

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: AC1129  
MCKEEHOMES/FINLEY; LOT 1129 ANDERSON CREEK ACADEMY

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Builders FirstSource-Apex,NC.

Pages or sheets covered by this seal: I44626659 thru I44626680

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

North Carolina COA: C-0844



February 2, 2021

Sevier, Scott

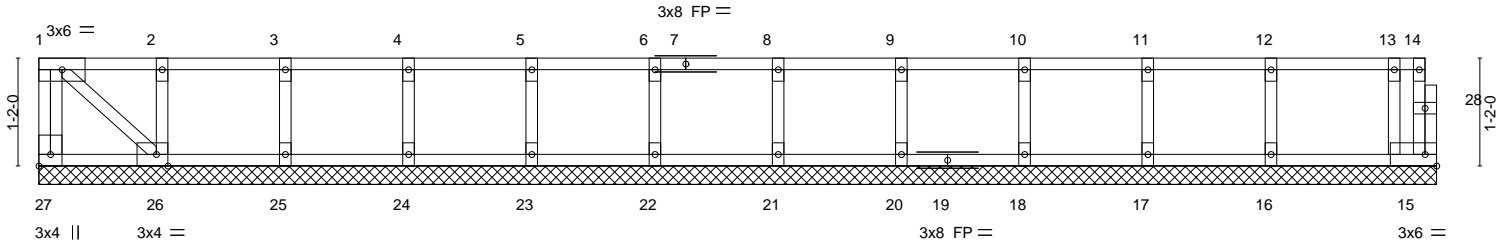
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes),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

Job AC1129	Truss F01G	Truss Type GABLE	Qty 99	Ply 1	MCKEEHOMES/FINLEY; LOT 1129 ANDERSON CREEK ACADEMY I44626659
Builders FirstSource (Apex, NC), Apex, NC - 27523,					Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Feb 1 20:48:16 2021 Page 1  
ID:Jnu27T8aAaS2DQsg9LB7sjzzj2p-1iBRKxLCfe45oUoVOHL7La5Ee8mngdj03DpEtGzpOWD

0-1-8

Scale = 1:24.9



1-4-0	2-8-0	4-0-0	5-4-0	6-8-0	8-0-0	9-4-0	10-8-0	12-0-0	13-4-0	14-8-0	15-1-8
1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	0-5-8

Plate Offsets (X,Y)-- [26:0-1-8,Edge], [27: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 0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.02	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	NO	WB 0.03	Horz(CT)	0.00	15	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						Weight: 67 lb	FT = 20%F, 11%E

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

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

**REACTIONS.** All bearings 15-1-8.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 15, 27, 26, 25, 24, 23, 22, 21, 20, 18, 17, 16

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

- NOTES-**
- All plates are 1.5x3 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 1-4-0 oc.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.  
Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - CAUTION, Do not erect truss backwards.



February 2, 2021

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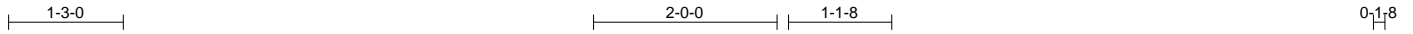


818 Soundside Road  
Edenton, NC 27932

Job AC1129	Truss F02	Truss Type FLOOR	Qty 99	Ply 1	MCKEEHOMES/FINLEY; LOT 1129 ANDERSON CREEK ACADEMY I44626660
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Feb 1 20:48:17 2021 Page 1  
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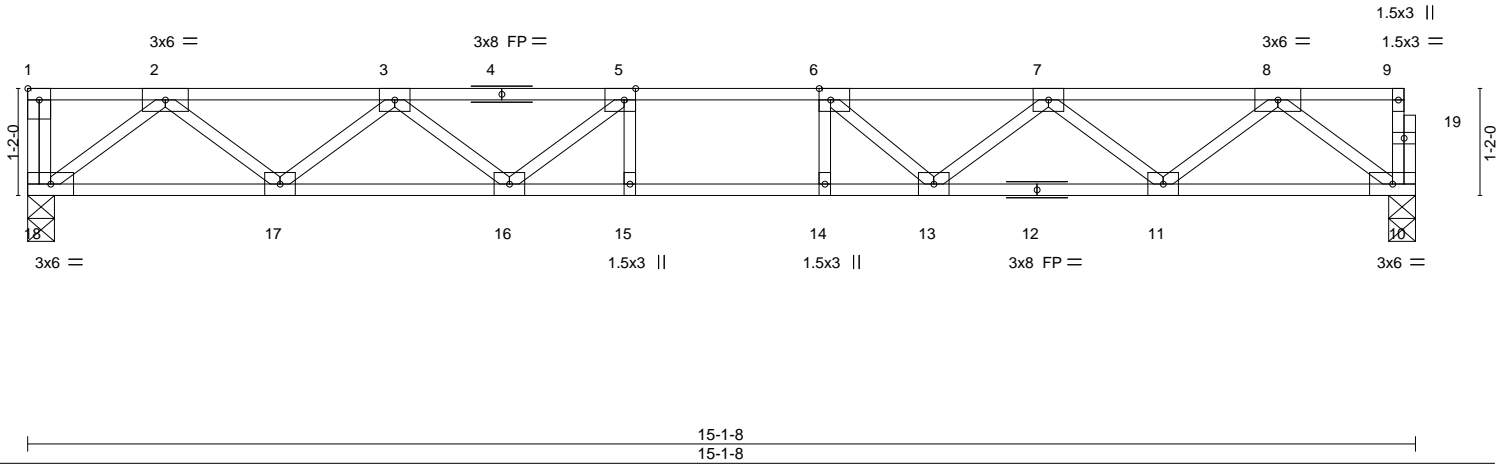


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [5:0-1-8,Edge], [6:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.47	Vert(LL) -0.16	15-16	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.79	Vert(CT) -0.22	15-16	>804	360		
BCLL 0.0	Rep Stress Incr YES	WB 0.41	Horz(CT) 0.04	10	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 76 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2(flat) *Except* 12-18: 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 10=0-3-8, 18=0-3-8  
Max Grav 10=812(LC 1), 18=818(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1668/0, 3-5=-2599/0, 5-6=-2890/0, 6-7=-2602/0, 7-8=-1666/0  
BOT CHORD 17-18=0/1007, 16-17=0/2294, 15-16=0/2890, 14-15=0/2890, 13-14=0/2890, 11-13=0/2288,  
10-11=0/1008  
WEBS 2-18=-1264/0, 2-17=0/859, 3-17=-815/0, 3-16=0/454, 5-16=-559/0, 8-10=-1262/0,  
8-11=0/857, 7-11=-810/0, 7-13=0/470, 6-13=-569/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x4 MT20 unless otherwise indicated.
  - 3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.  
Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 4) CAUTION, Do not erect truss backwards.



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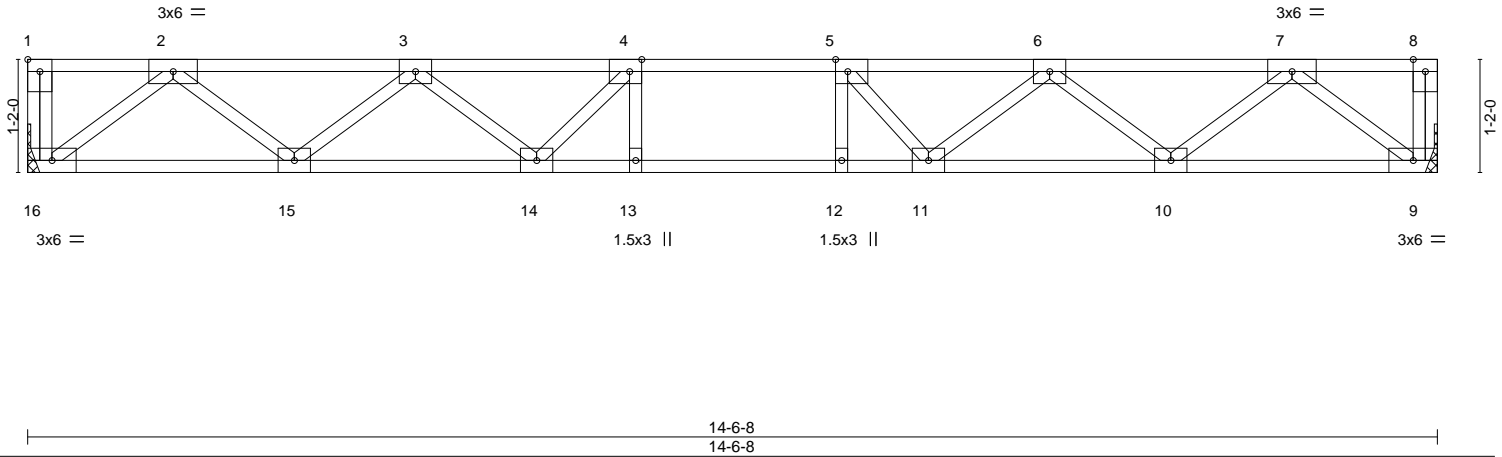
Job AC1129	Truss F04	Truss Type FLOOR	Qty 99	Ply 1	MCKEEHOMES/FINLEY; LOT 1129 ANDERSON CREEK ACADEMY I44626661
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Feb 1 20:48:18 2021 Page 1  
ID:Jnu27T8aAaS2DQsg9LB7sjzzj2p\_-4ICldMSBGLp2nxuViNbnQ?BVqxH68SkJWXILx8zpOWB



Scale: 1/2"=1'



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.44	Vert(LL)	-0.14	13-14	>999	480	MT20	244/190	
TCDL	10.0	Lumber DOL	1.00	BC	0.73	Vert(CT)	-0.19	12-13	>912	360	Weight: 74 lb FT = 20%F, 11%E		
BCLL	0.0	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.04	9	n/a	n/a			
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S									

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

**REACTIONS.** (size) 9=Mechanical, 16=Mechanical  
Max Grav 9=786(LC 1), 16=786(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1585/0, 3-4=-2451/0, 4-5=-2661/0, 5-6=-2456/0, 6-7=-1584/0  
BOT CHORD 15-16=0/968, 14-15=0/2168, 13-14=0/2661, 12-13=0/2661, 11-12=0/2661, 10-11=0/2163, 9-10=0/969  
WEBS 7-9=-1216/0, 7-10=0/800, 6-10=-754/0, 6-11=0/458, 5-11=-508/0, 2-16=-1214/0, 2-15=0/803, 3-15=-759/0, 3-14=0/441, 4-14=-492/0

