

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: 29967-29967A  
25 PRINCE PLACE - FLOOR

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: I49910270 thru I49910286

My license renewal date for the state of North Carolina is December 31, 2022.

North Carolina COA: C-0844



January 27, 2022

Sevier, Scott

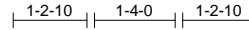
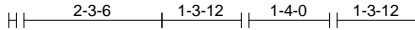
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), 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 29967-29967A	Truss F1	Truss Type Floor	Qty 2	Ply 1	25 PRINCE PLACE - FLOOR Job Reference (optional)	149910270
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84 Components (Dunn), Dunn, NC - 28334,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Jan 26 13:55:27 2022 Page 1  
ID:IE3W8KxmJ181yqAG6ibMy\_yZU56-AZYr?iyEmt4IFGQKBKF5UTBNFPo?I9nIXKHJsfrT7E

0-1-8



Scale = 1:38.1

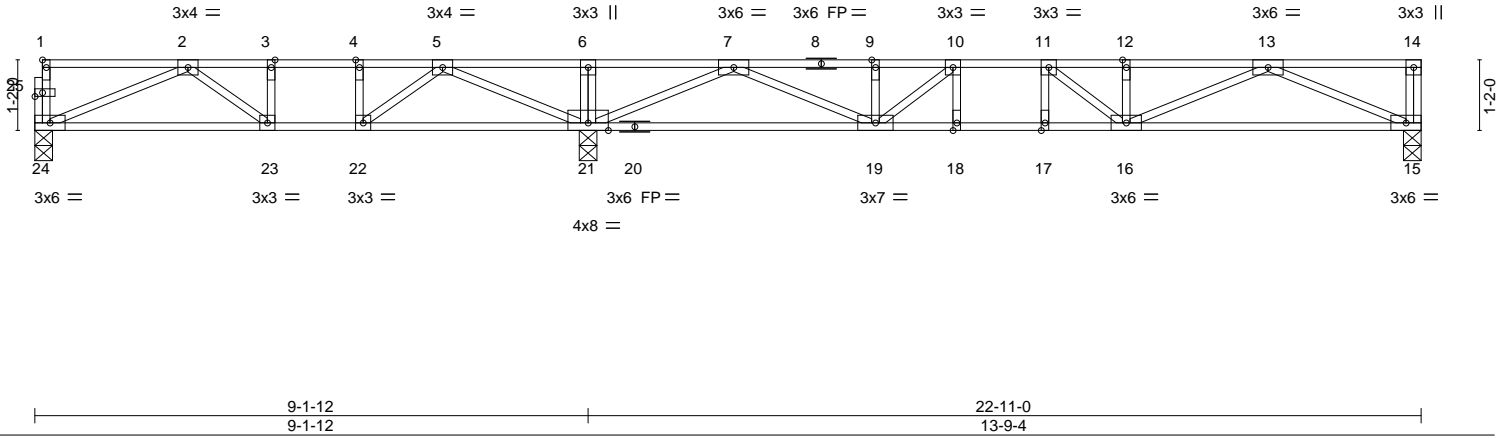


Plate Offsets (X,Y)-- [1:Edge,0-0-12], [25:0-1-8,0-0-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.65	Vert(LL) -0.12	17	>999	480	MT20	197/144
TCDL 10.0	Lumber DOL 1.00	BC 0.76	Vert(CT) -0.16	17	>999	360		
BCLL 0.0	Rep Stress Incr YES	WB 0.53	Horz(CT) 0.03	15	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 115 lb	FT = 20%F, 11%E

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2(flat)  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2(flat)  
 WEBS 2x4 SP No.3(flat)

**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.**

(size) 24=0-3-8, 21=0-3-8, 15=0-3-8  
 Max Grav 24=428(LC 3), 21=1485(LC 1), 15=671(LC 4)

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

TOP CHORD 2-3=-791/220, 3-4=-791/220, 4-5=-791/220, 5-6=0/1203, 6-7=0/1203, 7-9=-1581/0, 9-10=-1581/0, 10-11=-1914/0, 11-12=-1914/0, 12-13=-1914/0  
 BOT CHORD 23-24=-51/727, 22-23=-220/791, 21-22=-532/475, 19-21=-63/608, 18-19=0/1914, 17-18=0/1914, 16-17=0/1914, 15-16=0/1282  
 WEBS 6-21=-273/0, 2-24=-786/57, 5-21=-1214/0, 5-22=0/659, 4-22=-310/0, 7-21=-1742/0, 13-15=-1397/0, 7-19=0/1116, 13-16=0/692, 10-19=-601/0

**NOTES-**

- Unbalanced floor live loads have been considered for this design.
- As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.



January 27, 2022

**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

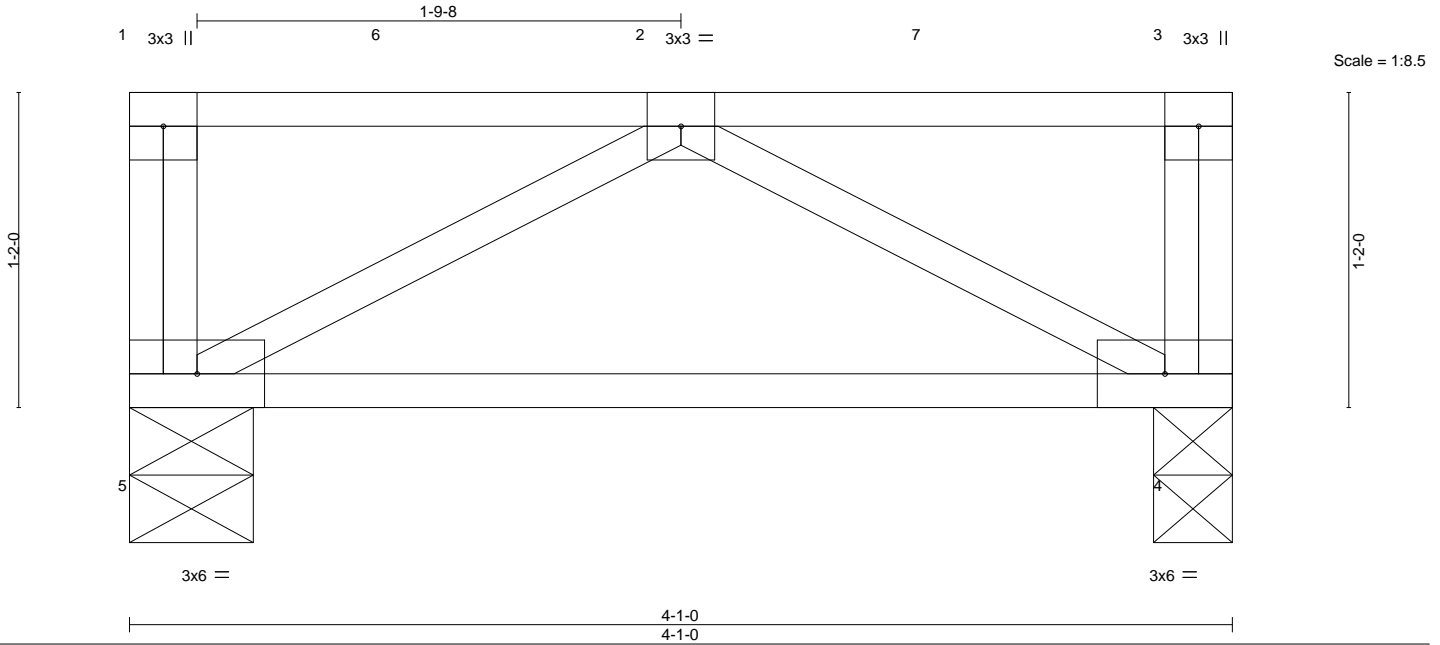


818 Soundside Road  
 Edenton, NC 27932

Job 29967-29967A	Truss F1G	Truss Type Floor Girder	Qty 1	Ply 1	25 PRINCE PLACE - FLOOR Job Reference (optional)	I49910271
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84 Components (Dunn), Dunn, NC - 28334,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Jan 26 13:55:29 2022 Page 1  
ID:IE3W8KxmJ181yqAG6ibMy\_yZU56-6xgbQO\_UHUKTVaZiIHZZuGm5DcQDA\_b?emQxYzrT7C



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.50	Vert(LL) 0.00	5	****	480		MT20	197/144
TCDL 10.0	Lumber DOL 1.00	BC 0.25	Vert(CT) -0.04	4-5	>999	360			
BCLL 0.0	Rep Stress Incr NO	WB 0.10	Horz(CT) 0.00	4	n/a	n/a			
BCDL 5.0	Code IRC2015/TPI2014	Matrix-P						Weight: 24 lb	FT = 20%F, 11%E

