

Trenco 818 Soundside Rd Edenton, NC 27932

Re: J1023-5900

Lot 1A Heritage at Neill's Cre

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Pages or sheets covered by this seal: I61967726 thru I61967738

My license renewal date for the state of North Carolina is December 31, 2023.

North Carolina COA: C-0844



November 14,2023

Gilbert, Eric

**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	Lot 1A Heritage at Neill's Cre
J1023-5900	F01	FLOOR	12	1	I61967726
01020 0000		LEGOK	12	· ·	Job Reference (optional)

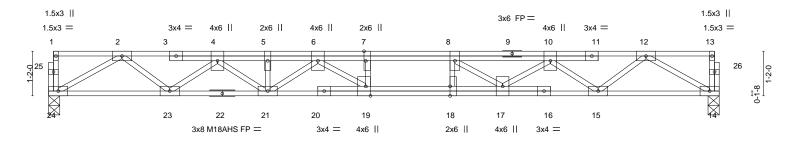
8.430 s Jan 6 2022 MiTek Industries, Inc. Sat Nov 11 11:37:26 2023 Page 1 ID:ttwY35f4XG0RA8Ojy64tSgzKsVE-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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

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

except end verticals.





			17-6-8	
			17-6-8	
Plate Offsets (X,Y)	[7:0-3-0,Edge], [18:0-3-0,0-0-0], [19:0-3	-0,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 0.18	Vert(LL) -0.21 18-19 >999 480	MT20 244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.89	Vert(CT) -0.28 18-19 >730 360	M18AHS 186/179
BCLL 0.0	Rep Stress Incr YES	WB 0.50	Horz(CT) 0.06 14 n/a n/a	
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S	, ,	Weight: 111 lb FT = 20%F, 11%E

TOP CHORD

**BOT CHORD** 

1760

LUMBER-BRACING-

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

> (size) 24=0-3-8, 14=0-3-8 Max Grav 24=945(LC 1), 14=945(LC 1)

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

2-4=-2291/0, 4-5=-3651/0, 5-6=-3651/0, 6-7=-4335/0, 7-8=-4335/0, 8-10=-3722/0, TOP CHORD

10-12=-2285/0

 $23 - 24 = 0/1483, \ 21 - 23 = 0/3088, \ 19 - 21 = 0/4042, \ 18 - 19 = 0/4335, \ 17 - 18 = 0/4335, \ 15 - 17 = 0/3168, \ 18 - 10/2016, \ 18 -$ 

14-15=0/1469

12-14=-1694/0, 12-15=0/1057, 10-15=-1127/0, 10-17=0/723, 8-17=-894/0, 2-24=-1711/0,

2-23=0/1046, 4-23=-1018/0, 4-21=0/702, 6-21=-487/0, 6-19=-30/683, 7-19=-276/0

### NOTES-

**WEBS** 

REACTIONS.

**BOT CHORD** 

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 3x6 MT20 unless otherwise indicated.
- 4) Plates checked for a plus or minus 1 degree rotation about its center.
- 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.



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Job Truss Truss Type Qty Ply Lot 1A Heritage at Neill's Cre 161967727 J1023-5900 FLOOR F02 Job Reference (optional)

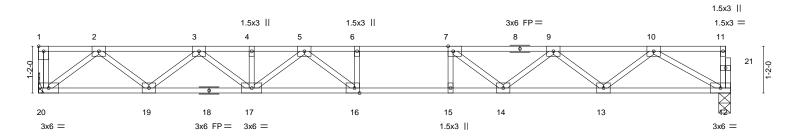
Fayetteville, NC - 28314, Comtech, Inc.

