ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 1673031
Ivercon / Lot 14 Sweetwater

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

Pages or sheets covered by this seal: E12733967 thru E12733975

My license renewal date for the state of North Carolina is December 31, 2019.

North Carolina COA: C-0844

February 25,2019

Gilbert, Eric

IMPORTANT NOTE: Truss Engineer's responsibility is solely for design of individual trusses based upon design parameters shown on referenced truss drawings. Parameters have not been verified as appropriate for any use. Any location identification specified is for file reference only and has not been used in preparing design. Suitability of truss designs for any particular building is the responsibility of the building designer, not the Truss Engineer, per ANSI/TPI-1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	Ivercon / Lot 14 Sweetwater E12733967
1673031	F01	Floor	5	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.220 s Nov 16 2018 MiTek Industries, Inc. Mon Feb 25 07:20:51 2019 Page 1
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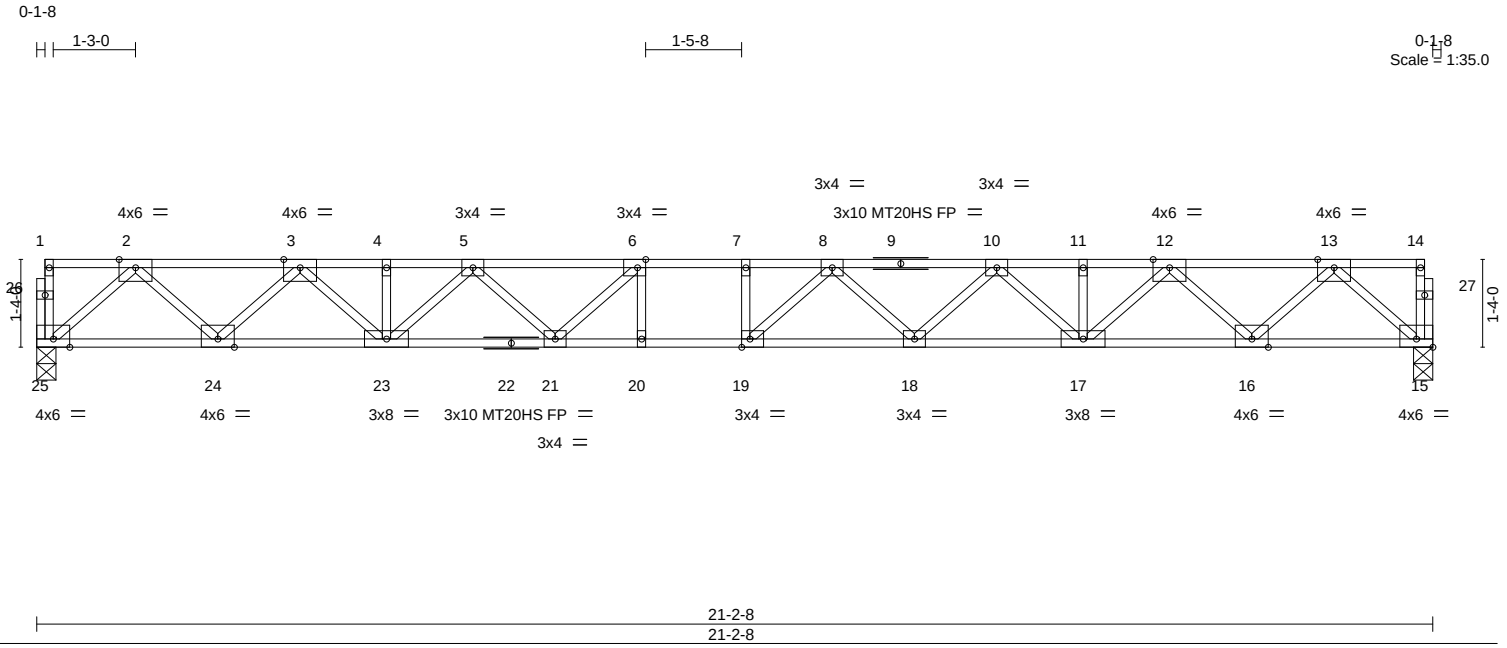

Plate Offsets (X,Y)-- [6:0-1-8,Edge], [15:Edge,0-1-8], [19:0-1-8,Edge]

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	0.44	Vert(LL)	-0.38	19	>661	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.65	Vert(CT)	-0.53	18-19	>479	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.09	15	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 112 lb	FT = 20%F, 11%E

