

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: 29260-29260A  
16 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: I48998733 thru I48998775

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

North Carolina COA: C-0844



November 30, 2021

Sevier, Scott

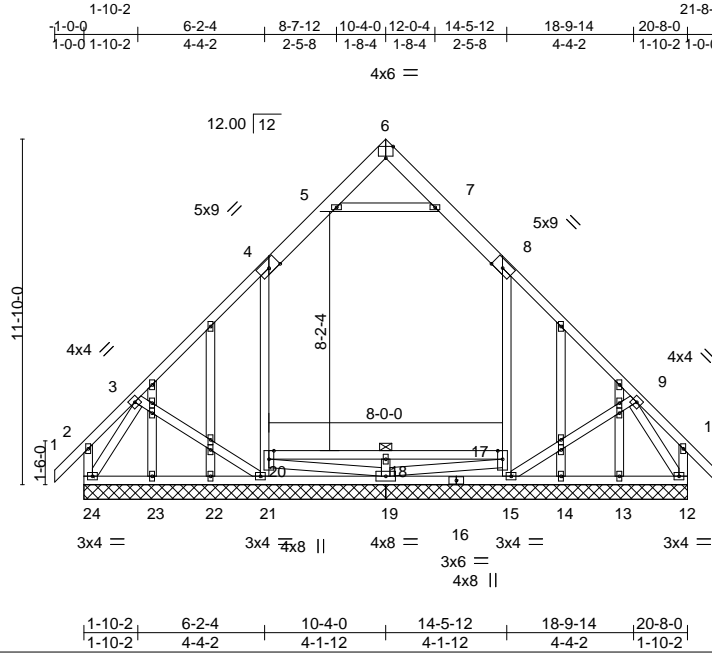
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), 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	16 PRINCE PLACE - ROOF	148998733
29260-29260A	A1E	GABLE	1	1	Job Reference (optional)	

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:42:31 2021 Page 1

ID:KWY5RqLejO4Ci4E?bWskQz\_4qT-Z\_Gh3iloGnfEhkg0gQ5rLisSBh7HUuqG025rbPyEHcs



Scale = 1:78.9

Plate Offsets (X,Y)--	[6:0-3:0,Edge]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.29	Vert(LL) -0.03	18-20	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.61	Vert(CT) -0.04	18-20	>999	180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.12	Horz(CT) 0.01	12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Attic -0.03	17-18	3200	360		
							Weight: 193 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 4-6,6-8: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 17-20
WEBS 2x4 SP No.3 *Except* 5-7,4-21,8-15: 2x4 SP No.2 or 2x4 SPF No.2	
OTHERS 2x4 SP No.3	

REACTIONS.
All bearings 10-4-0.
(lb) - Max Horz 24=-276(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) except 21=-185(LC 10), 15=-225(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 15, 19, 22, 23, 14, 13 except 21=637(LC 18), 24=433(LC 1), 12=433(LC 1), 17=526(LC 19), 19=645(LC 16)

FORCES.
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-327/49, 4-5=-297/53, 7-8=-297/53, 8-9=-322/33
BOT CHORD 23-24=-137/301, 22-23=-137/301, 21-22=-137/301, 19-21=-60/303, 15-19=-68/257
WEBS 20-21=-520/119, 4-20=-395/206, 8-17=-386/201, 3-24=-402/0, 9-12=-390/0, 18-19=-550/0

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCCL=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
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-20, 8-17
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 18-20, 17-18
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 185 lb uplift at joint 21 and 225 lb uplift at joint 15.
  - Attic room checked for L/360 deflection.



November 30,2021

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

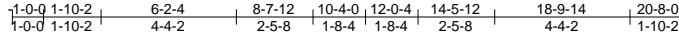
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	16 PRINCE PLACE - ROOF	148998734
29260-29260A	A2	ATTIC	5	1	Job Reference (optional)	

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:42:32 2021 Page 1

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4x6 =

Scale = 1:73.9

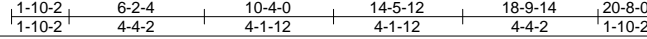
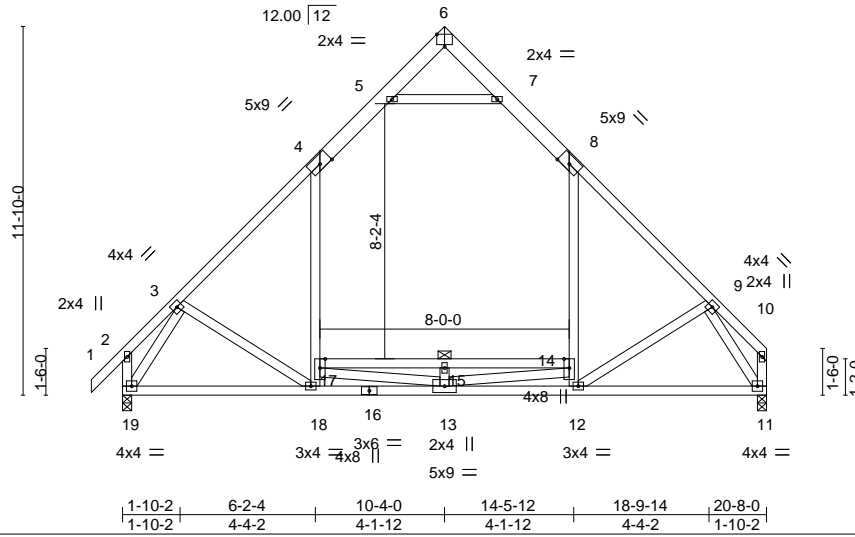


Plate Offsets (X,Y)-- [6:0-3:0,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 1.00	Vert(LL)	0.19 18-19	>999	240	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.95	Vert(CT)	-0.28 14-15	>867	180		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.61	Horz(CT)	0.02 11	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Attic	-0.13 14-17	739	360		
	Code IRC2015/TPI2014						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\*  
14-17: 2x4 SP No.1  
WEBS 2x4 SP No.3 \*Except\*  
5-7,4-18,8-12: 2x4 SP No.2 or 2x4 SPF No.2

**REACTIONS.**

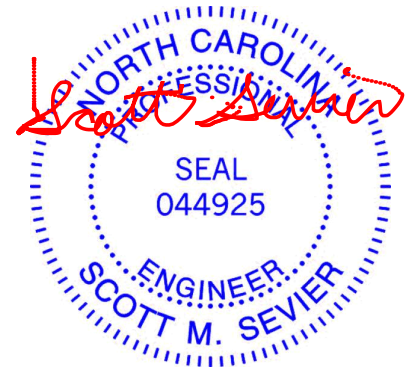
(size) 19=0-3-8, 11=0-3-8  
Max Horz 19=268(LC 7)  
Max Grav 19=1246(LC 19), 11=1198(LC 18)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 3-4=-1272/0, 4-5=-769/80, 5-6=-20/401, 6-7=-19/401, 7-8=-769/80, 8-9=-1274/0  
BOT CHORD 18-19=-71/831, 13-18=-44/1000, 12-13=0/819, 11-12=0/668, 15-17=-1260/0,  
14-15=-1260/0  
WEBS 5-7=-1306/146, 4-17=0/563, 8-14=0/564, 3-19=-1335/0, 9-11=-1326/0, 13-15=-514/0,  
13-17=0/1277, 13-14=0/1275

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-17, 8-14
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 15-17, 14-15
- Attic room checked for L/360 deflection.



November 30,2021

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

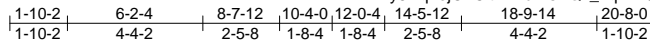
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
Edenton, NC 27932

Job 29260-29260A	Truss A3	Truss Type ATTIC	Qty 4	Ply 1	16 PRINCE PLACE - ROOF
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ID:KWY5RqLejO4Cit4E?bWskQz\_4qT-w0zu1vcY3xs1YJHuVFikOzx6Hcva3qacADJP4tyDxzW  
8.520 s Oct 11 2021 MITek Industries, Inc. Tue Nov 30 15:52:29 2021 Page 1



4x6 =

Scale = 1:73.9

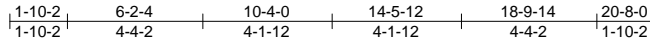
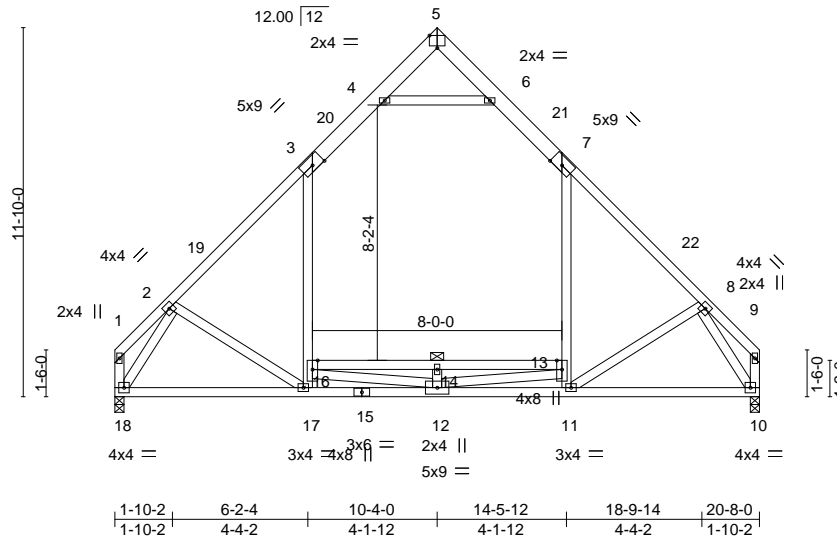


Plate Offsets (X,Y)-- [5:0-3-0,Edge]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.68	Vert(LL)	-0.16	12-17	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.93	Vert(CT)	-0.26	14-16	>953		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.60	Horz(CT)	0.02	10	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Attic	-0.13	13-16	753		
								Weight: 165 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 \*Except\*  
3-5-5-7: 2x6 SP DSS  
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 \*Except\*  
13-16: 2x4 SP No.1  
WEBS 2x4 SP No.3 \*Except\*  
4-6,3-17,7-11: 2x4 SP No.2 or 2x4 SPF No.2

**BRACING-**

TOP CHORD Sheathed or 4-2-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:  
4-5-0 oc bracing: 13-16

**REACTIONS.**

(lb/size) 18=1041/0-3-8 (min. 0-1-14), 10=1041/0-3-8 (min. 0-1-14)  
Max Horz 18=-193(LC 10)  
Max Grav 18=1198(LC 19), 10=1198(LC 18)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-19=-1273/0, 3-19=-1155/0, 3-20=-773/25, 4-20=-699/47, 4-5=0/426, 5-6=0/426,  
6-21=-699/47, 7-21=-774/25, 7-22=-1155/0, 8-22=-1272/0  
BOT CHORD 17-18=0/810, 15-17=0/973, 12-15=0/973, 11-12=0/831, 10-11=0/666, 14-16=-1243/0,  
13-14=-1243/0  
WEBS 4-6=-1355/56, 3-16=0/558, 7-13=0/558, 2-18=-1306/0, 8-10=-1305/0, 12-14=-515/0,  
12-16=0/1268, 12-13=0/1268

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 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 ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (5.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).3-16, 7-13
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 14-16, 13-14
- 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.
- Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard



November 30, 2021

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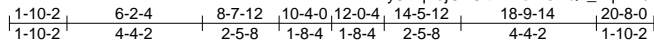
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818 Soundside Road  
Edenton, NC 27932

Job 29260-29260A	Truss A4	Truss Type ATTIC	Qty 2	Ply 1	16 PRINCE PLACE - ROOF	I48998736
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4x6 =

Scale = 1:73.9

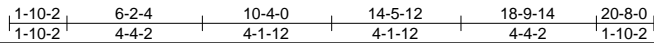
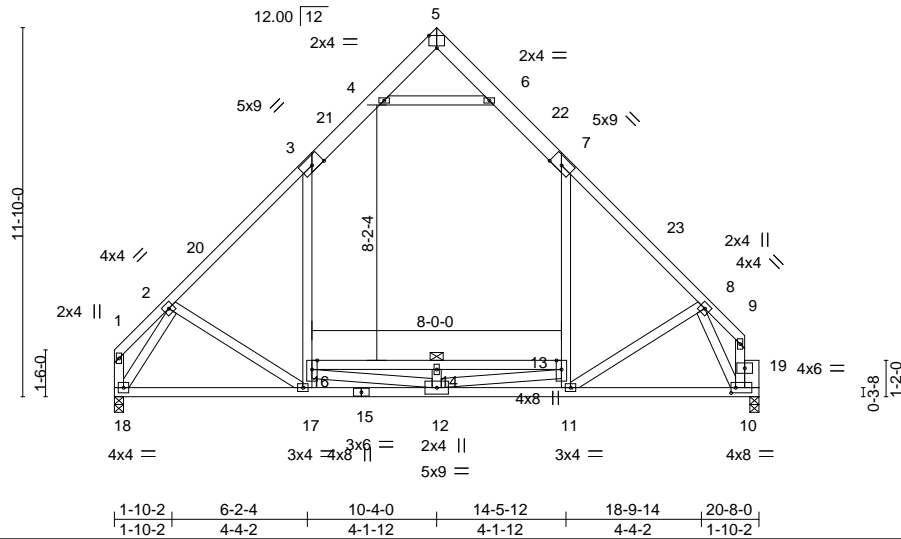


Plate Offsets (X,Y)-- [5:0-3-0,Edge], [10:0-1-12,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.98	Vert(LL)	-0.18	12-17	>999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.95	Vert(CT)	-0.29	14-16	>816		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.62	Horz(CT)	0.02	10	n/a		
BCDL 10.0	Code IBC2015/TPI2014	Matrix-MS	Attic	-0.13	13-16	733		
							Weight: 166 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 \*Except\*  
 3-5,5-7: 2x6 SP No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 \*Except\*  
 13-16: 2x4 SP No.1  
 WEBS 2x4 SP No.3 \*Except\*  
 4-6,3-17,7-11: 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: 13-16

**REACTIONS.**

(lb/size) 18=1025/0-3-8 (min. 0-1-14), 10=1023/0-3-8 (min. 0-1-14)  
 Max Horz 18=233(LC 11)  
 Max Grav 18=1180(LC 19), 10=1190(LC 18)

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

TOP CHORD 2-20=-1249/0, 3-20=-1112/0, 3-21=-745/29, 4-21=-671/51, 4-5=0/388, 5-6=-1/378,  
 6-22=-680/49, 7-22=-755/27, 7-23=-1103/0, 8-23=-1226/0  
 BOT CHORD 17-18=-6/817, 15-17=0/994, 12-15=0/994, 11-12=0/757, 10-11=0/557, 14-16=-1264/0,  
 13-14=-1264/0  
 WEBS 4-6=-1263/61, 3-16=0/558, 7-13=0/528, 8-11=0/321, 2-18=-1304/0, 8-10=-1320/0,  
 12-14=-514/0, 12-16=0/1251, 12-13=0/1306

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (5.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).3-16, 7-13
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 14-16, 13-14
- Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard



November 30,2021

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	16 PRINCE PLACE - ROOF	148998737
29260-29260A	B1E	GABLE	1	1	Job Reference (optional)	