#### LUMBER-

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2(flat)  
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2(flat)  
WEBS 2x4 SP No.3(flat)

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-1-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 5=0-5-8, 4=0-3-8  
Max Grav 5=330(LC 1), 4=334(LC 1)

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

BOT CHORD 4-5=0/365  
WEBS 2-5=-415/0, 2-4=-415/0

#### NOTES-

- As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 120 lb down at 1-0-12, and 122 lb down at 3-0-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 4-5=-10, 1-3=-100  
Concentrated Loads (lb)  
Vert: 6=-120(B) 7=-122(B)



January 27, 2022

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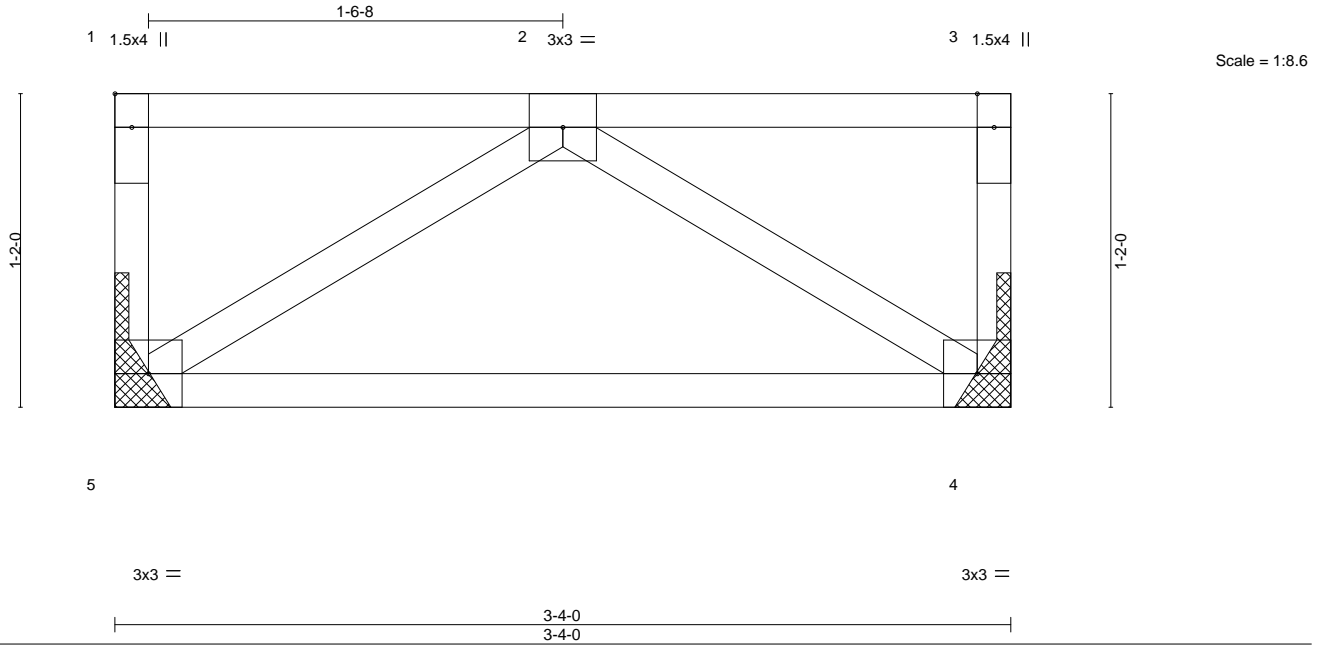


818 Soundside Road  
Edenton, NC 27932

Job 29967-29967A	Truss F2	Truss Type Floor	Qty 3	Ply 1	25 PRINCE PLACE - FLOOR Job Reference (optional)	149910272
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84 Components (Dunn), Dunn, NC - 28334,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Jan 26 13:55:30 2022 Page 1  
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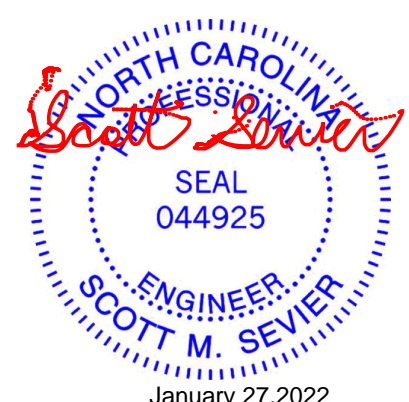
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.15	Vert(LL)	0.00	5	****	480	MT20	197/144	
TCDL	10.0	Lumber DOL	1.00	BC	0.13	Vert(CT)	-0.02	4-5	>999	360	Weight: 18 lb FT = 20%F, 11%E		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	4	n/a	n/a			
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-P									

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2(flat)	TOP CHORD	Structural wood sheathing directly applied or 3-4-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2(flat)	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3(flat)		

**REACTIONS.** (size) 5=Mechanical, 4=Mechanical  
Max Grav 5=176(LC 1), 4=176(LC 1)

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

- NOTES-**
- As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
  - Refer to girder(s) for truss to truss connections.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

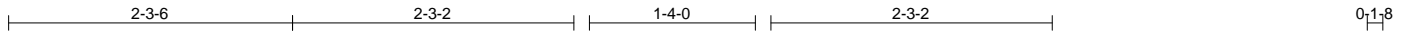


January 27, 2022

Job	Truss	Truss Type	Qty	Ply	25 PRINCE PLACE - FLOOR	149910273
29967-29967A	F2G	Floor Girder	1	1	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Jan 26 13:55:30 2022 Page 1  
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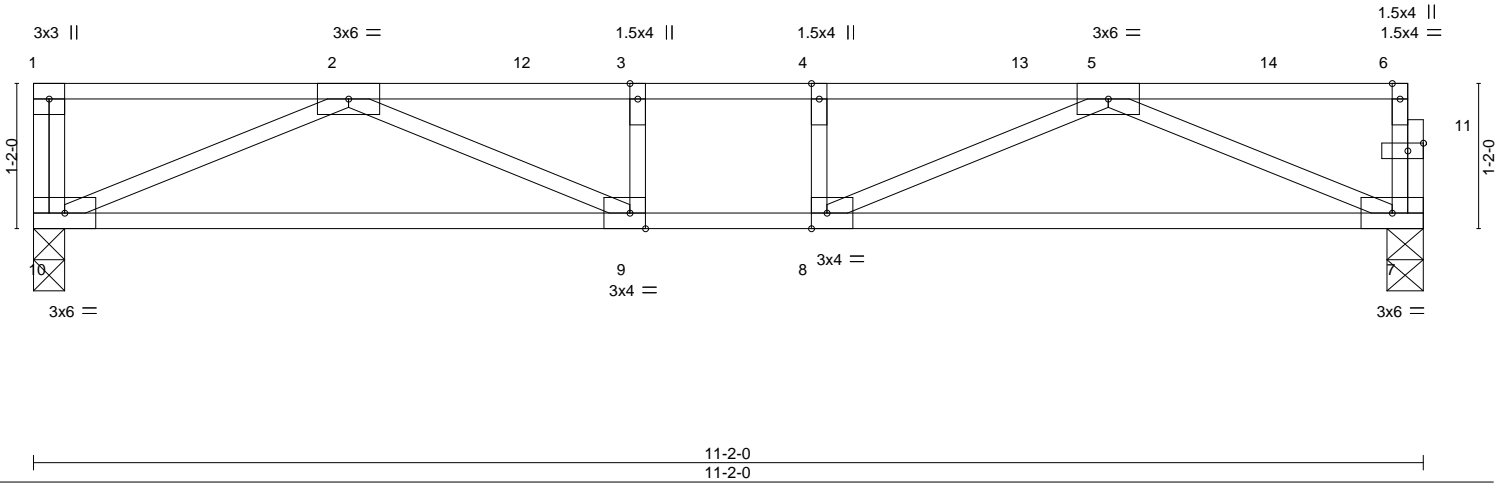


Plate Offsets (X,Y)-- [8:0-1-8,Edge], [9:0-1-8,Edge], [11:0-1-8,0-0-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.81	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.00	BC 0.81	Vert(LL) -0.09 7-8 >999 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.45	Vert(CT) -0.18 9-10 >747 360		
BCDL 5.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.03 7 n/a n/a		
	Code IRC2015/TPI2014			Weight: 56 lb	FT = 20%F, 11%E

**LUMBER-**

TOP CHORD 2x4 SP No.1(flat)  
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2(flat)  
WEBS 2x4 SP No.3(flat)

