ENGINEERING BY TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 22309A
238.2338.10x10cvp

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by 84 Components - #2383.

Pages or sheets covered by this seal: I38820305 thru I38820327

My license renewal date for the state of North Carolina is December 31, 2019.

North Carolina COA: C-0844

NORTH CAROLINA
PROFESSIONAL
SEAL
45844
ANDREW JOHNSON
ENGINEER

October 8,2019

Johnson, Andrew

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

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

8.320 s Aug 28 2019 MiTek Industries, Inc. Tue Oct 8 09:22:21 2019 Page 1
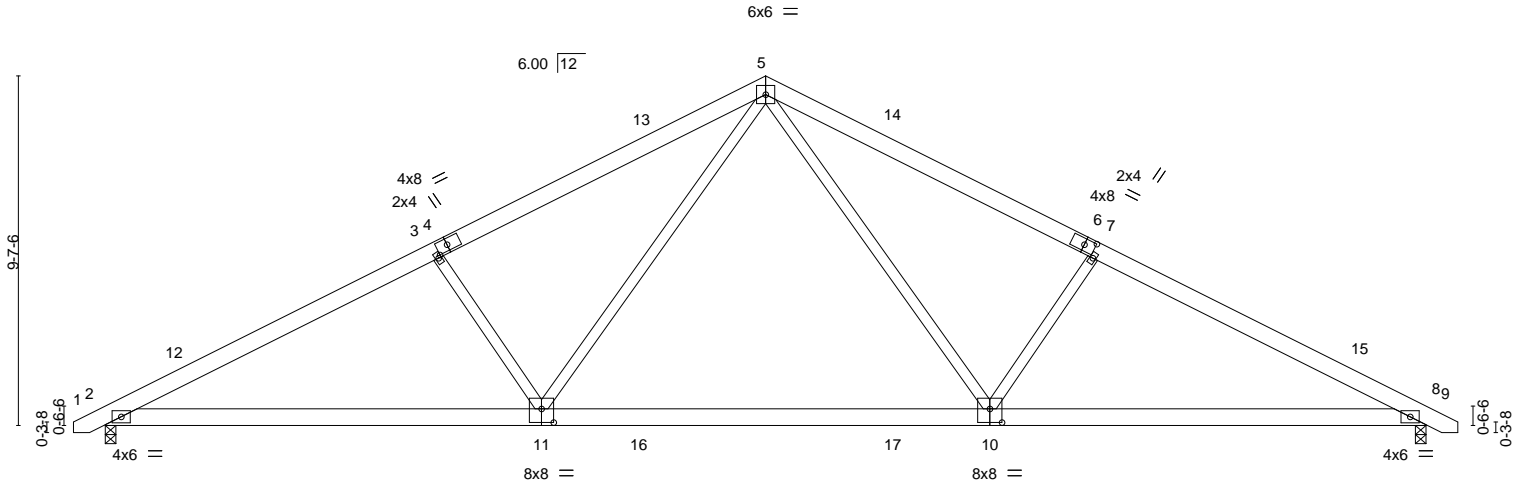ID:byj??x6A9z5_viqm_kAqhrzC2Gy-9r9M0Xh0a?CvDl3jGLsVfJly5AlxlCN6HCc2hhyVWXW

Scale: 3/16"=1'

Plate Offsets (X,Y)-- [4:0-3-9,0-2-0], [6:0-3-9,0-2-0], [10:0-4-0,0-4-8], [11:0-4-0,0-4-8]

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	0.50	Vert(LL)	-0.32	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.47	10-11	>925	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 232 lb	FT = 20%

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

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

REACTIONS.   (lb/size)   8=1490/0-3-8, 2=1490/0-3-8
              Max Horz 2=157(LC 16)
              Max Uplift 8=-186(LC 13), 2=-186(LC 12)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-2552/320, 3-5=-2276/335, 5-7=-2276/335, 7-8=-2552/321
BOT CHORD   2-11=-331/2204, 10-11=-63/1432, 8-10=-175/2204
WEBS   5-10=-158/922, 7-10=-549/332, 5-11=-157/922, 3-11=-549/332

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) -0-7-14 to 2-4-2, Interior(1) 2-4-2 to 18-2-0, Exterior(2) 18-2-0 to 21-2-0,
   Interior(1) 21-2-0 to 36-11-14 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, with BCDL = 10.0psf.
5) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 and 2. This connection is for
   uplift only and does not consider lateral forces.

NORTH CAROLINA
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ENGINEER
ANDREW JOHNSON

October 8,2019

ENGINEERING BY
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	238.2338.10x10cvp	
22309A	A1	ROOF TRUSS	5	1		I38820306
					Job Reference (optional)	

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

8.320 s Aug 28 2019 MiTek Industries, Inc. Tue Oct 8 09:22:21 2019 Page 1
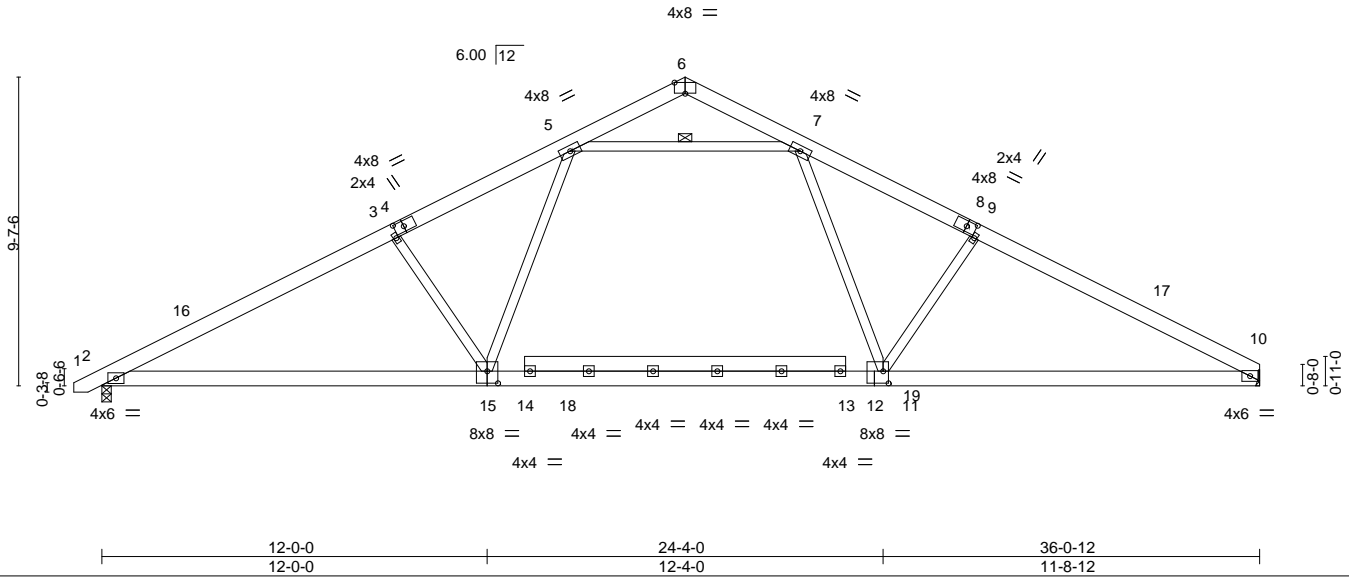ID:byj??x6A9z5_viqm_kAqhrzC2Gy-9r9M0Xh0a?CvDI3jGLsVfJlwAAk0lBL6HCc2hhyVWXW

Scale = 1:71.8

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

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	0.62	Vert(LL)	-0.28	2-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.45	2-15	>949	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 253 lb	FT = 20%

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

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

REACTIONS.   (lb/size)   2=1483/0-3-8, 10=1434/Mechanical
Max Horz   2=162(LC 16)
Max Uplift 2=-186(LC 12), 10=-167(LC 13)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-2512/317, 3-5=-2275/326, 5-6=-314/123, 6-7=-330/124, 7-9=-2259/334,
             9-10=-2488/325
BOT CHORD   2-15=-315/2162, 11-15=-103/1711, 10-11=-182/2133
WEBS   3-15=-564/326, 5-15=-109/798, 7-11=-107/771, 9-11=-533/325, 5-7=-1491/237

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) -0-7-14 to 2-11-7, Interior(1) 2-11-7 to 18-2-0, Exterior(2) 18-2-0 to 21-10-4,
   Interior(1) 21-10-4 to 36-0-0 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, with BCDL = 10.0psf.
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) except (jt=lb)
   10=167.
7) One RT7A USP 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) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.
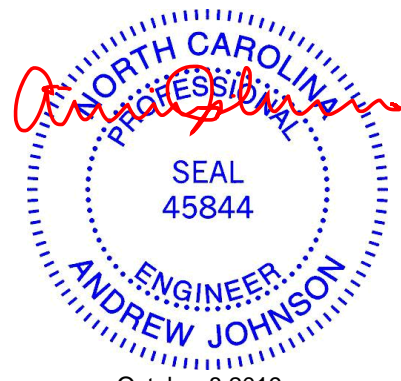
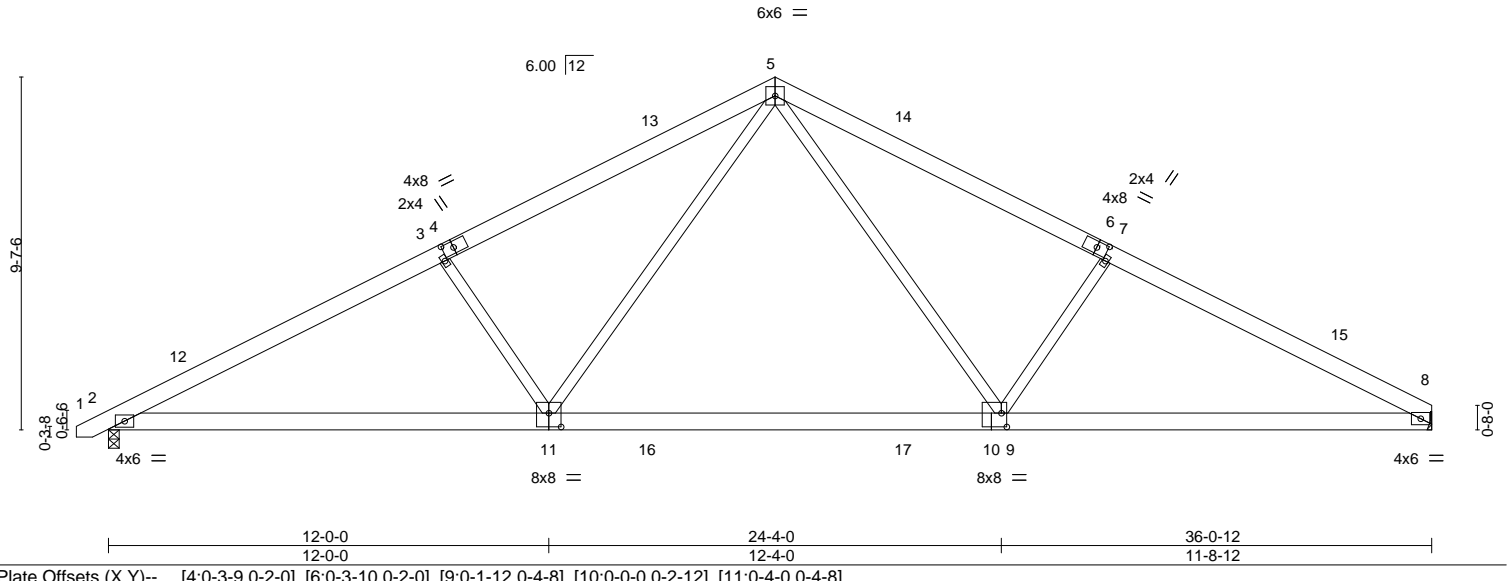| Job	Truss	Truss Type	Qty	Ply	238.2338.10x10cvp	
22309A	A2	COMMON	9	1		I38820307
					Job Reference (optional)	

