ENGINEERING BY TRENCO
A MiTek Affiliate

RE: 140.1445.C
36 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

1 of 1   Johnson, Andrew

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	AE	Common Supported Gable	1	1		I37903319
					Job Reference (optional)	

84 Components (Dunn),   Dunn, NC - 28334,   8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:20:54 2019 Page 1
ID:IAPzHts0ReLOVUWCHSrvZPyHLgv-q7TjIXC5T86PYCj3ArSAo54LRvg0LufFLGLEHryv7j7
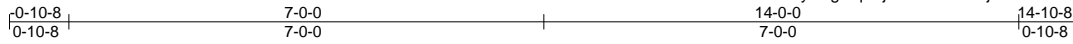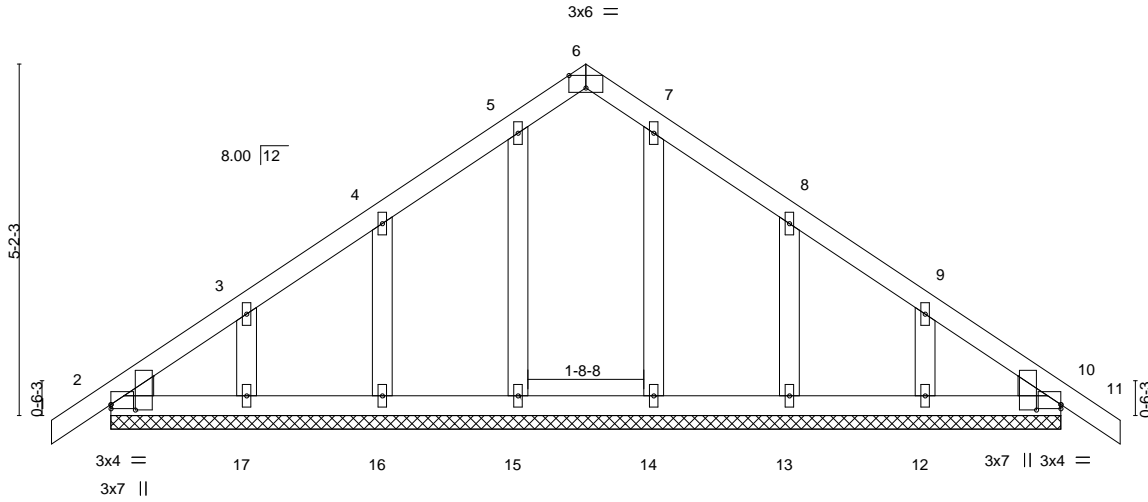
Scale = 1:34.0

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]

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	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	10	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	10	n/a	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-
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 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
   Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
9) n/a

North Carolina Professional Engineer Seal 45844 — Andrew Johnson

July 24,2019

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

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	AG	Common Girder	1	**2**		I37903320
					Job Reference (optional)	

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

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:20:57 2019 Page 1
ID:IAPzHts0ReLOVUWCHSrvZPyHLgv-Fi9swYF_m3U_PgSerz?tQjikt7ZzY47h1EZutAyv7j4
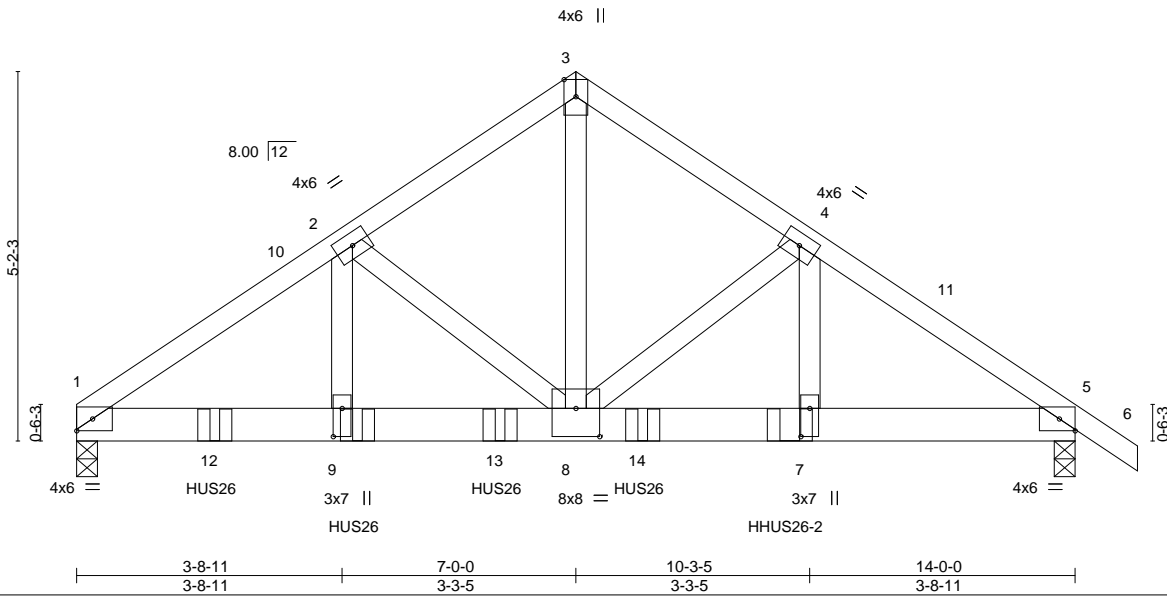

Scale: 3/8"=1'

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]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d		PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.07	7-8	>999	240		MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.14	7-8	>999	180			
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.76	Horz(CT)	0.04	5	n/a	n/a			
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S								Weight: 169 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP DSS
WEBS 2x4 SP No.3 *Except*
  3-8: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (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)

FORCES. (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-
1) 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.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) 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) 0-1-12 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
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) 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.
8) 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.
9) 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.
10) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

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

NORTH CAROLINA
PROFESSIONAL
SEAL
45844
ENGINEER
ANDREW JOHNSON

July 24, 2019

Job	Truss	Truss Type	Qty	**Ply**	36 MASON POINTE - ROOF	
140.1445.C	AG	Common Girder	1	**2**		I37903320
					Job Reference (optional)	

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

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:20:58 2019 Page 2
ID:IAPzHts0ReLOVUWCHSrvZPyHLgv-jujE8uGcXNcr1q1rPhW6zxFvdXvCHXNqGuJRQdyv7j3

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)

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	C1	Piggyback	1	1		I37903321
					Job Reference (optional)	

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

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:20:58 2019 Page 1
ID:IAPzHts0ReLOVUWCHSrvZPyHLgv-jujE8uGcXNcr1q1rPhW6zxF_cXz_HiGqGuJRQdyv7j3
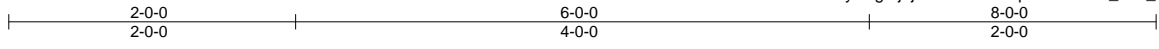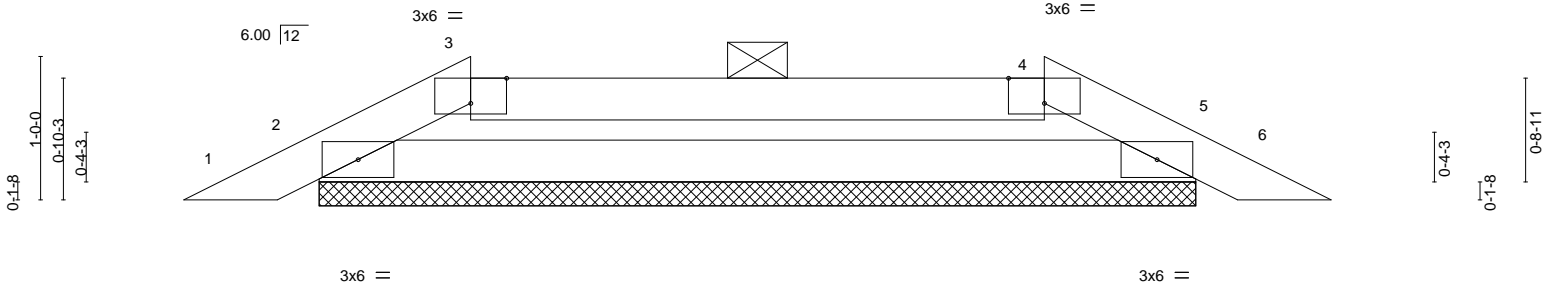
Scale: 3/4"=1'

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	0.00	6	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.35	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%

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

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

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.

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.

NORTH CAROLINA
PROFESSIONAL
SEAL
45844
ENGINEER
ANDREW JOHNSON

July 24,2019

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

ID:IAPzHts0ReLOVUWCHSrvZPyHLgv-fHq_ZaHs3_tZG7ADX5Za2MKLJKiSlcH7jBoYUVyv7j1
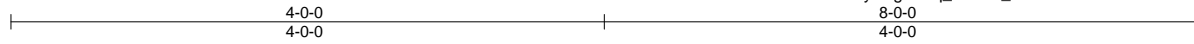
Scale = 1:15.5
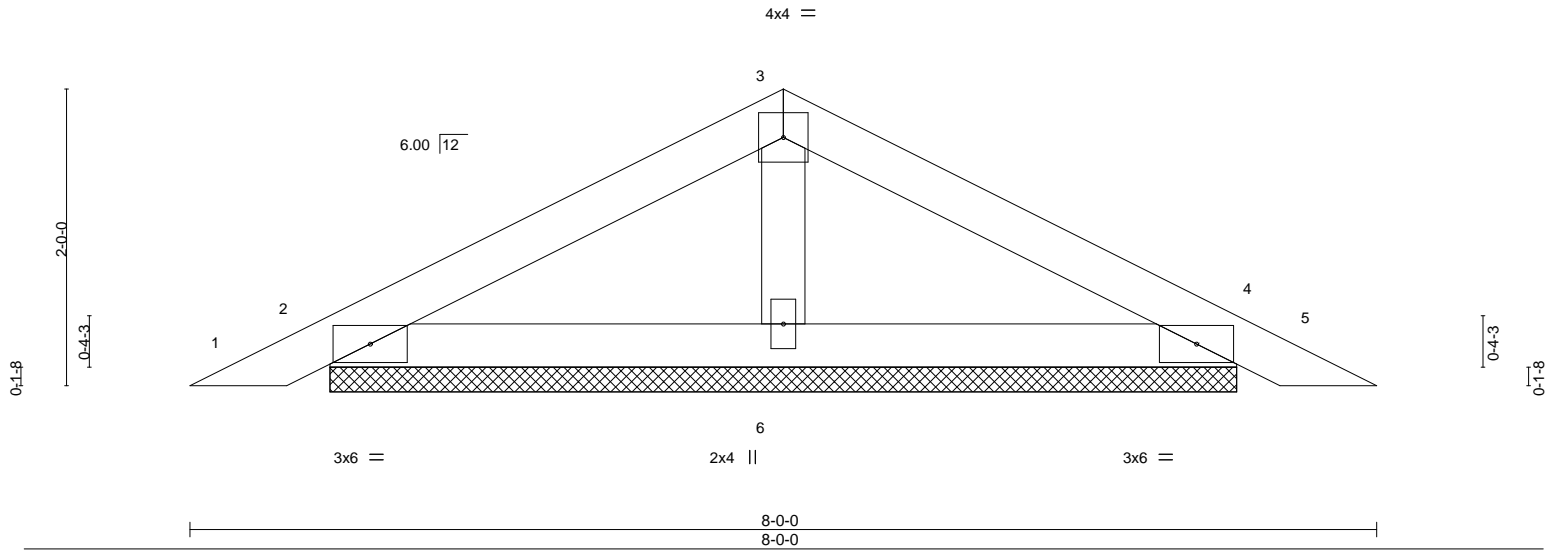
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	0.00	5	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	0.01	5	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		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-
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) Gable requires continuous bottom chord bearing.
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) n/a
8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building
   designer.

July 24,2019

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

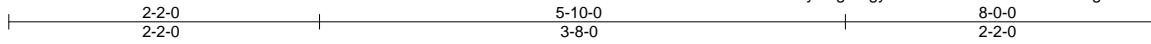| Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	C3	Piggyback	1	1		I37903323
					Job Reference (optional)	

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

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:02 2019 Page 1
ID:IAPzHts0ReLOVUWCHSrvZPyHLgv-bgylzGJ7bb7HWRKceWb27nQgF8K0DWFQBVHfZOyv7j?

