

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: Floor

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: I57052981 thru I57052994

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

North Carolina COA: C-0844



March 8, 2023

Gilbert, Eric

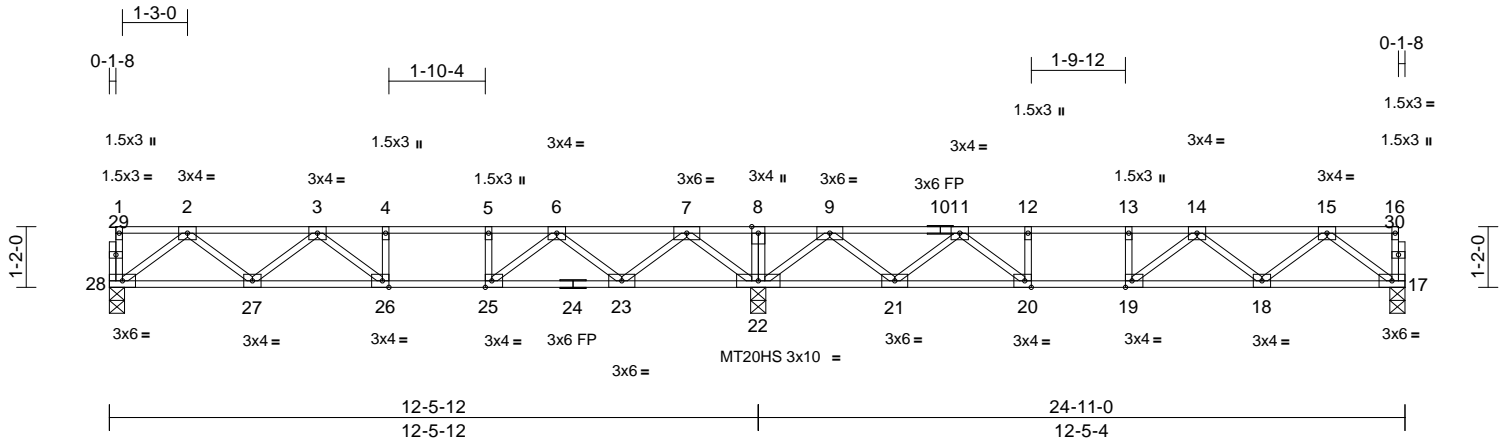
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which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

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)	I57052981
Floor	F01	Floor	7	1		

Builders FirstSource (Apex, NC), Apex, NC - 27523,

Run: 8.53 S Sep 22 2022 Print: 8.530 S Sep 22 2022 MiTek Industries, Inc. Wed Mar 08 08:16:04
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Page: 1



Scale = 1:44.3

Plate Offsets (X, Y): [19:0-1-8,Edge], [20:0-1-8,Edge], [25:0-1-8,Edge], [26:0-1-8,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	0.68	Vert(LL)	-0.11	26-27	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.73	Vert(CT)	-0.14	26-27	>999	240	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.03	17	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S								
										Weight: 124 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 6-0-0 oc bracing.

REACTIONS (size) 17=0-3-8, 22=0-3-8, 28=0-3-8
 Max Grav 17=604 (LC 4), 22=1568 (LC 1), 28=606 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-28=-37/0, 16-17=-37/0, 1-2=-2/0, 2-3=-1153/0, 3-4=-1581/0, 4-5=-1581/0, 5-6=-1581/0, 6-7=-675/269, 7-8=0/1261, 8-9=0/1261, 9-11=-674/273, 11-12=-1570/0, 12-13=-1570/0, 13-14=-1570/0, 14-15=-1148/0, 15-16=-2/0
 BOT CHORD 27-28=0/743, 26-27=0/1509, 25-26=0/1581, 23-25=-65/1217, 22-23=-481/127, 21-22=-485/128, 20-21=-70/1212, 19-20=0/1570, 18-19=0/1502, 17-18=0/740
 WEBS 8-22=-88/0, 7-22=-1196/0, 2-28=-930/0, 7-23=0/771, 2-27=0/534, 6-23=-777/0, 3-27=-464/0, 6-25=0/680, 3-26=-165/176, 4-26=-102/44, 5-25=-304/0, 9-22=-1193/0, 15-17=-926/0, 9-21=0/770, 15-18=0/530, 11-21=-775/0, 14-18=-461/0, 11-20=0/674, 14-19=-170/173, 12-20=-301/0, 13-19=-100/45

NOTES

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

- 3) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



March 8, 2023

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	Truss	Truss Type	Qty	Ply	Job Reference (optional)
Floor	F01G	Floor Supported Gable	1	1	

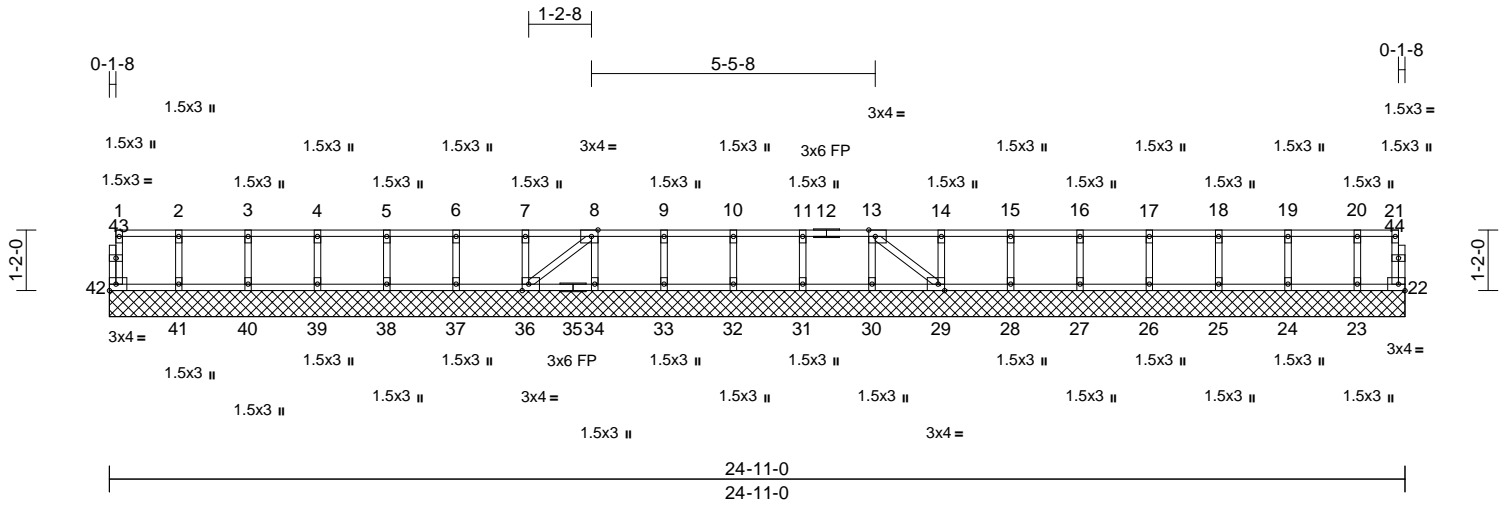
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

Run: 8.53 S Sep 22 2022 Print: 8.530 S Sep 22 2022 MiTek Industries, Inc. Wed Mar 08 08:16:06

Page: 1

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Scale = 1:44.3
 Plate Offsets (X, Y): [8:0-1-8,Edge], [13:0-1-8,Edge], [29:0-1-8,Edge], [36:0-1-8,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	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	22	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 108 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)

BOT CHORD 41-42=0/3, 40-41=0/3, 39-40=0/3, 38-39=0/3, 37-38=0/3, 36-37=0/3, 34-36=0/12, 33-34=0/12, 32-33=0/12, 31-32=0/12, 30-31=0/12, 29-30=0/12, 28-29=0/1, 27-28=0/1, 26-27=0/1, 25-26=0/1, 24-25=0/1, 23-24=0/1, 22-23=0/1

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.

