

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: 22-0799-A  
GARY ROBINSON-SUMMIT-LOT#1 FLOOR

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Riverside Roof Truss.

Pages or sheets covered by this seal: I50154814 thru I50154826

My license renewal date for the state of North Carolina is December 31, 2022.

North Carolina COA: C-0844



February 10, 2022

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 22-0799-A	Truss F01	Truss Type FLOOR GIRDER	Qty 1	Ply 2	GARY ROBINSON-SUMMIT-LOT#1 FLOOR Job Reference (optional)	150154814
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Riverside Roof Truss, LLC, Danville, Va - 24541,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Feb 9 13:43:52 2022 Page 1  
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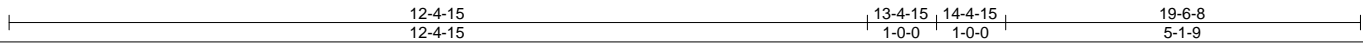
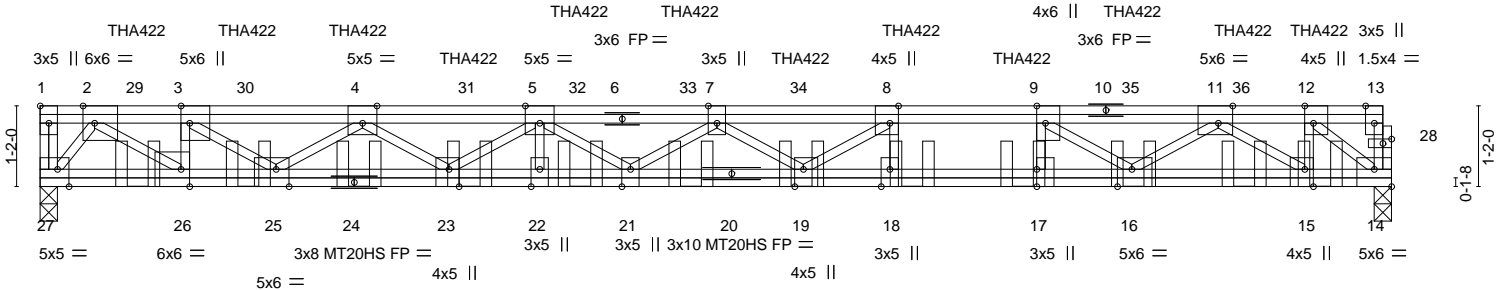


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [2:0-2-0,Edge], [3:0-3-0,Edge], [4:0-2-8,Edge], [5:0-2-8,Edge], [7:0-3-0,Edge], [8:0-3-0,Edge], [9:0-3-0,Edge], [11:0-2-8,Edge], [12:0-3-0,Edge], [13:0-3-0,Edge], [14:Edge,0-3-0], [15:0-3-0,Edge], [16:0-2-8,Edge], [17:0-3-0,0-0-0], [18:0-3-0,Edge], [19:0-3-0,Edge], [21:0-3-0,Edge], [22:0-3-0,Edge], [23:0-3-0,Edge], [25:0-2-4,Edge], [26:0-1-8,Edge], [27:0-2-0,Edge], [28:0-1-8,0-0-12]

<b>LOADING</b> (psf)	<b>SPACING-</b>	1-7-3	<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 0.35	Vert(LL)	-0.32	19	>715	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.63	Vert(CT)	-0.45	19	>513	MT20HS	187/143
BCLL 0.0	Rep Stress Incr	NO	WB 0.96	Horz(CT)	0.05	14	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 306 lb	FT = 20%F, 11%E

**LUMBER-**  
TOP CHORD 2x4 SP DSS(flat)  
BOT CHORD 2x4 SP DSS(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) 27=0-3-0, 14=0-3-0  
Max Grav 27=2603(LC 1), 14=2764(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-5220/0, 3-4=-7769/0, 4-5=-11663/0, 5-7=-13692/0, 7-8=-13560/0, 8-9=-11916/0, 9-11=-8503/0, 11-12=-3054/0  
BOT CHORD 26-27=0/1920, 25-26=0/5220, 23-25=0/10228, 22-23=0/13117, 21-22=0/13117, 19-21=0/14310, 18-19=0/11916, 17-18=0/11916, 16-17=0/11916, 15-16=0/6009, 14-15=0/3077  
WEBS 8-18=-1129/0, 9-17=0/1131, 8-19=0/2066, 7-19=-964/0, 7-21=-766/0, 5-21=0/701, 5-23=-1773/0, 4-23=0/1780, 4-25=-3049/0, 3-25=0/3110, 3-26=-2267/0, 2-26=0/4024, 2-27=-3282/0, 9-16=-4162/0, 11-16=0/3093, 11-15=-3605/0, 12-15=0/1766, 12-14=-3887/0

- NOTES-**
- 1) Fasten trusses together to act as a single unit as per standard industry detail, or loads are to be evenly applied to all plies.
  - 2) Unbalanced floor live loads have been considered for this design.
  - 3) All plates are MT20 plates unless otherwise indicated.
  - 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) Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent spaced at 1-7-3 oc max. starting at 1-4-15 from the left end to 18-6-2 to connect truss(es) to back face of top chord.
  - 7) Fill all nail holes where hanger is in contact with lumber.
  - 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: 14-27=-8, 1-13=-80



February 10, 2022

Continued on page 2

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



Job 22-0799-A	Truss F01	Truss Type FLOOR GIRDER	Qty 1	Ply <b>2</b>	GARY ROBINSON-SUMMIT-LOT#1 FLOOR I50154814 Job Reference (optional)
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Riverside Roof Truss, LLC, Danville, Va - 24541,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Feb 9 13:43:52 2022 Page 2  
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**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 8=-306(B) 9=-306(B) 4=-306(B) 12=-306(B) 29=-306(B) 30=-306(B) 31=-306(B) 32=-306(B) 33=-306(B) 34=-306(B) 35=-306(B) 36=-306(B)

**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 22-0799-A	Truss F02	Truss Type GABLE	Qty 1	Ply 1	GARY ROBINSON-SUMMIT-LOT#1 FLOOR 150154815 Job Reference (optional)
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Riverside Roof Truss, LLC, Danville, Va - 24541,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Feb 9 13:43:53 2022 Page 1  
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0:1:8

