ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0721-4305
Weaver/5-R Atkins Farm Estates/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: E15980498 thru E15980510

My license renewal date for the state of North Carolina is December 31, 2021.

North Carolina COA: C-0844

July 28,2021

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/5-R Atkins Farm Estates/Harnett
J0721-4305	F1	Floor	3	1	E15980498
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 27 15:15:47 2021 Page 1
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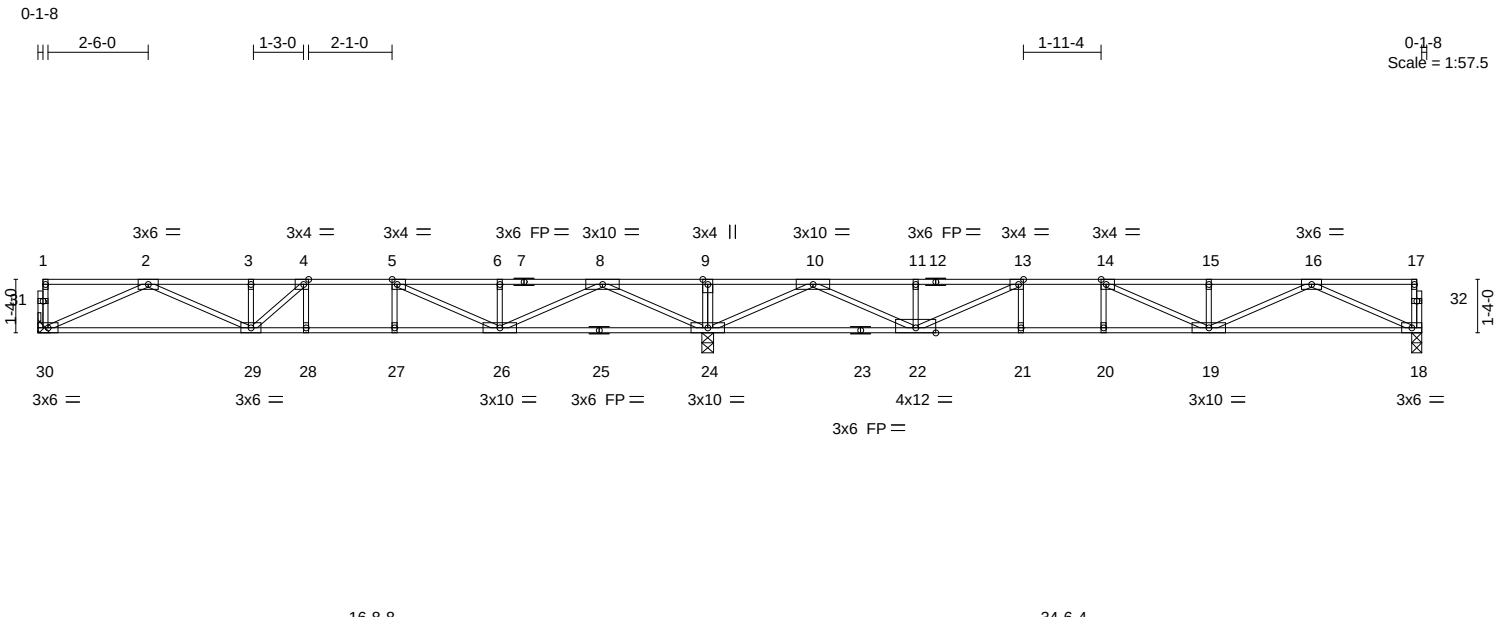

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge], [13:0-1-8,Edge], [14:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.75	Vert(LL)	-0.26	19-20	>809	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	1.00	Vert(CT)	-0.35	19-20	>607	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.06	18	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 171 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 2-2-0 oc bracing.

REACTIONS. (size) 30=Mechanical, 24=0-3-8, 18=0-3-0
Max Grav 30=794(LC 3), 24=2230(LC 1), 18=859(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2252/0, 3-4=-2252/0, 4-5=-2367/0, 5-6=-1680/345, 6-8=-1680/345, 8-9=0/2343, 9-10=0/2343, 10-11=-1865/276, 11-13=-1865/276, 13-14=-2749/0, 14-15=-2562/0, 15-16=-2562/0
BOT CHORD 29-30=0/1462, 28-29=0/2367, 27-28=0/2367, 26-27=0/2367, 24-26=-878/413, 22-24=-821/491, 21-22=0/2749, 20-21=0/2749, 19-20=0/2749, 18-19=0/1598
WEBS 9-24=-281/0, 2-30=-1604/0, 2-29=0/874, 3-29=-298/0, 8-24=-2190/0, 8-26=0/1548, 6-26=-266/15, 5-26=-1103/0, 4-29=-216/353, 10-24=-2307/0, 10-22=0/1652, 11-22=-261/33, 16-18=-1753/0, 16-19=0/1067, 15-19=-339/0, 14-19=-274/324, 13-22=-1277/0

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) Refer to girder(s) for truss to truss connections.
5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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 28,2021

