ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 28586-28586A
10 PRINCE PLACE - ROOF

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: I48477579 thru I48477614

My license renewal date for the state of North Carolina is December 31, 2021.

North Carolina COA: C-0844

October 25,2021

Sevier, Scott

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.

Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	A1E	GABLE	1	1	I48477579
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:23:08 2021 Page 1
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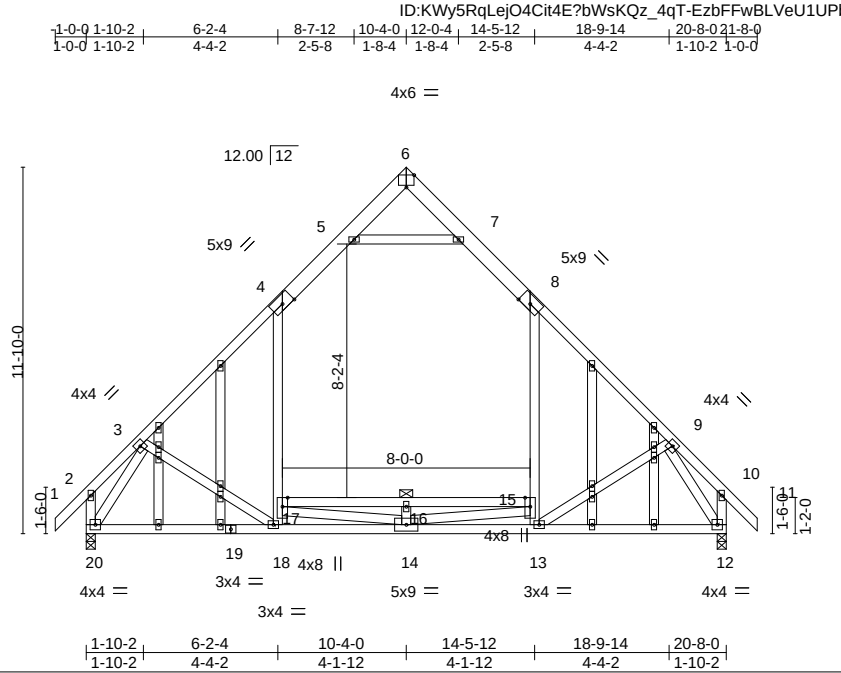

Plate Offsets (X,Y)-- [6:0-3-0,Edge]

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	0.69	Vert(LL)	0.19	18-20	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.27	16-17	>917	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.02	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Attic	-0.13	15-17	766	360	Weight: 193 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2 *Except* 4-6,6-8: 2x6 SP DSS
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2 *Except* 15-17: 2x4 SP No.1
WEBS	2x4 SP No.3 *Except* 5-7,4-18,8-13: 2x4 SP No.2 or 2x4 SPF No.2
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-6-3 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 4-4-0 oc bracing: 15-17

REACTIONS. (size) 20=0-3-8, 12=0-3-8
Max Horz 20=276(LC 9)
Max Grav 20=1311(LC 19), 12=1311(LC 18)

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

TOP CHORD	3-4=-1346/0, 4-5=-812/44, 5-6=0/462, 6-7=0/462, 7-8=-812/44, 8-9=-1346/0
BOT CHORD	18-20=-25/875, 14-18=0/1065, 13-14=0/861, 12-13=0/699, 16-17=-1251/0, 15-16=-1251/0
WEBS	5-7=-1449/54, 4-17=0/606, 8-15=0/606, 3-18=-13/272, 9-13=-13/272, 3-20=-1392/0, 9-12=-1391/0, 14-16=-514/0, 14-17=0/1272, 14-15=0/1272

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (10.0psf) on member(s).4-17, 8-15
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) Attic room checked for L/360 deflection.

October 25,2021

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Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	A2	ATTIC	3	1	I48477580
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:23:10 2021 Page 1
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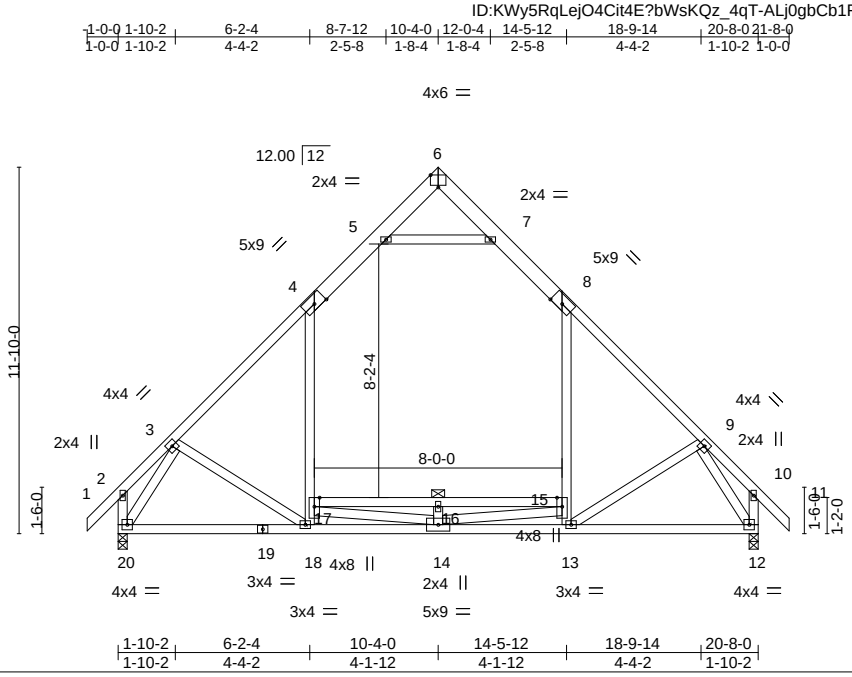

Plate Offsets (X,Y)-- [6:0-3-0,Edge]

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	0.69	Vert(LL)	0.19	18-20	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.27	16-17	>917	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.02	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Attic	-0.13	15-17	766	360	Weight: 169 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 4-6,6-8: 2x6 SP DSS
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 15-17: 2x4 SP No.1
WEBS 2x4 SP No.3 *Except* 5-7,4-18,8-13: 2x4 SP No.2 or 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-6-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 4-4-0 oc bracing: 15-17

REACTIONS. (size) 20=0-3-8, 12=0-3-8
Max Horz 20=276(LC 9)
Max Grav 20=1311(LC 19), 12=1311(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-1346/0, 4-5=-812/44, 5-6=0/462, 6-7=0/462, 7-8=-812/44, 8-9=-1346/0
BOT CHORD 18-20=-25/875, 14-18=0/1065, 13-14=0/861, 12-13=0/699, 16-17=-1251/0, 15-16=-1251/0
WEBS 5-7=-1449/54, 4-17=0/606, 8-15=0/606, 3-18=-13/272, 9-13=-13/272, 3-20=-1392/0, 9-12=-1391/0, 14-16=-514/0, 14-17=0/1272, 14-15=0/1272

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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) 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) Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (10.0psf) on member(s).4-17, 8-15
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 16-17, 15-16
7) Attic room checked for L/360 deflection.

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Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	A3	ATTIC	3	1	I48477581
					Job Reference (optional)

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 22 10:36:09 2021 Page 1
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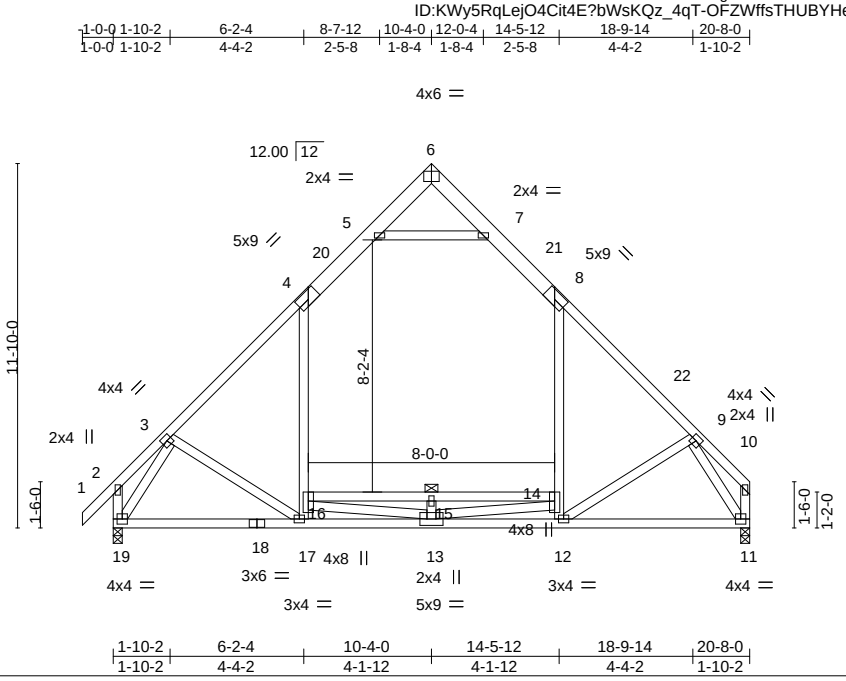

Plate Offsets (X,Y)-- [6:0-3-0,Edge]

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	1.00	Vert(LL)	-0.17	12-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.28	14-15	>867	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.02	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Attic	-0.13	14-16	739	360	Weight: 167 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except*
4-6,6-8: 2x6 SP No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except*
14-16: 2x4 SP No.1
WEBS 2x4 SP No.3 *Except*
5-7,4-17,8-12: 2x4 SP No.2 or 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
4-4-0 oc bracing: 14-16

REACTIONS. (lb/size) 19=1112/0-3-8 (min. 0-1-15), 11=1039/0-3-8 (min. 0-1-14)
Max Horz 19=243(LC 11)
Max Grav 19=1246(LC 19), 11=1197(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-1269/0, 4-20=-766/25, 5-20=-692/47, 5-6=0/398, 6-7=0/398, 7-21=-691/49, 8-21=-766/26, 8-22=-1138/0, 9-22=-1271/0
BOT CHORD 18-19=0/814, 17-18=0/814, 13-17=0/980, 12-13=0/816, 11-12=0/671, 15-16=-1260/0, 14-15=-1260/0
WEBS 5-7=-1306/57, 4-16=0/563, 8-14=0/564, 3-19=-1333/0, 9-11=-1325/0, 13-15=-514/0, 13-16=0/1277, 13-14=0/1275

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) -1-0-0 to 1-8-9, Interior(1) 1-8-9 to 10-4-0, Exterior(2) 10-4-0 to 13-4-0, Interior(1) 13-4-0 to 20-6-4 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) 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) Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-16, 8-14
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 15-16, 14-15
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Attic room checked for L/360 deflection.

LOAD CASE(S)
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-60, 2-4=-60, 4-5=-70, 5-6=-60, 6-7=-60, 7-8=-70, 8-10=-60, 5-7=-10, 14-16=-30
Drag: 4-16=-10, 8-14=-10

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LOAD CASE(S)

2) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-50, 2-4=-50, 4-5=-60, 5-6=-50, 6-7=-50, 7-8=-60, 8-10=-50, 5-7=-10, 14-16=-90
Drag: 4-16=-10, 8-14=-10

3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 11-19=-40, 1-2=-20, 2-4=-20, 4-5=-30, 5-6=-20, 6-7=-20, 7-8=-30, 8-10=-20, 5-7=-10, 14-16=-30
Drag: 4-16=-10, 8-14=-10

4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-12, 1-2=35, 2-3=19, 3-4=14, 4-5=8, 5-6=14, 6-7=19, 7-21=13, 8-21=8, 8-10=14, 5-7=-6, 14-16=-18
Horz: 1-2=-47, 2-3=-31, 3-6=-26, 6-21=31, 10-21=26, 2-19=16, 10-11=28
Drag: 4-16=-10, 8-14=-10

5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-12, 1-2=9, 2-4=14, 4-20=8, 5-20=13, 5-6=19, 6-7=14, 7-8=8, 8-22=14, 10-22=19, 5-7=-6, 14-16=-18
Horz: 1-2=-21, 2-20=-26, 6-20=-31, 6-22=26, 10-22=31, 2-19=-28, 10-11=-16
Drag: 4-16=-10, 8-14=-10

6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=1, 2-4=-46, 4-5=-56, 5-6=-46, 6-7=-46, 7-8=-56, 8-10=-46, 5-7=-10, 14-16=-30
Horz: 1-2=-21, 2-6=26, 6-10=-26, 2-19=-19, 10-11=-26
Drag: 4-16=-10, 8-14=-10

7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-41, 2-4=-46, 4-5=-56, 5-6=-46, 6-7=-46, 7-8=-56, 8-10=-46, 5-7=-10, 14-16=-30
Horz: 1-2=21, 2-6=26, 6-10=-26, 2-19=26, 10-11=19
Drag: 4-16=-10, 8-14=-10

8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-12, 1-2=5, 2-4=-7, 4-5=-13, 5-6=-7, 6-7=5, 7-8=-1, 8-10=5, 5-7=-6, 14-16=-18
Horz: 1-2=-17, 2-6=-5, 6-10=17, 2-19=13, 10-11=15
Drag: 4-16=-10, 8-14=-10

9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-12, 1-2=1, 2-4=5, 4-5=-1, 5-6=5, 6-7=-7, 7-8=-13, 8-10=-7, 5-7=-6, 14-16=-18
Horz: 1-2=-13, 2-6=-17, 6-10=5, 2-19=-15, 10-11=-13
Drag: 4-16=-10, 8-14=-10

10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-26, 2-4=-31, 4-5=-41, 5-6=-31, 6-7=-12, 7-8=-22, 8-10=-12, 5-7=-10, 14-16=-30
Horz: 1-2=6, 2-6=11, 6-10=8, 2-19=22, 10-11=6
Drag: 4-16=-10, 8-14=-10

11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-7, 2-4=-12, 4-5=-22, 5-6=-12, 6-7=-31, 7-8=-41, 8-10=-31, 5-7=-10, 14-16=-30
Horz: 1-2=-13, 2-6=-8, 6-10=-11, 2-19=-6, 10-11=-22
Drag: 4-16=-10, 8-14=-10

12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-12, 1-2=25, 2-4=13, 4-5=7, 5-6=13, 6-7=13, 7-8=7, 8-10=13, 5-7=-6, 14-16=-18
Horz: 1-2=-37, 2-6=-25, 6-10=25, 2-19=-19, 10-11=19
Drag: 4-16=-10, 8-14=-10

13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-12, 1-2=16, 2-4=4, 4-5=-2, 5-6=4, 6-7=4, 7-8=-2, 8-10=4, 5-7=-6, 14-16=-18
Horz: 1-2=-28, 2-6=-16, 6-10=16, 2-19=-19, 10-11=19
Drag: 4-16=-10, 8-14=-10

14) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-16, 2-4=-21, 4-5=-31, 5-6=-21, 6-7=-21, 7-8=-31, 8-10=-21, 5-7=-10, 14-16=-30
Horz: 1-2=-4, 2-6=1, 6-10=-1, 2-19=-10, 10-11=10
Drag: 4-16=-10, 8-14=-10

15) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-16, 2-4=-21, 4-5=-31, 5-6=-21, 6-7=-21, 7-8=-31, 8-10=-21, 5-7=-10, 14-16=-30
Horz: 1-2=-4, 2-6=1, 6-10=-1, 2-19=-10, 10-11=10
Drag: 4-16=-10, 8-14=-10

16) Dead + Attic Floor: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-20, 2-4=-20, 4-5=-30, 5-6=-20, 6-7=-20, 7-8=-30, 8-10=-20, 5-7=-10, 14-16=-110
Drag: 4-16=-10, 8-14=-10

17) Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-20, 2-4=-20, 4-5=-30, 5-6=-20, 6-7=-20, 7-8=-30, 8-10=-20, 5-7=-10, 14-16=-110
Drag: 4-16=-10, 8-14=-10

Continued on page 3

LOAD CASE(S)

18) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-55, 2-4=-58, 4-5=-68, 5-6=-58, 6-7=-44, 7-8=-54, 8-10=-44, 5-7=-10, 14-16=-90
Horz: 1-2=5, 2-6=8, 6-10=6, 2-19=16, 10-11=5
Drag: 4-16=-10, 8-14=-10

19) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-40, 2-4=-44, 4-5=-54, 5-6=-44, 6-7=-58, 7-8=-68, 8-10=-58, 5-7=-10, 14-16=-90
Horz: 1-2=-10, 2-6=-6, 6-10=-8, 2-19=-5, 10-11=-16
Drag: 4-16=-10, 8-14=-10

20) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-47, 2-4=-51, 4-5=-61, 5-6=-51, 6-7=-51, 7-8=-61, 8-10=-51, 5-7=-10, 14-16=-90
Horz: 1-2=-3, 2-6=1, 6-10=-1, 2-19=-8, 10-11=8
Drag: 4-16=-10, 8-14=-10

21) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-47, 2-4=-51, 4-5=-61, 5-6=-51, 6-7=-51, 7-8=-61, 8-10=-51, 5-7=-10, 14-16=-90
Horz: 1-2=-3, 2-6=1, 6-10=-1, 2-19=-8, 10-11=8
Drag: 4-16=-10, 8-14=-10

22) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-60, 2-4=-60, 4-5=-70, 5-6=-60, 6-7=-20, 7-8=-30, 8-10=-20, 5-7=-10, 14-16=-30
Drag: 4-16=-10, 8-14=-10

23) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-20, 2-4=-20, 4-5=-30, 5-6=-20, 6-7=-60, 7-8=-70, 8-10=-60, 5-7=-10, 14-16=-30
Drag: 4-16=-10, 8-14=-10

24) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-50, 2-4=-50, 4-5=-60, 5-6=-50, 6-7=-20, 7-8=-30, 8-10=-20, 5-7=-10, 14-16=-90
Drag: 4-16=-10, 8-14=-10

25) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-20, 2-4=-20, 4-5=-30, 5-6=-20, 6-7=-50, 7-8=-60, 8-10=-50, 5-7=-10, 14-16=-90
Drag: 4-16=-10, 8-14=-10

Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	A4	ATTIC	3	1	I48477582
					Job Reference (optional)

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 22 10:37:06 2021 Page 1
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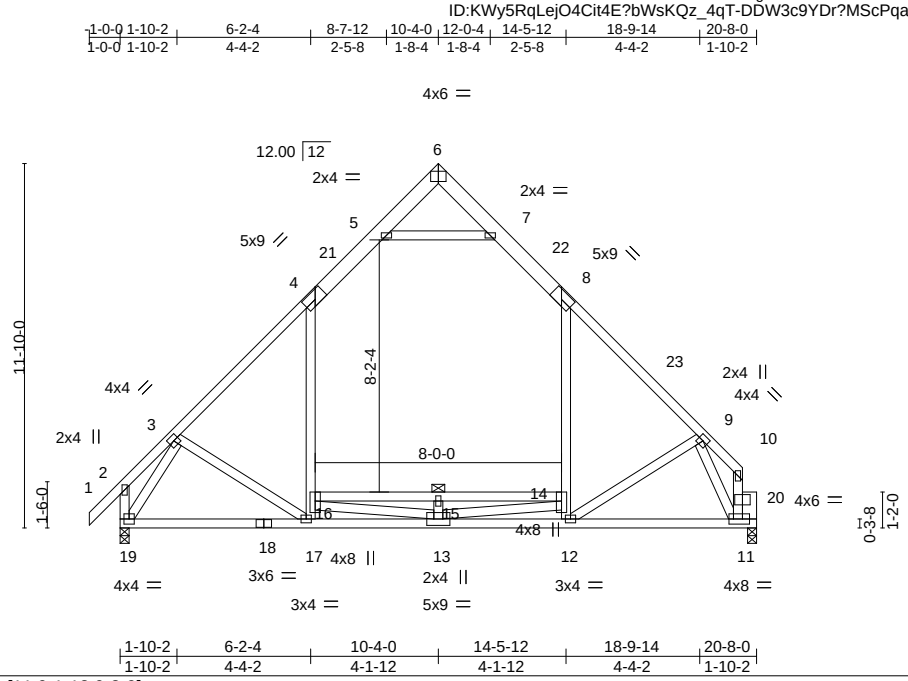

Plate Offsets (X,Y)-- [6:0-3-0,Edge], [11:0-1-12,0-2-0]

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	0.98	Vert(LL)	-0.17	13-17	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.29	15-16	>823	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.02	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Attic	-0.13	14-16	746	360	Weight: 168 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2 *Except* 4-6,6-8: 2x6 SP No.2
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2 *Except* 14-16: 2x4 SP No.1
WEBS	2x4 SP No.3 *Except* 5-7,4-17,8-12: 2x4 SP No.2 or 2x4 SPF No.2
OTHERS	2x6 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 4-4-0 oc bracing: 14-16

REACTIONS. (lb/size) 19=1096/0-3-8 (min. 0-1-15), 11=1021/0-3-8 (min. 0-1-14)
Max Horz 19=248(LC 11)
Max Grav 19=1229(LC 19), 11=1188(LC 18)

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

TOP CHORD	3-4=-1244/0, 4-21=-744/28, 5-21=-670/50, 5-6=0/387, 6-7=0/377, 7-22=-678/50, 8-22=-753/27, 8-23=-1100/0, 9-23=-1224/0
BOT CHORD	18-19=-9/805, 17-18=-9/805, 13-17=0/990, 12-13=0/758, 11-12=0/556, 15-16=-1264/0, 14-15=-1264/0
WEBS	5-7=-1259/60, 4-16=0/556, 8-14=0/528, 9-12=0/320, 3-19=-1311/0, 9-11=-1318/0, 13-15=-514/0, 13-16=0/1252, 13-14=0/1305

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) -1-0-0 to 1-8-9, Interior(1) 1-8-9 to 10-4-0, Exterior(2) 10-4-0 to 13-4-0, Interior(1) 13-4-0 to 20-0-12 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
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) Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-16, 8-14
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 15-16, 14-15
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Attic room checked for L/360 deflection.

LOAD CASE(S)

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

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Continued on page 2

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TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

LOAD CASE(S)

Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-60, 2-4=-60, 4-5=-70, 5-6=-60, 6-7=-60, 7-8=-70, 8-10=-60, 5-7=-10, 14-16=-30
Drag: 4-16=-10, 8-14=-10

2) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-50, 2-4=-50, 4-5=-60, 5-6=-50, 6-7=-50, 7-8=-60, 8-10=-50, 5-7=-10, 14-16=-90
Drag: 4-16=-10, 8-14=-10

3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 11-19=-40, 1-2=-20, 2-4=-20, 4-5=-30, 5-6=-20, 6-7=-20, 7-8=-30, 8-10=-20, 5-7=-10, 14-16=-30
Drag: 4-16=-10, 8-14=-10

4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-12, 1-2=35, 2-3=19, 3-4=14, 4-5=8, 5-6=14, 6-7=19, 7-22=13, 8-22=8, 8-10=14, 5-7=-6, 11-20=-28, 14-16=-18
Horz: 1-2=-47, 2-3=-31, 3-6=-26, 6-22=31, 10-22=26, 2-19=16, 10-11=28
Drag: 4-16=-10, 8-14=-10

5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-12, 1-2=9, 2-4=14, 4-21=8, 5-21=13, 5-6=19, 6-7=14, 7-8=8, 8-23=14, 10-23=19, 5-7=-6, 11-20=16, 14-16=-18
Horz: 1-2=-21, 2-21=-26, 6-21=-31, 6-23=26, 10-23=31, 2-19=-28, 10-11=-16
Drag: 4-16=-10, 8-14=-10

6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=1, 2-4=-46, 4-5=-56, 5-6=-46, 6-7=-46, 7-8=-56, 8-10=-46, 5-7=-10, 11-20=26, 14-16=-30
Horz: 1-2=-21, 2-6=26, 6-10=-26, 2-19=-19, 10-11=-26
Drag: 4-16=-10, 8-14=-10

7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-41, 2-4=-46, 4-5=-56, 5-6=-46, 6-7=-46, 7-8=-56, 8-10=-46, 5-7=-10, 11-20=-19, 14-16=-30
Horz: 1-2=21, 2-6=26, 6-10=-26, 2-19=26, 10-11=19
Drag: 4-16=-10, 8-14=-10

8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-12, 1-2=5, 2-4=-7, 4-5=-13, 5-6=-7, 6-7=5, 7-8=-1, 8-10=5, 5-7=-6, 11-20=-15, 14-16=-18
Horz: 1-2=-17, 2-6=-5, 6-10=17, 2-19=13, 10-11=15
Drag: 4-16=-10, 8-14=-10

9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-12, 1-2=1, 2-4=5, 4-5=-1, 5-6=5, 6-7=-7, 7-8=-13, 8-10=-7, 5-7=-6, 11-20=13, 14-16=-18
Horz: 1-2=-13, 2-6=-17, 6-10=5, 2-19=-15, 10-11=-13
Drag: 4-16=-10, 8-14=-10

10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-26, 2-4=-31, 4-5=-41, 5-6=-31, 6-7=-12, 7-8=-22, 8-10=-12, 5-7=-10, 11-20=-6, 14-16=-30
Horz: 1-2=6, 2-6=11, 6-10=8, 2-19=22, 10-11=6
Drag: 4-16=-10, 8-14=-10

11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-7, 2-4=-12, 4-5=-22, 5-6=-12, 6-7=-31, 7-8=-41, 8-10=-31, 5-7=-10, 11-20=22, 14-16=-30
Horz: 1-2=-13, 2-6=-8, 6-10=-11, 2-19=-6, 10-11=-22
Drag: 4-16=-10, 8-14=-10

12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-12, 1-2=25, 2-4=13, 4-5=7, 5-6=13, 6-7=13, 7-8=7, 8-10=13, 5-7=-6, 11-20=-19, 14-16=-18
Horz: 1-2=-37, 2-6=-25, 6-10=25, 2-19=-19, 10-11=19
Drag: 4-16=-10, 8-14=-10

13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-12, 1-2=16, 2-4=4, 4-5=-2, 5-6=4, 6-7=4, 7-8=-2, 8-10=4, 5-7=-6, 11-20=-19, 14-16=-18
Horz: 1-2=-28, 2-6=-16, 6-10=16, 2-19=-19, 10-11=19
Drag: 4-16=-10, 8-14=-10

14) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-16, 2-4=-21, 4-5=-31, 5-6=-21, 6-7=-21, 7-8=-31, 8-10=-21, 5-7=-10, 11-20=-10, 14-16=-30
Horz: 1-2=-4, 2-6=1, 6-10=-1, 2-19=-10, 10-11=10
Drag: 4-16=-10, 8-14=-10

15) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-16, 2-4=-21, 4-5=-31, 5-6=-21, 6-7=-21, 7-8=-31, 8-10=-21, 5-7=-10, 11-20=-10, 14-16=-30
Horz: 1-2=-4, 2-6=1, 6-10=-1, 2-19=-10, 10-11=10
Drag: 4-16=-10, 8-14=-10

16) Dead + Attic Floor: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-20, 2-4=-20, 4-5=-30, 5-6=-20, 6-7=-20, 7-8=-30, 8-10=-20, 5-7=-10, 14-16=-110
Drag: 4-16=-10, 8-14=-10

17) Dead: Lumber Increase=1.00, Plate Increase=1.00

Continued on page 3

LOAD CASE(S)

Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-20, 2-4=-20, 4-5=-30, 5-6=-20, 6-7=-20, 7-8=-30, 8-10=-20, 5-7=-10, 14-16=-110
Drag: 4-16=-10, 8-14=-10

18) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-55, 2-4=-58, 4-5=-68, 5-6=-58, 6-7=-44, 7-8=-54, 8-10=-44, 5-7=-10, 11-20=-5, 14-16=-90
Horz: 1-2=5, 2-6=8, 6-10=6, 2-19=16, 10-11=5
Drag: 4-16=-10, 8-14=-10

19) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-40, 2-4=-44, 4-5=-54, 5-6=-44, 6-7=-58, 7-8=-68, 8-10=-58, 5-7=-10, 11-20=16, 14-16=-90
Horz: 1-2=-10, 2-6=-6, 6-10=-8, 2-19=-5, 10-11=-16
Drag: 4-16=-10, 8-14=-10

20) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-47, 2-4=-51, 4-5=-61, 5-6=-51, 6-7=-51, 7-8=-61, 8-10=-51, 5-7=-10, 11-20=-8, 14-16=-90
Horz: 1-2=-3, 2-6=1, 6-10=-1, 2-19=-8, 10-11=8
Drag: 4-16=-10, 8-14=-10

21) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-47, 2-4=-51, 4-5=-61, 5-6=-51, 6-7=-51, 7-8=-61, 8-10=-51, 5-7=-10, 11-20=-8, 14-16=-90
Horz: 1-2=-3, 2-6=1, 6-10=-1, 2-19=-8, 10-11=8
Drag: 4-16=-10, 8-14=-10

22) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-60, 2-4=-60, 4-5=-70, 5-6=-60, 6-7=-20, 7-8=-30, 8-10=-20, 5-7=-10, 14-16=-30
Drag: 4-16=-10, 8-14=-10

23) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-20, 2-4=-20, 4-5=-30, 5-6=-20, 6-7=-60, 7-8=-70, 8-10=-60, 5-7=-10, 14-16=-30
Drag: 4-16=-10, 8-14=-10

24) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-50, 2-4=-50, 4-5=-60, 5-6=-50, 6-7=-20, 7-8=-30, 8-10=-20, 5-7=-10, 14-16=-90
Drag: 4-16=-10, 8-14=-10

25) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 11-19=-20, 1-2=-20, 2-4=-20, 4-5=-30, 5-6=-20, 6-7=-50, 7-8=-60, 8-10=-50, 5-7=-10, 14-16=-90
Drag: 4-16=-10, 8-14=-10

Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	B1E	GABLE	1	1	I48477583
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:23:15 2021 Page 1
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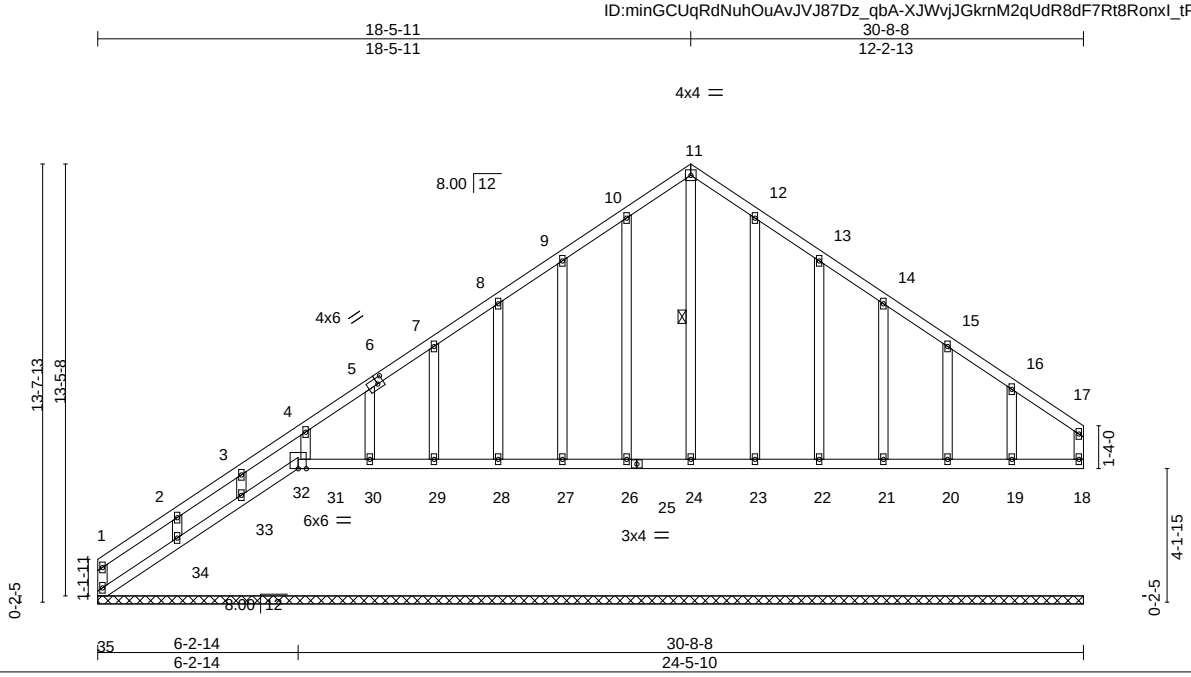

Plate Offsets (X,Y)-- [6:0-2-4,0-2-4]

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	0.22	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	-0.01	18	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-R							Weight: 196 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 11-24

REACTIONS. All bearings 30-8-8.
(lb) - Max Horz 35=280(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 32, 26, 27, 28, 29, 30, 31, 33, 23, 22, 21, 20, 19 except 35=-169(LC 8), 18=-113(LC 10), 34=-173(LC 10)
Max Grav All reactions 250 lb or less at joint(s) 18, 32, 26, 27, 28, 29, 30, 31, 33, 23, 22, 21, 20, 19 except 35=260(LC 7), 24=275(LC 10), 34=273(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 9-10=-253/283, 10-11=-289/326, 11-12=-289/326, 12-13=-253/283
WEBS 11-24=-303/210

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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) 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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 32, 26, 27, 28, 29, 30, 31, 33, 23, 22, 21, 20, 19 except (jt=lb) 35=169, 18=113, 34=173.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 18, 32, 24, 26, 27, 28, 29, 30, 31, 33, 34, 23, 22, 21, 20, 19.