**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=0-3-0, 7=0-3-8  
Max Grav 10=786(LC 1), 7=833(LC 1)

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

TOP CHORD 2-3=-2278/0, 3-4=-2278/0, 4-5=-2278/0  
BOT CHORD 9-10=0/1565, 8-9=0/2278, 7-8=0/1588  
WEBS 2-10=-1706/0, 5-7=-1722/0, 2-9=0/890, 5-8=0/793, 3-9=-325/0, 4-8=-261/0

**NOTES-**

- Unbalanced floor live loads have been considered for this design.
- As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 266 lb down at 4-0-4, 105 lb down at 6-0-4, and 156 lb down at 8-0-4, and 157 lb down at 10-0-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 7-10=-10, 1-6=-100  
Concentrated Loads (lb)  
Vert: 4=-76(F) 12=-193(F) 13=-76(F) 14=-79(F)



January 27, 2022

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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 29967-29967A	Truss F3	Truss Type Floor	Qty 2	Ply 1	25 PRINCE PLACE - FLOOR Job Reference (optional)	149910274
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84 Components (Dunn), Dunn, NC - 28334,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Jan 26 13:55:32 2022 Page 1  
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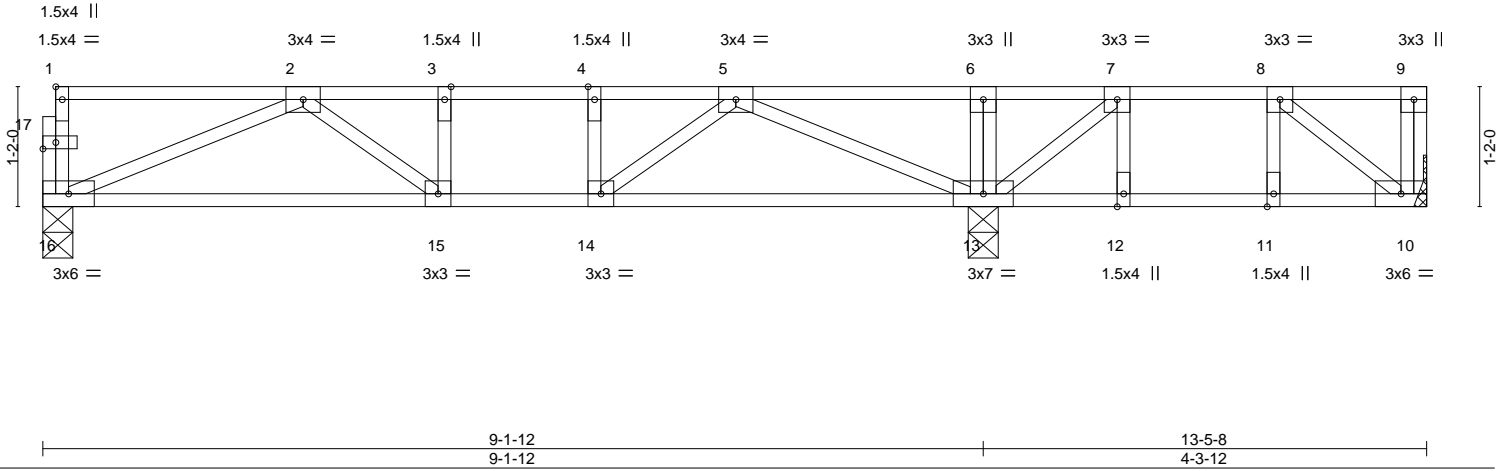
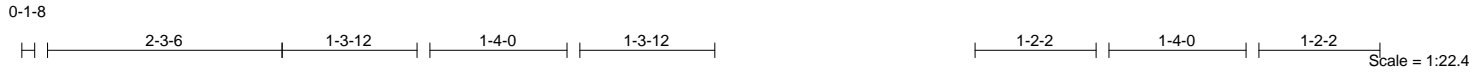


Plate Offsets (X,Y)-- [1:Edge,0-0-12], [17:0-1-8,0-0-12]

<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 40.0	Plate Grip DOL	1.00	TC 0.30	Vert(LL)	-0.04 15-16	>999	480	MT20	197/144
TCDL 10.0	Lumber DOL	1.00	BC 0.34	Vert(CT)	-0.07 15-16	>999	360		
BCLL 0.0	Rep Stress Incr	YES	WB 0.25	Horz(CT)	0.01 10	n/a	n/a		
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 70 lb	FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2(flat)	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(flat)	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 16=0-3-8, 10=Mechanical, 13=0-3-8  
Max Grav 16=473(LC 10), 10=217(LC 4), 13=796(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-986/0, 3-4=-986/0, 4-5=-986/0  
BOT CHORD 15-16=0/833, 14-15=0/986, 13-14=0/758  
WEBS 2-16=-901/0, 5-13=-950/0, 2-15=0/281, 5-14=0/375, 7-13=-347/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
  - 3) Refer to girder(s) for truss to truss connections.
  - 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 5) CAUTION, Do not erect truss backwards.



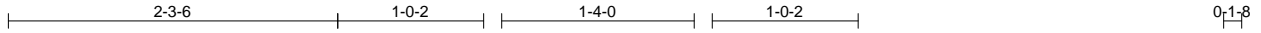
January 27, 2022

Job	Truss	Truss Type	Qty	Ply	25 PRINCE PLACE - FLOOR	149910275
29967-29967A	F3G	Floor Girder	1	1	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Jan 26 13:55:33 2022 Page 1

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Scale: 3/4"=1'

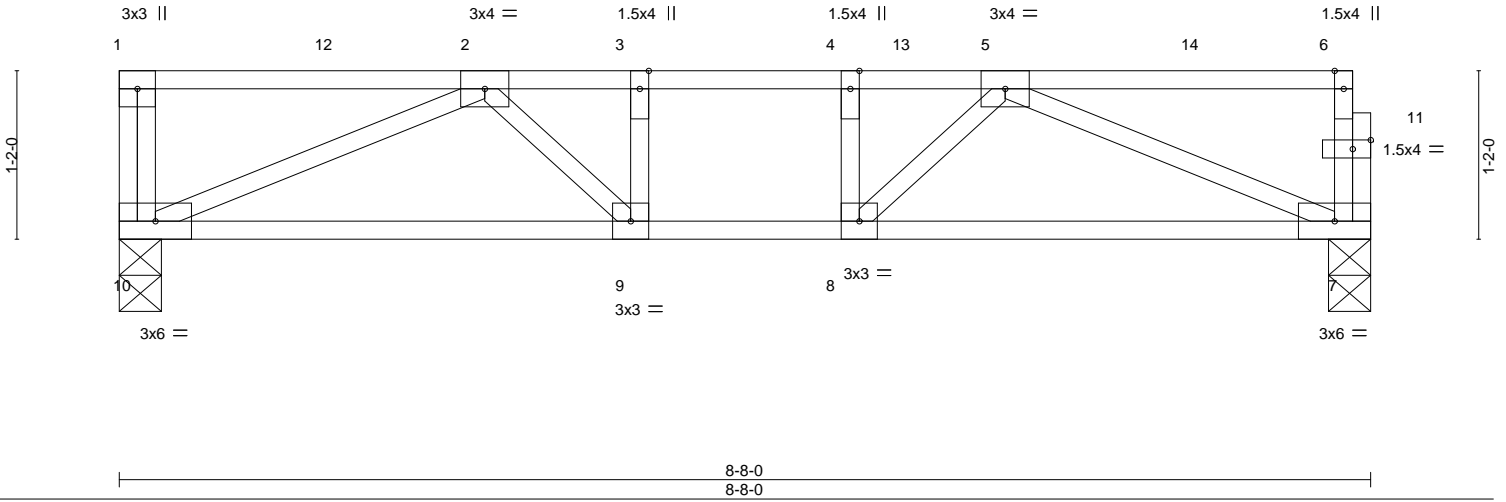


Plate Offsets (X,Y)-- [1:1-0-1-8,0-0-12]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	2-0-0	TC 0.90	Vert(LL) -0.04	8	>999	480		MT20	197/144
TCDL 10.0	Lumber DOL 1.00		BC 0.46	Vert(CT) -0.06	9-10	>999	360			
BCLL 0.0	Rep Stress Incr NO		WB 0.35	Horz(CT) 0.02	7	n/a	n/a			
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						Weight: 45 lb	FT = 20%F, 11%E

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2(flat)  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2(flat)  
 WEBS 2x4 SP No.3(flat)

