ENGINEERING BY TRENCO
A MiTek Affiliate

RE: NCF131
CHESAPEAKEHOMES/755H; LOT 131 NEILL'S CREEK FARMS

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: Project Name: NCF131
Lot/Block: Model:
Address: Subdivision:
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.6
Wind Code: ASCE 7-10 Wind Speed: 115 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 12 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	I62207101	F01G	11/28/2023
2	I62207102	F02	11/28/2023
3	I62207103	F03	11/28/2023
4	I62207104	F06	11/28/2023
5	I62207105	F06G	11/28/2023
6	I62207106	F07	11/28/2023
7	I62207107	F08	11/28/2023
8	I62207108	F09GR	11/28/2023
9	I62207109	F10GR	11/28/2023
10	I62207110	F11GR	11/28/2023
11	I62207111	F16	11/28/2023
12	I62207112	F17G	11/28/2023

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

Truss Design Engineer's Name: Gilbert, Eric

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

North Carolina COA: C-0844

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 TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. 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.

November 28, 2023

Gilbert, Eric

Job	Truss	Truss Type	Qty	Ply	CHESAPEAKEHOMES/755H; LOT 131 NEILL'S CREEK FARMS I62207101
NCF131	F01G	Floor	2	1	Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Nov 27 14:03:40 Page: 1
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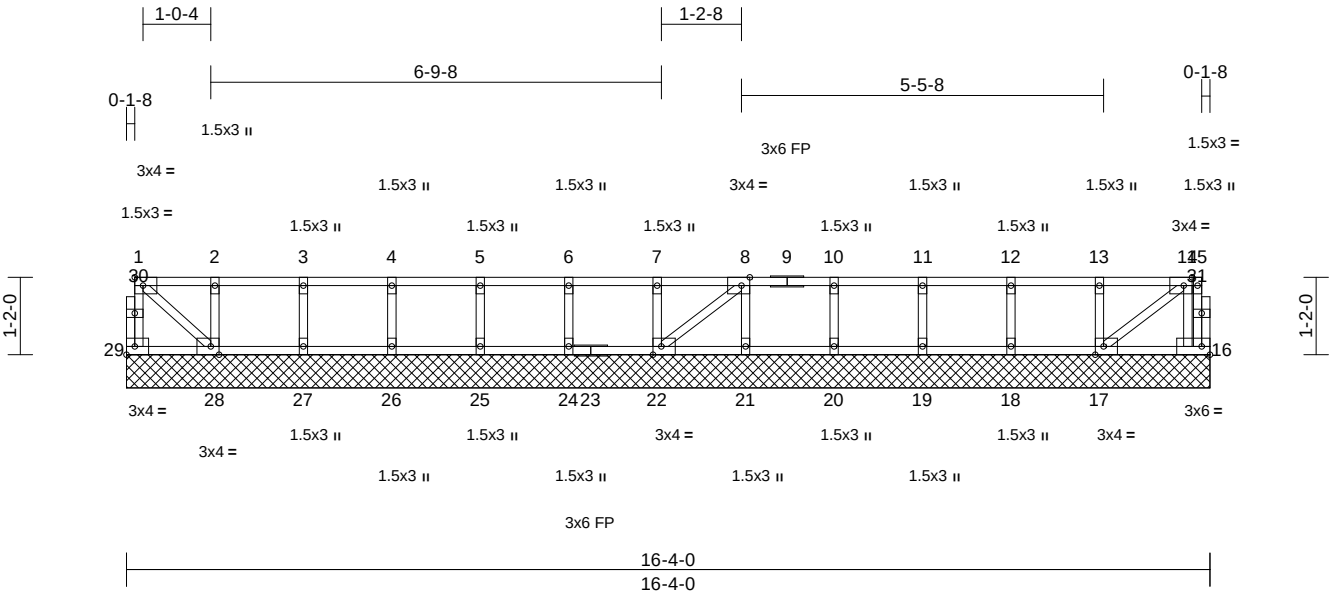

Scale = 1:34.7

Plate Offsets (X, Y): [8:0-1-8,Edge], [14:0-1-8,Edge], [17:0-1-8,Edge], [22:0-1-8,Edge], [28:0-1-8,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	0.09	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	NO	WB	0.03	Horiz(TL)	0.00	22	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 76 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
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) 16=16-4-0, 17=16-4-0, 18=16-4-0, 19=16-4-0, 20=16-4-0, 21=16-4-0, 22=16-4-0, 24=16-4-0, 25=16-4-0, 26=16-4-0, 27=16-4-0, 28=16-4-0, 29=16-4-0
Max Grav 16=71 (LC 1), 17=167 (LC 1), 18=144 (LC 1), 19=147 (LC 1), 20=146 (LC 1), 21=141 (LC 1), 22=153 (LC 1), 24=147 (LC 1), 25=147 (LC 1), 26=147 (LC 1), 27=146 (LC 1), 28=159 (LC 1), 29=41 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-29=-37/0, 15-16=0/59, 1-2=0/6, 2-3=0/6, 3-4=0/6, 4-5=0/6, 5-6=0/6, 6-7=0/6, 7-8=0/6, 8-10=-2/0, 10-11=-2/0, 11-12=-2/0, 12-13=-2/0, 13-14=-2/0, 14-15=-1/0
BOT CHORD 28-29=0/2, 27-28=-6/0, 26-27=-6/0, 25-26=-6/0, 24-25=-6/0, 22-24=-6/0, 21-22=0/2, 20-21=0/2, 19-20=0/2, 18-19=0/2, 17-18=0/2, 16-17=0/17
WEBS 2-28=-138/0, 3-27=-133/0, 4-26=-134/0, 5-25=-133/0, 6-24=-133/0, 7-22=-133/0, 8-21=-127/0, 10-20=-133/0, 11-19=-134/0, 12-18=-132/0, 13-17=-140/0, 14-16=-124/0, 14-17=-19/0, 1-28=-11/0, 8-22=-10/0

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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
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.