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

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. (lb/size) 25=1146/0-3-8, 15=1146/0-3-8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2159/0, 3-4=-3715/0, 4-5=-3715/0, 5-6=-4618/0, 6-7=-4956/0, 7-8=-4956/0, 8-10=-4622/0, 10-11=-3712/0, 11-12=-3712/0, 12-13=-2159/0
BOT CHORD 24-25=0/1252, 23-24=0/3037, 21-23=0/4291, 20-21=0/4956, 19-20=0/4956, 18-19=0/4912, 17-18=0/4296, 16-17=0/3036, 15-16=0/1252
WEBS 2-25=-1664/0, 2-24=0/1261, 3-24=-1221/0, 3-23=0/922, 5-23=-784/0, 5-21=0/575, 6-21=-700/11, 13-15=-1665/0, 13-16=0/1262, 12-16=-1219/0, 12-17=0/919, 10-17=-793/0, 10-18=0/454, 8-18=-436/0, 8-19=-311/491

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

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Job	Truss	Truss Type	Qty	Ply	Ivercon / Lot 14 Sweetwater
1673031	F02	Floor Supported Gable	1	1	E12733968 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.220 s Nov 16 2018 MiTek Industries, Inc. Mon Feb 25 07:20:52 2019 Page 1
ID:g7l_OrvzYBmJXXECr5USp3yZW3S-HLl1u9T8Zz5NHzMVeNl13Xx?upc57H9GzbGXt8zhg59

0-1-8 0-1-8

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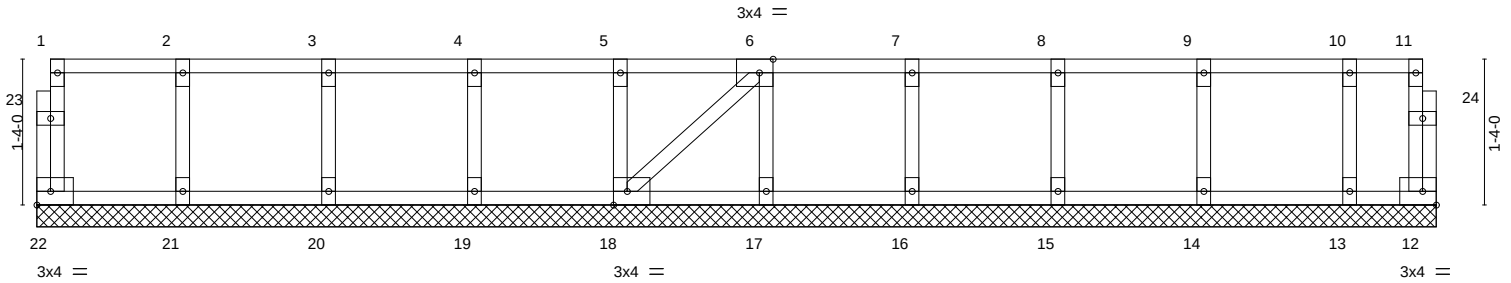

12-9-8
12-9-8

Plate Offsets (X,Y)-- [6:0-1-8,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	0.08	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	12	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 61 lb	FT = 20%F, 11%E

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

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

REACTIONS. All bearings 12-9-8.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 22, 12, 21, 20, 19, 18, 17, 16, 15, 14, 13

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) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

