ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 1621630
STURTZ HOMES-ROLLINS 2ND FLR

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: E12546398 thru E12546415

My license renewal date for the state of North Carolina is December 31, 2018.

North Carolina COA: C-0844

December 21,2018

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	STURTZ HOMES-ROLLINS 2ND FLR
1621630	F1	FLOOR	13	1	E12546398 Job Reference (optional)

Builders First Source, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:10 2018 Page 1
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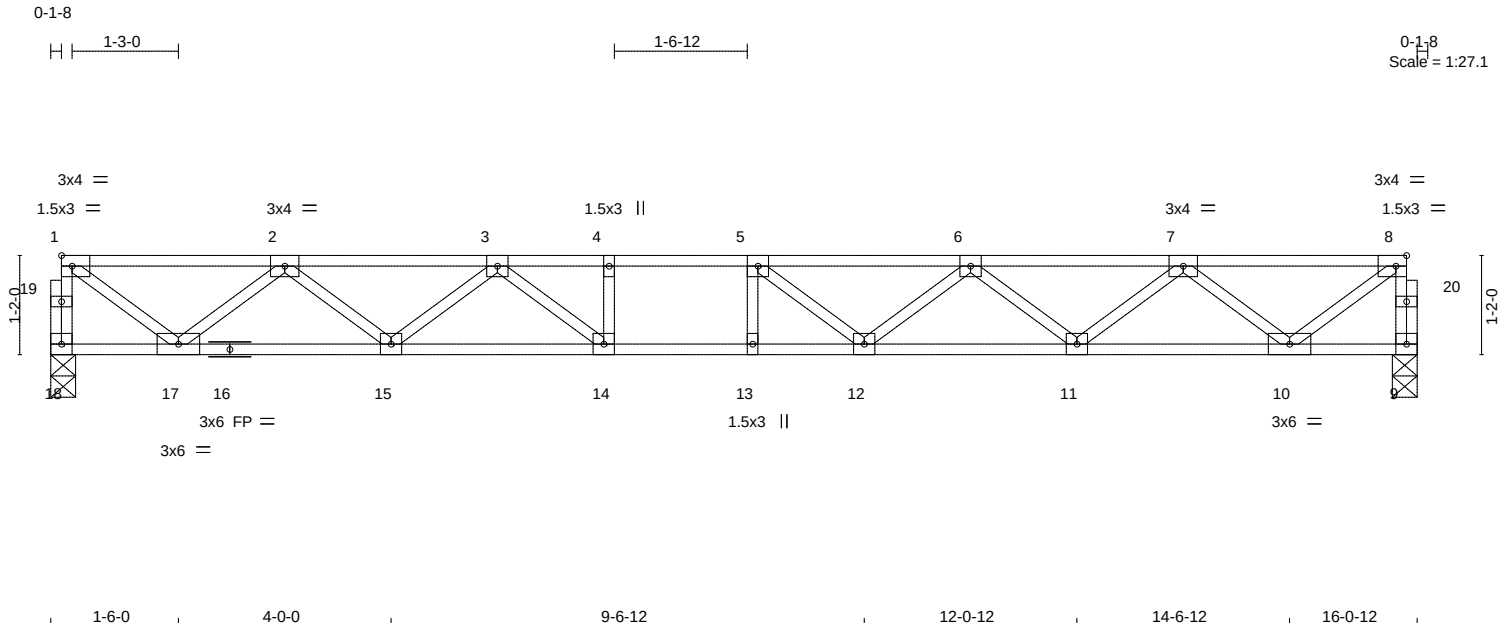

Plate Offsets (X,Y)-- [8:0-1-8,Edge]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.53	Vert(LL)	-0.19	12-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.99	Vert(CT)	-0.26	12-13	>732	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.04	9	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-S							Weight: 80 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, Except: 2-2-0 oc bracing: 13-14,12-13.

REACTIONS. (lb/size) 18=690/0-3-8, 9=690/0-3-8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-18=-688/0, 8-9=-687/0, 1-2=-804/0, 2-3=-1918/0, 3-4=-2602/0, 4-5=-2602/0, 5-6=-2502/0, 6-7=-1933/0, 7-8=-799/0
BOT CHORD 15-17=0/1505, 14-15=0/2327, 13-14=0/2602, 12-13=0/2602, 11-12=0/2346, 10-11=0/1500
WEBS 8-10=0/968, 1-17=0/974, 7-10=-912/0, 2-17=-912/0, 7-11=0/564, 2-15=0/538, 6-11=-538/0, 3-15=-532/0, 6-12=0/297, 3-14=0/526, 5-12=-329/89

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x3 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	STURTZ HOMES-ROLLINS 2ND FLR
1621630	F1E	Floor Supported Gable	1	1	E12546399 Job Reference (optional)

Builders First Source, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:13 2018 Page 1
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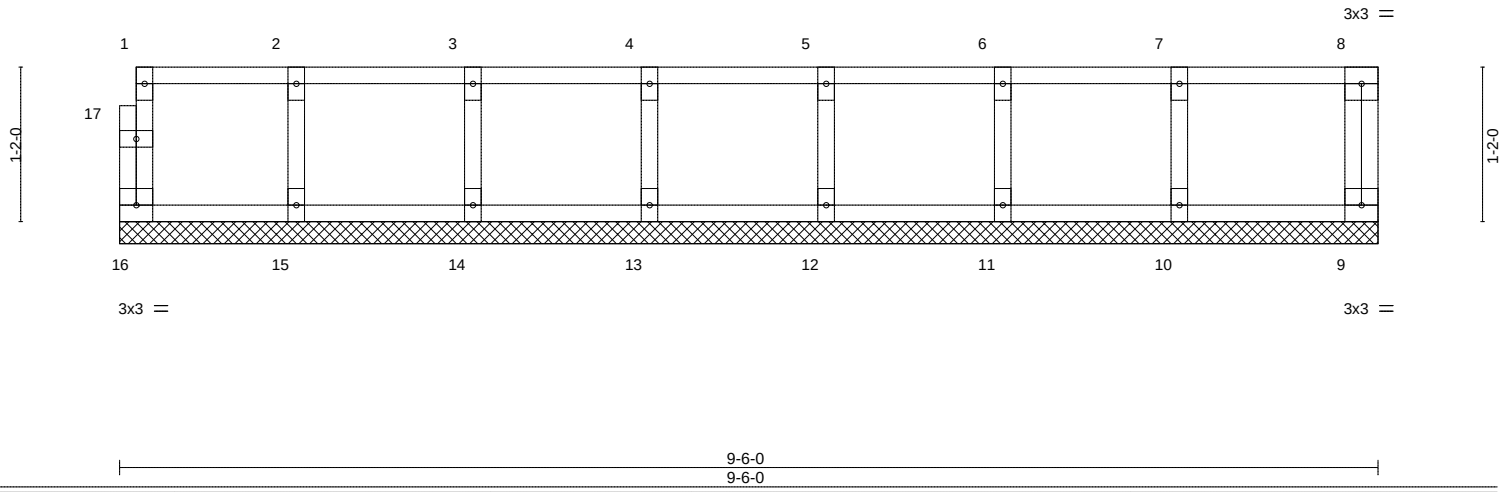

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	9	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-R							Weight: 41 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 9-6-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 16, 9, 15, 14, 13, 12, 11, 10

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

NOTES-
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) 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.
6) CAUTION, Do not erect truss backwards.