0:1:8

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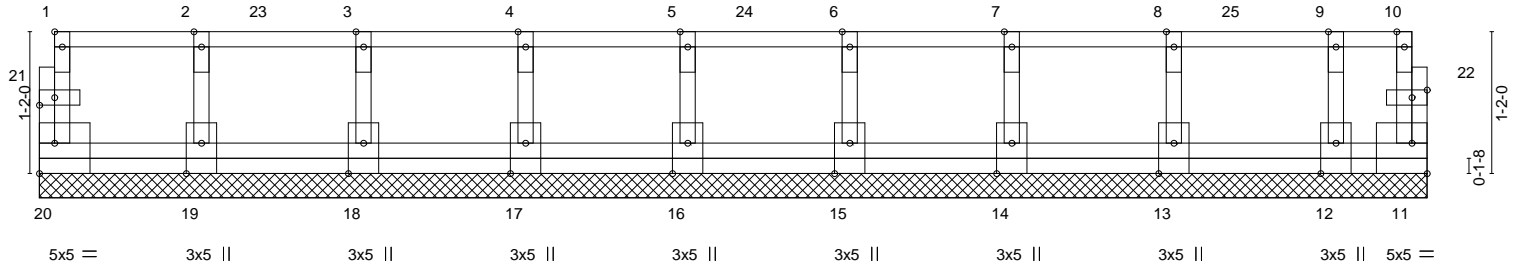


Plate Offsets (X, Y)--	[1:Edge,0-0-12], [11:Edge,0-3-0], [12:0-3-0,Edge], [13:0-3-0,Edge], [14:0-3-0,Edge], [15:0-3-0,Edge], [16:0-3-0,Edge], [17:0-3-0,Edge], [18:0-3-0,Edge], [19:0-3-0,Edge], [20:Edge,0-3-0], [21:0-1-8,0-0-12], [22:0-1-8,0-0-12]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.19	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 0.05	Horz(CT)	0.00	11	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-R						Weight: 64 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)	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 11-5-0.  
(lb) - Max Uplift All uplift 100 lb or less at joint(s) 11  
Max Grav All reactions 250 lb or less at joint(s) 20, 19, 18, 17, 16, 15, 14, 13, 12

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

- NOTES-**
- All plates are 1.5x4 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11.
  - 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.
  - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
  - 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: 11-20=-10, 1-10=-100  
Concentrated Loads (lb)  
Vert: 4=-95(F) 7=-95(F) 23=-95(F) 24=-95(F) 25=-95(F)



Job 22-0799-A	Truss F03	Truss Type Floor Girder	Qty 1	Ply 1	GARY ROBINSON-SUMMIT-LOT#1 FLOOR 150154816 Job Reference (optional)
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8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Feb 9 13:43:54 2022 Page 1  
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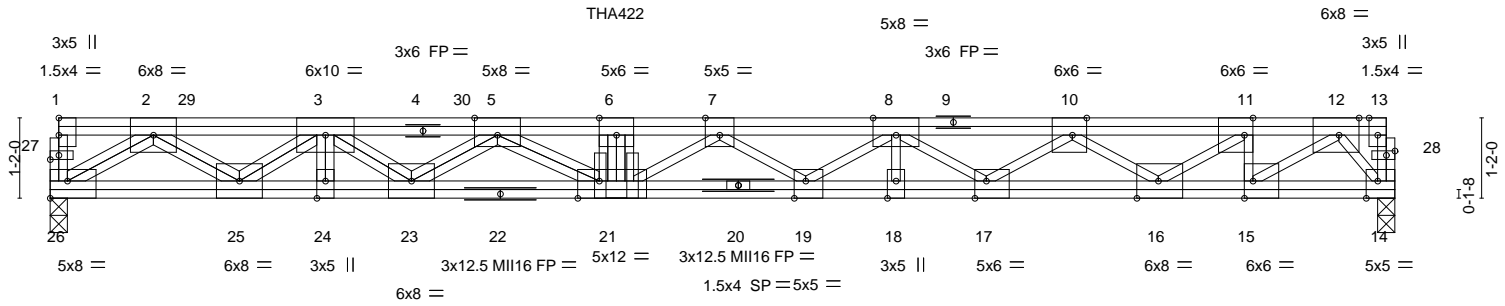


Plate Offsets (X, Y)--	[5:0-4-0,Edge], [6:0-3-0,Edge], [7:0-2-8,Edge], [8:0-4-0,Edge], [10:0-2-8,Edge], [11:0-1-8,Edge], [12:0-3-8,Edge], [13:0-3-0,Edge], [14:0-2-0,Edge], [15:0-1-8,Edge], [16:0-3-12,Edge], [17:0-2-0,Edge], [18:0-3-0,Edge], [19:0-2-0,Edge], [21:0-3-12,Edge], [24:0-3-0,Edge], [26:Edge,0-3-0], [27:0-1-8,0-0-12], [28:0-1-8,0-0-12]
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LOADING (psf)	SPACING-	1-7-3	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.43	Vert(LL)	-0.38 19-21	>602	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.66	Vert(CT)	-0.58 19-21	>395	360	MI16	174/126
BCLL 0.0	Rep Stress Incr	NO	WB 0.63	Horz(CT)	0.07 14	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 171 lb	FT = 20%F, 11%E

**LUMBER-**  
 TOP CHORD 2x4 SP DSS(flat)  
 BOT CHORD 2x4 SP DSS(flat)  
 WEBS 2x4 SP No.3(flat) \*Except\*  
 2-26,2-25,5-23,7-21,7-19,8-19,8-17,10-17,10-16,11-16,12-15: 2x4 SP No.2(flat)

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-9-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 26=0-3-0, 14=0-3-0  
 Max Grav 26=1855(LC 1), 14=1488(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4804/0, 3-5=-8595/0, 5-6=-11787/0, 6-7=-11917/0, 7-8=-10066/0, 8-10=-7617/0, 10-11=-4652/0, 11-12=-2955/0  
 BOT CHORD 25-26=0/2702, 24-25=0/6904, 23-24=0/6904, 21-23=0/10221, 19-21=0/11053, 18-19=0/8969, 17-18=0/8969, 16-17=0/6283, 15-16=0/2955, 14-15=0/1132  
 WEBS 6-21=-1402/0, 2-26=-3244/0, 2-25=0/2614, 3-25=-2597/0, 3-23=0/2090, 5-23=-2012/0, 5-21=0/1798, 7-21=0/998, 7-19=-1224/0, 8-19=0/1338, 8-17=-1649/0, 10-17=0/1654, 10-16=-2023/0, 11-16=0/2069, 11-15=-1311/0, 12-15=0/2227, 12-14=-1822/0