1-3-0

8.430 s Jan 6 2022 MiTek Industries, Inc. Sat Nov 11 11:37:27 2023 Page 1 ID:ttwY35f4XG0RA8Ojy64tSgzKsVE-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

2-2-8 1-8-0 \_ 0<u>-1</u>\_8

Scale = 1:28.7



						17-3-0 17-3-0					<del></del>
Plate Offsets (X,Y) [1:Edge,0-1-8], [7:0-1-8,Edge], [16:0-1-8,Edge]											
LOADING TCLL TCDL	(psf) 40.0 10.0	SPACING- Plate Grip DOL Lumber DOL	1-7-3 1.00 1.00	CSI. TC BC	0.48 0.79	DEFL. Vert(LL) Vert(CT)	in (loc) -0.22 16-17 -0.30 16-17	I/defI >913 >669	L/d 480 360	PLATES MT20	<b>GRIP</b> 244/190
BCLL BCDL	0.0 5.0	Rep Stress Incr Code IRC2015/TF	YES 12014	WB Matrix	0.39 k-S	Horz(CT)	0.05 12	n/a	n/a	Weight: 86 lb	FT = 20%F, 11%E

LUMBER-BRACING-

TOP CHORD 2x4 SP No.1(flat) TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, 2x4 SP No.1(flat) **BOT CHORD** except end verticals. **WEBS** 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 20=Mechanical, 12=0-3-8 Max Grav 20=748(LC 1), 12=743(LC 1)

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

 $2\text{-}3\text{=-}1562/0,\ 3\text{-}4\text{=-}2586/0,\ 4\text{-}5\text{=-}2586/0,\ 5\text{-}6\text{=-}3003/0,\ 6\text{-}7\text{=-}3003/0,\ 7\text{-}9\text{=-}2650/0,\ 7\text{-$ TOP CHORD

9-10=-1766/0

19-20=0/931, 17-19=0/2169, 16-17=0/2872, 15-16=0/3003, 14-15=0/3003, 13-14=0/2325, 12-13=0/1174

**WEBS** 10-12=-1354/0, 10-13=0/771, 9-13=-728/0, 9-14=0/478, 7-14=-605/0, 2-20=-1169/0,

 $2-19=0/821,\ 3-19=-790/0,\ 3-17=0/533,\ 5-17=-366/0,\ 5-16=-103/456$ 

### NOTES-

**BOT CHORD** 

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 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.



November 14,2023



Job Truss Truss Type Qty Ply Lot 1A Heritage at Neill's Cre 161967728 FLOOR J1023-5900 F<sub>02</sub>A Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Sat Nov 11 11:37:28 2023 Page 1

Fayetteville, NC - 28314, Comtech, Inc.

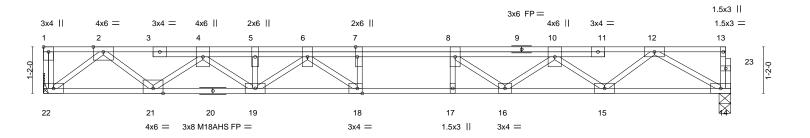
1-3-0

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

2-2-8 1-8-0 \_<sub>\_</sub> 0-<u>1</u>\_8

Scale = 1:28.9



17-3-0 Plate Offsets (X,Y)--[1:Edge,0-1-8], [7:0-3-0,Edge], [18:0-1-8,Edge] **PLATES** LOADING (psf) SPACING-CSI. DEFL. I/defI L/d GRIP (loc) **TCLL** 40.0 Plate Grip DOL 1.00 TC 0.28 Vert(LL) -0.22 18 >921 480 MT20 244/190 TCDL вс 0.75 Vert(CT) 186/179 10.0 Lumber DOL 1.00 -0.30 18 >669 360 M18AHS **BCLL** 0.0 Rep Stress Incr YES WB 0.52 Horz(CT) 0.07 14 n/a n/a Code IRC2015/TPI2014 FT = 20%F, 11%E **BCDL** 5.0 Weight: 102 lb Matrix-S

LUMBER-**BRACING-**

TOP CHORD 2x4 SP No.1(flat) TOP CHORD 2x4 SP No.1(flat) **BOT CHORD** 

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

REACTIONS. 22=Mechanical, 14=0-3-8 (size)