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Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES-ROLLINS 2ND FLR
1621630	F2	Floor	2	1	E12546400 Job Reference (optional)

Builders First Source, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:13 2018 Page 1
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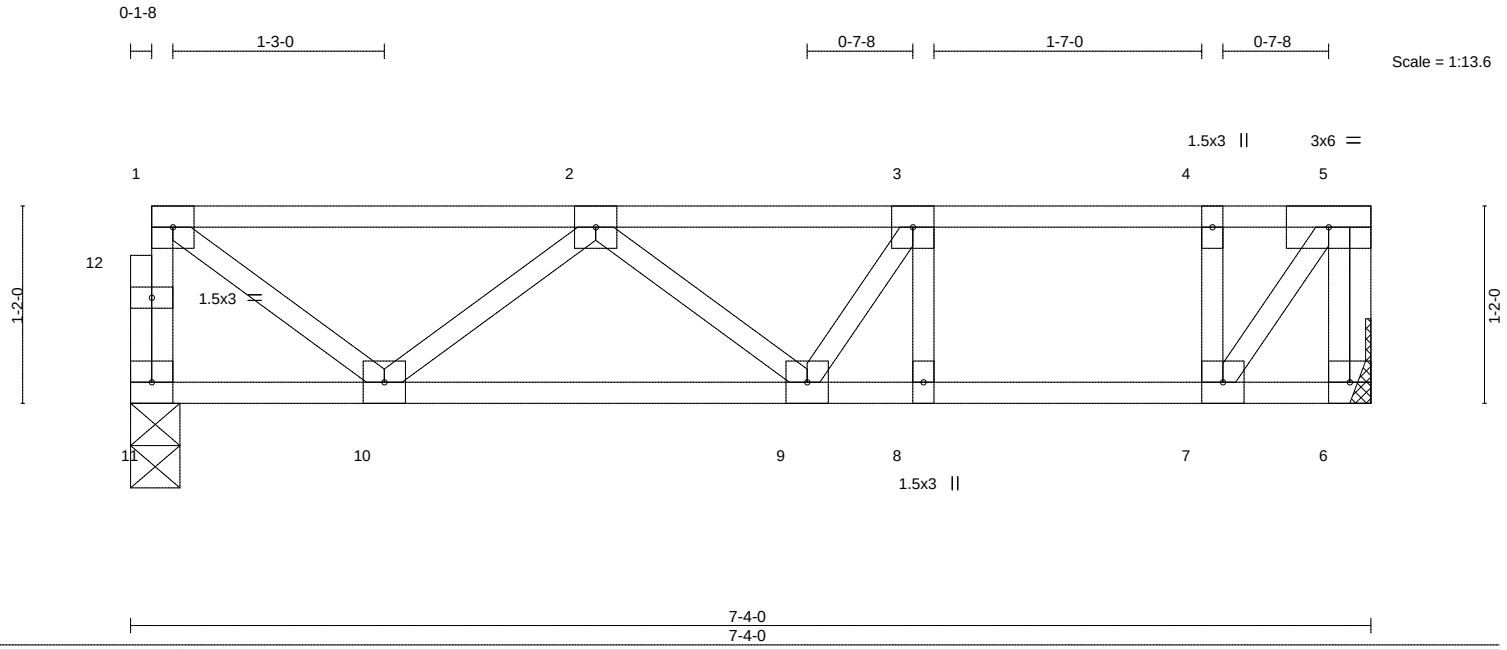

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.51	Vert(LL)	-0.05	8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.62	Vert(CT)	-0.07	8	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.00	6	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-S							Weight: 40 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) 11=306/0-3-8, 6=311/Mechanical

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-11=-301/0, 5-6=-404/0, 1-2=-297/0, 2-3=-498/0, 3-4=-370/0, 4-5=-370/0
BOT CHORD 9-10=0/550, 8-9=0/370, 7-8=0/370
WEBS 1-10=0/356, 2-10=-329/0, 5-7=0/601, 4-7=-274/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x3 MT20 unless otherwise indicated.
3) Refer to girder(s) for truss to truss connections.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) CAUTION, Do not erect truss backwards.

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Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES-ROLLINS 2ND FLR
1621630	F2E	Floor Supported Gable	1	1	E12546401 Job Reference (optional)

Builders First Source, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:14 2018 Page 1
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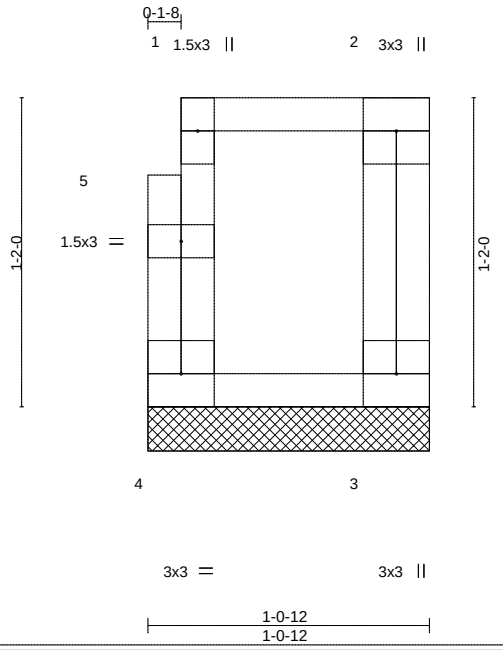

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-R							Weight: 8 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 1-0-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 4=39/1-0-12, 3=44/1-0-12

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.

