ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0325-1351
Lot 3 Mabry Ridge

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Pages or sheets covered by this seal: I71960042 thru I71960056

My license renewal date for the state of North Carolina is December 31, 2025.

North Carolina COA: C-0844

March 12,2025

Gilbert, Eric

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

Job	Truss	Truss Type	Qty	Ply	Lot 3 Mabry Ridge
J0325-1351	ET1	Floor Supported Gable	1	1	I71960042
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

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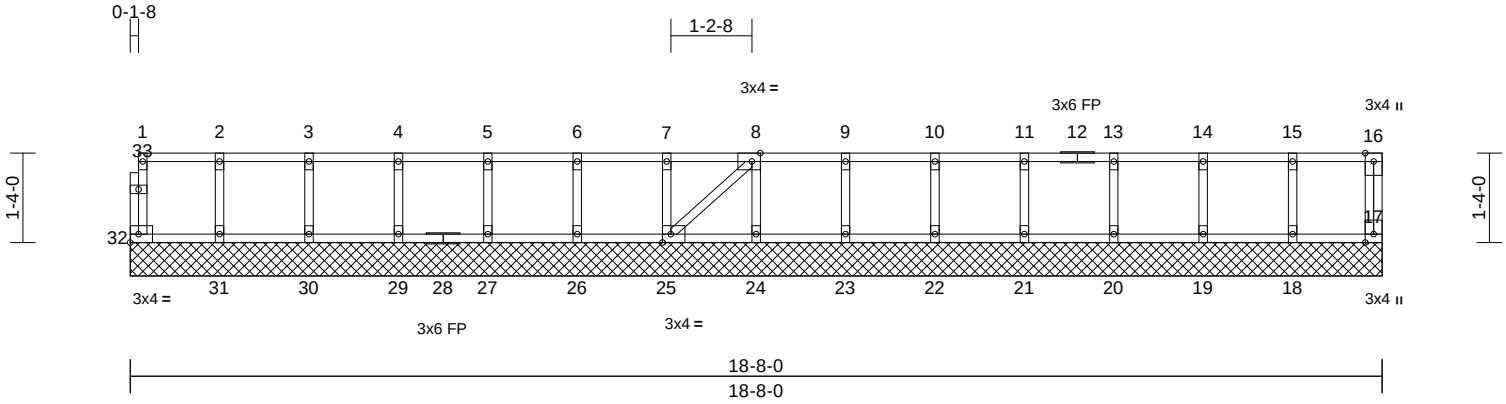

Scale = 1:34.4

Plate Offsets (X, Y): [8:0-1-8,Edge], [25:0-1-8,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	0.06	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	17	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 85 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) 17=18-8-0, 18=18-8-0, 19=18-8-0, 20=18-8-0, 21=18-8-0, 22=18-8-0, 23=18-8-0, 24=18-8-0, 25=18-8-0, 26=18-8-0, 27=18-8-0, 29=18-8-0, 30=18-8-0, 31=18-8-0, 32=18-8-0

Max Grav 17=52 (LC 1), 18=156 (LC 1), 19=145 (LC 1), 20=147 (LC 1), 21=147 (LC 1), 22=147 (LC 1), 23=147 (LC 1), 24=149 (LC 1), 25=145 (LC 1), 26=147 (LC 1), 27=147 (LC 1), 29=147 (LC 1), 30=146 (LC 1), 31=152 (LC 1), 32=49 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-32=-44/0, 16-17=-47/0, 1-2=-2/0, 2-3=-2/0, 3-4=-2/0, 4-5=-2/0, 5-6=-2/0, 6-7=-2/0, 7-8=-2/0, 8-9=0/0, 9-10=0/0, 10-11=0/0, 11-13=0/0, 13-14=0/0, 14-15=0/0, 15-16=0/0
BOT CHORD	31-32=0/2, 30-31=0/2, 29-30=0/2, 27-29=0/2, 26-27=0/2, 25-26=0/2, 24-25=0/0, 23-24=0/0, 22-23=0/0, 21-22=0/0, 20-21=0/0, 19-20=0/0, 18-19=0/0, 17-18=0/0
WEBS	2-31=-138/0, 3-30=-133/0, 4-29=-133/0, 5-27=-133/0, 6-26=-133/0, 7-25=-133/0, 8-24=-135/0, 9-23=-133/0, 10-22=-133/0, 11-21=-133/0, 13-20=-134/0, 14-19=-132/0, 15-18=-142/0, 8-25=0/3

NOTES

1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) Gable requires continuous bottom chord bearing.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) Gable studs spaced at 1-4-0 oc.
6) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
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

March 12,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 3 Mabry Ridge
J0325-1351	ET2	Floor Supported Gable	1	1	I71960043 Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

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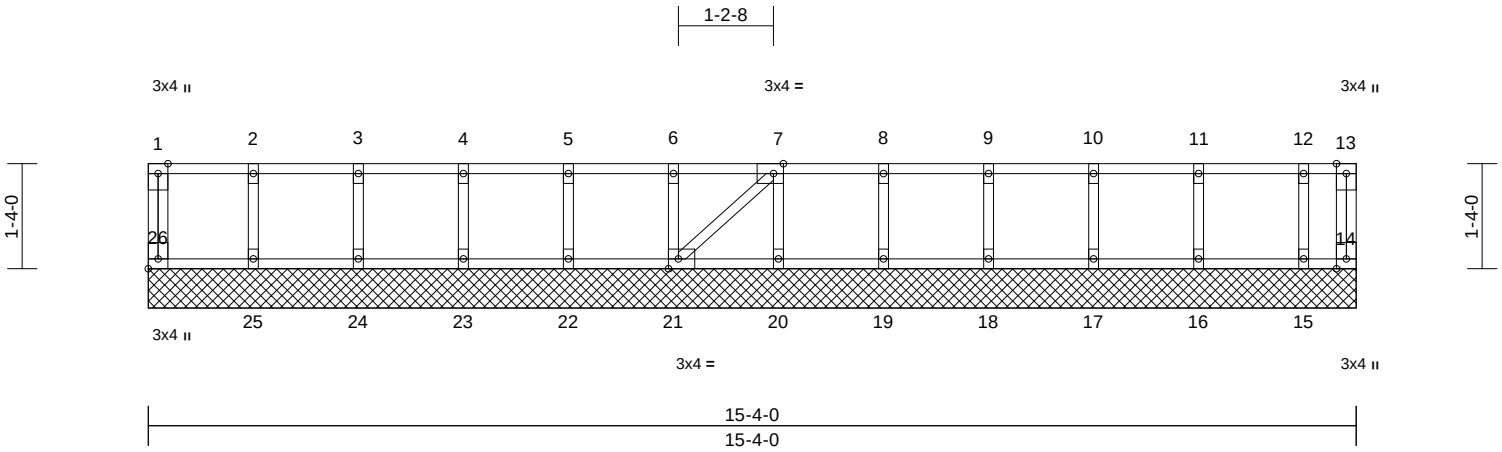


Scale = 1:29.2

Plate Offsets (X, Y): [7:0-1-8,Edge], [21:0-1-8,Edge], [26: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	0.06	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	16	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 72 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)

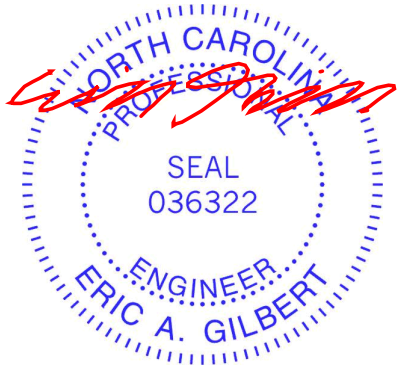
BRACING
TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 14=15-4-0, 15=15-4-0, 16=15-4-0, 17=15-4-0, 18=15-4-0, 19=15-4-0, 20=15-4-0, 21=15-4-0, 22=15-4-0, 23=15-4-0, 24=15-4-0, 25=15-4-0, 26=15-4-0
Max Grav 14=8 (LC 1), 15=121 (LC 1), 16=152 (LC 1), 17=145 (LC 1), 18=147 (LC 1), 19=147 (LC 1), 20=147 (LC 1), 21=147 (LC 1), 22=147 (LC 1), 23=147 (LC 1), 24=145 (LC 1), 25=156 (LC 1), 26=52 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-26=-47/0, 13-14=-7/0, 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=0/0, 10-11=0/0, 11-12=0/0, 12-13=0/0
BOT CHORD 25-26=0/0, 24-25=0/0, 23-24=0/0, 22-23=0/0, 21-22=0/0, 20-21=0/0, 19-20=0/0, 18-19=0/0, 17-18=0/0, 16-17=0/0, 15-16=0/0, 14-15=0/0
WEBS 2-25=-142/0, 3-24=-132/0, 4-23=-134/0, 5-22=-133/0, 6-21=-133/0, 7-20=-133/0, 8-19=-133/0, 9-18=-134/0, 10-17=-132/0, 11-16=-138/0, 12-15=-110/0, 7-21=0/0

NOTES
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) Gable requires continuous bottom chord bearing.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) Gable studs spaced at 1-4-0 oc.
6) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
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.