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:42:36 2021 Page 1  
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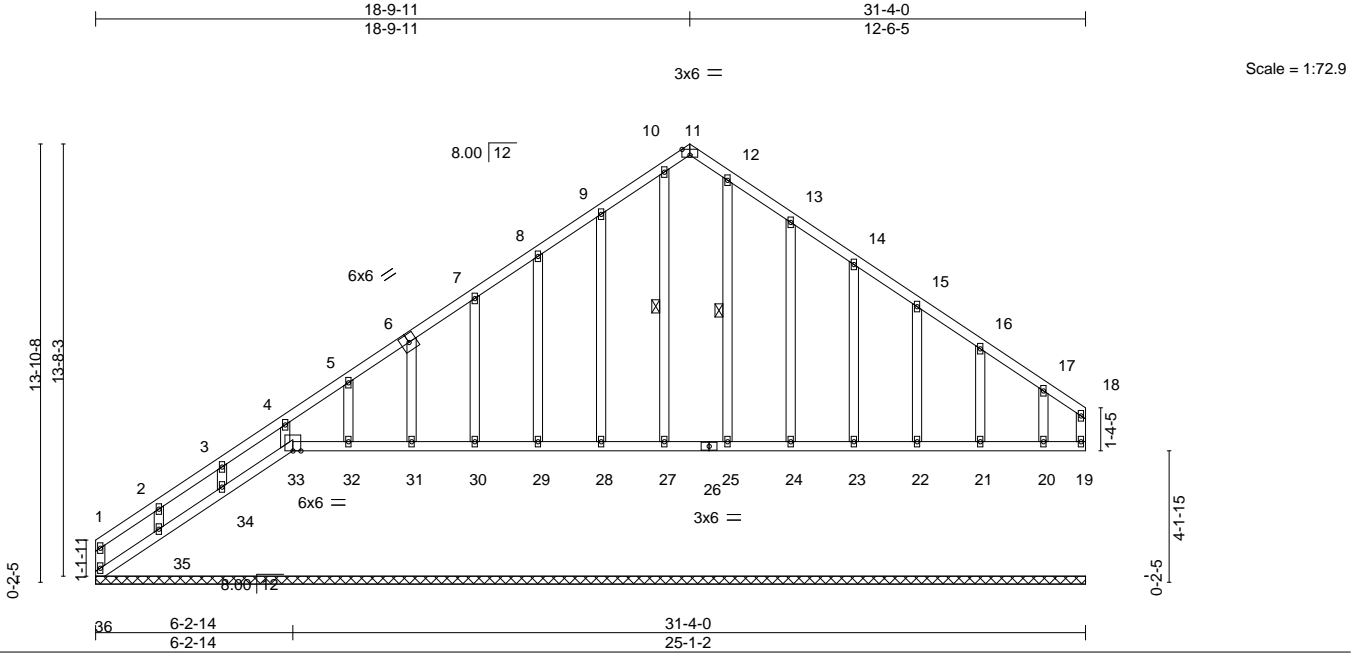


Plate Offsets (X,Y)--	[11:0-3-0,Edge]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.22	Vert(LL) n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.14	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.16	Horz(CT) -0.01	19	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-R					Weight: 204 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
WEBS 2x4 SP No.3	10-0-0 oc bracing: 35-36,34-35,33-34.
OTHERS 2x4 SP No.3	WEBS 1 Row at midpt 10-27, 12-25

**REACTIONS.** All bearings 31-4-0.  
 (lb) - Max Horz 36=285(LC 7)  
 Max Uplift All uplift 100 lb or less at joint(s) 31, 30, 29, 28, 24, 23, 22, 21 except 36=191(LC 8),  
 19=148(LC 7), 33=134(LC 10), 35=200(LC 10), 20=130(LC 6)  
 Max Grav All reactions 250 lb or less at joint(s) 19, 33, 35, 34, 32, 31, 30, 29, 28, 27, 25, 24, 23, 22, 21,  
 20 except 36=282(LC 7)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 9-10=244/287, 12-13=233/274

- 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) 31, 30, 29, 28, 24, 23, 22, 21 except (jt=lb) 36=191, 19=148, 33=134, 35=200, 20=130.
  - 11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 19, 33, 35, 34, 32, 31, 30, 29, 28, 27, 25, 24, 23, 22, 21, 20.



November 30, 2021









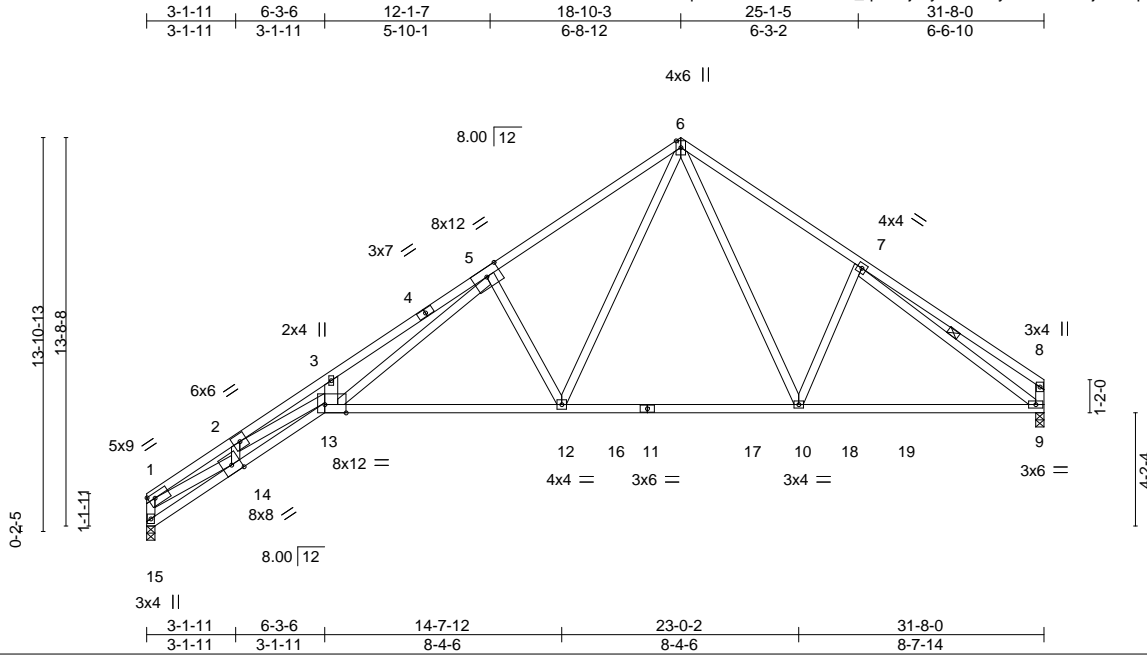
Job	Truss	Truss Type	Qty	Ply	16 PRINCE PLACE - ROOF	148998740
29260-29260A	B4	Common	1	1	Job Reference (optional)	

84 Components (Dunn),

Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:42:40 2021 Page 1

ID:minGCUqRdNuhOuAvJVJ87Dz\_qbA-ojJ4yNSR8YoyG3wP235DjFdDbpfjuNlb5xmpQOyEHCj



Scale = 1:81.3

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.97	Vert(LL) -0.55	12-13	>685	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.96	Vert(CT) -1.18	12-13	>319	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: 190 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  
2-13,1-14: 2x4 SP No.2 or 2x4 SPF No.2

**REACTIONS.**

(size) 15=0-3-8, 9=0-3-8  
Max Horz 9=283(LC 7)  
Max Uplift 15=-87(LC 10), 9=-37(LC 11)  
Max Grav 15=1255(LC 1), 9=1255(LC 1)

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

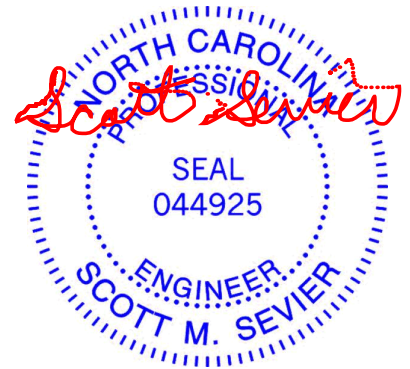
TOP CHORD 1-15=-1272/133, 1-2=-4273/343, 2-3=-7039/388, 3-5=-6996/531, 5-6=-1931/278,  
6-7=-1535/266, 7-8=-342/120, 8-9=-307/105  
BOT CHORD 13-14=-244/3924, 12-13=0/1978, 10-12=0/1082, 9-10=-16/1390  
WEBS 5-13=-320/5014, 5-12=-993/248, 6-12=-123/1263, 6-10=-105/519, 7-10=-261/221,  
7-9=-1412/70, 2-14=-890/90, 2-13=0/2672, 1-14=-237/3567

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCCL=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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 9.

**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



November 30,2021

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
Edenton, NC 27932

Job 29260-29260A	Truss C1	Truss Type Common	Qty 3	Ply 1	16 PRINCE PLACE - ROOF Job Reference (optional)	148998741
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:42:41 2021 Page 1

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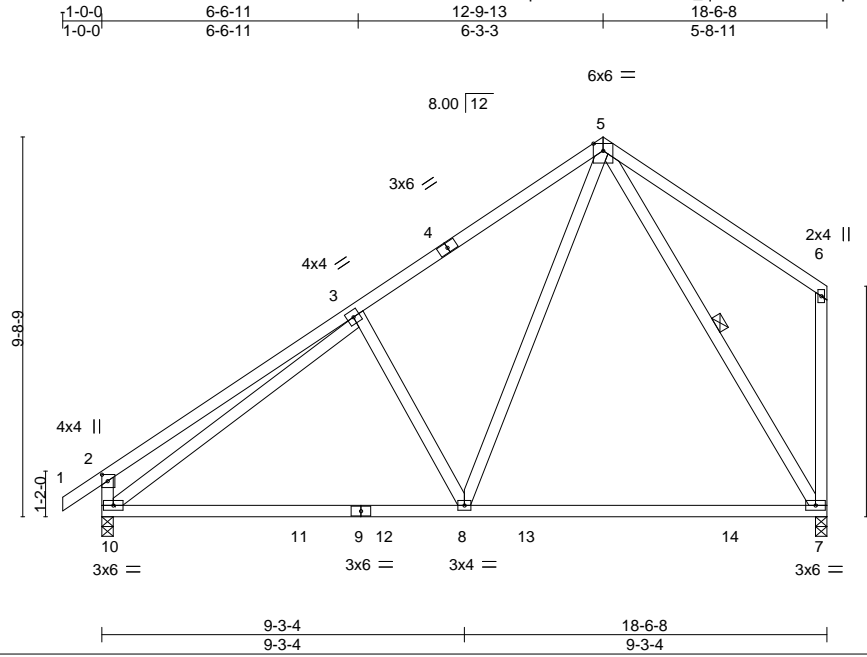


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.60	Vert(LL) -0.37	7-8	>584	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.91	Vert(CT) -0.53	7-8	>411	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.79	Horz(CT) -0.01	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS						
							Weight: 122 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 5-1-0 oc bracing.  
 WEBS 1 Row at midpt 5-7

**REACTIONS.** (size) 10=0-3-8, 7=0-3-8  
 Max Horz 7=270(LC 7)  
 Max Uplift 10=-52(LC 10), 7=-50(LC 10)  
 Max Grav 10=801(LC 1), 7=795(LC 17)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-359/158, 3-5=-713/185, 2-10=-386/171  
 BOT CHORD 8-10=0/642, 7-8=-11/393  
 WEBS 3-8=-310/217, 5-8=-70/624, 3-10=-633/0, 5-7=-630/44

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



November 30, 2021

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



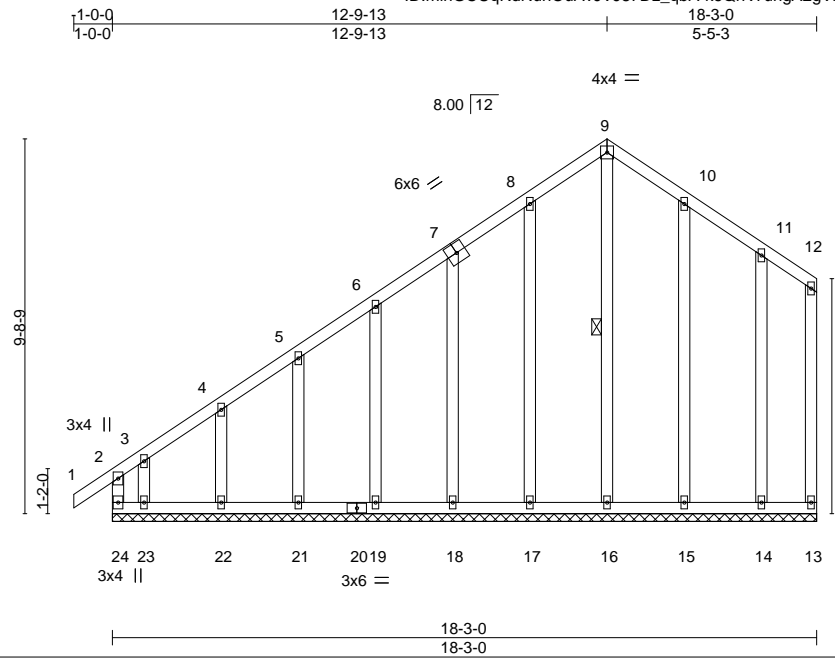
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	16 PRINCE PLACE - ROOF	148998742
29260-29260A	C1E	Common Supported Gable	1	1	Job Reference (optional)	

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:42:42 2021 Page 1

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<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.32	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.16	Vert(CT)	-0.00	1	n/r	90		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.17	Horz(CT)	-0.00	13	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-R						Weight: 147 lb	FT = 20%
	Code IRC2015/TPI2014								

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 9-16
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 18-3-0.  
 (lb) - Max Horz 24=272(LC 7)  
 Max Uplift All uplift 100 lb or less at joint(s) 13, 16, 17, 18, 19, 21, 22, 15, 14 except 24=-306(LC 8), 23=-353(LC 7)  
 Max Grav All reactions 250 lb or less at joint(s) 13, 16, 17, 18, 19, 21, 22, 15, 14 except 24=469(LC 7), 23=336(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-24=-295/189, 2-3=-335/250

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCCL=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) 13, 16, 17, 18, 19, 21, 22, 15, 14 except (jt=lb) 24=306, 23=353.

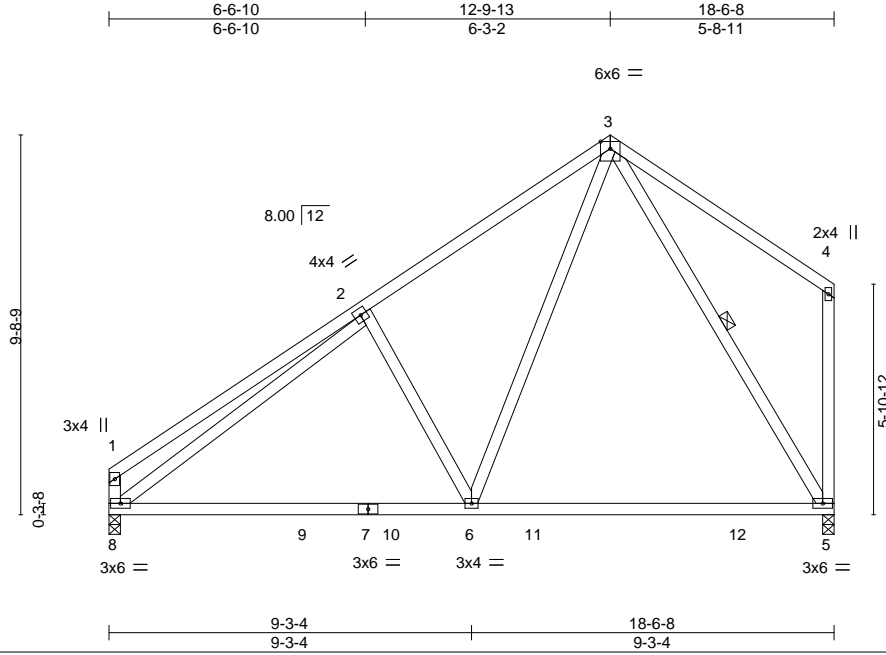


November 30, 2021

Job	Truss	Truss Type	Qty	Ply	16 PRINCE PLACE - ROOF	148998743
29260-29260A	C2	Common	4	1	Job Reference (optional)	

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:42:43 2021 Page 1  
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Scale = 1:58.9

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.60	Vert(LL) -0.37	5-6	>584	240	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.91	Vert(CT) -0.53	5-6	>411	180		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.84	Horz(CT) 0.01	5	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS					Weight: 120 lb	FT = 20%
	Code IRC2015/TPI2014							

**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 5-1-0 oc bracing.  
 WEBS 1 Row at midpt 3-5

**REACTIONS.**

(size) 8=0-3-8, 5=0-3-8  
 Max Horz 8=259(LC 7)  
 Max Uplift 8=-34(LC 10), 5=-50(LC 10)  
 Max Grav 8=730(LC 1), 5=796(LC 17)

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

TOP CHORD 1-2=-303/115, 2-3=-719/187, 1-8=-282/102  
 BOT CHORD 6-8=-102/746, 5-6=-52/367  
 WEBS 2-6=-318/219, 3-6=-71/632, 2-8=-669/13, 3-5=-631/44

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 5.