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

8.320 s Aug 28 2019 MiTek Industries, Inc. Tue Oct 8 09:22:22 2019 Page 1
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Scale = 1:62.8

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

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.32	9-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.47	9-11	>924	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 228 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 3-11-13 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (lb/size)   2=1483/0-3-8, 8=1434/Mechanical
Max Horz 2=162(LC 12)
Max Uplift 2=-186(LC 12), 8=-167(LC 13)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-2537/320, 3-5=-2261/334, 5-7=-2243/340, 7-8=-2513/316
BOT CHORD   2-11=-336/2191, 9-11=-67/1418, 8-9=-181/2161
WEBS   3-11=-549/332, 5-11=-158/922, 5-9=-155/898, 7-9=-528/332

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) -0-7-14 to 2-4-2, Interior(1) 2-4-2 to 18-2-0, Exterior(2) 18-2-0 to 21-2-0, Interior(1) 21-2-0 to 36-0-0 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, with BCDL = 10.0psf.
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) except (jt=lb) 8=167.
7) One RT7A USP 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.

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Job	Truss	Truss Type	Qty	Ply	238.2338.10x10cvp	
22309A	AE	COMMON SUPPORTED GAB	2	1		I38820308
					Job Reference (optional)	

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

8.320 s Aug 28 2019 MiTek Industries, Inc. Tue Oct 8 09:22:24 2019 Page 1
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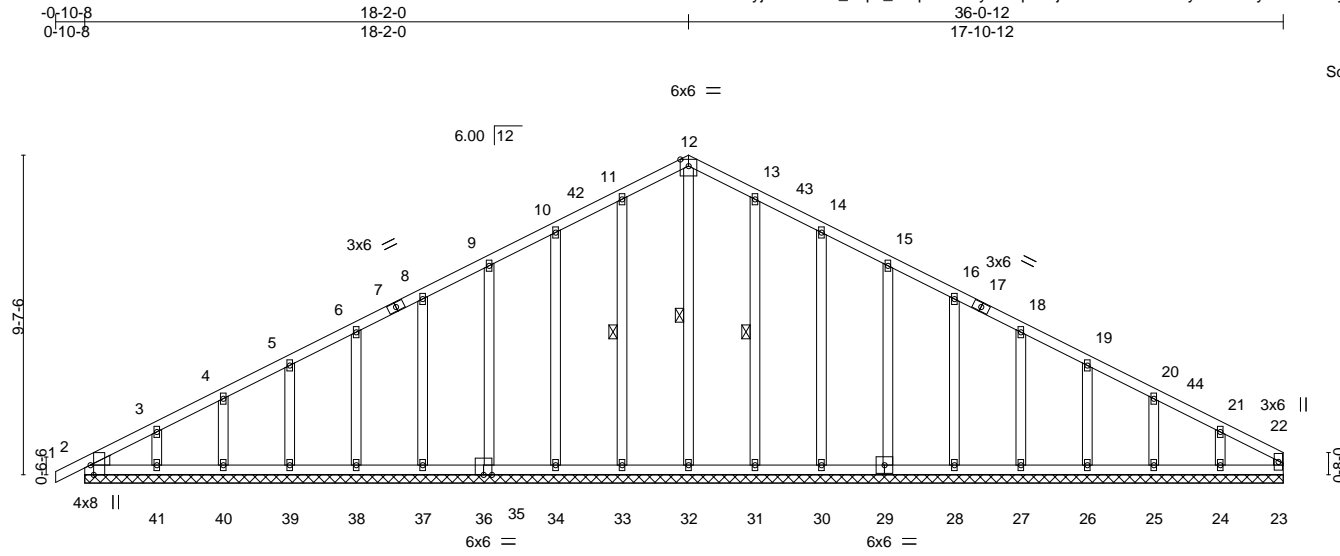
Scale = 1:69.3

Plate Offsets (X,Y)--   [2:0-0-8,0-1-0], [2:0-1-0,0-6-11], [2:0-3-8,Edge], [35:0-1-12,0-0-0], [36:0-0-0,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01	23	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 239 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
WEDGE
Left: 2x4 SP No.3

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS   1 Row at midpt   12-32, 11-33, 13-31

REACTIONS.   All bearings 36-0-12.
   (lb) - Max Horz   2=172(LC 12)
       Max Uplift   All uplift 100 lb or less at joint(s) 2, 33, 34, 35, 37, 38, 39, 40, 41, 31, 30, 29, 28, 27, 26, 25, 24
       Max Grav   All reactions 250 lb or less at joint(s) 23, 2, 32, 33, 34, 35, 37, 38, 39, 40, 41, 31, 30, 29, 28, 27, 26, 25, 24

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   10-11=-96/270, 11-12=-112/312, 12-13=-112/314, 13-14=-96/272

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 2-2-0, Exterior(2) 2-2-0 to 18-2-0, Corner(3) 18-2-0 to 21-2-0, Exterior(2) 21-2-0 to 35-11-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) N/A
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	238.2338.10x10cvp	
22309A	BE	COMMON SUPPORTED GAB	1	1		I38820309
					Job Reference (optional)	

84 Components (Dunn),   Dunn, NC - 28334,   8.320 s Aug 28 2019 MiTek Industries, Inc. Tue Oct 8 09:22:26 2019 Page 1
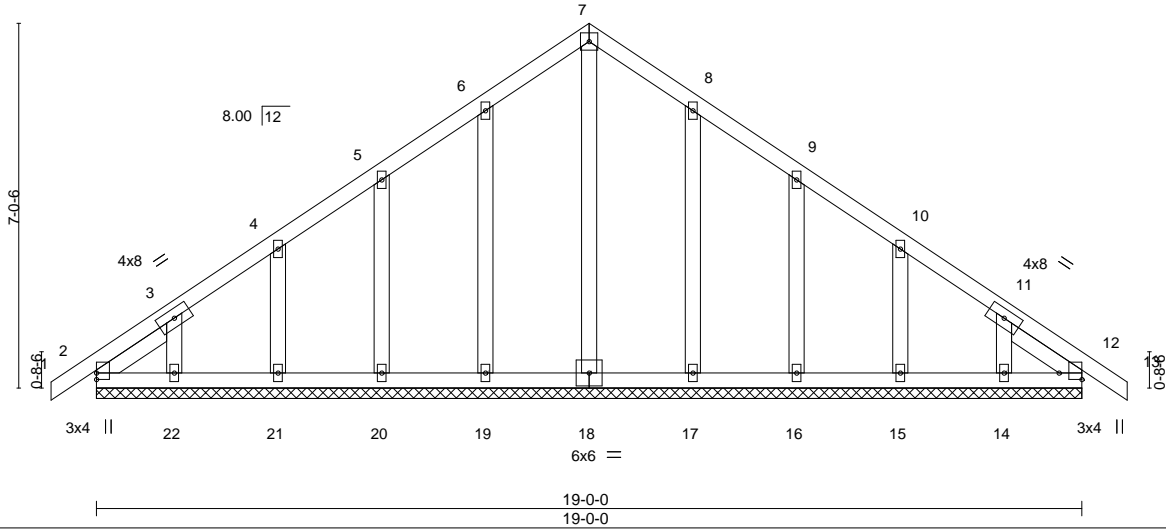ID:byj??x6A9z5_viqm_kAqhrzC2Gy-WoyF3Fl9OXqCJ3xh3uRgMNSwrBepQXurQUKpMuyVWXR

Plate Offsets (X,Y)--   [12:Edge,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	0.05	Vert(LL)	-0.00	12	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	13	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 118 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
OTHERS   2x4 SP No.3
SLIDER   Left 2x4 SP No.3 -H 1-7-15, Right 2x4 SP No.3 -H 1-7-15

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 19-0-0.
   (lb) - Max Horz 2=171(LC 11)
           Max Uplift All uplift 100 lb or less at joint(s) 2, 19, 20, 21, 22, 17, 16, 15, 14, 12
           Max Grav All reactions 250 lb or less at joint(s) 2, 18, 19, 20, 21, 22, 17, 16, 15, 14, 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 Corner(3) -0-10-8 to 2-1-8, Exterior(2) 2-1-8 to 9-6-0, Corner(3) 9-6-0 to 12-6-0,
   Exterior(2) 12-6-0 to 19-10-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
   DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
   Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
9) N/A
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