- NOTES-**
- All plates are MT20 plates unless otherwise indicated.
  - The Fabrication Tolerance at joint 20 = 11%
  - 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.
  - Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent at 8-2-12 from the left end to connect truss(es) to back face of top chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
  - Fill all nail holes where hanger is in contact with lumber.
  - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
  - 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: 14-26=-8, 1-13=-80  
 Concentrated Loads (lb)  
 Vert: 6=-1401(F=-85, B=-1316) 3=-85(F) 29=-85(F) 30=-85(F)



February 10, 2022

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

Job 22-0799-A	Truss F04	Truss Type Floor	Qty 5	Ply 1	GARY ROBINSON-SUMMIT-LOT#1 FLOOR 150154817 Job Reference (optional)
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Riverside Roof Truss, LLC, Danville, Va - 24541,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Feb 9 13:43:54 2022 Page 1  
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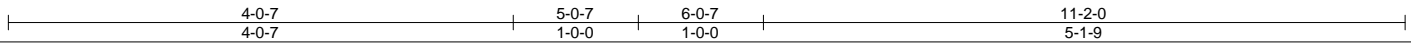
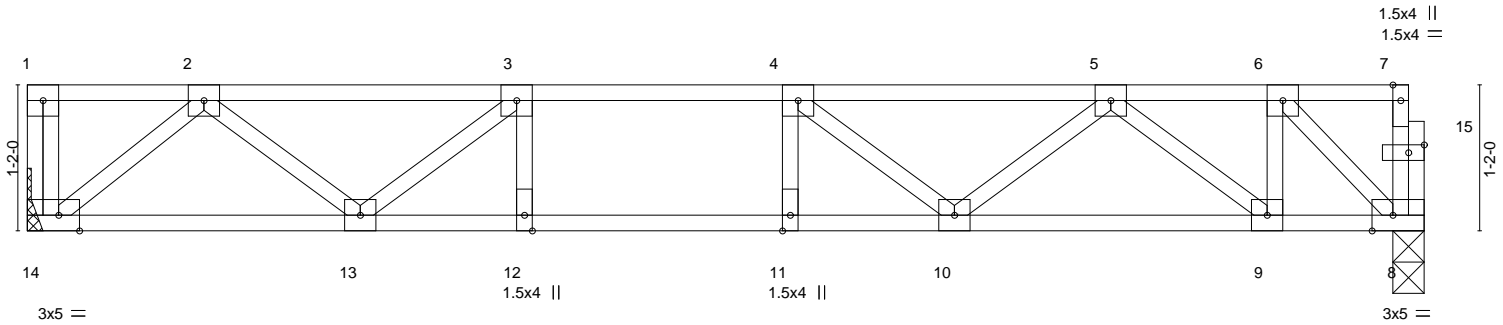


Plate Offsets (X, Y)-- [8:0-2-0,Edge], [14:0-2-0,Edge], [15:0-1-8,0-0-12]

LOADING (psf)	SPACING-	1-7-3	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.39	Vert(LL)	-0.08 10-11	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.68	Vert(CT)	-0.11 10-11	>999	360		
BCLL 0.0	Rep Stress Incr	YES	WB 0.20	Horz(CT)	0.02 8	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 58 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) 14=Mechanical, 8=0-3-0  
Max Grav 14=480(LC 1), 8=475(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-872/0, 3-4=-1229/0, 4-5=-1086/0, 5-6=-445/0  
BOT CHORD 13-14=0/542, 12-13=0/1229, 11-12=0/1229, 10-11=0/1229, 9-10=0/893, 8-9=0/445  
WEBS 3-13=-471/0, 2-13=0/429, 2-14=-698/0, 4-10=-280/0, 5-10=0/263, 5-9=-572/0, 6-9=0/367, 6-8=-619/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x3 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.
  - 5) CAUTION, Do not erect truss backwards.



February 10, 2022

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

Job 22-0799-A	Truss F05	Truss Type Floor	Qty 4	Ply 1	GARY ROBINSON-SUMMIT-LOT#1 FLOOR 150154818 Job Reference (optional)
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Riverside Roof Truss, LLC, Danville, Va - 24541,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Feb 9 13:43:55 2022 Page 1  
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2-0-0

0-10-9 | 0-1-8

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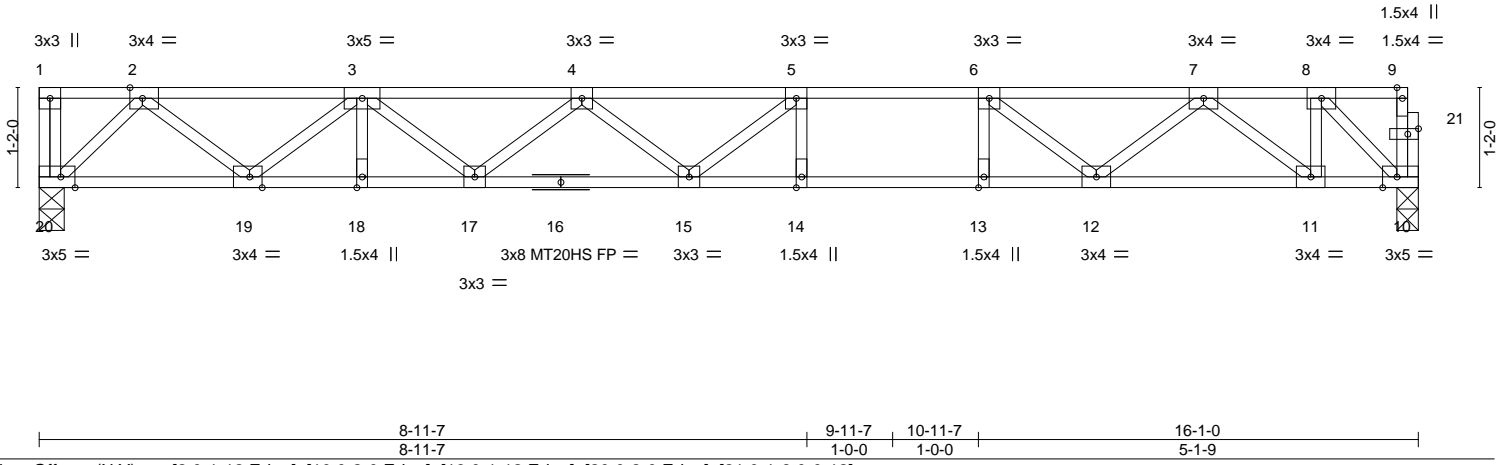