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Job	Truss	Truss Type	Qty	Ply	Weaver/5-R Atkins Farm Estates/Harnett
J0721-4305	F1A	GABLE	1	1	E15980499
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 27 15:15:48 2021 Page 1
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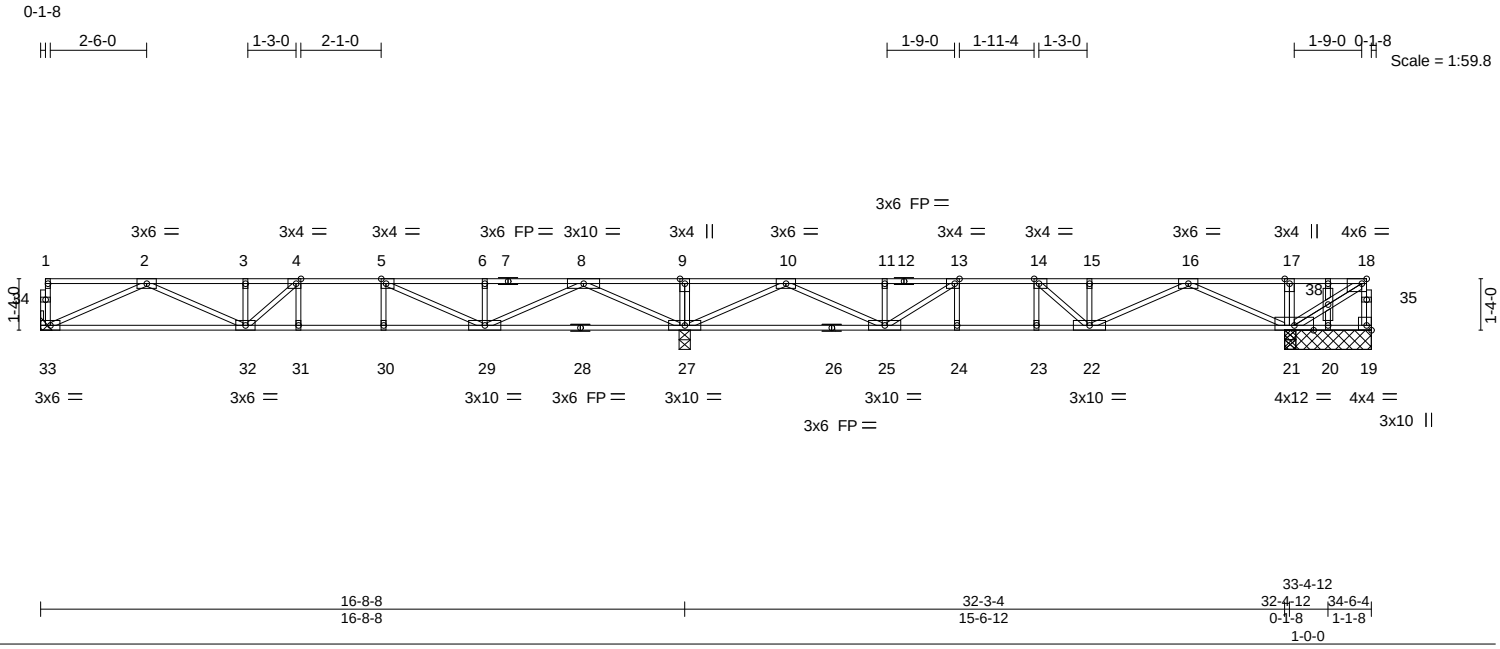

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge], [13:0-1-8,Edge], [14:0-1-8,Edge], [18:0-1-8,Edge], [19:Edge,0-1-8]

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	0.64	Vert(LL)	-0.15	30-31	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.61	Vert(CT)	-0.21	30-31	>962	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.04	27	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 179 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. All bearings 2-3-0 except (jt=length) 33=Mechanical, 27=0-3-8.
(lb) - Max Uplift All uplift 100 lb or less at joint(s) 20 except 19=-753(LC 4)
Max Grav All reactions 250 lb or less at joint(s) 20 except 33=796(LC 3), 27=1998(LC 1), 21=1833(LC 4), 21=1750(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 18-19=0/766, 2-3=-2259/0, 3-4=-2259/0, 4-5=-2378/0, 5-6=-1696/145, 6-8=-1696/145, 8-9=0/2109, 9-10=0/2109, 10-11=-1188/447, 11-13=-1188/447, 13-14=-1414/168, 14-15=-1135/36, 15-16=-1135/36, 16-17=0/1334, 17-18=0/1334
BOT CHORD 32-33=0/1466, 31-32=0/2378, 30-31=0/2378, 29-30=0/2378, 27-29=-640/432, 25-27=-898/287, 24-25=-168/1414, 23-24=-168/1414, 22-23=-168/1414
WEBS 9-27=-278/0, 17-21=-263/0, 2-33=-1608/0, 2-32=0/877, 8-27=-2153/0, 8-29=0/1513, 6-29=-250/0, 5-29=-925/0, 10-27=-1805/0, 10-25=0/1159, 16-21=-1694/0, 16-22=0/1029, 13-25=-479/0, 14-22=-371/175, 21-38=-1515/0, 18-38=-1537/0

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 studs spaced at 1-4-0 oc.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20 except (jt=lb) 19=753.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) 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.
9) CAUTION, Do not erect truss backwards.

July 28,2021

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Job	Truss	Truss Type	Qty	Ply	Weaver/5-R Atkins Farm Estates/Harnett
J0721-4305	F2	Floor	4	1	E15980500
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 27 15:15:50 2021 Page 1
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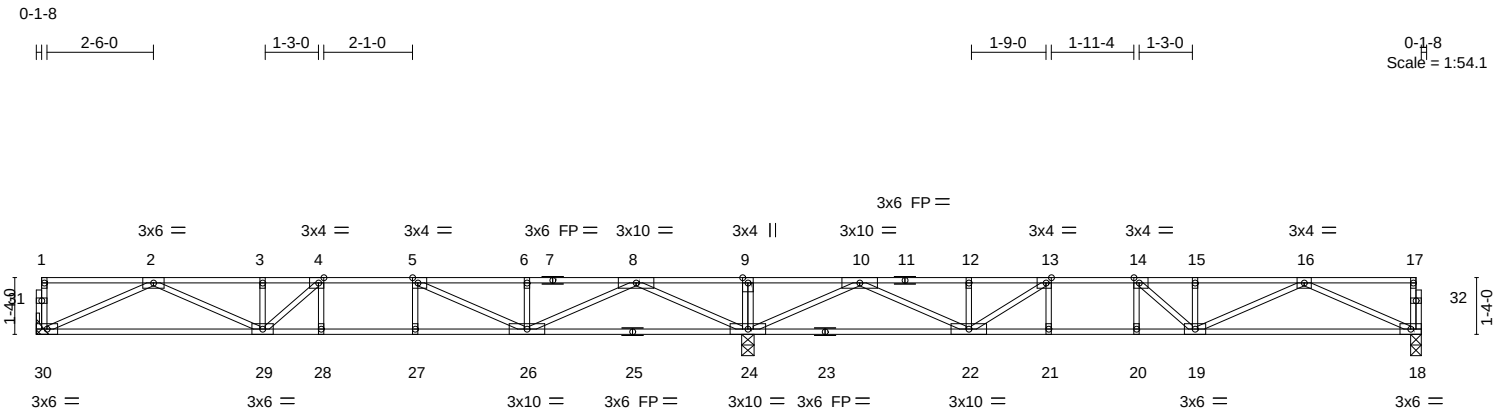

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge], [13:0-1-8,Edge], [14:0-1-8,Edge]

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)	-0.16	28-29	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.82	Vert(CT)	-0.22	28-29	>916	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.05	18	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 163 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, Except: 6-0-0 oc bracing: 24-26,22-24.