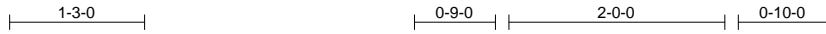
- NOTES-**
- Unbalanced floor live loads have been considered for this design.
  - All plates are 3x4 MT20 unless otherwise indicated.
  - Refer to girder(s) for truss to truss connections.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



February 2, 2021

Job AC1129	Truss F05	Truss Type FLOOR	Qty 99	Ply 1	MCKEEHOMES/FINLEY; LOT 1129 ANDERSON CREEK ACADEMY I44626662
Builders FirstSource (Apex, NC), Apex, NC - 27523,					Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Feb 1 20:48:18 2021 Page 1  
ID: Jnu27T8aAaS2DQsg9LB7sjzj2p-\_4ICldMSBGLp2nxuViNbQ?BSHxHz8SeJWXILx8zpOWB



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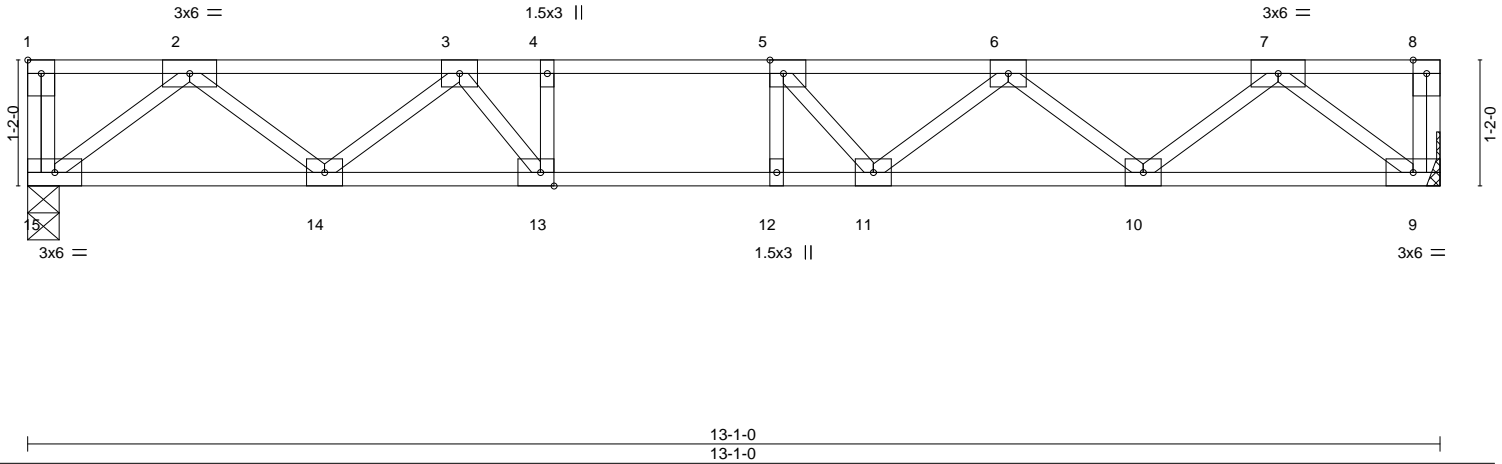


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [5:0-1-8,Edge], [13:0-1-8,Edge]							
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc)	<b>L/defl</b>	<b>L/d</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.60	Vert(LL) -0.13 11-12	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.74	Vert(CT) -0.17 11-12	>906	360		
BCLL 0.0	Rep Stress Incr YES	WB 0.32	Horz(CT) 0.03 9	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S				Weight: 67 lb	FT = 20%F, 11%E

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

**REACTIONS.** (size) 9=Mechanical, 15=0-3-8  
Max Grav 9=706(LC 1), 15=706(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1369/0, 3-4=-2112/0, 4-5=-2112/0, 5-6=-2055/0, 6-7=-1384/0  
BOT CHORD 14-15=0/863, 13-14=0/1876, 12-13=0/2112, 11-12=0/2112, 10-11=0/1877, 9-10=0/860  
WEBS 7-9=-1079/0, 7-10=0/682, 6-10=-642/0, 6-11=0/335, 5-11=-308/94, 4-13=-316/0,  
2-15=-1082/0, 2-14=0/659, 3-14=-660/0, 3-13=0/579

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



February 2, 2021

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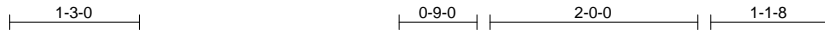
ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate  
818 Soundside Road  
Edenton, NC 27932

Job AC1129	Truss F06	Truss Type FLOOR	Qty 99	Ply 1	MCKEEHOMES/FINLEY; LOT 1129 ANDERSON CREEK ACADEMY I44626663
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Feb 1 20:48:19 2021 Page 1  
ID:Jnu27T8aAaS2DQsg9LB7sjzzj2p-SHsayzN4yZTgfw43QuqzCjc2LcKtveTIB1vUbzpoWA

Job Reference (optional)



0-1-8

Scale = 1:22.2

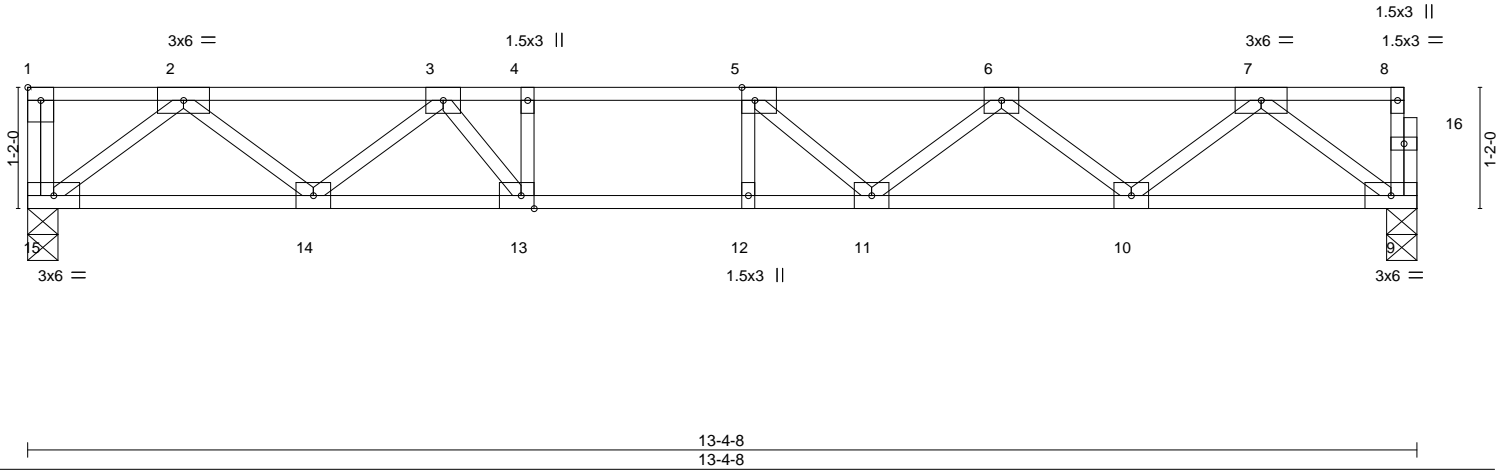


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [5:0-1-8,Edge], [13:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.66	Vert(LL) -0.15	11-12	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.80	Vert(CT) -0.20	11-12	>799	360		
BCLL 0.0	Rep Stress Incr YES	WB 0.34	Horz(CT) 0.03	9	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 68 lb	FT = 20%F, 11%E

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

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

**REACTIONS.** (size) 15=0-3-8, 9=0-3-8  
Max Grav 15=722(LC 1), 9=716(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1406/0, 3-4=-2205/0, 4-5=-2205/0, 5-6=-2127/0, 6-7=-1426/0  
BOT CHORD 14-15=0/883, 13-14=0/1940, 12-13=0/2205, 11-12=0/2205, 10-11=0/1947, 9-10=0/877  
WEBS 2-15=-1108/0, 2-14=0/681, 3-14=-695/0, 3-13=0/626, 4-13=-337/0, 7-9=-1097/0,  
7-10=0/714, 6-10=-678/0, 6-11=0/326, 5-11=-322/77

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x4 MT20 unless otherwise indicated.
  - 3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 4) CAUTION, Do not erect truss backwards.



February 2, 2021

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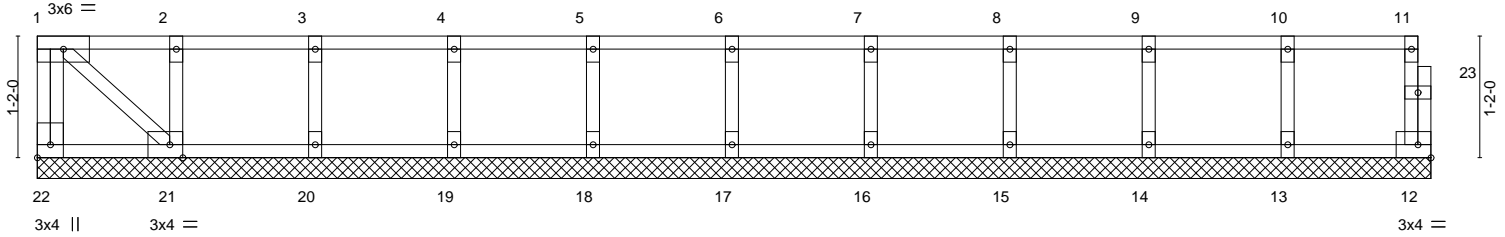
Job AC1129	Truss F07G	Truss Type GABLE	Qty 99	Ply 1	MCKEEHOMES/FINLEY; LOT 1129 ANDERSON CREEK ACADEMY I44626664
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Feb 1 20:48:20 2021 Page 1  
ID:Jnu27T8aAaS2DQsg9LB7sjzzj2p-wTQyAJQjtbXH55Gd7Q3VQGwfl8scRicrzmS01zpOW9

0-1-8

Scale = 1:22.1



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

Plate Offsets (X,Y)-- [21:0-1-8,Edge], [22: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 0.10	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	NO	WB 0.03	Horz(CT)	0.00	12	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						Weight: 59 lb	FT = 20%F, 11%E

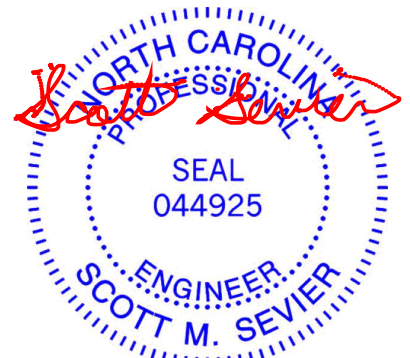
**LUMBER-**  
TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP No.2(flat)  
WEBS 2x4 SP No.3(flat)  
OTHERS 2x4 SP No.3(flat)

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

**REACTIONS.** All bearings 13-4-8.  
(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) Gable requires continuous bottom chord bearing.
  - 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 4) Gable studs spaced at 1-4-0 oc.
  - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.  
Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 6) CAUTION, Do not erect truss backwards.