Plate Offsets (X, Y)--	[2:0-1-12,Edge], [10:0-2-0,Edge], [19:0-1-12,Edge], [20:0-2-0,Edge], [21:0-1-8,0-0-12]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 1-7-3	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.66	Vert(LL) -0.23 14-15 >822 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.70	Vert(CT) -0.32 14-15 >601 360	MT20HS	187/143
BCLL 0.0	Rep Stress Incr YES	WB 0.37	Horz(CT) 0.04 10 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 83 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) *Except* 10-16: 2x4 SP DSS(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 20=0-3-8, 10=0-3-0  
Max Grav 20=697(LC 1), 10=692(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1299/0, 3-4=-2249/0, 4-5=-2602/0, 5-6=-2471/0, 6-7=-1835/0, 7-8=-682/0  
BOT CHORD 19-20=0/699, 18-19=0/1905, 17-18=0/1905, 15-17=0/2573, 14-15=0/2471, 13-14=0/2471,  
12-13=0/2471, 11-12=0/1349, 10-11=0/682  
WEBS 5-14=-279/13, 6-13=0/305, 5-15=-175/323, 4-17=-421/0, 3-17=0/439, 3-19=-774/0,  
2-19=0/781, 2-20=-972/0, 6-12=-847/0, 7-12=0/632, 7-11=-851/0, 8-11=0/564,  
8-10=-951/0

- 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 10, 2022

Job 22-0799-A	Truss F06	Truss Type Floor	Qty 2	Ply 1	GARY ROBINSON-SUMMIT-LOT#1 FLOOR 150154819
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Riverside Roof Truss, LLC, Danville, Va - 24541,

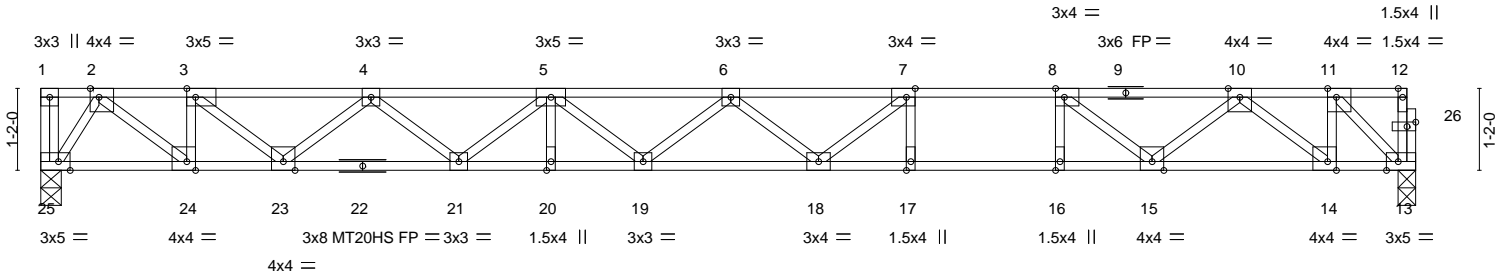
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Feb 9 13:43:56 2022 Page 1  
ID:wGH07kGIZJUXqaFdBnCYKlyjubB-xRDpYAeQ\_rF3S?M16qQbgx1Luzf6gs67kCRz\_zzms\_1

0-6-15 1-3-0

2-0-0

0-10-9 0-1-8

Scale = 1:32.8



12-5-7 12-5-7 13-5-7 1-0-0 14-5-7 1-0-0 19-7-0 5-1-9

Plate Offsets (X,Y)-- [2:0-1-8,Edge], [3:0-1-8,Edge], [7:0-1-8,Edge], [8:0-1-8,Edge], [11:0-1-8,Edge], [13:0-2-0,Edge], [14:0-1-8,Edge], [24:0-1-8,Edge], [25:0-2-0,Edge], [26:0-1-8,0-0-12]

<b>LOADING</b> (psf)	<b>SPACING-</b>	1-7-3	<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 0.61	Vert(LL)	-0.41 17-18	>563	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.90	Vert(CT)	-0.57 17-18	>410	360	MT20HS	187/143
BCLL 0.0	Rep Stress Incr	YES	WB 0.57	Horz(CT)	0.06 13	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 101 lb	FT = 20%F, 11%E

**LUMBER-**  
**TOP CHORD** 2x4 SP No.2(flat) \*Except\*  
1-9: 2x4 SP DSS(flat)  
**BOT CHORD** 2x4 SP No.2(flat) \*Except\*  
13-22: 2x4 SP DSS(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) 25=0-3-8, 13=0-3-0  
Max Grav 25=851(LC 1), 13=846(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 2-3=-1499/0, 3-4=-2217/0, 4-5=-3287/0, 5-6=-3850/0, 6-7=-3825/0, 7-8=-3353/0, 8-10=-2379/0, 10-11=-851/0  
**BOT CHORD** 24-25=0/554, 23-24=0/1499, 21-23=0/2883, 20-21=0/3692, 19-20=0/3692, 18-19=0/4015, 17-18=0/3353, 16-17=0/3353, 15-16=0/3353, 14-15=0/1672, 13-14=0/851  
**WEBS** 7-17=-419/0, 8-16=0/443, 7-18=-3/730, 6-18=-319/86, 5-21=-517/0, 4-21=0/526, 4-23=-867/0, 3-23=0/917, 3-24=-735/0, 2-24=0/1206, 2-25=-990/0, 8-15=-1249/0, 10-15=0/921, 10-14=-1048/0, 11-14=0/699, 11-13=-1186/0

- 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 10, 2022

**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 22-0799-A	Truss F07	Truss Type Floor Girder	Qty 1	Ply 1	GARY ROBINSON-SUMMIT-LOT#1 FLOOR Job Reference (optional)	150154820
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Riverside Roof Truss, LLC, Danville, Va - 24541,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Feb 9 13:43:56 2022 Page 1  
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1-3-0

0-3-0

Scale: 3/4"=1'

