

Trenco 818 Soundside Rd Edenton, NC 27932

Re: J0824-4543

Lot 160 Duncanx Creek

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: I67613444 thru I67613460

My license renewal date for the state of North Carolina is December 31, 2024.

North Carolina COA: C-0844



August 19,2024

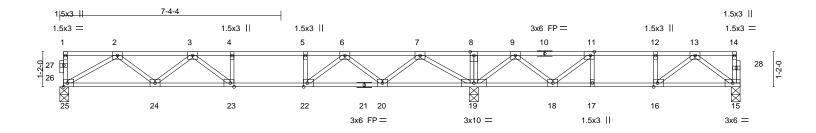
Gilbert, Eric

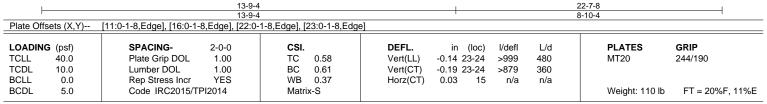
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), 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 160 Duncanx Creek
		_	_		I67613444
J0824-4543	F01	Floor	5	1	
					Job Reference (optional)

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 16 11:45:01 2024 Page 1 ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f







LUMBER-**BRACING-**

TOP CHORD 2x4 SP No.1(flat) BOT CHORD 2x4 SP No.1(flat) TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

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

REACTIONS. (size) 25=0-3-8, 15=0-3-8, 19=0-3-8

Max Grav 25=688(LC 10), 15=405(LC 4), 19=1436(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1474/0, 3-4=-2006/0, 4-5=-2006/0, 5-6=-2006/0, 6-7=-1052/3, 7-8=0/1108, 8-9=0/1107, 9-11=-407/303, 11-12=-714/61, 12-13=-714/61

BOT CHORD 24-25=0/1022, 23-24=0/1871, 22-23=0/2006, 20-22=0/1609, 19-20=-202/488,

18-19=-504/87, 17-18=-61/714, 16-17=-61/714, 15-16=0/450

2-25=-1193/0, 2-24=0/588, 3-24=-516/0, 3-23=-77/312, 7-19=-1456/0, 7-20=0/776,

6-20=-778/0, 6-22=0/714, 5-22=-329/0, 13-15=-561/0, 13-16=-101/337, 9-19=-886/0,

9-18=0/544, 11-18=-583/0

### NOTES-

WFBS

- 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.
- 5) CAUTION, Do not erect truss backwards.





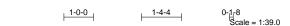
Job	Truss	Truss Type	Qty	Ply	Lot 160 Duncanx Creek
					l67613445
J0824-4543	F02	FLOOR	2	1	
					Job Reference (optional)

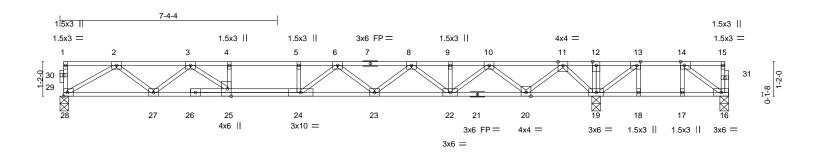
8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 16 11:45:01 2024 Page 1 ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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

except end verticals.







		22-7-8		
ı		4-5-12		
Plate Offsets (X,Y)	[13:0-1-8,Edge], [14:0-1-8,Edge], [25:0-	3-0,Edge]		
LOADING (psf)	SPACING- 1-7-3	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 40.0 TCDL 10.0	Plate Grip DOL 1.00 Lumber DOL 1.00	TC 0.79 BC 0.76	Vert(LL) -0.22 23-24 >973 480 Vert(CT) -0.30 23-24 >709 360	MT20 244/190
BCLL 0.0 BCDL 5.0	Rep Stress Incr YES Code IRC2015/TPI2014	WB 0.50 Matrix-S	Horz(CT) 0.04 19 n/a n/a	Weight: 118 lb FT = 20%F, 11%E

TOP CHORD

LUMBER-BRACING-

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

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

REACTIONS. (size) 28=0-3-8, 16=0-3-8, 19=0-3-8

Max Uplift 16=-249(LC 3)

Max Grav 28=719(LC 10), 16=101(LC 4), 19=1357(LC 1)

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

2-3=-1630/0, 3-4=-2766/0, 4-5=-2766/0, 5-6=-2766/0, 6-8=-2581/0, 8-9=-1826/0, 9-10=-1826/0, 10-11=-492/0, 11-12=0/1325, 12-13=0/1324, 13-14=-15/569 TOP CHORD

 $27 - 28 = 0/1085, \ 25 - 27 = 0/2240, \ 24 - 25 = 0/2768, \ 23 - 24 = 0/2786, \ 22 - 23 = 0/2322, \ 20 - 22 = 0/1251, \ 20 - 22 = 0/2322, \ 20 -$ BOT CHORD

19-20=-387/0, 18-19=-569/15, 17-18=-569/15, 16-17=-569/15

WEBS 2-28=-1267/0, 2-27=0/710, 3-27=-792/0, 3-25=0/792, 11-19=-1283/0, 11-20=0/1046, 10-20=-997/0, 10-22=0/742, 8-22=-640/0, 8-23=0/344, 6-23=-276/0, 6-24=-180/296,

14-16=-14/710, 13-19=-1050/0, 13-18=0/255

### 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 249 lb uplift at joint 16.
- 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.

