ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0425-2359
Weaver/Graves Residence/Harnett

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: I75037667 thru I75037678

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

North Carolina COA: C-0844

July 21,2025

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	Weaver/Graves Residence/Harnett
J0425-2359	F01	Floor	3	1	I75037667
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Jul 21 07:27:13 2025 Page 1
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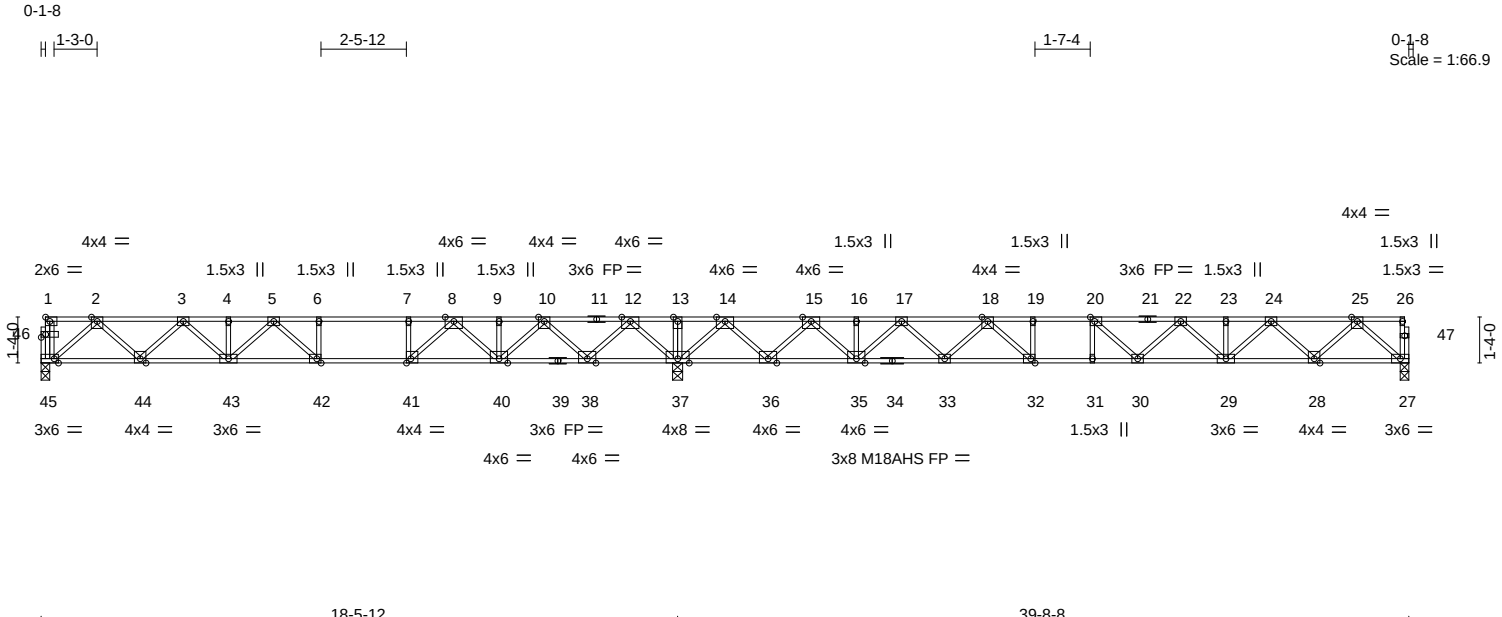

Plate Offsets (X,Y)-- [20:0-1-8,Edge], [32:0-1-8,Edge], [41:0-1-8,Edge], [42:0-1-8,Edge], [45:0-1-8,Edge], [46:0-1-8,0-1-0]

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	0.87	Vert(LL)	-0.28	31	>914	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.69	Vert(CT)	-0.37	31	>690	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.06	27	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 208 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS. (size) 37=0-3-8, 45=0-3-0, 27=0-3-0
Max Grav 37=2598(LC 1), 45=870(LC 3), 27=1012(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1630/0, 3-4=-2604/0, 4-5=-2604/0, 5-6=-2813/217, 6-7=-2813/217, 7-8=-2813/217, 8-9=-1715/942, 9-10=-1715/942, 10-12=-197/1615, 12-13=0/3440, 13-14=0/3440, 14-15=-0/1094, 15-16=-1878/427, 16-17=-1878/427, 17-18=-3089/0, 18-19=-3855/0, 19-20=-3855/0, 20-22=-3754/0, 22-23=-3133/0, 23-24=-3133/0, 24-25=-1868/0
BOT CHORD 44-45=0/1017, 43-44=0/2223, 42-43=0/2832, 41-42=-217/2813, 40-41=-651/2253, 38-40=-1267/1049, 37-38=-2272/0, 36-37=-1981/0, 35-36=-742/1037, 33-35=-156/2621, 32-33=0/3553, 31-32=0/3855, 30-31=0/3855, 29-30=0/3588, 28-29=0/2606, 27-28=0/1099
WEBS 2-45=-1301/0, 2-44=0/852, 3-44=-825/0, 3-43=-36/517, 5-43=-310/125, 5-42=-562/17, 12-37=-1764/0, 12-38=0/1379, 10-38=-1322/0, 10-40=0/1050, 8-40=-891/0, 8-41=0/1235, 14-37=-1943/0, 14-36=0/1551, 15-36=-1526/0, 15-35=0/1227, 17-35=-1093/0, 17-33=0/723, 25-27=-1461/0, 25-28=0/1069, 24-28=-1026/0, 24-29=0/716, 22-29=-618/0, 22-30=-104/294, 20-30=-301/345, 18-33=-738/0, 18-32=0/852, 19-32=-352/0, 20-31=-264/52, 7-41=-600/0

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

July 21,2025

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Graves Residence/Harnett
J0425-2359	F02	Floor	7	1	I75037668

