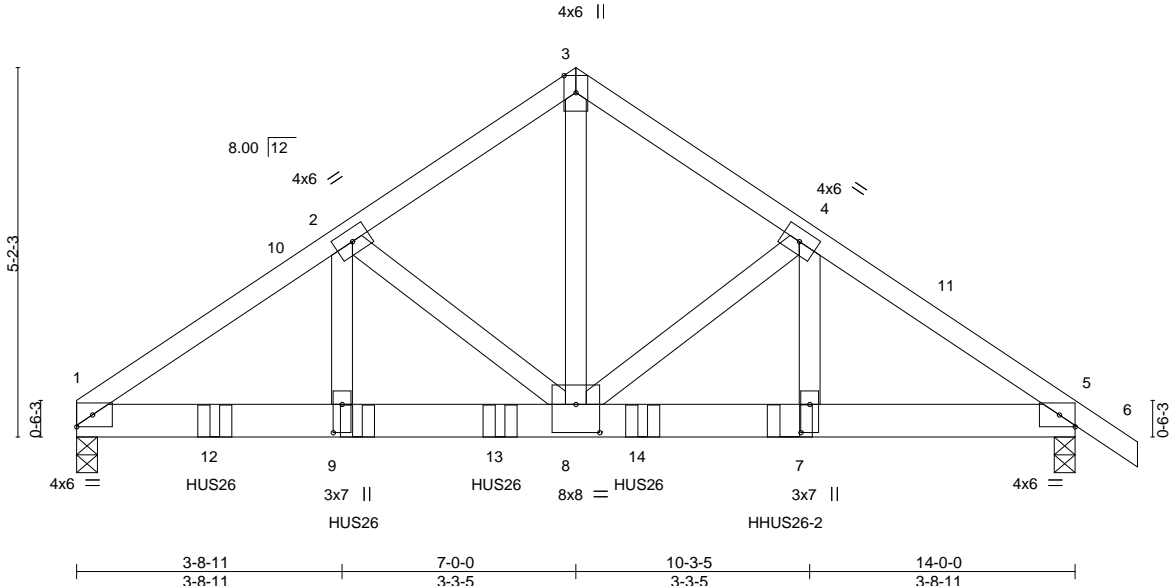


Plate Offsets (X,Y)--	[7:0-4-12,0-1-8], [8:0-4-0,0-4-12], [9:0-4-12,0-1-8]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.55	Vert(LL)	-0.07	7-8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.59	Vert(CT)	-0.14	7-8	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.76	Horz(CT)	0.04	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 169 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-9-8 oc purlins.
BOT CHORD 2x6 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except*	
3-8: 2x4 SP No.2	

<b>REACTIONS.</b> (lb/size)	1=6015/0-3-8, 5=5018/0-3-8
Max Horz	1=-126(LC 8)
Max Uplift	1=-751(LC 12), 5=-1018(LC 13)

<b>FORCES.</b> (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-8591/1147, 2-3=-5852/981, 3-4=-5849/973, 4-5=-8070/1643
BOT CHORD 1-9=-916/6922, 8-9=-916/6922, 7-8=-1268/6476, 5-7=-1268/6476
WEBS 3-8=-1000/6206, 4-8=-2091/794, 4-7=-828/2598, 2-8=-2660/277, 2-9=-202/3237

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 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; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-0-0, Exterior(2) 7-0-0 to 10-3-6, Interior(1) 10-3-6 to 14-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 5. This connection is for uplift only and does not consider lateral forces.
  - Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-11-4 from the left end to 7-11-4 to connect truss(es) to back face of bottom chord.
  - Use Simpson Strong-Tie HHUS26-2 (14-10d Girder, 6-10d Truss) or equivalent at 10-0-0 from the left end to connect truss(es) to back face of bottom chord.
  - Fill all nail holes where hanger is in contact with lumber.

**LOAD CASE(S)** Standard



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Continued on page 2

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY <b>TRENCO</b> A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job 140.1445.C	Truss AG	Truss Type Common Girder	Qty 1	Ply <b>2</b>	20 MASON POINTE - ROOF Job Reference (optional)	I37903320
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84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:20:58 2019 Page 2  
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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: 1-3=-60, 3-6=-60, 1-5=-20  
Concentrated Loads (lb)  
Vert: 7=-2520(B) 9=-1837(B) 12=-1837(B) 13=-1837(B) 14=-1843(B)

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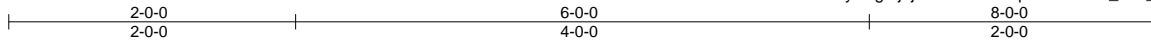
818 Soundside Road  
Edenton, NC 27932

Job 140.1445.C	Truss C1	Truss Type Piggyback	Qty 1	Ply 1	20 MASON POINTE - ROOF	137903321
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84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:20:58 2019 Page 1

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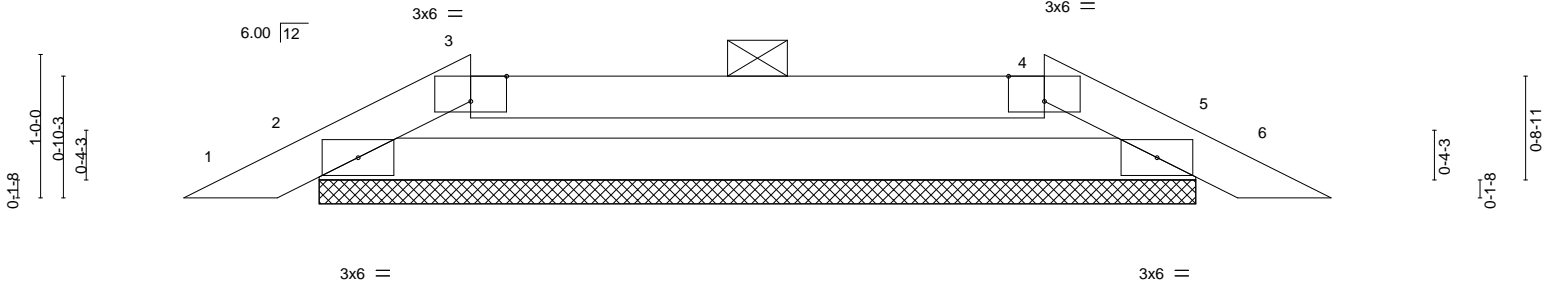


Plate Offsets (X,Y)--	[3:0-3-0,Edge], [4:0-3-0,Edge]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.23	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.35	Vert(LL) 0.00 6 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Vert(CT) 0.01 6 n/r 90		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-R	Horz(CT) 0.00 5 n/a n/a		
				Weight: 22 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
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=282/6-1-6, 5=282/6-1-6  
 Max Horz 2=13(LC 12)  
 Max Uplift 2=-31(LC 9), 5=-31(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-476/265, 3-4=-439/249, 4-5=-476/265  
 BOT CHORD 2-5=-207/439

**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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) All bearings are assumed to be User Defined crushing capacity of 425 psi.
- 8) n/a
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 24, 2019

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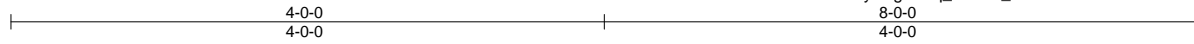
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	20 MASON POINTE - ROOF	137903322
140.1445.C	C2	Piggyback	3	1		

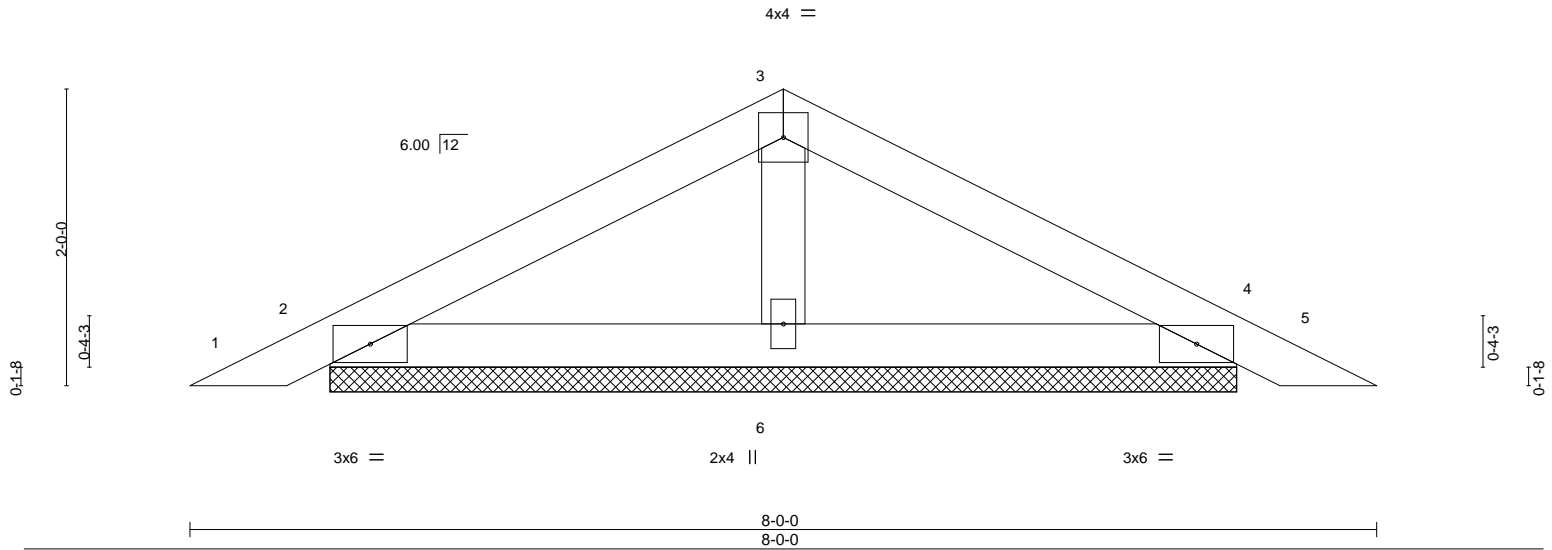
84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:00 2019 Page 1

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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 0.16	Vert(LL)	0.00	5	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	0.01	5	n/r	90		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 24 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=164/6-1-6, 4=164/6-1-6, 6=234/6-1-6  
 Max Horz 2=31(LC 12)  
 Max Uplift 2=44(LC 12), 4=50(LC 13)

**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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be User Defined crushing capacity of 425 psi.
- n/a
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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 Edenton, NC 27932

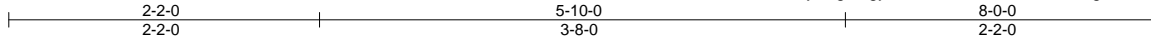


Job	Truss	Truss Type	Qty	Ply	20 MASON POINTE - ROOF	137903323
140.1445.C	C3	Piggyback	1	1		

84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:02 2019 Page 1

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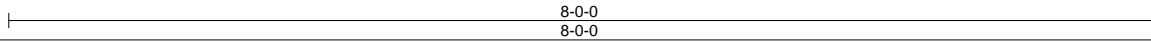
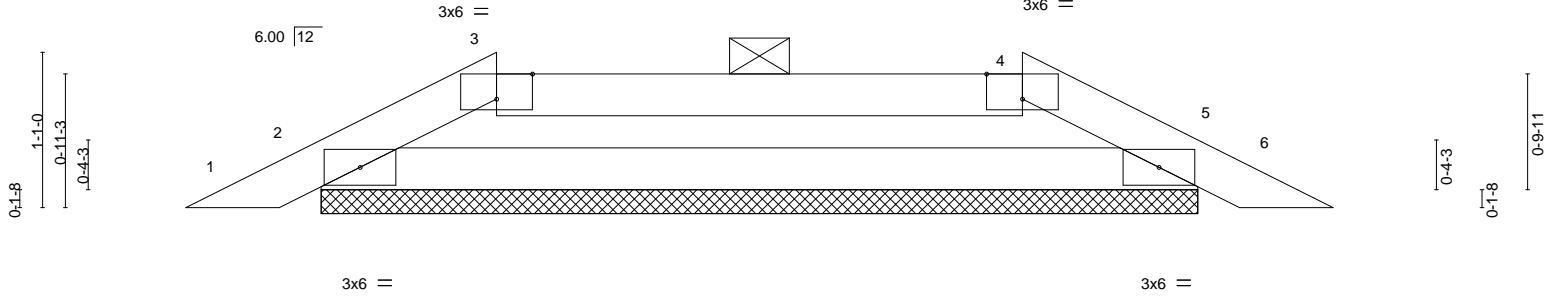


Plate Offsets (X,Y)--	[3:0-3-0,Edge], [4:0-3-0,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/def L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.19	Vert(LL) 0.00 6 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.34	Vert(CT) 0.01 6 n/r 90		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-R		Weight: 22 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
BOT CHORD 2x4 SP No.2	2-0-0 oc purlins (6-0-0 max.); 3-4.
	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=282/6-1-6, 5=282/6-1-6  
 Max Horz 2=-14(LC 13)  
 Max Uplift 2=-28(LC 9), 5=-28(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-441/249, 3-4=-401/234, 4-5=-441/249  
 BOT CHORD 2-5=-187/401

**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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) All bearings are assumed to be User Defined crushing capacity of 425 psi.
- 8) n/a
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 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.



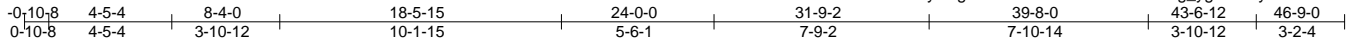
818 Soundside Road  
 Edenton, NC 27932

Job 140.1445.C	Truss H1	Truss Type Hip	Qty 1	Ply 1	20 MASON POINTE - ROOF	137903324
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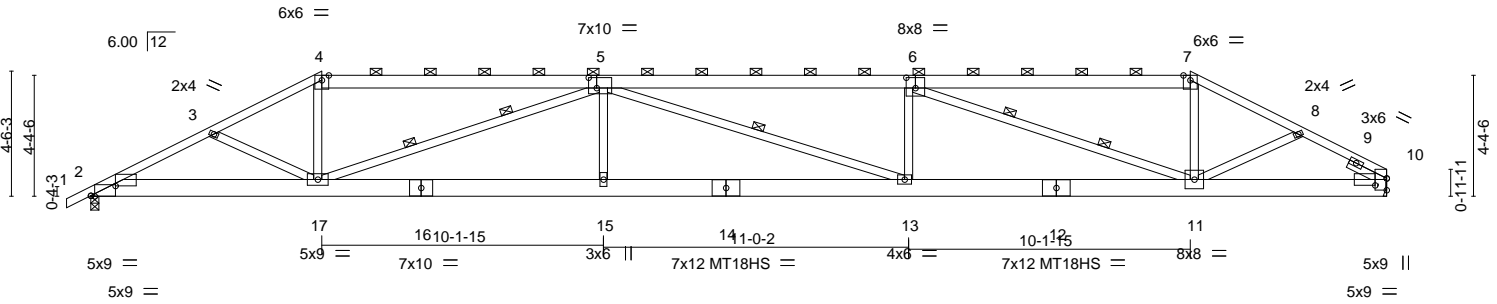
84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:03 2019 Page 1

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Scale = 1:83.1



	8-4-0	18-5-15	24-0-0	31-9-2	39-8-0	46-9-0
	8-4-0	10-1-15	5-6-1	7-9-2	7-10-14	7-1-0
Plate Offsets (X,Y)--	[2:0-1-11,Edge],	[2:0-10-11,0-4-4],	[5:0-3-8,0-4-8],	[6:0-4-0,0-4-8],	[10:0-5-0,0-3-0]	

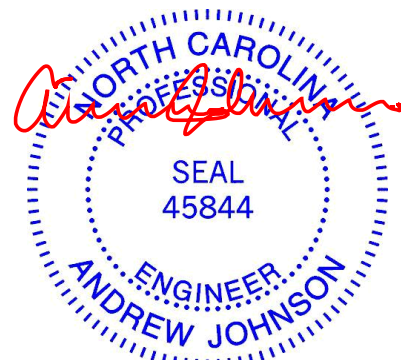
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.94	Vert(LL)	-0.41	13-15	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.92	Vert(CT)	-0.85	13-15	>657	180	MT18HS	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.86	Horz(CT)	0.16	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS							
									Weight: 328 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2 *Except* 1-4,7-10: 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 1-9-15 oc purlins, except 2-0-0 oc purlins (2-2-0 max.): 4-7.
BOT CHORD 2x8 SP No.2	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 5-17,6-11: 2x4 SP DSS	WEBS 1 Row at midpt 5-13 2 Rows at 1/3 pts 5-17, 6-11
SLIDER Right 2x4 SP No.3 -H 1-6-0	

**REACTIONS.** (lb/size) 10=1863/Mechanical, 2=1926/0-3-8  
 Max Horz 2=96(LC 12)  
 Max Uplift 10=-221(LC 8), 2=-219(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3794/820, 3-4=-3624/757, 4-5=-3201/711, 5-6=-5432/1157, 6-7=-2806/631,  
 7-8=-3162/664, 8-10=-3114/684  
 BOT CHORD 2-17=-695/3352, 15-17=-1052/5573, 13-15=-1052/5573, 11-13=-1022/5414,  
 10-11=-550/2671  
 WEBS 4-17=-147/1193, 5-15=0/420, 5-17=-2615/528, 6-13=0/483, 6-11=-2847/575,  
 7-11=-101/962, 8-11=-62/319