October 25,2021

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

Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	B2	Common	9	1	I48477584
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:23:18 2021 Page 1
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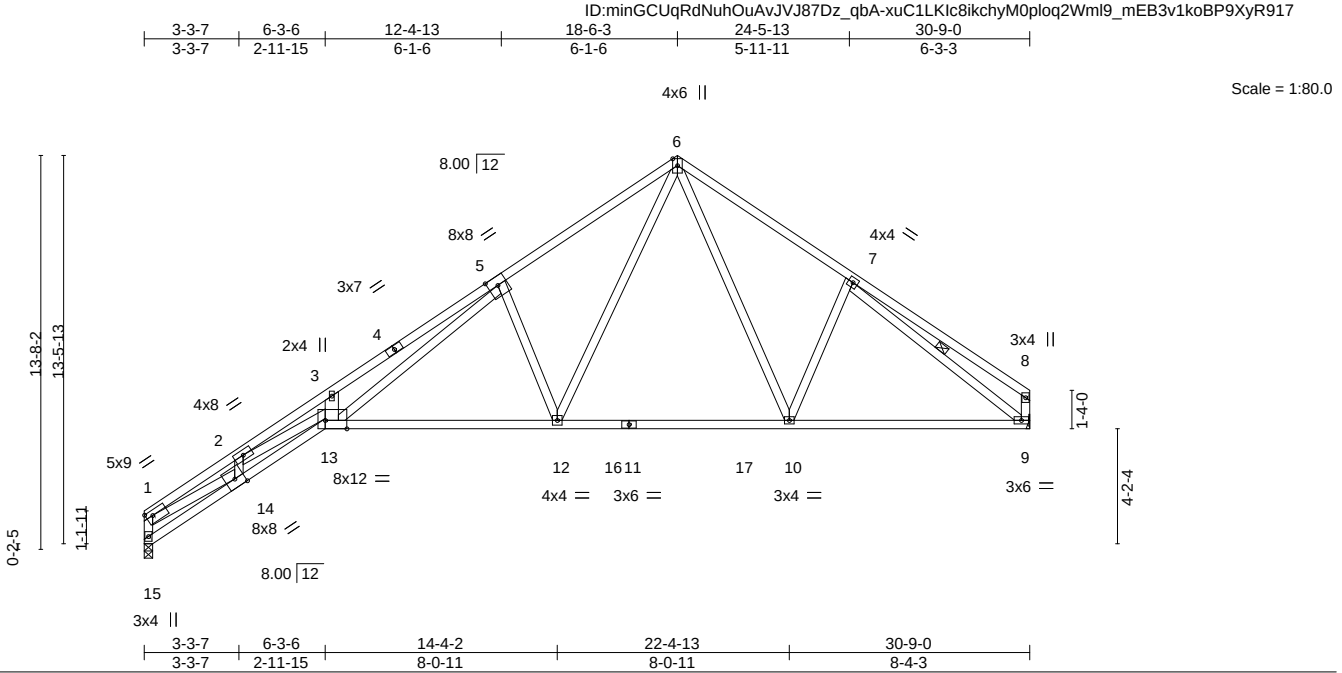

Plate Offsets (X,Y)-- [1:0-2-12,0-2-0], [13:0-9-0,Edge]

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	0.98	Vert(LL)	-0.54	12-13	>672	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-1.15	12-13	>318	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.88	Horz(CT)	-0.79	15	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 186 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP DSS *Except*
6-8: 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except*
13-15: 2x4 SP No.1
WEBS 2x4 SP No.3 *Except*
1-14,2-13: 2x4 SP No.2 or 2x4 SPF No.2, 3-13: 2x6 SP No.2
5-13: 2x4 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 7-9

REACTIONS. (size) 15=0-3-8, 9=Mechanical
Max Horz 9=280(LC 7)
Max Uplift 15=-86(LC 10), 9=-34(LC 11)
Max Grav 15=1218(LC 1), 9=1218(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-15=-1240/132, 1-2=-4277/336, 2-3=-6789/378, 3-5=-6774/533, 5-6=-1886/281, 6-7=-1449/255, 7-8=-278/114, 8-9=-266/99
BOT CHORD 13-14=-234/3933, 12-13=0/1836, 10-12=0/1037, 9-10=-7/1301
WEBS 1-14=-226/3566, 2-14=-843/85, 2-13=0/2438, 5-13=-339/4927, 5-12=-956/245, 6-12=-137/1270, 6-10=-99/465, 7-9=-1379/69

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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) 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) Bearing at joint(s) 15 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 9.

October 25,2021

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

Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	B3	Common	2	1	I48477585
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:23:20 2021 Page 1
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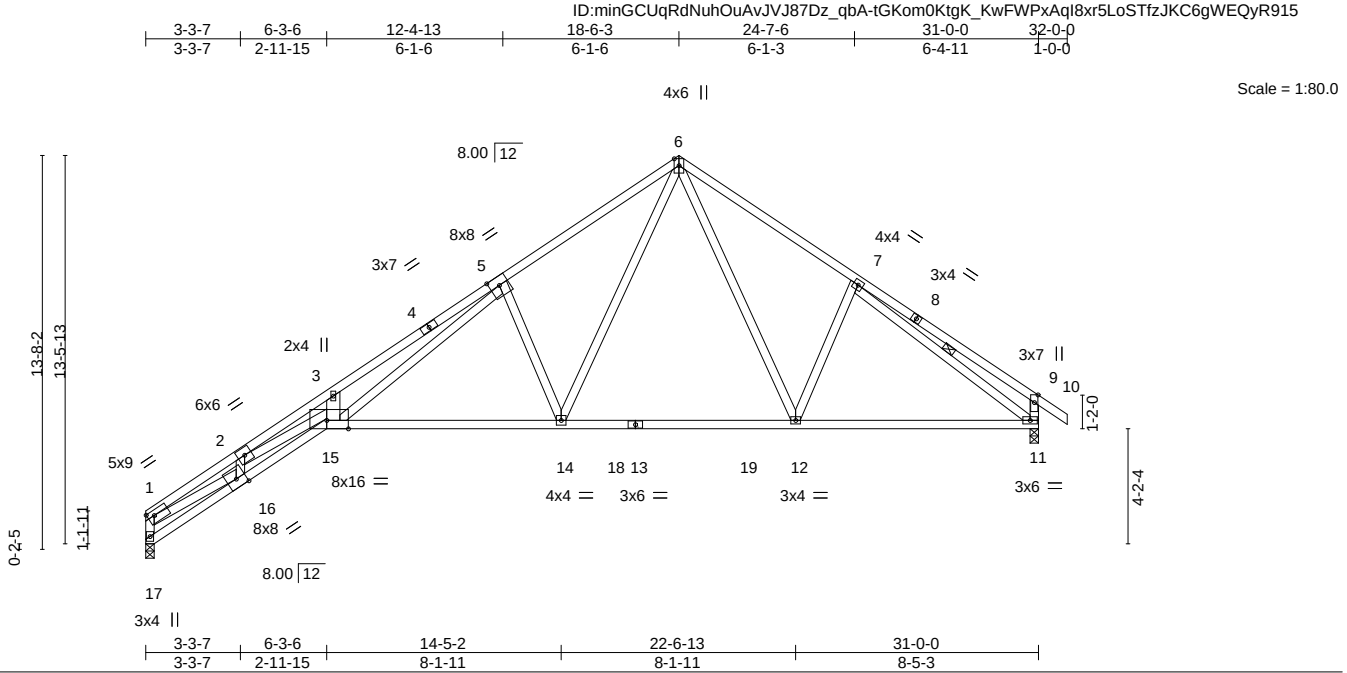

Plate Offsets (X,Y)-- [1:0-2-12,0-2-0], [15:0-9-0,Edge]

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	1.00	Vert(LL)	-0.55	14-15	>671	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-1.17	14-15	>316	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.88	Horz(CT)	-0.80	17	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 189 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP DSS *Except*
6-8,8-10: 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except*
15-17: 2x4 SP No.1
WEBS 2x4 SP No.3 *Except*
3-15: 2x6 SP No.2, 5-15: 2x4 SP No.1
1-16,2-15: 2x4 SP No.2 or 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 14-15.
WEBS 1 Row at midpt 7-11

REACTIONS. (size) 17=0-3-8, 11=0-3-8
Max Horz 11=272(LC 7)
Max Uplift 17=-86(LC 10), 11=-54(LC 11)
Max Grav 17=1227(LC 1), 11=1298(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-17=-1249/132, 1-2=-4309/339, 2-3=-6852/383, 3-5=-6836/538, 5-6=-1895/280, 6-7=-1490/258, 7-9=-385/158, 9-11=-405/170
BOT CHORD 15-16=-237/3963, 14-15=0/1856, 12-14=0/1056, 11-12=-12/1345
WEBS 5-15=-342/4968, 5-14=-957/244, 6-14=-133/1266, 6-12=-101/491, 7-11=-1335/26, 2-16=-851/85, 1-16=-229/3594, 2-15=0/2467

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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) 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) Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 11.

October 25,2021

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

Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	B4	Common	1	1	I48477586
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:23:23 2021 Page 1
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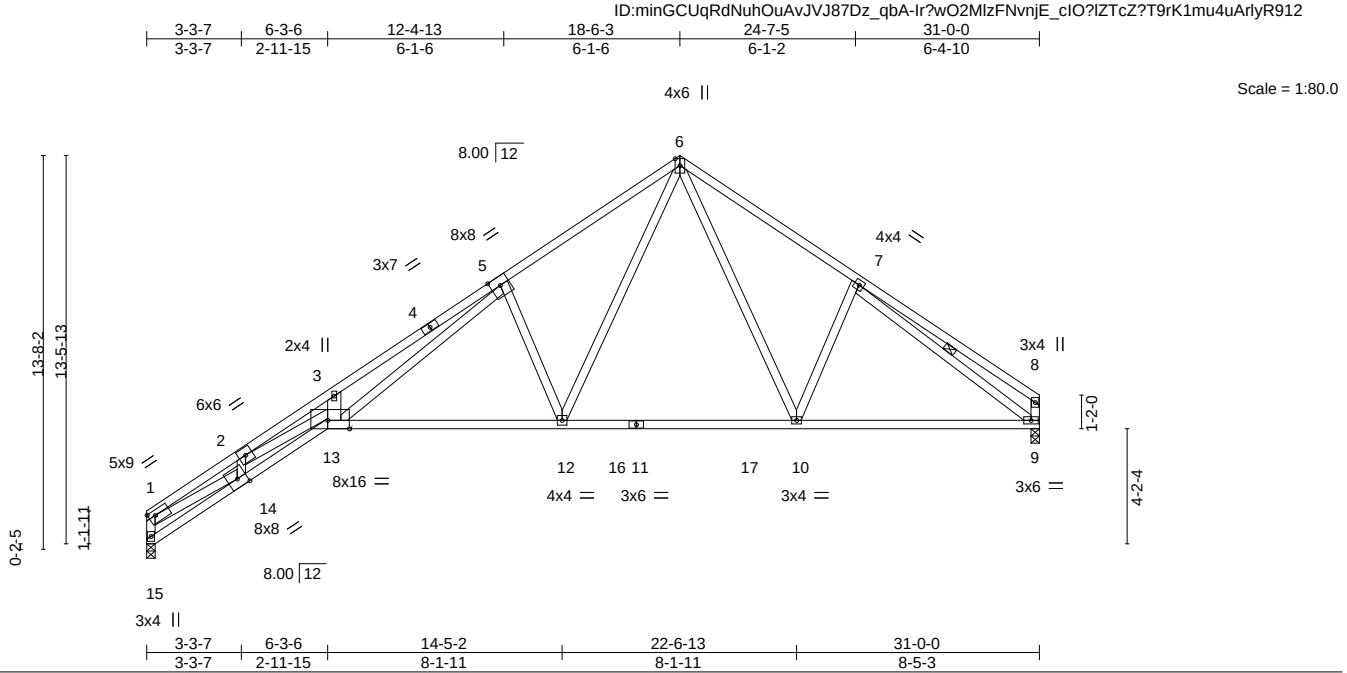

Plate Offsets (X,Y)-- [1:0-2-12,0-2-0], [13:0-9-0,Edge]

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	1.00	Vert(LL)	-0.55	12-13	>669	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-1.17	12-13	>315	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.88	Horz(CT)	-0.80	15	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 187 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP DSS *Except*
6-8: 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except*
13-15: 2x4 SP No.1
WEBS 2x4 SP No.3 *Except*
3-13: 2x6 SP No.2, 5-13: 2x4 SP No.1
1-14,2-13: 2x4 SP No.2 or 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 12-13.
WEBS 1 Row at midpt 7-9

REACTIONS. (size) 15=0-3-8, 9=0-3-8
Max Horz 9=278(LC 7)
Max Uplift 15=-86(LC 10), 9=-35(LC 11)
Max Grav 15=1228(LC 1), 9=1228(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-15=-1250/133, 1-2=-4314/339, 2-3=-6860/383, 3-5=-6844/538, 5-6=-1898/280, 6-7=-1499/260, 7-8=-328/116, 8-9=-295/101
BOT CHORD 13-14=-237/3968, 12-13=0/1859, 10-12=0/1057, 9-10=-13/1354
WEBS 5-13=-342/4973, 5-12=-959/244, 6-12=-133/1267, 6-10=-103/500, 7-10=-251/216, 7-9=-1381/69, 2-14=-852/85, 1-14=-229/3598, 2-13=0/2470

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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) 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) Bearing at joint(s) 15 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 9.