REACTIONS. (size) 30=Mechanical, 24=0-3-8, 18=0-3-0
Max Grav 30=795(LC 3), 24=2108(LC 1), 18=755(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2257/0, 3-4=-2257/0, 4-5=-2375/0, 5-6=-1691/160, 6-8=-1691/160, 8-9=0/2126, 9-10=0/2126, 10-12=-1625/335, 12-13=-1625/335, 13-14=-2126/0, 14-15=-2092/0, 15-16=-2092/0
BOT CHORD 29-30=0/1465, 28-29=0/2375, 27-28=0/2375, 26-27=0/2375, 24-26=-656/427, 22-24=-842/507, 21-22=0/2126, 20-21=0/2126, 19-20=0/2126, 18-19=0/1379
WEBS 9-24=-278/0, 2-30=-1607/0, 2-29=0/876, 3-29=-288/0, 8-24=-2154/0, 8-26=0/1514, 6-26=-271/10, 5-26=-1038/0, 4-29=-265/296, 10-24=-2062/0, 10-22=0/1395, 16-18=-1512/0, 16-19=0/788, 15-19=-302/0, 14-19=-112/404, 13-22=-949/0

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) Refer to girder(s) for truss to truss connections.
5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.

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Job	Truss	Truss Type	Qty	Ply	Weaver/5-R Atkins Farm Estates/Harnett
J0721-4305	F3	Floor	3	1	E15980501
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 27 15:15:51 2021 Page 1
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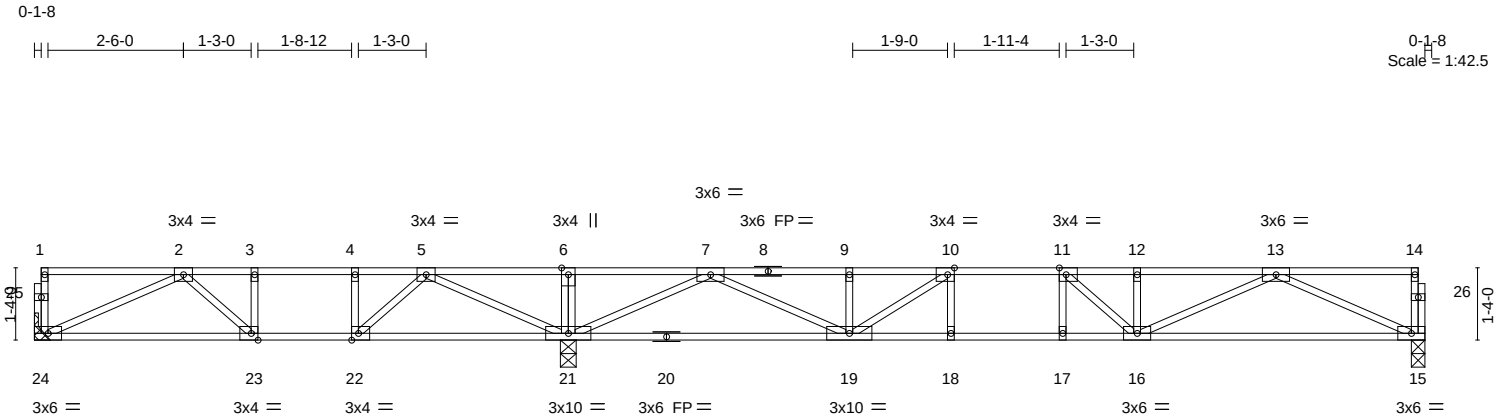

Plate Offsets (X,Y)-- [10:0-1-8,Edge], [11:0-1-8,Edge], [22:0-1-8,Edge], [23:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.62	Vert(LL)	-0.14	16-17	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.69	Vert(CT)	-0.19	17	>988	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.04	15	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 130 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 6-0-0 oc bracing.

REACTIONS. (size) 24=Mechanical, 21=0-3-8, 15=0-3-0
Max Grav 24=471(LC 3), 21=1629(LC 1), 15=785(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-825/200, 3-4=-825/200, 4-5=-825/200, 5-6=0/1163, 6-7=0/1163, 7-9=-1888/0, 9-10=-1888/0, 10-11=-2310/0, 11-12=-2213/0, 12-13=-2213/0
BOT CHORD 23-24=-41/756, 22-23=-200/825, 21-22=-491/543, 19-21=0/815, 18-19=0/2310, 17-18=0/2310, 16-17=0/2310, 15-16=0/1442
WEBS 6-21=-297/0, 2-24=-826/46, 5-21=-1217/0, 5-22=0/664, 4-22=-359/0, 7-21=-1888/0, 7-19=0/1242, 13-15=-1581/0, 13-16=0/853, 12-16=-259/11, 11-16=-349/170, 10-19=-700/0

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) Refer to girder(s) for truss to truss connections.
5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.

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Job	Truss	Truss Type	Qty	Ply	Weaver/5-R Atkins Farm Estates/Harnett
J0721-4305	F5	Floor	2	1	E15980502
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 27 15:15:51 2021 Page 1
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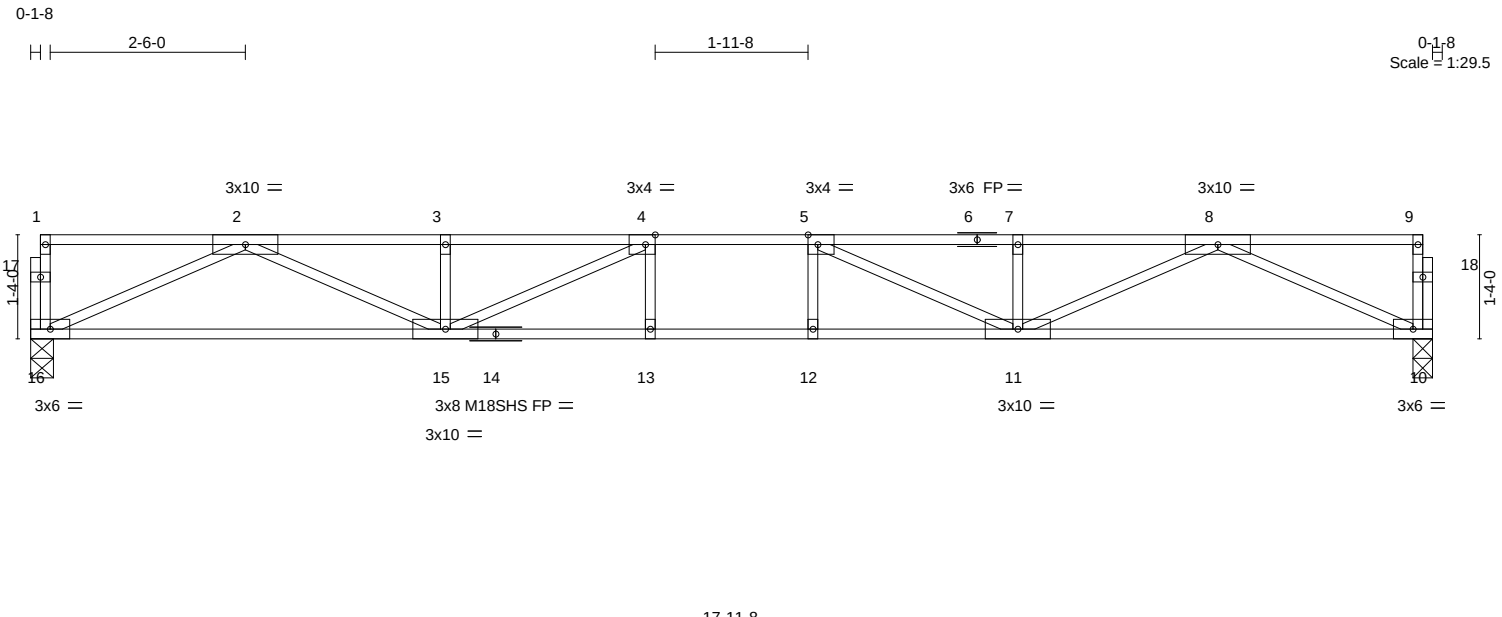