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Job	Truss	Truss Type	Qty	Ply	Ivercon / Lot 14 Sweetwater
1673031	F03	Floor	14	1	E12733969
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.220 s Nov 16 2018 MiTek Industries, Inc. Mon Feb 25 07:20:53 2019 Page 1
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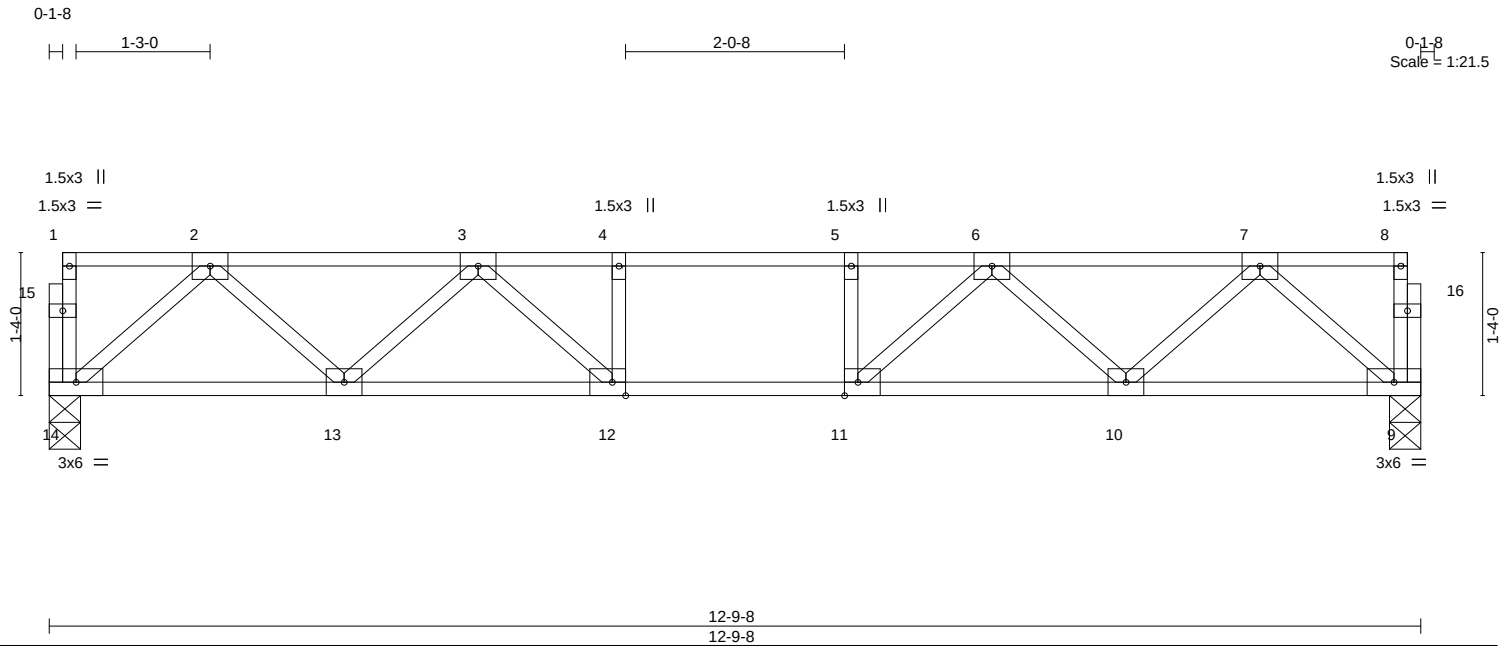

Plate Offsets (X,Y)-- [11:0-1-8,Edge], [12:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.49	Vert(LL)	-0.10	12-13	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.59	Vert(CT)	-0.12	12-13	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.03	9	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 67 lb	FT = 20%F, 11%E

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

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

REACTIONS. (lb/size) 14=684/0-3-8, 9=684/0-3-8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1156/0, 3-4=-1756/0, 4-5=-1756/0, 5-6=-1756/0, 6-7=-1156/0
BOT CHORD 13-14=0/729, 12-13=0/1553, 11-12=0/1756, 10-11=0/1553, 9-10=0/729
WEBS 2-14=-969/0, 2-13=0/594, 3-13=-552/0, 3-12=0/465, 7-9=-969/0, 7-10=0/594, 6-10=-552/0, 6-11=0/465

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

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Job	Truss	Truss Type	Qty	Ply	Ivercon / Lot 14 Sweetwater
1673031	F04	Floor	6	1	E12733970
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.220 s Nov 16 2018 MiTek Industries, Inc. Mon Feb 25 07:20:54 2019 Page 1
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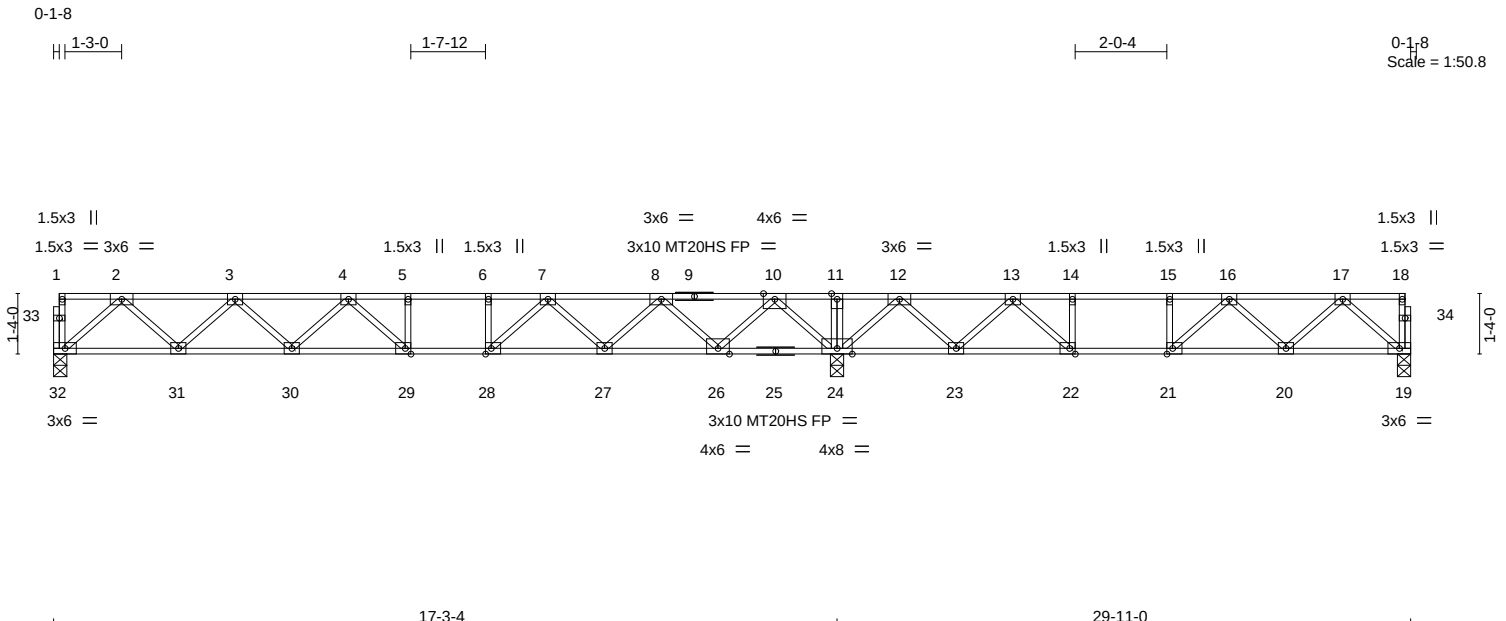