WEBS 2-41=-138/0, 3-40=-133/0, 4-39=-134/0, 5-38=-133/0, 6-37=-133/0, 7-36=-133/0, 8-34=-126/0, 9-33=-133/0, 10-32=-133/0, 11-31=-133/0, 13-30=-125/0, 14-29=-133/0, 15-28=-133/0, 16-27=-133/0, 17-26=-134/0, 18-25=-132/0, 19-24=-137/0, 20-23=-116/0, 8-36=-12/0, 13-29=-14/0

REACTIONS (size) 22=24-11-0, 23=24-11-0, 24=24-11-0, 25=24-11-0, 26=24-11-0, 27=24-11-0, 28=24-11-0, 29=24-11-0, 30=24-11-0, 31=24-11-0, 32=24-11-0, 33=24-11-0, 34=24-11-0, 36=24-11-0, 37=24-11-0, 38=24-11-0, 39=24-11-0, 40=24-11-0, 41=24-11-0, 42=24-11-0
 Max Grav 22=23 (LC 1), 23=127 (LC 1), 24=151 (LC 1), 25=146 (LC 1), 26=147 (LC 1), 27=147 (LC 1), 28=147 (LC 1), 29=155 (LC 1), 30=138 (LC 1), 31=147 (LC 1), 32=147 (LC 1), 33=147 (LC 1), 34=139 (LC 1), 36=154 (LC 1), 37=147 (LC 1), 38=147 (LC 1), 39=147 (LC 1), 40=146 (LC 1), 41=152 (LC 1), 42=48 (LC 1)

NOTES
 1) Gable requires continuous bottom chord bearing.
 2) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 3) Gable studs spaced at 1-4-0 oc.
 4) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-42=-44/0, 21-22=-21/0, 1-2=-3/0, 2-3=-3/0, 3-4=-3/0, 4-5=-3/0, 5-6=-3/0, 6-7=-3/0, 7-8=-3/0, 8-9=-12/0, 9-10=-12/0, 10-11=-12/0, 11-13=-12/0, 13-14=-1/0, 14-15=-1/0, 15-16=-1/0, 16-17=-1/0, 17-18=-1/0, 18-19=-1/0, 19-20=-1/0, 20-21=-1/0



Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
Floor	F02	Floor	13	1	

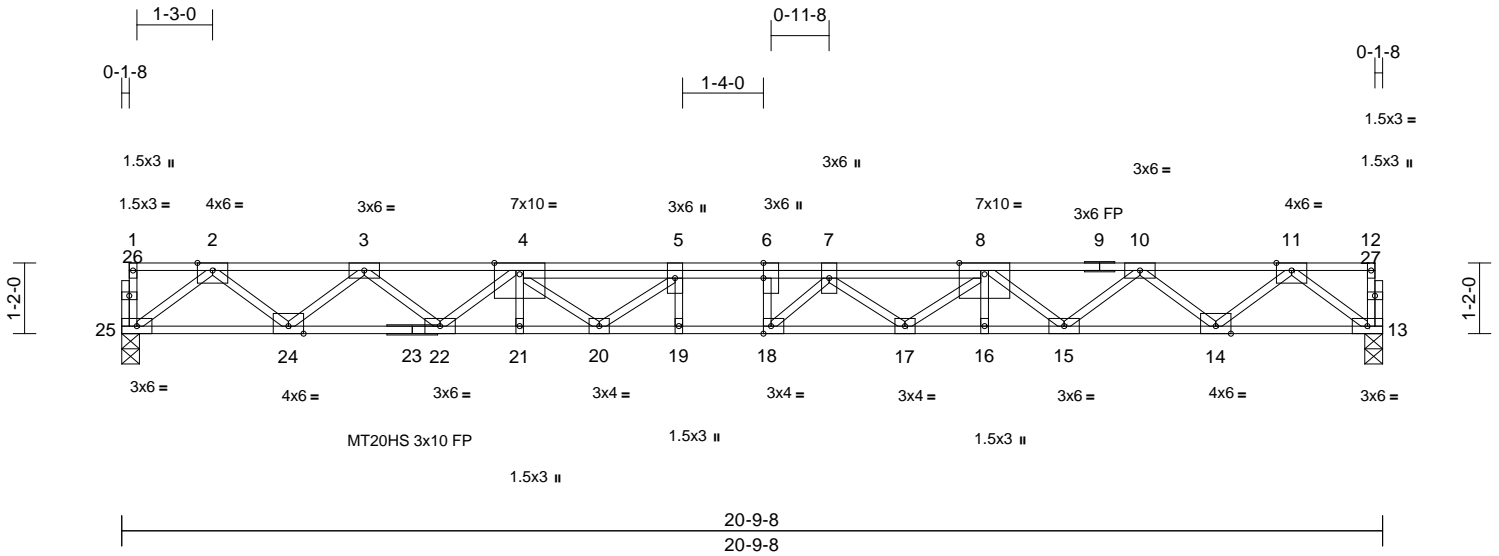
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

Run: 8.53 S Sep 22 2022 Print: 8.530 S Sep 22 2022 MiTek Industries, Inc. Wed Mar 08 08:16:06

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Scale = 1:38

Plate Offsets (X, Y): [6:0-3-0,Edge], [18:0-1-8,Edge]

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	0.24	Vert(LL)	-0.34	18	>729	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.53	Vert(CT)	-0.47	18	>530	240	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.08	13	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S								
											Weight: 116 lb	FT = 20%F, 11%E

LUMBER

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

- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

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, 25=0-3-8

Max Grav 13=898 (LC 1), 25=898 (LC 1)

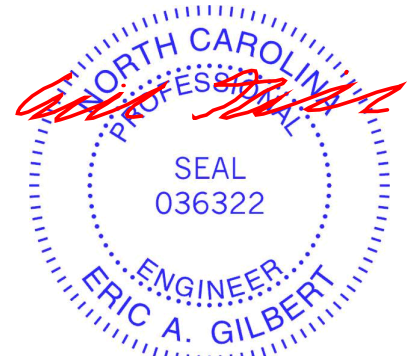
FORCES

(lb) - Maximum Compression/Maximum Tension

- TOP CHORD 1-25=-32/0, 12-13=-28/0, 1-2=-2/0, 2-3=-1958/0, 3-4=-3398/0, 4-5=-4395/0, 5-6=-4660/0, 6-7=-4660/0, 7-8=-4379/0, 8-10=-3380/0, 10-11=-1951/0, 11-12=-2/0
- BOT CHORD 24-25=0/1131, 22-24=0/2758, 21-22=0/4110, 20-21=0/4110, 19-20=0/4660, 18-19=0/4660, 17-18=0/4628, 16-17=0/4092, 15-16=0/4091, 14-15=0/2738, 13-14=0/1138
- WEBS 11-13=-1425/0, 2-25=-1417/0, 11-14=0/1059, 2-24=0/1076, 10-14=-1024/0, 3-24=-1041/0, 10-15=0/830, 3-22=0/829, 8-15=-879/0, 4-22=-878/0, 7-17=-356/0, 7-18=-305/435, 6-18=-253/182, 4-21=-12/6, 8-16=-12/5, 8-17=0/370, 4-20=0/483, 5-20=-511/12, 5-19=-39/60