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge]

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	0.55	Vert(LL)	-0.26	11-12	>829	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.86	Vert(CT)	-0.34	13-15	>625	360	M18SHS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.06	10	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.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) 16=0-3-8, 10=0-3-0
Max Grav 16=968(LC 1), 10=968(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3009/0, 3-4=-3009/0, 4-5=-3543/0, 5-7=-3009/0, 7-8=-3009/0
BOT CHORD 15-16=0/1833, 13-15=0/3543, 12-13=0/3543, 11-12=0/3543, 10-11=0/1833
WEBS 8-10=-2012/0, 8-11=0/1301, 7-11=-303/4, 5-11=-858/0, 2-16=-2012/0, 2-15=0/1301, 3-15=-303/4, 4-15=-858/0

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 1.5x3 MT20 unless otherwise indicated.
4) Plates checked for a plus or minus 1 degree rotation about its center.
5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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/5-R Atkins Farm Estates/Harnett
J0721-4305	F5A	GABLE	1	1	E15980503
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 27 15:15:52 2021 Page 1
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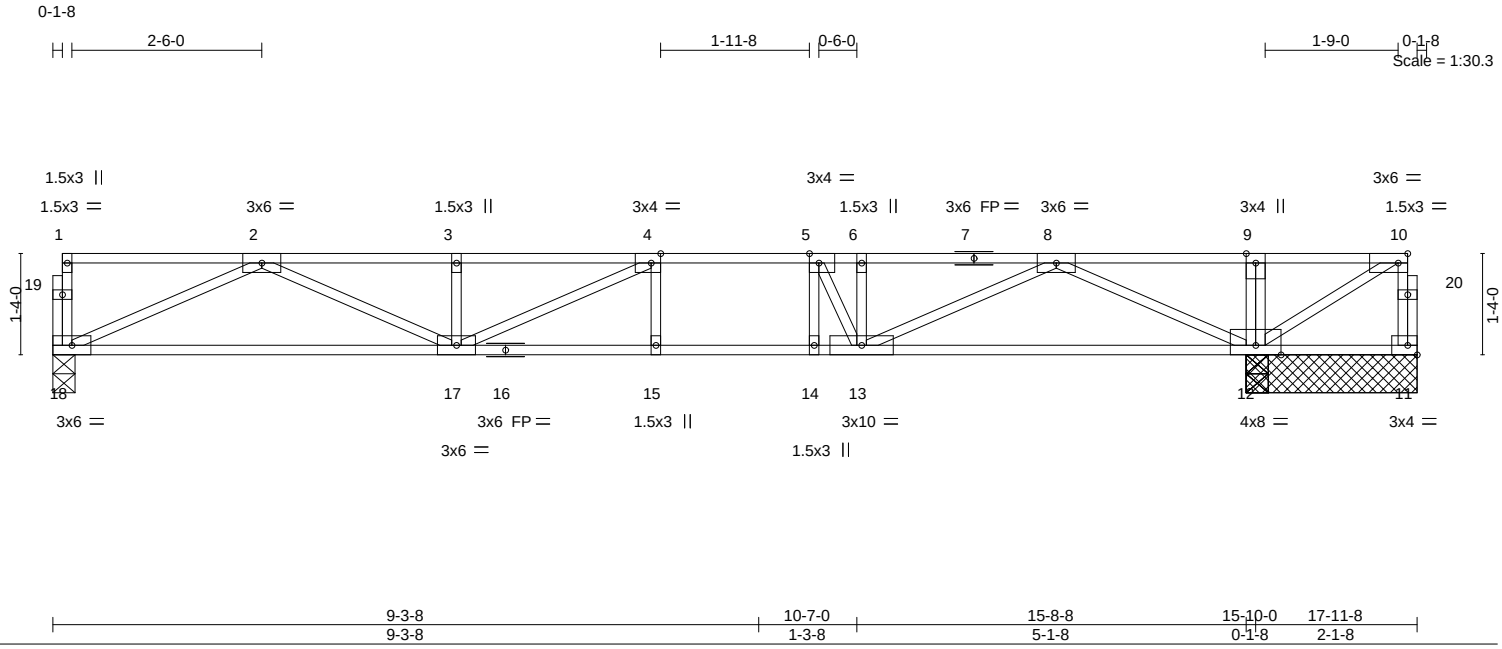

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge], [10:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.60	Vert(LL)	-0.21	15-17	>873	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.98	Vert(CT)	-0.29	15-17	>644	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.03	12	n/a	n/a		
BCDL	5.0	Code IRC2015/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)