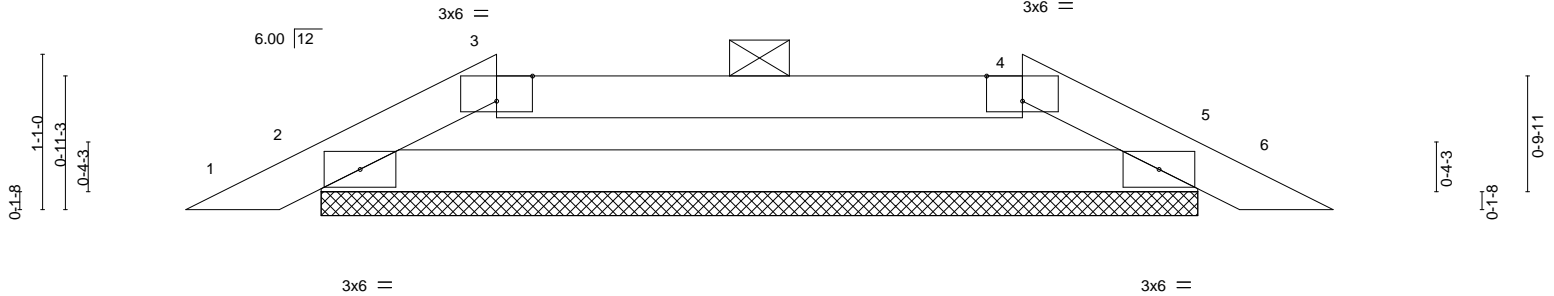| 2-2-0	5-10-0	8-0-0
2-2-0	3-8-0	2-2-0

Scale: 3/4"=1'

| | 8-0-0 | |
| | 8-0-0 | |

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.19	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%

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

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

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.

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.
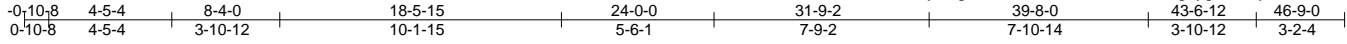
July 24,2019

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

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	H1	Hip	1	1		I37903324
					Job Reference (optional)	

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

Scale = 1:83.1

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]

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	0.94	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%

LUMBER-
TOP CHORD   2x6 SP No.2 *Except*
1-4,7-10: 2x4 SP No.2
BOT CHORD   2x8 SP No.2
WEBS   2x4 SP No.3 *Except*
5-17,6-11: 2x4 SP DSS
SLIDER   Right 2x4 SP No.3 -H 1-6-0

BRACING-
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   Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS   1 Row at midpt   5-13
2 Rows at 1/3 pts   5-17, 6-11

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; 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) 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

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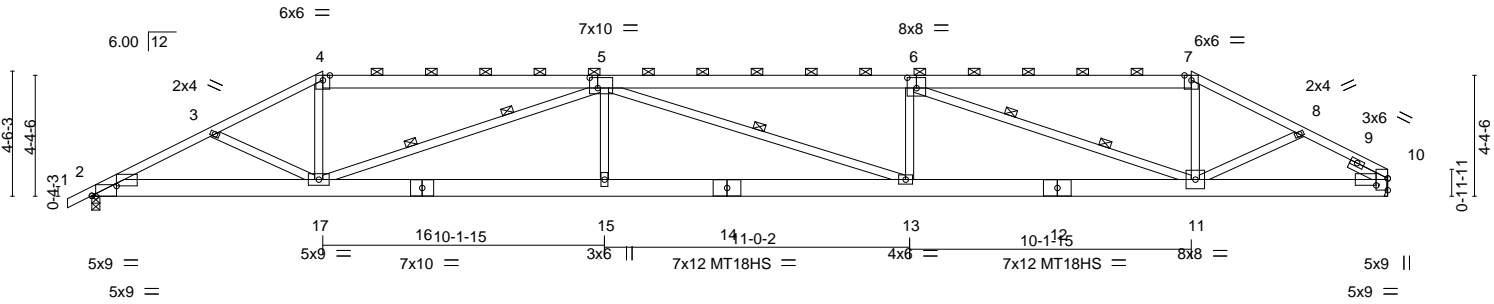A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:09 2019 Page 1
ID:IAPzHts0ReLOVUWCHSrvZPyHLgv-u0tORfOWxl?HrWMyYUDhvFCkNybHMWISo5TWHUyv7iu
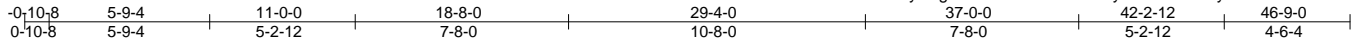
Scale = 1:82.8
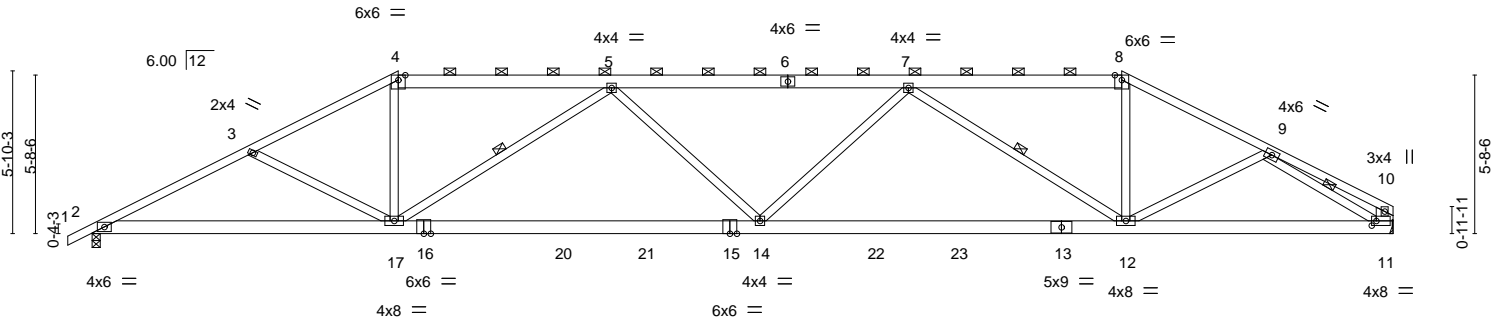
Plate Offsets (X,Y)--   [11:0-2-0,0-2-0]

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	0.71	Vert(LL)	-0.29	14-17	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.62	14-17	>900	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.14	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 295 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.2 *Except*
4-6,6-8: 2x6 SP No.2
BOT CHORD   2x6 SP DSS *Except*
15-16: 2x6 SP No.2
WEBS   2x4 SP No.3 *Except*
10-11: 2x8 SP No.2

BRACING-
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   Rigid ceiling directly applied or 8-2-15 oc bracing.
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-
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=174.
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.

NORTH CAROLINA
PROFESSIONAL
SEAL
45844
ENGINEER
ANDREW JOHNSON

July 24,2019

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	H3	Roof Special	1	1		I37903326
					Job Reference (optional)	

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

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:10 2019 Page 1
ID:IAPzHts0ReLOVUWCHSrvZPyHLgv-MCRmf?P8i378Tgx86CkwSTlt4MwU5zmb0lD4qwyv7it

Scale = 1:85.6

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]

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	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.50	14-16	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.16	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 319 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.2 *Except*
     5-6,7-8,6-7: 2x6 SP No.2
BOT CHORD   2x6 SP No.2
WEBS   2x4 SP No.3 *Except*
     10-11: 2x8 SP No.2

BRACING-
TOP CHORD   Structural wood sheathing directly applied, except end verticals, and
     2-0-6 oc purlins (3-7-5 max.): 5-8.
BOT CHORD   Rigid ceiling directly applied or 2-2-0 oc bracing.
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.

NORTH CAROLINA
PROFESSIONAL
SEAL
45844
ENGINEER
ANDREW JOHNSON

July 24,2019

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	H4	Roof Special	1	1		I37903327
					Job Reference (optional)	

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

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:11 2019 Page 1
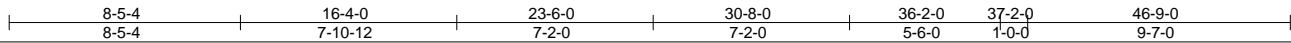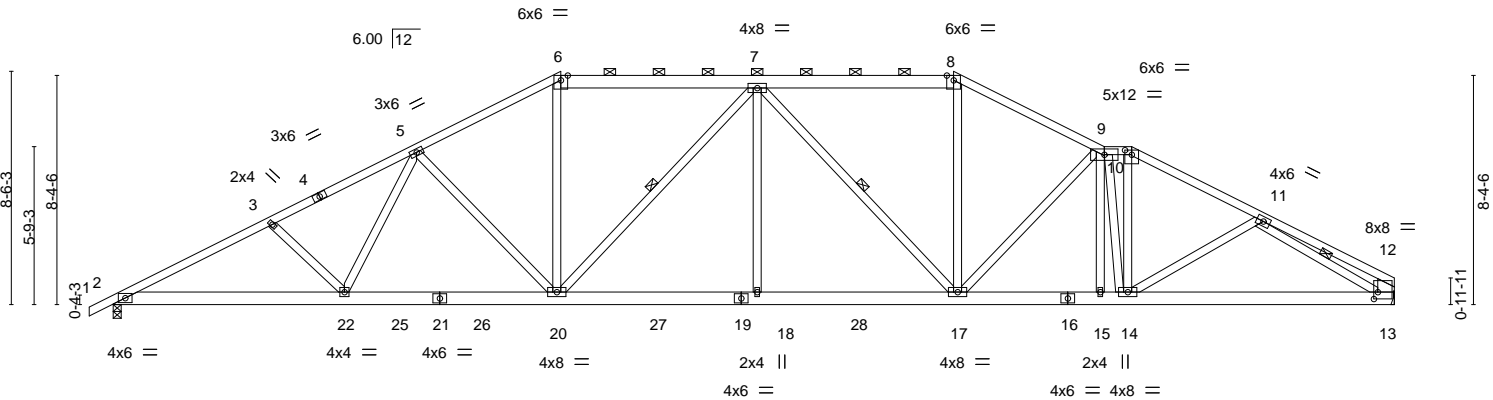ID:IAPzHts0ReLOVUWCHSrvZPyHLgv-qO?8sLQmTMF?5pWLgvF9_gH5FmHtqSllFPydMMyv7is

Scale = 1:84.1

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]

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	0.69	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%

LUMBER-
TOP CHORD   2x4 SP No.2 *Except*
6-8: 2x6 SP No.2
BOT CHORD   2x6 SP No.2
WEBS   2x4 SP No.3 *Except*
12-13: 2x8 SP No.2

BRACING-
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   Rigid ceiling directly applied or 8-7-1 oc bracing.
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; 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)
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.
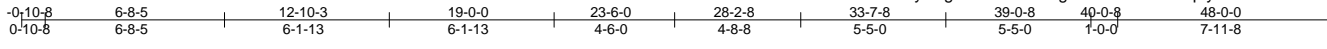
ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	H5	ROOF SPECIAL	1	1		I37903328
					Job Reference (optional)	

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

8.310 s Jun 11 2019 MiTek Industries, Inc.   Tue Jul 23 16:21:12 2019   Page 1
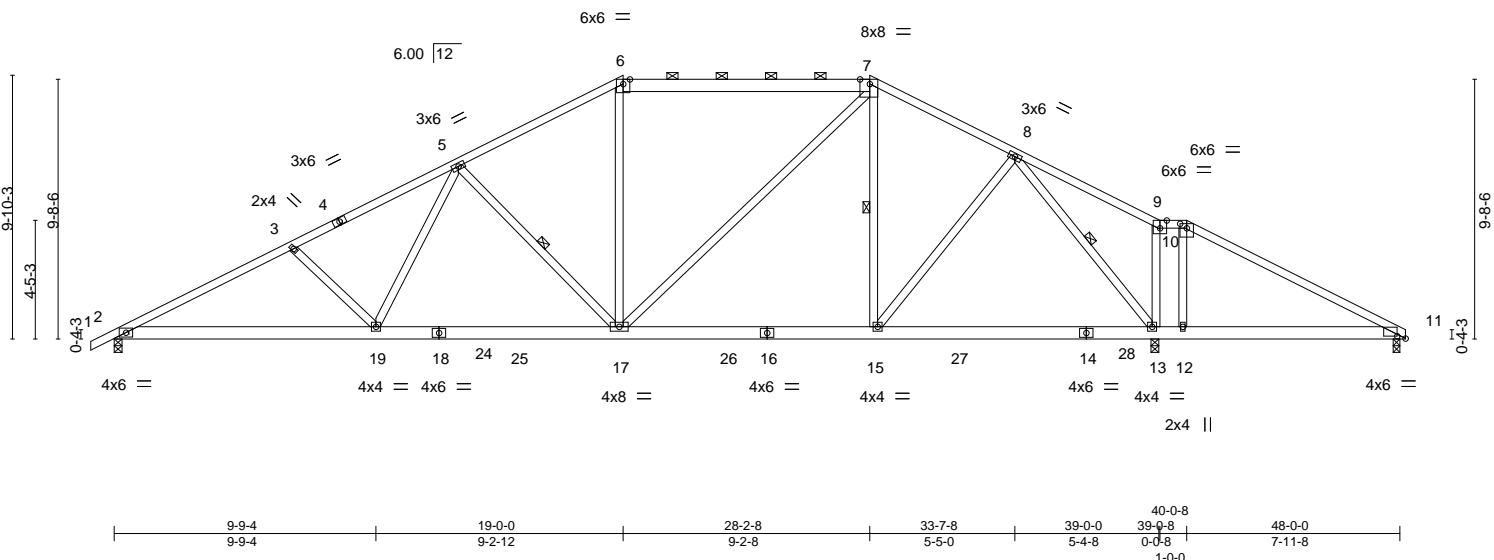ID:IAPzHts0ReLOVUWCHSrvZPyHLgv-IbZX4hQOEgNsiz5XEdmPXuqFyAeDZsHuU3iBupyv7ir

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]

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	0.75	Vert(LL)	-0.14	17-19	>999	240		MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.28	19-21	>999	180			
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%

LUMBER-
TOP CHORD   2x4 SP No.2 *Except*
    6-7: 2x6 SP No.2
BOT CHORD   2x6 SP No.2
WEBS   2x4 SP No.3 *Except*
    7-17: 2x4 SP No.2

BRACING-
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   Rigid ceiling directly applied or 6-0-0 oc bracing.
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; 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) 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.