NOTES

- Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 8, 2023

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



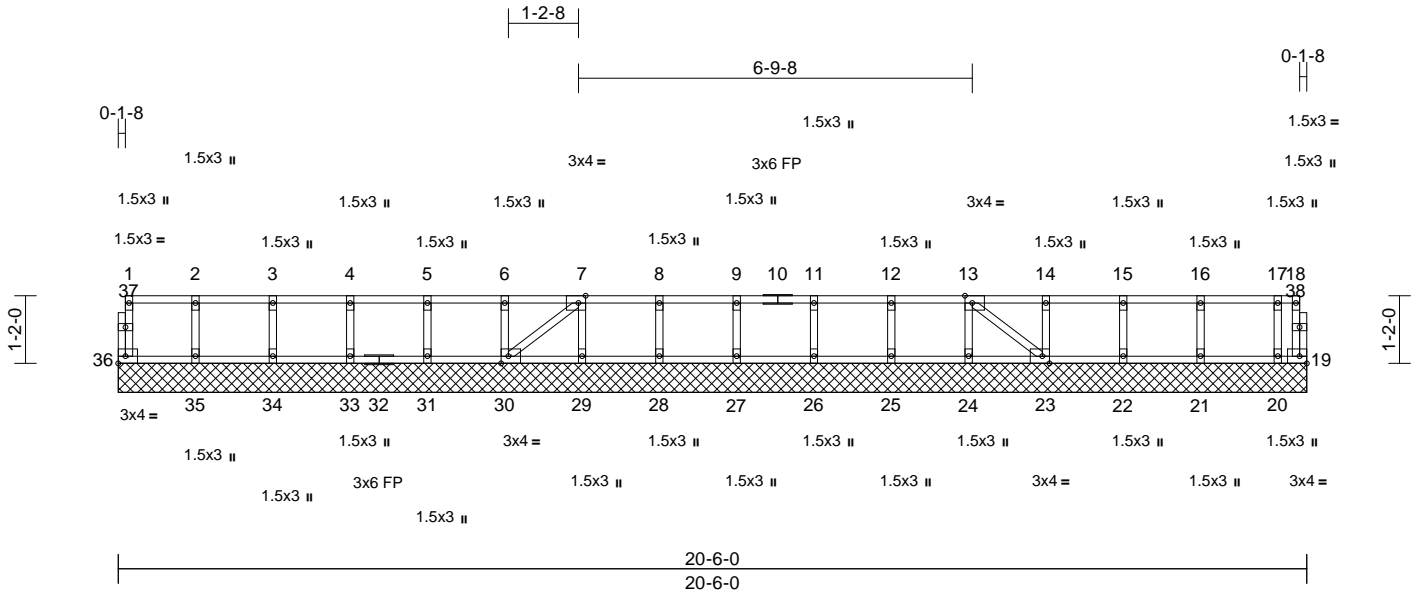
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)	I57052984
Floor	F02G	Floor Supported Gable	1	1		

Builders FirstSource (Apex, NC), Apex, NC - 27523,

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Page: 1



Scale = 1:39.7

Plate Offsets (X, Y): [7:0-1-8,Edge], [13:0-1-8,Edge], [23:0-1-8,Edge], [30:0-1-8,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	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	23	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 90 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)

BOT CHORD 35-36=0/3, 34-35=0/3, 33-34=0/3, 31-33=0/3, 30-31=0/3, 29-30=0/10, 28-29=0/10, 27-28=0/10, 26-27=0/10, 25-26=0/10, 24-25=0/10, 23-24=0/10, 22-23=-1/0, 21-22=-1/0, 20-21=-1/0, 19-20=-1/0
WEBS 2-35=-138/0, 3-34=-133/0, 4-33=-134/0, 5-31=-133/0, 6-30=-133/0, 7-29=-127/0, 8-28=-133/0, 9-27=-133/0, 11-26=-133/0, 12-25=-133/0, 13-24=-124/0, 14-23=-134/0, 15-22=-132/0, 16-21=-138/0, 17-20=-113/0, 7-30=-10/0, 13-23=-15/0

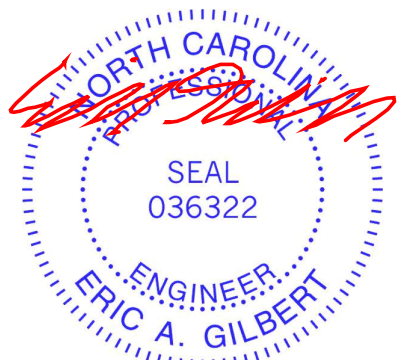
BRACING
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 22-23,21-22,20-21,19-20.

REACTIONS (size) 19=20-6-0, 20=20-6-0, 21=20-6-0, 22=20-6-0, 23=20-6-0, 24=20-6-0, 25=20-6-0, 26=20-6-0, 27=20-6-0, 28=20-6-0, 29=20-6-0, 30=20-6-0, 31=20-6-0, 33=20-6-0, 34=20-6-0, 35=20-6-0, 36=20-6-0
 Max Uplift 19=20 (LC 1)
 Max Grav 19=20 (LC 1), 20=125 (LC 1), 21=152 (LC 1), 22=145 (LC 1), 23=156 (LC 1), 24=138 (LC 1), 25=147 (LC 1), 26=147 (LC 1), 27=147 (LC 1), 28=147 (LC 1), 29=141 (LC 1), 30=153 (LC 1), 31=147 (LC 1), 33=147 (LC 1), 34=146 (LC 1), 35=152 (LC 1), 36=48 (LC 1)

NOTES
 1) Gable requires continuous bottom chord bearing.
 2) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 3) Gable studs spaced at 1-4-0 oc.
 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 19.
 5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-36=-44/0, 18-19=0/19, 1-2=-3/0, 2-3=-3/0, 3-4=-3/0, 4-5=-3/0, 5-6=-3/0, 6-7=-3/0, 7-8=-10/0, 8-9=-10/0, 9-11=-10/0, 11-12=-10/0, 12-13=-10/0, 13-14=0/1, 14-15=0/1, 15-16=0/1, 16-17=0/1, 17-18=0/1

LOAD CASE(S) Standard



March 8, 2023

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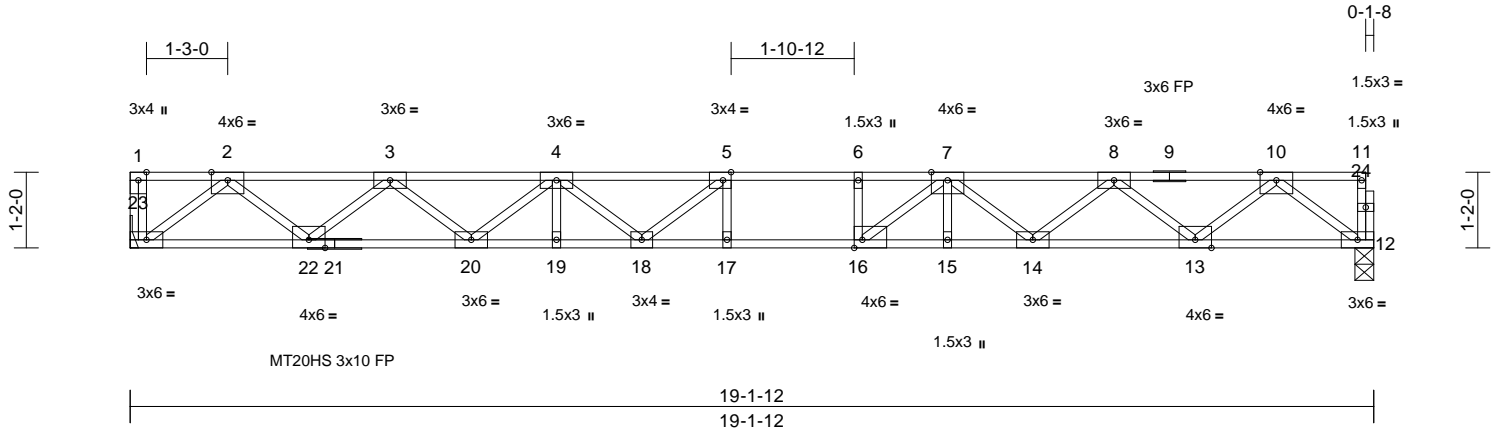
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
Floor	F03	Floor	8	1	