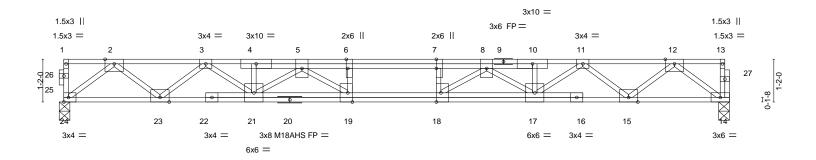




Job	Truss	Truss Type	Qty	Ply	Lot 160 Duncanx Creek
					I67613446
J0824-4543	F03	Floor	4	1	
					Job Reference (optional)

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 16 11:45:02 2024 Page 1 ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f





			18-3-8	
Plate Offsets (X,Y)	[6:0-3-0,Edge], [7:0-3-0,0-0-0], [18:0-3-	0,Edge], [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 0.28	Vert(LL) -0.23 18-19 >957 480	MT20 244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.65	Vert(CT) -0.31 18-19 >695 360	M18AHS 186/179
BCLL 0.0	Rep Stress Incr YES	WB 0.53	Horz(CT) 0.06 14 n/a n/a	
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 116 lb FT = 20%F, 11%E

18-3-8

LUMBER-**BRACING-**

2x4 SP No.1(flat) TOP CHORD TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, BOT CHORD 2x4 SP No.1(flat) except end verticals.

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

REACTIONS. (size) 24=0-3-8, 14=0-3-8 Max Grav 24=989(LC 1), 14=983(LC 1)

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

TOP CHORD 2-3=-2035/0, 3-4=-3611/0, 4-5=-3617/0, 5-6=-4741/0, 6-7=-4741/0, 7-8=-4741/0,

8-10=-3647/0, 10-11=-3643/0, 11-12=-2076/0

BOT CHORD  $23-24=0/1178,\ 21-23=0/2922,\ 19-21=0/4361,\ 18-19=0/4741,\ 17-18=0/4412,\ 15-17=0/2955,$ 

14-15=0/1228

2-24=-1504/0, 2-23=0/1114, 3-23=-1155/0, 3-21=0/860, 5-21=-915/0, 5-19=0/798, 6-19=-335/0, 12-14=-1538/0, 12-15=0/1104, 11-15=-1144/0, 11-17=0/858, 8-17=-939/0,

8-18=-37/759, 7-18=-312/0

### NOTES-

WFBS

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 4x6 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.





Job	Truss	Truss Type	Qty	Ply	Lot 160 Duncanx Creek
					l67613447
J0824-4543	F04	FLOOR	3	1	
					Job Reference (optional)

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 16 11:45:02 2024 Page 1 ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

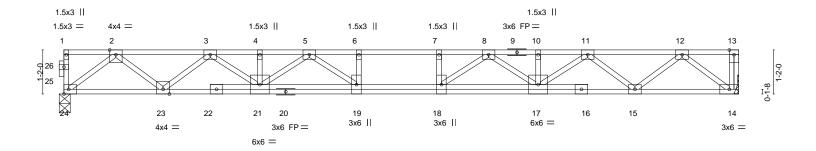
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.



2-0-0 Scale = 1:30.5



<del></del>			18-0-0 18-0-0	
LOADING (psf	SPACING- 1-7-3	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.32	Vert(LL) -0.20 18-19 >999 480	MT20 244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.50	Vert(CT) -0.28 18-19 >763 360	
BCLL 0.0	Rep Stress Incr YES	WB 0.41	Horz(CT) 0.04 14 n/a n/a	
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 104 lb FT = 20%F, 11%E

TOP CHORD

**BOT CHORD** 

LUMBER-BRACING-

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

REACTIONS. 24=0-3-8, 14=Mechanical

Max Grav 24=778(LC 1), 14=778(LC 1)

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

TOP CHORD 2-3=-1596/0, 3-4=-2819/0, 4-5=-2819/0, 5-6=-3453/0, 6-7=-3453/0, 7-8=-3453/0, 8-10=-2840/0, 10-11=-2840/0,

11-12=-1629/0

23-24=0/927, 21-23=0/2286, 19-21=0/3208, 18-19=0/3453, 17-18=0/3220, 15-17=0/2313, 14-15=0/966 BOT CHORD 2-24=-1183/0, 2-23=0/871, 3-23=-899/0, 3-21=0/665, 5-21=-485/0, 5-19=0/530, 12-14=-1212/0, 12-15=0/863, **WEBS** 

11-15=-891/0, 11-17=0/657, 8-17=-475/0, 8-18=-4/520

### 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) 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.





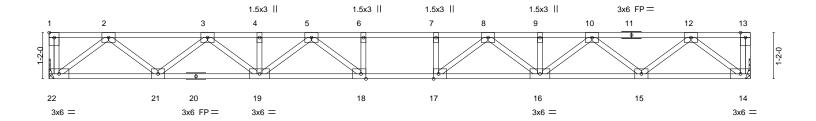
Job	Truss	Truss Type	Qty	Ply	Lot 160 Duncanx Creek
10004 4540	For	FLOOR			I67613448
J0824-4543	F05	FLOOR	1	1	Job Reference (optional)

