ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J1121-6697
TRACT 1 WILLIAMS FARM FLOOR

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: E16465078 thru E16465089

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

North Carolina COA: C-0844

December 2,2021

Strzyzewski, Marvin

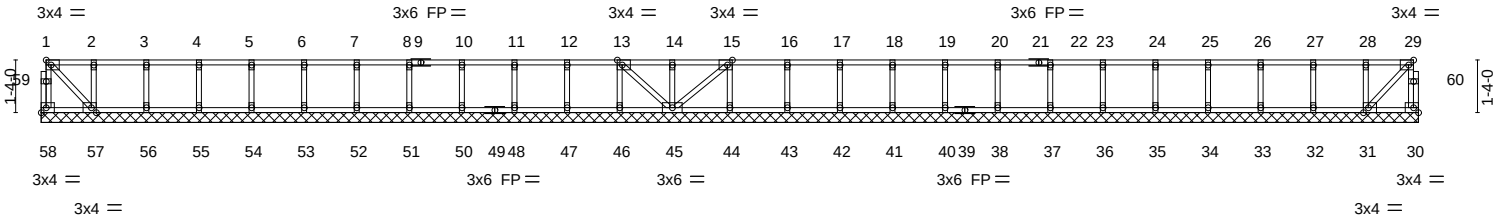
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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	TRACT 1 WILLIAMS FARM FLOOR
J1121-6697	2E1	GABLE	1	1	E16465078
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Dec 1 13:34:48 2021 Page 1
ID:ebrkqaY3lL0GCElEw2lknEyOVpp-JwMMErpFwc6mrITW3iSL3A9o?H2VKpsJskQviSyDJob

0-1-8 0-1-8

Scale = 1:58.4



1-4-0 2-8-0 4-0-0 5-4-0 6-8-0 8-0-0 9-4-0 10-8-0 12-0-0 13-4-0 14-8-0 16-0-0 17-5-8 18-11-0 20-3-0 21-7-0 22-11-0 24-3-0 25-7-0 26-11-0 28-3-0 29-7-0 30-11-0 32-3-0 33-7-0 34-11-0
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 1-5-8 1-5-8 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

Plate Offsets (X,Y)-- [13:0-1-8,Edge], [15:0-1-8,Edge], [29:0-1-8,Edge], [31:0-1-8,Edge], [57:0-1-8,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)	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	30	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 159 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-

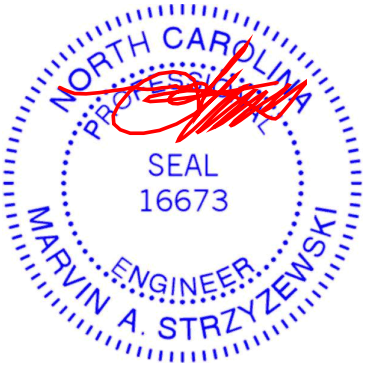
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 34-11-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 58, 30, 44, 31, 32, 33, 34, 35, 36, 37, 38, 40, 41, 42, 43, 57, 56, 55, 54, 53, 52, 51, 50, 48, 47, 46, 45

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.



December 2,2021

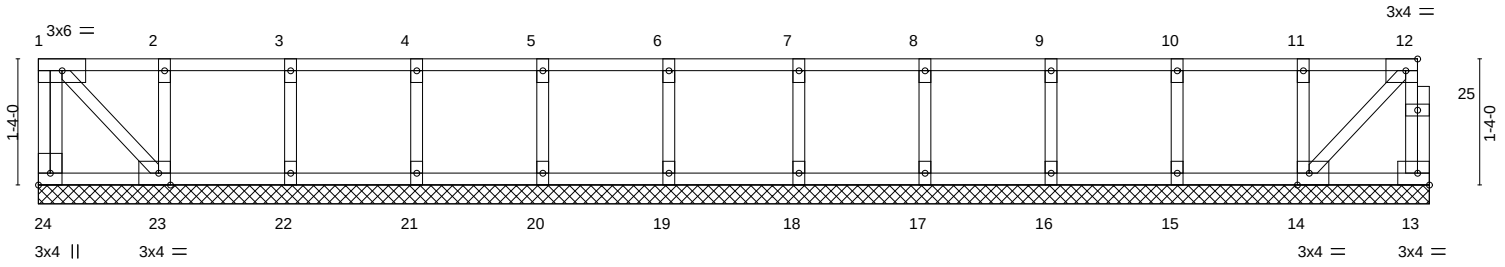
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	TRACT 1 WILLIAMS FARM FLOOR
J1121-6697	2E2	GABLE	1	1	E16465079
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Dec 1 13:34:54 2021 Page 1
ID:ebrkqaY3lL0GCElEw2lknEyOVpp-84jdUut0VSswZDxfPyZlIQOqih5wkXKCFgtEw5yDJoV

0-1-8

Scale = 1:24.4



1-4-0	2-8-0	4-0-0	5-4-0	6-8-0	7-4-4	8-0-8	9-4-8	10-8-8	12-0-8	13-4-8	14-8-8
1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	0-8-4	0-8-4	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0

Plate Offsets (X,Y)-- [12:0-1-8,Edge], [14:0-1-8,Edge], [23:0-1-8,Edge], [24:Edge,0-1-8]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(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-S							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-

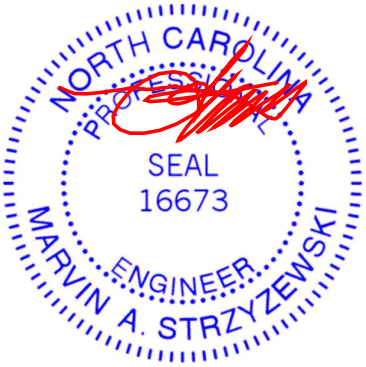
TOP CHORD	Structural wood sheathing directly applied or 10-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 23-24,13-14.

REACTIONS. All bearings 14-8-8.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 24, 13, 14, 15, 16, 17, 18, 23, 22, 21, 20, 19

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.
8) CAUTION, Do not erect truss backwards.