February 2, 2021

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Edenton, NC 27932

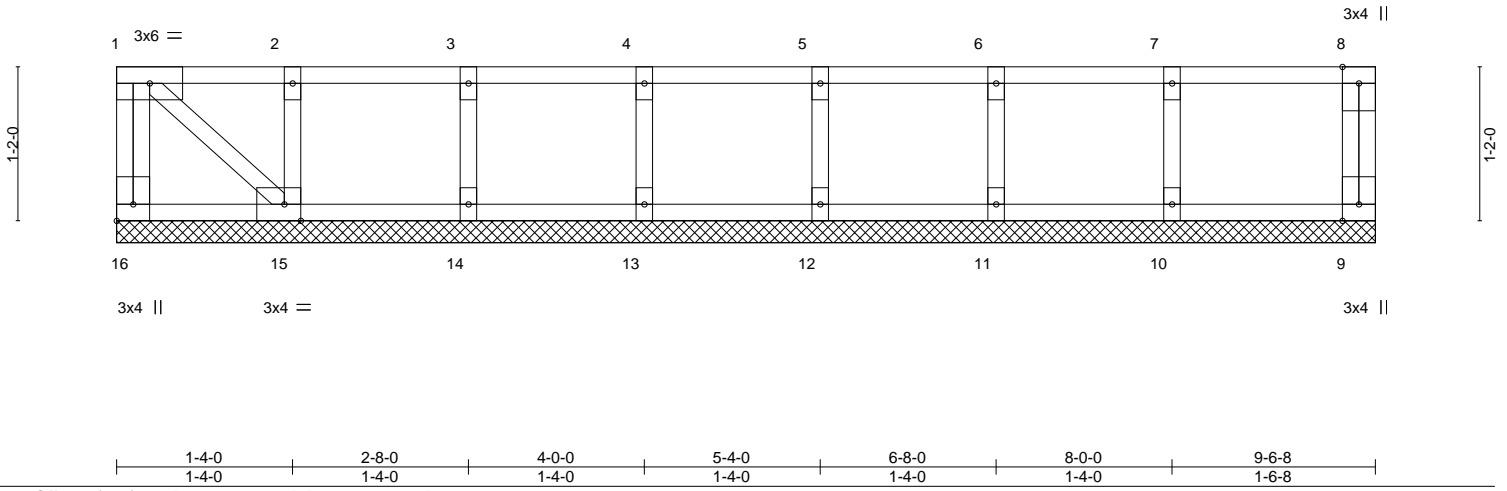


Job AC1129	Truss F09G	Truss Type GABLE	Qty 99	Ply 1	MCKEEHOMES/FINLEY; LOT 1129 ANDERSON CREEK ACADEMY I44626665
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Feb 1 20:48:21 2021 Page 1  
ID:Jnu27T8aAaS2DQsg9LB7sjzzj2p-Of\_KNfPKUBjOvFgSArxl2dp539U4LuvICVW?YTzpOW8

Scale = 1:17.5



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.12	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.01	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr NO	WB 0.04	Horz(CT)	-0.00	11	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 44 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2(flat)	TOP CHORD Structural wood sheathing directly applied or 9-6-8 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	
OTHERS 2x4 SP No.3(flat)	

**REACTIONS.** All bearings 9-6-8.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 16, 9, 15, 14, 13, 12, 11, 10

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

- NOTES-**
- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 2) Gable requires continuous bottom chord bearing.
  - 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 4) Gable studs spaced at 1-4-0 oc.
  - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



February 2, 2021



Job AC1129	Truss F10	Truss Type FLOOR	Qty 99	Ply 1	MCKEEHOMES/FINLEY; LOT 1129 ANDERSON CREEK ACADEMY I44626666
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Feb 1 20:48:21 2021 Page 1  
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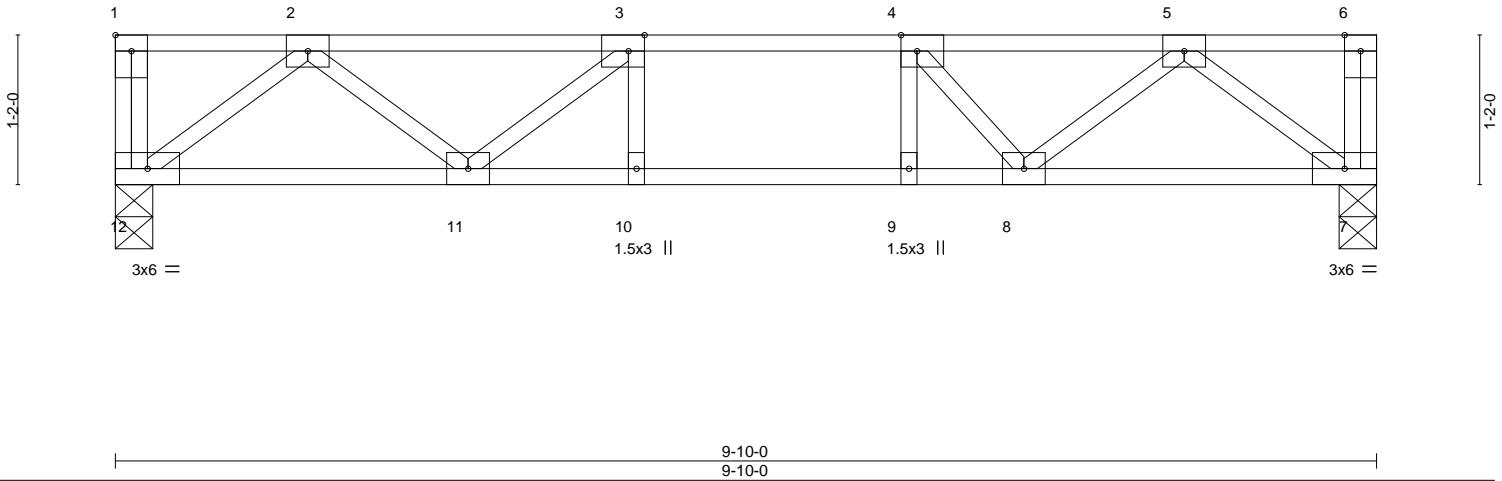


Plate Offsets (X,Y)--	[1:Edge,0-1-8], [3:0-1-8,Edge], [4:0-1-8,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.37	Vert(LL) -0.06 10-11 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.63	Vert(CT) -0.08 10-11 >999 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.21	Horz(CT) 0.01 7 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 51 lb	FT = 20%F, 11%E

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

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

**REACTIONS.** (size) 12=0-3-8, 7=0-3-8  
Max Grav 12=527(LC 1), 7=527(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-930/0, 3-4=-1188/0, 4-5=-948/0  
BOT CHORD 11-12=0/636, 10-11=0/1188, 9-10=0/1188, 8-9=0/1188, 7-8=0/614  
WEBS 2-12=-797/0, 2-11=0/384, 3-11=-373/0, 5-7=-770/0, 5-8=0/435, 4-8=-419/0

**NOTES-**  
1) Unbalanced floor live loads have been considered for this design.  
2) All plates are 3x4 MT20 unless otherwise indicated.  
3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.  
Strongbacks to be attached to walls at their outer ends or restrained by other means.



February 2, 2021

Job AC1129	Truss F11GR	Truss Type FLOOR	Qty 99	Ply 1	MCKEEHOMES/FINLEY; LOT 1129 ANDERSON CREEK ACADEMY I44626667
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Feb 1 20:48:22 2021 Page 1  
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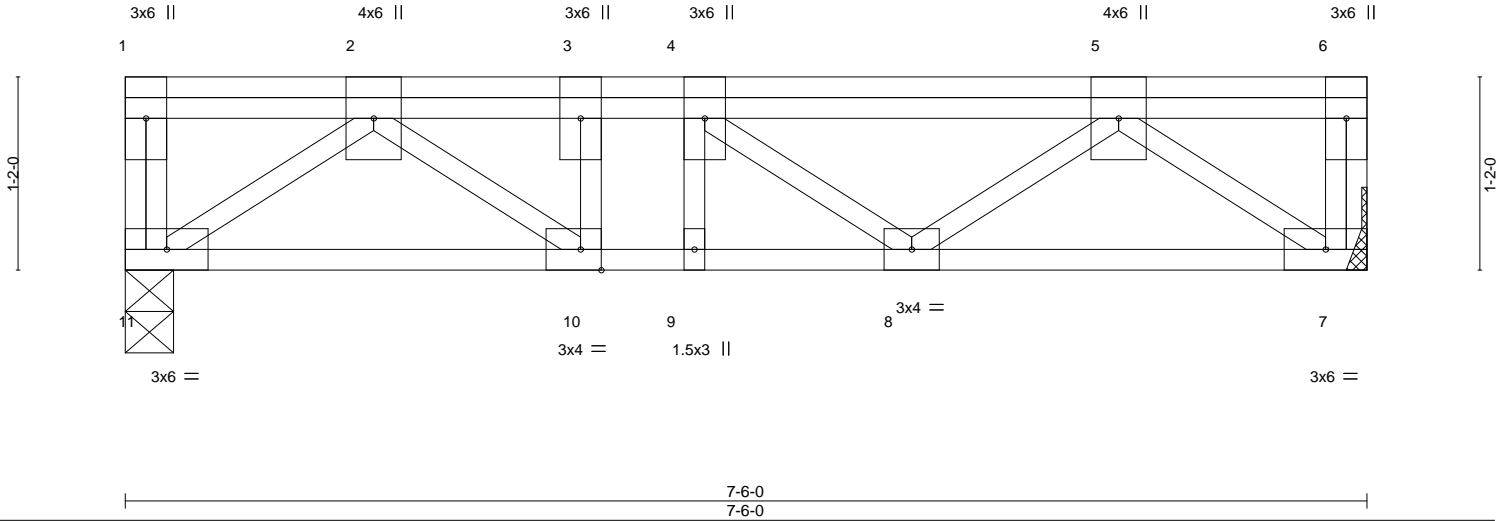


