

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 28201-28201A

7 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: I48113738 thru I48113758

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

North Carolina COA: C-0844



September 29,2021

Johnson, Andrew

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

Job	Truss	Truss Type	Qty	Ply	7 PRINCE PLACE - FLOOR
		_			148113738
28201-28201A	F1	Floor	3	1	
					Job Reference (optional)

84 Components (Dunn),

Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 28 10:56:12 2021 Page 1 ID:IE3W8KxmJ181yqAG6ibMy\_yZU56-T9sBfida?2uC9D2d\_yWnudnhU2UEHkZN\_ERFpQyZ7BX

Structural wood sheathing directly applied or 6-0-0 oc purlins,

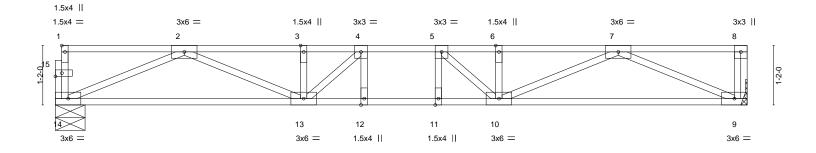
Rigid ceiling directly applied or 10-0-0 oc bracing.

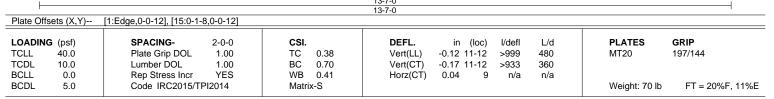
except end verticals.





Scale = 1:22.6





**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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)

> (size) 14=0-7-0, 9=Mechanical Max Grav 14=727(LC 1), 9=733(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-2187/0, 3-4=-2187/0, 4-5=-2318/0, 5-6=-2186/0, 6-7=-2186/0 **BOT CHORD** 13-14=0/1422, 12-13=0/2318, 11-12=0/2318, 10-11=0/2318, 9-10=0/1424  $2\text{-}14\text{=-}1544/0, 7\text{-}9\text{=-}1552/0, 2\text{-}13\text{=-}0/837, 7\text{-}10\text{=-}0/833, 4\text{-}13\text{=-}401/99, 5\text{-}10\text{=-}401/98}$ WEBS

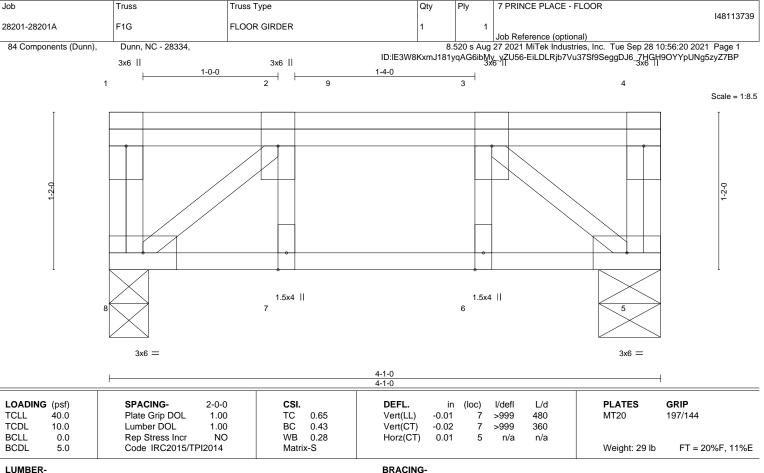
### NOTES-

- 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.



September 29,2021





TOP CHORD

**BOT CHORD** 

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

2x4 SP No.3(flat) WEBS

REACTIONS. (size) 8=0-3-8, 5=0-5-8

Max Grav 8=830(LC 1), 5=1004(LC 4)

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

TOP CHORD 2-3=-935/0

**BOT CHORD** 7-8=0/935, 6-7=0/935, 5-6=0/935

WEBS 2-8=-1212/0, 3-5=-1212/0

### 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) 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 304 lb down at 1-9-4, and 825 Ib down at 1-9-4, and 371 lb down at 3-11-8 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 5) 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 + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 5-8=-10, 1-4=-100

Concentrated Loads (lb) Vert: 4=-323(F) 9=-1086(F=-283, B=-803)



Structural wood sheathing directly applied or 4-1-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

September 29,2021



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



Job	Truss	Truss Type	Qty	Ply	7 PRINCE PLACE - FLOOR
					I48113740
28201-28201A	F2	Floor	8	1	
					Job Reference (optional)

84 Components (Dunn),

Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 28 10:56:21 2021 Page 1 ID:IE3W8KxmJ181yqAG6ibMy\_yZU56-iuubYnkDup0wkcEL0LBvmXe9agaDui7i276EdPyZ7BO

Structural wood sheathing directly applied or 5-0-6 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.