Max Grav 22=935(LC 1), 14=929(LC 1)

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

2-4=-1986/0, 4-5=-3435/0, 5-6=-3435/0, 6-7=-3967/0, 7-8=-3967/0, 8-10=-3501/0, TOP CHORD 10-12=-2246/0

> $21 - 22 = 0/1149,\ 19 - 21 = 0/2834,\ 18 - 19 = 0/3780,\ 17 - 18 = 0/3967,\ 16 - 17 = 0/3967,\ 15 - 16 = 0/3044,$ 14-15=0/1451

**WEBS** 12-14=-1673/0, 12-15=0/1030, 10-15=-1019/0, 10-16=0/681, 8-16=-731/0, 2-22=-1441/0,

2-21=0/1085, 4-21=-1083/0, 4-19=0/750, 6-19=-430/0, 6-18=-162/638, 7-18=-329/80

### NOTES-

**BOT CHORD** 

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 3x6 MT20 unless otherwise indicated.
- 4) Plates checked for a plus or minus 1 degree rotation about its center.
- 5) 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.
- 7) CAUTION, Do not erect truss backwards.



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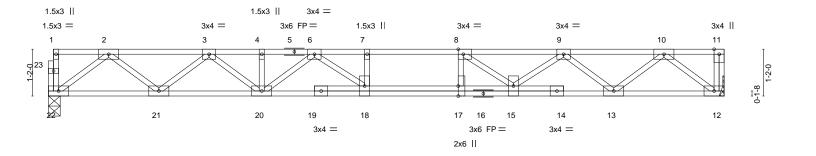
Job	Truss	Truss Type	Qty	Ply	Lot 1A Heritage at Neill's Cre
14000 5000	F00	FLOOR	_		I61967729
J1023-5900	F03	FLOOR	5	1	Job Reference (optional)

8.430 s Jan 6 2022 MiTek Industries, Inc. Sat Nov 11 11:37:29 2023 Page 1 ID:ttwY35f4XG0RA8Ojy64tSgzKsVE-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



2-2-8

Scale = 1:28.7



16-10-0 16-10-0									
Plate Offsets (X,Y)	[8:0-1-8,Edge], [17:0-3-0,0-0-0]								
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 0.50 BC 0.73 WB 0.47	DEFL. in Vert(LL) -0.21 Vert(CT) -0.29 Horz(CT) 0.05	17-18 >692	L/d <b>PLATES</b> 480 MT20 360 n/a	<b>GRIP</b> 244/190			
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S			Weight: 93 lb	FT = 20%F, 11%E			

LUMBER-BRACING-

TOP CHORD 2x4 SP No.1(flat) 2x4 SP No.1(flat) **BOT CHORD WEBS** 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. (size) 22=0-3-8, 12=Mechanical Max Grav 22=906(LC 1), 12=912(LC 1)

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

2-3=-1901/0, 3-4=-3102/0, 4-6=-3102/0, 6-7=-3742/0, 7-8=-3742/0, 8-9=-3163/0, TOP CHORD

9-10=-1893/0

**BOT CHORD** 21-22=0/1137, 20-21=0/2621, 18-20=0/3497, 17-18=0/3742, 15-17=0/3742, 13-15=0/2668,

12-13=0/1127

2-22=-1424/0, 2-21=0/995, 3-21=-937/0, 3-20=0/615, 6-20=-504/0, 6-18=0/574,

 $10 - 12 = -1414/0,\ 10 - 13 = 0/997,\ 9 - 13 = -1009/0,\ 9 - 15 = 0/629,\ 8 - 15 = -901/0,\ 8 - 17 = -90/348$ 

### NOTES-

**WEBS** 

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x6 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 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.