LOAD CASE(S) Standard

November 28,2023

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

Job	Truss	Truss Type	Qty	Ply	CHESAPEAKEHOMES/755H; LOT 131 NEILL'S CREEK FARMS I62207102
NCF131	F02	Floor	13	1	Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Nov 27 14:03:43 Page: 1
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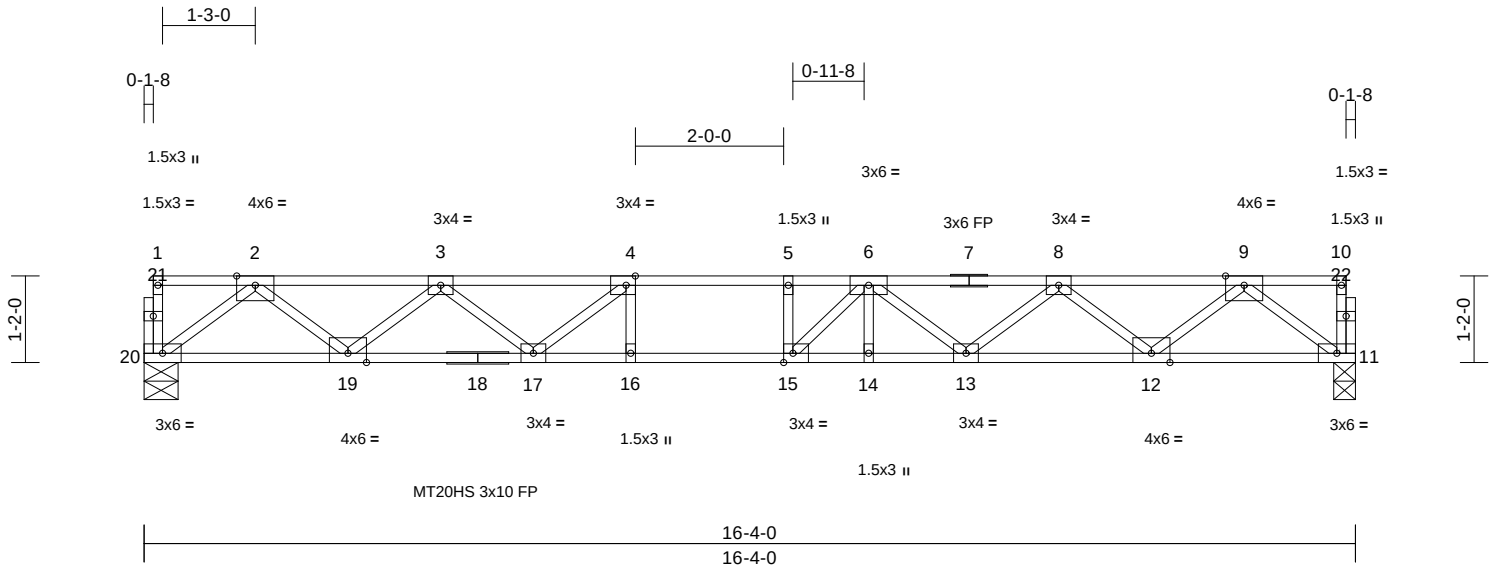

Scale = 1:31.1

Plate Offsets (X, Y): [4:0-1-8,Edge], [15:0-1-8,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	0.77	Vert(LL)	-0.22	15	>888	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.81	Vert(CT)	-0.30	15	>644	240	MT20	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.46	Horz(CT)	0.05	11	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 82 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 18-11:2x4 SP SS (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) 11=0-3-8, 20=0-5-8
Max Grav 11=878 (LC 1), 20=878 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-20=-40/0, 10-11=-39/0, 1-2=-2/0, 2-3=-1833/0, 3-4=-2926/0, 4-5=-3355/0, 5-6=-3355/0, 6-8=-2922/0, 8-9=-1834/0, 9-10=-2/0
BOT CHORD 19-20=0/1097, 17-19=0/2531, 16-17=0/3355, 15-16=0/3355, 14-15=0/3308, 13-14=0/3308, 12-13=0/2539, 11-12=0/1094
WEBS 2-20=-1373/0, 2-19=0/959, 3-19=-908/0, 3-17=0/555, 4-17=-704/0, 4-16=-94/206, 9-11=-1369/0, 9-12=0/964, 8-12=-918/0, 8-13=0/498, 6-13=-494/0, 6-14=-73/150, 6-15=-281/498, 5-15=-201/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) Bearings are assumed to be: Joint 20 SP No.2 crushing capacity of 565 psi, Joint 11 SP SS crushing capacity of 565 psi.
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

November 28,2023

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

Job	Truss	Truss Type	Qty	Ply	CHESAPEAKEHOMES/755H; LOT 131 NEILL'S CREEK FARMS I62207103
NCF131	F03	Floor	5	1	Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Nov 27 14:03:43 Page: 1
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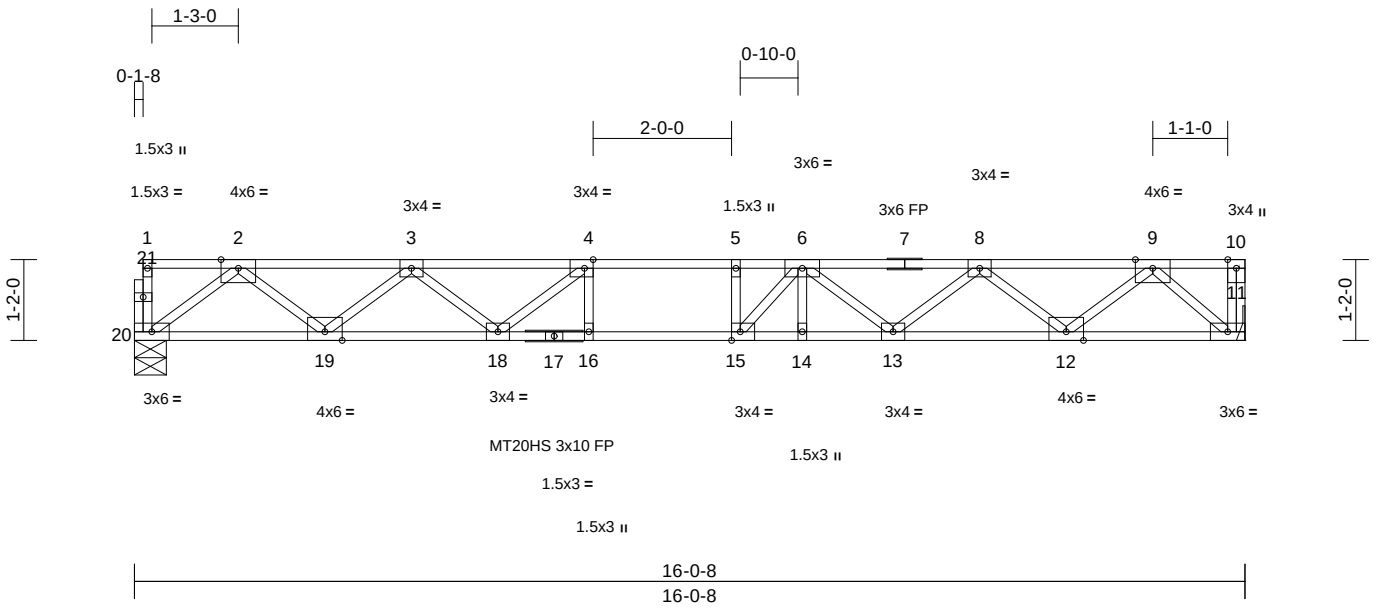