Scale = 1:34.0

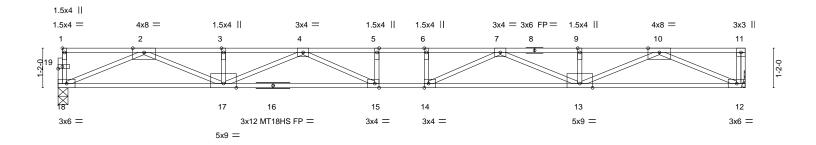


Plate Offsets (X,Y)--[1:Edge,0-0-12], [14:0-1-8,Edge], [15:0-1-8,Edge], [19:0-1-8,0-0-12] **PLATES** GRIP LOADING (psf) SPACING-DEFL. in (loc) I/defl L/d 244/190 TCLL 40.0 Plate Grip DOL 1.00 TC 0.61 Vert(LL) -0.46 14-15 >523 480 MT20 TCDL 10.0 Lumber DOL 1.00 BC 0.51 Vert(CT) -0.63 14-15 >381 360 MT18HS 244/190 **BCLL** 0.0 Rep Stress Incr YES WB 0.83 Horz(CT) 0.09 12 n/a n/a BCDL Code IRC2015/TPI2014 FT = 20%F. 11%E 5.0 Weight: 99 lb Matrix-S

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

REACTIONS. (size) 18=0-3-8, 12=Mechanical

Max Grav 18=1094(LC 1), 12=1100(LC 1) FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-3864/0, 3-4=-3864/0, 4-5=-5257/0, 5-6=-5257/0, 6-7=-5257/0, 7-9=-3863/0,

9-10=-3863/0

17-18=0/2263, 15-17=0/4846, 14-15=0/5257, 13-14=0/4847, 12-13=0/2266 BOT CHORD

WEBS 2-18=-2460/0, 10-12=-2469/0, 2-17=0/1752, 10-13=0/1749, 4-17=-1075/0, 7-13=-1076/0,

4-15=-77/816. 7-14=-77/816

### 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.
- 6) CAUTION, Do not erect truss backwards.



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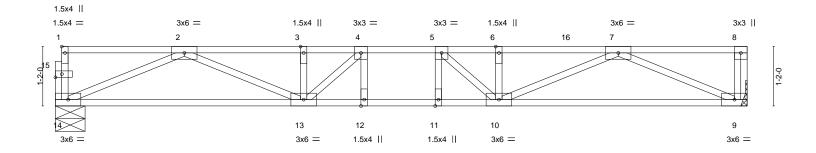
Job	Truss	Truss Type	Qty	Ply	7 PRINCE PLACE - FLOOR	
						148113741
28201-28201A	F2G	Floor Girder	1	1		
					Job Reference (optional)	

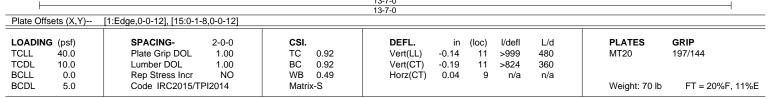
84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 28 10:56:22 2021 Page 1 ID:IE3W8KxmJ181yqAG6ibMy\_yZU56-A4Szm7lsf78nMlpYa2i8IkBFV4qBdFmrHnsn9ryZ7BN



Scale = 1:22.6





LUMBER-**BRACING-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2(flat) TOP CHORD Structural wood sheathing directly applied or 5-5-3 oc purlins,

BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2(flat) except end verticals.

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

REACTIONS. (size) 14=0-7-0, 9=Mechanical Max Grav 14=765(LC 1), 9=847(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-2356/0, 3-4=-2356/0, 4-5=-2558/0, 5-6=-2532/0, 6-7=-2532/0 **BOT CHORD** 13-14=0/1510, 12-13=0/2558, 11-12=0/2558, 10-11=0/2558, 9-10=0/1710 WEBS 2-14=-1639/0, 7-9=-1863/0, 2-13=0/926, 7-10=0/900, 6-10=-325/0, 4-13=-496/0

### 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.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 232 lb down at 10-1-4 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 + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf) Vert: 9-14=-10, 1-8=-100

Concentrated Loads (lb) Vert: 16=-152(F)



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Job Truss Truss Type Qty Ply 7 PRINCE PLACE - FLOOR 148113742 28201-28201A F3 Floor Job Reference (optional)

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 28 10:56:22 2021 Page 1 ID:IE3W8KxmJ181yqAG6ibMy\_yZU56-A4Szm7lsf78nMlpYa2i8IkBKu4rFdDzrHnsn9ryZ7BN

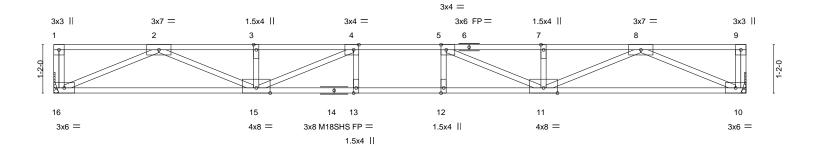
Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

2-3-6 1-11-12

Scale = 1:27.7



						16-8-0					
Plate Offse	ets (X,Y)	[4:0-1-8,Edge], [5:0-1-8,E	dge]								
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defI	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.64	Vert(LL)	-0.25 13-15	>785	480	MT20	197/144
TCDL	10.0	Lumber DOL	1.00	ВС	0.85	Vert(CT)	-0.35 12-13	>568	360	M18SHS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.06 10	n/a	n/a		
BCDL	5.0	Code IRC2015/TF	PI2014	Matrix	(-S					Weight: 82 lb	FT = 20%F, 11%E

BRACING-

TOP CHORD

**BOT CHORD** 

16-8-0

LUMBER-

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

BOT CHORD 2x4 SP No.1(flat)

WEBS 2x4 SP No.3(flat)

REACTIONS. (size) 16=Mechanical, 10=Mechanical Max Grav 16=903(LC 1), 10=903(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-2970/0, 3-4=-2970/0, 4-5=-3522/0, 5-7=-2970/0, 7-8=-2970/0 **BOT CHORD** 15-16=0/1810, 13-15=0/3522, 12-13=0/3522, 11-12=0/3522, 10-11=0/1810  $2 - 16 = -1972/0, \ 8 - 10 = -1972/0, \ 2 - 15 = 0/1270, \ 3 - 15 = -272/8, \ 8 - 11 = 0/1270, \ 7 - 11 = -272/8, \ 7 - 11 =$ WEBS