- 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; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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.
  - 7) All bearings are assumed to be User Defined crushing capacity of 425 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) 10=221.
  - 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
  - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 24, 2019

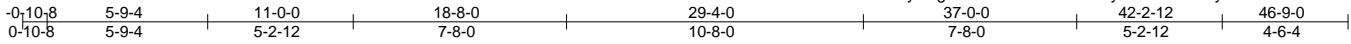
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	20 MASON POINTE - ROOF	137903325
140.1445.C	H2	Hip	1	1		
84 Components (Dunn), Dunn, NC - 28334,						Job Reference (optional)

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:09 2019 Page 1

ID: IAPzHts0ReLOVUWCHSrvZPyHLGv-u0tORfOWxl?HrWMYyUDhvFCKNybHMWISo5TWHUyv7iu



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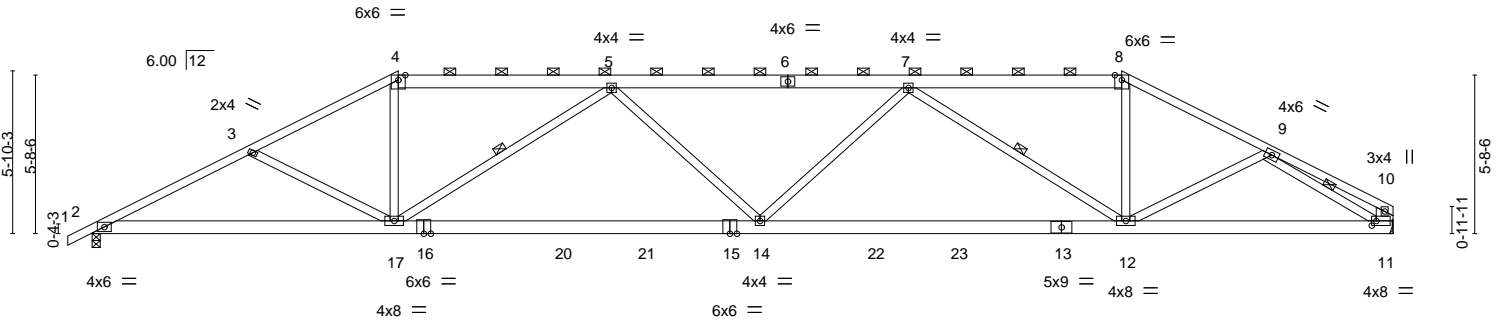


Plate Offsets (X,Y)--	[11:0-2-0,0-2-0]
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<b>LOADING</b> (psf)	<b>SPACING</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.71	Vert(LL)	-0.29	14-17	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.88	Vert(CT)	-0.62	14-17	>900		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.75	Horz(CT)	0.14	11	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 295 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except* 4-6,6-8: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-7-11 oc purlins, except end verticals, and 2-0-0 oc purlins (2-8-12 max.): 4-8.
BOT CHORD 2x6 SP DSS *Except* 15-16: 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 8-2-15 oc bracing.
WEBS 2x4 SP No.3 *Except* 10-11: 2x8 SP No.2	WEBS 1 Row at midpt 5-17, 7-12, 9-11

**REACTIONS.** (lb/size) 2=1911/0-3-8, 11=1857/Mechanical  
 Max Horz 2=122(LC 12)  
 Max Uplift 2=170(LC 9), 11=174(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3697/838, 3-4=-3383/726, 4-5=-2949/687, 5-7=-4089/872, 7-8=-2629/622,  
 8-9=-3017/652, 9-10=-458/101, 10-11=-302/93  
 BOT CHORD 2-17=-706/3275, 14-17=-776/4019, 12-14=-749/3886, 11-12=-541/2521  
 WEBS 3-17=-341/240, 4-17=-164/1169, 5-17=-1391/376, 5-14=0/313, 7-14=0/457,  
 7-12=-1591/390, 8-12=-130/996, 9-12=-37/310, 9-11=-2609/604

- 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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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.
  - All bearings are assumed to be User Defined crushing capacity of 425 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) 11=174.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 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**  
 A MiTek Affiliate

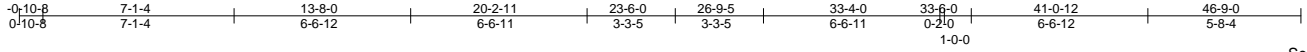
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	20 MASON POINTE - ROOF	137903326
140.1445.C	H3	Roof Special	1	1		

84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:10 2019 Page 1

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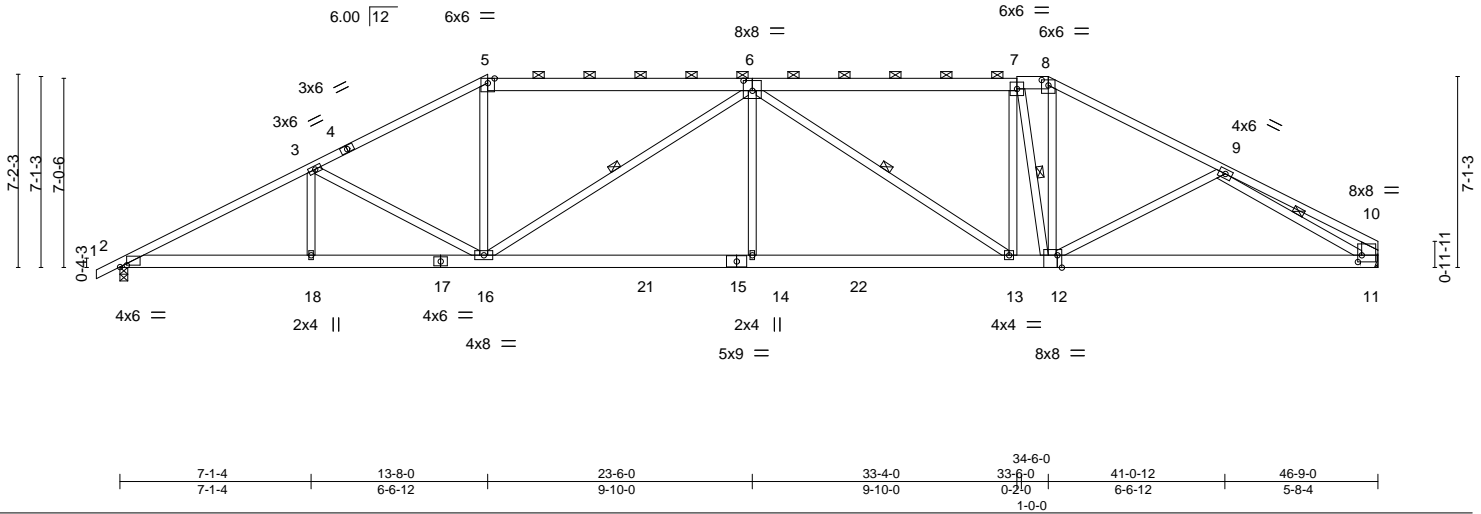


Plate Offsets (X,Y)--	[2:0-3-0,0-0-13], [6:0-4-0,0-4-8], [8:0-3-0,0-2-7], [10:0-3-10,0-1-13], [10:0-1-12,0-3-0], [12:0-2-0,Edge]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.84	Vert(LL)	-0.24	14-16	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.95	Vert(CT)	-0.50	14-16	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.73	Horz(CT)	0.16	11	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 319 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 5-6,7-8,6-7: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-7-5 max.): 5-8.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 10-11: 2x8 SP No.2	WEBS 1 Row at midpt 6-16, 6-13, 9-11, 7-12

**REACTIONS.** (lb/size) 2=1911/0-3-8, 11=1857/Mechanical  
Max Horz 2=144(LC 12)  
Max Uplift 2=-157(LC 12), 11=-123(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3719/822, 3-5=-3113/729, 5-6=-2699/699, 6-7=-2709/701, 7-8=-2469/637,  
8-9=-2902/667, 9-10=-569/86, 10-11=-375/102  
BOT CHORD 2-18=-674/3261, 16-18=-674/3261, 14-16=-590/3391, 13-14=-590/3391, 12-13=-449/2697,  
11-12=-577/2598  
WEBS 3-18=0/287, 3-16=-625/257, 5-16=-114/951, 6-16=-1031/233, 6-14=0/489,  
6-13=-995/186, 9-11=-2546/669, 8-12=-286/1346, 7-13=-78/610, 7-12=-1212/351

- 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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) All bearings are assumed to be 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) except (jt=lb) 11=123.
  - 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
  - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 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**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job 140.1445.C	Truss H4	Truss Type Roof Special	Qty 1	Ply 1	20 MASON POINTE - ROOF	137903327
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84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:11 2019 Page 1

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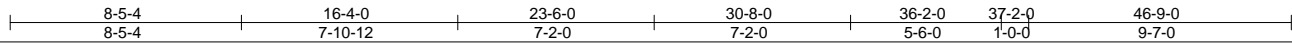
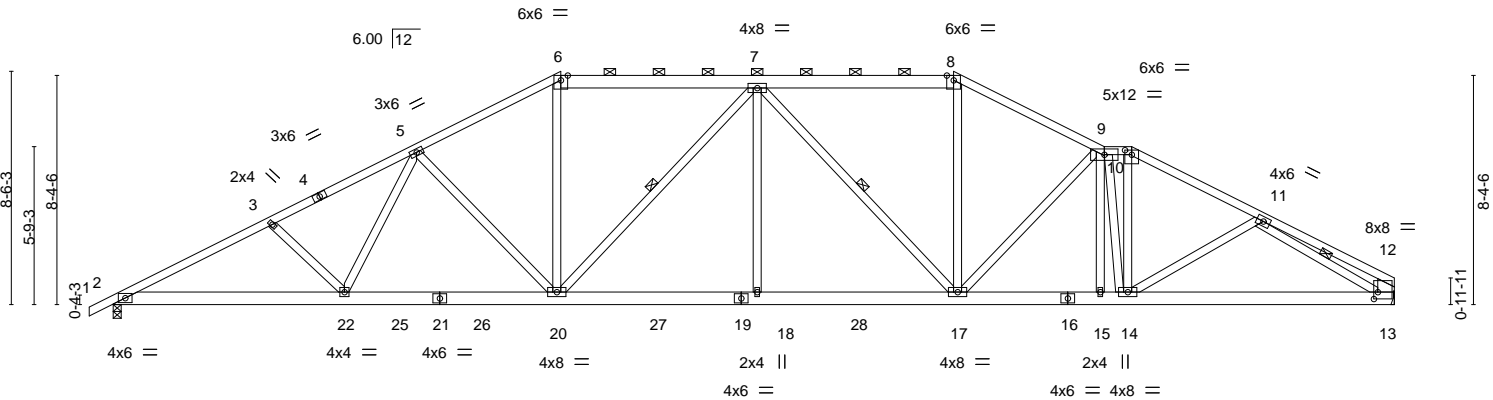


Plate Offsets (X,Y)--	[10:0-3-0,0-2-0], [12:0-3-10,0-1-13], [12:0-1-12,0-3-0]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.69	Vert(LL) -0.21 18-20 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.87	Vert(CT) -0.42 18-20 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.62	Horz(CT) 0.14 13 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS		Weight: 338 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except* 6-8: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-6-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-5-9 max.): 6-8, 9-10.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 8-7-1 oc bracing.
WEBS 2x4 SP No.3 *Except* 12-13: 2x8 SP No.2	WEBS 1 Row at midpt 7-20, 7-17, 11-13

**REACTIONS.** (lb/size) 2=1911/0-3-8, 13=1857/Mechanical  
Max Horz 2=167(LC 12)  
Max Uplift 2=-184(LC 12), 13=-160(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3723/861, 3-5=-3510/827, 5-6=-2824/732, 6-7=-2463/692, 7-8=-2429/686,  
8-9=-2775/717, 9-10=-2619/661, 10-11=-2963/692, 11-12=-503/102, 12-13=-339/104  
BOT CHORD 2-22=-725/3295, 20-22=-555/2870, 18-20=-451/2775, 17-18=-451/2775, 15-17=-511/2753,  
14-15=-510/2757, 13-14=-567/2534  
WEBS 3-22=-314/203, 5-22=-65/500, 5-20=-583/250, 6-20=-168/955, 7-20=-618/156,  
7-18=0/378, 7-17=-708/148, 8-17=-142/888, 9-17=-458/187, 10-14=-235/1104,  
11-13=-2566/639, 9-14=-884/306

- 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; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) All bearings are assumed to be 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) except (jt=lb) 13=160.
  - 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
  - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 24, 2019

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY <b>TRENCO</b> A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job 140.1445.C	Truss H5	Truss Type ROOF SPECIAL	Qty 1	Ply 1	20 MASON POINTE - ROOF	137903328
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84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:12 2019 Page 1

ID:IPzHts0ReLOVUWCHSrvZPyHLgv-lbZX4hQOEgNsiz5XEdmPXuqFyAeDZsHuU3iBupyv7ir

0-10-8 6-8-5 12-10-3 19-0-0 23-6-0 28-2-8 33-7-8 39-0-8 40-0-8 48-0-0  
 0-10-8 6-8-5 6-1-13 6-1-13 4-6-0 4-8-8 5-5-0 5-5-0 1-0-0 7-11-8

Scale = 1:86.0

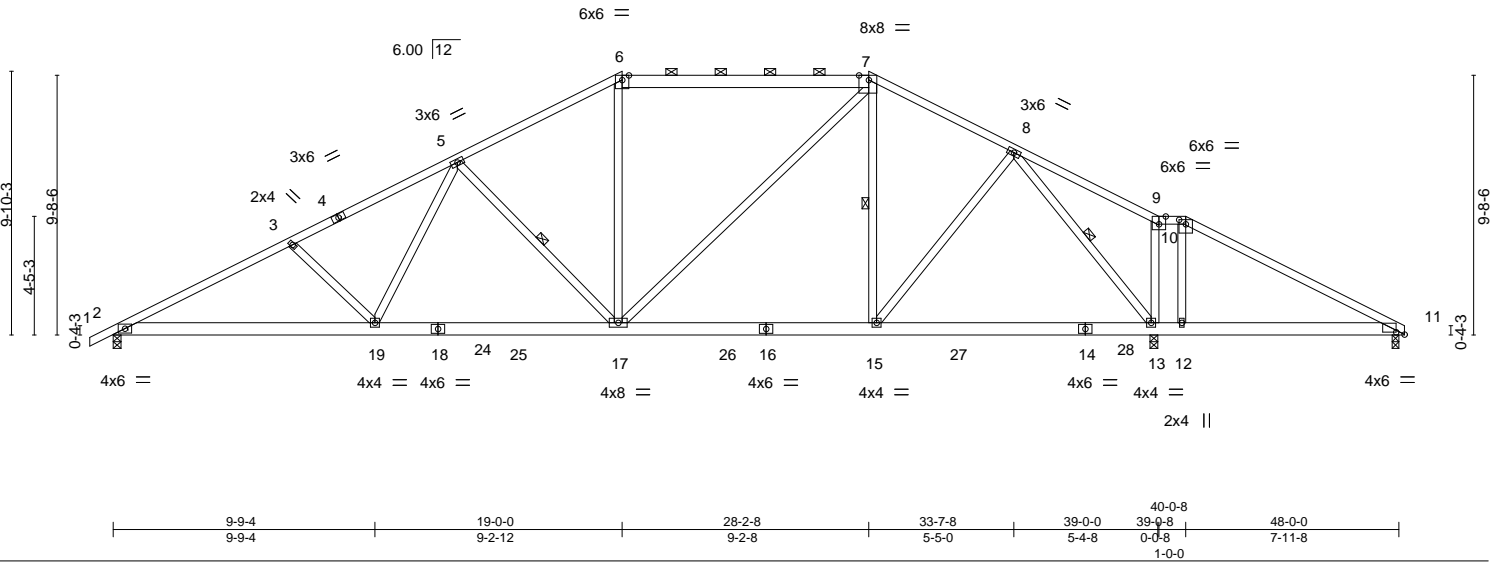


Plate Offsets (X, Y)--	[7:0-4-6,Edge], [9:0-3-0,Edge], [10:0-3-0,0-2-0], [11:0-3-12,0-1-1]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.75	Vert(LL)	-0.14	17-19	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.80	Vert(CT)	-0.28	19-21	>999	180	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.73	Horz(CT)	0.07	11	n/a	n/a	
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						Weight: 311 lb FT = 20%

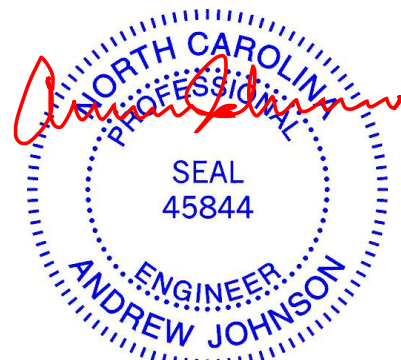
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except* 6-7: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-9-10 oc purlins, except 2-0-0 oc purlins (3-10-9 max.): 6-7, 9-10.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 7-17: 2x4 SP No.2	WEBS 1 Row at midpt 5-17, 7-15, 8-13