Plate Offsets (X,Y)-- [10:0-1-8,Edge]											
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>		
TCLL 40.0	Plate Grip DOL	1.00	TC 0.18	Vert(LL)	-0.02 8-9	>999	480	MT20	244/190		
TCDL 10.0	Lumber DOL	1.00	BC 0.47	Vert(CT)	-0.03 8-9	>999	360				
BCLL 0.0	Rep Stress Incr	NO	WB 0.30	Horz(CT)	0.01 7	n/a	n/a				
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 52 lb	FT = 20%F, 11%E

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

**REACTIONS.** (size) 11=0-3-8, 7=Mechanical  
Max Grav 11=526(LC 1), 7=506(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1118/0, 3-4=-1118/0, 4-5=-910/0  
BOT CHORD 10-11=0/625, 9-10=0/1118, 8-9=0/1118, 7-8=0/653  
WEBS 5-7=-801/0, 2-11=-768/0, 5-8=0/327, 2-10=0/627, 4-8=-260/0, 3-10=-285/0

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
  - Refer to girder(s) for truss to truss connections.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

**LOAD CASE(S)** Standard  
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 7-11=-10, 1-6=-100  
Concentrated Loads (lb)  
Vert: 4=-235

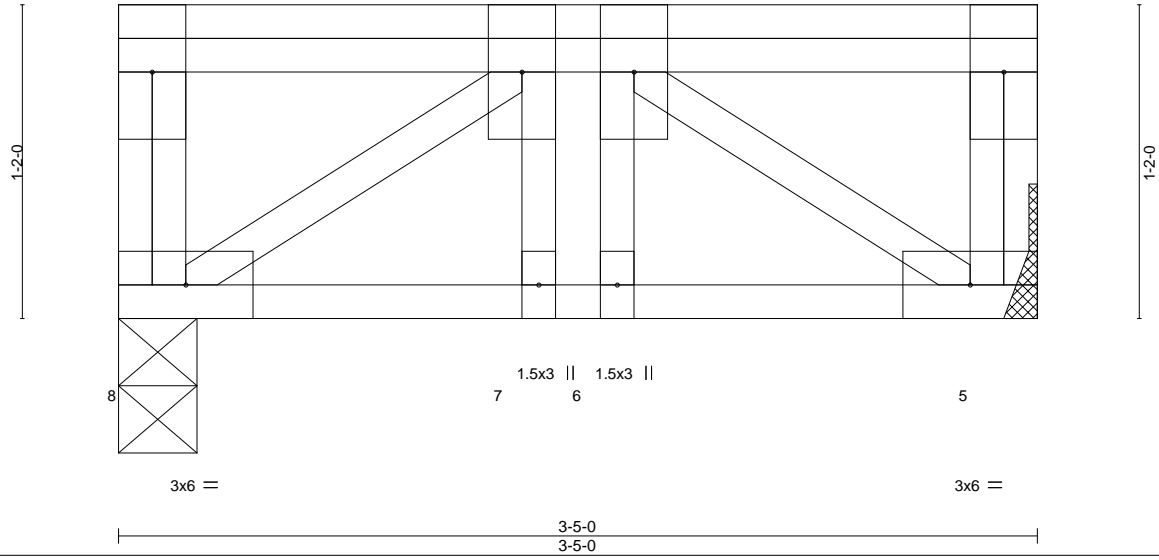
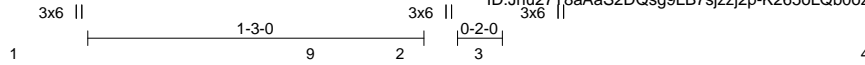


February 2, 2021

Job AC1129	Truss F12GR	Truss Type FLOOR	Qty 99	Ply 1	MCKEEHOMES/FINLEY; LOT 1129 ANDERSON CREEK ACADEMY I44626668
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Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Feb 1 20:48:23 2021 Page 1

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<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.07	Vert(LL) -0.00 7 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.08	Vert(CT) -0.00 7 >999 360		
BCLL 0.0	Rep Stress Incr NO	WB 0.06	Horz(CT) 0.00 5 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 27 lb	FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2(flat)	TOP CHORD Structural wood sheathing directly applied or 3-5-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 8=0-3-8, 5=Mechanical  
Max Grav 8=234(LC 1), 5=234(LC 1)

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

**NOTES-**

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) Girder carries tie-in span(s): 3-8-0 from 0-0-0 to 3-5-0
- 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.

**LOAD CASE(S)** Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 5-8=-10, 1-4=-138



February 2, 2021

Job AC1129	Truss F13	Truss Type FLOOR	Qty 99	Ply 1	MCKEEHOMES/FINLEY; LOT 1129 ANDERSON CREEK ACADEMY I44626669
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Feb 1 20:48:23 2021 Page 1  
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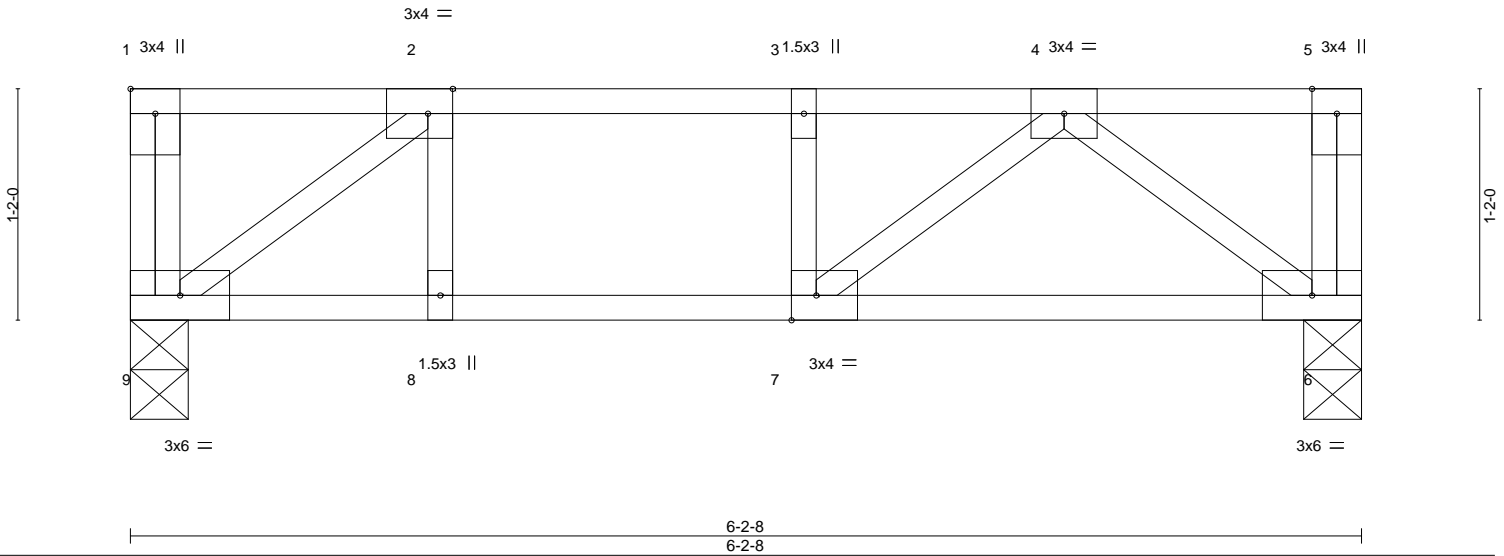


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [2:0-1-8,Edge], [7:0-1-8,Edge]

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 0.36	Vert(LL)	-0.04	6-7	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.35	Vert(CT)	-0.05	6-7	>999	360		
BCLL 0.0	Rep Stress Incr	YES	WB 0.13	Horz(CT)	0.00	6	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						Weight: 34 lb	FT = 20%F, 11%E

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

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

**REACTIONS.** (size) 9=0-3-8, 6=0-3-8  
Max Grav 9=328(LC 1), 6=328(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-430/0, 3-4=-430/0  
BOT CHORD 8-9=0/430, 7-8=0/430, 6-7=0/339  
WEBS 4-6=-425/0, 2-9=-531/0

**NOTES-**  
1) Unbalanced floor live loads have been considered for this design.  
2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



February 2, 2021

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



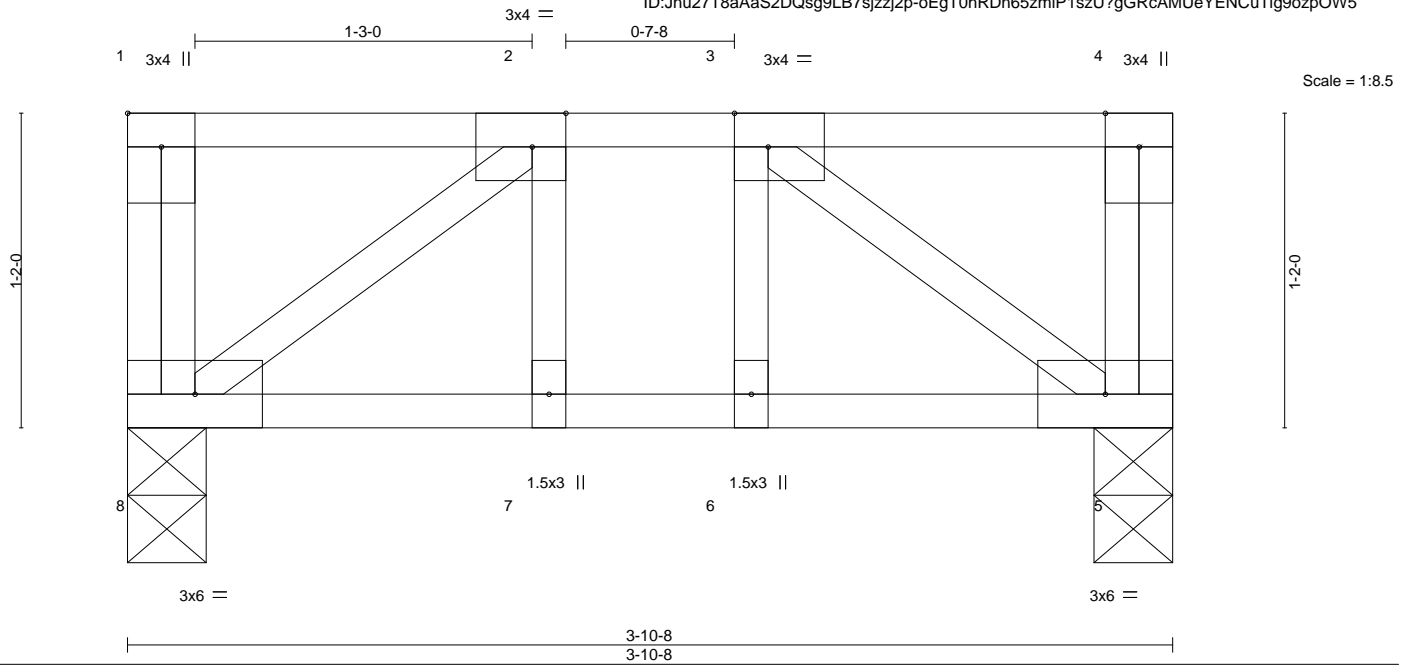
818 Soundside Road  
Edenton, NC 27932

Job AC1129	Truss F14	Truss Type FLOOR	Qty 99	Ply 1	MCKEEHOMES/FINLEY; LOT 1129 ANDERSON CREEK ACADEMY I44626670
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Feb 1 20:48:24 2021 Page 1