November 30, 2021

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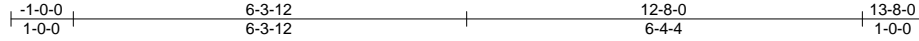


818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	16 PRINCE PLACE - ROOF	148998744
29260-29260A	D1E	GABLE	1	1	Job Reference (optional)	

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:42:52 2021 Page 1  
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3x6 =

Scale = 1:37.0

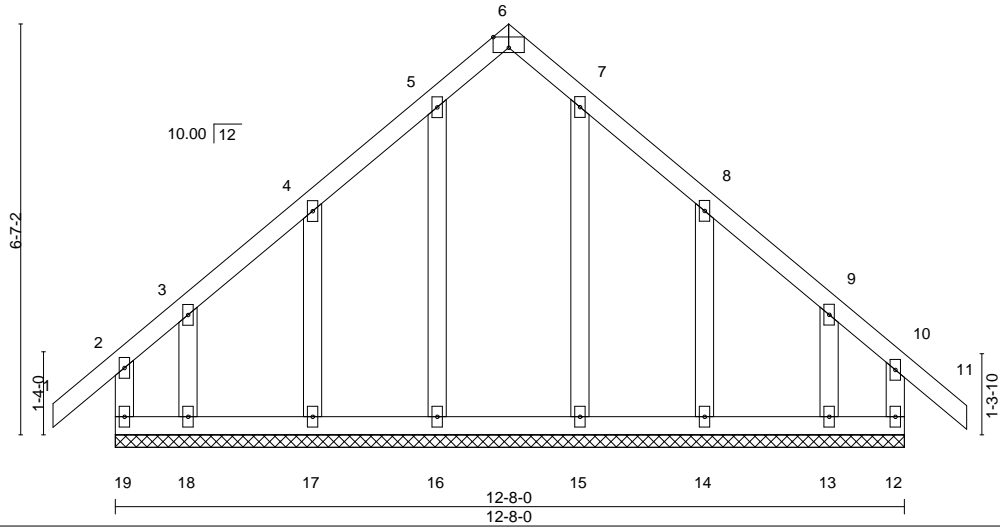


Plate Offsets (X,Y)-- [6:0-3-0,Edge]

LOADING (psf)	SPACING-	CSL.	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-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCCL=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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 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.



November 30, 2021

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**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
 Edenton, NC 27932



Job 29260-29260A	Truss DZE	Truss Type Common Structural Gable	Qty 1	Ply 1	16 PRINCE PLACE - ROOF	148998745
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Job Reference (optional)  
8.520 s Oct 22 2021 MiTek Industries, Inc. Tue Nov 30 08:23:37 2021 Page 1  
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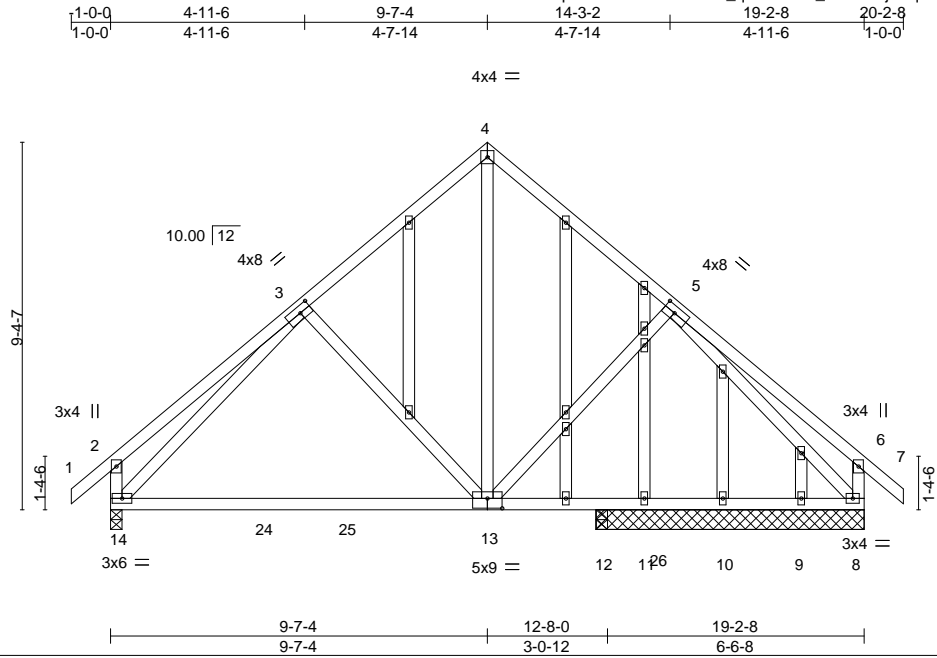


Plate Offsets (X,Y)-- [3:0-3-8,0-2-0], [5:0-3-8,0-2-0], [13:0-4-8,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.52	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.73	Vert(LL) -0.20 13-14 >753 240		
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) 14=0-3-8, 12=0-3-8.  
 (lb) - Max Horz 14=-222(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 14, 8 except 12=-132(LC 16)  
 Max Grav All reactions 250 lb or less at joint(s) 11, 10, 9 except 14=809(LC 1), 8=752(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-326/136, 3-4=-614/171, 4-5=-614/171, 2-14=-359/157, 6-8=-279/184  
 BOT CHORD 14-24=-67/604, 24-25=-67/604, 13-25=-67/604, 12-13=0/506, 12-26=0/506, 11-26=0/506,  
 10-11=0/506, 9-10=0/506, 8-9=0/506  
 WEBS 4-13=-116/471, 3-14=-551/37, 5-8=-646/0

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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, with BCDL = 10.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 8 except (jt=lb) 12=132.
- 9) 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.

**LOAD CASE(S)** Standard



November 30, 2021

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
 Edenton, NC 27932

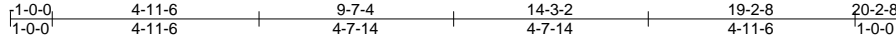
Job 29260-29260A	Truss D3	Truss Type Common	Qty 1	Ply 1	16 PRINCE PLACE - ROOF	148998746
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84 Components (Dunn),

Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:42:56 2021 Page 1

ID:minGCUqRdNuhOuAvJVJ87Dz\_qbA-KoG7JF3TNTphBW8U\_QNzMDH4eG9BehUymReg\_TyEHCT



Scale = 1:55.1

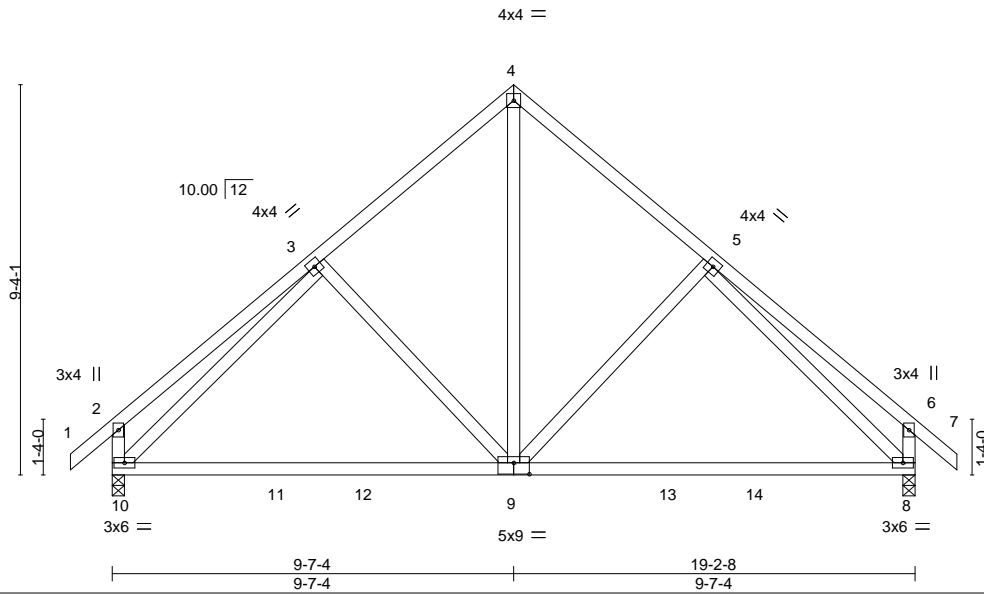


Plate Offsets (X,Y)-- [9:0-4-8,0-3-4]

LOADING (psf)	SPACING-	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-**

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



November 30, 2021

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



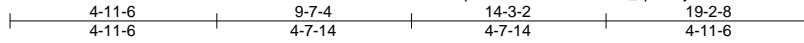
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	16 PRINCE PLACE - ROOF	148998747
29260-29260A	D3G	Common Girder	1	<b>2</b>	Job Reference (optional)	

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:43:02 2021 Page 1

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4x6 ||

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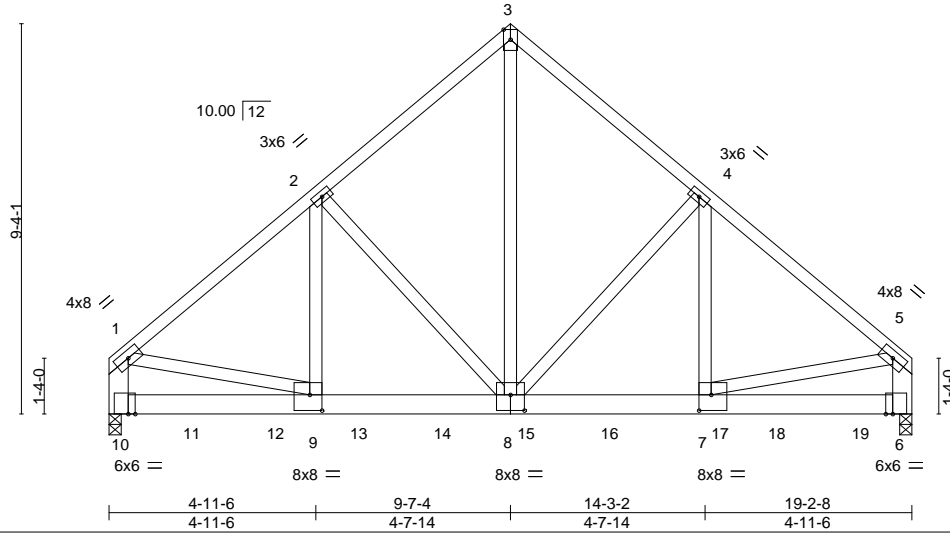


Plate Offsets (X,Y)-- [6:0-2-0,0-0-0], [7:0-3-8,0-4-8], [8:0-4-0,0-4-8], [9:0-3-8,0-4-8], [10:0-2-0,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.46	Vert(LL) -0.07	8-9	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.39	Vert(CT) -0.14	8-9	>999	180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.85	Horz(CT) 0.02	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 DSS  
 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 4-8-7 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 10=0-3-8 (req. 0-4-12), 6=0-3-8 (req. 0-5-1)  
 Max Horz 10=199(LC 5)  
 Max Uplift 10=-225(LC 8), 6=-240(LC 9)  
 Max Grav 10=6059(LC 1), 6=6451(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=-6274/272, 2-3=-4704/289, 3-4=-4704/289, 4-5=-6300/273, 1-10=-5040/213, 5-6=-5048/213  
 BOT CHORD 9-10=-208/814, 8-9=-217/4746, 7-8=-143/4766, 6-7=-59/810  
 WEBS 3-8=-275/5623, 4-8=-1817/204, 4-7=-70/2108, 2-8=-1788/203, 2-9=-68/2070, 1-9=-119/4103, 5-7=-120/4063

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- WARNING: Required bearing size at joint(s) 10, 6 greater than input bearing size.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=225, 6=240.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1223 lb down and 55 lb up at 1-11-4, 1223 lb down and 55 lb up at 3-11-4, 1223 lb down and 55 lb up at 5-11-4, 1223 lb down and 55 lb up at 7-11-4, 1223 lb down and 55 lb up at 9-11-4, 1223 lb down and 55 lb up at 11-11-4, 1223 lb down and 55 lb up at 13-11-4, and 1223 lb down and 55 lb up at 15-11-4, and 1223 lb down and 55 lb up at 17-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



November 30, 2021

Continued on page 2

**LOAD CASE(S) Standard**

WARNING: Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	16 PRINCE PLACE - ROOF	148998747
29260-29260A	D3G	Common Girder	1	<b>2</b>	Job Reference (optional)	

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:43:02 2021 Page 2  
ID:minGCUqRdNuhOuAvJVJ87Dz\_qbA-8yePaJ7EzJZrvRbdKhUNcuX61gJo2J9q8M5\_B6yEHCN

**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=-1223(B) 12=-1223(B) 13=-1223(B) 14=-1223(B) 15=-1223(B) 16=-1223(B) 17=-1223(B) 18=-1223(B) 19=-1223(B)

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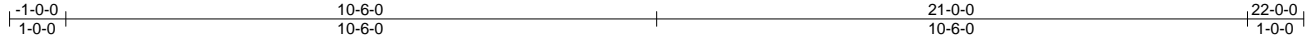


818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	16 PRINCE PLACE - ROOF	148998748
29260-29260A	E1E	GABLE	1	1	Job Reference (optional)	

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:43:04 2021 Page 1  
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3x6 =

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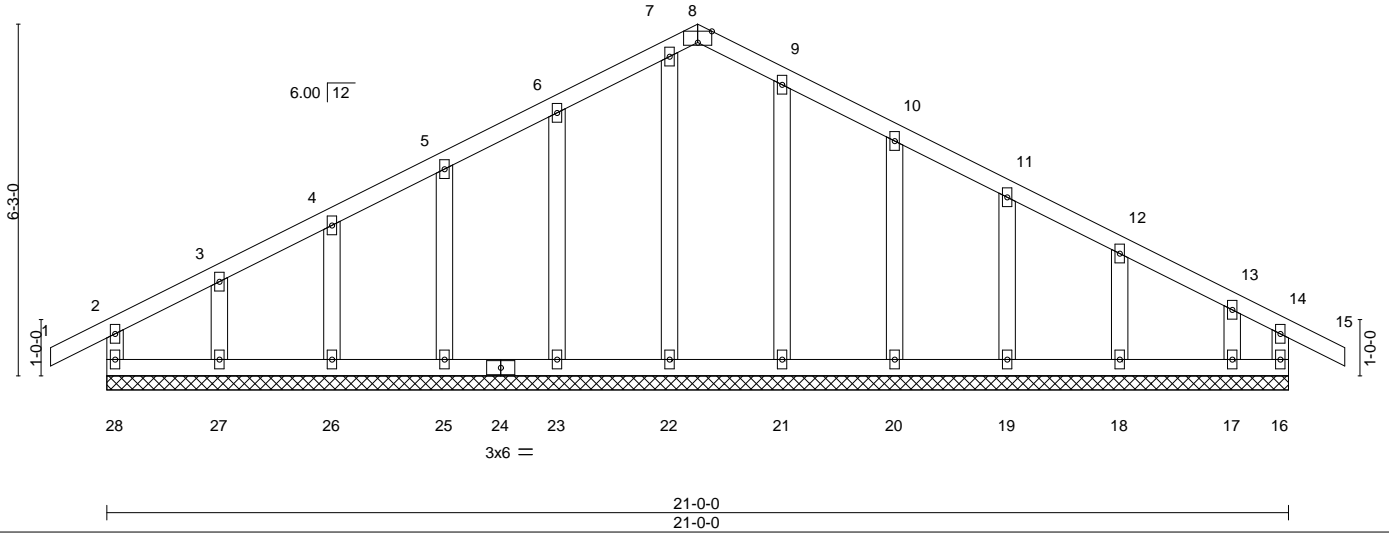


Plate Offsets (X,Y)-- [8:0-3-0,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.11	Vert(LL) -0.00	15	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) -0.01	15	n/r	90		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.08	Horz(CT) 0.00	16	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-R					Weight: 119 lb	FT = 20%

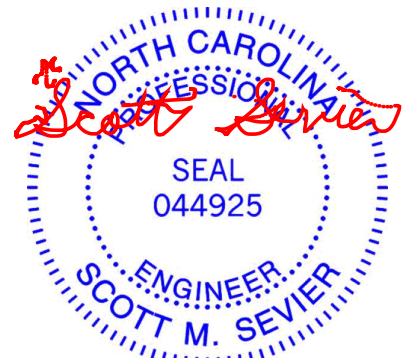
**LUMBER-**  
 TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.3

**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 21-0-0.  
 (lb) - Max Horz 28=83(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 28, 16, 27, 26, 25, 23, 21, 20, 19, 18, 17  
 Max Grav All reactions 250 lb or less at joint(s) 28, 16, 27, 26, 25, 23, 22, 21, 20, 19, 18, 17

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCCL=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
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 28, 16, 27, 26, 25, 23, 21, 20, 19, 18, 17.