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. (size) 18=0-3-8, 11=2-3-0, 12=2-3-0, 12=2-3-0
Max Uplift 11=-518(LC 1)
Max Grav 18=770(LC 1), 12=1683(LC 1), 12=1683(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 10-11=0/515, 2-3=-2194/0, 3-4=-2194/0, 4-5=-2127/0, 5-6=-1743/0, 6-8=-1743/0, 8-9=0/1009, 9-10=0/992
BOT CHORD 17-18=0/1407, 15-17=0/2127, 14-15=0/2127, 13-14=0/2127, 12-13=0/651
WEBS 9-12=-263/0, 2-18=-1542/0, 2-17=0/871, 3-17=-309/0, 8-12=-1837/0, 8-13=0/1207, 5-13=-837/0, 5-14=0/317, 10-12=-1126/0

NOTES-
1) Plates checked for a plus or minus 1 degree rotation about its center.
2) Gable studs spaced at 1-4-0 oc.
3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=518.
4) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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 28,2021

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/5-R Atkins Farm Estates/Harnett
J0721-4305	F6	Floor	2	1	E15980504
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 27 15:15:53 2021 Page 1
ID:z9tQeuaeEwTQ6FgPNEM81tzKtIE-xlCbULUrt?WpIIo6AljwgFjApsu_VYnLvKX?HyytqI4

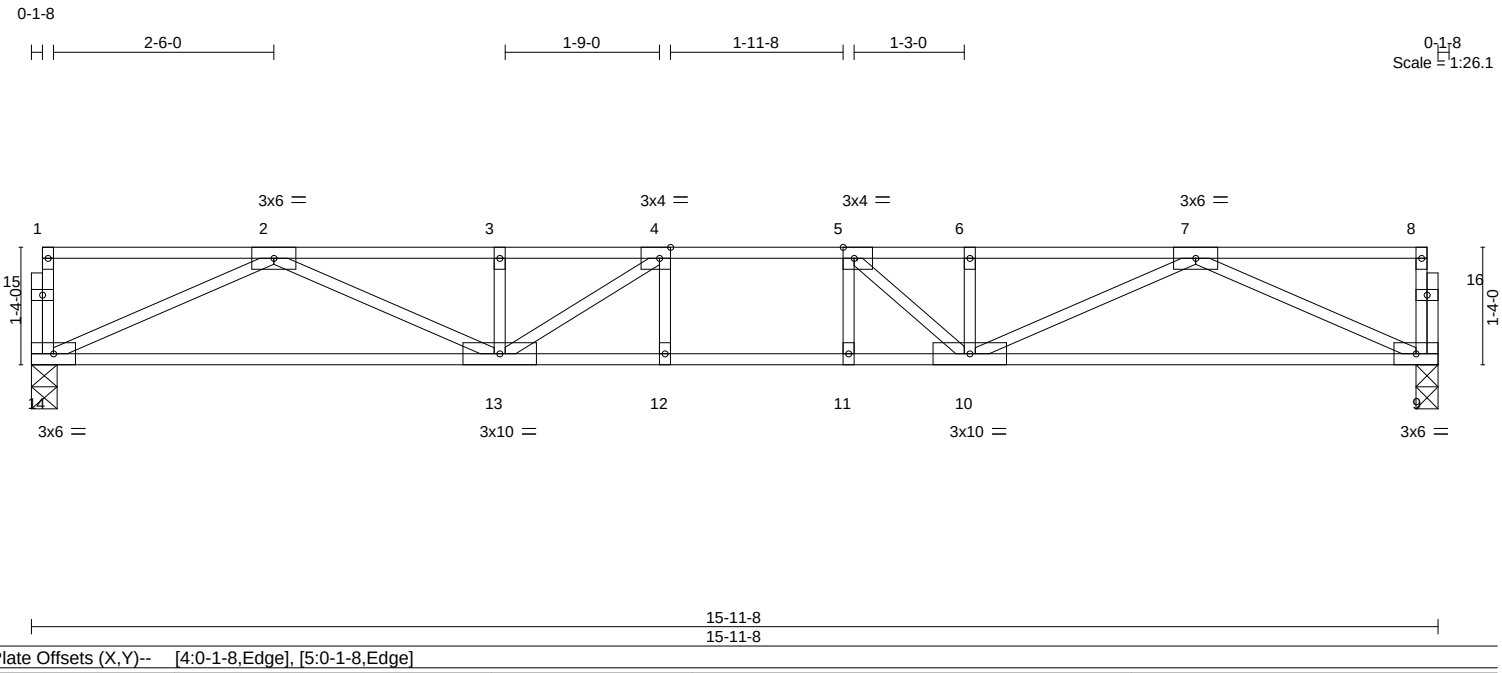

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge]

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	0.45	Vert(LL)	-0.17	12-13	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.72	Vert(CT)	-0.23	12-13	>837	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.04	9	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 81 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) 14=0-3-8, 9=0-3-0
Max Grav 14=858(LC 1), 9=858(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2528/0, 3-4=-2528/0, 4-5=-2770/0, 5-6=-2516/0, 6-7=-2516/0
BOT CHORD 13-14=0/1599, 12-13=0/2770, 11-12=0/2770, 10-11=0/2770, 9-10=0/1600
WEBS 2-14=-1754/0, 2-13=0/1028, 3-13=-263/11, 7-9=-1755/0, 7-10=0/1013, 5-10=-600/33, 4-13=-557/40

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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.