I57052985

Builders FirstSource (Apex, NC), Apex, NC - 27523,

Run: 8.53 S Sep 22 2022 Print: 8.530 S Sep 22 2022 MiTek Industries, Inc. Wed Mar 08 08:16:07
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Page: 1



Scale = 1:35.5

Plate Offsets (X, Y): [5:0-1-8,Edge], [16:0-1-8,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	0.50	Vert(LL)	-0.36	17-18	>636	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.75	Vert(CT)	-0.49	17-18	>463	240	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.08	12	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 97 lb	FT = 20%F, 11%E

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

- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

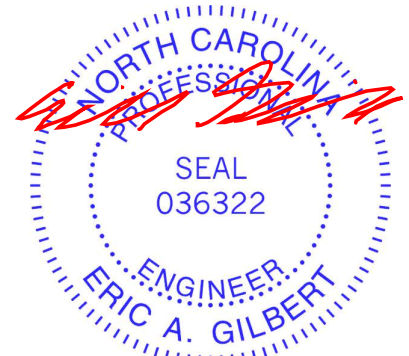
BRACING
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

LOAD CASE(S) Standard

REACTIONS (size) 12=0-3-8, 23= Mechanical
 Max Grav 12=1033 (LC 1), 23=1039 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-23=-42/0, 11-12=-40/0, 1-2=0/0,
 2-3=-2220/0, 3-4=-3690/0, 4-5=-4510/0,
 5-6=-4653/0, 6-7=-4653/0, 7-8=-3680/0,
 8-10=-2222/0, 10-11=-2/0
 BOT CHORD 22-23=0/1299, 20-22=0/3106, 19-20=0/4273,
 18-19=0/4273, 17-18=0/4653, 16-17=0/4653,
 15-16=0/4232, 14-15=0/4232, 13-14=0/3116,
 12-13=0/1295
 WEBS 10-12=-1622/0, 2-23=-1630/0, 10-13=0/1206,
 2-22=0/1198, 8-13=-1164/0, 3-22=-1154/0,
 8-14=0/734, 3-20=0/760, 7-14=-705/0,
 4-20=-744/0, 4-19=-30/28, 7-15=-124/74,
 7-16=-39/886, 4-18=0/441, 5-18=-533/176,
 5-17=-219/131, 6-16=-290/0

- NOTES**
- Unbalanced floor live loads have been considered for this design.
 - All plates are MT20 plates unless otherwise indicated.
 - Refer to girder(s) for truss to truss connections.
 - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 8, 2023

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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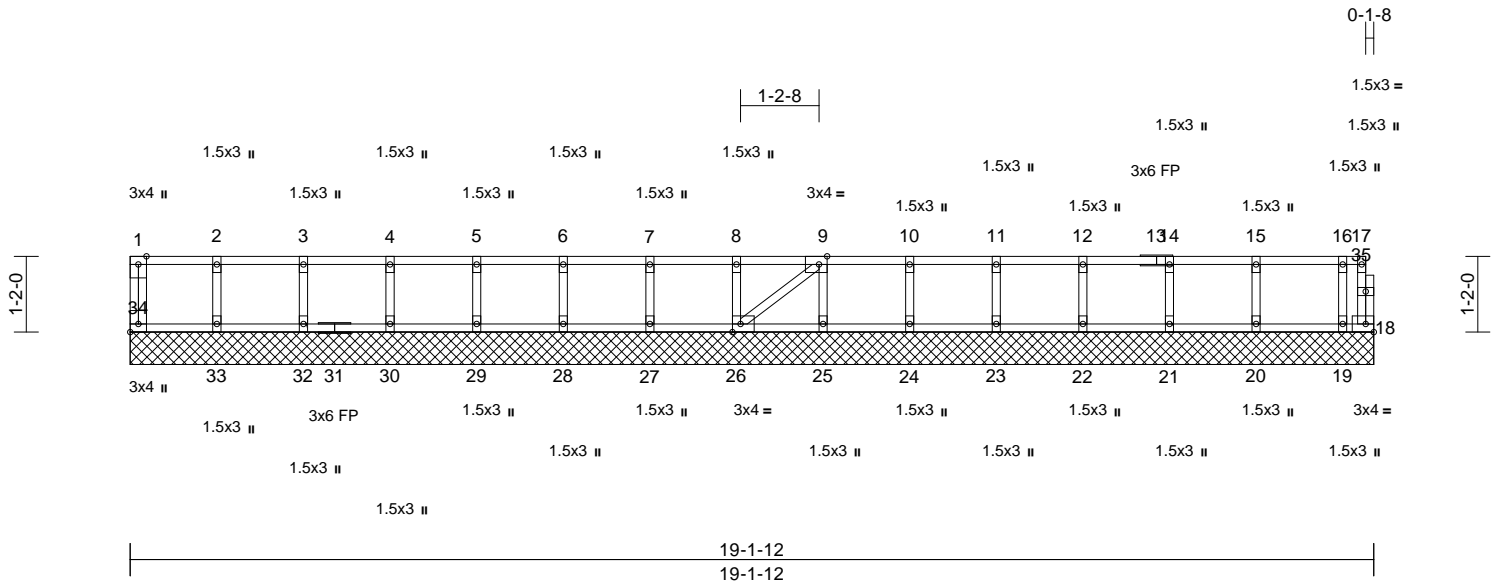
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)	I57052986
Floor	F03G	Floor Supported Gable	1	1		

Builders FirstSource (Apex, NC), Apex, NC - 27523,

Run: 8.53 S Sep 22 2022 Print: 8.530 S Sep 22 2022 MiTek Industries, Inc. Wed Mar 08 08:16:07
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Page: 1



Scale = 1:35.5

Plate Offsets (X, Y): [9:0-1-8,Edge], [26:0-1-8,Edge], [34: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	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	18	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 83 lb	FT = 20%F, 11%E

LUMBER	WEBS
TOP CHORD 2x4 SP No.2(flat)	2-33=-142/0, 3-32=-131/0, 4-30=-134/0,
BOT CHORD 2x4 SP No.2(flat)	5-29=-133/0, 6-28=-133/0, 7-27=-133/0,
WEBS 2x4 SP No.3(flat)	8-26=-133/0, 9-25=-134/0, 10-24=-133/0,
OTHERS 2x4 SP No.3(flat)	11-23=-133/0, 12-22=-134/0, 14-21=-132/0,
	15-20=-138/0, 16-19=-114/0, 9-26=0/2

BRACING	NOTES
TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins, except end verticals.	1) Gable requires continuous bottom chord bearing.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.	2) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
	3) Gable studs spaced at 1-4-0 oc.
	4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 18.
	5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
	6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
	7) CAUTION, Do not erect truss backwards.