December 2,2021

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

Job	Truss	Truss Type	Qty	Ply	TRACT 1 WILLIAMS FARM FLOOR
J1121-6697	2E3	Floor Supported Gable	1	1	E16465080
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Dec 1 13:34:57 2021 Page 1
ID:ebrkqaY3lL0GCElEw2lknEyOVpp-YfPm7wwuoNFVQhfE456Sw30LHv6exuaexe5uXQyDJoS

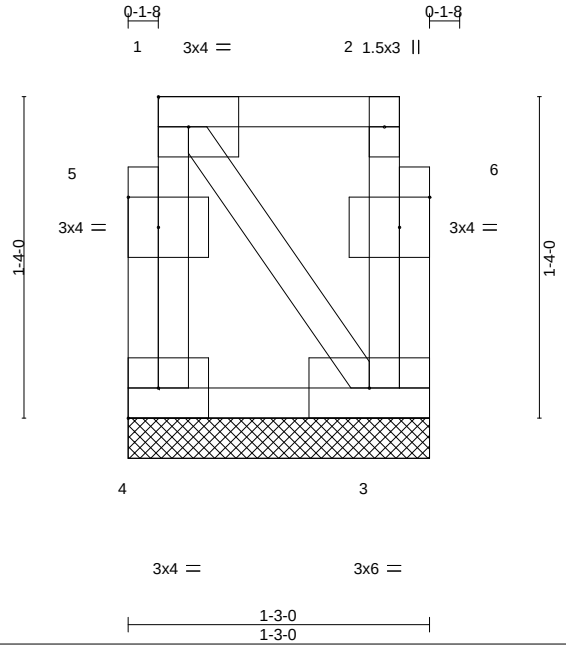


Plate Offsets (X,Y)-- [5:0-1-8,0-1-8], [6:0-1-8,0-1-8]

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	0.04	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	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 11 lb	FT = 20%F, 11%E

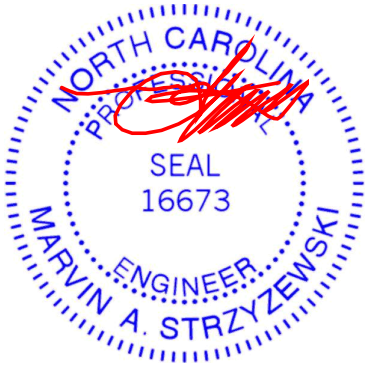
LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-3-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=1-3-0, 3=1-3-0
Max Grav 4=49(LC 1), 3=49(LC 1)

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

NOTES-
1) Plates checked for a plus or minus 1 degree rotation about its center.
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) 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.



December 2,2021

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

Job	Truss	Truss Type	Qty	Ply	TRACT 1 WILLIAMS FARM FLOOR
J1121-6697	2F1	Floor	6	1	E16465081
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Dec 1 13:34:59 2021 Page 1
ID:ebrkqaY3lL0GCElEw2lknEyOVpp-U1WWYcx9K?VCg_pdCW8w?U6ZWic4PhHxOya?bJyDJoQ

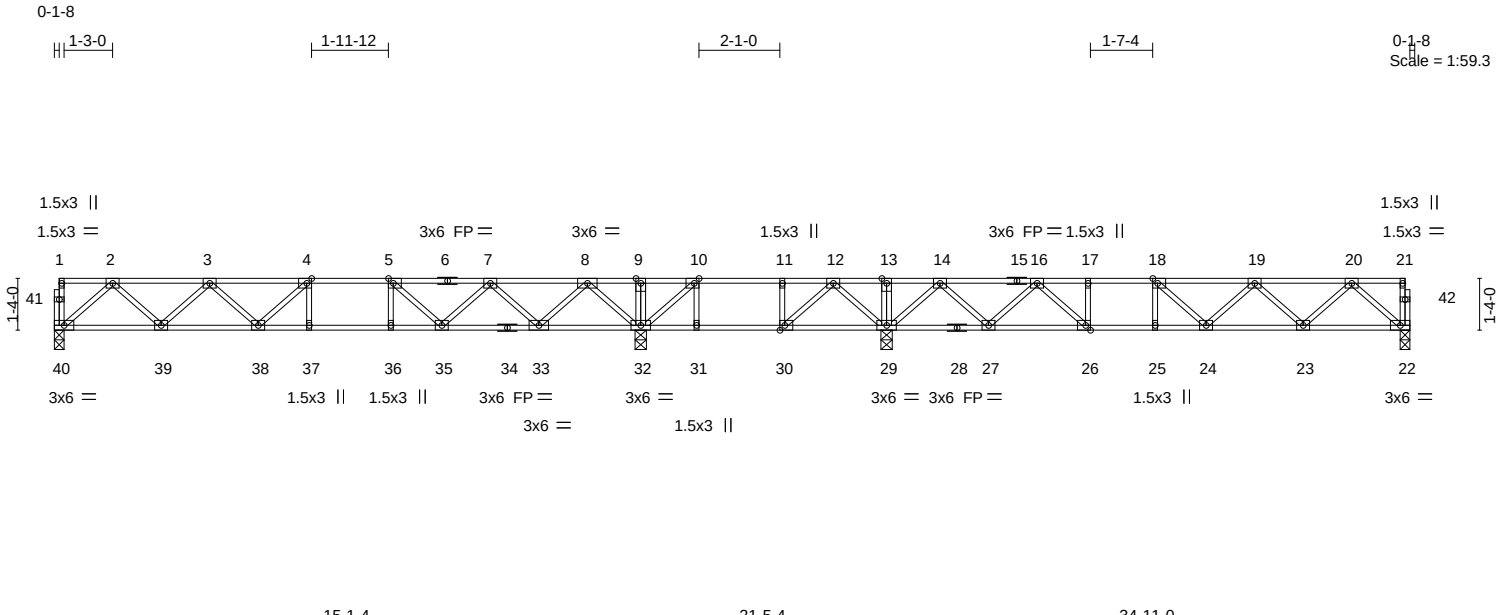


Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge], [10:0-1-8,Edge], [18:0-1-8,Edge], [26:0-1-8,Edge], [30:0-1-8,Edge]

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	0.57	Vert(LL)	-0.13	37-38	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.78	Vert(CT)	-0.18	37-38	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.04	22	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 180 lb	FT = 20%F, 11%E

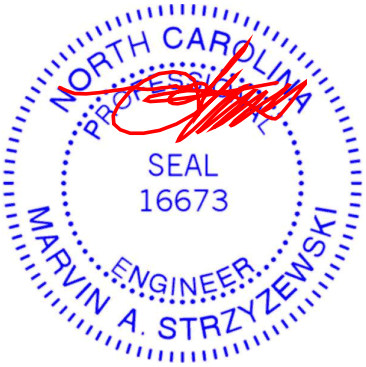
LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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. All bearings 0-3-0 except (jt=length) 32=0-3-8, 29=0-3-8.
(lb) - Max Grav All reactions 250 lb or less at joint(s) except 40=754(LC 3), 32=1232(LC 3), 22=656(LC 4), 29=1228(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1314/0, 3-4=-1994/0, 4-5=-2135/0, 5-7=-1749/0, 7-8=-798/0, 8-9=0/1027, 9-10=0/1027, 10-11=-74/870, 11-12=-74/870, 12-13=0/1137, 13-14=0/1137, 14-16=-592/320, 16-17=-1556/0, 17-18=-1556/0, 18-19=-1577/0, 19-20=-1103/0
BOT CHORD 39-40=0/800, 38-39=0/1801, 37-38=0/2135, 36-37=0/2135, 35-36=0/2135, 33-35=0/1402, 31-32=-870/74, 30-31=-870/74, 29-30=-883/0, 27-29=-522/61, 26-27=-116/1137, 25-26=0/1556, 24-25=0/1556, 23-24=0/1498, 22-23=0/686
WEBS 2-40=-1062/0, 2-39=0/714, 3-39=-678/0, 3-38=0/293, 4-38=-313/45, 8-32=-1286/0, 8-33=0/912, 7-33=-867/0, 7-35=0/516, 5-35=-630/0, 12-29=-500/0, 12-30=0/324, 10-32=-523/0, 20-22=-911/0, 20-23=0/579, 19-23=-550/0, 14-29=-1160/0, 14-27=0/776, 16-27=-812/0, 16-26=0/739, 17-26=-308/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) 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.