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Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES-ROLLINS 2ND FLR
1621630	F2G	Floor Girder	1	1	E12546402 Job Reference (optional)

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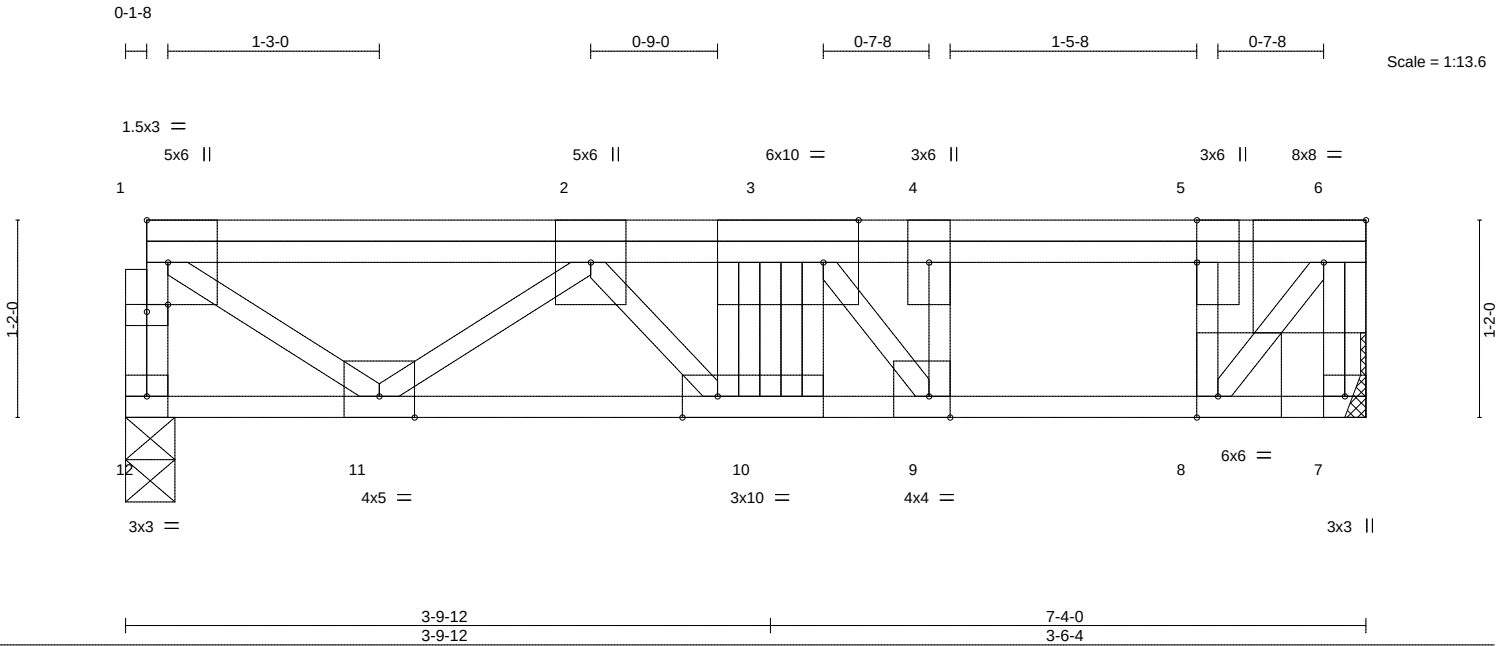

Plate Offsets (X,Y)-- [1:0-1-8,0-0-8], [3:0-2-8,Edge], [5:0-3-0,0-0-0], [6:0-3-0,Edge], [8:0-1-8,Edge], [9:0-1-8,Edge], [10:0-2-8,Edge]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.78	Vert(LL)	-0.08	9-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.58	Vert(CT)	-0.11	9-10	>799	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.99	Horz(CT)	0.01	7	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-S							Weight: 54 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP DSS(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) 12=833/0-3-8, 7=890/Mechanical

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-12=-824/0, 6-7=-1039/0, 1-2=-1033/0, 2-3=-2520/0, 3-4=-1324/0, 4-5=-1324/0, 5-6=-1324/0
BOT CHORD 10-11=0/1942, 9-10=0/2555, 8-9=0/1324
WEBS 3-10=-414/0, 1-11=0/1258, 2-11=-1155/0, 2-10=0/802, 3-9=-1766/0, 4-9=0/990, 6-8=0/2073, 5-8=-1278/0

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.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 7-12=-8, 1-6=-80
Concentrated Loads (lb)
Vert: 3=-1100

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Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES-ROLLINS 2ND FLR
1621630	F3	Floor	1	1	E12546403 Job Reference (optional)

Builders First Source, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:15 2018 Page 1
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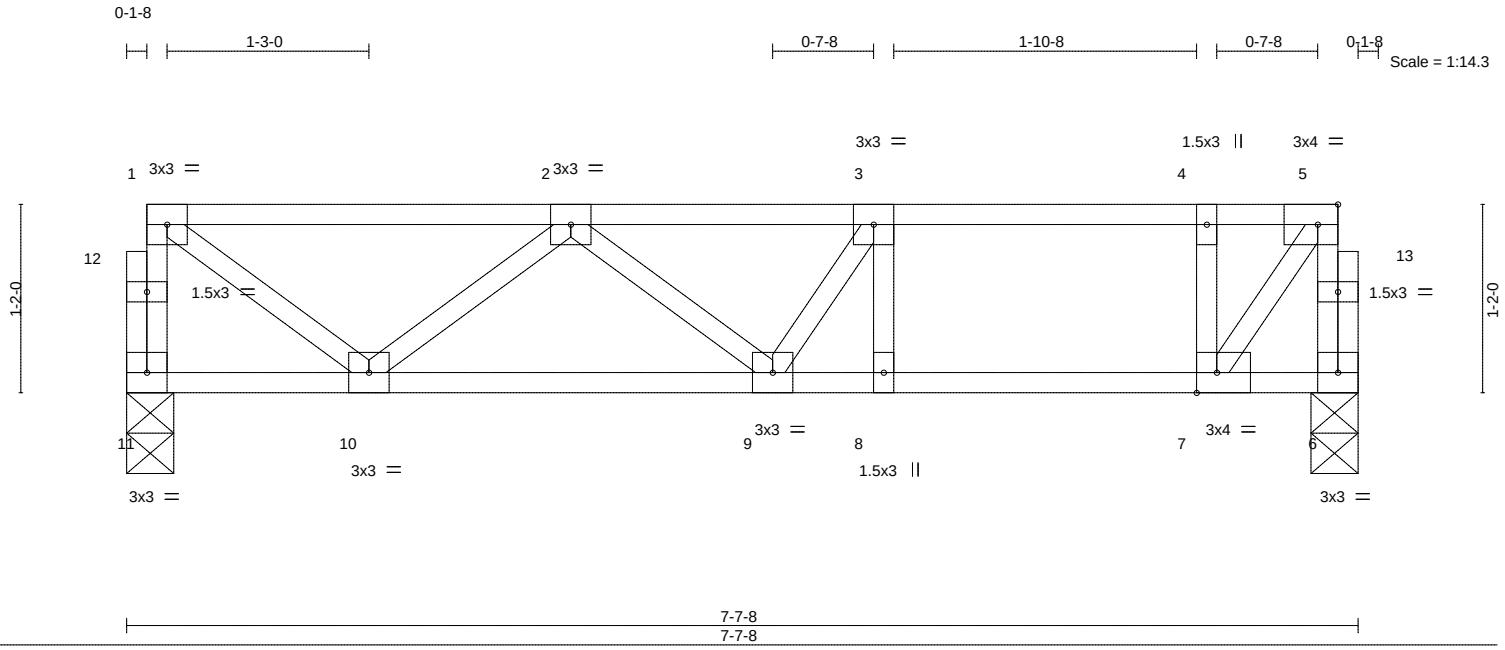