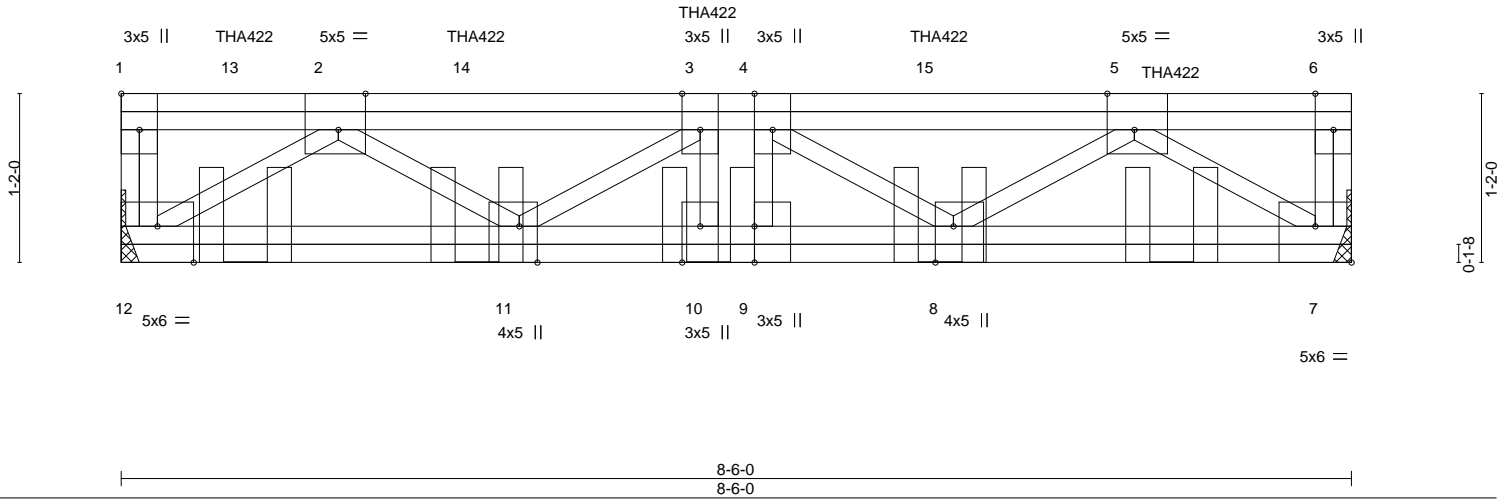


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [2:0-2-4,Edge], [3:0-3-0,Edge], [4:0-3-0,Edge], [5:0-2-4,Edge], [6:0-3-0,Edge], [7:Edge,0-3-0], [8:0-3-0,Edge], [9:0-3-0,0-0-0], [10:0-3-0,Edge], [11:0-3-0,Edge], [12:0-3-0,Edge]

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 0.56	Vert(LL)	-0.05	10	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.60	Vert(CT)	-0.07	10	>999	360		
BCLL 0.0	Rep Stress Incr	NO	WB 0.58	Horz(CT)	0.02	7	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						Weight: 69 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=Mechanical, 7=Mechanical  
Max Grav 12=1516(LC 1), 7=1396(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2778/0, 3-4=-3526/0, 4-5=-2797/0  
BOT CHORD 11-12=0/2027, 10-11=0/3526, 9-10=0/3526, 8-9=0/3526, 7-8=0/2063  
WEBS 2-12=-2436/0, 2-11=0/932, 3-11=-912/0, 5-7=-2479/0, 5-8=0/911, 4-8=-889/0

- 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.
  - 4) Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent spaced at 1-7-3 oc max. starting at 0-10-5 from the left end to 7-3-2 to connect truss(es) to back face of top chord.
  - 5) Fill all nail holes where hanger is in contact with lumber.
  - 6) 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: 7-12=-10, 1-6=-100  
Concentrated Loads (lb)  
Vert: 3=-400(B) 5=-400(B) 13=-404(B) 14=-400(B) 15=-400(B)



February 10, 2022

**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 22-0799-A	Truss F08	Truss Type FLOOR GIRDER	Qty 1	Ply 1	GARY ROBINSON-SUMMIT-LOT#1 FLOOR 150154821
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Riverside Roof Truss, LLC, Danville, Va - 24541,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Feb 9 13:43:57 2022 Page 1