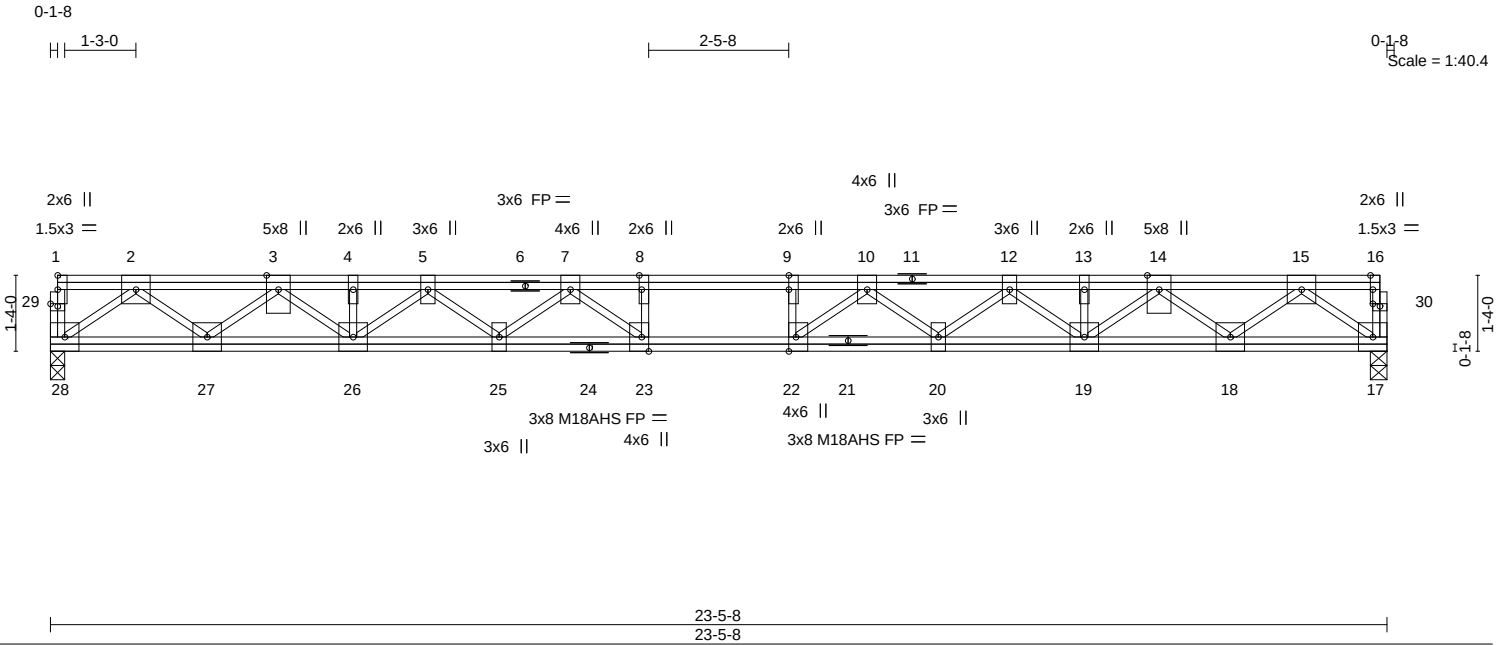


December 2,2021

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

Job	Truss	Truss Type	Qty	Ply	TRACT 1 WILLIAMS FARM FLOOR
J1121-6697	2F2	Floor	8	1	E16465082
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Dec 1 13:35:01 2021 Page 1
ID:ebrkqaY3lL0GCElEw2lknEyOVpp-RQeGyHzPsclwvIz0JwBP4vB?1WPBtX9EsG35gByDJoO



23-5-8
23-5-8

Plate Offsets (X,Y)-- [8:0-3-0,Edge], [9:0-3-0,0-0-0], [16:0-3-0,Edge], [22:0-3-0,Edge], [23:0-3-0,Edge], [29:0-1-8,0-0-8], [30:0-1-8,0-0-8]

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	0.18	Vert(LL)	-0.31	22-23	>880	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.35	Vert(CT)	-0.43	22-23	>639	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.05	17	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 184 lb	FT = 20%F, 11%E

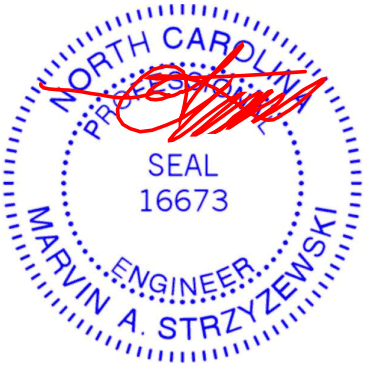
LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS. (size) 28=0-3-0, 17=0-3-8
Max Grav 28=1270(LC 1), 17=1270(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2611/0, 3-4=-4620/0, 4-5=-4620/0, 5-7=-5912/0, 7-8=-6643/0, 8-9=-6643/0, 9-10=-6643/0, 10-12=-5912/0, 12-13=-4620/0, 13-14=-4620/0, 14-15=-2611/0
BOT CHORD 27-28=0/1555, 26-27=0/3725, 25-26=0/5416, 23-25=0/6378, 22-23=0/6643, 20-22=0/6378, 19-20=0/5416, 18-19=0/3725, 17-18=0/1555
WEBS 15-17=-1922/0, 15-18=0/1401, 14-18=-1475/0, 14-19=0/1161, 12-19=-1031/0, 12-20=0/656, 10-20=-638/0, 10-22=-197/842, 9-22=-387/24, 2-28=-1922/0, 2-27=0/1401, 3-27=-1475/0, 3-26=0/1161, 5-26=-1031/0, 5-25=0/656, 7-25=-638/0, 7-23=-197/842, 8-23=-387/24

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 6x6 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.