ID:Jnu27T8aAaS2DQsg9LB7sjzzj2p-oEgT0hRDn65zmiP1szU?gGRcAMUeYENCuTIg9ozpOW5



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.13	Vert(LL)	-0.00	7	>999	480	MT20	244/190	
TCDL	10.0	Lumber DOL	1.00	BC	0.08	Vert(CT)	-0.00	7	>999	360	Weight: 24 lb FT = 20%F, 11%E		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	5	n/a	n/a			
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S									

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

**REACTIONS.** (size) 8=0-3-8, 5=0-3-8  
Max Grav 8=199(LC 1), 5=199(LC 1)

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

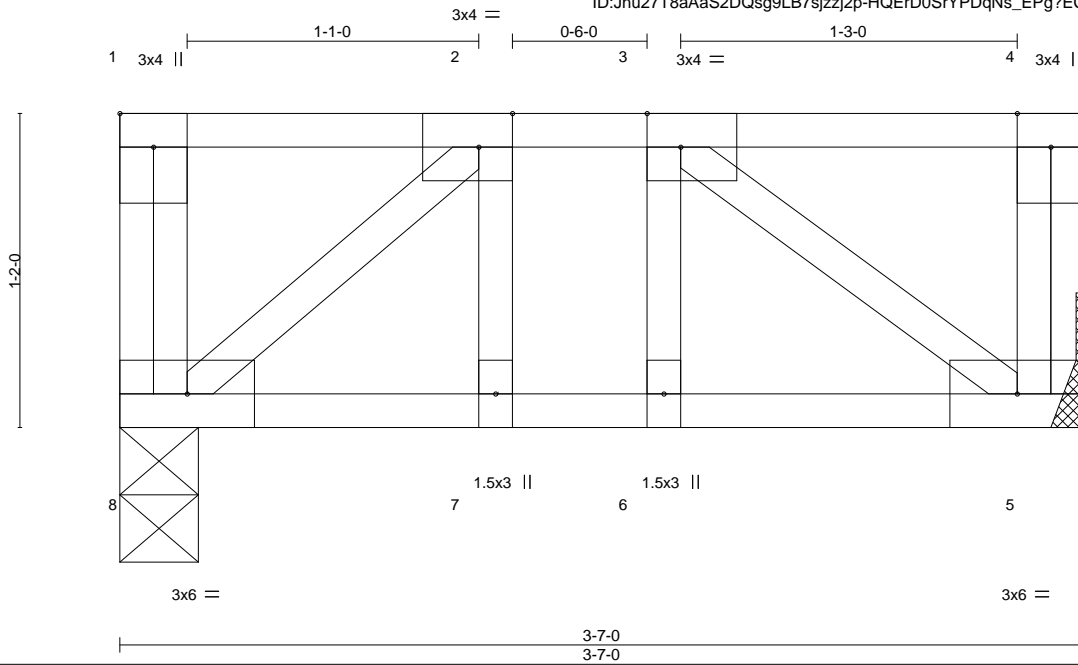
**NOTES-**  
1) Unbalanced floor live loads have been considered for this design.  
2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



February 2, 2021

Job AC1129	Truss F15	Truss Type FLOOR	Qty 99	Ply 1	MCKEEHOMES/FINLEY; LOT 1129 ANDERSON CREEK ACADEMY I44626671
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Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Feb 1 20:48:25 2021 Page 1  
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Plate Offsets (X,Y)-- [1:Edge,0-1-8], [2:0-1-8,Edge], [3:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.13	Vert(LL) -0.00	6	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.09	Vert(CT) -0.00	6	>999	360		
BCLL 0.0	Rep Stress Incr YES	WB 0.05	Horz(CT) 0.00	5	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 23 lb	FT = 20%F, 11%E

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-7-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 8=0-3-8, 5=Mechanical  
 Max Grav 8=183(LC 1), 5=183(LC 1)

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

**NOTES-**  
 1) Unbalanced floor live loads have been considered for this design.  
 2) Refer to girder(s) for truss to truss connections.  
 3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.  
 Strongbacks to be attached to walls at their outer ends or restrained by other means.



February 2, 2021

Job AC1129	Truss F16	Truss Type FLOOR	Qty 99	Ply 1	MCKEEHOMES/FINLEY; LOT 1129 ANDERSON CREEK ACADEMY I44626672
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Feb 1 20:48:26 2021 Page 1  
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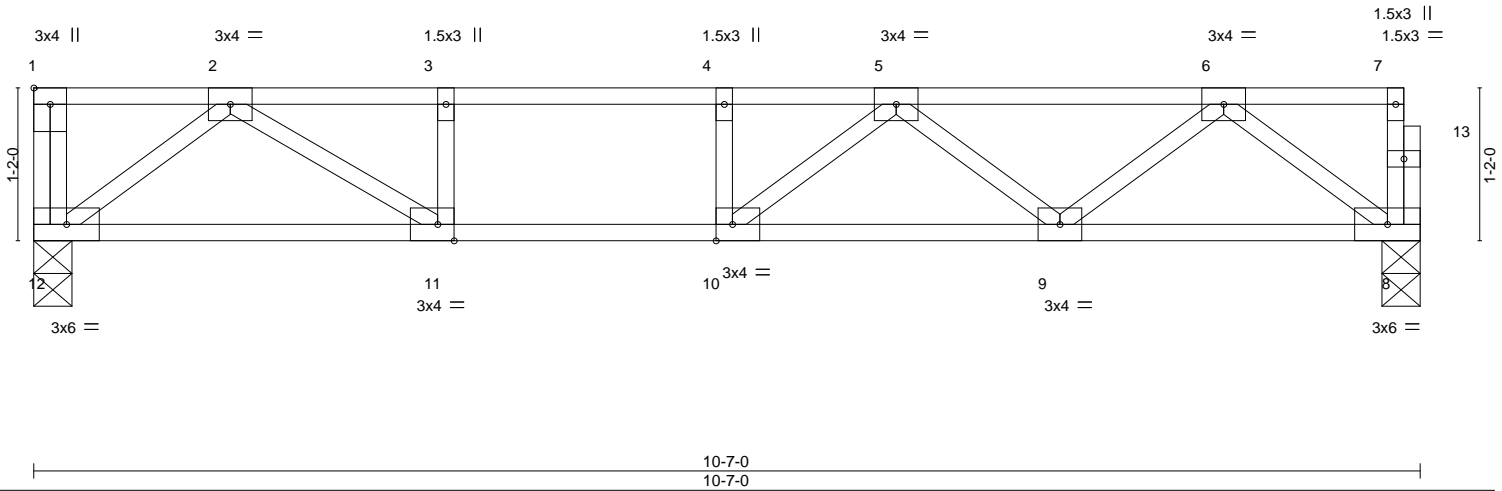


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [10:0-1-8,Edge], [11:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.74	Vert(LL) -0.13	9-10	>960	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.78	Vert(CT) -0.17	9-10	>735	360		
BCLL 0.0	Rep Stress Incr YES	WB 0.37	Horz(CT) 0.02	8	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 53 lb	FT = 20%F, 11%E

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

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

**REACTIONS.** (size) 8=0-3-8, 12=0-3-8  
Max Grav 8=562(LC 1), 12=568(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1309/0, 3-4=-1309/0, 4-5=-1309/0, 5-6=-1051/0  
BOT CHORD 11-12=0/660, 10-11=0/1309, 9-10=0/1345, 8-9=0/687  
WEBS 6-8=-859/0, 6-9=0/474, 5-9=-383/0, 3-11=-323/0, 2-12=-828/0, 2-11=0/772

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - CAUTION, Do not erect truss backwards.



February 2, 2021

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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Job AC1129	Truss F18	Truss Type FLOOR	Qty 99	Ply 1	MCKEEHOMES/FINLEY; LOT 1129 ANDERSON CREEK ACADEMY I44626673
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Feb 1 20:48:26 2021 Page 1  
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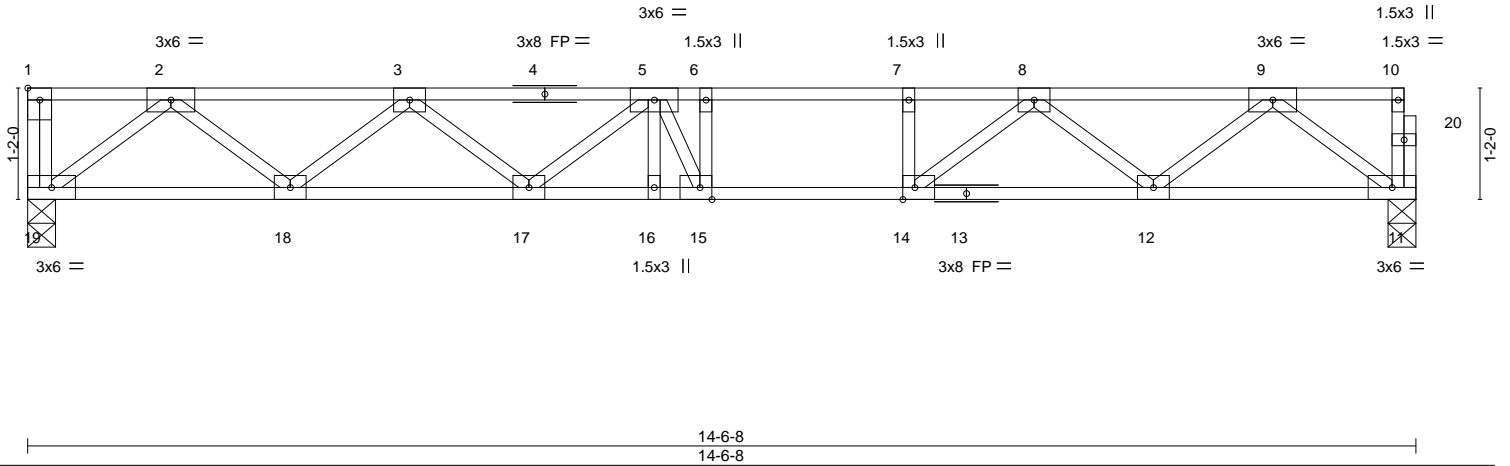