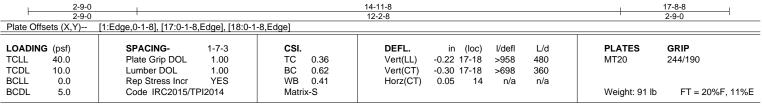
1-3-0

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 16 11:45:03 2024 Page 1 ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSqPqnL8w3uITXbGKWrCDoi7J4zJC?f

1-8-8

Scale = 1:29.1





LUMBER-**BRACING-**

TOP CHORD 2x4 SP No.1(flat) TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, BOT CHORD 2x4 SP No.1(flat)

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

REACTIONS. (size) 22=Mechanical, 14=Mechanical

Max Grav 22=768(LC 1), 14=768(LC 1)

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

TOP CHORD 2-3=-1614/0, 3-4=-2683/0, 4-5=-2683/0, 5-6=-3186/0, 6-7=-3186/0, 7-8=-3186/0,

8-9=-2683/0, 9-10=-2683/0, 10-12=-1614/0 BOT CHORD

21-22=0/959, 19-21=0/2242, 18-19=0/3000, 17-18=0/3186, 16-17=0/3000, 15-16=0/2242, 14-15=0/959

> 12-14=-1203/0, 2-22=-1203/0, 12-15=0/853, 2-21=0/853, 10-15=-818/0, 3-21=-818/0,  $10 - 16 = 0/563, \ 3 - 19 = 0/563, \ 8 - 16 = -405/0, \ 5 - 19 = -405/0, \ 8 - 17 = -68/488, \ 5 - 18 = -68/488$

### NOTES-

WFBS

- 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.





Job Truss Truss Type Qty Lot 160 Duncanx Creek 167613449 J0824-4543 F06 Floor

Comtech, Inc, Fayetteville, NC - 28314,

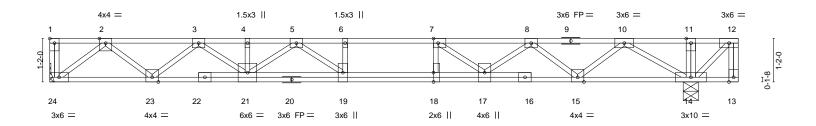
1-3-0

Job Reference (optional) 8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 16 11:45:03 2024 Page 1 ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

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

2-3-12 1-8-0 0-10-12

Scale = 1:31.0



<u> </u>		17-2-12 17-2-12				18-6-0
Plate Offsets (X,Y)	[1:Edge,0-1-8], [7:0-1-8,Edge], [18:0-3-0	0,Edge]				
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr NO	CSI. TC 0.60 BC 0.67 WB 0.50	DEFL. Vert(LL) Vert(CT) Horz(CT)	-0.23 19 :	l/defl L/d >894 480 >661 360 n/a n/a	PLATES GRIP MT20 244/190
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S				Weight: 107 lb FT = 20%F, 11%E

LUMBER-BRACING-

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

except end verticals. WEBS 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 14-15.

REACTIONS. (size) 24=Mechanical, 14=0-4-15 Max Grav 24=925(LC 3), 14=1820(LC 1)

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

TOP CHORD 2-3=-1917/0, 3-4=-3316/0, 4-5=-3316/0, 5-6=-3884/0, 6-7=-3884/0, 7-8=-3280/0,

8-10=-2004/96, 10-11=0/829, 11-12=0/827

23-24=0/1145, 21-23=0/2719, 19-21=0/3698, 18-19=0/3884, 17-18=0/3884, 15-17=0/2778,

14-15=-374/1246

10-14=-1740/0, 10-15=0/1045, 8-15=-1054/0, 8-17=0/700, 7-17=-1060/0, 7-18=-88/419, 2-24=-1437/0, 2-23=0/1005, 3-23=-1044/0, 3-21=0/745, 5-21=-499/0, 5-19=-178/536,

12-14=-1107/0

### NOTES-

WFBS

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.

### LOAD CASE(S) Standard

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

Vert: 13-24=-10, 1-12=-100

Concentrated Loads (lb) Vert: 12=-700



August 19,2024



Job Truss Truss Type Qty Lot 160 Duncanx Creek 167613450 Floor J0824-4543 F07 5 Job Reference (optional) 8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 16 11:45:04 2024 Page 1

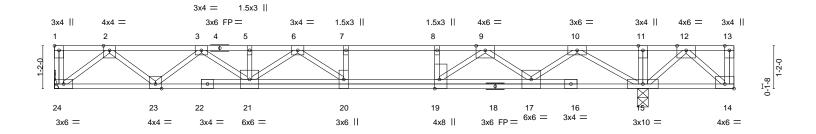
Fayetteville, NC - 28314, Comtech, Inc.