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Scale = 1:27.3

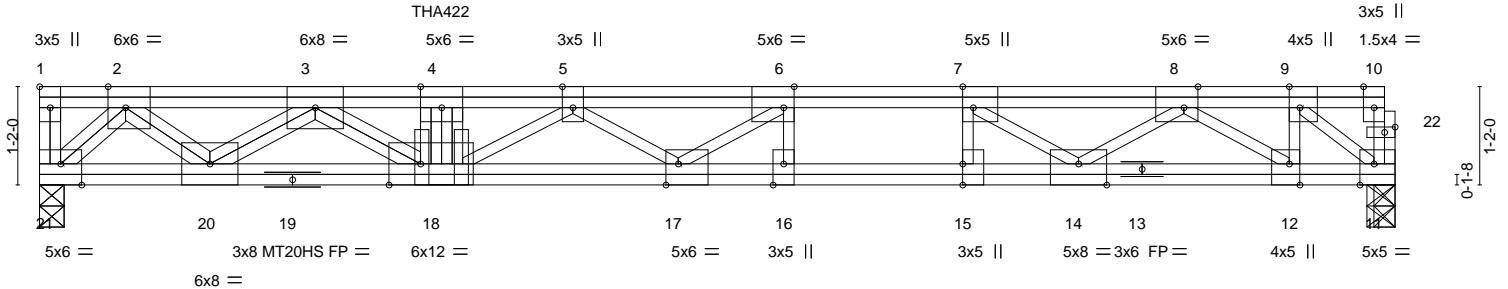


Plate Offsets (X, Y)--	[1:Edge,0-1-8], [2:0-2-8,Edge], [4:0-3-0,Edge], [5:0-3-0,Edge], [6:0-1-8,Edge], [7:0-3-0,Edge], [8:0-2-0,Edge], [9:0-3-0,Edge], [10:0-3-0,Edge], [11:0-2-0,Edge], [12:0-3-0,Edge], [14:0-4-0,Edge], [15:0-3-0,0-0-0], [16:0-3-0,Edge], [17:0-1-12,Edge], [18:0-4-8,Edge], [21:0-3-0,Edge], [22:0-1-8,0-0-12]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.66	Vert(LL)	-0.28 16-17	>684	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.74	Vert(CT)	-0.38 16-17	>492	360	MT20HS	187/143
BCLL 0.0	Rep Stress Incr	NO	WB 0.81	Horz(CT)	0.04 11	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 136 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 5-11-3 oc purlins, except end verticals.
BOT CHORD 2x4 SP DSS(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** All bearings 0-3-8 except (jt=length) 11=0-4-0, 11=0-4-0.  
 (lb) - Max Grav All reactions 250 lb or less at joint(s) except 21=1867(LC 1), 21=1867(LC 1), 11=1285(LC 1), 11=1285(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3624/0, 3-4=-7863/0, 4-5=-7959/0, 5-6=-7329/0, 6-7=-6097/0, 7-8=-4156/0, 8-9=-1403/0  
 BOT CHORD 20-21=0/1819, 18-20=0/5770, 17-18=0/7950, 16-17=0/6097, 15-16=0/6097, 14-15=0/6097, 12-14=0/2807, 11-12=0/1412  
 WEBS 4-18=-1390/0, 6-16=-808/0, 7-15=0/836, 6-17=0/1702, 5-17=-884/0, 5-18=0/285, 7-14=-2401/0, 8-14=0/1673, 8-12=-1713/0, 9-12=0/881, 9-11=-1786/0, 3-18=0/2482, 3-20=-2677/0, 2-20=0/2445, 2-21=-2577/0

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
  - All plates are MT20 plates unless otherwise indicated.
  - Non Standard bearing condition. Review required.
  - 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.
  - Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent at 4-9-4 from the left end to connect truss(es) to front face of top chord.
  - Fill all nail holes where hanger is in contact with lumber.
  - 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: 11-21=-10, 1-10=-100  
 Concentrated Loads (lb)  
 Vert: 4=-1416(F)



February 10, 2022

**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



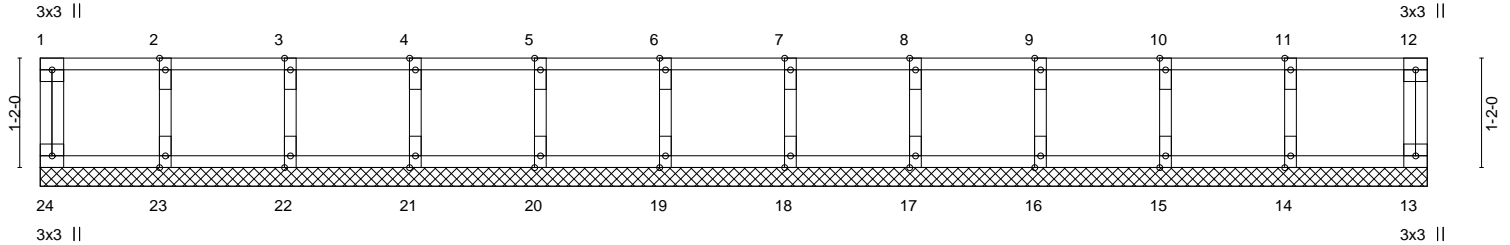
818 Soundside Road  
 Edenton, NC 27932

Job 22-0799-A	Truss F09	Truss Type Floor Supported Gable	Qty 1	Ply 1	GARY ROBINSON-SUMMIT-LOT#1 FLOOR 150154822 Job Reference (optional)
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Riverside Roof Truss, LLC, Danville, Va - 24541,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Feb 9 13:43:58 2022 Page 1  
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Scale = 1:24.6



14-9-8  
14-9-8

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 0.08	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 YES	WB 0.03	Horz(CT)	0.00	13	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-R					Weight: 63 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 14-9-8.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 24, 13, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14

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

**NOTES-**

- 1) All plates are 1.5x4 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 10, 2022

**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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**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

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job 22-0799-A	Truss F10	Truss Type Floor Supported Gable	Qty 1	Ply 1	GARY ROBINSON-SUMMIT-LOT#1 FLOOR Job Reference (optional)	I50154823
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Riverside Roof Truss, LLC, Danville, Va - 24541,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Feb 9 13:43:58 2022 Page 1  
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0r-1-8

Scale: 3/4"=1'

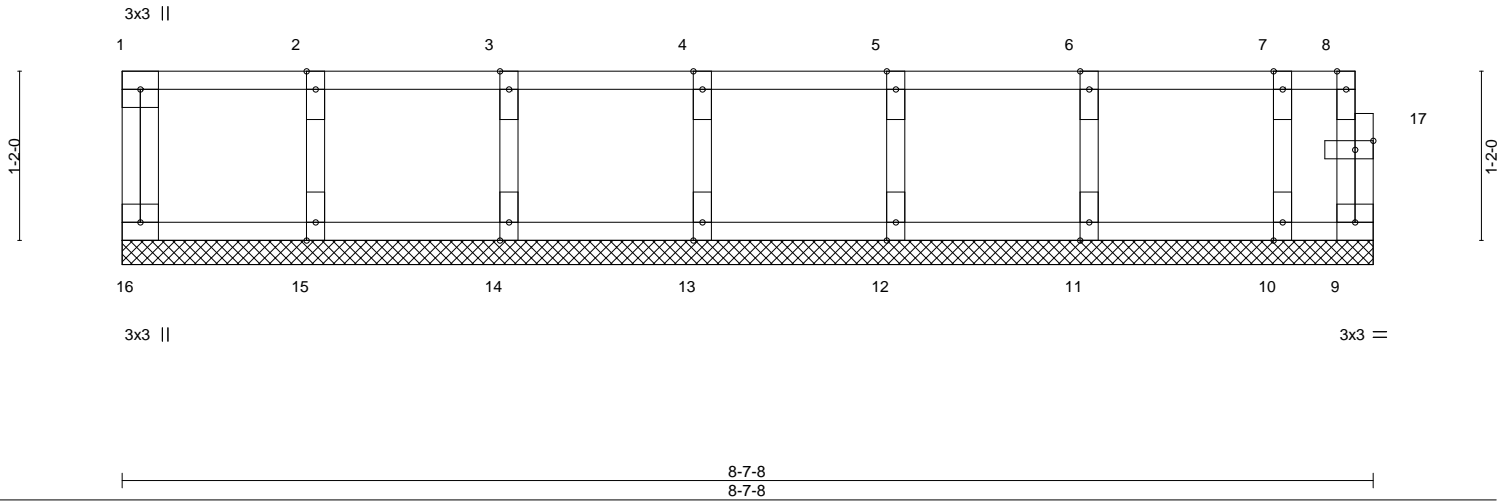


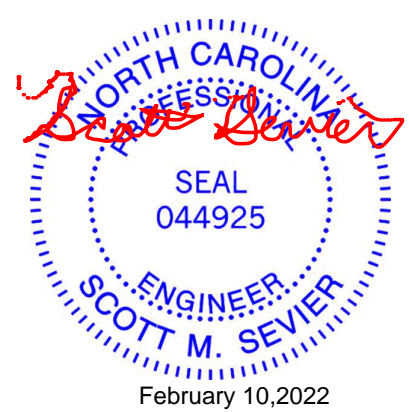
Plate Offsets (X,Y)--	[17:0-1-8,0-0-12]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.08	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.02	Vert(CT) n/a - n/a 999		
BCLL 0.0	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00 9 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-R		Weight: 39 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)	
OTHERS 2x4 SP No.3(flat)	

**REACTIONS.** All bearings 8-7-8.  
(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 1.5x4 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.