**REACTIONS.** (lb/size) 2=1581/0-3-8, 13=2070/0-3-8, 11=258/0-3-0  
 Max Horz 2=172(LC 12)  
 Max Uplift 2=-199(LC 12), 13=-122(LC 13), 11=-101(LC 13)  
 Max Grav 2=1581(LC 1), 13=2143(LC 2), 11=313(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2920/719, 3-5=-2668/679, 5-6=-1859/566, 6-7=-1595/554, 7-8=-1457/478,  
 8-9=-67/414, 9-10=-3/319, 10-11=-115/381  
 BOT CHORD 2-19=-554/2571, 17-19=-353/2068, 15-17=-70/1259, 13-15=-114/934, 12-13=-319/76,  
 11-12=-311/72  
 WEBS 3-19=-372/239, 5-19=-77/583, 5-17=-691/293, 6-17=-26/424, 7-17=-134/610,  
 7-15=-278/135, 8-15=-17/657, 8-13=-1831/317, 10-12=-301/115

**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; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) All bearings are assumed to be User Defined crushing capacity of 425 psi.
- 7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 13, and 11. This connection is for uplift only and does not consider lateral forces.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 24, 2019

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	20 MASON POINTE - ROOF	137903329
140.1445.C	H8	Hip	1	1		

84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:13 2019 Page 1

ID:IPzHts0ReLOUVWCHSrvZPyHLgv-nn7vH0R0?\_VjK7gjnKHe35Nqqa22IFM1jRkRFyw7iq

0-10-8	6-7-11	12-8-13	18-10-0	23-6-0	28-2-0	34-3-3	40-4-5	47-0-0	47-10-8
0-10-8	6-7-11	6-1-3	6-1-3	4-8-0	4-8-0	6-1-3	6-1-3	6-7-11	0-10-8

Scale = 1:82.6

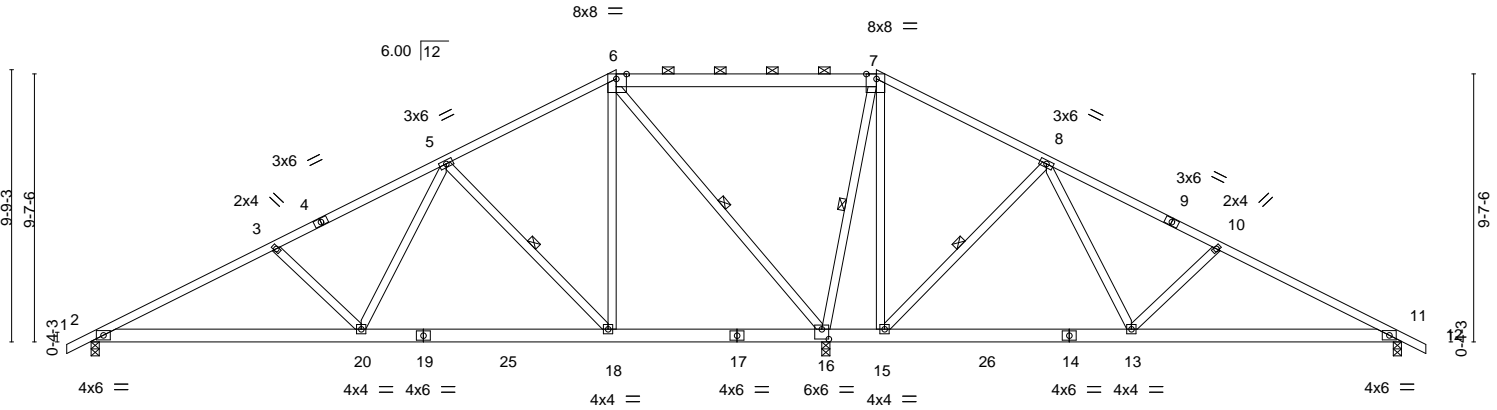


Plate Offsets (X,Y)--	[6:0-4-6,Edge], [7:0-4-6,Edge], [16:0-3-0,0-4-4]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.75	Vert(LL)	0.14	20-22	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.51	Vert(CT)	-0.17	20-22	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 1.00	Horz(CT)	0.02	16	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 312 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except* 6-7: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-7-3 oc purlins, except 2-0-0 oc purlins (10-0-0 max.): 6-7.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-18, 6-16, 7-16, 8-15

**REACTIONS.** (lb/size) 2=795/0-3-8, 16=2584/(0-3-8 + H10A Simpson Strong-Tie) (req. 0-4-1), 11=486/0-3-8  
 Max Horz 2=163(LC 16)  
 Max Uplift 2=-187(LC 9), 16=-580(LC 9), 11=-134(LC 13)  
 Max Grav 2=866(LC 23), 16=2584(LC 1), 11=584(LC 24)

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

TOP CHORD	2-3=-1321/716, 3-5=-1071/669, 5-6=-256/156, 6-7=-400/883, 7-8=-345/773, 8-10=-440/214, 10-11=-690/260
BOT CHORD	2-20=-534/1141, 18-20=-167/636, 16-18=-88/293, 15-16=-632/667, 13-15=-285/276, 11-13=-131/576
WEBS	3-20=-369/258, 5-20=-488/591, 5-18=-707/551, 6-18=-557/754, 6-16=-1416/915, 7-16=-1283/811, 7-15=-434/529, 8-15=-721/561, 8-13=-498/605, 10-13=-369/258

- 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=30ft; Cat. II; Exp B; 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
  - 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.
  - All bearings are assumed to be User Defined crushing capacity of 425 psi.
  - H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16. This connection is for uplift only and does not consider lateral forces.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 11. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 24, 2019

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY <b>TRENCO</b> A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job 140.1445.C	Truss H9	Truss Type Hip	Qty 1	Ply 1	20 MASON POINTE - ROOF	137903330
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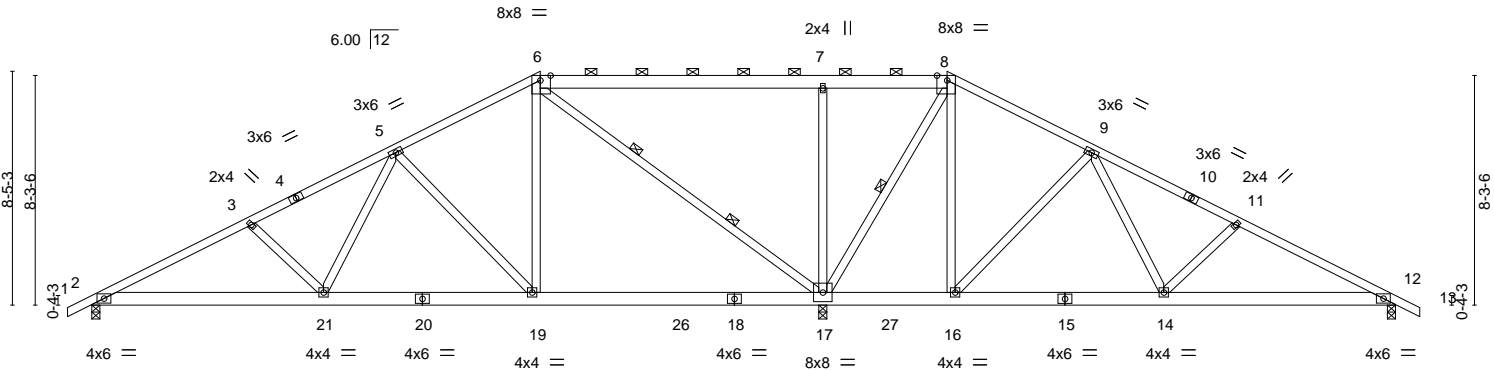
84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:14 2019 Page 1

ID:IPzHts0ReLOVUWCHSrvZPyHLgv-FzgHVMSemHdayHFvL2ptcJvbyzO71lcBxBNHzyv7ip

-0-10-8	5-9-0	10-11-8	16-2-0	23-6-0	26-4-4	30-10-0	36-0-8	41-3-0	47-0-0	47-10-8
0-10-8	5-9-0	5-2-8	5-2-8	7-4-0	2-10-4	4-5-12	5-2-8	5-2-8	5-9-0	0-10-8

Scale = 1:83.1



8-4-4	16-2-0	21-3-2	26-4-4	30-10-0	38-7-12	47-0-0
8-4-4	7-9-12	5-1-2	5-1-2	4-5-12	7-9-12	8-4-4

Plate Offsets (X,Y)-- [6:0-4-6,Edge], [8:0-4-6,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 0.72	Vert(LL)	0.10	21-23	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.45	Vert(CT)	-0.15	17-19	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.81	Horz(CT)	0.02	12	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 315 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except* 6-8: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-7-8 oc purlins, except 2-0-0 oc purlins (10-0-0 max.): 6-8.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 6-17: 2x4 SP No.2	WEBS 1 Row at midpt 8-17 2 Rows at 1/3 pts 6-17

**REACTIONS.** (lb/size) 2=820/0-3-8, 17=2533/(0-3-8 + H10A Simpson Strong-Tie) (req. 0-4-0), 12=512/0-3-8  
 Max Horz 2=-141(LC 13)  
 Max Uplift 2=-200(LC 9), 17=-677(LC 9), 12=-131(LC 13)  
 Max Grav 2=879(LC 23), 17=2533(LC 1), 12=586(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1409/799, 3-5=-1196/759, 5-6=-523/341, 6-7=-425/875, 7-8=-424/872,  
 8-9=-159/466, 9-11=-544/317, 11-12=-754/355  
 BOT CHORD 2-21=-619/1227, 19-21=-292/802, 17-19=-101/448, 16-17=-376/458, 12-14=-227/640  
 WEBS 3-21=-318/223, 5-21=-401/476, 5-19=-586/455, 6-19=-526/665, 6-17=-1451/958,  
 7-17=-573/264, 8-17=-1010/678, 8-16=-433/522, 9-16=-633/487, 9-14=-424/520,  
 11-14=-310/218

- 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=30ft; Cat. II; Exp B; 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
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) All bearings are assumed to be User Defined crushing capacity of 425 psi.
  - 7) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17. This connection is for uplift only and does not consider lateral forces.
  - 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 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.

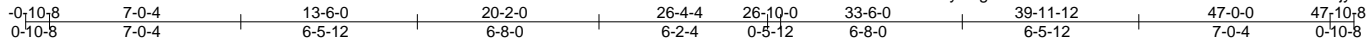
**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	20 MASON POINTE - ROOF	137903331
140.1445.C	H10	Hip	1	1		
84 Components (Dunn), Dunn, NC - 28334,						Job Reference (optional)

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:05 2019 Page 1  
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Scale = 1:84.6

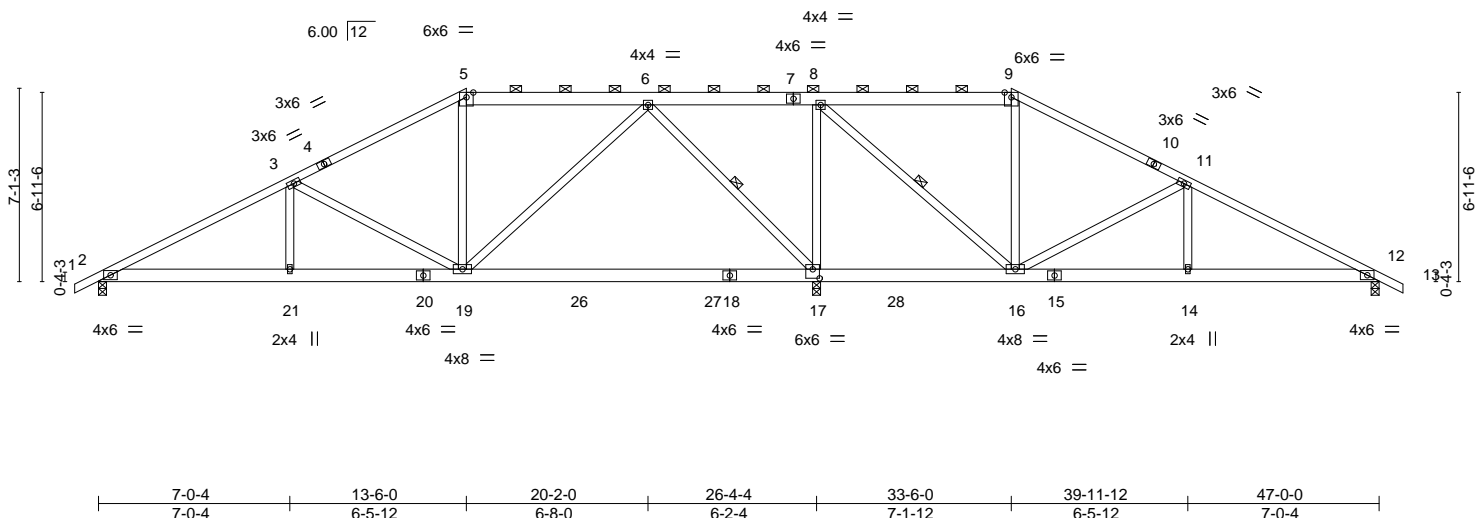


Plate Offsets (X,Y)--	[17:0-3-0,0-4-0]
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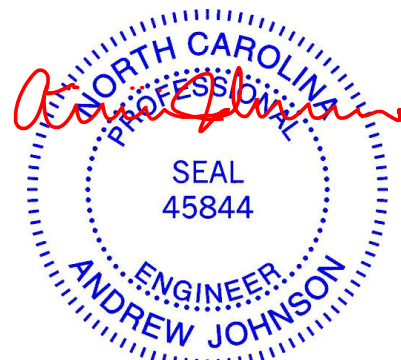
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.52	Vert(LL)	-0.20	17-19	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.56	Vert(CT)	-0.36	17-19	>883		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.94	Horz(CT)	0.02	12	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 302 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except* 5-7,7-9: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-3-12 oc purlins, except 2-0-0 oc purlins (6-0-0 max.); 5-9.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 6-17, 8-16

**REACTIONS.** (lb/size) 17=2391/(0-3-8 + H10A Simpson Strong-Tie) (req. 0-3-12), 12=592/0-3-8, 2=882/0-3-8  
 Max Horz 2=119(LC 16)  
 Max Uplift 17=-735(LC 9), 12=-146(LC 13), 2=-227(LC 9)  
 Max Grav 17=2391(LC 1), 12=643(LC 24), 2=917(LC 23)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1489/893, 3-5=-890/577, 5-6=-718/560, 6-8=-398/826, 11-12=-889/491  
 BOT CHORD 2-21=-683/1269, 19-21=-683/1269, 16-17=-826/702, 14-16=-330/733, 12-14=-330/733  
 WEBS 3-19=-636/489, 6-19=-559/785, 6-17=-1304/790, 8-17=-1198/687, 8-16=-729/1142, 9-16=-352/129, 11-16=-696/551, 11-14=-210/329

- 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=30ft; Cat. II; Exp B; 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
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) All bearings are assumed to be User Defined crushing capacity of 425 psi.
  - 7) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17. This connection is for uplift only and does not consider lateral forces.
  - 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12 and 2. This connection is for uplift only and does not consider lateral forces.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 24, 2019

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job 140.1445.C	Truss H11	Truss Type Hip	Qty 1	Ply 1	20 MASON POINTE - ROOF	137903332
					Job Reference (optional)	

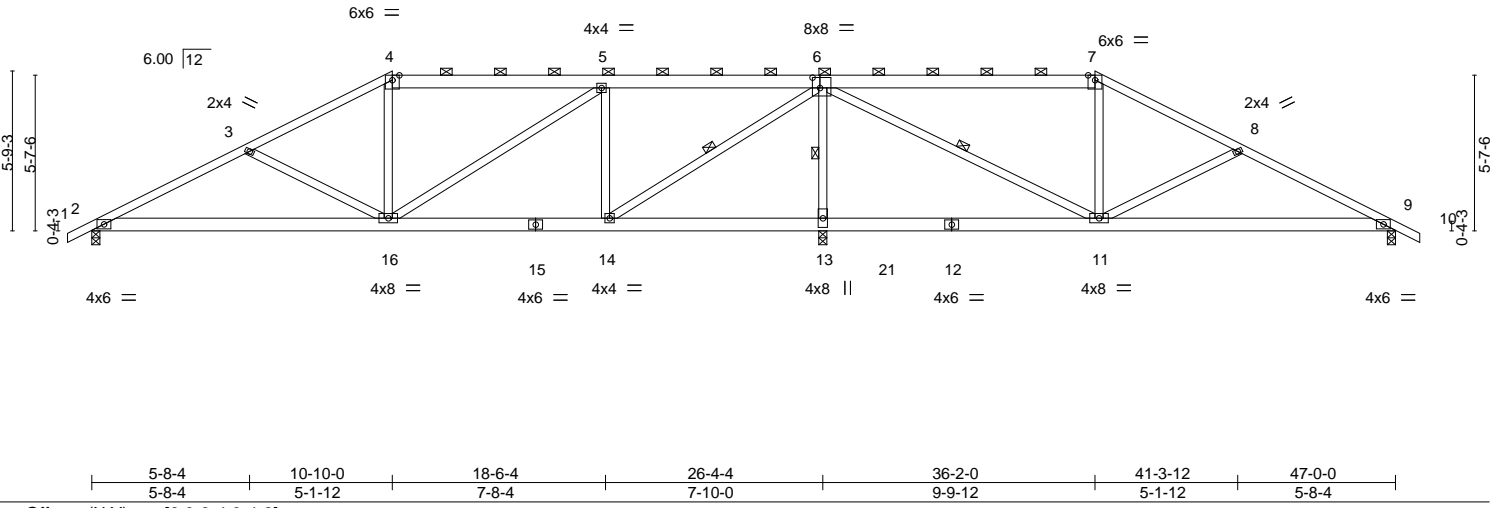
84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:06 2019 Page 1