LOAD CASE(S) Standard



March 12,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 3 Mabry Ridge
J0325-1351	ET3	Floor Supported Gable	1	1	I71960044 Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

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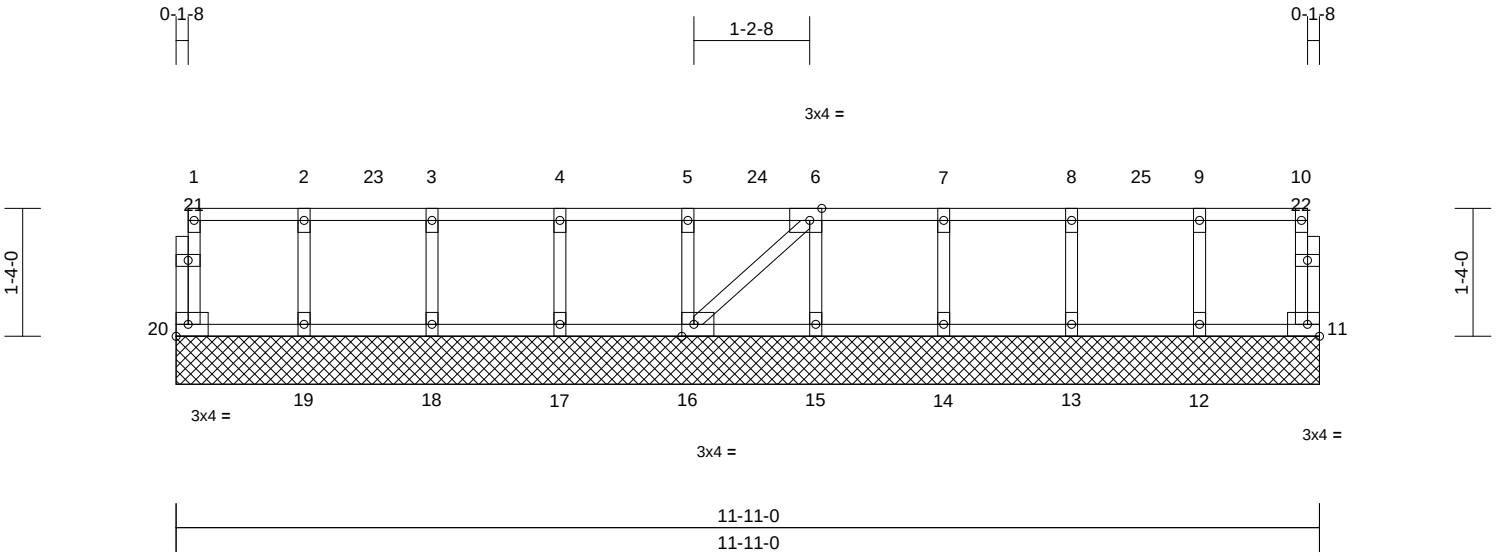

Scale = 1:24

Plate Offsets (X, Y): [6:0-1-8,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	0.22	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	0.05	Horiz(TL)	0.00	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 56 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 6-0-0 oc bracing.

REACTIONS (size) 11=11-11-0, 12=11-11-0, 13=11-11-0, 14=11-11-0, 15=11-11-0, 16=11-11-0, 17=11-11-0, 18=11-11-0, 19=11-11-0, 20=11-11-0
Max Uplift 11=-9 (LC 3), 12=-44 (LC 6), 13=-36 (LC 6), 14=-54 (LC 6), 15=-47 (LC 6), 16=-35 (LC 6), 17=-54 (LC 6), 18=-49 (LC 6), 19=-29 (LC 6), 20=-4 (LC 3)
Max Grav 11=34 (LC 1), 12=234 (LC 4), 13=220 (LC 4), 14=251 (LC 4), 15=239 (LC 4), 16=219 (LC 4), 17=251 (LC 4), 18=240 (LC 4), 19=216 (LC 4), 20=41 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-20=-36/8, 10-11=-30/13, 1-2=-2/0, 2-3=-2/0, 3-4=-2/0, 4-5=-2/0, 5-6=-2/0, 6-7=-2/1, 7-8=-2/1, 8-9=-2/1, 9-10=-2/1
BOT CHORD 19-20=0/2, 18-19=0/2, 17-18=0/2, 16-17=0/2, 15-16=-1/2, 14-15=-1/2, 13-14=-1/2, 12-13=-1/2, 11-12=-1/2
WEBS 2-19=-201/38, 3-18=-227/57, 4-17=-237/62, 5-16=-206/43, 6-15=-226/55, 7-14=-237/62, 8-13=-207/44, 9-12=-220/52, 6-16=0/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Gable requires continuous bottom chord bearing.
5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
6) Gable studs spaced at 1-4-0 oc.
7) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 4 lb uplift at joint 20, 9 lb uplift at joint 11, 29 lb uplift at joint 19, 49 lb uplift at joint 18, 54 lb uplift at joint 17, 35 lb uplift at joint 16, 47 lb uplift at joint 15, 54 lb uplift at joint 14, 36 lb uplift at joint 13 and 44 lb uplift at joint 12.
9) 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.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 202 lb down and 105 lb up at 2-0-12, 202 lb down and 105 lb up at 4-0-12, 202 lb down and 105 lb up at 6-0-12, and 202 lb down and 105 lb up at 8-0-12, and 202 lb down and 105 lb up at 10-0-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 11-20=-10, 1-10=-100
Concentrated Loads (lb)
Vert: 4=-92, 7=-92, 23=-92, 24=-92, 25=-92

March 12,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 3 Mabry Ridge	
J0325-1351	ET4	Floor Supported Gable	1	1	Job Reference (optional)	I71960045

Comtech, Inc, Fayetteville, NC - 28314,

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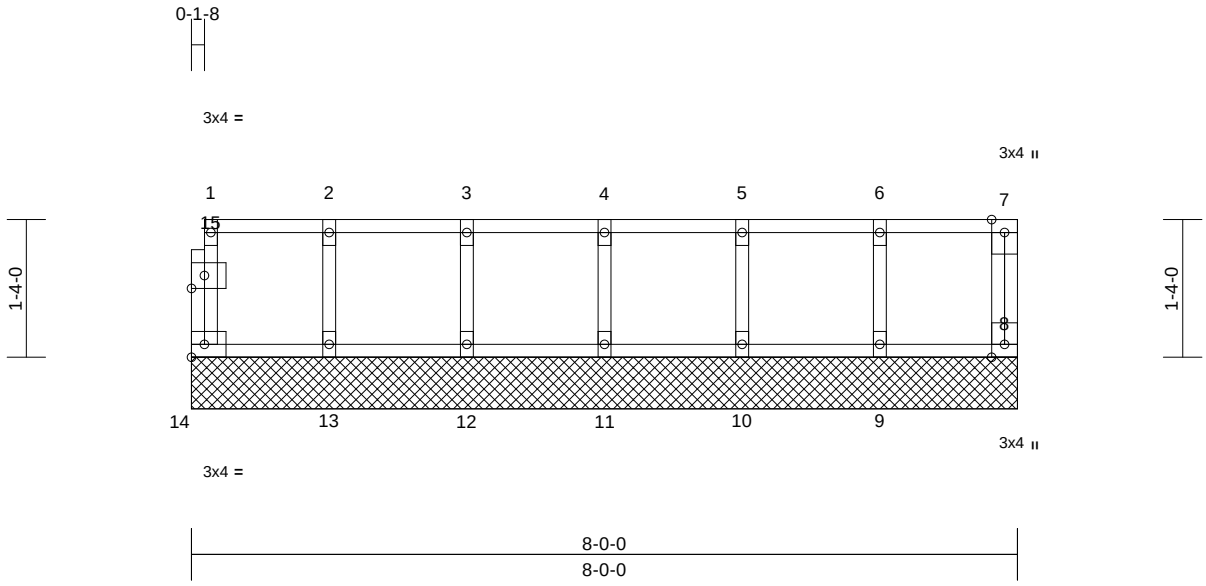

