

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 251075-B 861 Mann Road

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: I76200379 thru I76200393

My license renewal date for the state of North Carolina is December 31, 2025.

North Carolina COA: C-0844



September 10,2025

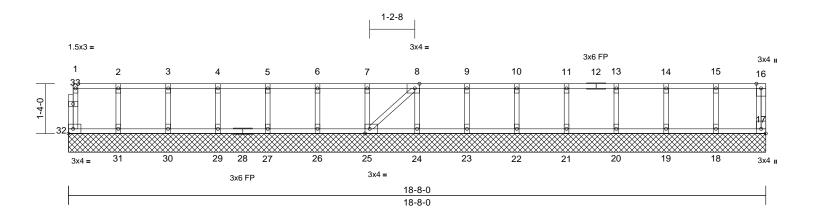
Gilbert, Eric

**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	861 Mann Road	
251075-B	ET1	Floor Supported Gable	1	1	Job Reference (optional)	176200379

Run: 25.30 S Aug 20 2025 Print: 25.3.0 S Aug 20 2025 MiTek Industries, Inc. Tue Sep 09 07:24:49 ID: tLz ISiCk4ttUX oh UqmfgStyJZ5j-RfC? PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC? for the property of the prope

Page: 1



### Scale = 1:30.8

Plate Offsets (X, Y): [8:0-1-8,Edge], [17:Edge,0-1-8], [25:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	17	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 85 lb	FT = 20%F, 11%E

### LUMBER

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

### **BRACING**

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

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

REACTIONS (size) 17=18-8-0, 18=18-8-0, 19=18-8-0, 20=18-8-0, 21=18-8-0, 22=18-8-0, 23=18-8-0, 24=18-8-0, 25=18-8-0, 26=18-8-0, 27=18-8-0, 29=18-8-0, 30=18-8-0, 31=18-8-0, 32=18-8-0

17=52 (LC 1), 18=156 (LC 1), Max Grav 19=145 (LC 1), 20=147 (LC 1), 21=147 (LC 1), 22=147 (LC 1), 23=147 (LC 1), 24=149 (LC 1), 25=145 (LC 1), 26=147 (LC 1), 27=147 (LC 1), 29=147 (LC 1),

30=146 (LC 1), 31=152 (LC 1),

32=49 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-32=-44/0, 16-17=-47/0, 1-2=-2/0, 2-3=-2/0, 3-4=-2/0, 4-5=-2/0, 5-6=-2/0, 6-7=-2/0,

7-8=-2/0, 8-9=0/0, 9-10=0/0, 10-11=0/0 11-13=0/0, 13-14=0/0, 14-15=0/0, 15-16=0/0

**BOT CHORD** 31-32=0/2, 30-31=0/2, 29-30=0/2, 27-29=0/2, 26-27=0/2, 25-26=0/2, 24-25=0/0, 23-24=0/0,

22-23=0/0, 21-22=0/0, 20-21=0/0, 19-20=0/0,

18-19=0/0, 17-18=0/0

WEBS 2-31=-138/0, 3-30=-133/0, 4-29=-133/0, 5-27=-133/0, 6-26=-133/0, 7-25=-133/0,

8-24=-135/0, 9-23=-133/0, 10-22=-133/0, 11-21=-133/0, 13-20=-134/0, 14-19=-132/0,

15-18=-142/0, 8-25=0/3

### **NOTES**

- 1) All plates are 1.5x3 (||) MT20 unless otherwise indicated.
- Plates checked for a plus or minus 1 degree rotation about its center.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely 4) braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

LOAD CASE(S) Standard



September 10,2025



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

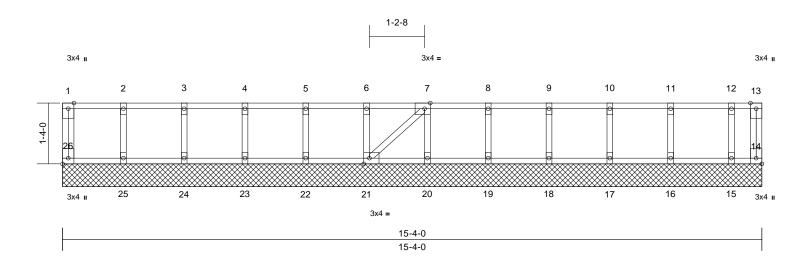
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



Job	Truss	Truss Type	Qty	Ply	861 Mann Road	
251075-B	ET2	Floor Supported Gable	1	1	Job Reference (optional)	176200380

Run: 25.30 S Aug 20 2025 Print: 25.3.0 S Aug 20 2025 MiTek Industries. Inc. Tue Sep 09 07:24:50 ID: tLz ISiCk4ttUX oh UqmfgStyJZ5j-RfC? PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC? for the property of the prope

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Scale = 1:25.3

Plate Offsets (X, Y): [7:0-1-8,Edge], [14:Edge,0-1-8], [21:0-1-8,Edge], [26:Edge,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	16	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 72 lb	FT = 20%F, 11%E

### LUMBER

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

### BRACING

TOP CHORD Structural wood sheathing directly applied or

10-0-0 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 14=15-4-0, 15=15-4-0, 16=15-4-0, 17=15-4-0, 18=15-4-0, 19=15-4-0,