ID:IPzHts0ReLOVUWCHSrvZPyHLgv-URBFpdMdfqjdj\_2eNtMf\_HdaF7If09Bf067Fsh9yv7ix

0-10-8	5-8-4	10-10-0	17-2-0	18-6-4	23-6-0	26-4-4	29-10-0	36-2-0	41-3-12	47-0-0	47-10-8
0-10-8	5-8-4	5-1-12	6-4-0	1-4-4	4-11-12	2-10-4	3-5-12	6-4-0	5-1-12	5-8-4	0-10-8

Scale = 1:83.1



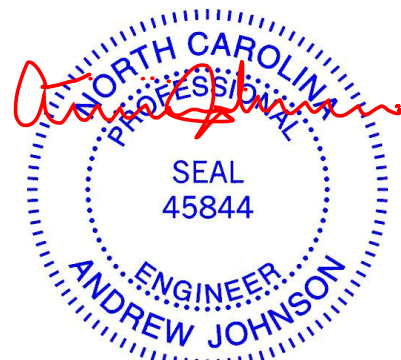
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.58	Vert(LL)	0.18	16-18	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.53	Vert(CT)	-0.24	16-18	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.61	Horz(CT)	0.02	9	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS					Weight: 296 lb	FT = 20%

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

<b>REACTIONS.</b>	(lb/size) 2=962/0-3-8, 13=2210/0-3-8, 9=693/0-3-8
	Max Horz 2=-96(LC 13)
	Max Uplift 2=-266(LC 9), 13=-762(LC 9), 9=-180(LC 8)
	Max Grav 2=978(LC 23), 13=2210(LC 1), 9=720(LC 24)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1599/979, 3-4=-1264/845, 4-5=-1069/790, 5-6=-713/531, 6-7=-555/453, 7-8=-680/464, 8-9=-1015/598
BOT CHORD	2-16=-789/1404, 14-16=-285/713, 13-14=-578/497, 11-13=-619/521, 9-11=-453/882
WEBS	3-16=-379/275, 4-16=-209/294, 5-16=-307/450, 5-14=-711/383, 6-14=-933/1483, 6-13=-2013/1178, 6-11=-812/1252, 8-11=-381/278

- 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=30ft; Cat. II; Exp B; 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
  - 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.
  - All bearings are assumed to be User Defined crushing capacity of 425 psi.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 9. This connection is for uplift only and does not consider lateral forces.
  - Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 24, 2019

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY <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	20 MASON POINTE - ROOF	137903333
140.1445.C	H12	Hip	1	1		

84 Components (Dunn), Dunn, NC - 28334,

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ID: IAPzHts0ReLOVUWCHSrvZPyHLgv-QpJ0EJNArTQEMnm?niSN2fYIZFjd1MIZRkz1yv7iv

0-10-8	4-4-4	8-2-0	15-10-0	17-3-2	23-6-0	26-4-4	31-2-0	32-8-14	38-10-0	42-7-12	47-0-0	47-10-8
0-10-8	4-4-4	3-9-12	7-8-0	1-5-2	6-2-14	2-10-4	4-9-12	1-6-14	6-1-2	3-9-12	4-4-4	0-10-8

Scale = 1:83.3

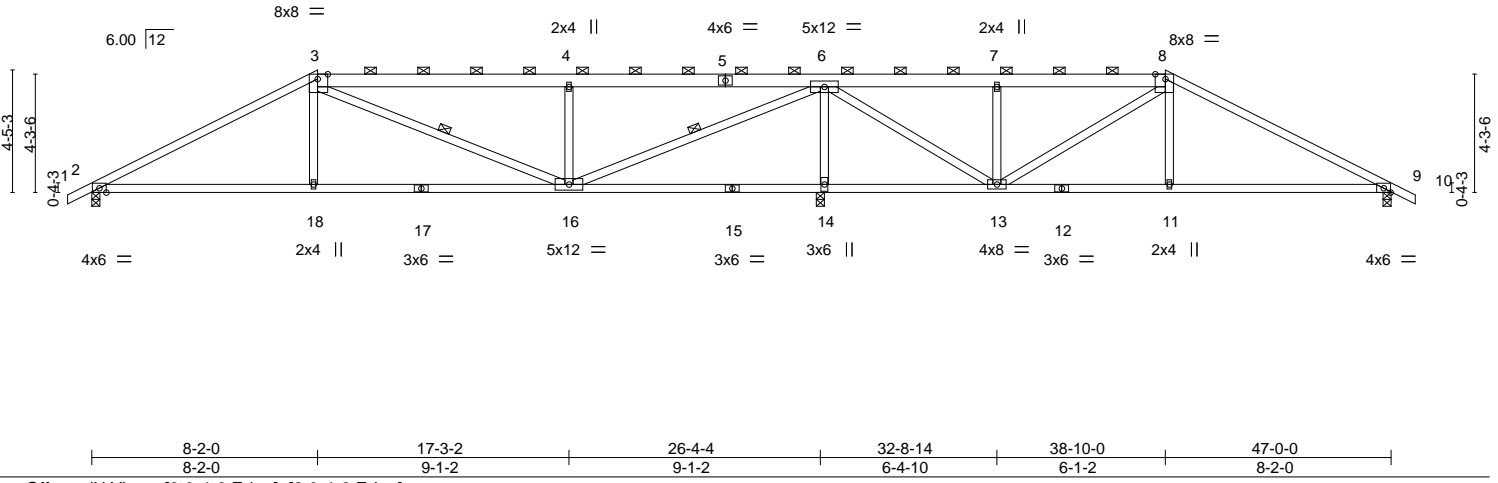


Plate Offsets (X,Y)--	[3:0-4-6,Edge], [8:0-4-6,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.83	Vert(LL) 0.22 11-24 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.84	Vert(CT) -0.28 16-18 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.86	Horz(CT) 0.03 9 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS		Weight: 248 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1 *Except* 3-5,5-8: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (5-10-6 max.): 3-8.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 8-13: 2x4 SP No.2	WEBS 1 Row at midpt 3-16, 6-16

**REACTIONS.** (lb/size) 2=994/0-3-8, 14=2152/0-3-8, 9=719/0-3-8  
 Max Horz 2=-74(LC 13)  
 Max Uplift 2=-294(LC 9), 14=-812(LC 9), 9=-194(LC 8)  
 Max Grav 2=999(LC 23), 14=2152(LC 1), 9=726(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1595/1005, 3-4=-1270/892, 4-6=-1265/888, 6-7=-401/351, 7-8=-405/354,  
 8-9=-974/614  
 BOT CHORD 2-18=-776/1348, 16-18=-768/1340, 14-16=-665/476, 13-14=-665/476, 11-13=-423/783,  
 9-11=-431/791  
 WEBS 3-18=-227/371, 4-16=-611/276, 6-16=-1272/2072, 6-14=-1972/1141, 8-13=-473/312,  
 8-11=-209/329, 7-13=-342/159, 6-13=-750/1229

- 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; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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
  - 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 425 psi.
  - 7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 9. This connection is for uplift only and does not consider lateral forces.
  - 8) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14. This connection is for uplift only and does not consider lateral forces.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 24, 2019

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	20 MASON POINTE - ROOF	I37903334
140.1445.C	HG1	Half Hip Girder	1	2	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:23 2019 Page 2  
 ID:IAPzHts0ReLOVUWCHSrvZPyHLgv-UjihNRZle2mIXfReNRT\_TcNBfcl?eqCW0HsGngyv7ig

**NOTES-**

- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-60, 3-9=-60, 2-10=-20

Concentrated Loads (lb)

Vert: 3=-41(B) 18=-17(B) 5=-41(B) 16=-17(B) 8=-41(B) 11=-17(B) 21=-38(B) 22=-41(B) 23=-41(B) 24=-41(B) 25=-41(B) 26=-41(B) 27=-41(B) 28=-41(B) 29=-41(B) 30=-41(B) 31=-41(B) 32=-41(B) 33=-41(B) 34=-41(B) 35=-41(B) 36=-41(B) 37=-41(B) 38=-41(B) 39=-41(B) 40=-42(B) 41=-17(B) 42=-17(B) 43=-17(B) 44=-17(B) 45=-17(B) 46=-17(B) 47=-17(B) 48=-17(B) 49=-17(B) 50=-17(B) 51=-17(B) 52=-17(B) 53=-17(B) 54=-17(B) 55=-17(B) 56=-17(B) 57=-17(B) 58=-17(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.



818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	20 MASON POINTE - ROOF	137903335
140.1445.C	HG2	Hip Girder	1	1		

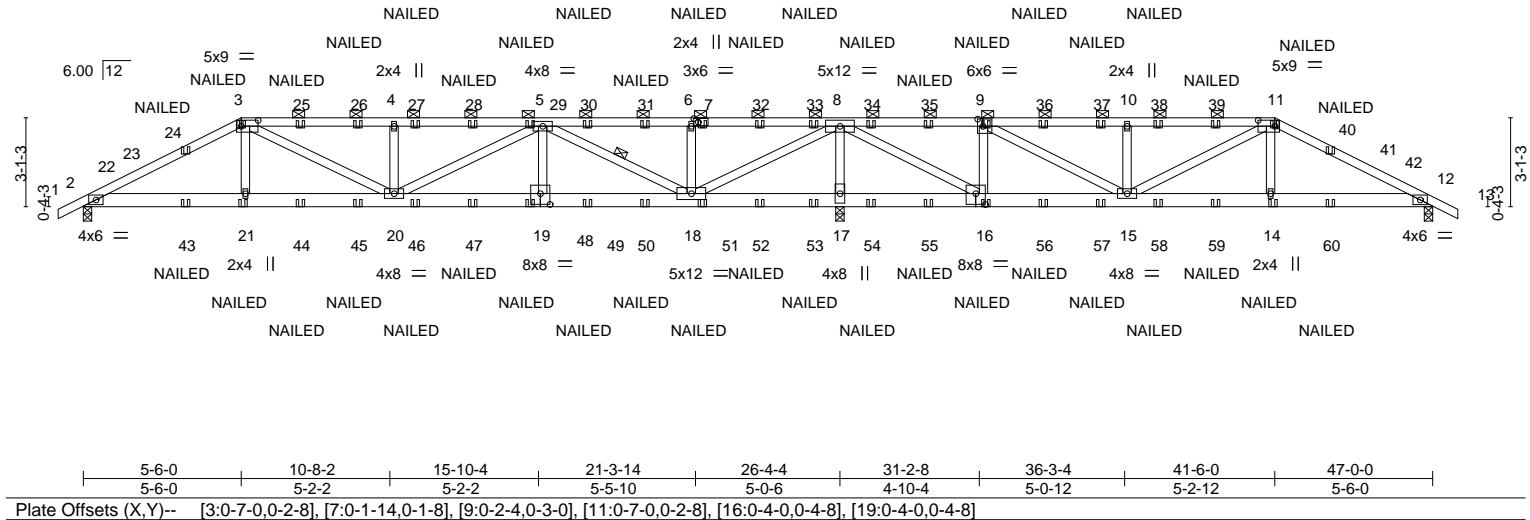
84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:26 2019 Page 1

ID:IPzHts0ReLOVUWCHSrvZPyHLgv-uHPp0TbAxz8t07AD2Z0h5rPxpUPr8ByiE5wO?yv7id

-0-10-8	5-6-0	10-8-2	15-10-4	21-3-14	26-0-14	26-4-4	31-2-8	36-3-4	41-6-0	47-0-0	47-10-8
0-10-8	5-6-0	5-2-2	5-2-2	5-5-10	4-9-0	0-3-6	4-10-4	5-0-12	5-2-12	5-6-0	0-10-8

Scale = 1:80.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.66	Vert(LL)	0.15	19-20	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.49	Vert(CT)	-0.24	19-20	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.96	Horz(CT)	0.03	17	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 269 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
3-20,5-20,5-18,8-18: 2x4 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-5-2 oc purlins, except 2-0-0 oc purlins (3-2-12 max.): 3-11.  
BOT CHORD Rigid ceiling directly applied or 4-6-3 oc bracing.  
WEBS 1 Row at midpt 5-18

**REACTIONS.** (lb/size) 2=1180/0-3-8, 17=3150/0-3-8 (req. 0-3-11), 12=795/0-3-8  
Max Horz 2=53(LC 35)  
Max Uplift 2=291(LC 12), 17=-1067(LC 9), 12=-189(LC 13)  
Max Grav 2=1182(LC 23), 17=3150(LC 1), 12=798(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2078/618, 3-4=-2344/810, 4-5=-2344/810, 8-9=-91/335, 9-10=-879/327,  
10-11=-879/327, 11-12=-1228/341  
BOT CHORD 2-21=-513/1780, 20-21=-508/1792, 19-20=-616/1842, 18-19=-618/1837, 17-18=-2361/821,  
16-17=-2361/821, 15-16=-342/180, 14-15=-224/1033, 12-14=-228/1022  
WEBS 3-21=0/349, 3-20=-315/664, 4-20=-444/311, 5-20=-172/571, 5-19=0/313,  
5-18=-1844/618, 6-18=-408/287, 8-18=-982/2884, 8-17=-2890/1113, 8-16=-766/2321,  
9-16=-1029/472, 9-15=-433/1359, 10-15=-438/304, 11-14=0/338

- 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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-6-0, Exterior(2) 5-6-0 to 9-8-15, Interior(1) 9-8-15 to 41-6-0, Exterior(2) 41-6-0 to 45-8-15, Interior(1) 45-8-15 to 47-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) 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) WARNING: Required bearing size at joint(s) 17 greater than input bearing size.
  - 7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.
  - 8) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17. This connection is for uplift only and does not consider lateral forces.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
  - 11) 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

Continued on page 2



July 24, 2019

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Job	Truss	Truss Type	Qty	Ply	20 MASON POINTE - ROOF	I37903335
140.1445.C	HG2	Hip Girder	1	1		
					Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:26 2019 Page 2  
 ID:IAPzHts0ReLOVUWCHSrvZPyHLgv-uHPp0TbAxz8tO7AD2Z0h5rPfxpUPr8ByiE5wO?yv7id

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-60, 3-11=-60, 11-13=-60, 2-12=-20

Concentrated Loads (lb)

Vert: 3=-41(F) 7=-41(F) 11=-41(F) 21=-17(F) 16=-17(F) 9=-41(F) 14=-17(F) 24=-38(F) 25=-41(F) 26=-41(F) 27=-41(F) 28=-41(F) 29=-41(F) 30=-41(F) 31=-41(F) 32=-41(F) 33=-41(F) 34=-41(F) 35=-41(F) 36=-41(F) 37=-41(F) 38=-41(F) 39=-41(F) 40=-38(F) 43=-42(F) 44=-17(F) 45=-17(F) 46=-17(F) 47=-17(F) 48=-17(F) 49=-17(F) 50=-17(F) 51=-17(F) 52=-17(F) 53=-17(F) 54=-17(F) 55=-17(F) 56=-17(F) 57=-17(F) 58=-17(F) 59=-17(F) 60=-42(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.



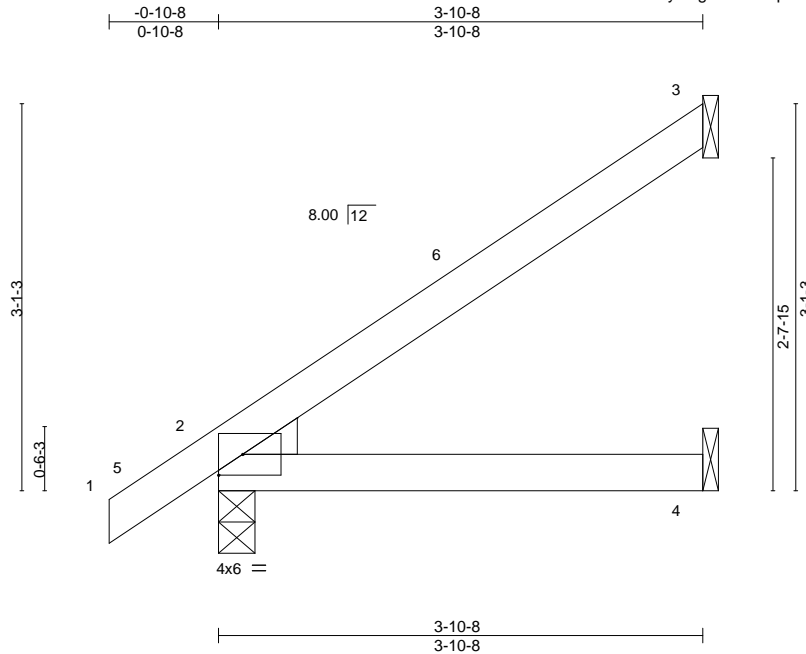
818 Soundside Road  
 Edenton, NC 27932

Job 140.1445.C	Truss J1	Truss Type Jack-Open	Qty 40	Ply 1	20 MASON POINTE - ROOF	137903336
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84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:27 2019 Page 1

ID: lAPzHts0ReLOVUWCHSrvZPyHLgv-MTzBDpcoiHGk0HkPcGYwe2yxFDvIaqS5xuqTwRyv7ic  
3-10-8  
3-10-8



Scale = 1:18.4

Plate Offsets (X,Y)--	[2:0-1-3,0-0-12], [2:0-5-13,0-1-9]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.24	Vert(LL) -0.01 2-4 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.16	Vert(CT) -0.02 2-4 >999 180		
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-P		Weight: 15 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-10-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=101/Mechanical, 2=216/0-3-8, 4=37/Mechanical  
Max Horz 2=119(LC 12)  
Max Uplift 3=85(LC 12), 2=-13(LC 12)  
Max Grav 3=113(LC 19), 2=216(LC 1), 4=73(LC 3)

**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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
- 6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.