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1-8-0

1-3-0 1-0-10 1-0-10

Scale = 1:31.4



I		2-5-12		
Plate Offsets (X,Y)	[1:Edge,0-1-8], [14:Edge,0-1-8], [19:0-3			
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 0.75	Vert(LL) -0.20 20-21 >943 480	MT20 244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.75	Vert(CT) -0.27 20-21 >701 360	
BCLL 0.0	Rep Stress Incr NO	WB 0.58	Horz(CT) 0.03 15 n/a n/a	
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S	, ,	Weight: 109 lb FT = 20%F, 11%E

LUMBER-BRACING-

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

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

16-0-4

REACTIONS. (size) 24=Mechanical, 15=0-3-8 Max Grav 24=839(LC 3), 15=1958(LC 1)

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

TOP CHORD 13-14=-748/0, 2-3=-1701/0, 3-5=-2894/0, 5-6=-2894/0, 6-7=-3082/212, 7-8=-3082/212,

8-9=-3082/212, 9-10=-1633/1019, 10-11=0/1845, 11-12=0/1844 BOT CHORD

 $23 - 24 = 0/1032, \ 21 - 23 = 0/2406, \ 20 - 21 = 0/3105, \ 19 - 20 = -212/3082, \ 17 - 19 = -630/2434, \ 10 - 20 = -212/3082, \ 10 - 2$ 

15-17=-1340/898, 14-15=-844/0

WFBS 2-24=-1294/0, 2-23=0/871, 3-23=-918/0, 3-21=-11/609, 6-21=-314/203, 6-20=-516/326,

10-15=-1727/0, 10-17=0/1038, 9-17=-1201/0, 9-19=0/1209, 8-19=-323/0, 12-14=0/1127,

### 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.

### LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 14-24=-10, 1-13=-100

Concentrated Loads (lb) Vert: 13=-700



18-6-0

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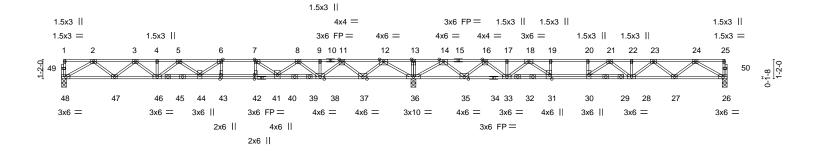


Job	Truss	Truss Type	Qty	Ply	Lot 160 Duncanx Creek
10004 4540	F00	El OOD	_		I67613451
J0824-4543	F08	FLOOR	/	1	
					Job Reference (optional)

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 16 11:45:05 2024 Page 1 ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

0-1-8





			21-1-4							39-11-0		
			ı	18-9-12								
Plate Offse	ets (X,Y)	[6:0-1-8,Edge], [7:0-1-8,E	dge], [31:0-3-0	),Edge], [42:	0-3-0,0-0-0	, [43:0-3-0,Edge]						
LOADING	(psf)	SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.78	Vert(LL)	-0.28	43	>905	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.35	Vert(CT)	-0.36	43	>697	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.03	36	n/a	n/a		
BCDL	5.0	Code IRC2015/TP	12014	Matri	x-S						Weight: 220 lb	FT = 20%F, 11%E

LUMBER-**BRACING-**

2x4 SP No.1(flat) TOP CHORD TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

BOT CHORD 2x4 SP 2400F 2.0E(flat) except end verticals. 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing. **WEBS** 

REACTIONS. (size) 48=0-3-8, 36=0-3-8, 26=0-3-8

Max Grav 48=790(LC 3), 36=2133(LC 1), 26=698(LC 4)

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

TOP CHORD 2-3=-1902/0, 3-4=-2926/0, 4-5=-2926/0, 5-6=-3534/0, 6-7=-3525/0, 7-8=-2922/110,
8-9=-1742/559, 9-11=-1742/559, 11-12=-78/1233, 12-13=0/3629, 13-14=0/3629,

14-16=-203/1601, 16-17=-1592/954, 17-18=-1592/954, 18-19=-2710/300,

 $19 - 20 = -2710/300,\ 20 - 21 = -2710/300,\ 21 - 22 = -2452/0,\ 22 - 23 = -2452/0,\ 23 - 24 = -1633/0$ 

47-48=0/1256, 46-47=0/2513, 44-46=0/3355, 43-44=0/3525, 42-43=0/3525, 40-42=0/3525, 38-40=-319/2439, 37-38=-858/1001, 36-37=-1891/0, 35-36=-2105/0, 33-35=-1264/988,

31-33=-653/2179, 30-31=-300/2710, 28-30=-65/2665, 27-28=0/2140, 26-27=0/1098

2-48=-1450/0, 2-47=0/841, 3-47=-795/0, 3-46=0/527, 5-46=-546/0, 6-44=-169/503, 6-43=-449/11, 12-36=-2010/0, 12-37=0/1318, 11-37=-1294/0, 11-38=0/1037,

8-38=-947/0, 8-40=0/681, 7-40=-1069/0, 7-42=0/498, 14-36=-1859/0, 14-35=0/1197,

16-35=-1157/0, 16-33=0/911, 18-33=-895/0, 18-31=0/996, 24-26=-1267/0, 24-27=0/696,

23-27=-660/0, 23-28=-57/397, 21-28=-272/189, 21-30=-424/67

### NOTES-

WEBS

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) 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.