Plate Offsets (X,Y)-- [21:0-1-8,Edge], [22:0-1-8,Edge], [28:0-1-8,Edge], [29:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.80	Vert(LL)	-0.19	29-30	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.80	Vert(CT)	-0.26	29-30	>799	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.04	19	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 153 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1(flat) *Except* 1-9: 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.1(flat) *Except* 19-25: 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS. (lb/size) 32=814/0-3-8, 24=1923/0-3-8, 19=514/0-3-8
Max Grav 32=840(LC 10), 24=1923(LC 1), 19=602(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1497/0, 3-4=-2374/0, 4-5=-2630/0, 5-6=-2630/0, 6-7=-2630/0, 7-8=-1802/0, 8-10=-548/234, 10-11=0/1824, 11-12=0/1824, 12-13=-484/791, 13-14=-1335/213, 14-15=-1335/213, 15-16=-1335/213, 16-17=-988/0
BOT CHORD 31-32=0/900, 30-31=0/2071, 29-30=0/2628, 28-29=0/2630, 27-28=0/2284, 26-27=-2/1316, 24-26=-684/0, 23-24=-1037/0, 22-23=-534/975, 21-22=-213/1335, 20-21=-12/1290, 19-20=0/637
WEBS 2-32=-1196/0, 10-24=-1518/0, 2-31=0/830, 10-26=0/1155, 3-31=-798/0, 8-26=-1114/0, 3-30=0/422, 8-27=0/719, 4-30=-353/0, 7-27=-726/0, 4-29=-289/258, 7-28=0/721, 6-28=-331/0, 12-24=-1195/0, 12-23=0/800, 13-23=-827/0, 13-22=0/816, 14-22=-404/0, 17-19=-846/0, 17-20=0/488, 16-20=-419/82, 16-21=-304/61

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) 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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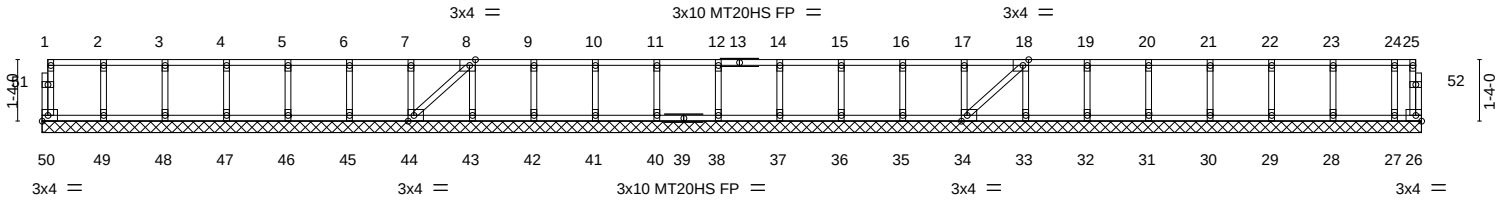
Job	Truss	Truss Type	Qty	Ply	Ivercon / Lot 14 Sweetwater
1673031	F05	Floor Supported Gable	1	1	E12733971
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.220 s Nov 16 2018 MiTek Industries, Inc. Mon Feb 25 07:20:56 2019 Page 1
ID:g7l_OrvzYBmJXXECr5USp3yZW3S-A6?XkXWedCbolagGtDqzDN5hsRz1358stDEk0wzhg55