NORTH CAROLINA
PROFESSIONAL
SEAL
45844
ENGINEER
ANDREW JOHNSON

July 24,2019

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

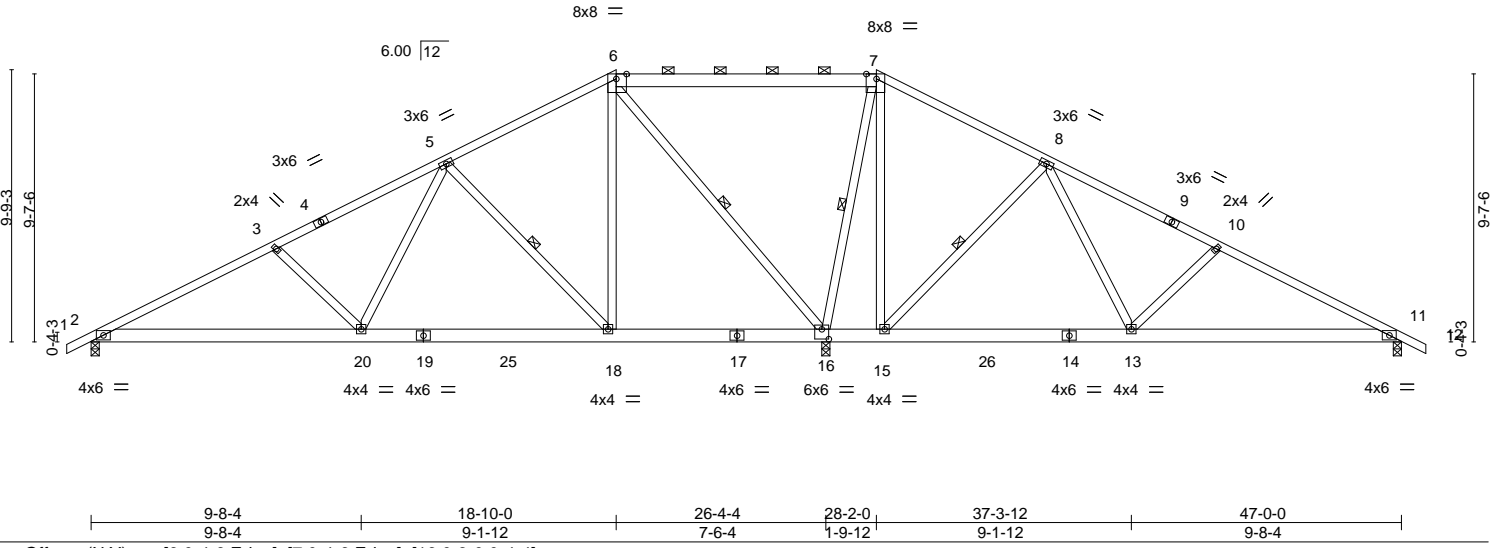| Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	H8	Hip	1	1		I37903329
					Job Reference (optional)	

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:IAPzHts0ReLOVUWCHSrvZPyHLgv-nn7vH0R0?_VjK7gjnKHe35NQqa22IFM1jjRkRFyv7iq

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]

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	0.75	Vert(LL)	0.14	20-22	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.17	20-22	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.02	16	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 312 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.2 *Except*
6-7: 2x6 SP No.2
BOT CHORD   2x6 SP No.2
WEBS   2x4 SP No.3

BRACING-
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   Rigid ceiling directly applied or 6-0-0 oc bracing.
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-
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) 16. 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 11. 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.

SEAL
45844
NORTH CAROLINA
PROFESSIONAL
ENGINEER
ANDREW JOHNSON

July 24,2019

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

| Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	H9	Hip	1	1		I37903330
					Job Reference (optional)	

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:IAPzHts0ReLOVUWCHSrvZPyHLgv-FzgHVMSemHdayHFvL2ptcJvbyzO71IcBxNBHzhyv7ip

Scale = 1:83.1

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	0.10	21-23	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.15	17-19	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.02	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 315 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
   6-8: 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
   6-17: 2x4 SP No.2

BRACING-
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 Rigid ceiling directly applied or 6-0-0 oc bracing.
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; 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) 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.

NORTH CAROLINA
PROFESSIONAL
SEAL
45844
ENGINEER
ANDREW JOHNSON

July 24,2019

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

| Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	H10	Hip	1	1		I37903331
					Job Reference (optional)	

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

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:05 2019 Page 1
ID:IAPzHts0ReLOVUWCHSrvZPyHLgv-0EetcHL?uWVsNu3BJf8llP15NLJJQfLstTVJ8jyv7iy
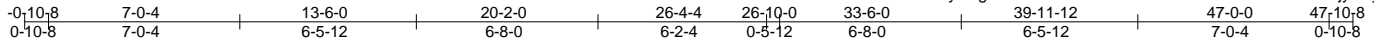
Scale = 1:84.6

Plate Offsets (X,Y)--   [17:0-3-0,0-4-0]
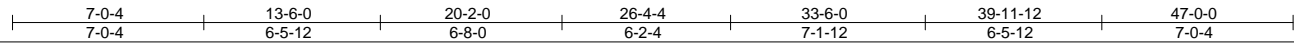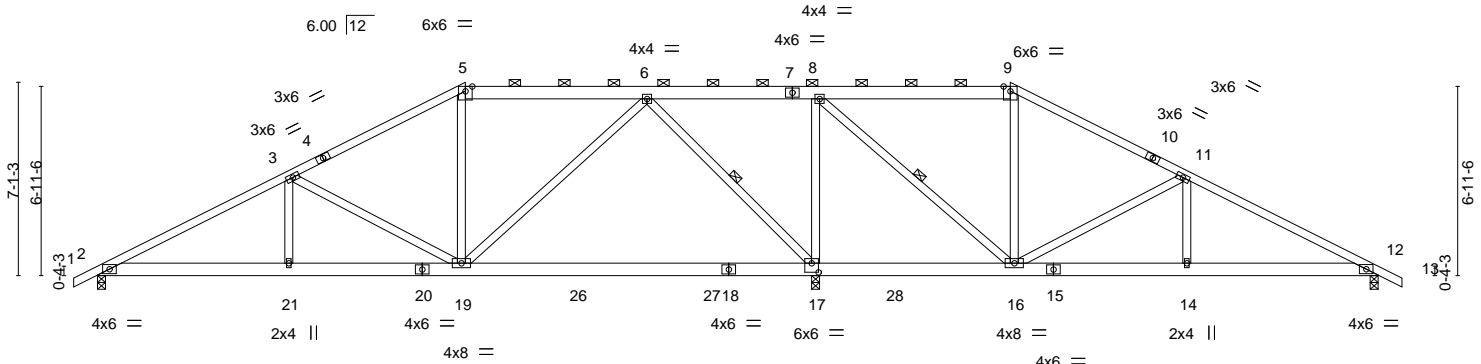
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.20	17-19	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.36	17-19	>883	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.02	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 302 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 4-3-12 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 5-9.
BOT CHORD   Rigid ceiling directly applied or 6-0-0 oc bracing.
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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	H11	Hip	1	1		I37903332
					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:IAPzHts0ReLOVUWCHSrvZPyHLgv-URBFpdMdfqdj_2eNtMf_HdaF7lf09Bf067Fsh9yv7ix

Scale = 1:83.1

Plate Offsets (X,Y)--   [6:0-3-4,0-4-8]
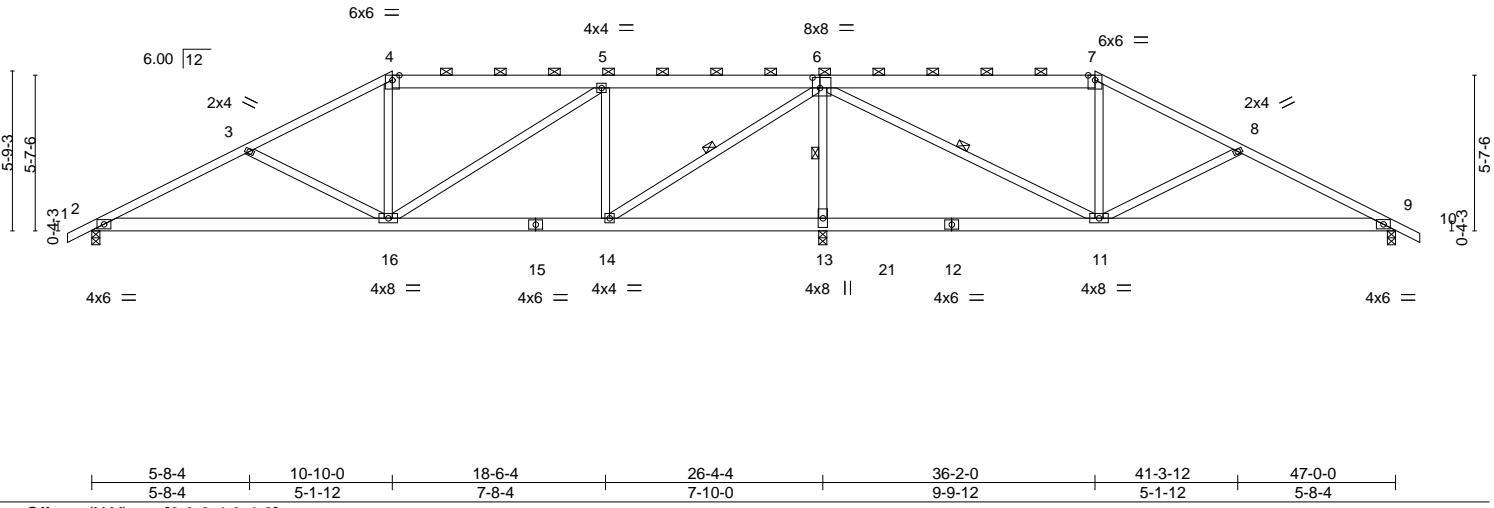
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	0.18	16-18	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.24	16-18	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.02	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 296 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.2 *Except*
4-6,6-7: 2x6 SP No.2
BOT CHORD   2x6 SP No.2
WEBS   2x4 SP No.3

BRACING-
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   Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS   1 Row at midpt   6-14, 6-13, 6-11

REACTIONS.   (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)

FORCES.   (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-
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) 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) 13. 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.