August 19,2024



Job	Truss	Truss Type	Qty	Ply	Lot 160 Duncanx Creek
					167613452
J0824-4543	F11	Floor	2	1	
					Job Reference (optional)

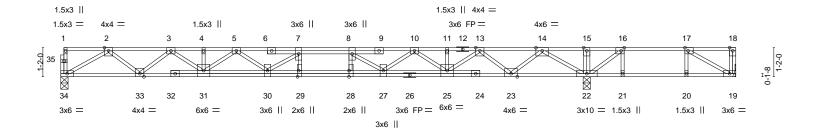
8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 16 11:45:06 2024 Page 1 ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



1-10-12

21-1-4

1-8-0 2-5-4 1-8-0 Scale = 1:46.2



				21-	I-4					ı	5-11-12	1
Plate Off	fsets (X,Y)	[16:0-1-8,Edge], [17:0-1-8	8,Edge], [28:0	-3-0,0-0-0], [2	29:0-3-0,Edg	ge]						
LOADIN	G (psf)	SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.77	Vert(LL)	-0.29	29	>856	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.43	Vert(CT)	-0.40	29	>623	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.05	22	n/a	n/a		
BCDL	5.0	Code IRC2015/TF	PI2014	Matri	x-S	' '					Weight: 158 lb	FT = 20%F, 11%E
				1								

LUMBER-**BRACING-**

TOP CHORD 2x4 SP No.1(flat) **BOT CHORD** 2x4 SP 2400F 2.0E(flat) WEBS 2x4 SP No.3(flat)

TOP CHORD **BOT 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, Except: 6-0-0 oc bracing: 21-22,20-21,19-20.

REACTIONS. (size) 34=0-3-8, 22=0-3-8, 19=Mechanical

Max Uplift 19=-93(LC 3)

Max Grav 34=876(LC 10), 22=1382(LC 9), 19=222(LC 4)

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

 $2\text{-}3\text{=-}2140/0,\ 3\text{-}4\text{=-}3531/0,\ 4\text{-}5\text{=-}3531/0,\ 5\text{-}7\text{=-}4367/0,\ 7\text{-}8\text{=-}4658/0,\ 8\text{-}10\text{=-}4169/0,}$ TOP CHORD

10-11=-3135/0, 11-13=-3135/0, 13-14=-1553/0, 14-15=0/976, 15-16=0/976,

16-17=-224/391

 $33-34=0/1396,\ 31-33=0/2908,\ 30-31=0/4001,\ 29-30=0/4658,\ 28-29=0/4658,\ 27-28=0/4658,\ 28-29=0/4658,\ 28-2$ **BOT CHORD** 

25-27=0/3697, 23-25=0/2408, 22-23=0/709, 21-22=-391/224, 20-21=-391/224,

WEBS 2-34=-1611/0, 2-33=0/968, 3-33=-1000/0, 3-31=0/778, 5-31=-586/0, 5-30=0/508,

7-30=-623/58, 14-22=-1796/0, 14-23=0/1111, 13-23=-1124/0, 13-25=0/916, 10-25=-711/0, 10-27=0/607, 8-27=-799/0, 16-22=-932/0, 17-19=-257/448

### 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) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 93 lb uplift at joint 19.
- 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.
- 7) CAUTION, Do not erect truss backwards.



August 19,2024

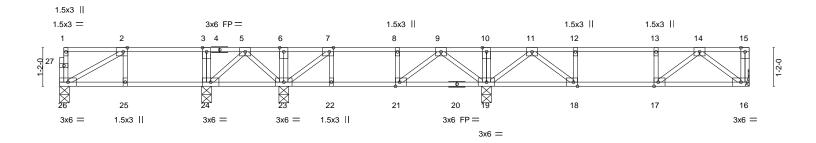


Job	Truss	Truss Type	Qty	Ply	Lot 160 Duncanx Creek
					I67613453
J0824-4543	F12	Floor	1	1	
					Job Reference (optional)

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 16 11:45:06 2024 Page 1 ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



2-3-12 Scale = 1:34.8



L		4-3-8 4-5 <sub>r</sub> 4	6-9-4	6-11-0	1	2-10-12	1			20-10-0	
		4-3-8 0-1-12	2-4-0	0-1-12	į	5-11-12	1			7-11-4	l
Plate Offs	sets (X,Y)	[2:0-1-8,Edge], [7:0-1-8,	Edge], [17:0	-1-8,Edge], [18	0-1-8,Edge],	, [21:0-1-8,Edge]					
LOADING	G (psf)	SPACING-	1-7-3	CSI.		DEFL.	in (loc)	I/defI	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.25	Vert(LL)	-0.03 16-17	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	ВС	0.19	Vert(CT)	-0.04 16-17	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.01 16	n/a	n/a		
BCDL	5.0	Code IRC2015/T	PI2014	Matri	x-S	` ′				Weight: 105 lb	FT = 20%F. 11%E

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. Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