July 28,2021

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Job	Truss	Truss Type	Qty	Ply	Weaver/5-R Atkins Farm Estates/Harnett
J0721-4305	F7	Floor	6	1	E15980505
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 27 15:15:54 2021 Page 1
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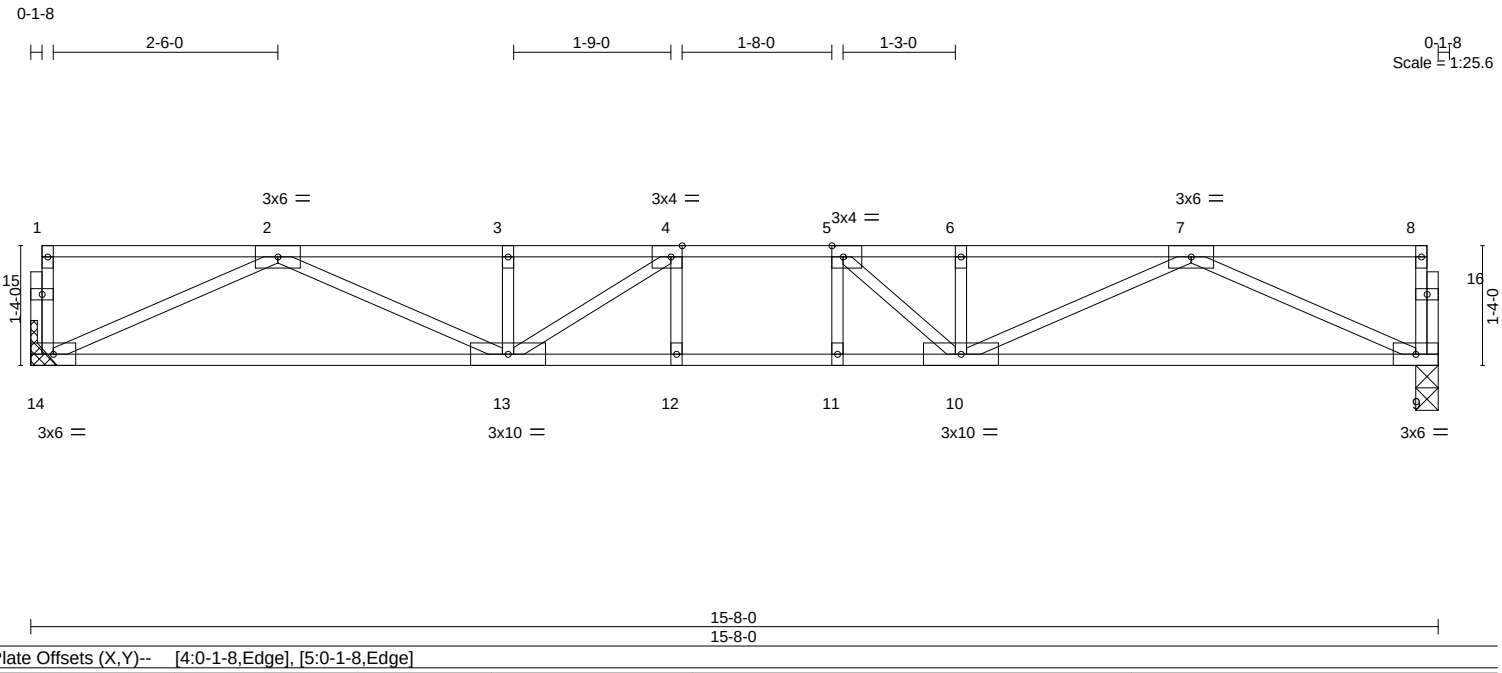

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge]

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	0.38	Vert(LL)	-0.15	12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.66	Vert(CT)	-0.21	12	>890	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.04	9	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 80 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) 14=Mechanical, 9=0-3-0
Max Grav 14=842(LC 1), 9=842(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2460/0, 3-4=-2460/0, 4-5=-2674/0, 5-6=-2449/0, 6-7=-2449/0
BOT CHORD 13-14=0/1564, 12-13=0/2674, 11-12=0/2674, 10-11=0/2674, 9-10=0/1565
WEBS 2-14=-1716/0, 2-13=0/991, 3-13=-261/1, 7-9=-1717/0, 7-10=0/978, 4-13=-508/62, 5-10=-546/55

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) Refer to girder(s) for truss to truss connections.
5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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/5-R Atkins Farm Estates/Harnett
J0721-4305	F8	Floor	6	1	E15980506
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 27 15:15:54 2021 Page 1
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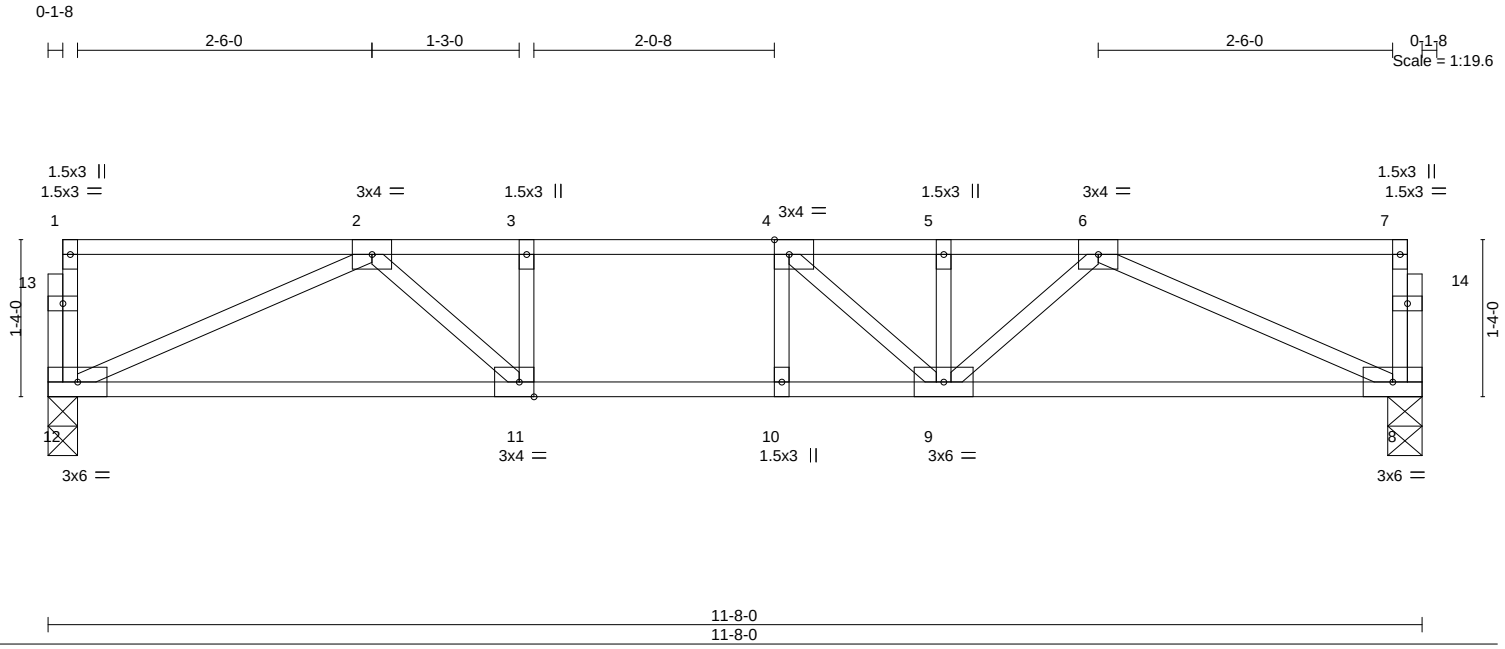

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [11:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.46	Vert(LL)	-0.10	9-10	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.56	Vert(CT)	-0.13	9-10	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.02	8	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.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=0-3-0, 8=0-3-8
Max Grav 12=622(LC 1), 8=622(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1426/0, 3-4=-1426/0, 4-5=-1359/0, 5-6=-1359/0
BOT CHORD 11-12=0/1092, 10-11=0/1426, 9-10=0/1426, 8-9=0/1089
WEBS 2-12=-1196/0, 2-11=0/564, 3-11=-278/0, 6-8=-1193/0, 6-9=0/367, 4-9=-310/75

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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.