November 30, 2021

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Job 29260-29260A	Truss E2	Truss Type Common	Qty 6	Ply 1	16 PRINCE PLACE - ROOF	148998749
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:43:06 2021 Page 1

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4x4 =

Scale = 1:40.3

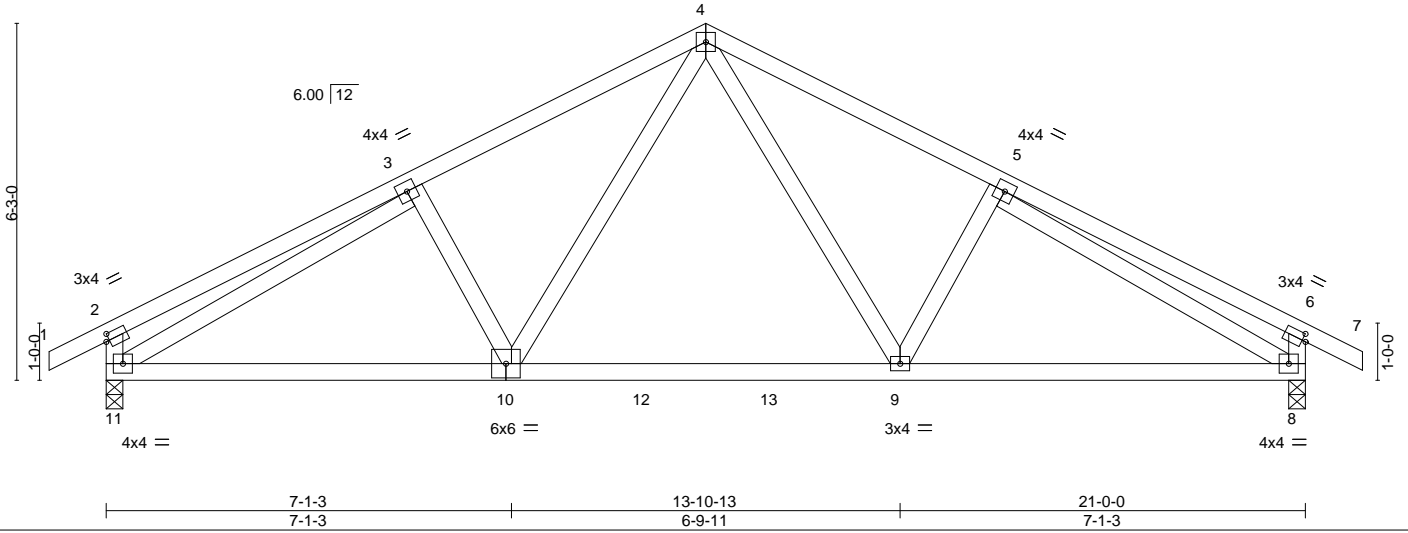


Plate Offsets (X,Y)-- [2:0-0-12,0-1-8], [6:0-0-12,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.36	Vert(LL) -0.09	9-10	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.50	Vert(CT) -0.14	9-10	>999	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.69	Horz(CT) 0.03	8	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 5-3-1 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 11=0-3-8, 8=0-3-8  
 Max Horz 11=-83(LC 8)  
 Max Uplift 11=-63(LC 10), 8=-63(LC 11)  
 Max Grav 11=897(LC 1), 8=897(LC 1)

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

TOP CHORD 2-3=-290/113, 3-4=-1081/251, 4-5=-1075/248, 5-6=-291/112, 2-11=-322/156, 6-8=-322/156  
 BOT CHORD 10-11=-83/983, 9-10=0/721, 8-9=-84/982  
 WEBS 4-9=-54/377, 4-10=-58/380, 3-11=-937/112, 5-8=-934/114

**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) 11, 8.



November 30, 2021

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



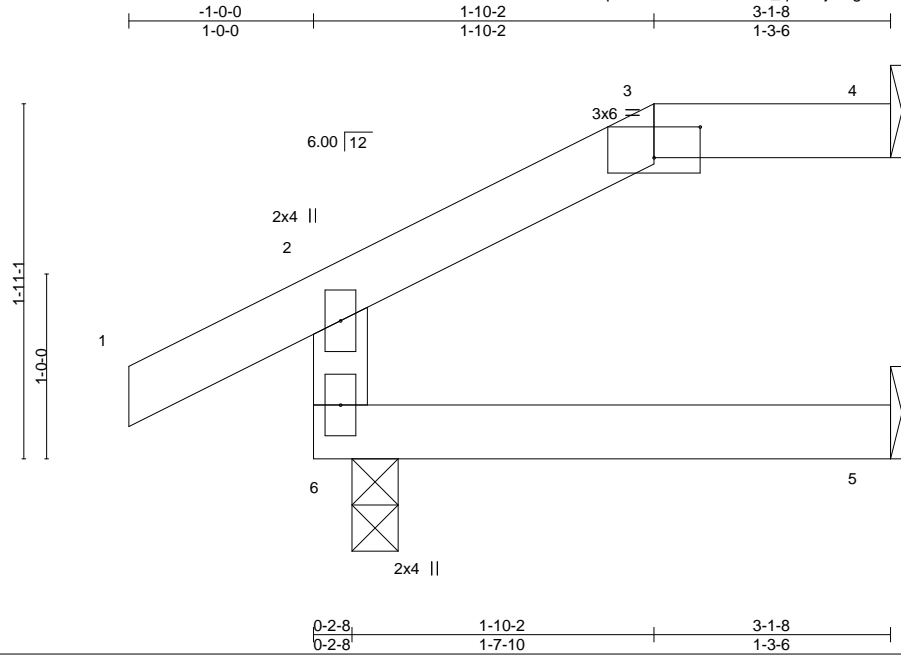
818 Soundside Road  
 Edenton, NC 27932

Job 29260-29260A	Truss H1	Truss Type Half Hip	Qty 1	Ply 1	16 PRINCE PLACE - ROOF	148998750
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:43:06 2021 Page 1

ID:minGCUqRdNuhOuAvJVJ87Dz\_qbA-1jtvPgAI0Y3GN2vPZWWYJmkiuLIY\_KPQ3\_3CKuyEHCJ



Scale = 1:12.5

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.12	Vert(LL)	-0.00	5-6	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	-0.01	5-6	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	4	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-MR						Weight: 12 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 3-1-8 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 4=Mechanical, 6=0-3-0, 5=Mechanical  
 Max Horz 6=37(LC 7)  
 Max Uplift 4=-26(LC 7), 6=-19(LC 10)  
 Max Grav 4=73(LC 1), 6=199(LC 1), 5=54(LC 3)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 6.



November 30, 2021

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



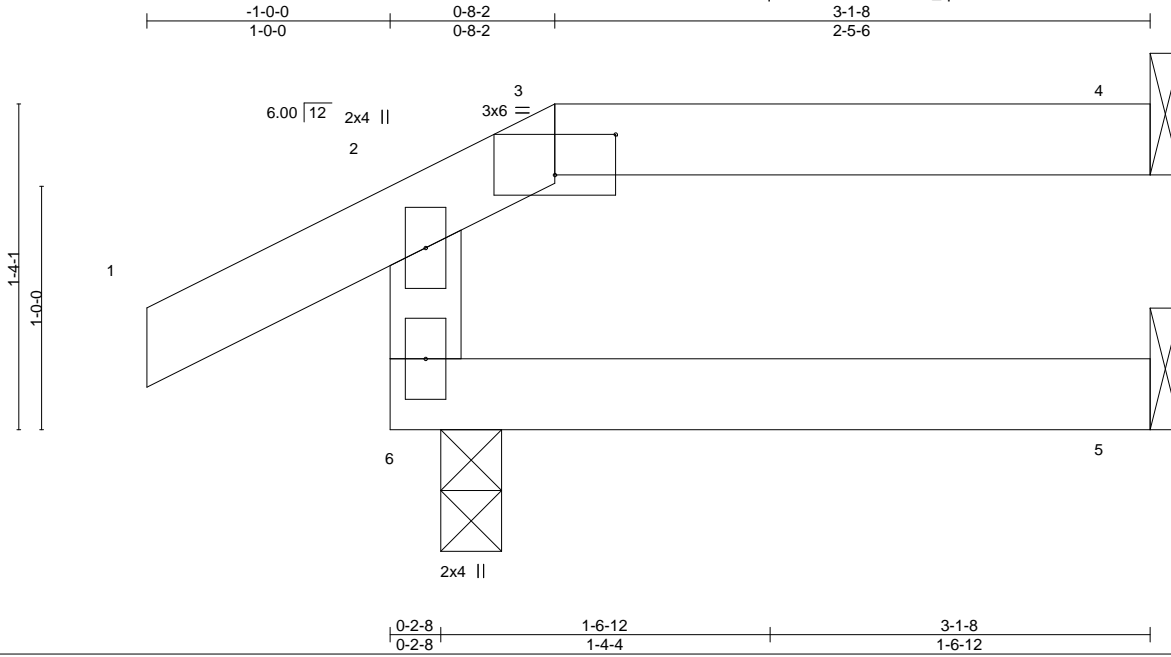
818 Soundside Road  
 Edenton, NC 27932

Job 29260-29260A	Truss H2	Truss Type Half Hip	Qty 1	Ply 1	16 PRINCE PLACE - ROOF Job Reference (optional)	148998751
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84 Components (Dunn),

Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:43:07 2021 Page 1  
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Scale = 1:9.5

Plate Offsets (X,Y)--	[3:0-3-0,0-2-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.12	Vert(LL) -0.00	5-6	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.08	Vert(CT) -0.01	5-6	>999	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MR					Weight: 12 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-1-8 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** (size) 4=Mechanical, 6=0-3-0, 5=Mechanical  
 Max Horz 6=29(LC 9)  
 Max Uplift 4=-28(LC 7), 6=-17(LC 10)  
 Max Grav 4=78(LC 22), 6=199(LC 1), 5=54(LC 3)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 3-0-12 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
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 6.

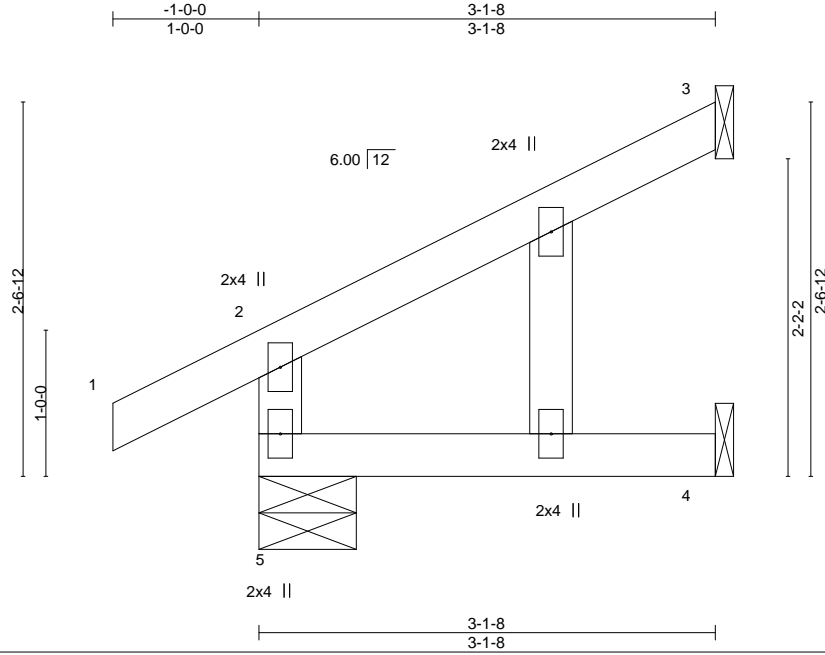


November 30, 2021

Job 29260-29260A	Truss J1	Truss Type GABLE	Qty 1	Ply 1	16 PRINCE PLACE - ROOF Job Reference (optional)	148998752
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:43:09 2021 Page 1  
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.17	Vert(LL) -0.00	4-5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT) -0.01	4-5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT) -0.01	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MR				Weight: 15 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-1-8 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 5=0-8-0, 3=Mechanical, 4=Mechanical  
 Max Horz 5=56(LC 10)  
 Max Uplift 5=-9(LC 10), 3=-41(LC 10)  
 Max Grav 5=199(LC 1), 3=73(LC 1), 4=54(LC 3)

**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) Gable studs spaced at 2-0-0 oc.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.

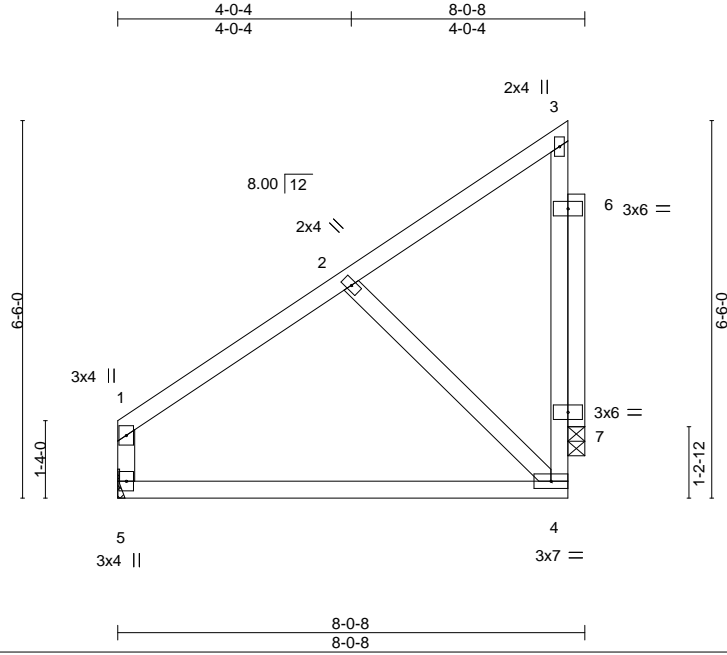


Job	Truss	Truss Type	Qty	Ply	16 PRINCE PLACE - ROOF	148998753
29260-29260A	M1	Monopitch	5	1	Job Reference (optional)	

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:43:10 2021 Page 1

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Scale = 1:39.7

LOADING (psf)	SPACING-	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-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

**REACTIONS.** (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; TCCL=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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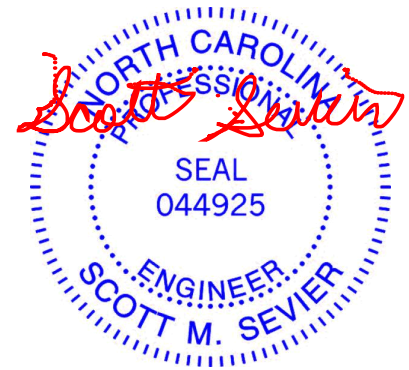
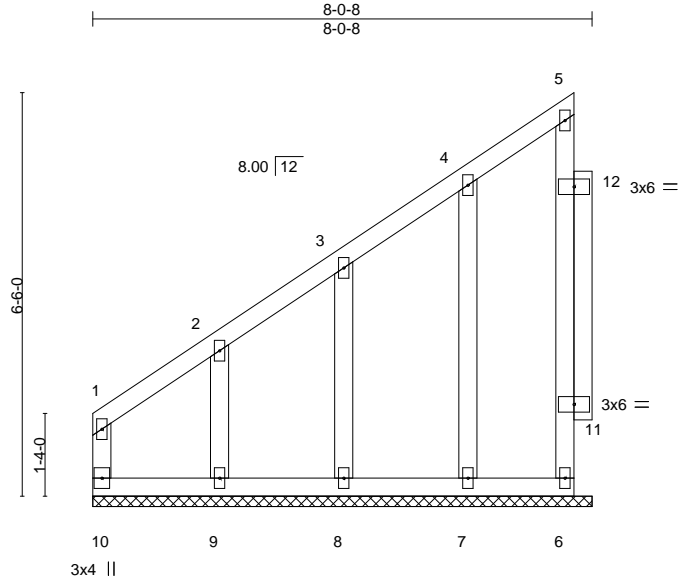