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [14:0-1-8,Edge], [15:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.69	Vert(LL) -0.17	15	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.88	Vert(CT) -0.23	15	>731	360		
BCLL 0.0	Rep Stress Incr YES	WB 0.39	Horz(CT) 0.04	11	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 75 lb	FT = 20%F, 11%E

**LUMBER-**  
TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP No.2(flat) \*Except\*  
13-19: 2x4 SP No.1(flat)  
WEBS 2x4 SP No.3(flat)

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

**REACTIONS.** (size) 11=0-3-8, 19=0-3-8  
Max Grav 11=780(LC 1), 19=786(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1587/0, 3-5=-2441/0, 5-6=-2597/0, 6-7=-2597/0, 7-8=-2597/0, 8-9=-1568/0  
BOT CHORD 18-19=0/966, 17-18=0/2174, 16-17=0/2705, 15-16=0/2705, 14-15=0/2597, 12-14=0/2161,  
11-12=0/969  
WEBS 9-11=-1213/0, 9-12=0/780, 8-12=-772/0, 8-14=0/715, 7-14=-303/0, 2-19=-1212/0,  
2-18=0/809, 3-18=-763/0, 3-17=0/349, 5-17=-337/0, 5-15=-523/336

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
  - All plates are 3x4 MT20 unless otherwise indicated.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.  
Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - CAUTION, Do not erect truss backwards.



February 2, 2021

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
Edenton, NC 27932

Job AC1129	Truss F18A	Truss Type FLOOR	Qty 99	Ply 1	MCKEEHOMES/FINLEY; LOT 1129 ANDERSON CREEK ACADEMY I44626674
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Feb 1 20:48:27 2021 Page 1  
ID:Jnu27T8aAaS2DQsg9LB7sjzzj2p-DpLbeiT541TXdA7cX52iHu3zLZMTIWwear\_Km7zpOW2



Scale: 1/2"=1'

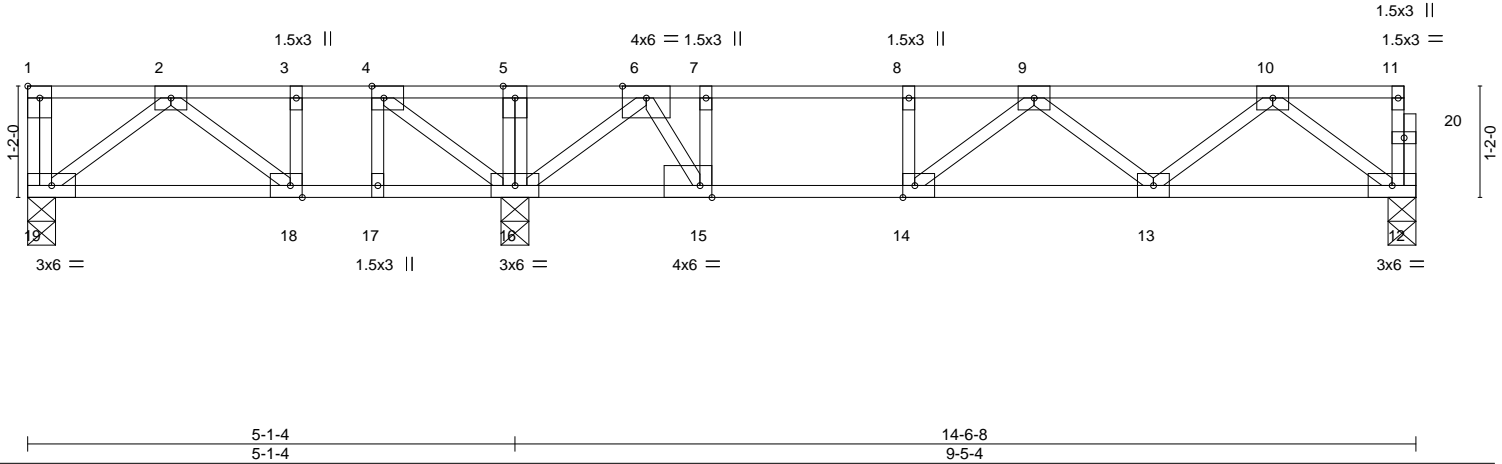


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [4:0-1-8,Edge], [14:0-1-8,Edge], [15:0-1-8,Edge], [18:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.71	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.72	Vert(LL) -0.11 13-14 >999 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.32	Vert(CT) -0.15 13-14 >761 360		
BCDL 5.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 12 n/a n/a		
	Code IRC2015/TPI2014			Weight: 76 lb	FT = 20%F, 11%E

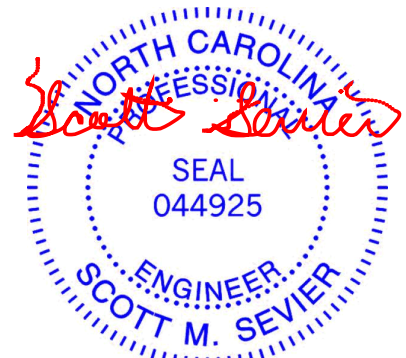
**LUMBER-**  
TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP No.2(flat)  
WEBS 2x4 SP No.3(flat)

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

**REACTIONS.** (size) 19=0-3-8, 12=0-3-8, 16=0-3-8  
Max Grav 19=349(LC 10), 12=541(LC 7), 16=698(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-532/0, 3-4=-532/0, 4-5=-365/0, 5-6=-365/0, 6-7=-1192/0, 7-8=-1192/0,  
8-9=-1192/0, 9-10=-998/0  
BOT CHORD 18-19=0/373, 17-18=0/532, 16-17=0/532, 15-16=0/862, 14-15=0/1192, 13-14=0/1266,  
12-13=0/658  
WEBS 10-12=-823/0, 10-13=0/442, 9-13=-348/0, 7-15=-463/0, 6-16=-692/0, 6-15=0/675,  
2-19=-468/0, 4-16=-356/32

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x4 MT20 unless otherwise indicated.
  - 3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.  
Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 4) CAUTION, Do not erect truss backwards.



February 2, 2021

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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818 Soundside Road  
Edenton, NC 27932

Job AC1129	Truss F19AG	Truss Type GABLE	Qty 99	Ply 1	MCKEEHOMES/FINLEY; LOT 1129 ANDERSON CREEK ACADEMY I44626675
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Feb 1 20:48:28 2021 Page 1  
ID:Jnu27T8aAaS2DQsg9LB7sjzzj2p-h?v\_r2UjrKbOEKip5pZxq6blezskU2hnp5jtIzZpOW1

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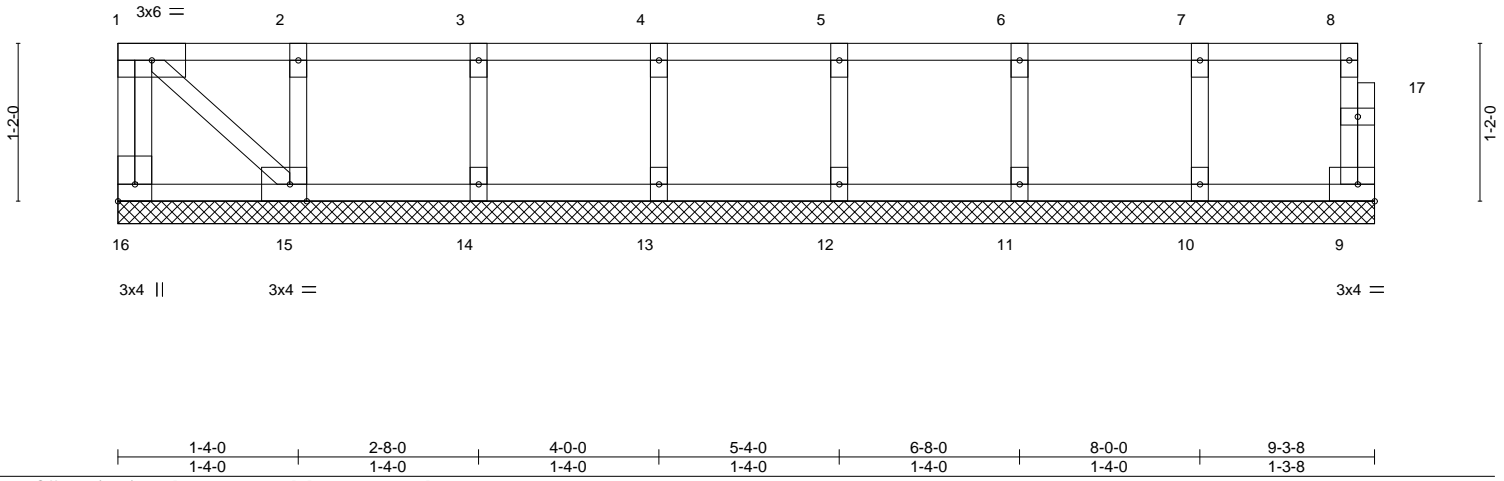


Plate Offsets (X,Y)-- [15:0-1-8,Edge], [16:Edge,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.10	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.01	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr NO	WB 0.03	Horz(CT)	0.00	9	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 43 lb	FT = 20%F, 11%E

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

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

**REACTIONS.** All bearings 9-3-8.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 16, 9, 15, 14, 13, 12, 11, 10

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

- NOTES-**
- All plates are 1.5x3 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 1-4-0 oc.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.  
Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - CAUTION, Do not erect truss backwards.