Scale = 1:22.3

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

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	0.06	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	8	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 38 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) 8=8-0-0, 9=8-0-0, 10=8-0-0, 11=8-0-0, 12=8-0-0, 13=8-0-0, 14=8-0-0

Max Grav 8=63 (LC 1), 9=142 (LC 1), 10=148 (LC 1), 11=146 (LC 1), 12=148 (LC 1), 13=142 (LC 1), 14=57 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-14=-51/0, 7-8=-56/0, 1-2=-9/0, 2-3=-9/0, 3-4=-9/0, 4-5=-9/0, 5-6=-9/0, 6-7=-9/0
BOT CHORD	13-14=0/9, 12-13=0/9, 11-12=0/9, 10-11=0/9, 9-10=0/9, 8-9=0/9
WEBS	2-13=-130/0, 3-12=-134/0, 4-11=-133/0, 5-10=-134/0, 6-9=-130/0

NOTES

1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) Gable requires continuous bottom chord bearing.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) Gable studs spaced at 1-4-0 oc.
6) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
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

March 12,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 3 Mabry Ridge
J0325-1351	F01	Floor	1	1	I71960046
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

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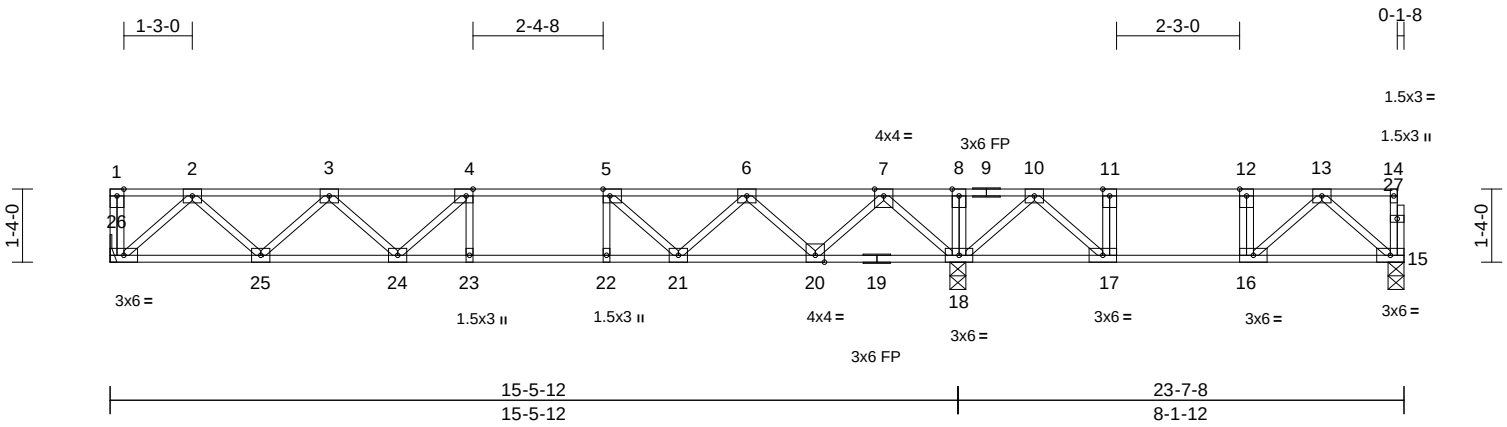

Scale = 1:42.1

Plate Offsets (X, Y): [4:0-1-8,Edge], [5:0-1-8,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	0.53	Vert(LL)	-0.17	23-24	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.82	Vert(CT)	-0.22	23-24	>857	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.04	15	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 124 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, Except:
6-0-0 oc bracing: 17-18,16-17.

REACTIONS (size) 15=0-3-8, 18=0-3-8, 26= Mechanical
Max Grav 15=401 (LC 4), 18=1425 (LC 1), 26=810 (LC 10)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-26=-45/0, 14-15=-53/1, 1-2=0/0, 2-3=-1423/0, 3-4=-2212/0, 4-5=-2432/0, 5-6=-2066/0, 6-7=-1128/0, 7-8=0/713, 8-10=0/713, 10-11=-586/83, 11-12=-586/83, 12-13=-586/83, 13-14=-3/0
BOT CHORD 25-26=0/860, 24-25=0/1958, 23-24=0/2432, 22-23=0/2432, 21-22=0/2432, 20-21=0/1727, 18-20=0/493, 17-18=-345/238, 16-17=-83/586, 15-16=0/379
WEBS 8-18=-163/0, 2-26=-1145/0, 2-25=0/783, 3-25=-745/0, 3-24=0/376, 4-24=-429/0, 4-23=-150/99, 7-18=-1261/0, 7-20=0/911, 6-20=-862/0, 6-21=0/511, 5-21=-632/0, 5-22=-60/188, 10-18=-688/0, 10-17=0/672, 11-17=-356/0, 13-15=-500/0, 13-16=-127/276, 12-16=-172/66

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Bearings are assumed to be: , Joint 18 SP No.1 crushing capacity of 565 psi, Joint 15 SP No.1 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
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

March 12,2025

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 3 Mabry Ridge	
J0325-1351	F02	FLOOR	4	1	Job Reference (optional)	I71960047

Comtech, Inc, Fayetteville, NC - 28314,

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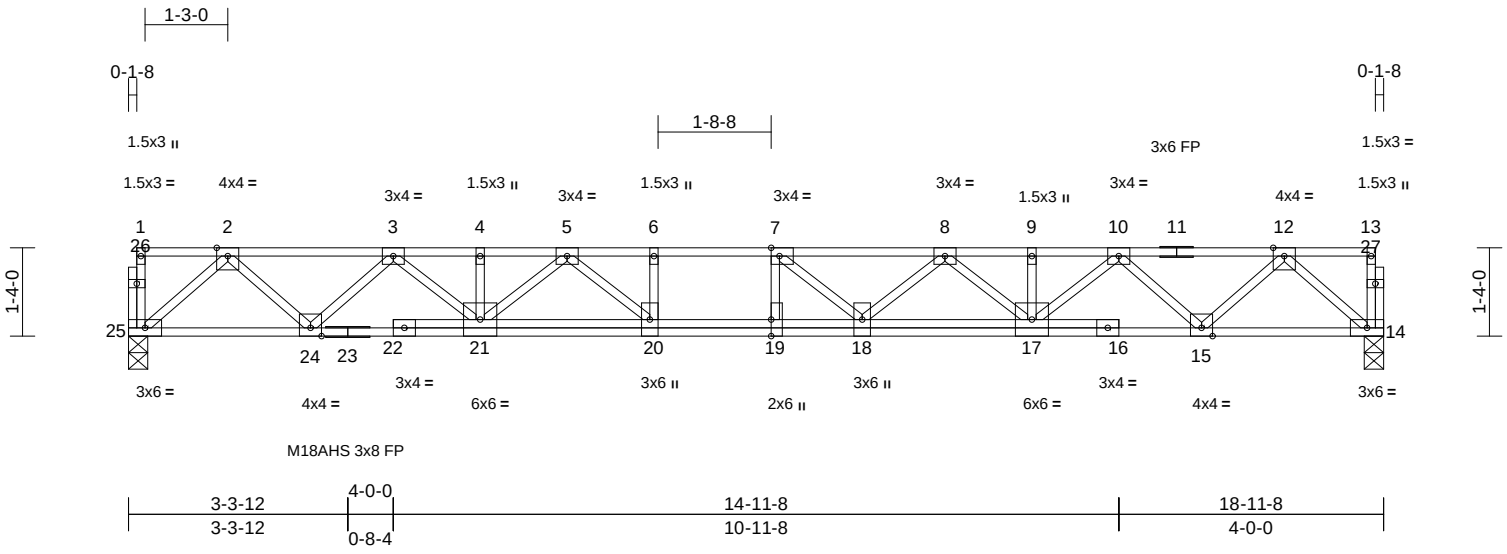