20=15-4-0, 21=15-4-0, 22=15-4-0, 23=15-4-0, 24=15-4-0, 25=15-4-0,

26=15-4-0

14=8 (LC 1), 15=121 (LC 1), Max Grav 16=152 (LC 1), 17=145 (LC 1),

18=147 (LC 1), 19=147 (LC 1), 20=147 (LC 1), 21=147 (LC 1), 22=147 (LC 1), 23=147 (LC 1),

24=145 (LC 1), 25=156 (LC 1), 26=52 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-26=-47/0, 13-14=-7/0, 1-2=0/0, 2-3=0/0, 3-4=0/0, 4-5=0/0, 5-6=0/0, 6-7=0/0, 7-8=0/0,

8-9=0/0, 9-10=0/0, 10-11=0/0, 11-12=0/0,

12-13=0/0

25-26=0/0, 24-25=0/0, 23-24=0/0, 22-23=0/0, BOT CHORD 21-22=0/0, 20-21=0/0, 19-20=0/0, 18-19=0/0,

17-18=0/0. 16-17=0/0. 15-16=0/0. 14-15=0/0 WFBS 2-25=-142/0, 3-24=-132/0, 4-23=-134/0,

5-22=-133/0, 6-21=-133/0, 7-20=-133/0, 8-19=-133/0. 9-18=-134/0. 10-17=-132/0. 11-16=-138/0, 12-15=-110/0, 7-21=0/0

### NOTES

All plates are 1.5x3 (||) MT20 unless otherwise indicated.

- Plates checked for a plus or minus 1 degree rotation about its center.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

LOAD CASE(S) Standard



September 10,2025



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

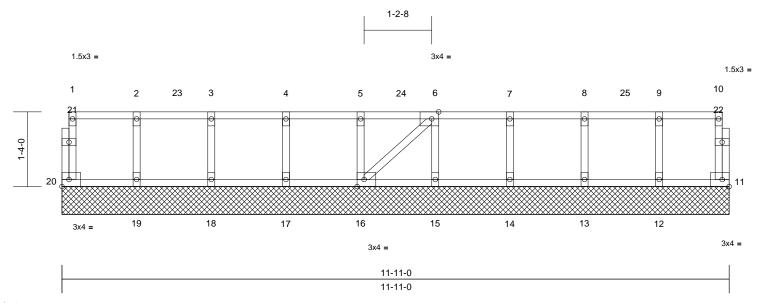
building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria 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)



Job	Truss	Truss Type	Qty	Ply	861 Mann Road	
251075-B	ET3	Floor Supported Gable	1	1	Job Reference (optional)	176200381

Run: 25.30 S Aug 20 2025 Print: 25.3.0 S Aug 20 2025 MiTek Industries, Inc. Tue Sep 09 07:24:50 ID:tLzISiCk4ttUXohUqmfgStyJZ5j-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:20.6

Plate Offsets ()	(, Y):	[6:0-1-8,Edge],	[16:0-1-8,Edge]
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 56 lb	FT = 20%F, 11%E

### LUMBER

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

### BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 6-0-0 oc

bracing.

REACTIONS (size)

11=11-11-0, 12=11-11-0, 13=11-11-0, 14=11-11-0, 15=11-11-0, 16=11-11-0, 17=11-11-0, 18=11-11-0, 19=11-11-0, 20=11-11-0

Max Uplift 11=-9 (LC 3), 12=-44 (LC 6), 13=-36 (LC 6), 14=-54 (LC 6), 15=-47 (LC 6), 16=-35 (LC 6), 17=-54 (LC 6), 18=-49 (LC 6).

17=-54 (LC 6), 18=-49 (LC 6), 19=-29 (LC 6), 20=-4 (LC 3)

Max Grav 11=34 (LC 1), 12=234 (LC 4), 13=220 (LC 4), 14=251 (LC 4), 15=239 (LC 4), 16=219 (LC 4),

17=251 (LC 4), 18=240 (LC 4), 19=216 (LC 4), 20=41 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-20=-36/8, 10-11=-30/13, 1-2=-2/0, 2-3=-2/0, 3-4=-2/0, 4-5=-2/0, 5-6=-2/0, 6-7=-2/1,

7-8=-2/1, 8-9=-2/1, 9-10=-2/1

BOT CHORD 19-20=0/2, 18-19=0/2, 17-18=0/2, 16-17=0/2,

15-16=-1/2, 14-15=-1/2, 13-14=-1/2,

12-13=-1/2, 11-12=-1/2

WEBS 2-19=-201/38, 3-18=-227/57, 4-17=-237/62, 5-16=-206/43, 6-15=-226/55, 7-14=-237/62,

8-13=-207/44, 9-12=-220/52, 6-16=0/0

NOTES

- Unbalanced floor live loads have been considered for
   this desire.
- 2) All plates are 1.5x3 (||) MT20 unless otherwise indicated.
- Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 6) Gable studs spaced at 1-4-0 oc.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 4 lb uplift at joint 20, 9 lb uplift at joint 11, 29 lb uplift at joint 19, 49 lb uplift at joint 18, 54 lb uplift at joint 17, 35 lb uplift at joint 16, 47 lb uplift at joint 15, 54 lb uplift at joint 14, 36 lb uplift at joint 13 and 44 lb uplift at joint 12.
- 8) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 202 lb down and 105 lb up at 2-0-12, 202 lb down and 105 lb up at 4-0-12, 202 lb down and 105 lb up at 6-0-12, and 202 lb down and 105 lb up at 8-0-12, and 202 lb down and 105 lb up at 8-0-12, and 202 lb down and 105 lb up at 10-0-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.