February 2, 2021

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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818 Soundside Road  
Edenton, NC 27932

Job AC1129	Truss F20	Truss Type FLOOR	Qty 99	Ply 1	MCKEEHOMES/FINLEY; LOT 1129 ANDERSON CREEK ACADEMY I44626676
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Feb 1 20:48:29 2021 Page 1  
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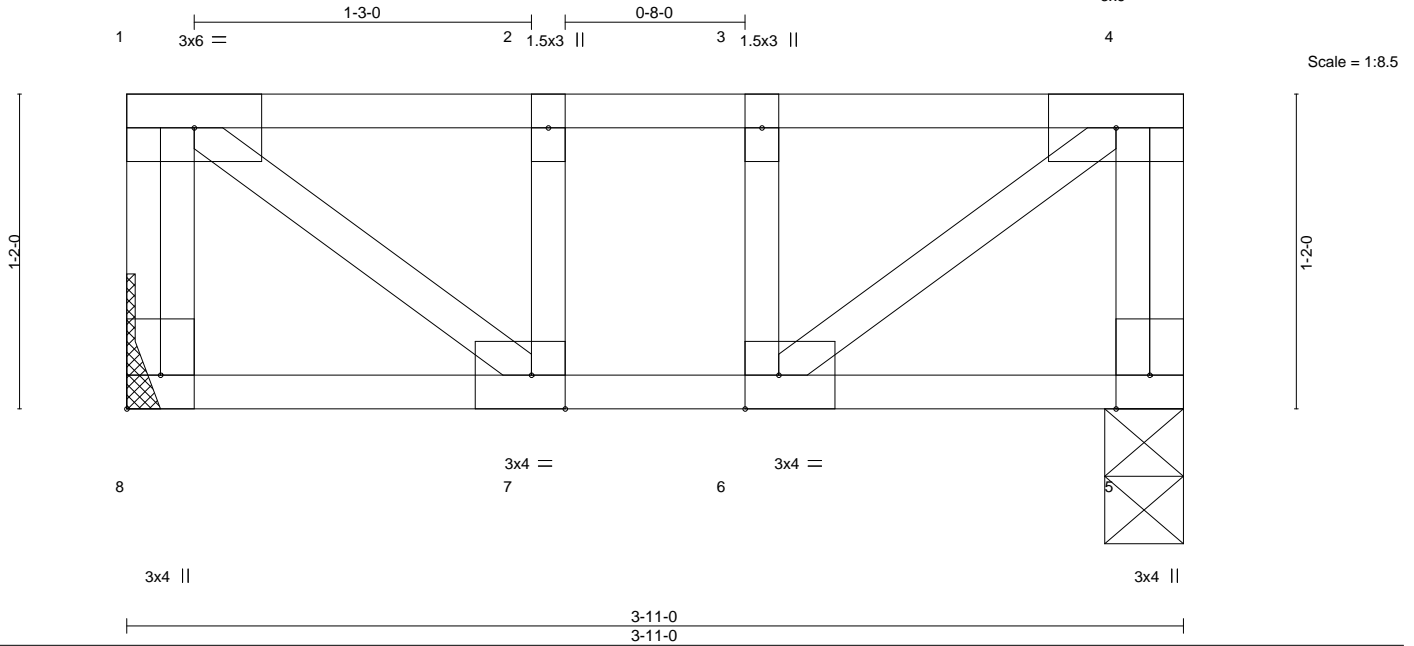


Plate Offsets (X,Y)-- [6:0-1-8,Edge], [7:0-1-8,Edge], [8:Edge,0-1-8]							
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc)	<b>L/defl</b>	<b>L/d</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.13	Vert(LL) -0.00 7 >999	480		MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.09	Vert(CT) -0.00 7 >999	360			
BCLL 0.0	Rep Stress Incr YES	WB 0.11	Horz(CT) 0.00 5 n/a	n/a			
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S				Weight: 24 lb	FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2(flat)	TOP CHORD Structural wood sheathing directly applied or 3-11-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 8=Mechanical, 5=0-3-8  
 Max Grav 8=202(LC 1), 5=202(LC 1)

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

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) Refer to girder(s) for truss to truss connections.
  - 3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



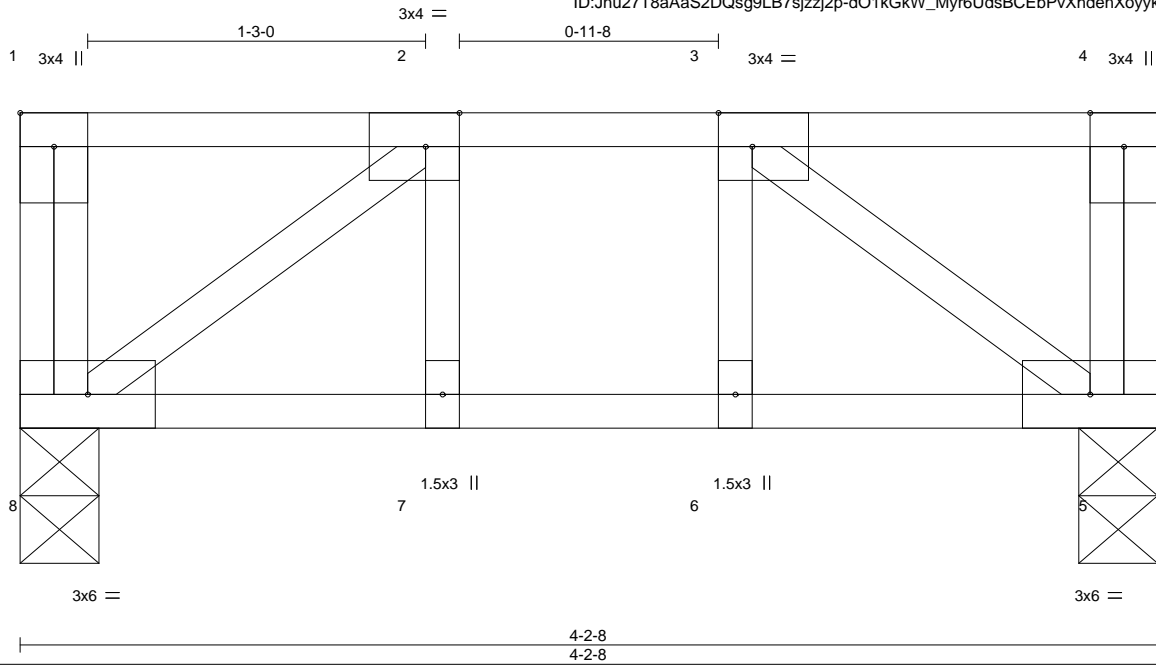
February 2, 2021

Job AC1129	Truss F21	Truss Type FLOOR	Qty 99	Ply 1	MCKEEHOMES/FINLEY; LOT 1129 ANDERSON CREEK ACADEMY I44626677
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Feb 1 20:48:30 2021 Page 1

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Scale = 1:8.5

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [2:0-1-8,Edge], [3:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.13	Vert(LL) -0.00	7	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.10	Vert(CT) -0.01	7	>999	360		
BCLL 0.0	Rep Stress Incr YES	WB 0.06	Horz(CT) 0.00	5	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 25 lb	FT = 20%F, 11%E

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-2-8 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 8=0-3-8, 5=0-3-8  
 Max Grav 8=218(LC 1), 5=218(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-8=-256/0, 3-5=-256/0

**NOTES-**  
 1) Unbalanced floor live loads have been considered for this design.  
 2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.  
 Strongbacks to be attached to walls at their outer ends or restrained by other means.



February 2, 2021

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818 Soundside Road  
 Edenton, NC 27932

Job AC1129	Truss F22	Truss Type FLOOR	Qty 99	Ply 1	MCKEEHOMES/FINLEY; LOT 1129 ANDERSON CREEK ACADEMY I44626678
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Feb 1 20:48:31 2021 Page 1  
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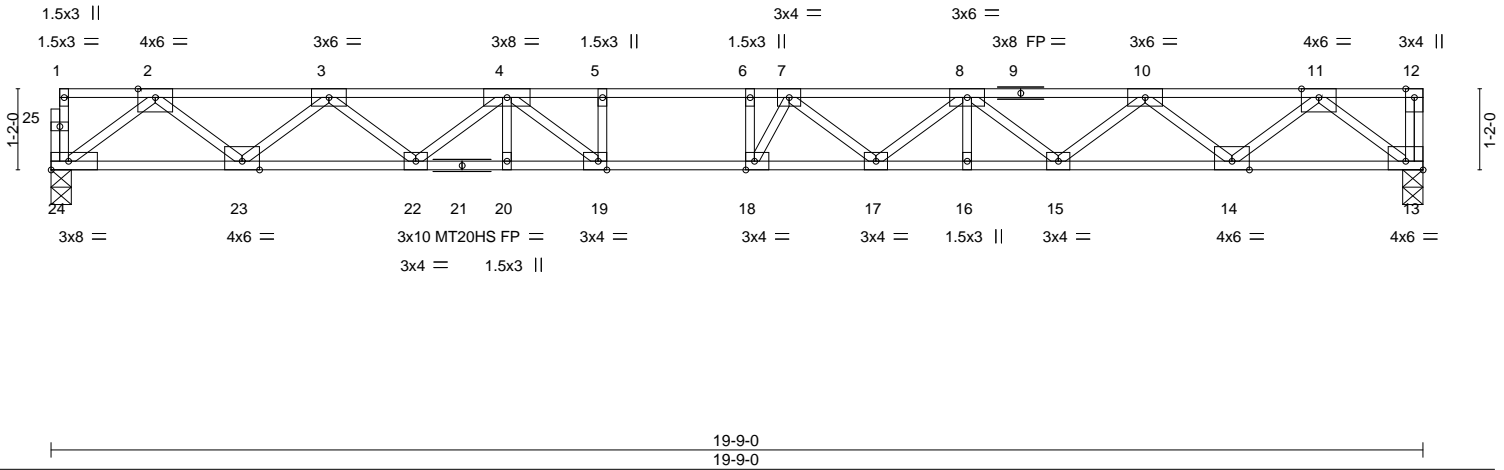
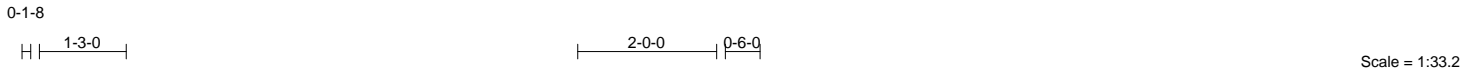