November 14,2023



Job	Truss	Truss Type	Qty	Ply	Lot 1A Heritage at Neill's Cre
				l .	I61967730
J1023-5900	F04	Floor	3	1	Joh Deference (entional)
					Job Reference (optional)

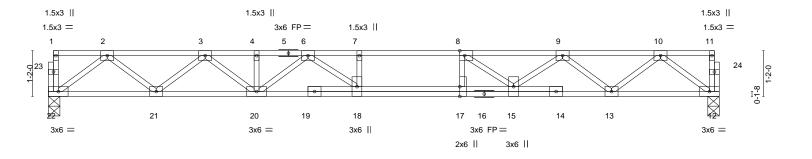
8.430 s Jan 6 2022 MiTek Industries, Inc. Sat Nov 11 11:37:30 2023 Page 1 ID:ttwY35f4XG0RA8Ojy64tSgzKsVE-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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

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

except end verticals.





<b>—</b>			17-1-8 17-1-8				
Plate Offsets (X,Y)	[8:0-1-8,Edge], [17:0-3-0,0-0-0]						
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0	SPACING- 1-7-3 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES	CSI. TC 0.33 BC 0.59 WB 0.39	DEFL. Vert(LL) Vert(CT) Horz(CT)	-0.18 17-18 >	l/defl L/d >999 480 >818 360 n/a n/a	PLATES MT20	<b>GRIP</b> 244/190
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S	1.012(01)	0.01 12	11/4	Weight: 94 lb	FT = 20%F, 11%E

**BOT CHORD** 

LUMBER-BRACING-TOP CHORD

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

> (size) 22=0-3-8, 12=0-3-8 Max Grav 22=737(LC 1), 12=737(LC 1)

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

2-3=-1552/0, 3-4=-2544/0, 4-6=-2544/0, 6-7=-3093/0, 7-8=-3093/0, 8-9=-2595/0, TOP CHORD

9-10=-1545/0

**BOT CHORD** 21-22=0/926, 20-21=0/2143, 18-20=0/2873, 17-18=0/3093, 15-17=0/3093, 13-15=0/2178,

12-13=0/918

**WEBS** 2-22=-1159/0, 2-21=0/815, 3-21=-769/0, 3-20=0/513, 6-20=-420/0, 6-18=0/498,

10-12=-1149/0, 10-13=0/816, 9-13=-825/0, 9-15=0/530, 8-15=-774/0, 8-17=-69/294

### NOTES-

REACTIONS.

### 1) Unbalanced floor live loads have been considered for this design.

- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 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	Ply	Lot 1A Heritage at Neill's Cre
J1023-5900	F05	FLOOR	12	1	l61967731
31023-3900	1 03	LOOK	12	'	Job Reference (optional)

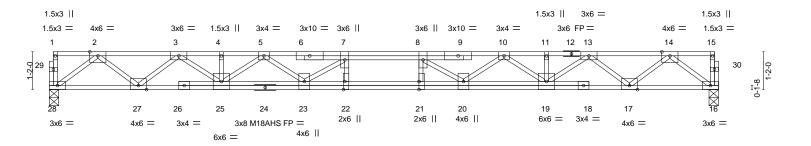
8.430 s Jan 6 2022 MiTek Industries, Inc. Sat Nov 11 11:37:31 2023 Page 1 ID:ttwY35f4XG0RA8Ojy64tSgzKsVE-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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

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

except end verticals.

0-1-8 H <del>- 1-3-0</del> 0-1-8 Scale = 1:35.6 2-2-0



						20-0-0					
						20-8-0					1
Plate Offse	ets (X,Y)	[21:0-3-0,0-0-0], [22:0-3-0	),Edgel								
LOADING	i (psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defI	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.43	Vert(LL)	-0.32 21-22	>769	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.40	Vert(CT)	-0.44 21-22	>558	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.06 16	n/a	n/a		
BCDL	5.0	Code IRC2015/TF	PI2014	Matri	x-S					Weight: 128 lb	FT = 20%F, 11%E

**BOT CHORD** 

20-8-0

LUMBER-BRACING-TOP CHORD

TOP CHORD 2x4 SP 2400F 2.0E(flat) **BOT CHORD** 2x4 SP 2400F 2.0E(flat)