### LOAD CASE(S) Standard

 Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (lb/ft) Vert: 11-20=-10, 1-10=-100

Concentrated Loads (lb) Vert: 4=-92, 7=-92, 23=-92, 24=-92, 25=-92



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

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/TPH 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)

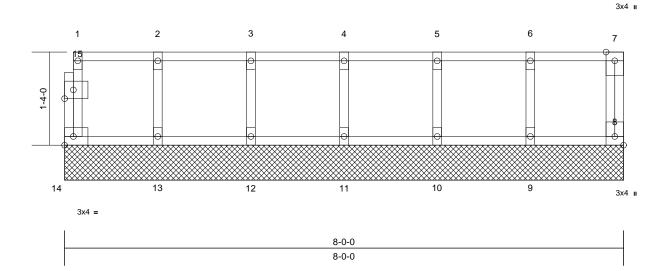


Job	Truss	Truss Type	Qty	Ply	861 Mann Road	
251075-B	ET4	Floor Supported Gable	1	1	Job Reference (optional)	176200382

Run: 25.30 S Aug 20 2025 Print: 25.3.0 S Aug 20 2025 MiTek Industries, Inc. Tue Sep 09 07:24:50 ID: tLz ISiCk4ttUX oh UqmfgStyJZ5j-RfC? PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC? for the property of the prope

Page: 1

3x4 =



Scale = 1:16.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	8	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 38 lb	FT = 20%F, 11%E

LOAD CASE(S) Standard

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

BRACING

LUMBER

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

**BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 8=8-0-0, 9=8-0-0, 10=8-0-0,

11=8-0-0, 12=8-0-0, 13=8-0-0,

14=8-0-0

Max Grav 8=63 (LC 1), 9=142 (LC 1), 10=148

(LC 1), 11=146 (LC 1), 12=148 (LC 1), 13=142 (LC 1), 14=57 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-14=-51/0, 7-8=-56/0, 1-2=-9/0, 2-3=-9/0,

3-4=-9/0, 4-5=-9/0, 5-6=-9/0, 6-7=-9/0

**BOT CHORD** 13-14=0/9, 12-13=0/9, 11-12=0/9, 10-11=0/9,

9-10=0/9, 8-9=0/9

**WEBS** 2-13=-130/0, 3-12=-134/0, 4-11=-133/0,

5-10=-134/0, 6-9=-130/0

### NOTES

- All plates are 1.5x3 (||) MT20 unless otherwise 1) 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).
- Gable studs spaced at 1-4-0 oc.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.



September 10,2025

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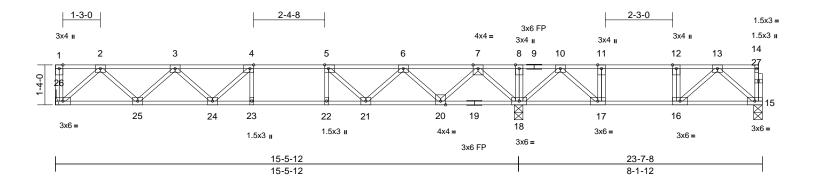
building design. Bracing indicated is to prevent bucking of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, 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)



Job	Truss	Truss Type	Qty	Ply	861 Mann Road	
251075-B	F01	Floor	1	1	Job Reference (optional)	176200383

Run: 25.30 S Aug 20 2025 Print: 25.3.0 S Aug 20 2025 MiTek Industries, Inc. Tue Sep 09 07:24:50 ID: tLz ISiCk4ttUX oh UqmfgStyJZ5j-RfC? PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC? fill the property of the prop

Page: 1



### Scale = 1:38.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.53	Vert(LL)	-0.17	23-24	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.82	Vert(CT)	-0.22	23-24	>857	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.04	15	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 124 lb	FT = 20%F, 11%E

### LUMBER

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

### BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc

bracing, Except:

6-0-0 oc bracing: 17-18,16-17.

REACTIONS (size) 15=0-3-8, 18=0-3-8, 26=

Mechanical

Max Grav 15=401 (LC 4), 18=1425 (LC 1),

26=810 (LC 10)

**FORCES** (lb) - Maximum Compression/Maximum

Tension TOP CHORD

1-26=-45/0, 14-15=-53/1, 1-2=0/0,

2-3=-1423/0, 3-4=-2212/0, 4-5=-2432/0, 5-6=-2066/0, 6-7=-1128/0, 7-8=0/713,

8-10=0/713, 10-11=-586/83, 11-12=-586/83, 12-13=-586/83, 13-14=-3/0

BOT CHORD 25-26=0/860, 24-25=0/1958, 23-24=0/2432,

22-23=0/2432, 21-22=0/2432, 20-21=0/1727,

18-20=0/493, 17-18=-345/238,

16-17=-83/586, 15-16=0/379 **WEBS** 8-18=-163/0, 2-26=-1145/0, 2-25=0/783,

3-25=-745/0, 3-24=0/376, 4-24=-429/0, 4-23=-150/99, 7-18=-1261/0, 7-20=0/911. 6-20=-862/0, 6-21=0/511, 5-21=-632/0

5-22=-60/188, 10-18=-688/0, 10-17=0/672,

11-17=-356/0, 13-15=-500/0 13-16=-127/276, 12-16=-172/66

### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- All plates are 3x4 (=) MT20 unless otherwise indicated.