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Jul 21 07:27:14 2025 Page 1

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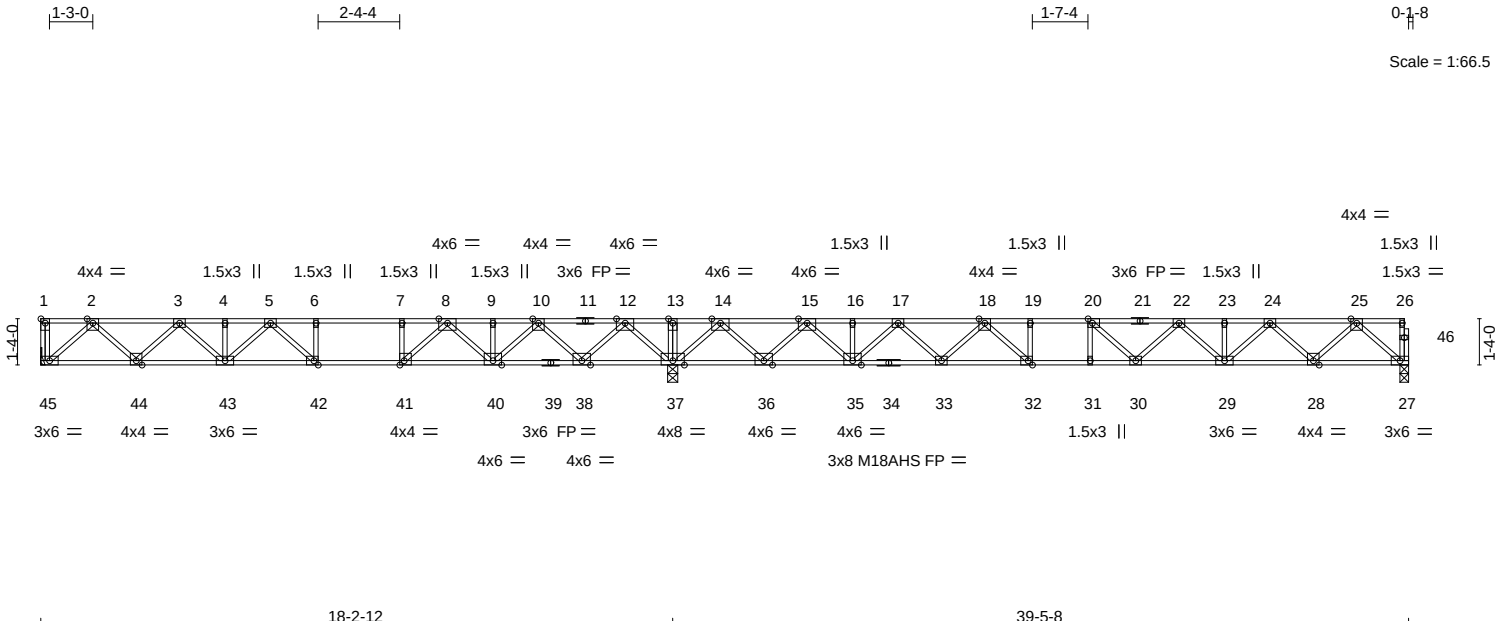

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [20:0-1-8,Edge], [32:0-1-8,Edge], [41:0-1-8,Edge], [42:0-1-8,Edge]

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	0.81	Vert(LL)	-0.28	31	>917	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.66	Vert(CT)	-0.37	31	>692	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.06	27	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 206 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

BRACING-

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

REACTIONS. (size) 45=Mechanical, 37=0-3-8, 27=0-3-0
Max Grav 45=867(LC 3), 37=2591(LC 1), 27=1010(LC 4)

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

TOP CHORD 2-3=-1537/0, 3-4=-2506/0, 4-5=-2506/0, 5-6=-2721/254, 6-7=-2721/254, 7-8=-2721/254, 8-9=-1666/975, 9-10=-1666/975, 10-12=-172/1651, 12-13=0/3461, 13-14=0/3461, 14-15=0/1101, 15-16=-1849/426, 16-17=-1849/426, 17-18=-3065/0, 18-19=-3837/0, 19-20=-3837/0, 20-22=-3740/0, 22-23=-3124/0, 23-24=-3124/0, 24-25=-1863/0

BOT CHORD 44-45=0/927, 43-44=0/2127, 42-43=0/2734, 41-42=-254/2721, 40-41=-683/2191, 38-40=-1301/1013, 37-38=-2284/0, 36-37=-2001/0, 35-36=-741/1006, 33-35=-154/2595, 32-33=0/3531, 31-32=0/3837, 30-31=0/3837, 29-30=0/3576, 28-29=0/2599, 27-28=0/1097

WEBS 2-45=-1234/0, 2-44=0/848, 3-44=-822/0, 3-43=-43/515, 5-43=-310/131, 5-42=-559/10, 12-37=-1751/0, 12-38=0/1366, 10-38=-1311/0, 10-40=0/1038, 8-40=-878/0, 8-41=0/1200, 7-41=-580/0, 14-37=-1944/0, 14-36=0/1553, 15-36=-1528/0, 15-35=0/1229, 17-35=-1095/0, 17-33=0/725, 25-27=-1458/0, 25-28=0/1066, 24-28=-1023/0, 24-29=0/713, 22-29=-615/0, 22-30=-105/292, 20-30=-298/346, 20-31=-265/51, 18-33=-740/0, 18-32=0/853, 19-32=-353/0

NOTES-

1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 3x4 MT20 unless otherwise indicated.
4) Plates checked for a plus or minus 1 degree rotation about its center.
5) Refer to girder(s) for truss to truss connections.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
7) CAUTION, Do not erect truss backwards.

July 21,2025

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Graves Residence/Harnett
J0425-2359	F03	Floor	2	1	I75037669
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Jul 21 07:27:15 2025 Page 1
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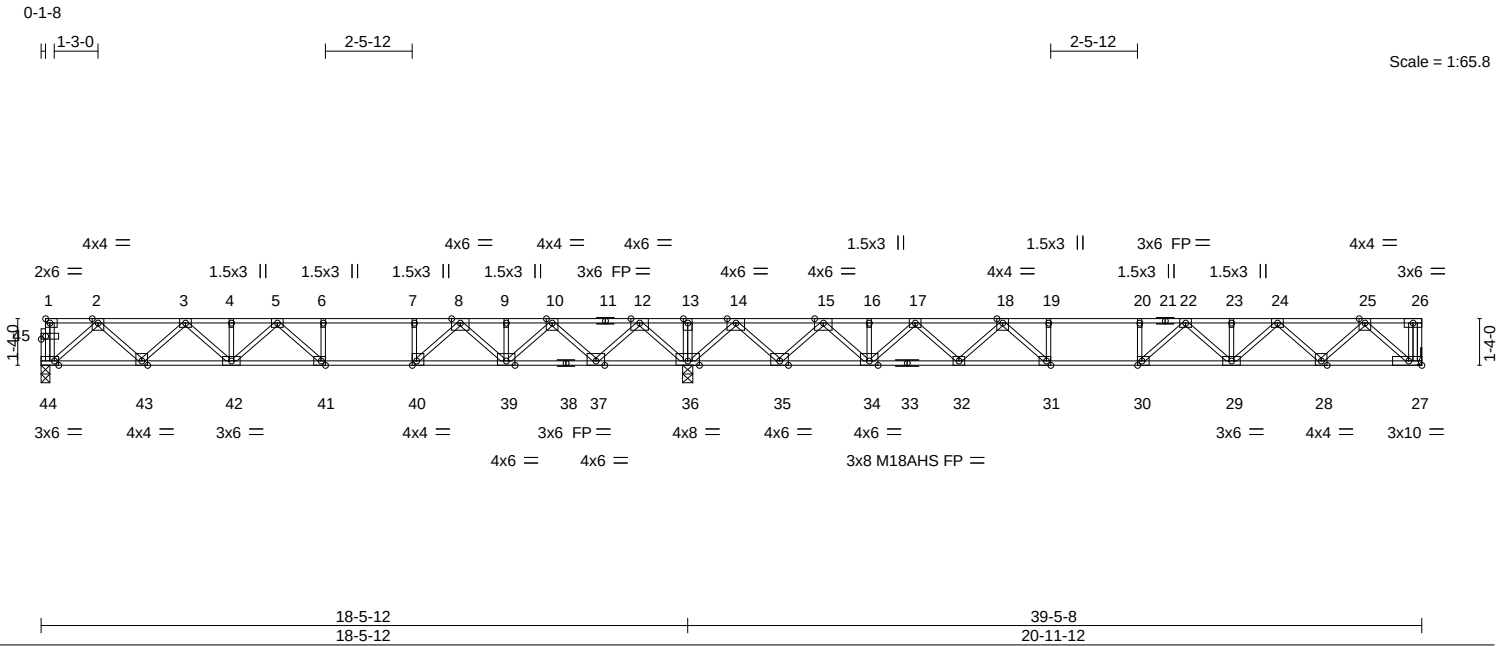