**BOT CHORD** 6-0-0 oc bracing: 19-21,18-19.

BRACING-

REACTIONS. All bearings 0-3-8 except (jt=length) 16=Mechanical.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 24 except 26=258(LC 6), 19=686(LC 16), 16=327(LC 7), 23=477(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-348/0, 3-5=-348/0, 7-8=-417/0, 8-9=-417/0, 9-10=0/288, 10-11=0/288,

11-12=-552/0, 12-13=-552/0, 13-14=-552/0

BOT CHORD  $25-26=0/348,\ 24-25=0/348,\ 23-24=0/277,\ 22-23=0/417,\ 21-22=0/417,\ 19-21=-29/259,\ 24-25=0/279,$ 

18-19=-22/276, 17-18=0/552, 16-17=0/355

WEBS  $2 - 26 = -395/0, \ 7 - 23 = -331/0, \ 9 - 19 = -400/0, \ 5 - 23 = -295/0, \ 11 - 19 = -487/0, \ 11 - 18 = 0/392, \ 11 - 19 = -487/0, \ 11 - 19 = -487/0, \ 11 - 19 = -487/0,$ 

14-16=-445/0, 14-17=0/252

### NOTES-

LUMBER-

- 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.



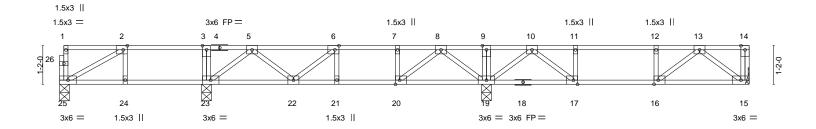
Job	Truss	Truss Type	Qty	Ply	Lot 160 Duncanx Creek
					167613454
J0824-4543	F13	FLOOR	1	1	
					Job Reference (optional)

0-1-8

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 16 11:45:07 2024 Page 1 ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

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





1	4-5-4		12-10-12		1			20-10-0	
	4-5-4		8-5-8		ı			7-11-4	ı
Plate Offsets (X,Y)	[2:0-1-8,Edge], [6:0-1-8,	Edge], [16:0-1-	8,Edge], [17:0-1-8,Edge],	[20:0-1-8,Edge]					
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2015/T	2-0-0 1.00 1.00 YES	CSI. TC 0.36 BC 0.49 WB 0.29 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.06 21-22 -0.08 21-22 0.02 15	I/defl >999 >999 n/a	L/d 480 360 n/a	PLATES MT20 Weight: 103 lb	<b>GRIP</b> 244/190 FT = 20%F, 11%E

BRACING-

**BOT CHORD** 

TOP CHORD 2x4 SP No.1(flat)

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, BOT CHORD 2x4 SP No.1(flat) except end verticals.

REACTIONS. All bearings 0-3-8 except (jt=length) 15=Mechanical.

(lb) - Max Grav All reactions 250 lb or less at joint(s) except 25=303(LC 5), 23=639(LC 16), 15=434(LC 13), 19=933(LC 1)

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

2-3=-377/0, 3-5=-377/0, 5-6=-936/0, 6-7=-1065/0, 7-8=-1065/0, 10-11=-785/0, TOP CHORD

11-12=-785/0, 12-13=-785/0

2x4 SP No.3(flat)

**BOT CHORD** 24-25=0/377, 23-24=0/377, 22-23=0/759, 21-22=0/1065, 20-21=0/1065, 19-20=0/654,

17-19=0/492, 16-17=0/785, 15-16=0/478

WEBS 2-25=-427/0, 5-23=-640/0, 5-22=0/260, 8-19=-703/0, 8-20=0/616, 7-20=-274/0,

13-15=-599/0, 13-16=0/392, 10-19=-586/0, 10-17=0/450

### NOTES-

LUMBER-

WEBS

- 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.



Job Truss Truss Type Qty Lot 160 Duncanx Creek 167613455 F14-GR J0824-4543 FLOOR GIRDER Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

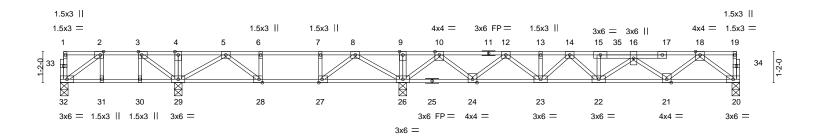
8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 16 11:45:08 2024 Page 1 ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

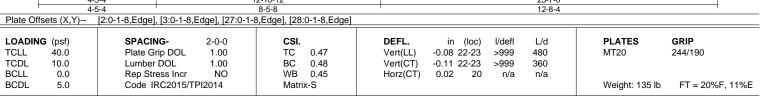
0-1-8

H 1-3-0 1-3-12 1-8-0 2-1-8 1-8-0

1-0-6 1-0-6

0-1-8 Scale = 1:43.4





LUMBER-**BRACING-**

TOP CHORD 2x4 SP No.1(flat) BOT CHORD 2x4 SP No.1(flat) TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals.

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

REACTIONS. All bearings 0-3-8.