REACTIONS (size)	Max Uplift	Max Grav
18=19-1-12, 19=19-1-12, 20=19-1-12, 21=19-1-12, 22=19-1-12, 23=19-1-12, 24=19-1-12, 25=19-1-12, 26=19-1-12, 27=19-1-12, 28=19-1-12, 29=19-1-12, 30=19-1-12, 32=19-1-12, 33=19-1-12, 34=19-1-12	18=-24 (LC 1)	18=24 (LC 1), 19=126 (LC 1), 20=152 (LC 1), 21=145 (LC 1), 22=147 (LC 1), 23=147 (LC 1), 24=147 (LC 1), 25=148 (LC 1), 26=146 (LC 1), 27=147 (LC 1), 28=147 (LC 1), 29=147 (LC 1), 30=147 (LC 1), 32=145 (LC 1), 33=156 (LC 1), 34=52 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-34=-47/0, 17-18=0/22, 1-2=0/0, 2-3=0/0, 3-4=0/0, 4-5=0/0, 5-6=0/0, 6-7=0/0, 7-8=0/0, 8-9=0/0, 9-10=0/1, 10-11=0/1, 11-12=0/1, 12-14=0/1, 14-15=0/1, 15-16=0/1, 16-17=0/1
BOT CHORD 33-34=0/0, 32-33=0/0, 30-32=0/0, 29-30=0/0, 28-29=0/0, 27-28=0/0, 26-27=0/0, 25-26=-1/0, 24-25=-1/0, 23-24=-1/0, 22-23=-1/0, 21-22=-1/0, 20-21=-1/0, 19-20=-1/0, 18-19=-1/0

LOAD CASE(S) Standard



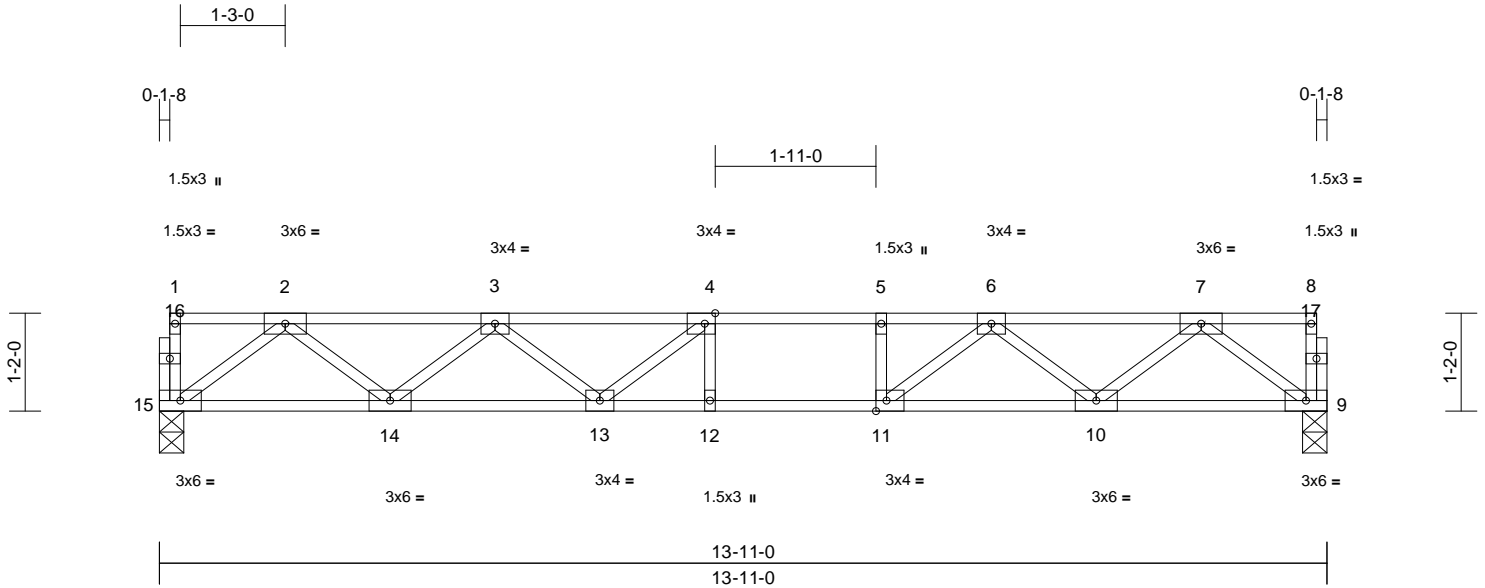
March 8, 2023

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)	I57052988
Floor	F05	Floor	8	1		

Builders FirstSource (Apex, NC), Apex, NC - 27523,

Run: 8.53 S Sep 22 2022 Print: 8.530 S Sep 22 2022 MiTek Industries, Inc. Wed Mar 08 08:16:08
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Page: 1



Scale = 1:27.5

Plate Offsets (X, Y): [4:0-1-8,Edge], [11:0-1-8,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	0.62	Vert(LL)	-0.16	12-13	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.81	Vert(CT)	-0.21	12-13	>784	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.03	9	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.1(flat)
 WEBS 2x4 SP No.3(flat)
 OTHERS 2x4 SP No.3(flat)

BRACING

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

REACTIONS (size) 9=0-3-8, 15=0-3-8

Max Grav 9=745 (LC 1), 15=745 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-15=-42/0, 8-9=-35/0, 1-2=-3/0,
 2-3=-1501/0, 3-4=-2272/0, 4-5=-2411/0,
 5-6=-2411/0, 6-7=-1483/0, 7-8=-2/0
 BOT CHORD 14-15=0/916, 13-14=0/2058, 12-13=0/2411,
 11-12=0/2411, 10-11=0/2036, 9-10=0/923
 WEBS 7-9=-1155/0, 2-15=-1146/0, 7-10=0/729,
 2-14=0/762, 6-10=-720/0, 3-14=-725/0,
 6-11=0/653, 3-13=0/357, 4-13=-388/43,
 4-12=-159/71, 5-11=-260/0

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



March 8, 2023

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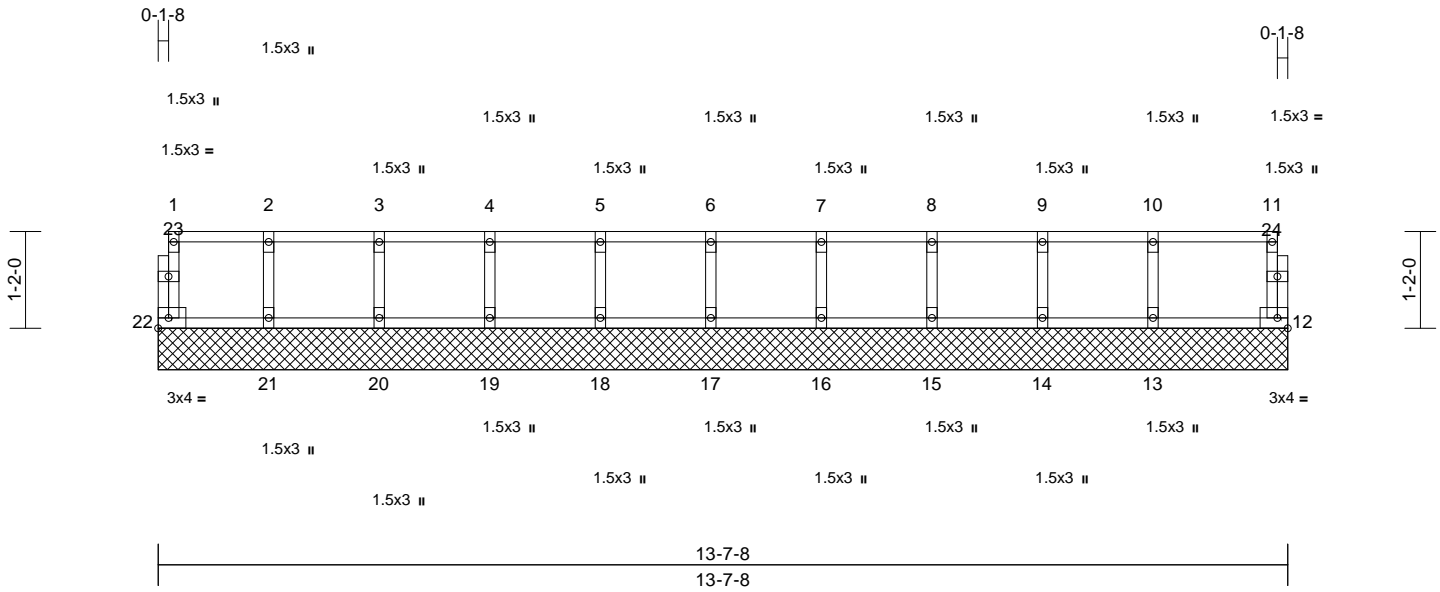
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)	I57052989
Floor	F05G	Floor Supported Gable	1	1		