Plate Offsets (X,Y)-- [30:0-1-8,Edge], [31:0-1-8,Edge], [40:0-1-8,Edge], [41:0-1-8,Edge], [44:0-1-8,Edge], [45:0-1-8,0-1-0]

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	0.91	Vert(LL)	-0.30	30-31	>831	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.97	Vert(CT)	-0.40	30-31	>627	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.07	27	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 207 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1(flat) *Except*
1-11: 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP No.1(flat) *Except*
38-44: 2x4 SP 2400F 2.0E(flat)
WEBS 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 2-2-0 oc bracing.

REACTIONS. (size) 36=0-3-8, 44=0-3-0, 27=Mechanical
Max Grav 36=2580(LC 1), 44=882(LC 3), 27=996(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1657/0, 3-4=-2656/0, 4-5=-2656/0, 5-6=-2905/275, 6-7=-2905/275, 7-8=-2905/275, 8-9=-1847/1026, 9-10=-1847/1026, 10-12=-352/1715, 12-13=0/3388, 13-14=0/3388, 14-15=0/990, 15-16=-1737/301, 16-17=-1737/301, 17-18=-2943/0, 18-19=-3680/0, 19-20=-3680/0, 20-22=-3680/0, 22-23=-3095/0, 23-24=-3095/0, 24-25=-1892/0
BOT CHORD 43-44=0/1032, 42-43=0/2262, 41-42=0/2898, 40-41=-275/2905, 39-40=-726/2371, 37-39=-1359/1195, 36-37=-2222/0, 35-36=-1959/0, 34-35=-601/903, 32-34=-42/2479, 31-32=0/3390, 30-31=0/3680, 29-30=0/3453, 28-29=0/2593, 27-28=0/1162
WEBS 2-44=-1320/0, 2-43=0/869, 3-43=-841/0, 3-42=-47/535, 5-42=-329/137, 5-41=-579/28, 12-36=-1761/0, 12-37=0/1376, 10-37=-1320/0, 10-39=0/1045, 8-39=-886/0, 8-40=0/1252, 7-40=-607/0, 14-36=-1926/0, 14-35=0/1531, 15-35=-1503/0, 15-34=0/1204, 17-34=-1076/0, 17-32=0/704, 18-32=-702/0, 18-31=0/868, 19-31=-427/0, 25-27=-1492/0, 25-28=0/1015, 24-28=-976/0, 24-29=0/682, 22-29=-487/0, 22-30=-215/482, 20-30=-261/42

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 3x4 MT20 unless otherwise indicated.
4) Plates checked for a plus or minus 1 degree rotation about its center.
5) Refer to girder(s) for truss to truss connections.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
7) CAUTION, Do not erect truss backwards.

July 21,2025

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Graves Residence/Harnett
J0425-2359	F04	Floor	4	1	I75037670
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Jul 21 07:27:16 2025 Page 1
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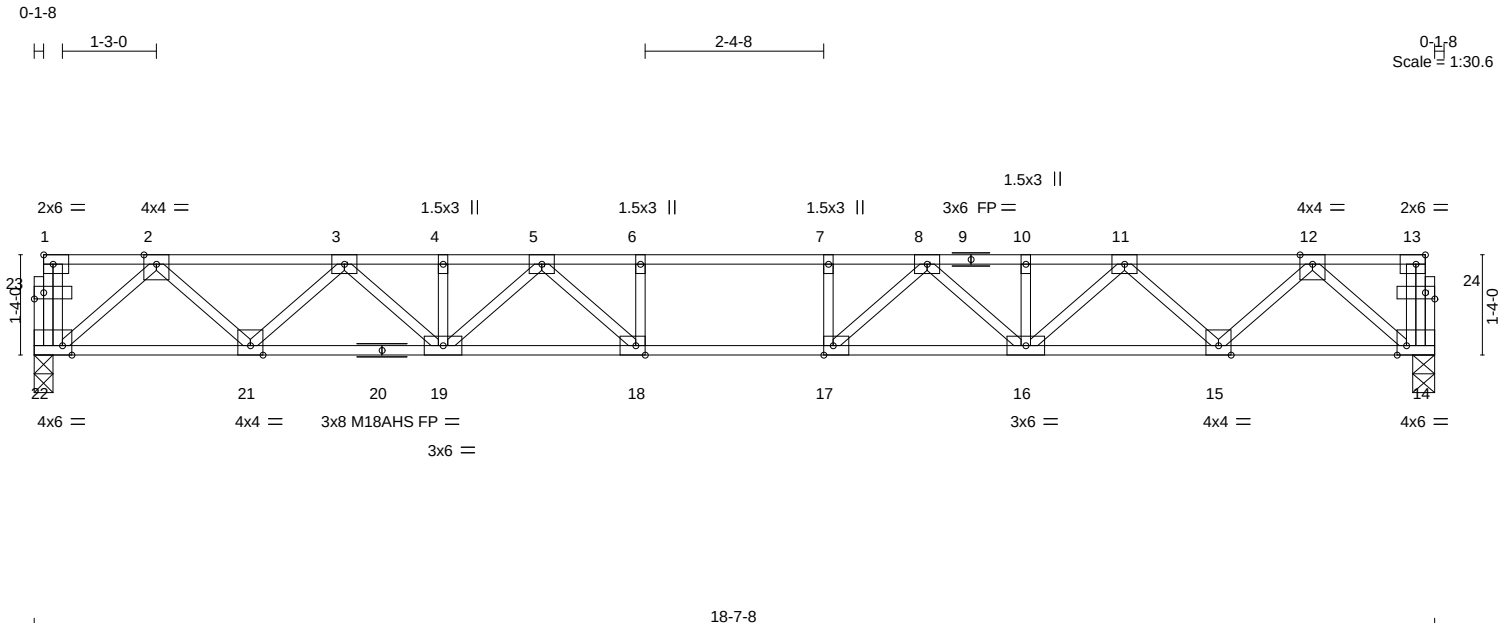