Scale = 1:34.8

Plate Offsets (X, Y): [7:0-1-8,Edge], [19:0-3-0,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	0.53	Vert(LL)	-0.24	18-19	>933	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.58	Vert(CT)	-0.33	18-19	>679	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.05	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 115 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 5-11-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 14=0-3-8, 25=0-3-8
Max Grav 14=1023 (LC 1), 25=1023 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-25=-35/0, 13-14=-35/0, 1-2=-2/0, 2-3=-1882/0, 3-4=-3291/0, 4-5=-3291/0, 5-6=-4133/0, 6-7=-4133/0, 7-8=-4028/0, 8-9=-3291/0, 9-10=-3291/0, 10-12=-1881/0, 12-13=-2/0
BOT CHORD 24-25=0/1107, 21-24=0/2671, 20-21=0/3789, 19-20=0/4133, 18-19=0/4133, 17-18=0/3803, 15-17=0/2675, 14-15=0/1106
WEBS 2-25=-1471/0, 2-24=0/1078, 3-24=-1097/0, 3-21=0/823, 4-21=-90/0, 5-21=-661/0, 5-20=0/673, 6-20=-163/0, 12-14=-1470/0, 12-15=0/1078, 10-15=-1104/0, 10-17=0/817, 9-17=-50/0, 8-17=-680/0, 8-18=0/407, 7-18=-500/220, 7-19=-333/177

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
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 12,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 3 Mabry Ridge
J0325-1351	F03	Floor	9	1	I71960048
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Mar 11 14:20:14 Page: 1
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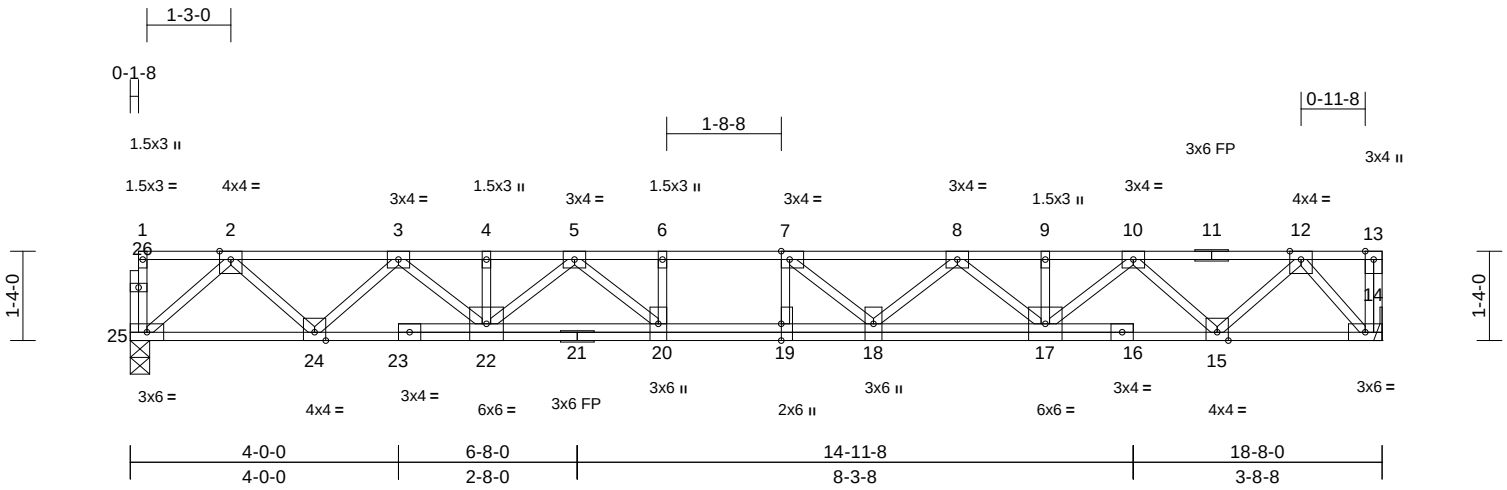

Scale = 1:34.4

Plate Offsets (X, Y): [7:0-1-8,Edge], [19:0-3-0,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	0.51	Vert(LL)	-0.22	19	>985	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.56	Vert(CT)	-0.31	19	>718	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.05	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 114 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) 14= Mechanical, 25=0-3-8
Max Grav 14=1013 (LC 1), 25=1007 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-25=-35/0, 13-14=-17/0, 1-2=-2/0, 2-3=-1847/0, 3-4=-3221/0, 4-5=-3221/0, 5-6=-4013/0, 6-7=-4013/0, 7-8=-3873/0, 8-9=-3108/0, 9-10=-3108/0, 10-12=-1668/0, 12-13=0/0
BOT CHORD 24-25=0/1089, 22-24=0/2620, 20-22=0/3696, 19-20=0/4013, 18-19=0/4013, 17-18=0/3633, 15-17=0/2476, 14-15=0/879
WEBS 2-25=-1447/0, 2-24=0/1055, 3-24=-1075/0, 3-22=0/799, 4-22=-89/0, 5-22=-630/0, 5-20=0/641, 6-20=-158/0, 12-14=-1316/0, 12-15=0/1098, 10-15=-1124/0, 10-17=0/839, 9-17=-52/0, 8-17=-697/0, 8-18=0/417, 7-18=-521/181, 7-19=-310/189

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Bearings are assumed to be: Joint 25 SP No.1 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
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

March 12,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 3 Mabry Ridge
J0325-1351	F04	Floor	5	1	I71960049
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Mar 11 14:20:14 Page: 1
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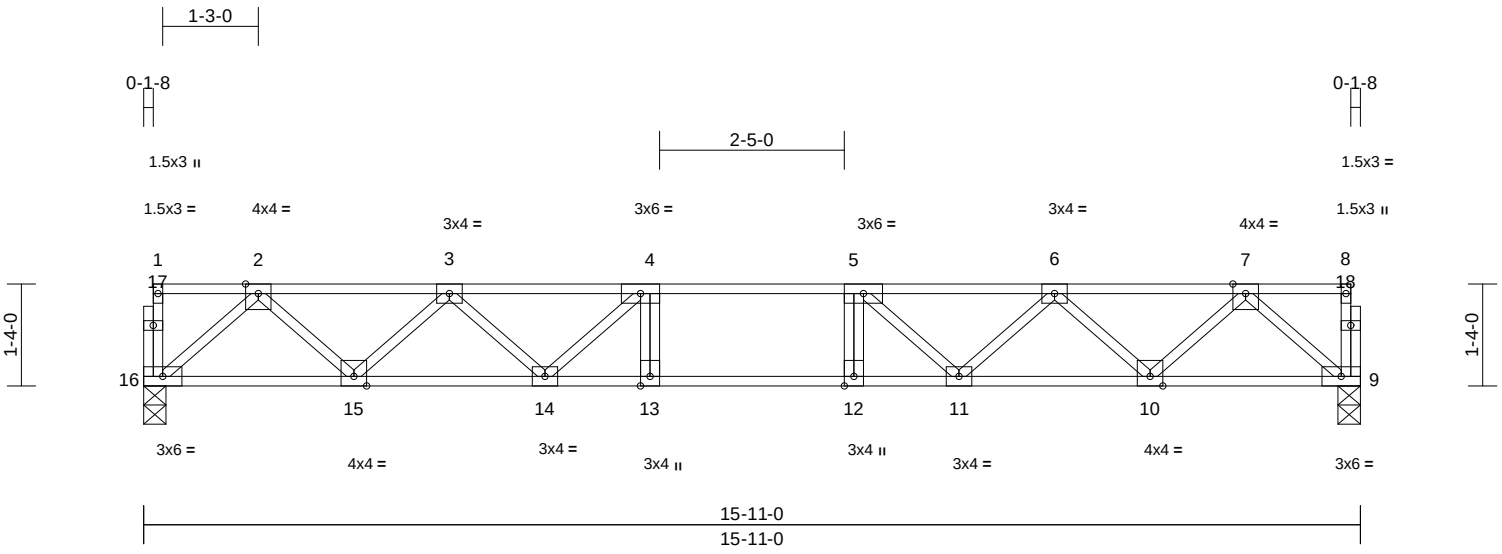