Builders FirstSource (Apex, NC), Apex, NC - 27523,

Run: 8.53 S Sep 22 2022 Print: 8.530 S Sep 22 2022 MiTek Industries, Inc. Wed Mar 08 08:16:09

Page: 1

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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	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	12	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 57 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 (size) 12=13-7-8, 13=13-7-8, 14=13-7-8, 15=13-7-8, 16=13-7-8, 17=13-7-8, 18=13-7-8, 19=13-7-8, 20=13-7-8, 21=13-7-8, 22=13-7-8
Max Grav 12=73 (LC 1), 13=163 (LC 1), 14=142 (LC 1), 15=148 (LC 1), 16=146 (LC 1), 17=147 (LC 1), 18=147 (LC 1), 19=146 (LC 1), 20=149 (LC 1), 21=137 (LC 1), 22=61 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-22=-53/0, 11-12=-67/0, 1-2=-14/0, 2-3=-14/0, 3-4=-14/0, 4-5=-14/0, 5-6=-14/0, 6-7=-14/0, 7-8=-14/0, 8-9=-14/0, 9-10=-14/0, 10-11=-14/0
BOT CHORD 21-22=0/14, 20-21=0/14, 19-20=0/14, 18-19=0/14, 17-18=0/14, 16-17=0/14, 15-16=0/14, 14-15=0/14, 13-14=0/14, 12-13=0/14
WEBS 2-21=-128/0, 3-20=-135/0, 4-19=-133/0, 5-18=-133/0, 6-17=-133/0, 7-16=-133/0, 8-15=-134/0, 9-14=-130/0, 10-13=-147/0

NOTES
1) Gable requires continuous bottom chord bearing.
2) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
3) Gable studs spaced at 1-4-0 oc.

4) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



March 8, 2023

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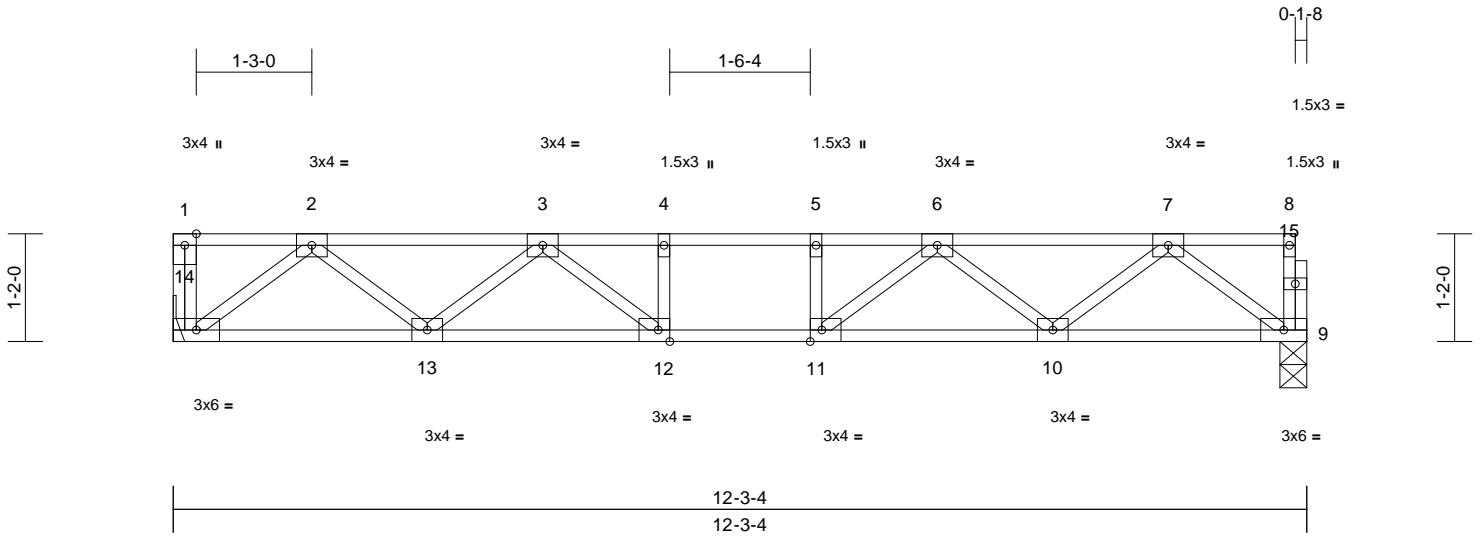
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
Floor	F06	Floor	1	1	

I57052990

Builders FirstSource (Apex, NC), Apex, NC - 27523,

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Page: 1



Scale = 1:24.9

Plate Offsets (X, Y): [11:0-1-8,Edge], [12:0-1-8,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	0.35	Vert(LL)	-0.08	12-13	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.55	Vert(CT)	-0.11	12-13	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.03	9	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							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** (size) 9=0-3-8, 14= Mechanical
Max Grav 9=655 (LC 1), 14=661 (LC 1)

FORCES

- (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-14=-40/0, 8-9=-36/0, 1-2=0/0, 2-3=-1268/0, 3-4=-1879/0, 4-5=-1879/0, 5-6=-1879/0, 6-7=-1268/0, 7-8=-2/0
 - BOT CHORD 13-14=0/807, 12-13=0/1695, 11-12=0/1879, 10-11=0/1695, 9-10=0/806
 - WEBS 7-9=-1009/0, 2-14=-1013/0, 7-10=0/601, 2-13=0/601, 6-10=-555/0, 3-13=-555/0, 6-11=0/424, 3-12=0/424, 4-12=-195/0, 5-11=-195/0

NOTES

- Unbalanced floor live loads have been considered for this design.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



March 8, 2023

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



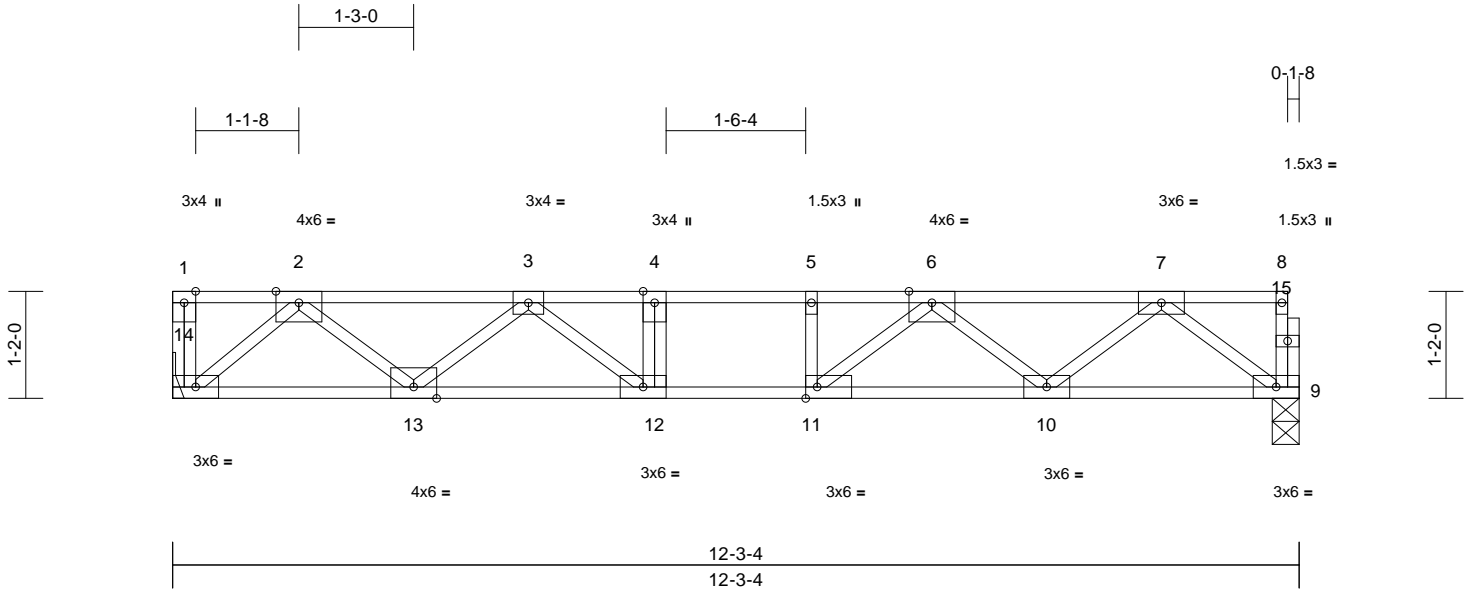
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)	I57052991
Floor	F06GR	Floor Girder	1	1		