Plate Offsets (X,Y)-- [13:0-1-8,Edge], [14:0-1-8,Edge], [17:0-1-8,Edge], [18:0-1-8,Edge], [22:0-1-8,Edge], [23:0-1-8,0-1-0], [24:0-1-8,0-1-0]

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	0.75	Vert(LL)	-0.26	18-19	>833	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.84	Vert(CT)	-0.36	18-19	>620	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.07	14	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 100 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 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 22=0-3-0, 14=0-3-8
Max Grav 22=998(LC 1), 14=998(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1925/0, 3-4=-3157/0, 4-5=-3157/0, 5-6=-3796/0, 6-7=-3796/0, 7-8=-3796/0, 8-10=-3157/0, 10-11=-3157/0, 11-12=-1925/0
BOT CHORD 21-22=0/1178, 19-21=0/2640, 18-19=0/3534, 17-18=0/3796, 16-17=0/3534, 15-16=0/2640, 14-15=0/1178
WEBS 2-22=-1508/0, 2-21=0/1038, 3-21=-996/0, 3-19=0/702, 5-19=-513/0, 5-18=-40/687, 6-18=-350/0, 12-14=-1508/0, 12-15=0/1038, 11-15=-996/0, 11-16=0/702, 8-16=-513/0, 8-17=-40/687, 7-17=-350/0

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

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Graves Residence/Harnett
J0425-2359	F05	Floor	2	1	I75037671
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Jul 21 07:27:16 2025 Page 1
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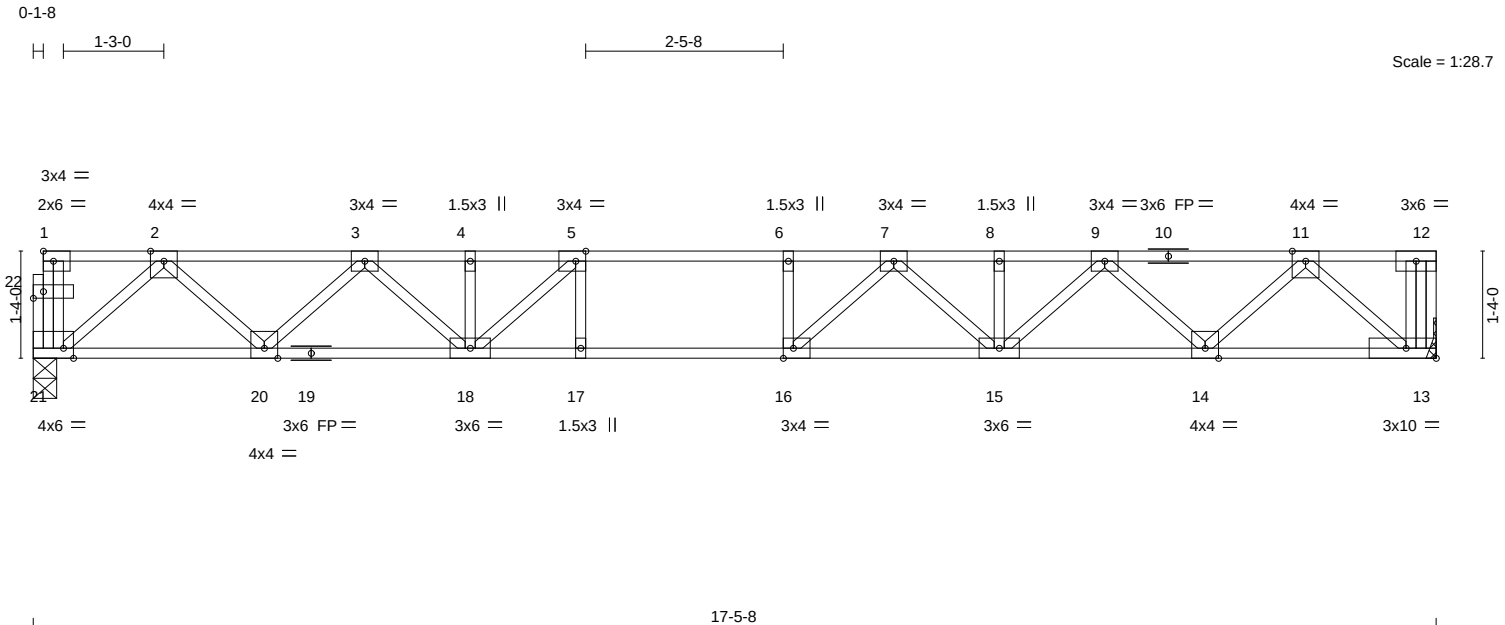

Plate Offsets (X,Y)-- [5:0-1-8,Edge], [16:0-1-8,Edge], [21:0-1-8,Edge], [22:0-1-8,0-1-0]

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	0.83	Vert(LL)	-0.27	15-16	>767	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.98	Vert(CT)	-0.36	15-16	>576	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.06	13	n/a	n/a		
BCDL	5.0	Code IRC2015/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)

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

REACTIONS. (size) 21=0-3-8, 13=Mechanical
Max Grav 21=934(LC 1), 13=946(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1782/0, 3-4=-2851/0, 4-5=-2851/0, 5-6=-3308/0, 6-7=-3308/0, 7-8=-2881/0, 8-9=-2881/0, 9-11=-1778/0
BOT CHORD 20-21=0/1099, 18-20=0/2429, 17-18=0/3308, 16-17=0/3308, 15-16=0/3183, 14-15=0/2432, 13-14=0/1100
WEBS 2-21=-1406/0, 2-20=0/950, 11-13=-1412/0, 11-14=0/944, 9-14=-909/0, 9-15=0/611, 7-15=-410/0, 7-16=-128/525, 6-16=-272/0, 3-20=-900/0, 3-18=0/573, 5-18=-875/0

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) Refer to girder(s) for truss to truss connections.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) CAUTION, Do not erect truss backwards.