Plate Offsets (X,Y)-- [5:0-1-8,Edge], [7:0-1-8,Edge]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.55	Vert(LL)	-0.07	8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.72	Vert(CT)	-0.10	8	>904	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.00	6	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-S							Weight: 40 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) 11=319/0-3-8, 6=319/0-3-8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-11=-313/0, 5-6=-428/0, 1-2=-314/0, 2-3=-544/0, 3-4=-409/0, 4-5=-409/0
BOT CHORD 9-10=0/583, 8-9=0/409, 7-8=0/409
WEBS 5-7=0/657, 4-7=-319/0, 1-10=0/376, 2-10=-351/0, 3-9=0/252

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) 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	STURTZ HOMES-ROLLINS 2ND FLR
1621630	F3G	Floor Girder	1	1	E12546404 Job Reference (optional)

Builders First Source, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:16 2018 Page 1
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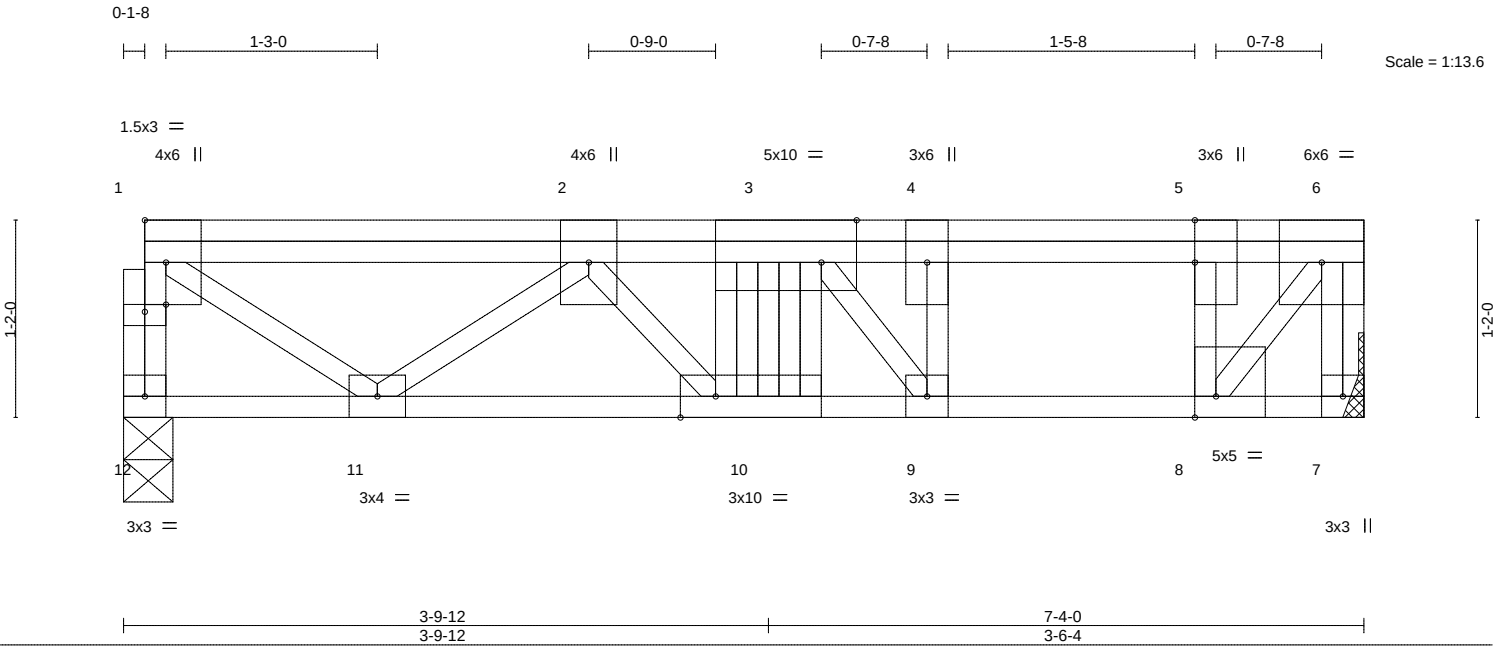

Plate Offsets (X,Y)-- [1:0-1-8,0-0-8], [3:0-2-8,Edge], [5:0-3-0,0-0-0], [8:0-1-8,Edge], [10:0-2-8,Edge]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.46	Vert(LL)	-0.04	9-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.31	Vert(CT)	-0.06	9-10	>999	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.66	Horz(CT)	0.01	7	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-S							Weight: 54 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP DSS(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) 12=736/0-3-8, 7=736/Mechanical

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-12=-729/0, 6-7=-814/0, 1-2=-718/0, 2-3=-1354/0, 3-4=-891/0, 4-5=-891/0, 5-6=-891/0
BOT CHORD 10-11=0/1343, 9-10=0/1347, 8-9=0/891
WEBS 1-11=0/873, 2-11=-796/0, 3-9=-671/0, 4-9=0/332, 6-8=0/1395, 5-8=-900/0

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.
5) 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: 7-12=-8, 1-6=-200(F=-120)

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Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES-ROLLINS 2ND FLR
1621630	F4	Floor	4	1	E12546405 Job Reference (optional)