December 2,2021

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

Job	Truss	Truss Type	Qty	Ply	TRACT 1 WILLIAMS FARM FLOOR
J1121-6697	2F3	Floor	4	1	E16465083
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Dec 1 13:35:02 2021 Page 1
ID:ebrkqaY3lL0GCElEw2lknEyOVpp-vcCfAd_1dwtnXSYCteied6k5YweFc2AN4vpfCeyDJoN

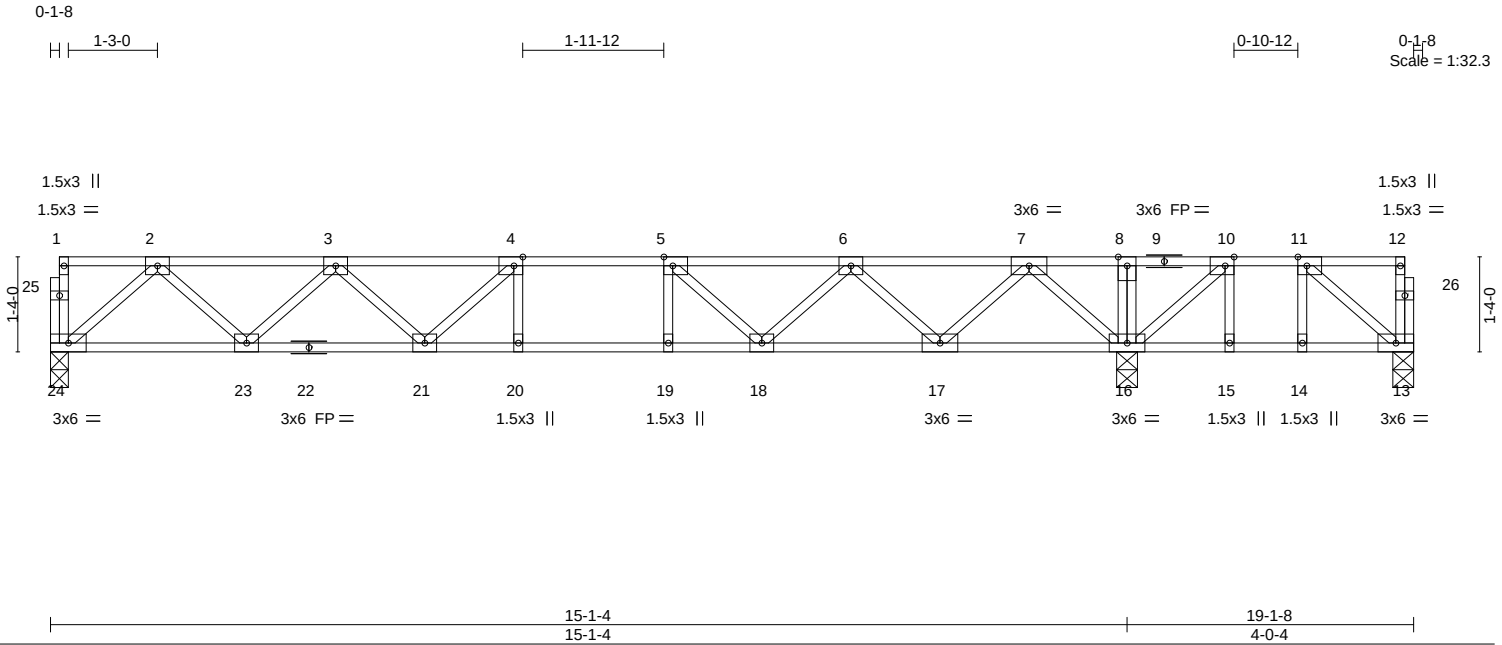


Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge], [10:0-1-8,Edge], [11:0-1-8,Edge]

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	0.45	Vert(LL)	-0.13	20-21	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.75	Vert(CT)	-0.18	20-21	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.03	16	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 102 lb	FT = 20%F, 11%E

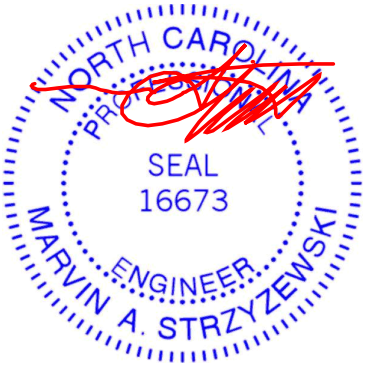
LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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=0-3-0, 13=0-3-8, 16=0-3-8
Max Uplift 13=-187(LC 3)
Max Grav 24=757(LC 10), 13=139(LC 4), 16=1349(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1321/0, 3-4=-2009/0, 4-5=-2157/0, 5-6=-1777/0, 6-7=-836/0, 7-8=0/838, 8-10=0/838, 10-11=-61/344
BOT CHORD 23-24=0/804, 21-23=0/1812, 20-21=0/2157, 19-20=0/2157, 18-19=0/2157, 17-18=0/1435, 15-16=-344/61, 14-15=-344/61, 13-14=-344/61
WEBS 2-24=-1068/0, 2-23=0/719, 3-23=-683/0, 3-21=0/318, 4-21=-350/4, 7-16=-1276/0, 7-17=0/894, 6-17=-844/0, 6-18=0/487, 5-18=-589/0, 11-13=-75/453, 10-16=-774/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 187 lb uplift at joint 13.
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.



December 2,2021

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

Job	Truss	Truss Type	Qty	Ply	TRACT 1 WILLIAMS FARM FLOOR
J1121-6697	2F4	Floor	3	1	E16465084
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Dec 1 13:35:03 2021 Page 1
ID:ebrkqaY3lL0GCElEw2lknEyOVpp-Nom1Nz_fOD?e8c7ORLDt9KGIkK_7LW5XJZYCk4yDJoM