Scale = 1:30.1

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	0.49	Vert(LL)	-0.19	13-14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.82	Vert(CT)	-0.23	13-14	>803	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.04	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 84 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, 16=0-3-8
Max Grav 9=855 (LC 1), 16=855 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-16=-42/0, 8-9=-42/0, 1-2=-2/0, 2-3=-1533/0, 3-4=-2429/0, 4-5=-2753/0, 5-6=-2429/0, 6-7=-1533/0, 7-8=-2/0
BOT CHORD 15-16=0/919, 14-15=0/2117, 13-14=0/2753, 12-13=0/2753, 11-12=0/2753, 10-11=0/2117, 9-10=0/919
WEBS 2-16=-1221/0, 2-15=0/854, 3-15=-812/0, 3-14=0/488, 4-14=-621/0, 4-13=-127/169, 7-9=-1221/0, 7-10=0/854, 6-10=-812/0, 6-11=0/488, 5-11=-621/0, 5-12=-127/169

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
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

March 12,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 3 Mabry Ridge
J0325-1351	F05	Floor	8	1	I71960050 Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

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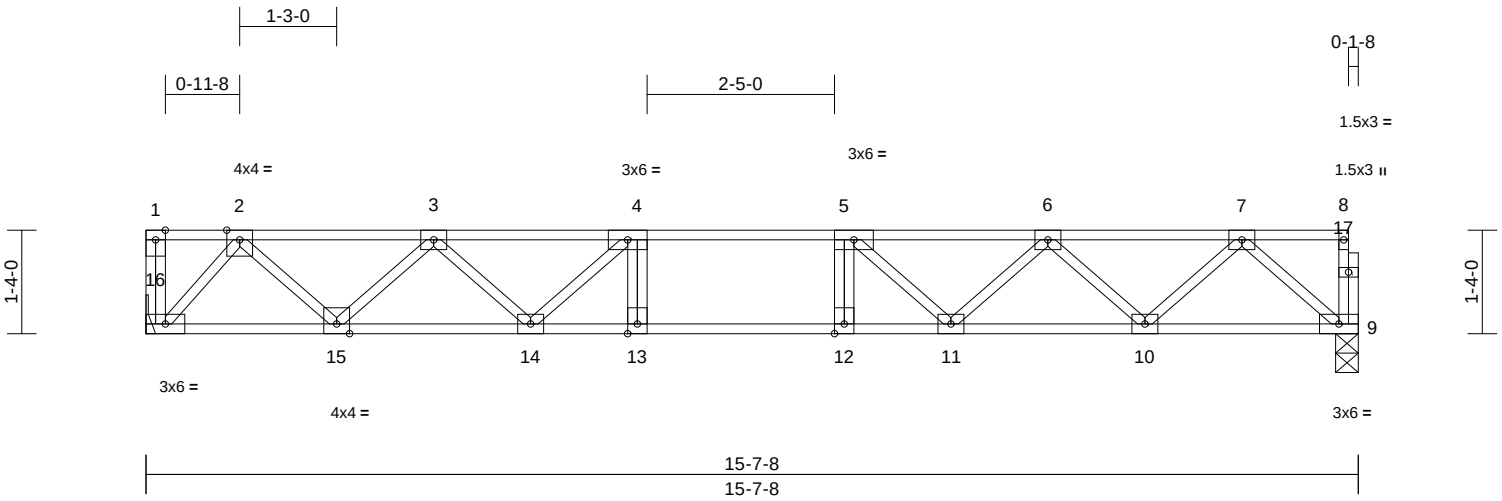

Scale = 1:29.7

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	0.51	Vert(LL)	-0.19	11-12	>985	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.84	Vert(CT)	-0.24	11-12	>780	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.04	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 83 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, 16= Mechanical
Max Grav 9=839 (LC 1), 16=846 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-16=-25/4, 8-9=-42/0, 1-2=0/0, 2-3=-1360/0, 3-4=-2290/0, 4-5=-2650/0, 5-6=-2361/0, 6-7=-1499/0, 7-8=-2/0
BOT CHORD 15-16=0/732, 14-15=0/1958, 13-14=0/2650, 12-13=0/2650, 11-12=0/2650, 10-11=0/2068, 9-10=0/900
WEBS 2-16=-1096/0, 2-15=0/874, 3-15=-832/0, 3-14=0/503, 4-14=-646/0, 4-13=-110/179, 7-9=-1195/0, 7-10=0/833, 6-10=-793/0, 6-11=0/464, 5-11=-580/0, 5-12=-138/151

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Bearings are assumed to be: , Joint 9 SP No.1 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
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

March 12,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 3 Mabry Ridge	I71960051
J0325-1351	F06	Floor	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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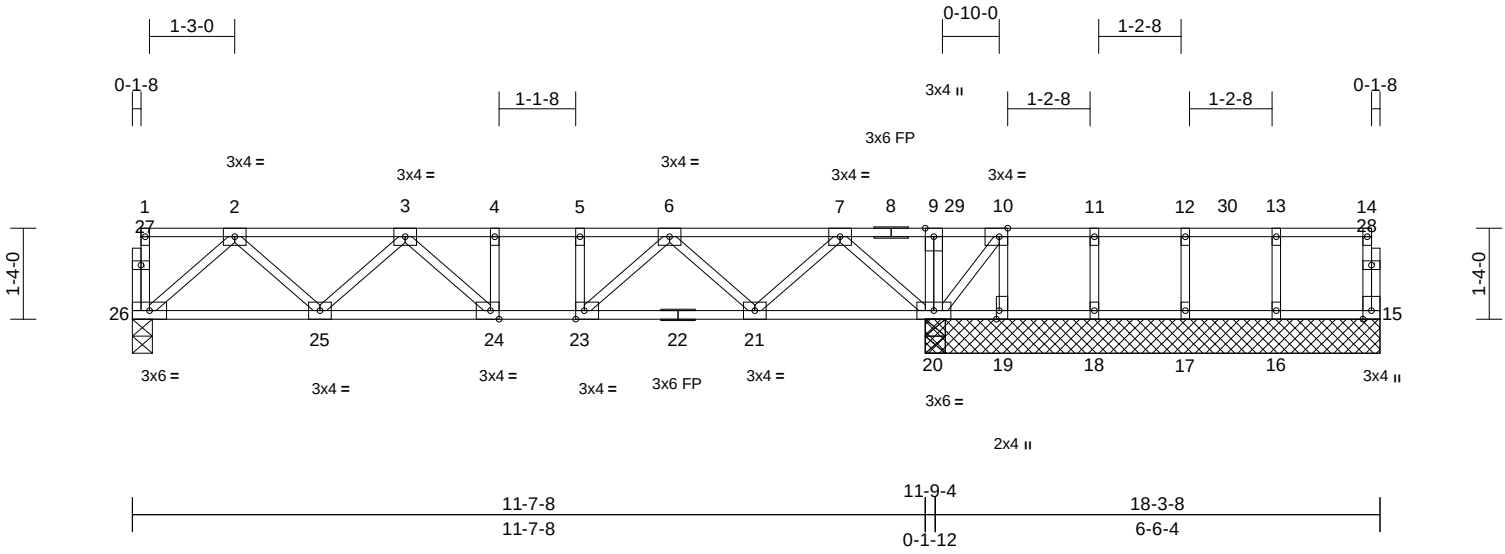

Scale = 1:33.8

Plate Offsets (X, Y): [10:0-1-8,Edge], [19:0-1-8,Edge], [23:0-1-8,Edge], [24:0-1-8,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	0.27	Vert(LL)	-0.05	24-25	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.32	Vert(CT)	-0.06	24-25	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.01	15	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S		Wind(LL)	0.00	21-23	>999	0	Weight: 95 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 6-0-0 oc bracing.