0-1-8 0-1-8

Scale = 1:50.0



29-11-0
29-11-0

Plate Offsets (X,Y)-- [8:0-1-8,Edge], [18:0-1-8,Edge], [34:0-1-8,Edge], [44:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999	MT20HS	187/143
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-S							Weight: 135 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. All bearings 29-11-0.
(lb) - Max Uplift All uplift 100 lb or less at joint(s) 26
Max Grav All reactions 250 lb or less at joint(s) 50, 26, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27

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

NOTES-
1) All plates are MT20 plates unless otherwise indicated.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 26.
7) 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	Ivercon / Lot 14 Sweetwater
1673031	F07	Floor Girder	1	1	E12733972
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.220 s Nov 16 2018 MiTek Industries, Inc. Mon Feb 25 07:20:57 2019 Page 1
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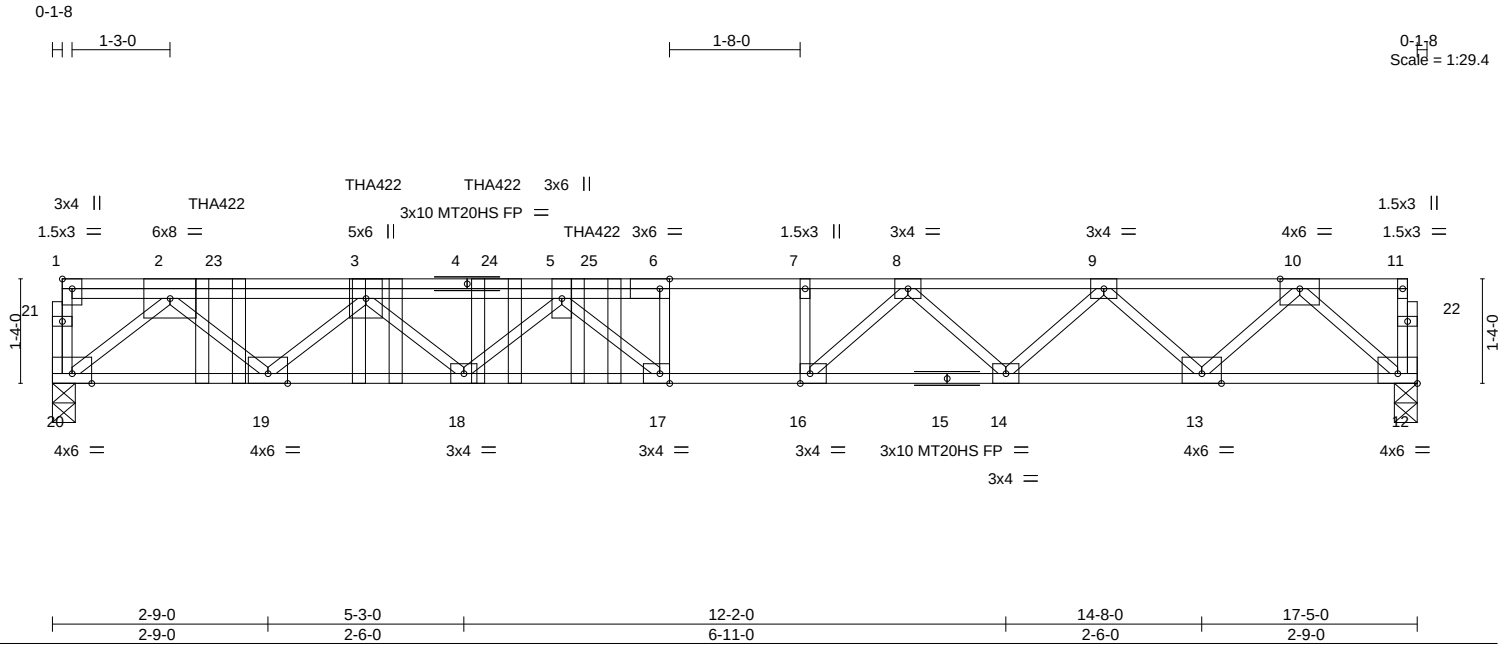