- Plates checked for a plus or minus 1 degree rotation about its center.
- Refer to girder(s) for truss to truss connections.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

LOAD CASE(S) Standard



September 10,2025



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

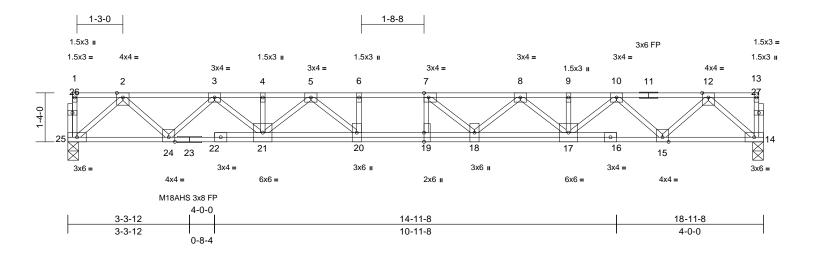
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



Job	Truss	Truss Type	Qty	Ply	861 Mann Road	
251075-B	F02	FLOOR	4	1	Job Reference (optional)	176200384

Run: 25.30 S Aug 20 2025 Print: 25.3.0 S Aug 20 2025 MiTek Industries, Inc. Tue Sep 09 07:24:50 ID: tLz ISiCk4ttUX oh UqmfgStyJZ5j-RfC? PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC? full fill for the property of the property of

Page: 1



Scale = 1:31.4

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.53	Vert(LL)	-0.24	18-19	>933	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.58	Vert(CT)	-0.33	18-19	>679	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.05	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 115 lb	FT = 20%F, 11%E

LOAD CASE(S) Standard

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

BRACING

LUMBER

TOP CHORD Structural wood sheathing directly applied or 5-11-12 oc purlins, except end verticals. BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc

bracing. REACTIONS

14=0-3-8, 25=0-3-8 (size)

Max Grav 14=1023 (LC 1), 25=1023 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-25=-35/0, 13-14=-35/0, 1-2=-2/0, 2-3=-1882/0, 3-4=-3291/0, 4-5=-3291/0,

5-6=-4133/0, 6-7=-4133/0, 7-8=-4028/0, 8-9=-3291/0, 9-10=-3291/0, 10-12=-1881/0,

12-13=-2/0

BOT CHORD 24-25=0/1107, 21-24=0/2671, 20-21=0/3789,

19-20=0/4133, 18-19=0/4133, 17-18=0/3803,

15-17=0/2675, 14-15=0/1106

WEBS 2-25=-1471/0, 2-24=0/1078, 3-24=-1097/0,

3-21=0/823. 4-21=-90/0, 5-21=-661/0, 5-20=0/673, 6-20=-163/0, 12-14=-1470/0, 12-15=0/1078, 10-15=-1104/0, 10-17=0/817,

9-17=-50/0, 8-17=-680/0, 8-18=0/407, 7-18=-500/220, 7-19=-333/177

### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- Plates checked for a plus or minus 1 degree rotation
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.



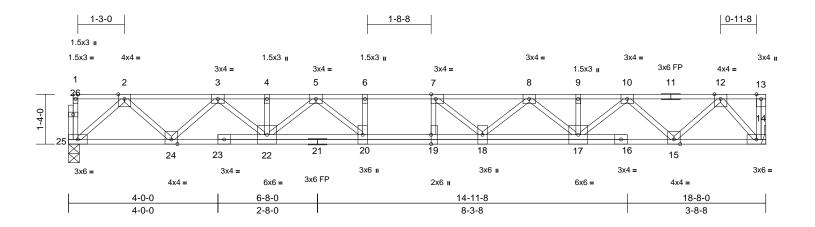
September 10,2025



Job	Truss	Truss Type	Qty	Ply	861 Mann Road	
251075-B	F03	Floor	9	1	Job Reference (optional)	00385

Run: 25.30 S Aug 20 2025 Print: 25.3.0 S Aug 20 2025 MiTek Industries, Inc. Tue Sep 09 07:24:50 ID: tLz ISiCk4ttUX oh UqmfgStyJZ5j-RfC? PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC? full fill for the property of the property of

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Scale = 1:30.8

Plate Offsets (X, Y)	[7:0-1-8,Edge],	[19:0-3-0,Edge]
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.51	Vert(LL)	-0.22	19	>985	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.56	Vert(CT)	-0.31	19	>718	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.05	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 114 lb	FT = 20%F, 11%E

5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

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

BRACING

LUMBER

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 14= Mechanical, 25=0-3-8 (size) Max Grav 14=1013 (LC 1), 25=1007 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-25=-35/0, 13-14=-17/0, 1-2=-2/0,

2-3=-1847/0, 3-4=-3221/0, 4-5=-3221/0, 5-6=-4013/0, 6-7=-4013/0, 7-8=-3873/0, 8-9=-3108/0, 9-10=-3108/0, 10-12=-1668/0,

12-13=0/0

BOT CHORD 24-25=0/1089, 22-24=0/2620, 20-22=0/3696,

19-20=0/4013, 18-19=0/4013, 17-18=0/3633,

15-17=0/2476, 14-15=0/879

WEBS 2-25=-1447/0, 2-24=0/1055, 3-24=-1075/0,

3-22=0/799, 4-22=-89/0, 5-22=-630/0, 5-20=0/641, 6-20=-158/0, 12-14=-1316/0, 12-15=0/1098, 10-15=-1124/0, 10-17=0/839, 9-17=-52/0, 8-17=-697/0, 8-18=0/417,

7-18=-521/181, 7-19=-310/189

### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- Plates checked for a plus or minus 1 degree rotation about its center.
- Refer to girder(s) for truss to truss connections.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.