October 25,2021

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

Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	C1	Common	3	1	I48477587
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:23:27 2021 Page 1
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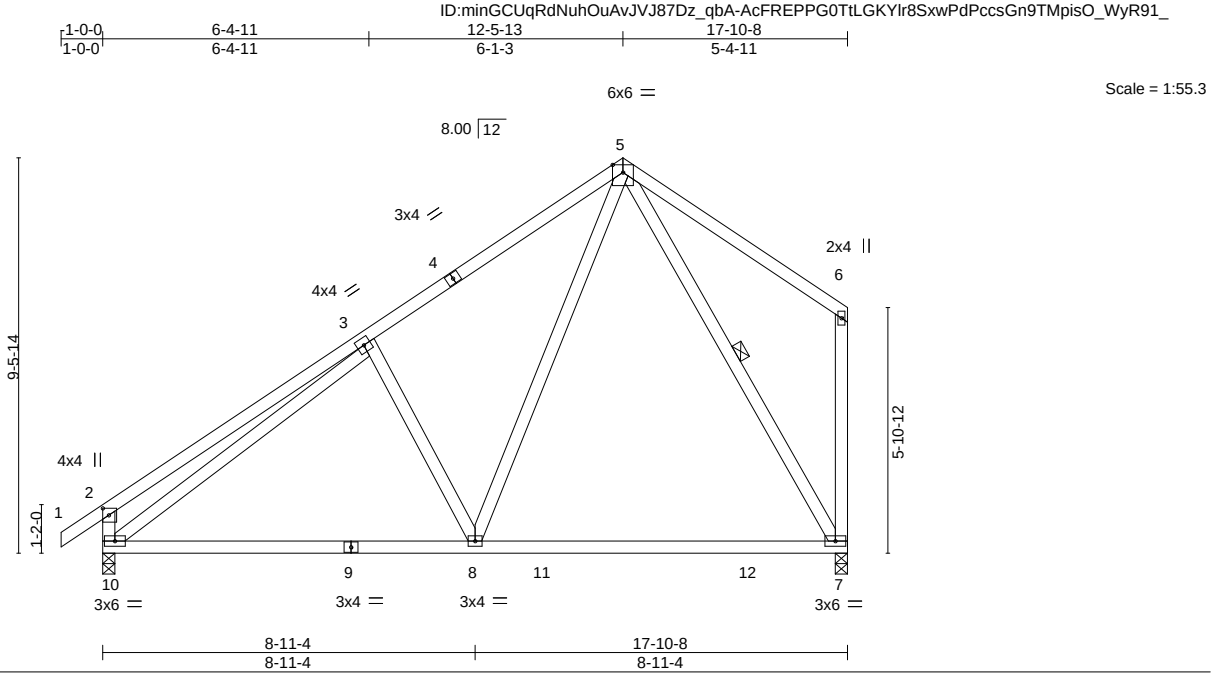

Plate Offsets (X,Y)-- [2:0-2-0,0-1-12]

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	0.55	Vert(LL)	-0.32	7-8	>657	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.46	7-8	>460	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 119 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2
WEBS 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 5-7

REACTIONS. (size) 10=0-3-8, 7=0-3-8
Max Horz 10=265(LC 7)
Max Uplift 10=-51(LC 10), 7=-50(LC 10)
Max Grav 10=774(LC 1), 7=766(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-341/154, 3-5=-683/182, 2-10=-372/167
BOT CHORD 8-10=-97/705, 7-8=-53/344
WEBS 3-8=-302/212, 5-8=-72/606, 3-10=-610/0, 5-7=-608/46

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 7.

October 25,2021

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

Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	C1E	GABLE	1	1	I48477588
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:23:30 2021 Page 1
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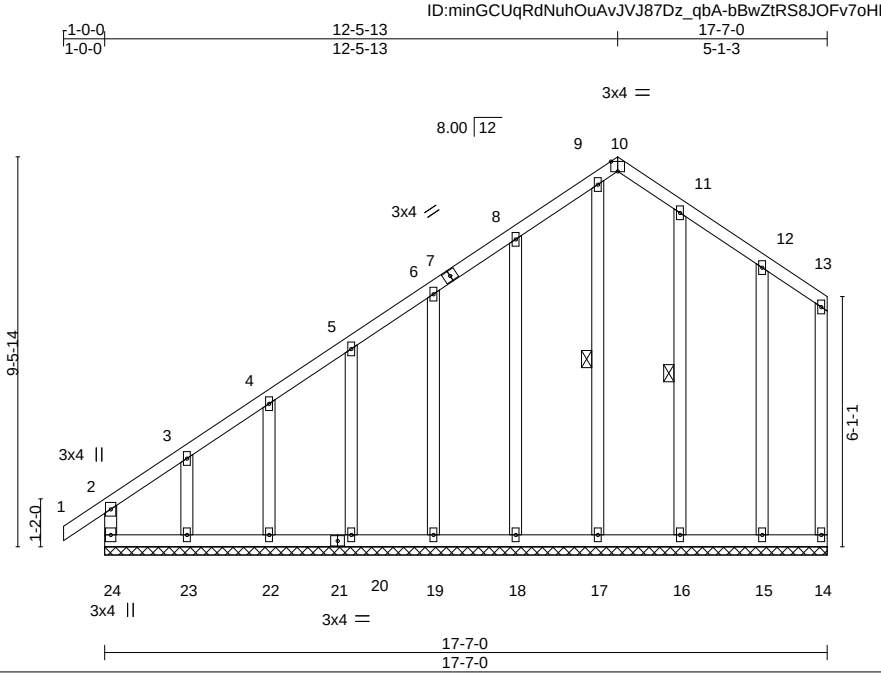

Plate Offsets (X,Y)-- [10:0-2-0,Edge]

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	0.32	Vert(LL)	0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.00	1	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	-0.00	14	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-R							Weight: 138 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 9-17, 11-16

REACTIONS. All bearings 17-7-0.
(lb) - Max Horz 24=268(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 14, 22, 20, 19, 18, 17, 16, 15 except 24=-145(LC 6), 23=-173(LC 10)
Max Grav All reactions 250 lb or less at joint(s) 14, 23, 22, 20, 19, 18, 17, 16, 15 except 24=286(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-272/210

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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) 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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 22, 20, 19, 18, 17, 16, 15 except (jt=lb) 24=145, 23=173.

October 25,2021

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

Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	C2	Common	4	1	I48477589
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:23:32 2021 Page 1
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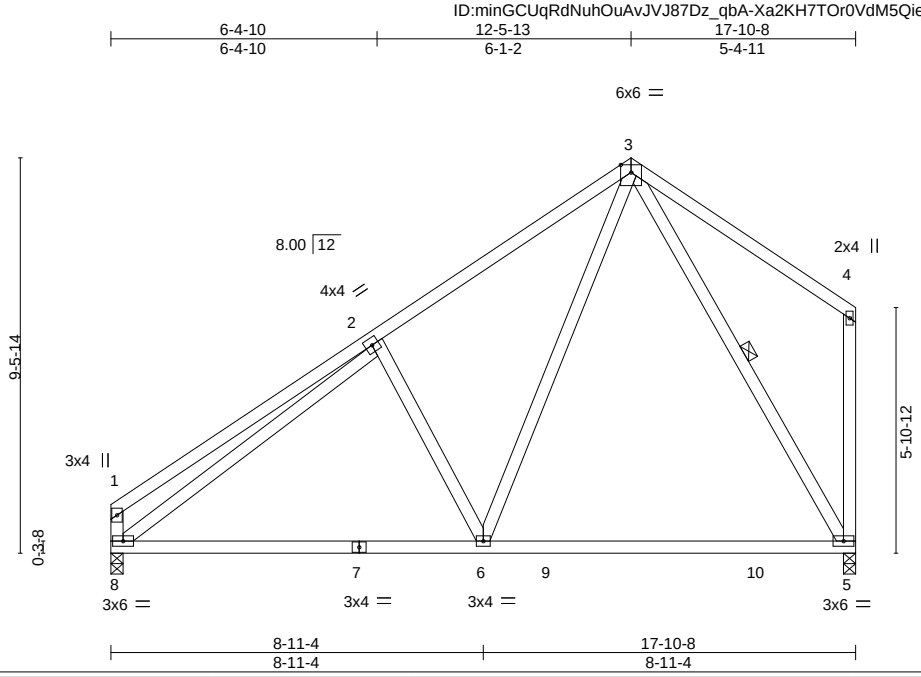

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.32	5-6	>658	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.46	5-6	>460	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 117 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2
WEBS 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 3-5

REACTIONS. (size) 8=0-3-8, 5=0-3-8
Max Horz 8=255(LC 7)
Max Uplift 8=-32(LC 10), 5=-50(LC 10)
Max Grav 8=703(LC 1), 5=768(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-288/113, 2-3=-689/183, 1-8=-270/99
BOT CHORD 6-8=-98/713, 5-6=-53/345
WEBS 2-6=-310/214, 3-6=-74/614, 2-8=-643/11, 3-5=-610/46

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 5.

October 25,2021

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

Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	D1E	GABLE	1	1	I48477590

Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:23:44 2021 Page 1
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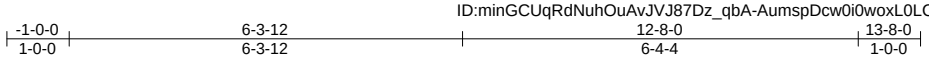

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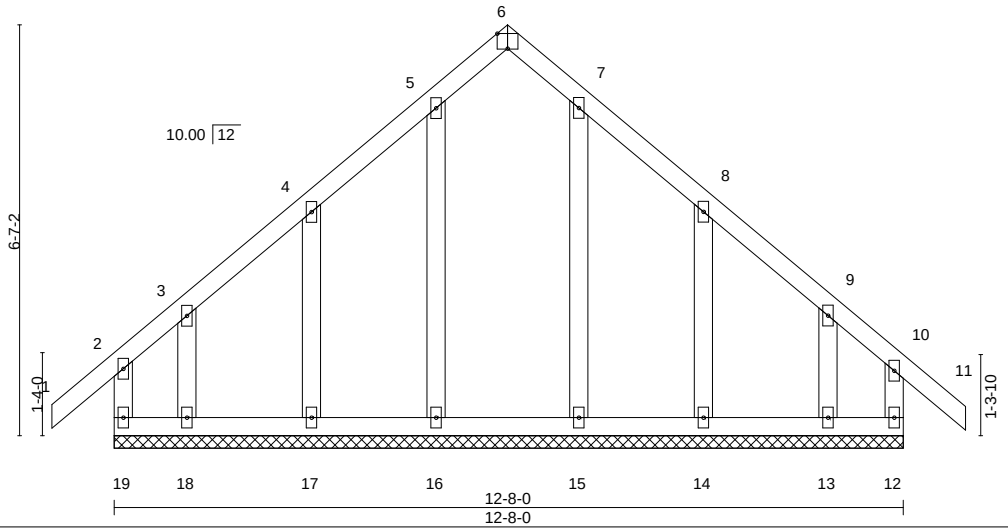

Plate Offsets (X,Y)-- [6:0-2-0,Edge]

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	0.16	Vert(LL)	-0.00	11	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	11	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-R							Weight: 81 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

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

REACTIONS. All bearings 12-8-0.
(lb) - Max Horz 19=-163(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 19, 12, 17, 14 except 18=-147(LC 10), 13=-141(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 19, 12, 16, 17, 18, 15, 14, 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=120mph Vasd=95mph; 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) 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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 12, 17, 14 except (jt=lb) 18=147, 13=141.

October 25,2021

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Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	D2E	Common Structural Gable	1	1	I48477591
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:23:49 2021 Page 1
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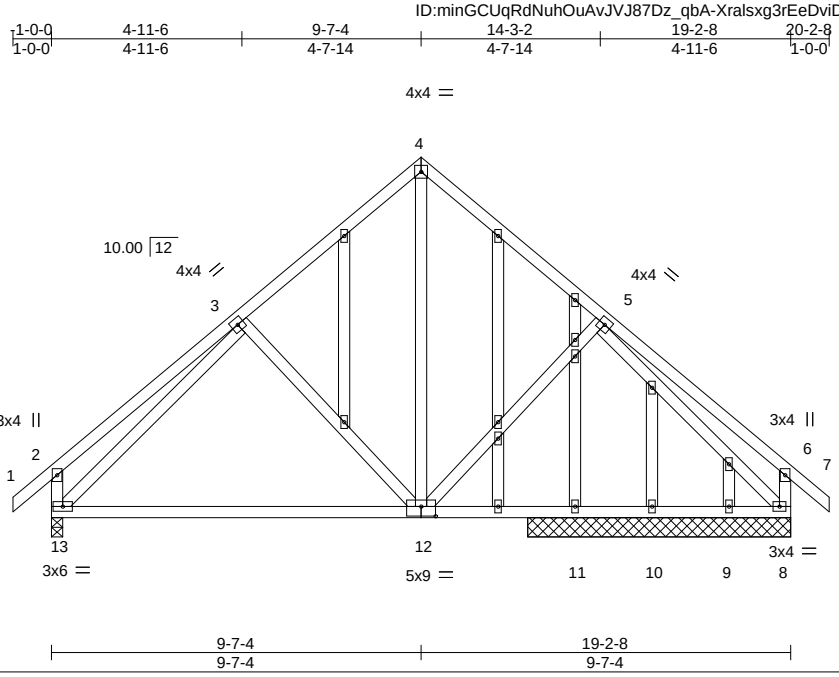

Plate Offsets (X,Y)-- [12:0-4-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.20	12-13	>800	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.41	12-13	>394	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 158 lb	FT = 20%

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

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

REACTIONS. All bearings 6-10-0 except (jt=length) 13=0-3-8.
(lb) - Max Horz 13=222(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 13, 8, 11
Max Grav All reactions 250 lb or less at joint(s) 11, 10, 9 except 13=808(LC 1), 8=751(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-282/132, 3-4=-614/177, 4-5=-614/177, 2-13=-325/154, 6-8=-273/182
BOT CHORD 12-13=-73/566, 11-12=-0/498, 10-11=-0/498, 9-10=-0/498, 8-9=-0/498
WEBS 4-12=-122/464, 3-13=-554/45, 5-8=-632/0

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 8, 11.

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Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	D3	Common	1	1	I48477592
					Job Reference (optional)

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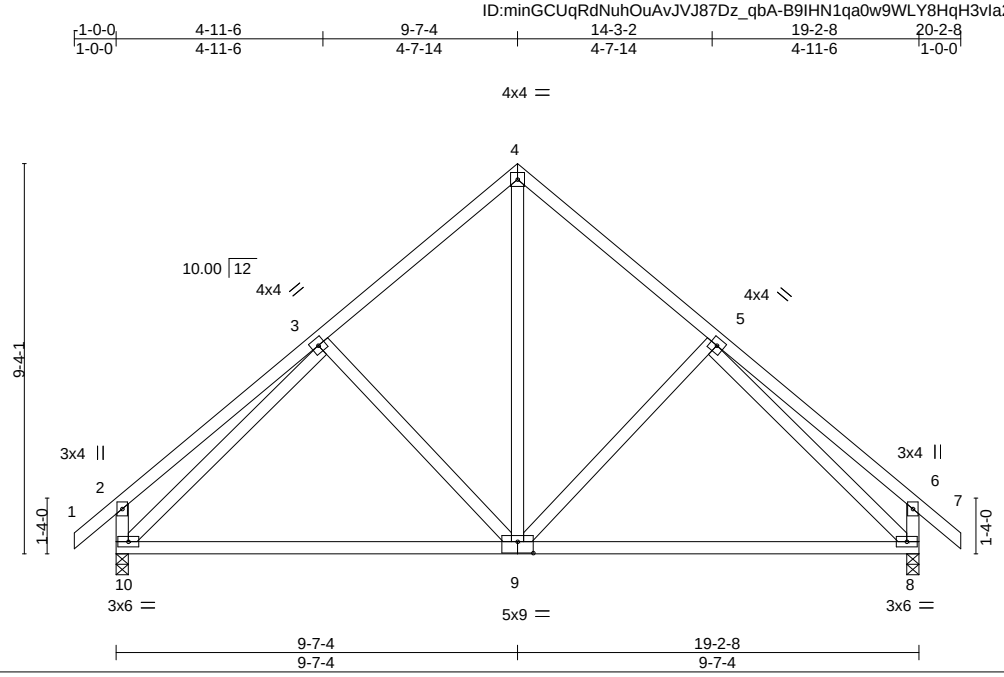

Plate Offsets (X,Y)-- [9:0-4-8,0-3-4]

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	0.45	Vert(LL)	-0.16	9-10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.32	9-10	>712	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 125 lb	FT = 20%

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

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

REACTIONS. (size) 10=0-3-8, 8=0-3-8
Max Horz 10=-221(LC 8)
Max Uplift 10=-40(LC 10), 8=-40(LC 11)
Max Grav 10=825(LC 1), 8=825(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-274/137, 3-4=-647/162, 4-5=-647/162, 5-6=-274/137, 2-10=-320/157, 6-8=-319/157
BOT CHORD 9-10=-64/589, 8-9=0/528
WEBS 4-9=-103/505, 3-10=-596/24, 5-8=-596/24

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 8.