NORTH CAROLINA
PROFESSIONAL
SEAL
45844
ENGINEER
ANDREW JOHNSON

July 24,2019

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

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	H12	Hip	1	1		I37903333
					Job Reference (optional)	

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

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:08 2019 Page 1
ID:IAPzHts0ReLOVUWCHSrvZPyHLgv-QpJ0EJNtARtQEMnm?niSN2fYlZFjd1MIZRkzl1yv7iv

Scale = 1:83.3
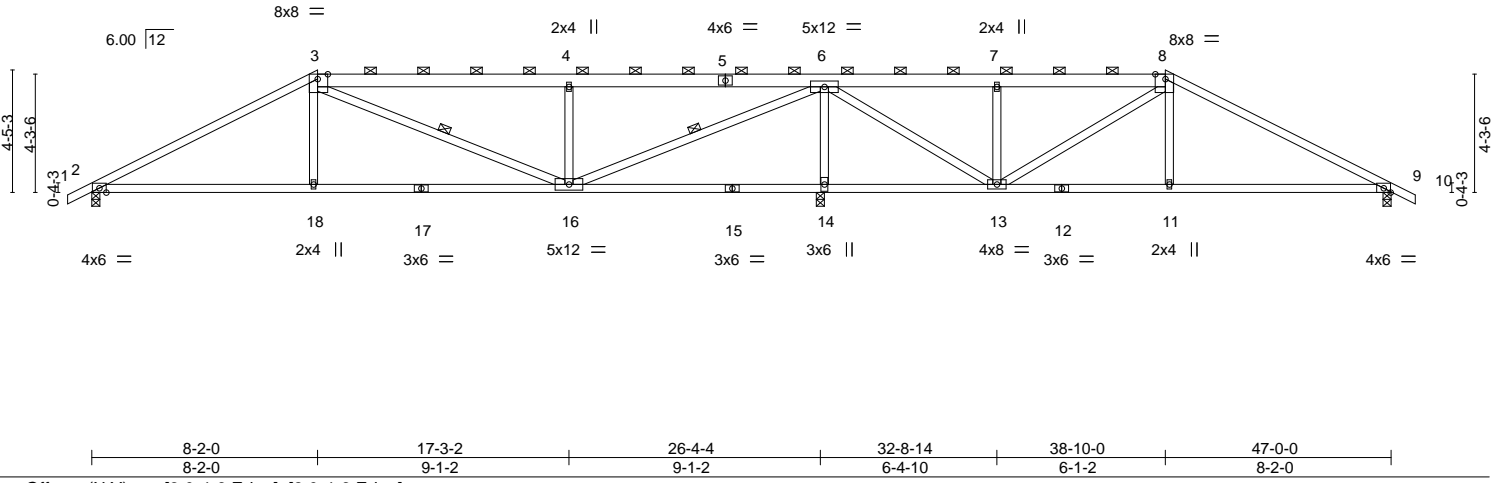
Plate Offsets (X,Y)--   [3:0-4-6,Edge], [8:0-4-6,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.83	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%

LUMBER-
TOP CHORD   2x4 SP No.1 *Except*
3-5,5-8: 2x6 SP No.2
BOT CHORD   2x4 SP No.2
WEBS   2x4 SP No.3 *Except*
8-13: 2x4 SP No.2

BRACING-
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   Rigid ceiling directly applied or 6-0-0 oc bracing.
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; 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.
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

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

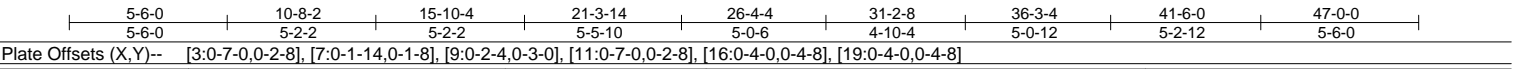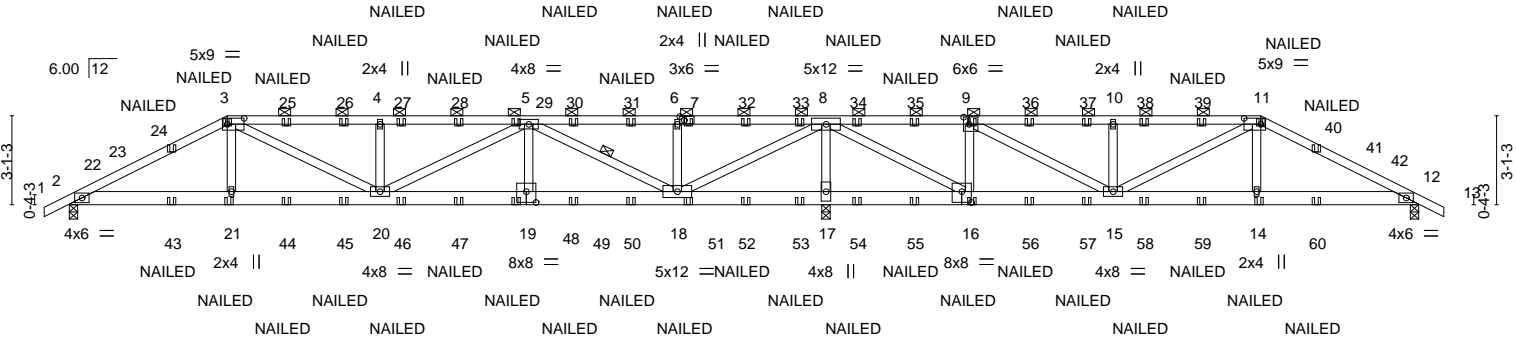| Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	HG1	Half Hip Girder	1	**2**		I37903334
					Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,
8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:23 2019 Page 1
ID:IAPzHts0ReLOVUWCHSrvZPyHLgv-UijhNRZIe2mIXfReNRT_TCnBfcL?eqCW0HsGngyv7ig

Scale = 1:80.3

Plate Offsets (X,Y)-- [5:0-3-0,0-4-8], [7:0-3-0,0-4-8], [11:0-3-0,0-4-8], [17:0-2-12,0-5-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	0.74	15-16	>758	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-1.13	15-16	>494	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.78	Horz(CT)	0.16	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 601 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.2 *Except*
1-3: 2x4 SP No.2
BOT CHORD   2x6 SP No.2 *Except*
14-17: 2x6 SP DSS
WEBS   2x4 SP No.3 *Except*
3-17,5-17,7-15,7-11,9-11: 2x4 SP No.2

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 5-1-15 oc purlins,
except end verticals, and 2-0-0 oc purlins (4-3-11 max.): 3-9.
BOT CHORD   Rigid ceiling directly applied or 8-9-6 oc bracing.

REACTIONS.   (lb/size)   10=2540/Mechanical, 2=2542/0-3-8
Max Horz 2=119(LC 12)
Max Uplift 10=-892(LC 9), 2=-743(LC 9)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-5257/1779, 3-4=-8817/3148, 4-5=-8815/3145, 5-6=-11047/3941, 6-7=-11047/3941,
7-8=-5702/2039, 8-9=-5702/2039, 9-10=-2426/943
BOT CHORD   2-18=-1632/4647, 17-18=-1629/4665, 16-17=-3909/10962, 15-16=-3914/10952,
13-15=-3357/9380, 11-13=-3353/9389
WEBS   3-18=0/452, 3-17=-1653/4492, 4-17=-658/442, 5-17=-2311/823, 5-16=0/396,
6-15=-521/368, 7-15=-627/1791, 7-13=0/383, 7-11=-3944/1405, 8-11=-586/418,
9-11=-2148/6009

NOTES-
1) 2-ply truss to be connected together with 10d (0.120"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) 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
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
will fit between the bottom chord and any other members.
8) All bearings are assumed to be User Defined crushing capacity of 425 psi.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
10=892.
11) Two 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.

July 24,2019

TRENCO
ENGINEERING BY
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	HG1	Half Hip Girder	1	**2**		I37903334
					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-UijhNRZIe2mIXfReNRT_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 guidlines.

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)

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	HG2	Hip Girder	1	1		I37903335
					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 1
ID:IAPzHts0ReLOVUWCHSrvZPyHLgv-uHPp0TbAxz8tO7AD2Z0h5rPfxpUPr8ByiE5wO?yv7id

Scale = 1:80.3

Plate Offsets (X,Y)-- [3:0-7-0,0-2-8], [7:0-1-14,0-1-8], [9:0-2-4,0-3-0], [11:0-7-0,0-2-8], [16:0-4-0,0-4-8], [19:0-4-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	0.15	19-20	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.24	19-20	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.96	Horz(CT)	0.03	17	n/a	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 guidlines.
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

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	HG2	Hip Girder	1	1		I37903335
					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)

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	J1	Jack-Open	40	1		I37903336
					Job Reference (optional)	

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:IAPzHts0ReLOVUWCHSrvZPyHLgv-MTzBDpcoiHGk0HkPcGYwe2yxFDvlaqS5xuqTwRyv7ic

Scale = 1:18.4
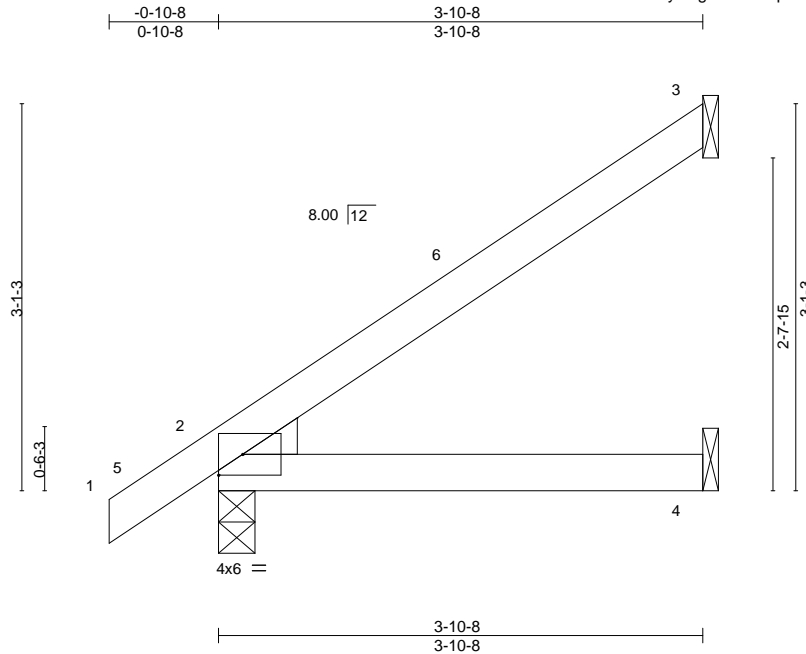
Plate Offsets (X,Y)-- [2:0-1-3,0-0-12], [2:0-5-13,0-1-9]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.24	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.

July 24,2019

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

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	J2	Jack-Open Girder	3	1		I37903337
					Job Reference (optional)	

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:lAPzHts0ReLOVUWCHSrvZPyHLgv-qgXaR9dQTbObdRJcA_39AGU6EdGwJHhF9Ya1Styv7ib
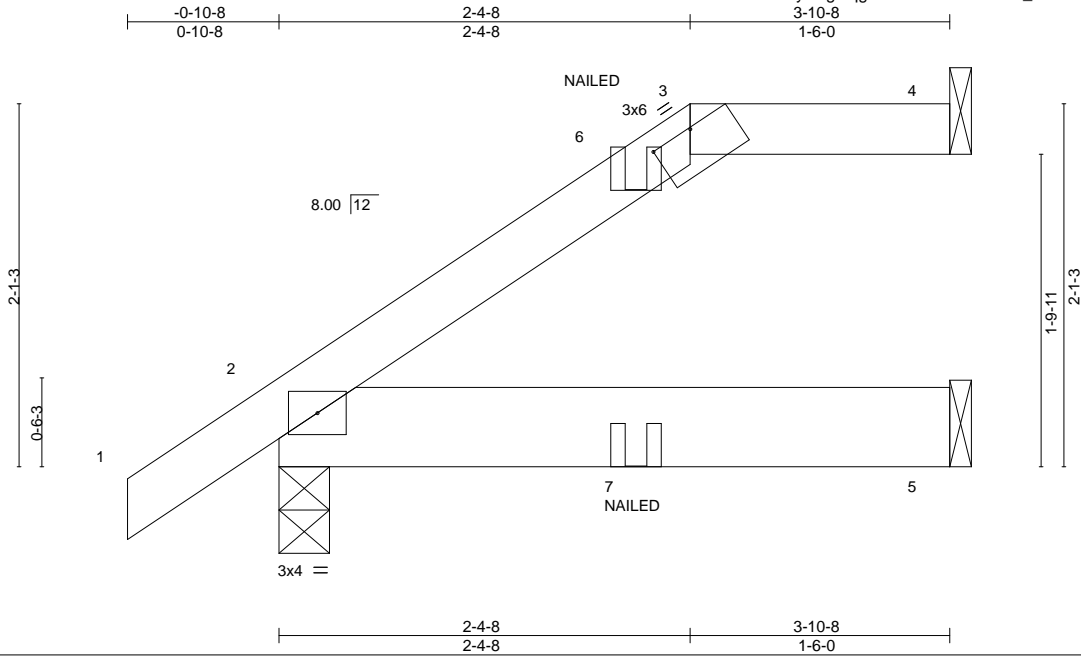
Scale = 1:13.3

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

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	0.22	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-
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; 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 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.
11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) 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

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

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	J3	Jack-Open	3	1		I37903338
					Job Reference (optional)	