**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

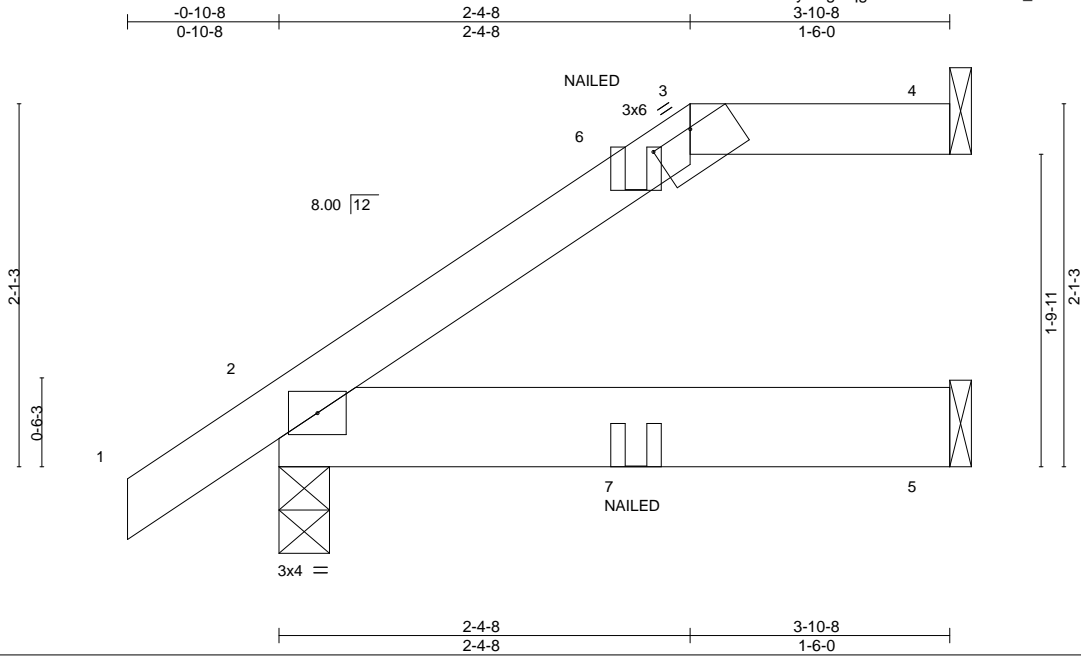
Job 140.1445.C	Truss J2	Truss Type Jack-Open Girder	Qty 3	Ply 1	20 MASON POINTE - ROOF	137903337
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84 Components (Dunn),

Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:28 2019 Page 1

ID:IPzHts0ReLOVUWCHSrvZPyHLGv-ggXaR9dQTbObdRJcA\_39AGU6EdGwJHhF9Ya1Styv7ib



Scale = 1:13.3

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 0.22	Vert(LL) -0.00 2-5 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.10	Vert(CT) -0.01 2-5 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT) 0.02 4 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P		Weight: 17 lb	FT = 20%

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

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

**REACTIONS.** (lb/size) 4=98/Mechanical, 2=237/0-3-8, 5=62/Mechanical  
 Max Horz 2=82(LC 12)  
 Max Uplift 4=45(LC 9), 2=37(LC 12)  
 Max Grav 4=98(LC 1), 2=237(LC 1), 5=88(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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.
- One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 3-4=-60, 2-5=-20  
 Concentrated Loads (lb)  
 Vert: 6=-25(F) 7=-17(F)



July 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 140.1445.C	Truss J3	Truss Type Jack-Open	Qty 3	Ply 1	20 MASON POINTE - ROOF	137903338
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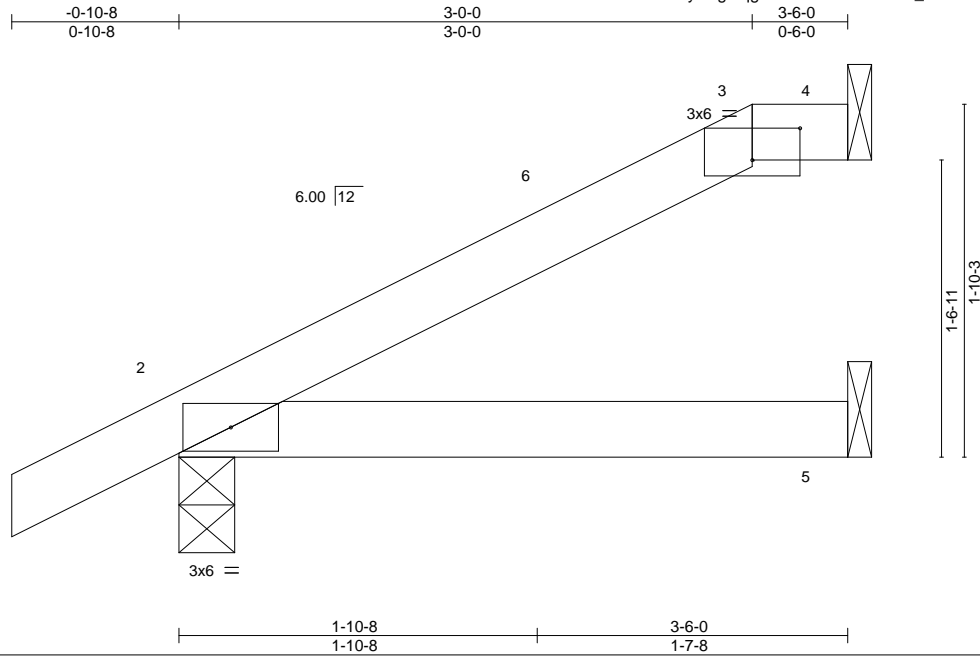
84 Components (Dunn),

Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:28 2019 Page 1

ID: IAPzHts0ReLOVUWCHSrvZPyHLGv-ggXaR9dQTbObdRJcA\_39AGU7QdGoJHhF9Ya1Styv7ib

Job Reference (optional)



Scale: 1"=1'

Plate Offsets (X,Y)--	[3:0-3-0,0-2-0]									
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	-0.01	2-5	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	-0.01	2-5	>999	180		
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-P						Weight: 13 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-6-0 oc purlins, except
BOT CHORD 2x4 SP No.2	2-0-0 oc purlins: 3-4.
	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 4=85/Mechanical, 2=202/0-3-8, 5=37/Mechanical  
 Max Horz 2=73(LC 12)  
 Max Uplift 4=39(LC 12), 2=35(LC 12)  
 Max Grav 4=85(LC 1), 2=202(LC 1), 5=61(LC 3)

**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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-0-0, Exterior(2) 3-0-0 to 3-5-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.
- 8) One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 24, 2019

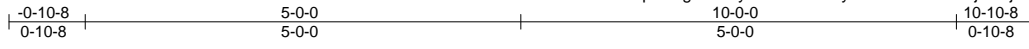
Job 140.1445.C	Truss P	Truss Type Common	Qty 1	Ply 1	20 MASON POINTE - ROOF	137903339
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84 Components (Dunn),

Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:29 2019 Page 1

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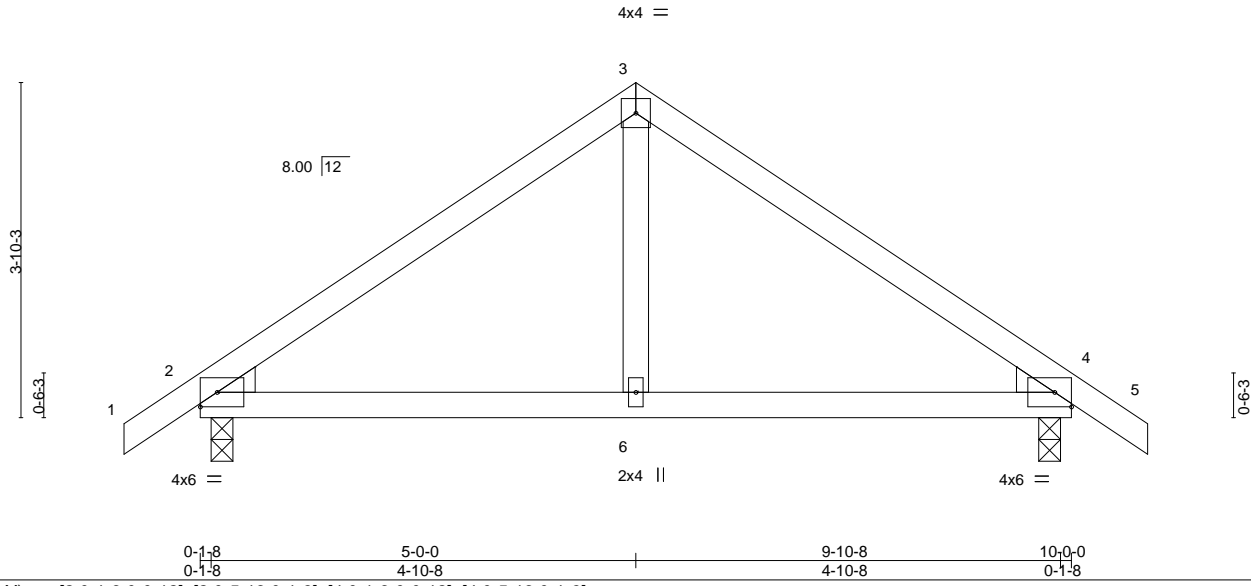


Plate Offsets (X,Y)--	[2:0-1-3,0-0-12], [2:0-5-13,0-1-9], [4:0-1-3,0-0-12], [4:0-5-13,0-1-9]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.26	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.26	Vert(LL) -0.02 6-9 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.09	Vert(CT) -0.04 6-9 >999 180		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Horz(CT) 0.01 2 n/a n/a		
				Weight: 43 lb	FT = 20%

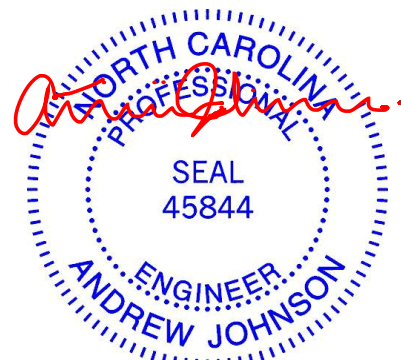
**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
WEDGE  
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

**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=452/0-3-0, 4=452/0-3-0  
Max Horz 2=-87(LC 10)  
Max Uplift 2=-75(LC 12), 4=-75(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-456/110, 3-4=-456/110  
BOT CHORD 2-6=0/322, 4-6=0/322

- 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=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone;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 425 psi.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.



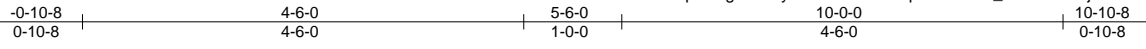
July 24, 2019

Job 140.1445.C	Truss P1	Truss Type Hip	Qty 1	Ply 1	20 MASON POINTE - ROOF	137903340
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84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:30 2019 Page 1

ID:WRU0VEQdOJp5FPgJ5XsbyzzDMSL-n2eKrqeh?CeJtkT\_HP5dGhaSjQwVnAWYds37Xmyv7iZ



4x4 =                      4x4 =

Scale = 1:23.5

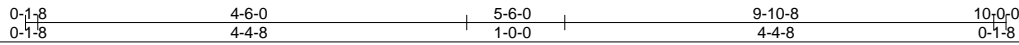
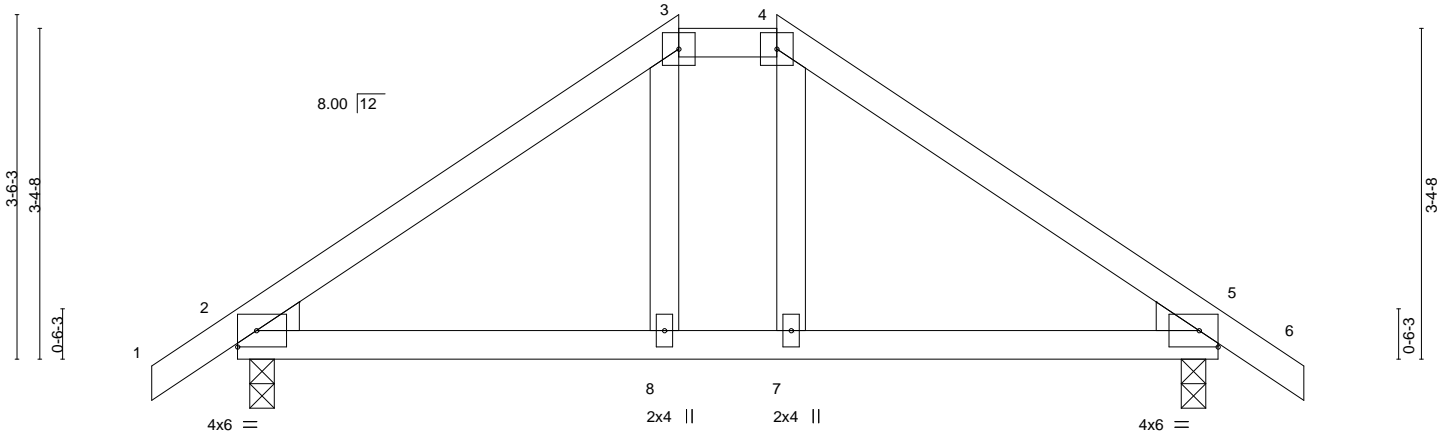


Plate Offsets (X,Y)--	[2:0-1-3,0-0-12], [2:0-5-13,0-1-9], [5:0-1-3,0-0-12], [5:0-5-13,0-1-9]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.22	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.22	Vert(LL) -0.02 7-14 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.04	Vert(CT) -0.03 7-14 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.00 2 n/a n/a		
	Code IRC2015/TPI2014			Weight: 46 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
BOT CHORD 2x4 SP No.2	2-0-0 oc purlins (6-0-0 max.): 3-4.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEDGE	
Left: 2x4 SP No.3 , Right: 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=452/0-3-0, 5=452/0-3-0  
 Max Horz 2=-78(LC 10)  
 Max Uplift 2=-75(LC 12), 5=-75(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-467/118, 3-4=-351/138, 4-5=-467/118  
 BOT CHORD 2-8=-2/340, 7-8=-2/336, 5-7=-2/340

- 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=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; 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 425 psi.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 24, 2019

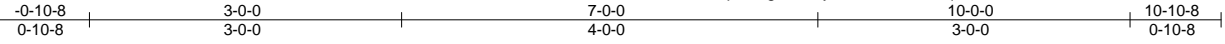


Job 140.1445.C	Truss P2	Truss Type Hip	Qty 1	Ply 1	20 MASON POINTE - ROOF	137903341
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84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:30 2019 Page 1

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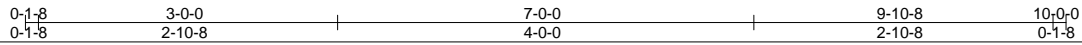
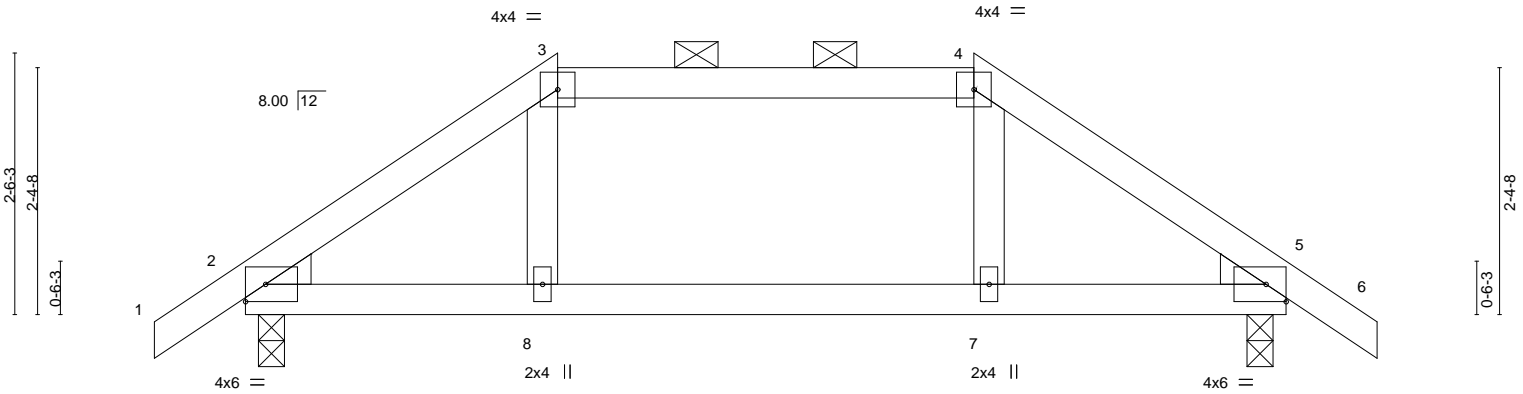