	2-9-0	5-3-0	12-2-0	14-8-0	17-5-0
	2-9-0	2-6-0	6-11-0	2-6-0	2-9-0

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [6:0-1-8,Edge], [12:Edge,0-1-8], [16:0-1-8,Edge], [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	0.65	Vert(LL)	-0.21	17	>979	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.73	Vert(CT)	-0.30	17-18	>691	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	NO	WB	0.61	Horz(CT)	0.06	12	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 101 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.2(flat) *Except* 4-11: 2x4 SP SS(flat)
BOT CHORD 2x4 SP SS(flat) *Except* 12-15: 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. (lb/size) 20=1189/0-3-8, 12=1029/0-3-8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2310/0, 3-5=-3699/0, 5-6=-3977/0, 6-7=-3964/0, 7-8=-3964/0, 8-9=-3153/0, 9-10=-1910/0
BOT CHORD 19-20=0/1371, 18-19=0/3224, 17-18=0/4127, 16-17=0/3964, 14-16=0/3626, 13-14=0/2673, 12-13=0/1115
WEBS 10-12=-1481/0, 2-20=-1782/0, 10-13=0/1107, 2-19=0/1274, 9-13=-1060/0, 3-19=-1240/0, 9-14=0/668, 3-18=0/644, 8-14=-658/0, 5-18=-580/0, 8-16=0/742, 5-17=-516/0, 7-16=-367/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
4) Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-1-12 from the left end to 6-11-4 to connect truss(es) to back face of top chord.
5) Fill all nail holes where hanger is in contact with lumber.
6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 12-20=-10, 1-11=-100
Concentrated Loads (lb)
Vert: 3=-86(B) 23=-86(B) 24=-86(B) 25=-86(B)

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Job	Truss	Truss Type	Qty	Ply	Ivercon / Lot 14 Sweetwater
1673031	F08	Floor	1	1	E12733973
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.220 s Nov 16 2018 MiTek Industries, Inc. Mon Feb 25 07:20:58 2019 Page 1
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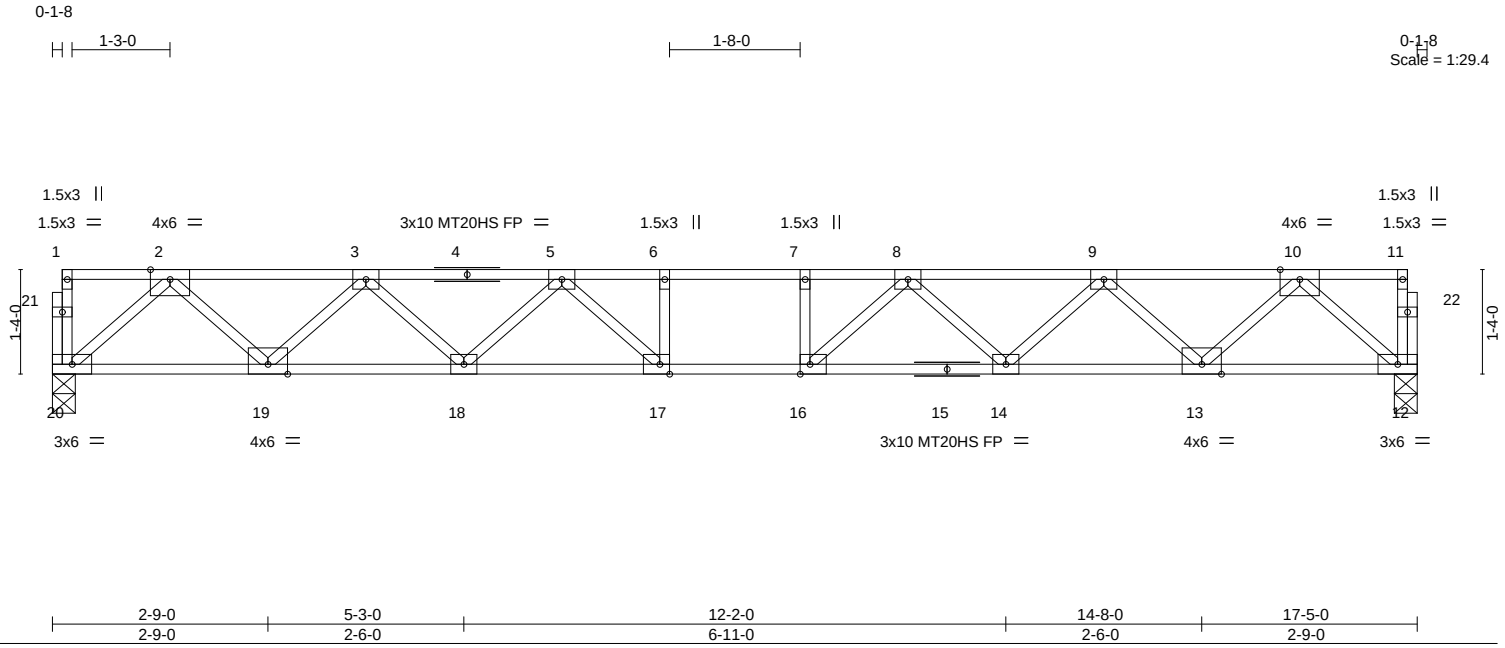

Plate Offsets (X,Y)-- [16:0-1-8,Edge], [17:0-1-8,Edge]

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	0.58	Vert(LL)	-0.22	16-17	>942	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.97	Vert(CT)	-0.30	16-17	>686	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.06	12	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 90 lb	FT = 20%F, 11%E