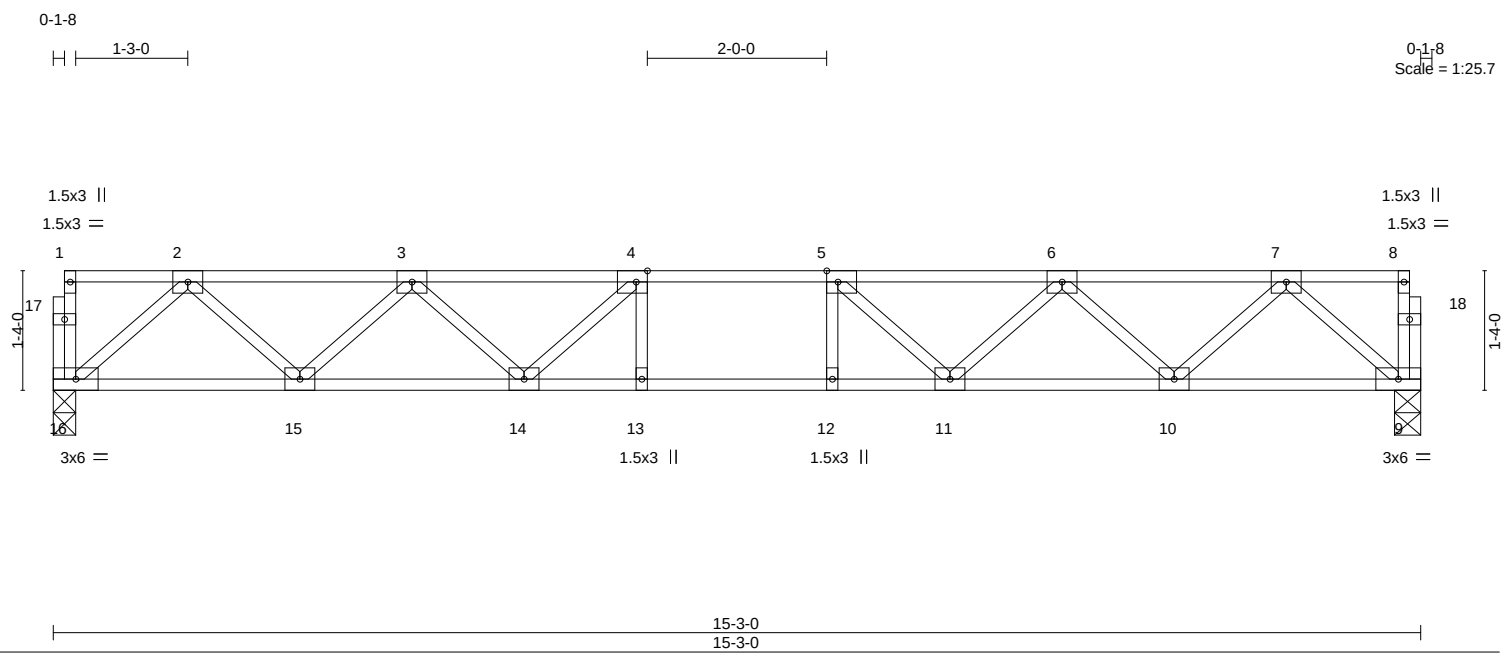


Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge]

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	0.36	Vert(LL)	-0.13	13-14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.70	Vert(CT)	-0.18	13-14	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.04	9	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 79 lb	FT = 20%F, 11%E

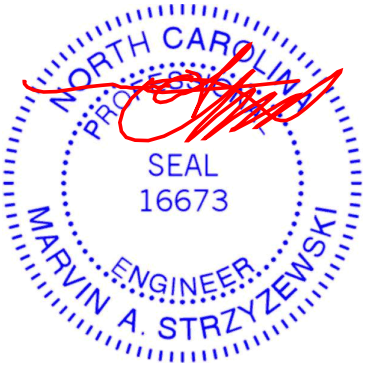
LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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=0-3-0, 9=0-3-8
Max Grav 16=819(LC 1), 9=819(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1454/0, 3-4=-2272/0, 4-5=-2538/0, 5-6=-2272/0, 6-7=-1454/0
BOT CHORD 15-16=0/877, 14-15=0/2001, 13-14=0/2538, 12-13=0/2538, 11-12=0/2538, 10-11=0/2001, 9-10=0/877
WEBS 2-16=-1165/0, 2-15=0/803, 3-15=-761/0, 3-14=0/432, 4-14=-530/0, 7-9=-1165/0, 7-10=0/803, 6-10=-761/0, 6-11=0/432, 5-11=-530/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) 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.



December 2,2021

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

Job	Truss	Truss Type	Qty	Ply	TRACT 1 WILLIAMS FARM FLOOR
J1121-6697	2F4A	Floor	8	1	E16465085
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Dec 1 13:35:05 2021 Page 1
ID:ebrkqaY3lL0GCElEw2lknEyOVpp-JBunof0vvrFMOvHnYmFLFlMf37hUpQlqmt1JpyyDJoK

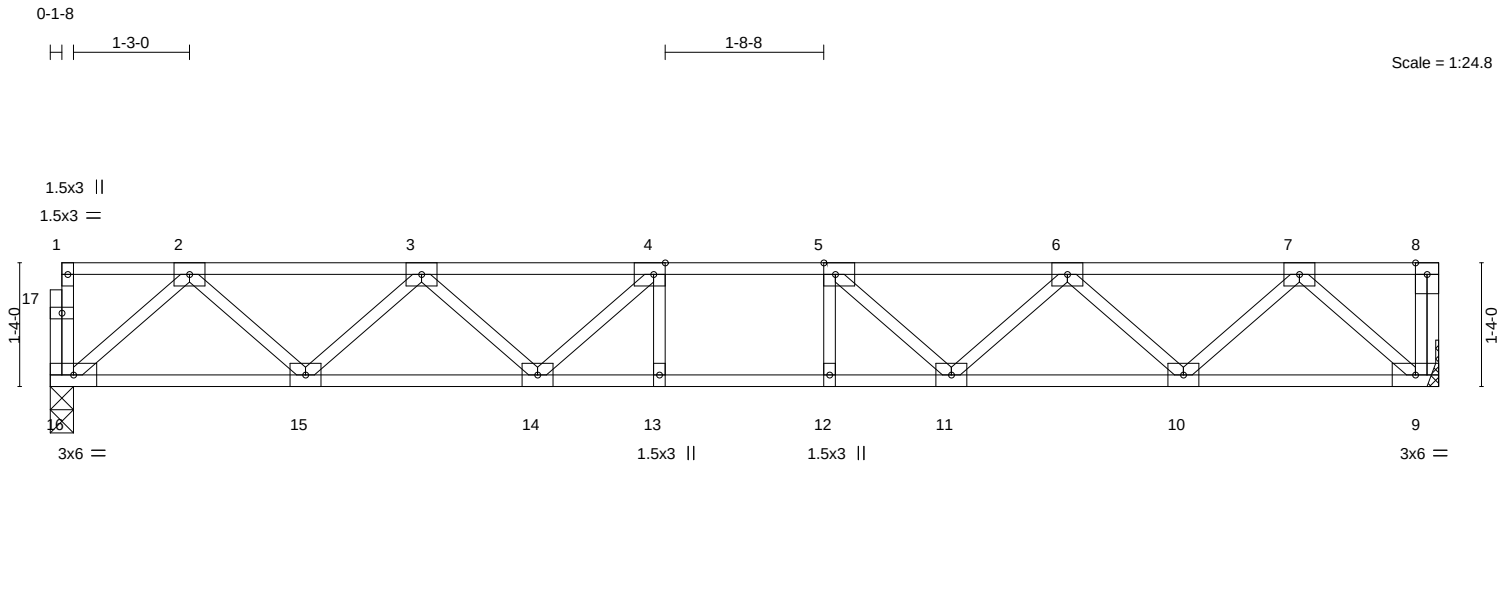


Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge]

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	0.31	Vert(LL)	-0.11	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.65	Vert(CT)	-0.15	11-12	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.04	9	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 78 lb	FT = 20%F, 11%E

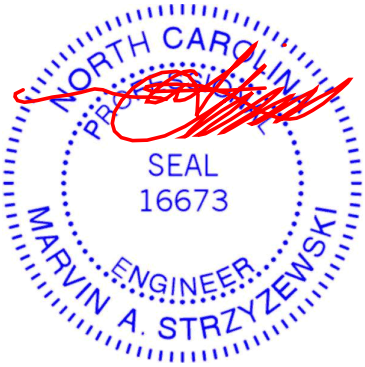
LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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=0-3-0, 9=Mechanical
Max Grav 16=803(LC 1), 9=809(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1420/0, 3-4=-2203/0, 4-5=-2448/0, 5-6=-2203/0, 6-7=-1420/0
BOT CHORD 15-16=0/858, 14-15=0/1951, 13-14=0/2448, 12-13=0/2448, 11-12=0/2448, 10-11=0/1951, 9-10=0/859
WEBS 7-9=-1144/0, 2-16=-1140/0, 7-10=0/780, 2-15=0/781, 6-10=-738/0, 3-15=-739/0, 6-11=0/405, 3-14=0/405, 5-11=-490/0, 4-14=-490/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) 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.