Plate Offsets (X,Y)--		[13:Edge,0-1-8], [18:0-1-8,Edge], [19:0-1-8,Edge]			
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.73	Vert(LL) -0.41 17-18 >565 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.84	Vert(CT) -0.57 17-18 >411 360	MT20HS	187/143
BCLL 0.0	Rep Stress Incr YES	WB 0.60	Horz(CT) 0.09 13 n/a n/a	Weight: 101 lb FT = 20%F, 11%E	
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S			

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP SS(flat) *Except* 9-12: 2x4 SP No.2(flat)	TOP CHORD Structural wood sheathing directly applied or 5-7-10 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat) *Except* 13-21: 2x4 SP SS(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 24=0-3-8, 13=0-3-8  
Max Grav 24=1066(LC 1), 13=1072(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 2-3=-2306/0, 3-4=-3842/0, 4-5=-4922/0, 5-6=-4922/0, 6-7=-4922/0, 7-8=-4770/0, 8-10=-3849/0, 10-11=-2304/0  
**BOT CHORD** 23-24=0/1339, 22-23=0/3240, 20-22=0/4432, 19-20=0/4432, 18-19=0/4922, 17-18=0/4982, 16-17=0/4470, 15-16=0/4470, 14-15=0/3232, 13-14=0/1342  
**WEBS** 2-24=-1676/0, 2-23=0/1259, 3-23=-1216/0, 3-22=0/784, 4-22=-754/0, 4-19=0/954, 5-19=-359/0, 6-18=-317/278, 11-13=-1684/0, 11-14=0/1252, 10-14=-1208/0, 10-15=0/804, 8-15=-792/0, 8-17=0/408, 7-17=-433/0, 7-18=-490/460

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are MT20 plates unless otherwise indicated.
  - 3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 4) CAUTION, Do not erect truss backwards.



February 2, 2021

Job AC1129	Truss F23	Truss Type FLOOR	Qty 99	Ply 1	MCKEEHOMES/FINLEY; LOT 1129 ANDERSON CREEK ACADEMY I44626679
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Feb 1 20:48:31 2021 Page 1  
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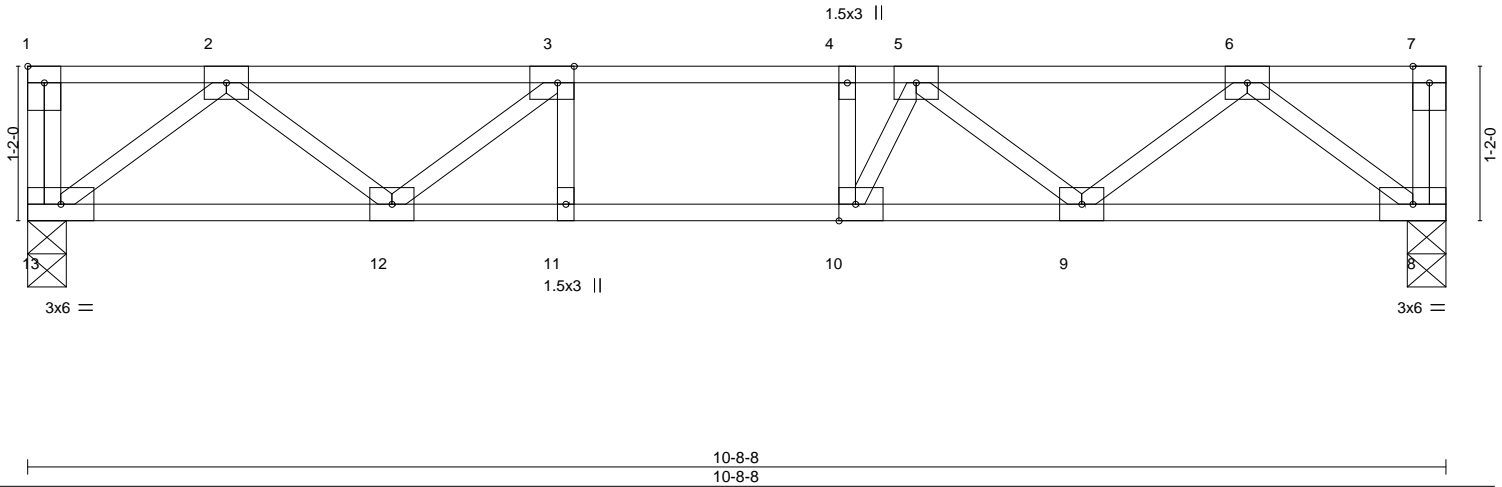


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [3:0-1-8,Edge], [10:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	2-0-0 Plate Grip DOL 1.00	TC 0.42	Vert(LL)	-0.07 9-10	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.58	Vert(CT)	-0.09 9-10	>999	360		
BCLL 0.0	Rep Stress Incr YES	WB 0.23	Horz(CT)	0.02 8	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 55 lb	FT = 20%F, 11%E

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

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

**REACTIONS.** (size) 13=0-3-8, 8=0-3-8  
Max Grav 13=575(LC 1), 8=575(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1054/0, 3-4=-1411/0, 4-5=-1411/0, 5-6=-1054/0  
BOT CHORD 12-13=0/691, 11-12=0/1411, 10-11=0/1411, 9-10=0/1381, 8-9=0/693  
WEBS 2-13=-867/0, 2-12=0/473, 3-12=-480/0, 6-8=-869/0, 6-9=0/470, 5-9=-426/0, 5-10=-119/346

**NOTES-**  
1) Unbalanced floor live loads have been considered for this design.  
2) All plates are 3x4 MT20 unless otherwise indicated.  
3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



February 2, 2021

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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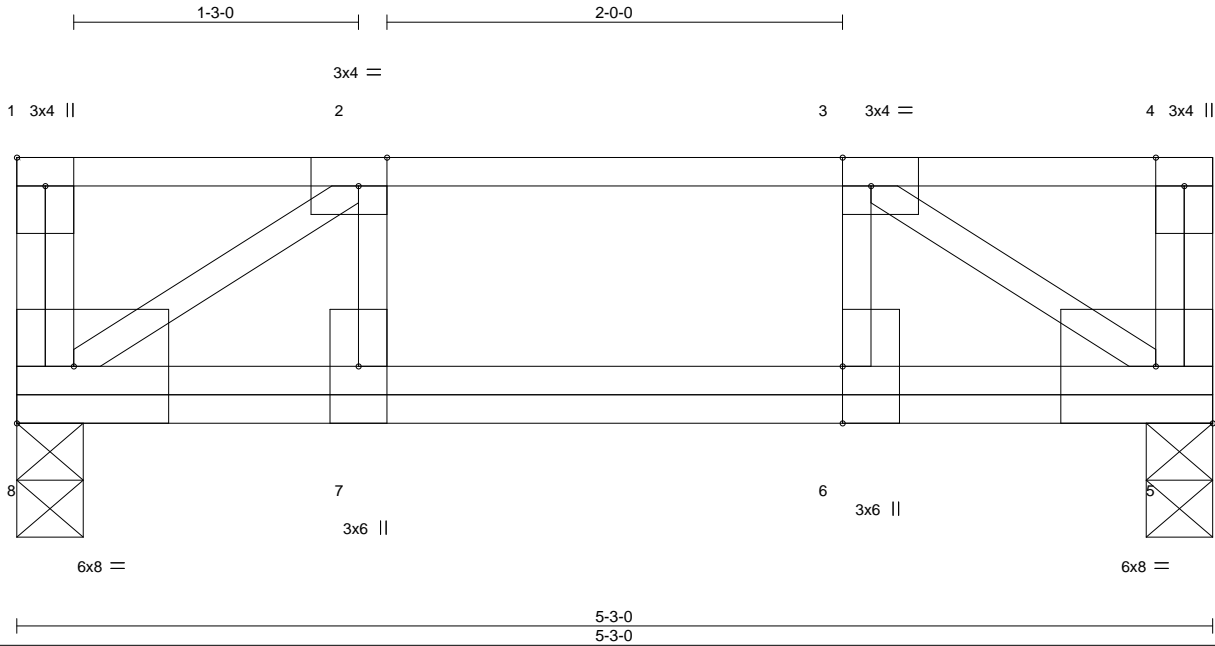
818 Soundside Road  
Edenton, NC 27932



Job AC1129	Truss F24GR	Truss Type FLOOR	Qty 99	Ply 1	MCKEEHOMES/FINLEY; LOT 1129 ANDERSON CREEK ACADEMY I44626680
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Feb 1 20:48:32 2021 Page 1  
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Scale = 1:10.1

Plate Offsets (X,Y)--	[1:Edge,0-1-8], [2:0-1-8,Edge], [3:0-1-8,Edge], [6:0-3-0,0-0-0]						
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc)	<b>L/defl</b>	<b>L/d</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.36	Vert(LL) -0.01 7	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.20	Vert(CT) -0.01 6-7	>999	360		
BCLL 0.0	Rep Stress Incr NO	WB 0.23	Horz(CT) 0.00 5	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S				Weight: 35 lb	FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2(flat)	TOP CHORD Structural wood sheathing directly applied or 5-3-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 8=0-3-8, 5=0-3-8  
Max Grav 8=690(LC 1), 5=690(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-796/0  
BOT CHORD 7-8=0/796, 6-7=0/796, 5-6=0/796  
WEBS 2-8=-964/0, 3-5=-964/0

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
  - Load case(s) 1, 2, 3, 4, 5, 6 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

- LOAD CASE(S)** Standard
- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 5-8=-96(F=-86), 1-4=-180
  - Dead: Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 5-8=-96(F=-86), 1-4=-180
  - 1st chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 6-8=-96(F=-86), 5-6=-33(F=-23), 1-3=-180, 3-4=-100
  - 2nd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 7-8=-33(F=-23), 5-7=-96(F=-86), 1-2=-100, 2-4=-180
  - 3rd chase Dead: Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 6-8=-96(F=-86), 5-6=-33(F=-23), 1-3=-180, 3-4=-100
  - 4th chase Dead: Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 7-8=-33(F=-23), 5-7=-96(F=-86), 1-2=-100, 2-4=-180



February 2, 2021

# Symbols

## PLATE LOCATION AND ORIENTATION



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



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



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

\* Plate location details available in **MITek 20/20 software or upon request.**

## PLATE SIZE

**4 X 4**

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

## LATERAL BRACING LOCATION



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

## BEARING



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

### Industry Standards:

ANSI/TFP 1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing, Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

6-4-8  
dimensions shown in ft-in-sixteenths  
(Drawings not to scale)



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



# General Safety Notes

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

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