Scale = 1:33.3

Plate Offsets (X, Y): [4:0-1-8,Edge], [15:0-1-8,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	0.75	Vert(LL)	-0.21	15-16	>910	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.98	Vert(CT)	-0.29	15-16	>660	240	MT20	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.46	Horz(CT)	0.05	11	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 82 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 17-11:2x4 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) 11= Mechanical, 20=0-5-8
Max Grav 11=869 (LC 1), 20=862 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-20=-41/0, 10-11=-31/0, 1-2=-2/0, 2-3=-1793/0, 3-4=-2849/0, 4-5=-3241/0, 5-6=-3241/0, 6-8=-2794/0, 8-9=-1700/0, 9-10=0/0
BOT CHORD 19-20=0/1075, 18-19=0/2474, 16-18=0/3241, 15-16=0/3241, 14-15=0/3178, 13-14=0/3178, 12-13=0/2409, 11-12=0/958
WEBS 2-20=-1346/0, 2-19=0/935, 3-19=-887/0, 3-18=0/534, 4-18=-658/0, 9-12=0/966, 8-12=-922/0, 8-13=0/502, 6-13=-490/0, 9-11=-1265/0, 4-16=-97/179, 6-14=-87/141, 5-15=-222/9, 6-15=-265/517

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) The Fabrication Tolerance at joint 17 = 11%
4) Bearings are assumed to be: Joint 20 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) 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.
7) 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.
8) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

November 28,2023

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CHESAPEAKEHOMES/755H; LOT 131 NEILL'S CREEK FARMS I62207104
NCF131	F06	Floor	6	1	Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Nov 27 14:03:43 Page: 1
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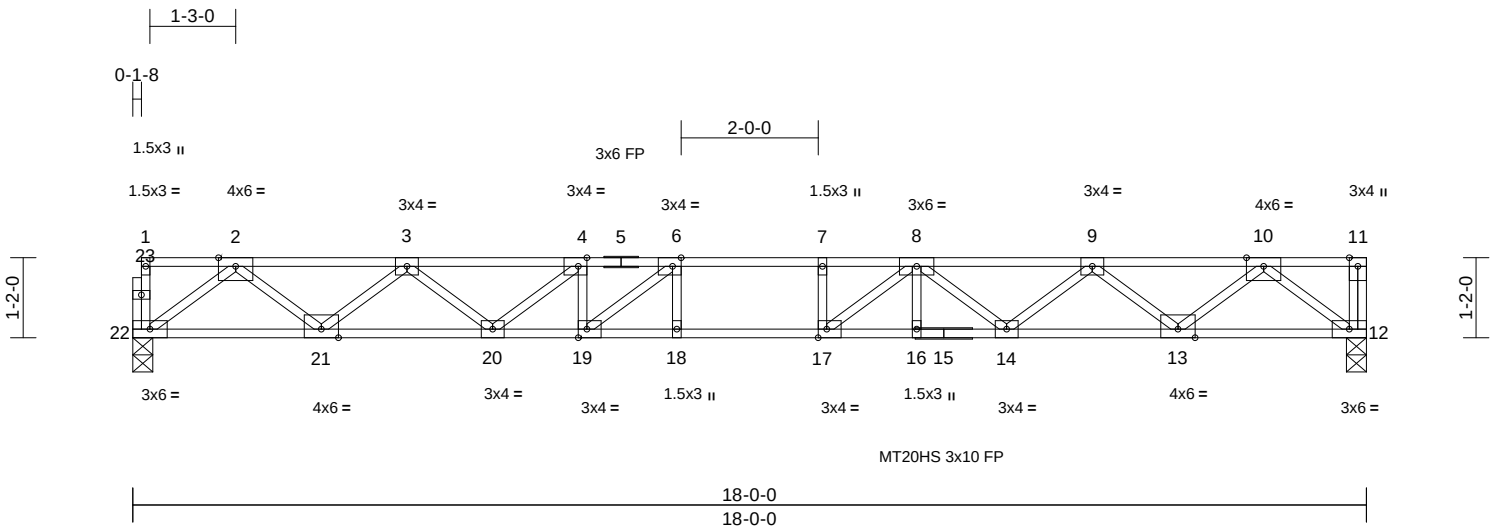

Scale = 1:33.6

Plate Offsets (X, Y): [4:0-1-8,Edge], [6:0-1-8,Edge], [17:0-1-8,Edge], [19:0-1-8,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	0.67	Vert(LL)	-0.31	17-18	>686	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.92	Vert(CT)	-0.43	17-18	>498	240	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.07	12	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 92 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 5-2-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 17-18.

REACTIONS (size) 12=0-3-8, 22=0-3-8
Max Grav 12=976 (LC 1), 22=970 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-22=-39/0, 11-12=-43/0, 1-2=-2/0, 2-3=-2064/0, 3-4=-3371/0, 4-6=-3861/0, 6-7=-4108/0, 7-8=-4108/0, 8-9=-3371/0, 9-10=-2065/0, 10-11=0/0
BOT CHORD 21-22=0/1214, 20-21=0/2881, 19-20=0/3861, 18-19=0/4108, 17-18=0/4108, 16-17=0/3863, 14-16=0/3863, 13-14=0/2880, 12-13=0/1215
WEBS 10-12=-1524/0, 2-22=-1520/0, 10-13=0/1106, 2-21=0/1107, 9-13=-1061/0, 3-21=-1063/0, 9-14=0/639, 3-20=0/638, 8-14=-628/0, 4-20=-625/0, 4-19=0/341, 6-19=-698/130, 6-18=-126/164, 8-16=-78/99, 8-17=-132/696, 7-17=-257/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
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