REACTIONS (size) 15=6-8-0, 16=6-8-0, 17=6-8-0, 18=6-8-0, 19=6-8-0, 20=6-8-0, 26=0-3-8
Max Uplift 15=-1 (LC 3), 16=-36 (LC 6), 17=-58 (LC 6), 18=-72 (LC 6), 19=-602 (LC 1)
Max Grav 15=50 (LC 8), 16=246 (LC 4), 17=256 (LC 29), 18=292 (LC 28), 19=-70 (LC 48), 20=1615 (LC 1), 26=563 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-26=-36/0, 14-15=-45/6, 1-2=-2/0, 2-3=-901/0, 3-4=-1186/0, 4-5=-1186/0, 5-6=-1186/0, 6-7=-518/0, 7-9=0/642, 9-10=0/641, 10-11=-2/0, 11-12=-2/0, 12-13=-2/0, 13-14=-2/0
BOT CHORD	25-26=0/592, 24-25=0/1168, 23-24=0/1186, 21-23=0/946, 20-21=0/78, 19-20=0/2, 18-19=0/2, 17-18=0/2, 16-17=0/2, 15-16=0/2
WEBS	9-20=-238/80, 2-26=-786/0, 2-25=0/430, 3-25=-372/0, 3-24=-97/196, 4-24=-102/18, 7-20=-961/0, 13-16=-230/45, 12-17=-244/65, 7-21=0/612, 11-18=-276/81, 10-19=0/594, 10-20=-992/0, 6-21=-596/0, 6-23=0/409, 5-23=-193/0

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) n/a
3) n/a
4) All plates are 1.5x3 MT20 unless otherwise indicated.
5) Plates checked for a plus or minus 1 degree rotation about its center.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 0-0-0 oc.
8) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1 lb uplift at joint 15, 36 lb uplift at joint 16, 58 lb uplift at joint 17, 72 lb uplift at joint 18 and 602 lb uplift at joint 19.
10) 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.
11) CAUTION, Do not erect truss backwards.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 243 lb down and 121 lb up at 12-0-12, and 243 lb down and 121 lb up at 14-0-12, and 243 lb down and 121 lb up at 16-0-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 15-26=-10, 1-14=-100
Concentrated Loads (lb)
Vert: 11=-112, 29=-112, 30=-112

March 12,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 3 Mabry Ridge	
J0325-1351	F07	Floor	3	1	Job Reference (optional)	I71960052

Comtech, Inc, Fayetteville, NC - 28314,

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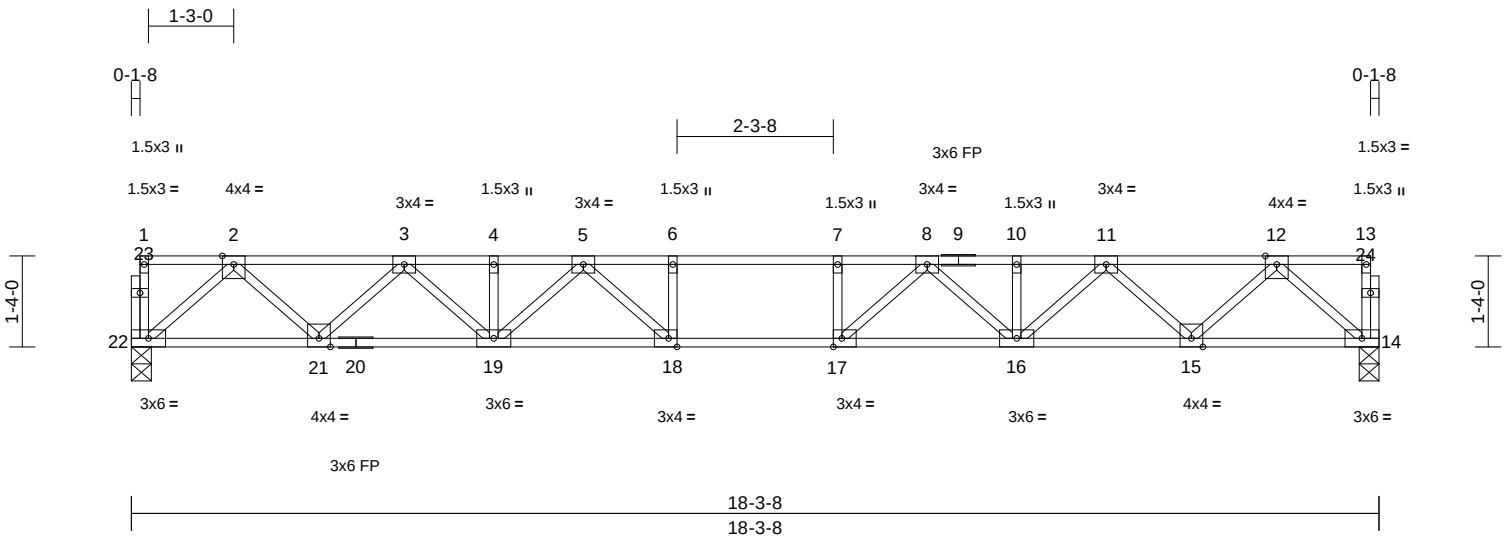

Scale = 1:33.8

Plate Offsets (X, Y): [17:0-1-8,Edge], [18:0-1-8,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	0.66	Vert(LL)	-0.24	18-19	>885	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.81	Vert(CT)	-0.33	18-19	>658	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.06	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 96 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) 14=0-3-8, 22=0-3-8
Max Grav 14=986 (LC 1), 22=986 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-22=-34/0, 13-14=-34/0, 1-2=-2/0, 2-3=-1811/0, 3-4=-3034/0, 4-5=-3034/0, 5-6=-3661/0, 6-7=-3661/0, 7-8=-3661/0, 8-10=-3034/0, 10-11=-3034/0, 11-12=-1811/0, 12-13=-2/0

BOT CHORD 21-22=0/1071, 19-21=0/2523, 18-19=0/3407, 17-18=0/3661, 16-17=0/3407, 15-16=0/2523, 14-15=0/1071

WEBS 2-22=-1423/0, 2-21=0/1030, 3-21=-989/0, 3-19=0/695, 4-19=-103/0, 5-19=-507/0, 5-18=-40/665, 6-18=-338/0, 12-14=-1423/0, 12-15=0/1030, 11-15=-989/0, 11-16=0/695, 10-16=-103/0, 8-16=-507/0, 8-17=-40/665, 7-17=-338/0

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
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 12,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 3 Mabry Ridge	
J0325-1351	F08	Floor	2	1	Job Reference (optional)	I71960053