Job	Truss	Truss Type	Qty	Ply	16 PRINCE PLACE - ROOF	148998754
29260-29260A	M1GE	Monopitch Supported Gable	1	1	Job Reference (optional)	

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

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

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

**REACTIONS.** All bearings 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.

November 30, 2021

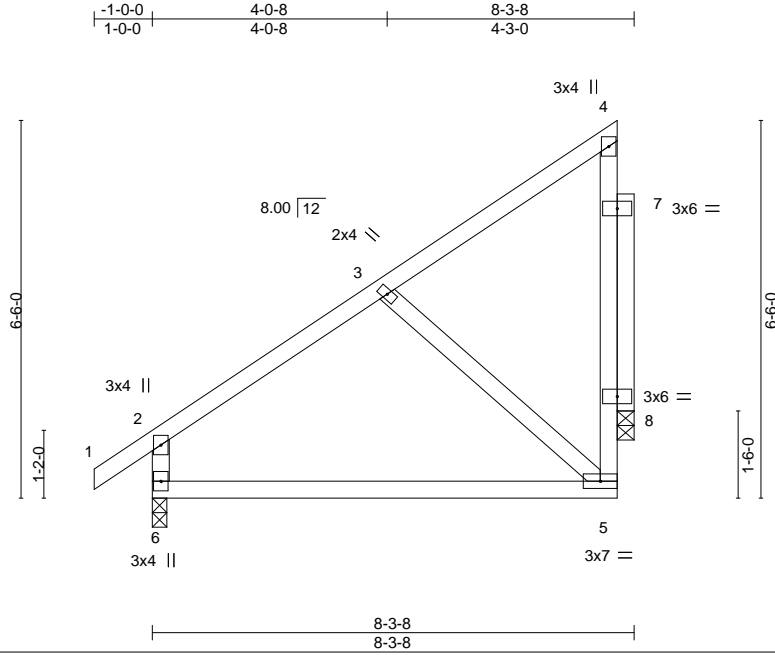
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b>          Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY  <b>TRENCO</b>          A MiTek Affiliate</p> <p>818 Soundside Road          Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	16 PRINCE PLACE - ROOF	148998755
29260-29260A	M2	Monopitch	1	1	Job Reference (optional)	

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

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Scale = 1:39.7

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

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

**REACTIONS.** (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)



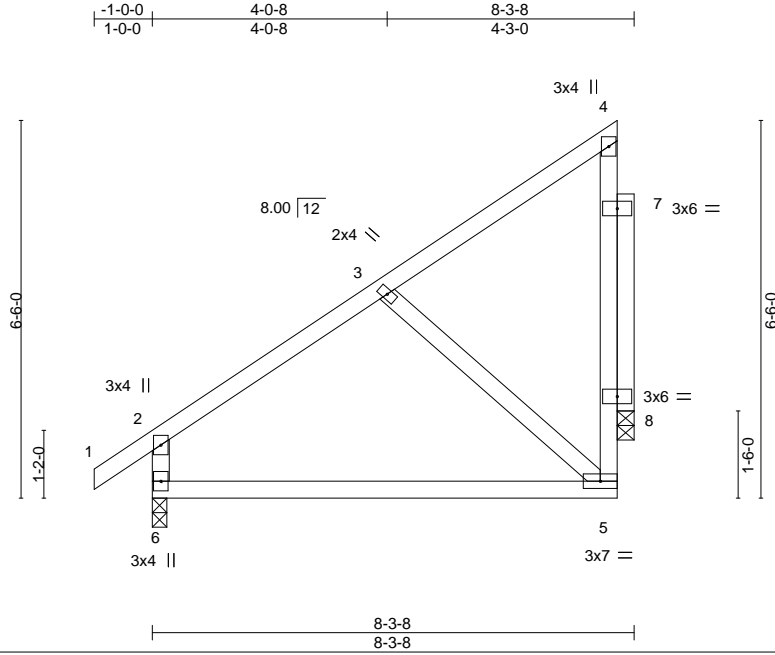
November 30, 2021

Job	Truss	Truss Type	Qty	Ply	16 PRINCE PLACE - ROOF	148998756
29260-29260A	M3	Monopitch	6	1	Job Reference (optional)	

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Scale = 1:39.7

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

**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)



November 30, 2021

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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818 Soundside Road  
 Edenton, NC 27932

Job 29260-29260A	Truss M4	Truss Type Monopitch	Qty 7	Ply 1	16 PRINCE PLACE - ROOF	148998757
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84 Components (Dunn),

Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:43:13 2021 Page 1

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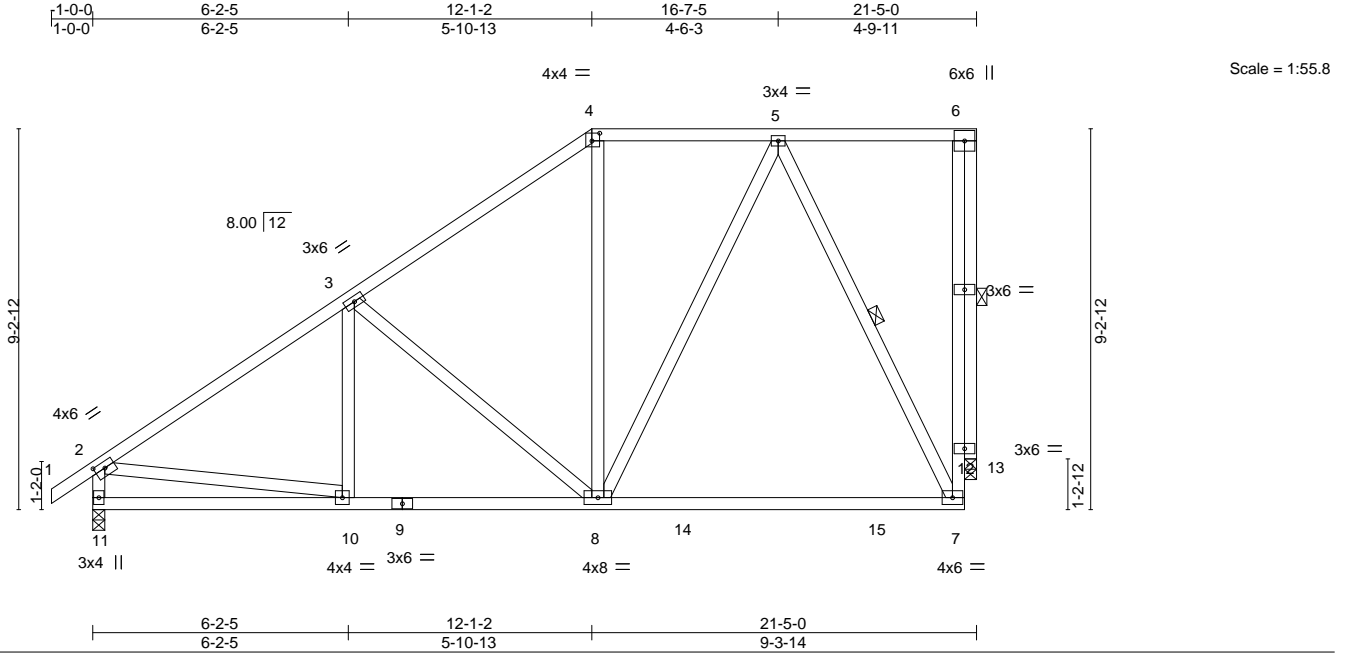


Plate Offsets (X,Y)-- [2:0-3-0,0-1-12], [4:0-2-4,0-2-4]

LOADING (psf)	SPACING-	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-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 13.



November 30, 2021

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818 Soundside Road  
 Edenton, NC 27932

Job 29260-29260A	Truss M4E	Truss Type Monopitch Supported Gable	Qty 1	Ply 1	16 PRINCE PLACE - ROOF Job Reference (optional)	148998758
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:43:15 2021 Page 1  
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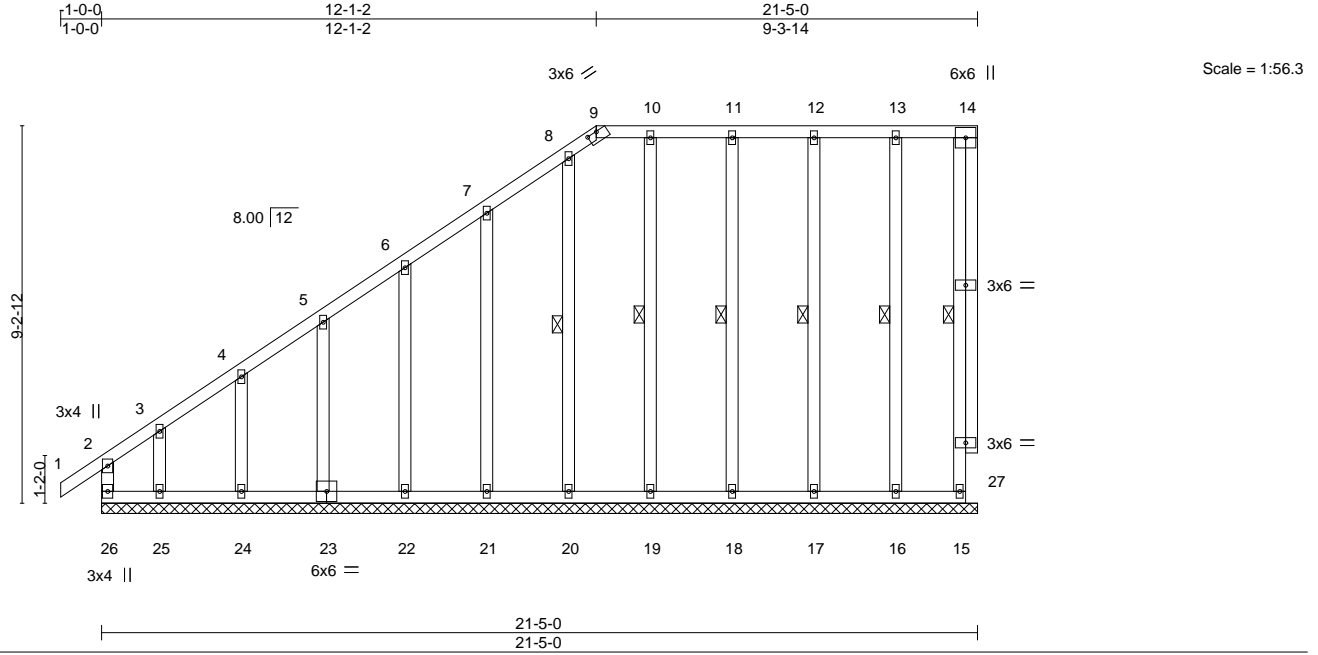


Plate Offsets (X,Y)-- [9:0-3-0,0-0-2]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.31	Vert(LL) -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.**

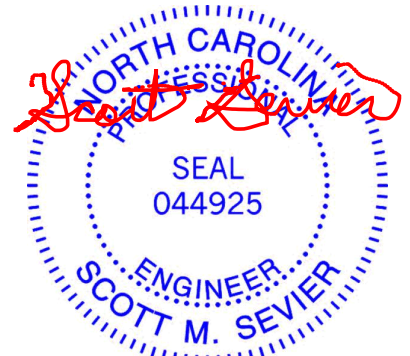
All bearings 21-5-0.  
 (lb) - Max Horz 26=297(LC 7)  
 Max Uplift All uplift 100 lb or less at joint(s) 15, 16, 17, 18, 19, 20, 21, 22, 23, 24 except 26=-141(LC 8), 25=-229(LC 7)  
 Max Grav All reactions 250 lb or less at joint(s) 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25 except 26=334(LC 7)

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

TOP CHORD 2-3=-305/189

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- 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
- 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.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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.



November 30, 2021

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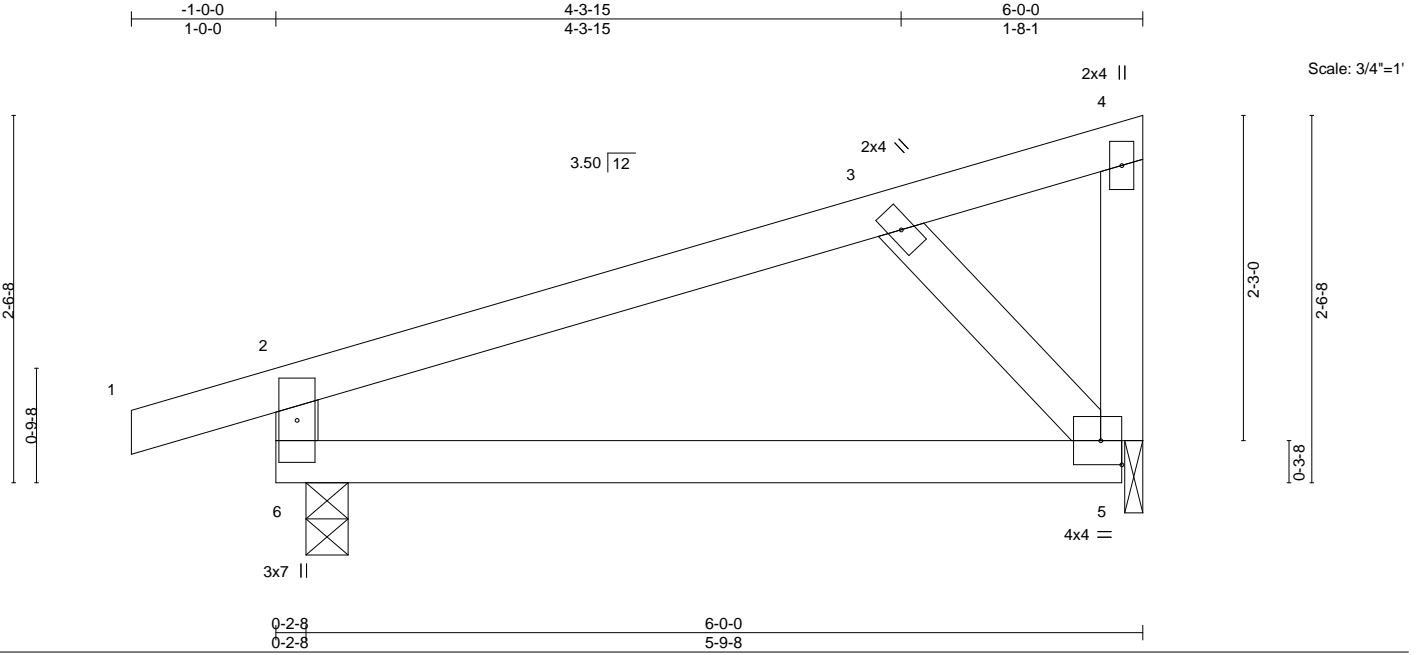
Job 29260-29260A	Truss M5	Truss Type Monopitch	Qty 6	Ply 1	16 PRINCE PLACE - ROOF	148998759
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84 Components (Dunn),

Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:43:16 2021 Page 1

ID:minGCUqRdNuhOuAvJVJ87Dz\_qbA-keUhW5l0gcKrabgK9dkfAq6Z3K7kKsAuMYUjhlyEHC9



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.23	Vert(LL)	-0.04	5-6	>999	240	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.29	Vert(CT)	-0.07	5-6	>932	180		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS						Weight: 26 lb	FT = 20%
	Code IRC2015/TPI2014								