4-15=-870/0, 5-11=-870/0

### 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.





Job Truss Truss Type Qty 7 PRINCE PLACE - FLOOR 148113743 28201-28201A F3G Floor Girder Job Reference (optional) 84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 28 10:56:23 2021 Page 1 ID:IE3W8KxmJ181yqAG6ibMy\_yZU56-eH0MzTmUPQGe\_vNk7mDNrykZkULNMoM\_WRbLiHyZ7BM 1-8-4 3x3 = 1 3x3 || 6 3 3x3 || Scale = 1:8.5 3x6 =5 3x6 = 3-10-8 3-10-8 LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) Plate Grip DOL 1.00 Vert(LL) 0.00 480 197/144 **TCLL** 40.0 TC 0.38 MT20 **TCDL** 10.0 Lumber DOL 1.00 ВС 0.21 Vert(CT) -0.03 >999 360 4-5 **BCLL** 0.0 Rep Stress Incr NO WB 0.08 Horz(CT) 0.00 n/a n/a Code IRC2015/TPI2014 BCDL 5.0 Matrix-P Weight: 23 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 3-10-8 oc purlins, except end verticals.

BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc bracing.

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

2x4 SP No.3(flat) WEBS

REACTIONS. 5=Mechanical, 4=0-3-8

Max Grav 5=252(LC 1), 4=295(LC 1)

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

BOT CHORD 4-5=0/298

**WEBS** 2-5=-344/0, 2-4=-344/0

### 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) Refer to girder(s) for truss to truss connections.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 70 lb down at 1-10-4, and 79 lb down at 2-11-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 5) 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 + 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: 2=-70(B) 6=-79(B)





Job Truss Truss Type Qty 7 PRINCE PLACE - FLOOR 148113744 F4 Floor 28201-28201A 2 Job Reference (optional)

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 28 10:56:23 2021 Page 1 ID:IE3W8KxmJ181yqAG6ibMy\_yZU56-eH0MzTmUPQGe\_vNk7mDNrykYKUJQMnq\_WRbLiHyZ7BM

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

2-3-6 1-10-12

Scale = 1:13.4

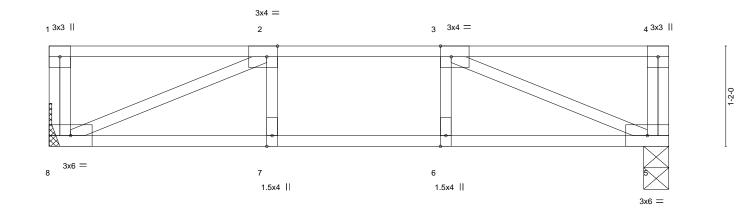


Plate Offsets (X,Y)--[2:0-1-8,Edge], [3:0-1-8,Edge] SPACING-**PLATES** LOADING (psf) CSI. DEFL. in (loc) I/defI L/d GRIP 0.40 **TCLL** 40.0 Plate Grip DOL 1.00 TC Vert(LL) -0.04 7-8 >999 480 197/144 MT20 TCDL 10.0 Lumber DOL 1.00 BC 0.34 Vert(CT) -0.05 7-8 >999 360 **BCLL** 0.0 Rep Stress Incr YES WB 0.18 Horz(CT) 0.01 5 n/a n/a **BCDL** Code IRC2015/TPI2014 FT = 20%F, 11%E 5.0 Matrix-S Weight: 37 lb

**BRACING-**

TOP CHORD

**BOT CHORD** 

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)

REACTIONS. (size) 8=Mechanical, 5=0-3-8 Max Grav 8=383(LC 1), 5=383(LC 1)

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

TOP CHORD 2-3=-635/0

**BOT CHORD** 7-8=0/635, 6-7=0/635, 5-6=0/635

2-8=-689/0, 3-5=-689/0 WEBS

### 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.



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Job Truss Truss Type Qty 7 PRINCE PLACE - FLOOR 148113745 28201-28201A F5 Floor Job Reference (optional)

84 Components (Dunn),

2-3-6

Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 28 10:56:24 2021 Page 1 ID:IE3W8KxmJ181yqAG6ibMy\_yZU56-6TakBpn6AkOVc3ywhTkcN9GgOuXj57T8k5LuEkyZ7BL

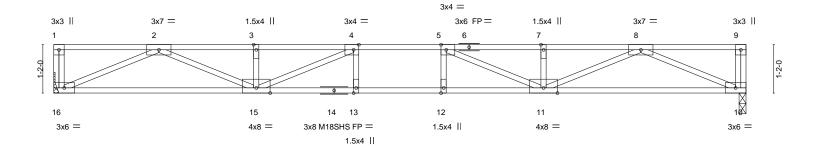
Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

1-11-12

Scale = 1:27.7



						16-8-0					
Plate Offs	sets (X,Y)	[4:0-1-8,Edge], [5:0-1-8,E	dge]								
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defI	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.64	Vert(LL)	-0.25 13-15	>785	480	MT20	197/144
TCDL	10.0	Lumber DOL	1.00	ВС	0.85	Vert(CT)	-0.35 12-13	>568	360	M18SHS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.06 10	n/a	n/a		
BCDL	5.0	Code IRC2015/TP	12014	Matrix	:-S					Weight: 82 lb	FT = 20%F, 11%E

BRACING-

TOP CHORD

**BOT CHORD** 

16-8-0

LUMBER-

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

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

REACTIONS. (size) 16=Mechanical, 10=0-2-0 Max Grav 16=903(LC 1), 10=903(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-2970/0, 3-4=-2970/0, 4-5=-3522/0, 5-7=-2970/0, 7-8=-2970/0 **BOT CHORD** 15-16=0/1810, 13-15=0/3522, 12-13=0/3522, 11-12=0/3522, 10-11=0/1810 WEBS 2-16=-1972/0, 8-10=-1972/0, 2-15=0/1270, 3-15=-272/8, 8-11=0/1270, 7-11=-272/8,

4-15=-870/0, 5-11=-870/0

### 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) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 10.
- 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.