November 28,2023

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CHESAPEAKEHOMES/755H; LOT 131 NEILL'S CREEK FARMS I62207105
NCF131	F06G	Floor	1	1	Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Nov 27 14:03:43 Page: 1
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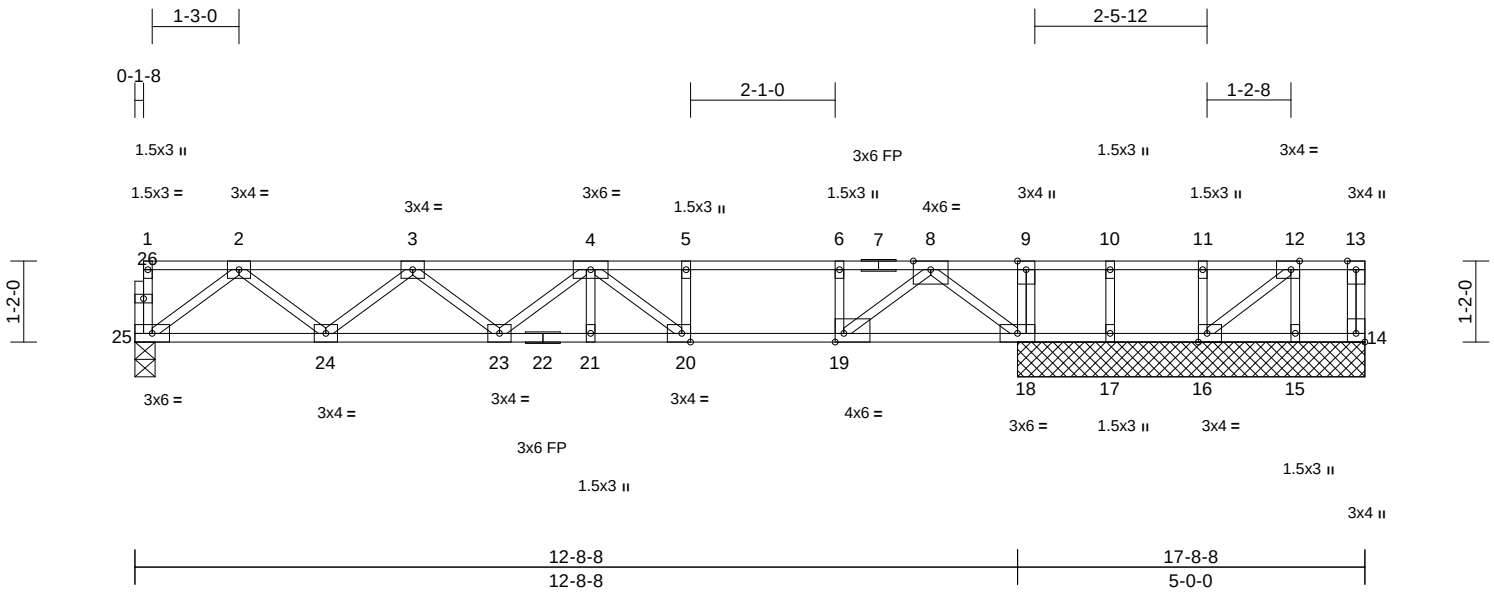

Scale = 1:33.2

Plate Offsets (X, Y): [12:0-1-8,Edge], [14:Edge,0-1-8], [16:0-1-8,Edge], [19:0-1-8,Edge], [20:0-1-8,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	0.93	Vert(LL)	-0.22	20-21	>687	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.73	Vert(CT)	-0.30	20-21	>503	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.03	18	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 89 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat) *Except* 7-1:2x4 SP No.1 (flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 22-14:2x4 SP SS (flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 17-18,16-17.

REACTIONS (size) 14=5-0-0, 15=5-0-0, 16=5-0-0, 17=5-0-0, 18=5-0-0, 25=0-3-8
Max Grav 14=32 (LC 3), 15=220 (LC 3), 16=286 (LC 4), 17=184 (LC 3), 18=743 (LC 1), 25=692 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-25=-37/0, 13-14=-30/0, 1-2=-2/0, 2-3=-1365/0, 3-4=-2012/0, 4-5=-1724/0, 5-6=-1724/0, 6-8=-1724/0, 8-9=-108/172, 9-10=-108/172, 10-11=-108/172, 11-12=-108/172, 12-13=0/0
BOT CHORD 24-25=0/851, 23-24=0/1841, 21-23=0/2215, 20-21=0/2215, 19-20=0/1724, 18-19=0/821, 17-18=-172/108, 16-17=-172/108, 15-16=0/0, 14-15=0/0
WEBS 9-18=-193/0, 8-18=-1055/0, 2-25=-1065/0, 8-19=0/1153, 2-24=0/669, 3-24=-619/0, 3-23=0/223, 10-17=-113/0, 11-16=-143/0, 12-15=-204/12, 4-23=-258/0, 4-21=0/200, 4-20=-654/0, 5-20=-37/116, 6-19=-491/0, 12-16=-218/137

NOTES
1) Unbalanced floor live loads have been considered for this design.
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) Bearings are assumed to be: Joint 25 SP No.2 crushing capacity of 565 psi, Joint 15 SP SS crushing capacity of 565 psi.
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.

LOAD CASE(S) Standard

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CHESAPEAKEHOMES/755H; LOT 131 NEILL'S CREEK FARMS I62207106
NCF131	F07	Floor	2	1	Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Nov 27 14:03:44 Page: 1
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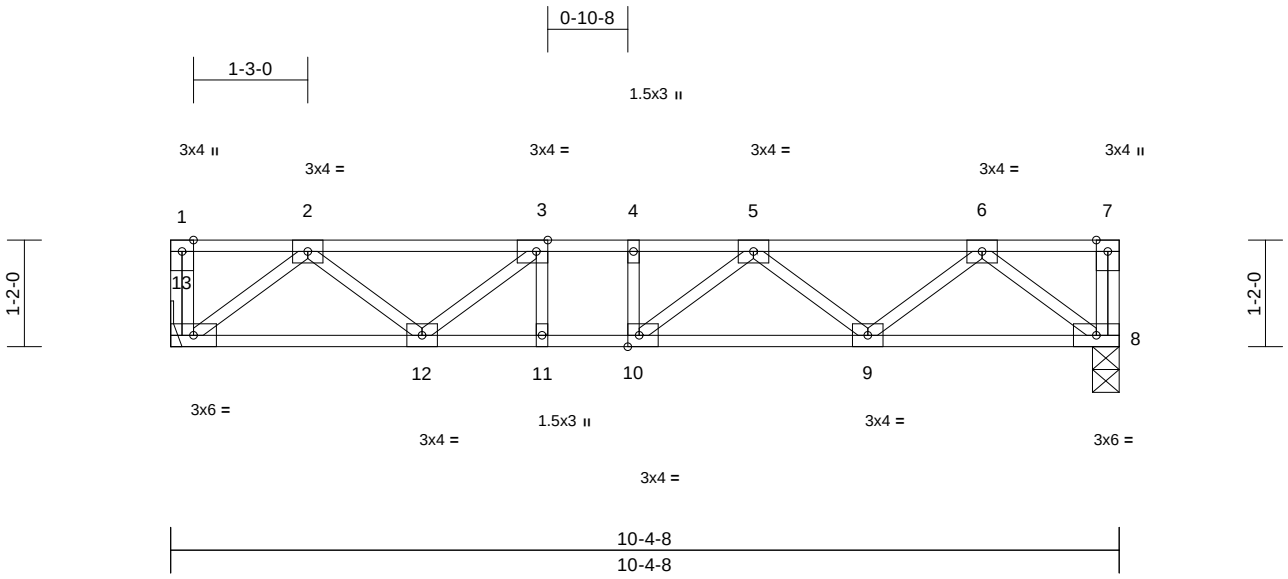