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

REACTIONS. (size) 28=0-3-8, 16=0-3-8

Max Grav 28=1117(LC 1), 16=1117(LC 1)

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

TOP CHORD 2-3=-2411/0, 3-4=-4327/0, 4-5=-4327/0, 5-7=-5545/0, 7-8=-6056/0, 8-10=-5545/0,

10-11=-4327/0. 11-13=-4327/0. 13-14=-2411/0

**BOT CHORD** 27-28=0/1403, 25-27=0/3455, 23-25=0/4991, 22-23=0/6056, 21-22=0/6056, 20-21=0/6056, 19-20=0/4991, 17-19=0/3455, 16-17=0/1403

**WEBS** 2-28=-1758/0, 2-27=0/1312, 3-27=-1358/0, 3-25=0/1089, 14-16=-1758/0, 14-17=0/1312,

13-17=-1358/0, 13-19=0/1089, 10-19=-828/0, 10-20=0/737, 5-25=-828/0, 5-23=0/737,

7-23=-921/0, 8-20=-921/0

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 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.



November 14,2023



Job	Truss	Truss Type	Qty	Ply	Lot 1A Heritage at Neill's Cre
			_		I61967732
J1023-5900	F06	FLOOR	2	1	
					Job Reference (optional)

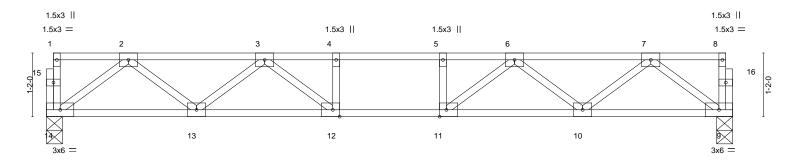
8.430 s Jan 6 2022 MiTek Industries, Inc. Sat Nov 11 11:37:32 2023 Page 1 ID:ttwY35f4XG0RA8Ojy64tSgzKsVE-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

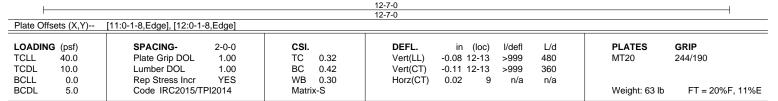
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.







**BOT CHORD** 

LUMBER-BRACING-TOP CHORD

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

REACTIONS. (size) 14=0-3-8, 9=0-3-8

Max Grav 14=672(LC 1), 9=672(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-1311/0, 3-4=-1971/0, 4-5=-1971/0, 5-6=-1971/0, 6-7=-1311/0 TOP CHORD **BOT CHORD** 13-14=0/829, 12-13=0/1757, 11-12=0/1971, 10-11=0/1757, 9-10=0/829  $2\text{-}14\text{=-}1038/0,\ 2\text{-}13\text{=-}0/627,\ 3\text{-}13\text{=-}581/0,\ 3\text{-}12\text{=-}0/472,\ 7\text{-}9\text{=-}1038/0,\ 7\text{-}10\text{=-}0/627,\ 3\text{-}10\text{=-}0/627,\ 3\text{$ **WEBS** 6-10=-581/0, 6-11=0/472

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 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.



November 14,2023



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

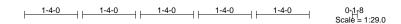
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

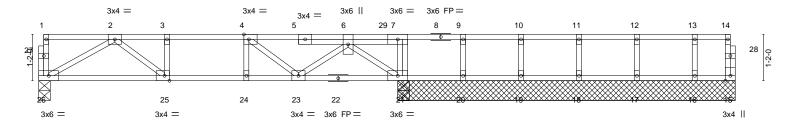




8.430 s Jan 6 2022 MiTek Industries, Inc. Sat Nov 11 11:37:34 2023 Page 1 ID:ttwY35f4XG0RA8Ojy64tSgzKsVE-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f