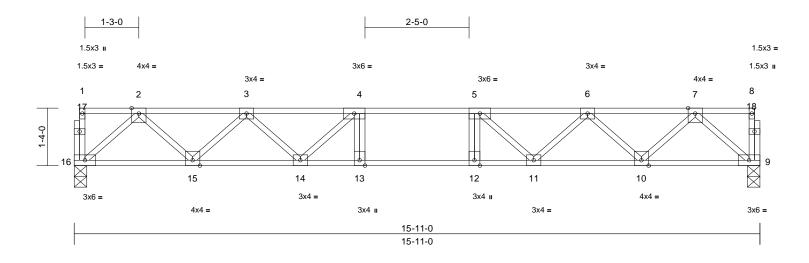
September 10,2025



Job	Truss	Truss Type	Qty	Ply	861 Mann Road	
251075-B	F04	Floor	5	1	Job Reference (optional)	6200386

Run: 25.30 S Aug 20 2025 Print: 25.3.0 S Aug 20 2025 MiTek Industries, Inc. Tue Sep 09 07:24:50 ID: tLz ISiCk4ttUX oh UqmfgStyJZ5j-RfC? PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC? for the property of the prope

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Loading	(psf)	Spacing	2-0-0	csı		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.49	Vert(LL)	-0.19	13-14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.82	Vert(CT)	-0.23	13-14	>803	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.04	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 84 lb	FT = 20%F, 11%E

### LUMBER

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

### BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 9=0-3-8, 16=0-3-8

Max Grav 9=855 (LC 1), 16=855 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-16=-42/0, 8-9=-42/0, 1-2=-2/0, 2-3=-1533/0,

3-4=-2429/0, 4-5=-2753/0, 5-6=-2429/0,

6-7=-1533/0, 7-8=-2/0

**BOT CHORD** 15-16=0/919, 14-15=0/2117, 13-14=0/2753,

12-13=0/2753, 11-12=0/2753, 10-11=0/2117,

9-10=0/919

**WEBS** 2-16=-1221/0, 2-15=0/854, 3-15=-812/0,

3-14=0/488, 4-14=-621/0, 4-13=-127/169, 7-9=-1221/0, 7-10=0/854, 6-10=-812/0, 6-11=0/488, 5-11=-621/0, 5-12=-127/169

### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- Plates checked for a plus or minus 1 degree rotation about its center.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

LOAD CASE(S) Standard



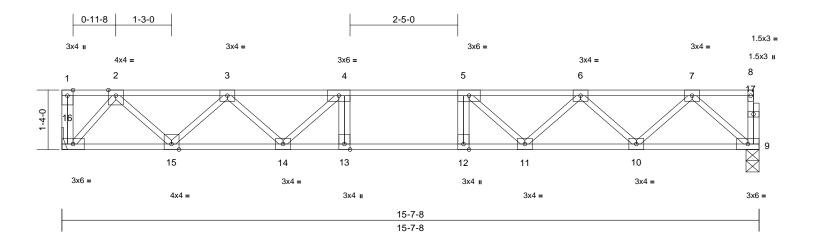
September 10,2025



Job	Truss	Truss Type	Qty	Ply	861 Mann Road	
251075-B	F05	Floor	8	1	Job Reference (optional)	200387

Run: 25.30 S Aug 20 2025 Print: 25.3.0 S Aug 20 2025 MiTek Industries, Inc. Tue Sep 09 07:24:50 ID: tLz ISiCk4ttUX oh UqmfgStyJZ5j-RfC? PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC? full fill for the property of the property of

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Scale = 1:25.8

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.51	Vert(LL)	-0.19	11-12	>985	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.84	Vert(CT)	-0.24	11-12	>780	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.04	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 83 lb	FT = 20%F, 11%E

### LUMBER

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

### BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 9=0-3-8, 16= Mechanical Max Grav 9=839 (LC 1), 16=846 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-16=-25/4, 8-9=-42/0, 1-2=0/0, 2-3=-1360/0,

3-4=-2290/0, 4-5=-2650/0, 5-6=-2361/0,

6-7=-1499/0, 7-8=-2/0

**BOT CHORD** 15-16=0/732, 14-15=0/1958, 13-14=0/2650,

12-13=0/2650, 11-12=0/2650, 10-11=0/2068,

9-10=0/900

**WEBS** 2-16=-1096/0, 2-15=0/874, 3-15=-832/0,

3-14=0/503, 4-14=-646/0, 4-13=-110/179, 7-9=-1195/0, 7-10=0/833, 6-10=-793/0, 6-11=0/464, 5-11=-580/0, 5-12=-138/151

### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- Plates checked for a plus or minus 1 degree rotation about its center.
- Refer to girder(s) for truss to truss connections.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

LOAD CASE(S) Standard



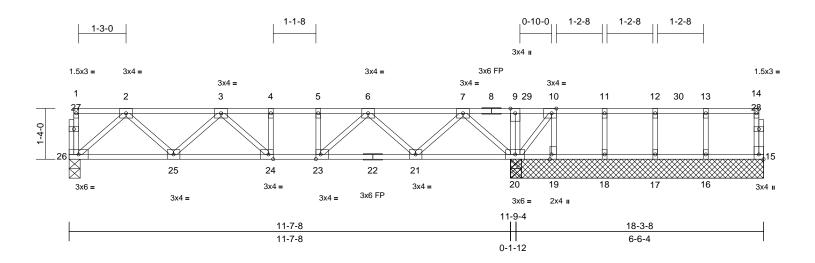
September 10,2025



Job	Truss	Truss Type	Qty	Ply	861 Mann Road	
251075-B	F06	Floor	1	1	Job Reference (optional)	176200388

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Page: 1



Scale = 1:30.3

Plate Offsets (X, Y): [10:0-1-8,Edge], [15:Edge,0-1-8], [19:0-1-8,Edge], [23:0-1-8,Edge], [24:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.27	Vert(LL)	-0.05	24-25	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.32	Vert(CT)	-0.06	24-25	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.01	15	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 95 lb	FT = 20%F, 11%E

LUMBER

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

**BRACING** 

TOP CHORD

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

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc

bracing.