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-qgXaR9dQTbObdRJcA_39AGU7QdGoJHhF9Ya1Styv7ib
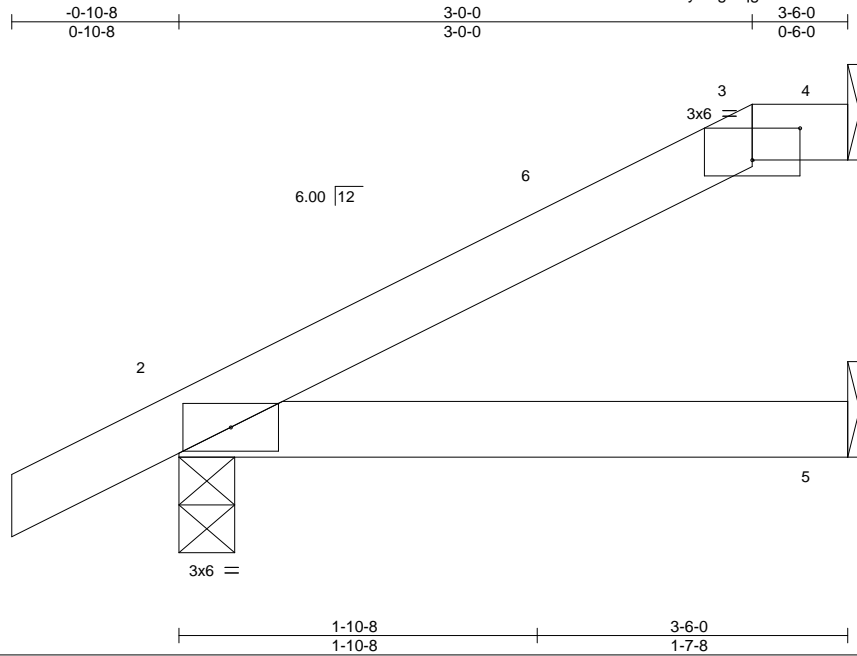
Scale: 1"=1'

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

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	0.15	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%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 3-6-0 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)   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; 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 3-0-0, 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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	P	Common	1	1		I37903339
					Job Reference (optional)	

84 Components (Dunn),   Dunn, NC - 28334,   8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:29 2019 Page 1
ID:WRU0VEQdOJp5FPgJ5XsbyzzDMSL-Js4yeVe2EuWSFauojhaOjT1GK0Zh2jcOOCJa?Kyv7ia

Scale = 1:26.4
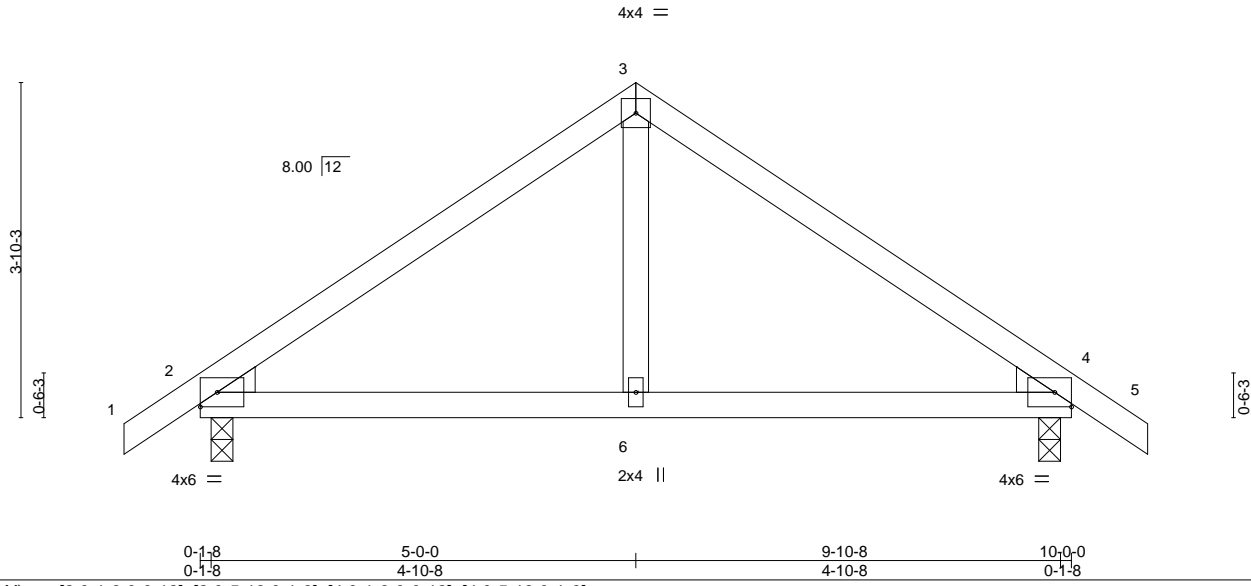
Plate Offsets (X,Y)--   [2:0-1-3,0-0-12], [2:0-5-13,0-1-9], [4:0-1-3,0-0-12], [4:0-5-13,0-1-9]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.02	6-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.04	6-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							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-
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; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be User Defined crushing capacity of 425 psi.
6) 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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	P1	Hip	1	1		I37903340
					Job Reference (optional)	

84 Components (Dunn),   Dunn, NC - 28334,
8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:30 2019 Page 1
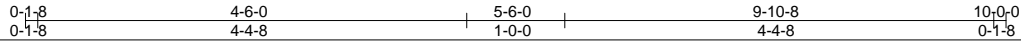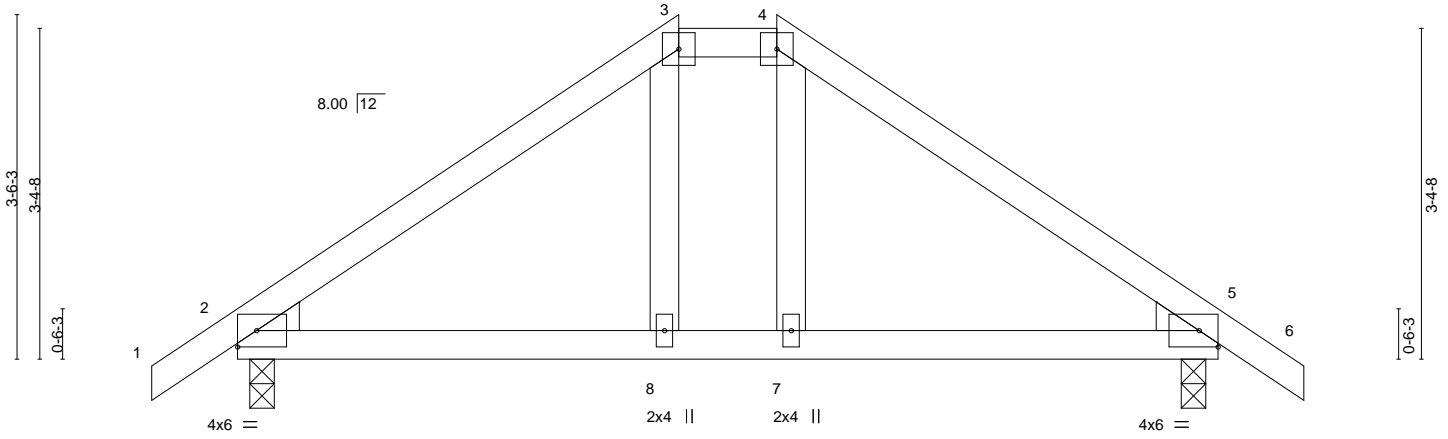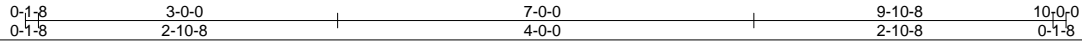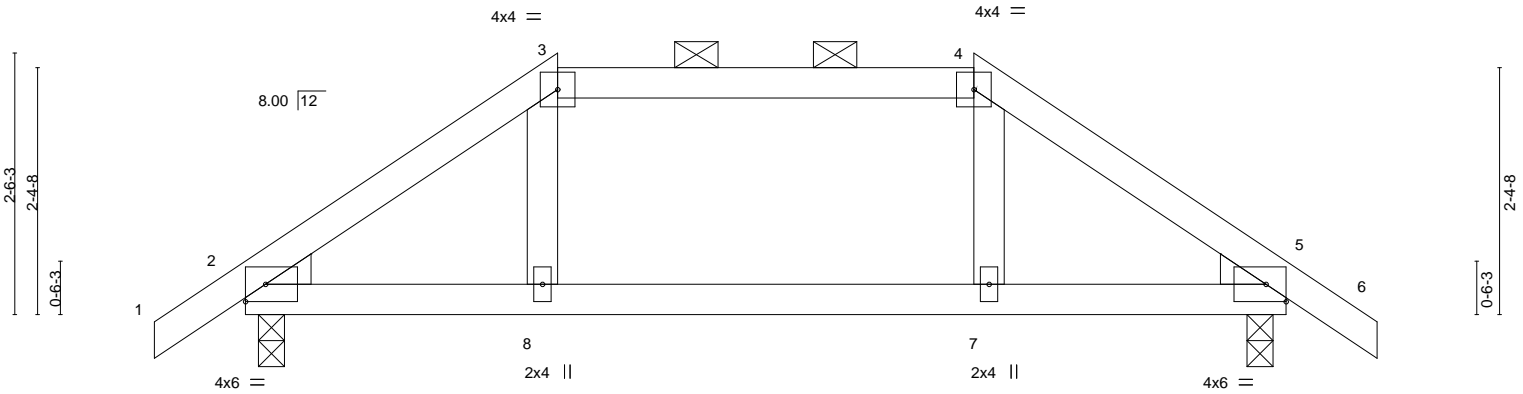ID:WRU0VEQdOJp5FPgJ5XsbyzzDMSL-n2eKrqeh?CeJtkT_HP5dGhaSjQwVnAWYds37Xmyv7iZ
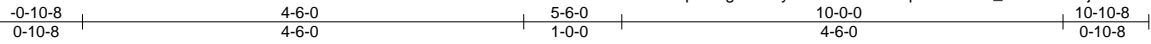
Scale = 1:23.5

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]

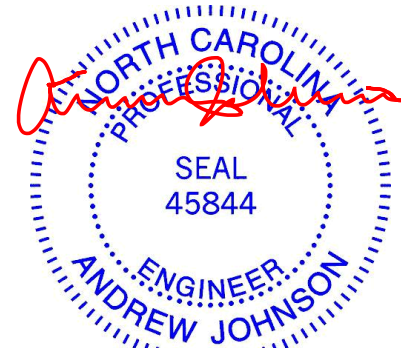| LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.02	7-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.03	7-14	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 46 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=-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-
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; 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) 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.
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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	P2	Hip	1	1		I37903341
					Job Reference (optional)	

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_HP5dGhaSZQx8nAKYds37Xmyv7iZ
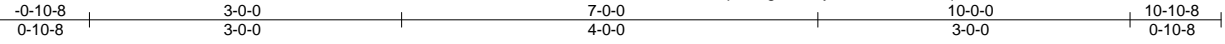
Scale = 1:22.1

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]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.02	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-
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; 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) 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.
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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	P3	Hip Girder	1	1		I37903342
					Job Reference (optional)	

84 Components (Dunn),   Dunn, NC - 28334,   8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:31 2019 Page 1
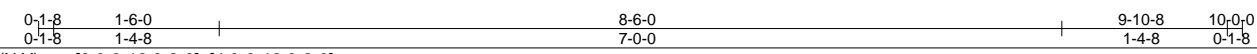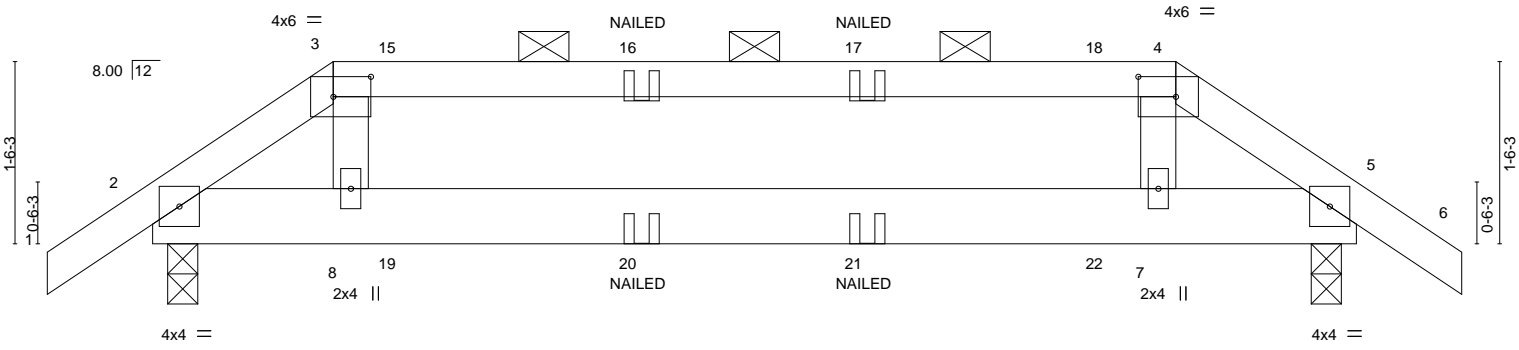ID:WRU0VEQdOJp5FPgJ5XsbyzzDMSL-FFCi3AfJmWm9Uu2Br6csou6TlqGNWcEhrWoh3Cyv7iY
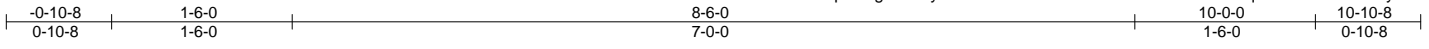
Scale = 1:19.1