<b>—</b>		9-0-8			9-2-0			17-6-8		
Plate Offsets (X	,Y) [4:0-1-8,Edge], [	9-0-8 25:0-1-8.Edgel			0-11-8			8-4-8		
	, , <u>, , , , , , , , , , , , , , , , , </u>									
LOADING (psf)			CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0			_	0.45	Vert(LL)	-0.07 23-24	>999	480	MT20	244/190
TCDL 10.0			_	0.54	Vert(CT)	-0.08 23-24	>999	360		
BCLL 0.0				0.27	Horz(CT)	0.01 15	n/a	n/a		
BCDL 5.0	Code IRC	C2015/TPI2014	Matrix-	·S					Weight: 85 lb	FT = 20%F, 11%E

LUMBER-BRACING-

TOP CHORD 2x4 SP No.1(flat) **BOT CHORD** 2x4 SP No.1(flat) **WEBS** 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 8-6-0 except (jt=length) 26=0-3-8.

Max Uplift All uplift 100 lb or less at joint(s) 20 (lb) -

Max Grav All reactions 250 lb or less at joint(s) 15, 20, 19, 18, 17, 16 except 26=523(LC 3), 21=1403(LC 1), 21=1403(LC 1)

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

TOP CHORD 2-3=-1165/0, 3-4=-1165/0, 4-6=-1085/0 **BOT CHORD** 25-26=0/760, 24-25=0/1165, 23-24=0/1165, 21-23=0/924

**WEBS** 7-21=-828/0, 2-26=-874/0, 2-25=0/567, 3-25=-251/0, 6-21=-1019/0

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 1.5x3 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20.
- 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.
- CAUTION, Do not erect truss backwards.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 859 lb down at 8-8-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 15-26=-10. 1-14=-100

Concentrated Loads (lb) Vert: 29=-802(B)



November 14,2023



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)





8.430 s Jan 6 2022 MiTek Industries, Inc. Sat Nov 11 11:37:35 2023 Page 1 ID:ttwY35f4XG0RA8Ojy64tSgzKsVE-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

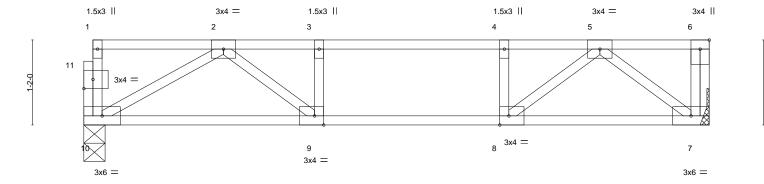
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.



Scale = 1:15.8



8-7-0

Plate Offs	sets (X,Y)	[8:0-1-8,Edge], [9:0-1-8,E	Edge], [11:0-1-	8,0-1-8]								
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.37	Vert(LL)	-0.05	9-10	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.29	Vert(CT)	-0.07	9-10	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.01	7	n/a	n/a		
BCDL	5.0	Code IRC2015/TI	PI2014	Matri	x-S						Weight: 43 lb	FT = 20%F, 11%E

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

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

REACTIONS. 10=0-3-8, 7=Mechanical (size)

Max Grav 10=452(LC 1), 7=458(LC 1)

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

2-3=-872/0, 3-4=-872/0, 4-5=-872/0 9-10=0/626, 8-9=0/872, 7-8=0/509 **BOT CHORD** 

2-10=-719/0, 2-9=0/397, 5-7=-639/0, 5-8=0/506, 4-8=-255/0 **WEBS** 

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 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.



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818 Soundside Road Edenton, NC 27932

Job Truss Truss Type Qty Ply Lot 1A Heritage at Neill's Cre 161967735 FLOOR GIRDER J1023-5900 F09-GR Job Reference (optional)
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Fayetteville, NC - 28314, Comtech, Inc.