Builders FirstSource (Apex, NC), Apex, NC - 27523,

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Page: 1



Scale = 1:25.1

Plate Offsets (X, Y): [11:0-1-8,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	0.80	Vert(LL)	-0.15	12-13	>993	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.92	Vert(CT)	-0.20	12-13	>732	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.48	Horz(CT)	0.03	9	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 64 lb	FT = 20%F, 11%E

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

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

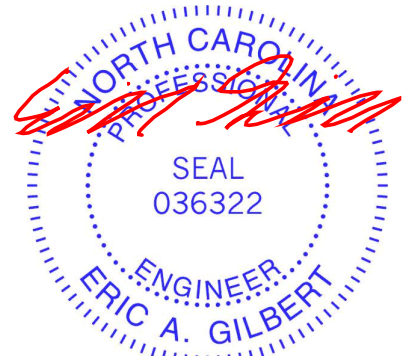
REACTIONS (size) 9=0-3-8, 14= Mechanical
Max Grav 9=825 (LC 1), 14=891 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-14=-36/0, 8-9=-35/0, 1-2=0/0, 2-3=-1790/0, 3-4=-2861/0, 4-5=-2861/0, 5-6=-2861/0, 6-7=-1677/0, 7-8=-2/0
BOT CHORD 13-14=0/1021, 12-13=0/2485, 11-12=0/2861, 10-11=0/2330, 9-10=0/1028
WEBS 7-9=-1288/0, 7-10=0/845, 6-10=-850/0, 6-11=0/870, 4-12=-360/0, 5-11=-377/0, 3-12=0/504, 3-13=-904/0, 2-13=0/1001, 2-14=-1329/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) CAUTION, Do not erect truss backwards.

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

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 9-14=-10, 1-8=-100
Concentrated Loads (lb)
Vert: 4=-400 (F)



March 8, 2023

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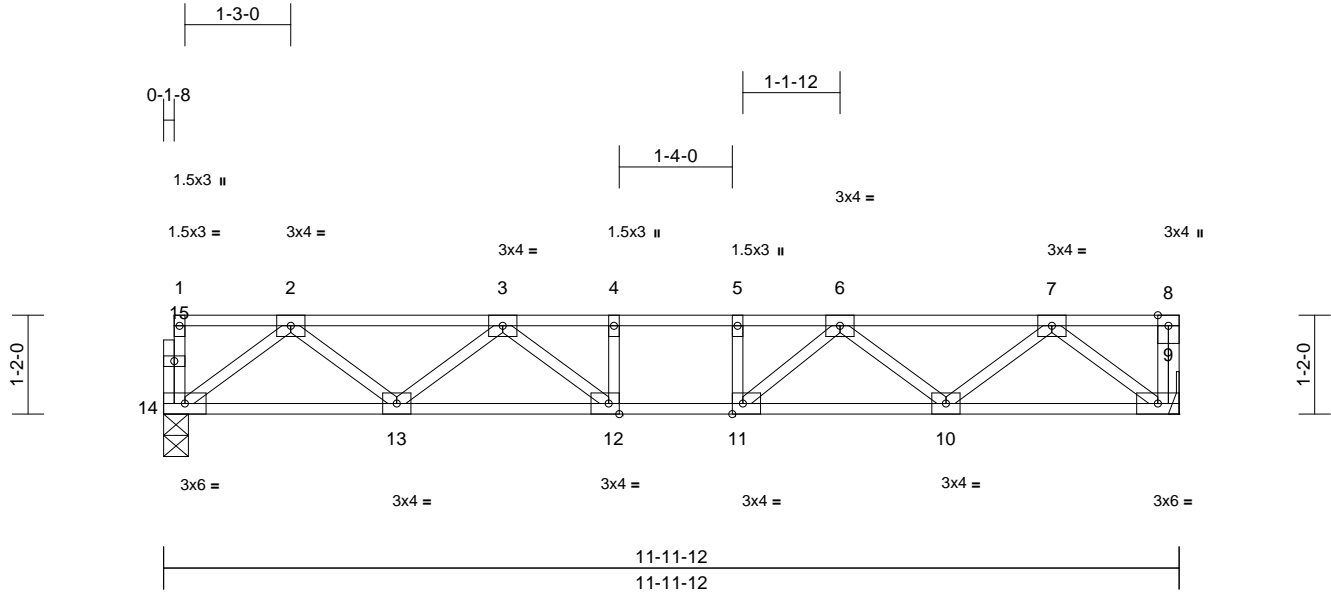
818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)	I57052992
Floor	F07	Floor	11	1		

Builders FirstSource (Apex, NC), Apex, NC - 27523,

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Page: 1



Scale = 1:27.2

Plate Offsets (X, Y): [11:0-1-8,Edge], [12:0-1-8,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	0.31	Vert(LL)	-0.07	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.52	Vert(CT)	-0.09	12-13	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.02	9	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 62 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 (size) 9= Mechanical, 14=0-3-8
 Max Grav 9=645 (LC 1), 14=639 (LC 1)

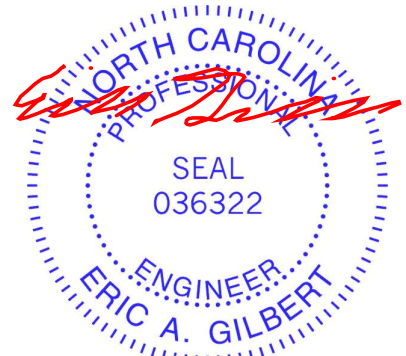
FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-14=-36/0, 8-9=-39/0, 1-2=-2/0,
 2-3=-1229/0, 3-4=-1791/0, 4-5=-1791/0,
 5-6=-1791/0, 6-7=-1228/0, 7-8=0/0
 BOT CHORD 13-14=0/785, 12-13=0/1636, 11-12=0/1791,
 10-11=0/1636, 9-10=0/786
 WEBS 7-9=-986/0, 2-14=-983/0, 7-10=0/575,
 2-13=0/577, 6-10=-532/0, 3-13=-530/0,
 6-11=-16/388, 3-12=-17/382, 4-12=-174/0,
 5-11=-186/0