Comtech, Inc, Fayetteville, NC - 28314,

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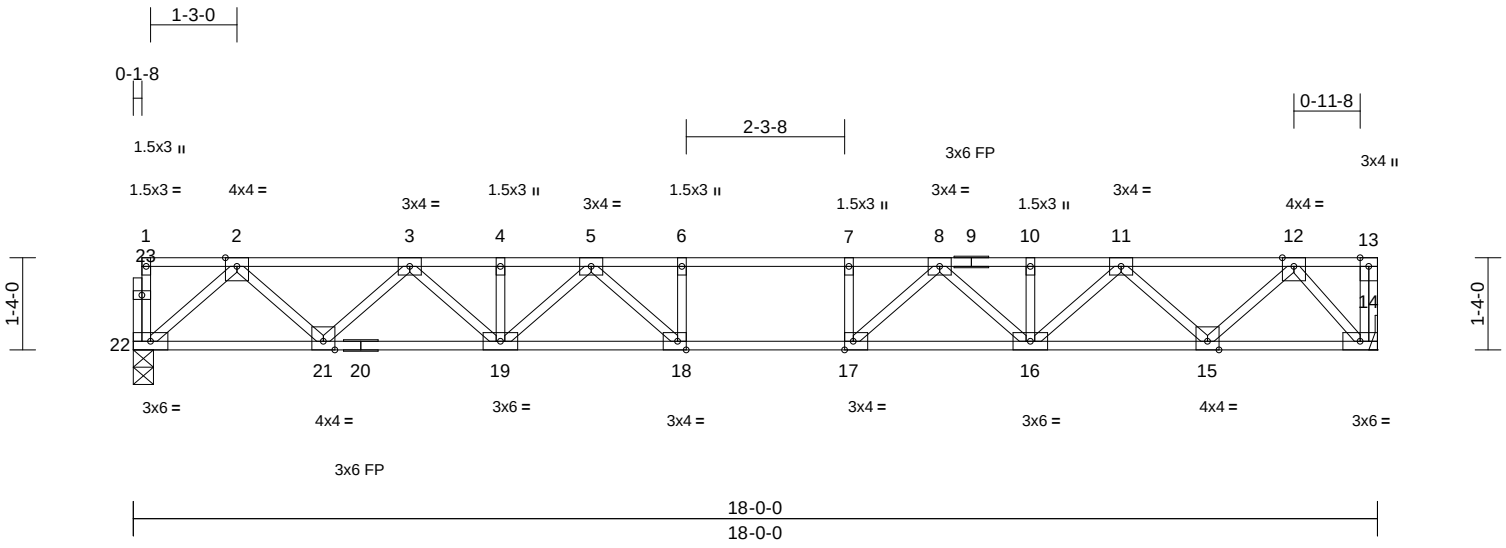


Scale = 1:33.3

Plate Offsets (X, Y): [17:0-1-8,Edge], [18:0-1-8,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)	-0.24	18-19	>873	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.82	Vert(CT)	-0.33	18-19	>651	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.06	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 95 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) 14= Mechanical, 22=0-3-8
Max Grav 14=976 (LC 1), 22=970 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-22=-34/0, 13-14=-16/0, 1-2=-2/0, 2-3=-1776/0, 3-4=-2967/0, 4-5=-2967/0, 5-6=-3541/0, 6-7=-3541/0, 7-8=-3541/0, 8-10=-2863/0, 10-11=-2863/0, 11-12=-1607/0, 12-13=0/0
BOT CHORD	21-22=0/1052, 19-21=0/2472, 18-19=0/3321, 17-18=0/3541, 16-17=0/3255, 15-16=0/2334, 14-15=0/852
WEBS	2-22=-1399/0, 2-21=0/1007, 3-21=-968/0, 3-19=0/672, 4-19=-99/0, 5-19=-482/0, 5-18=-63/626, 6-18=-320/0, 12-14=-1276/0, 12-15=0/1051, 11-15=-1011/0, 11-16=0/719, 10-16=-106/0, 8-16=-532/0, 8-17=-1/688, 7-17=-348/0

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) Bearings are assumed to be: Joint 22 SP No.1 crushing capacity of 565 psi.
4) Refer to girder(s) for truss to truss connections.
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

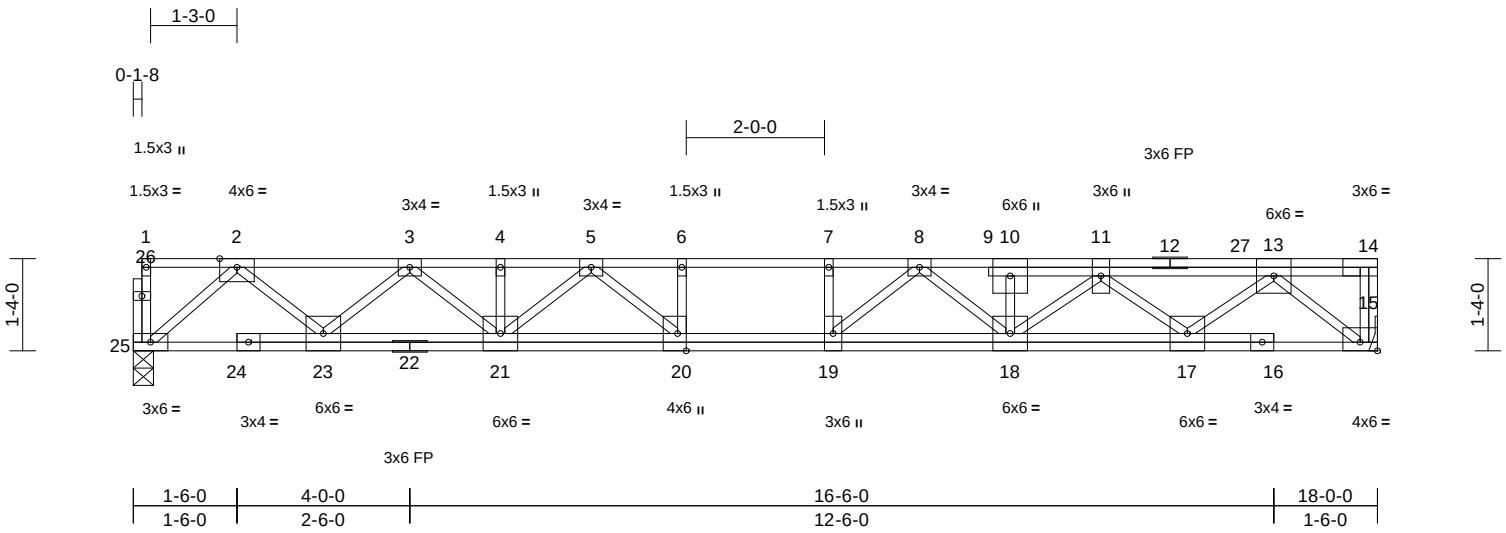
March 12,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 3 Mabry Ridge	
J0325-1351	F09	Floor Girder	1	1	Job Reference (optional)	I71960054

Comtech, Inc, Fayetteville, NC - 28314,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Mar 11 14:20:15 ID:tLzISiCk4ttUXohUqmfgStyJZ5j-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:33.3

Plate Offsets (X, Y): [15:Edge,0-1-8], [20:0-3-0,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	0.53	Vert(LL)	-0.21	19-20	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.63	Vert(CT)	-0.28	19-20	>752	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.55	Horz(CT)	0.05	15	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 123 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) 15= Mechanical, 25=0-3-8
Max Grav 15=1398 (LC 1), 25=1019 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-25=-35/0, 14-15=0/50, 1-2=-2/0, 2-3=-1957/0, 3-4=-3322/0, 4-5=-3322/0, 5-6=-4097/0, 6-7=-4097/0, 7-8=-4097/0, 8-10=-3732/0, 10-11=-3732/0, 11-13=-2563/0, 13-14=0/0
BOT CHORD 23-25=0/1123, 21-23=0/2747, 20-21=0/3778, 19-20=0/4097, 18-19=0/3946, 17-18=0/3406, 15-17=0/1690
WEBS 2-25=-1493/0, 2-23=0/1131, 3-23=-1072/0, 3-21=0/763, 4-21=-92/0, 5-21=-643/0, 5-20=0/721, 6-20=-227/0, 13-15=-2199/0, 13-17=0/1155, 11-17=-1116/0, 11-18=0/422, 10-18=-7/47, 8-18=-331/0, 8-19=-160/449, 7-19=-187/0

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) Bearings are assumed to be: Joint 25 SP No.1 crushing capacity of 565 psi.
4) Refer to girder(s) for truss to truss connections.
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) 550 lb down at 16-0-4 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).