Job Truss Truss Type Qty 7 PRINCE PLACE - FLOOR 148113746 28201-28201A F6 Floor 5 Job Reference (optional)

84 Components (Dunn),

2-3-6

Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 28 10:56:25 2021 Page 1 ID:IE3W8KxmJ181yqAG6ibMy\_yZU56-af86O8nkx2WMDDX6FBFrwNpnkltbqaRHzl4RmAyZ7BK

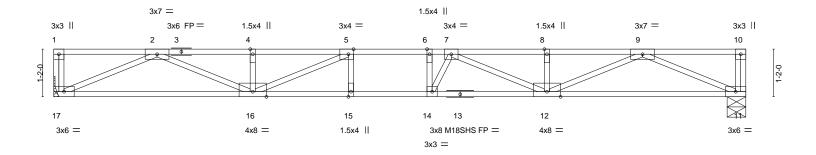
Structural wood sheathing directly applied or 2-2-0 oc purlins,

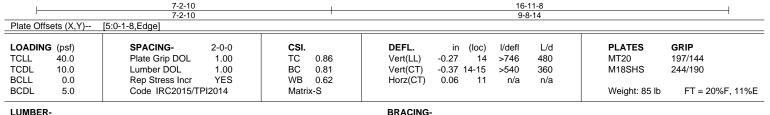
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

1-9-10

Scale = 1:28.2





TOP CHORD

**BOT CHORD** 

LUMBER-

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

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

REACTIONS. (size) 17=Mechanical, 11=0-5-8 Max Grav 17=919(LC 1), 11=919(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-4=-3040/0, 4-5=-3040/0, 5-6=-3643/0, 6-7=-3643/0, 7-8=-3043/0, 8-9=-3043/0 **BOT CHORD** 16-17=0/1847, 15-16=0/3643, 14-15=0/3643, 12-14=0/3615, 11-12=0/1847 2-17=-2013/0, 9-11=-2013/0, 2-16=0/1306, 4-16=-267/8, 9-12=0/1308, 5-16=-889/0, WEBS

7-12=-677/0, 7-14=-292/500, 6-14=-354/192

### 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.





Job	Truss	Truss Type	Qty	Ply	7 PRINCE PLACE - FLOOR
					I48113747
28201-28201A	F7	Floor	6	1	
					Job Reference (optional)

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

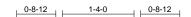
8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 28 10:56:26 2021 Page 1 ID:IE3W8KxmJ181yqAG6ibMy\_yZU56-3siUbUoMiLeDrN6Jpun4TaM45hGXZ4PRCPq?IcyZ7BJ

Structural wood sheathing directly applied or 6-0-0 oc purlins,

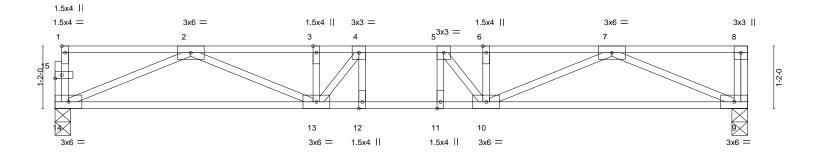
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.





Scale = 1:21.5



						12-11-0					
Plate Off	sets (X,Y)	[1:Edge,0-0-12], [15:0-1-	8,0-0-12]								
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.37	Vert(LL)	-0.10 11-12	>999	480	MT20	197/144
TCDL	10.0	Lumber DOL	1.00	BC	0.63	Vert(CT)	-0.14 11-12	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.03 9	n/a	n/a		
BCDL	5.0	Code IRC2015/Ti	PI2014	Matri	x-S					Weight: 67 lb	FT = 20%F, 11%E

**BRACING-**

TOP CHORD

**BOT CHORD** 

12-11-0

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)

REACTIONS. (size) 14=0-3-8, 9=0-3-8 Max Grav 14=690(LC 1), 9=697(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-2021/0, 3-4=-2021/0, 4-5=-2089/0, 5-6=-2020/0, 6-7=-2020/0 **BOT CHORD** 13-14=0/1338, 12-13=0/2089, 11-12=0/2089, 10-11=0/2089, 9-10=0/1341

 $2\text{-}14\text{=-}1452/0, \, 7\text{-}9\text{=-}1461/0, \, 2\text{-}13\text{=-}0/747, \, 7\text{-}10\text{=-}0/743, \, 4\text{-}13\text{=-}345/141, \, 5\text{-}10\text{=-}346/140}$ **WEBS** 

### 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	Truss	Truss Type	Qty	Ply	7 PRINCE PLACE - FLOOR
					I48113748
28201-28201A	F8	Floor	5	1	
					Job Reference (optional)

84 Components (Dunn),

Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 28 10:56:26 2021 Page 1 

Structural wood sheathing directly applied or 6-0-0 oc purlins,

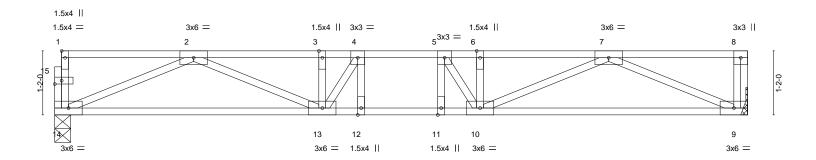
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.