REACTIONS (size) 15=6-8-0, 16=6-8-0, 17=6-8-0,

18=6-8-0, 19=6-8-0, 20=6-8-0,

26=0-3-8

Max Uplift 15=-1 (LC 3), 16=-36 (LC 6),

17=-58 (LC 6), 18=-72 (LC 6), 19=-602 (LC 1)

15=50 (LC 8), 16=246 (LC 4), Max Grav 17=256 (LC 29), 18=292 (LC 28),

19=-70 (LC 48), 20=1615 (LC 1),

26=563 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

1-26=-36/0, 14-15=-45/6, 1-2=-2/0,

2-3=-901/0, 3-4=-1186/0, 4-5=-1186/0, 5-6=-1186/0, 6-7=-518/0, 7-9=0/642, 9-10=0/641, 10-11=-2/0, 11-12=-2/0,

12-13=-2/0, 13-14=-2/0

BOT CHORD 25-26=0/592, 24-25=0/1168, 23-24=0/1186,

21-23=0/946, 20-21=0/78, 19-20=0/2, 18-19=0/2. 17-18=0/2. 16-17=0/2. 15-16=0/2

WFBS 9-20=-238/80, 2-26=-786/0, 2-25=0/430,

3-25=-372/0, 3-24=-97/196, 4-24=-102/18 7-20=-961/0, 13-16=-230/45, 12-17=-244/65,

7-21=0/612, 11-18=-276/81, 10-19=0/594, 10-20=-992/0, 6-21=-596/0, 6-23=0/409,

5-23=-193/0

1) Unbalanced floor live loads have been considered for

All plates are 1.5x3 (||) MT20 unless otherwise 2) indicated.

Plates checked for a plus or minus 1 degree rotation about its center.

Truss to be fully sheathed from one face or securely 4) braced against lateral movement (i.e. diagonal web).

Gable studs spaced at 2-0-0 oc.

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1 lb uplift at joint 15, 36 lb uplift at joint 16, 58 lb uplift at joint 17, 72 lb uplift at joint 18 and 602 lb uplift at joint 19.

Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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) 243 lb down and 121 lb up at 12-0-12, and 243 lb down and 121 lb up at 14-0-12, and 243 lb down and 121 lb up at 16-0-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.

### LOAD CASE(S) Standard

Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (lb/ft)

Vert: 15-26=-10, 1-14=-100 Concentrated Loads (lb)

Vert: 11=-112, 29=-112, 30=-112



September 10,2025

NOTES

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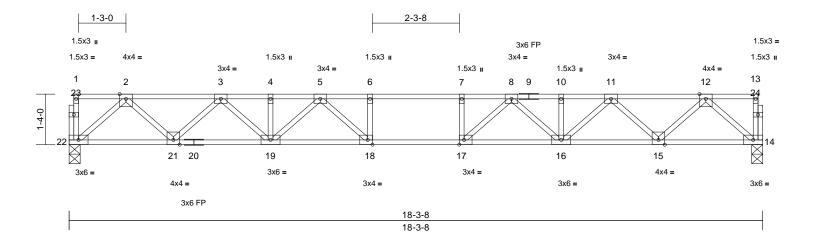
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



ſ	Job	Truss	Truss Type	Qty	Ply	861 Mann Road	
	251075-B	F07	Floor	3	1	Job Reference (optional)	176200389

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Page: 1



Scale = 1:30.4

	Plate Offsets	(X, Y):	[17:0-1-8,Edge],	[18:0-1-8,Edge]
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.66	Vert(LL)	-0.24	18-19	>885	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.81	Vert(CT)	-0.33	18-19	>658	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.06	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 96 lb	FT = 20%F, 11%E

### LUMBER

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

### BRACING

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

Rigid ceiling directly applied or 10-0-0 oc

bracing.

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

Max Grav 14=986 (LC 1), 22=986 (LC 1) **FORCES** (lb) - Maximum Compression/Maximum

TOP CHORD

Tension 1-22=-34/0, 13-14=-34/0, 1-2=-2/0,

2-3=-1811/0, 3-4=-3034/0, 4-5=-3034/0, 5-6=-3661/0, 6-7=-3661/0, 7-8=-3661/0,

8-10=-3034/0, 10-11=-3034/0, 11-12=-1811/0, 12-13=-2/0

BOT CHORD 21-22=0/1071, 19-21=0/2523, 18-19=0/3407,

17-18=0/3661, 16-17=0/3407, 15-16=0/2523,

14-15=0/1071

2-22=-1423/0, 2-21=0/1030, 3-21=-989/0, WEBS

3-19=0/695, 4-19=-103/0, 5-19=-507/0 5-18=-40/665, 6-18=-338/0, 12-14=-1423/0, 12-15=0/1030, 11-15=-989/0, 11-16=0/695, 10-16=-103/0, 8-16=-507/0, 8-17=-40/665,