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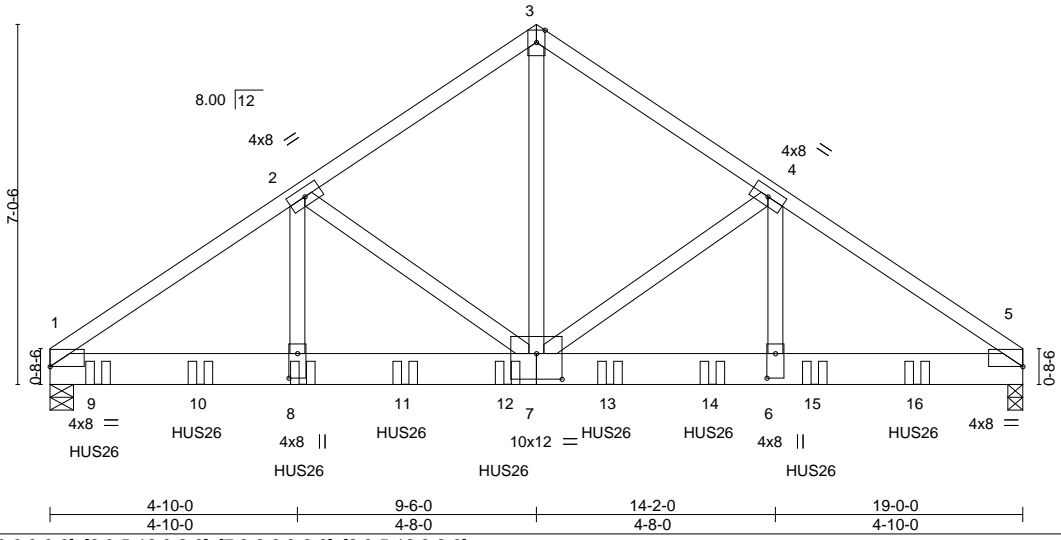ID:byj??x6A9z5_viqm_kAqhrzC2Gy-_?WdGbln9ry3xDWtcbyvva?vgbt49oY_f83MvKyVWXQ

4-10-0	9-6-0	14-2-0	19-0-0
4-10-0	4-8-0	4-8-0	4-10-0

4x6 ||

Scale = 1:45.0

4-10-0	9-6-0	14-2-0	19-0-0
4-10-0	4-8-0	4-8-0	4-10-0

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

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	0.81	Vert(LL)	-0.10	6-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.20	6-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.85	Horz(CT)	0.04	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 254 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.2
BOT CHORD   2x8 SP DSS
WEBS   2x4 SP No.3 *Except*
          3-7: 2x4 SP No.2

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 3-3-1 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (lb/size)   1=7530/0-5-8, 5=6686/0-3-8
               Max Horz 1=162(LC 26)
               Max Uplift 1=-937(LC 8), 5=-833(LC 9)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-2=-9489/1183, 2-3=-6577/887, 3-4=-6577/887, 4-5=-9483/1184
BOT CHORD   1-8=-983/7554, 7-8=-983/7554, 6-7=-891/7595, 5-6=-891/7595
WEBS   3-7=-879/6925, 4-7=-2733/466, 4-6=-358/3301, 2-7=-2684/457, 2-8=-361/3341

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 0-7-0 oc.
   Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-6-0 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; 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
   1=937, 5=833.
8) Use USP HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-11-4
   from the left end to 16-11-4 to connect truss(es) to back face of bottom chord.
9) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S)   Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
       Vert: 1-3=-60, 3-5=-60, 1-5=-20
   Concentrated Loads (lb)
       Vert: 8=-1414(B) 9=-1417(B) 10=-1414(B) 11=-1414(B) 12=-1414(B) 13=-1414(B) 14=-1414(B) 15=-1414(B) 16=-1414(B)

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Job	Truss	Truss Type	Qty	Ply	238.2338.10x10cvp	
22309A	CE	COMMON SUPPORTED GAB	1	1		I38820311
					Job Reference (optional)	

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

8.320 s Aug 28 2019 MiTek Industries, Inc. Tue Oct 8 09:22:29 2019 Page 1
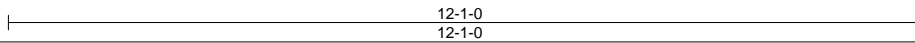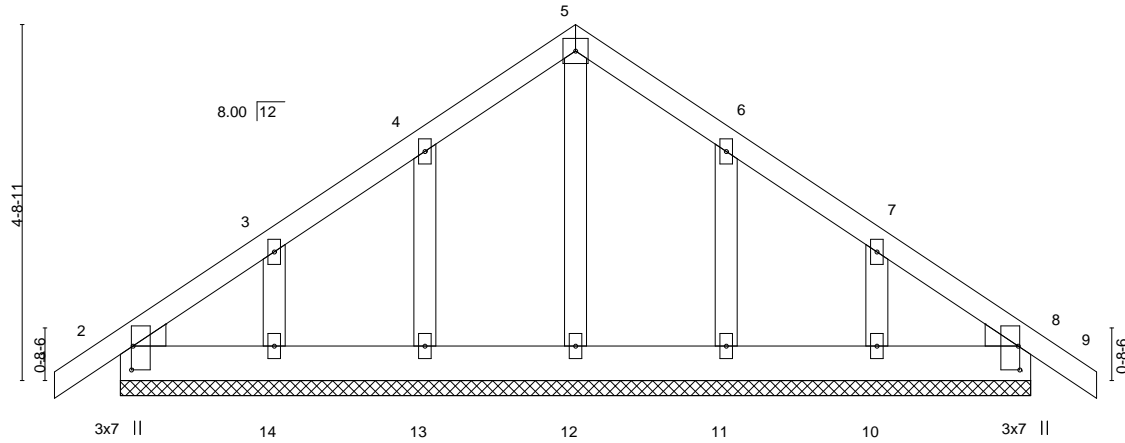ID:byj??x6A9z5_viqm_kAqhrzC2Gy-wNeNhGn2hSCmAWgGk0?N_?4R4PgidvpH6SYTzDyVWXO
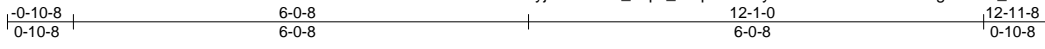
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Plate Offsets (X,Y)--   [2:0-0-11,0-1-0], [2:0-1-5,0-5-8], [2:0-3-13,0-0-4], [8:0-0-11,0-1-0], [8:0-1-5,0-5-8], [8:0-3-13,0-0-4]

LOADING (psf)		SPACING-		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	8	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	8	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 73 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.2
BOT CHORD   2x6 SP No.2
OTHERS   2x4 SP No.3
WEDGE
Left: 2x4 SP No.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 12-1-0.
   (lb) -   Max Horz   2=114(LC 11)
         Max Uplift   All uplift 100 lb or less at joint(s) 2, 13, 14, 11, 10
         Max Grav   All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

NOTES-
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 2-0-8, Exterior(2) 2-0-8 to 6-0-8, Corner(3) 6-0-8 to 9-0-8, Exterior(2) 9-0-8 to 12-11-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) N/A
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
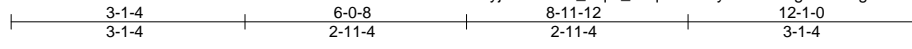

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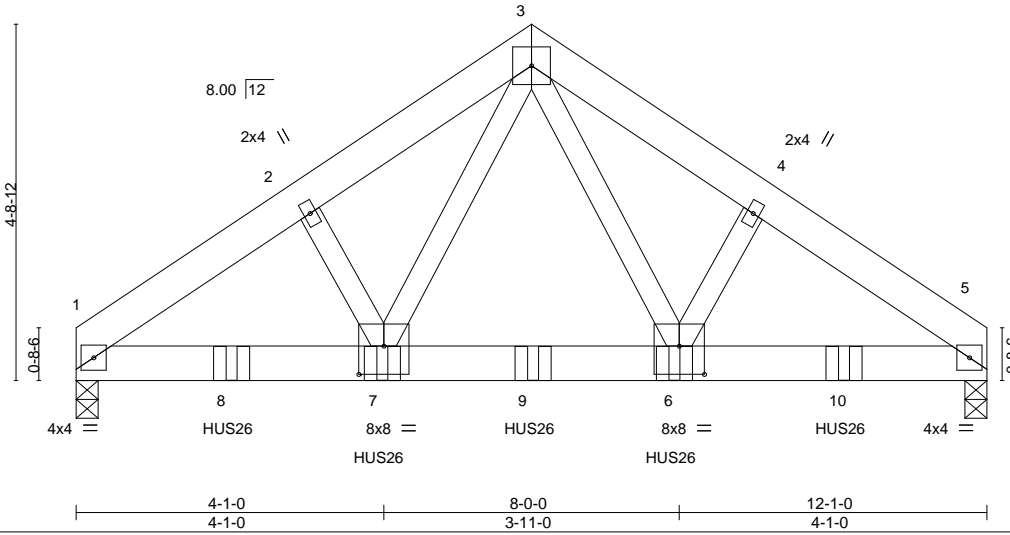84 Components (Dunn),   Dunn, NC - 28334,

8.320 s Aug 28 2019 MiTek Industries, Inc. Tue Oct 8 09:22:30 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-OaBlvcogSmKdogFSIkWcXDdZPon0MClQL6I0VfyVWXN

3-1-4   6-0-8   8-11-12   12-1-0
3-1-4   2-11-4   2-11-4   3-1-4

6x6 =

Scale = 1:30.6

8.00 [12

2x4 \\   2x4 //

4-8-12

0-8-6   0-8-6

4x4 =   HUS26   8x8 =   HUS26   8x8 =   HUS26   4x4 =
HUS26   HUS26

4-1-0   8-0-0   12-1-0
4-1-0   3-11-0   4-1-0

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

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	0.21	Vert(LL)	-0.04	6-7	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.08	6-7	>999	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB	0.63	Horz(CT)	0.02	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 164 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 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.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size)   1=3983/0-3-8, 5=4028/0-3-8
Max Horz 1=-104(LC 6)
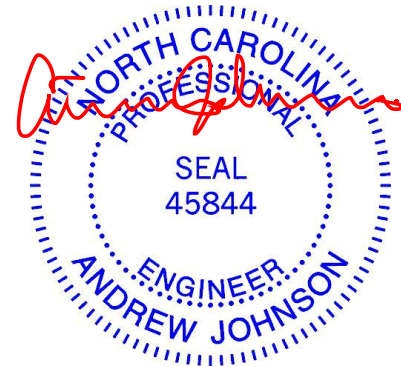Max Uplift 1=-495(LC 8), 5=-501(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-2=-5386/677, 2-3=-5247/709, 3-4=-5216/705, 4-5=-5354/674
BOT CHORD   1-7=-560/4236, 6-7=-353/3098, 5-6=-496/4213
WEBS   3-6=-414/2970, 4-6=-148/388, 3-7=-421/3032, 2-7=-148/396

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
   Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 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; 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) One RT7A USP 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 USP HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent spaced at 2-3-0 oc max. starting at 2-0-12
   from the left end to 10-2-4 to connect truss(es) to back face of bottom chord.
9) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S)   Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
       Vert: 1-3=-60, 3-5=-60, 1-5=-20
   Concentrated Loads (lb)
       Vert: 6=-1414(B) 7=-1414(B) 8=-1414(B) 9=-1414(B) 10=-1414(B)

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Job	Truss	Truss Type	Qty	Ply	238.2338.10x10cvp	
22309A	M1	MONOPITCH	4	1		I38820313
					Job Reference (optional)	

84 Components (Dunn),   Dunn, NC - 28334,   8.320 s Aug 28 2019 MiTek Industries, Inc. Tue Oct 8 09:22:30 2019 Page 1
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Scale = 1:11.3

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.01	2-4	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.03	2-4	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 16 lb	FT = 20%

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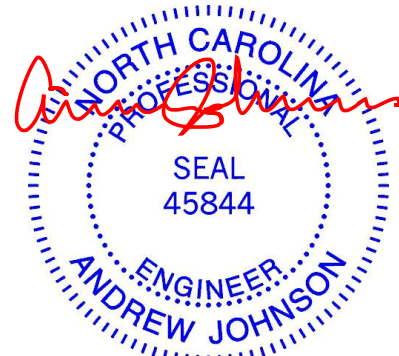WEBS   2x4 SP No.3

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

REACTIONS.   (lb/size)   2=224/0-3-8, 4=147/0-1-8
              Max Horz 2=66(LC 8)
              Max Uplift 2=-65(LC 8), 4=-35(LC 12)

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 4-0-4 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) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify
   capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
6) One RT7A USP 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.