Plate Offsets (X, Y)--	[2:0-1-3,0-0-12], [2:0-5-13,0-1-9], [5:0-1-3,0-0-12], [5:0-5-13,0-1-9]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.23	Vert(LL) -0.02 8 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.18	Vert(CT) -0.03 7-8 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT) 0.01 5 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS		Weight: 42 lb	FT = 20%

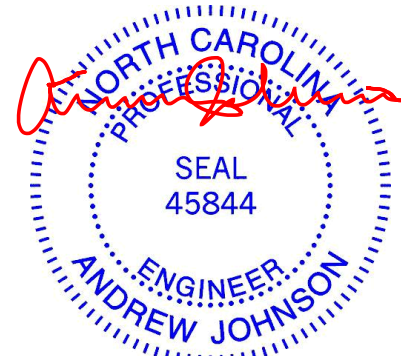
**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3  
 WEDGE  
 Left: 2x4 SP No.3 , Right: 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-4.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=452/0-3-0, 5=452/0-3-0  
 Max Horz 2=-56(LC 10)  
 Max Uplift 2=-75(LC 12), 5=-75(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-525/140, 3-4=-408/147, 4-5=-525/140  
 BOT CHORD 2-8=-48/413, 7-8=-51/408, 5-7=-48/413

- 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=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone;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 425 psi.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



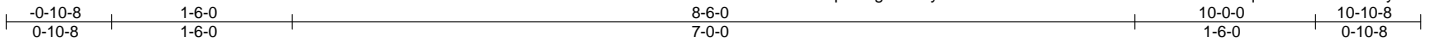
July 24, 2019

**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 140.1445.C	Truss P3	Truss Type Hip Girder	Qty 1	Ply 1	20 MASON POINTE - ROOF	137903342
84 Components (Dunn), Dunn, NC - 28334,					8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:31 2019 Page 1	
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					Job Reference (optional)	



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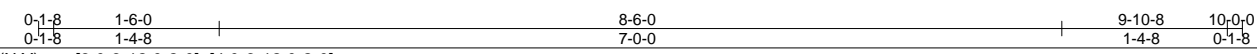
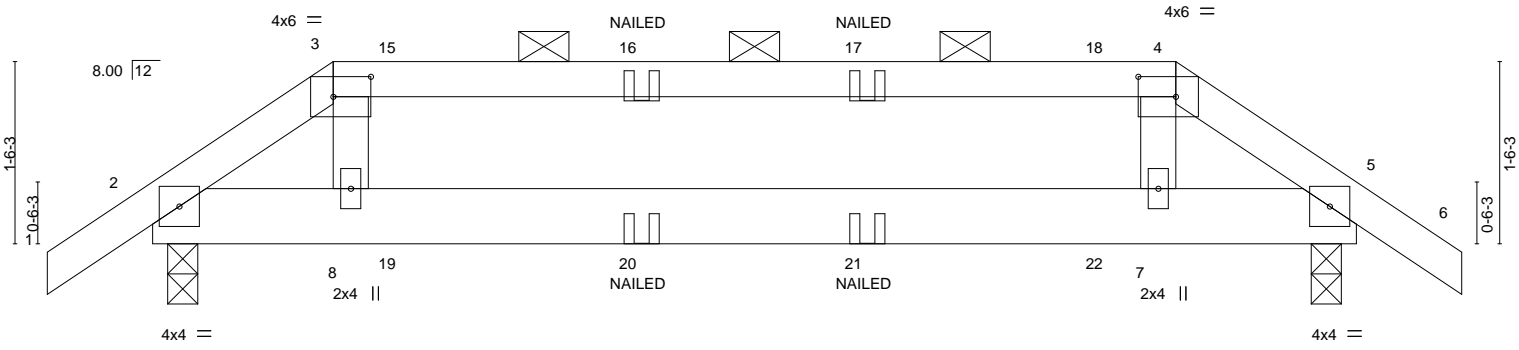


Plate Offsets (X,Y)-- [3:0-3-12,0-2-0], [4:0-3-12,0-2-0]

<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 0.84	Vert(LL)	-0.02	7-8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.24	Vert(CT)	-0.04	7-8	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.08	Horz(CT)	0.01	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 45 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
BOT CHORD 2x6 SP No.2	2-0-0 oc purlins (4-8-11 max.): 3-4.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=488/0-3-0, 5=488/0-3-0  
 Max Horz 2=-36(LC 10)  
 Max Uplift 2=-100(LC 12), 5=-100(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-713/186, 3-4=-646/198, 4-5=-713/186  
 BOT CHORD 2-8=-152/640, 7-8=-138/646, 5-7=-152/640

- 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=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; 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 425 psi.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 69 lb down and 58 lb up at 2-0-12, and 69 lb down and 58 lb up at 7-11-4 on top chord, and 25 lb down and 23 lb up at 2-0-12, and 25 lb down and 23 lb up at 7-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 3-4=-60, 4-6=-60, 9-12=-20  
 Concentrated Loads (lb)  
 Vert: 15=-3(B) 16=-1(B) 17=-1(B) 18=-3(B) 19=-25(B) 20=-8(B) 21=-8(B) 22=-25(B)

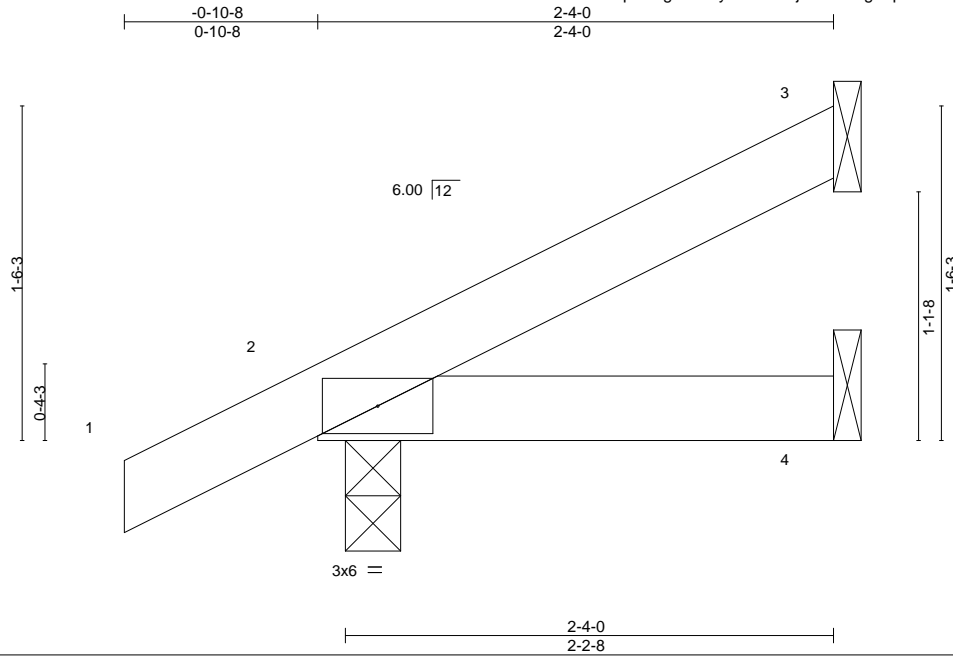


Job 140.1445.C	Truss PJ1	Truss Type Jack-Open	Qty 2	Ply 1	20 MASON POINTE - ROOF	137903343
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84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:32 2019 Page 1

ID:WRU0VEQdOJp5FPgJ5XsbyzzDMSL-jRm4GWgxXpv062dNPq75L6frsEekF4hq4AYEbeyv7iX



Scale = 1:10.4

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL) -0.00	7	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	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: 9 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

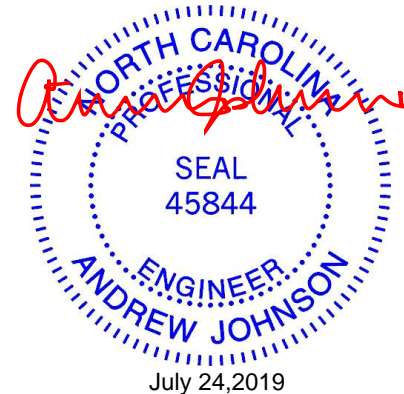
TOP CHORD Structural wood sheathing directly applied or 2-4-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=53/Mechanical, 4=28/Mechanical, 2=153/0-3-0  
Max Horz 2=58(LC 12)  
Max Uplift 3=-20(LC 12), 2=-39(LC 12)  
Max Grav 3=53(LC 1), 4=40(LC 3), 2=153(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=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; 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.
- 7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.



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

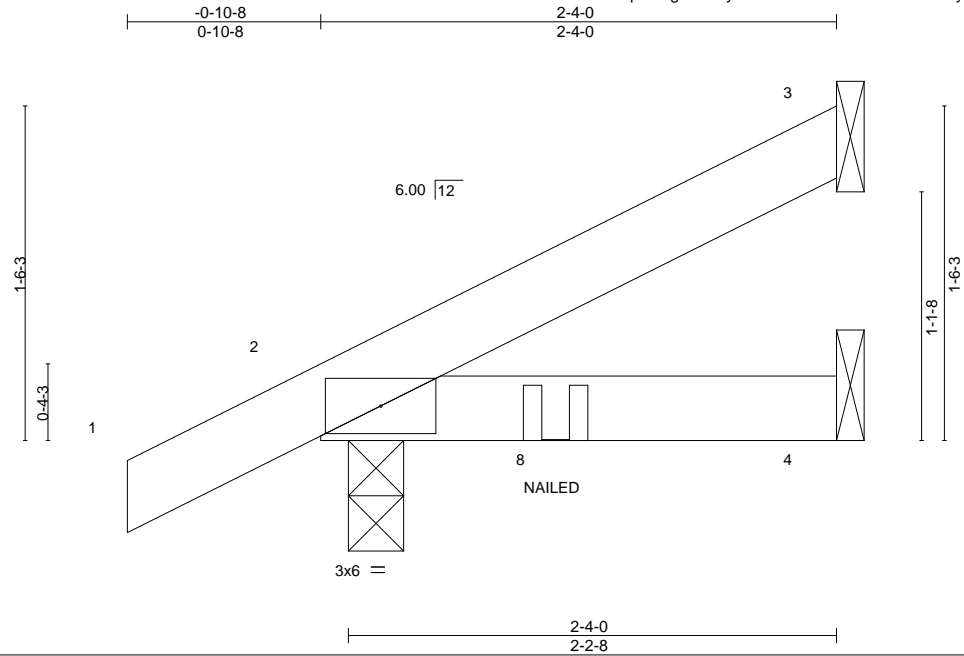
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	20 MASON POINTE - ROOF	137903344
140.1445.C	PJ2	Jack-Open Girder	2	1		
84 Components (Dunn), Dunn, NC - 28334,						Job Reference (optional)

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:33 2019 Page 1  
 ID:WRU0VEQdOJp5FPgJ5XsbyzzDMSL-BdKTUshZ171tkCCZyXeKJJC?Bez6\_Xx\_JqHo85yv7iW



Scale = 1:10.4

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	-0.00	7	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	-0.00	4-7	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP						
								Weight: 9 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 2-4-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=61/Mechanical, 4=45/Mechanical, 2=182/0-3-0  
 Max Horz 2=58(LC 12)  
 Max Uplift 3=27(LC 12), 4=7(LC 12), 2=65(LC 12)  
 Max Grav 3=61(LC 1), 4=45(LC 3), 2=182(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=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone;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, 4.
- 7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 8) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)  
 Vert: 1-3=-60, 4-5=-20
- Concentrated Loads (lb)  
 Vert: 8=-54(B)

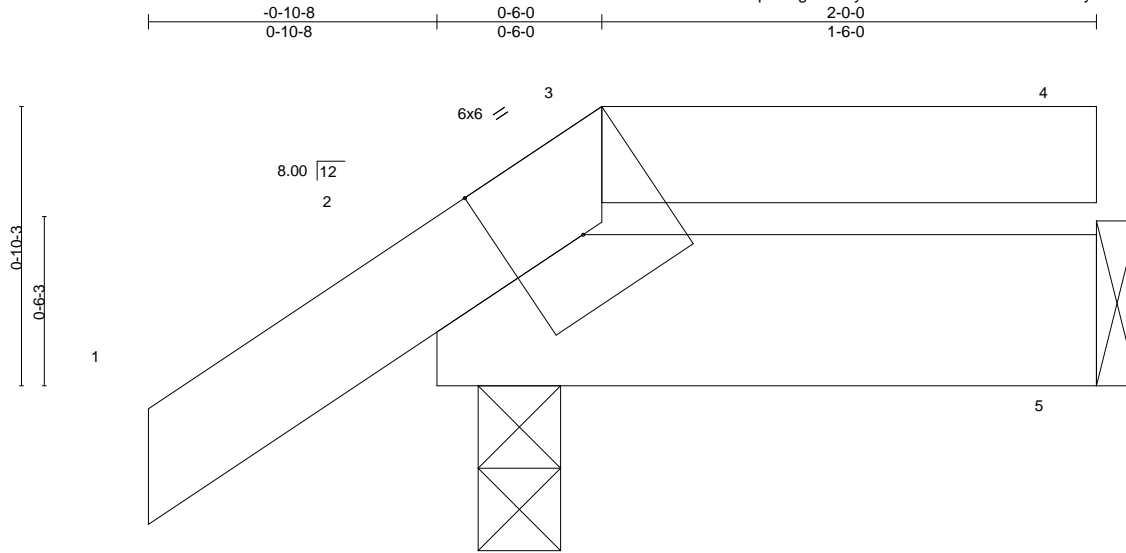


July 24, 2019

Job 140.1445.C	Truss PJ3	Truss Type Half Hip	Qty 2	Ply 1	20 MASON POINTE - ROOF	137903345
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84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:33 2019 Page 1  
ID:WRU0VEQdOJp5FPgJ5XsbyzzDMSL-BdKTUshZ171tkCCZyXeKtJC\_4ezH\_Xx\_JqHo85yv7iW



Scale = 1:7.0

Plate Offsets (X,Y)--	[2:0-3-3,0-0-0], [3:0-2-13,Edge], [3:0-1-0,0-1-7]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.15	Vert(LL) -0.00 8 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.09	Vert(CT) -0.00 8 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 2 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MP		Weight: 10 lb	FT = 20%

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

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

**REACTIONS.** (lb/size) 5=69/Mechanical, 2=144/0-3-0  
Max Horz 2=40(LC 12)  
Max Uplift 5=-36(LC 12), 2=-68(LC 12)  
Max Grav 5=74(LC 22), 2=144(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; 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 425 psi.
- 7) Refer to girder(s) for truss to truss connections.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5 and 2. This connection is for uplift only and does not consider lateral forces.
- 9) 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.**

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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Edenton, NC 27932

Job 140.1445.C	Truss T5	Truss Type Piggyback Base	Qty 1	Ply 1	20 MASON POINTE - ROOF	137903346
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84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:35 2019 Page 1

ID:IAPzHts0ReLOVUWCHSrvZPyHLGv-70SDvYippkHbzVMY4yhozkHCTRtJSFbHm8muCzy7iU

0-10-8	6-10-5	13-2-3	19-6-0	27-6-0	34-6-0	38-10-4	41-6-0	42-6-0	48-0-0	48-10-8
0-10-8	6-10-5	6-3-13	6-3-13	8-0-0	7-0-0	4-4-4	2-7-12	1-0-0	5-6-0	0-10-8