**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, 7=0-3-8  
 Max Grav 10=706(LC 1), 7=638(LC 1)

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

TOP CHORD 2-3=-1317/0, 3-4=-1317/0, 4-5=-1317/0  
 BOT CHORD 9-10=0/1231, 8-9=0/1317, 7-8=0/1135  
 WEBS 2-10=-1342/0, 5-7=-1228/0, 5-8=0/326

**NOTES-**

- Unbalanced floor live loads have been considered for this design.
- As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 273 lb down at 1-6-4, 120 lb down at 3-6-4, and 135 lb down at 5-6-4, and 157 lb down at 7-6-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
 Uniform Loads (plf)  
 Vert: 7-10=-10, 1-6=-100  
 Concentrated Loads (lb)  
 Vert: 3=-76(B) 12=-193(B) 13=-76(B) 14=-79(B)



January 27, 2022

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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 29967-29967A	Truss F4	Truss Type Floor	Qty 2	Ply 1	25 PRINCE PLACE - FLOOR Job Reference (optional)	149910276
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84 Components (Dunn), Dunn, NC - 28334,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Jan 26 13:55:34 2022 Page 1  
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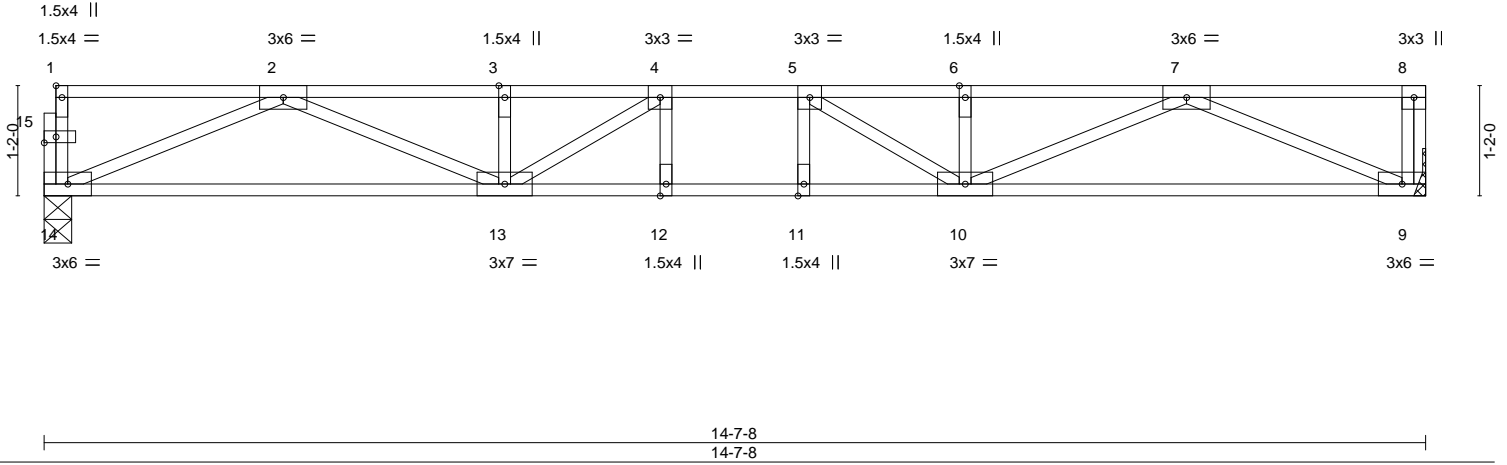
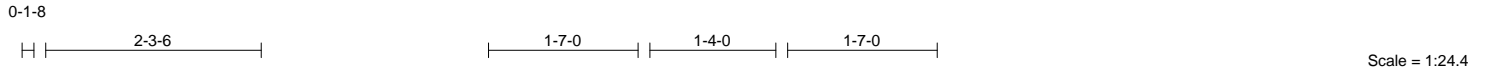


Plate Offsets (X,Y)-- [1:Edge,0-0-12], [15:0-1-8,0-0-12]

<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 40.0	Plate Grip DOL	1.00	TC 0.39	Vert(LL)	-0.16 11-12	>999	480	MT20	197/144
TCDL 10.0	Lumber DOL	1.00	BC 0.81	Vert(CT)	-0.22 11-12	>768	360		
BCLL 0.0	Rep Stress Incr	YES	WB 0.47	Horz(CT)	0.05 9	n/a	n/a		
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 74 lb	FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2(flat)	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(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 14=0-3-8, 9=Mechanical  
Max Grav 14=784(LC 1), 9=791(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2451/0, 3-4=-2451/0, 4-5=-2702/0, 5-6=-2450/0, 6-7=-2450/0  
BOT CHORD 13-14=0/1552, 12-13=0/2702, 11-12=0/2702, 10-11=0/2702, 9-10=0/1555  
WEBS 2-14=-1685/0, 7-9=-1694/0, 2-13=0/983, 7-10=0/980, 4-13=-522/44, 5-10=-523/43

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
  - 3) Refer to girder(s) for truss to truss connections.
  - 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 5) CAUTION, Do not erect truss backwards.



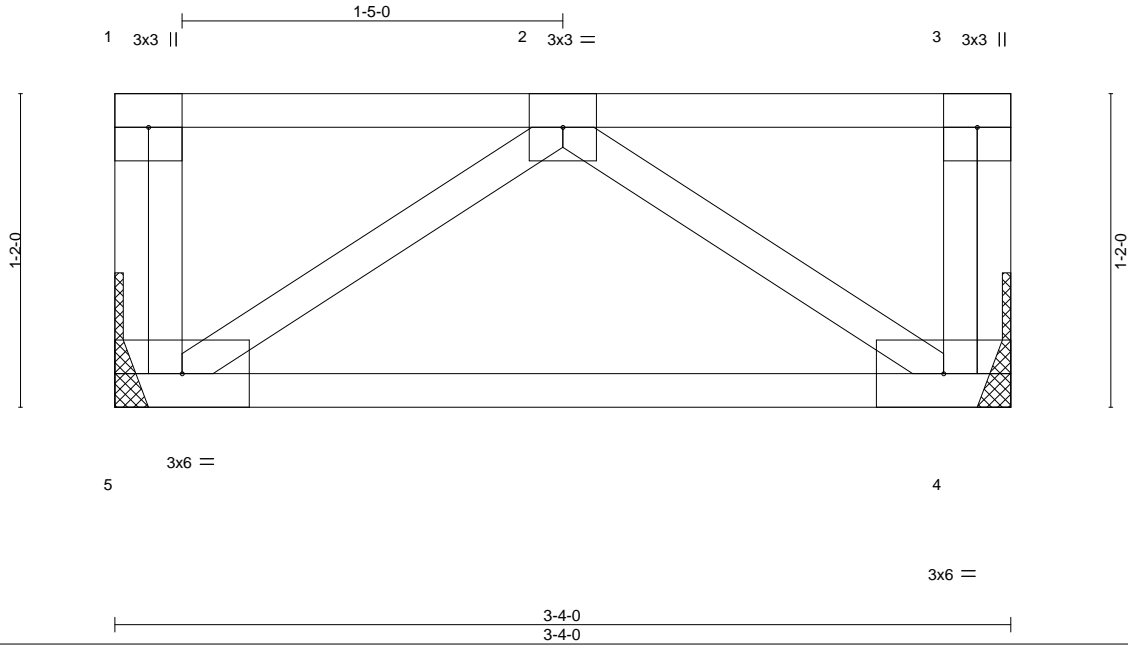
January 27, 2022



Job 29967-29967A	Truss F4G	Truss Type Floor Girder	Qty 1	Ply 1	25 PRINCE PLACE - FLOOR Job Reference (optional)	149910277
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84 Components (Dunn), Dunn, NC - 28334,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Jan 26 13:55:36 2022 Page 1  
ID:IE3W8KxmJ181yqAG6ibMy\_yZU56-PlbEun3teeCTrec3CjvCLM30S10PMLAdcEzIhezrT75



Scale = 1:8.6

<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 40.0	Plate Grip DOL	1.00	TC 0.30	Vert(LL)	0.00	5	****	480	MT20	197/144
TCDL 10.0	Lumber DOL	1.00	BC 0.16	Vert(CT)	-0.01	4-5	>999	360		
BCLL 0.0	Rep Stress Incr	NO	WB 0.07	Horz(CT)	0.00	4	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-P						Weight: 20 lb	FT = 20%F, 11%E

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2(flat)  
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2(flat)  
WEBS 2x4 SP No.3(flat)

**BRACING-**

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

**REACTIONS.**

(size) 5=Mechanical, 4=Mechanical  
Max Grav 5=293(LC 1), 4=293(LC 1)