Scale = 1:25.2

Plate Offsets (X, Y): [3:0-1-8,Edge], [10:0-1-8,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	0.30	Vert(LL)	-0.05	9-10	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.45	Vert(CT)	-0.07	9-10	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.02	8	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 55 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
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) 8=0-3-8, 13= Mechanical
Max Grav 8=557 (LC 1), 13=557 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-13=-38/0, 7-8=-40/0, 1-2=0/0, 2-3=-1006/0, 3-4=-1333/0, 4-5=-1333/0, 5-6=-1010/0, 6-7=0/0
BOT CHORD 12-13=0/669, 11-12=0/1333, 10-11=0/1333, 9-10=0/1312, 8-9=0/669
WEBS 6-8=-840/0, 2-13=-839/0, 6-9=0/443, 2-12=0/439, 5-9=-393/0, 3-12=-417/0, 5-10=-120/218, 3-11=-63/94, 4-10=-64/21

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Bearings are assumed to be: , Joint 8 SP No.2 crushing capacity of 565 psi.
3) Refer to girder(s) for truss to truss connections.
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.
6) CAUTION, Do not erect truss backwards.

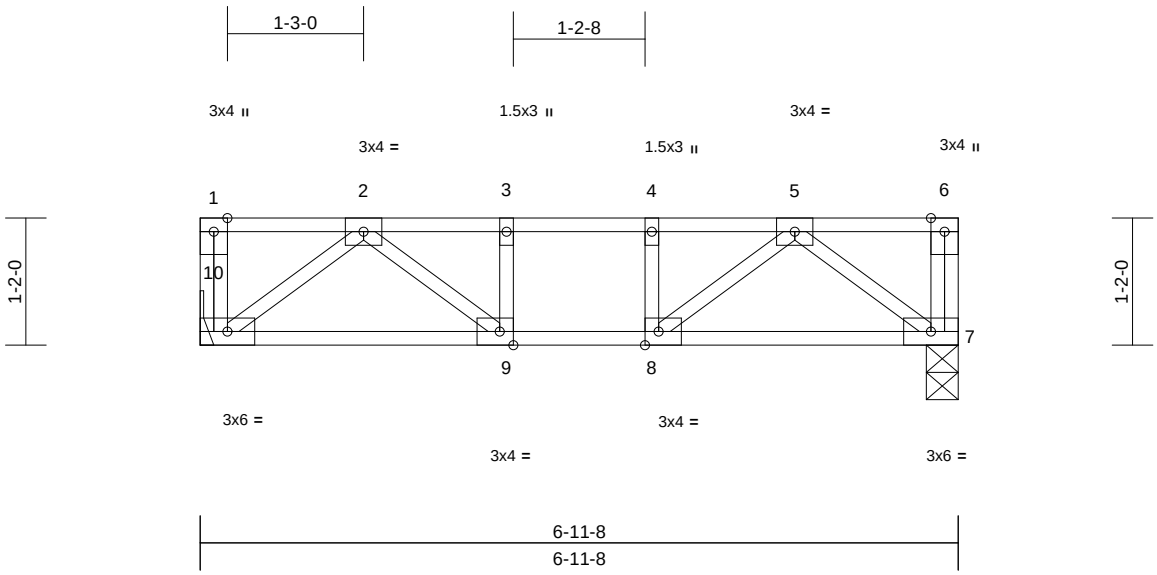
LOAD CASE(S) Standard

November 28,2023

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

Job	Truss	Truss Type	Qty	Ply	CHESAPEAKEHOMES/755H; LOT 131 NEILL'S CREEK FARMS I62207107
NCF131	F08	Floor	2	1	Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Nov 27 14:03:44 Page: 1
ID:ZhkZ0BteFBtEMRm?reVxX7ySAPh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:21.1

Plate Offsets (X, Y): [8:0-1-8,Edge], [9:0-1-8,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	0.16	Vert(LL)	-0.02	9-10	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.21	Vert(CT)	-0.02	9-10	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	7	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 38 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) 7=0-3-8, 10= Mechanical
Max Grav 7=369 (LC 1), 10=369 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=-56/0, 6-7=-56/0, 1-2=0/0, 2-3=-585/0, 3-4=-585/0, 4-5=-585/0, 5-6=0/0
BOT CHORD 9-10=0/397, 8-9=0/585, 7-8=0/397
WEBS 5-7=-498/0, 2-10=-498/0, 5-8=0/276, 2-9=0/276, 3-9=-129/0, 4-8=-129/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Bearings are assumed to be: , Joint 7 SP No.2 crushing capacity of 565 psi.
3) Refer to girder(s) for truss to truss connections.
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.
6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

November 28,2023

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

Job	Truss	Truss Type	Qty	Ply	CHESAPEAKEHOMES/755H; LOT 131 NEILL'S CREEK FARMS
NCF131	F09GR	Floor Girder	1	1	I62207108
					Job Reference (optional)

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Nov 27 14:03:44 Page: 1
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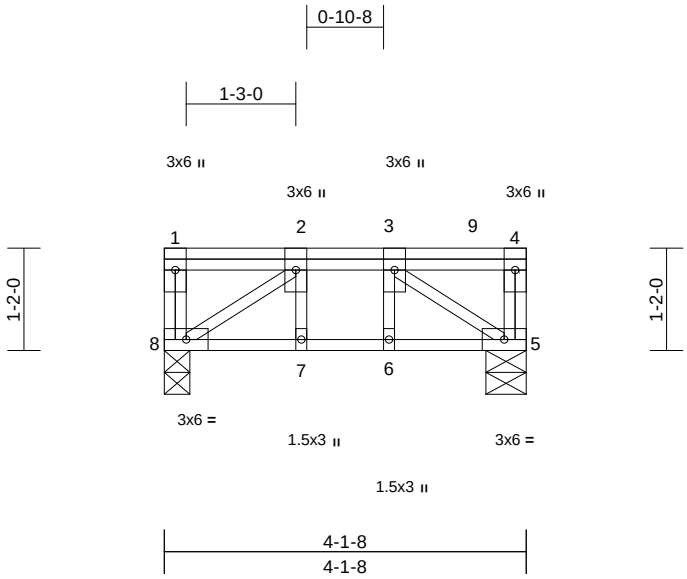