July 28,2021

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Job	Truss	Truss Type	Qty	Ply	Weaver/5-R Atkins Farm Estates/Harnett
J0721-4305	F9	GABLE	1	1	E15980507
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 27 15:15:55 2021 Page 1
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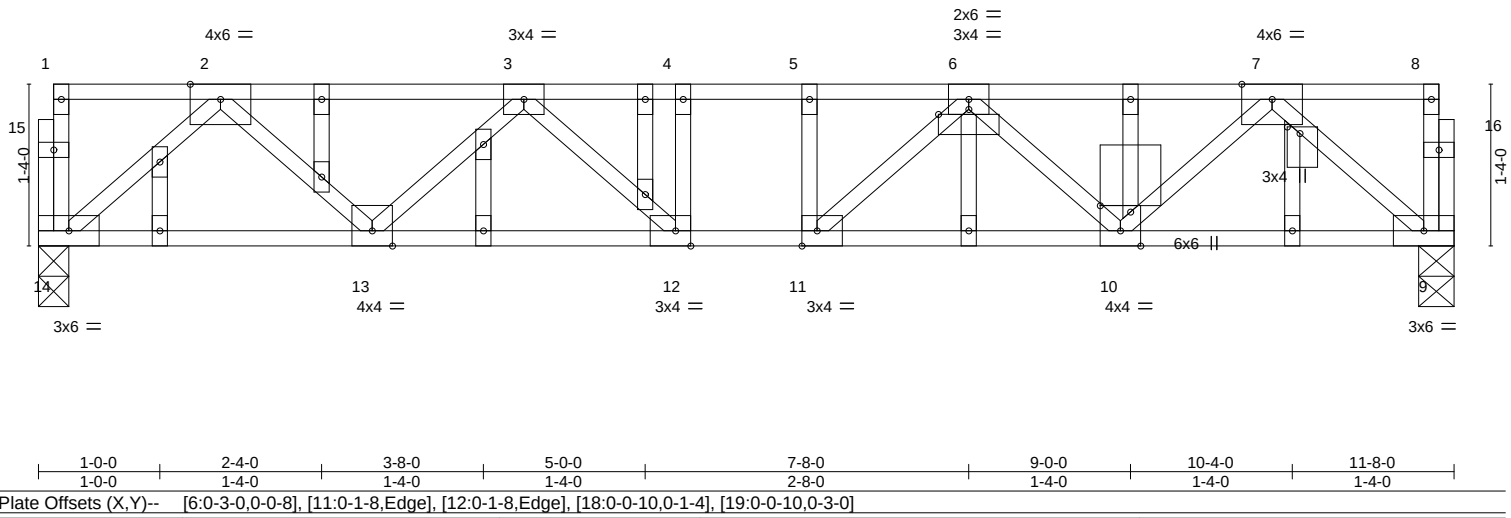

Plate Offsets (X,Y)-- [6:0-3-0,0-0-8], [11:0-1-8,Edge], [12:0-1-8,Edge], [18:0-0-10,0-1-4], [19:0-0-10,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.56	Vert(LL)	-0.09	12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.63	Vert(CT)	-0.12	12	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.50	Horz(CT)	0.04	9	n/a	n/a		
BCDL	5.0	Code	IRC2015/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 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 14=0-3-0, 9=0-3-8
Max Grav 14=1327(LC 1), 9=1327(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2176/0, 3-4=-3140/0, 4-5=-3140/0, 5-6=-3140/0, 6-7=-2176/0
BOT CHORD 13-14=0/1414, 12-13=0/2908, 11-12=0/3140, 10-11=0/2908, 9-10=0/1414
WEBS 2-14=-1877/0, 2-13=0/1060, 3-13=-1018/0, 3-12=0/316, 7-9=-1877/0, 7-10=0/1060, 6-10=-1018/0, 6-11=0/316

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 studs spaced at 1-4-0 oc.
4) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 9-14=-10, 1-8=-225

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Job	Truss	Truss Type	Qty	Ply	Weaver/5-R Atkins Farm Estates/Harnett
J0721-4305	KW3	GABLE	1	1	E15980508
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 27 15:15:56 2021 Page 1
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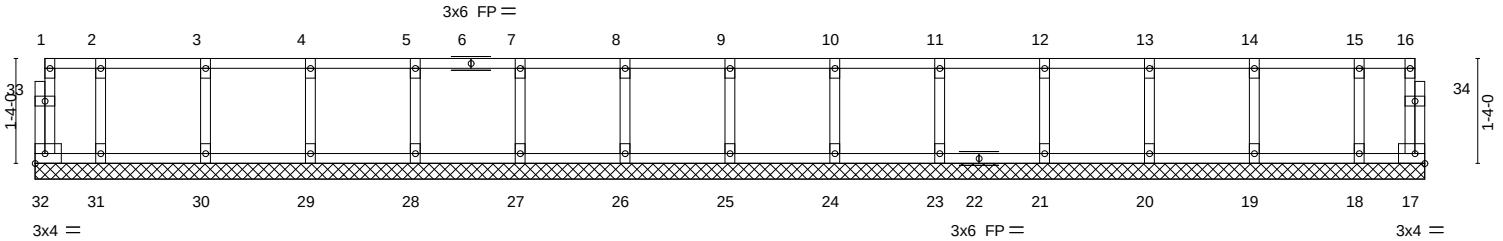

0-10-0	2-2-0	3-6-0	4-10-0	6-2-0	7-6-0	8-10-0	10-2-0	11-6-0	12-10-0	14-2-0	15-6-0	16-10-0	17-8-0
0-10-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	0-10-0

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	0.06	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	17	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 79 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 17-8-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 32, 17, 25, 26, 27, 28, 29, 30, 31, 24, 23, 21, 20, 19, 18