ID:ttwY35f4XG0RA8Ojy64tSgzKsVE-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

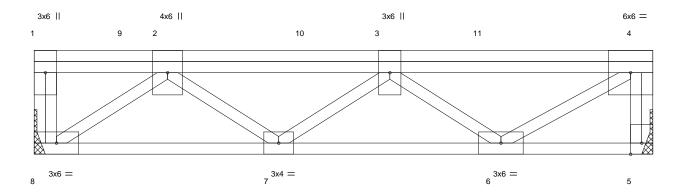
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

1-3-0 1-5-8

Scale = 1:13.0



3x4 ||

		6-11-8 1-8-8				
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 NO Code IRC2015/TPI2014	CSI. TC 0.36 BC 0.39 WB 0.57 Matrix-P	DEFL.         in (loc)           Vert(LL)         -0.02         6-7           Vert(CT)         -0.03         6-7           Horz(CT)         0.01         5	l/defl L/d >999 480 >999 360 n/a n/a	PLATES MT20 Weight: 47 lb	<b>GRIP</b> 244/190 FT = 20%F, 11%E

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x4 SP No.1(flat)

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

REACTIONS. (size) 5=Mechanical, 8=Mechanical

Max Grav 5=846(LC 1), 8=967(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 4-5=-838/0, 2-3=-1511/0, 3-4=-1025/0

BOT CHORD 7-8=0/1177, 6-7=0/1809

WFBS 2-8=-1445/0, 2-7=0/423, 3-7=-380/0, 3-6=-997/0, 4-6=0/1205

### NOTES-

- 1) Plates checked for a plus or minus 1 degree rotation about its center.
- 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) 359 lb down at 1-1-4, and 358 Ib down at 3-1-4, and 358 lb down at 5-1-4 on top chord. The design/selection of such connection device(s) is the responsibility of
- 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: 9=-359(F) 10=-358(F) 11=-358(F)



November 14,2023



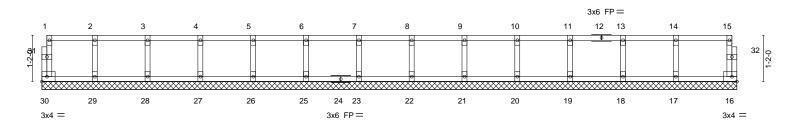
	Job	Truss	Truss Type	Qty	Ply	Lot 1A Heritage at Neill's Cre
						l61967736
	J1023-5900	FKW1	Floor Supported Gable	1	1	
L						Job Reference (optional)

0-11-8

8.430 s Jan 6 2022 MiTek Industries, Inc. Sat Nov 11 11:37:36 2023 Page 1 ID:ttwY35f4XG0RA8Ojy64tSgzKsVE-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-1-8

Scale = 1:29.1



	17-6-8 17-6-8											
LOADING (p	psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
	0.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10	0.0	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	16	n/a	n/a		
BCDL	5.0	Code IRC2015/TF	PI2014	Matri	x-R	, ,					Weight: 73 lb	FT = 20%F, 11%E

LUMBER-

2x4 SP No.1(flat) TOP CHORD **BOT CHORD** 2x4 SP No.1(flat)

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 17-6-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 30, 16, 29, 28, 27, 26, 25, 23, 22, 21, 20, 19, 18, 17

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

### NOTES-

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 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.



November 14,2023



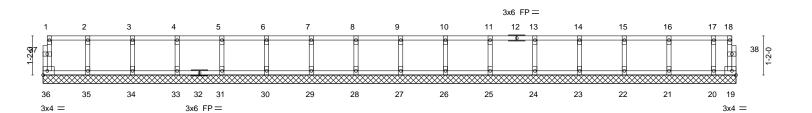
Job	Truss	Truss Type	Qty	Ply	Lot 1A Heritage at Neill's Cre
14000 5000	FIZINO	Flace Company of Cabila	_		I61967737
J1023-5900	FKW2	Floor Supported Gable	1	1	Job Reference (optional)