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Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	D3G	Common Girder	1	2	I48477593
					Job Reference (optional)

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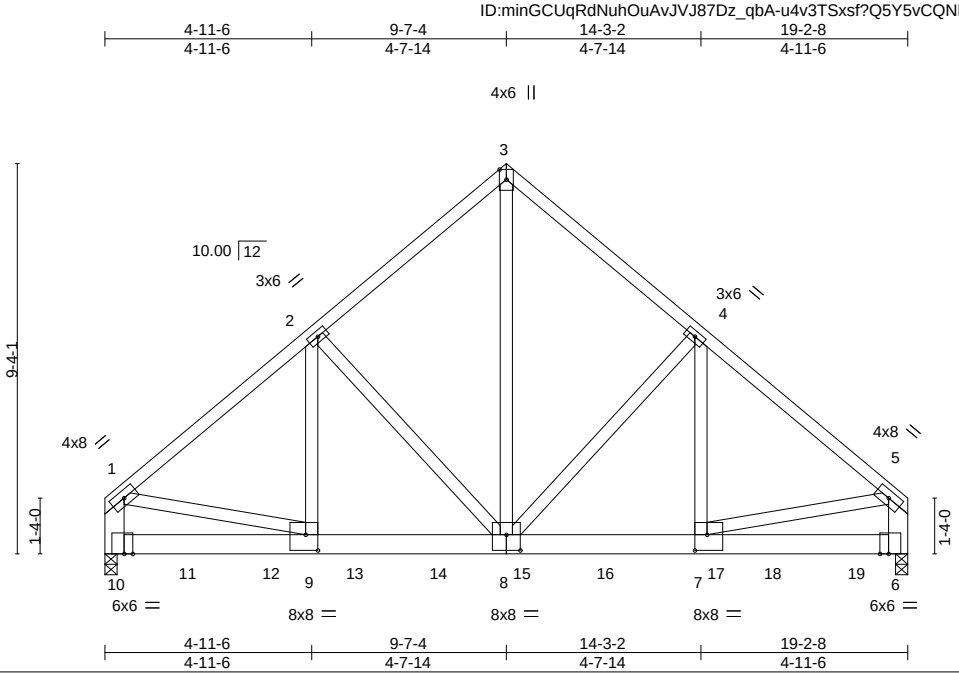

Plate Offsets (X,Y)-- [6:0-2-8,0-0-0], [7:0-3-8,0-4-8], [8:0-4-0,0-4-8], [9:0-3-8,0-4-8], [10:0-2-8,0-0-0]

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	0.44	Vert(LL)	-0.08	8-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.15	8-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.84	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 292 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
3-8: 2x4 SP No.2 or 2x4 SPF No.2, 1-10,5-6: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-8-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 10=0-3-8 (req. 0-4-11), 6=0-3-8 (req. 0-4-15)
Max Horz 10=-199(LC 23)
Max Uplift 10=-220(LC 8), 6=-234(LC 9)
Max Grav 10=5951(LC 1), 6=6334(LC 1)

SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.) ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER OR THE BUILDING DESIGNER.

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-6182/268, 2-3=-4619/285, 3-4=-4619/285, 4-5=-6207/269, 1-10=-4974/210, 5-6=-4980/210
BOT CHORD 9-10=-207/758, 8-9=-214/4676, 7-8=-140/4695, 6-7=-57/773
WEBS 3-8=-270/5514, 4-8=-1809/203, 4-7=-67/2096, 2-8=-1780/202, 2-9=-65/2059, 1-9=-118/4071, 5-7=-118/4028

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, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-8-0 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=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; 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) WARNING: Required bearing size at joint(s) 10, 6 greater than input bearing size.
8) Bearing at joint(s) 10, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=220, 6=234.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1198 lb down and 54 lb up at 1-11-4, 1198 lb down and 54 lb up at 3-11-4, 1198 lb down and 54 lb up at 5-11-4, 1198 lb down and 54 lb up at 7-11-4, 1198 lb down and 54 lb up at 9-11-4, 1198 lb down and 54 lb up at 11-11-4, 1198 lb down and 54 lb up at 13-11-4, and 1198 lb down and 54 lb up at 15-11-4, and 1198 lb down and 54 lb up at 17-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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Continued on page 2

LOAD CASE(S) Standard

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LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-60, 3-5=-60, 6-10=-20
   Concentrated Loads (lb)
   Vert: 11=-1198(B) 12=-1198(B) 13=-1198(B) 14=-1198(B) 15=-1198(B) 16=-1198(B) 17=-1198(B) 18=-1198(B) 19=-1198(B)

Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	M1	Monopitch	5	1	I48477594
					Job Reference (optional)

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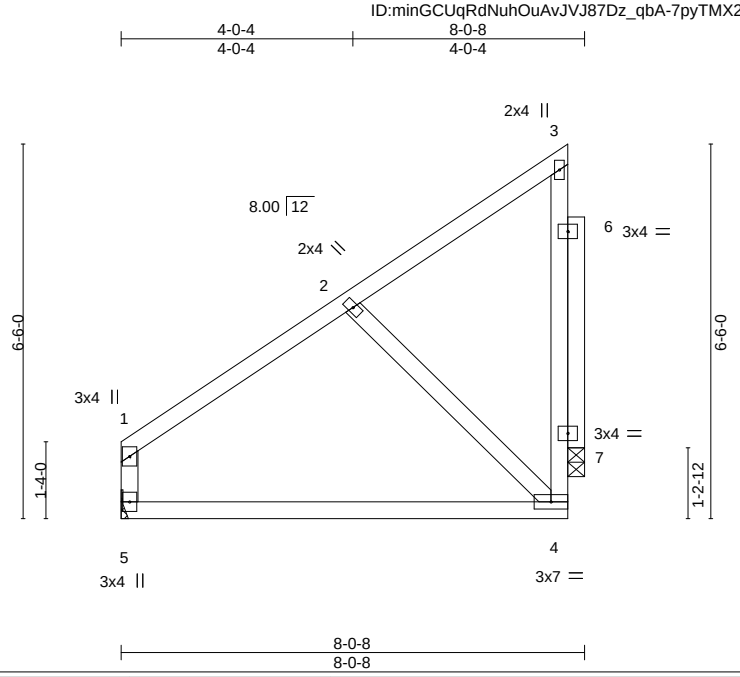


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.11	4-5	>810	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.21	4-5	>420	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	-0.02	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 49 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

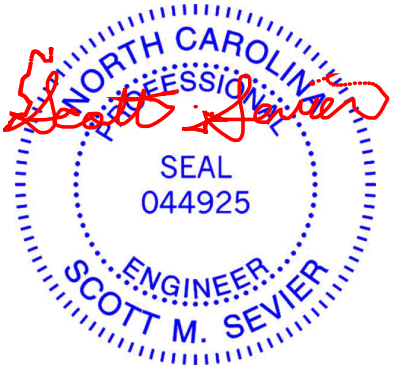
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=Mechanical, 7=0-3-8
Max Horz 5=194(LC 7)
Max Uplift 7=-71(LC 10)
Max Grav 5=298(LC 1), 7=332(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-259/81

NOTES-

1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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
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) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7.



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Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	M1GE	Monopitch Supported Gable	1	1	I48477595
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:24:28 2021 Page 1
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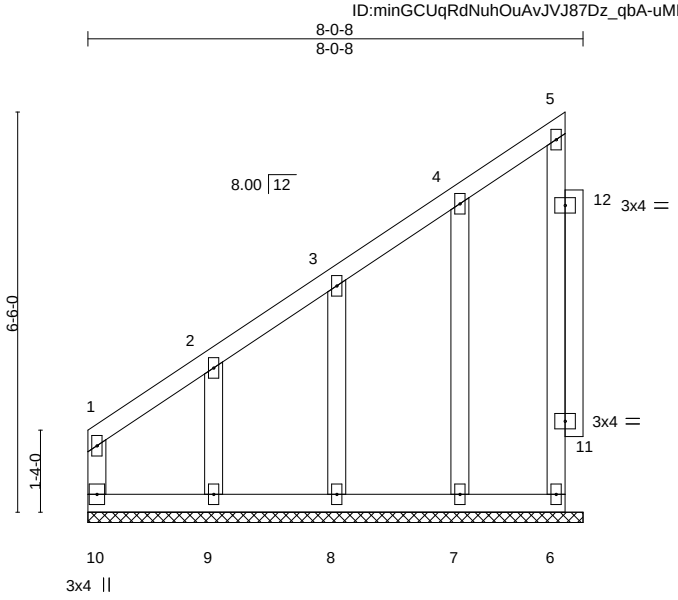

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 57 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

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

REACTIONS. All bearings 8-0-8.
(lb) - Max Horz 10=194(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 10, 6, 7, 8 except 9=-148(LC 10)
Max Grav All reactions 250 lb or less at joint(s) 10, 6, 7, 8, 9

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

NOTES-

1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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
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) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 6, 7, 8 except (jt=lb) 9=148.

October 25,2021

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Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	M2	Monopitch	1	1	I48477596
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:24:35 2021 Page 1
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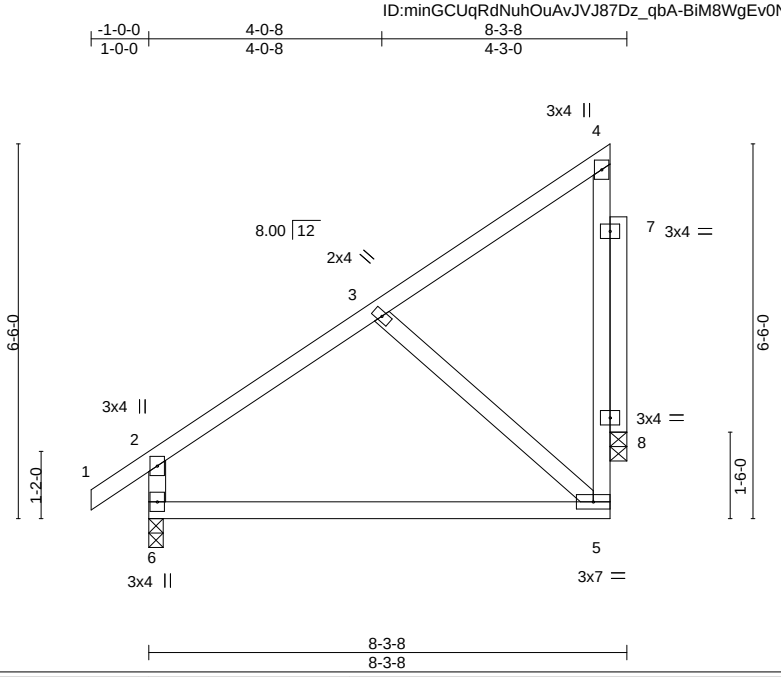

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.12	5-6	>743	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.24	5-6	>381	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.12	Horz(CT)	-0.03	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 51 lb	FT = 20%

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

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

REACTIONS. (size) 6=0-3-0, 8=0-3-8
Max Horz 6=205(LC 7)
Max Uplift 6=-15(LC 10), 8=-209(LC 10)
Max Grav 6=382(LC 1), 8=1673(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-274/84, 4-8=-1447/167, 2-6=-300/124

NOTES-
1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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
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) 8 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 capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 8=209.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1337 lb down and 160 lb up at 7-10-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
7) 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: 1-2=-60, 2-4=-60, 5-6=-20
Concentrated Loads (lb)
Vert: 4=-1227(F)

October 25,2021

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

Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	M3	Monopitch	6	1	I48477597
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:24:40 2021 Page 1
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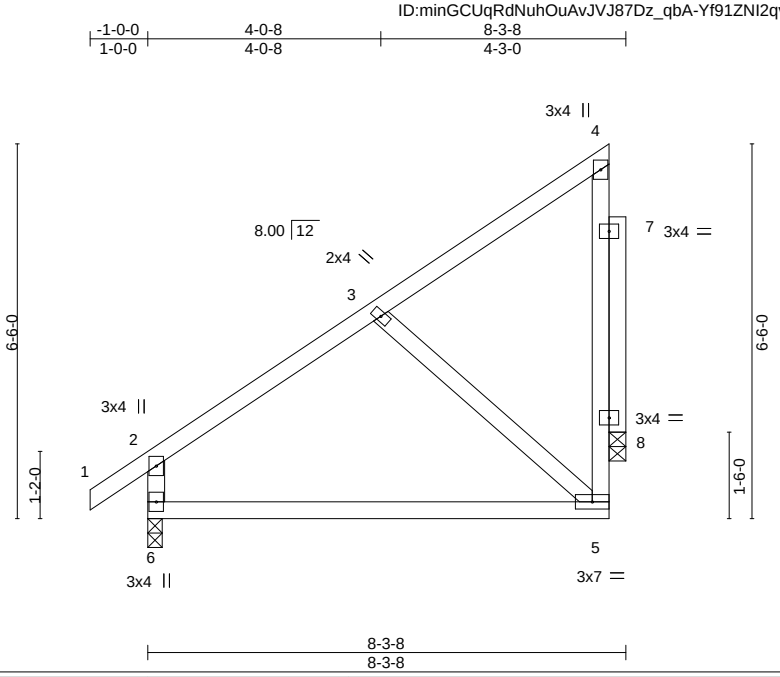

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.12	5-6	>743	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.24	5-6	>381	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.12	Horz(CT)	-0.03	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 51 lb	FT = 20%

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

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

REACTIONS. (size) 6=0-3-0, 8=0-3-8
Max Horz 6=205(LC 7)
Max Uplift 6=-15(LC 10), 8=-209(LC 10)
Max Grav 6=382(LC 1), 8=1673(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-274/84, 4-8=-1447/167, 2-6=-300/124

NOTES-
1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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
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) 8 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 capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 8=209.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1337 lb down and 160 lb up at 7-10-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
7) 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: 1-2=-60, 2-4=-60, 5-6=-20
Concentrated Loads (lb)
Vert: 4=-1227(F)

October 25,2021

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

Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	M4	Monopitch	7	1	I48477598
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:24:47 2021 Page 1
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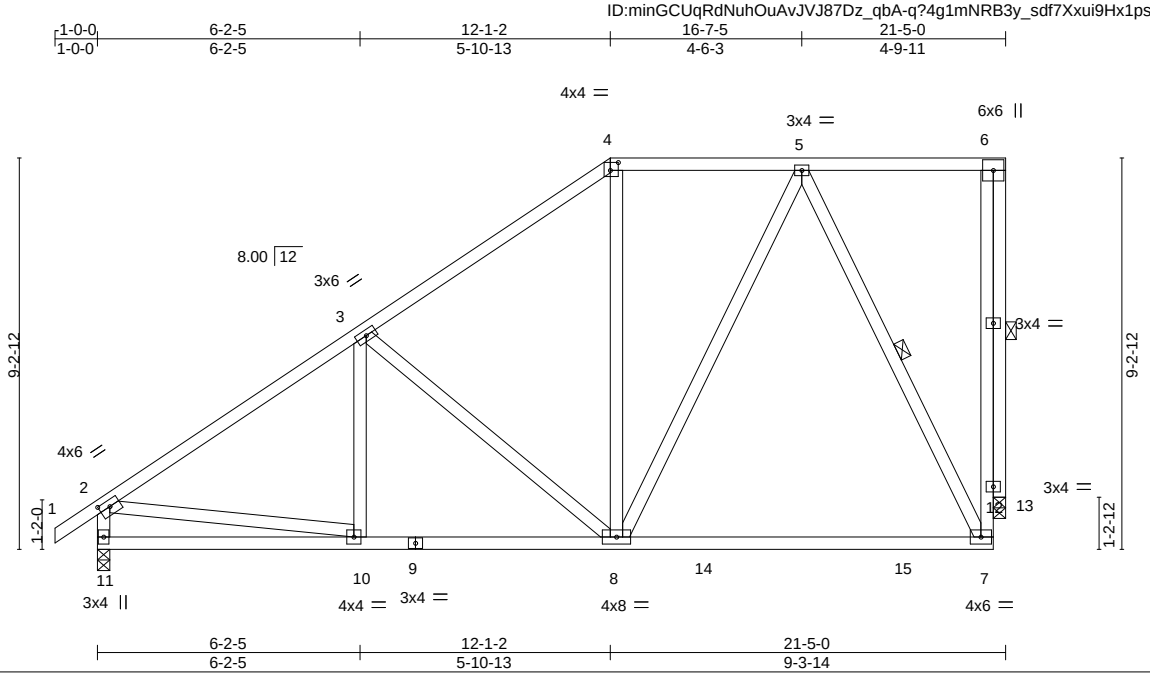

Plate Offsets (X,Y)-- [2:0-3-0,0-1-12], [4:0-2-4,0-2-4]

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	0.72	Vert(LL)	-0.29	7-8	>889	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.46	7-8	>551	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.44	Horz(CT)	-0.05	13	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 163 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-4-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-7, 6-13

REACTIONS. (size) 11=0-3-8, 13=0-3-8
Max Horz 11=257(LC 10)
Max Uplift 11=-24(LC 10), 13=-80(LC 7)
Max Grav 11=915(LC 1), 13=828(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1030/55, 3-4=-720/82, 4-5=-507/106, 7-12=-109/730, 6-12=-109/730, 2-11=-855/98
BOT CHORD 10-11=-298/361, 8-10=-188/782, 7-8=-58/344
WEBS 3-8=-380/165, 5-8=-70/445, 5-7=-698/174, 2-10=0/614, 6-13=-828/149

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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, with BCDL = 10.0psf.
6) Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 13.