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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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/5-R Atkins Farm Estates/Harnett
J0721-4305	KW7	GABLE	1	1	E15980509
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 27 15:15:57 2021 Page 1
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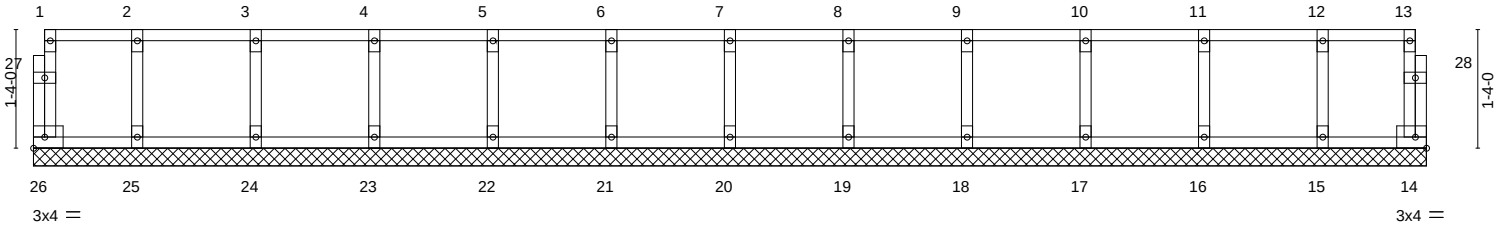

1-2-0	2-6-0	3-10-0	5-2-0	6-6-0	7-10-0	9-2-0	10-6-0	11-10-0	13-2-0	14-6-0	15-8-0
1-2-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-2-0

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	0.06	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	14	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 70 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 15-8-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 26, 14, 20, 21, 22, 23, 24, 25, 19, 18, 17, 16, 15

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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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/5-R Atkins Farm Estates/Harnett
J0721-4305	KW8	GABLE	1	1	E15980510
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 27 15:15:58 2021 Page 1
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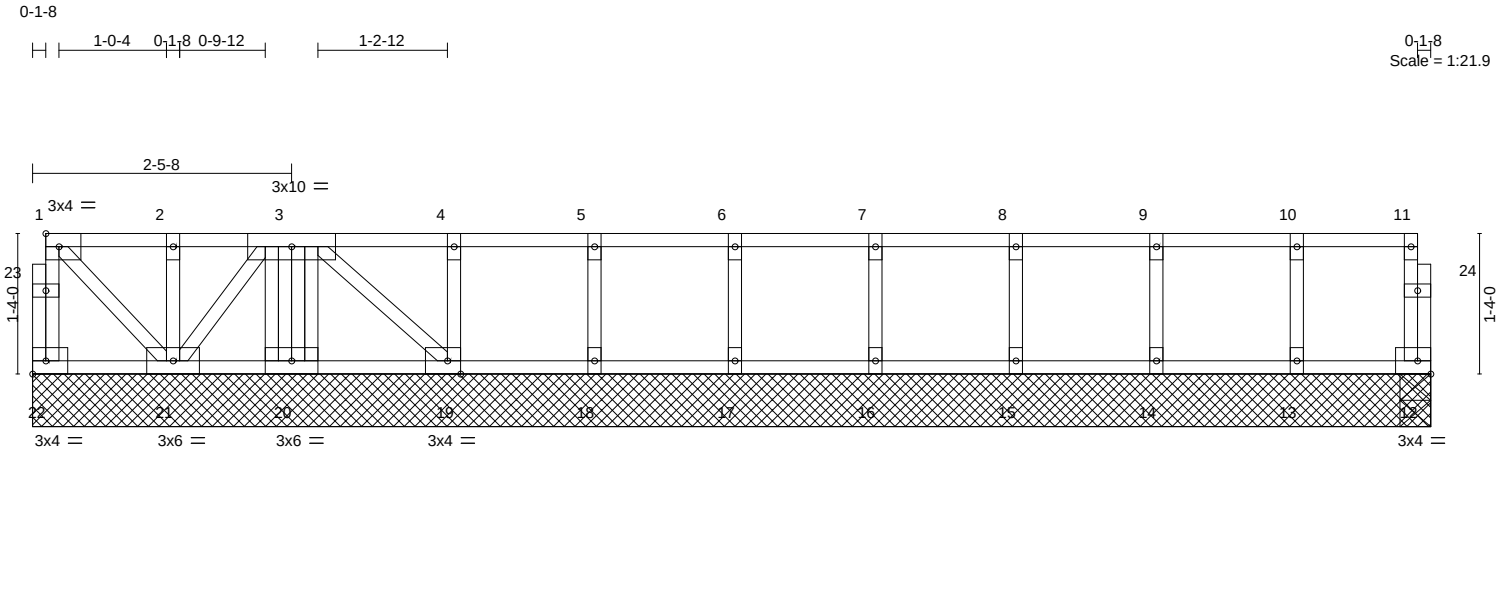

Plate Offsets (X,Y)-- [19:0-1-8,Edge]

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	0.07	Vert(LL)	0.00	13	****	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	-0.00	20	>999	360		
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: 71 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 13-3-4.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 22, 12, 12, 20, 21, 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) Plates checked for a plus or minus 1 degree rotation about its center.
3) Gable studs spaced at 1-4-0 oc.
4) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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 28,2021

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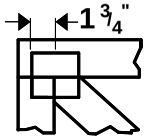
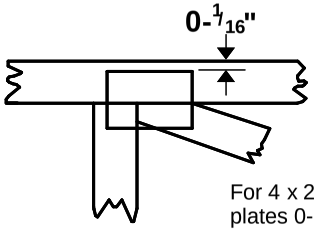
Symbols

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.

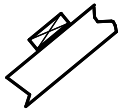
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

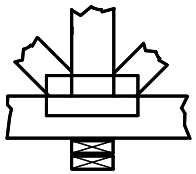
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

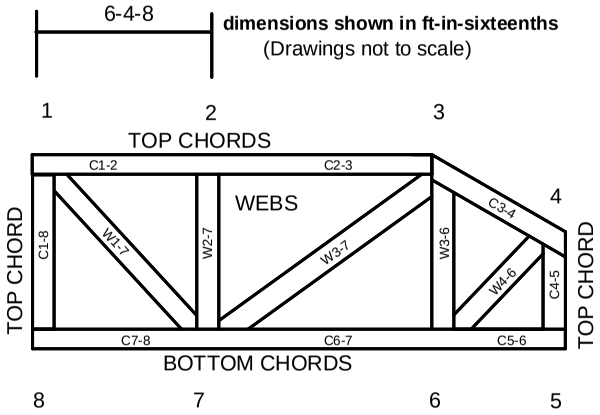


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.

MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/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.