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



March 8, 2023

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



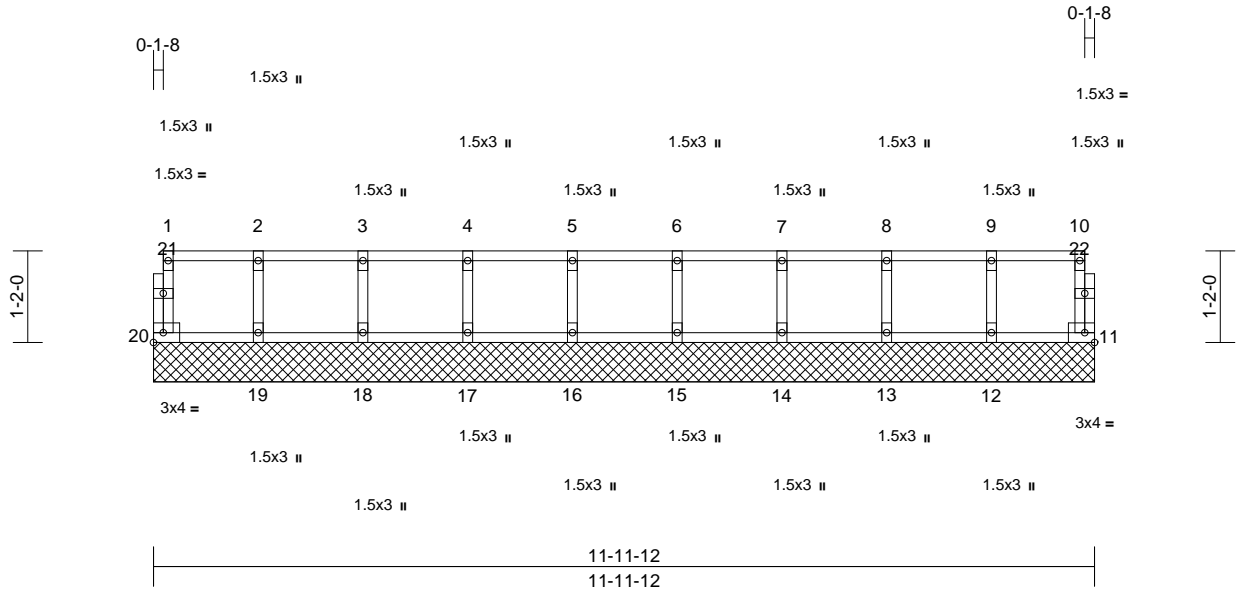
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)	I57052993
Floor	F07G	Floor Supported Gable	1	1		

Builders FirstSource (Apex, NC), Apex, NC - 27523,

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Page: 1



Scale = 1:29.3

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	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	11	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							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)
 OTHERS 2x4 SP No.3(flat)

5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

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

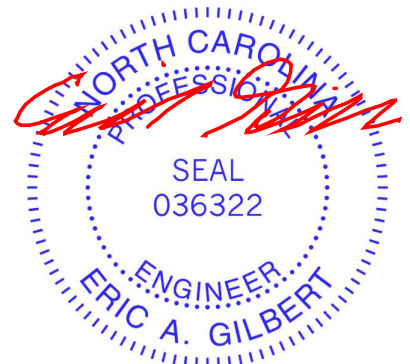
Max Grav 11=55 (LC 1), 12=141 (LC 1),
 13=148 (LC 1), 14=146 (LC 1),
 15=147 (LC 1), 16=147 (LC 1),
 17=146 (LC 1), 18=148 (LC 1),
 19=143 (LC 1), 20=56 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-20=-51/0, 10-11=-50/0, 1-2=-10/0,
 2-3=-10/0, 3-4=-10/0, 4-5=-10/0, 5-6=-10/0,
 6-7=-10/0, 7-8=-10/0, 8-9=-10/0, 9-10=-10/0
 BOT CHORD 19-20=0/10, 18-19=0/10, 17-18=0/10,
 16-17=0/10, 15-16=0/10, 14-15=0/10,
 13-14=0/10, 12-13=0/10, 11-12=0/10
 WEBS 2-19=-130/0, 3-18=-134/0, 4-17=-133/0,
 5-16=-133/0, 6-15=-133/0, 7-14=-133/0,
 8-13=-135/0, 9-12=-129/0

NOTES

- 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.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 8, 2023

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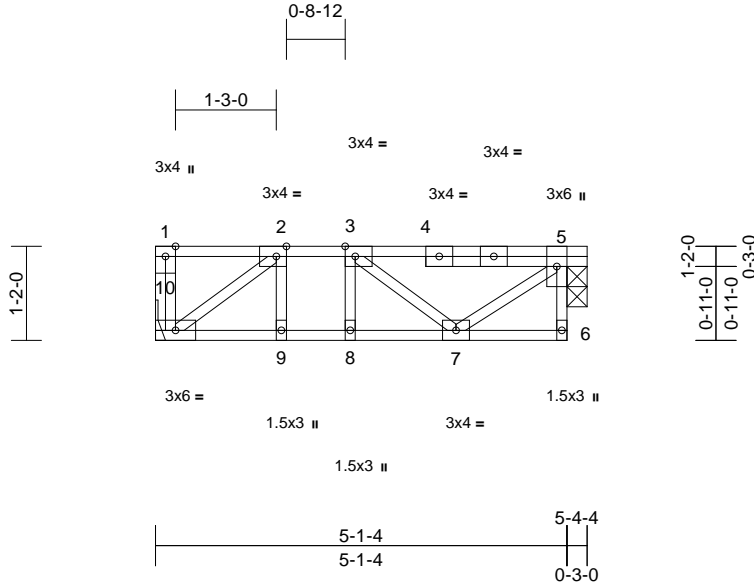
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
Floor	F08	Floor	2	1	

I57052994

Builders FirstSource (Apex, NC), Apex, NC - 27523,

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Page: 1



Scale = 1:28.6

Plate Offsets (X, Y): [2:0-1-8,Edge], [3:0-1-8,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	0.41	Vert(LL)	-0.01	7-8	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.28	Vert(CT)	-0.02	7-8	>999	240		
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: 32 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 5-4-4 oc purlins, except end verticals.
- BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

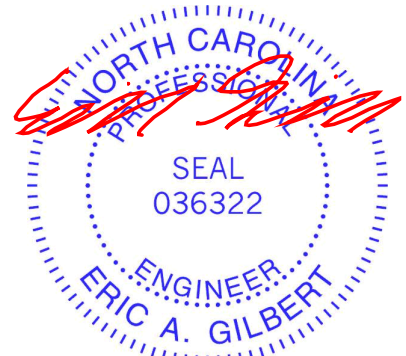
REACTIONS (size) 5=0-3-0, 10= Mechanical
 Max Grav 5=270 (LC 1), 10=270 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-10=-61/3, 5-6=-2/5, 1-2=0/0, 2-3=-315/0, 3-5=-196/0
 BOT CHORD 9-10=0/315, 8-9=0/315, 7-8=0/315, 6-7=0/0
 WEBS 2-10=-389/0, 2-9=0/109, 5-7=0/240, 3-7=-157/0, 3-8=-100/11

NOTES

- Unbalanced floor live loads have been considered for this design.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



March 8, 2023

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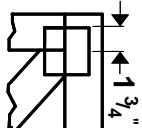
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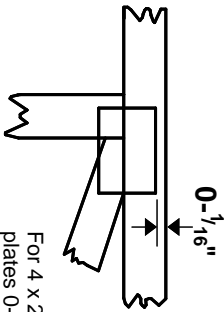
818 Soundside Road
 Edenton, NC 27932

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

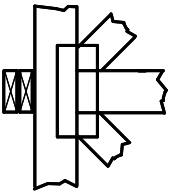
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



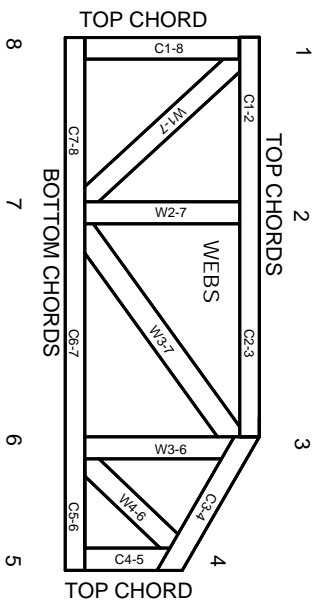
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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: 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/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.