December 2,2021

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

Job	Truss	Truss Type	Qty	Ply	TRACT 1 WILLIAMS FARM FLOOR
J1121-6697	2F5	Floor	3	1	E16465086
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Dec 1 13:35:06 2021 Page 1
ID:ebrkqaY3lL0GCElEw2lknEyOVpp-nNS90?1Yg8ND?3sz6UmanyupSX6GYuez?XnsLPyDJoJ

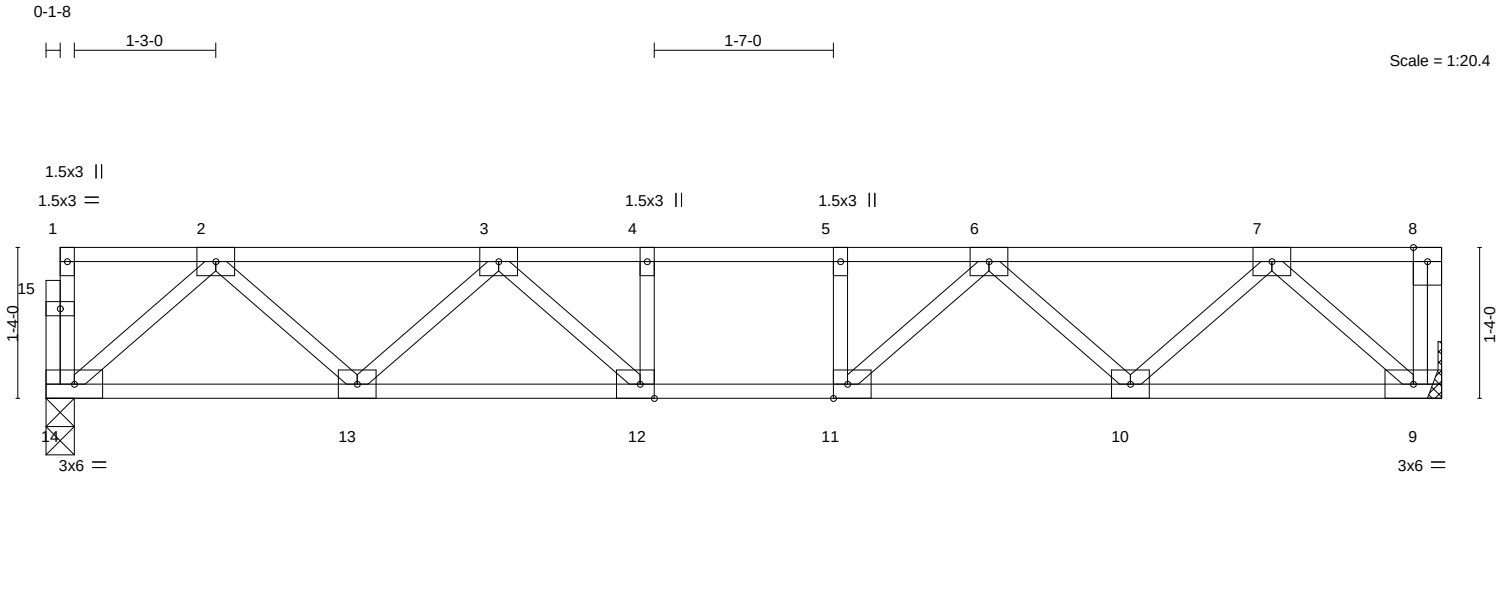


Plate Offsets (X,Y)-- [11:0-1-8,Edge], [12:0-1-8,Edge]

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	0.27	Vert(LL)	-0.06	10-11	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.36	Vert(CT)	-0.08	10-11	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.02	9	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 66 lb	FT = 20%F, 11%E

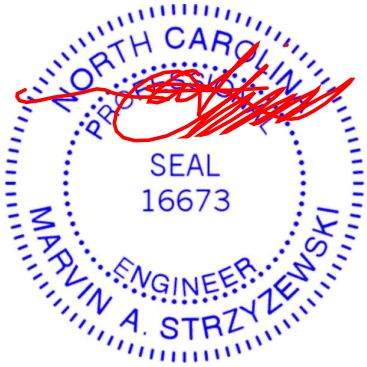
LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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=0-3-0, 9=Mechanical
Max Grav 14=658(LC 1), 9=665(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1102/0, 3-4=-1638/0, 4-5=-1638/0, 5-6=-1638/0, 6-7=-1102/0
BOT CHORD 13-14=0/700, 12-13=0/1474, 11-12=0/1638, 10-11=0/1473, 9-10=0/701
WEBS 7-9=-933/0, 2-14=-930/0, 7-10=0/559, 2-13=0/559, 6-10=-516/0, 3-13=-517/0, 6-11=0/398, 3-12=0/398

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) 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.



December 2,2021

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

Job	Truss	Truss Type	Qty	Ply	TRACT 1 WILLIAMS FARM FLOOR
J1121-6697	2F6	Floor	3	1	E16465087
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Dec 1 13:35:09 2021 Page 1
ID:ebrkqaY3lL0GCElEw2lknEyOVpp-Cy7Ie03Qz3losXaYncKHPbWL7k94IlrPhV?WykyDJoG