**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) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 5.



November 30, 2021

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932

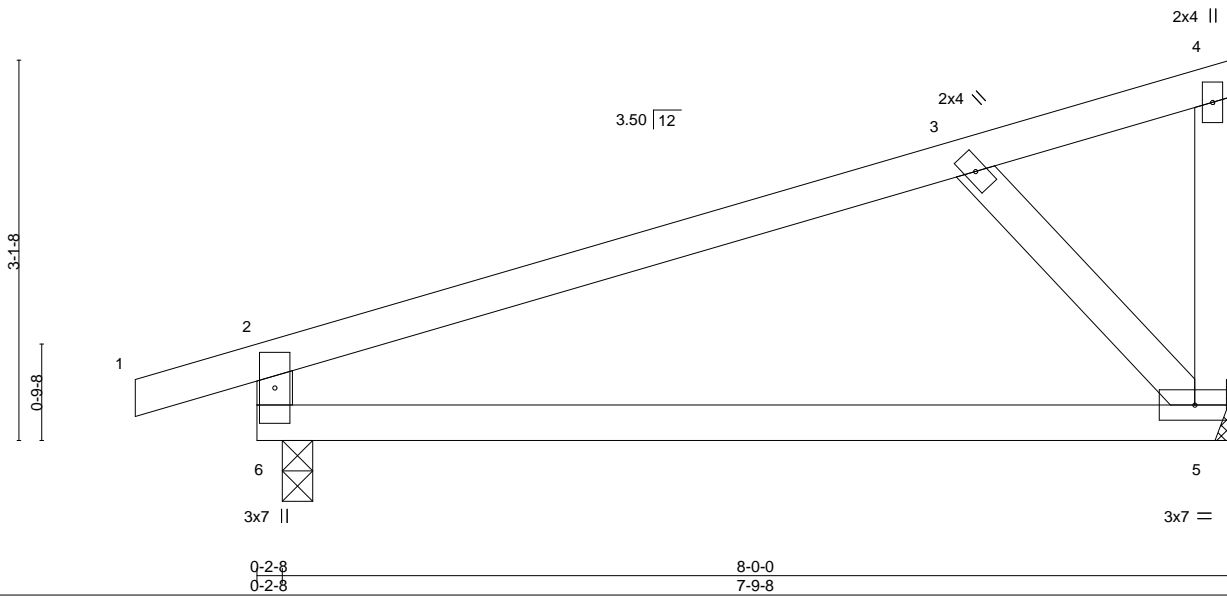
Job	Truss	Truss Type	Qty	Ply	16 PRINCE PLACE - ROOF	148998760
29260-29260A	M6	Monopitch	2	1	Job Reference (optional)	

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:43:16 2021 Page 1  
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Scale = 1:18.9



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



November 30, 2021

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

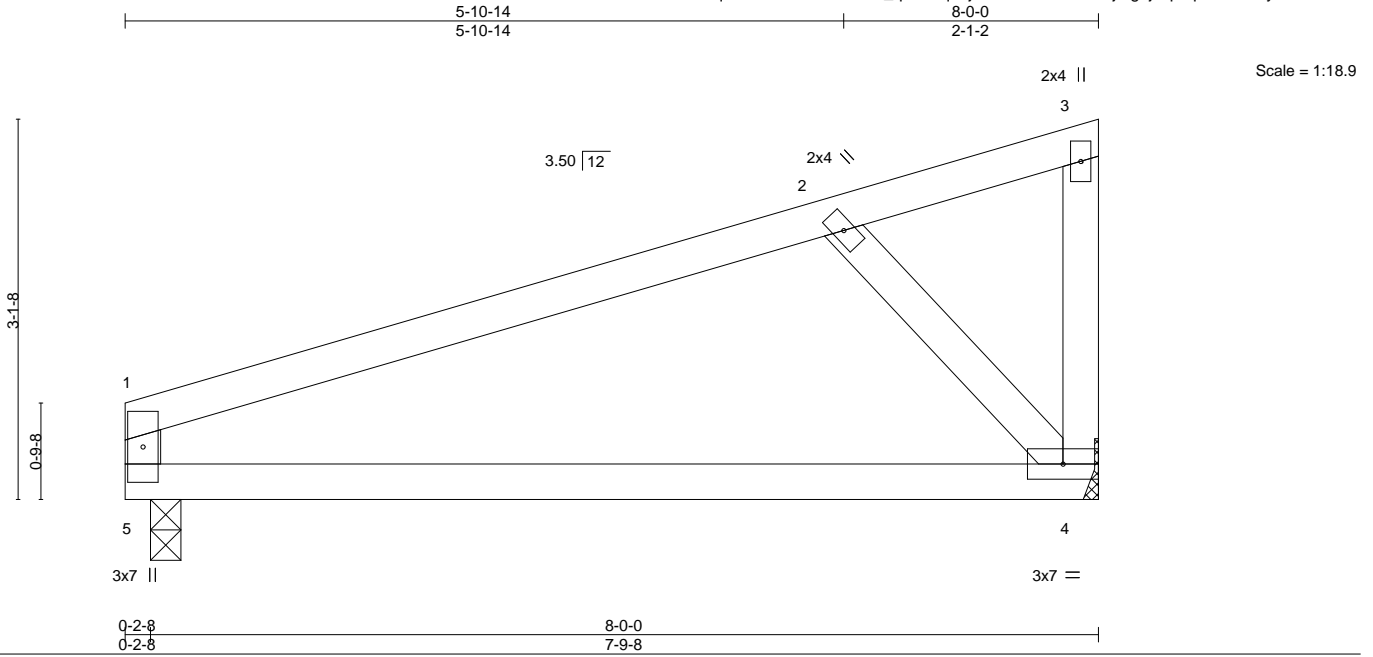


818 Soundside Road  
Edenton, NC 27932

Job 29260-29260A	Truss M7	Truss Type Monopitch	Qty 1	Ply 1	16 PRINCE PLACE - ROOF	148998761
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:43:17 2021 Page 1  
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LOADING (psf)	SPACING-	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.



November 30, 2021

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**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601  
**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**



818 Soundside Road  
Edenton, NC 27932

Job 29260-29260A	Truss MG5	Truss Type Roof Special Girder	Qty 1	Ply 1	16 PRINCE PLACE - ROOF	148998762
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84 Components (Dunn),

Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:43:18 2021 Page 1

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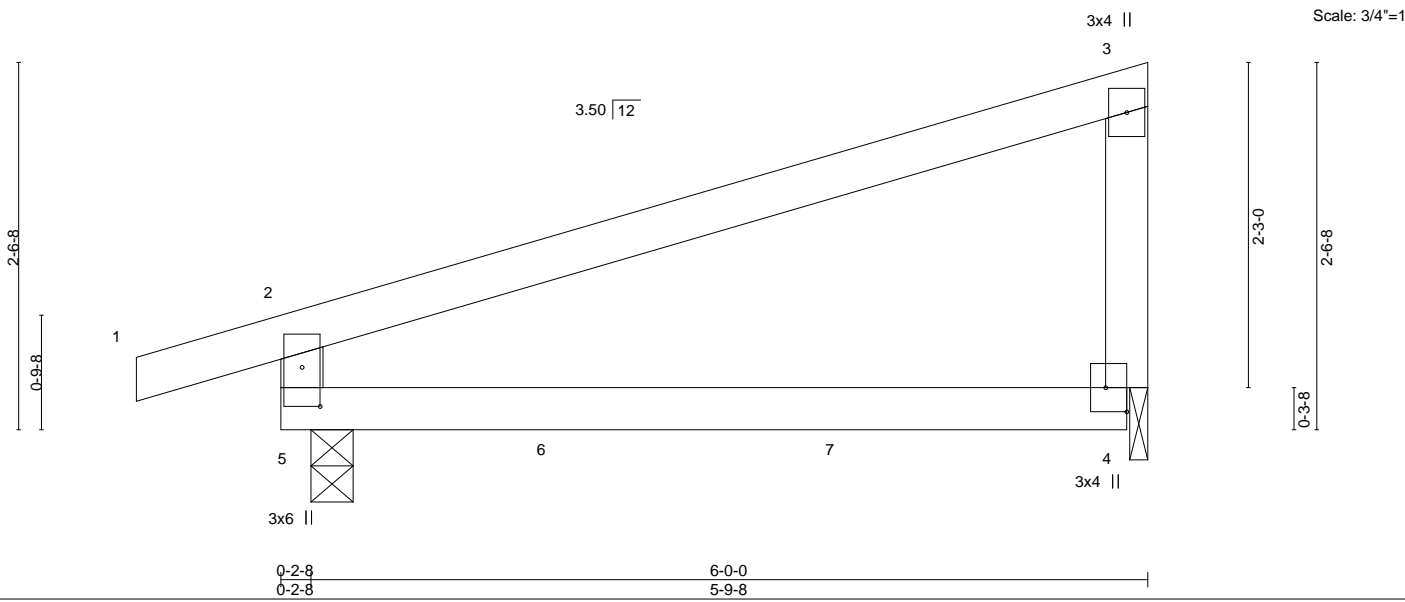


Plate Offsets (X,Y)-- [4:Edge,0-1-12], [5:0-3-4,0-1-8]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.65	Vert(LL)	-0.07	4-5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.50	Vert(CT)	-0.14	4-5	>492		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.05	Horz(CT)	-0.00	4	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-MS					Weight: 23 lb	FT = 20%

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

**REACTIONS.** (size) 5=0-3-8, 4=0-1-8  
 Max Horz 5=77(LC 7)  
 Max Uplift 5=-54(LC 4), 4=-46(LC 8)  
 Max Grav 5=316(LC 1), 4=293(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; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.
  - 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 42 lb down and 47 lb up at 5-10-4 on top chord, and 15 lb down at 1-11-4, and 16 lb down at 3-11-4, and 34 lb down at 5-10-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)  
 Vert: 1-3=-60, 4-5=-20

Concentrated Loads (lb)  
 Vert: 3=-42(B) 4=-19(B) 6=-12(B) 7=-10(B)

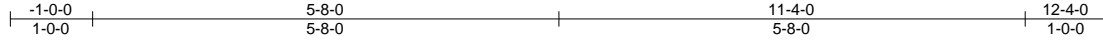


November 30, 2021

Job 29260-29260A	Truss P1E	Truss Type Common Structural Gable	Qty 1	Ply 1	16 PRINCE PLACE - ROOF Job Reference (optional)	148998763
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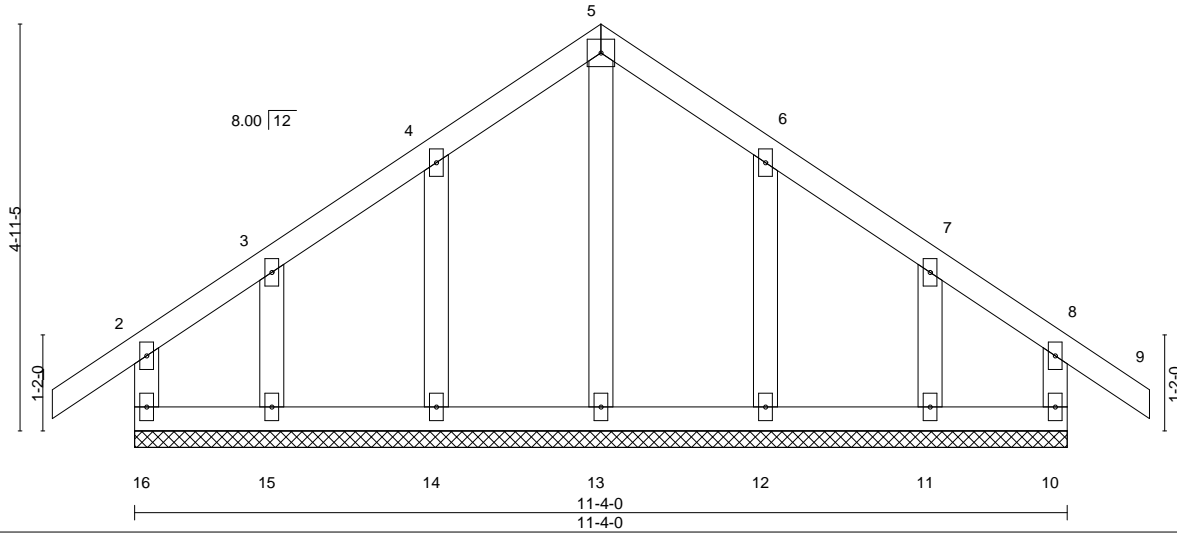
84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:43:19 2021 Page 1  
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4x4 =

Scale = 1:28.0



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.09	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-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCCL=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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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.



November 30, 2021

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

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

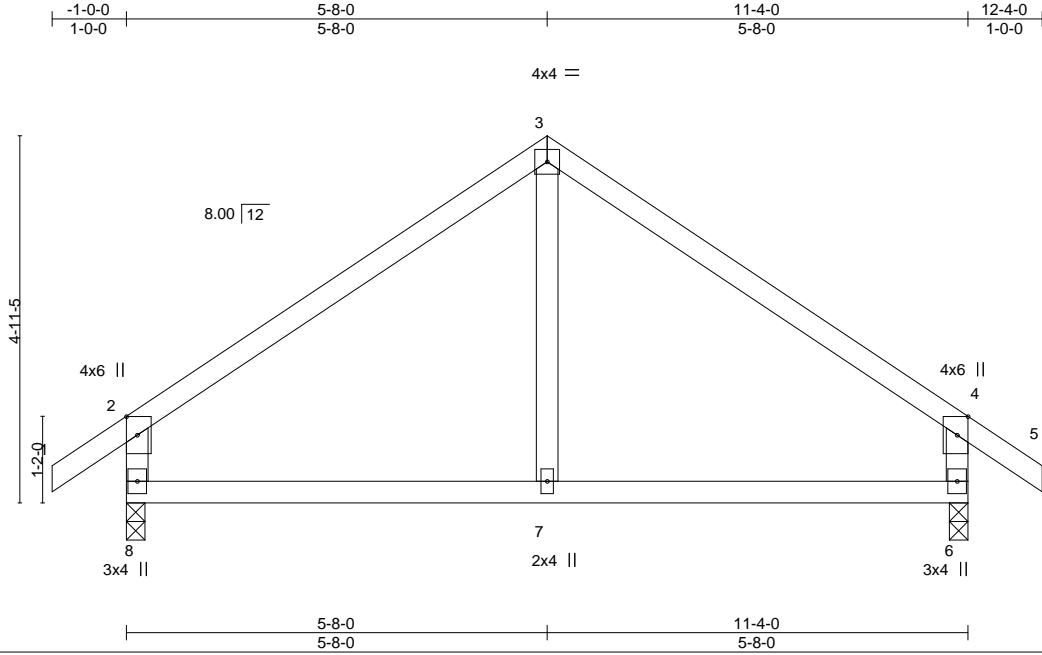


818 Soundside Road  
Edenton, NC 27932

Job 29260-29260A	Truss P2	Truss Type Common	Qty 1	Ply 1	16 PRINCE PLACE - ROOF Job Reference (optional)	148998764
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:43:20 2021 Page 1  
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Scale = 1:31.0

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.66	Vert(LL)	-0.03	6-7	>999	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.23	Vert(CT)	-0.06	6-7	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.08	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MR					Weight: 50 lb	FT = 20%
	Code IRC2015/TPI2014							