7-17=-338/0

### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- Plates checked for a plus or minus 1 degree rotation about its center.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

LOAD CASE(S) Standard



September 10,2025



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

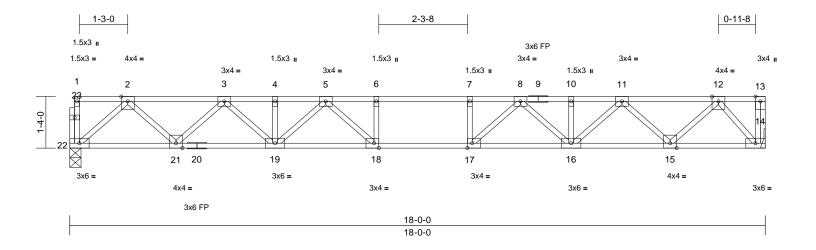
building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, 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)



Job	Truss	Truss Type	Qty	Ply	861 Mann Road	
251075-B	F08	Floor	2	1	Job Reference (optional)	176200390

Run: 25.30 S Aug 20 2025 Print: 25.3.0 S Aug 20 2025 MiTek Industries, Inc. Tue Sep 09 07:24:51 ID: tLz ISiCk4ttUX oh UqmfgStyJZ5j-RfC? PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC? for the property of the prope

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Scale = 1:29.8

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.Ó	Plate Grip DOL	1.00	тс	0.68	Vert(LL)	-0.24	18-19	>873	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.82	Vert(CT)	-0.33	18-19	>651	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.06	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 95 lb	FT = 20%F, 11%E

5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

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

2x4 SP No.3(flat) OTHERS

BRACING

LUMBER

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 14= Mechanical, 22=0-3-8 (size) Max Grav 14=976 (LC 1), 22=970 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-22=-34/0, 13-14=-16/0, 1-2=-2/0,

2-3=-1776/0, 3-4=-2967/0, 4-5=-2967/0, 5-6=-3541/0, 6-7=-3541/0, 7-8=-3541/0, 8-10=-2863/0, 10-11=-2863/0, 11-12=-1607/0,

12-13=0/0

BOT CHORD 21-22=0/1052, 19-21=0/2472, 18-19=0/3321,

17-18=0/3541, 16-17=0/3255, 15-16=0/2334,

14-15=0/852

2-22=-1399/0, 2-21=0/1007, 3-21=-968/0, WEBS

3-19=0/672, 4-19=-99/0, 5-19=-482/0, 5-18=-63/626, 6-18=-320/0, 12-14=-1276/0, 12-15=0/1051, 11-15=-1011/0, 11-16=0/719, 10-16=-106/0, 8-16=-532/0, 8-17=-1/688,

7-17=-348/0

### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- Plates checked for a plus or minus 1 degree rotation about its center.
- Refer to girder(s) for truss to truss connections.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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 10,2025

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

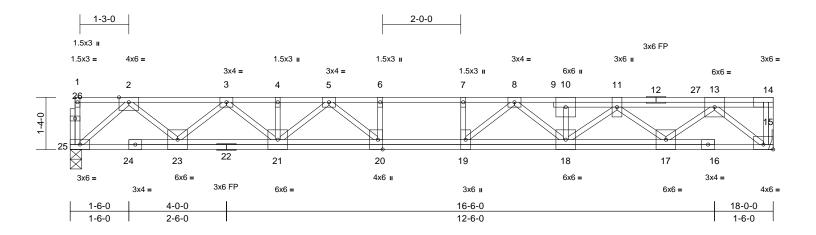
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



Job	Truss	Truss Type	Qty	Ply	861 Mann Road		
251075-B	F09	Floor Girder	1	1	Job Reference (optional)	176200391	

Run: 25.30 S Aug 20 2025 Print: 25.3.0 S Aug 20 2025 MiTek Industries, Inc. Tue Sep 09 07:24:51 ID:tLzISiCk4ttUXohUqmfgStyJZ5j-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:29.5

Plate Offsets (X,	Y):	[15:Edge,0-1-8], [20:0-3-0,Edge]
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	тс	0.53	Vert(LL)	-0.21	19-20	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.63	Vert(CT)	-0.28	19-20	>752	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.55	Horz(CT)	0.05	15	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 123 lb	FT = 20%F, 11%E

### LUMBER

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

### 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

15= Mechanical, 25=0-3-8 (size) Max Grav 15=1398 (LC 1), 25=1019 (LC 1)

**FORCES** 

(lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-25=-35/0, 14-15=0/16, 1-2=-2/0, 2-3=-1957/0, 3-4=-3322/0, 4-5=-3322/0, 5-6=-4097/0, 6-7=-4097/0, 7-8=-4097/0,

8-10=-3732/0, 10-11=-3732/0, 11-13=-2563/0,

13-14=0/0

BOT CHORD 23-25=0/1123, 21-23=0/2747, 20-21=0/3778,

19-20=0/4097. 18-19=0/3946. 17-18=0/3406.