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| Job	Truss	Truss Type	Qty	Ply	238.2338.10x10cvp	
22309A	M2	MONOPITCH	1	1		I38820314
					Job Reference (optional)	

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

8.320 s Aug 28 2019 MiTek Industries, Inc. Tue Oct 8 09:22:31 2019 Page 1
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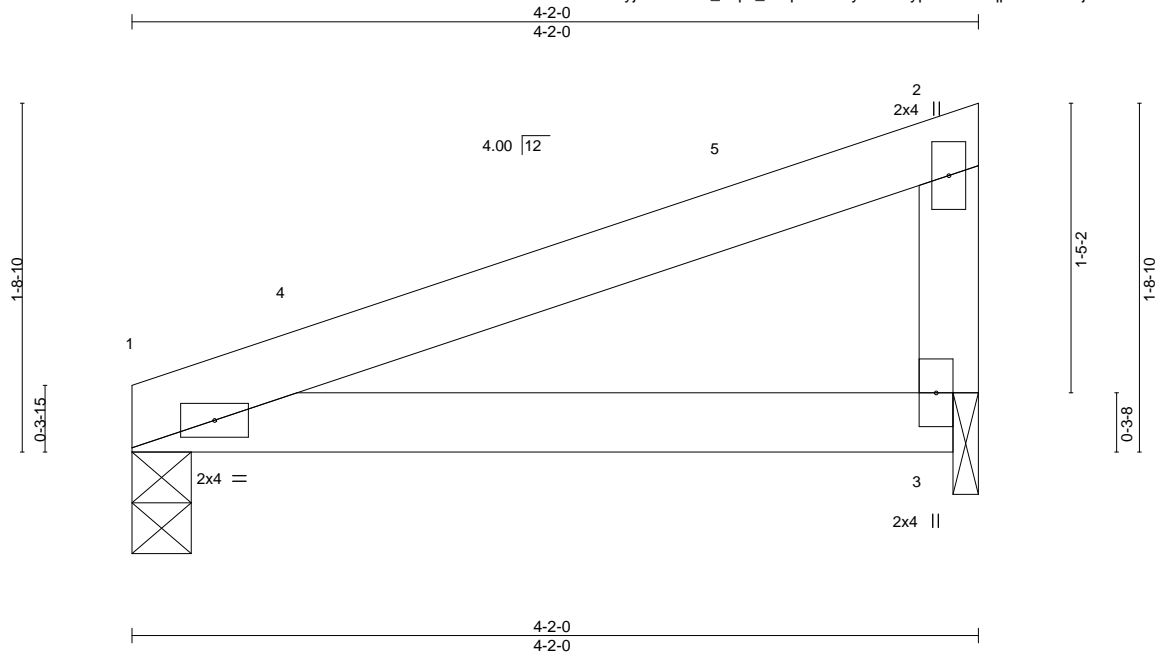
Scale = 1:11.3

4-2-0

4.00 |12

4-2-0

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	0.28	Vert(LL)	-0.01	1-3	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.03	1-3	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 14 lb	FT = 20%

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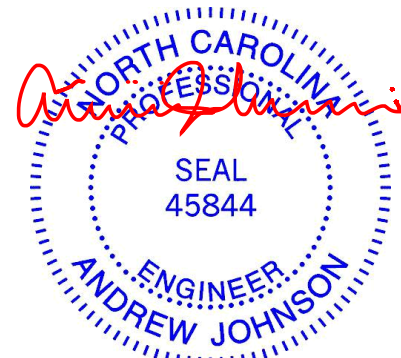WEBS   2x4 SP No.3

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

REACTIONS.   (lb/size)   1=155/0-3-8, 3=155/0-1-8
Max Horz 1=53(LC 8)
Max Uplift 1=-19(LC 8), 3=-38(LC 8)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=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 4-0-4 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) Bearing at joint(s) 3 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 3.
6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.

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Job	Truss	Truss Type	Qty	Ply	238.2338.10x10cvp	
22309A	ME	MONOPITCH SUPPORTED	1	1		I38820315
					Job Reference (optional)	

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

8.320 s Aug 28 2019 MiTek Industries, Inc.   Tue Oct 8 09:22:31 2019   Page 1
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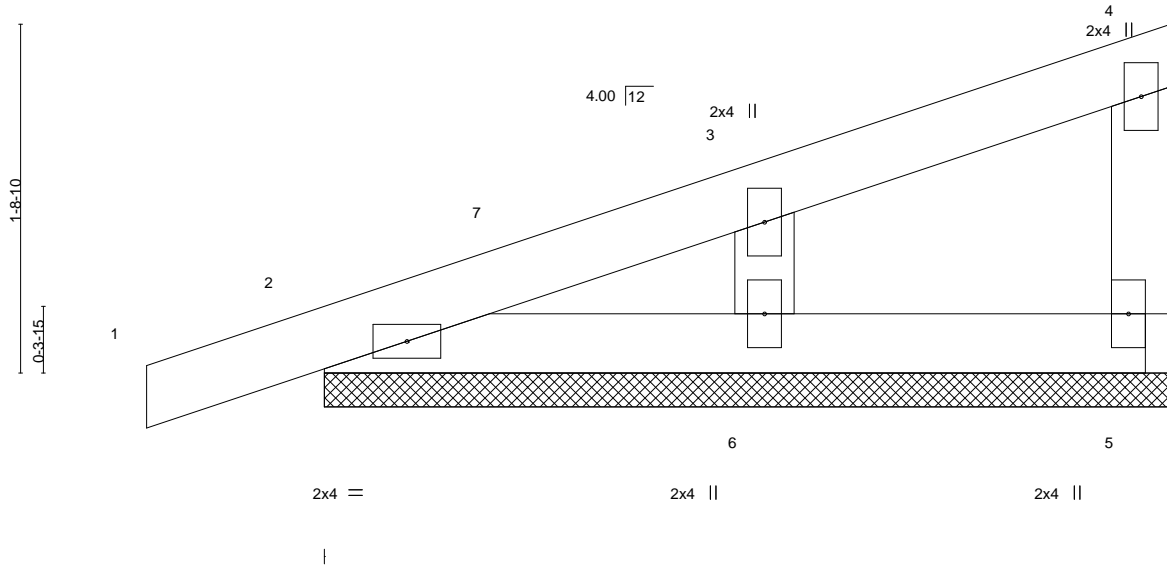
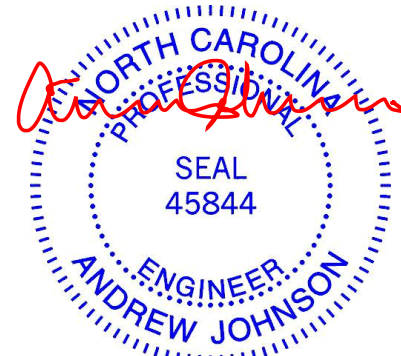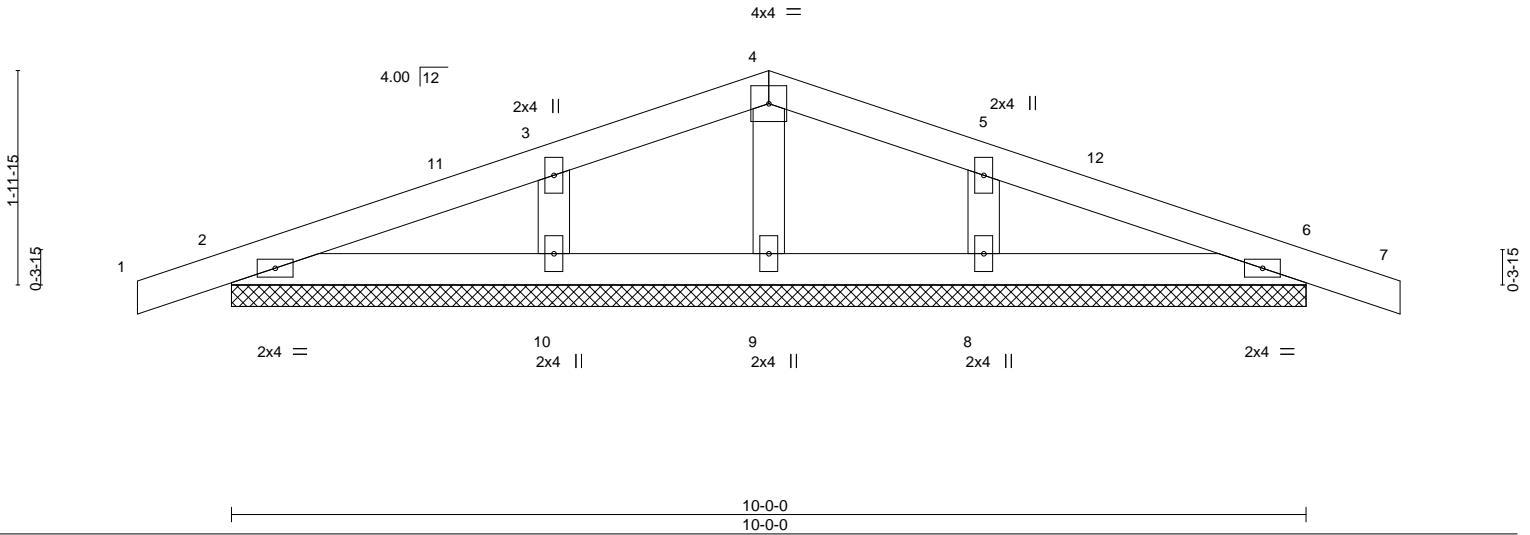| LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 16 lb	FT = 20%