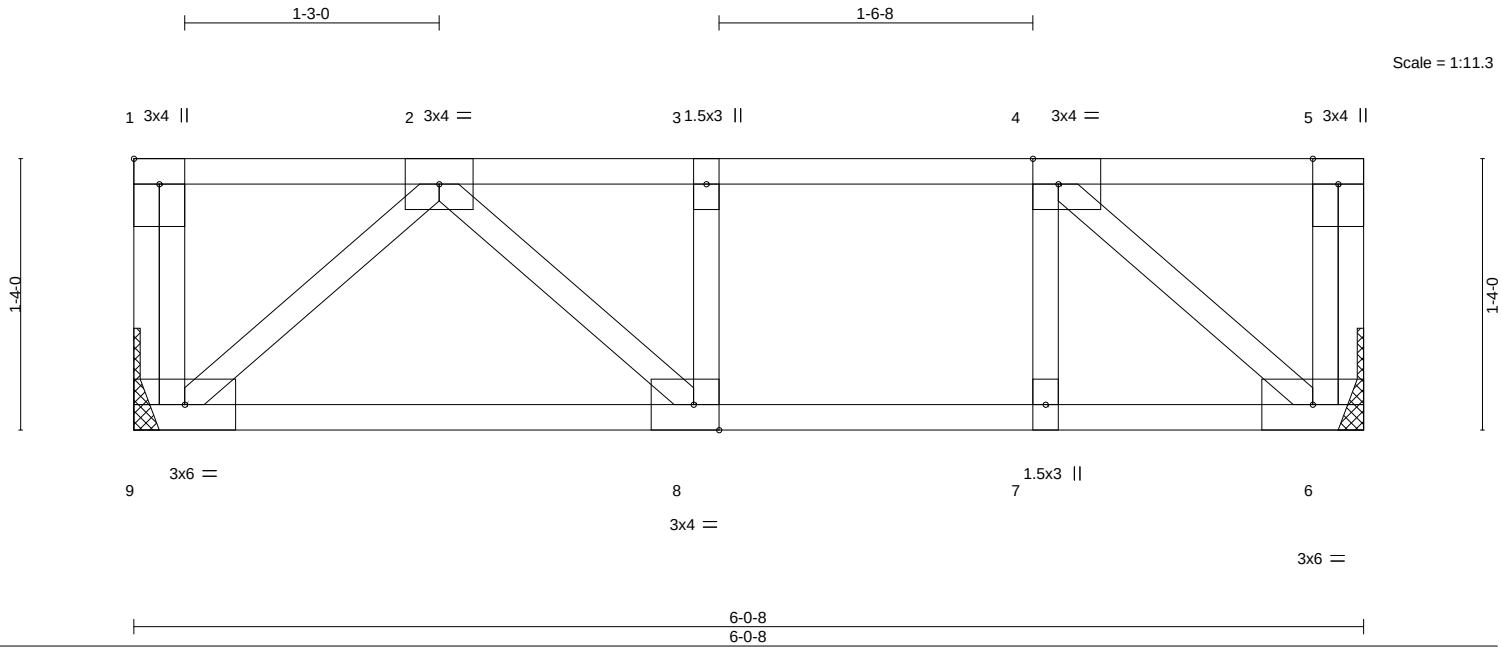


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [4:0-1-8,Edge], [8:0-1-8,Edge]

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	0.24	Vert(LL)	-0.03	8-9	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.22	Vert(CT)	-0.04	8-9	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	6	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 35 lb	FT = 20%F, 11%E

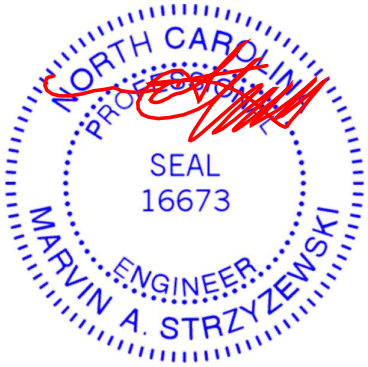
LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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) 9=Mechanical, 6=Mechanical
Max Grav 9=319(LC 1), 6=319(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-353/0, 3-4=-353/0
BOT CHORD 8-9=0/283, 7-8=0/353, 6-7=0/353
WEBS 2-9=-377/0, 4-6=-461/0

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) 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.



December 2,2021

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

Job	Truss	Truss Type	Qty	Ply	TRACT 1 WILLIAMS FARM FLOOR
J1121-6697	2F7	Floor	2	1	E16465088
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Dec 1 13:35:12 2021 Page 1
ID:ebrkqaY3lL0GCElEw2lknEyOVpp-cXpQG25IG_8Mj_J7Tkt_1D8ukyDyyfHrNTEBZ3yDJoD

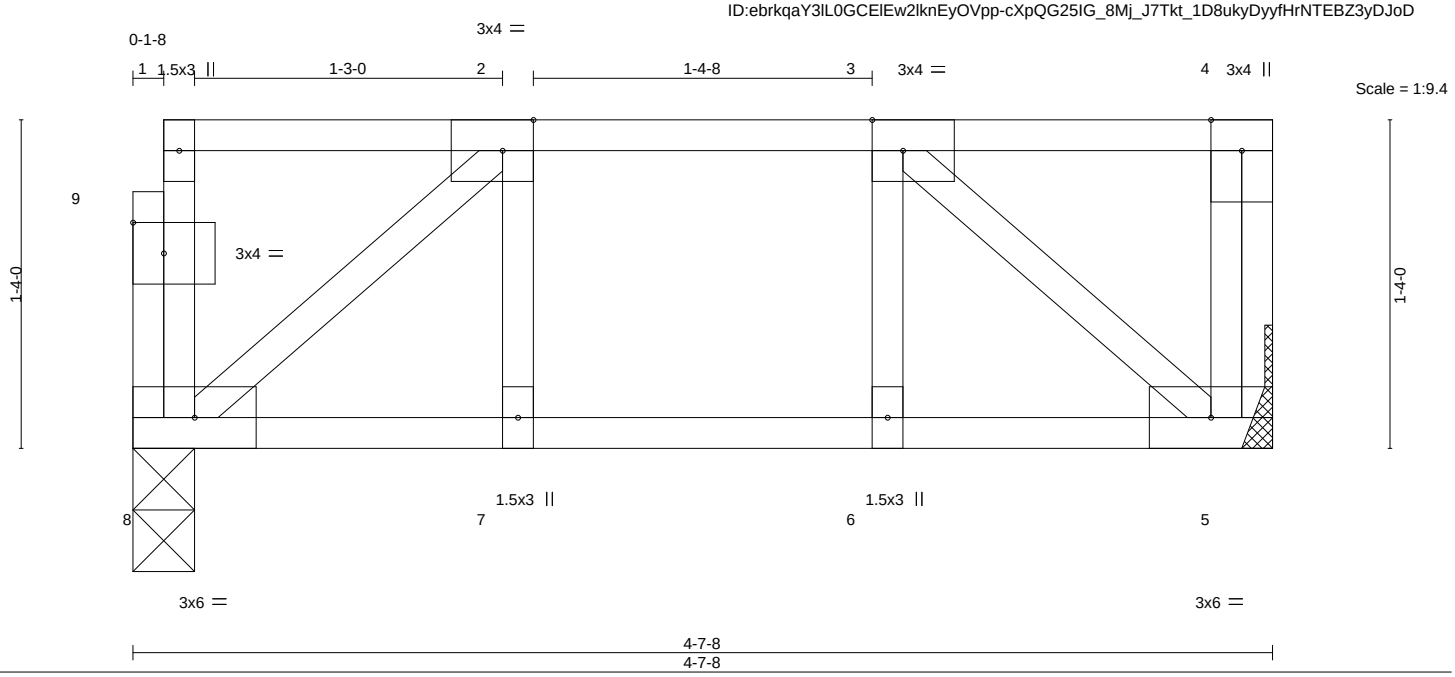


Plate Offsets (X,Y)-- [2:0-1-8,Edge], [3:0-1-8,Edge], [9:0-1-8,0-1-8]

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	0.09	Vert(LL)	-0.01	6	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.08	Vert(CT)	-0.01	6	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 28 lb	FT = 20%F, 11%E

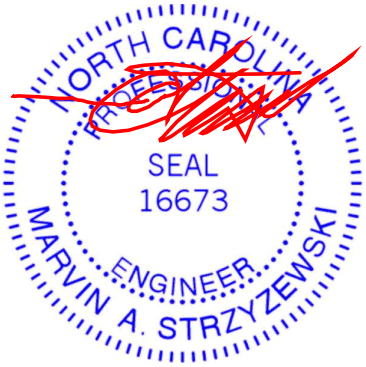
LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-7-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-0, 5=Mechanical
Max Grav 8=234(LC 1), 5=241(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-5=-273/0, 2-8=-270/0

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) 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.