15-17=0/1690

WEBS 2-25=-1493/0, 2-23=0/1131, 3-23=-1072/0, 3-21=0/763, 4-21=-92/0, 5-21=-643/0,

5-20=0/721, 6-20=-227/0, 13-15=-2199/0 13-17=0/1155, 11-17=-1116/0, 11-18=0/422, 10-18=-7/10, 8-18=-425/0, 8-19=-160/557,

7-19=-207/0

### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- Plates checked for a plus or minus 1 degree rotation about its center.
- Refer to girder(s) for truss to truss connections.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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) 550 lb down at 16-0-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (lb/ft)

Vert: 15-25=-10, 1-14=-100

Concentrated Loads (lb)

Vert: 27=-470 (F)



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

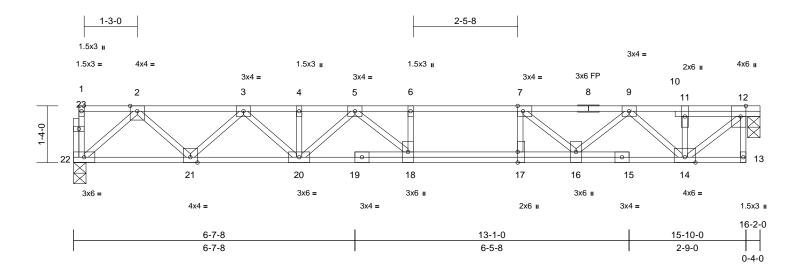
building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria 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)



Job	Truss	Truss Type	Qty	Ply	861 Mann Road	
251075-B	F10	Floor	1	1	Job Reference (optional)	176200392

Run: 25.30 S Aug 20 2025 Print: 25.3.0 S Aug 20 2025 MiTek Industries, Inc. Tue Sep 09 07:24:51 ID: tLz ISiCk4ttUX oh UqmfgStyJZ5j-RfC? PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC? full fill for the property of the property of

Page: 1



Scale = 1:27.1

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.48	Vert(LL)	-0.15	18-20	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.61	Vert(CT)	-0.21	18-20	>890	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.01	12	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 94 lb	FT = 20%F, 11%E

LUMBER LOAD CASE(S) Standard

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

BRACING

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

bracing.

REACTIONS (size) 12=0-3-8, 22=0-3-8

Max Grav 12=861 (LC 1), 22=854 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-22=-34/0, 12-13=0/12, 1-2=-2/0, 2-3=-1526/0, 3-4=-2469/0, 4-5=-2469/0,

5-6=-2800/0, 6-7=-2800/0, 7-9=-2128/0,

9-11=-910/0, 11-12=-910/0

**BOT CHORD** 21-22=0/921, 20-21=0/2102, 18-20=0/2713,

17-18=0/2800, 16-17=0/2800, 14-16=0/1611,

13-14=0/0

WEBS 11-14=-110/0, 12-14=0/1184, 2-22=-1224/0, 2-21=0/841, 3-21=-801/0, 3-20=0/498,

4-20=-91/0 5-20=-357/0 5-18=-76/404 6-18=-180/0, 9-14=-953/0, 9-16=0/701,

7-16=-984/0, 7-17=-12/418

### NOTES

- Unbalanced floor live loads have been considered for 1) this design.
- Plates checked for a plus or minus 1 degree rotation about its center.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- CAUTION, Do not erect truss backwards.



September 10,2025



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

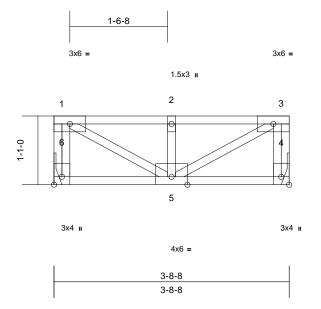
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Job	Truss	Truss Type	Qty	Ply	861 Mann Road		
251075-B	F11	Floor Girder	1	1	Job Reference (optional)	176200393	

Run: 25.30 S Aug 20 2025 Print: 25.3.0 S Aug 20 2025 MiTek Industries, Inc. Tue Sep 09 07:24:51 ID: tLz ISiCk4ttUX oh UqmfgStyJZ5j-RfC? PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC? full fill for the property of the property of

Page: 1



Scale = 1:18.2

Plate Offsets (X, Y):	[4:Edge,0-1-8], [6:Edge,0-1-8]
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.15	Vert(LL)	-0.01	5	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.04	Vert(CT)	-0.01	5	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.48	Horz(CT)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 22 lb	FT = 20%F, 11%E

### LUMBER

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

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or 3-8-8 oc purlins, except end verticals. **BOT CHORD** 

Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 4= Mechanical, 6= Mechanical

Max Grav 4=570 (LC 1), 6=570 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-6=-558/0, 3-4=-558/0, 1-2=-877/0,

2-3=-877/0

**BOT CHORD** 5-6=0/0, 4-5=0/0 1-5=0/1003, 2-5=-963/0, 3-5=0/1003

### WEBS NOTES

- Plates checked for a plus or minus 1 degree rotation 1) about its center.
- Refer to girder(s) for truss to truss connections.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

### LOAD CASE(S) Standard

Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (lb/ft) Vert: 4-6=-10, 1-3=-100

Concentrated Loads (lb)

Vert: 2=-761

September 10,2025



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### Symbols

## PLATE LOCATION AND ORIENTATION



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



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

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

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

### PLATE SIZE

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

## LATERAL BRACING LOCATION



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

### **BEARING**



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

### Industry Standards:

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

DSB-22: ANSI/TPI1:

## 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

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

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

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## MiTek



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

# General Safety Notes

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

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Ņ 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

'n

- joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1. Place plates on each face of truss at each
- 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

- 9 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 camber for dead load deflection responsibility of truss fabricator. General practice is to
- 11. 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
- 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.
- Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- 19. Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- 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.