October 25,2021

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Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	M4E	Monopitch Supported Gable	1	1	I48477599
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:24:55 2021 Page 1
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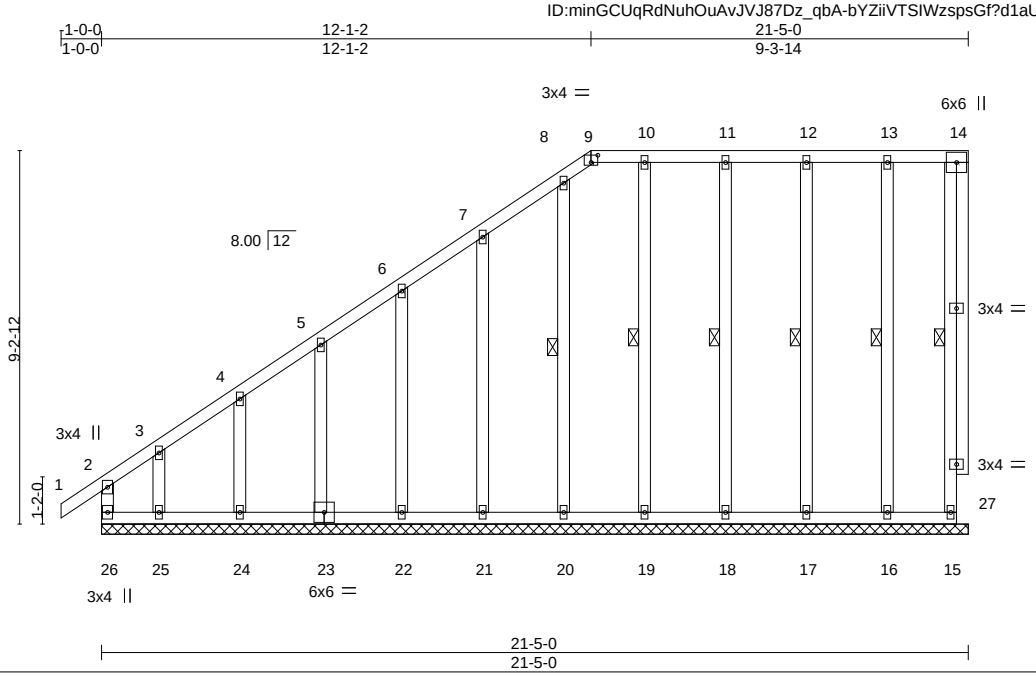

Plate Offsets (X,Y)-- [9:0-2-0,0-2-3]

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	0.31	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.00	1	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	-0.00	15	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-R							Weight: 189 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 25-26,24-25,23-24.
WEBS 1 Row at midpt 14-15, 13-16, 12-17, 11-18, 10-19, 8-20

REACTIONS. All bearings 21-5-0.
(lb) - Max Horz 26=297(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 15, 16, 17, 18, 19, 20, 21, 22, 23, 24 except 26=-141(LC 8), 25=-229(LC 7)
Max Grav All reactions 250 lb or less at joint(s) 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25 except 26=334(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-305/189

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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) 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) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 16, 17, 18, 19, 20, 21, 22, 23, 24 except (jt=lb) 26=141, 25=229.

October 25,2021

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Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	M5	Monopitch	6	1	I48477600
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:25:00 2021 Page 1
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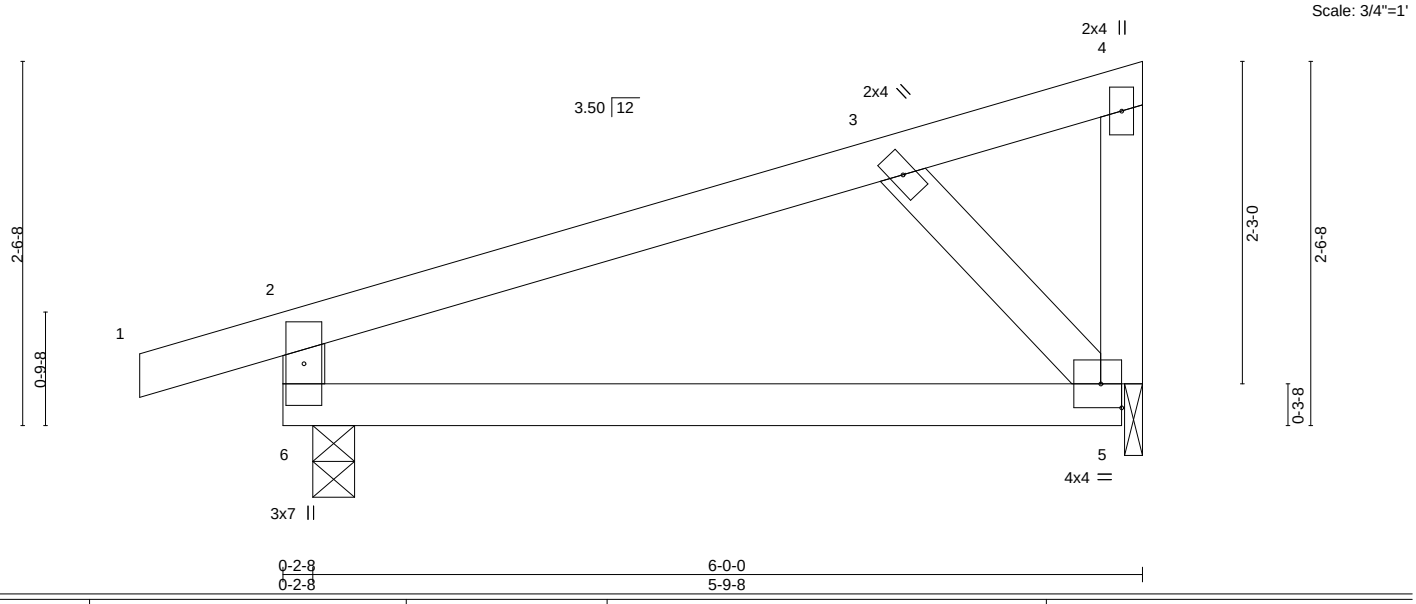
1-0-0 4-3-15 1-8-1

Scale: 3/4"=1'



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.04	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.07	5-6	>932	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-MS							Weight: 26 lb	FT = 20%

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

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

REACTIONS. (size) 6=0-3-8, 5=0-1-8
Max Horz 6=81(LC 7)
Max Uplift 6=-59(LC 6), 5=-30(LC 10)
Max Grav 6=304(LC 1), 5=221(LC 1)

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

NOTES-
1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 5.

October 25,2021

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	M5E	Monopitch Supported Gable	1	1	I48477601
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:25:02 2021 Page 1
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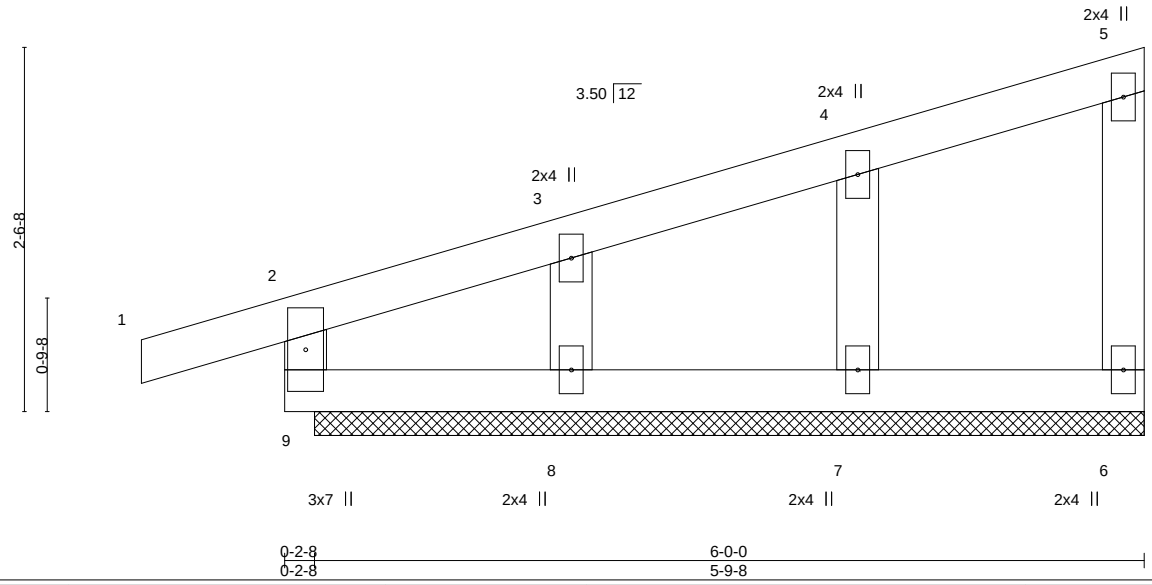
Scale: 3/4"=1'



0-2-8 6-0-0
0-2-8 5-9-8

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	0.09	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	1	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 27 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

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

REACTIONS. All bearings 5-9-8.
(lb) - Max Horz 9=81(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 9, 6, 7, 8
Max Grav All reactions 250 lb or less at joint(s) 9, 6, 7, 8

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

NOTES-

1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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
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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 6, 7, 8.
8) Non Standard bearing condition. Review required.

October 25,2021

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	M6	Monopitch	2	1	I48477602
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:25:03 2021 Page 1
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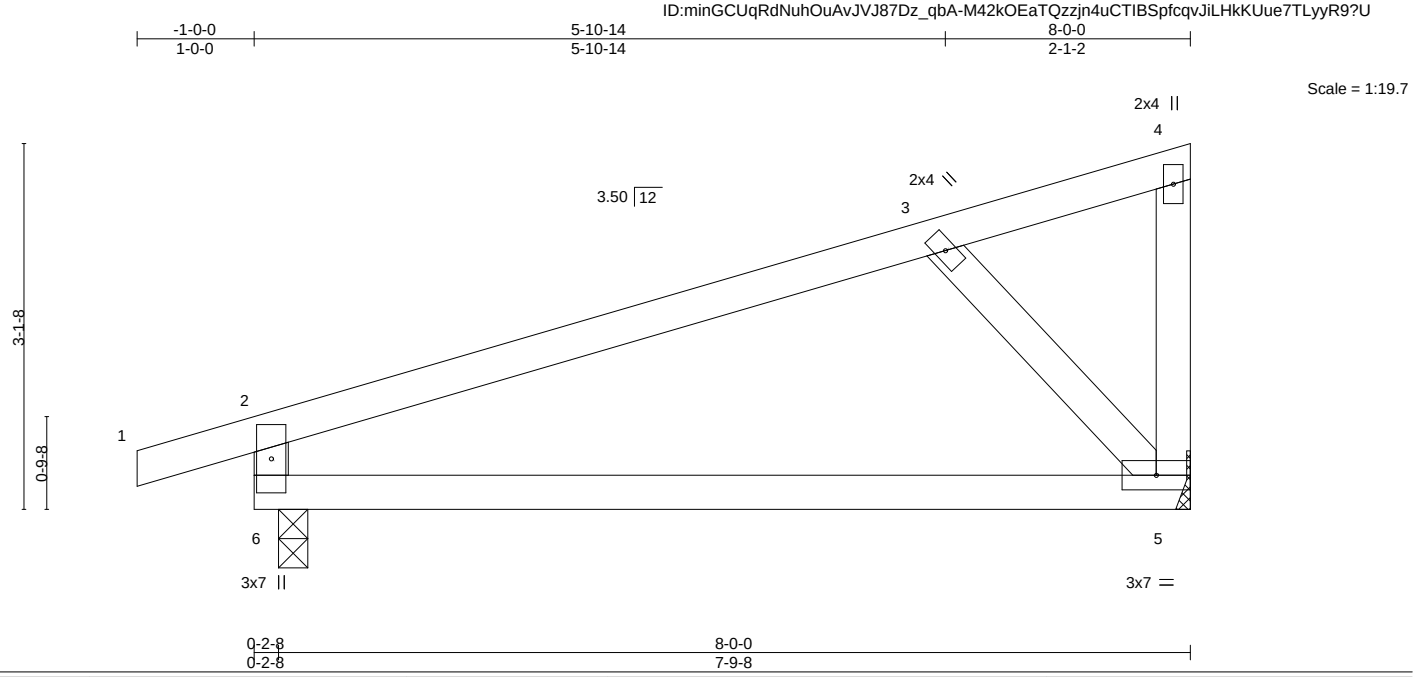

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	-0.12	5-6	>754	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.25	5-6	>376	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 34 lb	FT = 20%

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

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

REACTIONS. (size) 6=0-3-0, 5=Mechanical
Max Horz 6=102(LC 7)
Max Uplift 6=-66(LC 6), 5=-41(LC 10)
Max Grav 6=382(LC 1), 5=303(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-300/115, 2-6=-305/178
WEBS 3-5=-327/192

NOTES-
1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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
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) 6, 5.

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Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	M7	Monopitch	1	1	I48477603
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:25:05 2021 Page 1
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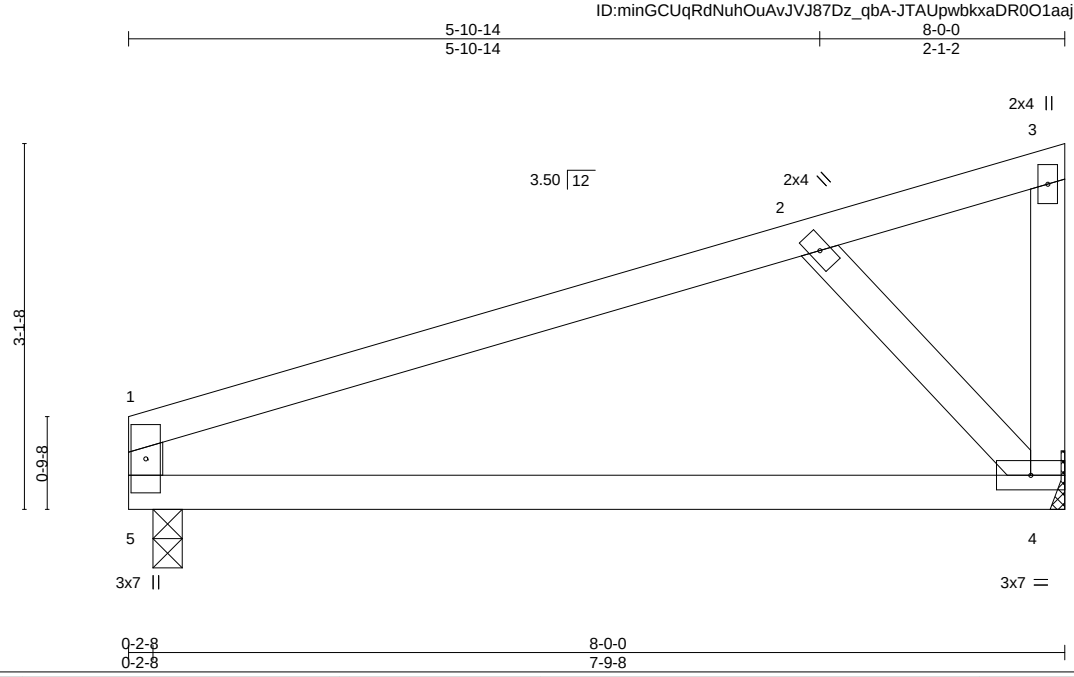

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.13	4-5	>735	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.25	4-5	>371	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 33 lb	FT = 20%

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

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

REACTIONS. (size) 5=0-3-0, 4=Mechanical
Max Horz 5=96(LC 7)
Max Uplift 5=-27(LC 6), 4=-42(LC 10)
Max Grav 5=308(LC 1), 4=308(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-308/119
BOT CHORD 4-5=-81/253
WEBS 2-4=-345/203

NOTES-
1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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
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) 5, 4.