Scale = 1:85.8

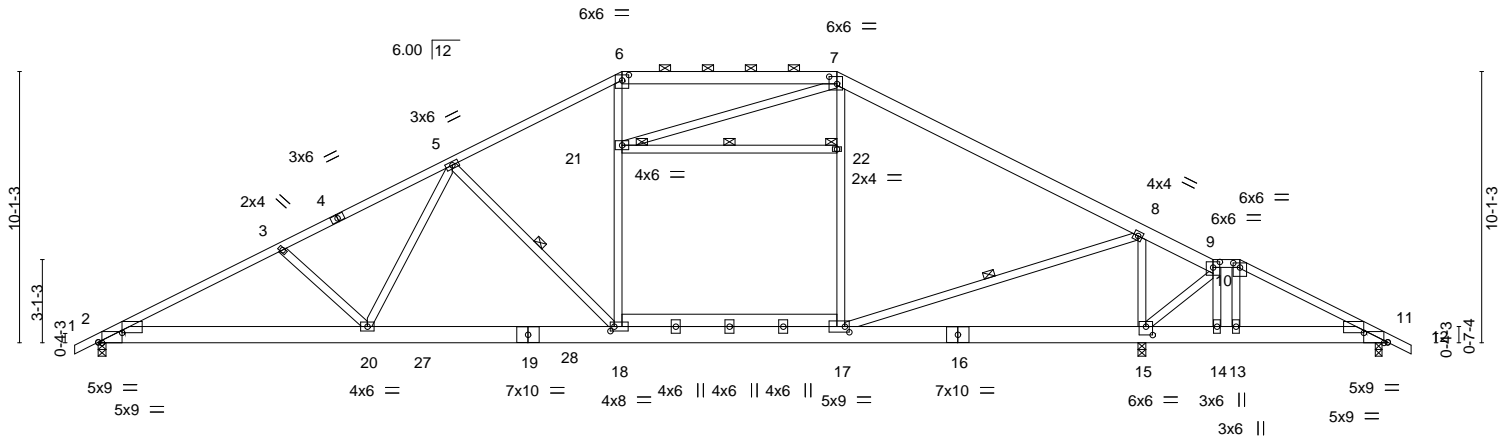


Plate Offsets (X,Y)--	[2:0-10-11,0-4-4], [2:0-1-11,Edge], [6:0-3-0,0-2-7], [7:0-3-8,0-3-4], [9:0-3-0,0-2-8], [10:0-3-0,0-2-0], [11:0-10-11,0-4-4], [11:0-1-11,Edge], [15:0-3-0,0-3-12]
	[17:0-2-0,0-2-8], [18:0-1-12,0-2-0]

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 0.67	Vert(LL)	0.34	18-20	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.86	Vert(CT)	-0.56	18-20	>837		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.82	Horz(CT)	0.06	11	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS					Weight: 382 lb	FT = 20%

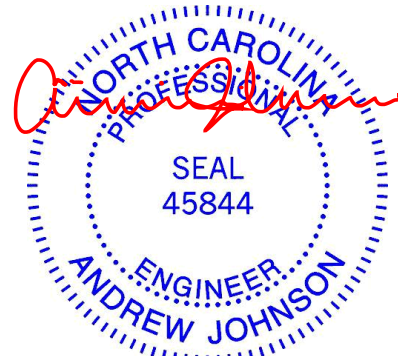
**LUMBER-**  
 TOP CHORD 2x4 SP No.2 \*Except\*  
 6-7,7-9: 2x6 SP No.2  
 BOT CHORD 2x8 SP No.2 \*Except\*  
 17-18: 2x6 SP No.2  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-11-6 oc purlins, except  
 2-0-0 oc purlins (5-0-6 max.): 6-7, 9-10.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
 6-3-1 oc bracing: 2-20  
 7-0-1 oc bracing: 18-20.  
 WEBS 1 Row at midpt 5-18, 8-17, 21-22  
 JOINTS 1 Brace at Jt(s): 21, 22

**REACTIONS.** (lb/size) 2=1675/0-3-8, 15=1575/0-3-8, 11=692/0-3-0  
 Max Horz 2=170(LC 16)  
 Max Uplift 2=-398(LC 9), 15=-460(LC 8), 11=-173(LC 9)  
 Max Grav 2=1675(LC 1), 15=1661(LC 24), 11=692(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3133/1993, 3-5=-2874/1951, 5-6=-1924/1355, 6-7=-1647/1254, 7-8=-1960/1285,  
 8-9=-1018/529, 9-10=-1026/594, 10-11=-1144/619  
 BOT CHORD 2-20=-1665/2741, 18-20=-1251/2201, 17-18=-810/1621, 15-17=-376/944,  
 14-15=-453/1039, 13-14=-455/1026, 11-13=-449/1005  
 WEBS 3-20=-343/240, 5-20=-561/719, 5-18=-840/628, 18-21=-462/539, 6-21=-444/516,  
 17-22=-238/364, 7-22=-240/366, 8-17=-448/903, 8-15=-1451/875, 10-13=-130/385

- 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=30ft; Cat. II; Exp B; 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
  - 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.
  - All bearings are assumed to be User Defined crushing capacity of 425 psi.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 15, and 11. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 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



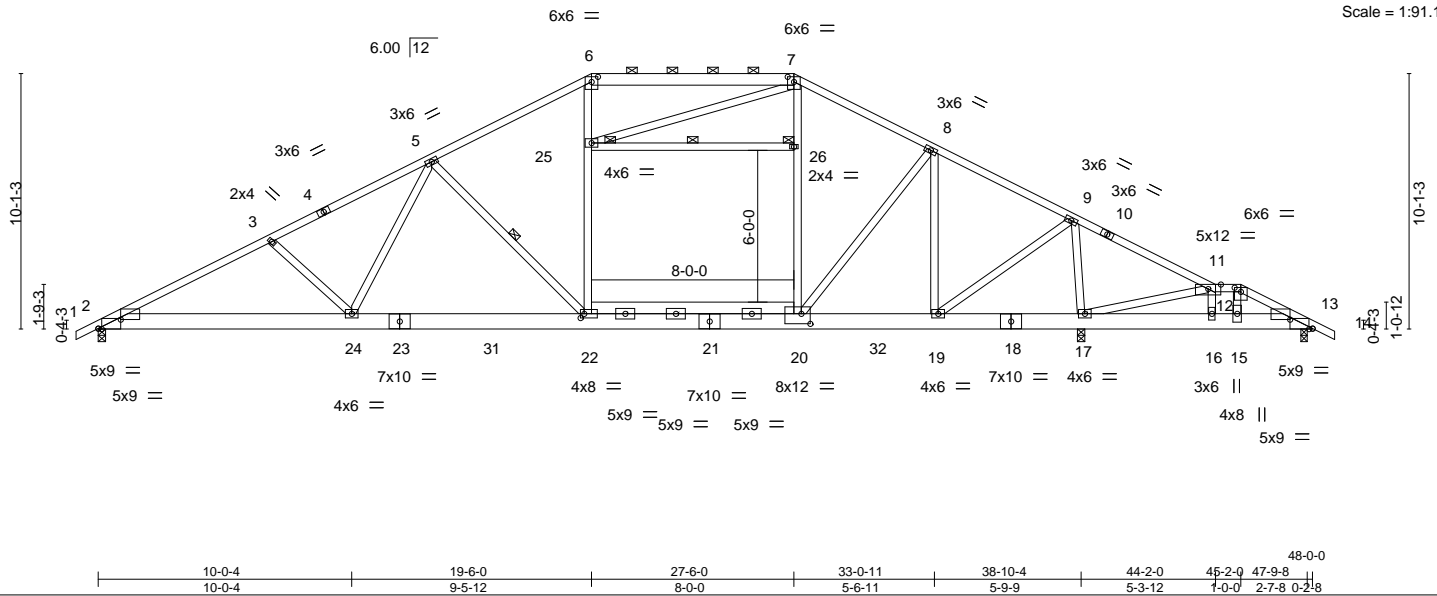
Job 140.1445.C	Truss T6	Truss Type ROOF TRUSS	Qty 1	Ply 1	20 MASON POINTE - ROOF	137903347
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84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:36 2019 Page 1

ID: IAPzHts0ReL0VUWCHSrvZPyHLgv-bC?b6ujRa2PSbfw8efC1VvqOlrorBfXQ7oWSIQyv7IT

0-10-8 6-10-5 13-2-3 19-6-0 27-6-0 33-0-11 38-7-5 44-2-0 45-2-0 48-0-0 48-10-8  
 0-10-8 6-10-5 6-3-13 6-3-13 8-0-0 5-6-11 5-6-11 5-6-11 1-0-0 2-10-0 0-10-8



Scale = 1:91.1

Plate Offsets (X, Y)--	[2:0-10-11,0-4-4], [2:0-1-11,Edge], [6:0-3-0,0-2-7], [7:0-3-0,0-2-7], [12:0-3-0,0-2-0], [13:0-10-11,0-4-4], [13:0-1-11,Edge], [20:0-4-4,0-4-12], [22:0-1-12,0-2-0]
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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 0.60	Vert(LL)	0.34 22-24	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.93	Vert(CT)	-0.63 22-24	>734	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.97	Horz(CT)	0.06 13	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Attic	-0.15 20-22	659	360	Weight: 383 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 6-7: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-9-2 oc purlins, except 2-0-0 oc purlins (4-3-14 max.); 6-7, 11-12.
BOT CHORD 2x8 SP DSS *Except* 21-23: 2x8 SP No.2, 20-22: 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-22, 25-26
	JOINTS 1 Brace at Jt(s): 25, 26 This truss requires both edges of the bottom chord be sheathed in the room area.

REACTIONS.	(lb/size)
2=1766/0-3-8, 17=1916/0-3-8, 13=564/0-3-0	
Max Horz 2=-170(LC 13)	
Max Uplift 2=-228(LC 9), 17=-262(LC 8), 13=-116(LC 9)	
Max Grav 2=1848(LC 2), 17=2039(LC 27), 13=564(LC 1)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-3622/1732, 3-5=-3409/1691, 5-6=-2464/1091, 6-7=-2133/1027, 7-8=-2401/1071, 8-9=-1868/837, 9-11=-785/261, 11-12=-885/496, 12-13=-948/511
BOT CHORD	2-24=-1430/3186, 22-24=-1016/2674, 20-22=-575/2114, 19-20=-472/1611, 17-19=-130/761, 16-17=-397/846, 15-16=-414/885, 13-15=-389/841
WEBS	3-24=-338/237, 5-24=-565/734, 5-22=-849/629, 22-25=-401/744, 6-25=-294/746, 20-26=-336/634, 7-26=-250/679, 8-20=-152/812, 8-19=-1112/389, 9-19=-425/1279, 9-17=-1638/698, 11-17=-404/324, 11-16=-368/161, 12-15=-233/402

- 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=30ft; Cat. II; Exp B; 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
  - 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.
  - Ceiling dead load (5.0 psf) on member(s). 25-26; Wall dead load (5.0psf) on member(s). 22-25, 20-26
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 20-22
  - All bearings are assumed to be User Defined crushing capacity of 425 psi.
  - Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 17. This connection is for uplift only and does not consider lateral forces.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



**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	20 MASON POINTE - ROOF	137903348
140.1445.C	T7	ROOF TRUSS	2	1		

84 Components (Dunn), Dunn, NC - 28334,

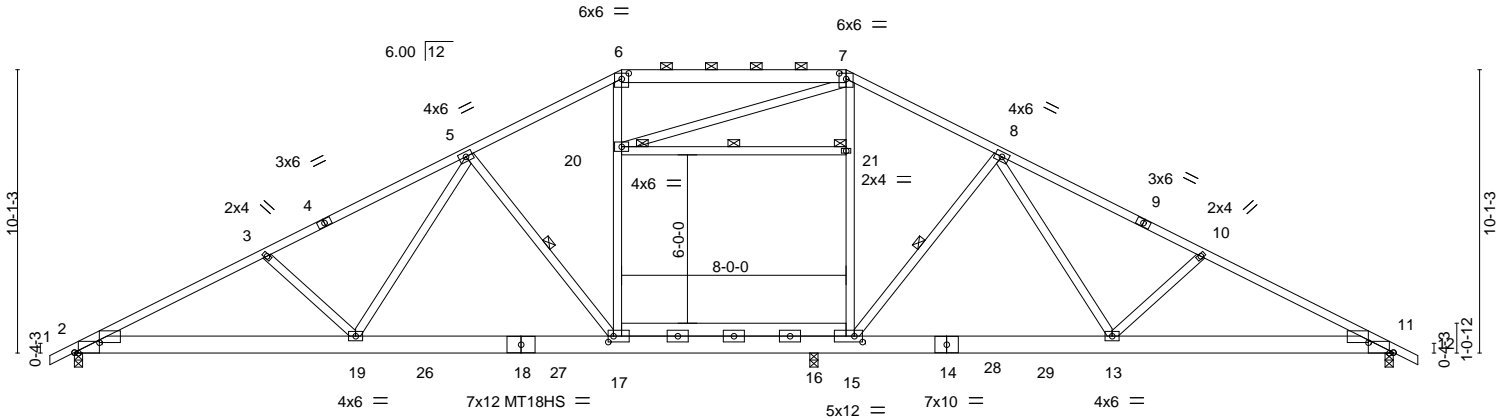
8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:37 2019 Page 1

ID: IAPzHts0ReLOVUWCHSRvZPyHLgv-4OZzKEk4LMXJCPvKBNjG29MXtF7EwBlaESF?Hsyv7iS

Job Reference (optional)

0-10-8	6-10-5	13-2-3	19-6-0	27-6-0	33-9-13	40-1-11	47-0-0	47-10-8
0-10-8	6-10-5	6-3-13	6-3-13	8-0-0	6-3-13	6-3-13	6-10-5	0-10-8

Scale = 1:82.1



Job	Truss	Truss Type	Qty	Ply	20 MASON POINTE - ROOF	137903349
140.1445.C	T7A	ROOF TRUSS	1	1		

84 Components (Dunn), Dunn, NC - 28334,

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ID: IAPzHts0ReLOVUWCHSrvZPyHLgv-Yb7MXZli6ffAqz4XI4EVaNvkMTWfeijS6?Zplyv7iR

Job Reference (optional)

0-10-8	6-10-5	13-2-3	19-6-0	27-6-0	33-9-13	40-1-11	47-0-0
0-10-8	6-10-5	6-3-13	6-3-13	8-0-0	6-3-13	6-3-13	6-10-5

Scale = 1:81.3

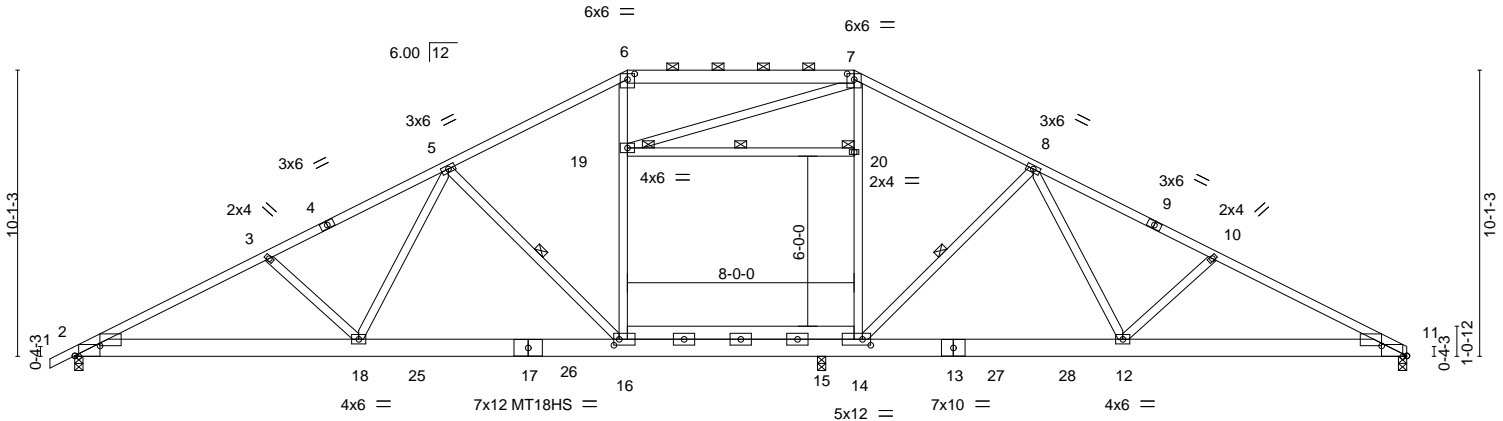


Plate Offsets (X,Y)--	[2:0-10-11,0-4-4], [2:0-1-11,Edge], [6:0-3-0,0-2-7], [7:0-3-0,0-2-7], [11:0-10-11,0-4-4], [11:0-1-11,Edge], [14:0-3-8,0-2-8], [16:0-2-4,0-2-8]
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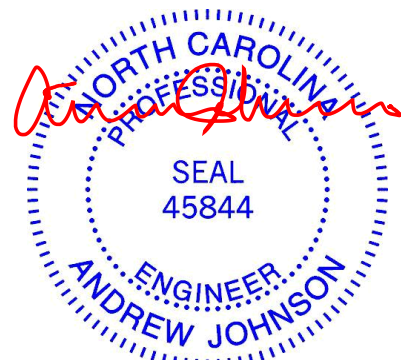
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.56	Vert(LL)	-0.36	16-18	>866	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.98	Vert(CT)	-0.71	16-18	>444	MT18HS	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.67	Horz(CT)	0.06	11	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Attic	-0.31	15-16	538		
								Weight: 359 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 6-7: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-1-1 oc purlins, except 2-0-0 oc purlins (5-0-7 max.): 6-7.
BOT CHORD 2x8 SP No.2 *Except* 14-16: 2x6 SP No.2, 13-17: 2x8 SP DSS	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 6-16,7-14: 2x4 SP No.2	WEBS 1 Row at midpt 5-16, 8-14, 19-20 1 Brace at Jt(s): 19, 20
	JOINTS This truss requires both edges of the bottom chord be sheathed in the room area.