Builders First Source, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:17 2018 Page 1
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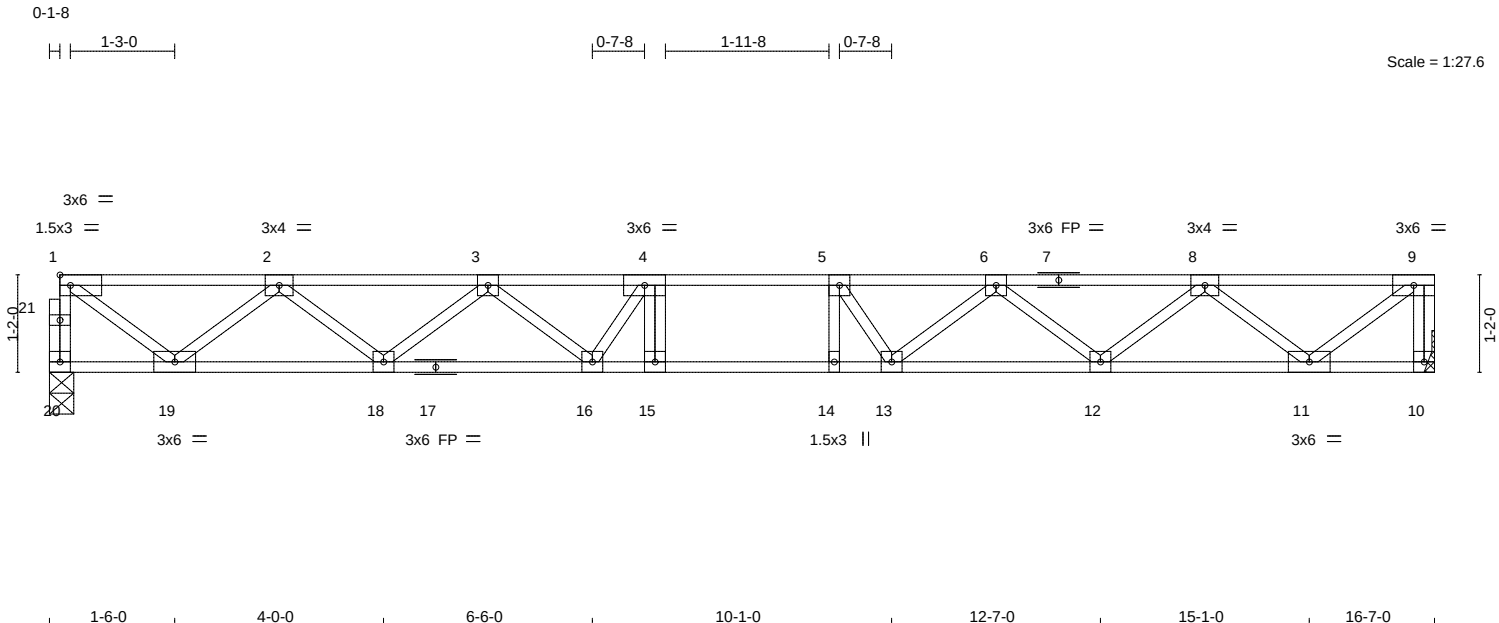


LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.40	Vert(LL)	-0.19	14-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	1.00	Vert(CT)	-0.26	14-15	>740	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.05	10	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-S							Weight: 85 lb	FT = 20%F, 11%E

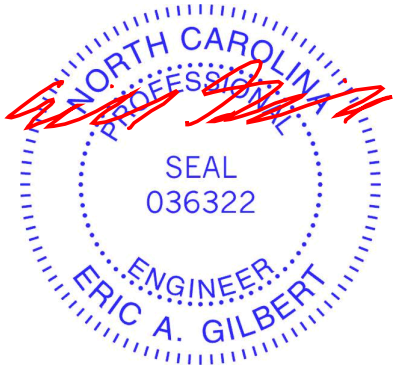
LUMBER-
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

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, Except: 2-2-0 oc bracing: 15-16,14-15.

REACTIONS. (lb/size) 20=713/0-3-8, 10=718/Mechanical

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-20=-709/0, 9-10=-713/0, 1-2=-831/0, 2-3=-2013/0, 3-4=-2661/0, 4-5=-2782/0, 5-6=-2663/0, 6-8=-2014/0, 8-9=-829/0
BOT CHORD 18-19=0/1562, 16-18=0/2440, 15-16=0/2782, 14-15=0/2782, 13-14=0/2782, 12-13=0/2438, 11-12=0/1564
WEBS 9-11=0/1041, 1-19=0/1006, 8-11=-957/0, 2-19=-952/0, 8-12=0/585, 2-18=0/587, 6-12=-552/0, 3-18=-555/0, 6-13=0/400, 3-16=0/392, 5-13=-431/69, 4-16=-420/66

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x3 MT20 unless otherwise indicated.
3) Refer to girder(s) for truss to truss connections.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) CAUTION, Do not erect truss backwards.



December 21,2018

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

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES-ROLLINS 2ND FLR
1621630	F4E	Floor Supported Gable	1	1	E12546406 Job Reference (optional)

Builders First Source, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:17 2018 Page 1
ID:o4ssQVnCuCZBoXusHbZGawyWRuY-DmON?s0IsjmJ8RK7DfkIKl350E6Ugta4_X5h8Dy71ey

0-1-8

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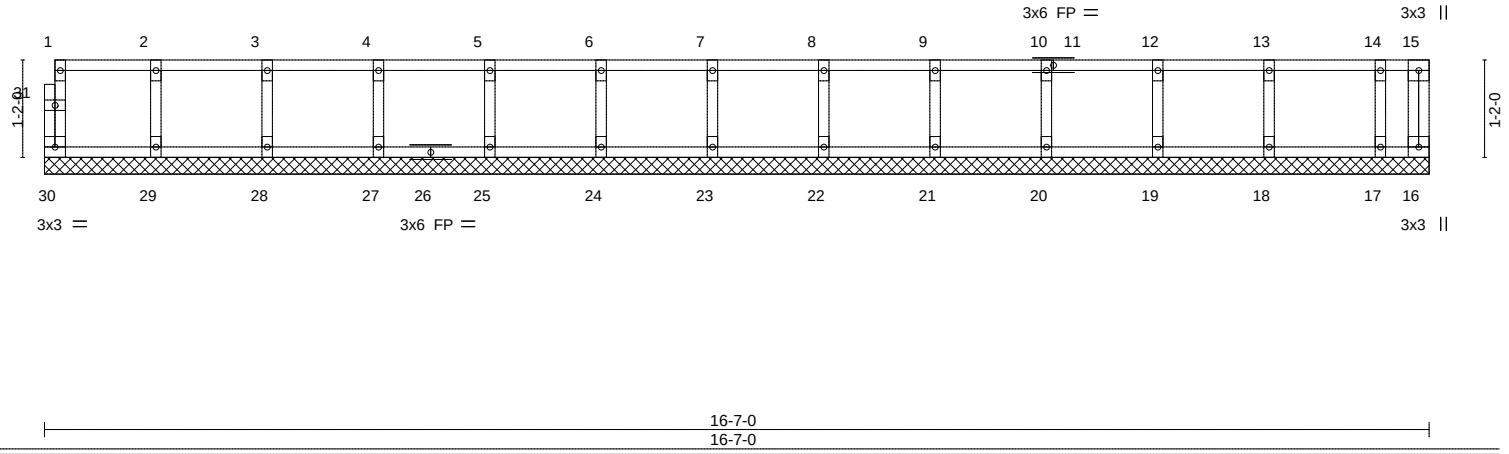

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	16	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-R							Weight: 71 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 16-7-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 30, 16, 29, 28, 27, 25, 24, 23, 22, 21, 20, 19, 18, 17

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.
6) CAUTION, Do not erect truss backwards.