October 25,2021

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

Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	P1E	Common Structural Gable	1	1	I48477604
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:25:07 2021 Page 1
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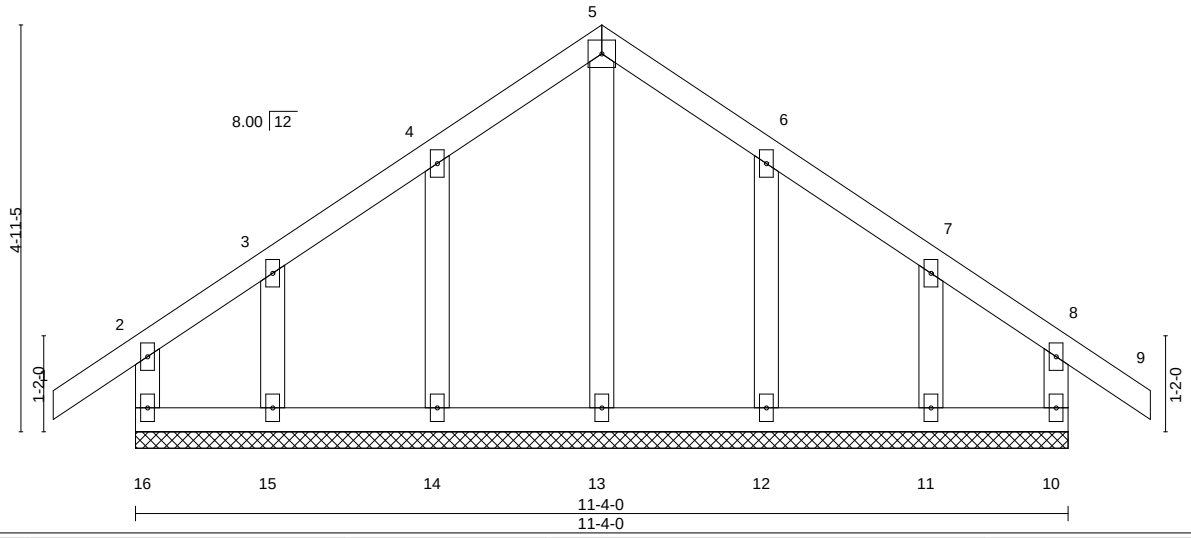
-1-0-0 1-0-0 | 5-8-0 5-8-0 | 11-4-0 5-8-0 | 12-4-0 1-0-0

4x4 =

Scale = 1:28.0



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	0.09	Vert(LL)	-0.00	9	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.01	9	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 64 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

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

REACTIONS. All bearings 11-4-0.
(lb) - Max Horz 16=123(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11
Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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=120mph Vasd=95mph; 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) 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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 11.

October 25,2021

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	P2	Common	1	1	I48477605
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:25:13 2021 Page 1
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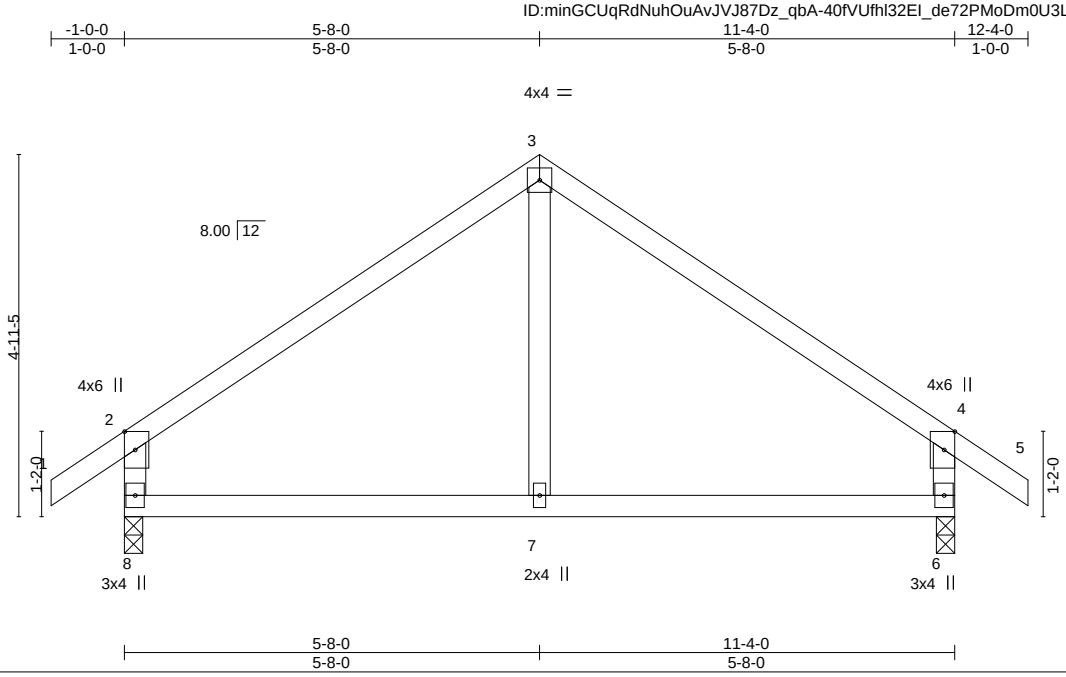

Plate Offsets (X,Y)-- [2:0-3-0,Edge], [4:0-3-0,Edge]

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	0.66	Vert(LL)	-0.03	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.06	6-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MR							Weight: 50 lb	FT = 20%

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

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

REACTIONS. (size) 8=0-3-0, 6=0-3-0
Max Horz 8=123(LC 9)
Max Uplift 8=-36(LC 10), 6=-36(LC 11)
Max Grav 8=510(LC 1), 6=510(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-435/86, 3-4=-435/86, 2-8=-445/134, 4-6=-445/134
BOT CHORD 7-8=0/285, 6-7=0/285

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.

October 25,2021

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Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	P3G	COMMON GIRDER	1	2	I48477606

Job Reference (optional)

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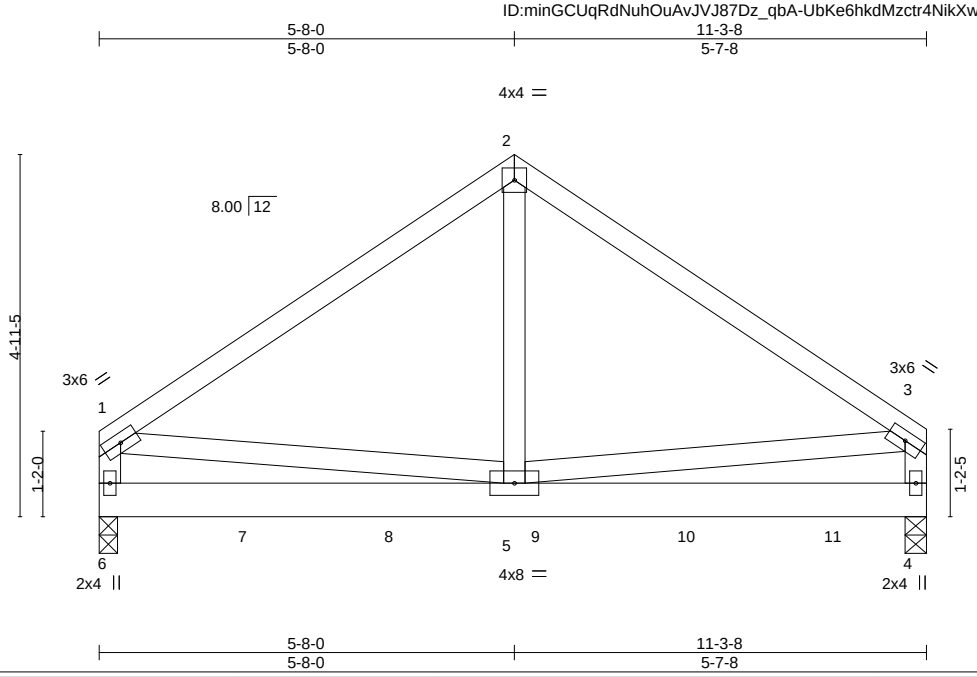

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.01	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.03	4-5	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.17	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 141 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF 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 end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=0-3-0, 4=0-3-8
Max Horz 6=104(LC 24)
Max Grav 6=1083(LC 1), 4=1189(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1119/0, 2-3=-1119/0, 1-6=-825/0, 3-4=-826/0
BOT CHORD 5-6=-72/338, 4-5=-16/289
WEBS 2-5=0/824, 1-5=0/596, 3-5=0/588

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 0-9-0 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=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 278 lb down at 2-0-12, 278 lb down at 4-0-12, 278 lb down at 6-0-12, and 278 lb down at 8-0-12, and 278 lb down at 10-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-60, 4-6=-20
Concentrated Loads (lb)
Vert: 7=-278(F) 8=-278(F) 9=-278(F) 10=-278(F) 11=-278(F)

October 25,2021

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Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	PB1	Piggyback	7	1	I48477607
					Job Reference (optional)

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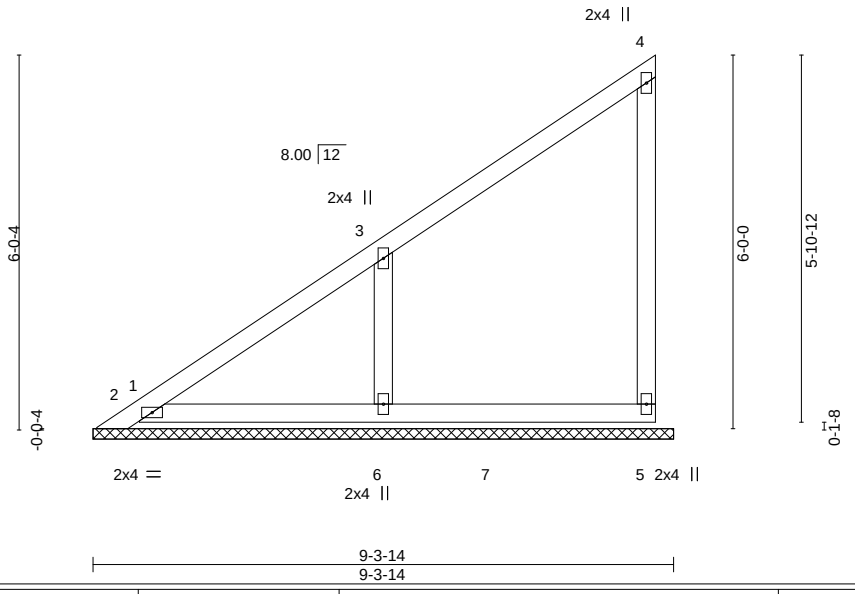

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 40 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

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

REACTIONS. All bearings 9-3-14.
(lb) - Max Horz 1=181(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 5, 2 except 1=-160(LC 17), 6=-109(LC 10)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 2=283(LC 17), 6=433(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-299/180

NOTES-

1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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
2) Gable requires continuous bottom chord bearing.
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) Bearing at joint(s) 1, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2 except (jt=lb) 1=160, 6=109.
7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

October 25,2021

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	PB1GE	GABLE	1	1	I48477608
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:25:20 2021 Page 1
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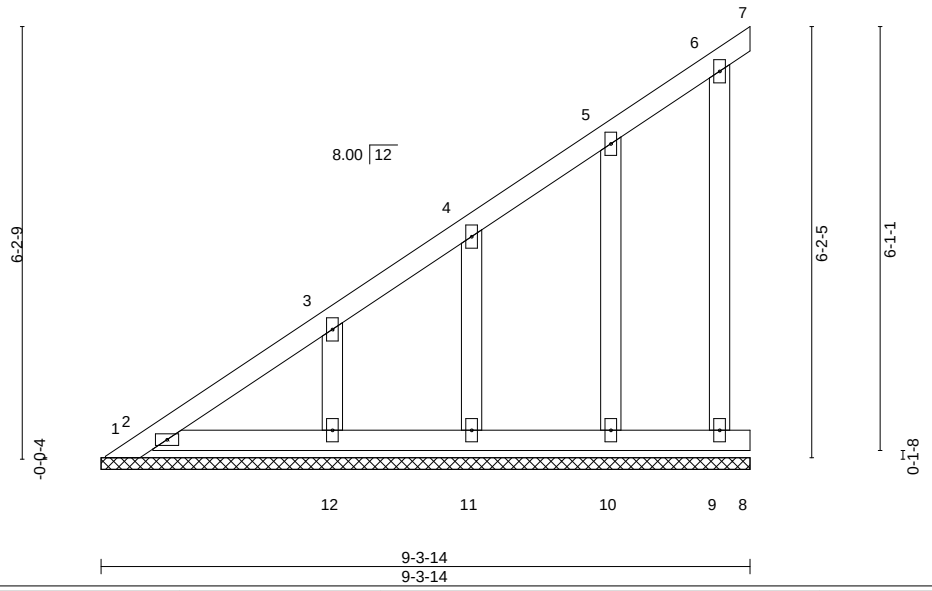

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 50 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

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

REACTIONS. All bearings 9-3-14.
(lb) - Max Horz 1=186(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 7, 9, 2, 8, 10, 11, 12 except 1=-106(LC 17)
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 9, 2, 10, 11, 12

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

NOTES-

1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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
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) All plates are 2x4 MT20 unless otherwise indicated.
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) Bearing at joint(s) 1, 7, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 9, 2, 8, 10, 11, 12 except (jt=lb) 1=106.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

October 25,2021

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	V1	Valley	1	1	I48477609
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:25:21 2021 Page 1
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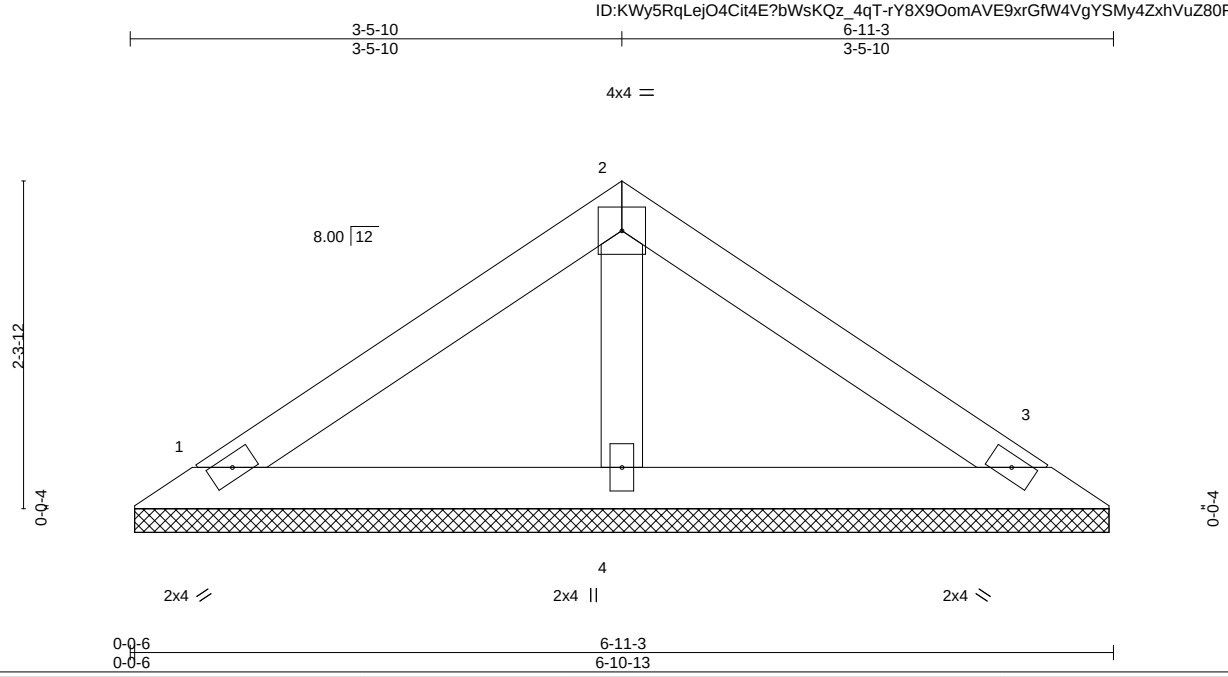