Scale = 1:21.0



			12-7-8	
Plate Offsets (X,Y)	[1:Edge,0-0-12], [15:0-1-8,0-0-12]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.36	Vert(LL) -0.09 11-12 >999 480	MT20 197/144
TCDL 10.0	Lumber DOL 1.00	BC 0.61	Vert(CT) -0.13 11-12 >999 360	
BCLL 0.0	Rep Stress Incr YES	WB 0.37	Horz(CT) 0.03 9 n/a n/a	
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S	, ,	Weight: 66 lb FT = 20%F, 11%E

BRACING-

TOP CHORD

**BOT CHORD** 

12-7-8

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)

REACTIONS. (size) 14=0-3-8, 9=Mechanical Max Grav 14=674(LC 1), 9=681(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1949/0, 3-4=-1949/0, 4-5=-1994/0, 5-6=-1948/0, 6-7=-1948/0 **BOT CHORD** 13-14=0/1302, 12-13=0/1994, 11-12=0/1994, 10-11=0/1994, 9-10=0/1304

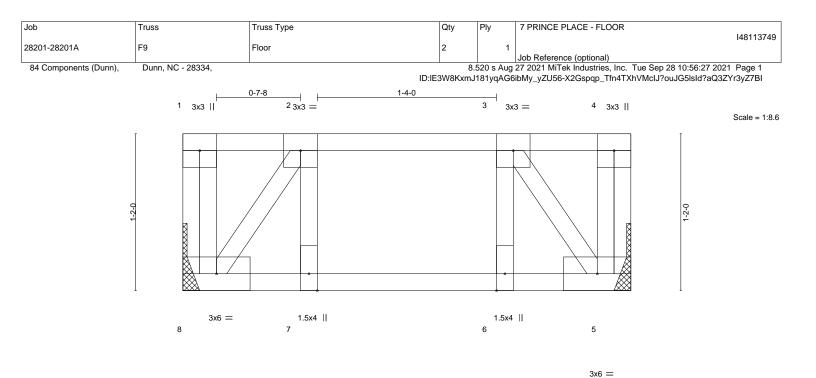
 $2\text{-}14\text{=-}1412/0, \, 7\text{-}9\text{=-}1421/0, \, 2\text{-}13\text{=-}0/708, \, 7\text{-}10\text{=-}0/705, \, 4\text{-}13\text{=-}330/167, \, 5\text{-}10\text{=-}330/165}$ **WEBS** 

### 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.







3-4-0 3-4-0

LOADING	G (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)	-0.00	7	>999	480	MT20	197/144
TCDL	10.0	Lumber DOL	1.00	BC	0.05	Vert(CT	-0.00	7	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(C1	0.00	5	n/a	n/a		
BCDL	5.0	Code IRC2015/TF	PI2014	Matri	x-S						Weight: 21 lb	FT = 20%F, 11%E

BRACING-

TOP CHORD

**BOT CHORD** 

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)

2x4 SP No.3(flat) WEBS

REACTIONS. 8=Mechanical, 5=Mechanical

Max Grav 8=170(LC 1), 5=170(LC 1)

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

### 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.



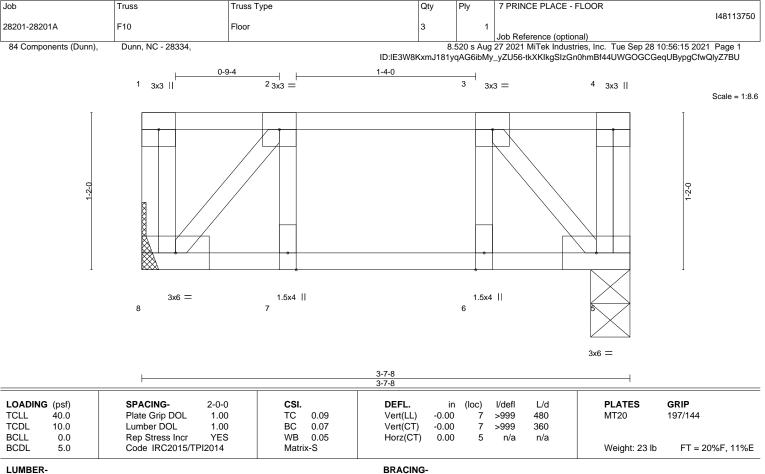
Structural wood sheathing directly applied or 3-4-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

September 29,2021





TOP CHORD

**BOT CHORD** 

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

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

REACTIONS. 8=Mechanical, 5=0-3-8 Max Grav 8=186(LC 1), 5=186(LC 1)

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

### 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.



Structural wood sheathing directly applied or 3-7-8 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.