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

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

REACTIONS.   (lb/size)   5=56/4-2-0, 2=134/4-2-0, 6=185/4-2-0
              Max Horz   2=66(LC 8)
              Max Uplift   5=-15(LC 8), 2=-43(LC 8), 6=-42(LC 12)

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 Corner(3) -0-10-8 to 2-2-0, Exterior(2) 2-2-0 to 4-0-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) N/A
8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

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Job	Truss	Truss Type	Qty	Ply	238.2338.10x10cvp	
22309A	P1	COMMON	4	1		I38820316
					Job Reference (optional)	

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

8.320 s Aug 28 2019 MiTek Industries, Inc. Tue Oct 8 09:22:32 2019 Page 1
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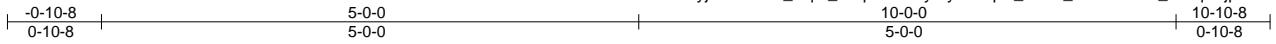
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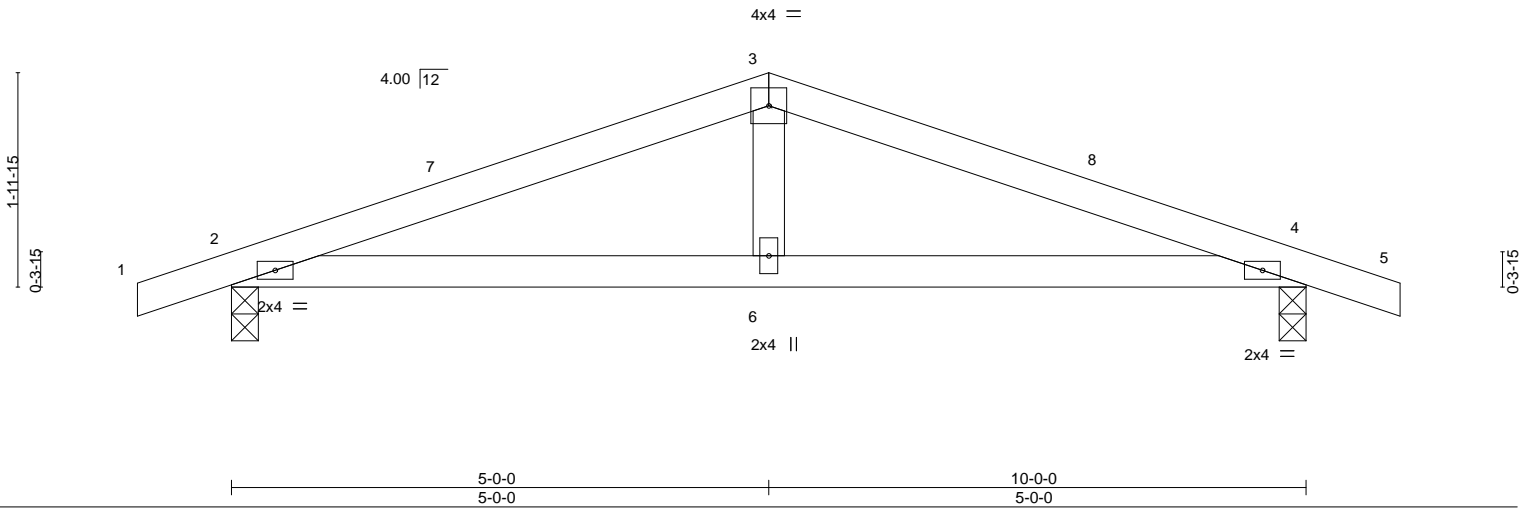
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	0.04	4-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.04	2-6	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 36 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 8-0-10 oc bracing.

REACTIONS. (lb/size) 2=450/0-3-0, 4=450/0-3-0
Max Horz 2=33(LC 16)
Max Uplift 2=-185(LC 8), 4=-185(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-705/598, 3-4=-705/594
BOT CHORD   2-6=-506/622, 4-6=-506/622

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 5-0-0, Exterior(2) 5-0-0 to 8-0-0,
   Interior(1) 8-0-0 to 10-10-8 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) 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) One RT7A USP 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.

NORTH CAROLINA
PROFESSIONAL
SEAL
45844
ENGINEER
ANDREW JOHNSON

October 8,2019

ENGINEERING BY
TRENCO
A MiTek Affiliate

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	238.2338.10x10cvp	
22309A	PE	COMMON SUPPORTED GAB	1	1		I38820317
					Job Reference (optional)	

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

8.320 s Aug 28 2019 MiTek Industries, Inc. Tue Oct 8 09:22:33 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-p9tuXeqYlhiCf8z1zs3J9rF6M01vZiSt14Wg6_yVWXK

-0-10-8	5-0-0	10-0-0	10-10-8
0-10-8	5-0-0	5-0-0	0-10-8

Scale = 1:21.4

10-0-0
10-0-0

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	0.00	7	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	7	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 38 lb	FT = 20%

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

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

REACTIONS.   All bearings 10-0-0.
(lb) -   Max Horz 2=33(LC 12)
Max Uplift   All uplift 100 lb or less at joint(s) 2, 6, 10, 8
Max Grav   All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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 2-1-8, Exterior(2) 2-1-8 to 5-0-0, Corner(3) 5-0-0 to 8-0-0, Exterior(2) 8-0-0 to 10-10-8 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) N/A
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

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October 8,2019

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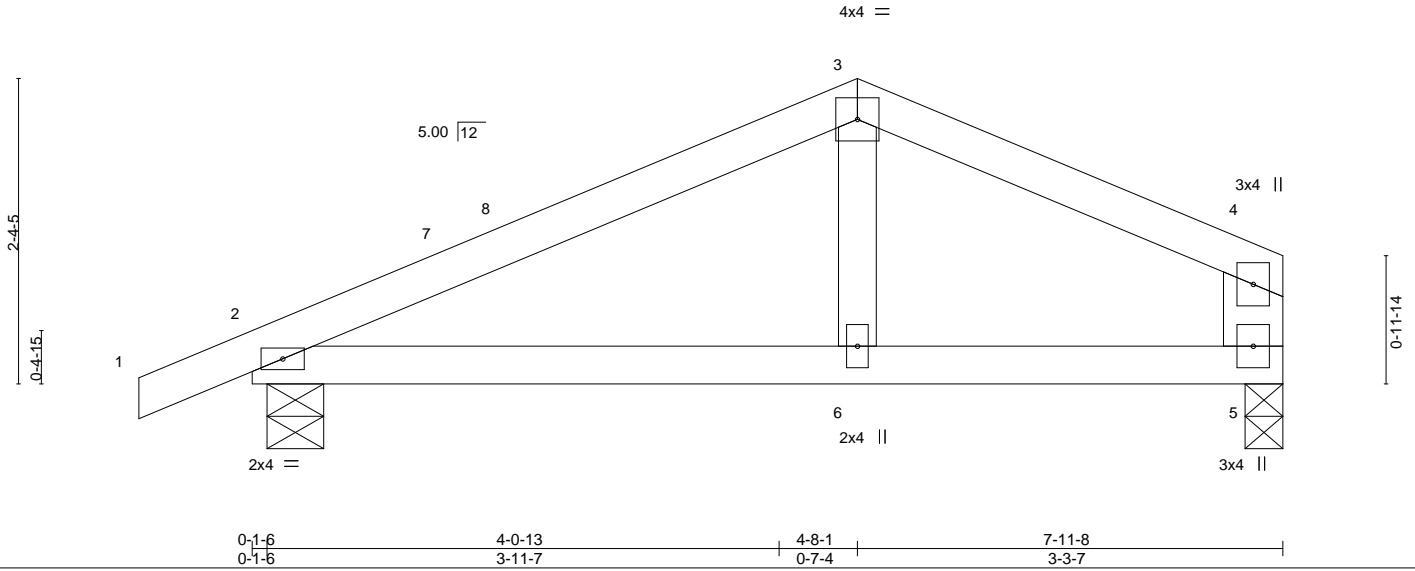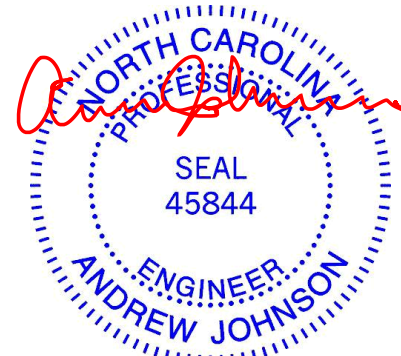| Job	Truss	Truss Type	Qty	Ply	238.2338.10x10cvp	
22309A	PF1	COMMON	2	1		I38820318
					Job Reference (optional)	

84 Components (Dunn),   Dunn, NC - 28334,   8.320 s Aug 28 2019 MiTek Industries, Inc. Tue Oct 8 09:22:34 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-HLRGk_rAW_q3HIYDXZaYh3nD6QFtI9l0GkGEfQyVWXJ
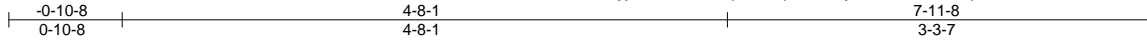
Scale = 1:17.8

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	0.35	Vert(LL)	0.05	2-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.05	2-6	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 30 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
WEBS   2x4 SP No.3 *Except*
             4-5: 2x6 SP No.2

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

REACTIONS.   (lb/size)   2=371/0-5-4, 5=296/0-3-8
                 Max Horz 2=60(LC 12)
                 Max Uplift 2=-114(LC 8), 5=-77(LC 8)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-354/320, 3-4=-336/342
BOT CHORD   2-6=-266/269, 5-6=-266/269

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 4-8-1, Exterior(2) 4-8-1 to 7-8-12 zone;
   porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
5) One RT7A USP 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.