Max Uplift All uplift 100 lb or less at joint(s) 32 (lb) -

Max Grav All reactions 250 lb or less at joint(s) 32 except 29=741(LC 3), 20=788(LC 13), 26=1422(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 3-4=0/468, 4-5=0/469, 5-6=-432/350, 6-7=-432/350, 7-8=-432/350, 8-9=0/1140,

9-10=0/1138, 10-12=-909/0, 12-13=-1995/0, 13-14=-1995/0, 14-15=-2362/0,

15-16=-2374/0, 16-18=-1637/0

28-29=-266/256, 27-28=-350/432, 26-27=-596/69, 23-24=0/1576, 22-23=0/2234, **BOT CHORD** 

21-22=0/2306, 20-21=0/962

3-29=-557/0, 5-29=-629/0, 8-26=-861/0, 8-27=0/585, 7-27=-296/0, 18-20=-1204/0,

18-21=0/871, 16-21=-858/0, 10-26=-1339/0, 10-24=0/951, 12-24=-911/0, 12-23=0/576,

14-23=-367/0, 14-22=0/254

### NOTES-

**WEBS** 

- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 32.
- 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.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 336 lb down at 20-11-12 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)

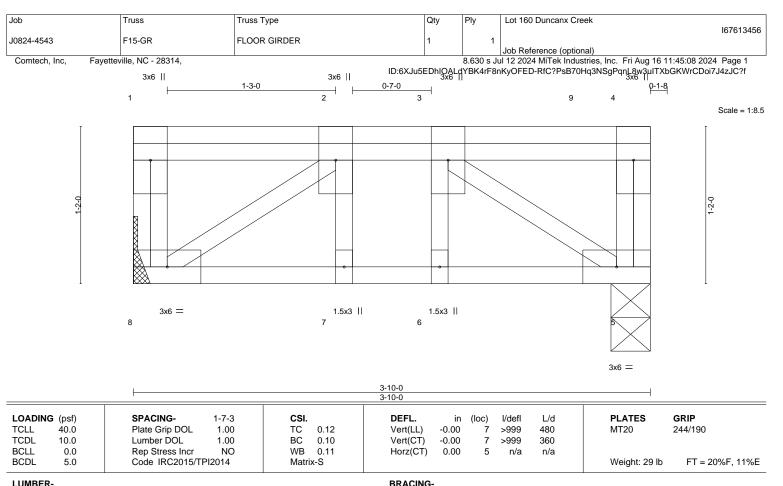
Vert: 20-32=-10, 1-19=-100

Concentrated Loads (lb) Vert: 35=-272(F)



August 19,2024





TOP CHORD

**BOT CHORD** 

LUMBER-

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

2x4 SP No.3(flat) WEBS

REACTIONS. 8=Mechanical, 5=0-3-8 Max Grav 8=352(LC 1), 5=529(LC 1)

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

4-5=-255/0, 2-3=-400/0 TOP CHORD

**BOT CHORD** 7-8=0/400, 6-7=0/400, 5-6=0/400 3-5=-484/0, 2-8=-484/0 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.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 314 lb down at 1-4-12, and 318 lb down at 3-4-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

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

Vert: 5-8=-8, 1-4=-80 Concentrated Loads (lb)

Vert: 2=-283(F) 9=-283(F)



Structural wood sheathing directly applied or 3-10-0 oc purlins,

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

except end verticals.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 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	Lot 160 Duncanx Creek
					l67613457
J0824-4543	F16	FLOOR	1	1	
					Job Reference (optional)

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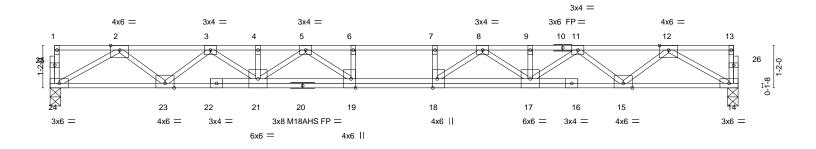


Plate Off	sets (X,Y)	[18:0-3-0,Edge], [19:0-3-0,E	dge]								
LOADIN	G (psf)	SPACING- 2	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.35	Vert(LL)	-0.26 18-19	>866	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.39	Vert(CT)	-0.36 18-19	>630	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.05 14	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2	014	Matri	x-S					Weight: 109 lb	FT = 20%F, 11%E

LUMBER-**BRACING-**

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

Structural wood sheathing directly applied or 6-0-0 oc purlins, BOT CHORD 2x4 SP 2400F 2.0E(flat) except end verticals. WEBS 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 24=0-3-8, 14=0-3-8

Max Grav 24=1023(LC 1), 14=1023(LC 1)

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

TOP CHORD 2-3=-2464/0, 3-4=-4018/0, 4-5=-4018/0, 5-6=-4832/0, 6-7=-4832/0, 7-8=-4832/0,

8-9=-4018/0, 9-11=-4018/0, 11-12=-2464/0

23-24=0/1621, 21-23=0/3338, 19-21=0/4514, 18-19=0/4832, 17-18=0/4514, 15-17=0/3338,

14-15=0/1621 2-24=-1870/0, 2-23=0/1098, 3-23=-1138/0, 3-21=0/848, 12-14=-1870/0, 12-15=0/1098, WFBS

 $11 - 15 = -1138/0, \ 11 - 17 = 0/848, \ 8 - 17 = -636/0, \ 8 - 18 = -6/706, \ 5 - 21 = -636/0, \ 5 - 19 = -6/706$ 