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

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	0.84	Vert(LL)	-0.02	7-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.04	7-8	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.08	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 45 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins, except
            2-0-0 oc purlins (4-8-11 max.): 3-4.
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-
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; 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) 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.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) "NAILED" indicates 3-10d (0.148"x3) or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
10) 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.
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
1) 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)

July 24,2019

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

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	PJ1	Jack-Open	2	1		I37903343
					Job Reference (optional)	

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
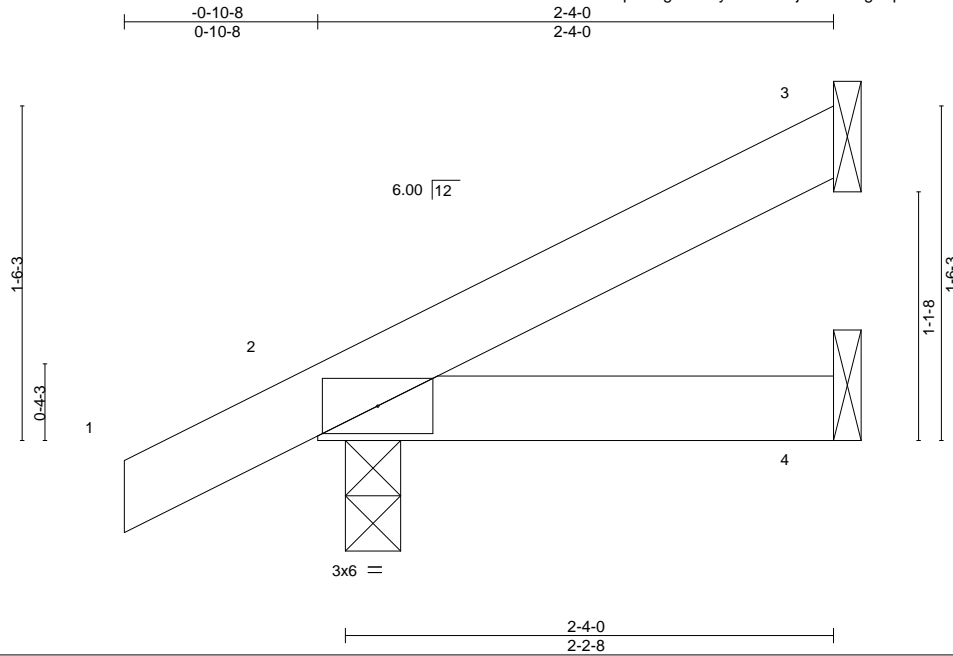
-0-10-8   2-4-0
0-10-8   2-4-0

Scale = 1:10.4

6.00 ⌐12

2-4-0
2-2-8

LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00	7	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	7	>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-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.

[Professional Engineer seal: NORTH CAROLINA PROFESSIONAL ENGINEER, SEAL 45844, ANDREW JOHNSON]

July 24,2019

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

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	PJ2	Jack-Open Girder	2	1		I37903344
					Job Reference (optional)	

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-BdKTUshZI71tkCCZyXeKtJC?Bez6_Xx_JqHo85yv7iW

Scale = 1:10.4

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.00	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-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 guidlines.
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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	PJ3	Half Hip	2	1		I37903345
					Job Reference (optional)	

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-BdKTUshZI71tkCCZyXeKtJC_4ezH_Xx_JqHo85yv7iW
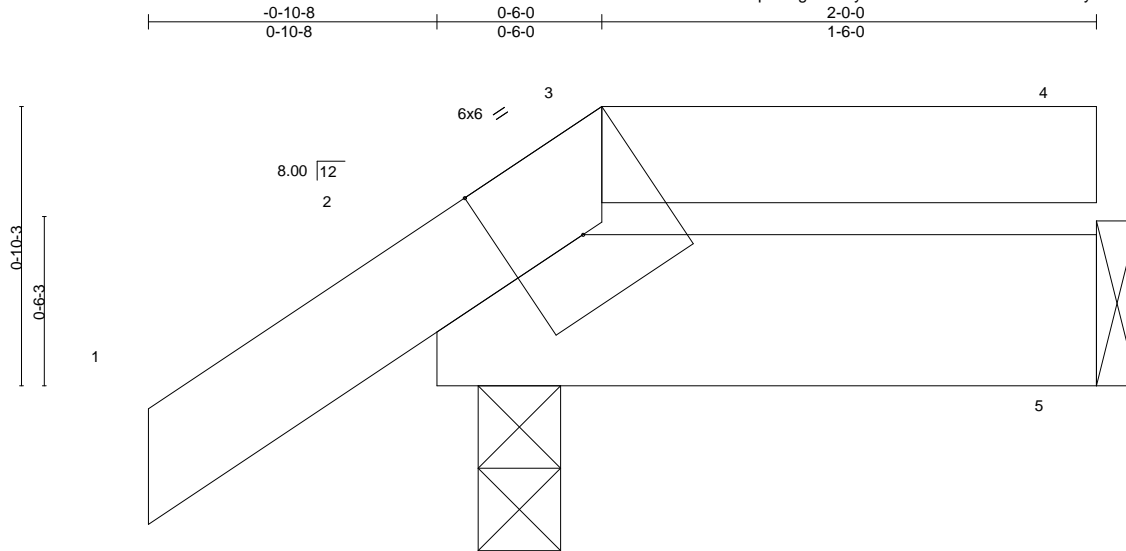
Scale = 1:7.0

Plate Offsets (X,Y)-- [2:0-3-3,0-0-0], [3:0-2-13,Edge], [3:0-1-0,0-1-7]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.00	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

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.

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.

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; 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.

July 24,2019

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

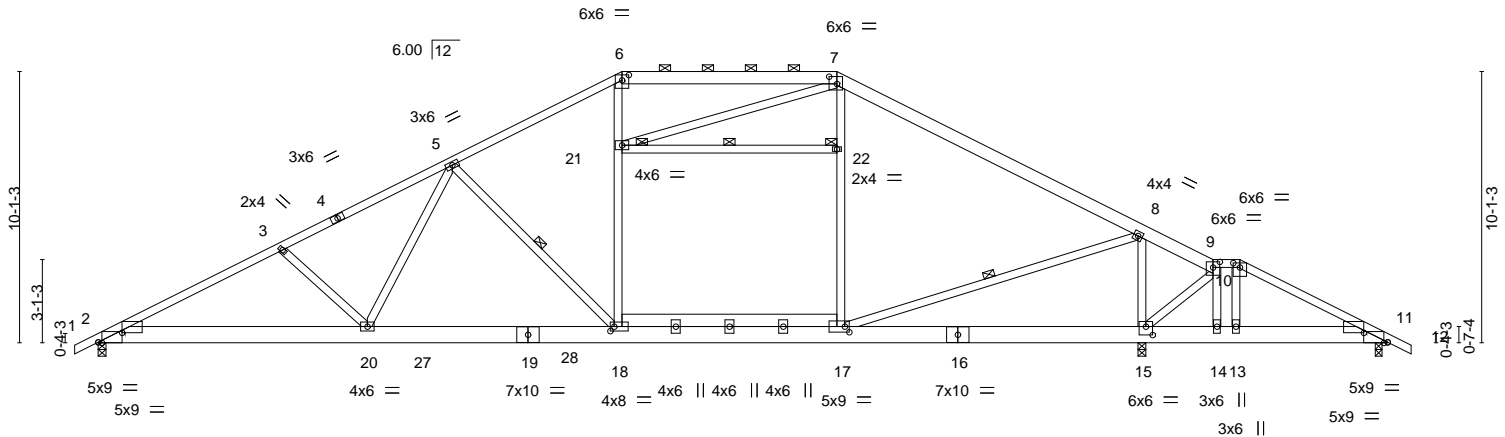| Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	T5	Piggyback Base	1	1		I37903346
					Job Reference (optional)	

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-70SDvYippkHbzVMy4yhozkHCTRTjSFbHm8muCzyv7iU

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	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.56	18-20	>837	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.06	11	n/a	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-
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) 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.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

NORTH CAROLINA
PROFESSIONAL
SEAL
45844
ENGINEER
ANDREW JOHNSON

July 24,2019

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	T6	ROOF TRUSS	1	1		I37903347
					Job Reference (optional)	

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:IAPzHts0ReLOVUWCHSrvZPyHLgv-bC?b6ujRa2PSbfw8efC1VyqOIrorBfXQ?oWSlQyv7iT
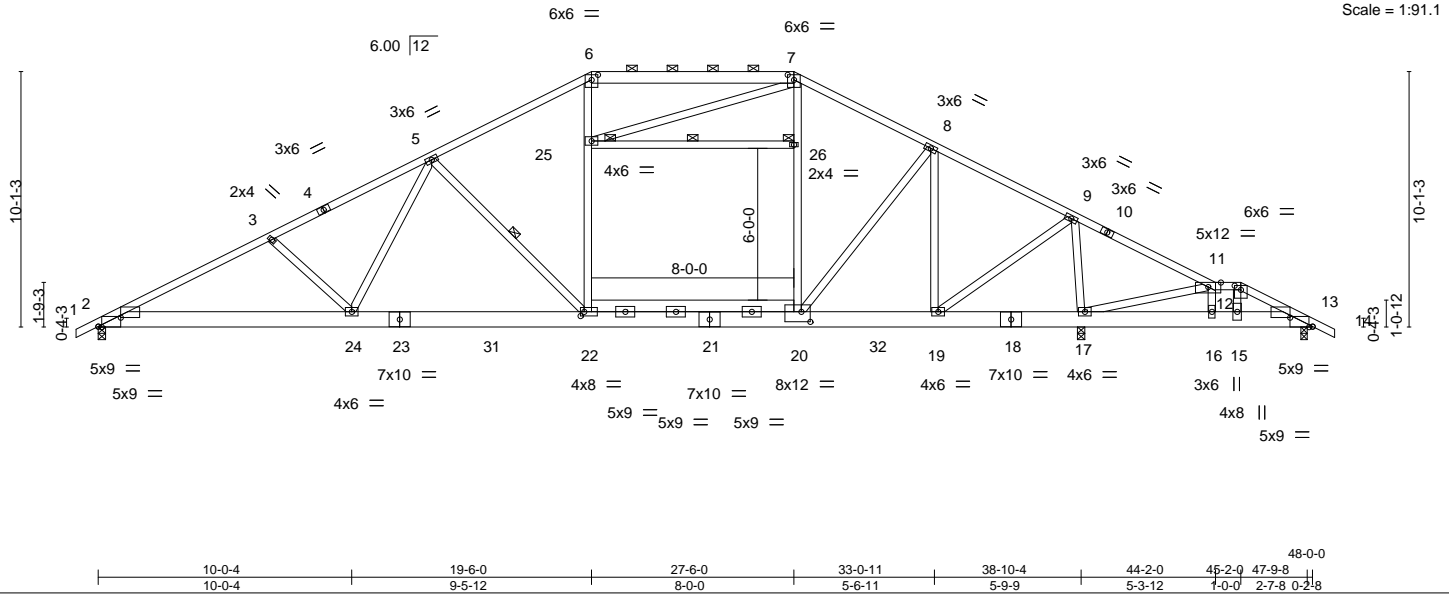
Scale = 1:91.1

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]

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-
TOP CHORD   2x4 SP No.2 *Except*
6-7: 2x6 SP No.2
BOT CHORD   2x8 SP DSS *Except*
21-23: 2x8 SP No.2, 20-22: 2x6 SP No.2
WEBS   2x4 SP No.3

BRACING-
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   Rigid ceiling directly applied or 2-2-0 oc bracing.
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-
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) Ceiling dead load (5.0 psf) on member(s). 25-26; Wall dead load (5.0psf) on member(s).22-25, 20-26
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 20-22
8) All bearings are assumed to be User Defined crushing capacity of 425 psi.
9) 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.
10) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