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

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

REACTIONS. (lb/size) 20=938/0-3-8, 12=938/0-3-8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1712/0, 3-5=-2777/0, 5-6=-3323/0, 6-7=-3323/0, 7-8=-3323/0, 8-9=-2777/0, 9-10=-1712/0
BOT CHORD 19-20=0/1012, 18-19=0/2383, 17-18=0/3146, 16-17=0/3323, 14-16=0/3146, 13-14=0/2383, 12-13=0/1012
WEBS 10-12=-1344/0, 2-20=-1344/0, 10-13=0/973, 2-19=0/973, 9-13=-933/0, 3-19=-933/0, 9-14=0/549, 3-18=0/549, 8-14=-513/0, 5-18=-513/0, 8-16=-96/534, 5-17=-96/534, 6-17=-260/6, 7-16=-260/6

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

February 25,2019

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

Job	Truss	Truss Type	Qty	Ply	Ivercon / Lot 14 Sweetwater
1673031	F09	Floor Supported Gable	1	1	E12733974
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.220 s Nov 16 2018 MiTek Industries, Inc. Mon Feb 25 07:20:59 2019 Page 1
ID:g7l_OrvzYBmJXXECr5USp3yZW3S-ahggMYZXv7zNc2OrYLNgr0jB5e?kGStIaBSOdEzhg52

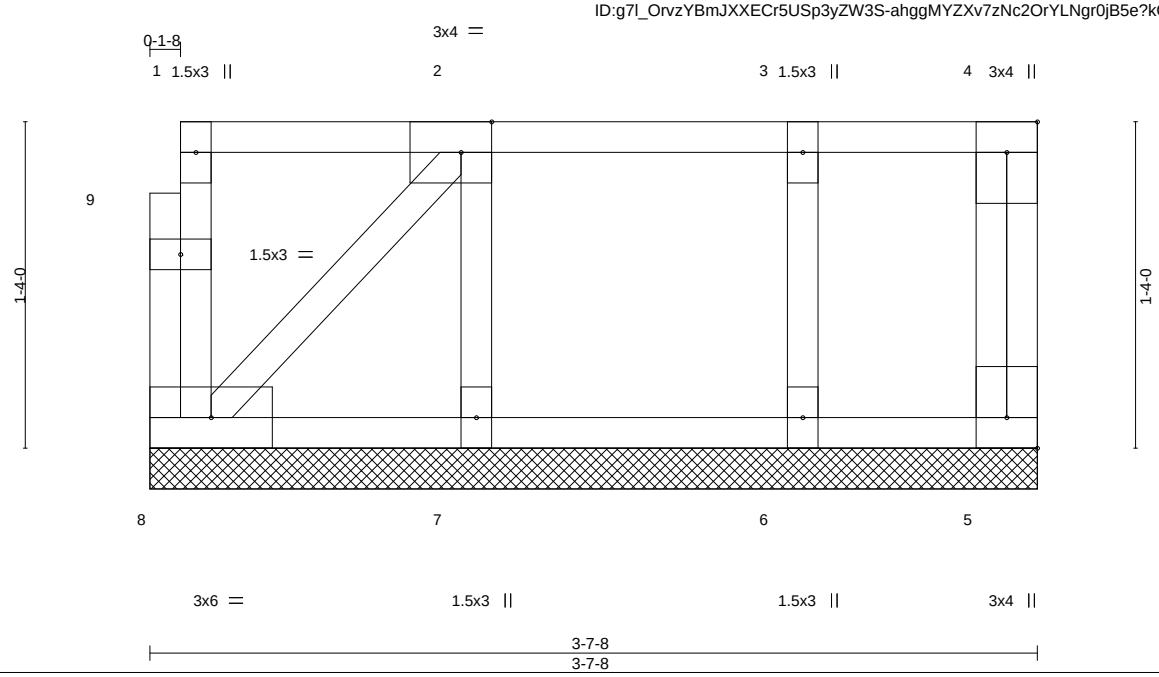

Plate Offsets (X,Y)-- [2:0-1-8,Edge], [5:Edge,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00		n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 22 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. All bearings 3-7-8.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 5, 8, 7, 6

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

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

February 25,2019

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

Job	Truss	Truss Type	Qty	Ply	Ivercon / Lot 14 Sweetwater
1673031	F10	Floor	4	1	E12733975
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.220 s Nov 16 2018 MiTek Industries, Inc. Mon Feb 25 07:20:59 2019 Page 1
ID:g7l_OrvzYBmJXXECr5USp3yZW3S-ahggMYZXv7zNc2OrYLNgr0jBPe_ZGSiIaBSOdEzhg52