July 21,2025

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Job	Truss	Truss Type	Qty	Ply	Weaver/Graves Residence/Harnett
J0425-2359	F05G	Floor	1	1	I75037672
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Jul 21 07:27:17 2025 Page 1
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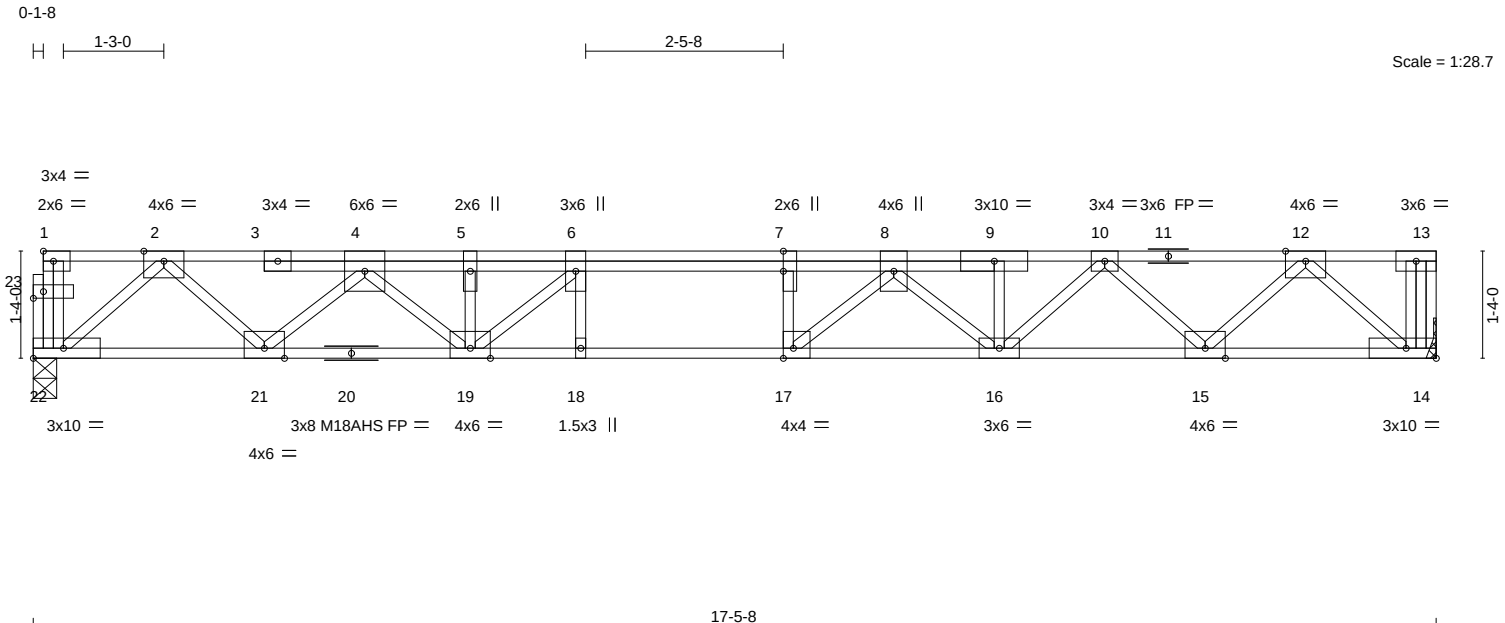


Plate Offsets (X,Y)-- [7:0-3-0,0-0-0], [17:0-1-8,Edge], [23:0-1-8,0-1-0]

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	0.47	Vert(LL)	-0.22	17-18	>945	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.98	Vert(CT)	-0.31	17-18	>676	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	NO	WB	0.63	Horz(CT)	0.07	14	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 107 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 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 22=0-3-8, 14=Mechanical
Max Grav 22=1152(LC 1), 14=1085(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2306/0, 4-5=-4049/0, 5-6=-4049/0, 6-7=-4570/0, 7-8=-4570/0, 8-9=-3485/0, 9-10=-3481/0, 10-12=-2095/0
BOT CHORD 21-22=0/1352, 19-21=0/3273, 18-19=0/4570, 17-18=0/4570, 16-17=0/4103, 15-16=0/2886, 14-15=0/1273
WEBS 2-22=-1729/0, 2-21=0/1321, 12-14=-1634/0, 12-15=0/1144, 10-15=-1100/0, 10-16=0/809, 8-16=-826/0, 8-17=0/1008, 7-17=-586/0, 4-21=-1317/0, 4-19=0/1030, 5-19=-366/0, 6-19=-955/0

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) Refer to girder(s) for truss to truss connections.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 394 lb down at 6-10-12 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 (plf)
Vert: 14-22=-10, 1-13=-100
Concentrated Loads (lb)
Vert: 6=-357(B)

July 21,2025

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Graves Residence/Harnett
J0425-2359	F06	Floor	1	1	I75037673
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Jul 21 07:27:17 2025 Page 1
ID:Xcd2wBU80GJSquqi0xdUZtzFxwM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

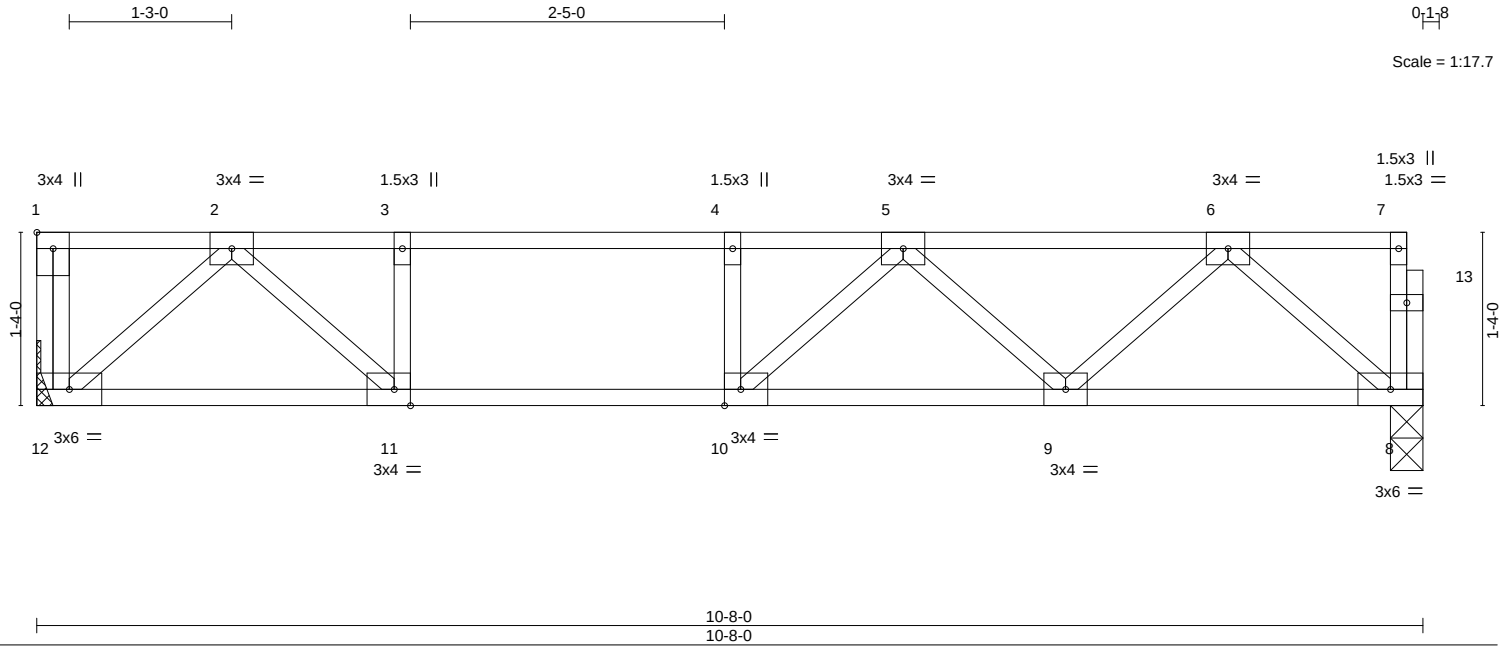


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [10:0-1-8,Edge], [11:0-1-8,Edge]