July 24,2019

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

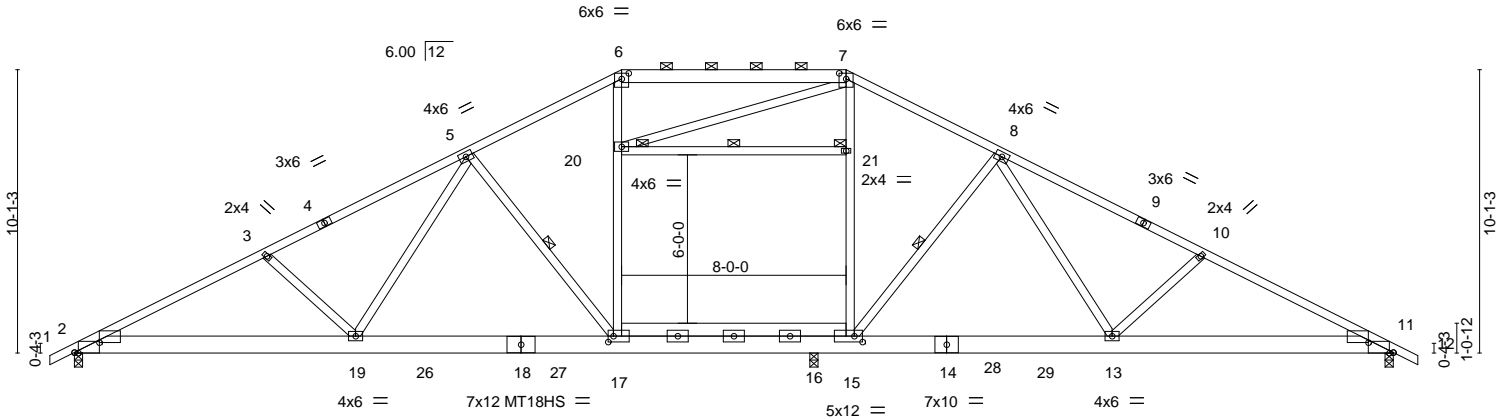| Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	T7	ROOF TRUSS	2	1		I37903348
					Job Reference (optional)	

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-4OZzKEk4LMXJCpVKBNjG29MXtF7EwBIaESF?Hsyv7iS

Scale = 1:82.1

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], [11:0-10-11,0-4-4], [11:0-1-11,Edge], [15:0-3-8,0-2-8], [17:0-2-4,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.37	17-19	>853	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.71	17-19	>440	180	MT18HS	244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.06	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Attic	-0.31	16-17	538	360	Weight: 362 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.2 *Except*
6-7: 2x6 SP No.2
BOT CHORD   2x8 SP No.2 *Except*
14-18: 2x8 SP DSS, 15-17: 2x6 SP No.2
WEBS   2x4 SP No.3 *Except*
6-17,7-15,20-21: 2x4 SP No.2

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 2-8-6 oc purlins, except
2-0-0 oc purlins (4-11-11 max.): 6-7.
BOT CHORD   Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS   1 Row at midpt   5-17, 8-15, 20-21
JOINTS   1 Brace at Jt(s): 20, 21
This truss requires both edges of the bottom chord be sheathed in
the room area.

REACTIONS.   (lb/size)   2=1496/0-3-8, 11=1337/0-3-8, 16=1330/0-3-8
Max Horz 2=-170(LC 13)
Max Uplift 2=-169(LC 12), 11=-39(LC 13), 16=-99(LC 13)
Max Grav 2=1583(LC 26), 11=1352(LC 2), 16=1557(LC 27)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-3062/463, 3-5=-2837/418, 5-6=-1794/275, 6-7=-1573/293, 7-8=-1671/266,
8-10=-2181/354, 10-11=-2402/400
BOT CHORD   2-19=-338/2689, 17-19=-133/2038, 16-17=0/1542, 15-16=0/1570, 13-15=-26/1688,
11-13=-251/2117
WEBS   3-19=-380/262, 5-19=-127/866, 5-17=-863/333, 17-20=-64/508, 6-20=0/489,
15-21=-187/340, 7-21=-81/385, 8-15=-638/297, 8-13=-106/505, 10-13=-404/265

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) All plates are MT20 plates unless otherwise indicated.
5) All plates are 5x9 MT20 unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Ceiling dead load (5.0 psf) on member(s). 20-21; Wall dead load (5.0psf) on member(s).17-20, 15-21
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 16-17, 15-16
10) All bearings are assumed to be User Defined crushing capacity of 425 psi.
11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 11, and 16.
This connection is for uplift only and does not consider lateral forces.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
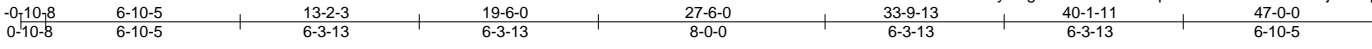13) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

July 24,2019

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

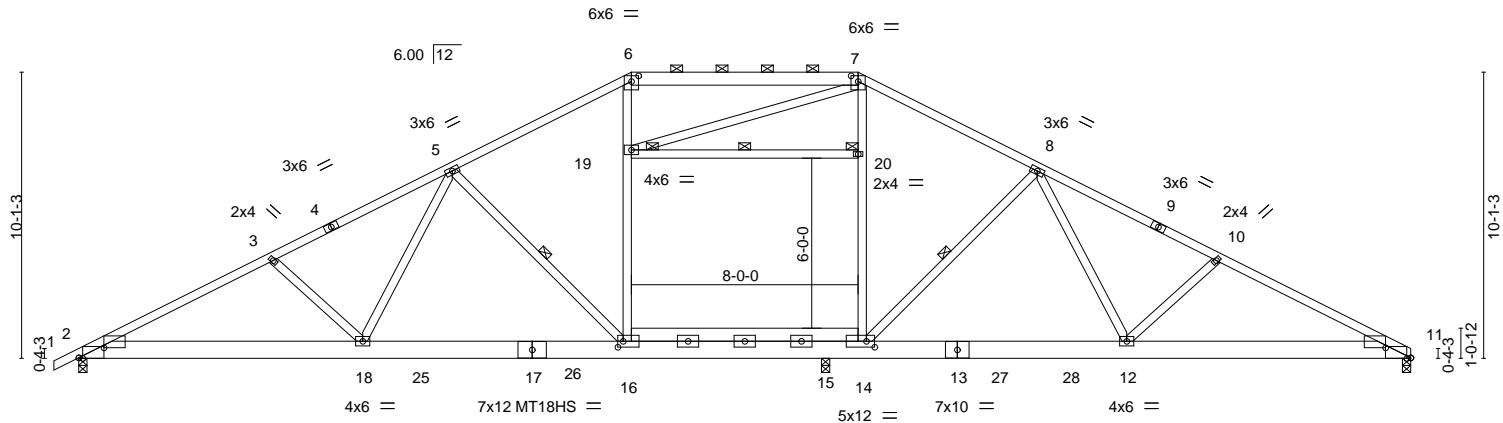| Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	T7A	ROOF TRUSS	1	1		I37903349
					Job Reference (optional)	

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

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:38 2019 Page 1
ID:IAPzHts0ReLOVUWCHSrvZPyHLgv-Yb7MXZli6ffAqz4Xl4EVaNvkMfTWfeijS6?ZpIyv7iR

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]
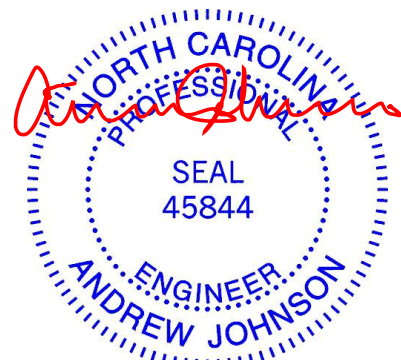
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.36	16-18	>866	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.71	16-18	>444	180	MT18HS	244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.06	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Attic	-0.31	15-16	538	360	Weight: 359 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.2 *Except*
6-7: 2x6 SP No.2
BOT CHORD   2x8 SP No.2 *Except*
14-16: 2x6 SP No.2, 13-17: 2x8 SP DSS
WEBS   2x4 SP No.3 *Except*
6-16,7-14: 2x4 SP No.2

BRACING-
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   Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS   1 Row at midpt   5-16, 8-14, 19-20
JOINTS   1 Brace at Jt(s): 19, 20
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-
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) All plates are MT20 plates unless otherwise indicated.
5) All plates are 5x9 MT20 unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Ceiling dead load (5.0 psf) on member(s). 19-20; Wall dead load (5.0psf) on member(s).16-19, 14-20
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 15-16, 14-15
10) All bearings are assumed to be User Defined crushing capacity of 425 psi.
11) 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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

July 24,2019

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

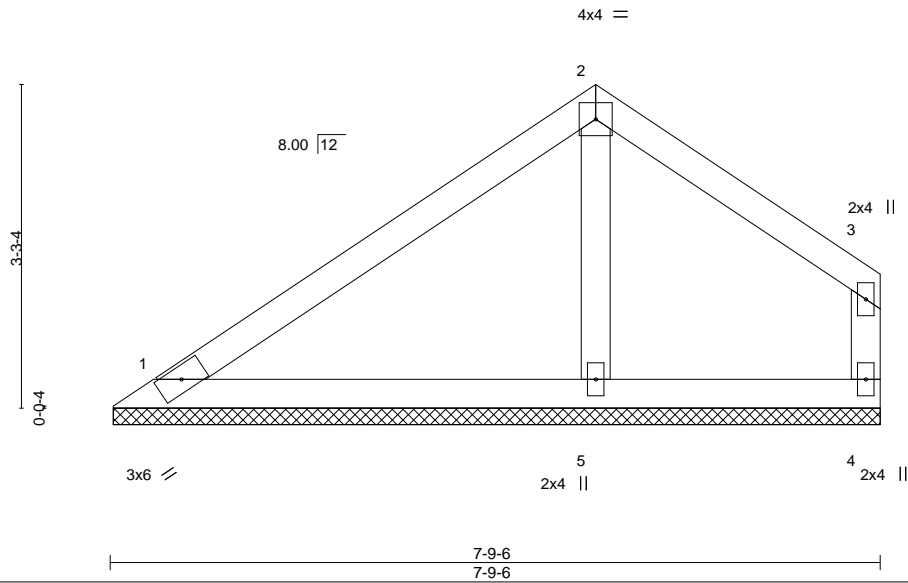| Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	V1	Valley	1	1		I37903350
					Job Reference (optional)	

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-0nhkkvlKtzn1S7fjJolk7aSxv2?aOFcshmk6Llyv7iQ

4-10-14
4-10-14
7-9-6
2-10-8

Scale = 1:23.3

8.00 [12]

3-3-4

4x4 ═

2

2x4 ‖
3

1-4-4

0-0-4

1

3x6 ⫽

5
2x4 ‖

4
2x4 ‖

7-9-6
7-9-6

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d		PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	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-
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) Gable requires continuous bottom chord bearing.
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.
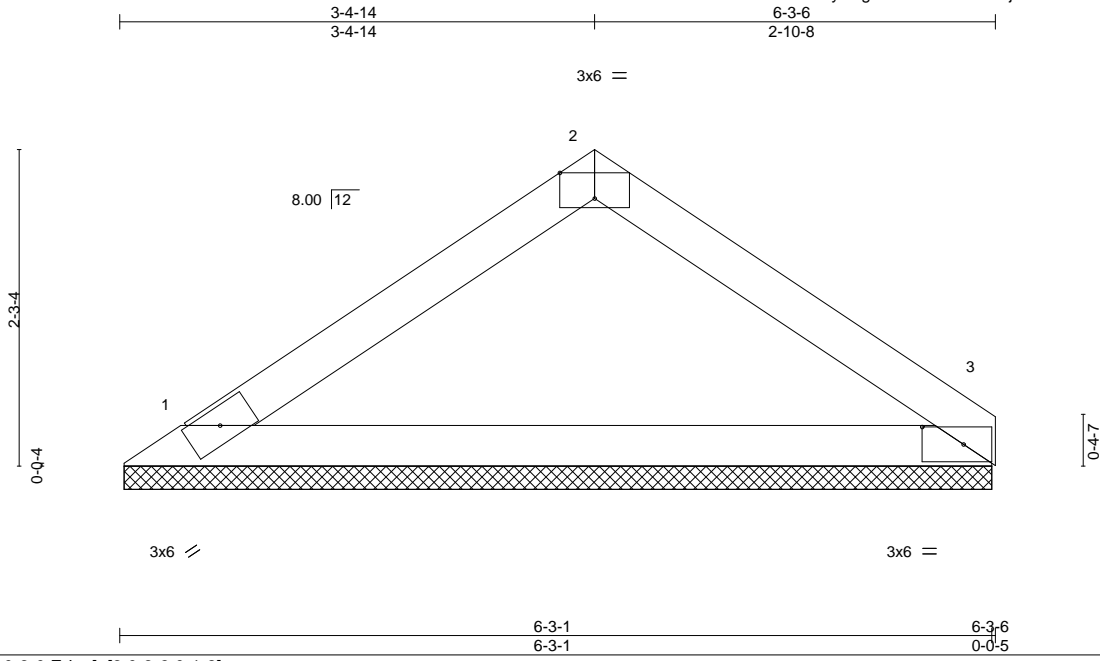6) All bearings are assumed to be User Defined crushing capacity of 425 psi.
7) n/a