Job 22-0799-A	Truss F11	Truss Type Floor	Qty 14	Ply 1	GARY ROBINSON-SUMMIT-LOT#1 FLOOR 150154824
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Riverside Roof Truss, LLC, Danville, Va - 24541,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Feb 9 13:43:59 2022 Page 1

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Job Reference (optional)



Scale = 1:24.3

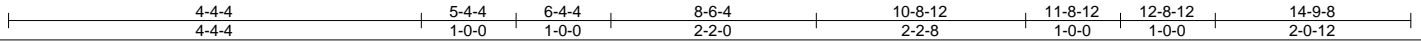
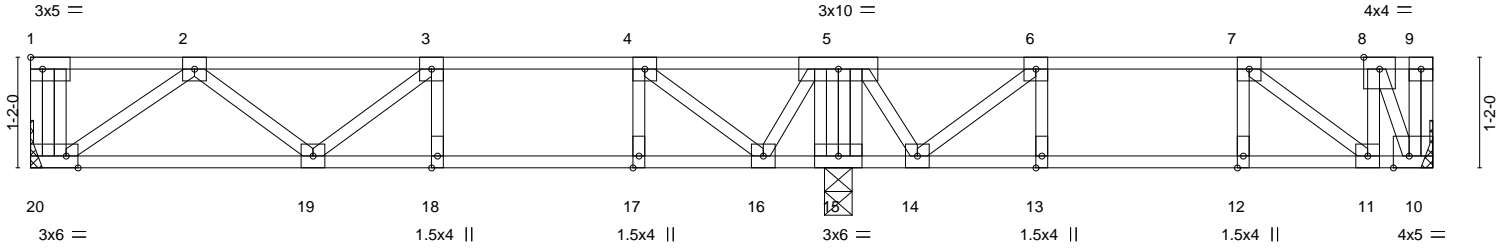


Plate Offsets (X,Y)-- [10:0-2-0,Edge], [20:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	1-7-3	TC 0.38	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.63	Vert(LL) -0.07 18-19 >999 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.16	Vert(CT) -0.09 18-19 >999 360		
BCDL 5.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 10 n/a n/a		
	Code IRC2015/TPI2014			Weight: 82 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, Except: 6-0-0 oc bracing: 15-16,14-15.

**REACTIONS.** (size) 10=Mechanical, 15=0-3-8, 20=Mechanical  
 Max Grav 10=285(LC 7), 15=632(LC 1), 20=385(LC 10)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-681/0, 3-4=-761/0, 4-5=-338/0, 6-7=-422/0  
 BOT CHORD 19-20=0/526, 18-19=0/761, 17-18=0/761, 16-17=0/761, 13-14=0/422, 12-13=0/422, 11-12=0/422  
 WEBS 5-15=-584/0, 2-20=-627/0, 4-16=-582/0, 5-16=0/342, 6-14=-318/0, 7-11=-380/0, 8-10=-277/0

**NOTES-**

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x3 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.
- 5) CAUTION, Do not erect truss backwards.



February 10, 2022

**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

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



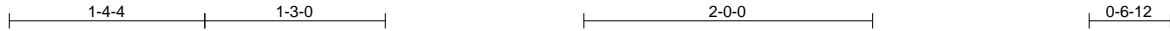
818 Soundside Road  
 Edenton, NC 27932

Job 22-0799-A	Truss F12	Truss Type Floor	Qty 10	Ply 1	GARY ROBINSON-SUMMIT-LOT#1 FLOOR Job Reference (optional)	150154825
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Riverside Roof Truss, LLC, Danville, Va - 24541,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Feb 9 13:43:59 2022 Page 1

ID:wGHO7kGIZJUXqaFdBnCYKlyjubB-L0uyACglHmdeJS4cnz\_IIZfucBmltJaZQ9fdaHzms\_



Scale: 3/4"=1'

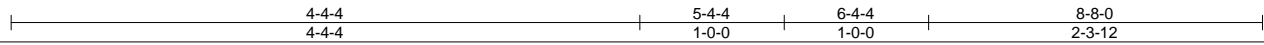
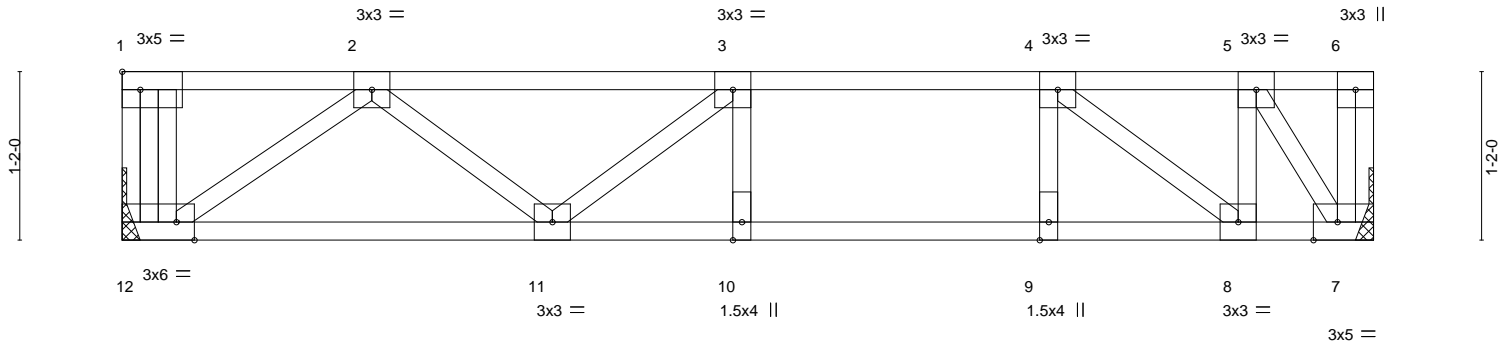