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	0.71	Vert(LL)	-0.15	9-10	>860	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.61	Vert(CT)	-0.19	9-10	>655	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.01	8	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 56 lb	FT = 20%F, 11%E

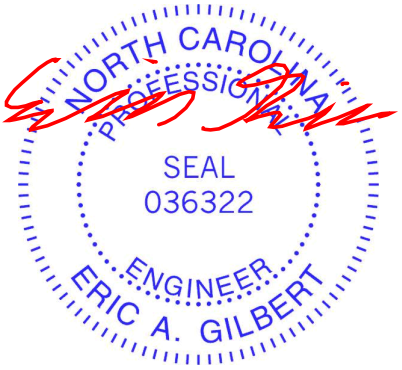
LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS. (size) 12=Mechanical, 8=0-3-0
Max Grav 12=573(LC 1), 8=567(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1123/0, 3-4=-1123/0, 4-5=-1123/0, 5-6=-922/0
BOT CHORD 11-12=0/576, 10-11=0/1123, 9-10=0/1172, 8-9=0/599
WEBS 2-12=-767/0, 2-11=0/761, 3-11=-397/0, 6-8=-795/0, 6-9=0/448, 5-9=-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) Refer to girder(s) for truss to truss connections.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) CAUTION, Do not erect truss backwards.



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Job	Truss	Truss Type	Qty	Ply	Weaver/Graves Residence/Harnett
J0425-2359	F07	Floor	1	1	I75037674
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Jul 21 07:27:17 2025 Page 1
ID:Xcd2wBU80GJSquqi0xdUZtzFxwM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

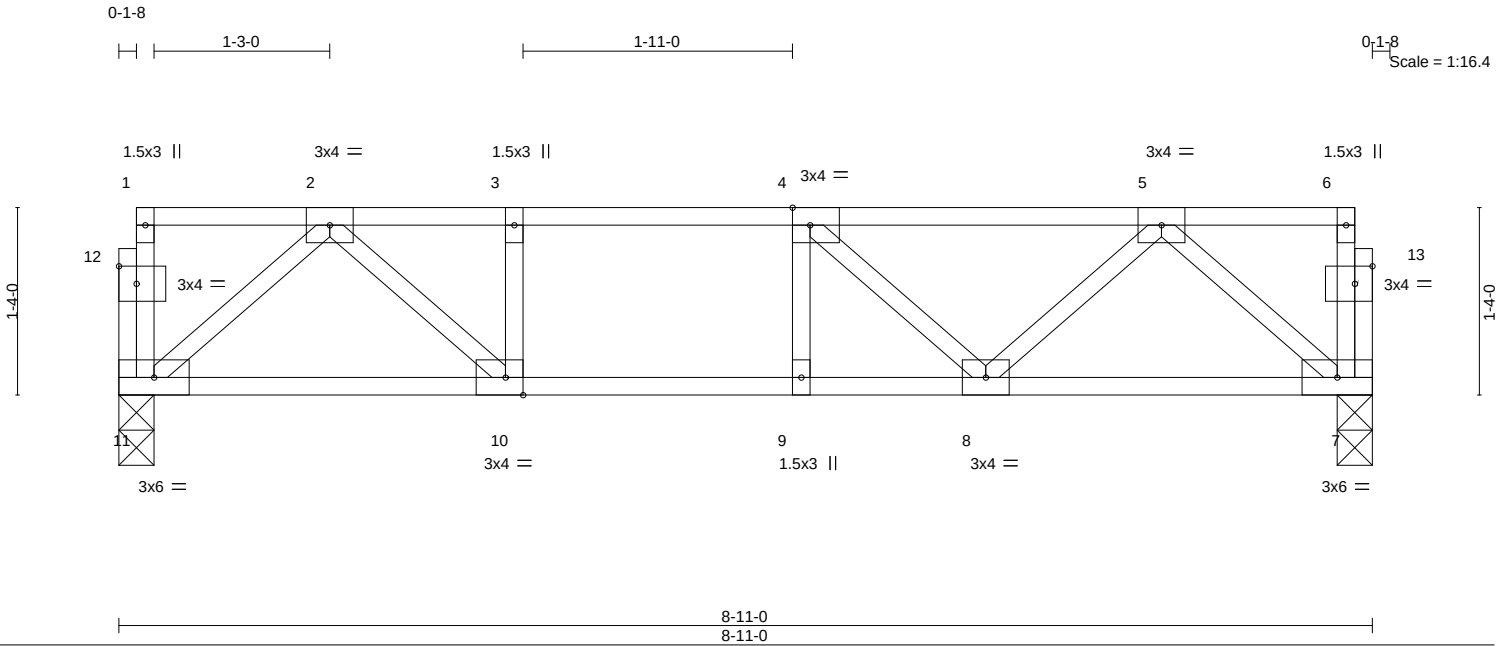

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [10:0-1-8,Edge], [12:0-1-8,0-1-8], [13:0-1-8,0-1-8]

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	0.36	Vert(LL)	-0.06	8-9	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.44	Vert(CT)	-0.07	8-9	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.01	7	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 48 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 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 11=0-3-0, 7=0-3-0
Max Grav 11=470(LC 1), 7=470(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-818/0, 3-4=-818/0, 4-5=-691/0
BOT CHORD 10-11=0/468, 9-10=0/818, 8-9=0/818, 7-8=0/499
WEBS 2-11=-618/0, 2-10=0/498, 5-7=-663/0, 5-8=0/266

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) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