December 2,2021

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

Job	Truss	Truss Type	Qty	Ply	TRACT 1 WILLIAMS FARM FLOOR
J1121-6697	2F8GR	Floor Girder	1	1	E16465089
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Dec 1 13:35:13 2021 Page 1
ID:ebrkqaY3lL0GCElEw2lknEyOVpp-4kNpUO6x1IGDL8uJ0SODZRh39Mash6F?c7zk5VyDJoC

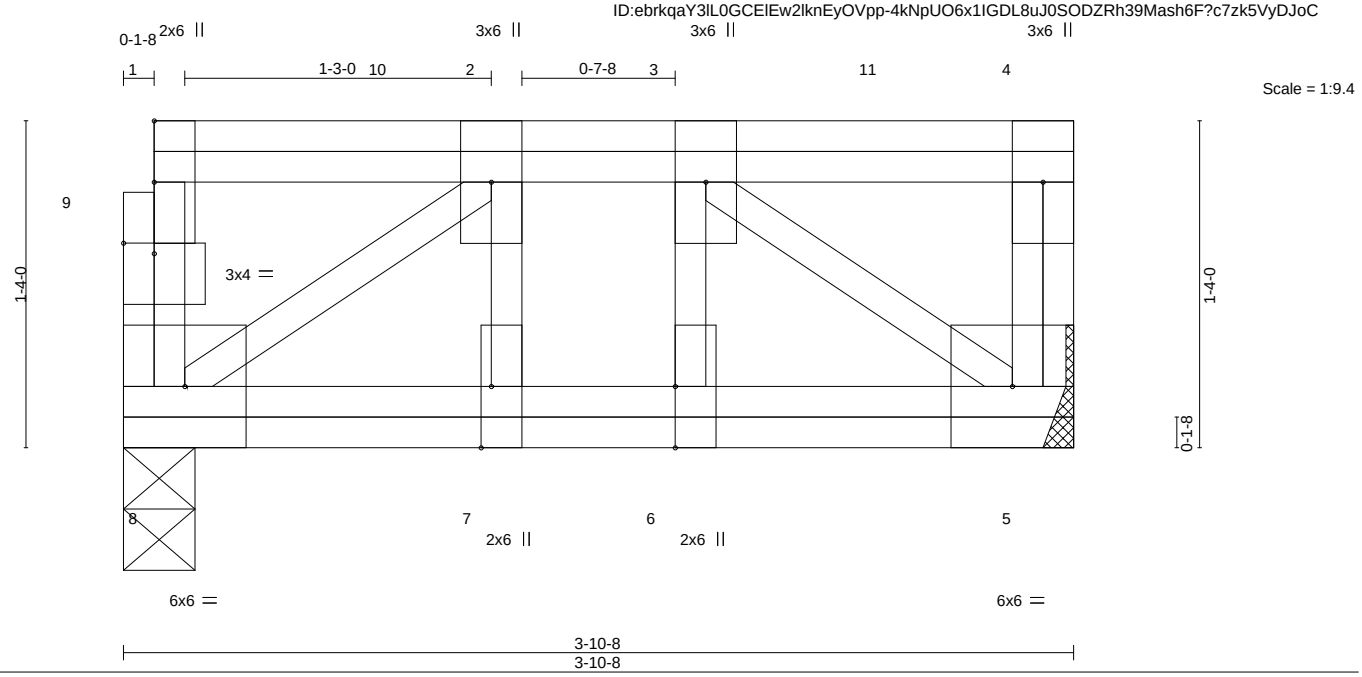


Plate Offsets (X,Y)-- [6:0-3-0,0-0-0], [7:0-3-0,Edge], [9:0-1-8,0-0-8]

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	0.11	Vert(LL)	-0.00	7	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.04	Vert(CT)	-0.00	7	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.08	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 35 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)

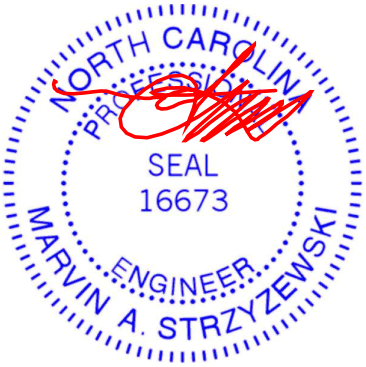
BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-8, 5=Mechanical
Max Grav 8=325(LC 1), 5=370(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-282/0
BOT CHORD 7-8=0/284, 6-7=0/282, 5-6=0/282
WEBS 3-5=-353/0, 2-8=-343/0

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) 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.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 197 lb down at 1-2-0, and 219 lb down at 3-2-0 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: 5-8=-10, 1-4=-100
Concentrated Loads (lb)
Vert: 10=-142(F) 11=-161(F)

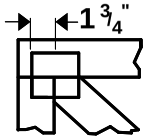


December 2,2021

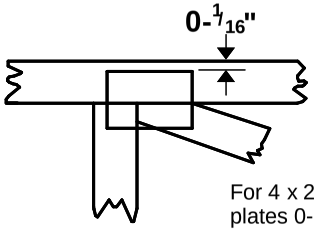
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

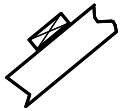
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

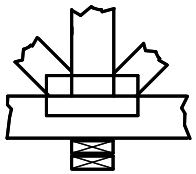
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

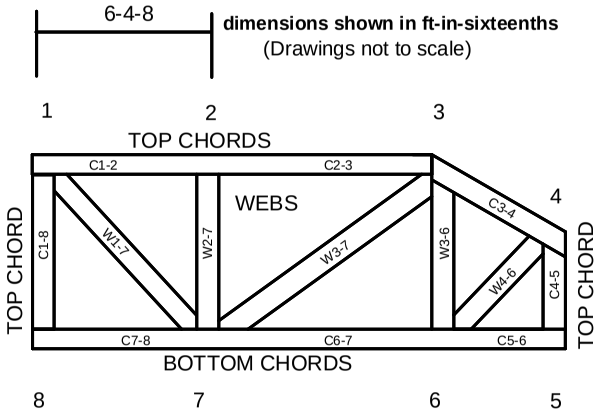


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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 BY TRENCO
A MiTek Affiliate

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.