Scale = 1:26.3

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	0.37	Vert(LL)	-0.01	7	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.26	Vert(CT)	-0.01	7	>999	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.20	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 30 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 4-1-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 5=0-5-8, 8=0-3-8
Max Grav 5=866 (LC 4), 8=597 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-8=-108/0, 4-5=-383/0, 1-2=0/0, 2-3=-697/0, 3-4=0/0
BOT CHORD 7-8=0/697, 6-7=0/697, 5-6=0/697
WEBS 3-5=-843/0, 2-8=-843/0, 2-7=-9/8, 3-6=0/29

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 537 lb down at 1-6-4, and 542 lb down at 3-6-4 on top chord. The design/selection of such connection device (s) is the responsibility of others.
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 (lb/ft)
Vert: 5-8=-10, 1-4=-100
Concentrated Loads (lb)
Vert: 2=-457 (F), 9=-483 (F)

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

November 28,2023

ENGINEERING BY TRENCO A MiTek Affiliate
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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CHESAPEAKEHOMES/755H; LOT 131 NEILL'S CREEK FARMS I62207109
NCF131	F10GR	Floor Girder	1	1	Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Nov 27 14:03:44 Page: 1
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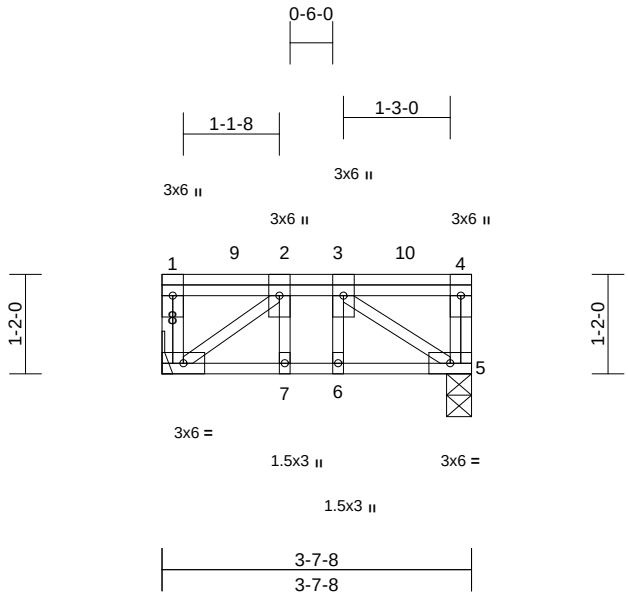

Scale = 1:27

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	0.28	Vert(LL)	0.00	6	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.15	Vert(CT)	-0.01	6	>999	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.12	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 27 lb	FT = 20%F, 11%E

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 3-7-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 5=0-3-8, 8= Mechanical
Max Grav 5=526 (LC 4), 8=504 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-8=-190/0, 4-5=-234/0, 1-2=0/0, 2-3=-414/0, 3-4=0/0
BOT CHORD 7-8=0/414, 6-7=0/414, 5-6=0/414
WEBS 3-5=-501/0, 2-8=-516/0, 2-7=-1/19, 3-6=-1/18

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Bearings are assumed to be: , Joint 5 SP No.2 crushing capacity of 565 psi.
3) Refer to girder(s) for truss to truss connections.
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.
6) CAUTION, Do not erect truss backwards.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 352 lb down at 0-10-4, and 353 lb down at 2-10-4 on top chord. The design/selection of such connection device (s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 5-8=-10, 1-4=-100
Concentrated Loads (lb)
Vert: 9=-283 (F), 10=-287 (F)

November 28,2023

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CHESAPEAKEHOMES/755H; LOT 131 NEILL'S CREEK FARMS I62207110
NCF131	F11GR	Floor Girder	1	1	Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Nov 27 14:03:45 Page: 1
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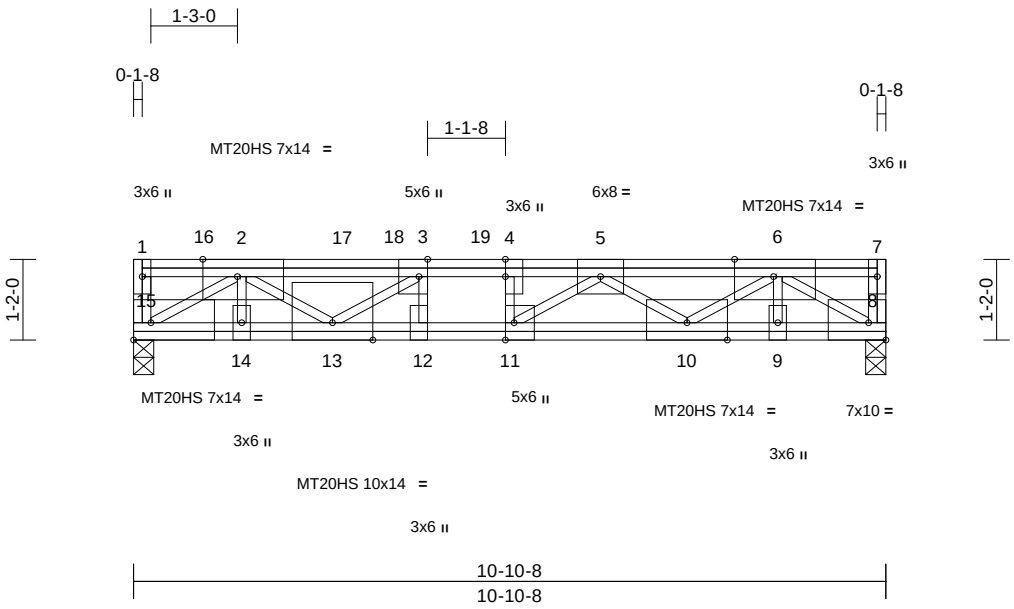

Scale = 1:33.3

Plate Offsets (X, Y): [2:0-6-0,Edge], [3:0-3-0,Edge], [4:0-3-0,Edge], [6:0-6-12,Edge], [8:Edge,0-3-0], [11:0-3-0,Edge], [15:Edge,0-3-0]