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 chorembers 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, rerection and bracing of trusses and truss systems, see

ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty 7 PRINCE PLACE - FLOOR 148113751 F11 28201-28201A Floor Job Reference (optional)

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 28 10:56:15 2021 Page 1 ID:IE3W8KxmJ181yqAG6ibMy\_yZU56-tkXKlkgSlzGn0hmBf44UWGOCTGc5U9bpgCfwQlyZ7BU

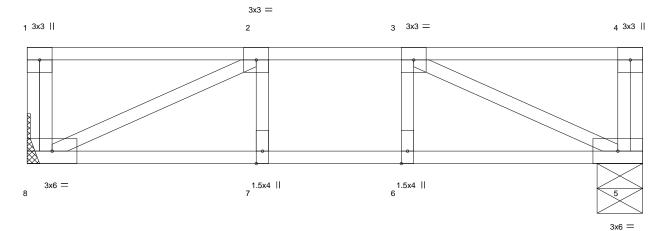
Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

2-0-10 1-4-0

Scale = 1:11.6



	6-2-4 6-2-4									
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP						
TCLL 40.0 TCDL 10.0	Plate Grip DOL 1.00 Lumber DOL 1.00	TC 0.33 BC 0.24	Vert(LL) -0.02 7-8 >999 480 Vert(CT) -0.03 7-8 >999 360	MT20 197/144						
BCLL 0.0 BCDL 5.0	Rep Stress Incr YES Code IRC2015/TPI2014	WB 0.13 Matrix-S	Horz(CT) 0.00 5 n/a n/a	Weight: 33 lb FT = 20%F, 11%E						

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

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

**BOT CHORD** 2x4 SP No.2 or 2x4 SPF No.2(flat)

WEBS 2x4 SP No.3(flat)

REACTIONS. 8=Mechanical, 5=0-5-8 Max Grav 8=327(LC 1), 5=327(LC 1)

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

TOP CHORD 2-3=-475/0

**BOT CHORD** 7-8=0/475, 6-7=0/475, 5-6=0/475

**WEBS** 2-8=-524/0, 3-5=-524/0

### 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.





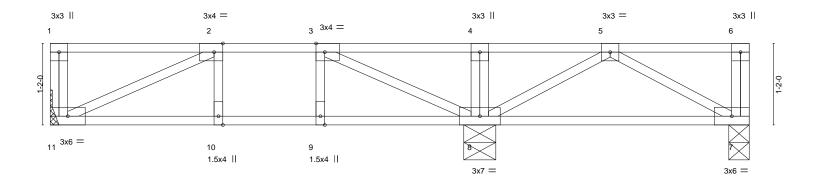
Job	Truss	Truss Type	Qty	Ply	7 PRINCE PLACE - FLOOR	
					14	8113752
28201-28201A	F12	Floor	2	1		
					Job Reference (optional)	
84 Components (Dunn),	Dunn, NC - 28334,		8.	520 s Aug	27 2021 MiTek Industries, Inc. Tue Sep 28 10:56:16 2021 Page 2015 Page 2016	age 1
		ID:IE3	3W8KxmJ1	81yqAG6	bMy_yZU56-Lx5iV3g53HOdeqLODobk3TxNlfyiDcsyusPTyBy.	Z7BT

1-8-14

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Scale = 1:16.5

1-8-14



<u> </u>	6-1-12 6-1-12			+		10-0-0 3-10-4	
Plate Offsets (X,Y)	[2:0-1-8,Edge], [3:0-1-8,Edge]						
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES	CSI. TC 0.32 BC 0.22 WB 0.13	- ' '	(loc) I/defl 10-11 >999 10-11 >999 7 n/a	L/d 480 360 n/a	PLATES MT20	<b>GRIP</b> 197/144
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S				Weight: 53 lb	FT = 20%F, 11%E

LUMBER-**BRACING-**

1-4-0

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

except end verticals. WEBS 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 11=Mechanical, 7=0-3-8, 8=0-5-8 Max Grav 11=320(LC 3), 7=242(LC 7), 8=612(LC 8)

2-1-2

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

TOP CHORD 2-3=-453/0

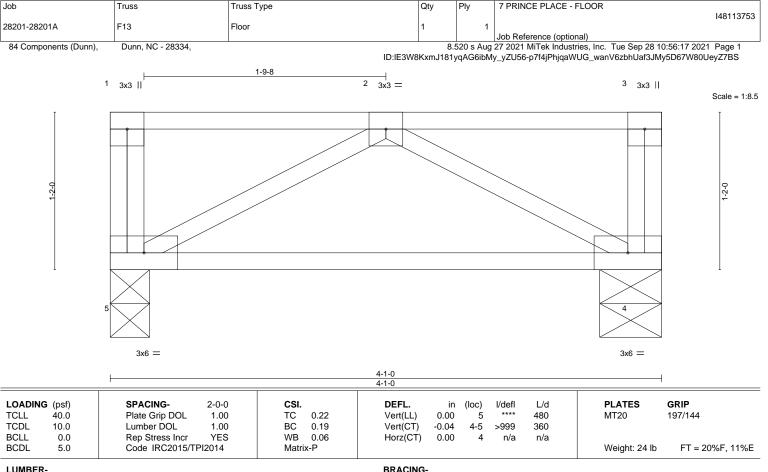
BOT CHORD 10-11=0/453, 9-10=0/453, 8-9=0/453, 7-8=0/273 2-11=-498/0, 3-8=-518/0, 5-8=-310/0, 5-7=-313/0 **WEBS** 

### 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.







TOP CHORD

**BOT CHORD** 

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)

2x4 SP No.3(flat) WEBS

REACTIONS. 5=0-3-8, 4=0-5-8

Max Grav 5=211(LC 1), 4=211(LC 1)

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) 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.