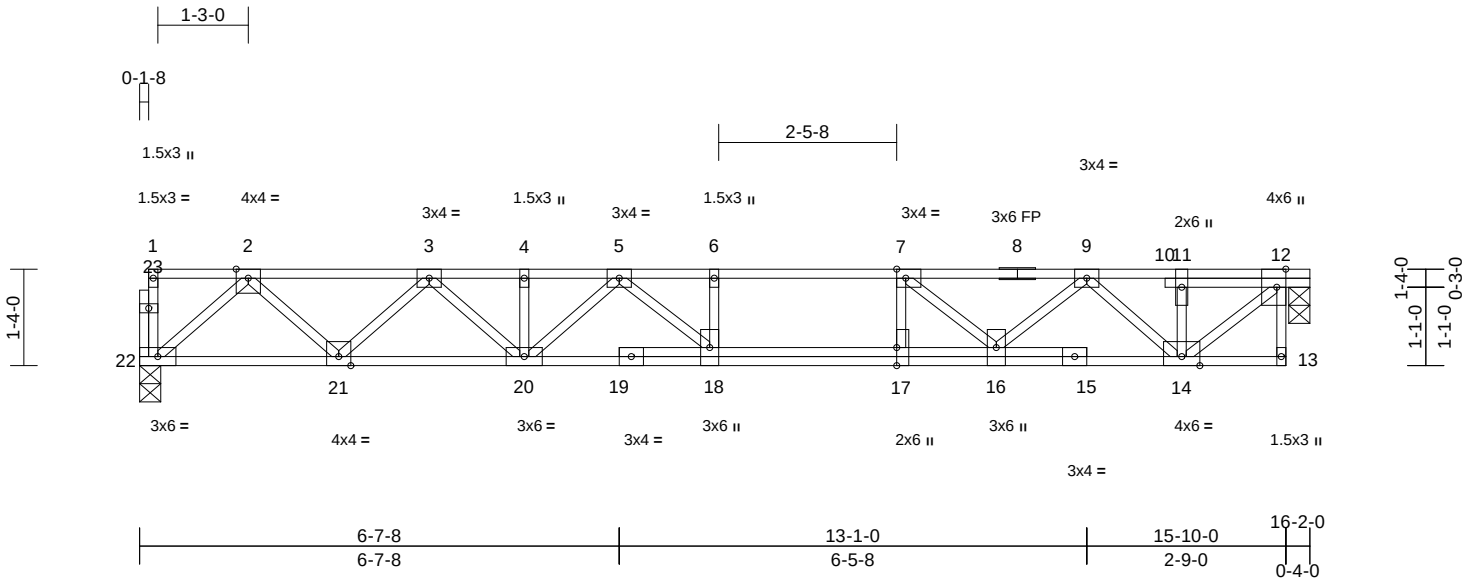
LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 15-25=-10, 1-14=-100
Concentrated Loads (lb)
Vert: 27=-470 (F)

March 12,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 3 Mabry Ridge	I71960055
J0325-1351	F10	Floor	1	1	Job Reference (optional)	



Scale = 1:31.8

Plate Offsets (X, Y): [7:0-1-8,Edge], [12:0-3-0,Edge], [17:0-3-0,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	0.48	Vert(LL)	-0.15	18-20	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.61	Vert(CT)	-0.21	18-20	>890	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.01	12	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 94 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) 12=0-3-8, 22=0-3-8
Max Grav 12=861 (LC 1), 22=854 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-22=-34/0, 12-13=0/12, 1-2=-2/0, 2-3=-1526/0, 3-4=-2469/0, 4-5=-2469/0, 5-6=-2800/0, 6-7=-2800/0, 7-9=-2128/0, 9-11=-910/0, 11-12=-910/0
BOT CHORD 21-22=0/921, 20-21=0/2102, 18-20=0/2713, 17-18=0/2800, 16-17=0/2800, 14-16=0/1611, 13-14=0/0
WEBS 11-14=-110/0, 12-14=0/1184, 2-22=-1224/0, 2-21=0/841, 3-21=-801/0, 3-20=0/498, 4-20=-91/0, 5-20=-357/0, 5-18=-76/404, 6-18=-180/0, 9-14=-953/0, 9-16=0/701, 7-16=-984/0, 7-17=-12/418

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

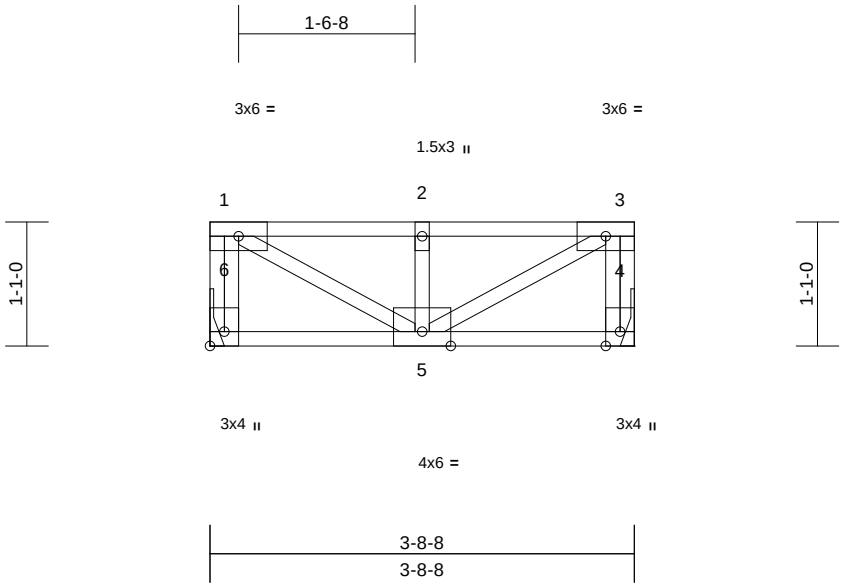
March 12,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 3 Mabry Ridge
J0325-1351	F11	Floor Girder	1	1	I71960056
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Mar 11 14:20:15 Page: 1
ID:tLzISiCk4ttUXohUqmfgStyJZ5j-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:20.1

Plate Offsets (X, Y): [6: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	0.15	Vert(LL)	-0.01	5	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.04	Vert(CT)	-0.01	5	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.48	Horz(CT)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 22 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)

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-8-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 6= Mechanical
Max Grav 4=570 (LC 1), 6=570 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-6=-558/0, 3-4=-558/0, 1-2=-877/0, 2-3=-877/0
BOT CHORD 5-6=0/0, 4-5=0/0
WEBS 1-5=0/1003, 2-5=-963/0, 3-5=0/1003

NOTES
1) Plates checked for a plus or minus 1 degree rotation about its center.
2) Refer to girder(s) for truss to truss connections.
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
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 4-6=-10, 1-3=-100
Concentrated Loads (lb)
Vert: 2=-761

March 12,2025

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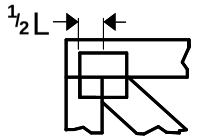
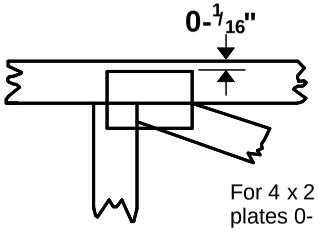
Edenton, NC 27932

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.

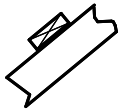
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

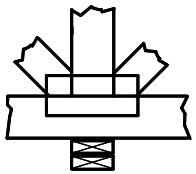
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

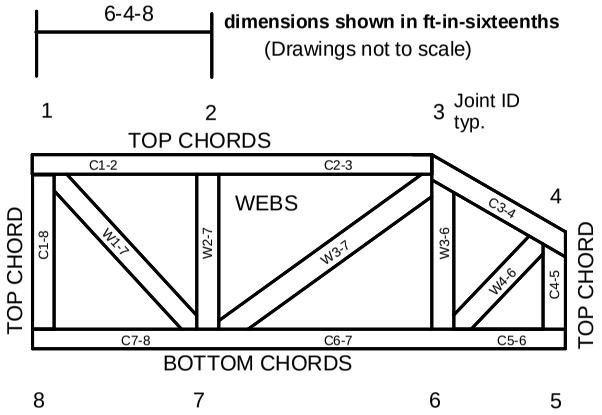


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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
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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.