December 21,2018

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES-ROLLINS 2ND FLR
1621630	F5	Floor	3	1	E12546407
					Job Reference (optional)

Builders First Source, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:18 2018 Page 1
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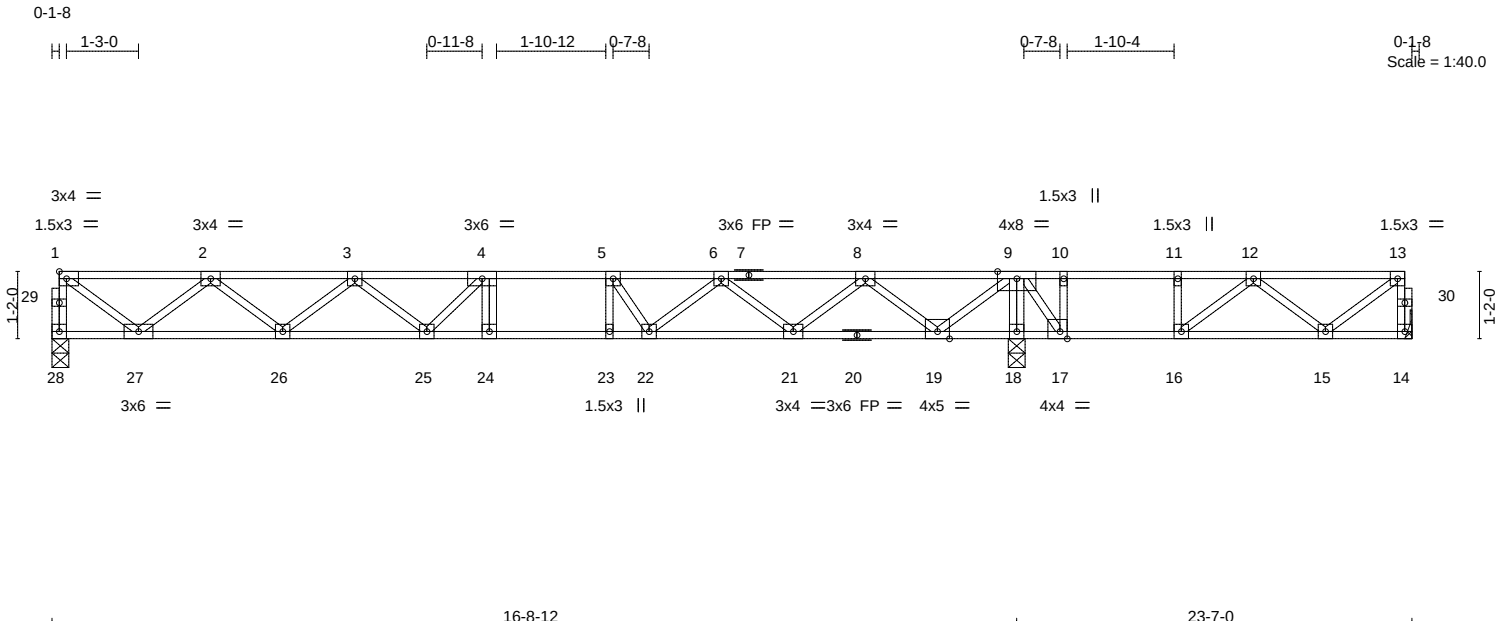

16-8-12 | 23-7-0
16-8-12 | 6-10-4

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

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.96	Vert(LL)	-0.19	24	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.81	Vert(CT)	-0.26	24	>773	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.04	18	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-S							Weight: 119 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.1(flat) *Except*
14-20: 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS. (lb/size) 28=686/0-3-8, 14=193/Mechanical, 18=1163/0-3-8
Max Uplift 14=-50(LC 3)
Max Grav 28=686(LC 10), 14=297(LC 4), 18=1163(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-28=-682/0, 13-14=-305/38, 1-2=-795/0, 2-3=-1917/0, 3-4=-2484/0, 4-5=-2565/0, 5-6=-2364/0, 6-8=-1584/0, 8-9=-291/0, 9-10=-392/501, 10-11=-392/501, 11-12=-392/501, 12-13=-300/64
BOT CHORD 26-27=0/1492, 25-26=0/2321, 24-25=0/2565, 23-24=0/2565, 22-23=0/2565, 21-22=0/2067, 19-21=0/1074, 18-19=-806/34, 17-18=-822/26, 16-17=-501/392, 15-16=-203/504
WEBS 9-18=-1327/0, 1-27=0/962, 9-19=0/1127, 2-27=-908/0, 8-19=-1038/0, 2-26=0/553, 8-21=0/687, 3-26=-526/0, 6-21=-650/0, 3-25=0/311, 6-22=0/440, 4-25=-333/82, 5-22=-509/0, 9-17=0/865, 10-17=-396/0, 13-15=-79/360, 12-15=-265/181, 12-16=-421/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x3 MT20 unless otherwise indicated.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 50 lb uplift at joint 14.
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 21,2018

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

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES-ROLLINS 2ND FLR
1621630	F6	Floor	6	1	E12546408 Job Reference (optional)

Builders First Source, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:20 2018 Page 1
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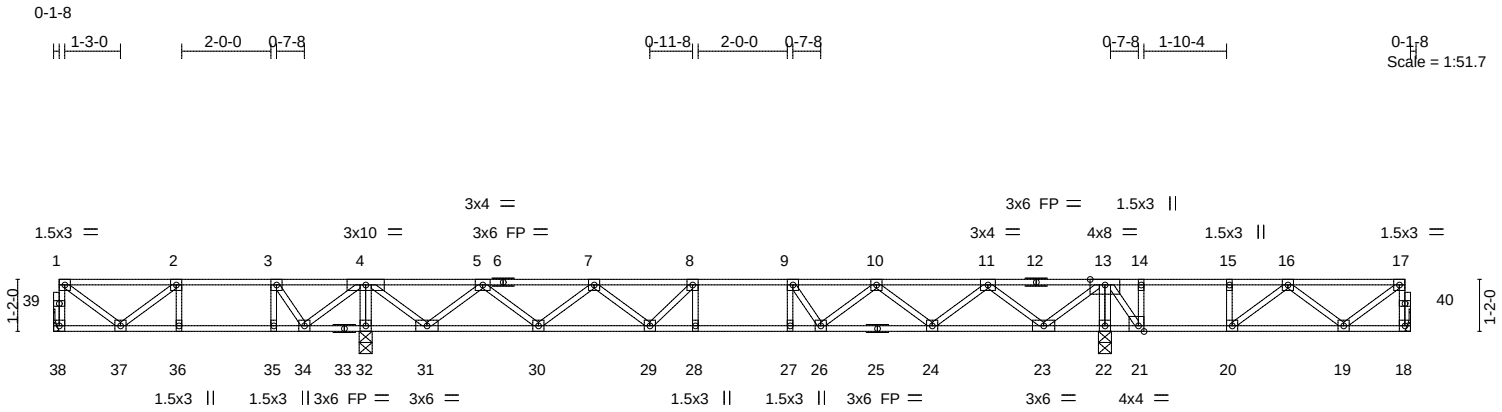