Structural wood sheathing directly applied or 4-1-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

September 29,2021



Job	Truss	Truss Type	Qty	Ply	7 PRINCE PLACE - FLOOR
					148113754
28201-28201A	F14	Floor	4	1	
					Job Reference (optional)

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

2-3-6

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 28 10:56:18 2021 Page 1 ID:IE3W8KxmJ181yqAG6ibMy\_yZU56-IJDTwliLbueLt8VmLDdC8u0fnTWChOHFMAua04yZ7BR

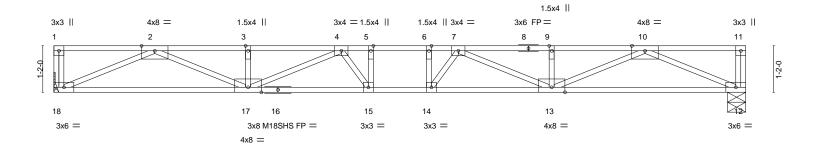
Structural wood sheathing directly applied or 5-11-5 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

0-8-2 1-4-0 0-8-2

Scale = 1:28.9



	17-4-8 17-4-8				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP	
TCLL 40.0	Plate Grip DOL 1.00	TC 0.58	Vert(LL) -0.29 14-15 >703 480	MT20 197/144	
TCDL 10.0	Lumber DOL 1.00	BC 0.73	Vert(CT) -0.40 14-15 >511 360	M18SHS 244/190	
BCLL 0.0	Rep Stress Incr YES	WB 0.65	Horz(CT) 0.07 12 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 88 lb FT = 20%F, 11%E	

TOP CHORD

**BOT CHORD** 

LUMBER-BRACING-

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

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

REACTIONS. 18=Mechanical, 12=0-5-8

Max Grav 18=942(LC 1), 12=942(LC 1)

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

TOP CHORD 2-3=-3147/0, 3-4=-3147/0, 4-5=-3835/0, 5-6=-3835/0, 6-7=-3835/0, 7-9=-3147/0, 9-10=-3147/0

**BOT CHORD** 17-18=0/1900, 15-17=0/3769, 14-15=0/3835, 13-14=0/3769, 12-13=0/1900

2-18=-2070/0, 10-12=-2070/0, 2-17=0/1365, 10-13=0/1365, 4-17=-681/0, 7-13=-681/0, 4-15=-210/451, **WEBS** 

7-14=-210/451, 5-15=-295/130, 6-14=-295/130

### NOTES-

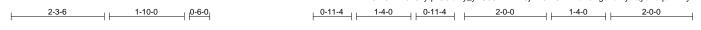
- 1) Unbalanced floor live loads have been considered for this design.
- 2) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- 3) 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.

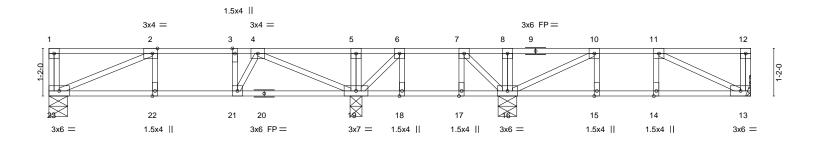


September 29,2021



Job Truss Truss Type Qty Ply 7 PRINCE PLACE - FLOOR 148113755 F15 Floor 28201-28201A Job Reference (optional) 84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 28 10:56:19 2021 Page 1 ID:IE3W8KxmJ181yqAG6ibMy\_yZU56-mVnr75jzMCmCVI4zuw9Rg6ZuhtyaQydPbqd7ZWyZ7BQ





2-6-6	7-6-4	1	11-2-12		17-2-4	
2-6-6	4-11-14	<u> </u>	3-8-8	1	5-11-8	
Plate Offsets (X,Y) [2	2:0-1-8,Edge]					
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	I/defl L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.38	Vert(LL) -0.03 22-23	>999 480	MT20	197/144
TCDL 10.0	Lumber DOL 1.00	BC 0.27	Vert(CT) -0.04 22-23	>999 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.20	Horz(CT) 0.01 13	n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S			Weight: 89 lb	FT = 20%F, 11%E
					_	

LUMBER-BRACING-

2x4 SP No.2 or 2x4 SPF No.2(flat) TOP CHORD TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2(flat) except end verticals.

WEBS 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 0-5-8 except (jt=length) 19=0-3-8, 13=Mechanical.

(lb) - Max Grav All reactions 250 lb or less at joint(s) except 23=393(LC 16), 19=651(LC 12), 16=540(LC 11), 13=315(LC 11)

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

TOP CHORD 2-3=-658/0, 3-4=-658/0, 10-11=-436/0

**BOT CHORD** 22-23=0/658, 21-22=0/658, 19-21=0/604, 15-16=0/436, 14-15=0/436, 13-14=0/436

WEBS 2-23=-714/0, 4-19=-742/0, 4-21=0/260, 10-16=-558/0, 11-13=-483/0

### 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 3x3 MT20 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.
- 6) CAUTION, Do not erect truss backwards.