### 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 1.5x3 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.



August 19,2024



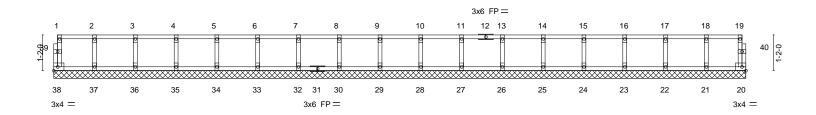
Job	Truss	Truss Type	Qty	Ply	Lot 160 Duncanx Creek
					l67613458
J0824-4543	FKW1	Floor Supported Gable	1	1	
					Job Reference (optional)

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 16 11:45:09 2024 Page 1 ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

0-<u>1</u>-8

0-<u>1</u>-8

Scale = 1:37.7



	22-7-8 22-7-8											<del></del>
LOADIN	IG (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	20	n/a	n/a		
BCDL	5.0	Code IRC2015/TI	PI2014	Matri	x-R						Weight: 94 lb	FT = 20%F, 11%E

LUMBER-BRACING-

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

**OTHERS** 2x4 SP No.3(flat) TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

**BOT CHORD** 

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

REACTIONS. All bearings 22-7-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 38, 20, 37, 36, 35, 34, 33, 32, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21

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.





Job	Truss	Truss Type	Qty	Ply	Lot 160 Duncanx Creek
					I67613459
J0824-4543	FKW2	Floor Supported Gable	1	1	
					Job Reference (optional)

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 16 11:45:10 2024 Page 1 ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?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-<u>11</u>-8

Scale = 1:30.8

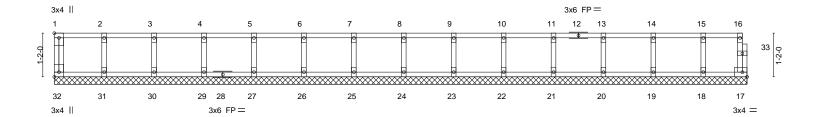


Plate Offsets	(X Y)	[1:Edge,0-1-8], [32:Edge	0-1-8]			18-6-0						1
									.,. ,			
LOADING (p	ost)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL 40	0.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10	0.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL (	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	17	n/a	n/a		
BCDL 5	5.0	Code IRC2015/TF	PI2014	Matri	x-R						Weight: 78 lb	FT = 20%F, 11%E
LUMBER-						BRACING-						

TOP CHORD

**BOT CHORD** 

18-6-0

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

2x4 SP No.1(flat)

2x4 SP No.1(flat)

REACTIONS. All bearings 18-6-0. (lb) - Max Grav All reactions 250 lb or less at joint(s) 32, 17, 31, 30, 29, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18

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

### NOTES-

TOP CHORD

BOT CHORD

- 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.
- 7) CAUTION, Do not erect truss backwards.





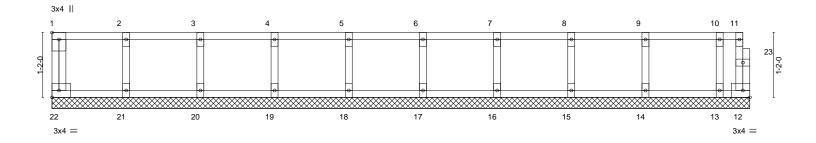
Job	Truss	Truss Type	Qty	Ply	Lot 160 Duncanx Creek
					I67613460
J0824-4543	FKW3	Floor Supported Gable	1	1	
					Job Reference (optional)

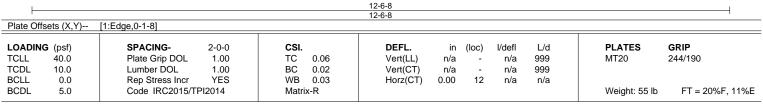
0118

8.630 s Jul 12 2024 MiTek Industries, Inc. Fri Aug 16 11:45:10 2024 Page 1 ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSqPqnL8w3uITXbGKWrCDoi7J4zJC?f

8<sub>[1]</sub>0

Scale = 1:20.7





LUMBER-**BRACING-**

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

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

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

REACTIONS. All bearings 12-6-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 22, 12, 21, 20, 19, 18, 17, 16, 15, 14, 13

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.



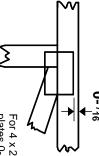


## Symbols

## 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- <sup>1</sup>/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

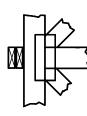
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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.

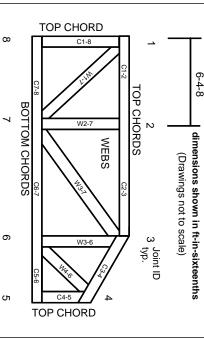
### Industry Standards:

National Design Specification for Metal Plate Connected Wood Truss Construction Design Standard for Bracing.

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

ANSI/TPI1: DSB-22:

## 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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## MiTek



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.

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- 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.

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- 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.

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- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- 15. Connections not shown are the responsibility of others
- Do not cut or 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 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.