	7-0-0	23-7-0	30-5-4
	7-0-0	16-7-0	6-10-4

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

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.95	Vert(LL)	-0.16	28	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.85	Vert(CT)	-0.21	27-28	>936	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.03	18	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-S							Weight: 153 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 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings Mechanical except (jt=length) 32=0-3-8, 22=0-3-8.
(lb) - Max Uplift All uplift 100 lb or less at joint(s) 38, 18
Max Grav All reactions 250 lb or less at joint(s) except 38=268(LC 5), 18=297(LC 5), 32=1168(LC 16), 22=1113(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-38=-270/37, 17-18=-305/34, 2-3=-381/324, 3-4=-155/573, 5-7=-1372/0, 7-8=-2049/0, 8-9=-2212/0, 9-10=-2085/0, 10-11=-1420/0, 11-13=-256/0, 13-14=-392/480, 14-15=-392/480, 15-16=-392/480, 16-17=-300/59
BOT CHORD 36-37=-324/381, 35-36=-324/381, 34-35=-324/381, 32-34=-910/0, 31-32=-910/0, 30-31=0/894, 29-30=0/1822, 28-29=0/2212, 27-28=0/2212, 26-27=0/2212, 24-26=0/1853, 23-24=0/964, 22-23=-777/34, 21-22=-792/26, 20-21=-480/392, 19-20=-192/504
WEBS 4-32=-1117/0, 13-22=-1277/0, 1-37=-117/281, 4-34=0/560, 2-37=-185/293, 3-34=-675/0, 3-35=0/343, 13-23=0/1041, 4-31=0/1053, 11-23=-954/0, 5-31=-990/0, 11-24=0/608, 5-30=0/650, 10-24=-575/0, 7-30=-613/0, 10-26=0/350, 7-29=0/359, 9-26=-362/31, 8-29=-394/0, 13-21=0/856, 14-21=-392/0, 17-19=-72/360, 16-19=-265/173, 16-20=-410/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x3 MT20 unless otherwise indicated.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 38, 18.
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 21,2018

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

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES-ROLLINS 2ND FLR
1621630	F7	Floor	2	1	E12546409 Job Reference (optional)

Builders First Source, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:22 2018 Page 1
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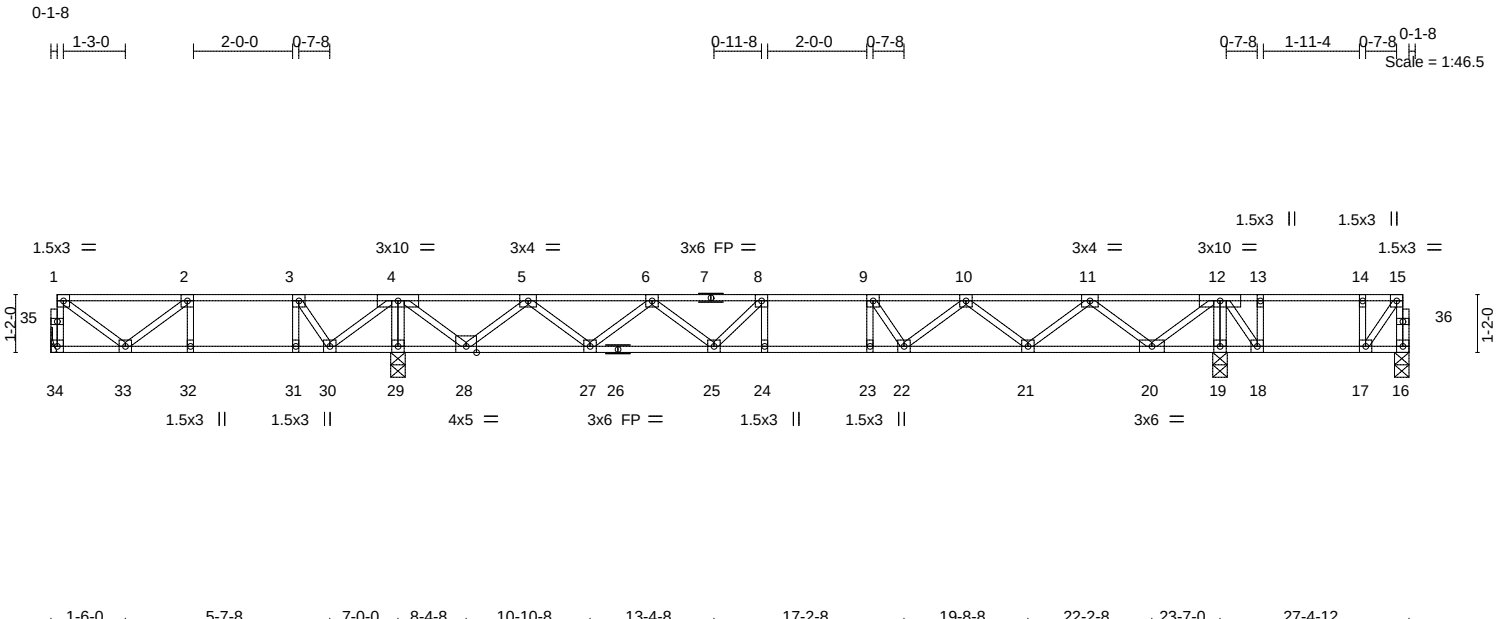

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.60	Vert(LL)	-0.16	23-24	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.86	Vert(CT)	-0.22	23-24	>921	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.03	19	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-S							Weight: 138 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 6-0-0 oc bracing.