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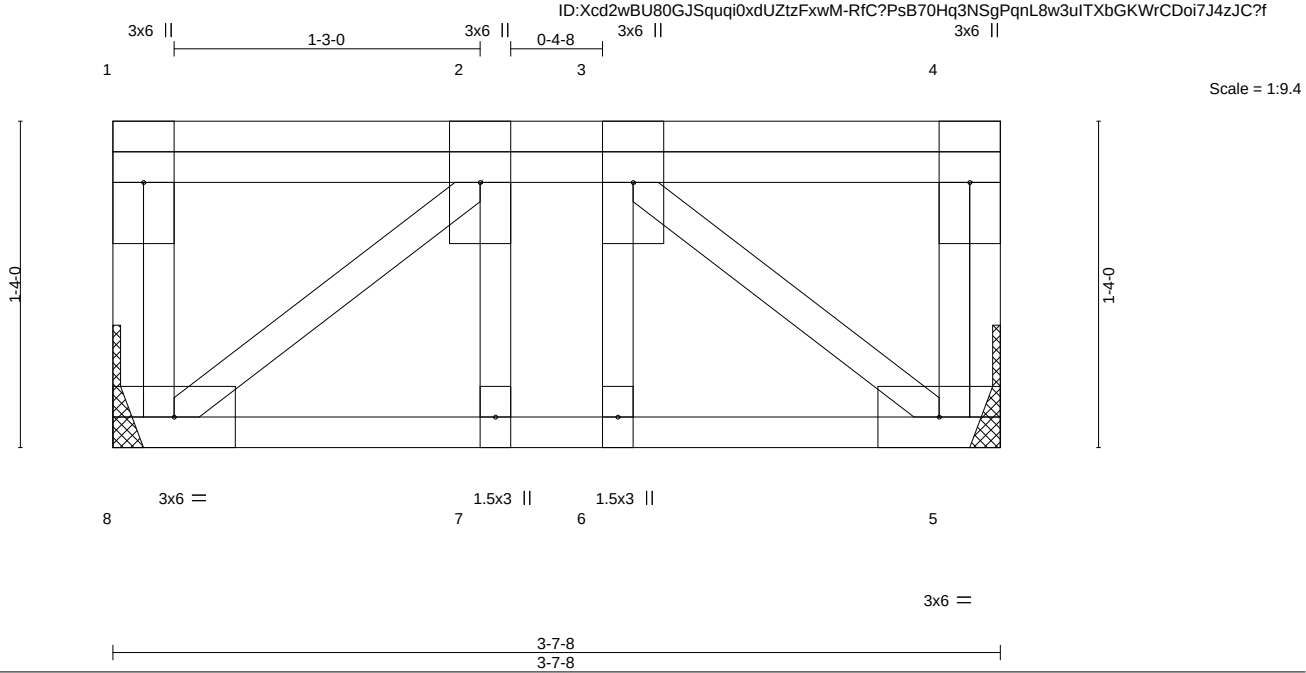
Job	Truss	Truss Type	Qty	Ply	Weaver/Graves Residence/Harnett
J0425-2359	F08G	Floor Girder	1	1	I75037675
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Jul 21 07:27:18 2025 Page 1
ID:Xcd2wBU80GJSquqi0xdUZtzFxwM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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)	-0.00	7	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.14	Vert(CT)	-0.01	7	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.13	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 29 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 3-7-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=Mechanical, 5=Mechanical
Max Grav 8=457(LC 1), 5=387(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-429/0
BOT CHORD 7-8=0/429, 6-7=0/429, 5-6=0/429
WEBS 3-5=-548/0, 2-8=-548/0

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) Refer to girder(s) for truss to truss connections.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 505 lb down at 1-10-4 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 (plf)
Vert: 5-8=-10, 1-4=-100
Concentrated Loads (lb)
Vert: 2=-473(F)

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Graves Residence/Harnett
J0425-2359	KW1	Floor Supported Gable	1	1	I75037676

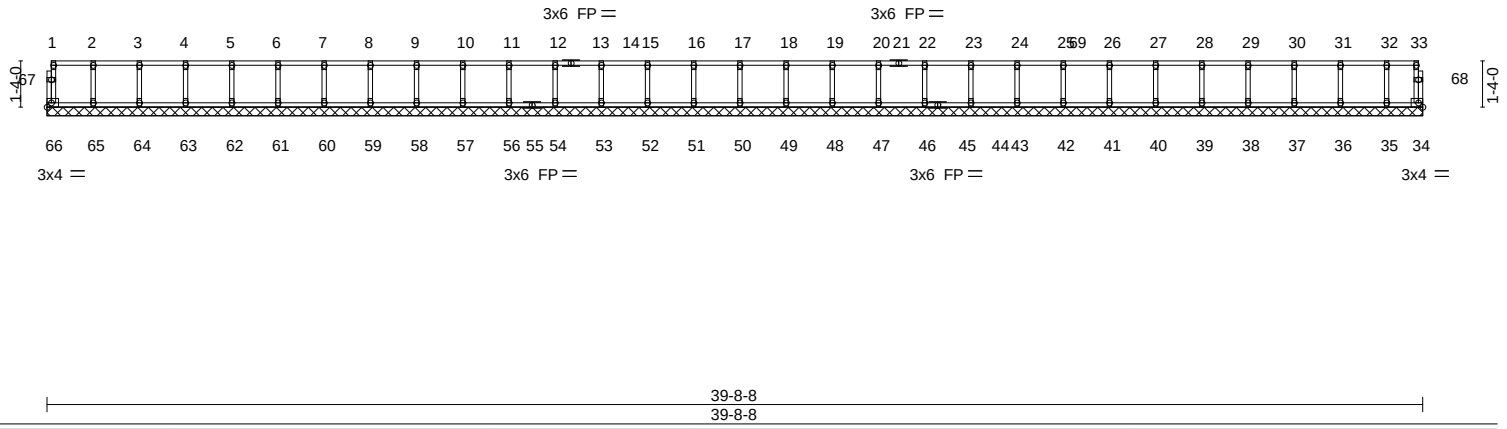
Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Jul 21 07:27:18 2025 Page 1

ID:Xcd2wBU80GJSquqi0xdUZtzFxwM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-1-8 0-1-8

Scale = 1:66.5



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)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.08	Horz(CT)	0.00	34	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 170 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. All bearings 39-8-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 66, 34, 65, 64, 63, 62, 61, 60, 59, 58, 57, 56, 54, 53, 52, 51, 50, 49, 48, 47, 46, 44, 41, 40, 39, 38, 37, 36, 35 except 43=254(LC 1), 42=376(LC 1)

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

WEBS 25-42=-363/0

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) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 287 lb down at 28-10-12 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 (plf)
   Vert: 34-66=-10, 1-33=-100
   Concentrated Loads (lb)
   Vert: 69=-287(F)