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

BOT CHORD 4-5=0/254  
WEBS 2-5=-307/0, 2-4=-307/0

**NOTES-**

- As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- Refer to girder(s) for truss to truss connections.
- Load case(s) 1, 2 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 4-5=-10, 1-3=-180(F=-80)
- Dead: Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 4-5=-10, 1-3=-180(F=-80)



January 27, 2022

**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

**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 29967-29967A	Truss F5	Truss Type Floor	Qty 3	Ply 1	25 PRINCE PLACE - FLOOR Job Reference (optional)	149910278
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84 Components (Dunn), Dunn, NC - 28334,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Jan 26 13:55:37 2022 Page 1  
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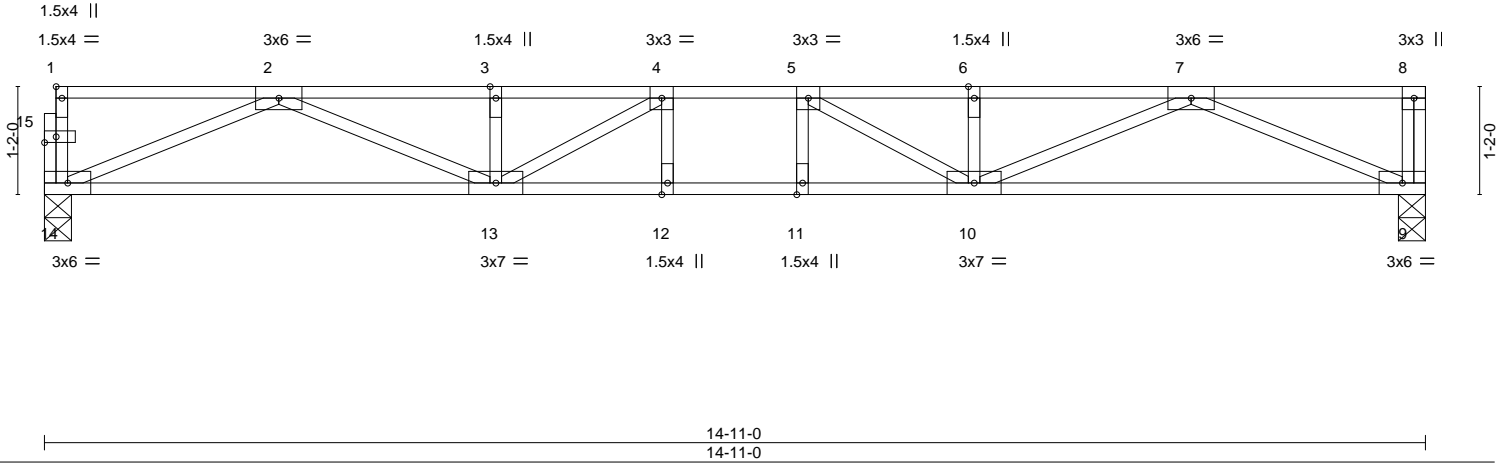
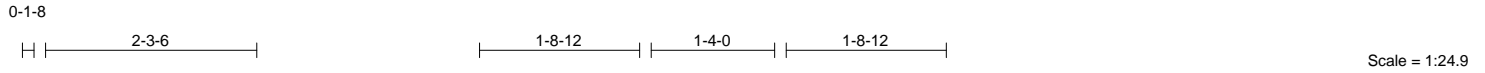


Plate Offsets (X,Y)-- [1:Edge,0-0-12], [15:0-1-8,0-0-12]

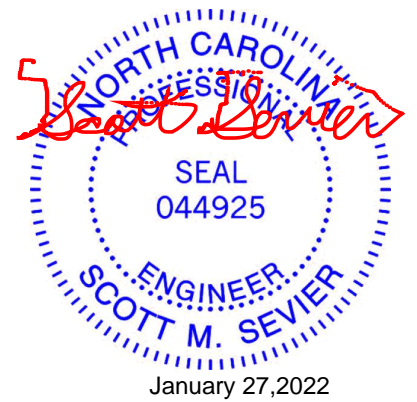
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.39	Vert(LL) -0.17	11-12	>999	480	MT20	197/144
TCDL 10.0	Lumber DOL 1.00	BC 0.85	Vert(CT) -0.24	11-12	>728	360		
BCLL 0.0	Rep Stress Incr YES	WB 0.49	Horz(CT) 0.05	9	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 75 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2(flat)	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(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 14=0-3-8, 9=0-3-8  
Max Grav 14=800(LC 1), 9=807(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2526/0, 3-4=-2526/0, 4-5=-2815/0, 5-6=-2525/0, 6-7=-2525/0  
BOT CHORD 13-14=0/1588, 12-13=0/2815, 11-12=0/2815, 10-11=0/2815, 9-10=0/1591  
WEBS 2-14=-1725/0, 7-9=-1733/0, 2-13=0/1026, 7-10=0/1022, 4-13=-562/28, 5-10=-562/27

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
  - 3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 4) CAUTION, Do not erect truss backwards.



Job 29967-29967A	Truss F5G	Truss Type FLOOR GIRDER	Qty 1	Ply 1	25 PRINCE PLACE - FLOOR Job Reference (optional)	149910279
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84 Components (Dunn),

Dunn, NC - 28334,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Jan 26 13:55:38 2022 Page 1

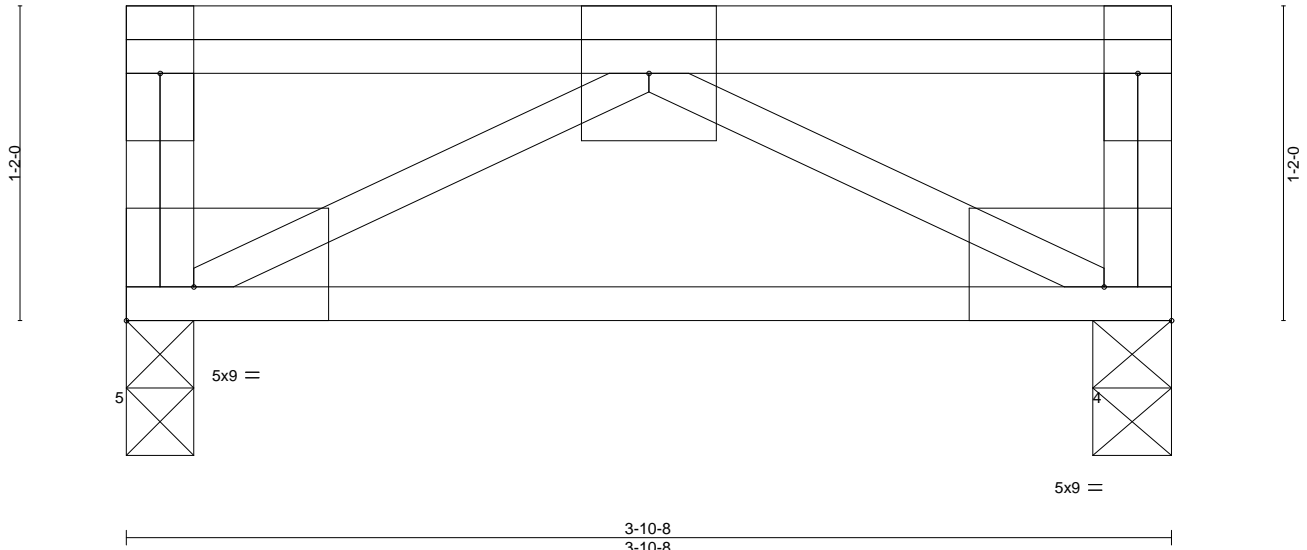
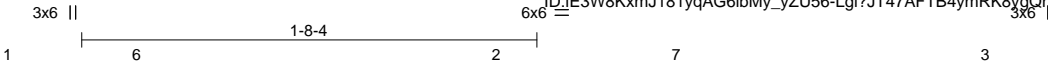


Plate Offsets (X,Y)--	[4:Edge,0-1-8], [5:Edge,0-1-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.44	Vert(LL) 0.00	5	****	480	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.00	BC 0.63	Vert(CT) -0.03	4-5	>999	360		
BCLL 0.0	Lumber DOL 1.00	WB 0.49	Horz(CT) 0.01	4	n/a	n/a		
BCDL 5.0	Rep Stress Incr NO	Matrix-P					Weight: 28 lb	FT = 20%F, 11%E
	Code IRC2015/TPI2014							

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

**REACTIONS.** (size) 5=0-3-0, 4=0-3-8  
Max Grav 5=1994(LC 1), 4=1412(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-5=-1023/0, 3-4=-441/0  
BOT CHORD 4-5=0/1764  
WEBS 2-5=-2005/0, 2-4=-2005/0