Scale = 1:28.2

September 29,2021



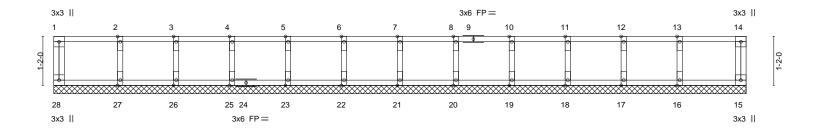
Job	Truss	Truss Type	Qty	Ply	7 PRINCE PLACE - FLOOR
					148113756
28201-28201A	KW1	GABLE	1	1	
					Job Reference (optional)

84 Components (Dunn),

Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 28 10:56:28 2021 Page 1  $ID:IE3W8KxmJ181yqAG6ibMy\_yZU56-?EqF0AqcEzvx4gGhwJpYY?RU?V5f14OkfjJ6NVyZ7BHAQcEzvx4gGhwJffAqcezvx4gGhwJffAqcezvx4gGhwJffAqcezvx4gGhwJffAqcezvx4gGhwJffAqcezvx4gGhwJffAqcezvx4gGhwJffAqcezvx4gGhwJffAqcezvx4gghwJffAqcezvx4$ 

Scale = 1:27.5



1-7-0 1-7-0	2-11-0 4-3-0 5-7-0 1-4-0 1-4-0 1-4-0	6-11-0 8-3-0 1-4-0 1-4-0	9-7-0   10-11-0 1-4-0   1-4-0	12-3-0 1-4-0 1-4-0	
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0	SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.09 BC 0.02 WB 0.03 Matrix-R	DEFL.         in (loc)           Vert(LL)         n/a         -           Vert(CT)         n/a         -           Horz(CT)         0.00         15	l/defl L/d n/a 999 n/a 999 n/a n/a	PLATES GRIP MT20 197/144 Weight: 70 lb FT = 20%F, 11%E

LUMBER-BRACING-

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

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

2x4 SP No.3(flat) **WEBS** 

**OTHERS** 2x4 SP No.3(flat)

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 16-6-0.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 28, 15, 21, 22, 23, 25, 26, 27, 20, 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.



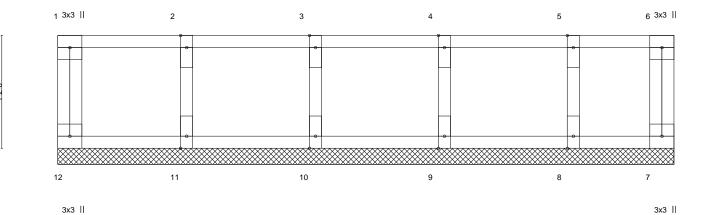


Job		Truss	Truss Type	Qty	Ply	7 PRINCE PLACE - FLOOR
						148113757
28201-	-28201A	KW2	Floor Supported Gable	1	1	
						Job Reference (optional)

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 28 10:56:29 2021 Page 1  $ID:IE3W8KxmJ181yqAG6ibMy\_yZU56-TRNdEWqF?G1niqruU0Kn4D\_frvRumXftuN2fvxyZ7BG$ 

Scale: 1"=1



			6-4-8	
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES	CSI. TC 0.08 BC 0.02 WB 0.03	DEFL.         in (loc)         l/defl         L/d           Vert(LL)         n/a         -         n/a         999           Vert(CT)         n/a         -         n/a         999           Horz(CT)         0.00         7         n/a         n/a	PLATES GRIP MT20 197/144
BCDL 5.0	Code IRC2015/TPI2014	Matrix-R	•	Weight: 30 lb FT = 20%F, 11%E

6-4-8

LUMBER-

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

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

2x4 SP No.3(flat) **WEBS 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 6-4-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 12, 7, 11, 10, 9, 8

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.



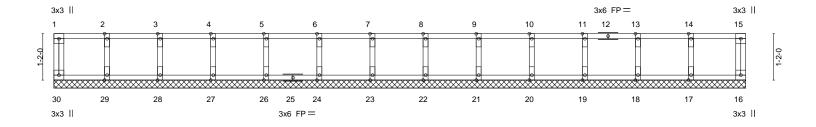


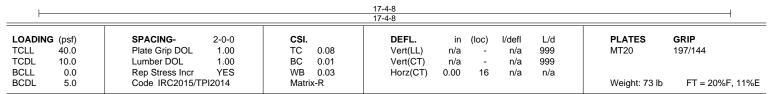
Job	Truss	Truss Type	Qty	Ply	7 PRINCE PLACE - FLOOR
					I48113758
28201-28201A	KW3	Floor Supported Gable	1	1	
					Job Reference (optional)

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Tue Sep 28 10:56:30 2021 Page 1 ID:IE3W8KxmJ181yqAG6ibMy\_yZU56-xdx?Rsrtma9eK\_Q42kr0dQWqfJnCVzw071oCRNyZ7BF

Scale = 1:28.9





LUMBER-BRACING-

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

2x4 SP No.2 or 2x4 SPF No.2(flat) **BOT CHORD** 

2x4 SP No.3(flat) WEBS **OTHERS** 2x4 SP No.3(flat)

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 17-4-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 30, 16, 29, 28, 27, 26, 24, 23, 22, 21, 20, 19, 18, 17

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.



September 29,2021



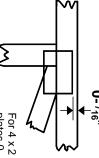


### Symbols

## 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-  $\frac{1}{16}$  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 × 4

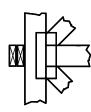
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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**



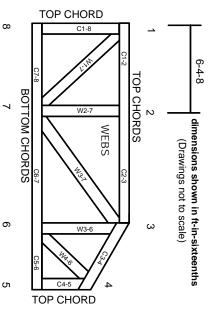
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only

### Industry Standards:

National Design Specification for Metal Plate Connected Wood Truss Construction. Design Standard for Bracing. Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

ANSI/TPI1: DSB-89:

## Numbering System



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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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

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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

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- Cut members to bear tightly against each other.
- 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.

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- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- 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
- Do not cut or after truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- 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.