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	1.00	Vert(LL)	-0.14	11	>886	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.66	Vert(CT)	-0.19	11-12	>651	240	MT20	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.78	Horz(CT)	0.03	8	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 87 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP SS(flat)
WEBS 2x4 SP No.3(flat) *Except* 6-8,2-15,2-13,6-10:2x4 SP No.2(flat)
OTHERS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-9-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 8=0-3-8, 15=0-3-8
Max Grav 8=2643 (LC 4), 15=3087 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-15=-176/0, 7-8=-64/0, 1-2=0/14, 2-3=-6435/0, 3-4=-8481/0, 4-5=-8481/0, 5-6=-5938/0, 6-7=0/5
BOT CHORD 14-15=0/4293, 13-14=0/4270, 12-13=0/8481, 11-12=0/8481, 10-11=0/7922, 9-10=0/3800, 8-9=0/3819
WEBS 6-8=-4390/0, 2-15=-4944/0, 2-14=-462/0, 2-13=0/2755, 3-13=-2615/0, 3-12=-225/0, 6-9=-371/0, 6-10=0/2608, 5-10=-2460/0, 5-11=0/1057, 4-11=-455/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) The Fabrication Tolerance at joint 2 = 3%
4) All bearings are assumed to be SP SS crushing capacity of 565 psi.
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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 850 lb down at 1-0-4, 849 lb down at 3-0-4, 484 lb down at 3-9-4, 849 lb down at 5-0-4, and 849 lb down at 7-0-4, and 849 lb down at 9-0-4 on top chord. The design/ selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 8-15=-10, 1-7=-100
Concentrated Loads (lb)
Vert: 6=-769 (F), 5=-769 (F), 16=-774 (F), 17=-769 (F), 18=-404 (B), 19=-769 (F)

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

November 28,2023

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

Job	Truss	Truss Type	Qty	Ply	CHESAPEAKEHOMES/755H; LOT 131 NEILL'S CREEK FARMS
NCF131	F16	Floor	10	1	I62207111
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Nov 27 14:03:45 Page: 1

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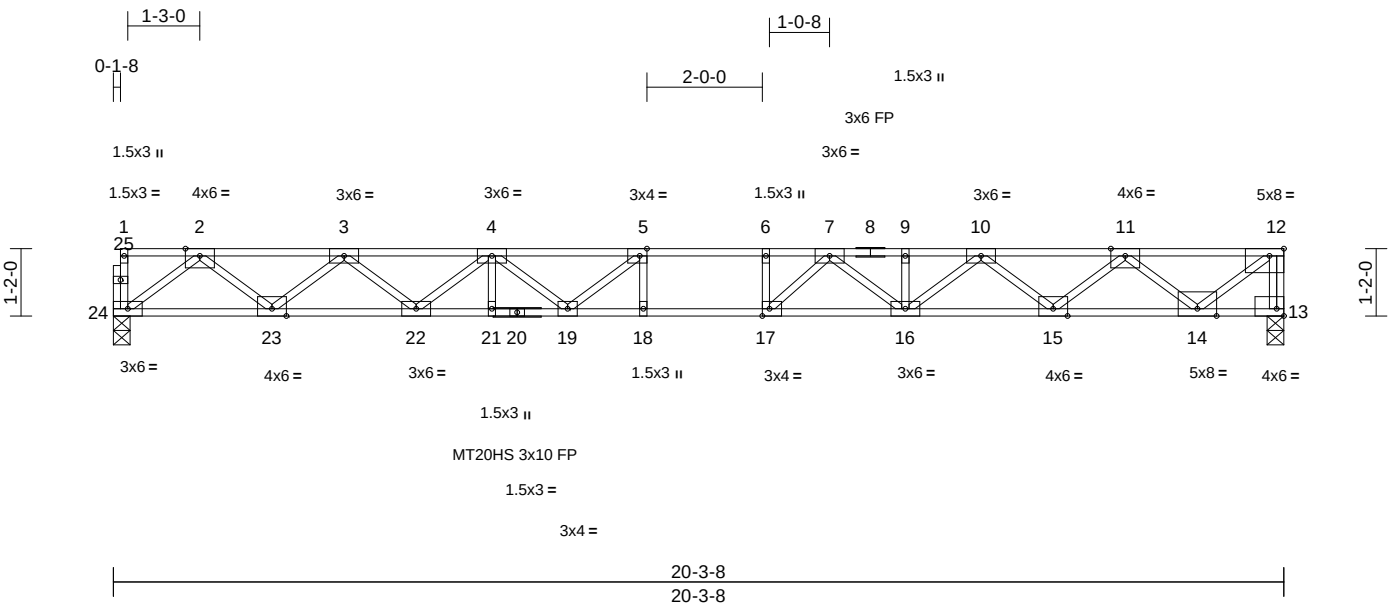

Scale = 1:39.9

Plate Offsets (X, Y): [5:0-1-8,Edge], [12:0-3-0,Edge], [13:Edge,0-1-8], [17:0-1-8,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	0.77	Vert(LL)	-0.46	17-18	>525	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.87	Vert(CT)	-0.63	17-18	>382	240	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.09	13	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 103 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.2(flat) *Except* 8-1:2x4 SP No.1 (flat)
BOT CHORD 2x4 SP No.1(flat) *Except* 20-13:2x4 SP SS (flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-6-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 13=0-3-8, 24=0-3-8
Max Grav 13=1102 (LC 1), 24=1096 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-24=-39/0, 12-13=-1094/0, 1-2=-2/0, 2-3=-2378/0, 3-4=-3996/0, 4-5=-4975/0, 5-6=-5255/0, 6-7=-5255/0, 7-9=-4610/0, 9-10=-4610/0, 10-11=-3274/0, 11-12=-1305/0
BOT CHORD 23-24=0/1381, 22-23=0/3341, 21-22=0/4657, 19-21=0/4657, 18-19=0/5255, 17-18=0/5255, 16-17=0/5016, 15-16=0/4045, 14-15=0/2469, 13-14=0/0
WEBS 12-14=0/1637, 2-24=-1730/0, 11-14=-1515/0, 2-23=0/1298, 11-15=0/1048, 3-23=-1254/0, 10-15=-1004/0, 3-22=0/853, 10-16=0/722, 9-16=-111/0, 4-22=-844/0, 7-16=-568/0, 4-21=-24/40, 4-19=0/531, 5-19=-696/94, 5-18=-185/189, 6-17=-321/0, 7-17=-130/710

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) The Fabrication Tolerance at joint 20 = 11%
4) Bearings are assumed to be: Joint 24 SP No.1 crushing capacity of 565 psi, Joint 13 SP SS crushing capacity of 565 psi.
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.