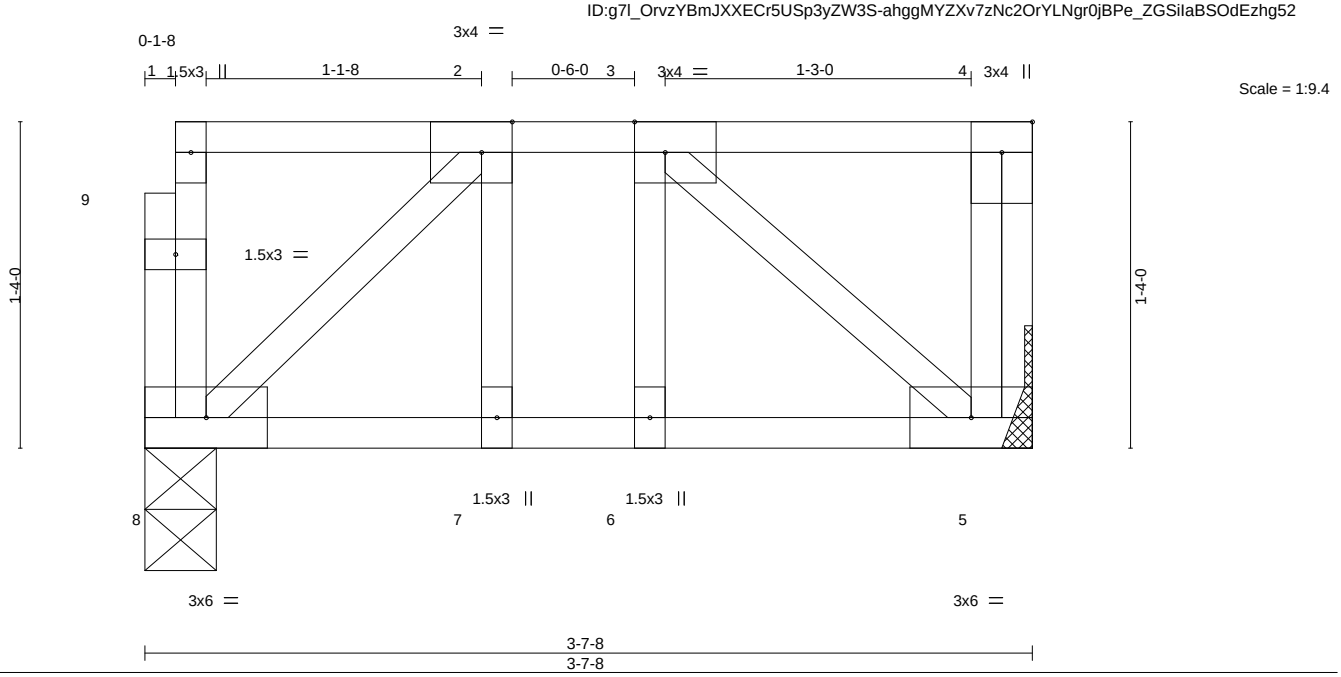

Plate Offsets (X,Y)-- [2:0-1-8,Edge], [3:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.13	Vert(LL)	-0.00	6	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.08	Vert(CT)	-0.00	6	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 25 lb	FT = 20%F, 11%E

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

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

REACTIONS. (lb/size) 8=179/0-3-8, 5=186/Mechanical

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

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

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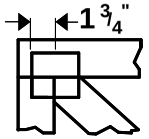
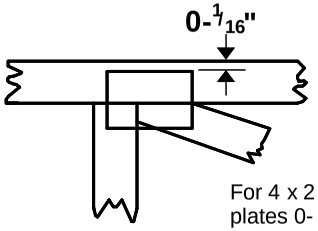
Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

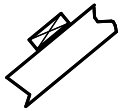
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

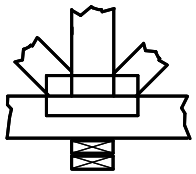
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

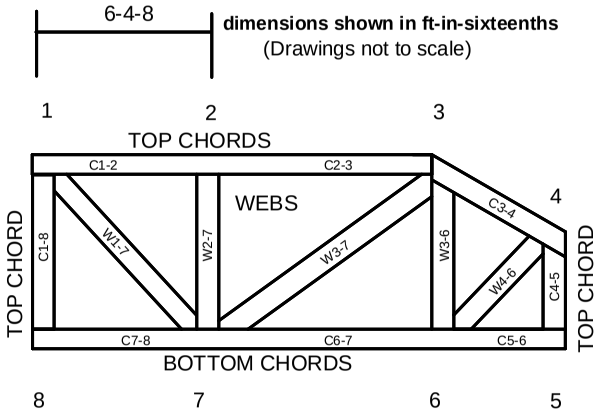


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & 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-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

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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.