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 23 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.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. (size) 1=6-10-7, 3=6-10-7, 4=6-10-7
Max Horz 1=-42(LC 6)
Max Uplift 1=-19(LC 10), 3=-25(LC 11)
Max Grav 1=128(LC 1), 3=128(LC 1), 4=222(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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) 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 25,2021

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

Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	V3	Valley	1	1	I48477610
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:25:22 2021 Page 1
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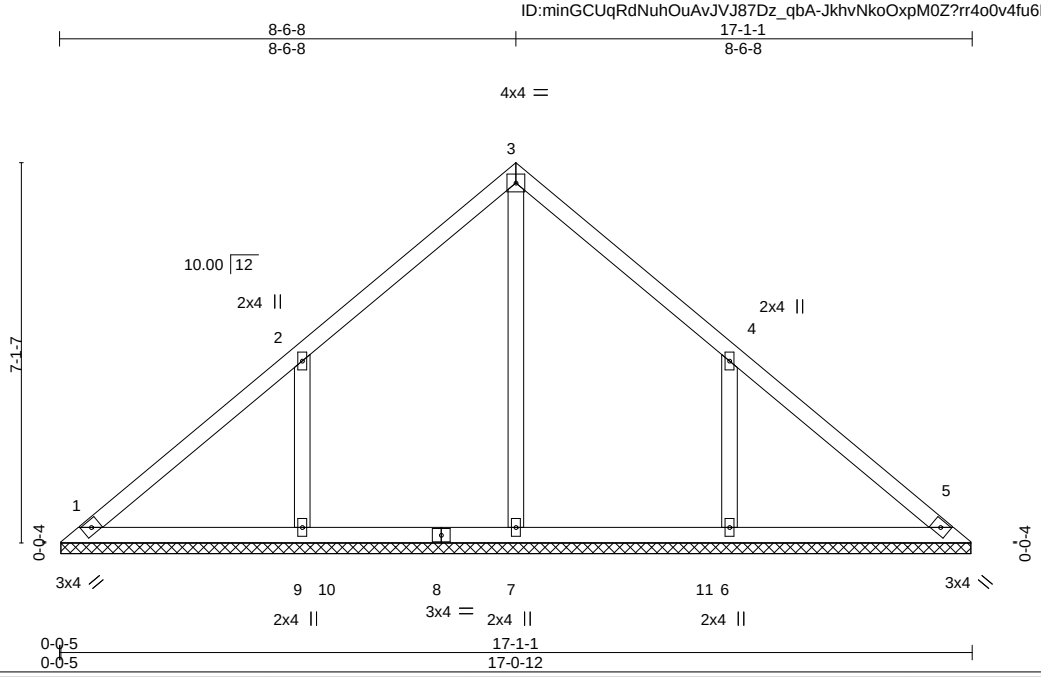

LOADING (psf)		SPACING-	1-10-8	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 76 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. All bearings 17-0-7.
(lb) - Max Horz 1=-134(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-149(LC 10), 6=-149(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=337(LC 20), 9=427(LC 17), 6=427(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-291/193, 4-6=-291/193

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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) 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, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=149, 6=149.

October 25,2021

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Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	V4	Valley	1	1	I48477611
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:25:23 2021 Page 1
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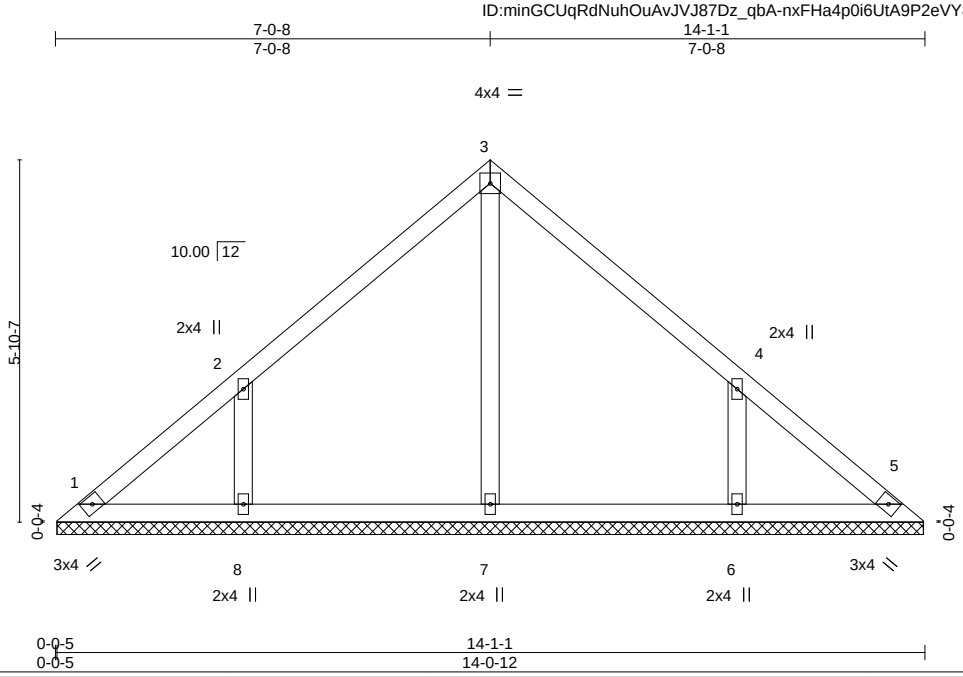

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 60 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.3
BOT CHORD 2x4 SP No.2 or 2x4 SPF 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 14-0-7.
(lb) - Max Horz 1=-117(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-133(LC 10), 6=-133(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=335(LC 17), 6=335(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-260/174, 4-6=-260/174

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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) 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 except (jt=lb) 8=133, 6=133.

October 25,2021

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Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	V5	Valley	1	1	I48477612
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:25:24 2021 Page 1
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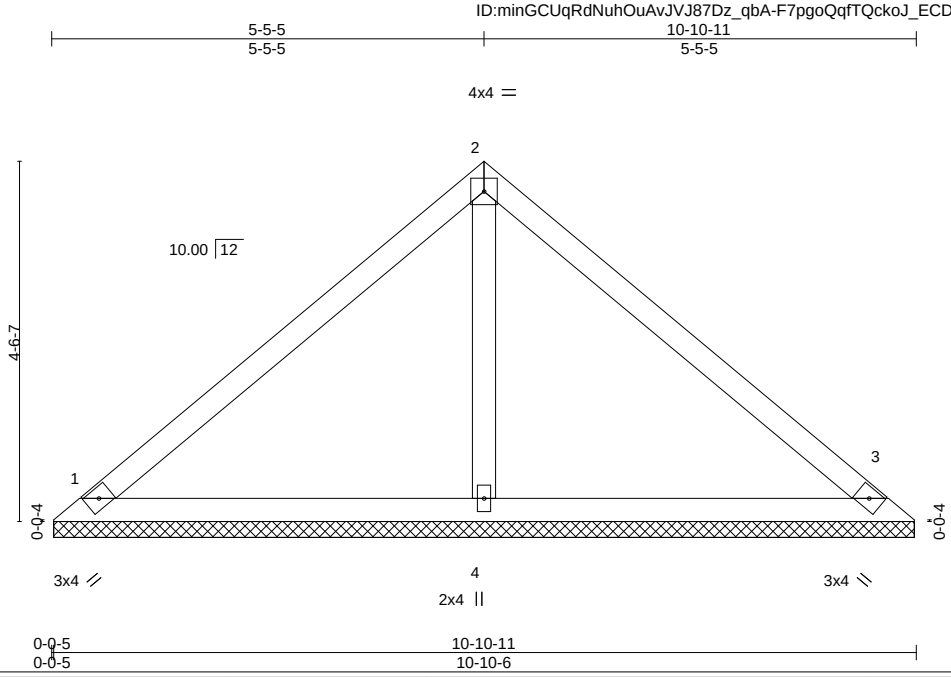

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 42 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. (size) 1=10-10-1, 3=10-10-1, 4=10-10-1
Max Horz 1=-89(LC 6)
Max Uplift 1=-21(LC 11), 3=-32(LC 11)
Max Grav 1=211(LC 1), 3=211(LC 1), 4=384(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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) 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 25,2021

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	V6	GABLE	1	1	I48477613
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:25:24 2021 Page 1
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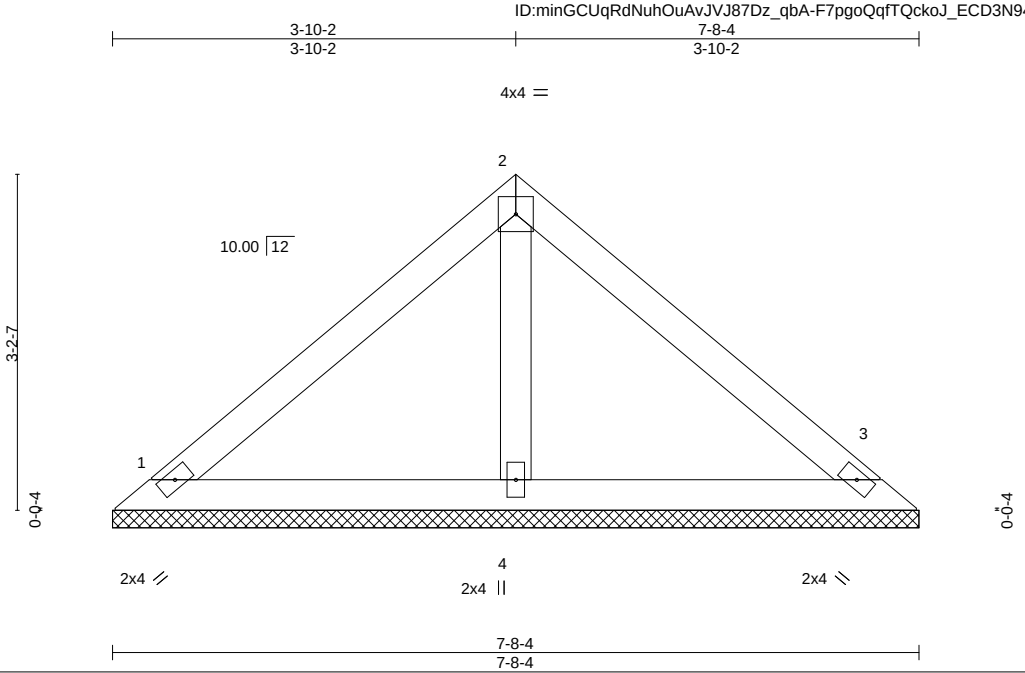

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 29 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. (size) 1=7-8-4, 3=7-8-4, 4=7-8-4
Max Horz 1=-60(LC 6)
Max Uplift 1=-22(LC 11), 3=-29(LC 11)
Max Grav 1=156(LC 1), 3=156(LC 1), 4=238(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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) 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 25,2021

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Job	Truss	Truss Type	Qty	Ply	10 PRINCE PLACE - ROOF
28586-28586A	V7	Valley	1	1	I48477614
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Thu Oct 21 15:25:25 2021 Page 1
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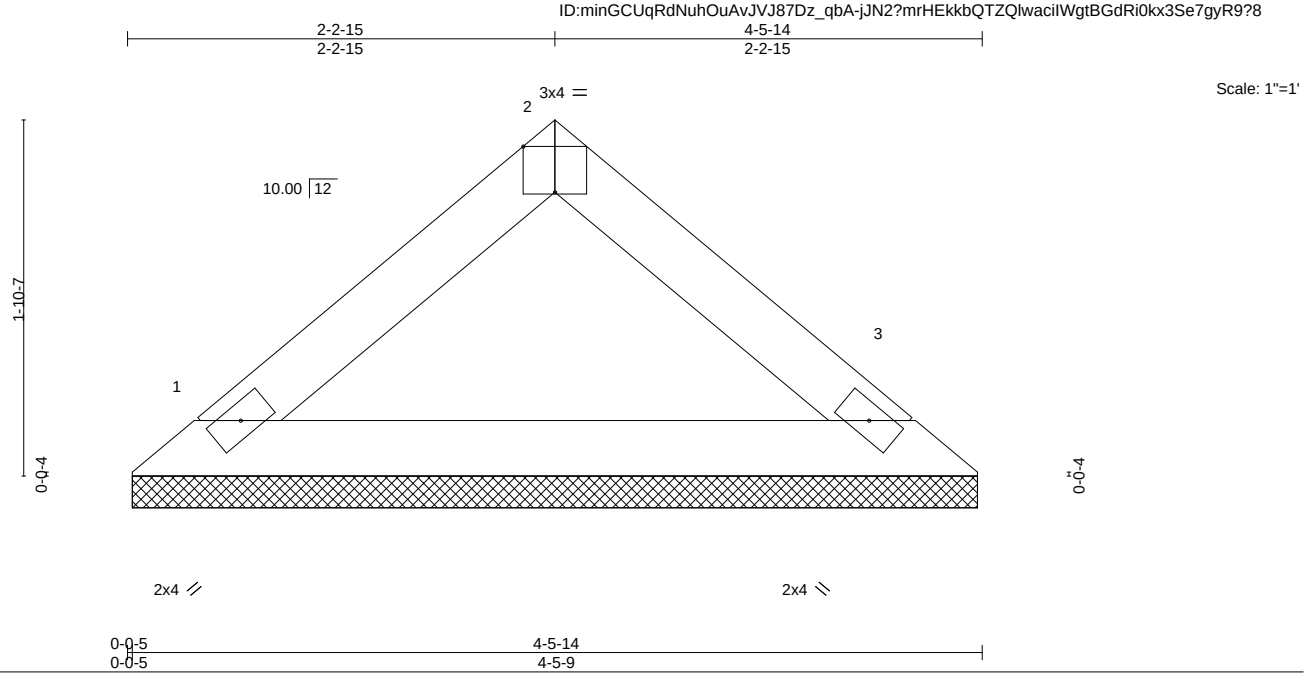

Plate Offsets (X,Y)-- [2:0-2-0,Edge]

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	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.28	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: 14 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 4-5-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-5-4, 3=4-5-4
Max Horz 1=-32(LC 6)
Max Uplift 1=-5(LC 10), 3=-5(LC 11)
Max Grav 1=147(LC 1), 3=147(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; 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) 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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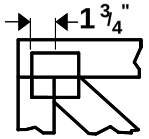
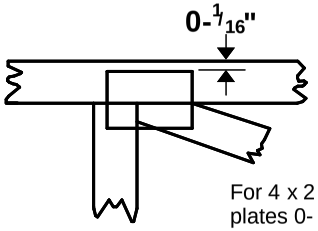
Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

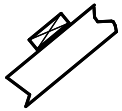
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

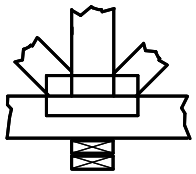
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

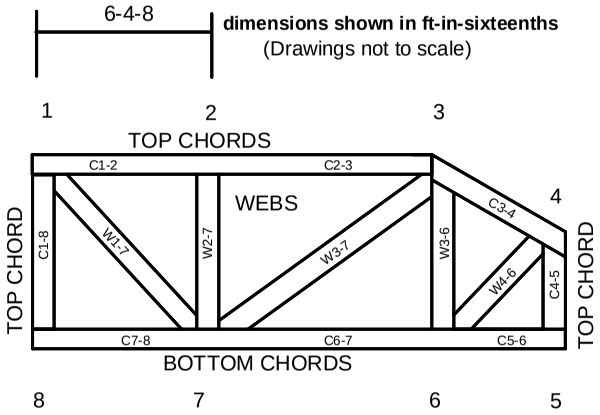


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/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



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.

MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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