LOAD CASE(S) Standard

November 28,2023

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

Job	Truss	Truss Type	Qty	Ply	CHESAPEAKEHOMES/755H; LOT 131 NEILL'S CREEK FARMS
NCF131	F17G	Floor Supported Gable	1	1	I62207112
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Nov 27 14:03:45 Page: 1

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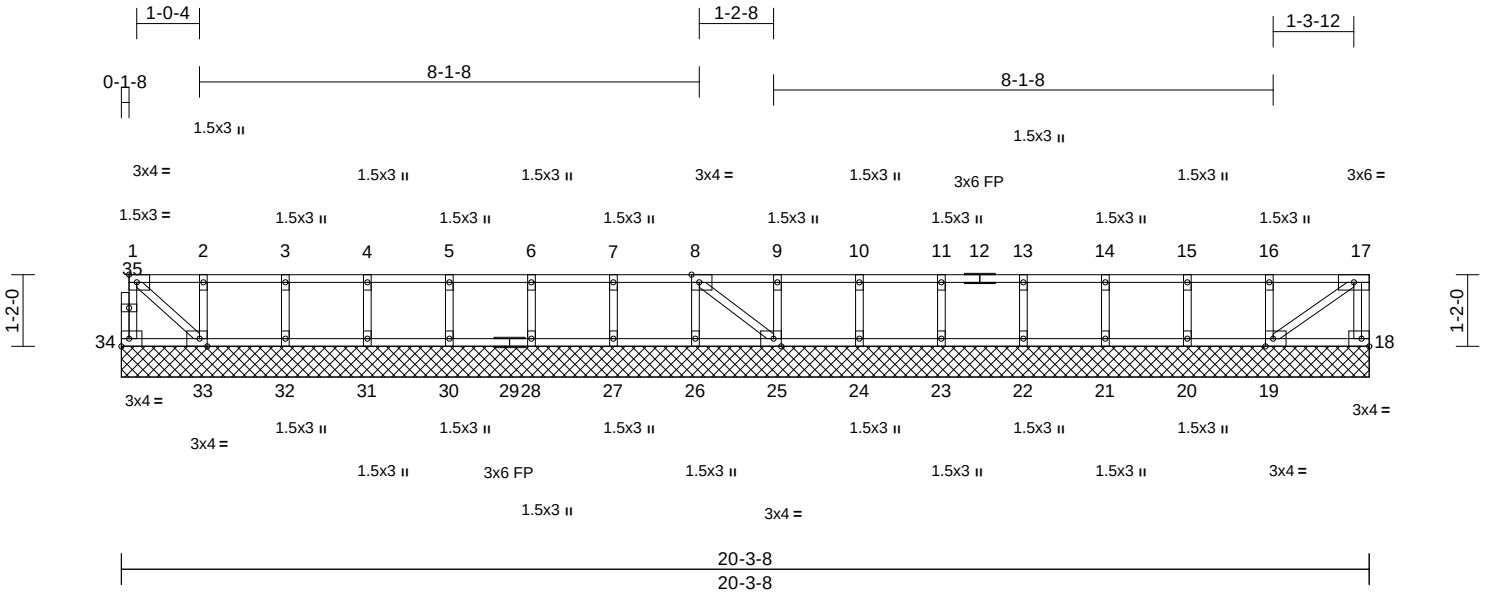


Scale = 1:37.5

Plate Offsets (X, Y): [8:0-1-8,Edge], [19:0-1-8,Edge], [25:0-1-8,Edge], [33:0-1-8,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	0.11	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	0.04	Horiz(TL)	0.00	25	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 91 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) 18=20-3-8, 19=20-3-8, 20=20-3-8, 21=20-3-8, 22=20-3-8, 23=20-3-8, 24=20-3-8, 25=20-3-8, 26=20-3-8, 27=20-3-8, 28=20-3-8, 30=20-3-8, 31=20-3-8, 32=20-3-8, 33=20-3-8, 34=20-3-8

Max Grav 18=63 (LC 1), 19=183 (LC 1), 20=137 (LC 1), 21=149 (LC 1), 22=146 (LC 1), 23=147 (LC 1), 24=147 (LC 1), 25=153 (LC 1), 26=140 (LC 1), 27=147 (LC 1), 28=147 (LC 1), 30=147 (LC 1), 31=147 (LC 1), 32=146 (LC 1), 33=152 (LC 1), 34=49 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-34=-44/0, 17-18=-57/0, 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=0/5, 9-10=0/5, 10-11=0/5, 11-13=0/5, 13-14=0/5, 14-15=0/5, 15-16=0/5, 16-17=0/5

BOT CHORD 33-34=0/3, 32-33=0/3, 31-32=0/3, 30-31=0/3, 28-30=0/3, 27-28=0/3, 26-27=0/3, 25-26=0/3, 24-25=-5/0, 23-24=-5/0, 22-23=-5/0, 21-22=-5/0, 20-21=-5/0, 19-20=-5/0, 18-19=0/0

WEBS 2-33=-138/0, 3-32=-133/0, 4-31=-134/0, 5-30=-133/0, 6-28=-133/0, 7-27=-133/0, 8-26=-127/0, 9-25=-133/0, 10-24=-133/0, 11-23=-133/0, 13-22=-133/0, 14-21=-136/0, 15-20=-125/0, 16-19=-163/0, 17-19=-6/0, 8-25=-10/0, 1-33=0/1

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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
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.

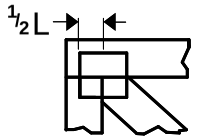
LOAD CASE(S) Standard

November 28,2023

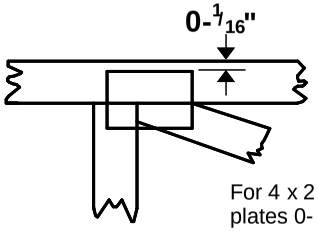
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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.

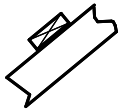
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

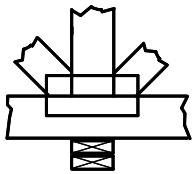
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

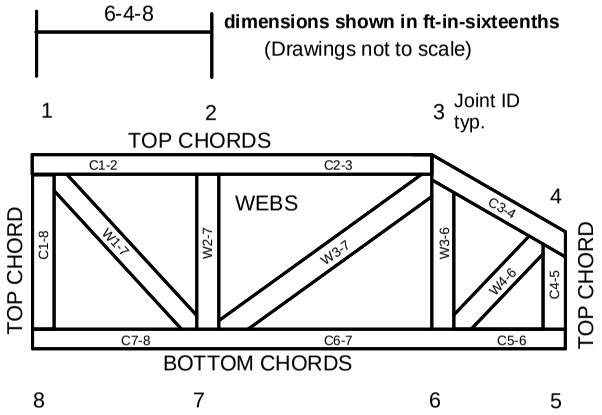


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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

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

MiTek®

ENGINEERING BY TRENCO
A MiTek Affiliate

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

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. Reviewing 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.