8) n/a

NORTH CAROLINA
PROFESSIONAL
SEAL
45844
ENGINEER
ANDREW JOHNSON

July 24,2019

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	V2	Valley	1	1		I37903351
					Job Reference (optional)	

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-0nhkkvlKtzn1S7fjJolk7aS?S2xGOFQshmk6Llyv7iQ

Scale = 1:16.5

3-4-14 | 6-3-6
3-4-14 | 2-10-8

8.00 ⌐12

2-3-4
0-0-4

0-4-7

6-3-1 | 6-3-6
6-3-1 | 0-0-5

3x6 =   3x6 =

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.16	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-
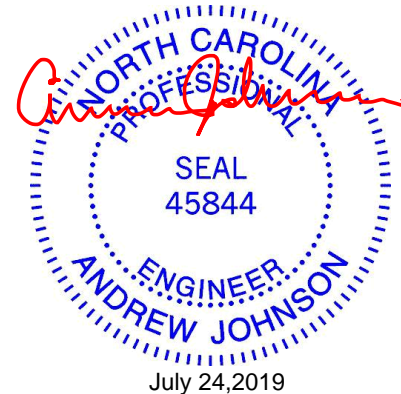TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2

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-
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) Gable requires continuous bottom chord bearing.
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) n/a

8) n/a

July 24,2019

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	V3	Valley	1	1		I37903352
					Job Reference (optional)	

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

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.06	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	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							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-
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) Gable requires continuous bottom chord bearing.
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) n/a

July 24,2019

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	VP1	Valley	1	1		I37903353
					Job Reference (optional)	

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

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:41 2019 Page 1
ID:WRU0VEQdOJp5FPgJ5XsbyzzDMSL-yApU9bnaPa1lhRp6QDoCC?XJ6sgSs91994DDQdyv7iO

Scale = 1:23.2
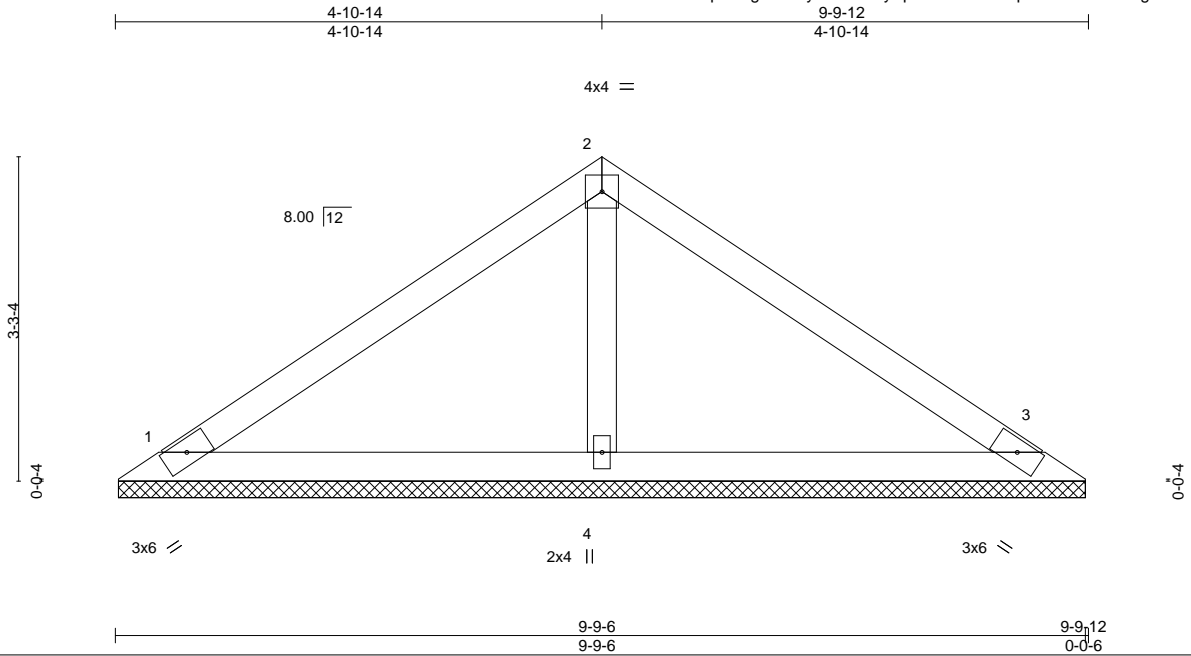
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		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-
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) Gable requires continuous bottom chord bearing.
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.
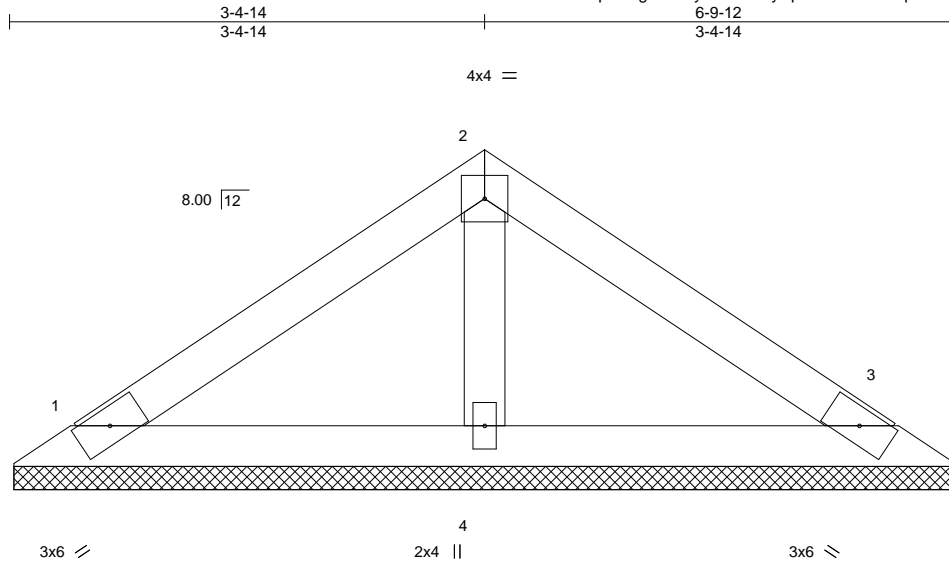6) All bearings are assumed to be User Defined crushing capacity of 425 psi.
7) n/a

8) n/a

July 24,2019

TRENCO
ENGINEERING BY
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	VP2	Valley	1	1		I37903354
					Job Reference (optional)	

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

8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:41 2019 Page 1
ID:WRU0VEQdOJp5FPgJ5XsbyzzDMSL-yApU9bnaPa1lhRp6QDoCC?XLzsiAs9S994DDQdyv7iO

3-4-14 / 6-9-12
3-4-14 / 3-4-14

4x4 =

Scale = 1:16.5

8.00 ⎡12

2-3-4

0-0-4

1

2

3

4

3x6 //   2x4 || 3x6 \\

0-0-6   6-9-12
0-0-6   6-9-6

0-0-4

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 23 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
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-
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) Gable requires continuous bottom chord bearing.
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.
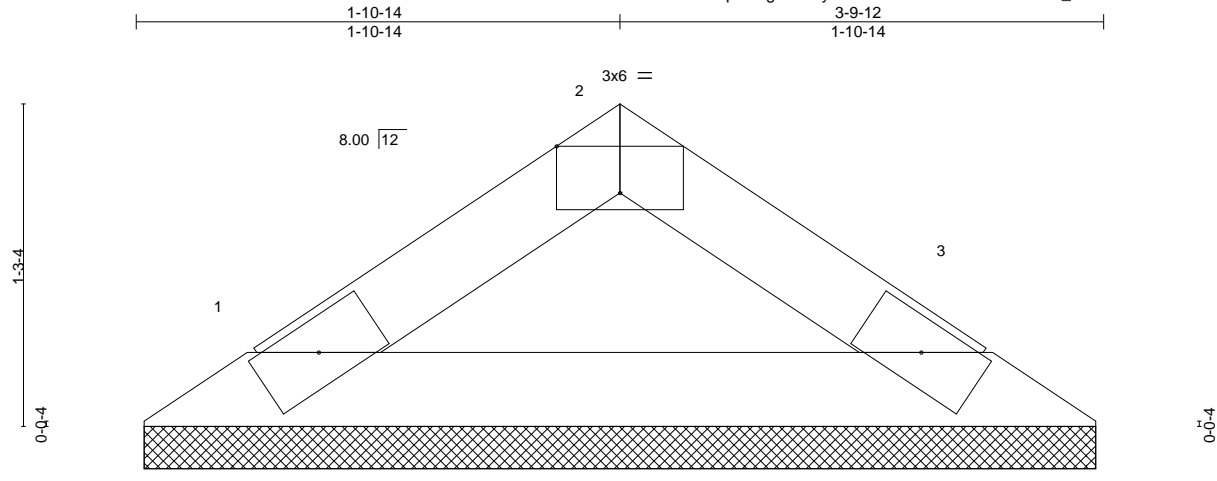6) All bearings are assumed to be User Defined crushing capacity of 425 psi.
7) n/a

July 24,2019

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	36 MASON POINTE - ROOF	
140.1445.C	VP3	Valley	1	1		I37903355
					Job Reference (optional)	

84 Components (Dunn),   Dunn, NC - 28334,
8.310 s Jun 11 2019 MiTek Industries, Inc. Tue Jul 23 16:21:42 2019 Page 1
ID:WRU0VEQdOJp5FPgJ5XsbyzzDMSL-QMNsNxoCAu9cJaOI_wJRlD4YHG1Cbc9JNkzmy3yv7iN

Scale = 1:9.1

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.06	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	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							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 11)
             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.
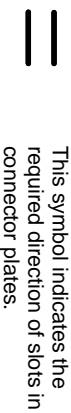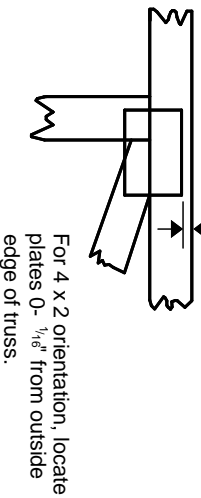
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed;C-C for members and forces & MWFRS
   for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
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) n/a

July 24,2019

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION

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

1 ³⁄₄ "

0-¹⁄₁₆"

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

=

This symbol indicates the required direction of slots in connector plates.
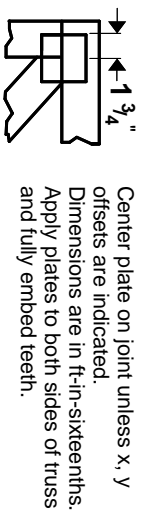
* **Plate location details available in MiTek 20/20 software or upon request.**
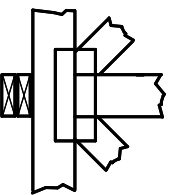
PLATE SIZE

4 x 4

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

LATERAL BRACING LOCATION

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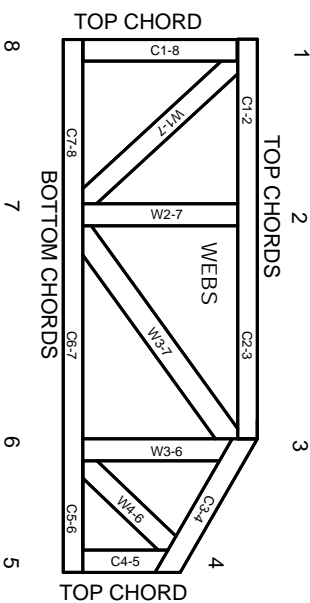
BEARING

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

Industry Standards:

ANSI/TPI1: 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.

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

Numbering System

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

6-4-8

TOP CHORD

TOP CHORDS

BOTTOM CHORDS

WEBS

TOP CHORD

1 2 3 4 5 6 7 8

C1-8 C1-2 W1-7 W2-7 W3-7 C2-3 C2-4 W4-6 C4-5 C5-6 C6-7 C7-8 W3-6

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.

© 2012 MiTek® All Rights Reserved

⚠ General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.

2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative T or I bracing should be considered.

3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.

4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.

5. Cut members to bear tightly against each other.

6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.

7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.

8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.

10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.

11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.

12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.

13. Top chords must be sheathed or purlins provided at spacing indicated on design.

14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.

15. Connections not shown are the responsibility of others.

16. Do not cut or alter truss member or plate without prior approval of an engineer.

17. Install and load vertically unless indicated otherwise.

18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.

19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.

20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.

MiTek
VII
ENGINEERING BY
TRENCO
A MiTek Affiliate