0-11-8

8.430 s Jan 6 2022 MiTek Industries, Inc. Sat Nov 11 11:37:37 2023 Page 1 ID:ttwY35f4XG0RA8Ojy64tSgzKsVE-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-11-8

Scale = 1:34.4



	20-6-0 20-8-0									
LOADING (psf) TCLL 40.0	SPACING- 2-0-0 Plate Grip DOL 1.00	CSI. TC 0.06	DEFL. Vert(LL)	in (loc)	l/defl n/a	L/d 999	PLATES MT20	<b>GRIP</b> 244/190		
TCDL 10.0 BCLL 0.0	Lumber DOL 1.00 Rep Stress Incr YES	BC 0.01 WB 0.03	Vert(CT) Horz(CT)	n/a - 0.00 19		999 n/a	WIIZO	244/190		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-R	1.0.2(0.1)	0.00	.,, \	.,,	Weight: 86 lb	FT = 20%F, 11%E		

20 0 0

LUMBER-

2x4 SP No.1(flat) TOP CHORD **BOT CHORD** 2x4 SP No.1(flat)

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

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

**BOT CHORD** 

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

except end verticals.

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

REACTIONS. All bearings 20-8-0.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 36, 19, 35, 34, 33, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22,

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

### NOTES-

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 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.



November 14,2023





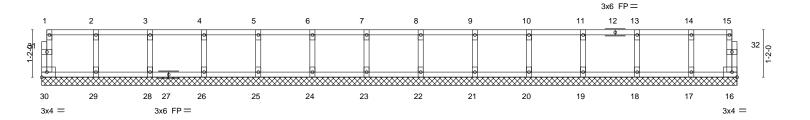
Job	Truss	Truss Type	Qty	Ply	Lot 1A Heritage at Neill's Cre
	=			l .	I61967738
J1023-5900	FKW4	Floor Supported Gable	1	1	I-b Defenses (entire al)
					Job Reference (optional)

8.430 s Jan 6 2022 MiTek Industries, Inc. Sat Nov 11 11:37:38 2023 Page 1 ID:ttwY35f4XG0RA8Ojy64tSgzKsVE-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-1-8

Scale = 1:28.4





	17-1-8 17-1-8											
LOADING TCLL	G (psf) 40.0	SPACING- Plate Grip DOL	2-0-0 1.00	CSI.	0.06	DEFL. Vert(LL)	in n/a	(loc)	l/defl n/a	L/d 999	PLATES MT20	<b>GRIP</b> 244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999	WITZO	244/130
BCLL BCDL	0.0 5.0	Rep Stress Incr Code IRC2015/TF	YES PI2014	WB Matri	0.03 x-R	Horz(CT)	0.00	16	n/a	n/a	Weight: 72 lb	FT = 20%F, 11%E

TOP CHORD

LUMBER-

2x4 SP No.1(flat)

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

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

**BOT CHORD** 

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

except end verticals.

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

REACTIONS. All bearings 17-1-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 30, 16, 29, 28, 26, 25, 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) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 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.

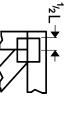


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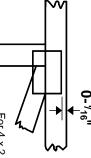


### Symbols

### PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0-  $\frac{1}{16}$  from outside edge of truss.

₹

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

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

### PLATE SIZE

4 × 4

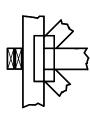
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

### 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**



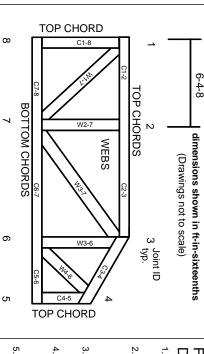
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur Min size shown is for crushing only.

## Industry Standards: ANSI/TPI1: National Design Specification for Metal

DSB-22:

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

## Numbering System



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

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

## Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282 ESR-4722, ESL-1388

## Design General Notes

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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### MITOK



MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

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

œ

Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.

9

- 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 alter 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.
- The design does not take into account any dynamic or other loads other than those expressly stated.