- NOTES-**
- As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 813 lb down at 0-7-4, 717 lb down at 0-7-4, and 787 lb down at 2-7-4, and 691 lb down at 2-7-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 4-5=-10, 1-3=-100  
Concentrated Loads (lb)  
Vert: 6=-1530(F=-717, B=-813) 7=-1477(F=-691, B=-787)



January 27, 2022

Job	Truss	Truss Type	Qty	Ply	25 PRINCE PLACE - FLOOR	149910280
29967-29967A	F6	Floor	10	1	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Jan 26 13:55:41 2022 Page 1  
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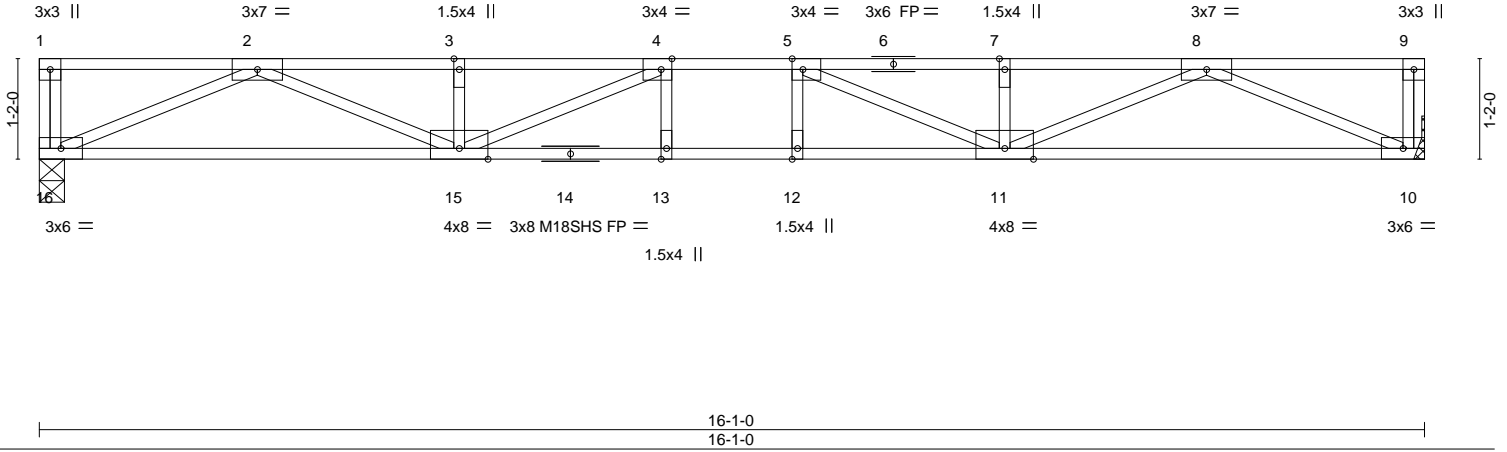


Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.58	Vert(LL)	-0.22 12-13	>852	480	MT20	197/144
TCDL 10.0	Lumber DOL	1.00	BC 0.92	Vert(CT)	-0.31 12-13	>617	360	M18SHS	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.57	Horz(CT)	0.06 10	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 81 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2(flat)	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(flat) *Except* 10-14: 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 13-15.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 16=0-3-8, 10=Mechanical  
Max Grav 16=871(LC 1), 10=871(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2828/0, 3-4=-2828/0, 4-5=-3293/0, 5-7=-2827/0, 7-8=-2827/0  
BOT CHORD 15-16=0/1735, 13-15=0/3293, 12-13=0/3293, 11-12=0/3293, 10-11=0/1736  
WEBS 2-16=-1891/0, 8-10=-1891/0, 2-15=0/1196, 3-15=-269/0, 8-11=0/1194, 7-11=-268/0,  
4-15=-743/0, 5-11=-745/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
  - 3) All plates are MT20 plates unless otherwise indicated.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



January 27, 2022

Job 29967-29967A	Truss F8	Truss Type Floor	Qty 2	Ply 1	25 PRINCE PLACE - FLOOR Job Reference (optional)	149910281
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84 Components (Dunn), Dunn, NC - 28334,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Jan 26 13:55:42 2022 Page 1  
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2-3-6

1-8-4

0-1-8

Scale = 1:27.4

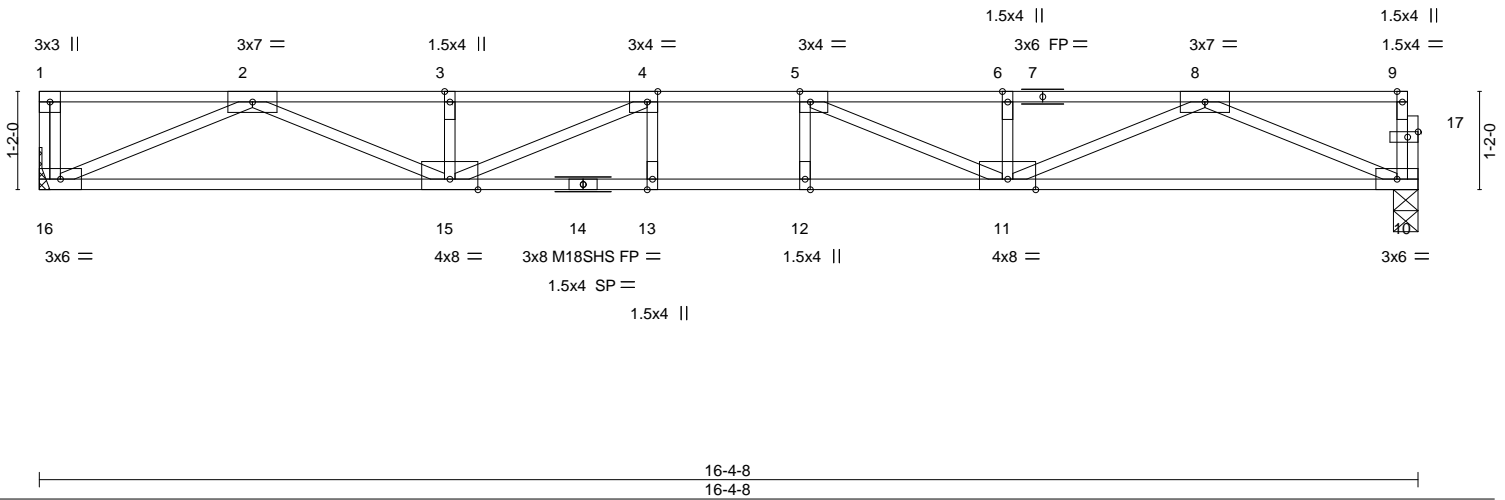


Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge], [17:0-1-8,0-0-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.61	Vert(LL) -0.24	12-13	>810	480	MT20	197/144
TCDL 10.0	Lumber DOL 1.00	BC 0.95	Vert(CT) -0.33	12-13	>586	360	M18SHS	197/144
BCLL 0.0	Rep Stress Incr YES	WB 0.59	Horz(CT) 0.06	10	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 81 lb	FT = 20%F, 11%E

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2(flat)  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2(flat) \*Except\*  
 10-14: 2x4 SP No.1(flat)  
 WEBS 2x4 SP No.3(flat)

**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, Except: 2-2-0 oc bracing: 13-15.

**REACTIONS.**

(size) 16=Mechanical, 10=0-3-8  
 Max Grav 16=887(LC 1), 10=881(LC 1)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2900/0, 3-4=-2900/0, 4-5=-3407/0, 5-6=-2899/0, 6-8=-2899/0  
 BOT CHORD 15-16=0/1772, 13-15=0/3407, 12-13=0/3407, 11-12=0/3407, 10-11=0/1770  
 WEBS 2-16=-1931/0, 8-10=-1923/0, 2-15=0/1234, 3-15=-272/0, 8-11=0/1235, 6-11=-273/0, 4-15=-804/0, 5-11=-807/0

**NOTES-**

- Unbalanced floor live loads have been considered for this design.
- As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- All plates are MT20 plates unless otherwise indicated.
- The Fabrication Tolerance at joint 14 = 11%
- Refer to girder(s) for truss to truss connections.
- Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.