October 8,2019

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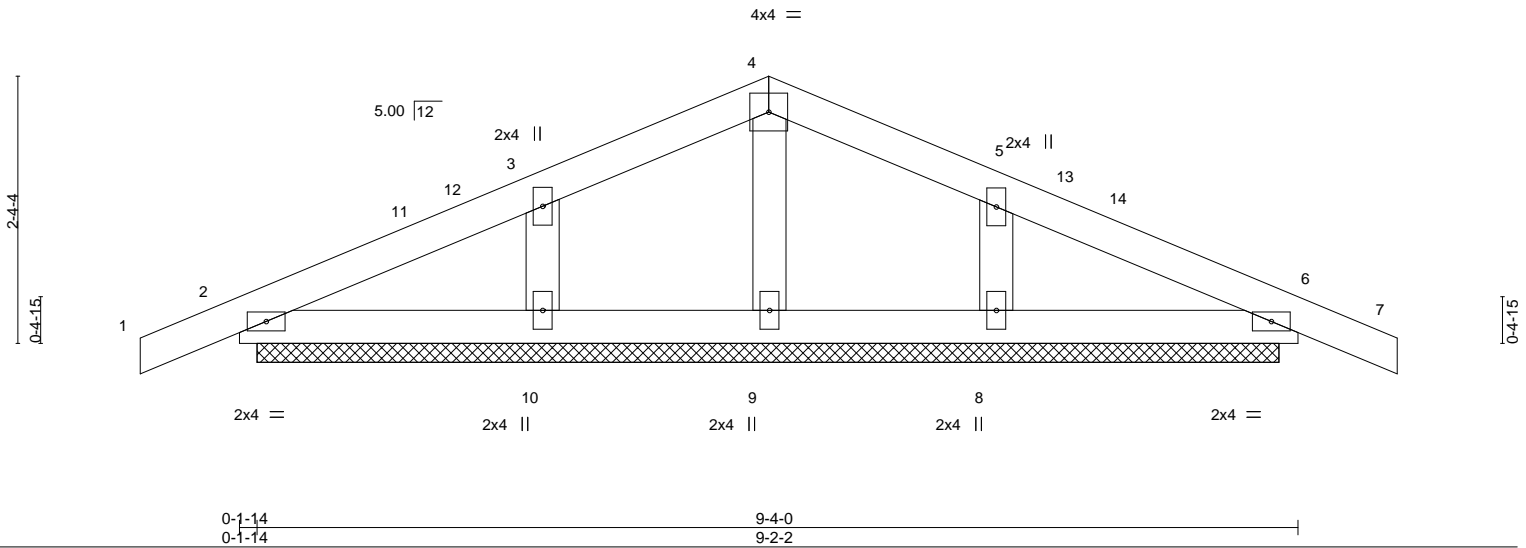| Job	Truss	Truss Type	Qty	Ply	238.2338.10x10cvp	
22309A	PFE	COMMON SUPPORTED GAB	1	1		I38820319
					Job Reference (optional)	

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

8.320 s Aug 28 2019 MiTek Industries, Inc. Tue Oct 8 09:22:34 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-HLRGk_rAW_q3HlYDXZaYh3nHOQNKI9g0GkGEfQyVWXJ
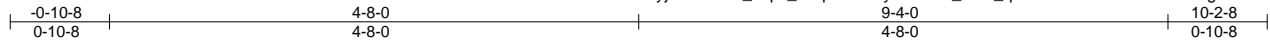
Scale = 1:20.3

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	0.00	6	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	0.00	7	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 38 lb	FT = 20%

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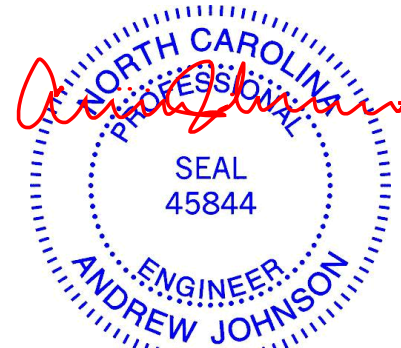BOT CHORD   2x4 SP No.2
OTHERS   2x4 SP No.3

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

REACTIONS.   All bearings 9-0-2.
        (lb) -   Max Horz 2=-39(LC 13)
            Max Uplift   All uplift 100 lb or less at joint(s) 2, 6, 10, 8
            Max Grav   All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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 2-1-8, Exterior(2) 2-1-8 to 4-8-0, Corner(3) 4-8-0 to 7-8-0,
   Exterior(2) 7-8-0 to 10-2-8 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
   Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
7) N/A
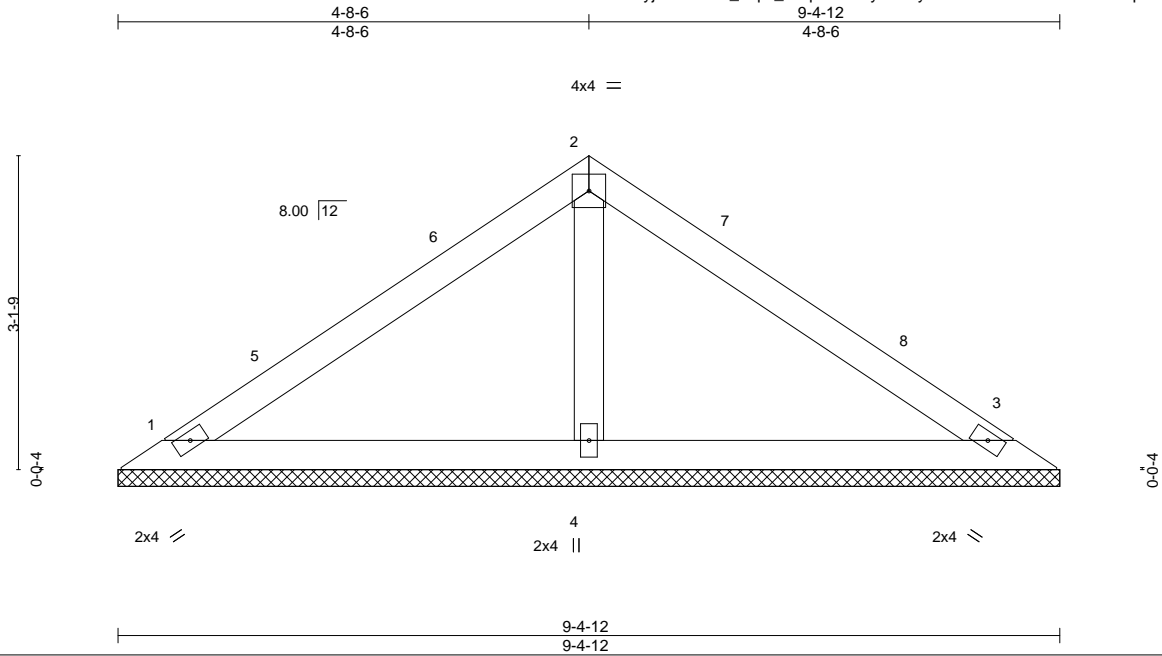8) Non Standard bearing condition. Review required.

October 8,2019

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Job	Truss	Truss Type	Qty	Ply	238.2338.10x10cvp	
22309A	V1	GABLE	1	1		I38820320
					Job Reference (optional)	

84 Components (Dunn),   Dunn, NC - 28334,   8.320 s Aug 28 2019 MiTek Industries, Inc. Tue Oct 8 09:22:35 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-IX?eyKsoHIzwuR7Q4H6nEGKNopff1cz9VO?nBtyVWXI

4-8-6
4-8-6
9-4-12
4-8-6

Scale = 1:23.0

4x4

8.00 [12

2x4   2x4   2x4

9-4-12
9-4-12

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 33 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.3
BOT CHORD   2x4 SP No.3
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=165/9-4-12, 3=165/9-4-12, 4=346/9-4-12
                        Max Horz 1=-70(LC 8)
                        Max Uplift 1=-30(LC 12), 3=-40(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) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 4-8-6, Exterior(2) 4-8-6 to 7-8-6,
   Interior(1) 7-8-6 to 8-11-0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
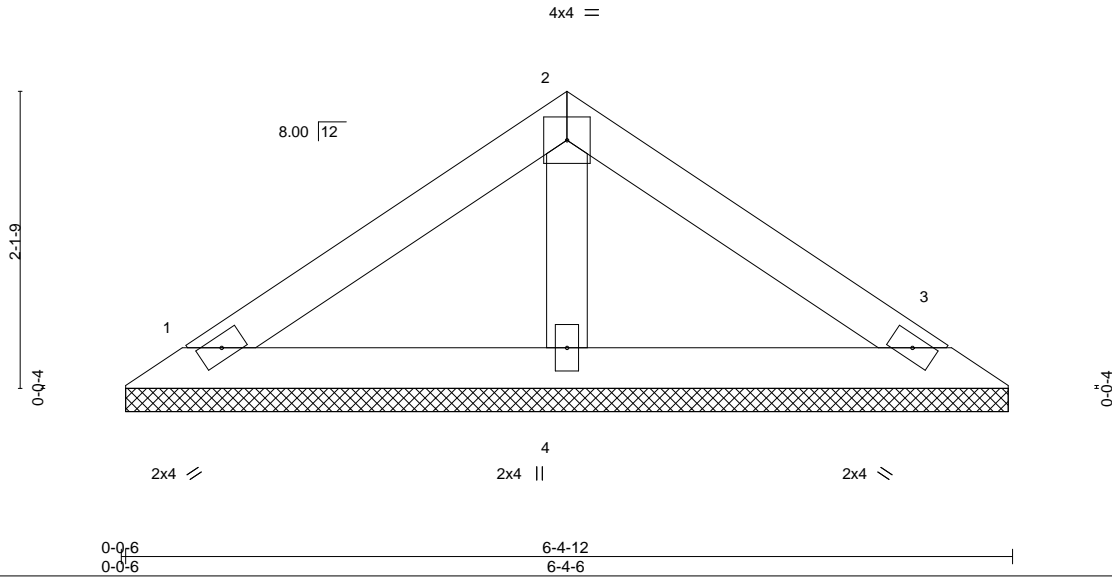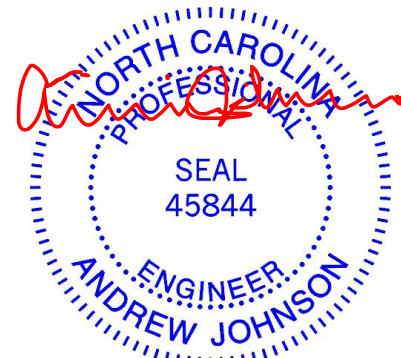
October 8,2019

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Job	Truss	Truss Type	Qty	Ply	238.2338.10x10cvp	
22309A	V2	Valley	1	1		I38820321
					Job Reference (optional)	

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

8.320 s Aug 28 2019 MiTek Industries, Inc. Tue Oct 8 09:22:36 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-DkZ19fsR2c5nWbice_d0mUtbbD2dm3cJj2lKjJyVWXH