Plate Offsets (X,Y)--	[7:0-2-0,Edge], [12:0-1-8,Edge]						
<b>LOADING</b> (psf)	<b>SPACING-</b>	1-7-3	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d
TCLL 40.0	Plate Grip DOL	1.00	TC 0.46	Vert(LL)	-0.07 10-11	>999	480
TCDL 10.0	Lumber DOL	1.00	BC 0.61	Vert(CT)	-0.09 10-11	>999	360
BCLL 0.0	Rep Stress Incr	YES	WB 0.14	Horz(CT)	0.01 7	n/a	n/a
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S				
							<b>PLATES</b>
							MT20
							<b>GRIP</b>
							244/190
							Weight: 48 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) 7=Mechanical, 12=Mechanical  
Max Grav 7=370(LC 1), 12=370(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-641/0, 3-4=-689/0  
BOT CHORD 11-12=0/507, 10-11=0/689, 9-10=0/689, 8-9=0/689  
WEBS 2-12=-604/0, 4-8=-591/0, 5-8=0/286, 5-7=-373/0

**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 10, 2022

**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



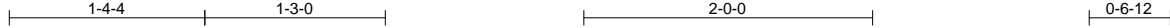
818 Soundside Road  
Edenton, NC 27932

Job 22-0799-A	Truss F13	Truss Type Floor	Qty 2	Ply 1	GARY ROBINSON-SUMMIT-LOT#1 FLOOR 150154826
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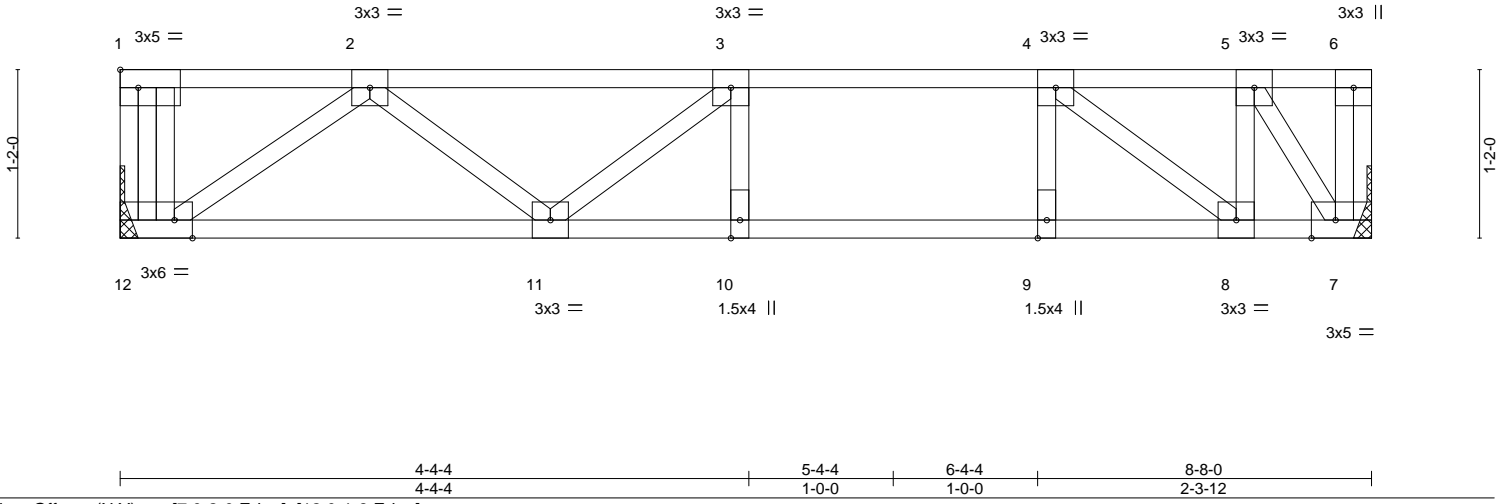
Riverside Roof Truss, LLC, Danville, Va - 24541,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Feb 9 13:44:00 2022 Page 1

ID:wGHO7kGIZJUXqaFdBnCYKlyjubB-pCSKOYhx24VwcoLgVXqnC3Ma6acmqjfpPB6kzmrzz



Scale: 3/4"=1'



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	1-7-3	TC 0.46	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.61	Vert(LL) -0.07 10-11 >999 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.14	Vert(CT) -0.09 10-11 >999 360		
BCDL 5.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 7 n/a n/a		
	Code IRC2015/TPI2014			Weight: 48 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)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 7=Mechanical, 12=Mechanical  
Max Grav 7=370(LC 1), 12=370(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-641/0, 3-4=-689/0  
BOT CHORD 11-12=0/507, 10-11=0/689, 9-10=0/689, 8-9=0/689  
WEBS 2-12=-604/0, 4-8=-591/0, 5-8=0/286, 5-7=-373/0

**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.

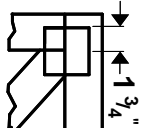


February 10, 2022

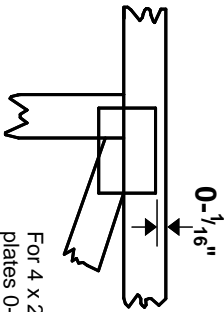
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b> Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. 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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY <b>TRENCO</b> A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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# Symbols

## PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- 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**

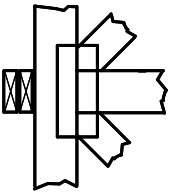
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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



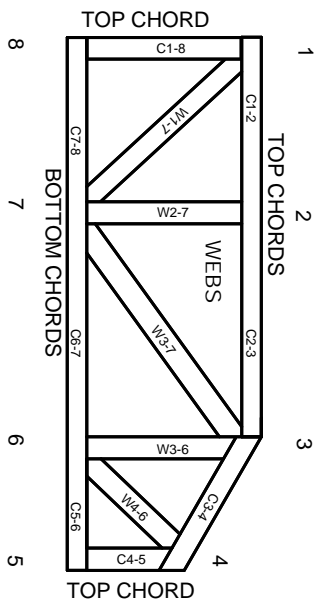
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TPI 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/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: Mill-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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 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/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.