July 21,2025

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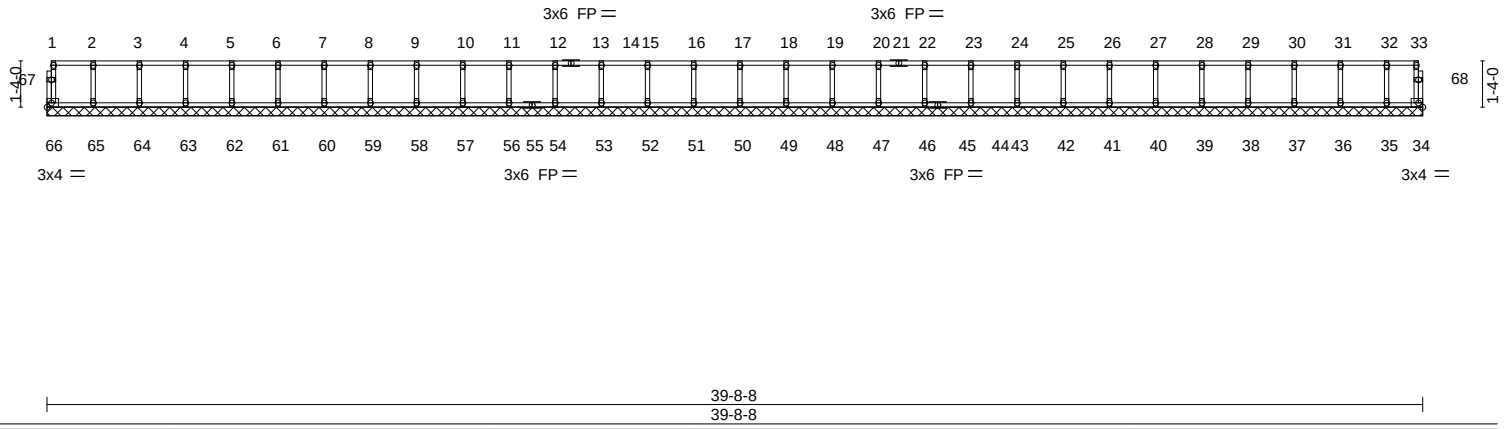
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Graves Residence/Harnett
J0425-2359	KW2	Floor Supported Gable	1	1	I75037677
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Jul 21 07:27:19 2025 Page 1
ID:Xcd2wBU80GJSquqi0xdUZtzFxwM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-1-8 0-1-8

Scale = 1:66.5



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(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	34	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 170 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. All bearings 39-8-8.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 66, 34, 65, 64, 63, 62, 61, 60, 59, 58, 57, 56, 54, 53, 52, 51, 50, 49, 48, 47, 46, 44, 43, 42, 41, 40, 39, 38, 37, 36, 35

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

NOTES-
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) 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) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

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818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	Weaver/Graves Residence/Harnett
J0425-2359	KW3	Floor Supported Gable	1	1	I75037678
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Jul 21 07:27:19 2025 Page 1
ID:Xcd2wBU80GJSquqi0xdUZtzFxwM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-1-8 0-1-8

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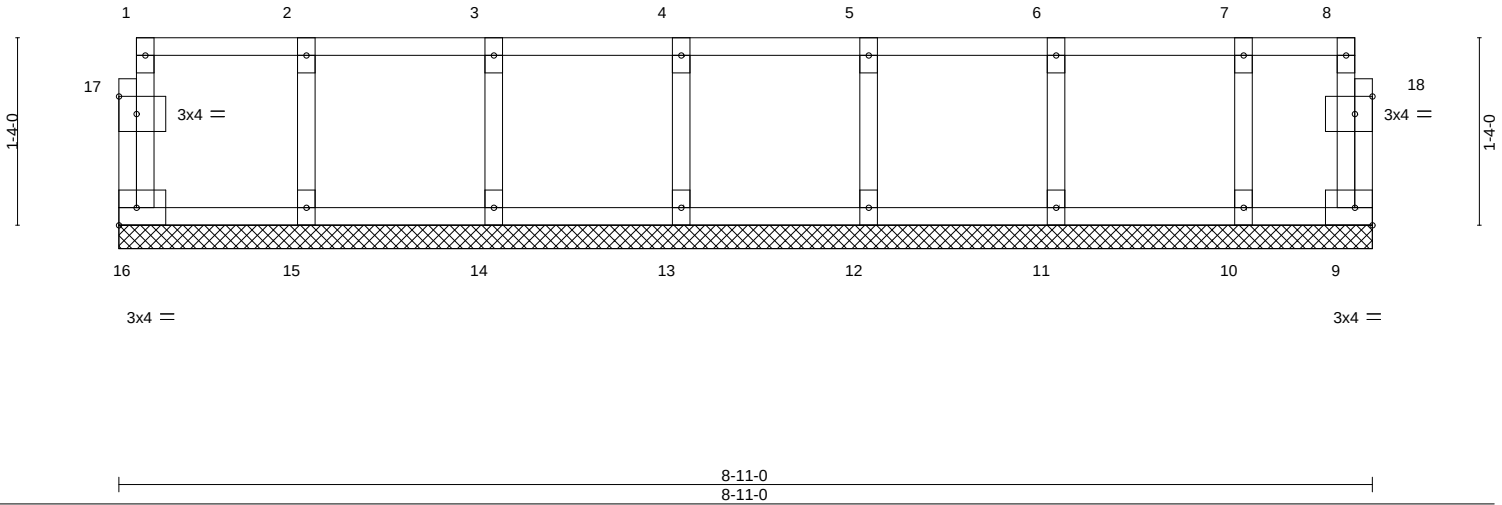

8-11-0
8-11-0

Plate Offsets (X,Y)-- [17:0-1-8,0-1-8], [18:0-1-8,0-1-8]

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(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	9	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 42 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. All bearings 8-11-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 16, 9, 15, 14, 13, 12, 11, 10

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

NOTES-
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) 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) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

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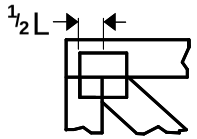
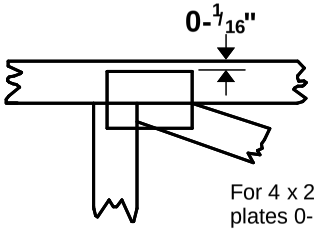
Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

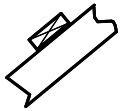
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

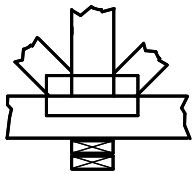
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

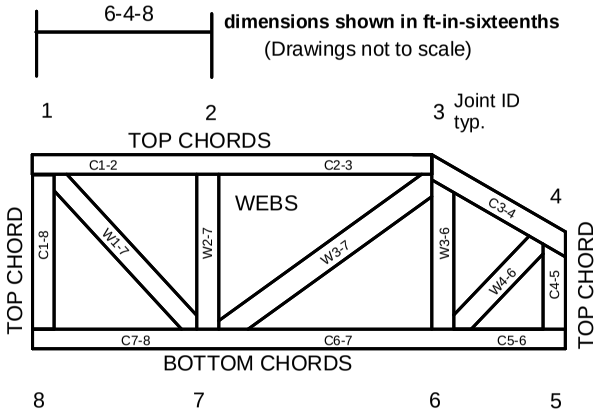


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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.