	3-2-6		6-4-12	
	3-2-6		3-2-6	

Scale = 1:16.5

4x4 =

8.00 ⟌12

2-1-9

0-0-4

1   2   3

4

2x4 ╱   2x4 ‖   2x4 ╲

0-0-6	6-4-12	
0-0-6	6-4-6	

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	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: 21 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.3
BOT CHORD   2x4 SP No.3
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=116/6-4-0, 3=116/6-4-0, 4=202/6-4-0
Max Horz 1=45(LC 9)
Max Uplift 1=-26(LC 12), 3=-32(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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

NORTH CAROLINA
PROFESSIONAL
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45844
ENGINEER
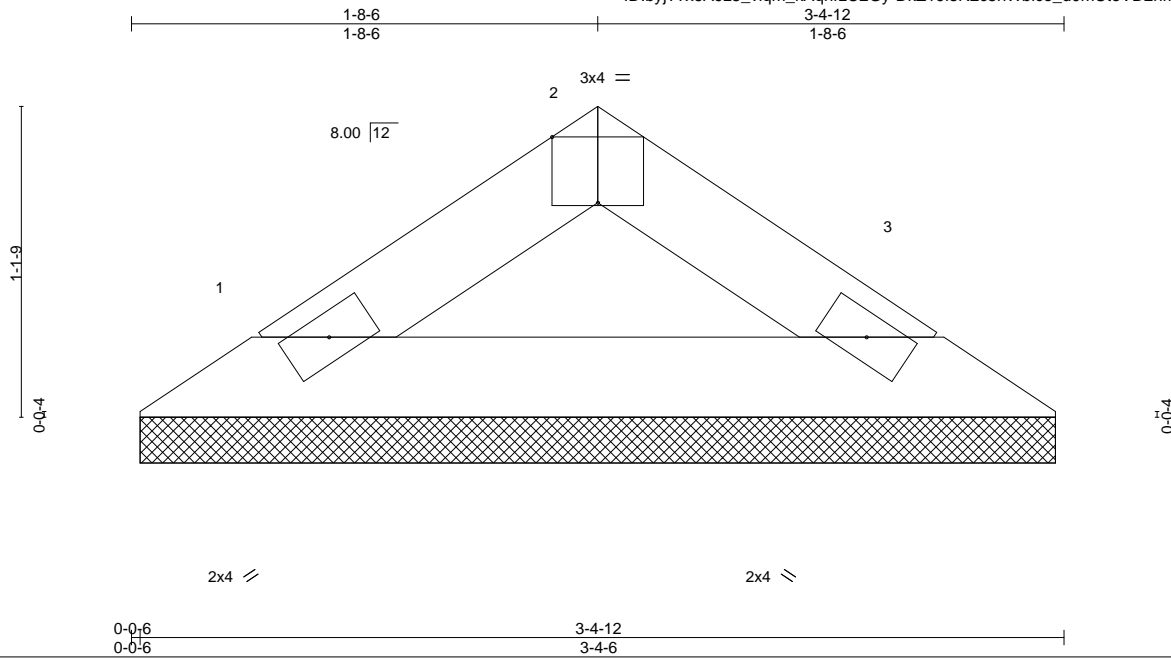ANDREW JOHNSON

October 8,2019

ENGINEERING BY
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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	238.2338.10x10cvp	
22309A	V3	Valley	1	1		I38820322
					Job Reference (optional)	

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

8.320 s Aug 28 2019 MiTek Industries, Inc. Tue Oct 8 09:22:36 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-DkZ19fsR2c5nWbice_d0mUteVD2nm31Jj2IKjJyVWXH

Scale = 1:8.4

3x4 =

8.00 12

2x4

2x4

Plate Offsets (X,Y)--   [2:0-2-0,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	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	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: 9 lb	FT = 20%

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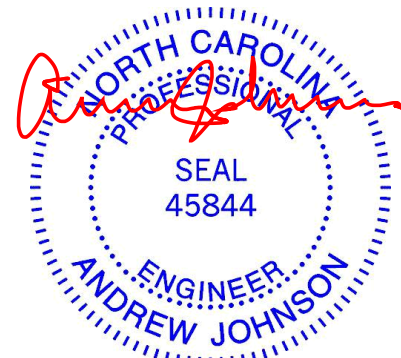BOT CHORD   2x4 SP No.3

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 3-4-12 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (lb/size)   1=97/3-4-0, 3=97/3-4-0
Max Horz 1=20(LC 9)
Max Uplift 1=-10(LC 12), 3=-10(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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
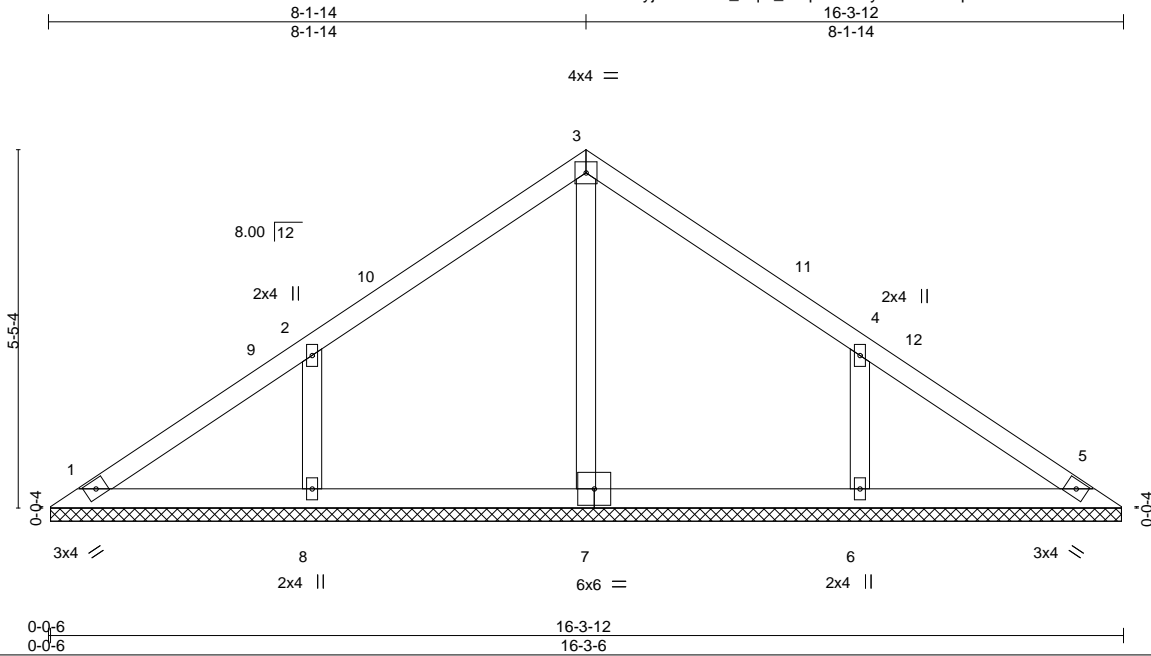
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	238.2338.10x10cvp	
22309A	V4	Valley	1	1		I38820323
					Job Reference (optional)	

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

8.320 s Aug 28 2019 MiTek Industries, Inc. Tue Oct 8 09:22:37 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-hw7PN?t3pvDe8lHoCi8FJhPlPdNsVVqSyiUuFlyVWXG

8-1-14   16-3-12
8-1-14   8-1-14

4x4 ═

Scale = 1:35.0

8.00 ⌐12

2x4 ‖   10   11   2x4 ‖

2   4

9   12

1   5

3x4 ⫽   3x4 ⟍

8   7   6

2x4 ‖   6x6 ═   2x4 ‖

0-0-6   16-3-12
0-0-6   16-3-6

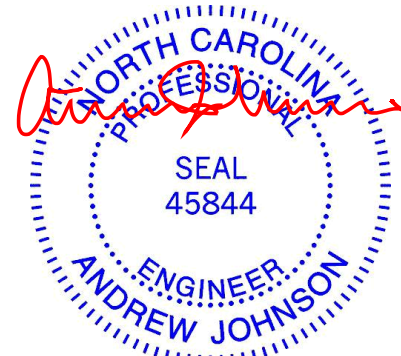| LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 65 lb	FT = 20%

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

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

REACTIONS.   All bearings 16-3-0.
    (lb) -   Max Horz   1=-127(LC 8)
           Max Uplift   All uplift 100 lb or less at joint(s) 1 except 6=-152(LC 13), 8=-149(LC 12)
           Max Grav   All reactions 250 lb or less at joint(s) 1, 5 except 7=261(LC 1), 6=382(LC 20), 8=386(LC 19)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS   4-6=-294/196, 2-8=-294/196

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) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 8-1-14, Exterior(2) 8-1-14 to 11-1-14,
Interior(1) 11-1-14 to 15-10-0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1.

NORTH CAROLINA
PROFESSIONAL
SEAL
45844
ENGINEER
ANDREW JOHNSON

October 8,2019

ENGINEERING BY
TRENCO
A MiTek Affiliate

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Edenton, NC 27932
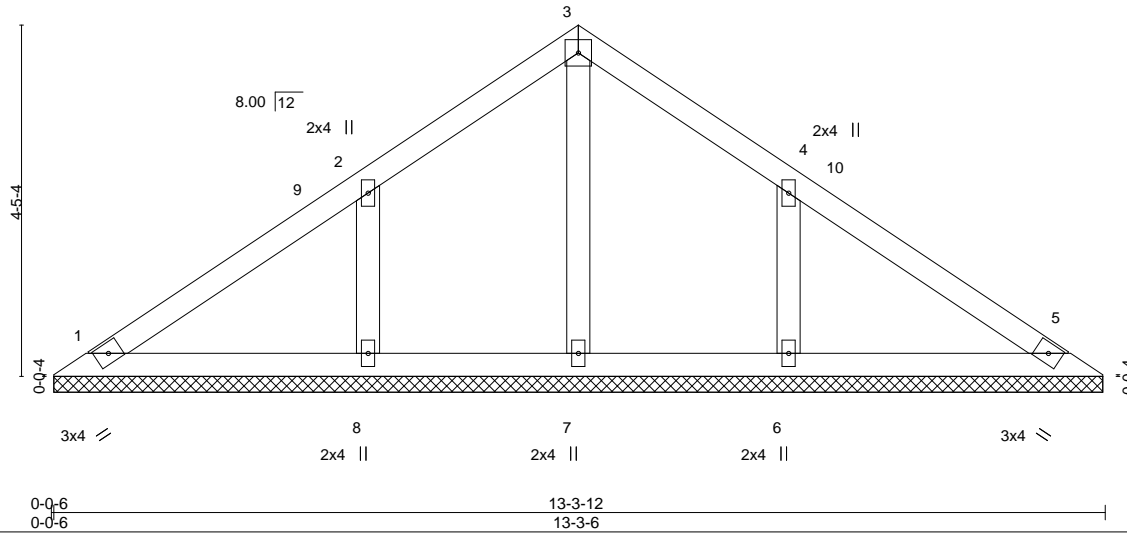
84 Components (Dunn),   Dunn, NC - 28334,   8.320 s Aug 28 2019 MiTek Industries, Inc. Tue Oct 8 09:22:38 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-96gnaLuhaDLVlvs_mPfUsvyxB1jaEzmcBMERoCyVWXF