**REACTIONS.** (lb/size) 2=1500/0-3-8, 11=1279/0-3-8, 15=1323/0-3-8  
 Max Horz 2=178(LC 12)  
 Max Uplift 2=170(LC 12), 11=-15(LC 13), 15=-103(LC 13)  
 Max Grav 2=1580(LC 26), 11=1299(LC 2), 15=1546(LC 27)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3047/453, 3-5=-2833/412, 5-6=-1793/264, 6-7=-1570/294, 7-8=-1671/256,  
 8-10=-2184/354, 10-11=-2407/396  
 BOT CHORD 2-18=-338/2671, 16-18=-164/2118, 15-16=0/1536, 14-15=0/1551, 12-14=-68/1733,  
 11-12=-263/2107  
 WEBS 3-18=-340/235, 5-18=-106/816, 5-16=-894/333, 16-19=-44/471, 6-19=0/466,  
 14-20=-215/337, 7-20=-110/382, 8-14=-661/296, 8-12=-90/470, 10-12=-367/239

- 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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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.
  - All plates are 5x9 MT20 unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Ceiling dead load (5.0 psf) on member(s). 19-20; Wall dead load (5.0psf) on member(s).16-19, 14-20
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 15-16, 14-15
  - All bearings are assumed to be User Defined crushing capacity of 425 psi.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 11, and 15.  
This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



July 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	20 MASON POINTE - ROOF	137903350
140.1445.C	V1	Valley	1	1		

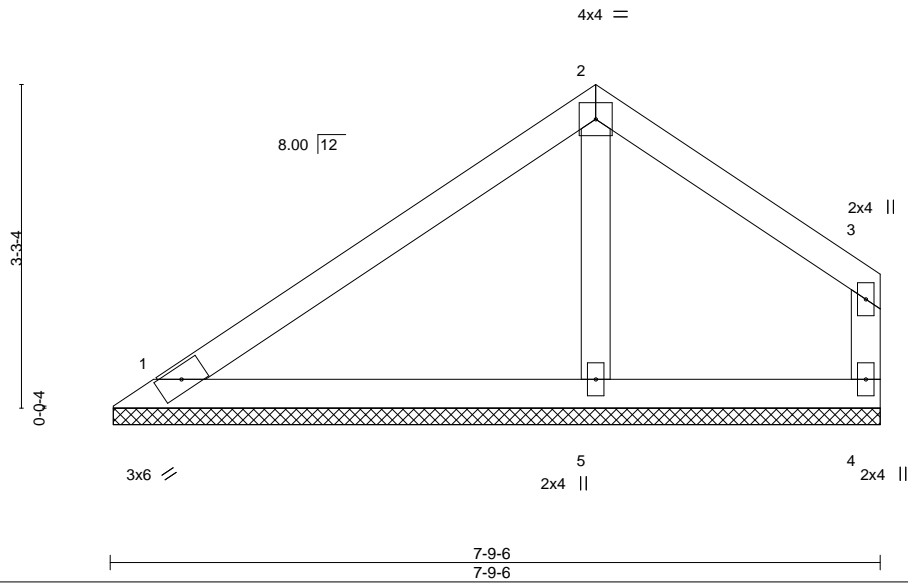
84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:39 2019 Page 1

ID:IApZhts0ReLOVUWCHSrvZPyHLgv-0nhkvtKtzn1S7fjJolk7aSxv2?aOfcshmk6Llyv7iQ



Scale = 1:23.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.38	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00		n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 30 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 7-9-6 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 1=169/7-9-0, 4=95/7-9-0, 5=308/7-9-0  
 Max Horz 1=74(LC 12)  
 Max Uplift 1=-26(LC 12), 4=-52(LC 13), 5=-14(LC 12)  
 Max Grav 1=169(LC 1), 4=102(LC 20), 5=310(LC 19)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be User Defined crushing capacity of 425 psi.
- n/a
- n/a



**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 140.1445.C	Truss V2	Truss Type Valley	Qty 1	Ply 1	20 MASON POINTE - ROOF	I37903351
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84 Components (Dunn),

Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:39 2019 Page 1

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3x6 =

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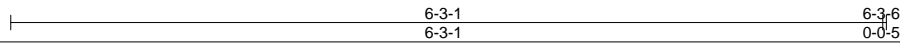
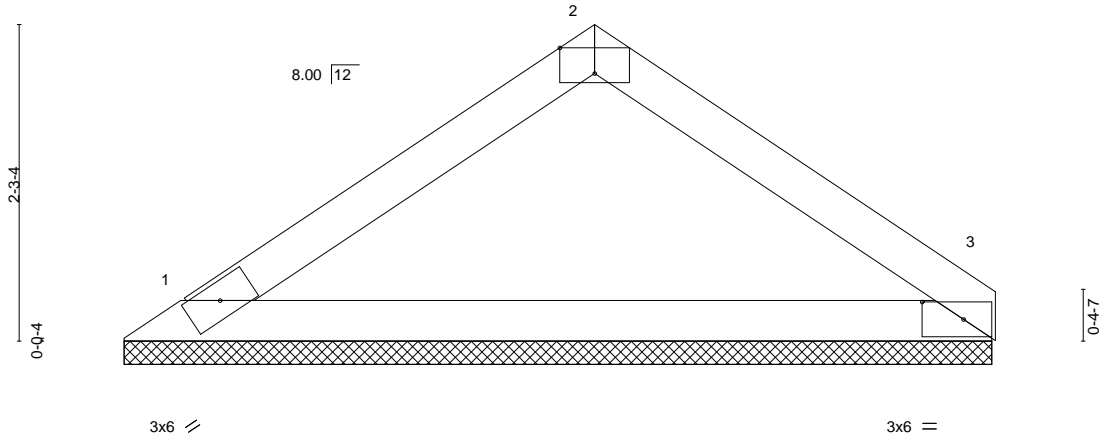


Plate Offsets (X,Y)--	[2:0-3-0,Edge], [3:0-3-9,0-1-8]									
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.43	Vert(CT)	n/a	-	n/a	999		
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-P						Weight: 20 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

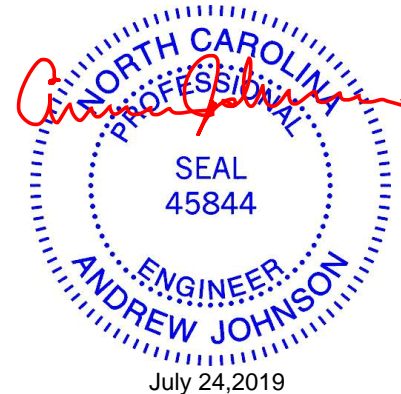
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 1=231/6-2-11, 3=231/6-2-11  
Max Horz 1=48(LC 9)  
Max Uplift 1=-25(LC 12), 3=-24(LC 13)

**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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be User Defined crushing capacity of 425 psi.
- n/a
- n/a



**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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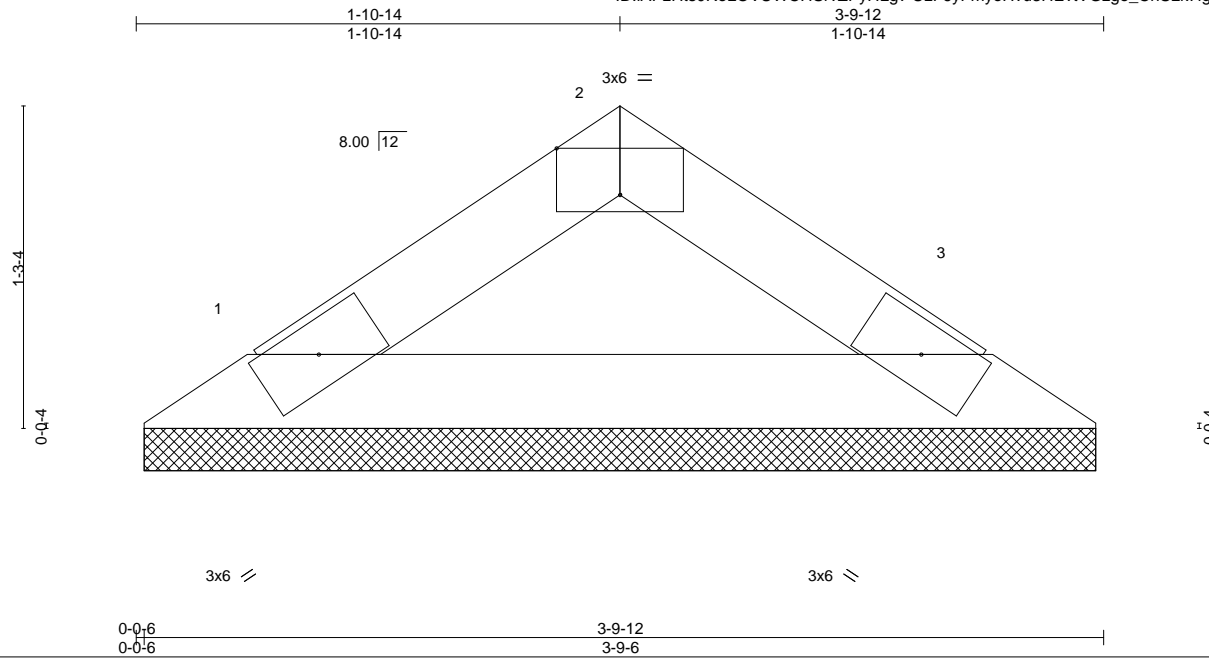


Job 140.1445.C	Truss V3	Truss Type Valley	Qty 1	Ply 1	20 MASON POINTE - ROOF	137903352
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84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:40 2019 Page 1

ID: IAPzHts0ReLOVUWCHSrvZPyHLgv-UzF6yFmyeHvu3HEvtVGzgo\_CnSLk7ig0wQUfuByv7iP



Scale = 1:9.1

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.06	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.16	Vert(LL) n/a - n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Vert(CT) n/a - n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
				Weight: 11 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-9-12 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 1=114/3-9-0, 3=114/3-9-0  
 Max Horz 1=-23(LC 8)  
 Max Uplift 1=-12(LC 12), 3=-12(LC 13)

**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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be User Defined crushing capacity of 425 psi.
- n/a



July 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.

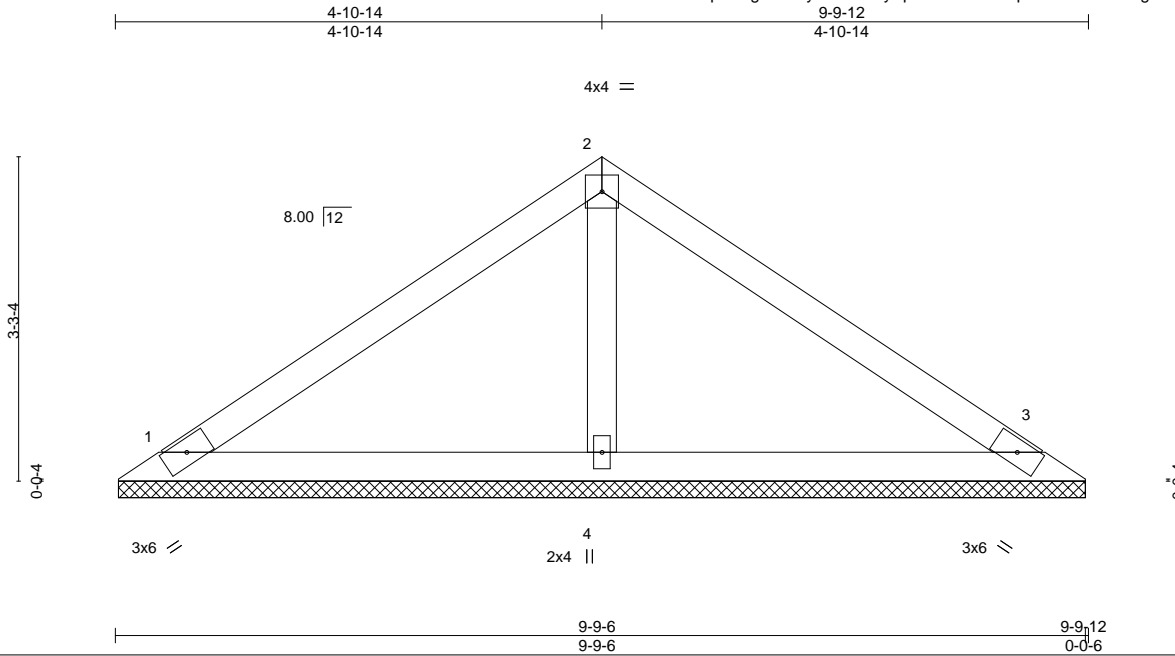
ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932



Job 140.1445.C	Truss VP1	Truss Type Valley	Qty 1	Ply 1	20 MASON POINTE - ROOF	137903353
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84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:41 2019 Page 1  
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Scale = 1:23.2

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 0.28	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 34 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) 1=174/9-9-0, 3=174/9-9-0, 4=359/9-9-0  
 Max Horz 1=-73(LC 8)  
 Max Uplift 1=-32(LC 12), 3=-42(LC 13), 4=-12(LC 12)

**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; BC DL=6.0psf; h=30ft; Cat. II; Exp B; 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be User Defined crushing capacity of 425 psi.
- n/a
- n/a



**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.



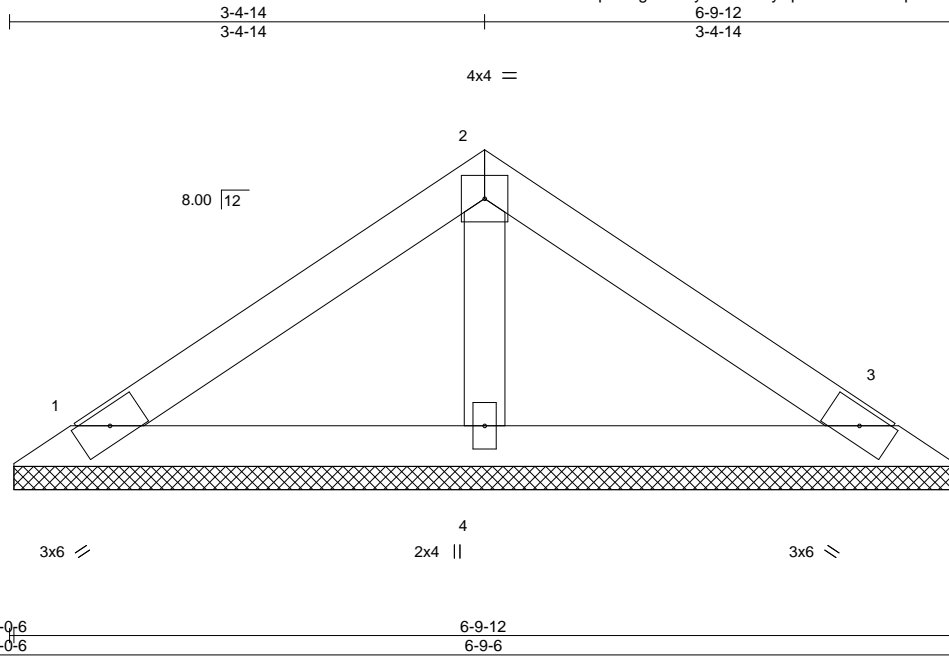
818 Soundside Road  
 Edenton, NC 27932

Job 140.1445.C	Truss VP2	Truss Type Valley	Qty 1	Ply 1	20 MASON POINTE - ROOF	137903354
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84 Components (Dunn), Dunn, NC - 28334,

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:41 2019 Page 1

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Scale = 1:16.5

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 0.16	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	3	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  
 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) 1=126/6-9-0, 3=126/6-9-0, 4=215/6-9-0  
 Max Horz 1=48(LC 9)  
 Max Uplift 1=-28(LC 12), 3=-34(LC 13)

**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; BC DL=6.0psf; h=30ft; Cat. II; Exp B; 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be User Defined crushing capacity of 425 psi.
- n/a



July 24, 2019

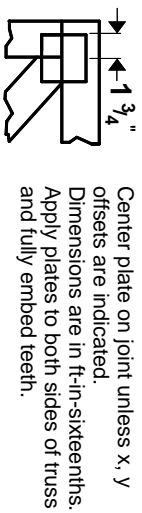
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before 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

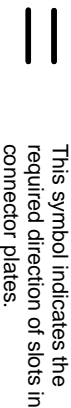


# Symbols

## PLATE LOCATION AND ORIENTATION



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



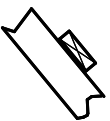
\* Plate location details available in **MITrak 20/20 software or upon request.**

## PLATE SIZE

4 X 4

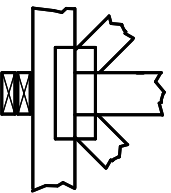
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING

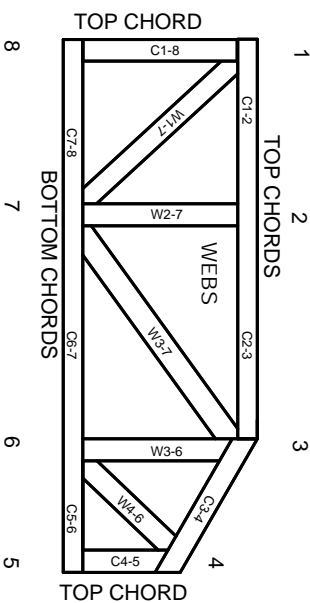


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

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

# Numbering System



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



# General Safety Notes

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

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