January 27, 2022

**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 29967-29967A	Truss F10	Truss Type Floor	Qty 2	Ply 1	25 PRINCE PLACE - FLOOR Job Reference (optional)	149910282
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84 Components (Dunn), Dunn, NC - 28334,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Jan 26 13:55:27 2022 Page 1  
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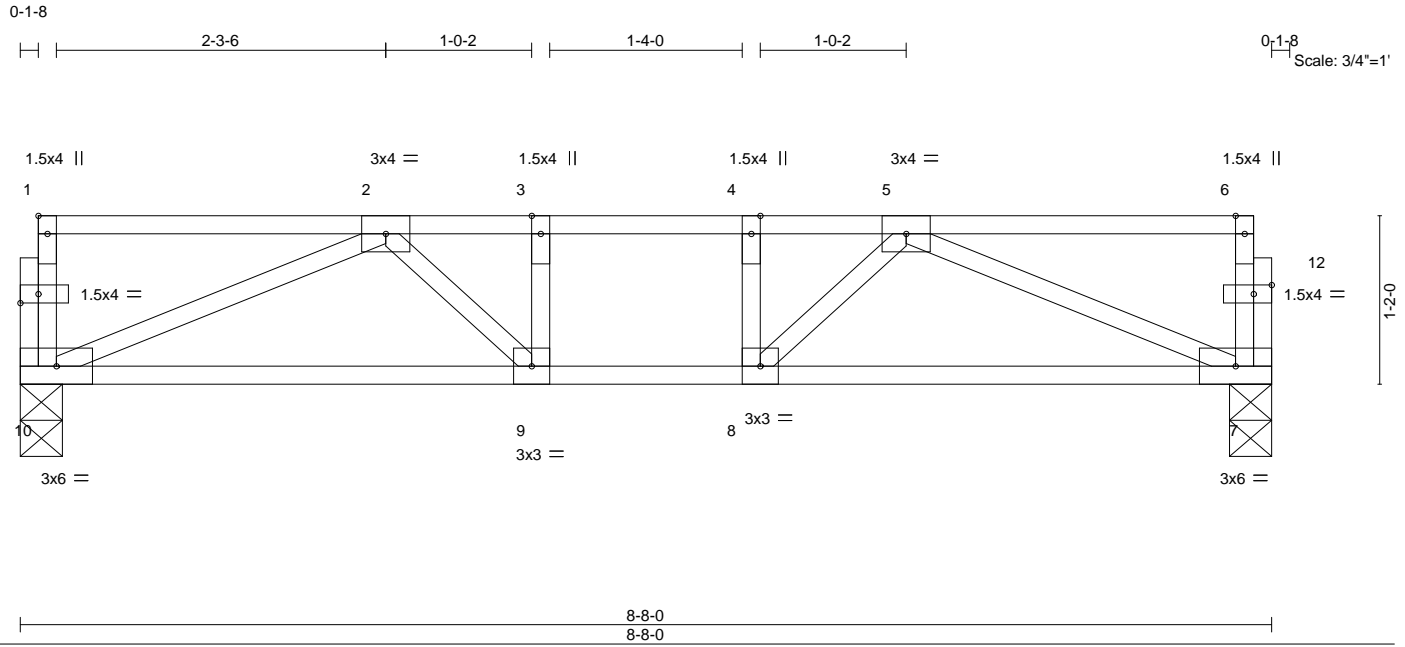


Plate Offsets (X,Y)-- [1:Edge,0-0-12], [11:0-1-8,0-0-12], [12:0-1-8,0-0-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.31	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.00	BC 0.30	Vert(LL) -0.03 7-8 >999 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.23	Vert(CT) -0.05 9-10 >999 360		
BCDL 5.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 7 n/a n/a	Weight: 44 lb	FT = 20%F, 11%E
	Code IRC2015/TPI2014				

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2(flat)  
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2(flat)  
WEBS 2x4 SP No.3(flat)

**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, 7=0-3-8  
Max Grav 10=457(LC 1), 7=457(LC 1)

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

TOP CHORD 2-3=-918/0, 3-4=-918/0, 4-5=-918/0  
BOT CHORD 9-10=0/798, 8-9=0/918, 7-8=0/798  
WEBS 2-10=-864/0, 5-7=-864/0, 2-9=0/294, 5-8=0/294

**NOTES-**

- Unbalanced floor live loads have been considered for this design.
- As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



January 27, 2022

**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



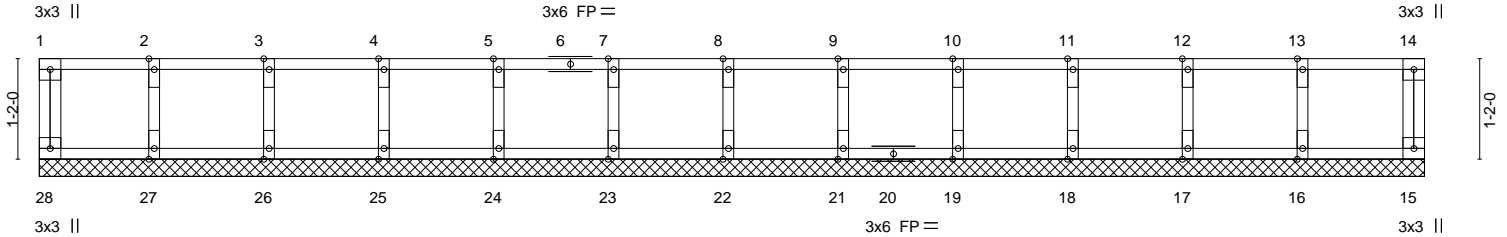
818 Soundside Road  
Edenton, NC 27932

Job 29967-29967A	Truss KW2	Truss Type Floor Supported Gable	Qty 1	Ply 1	25 PRINCE PLACE - FLOOR Job Reference (optional)	149910283
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84 Components (Dunn), Dunn, NC - 28334,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Jan 26 13:55:46 2022 Page 1  
ID:IE3W8KxmJ181yqAG6ibMy\_yZU56-6DB0\_CB8HJT21BN\_op5YITmL3S5itJ5vnOq03zrT6x

Scale = 1:26.8



16-1-0  
16-1-0

<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 40.0	Plate Grip DOL 1.00	TC 0.08	Vert(LL) n/a - n/a 999	MT20	197/144
TCDL 10.0	Lumber DOL 1.00	BC 0.01	Vert(CT) n/a - n/a 999		
BCLL 0.0	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00 15 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-R		Weight: 68 lb	FT = 20%F, 11%E

**LUMBER-**

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

**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.

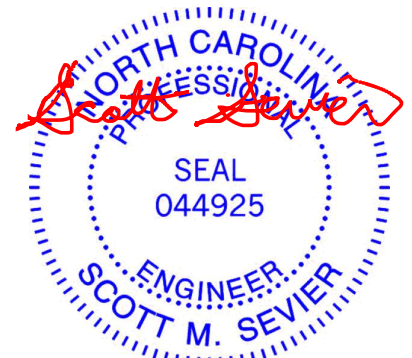
**REACTIONS.** All bearings 16-1-0.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 28, 15, 27, 26, 25, 24, 23, 22, 21, 19, 18, 17, 16

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

**NOTES-**

- 1) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- 2) All plates are 1.5x4 MT20 unless otherwise indicated.
- 3) Gable requires continuous bottom chord bearing.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 1-4-0 oc.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



January 27, 2022

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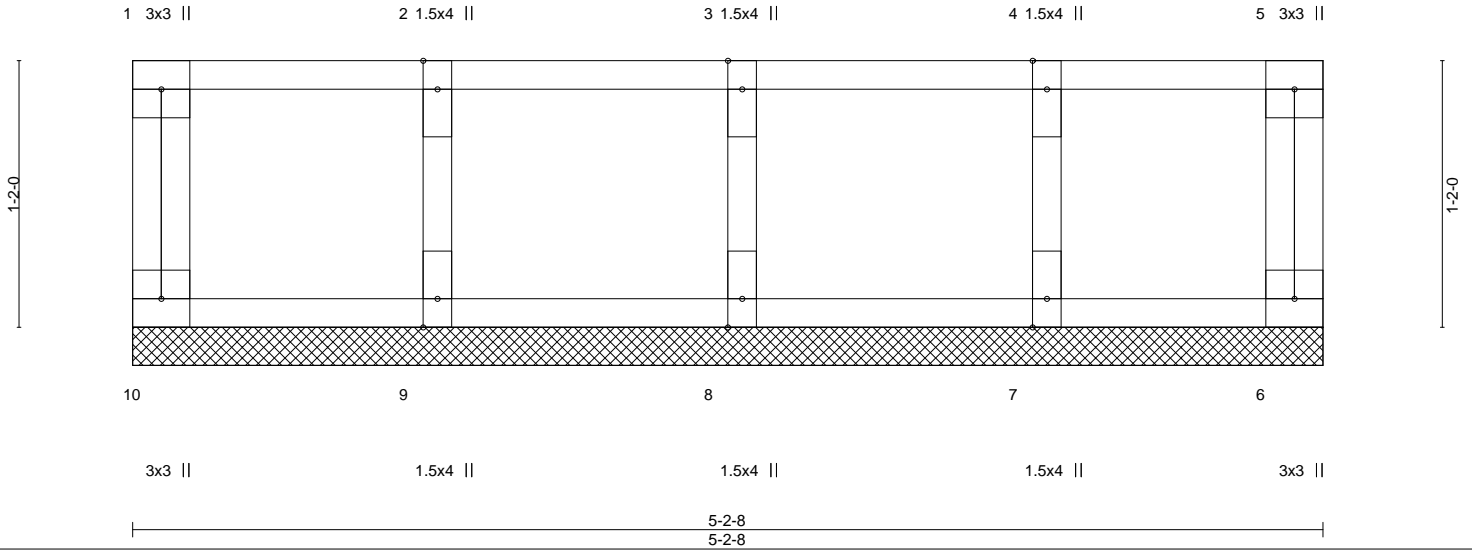
818 Soundside Road  
Edenton, NC 27932