**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-**

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



November 30, 2021

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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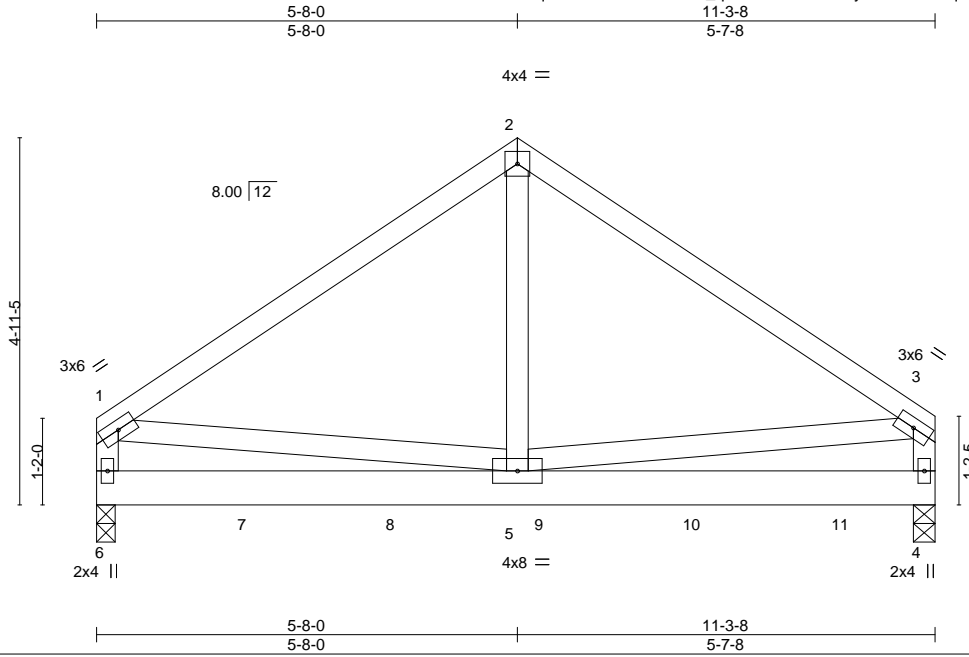


Job	Truss	Truss Type	Qty	Ply	16 PRINCE PLACE - ROOF	148998765
29260-29260A	P3G	COMMON GIRDER	1	2	Job Reference (optional)	

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

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

**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-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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

- 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)



November 30, 2021

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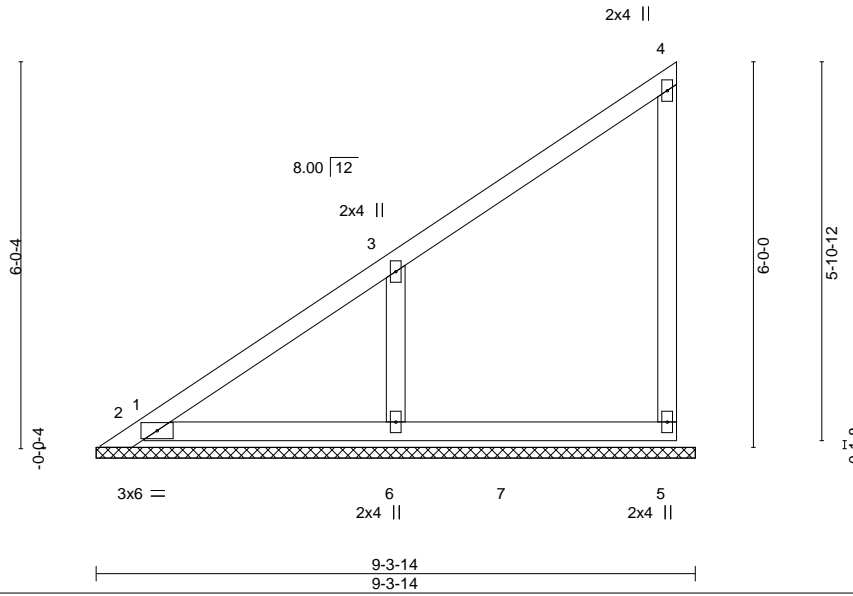


818 Soundside Road  
 Edenton, NC 27932

Job 29260-29260A	Truss PB1	Truss Type Piggyback	Qty 7	Ply 1	16 PRINCE PLACE - ROOF Job Reference (optional)	148998766
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84 Components (Dunn), Dunn, NC - 28334,

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Scale = 1:35.9

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

**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 ANSII/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.



November 30, 2021

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

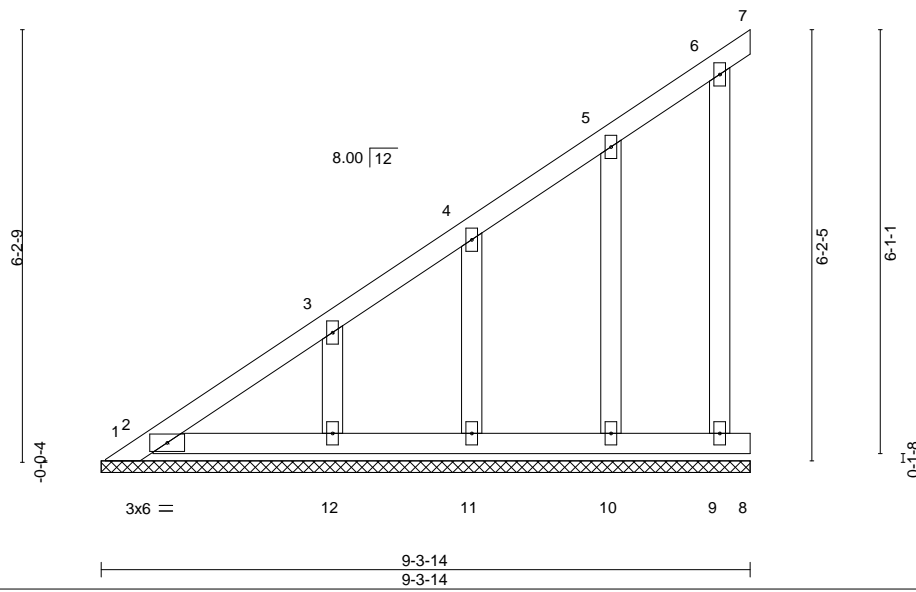


818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	16 PRINCE PLACE - ROOF	148998767
29260-29260A	PB1GE	GABLE	1	1	Job Reference (optional)	

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

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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.44	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%

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

**REACTIONS.** All bearings 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.



November 30, 2021

Job 29260-29260A	Truss V1	Truss Type Valley	Qty 1	Ply 1	16 PRINCE PLACE - ROOF Job Reference (optional)	148998768
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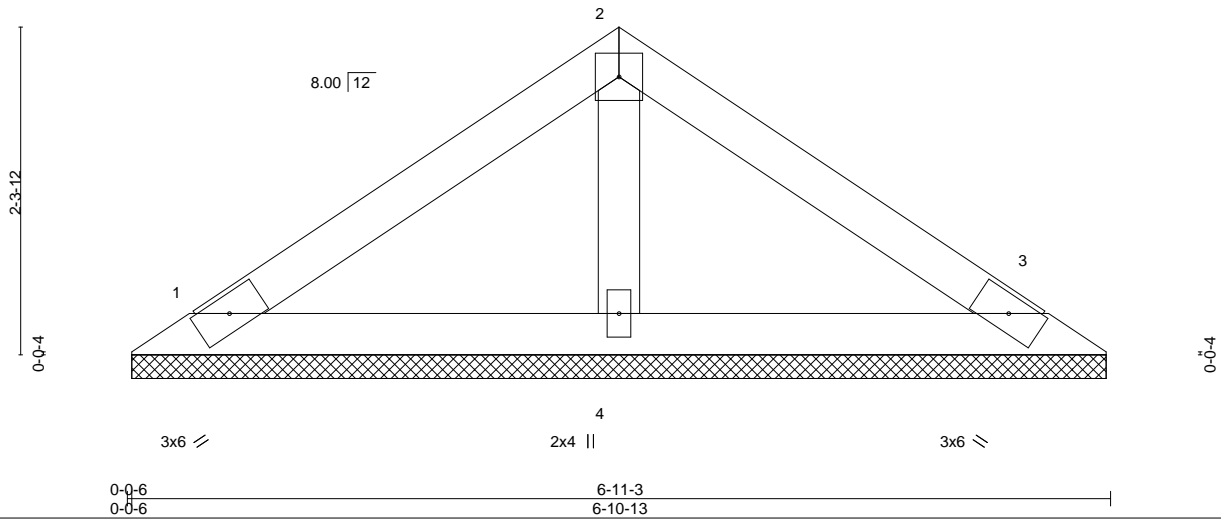
84 Components (Dunn), Dunn, NC - 28334,

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4x4 =

Scale = 1:16.2



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

- Unbalanced roof live loads have been considered for this design.
- 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



November 30, 2021

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



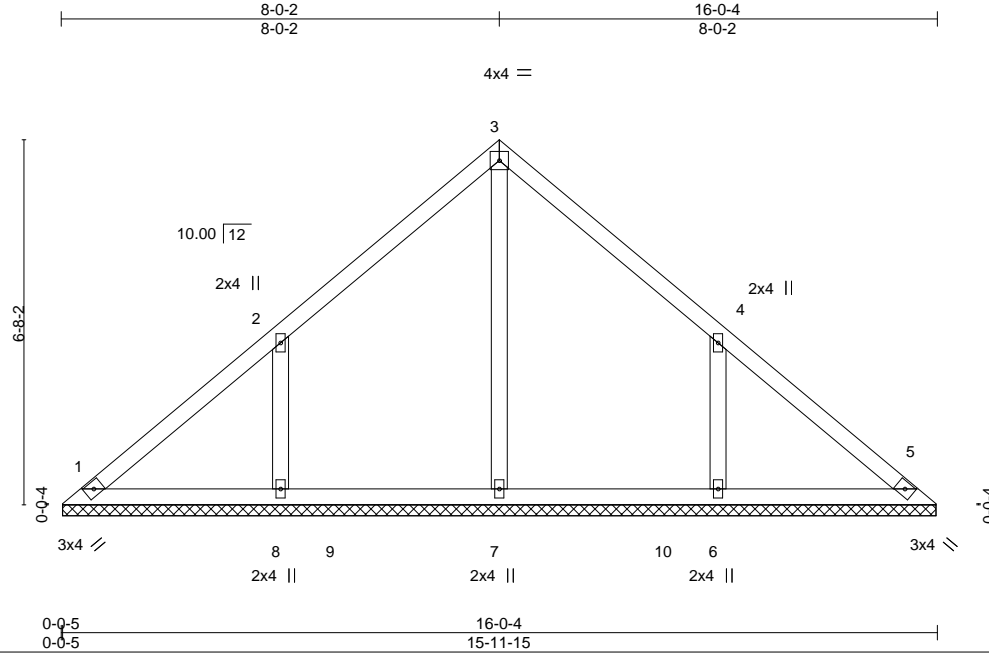
818 Soundside Road  
Edenton, NC 27932

Job 29260-29260A	Truss V2	Truss Type Valley	Qty 1	Ply 1	16 PRINCE PLACE - ROOF Job Reference (optional)	148998769
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:43:25 2021 Page 1

ID:minGCUqRdNuhOuAvJVJ87Dz\_qbA-zNX5PAPgYNTa9zs2A0Om1k\_4yyDcxvFDRRaivHyEHC0



Scale = 1:42.1

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.35	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.17	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.12	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						Weight: 71 lb	FT = 20%
	Code IRC2015/TPI2014								

**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 15-11-11.  
 (lb) - Max Horz 1=134(LC 7)  
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-149(LC 10), 6=-148(LC 11)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=353(LC 20), 8=412(LC 17), 6=411(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-8=-289/193, 4-6=-289/193

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCCL=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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=149, 6=148.



November 30, 2021

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

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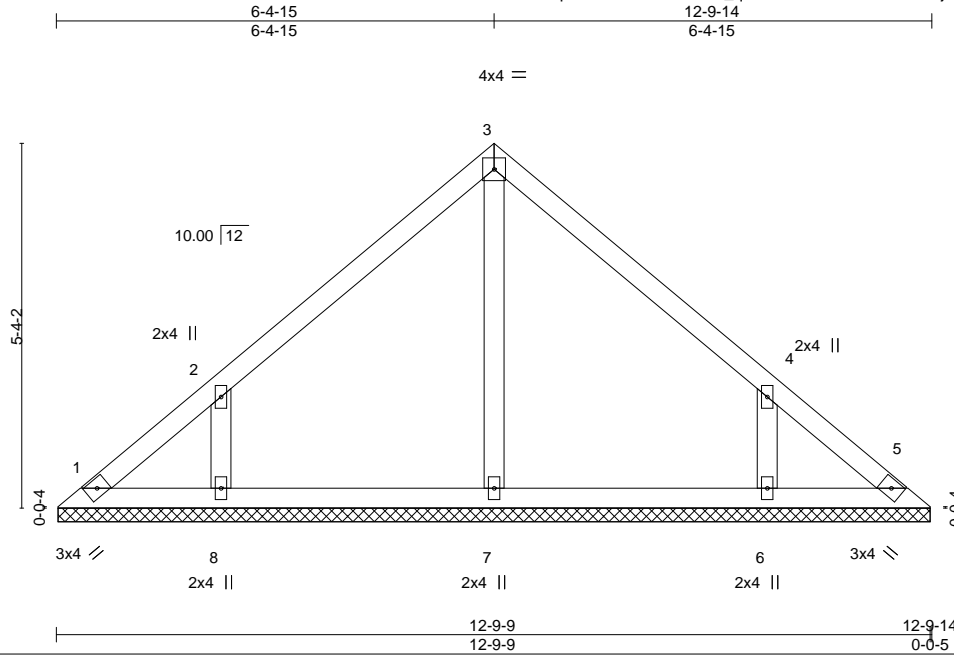


818 Soundside Road  
 Edenton, NC 27932

Job 29260-29260A	Truss V3	Truss Type Valley	Qty 1	Ply 1	16 PRINCE PLACE - ROOF Job Reference (optional)	148998770
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:43:26 2021 Page 1  
ID:minGCUqRdNuhOuAvJVJ87Dz\_qbA-RZ5TcWQIJhbRn7RFkiv?axXGSMaegM6Ng5vF2jyEHC?



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.30	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.12	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.08	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 5 n/a n/a	Weight: 54 lb	FT = 20%
	Code IRC2015/TPI2014				

**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 12-9-4.  
(lb) - Max Horz 1=106(LC 6)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=127(LC 10), 6=127(LC 11)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=315(LC 17), 6=315(LC 18)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=127, 6=127.