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 0.05	Horz(CT) 0.00 5 n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 54 lb FT = 20%

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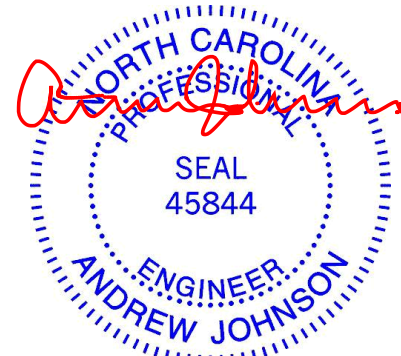OTHERS   2x4 SP No.3

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

REACTIONS.   All bearings 13-3-0.
     (lb) - Max Horz 1=-102(LC 10)
              Max Uplift   All uplift 100 lb or less at joint(s) 1 except 6=-123(LC 13), 8=-123(LC 12)
              Max Grav   All reactions 250 lb or less at joint(s) 1, 5, 7 except 6=326(LC 20), 8=326(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) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 6-7-14, Exterior(2) 6-7-14 to 9-7-14,
   Interior(1) 9-7-14 to 12-10-0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1.
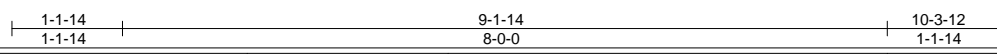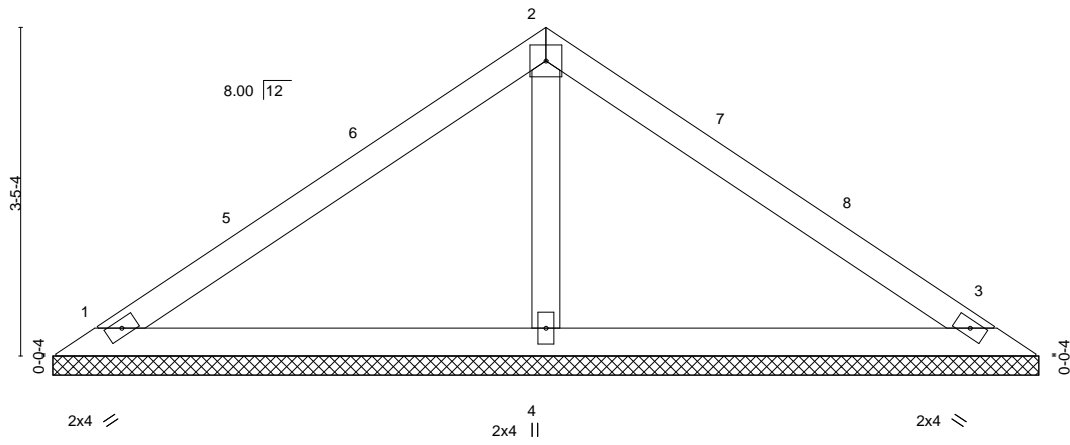
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	238.2338.10x10cvp	
22309A	V6	GABLE	1	1		I38820325
					Job Reference (optional)	

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

8.320 s Aug 28 2019 MiTek Industries, Inc. Tue Oct 8 09:22:38 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-96gnaLuhaDLVlvs_mPfUsvyvm1hdEzZcBMERoCyVWXF

1-1-14	5-1-14	9-1-14	10-3-12
1-1-14	4-0-0	4-0-0	1-1-14

4x4 =

Scale: 1/2"=1'

8.00 |12

3-5-4

0-0-4

2x4 //

4
2x4 ||

2x4 \\

1-1-14	9-1-14	10-3-12
1-1-14	8-0-0	1-1-14

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.22	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: 36 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=184/10-3-12, 3=184/10-3-12, 4=380/10-3-12
Max Horz 1=77(LC 9)
Max Uplift 1=-34(LC 12), 3=-44(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) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 5-1-14, Exterior(2) 5-1-14 to 8-1-14,
   Interior(1) 8-1-14 to 9-10-0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
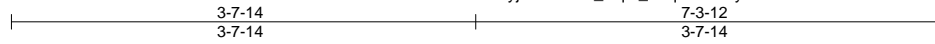
NORTH CAROLINA
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ENGINEER
ANDREW JOHNSON

October 8,2019

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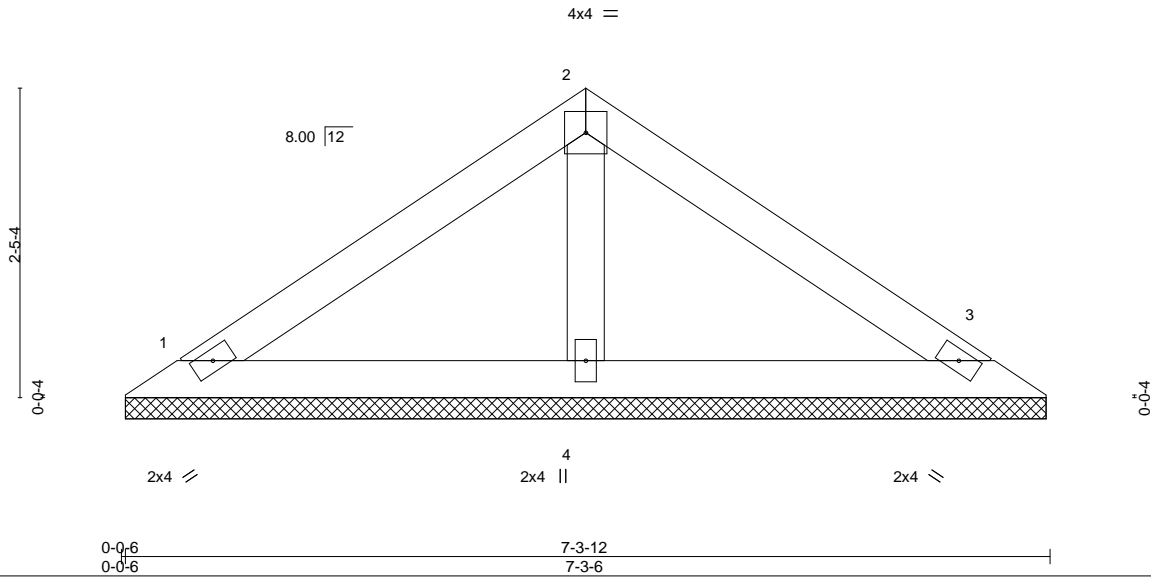
818 Soundside Road
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84 Components (Dunn),   Dunn, NC - 28334,

8.320 s Aug 28 2019 MiTek Industries, Inc. Tue Oct 8 09:22:39 2019 Page 1
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3-7-14   7-3-12
3-7-14   3-7-14

Scale = 1:18.1

4x4 =

8.00 [12

2-5-4

0-0-4

1

2

3

4

2x4 //   2x4 || 2x4 \\

0-0-4

0-0-6   7-3-12
0-0-6   7-3-6

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	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: 25 lb	FT = 20%

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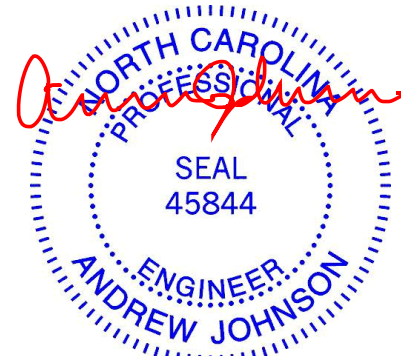BOT CHORD   2x4 SP No.3
OTHERS   2x4 SP No.3

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=136/7-3-0, 3=136/7-3-0, 4=236/7-3-0
Max Horz 1=-52(LC 8)
Max Uplift 1=-30(LC 12), 3=-37(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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

October 8,2019

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	238.2338.10x10cvp	
22309A	V8	Valley	1	1		I38820327
					Job Reference (optional)	

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

8.320 s Aug 28 2019 MiTek Industries, Inc. Tue Oct 8 09:22:40 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-6VoX?1wx5qbD?D?NtqhyxK1IsqNxit1vefjYs4yVWXD

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.23	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: 12 lb	FT = 20%

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

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 4-3-12 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (lb/size)   1=134/4-3-0, 3=134/4-3-0
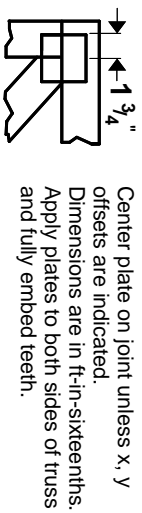Max Horz 1=-28(LC 8)
Max Uplift 1=-14(LC 12), 3=-14(LC 13)

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
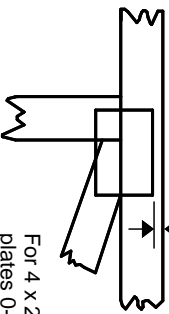
October 8,2019

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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 ¾"

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.
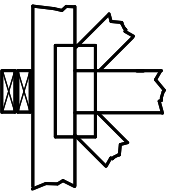
PLATE SIZE

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.
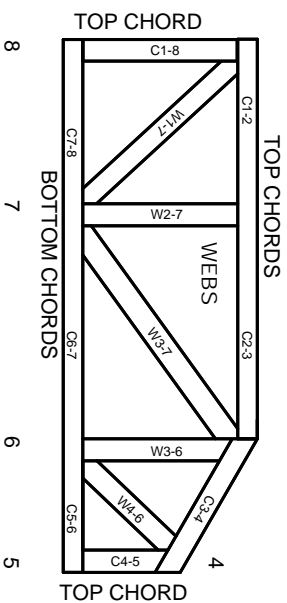
BEARING

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.

Numbering System

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

6-4-8

TOP CHORD

C1-8

C1-2

W1-7

W2-7

C7-8

BOTTOM CHORDS

WEBS

C2-3

C6-7

W3-7

W3-6

C5-6

W4-6

C3-4

C4-5

TOP CHORD

1 2 3 4 5 6 7 8

TOP CHORDS

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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

⚠ General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

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

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