Job 29967-29967A	Truss KW3	Truss Type Floor Supported Gable	Qty 1	Ply 1	25 PRINCE PLACE - FLOOR Job Reference (optional)	149910284
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84 Components (Dunn), Dunn, NC - 28334,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Jan 26 13:55:52 2022 Page 1  
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Scale = 1:10.1



<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 40.0	Plate Grip DOL	1.00	TC 0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.00	BC 0.01	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	6	n/a	n/a	Weight: 25 lb	FT = 20%F, 11%E
BCDL 5.0	Code IRC2015/TPI2014		Matrix-R							

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-2-8 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

All bearings 5-2-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 10, 6, 9, 8, 7

**FORCES.**

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

**NOTES-**

- 1) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



January 27, 2022

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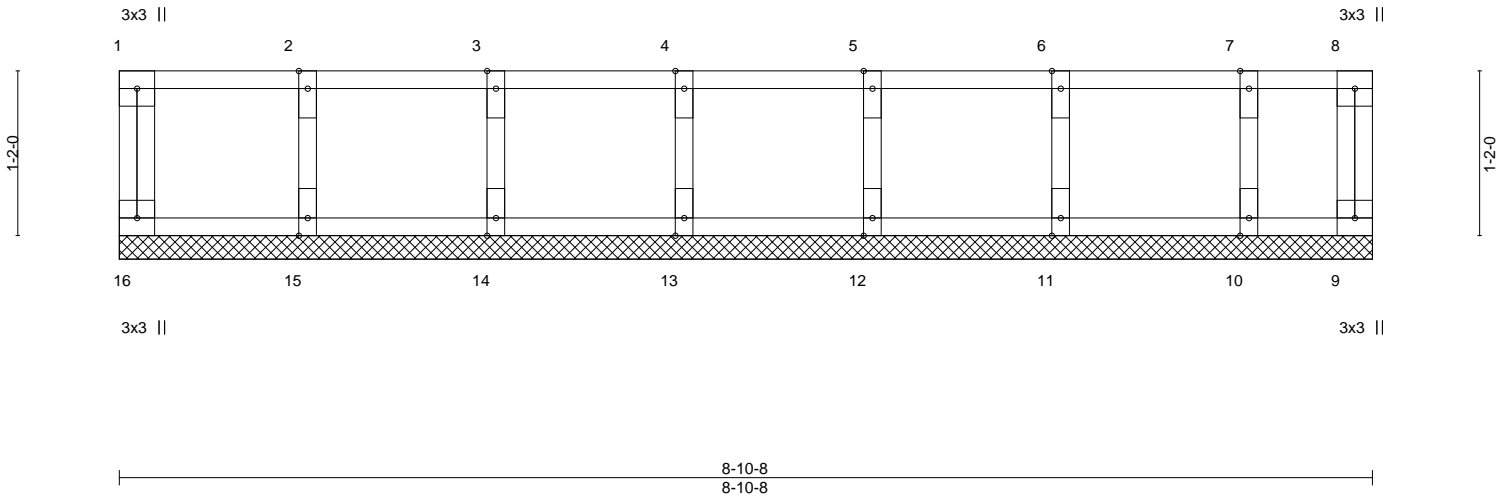


Job 29967-29967A	Truss KW4	Truss Type Floor Supported Gable	Qty 1	Ply 1	25 PRINCE PLACE - FLOOR Job Reference (optional)	149910285
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84 Components (Dunn), Dunn, NC - 28334,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Jan 26 13:55:56 2022 Page 1  
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Scale = 1:16.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.08	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.00	BC 0.02	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	9	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-R					Weight: 40 lb	FT = 20%F, 11%E

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

All bearings 8-10-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 16, 9, 15, 14, 13, 12, 11, 10

**FORCES.**

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

**NOTES-**

- 1) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- 2) All plates are 1.5x4 MT20 unless otherwise indicated.
- 3) Gable requires continuous bottom chord bearing.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 1-4-0 oc.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



January 27, 2022

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Job 29967-29967A	Truss KW5	Truss Type GABLE	Qty 1	Ply 1	25 PRINCE PLACE - FLOOR Job Reference (optional)	149910286
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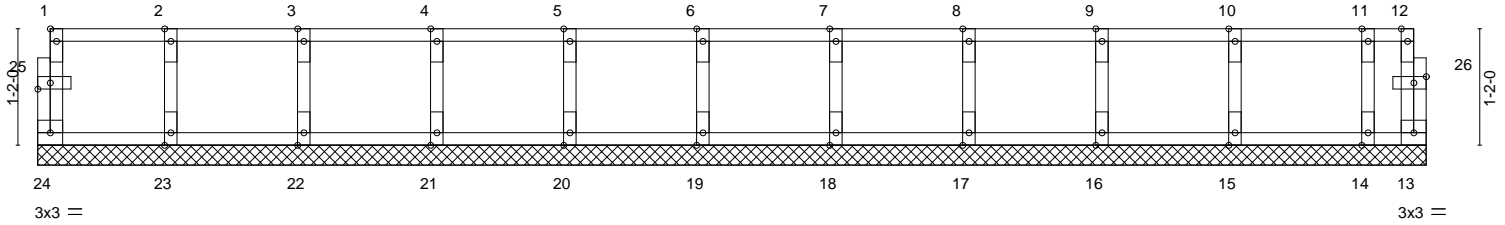
84 Components (Dunn), Dunn, NC - 28334,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Jan 26 13:55:58 2022 Page 1  
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0<sub>1</sub>8

0<sub>1</sub>8

Scale = 1:23.1



1-4-0	2-8-0	4-0-0	5-4-0	6-8-0	8-0-0	9-4-0	10-8-0	12-0-0	13-4-0	13-11-0
1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	0-7-0

Plate Offsets (X,Y)-- [1:Edge,0-0-12], [25:0-1-8,0-0-12], [26:0-1-8,0-0-12]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.00	BC 0.02	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	13	n/a	n/a		
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-R						Weight: 60 lb	FT = 20%F, 11%E

**LUMBER-**

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

**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 13-11-0.  
 (lb) - Max Grav All reactions 250 lb or less at joint(s) 24, 13, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14

**FORCES.**

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

**NOTES-**

- As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- All plates are 1.5x4 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 1-4-0 oc.
- Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



January 27, 2022

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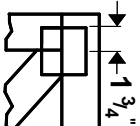
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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



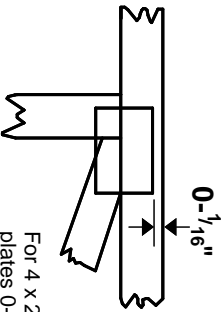
818 Soundside Road  
 Edenton, NC 27932

# 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

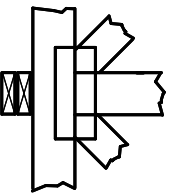
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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



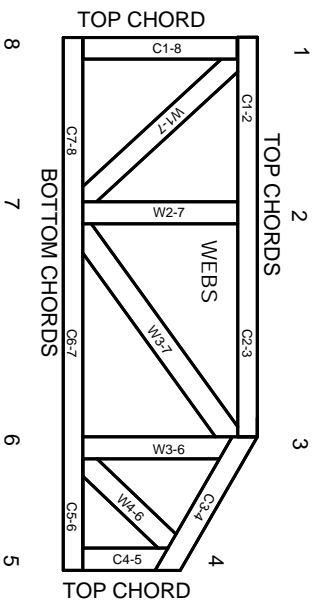
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

### Industry Standards:

ANSI/TPI 1: 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/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: Mill-7473 rev. 5/19/2020



# General Safety Notes

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

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