November 30, 2021

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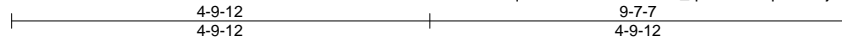


Job 29260-29260A	Truss V4	Truss Type Valley	Qty 1	Ply 1	16 PRINCE PLACE - ROOF	148998771
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84 Components (Dunn), Dunn, NC - 28334,

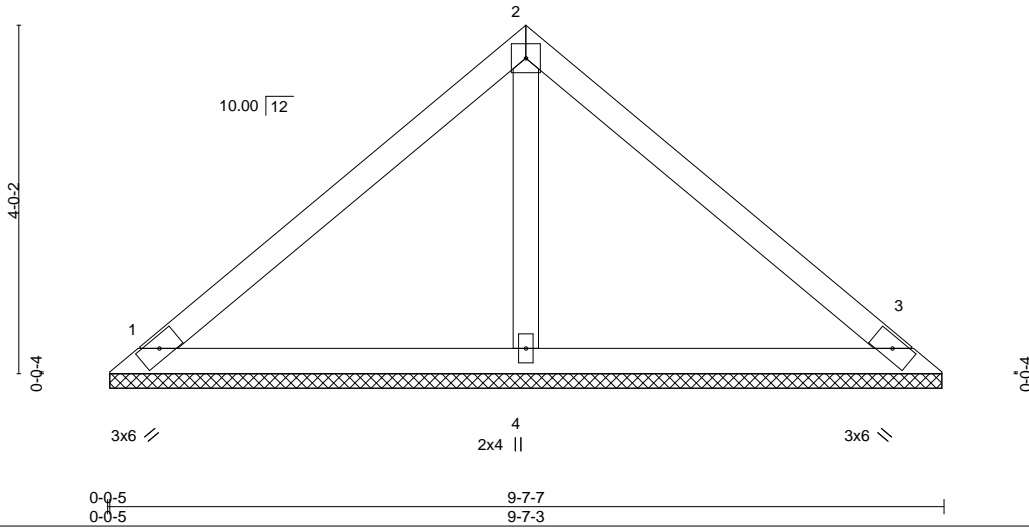
8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:43:27 2021 Page 1

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4x4 =

Scale = 1:26.5



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.47	Vert(LL) n/a	-	n/a	999		MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.33	Vert(CT) n/a	-	n/a	999			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT) 0.00	3	n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S						Weight: 36 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.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=9-6-14, 3=9-6-14, 4=9-6-14  
 Max Horz 1=-77(LC 6)  
 Max Uplift 1=-18(LC 11), 3=-28(LC 11)  
 Max Grav 1=185(LC 1), 3=185(LC 1), 4=336(LC 1)

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

**NOTES-**

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



November 30, 2021

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

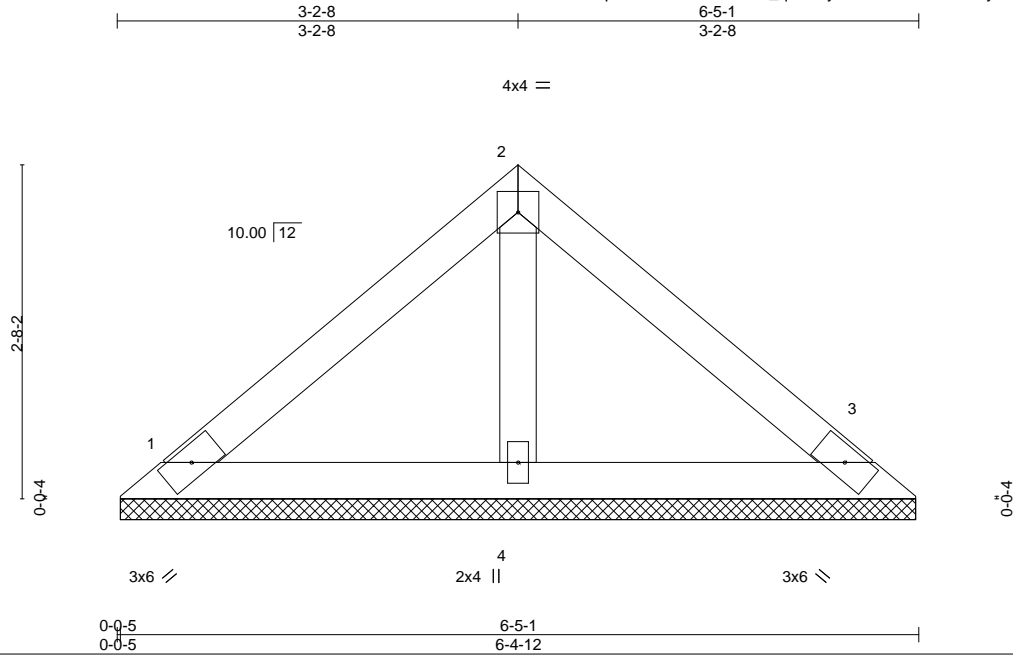


818 Soundside Road  
 Edenton, NC 27932

Job 29260-29260A	Truss V5	Truss Type Valley	Qty 1	Ply 1	16 PRINCE PLACE - ROOF Job Reference (optional)	148998772
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:43:28 2021 Page 1  
ID:minGCUqRdNuhOuAvJVJ87Dz\_qbA-OyCE1CRYrlr80Rads8yTfMccI9Fu8HSf7POM5cyEHBz



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.25	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.14	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a	Weight: 23 lb	FT = 20%
	Code IRC2015/TPI2014				

**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.

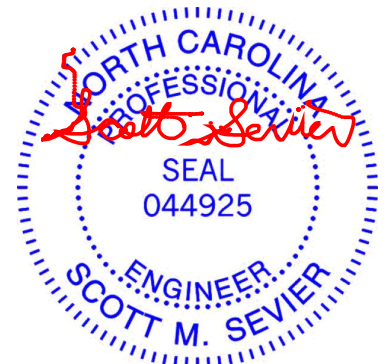
**REACTIONS.**

(size) 1=6-4-7, 3=6-4-7, 4=6-4-7  
Max Horz 1=-49(LC 6)  
Max Uplift 1=-18(LC 11), 3=-24(LC 11)  
Max Grav 1=128(LC 1), 3=128(LC 1), 4=194(LC 1)

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

**NOTES-**

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



November 30, 2021

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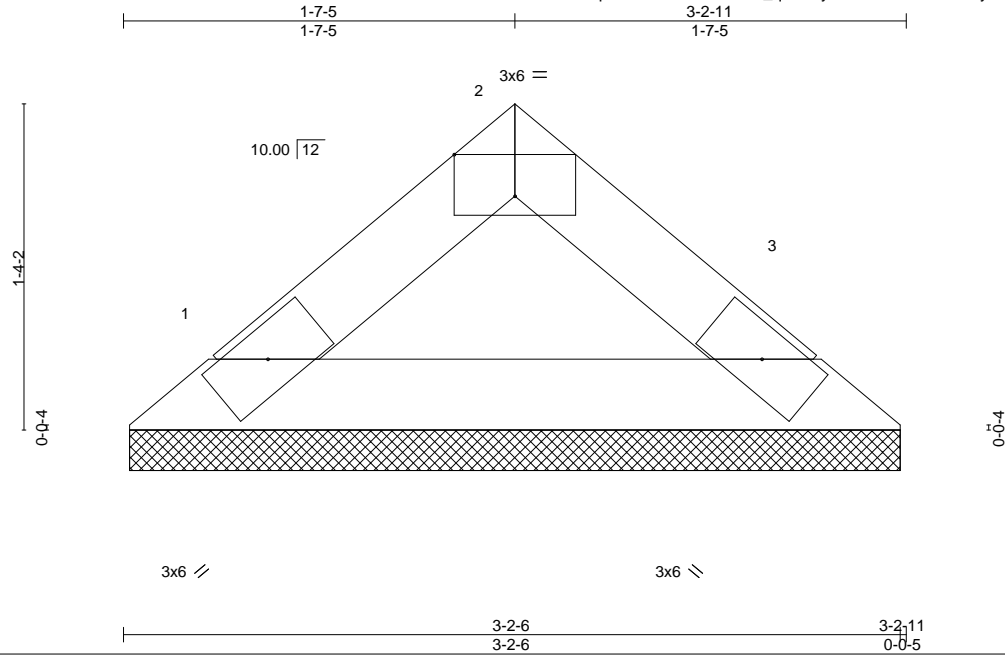


818 Soundside Road  
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Job 29260-29260A	Truss V6	Truss Type Valley	Qty 1	Ply 1	16 PRINCE PLACE - ROOF Job Reference (optional)	148998773
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:43:28 2021 Page 1  
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Scale = 1:9.5

Plate Offsets (X,Y)--	[2:0-3:0,Edge]	3-2-6	3-2-11
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d
TCLL 20.0	Plate Grip DOL 1.15	TC 0.04	Vert(LL) n/a - n/a 999
TCDL 10.0	Lumber DOL 1.15	BC 0.11	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	
			<b>PLATES</b> <b>GRIP</b>
			MT20 244/190
			Weight: 10 lb FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-2-11 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=3-2-1, 3=3-2-1  
Max Horz 1=21(LC 7)  
Max Uplift 1=4(LC 10), 3=-4(LC 11)  
Max Grav 1=97(LC 1), 3=97(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



November 30, 2021

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**



818 Soundside Road  
Edenton, NC 27932

Job 29260-29260A	Truss V7	Truss Type Valley	Qty 1	Ply 1	16 PRINCE PLACE - ROOF	148998774
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84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:43:29 2021 Page 1

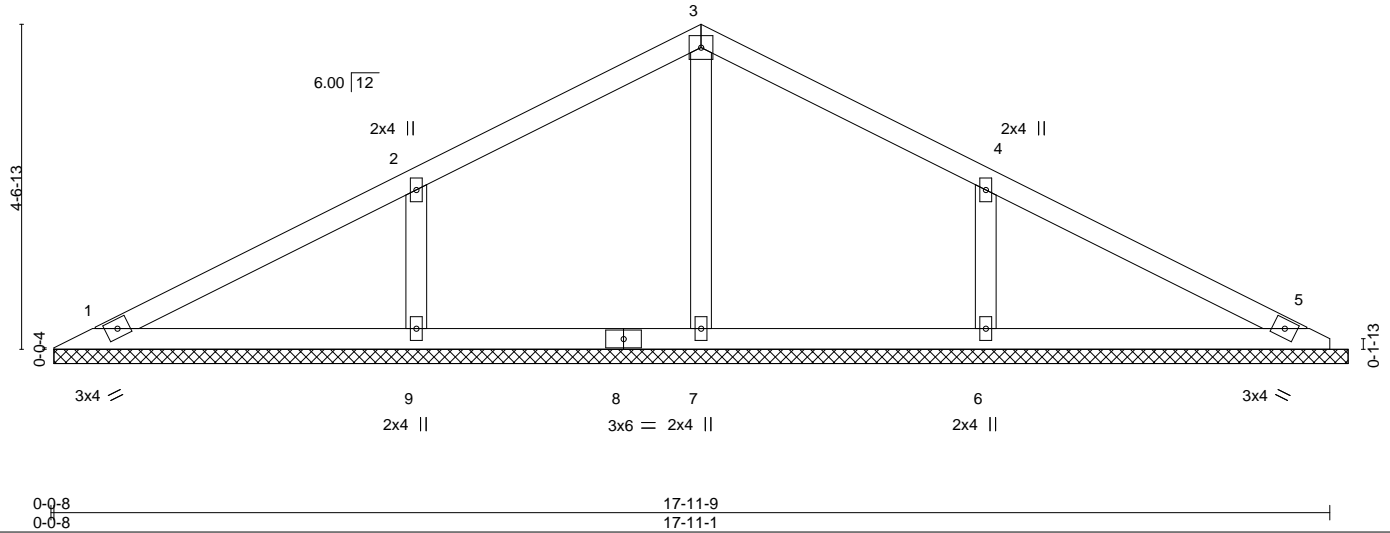
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Job Reference (optional)



4x4 =

Scale = 1:32.4



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.44	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.27	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-S						Weight: 67 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.

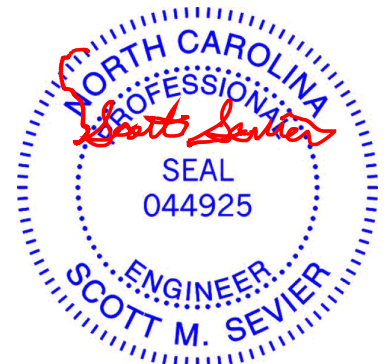
**REACTIONS.**

All bearings 18-2-3.  
 (lb) - Max Horz 1=61(LC 14)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 9, 6  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 9=412(LC 21), 6=412(LC 22)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-9=-305/163, 4-6=-305/163

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCCL=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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 9, 6.



November 30, 2021

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



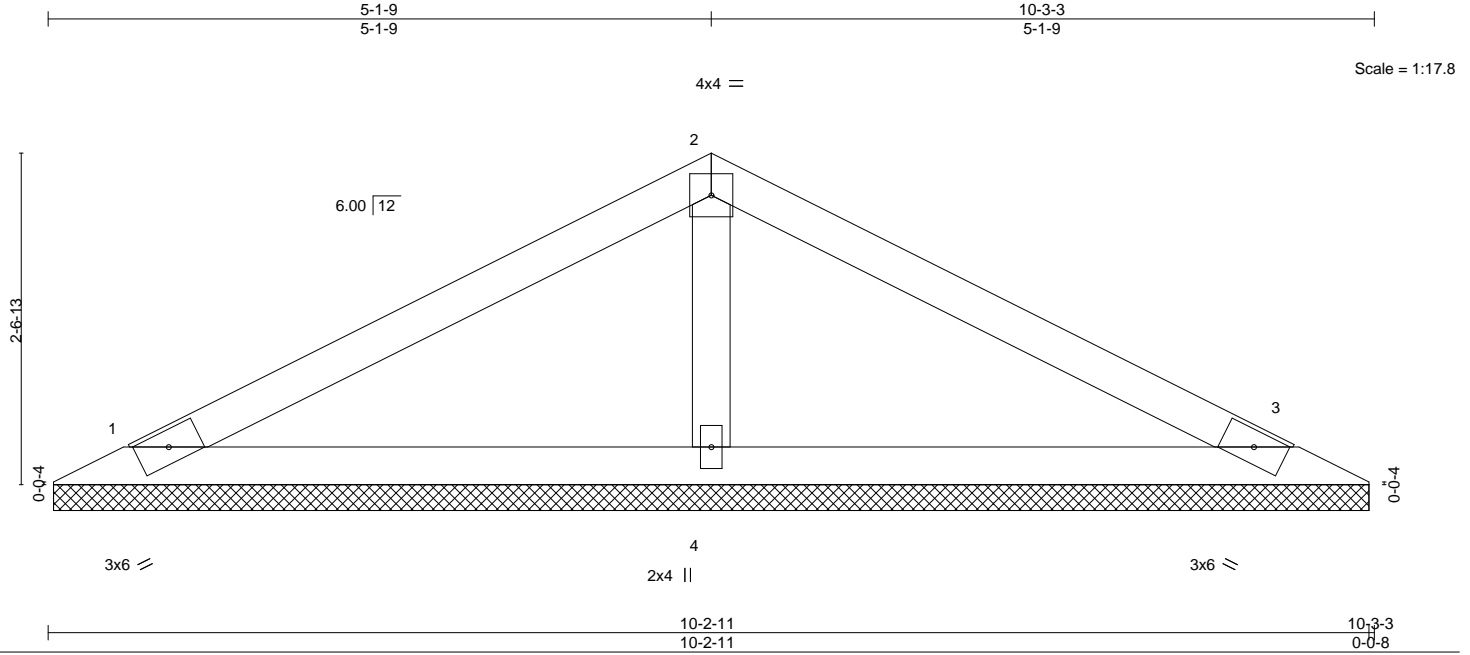
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	16 PRINCE PLACE - ROOF	148998775
29260-29260A	V8	Valley	1	1	Job Reference (optional)	

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Nov 29 15:43:30 2021 Page 1

ID:minGCUqRdNuhOuAvJVJ87Dz\_qbA-KLK\_StToNv5sGkk0zZ\_xknhuZzuAcBUybjtTAVyEHBx



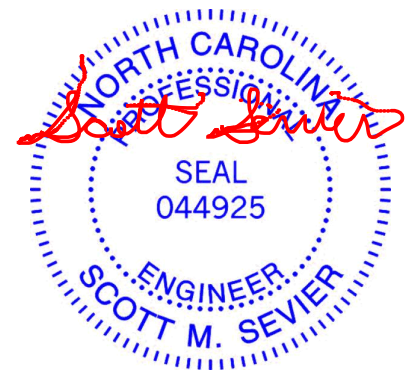
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.48	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.34	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT) 0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 33 lb	FT = 20%

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

**REACTIONS.** (size) 1=10-2-3, 3=10-2-3, 4=10-2-3  
 Max Horz 1=32(LC 10)  
 Max Uplift 1=-21(LC 10), 3=-27(LC 11)  
 Max Grav 1=165(LC 21), 3=165(LC 22), 4=394(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-4=-262/113

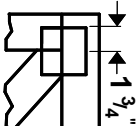
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left 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.



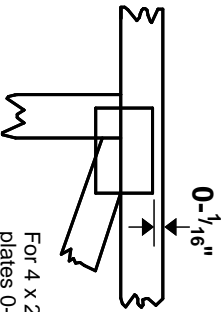
November 30, 2021

# 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

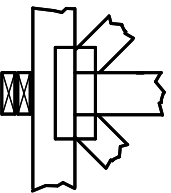
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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



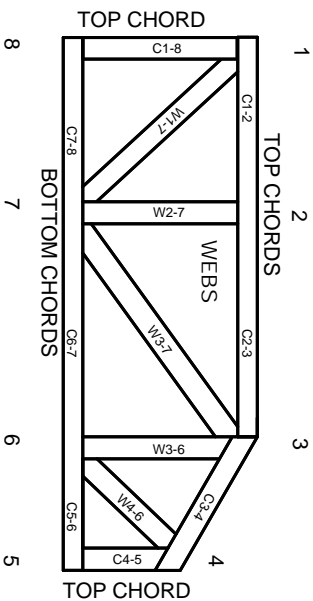
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

### Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing, Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

6-4-8  
dimensions shown in ft-in-sixteenths  
(Drawings not to scale)



**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/TP1 section 6.3 These truss designs rely on lumber values established by others.

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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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.