REACTIONS. All bearings 0-3-8 except (jt=length) 34=Mechanical.
(lb) - Max Uplift All uplift 100 lb or less at joint(s) 34, 16
Max Grav All reactions 250 lb or less at joint(s) 16 except 34=270(LC 5), 29=1177(LC 16), 19=1018(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-34=-272/38, 2-3=-388/328, 3-4=-166/579, 5-6=-1392/0, 6-8=-2088/0, 8-9=-2265/0, 9-10=-2149/0, 10-11=-1504/0, 11-12=-350/0
BOT CHORD 32-33=-328/388, 31-32=-328/388, 30-31=-328/388, 29-30=-918/0, 28-29=-918/0, 27-28=0/905, 25-27=0/1851, 24-25=0/2265, 23-24=0/2265, 22-23=0/2265, 21-22=0/1930, 20-21=0/1056, 19-20=-474/0, 18-19=-490/0
WEBS 4-29=-1125/0, 12-19=-1111/0, 1-33=-119/284, 4-30=0/562, 2-33=-191/296, 3-30=-679/0, 3-31=0/346, 12-20=0/1011, 4-28=0/1064, 11-20=-930/0, 5-28=-1001/0, 11-21=0/587, 5-27=0/660, 10-21=-554/0, 6-27=-623/0, 10-22=0/361, 6-25=0/369, 9-22=-379/45, 8-25=-407/0, 15-17=-345/78, 12-18=0/565, 13-18=-261/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x3 MT20 unless otherwise indicated.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 34.
5) Two HTS20 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16. This connection is for uplift only and does not consider lateral forces.
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 21,2018

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

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES-ROLLINS 2ND FLR
1621630	F8	Floor	2	1	E12546410
					Job Reference (optional)

Builders First Source, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:23 2018 Page 1
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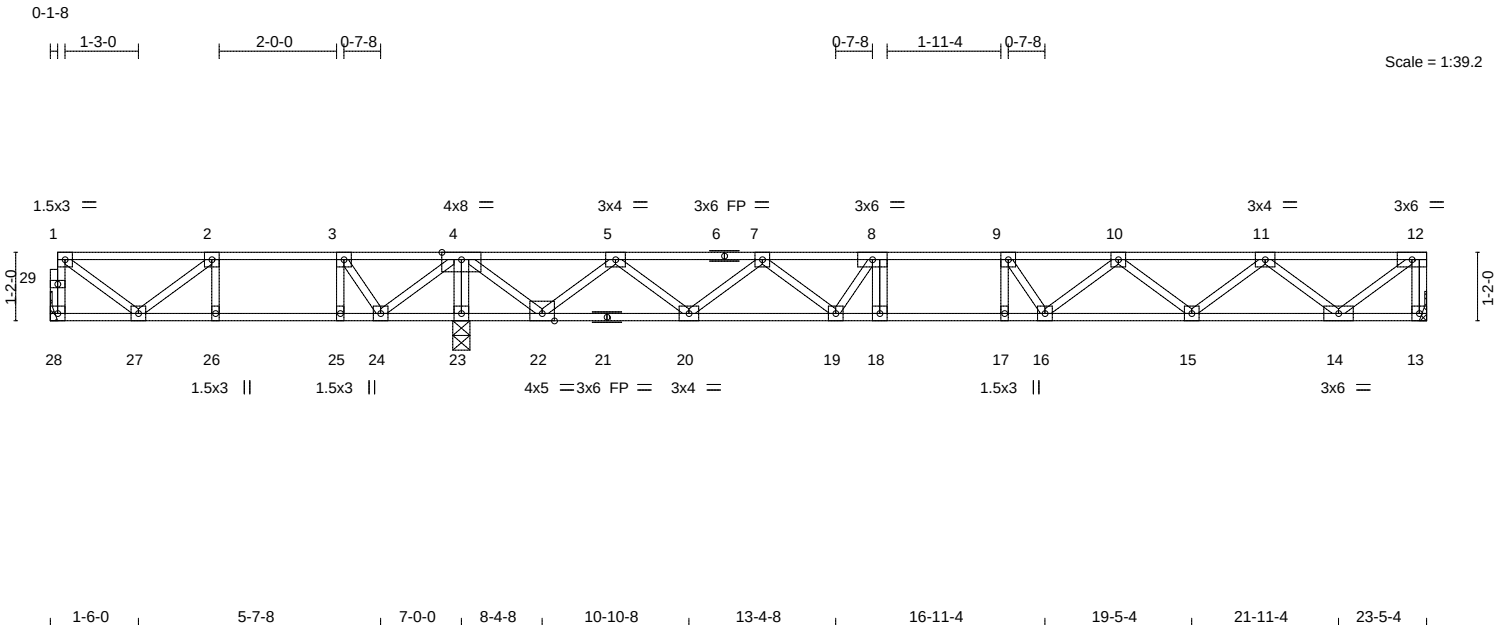

1-6-0	5-7-8	7-0-0	8-4-8	10-10-8	13-4-8	16-11-4	19-5-4	21-11-4	23-5-4
1-6-0	4-1-8	1-4-8	1-4-8	2-6-0	2-6-0	3-6-12	2-6-0	2-6-0	1-6-0

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.56	Vert(LL)	-0.17	17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.83	Vert(CT)	-0.23	17	>859	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.03	13	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-S							Weight: 119 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except*
13-21: 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. (lb/size) 28=182/Mechanical, 13=669/Mechanical, 23=1184/0-3-8
Max Uplift 28=-40(LC 4)
Max Grav 28=272(LC 3), 13=675(LC 7), 23=1184(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-28=-274/31, 12-13=-670/0, 2-3=-396/299, 3-4=-177/538, 5-7=-1507/0, 7-8=-2257/0, 8-9=-2446/0, 9-10=-2394/0, 10-11=-1854/0, 11-12=-772/0
BOT CHORD 26-27=-299/396, 25-26=-299/396, 24-25=-299/396, 23-24=-867/0, 22-23=-867/0, 20-22=0/1005, 19-20=0/1979, 18-19=0/2446, 17-18=0/2446, 16-17=0/2446, 15-16=0/2231, 14-15=0/1455
WEBS 4-23=-1134/0, 1-27=-106/288, 4-24=0/547, 2-27=-197/274, 3-24=-655/0, 3-25=0/330, 12-14=0/969, 4-22=0/1092, 11-14=-888/0, 5-22=-1028/0, 11-15=0/520, 5-20=0/681, 10-15=-490/0, 7-20=-640/0, 10-16=0/314, 7-19=0/430, 9-16=-313/140, 8-19=-488/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x3 MT20 unless otherwise indicated.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 28.
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 21,2018

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES-ROLLINS 2ND FLR
1621630	F9	Floor	3	1	E12546411
					Job Reference (optional)

Builders First Source, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:23 2018 Page 1
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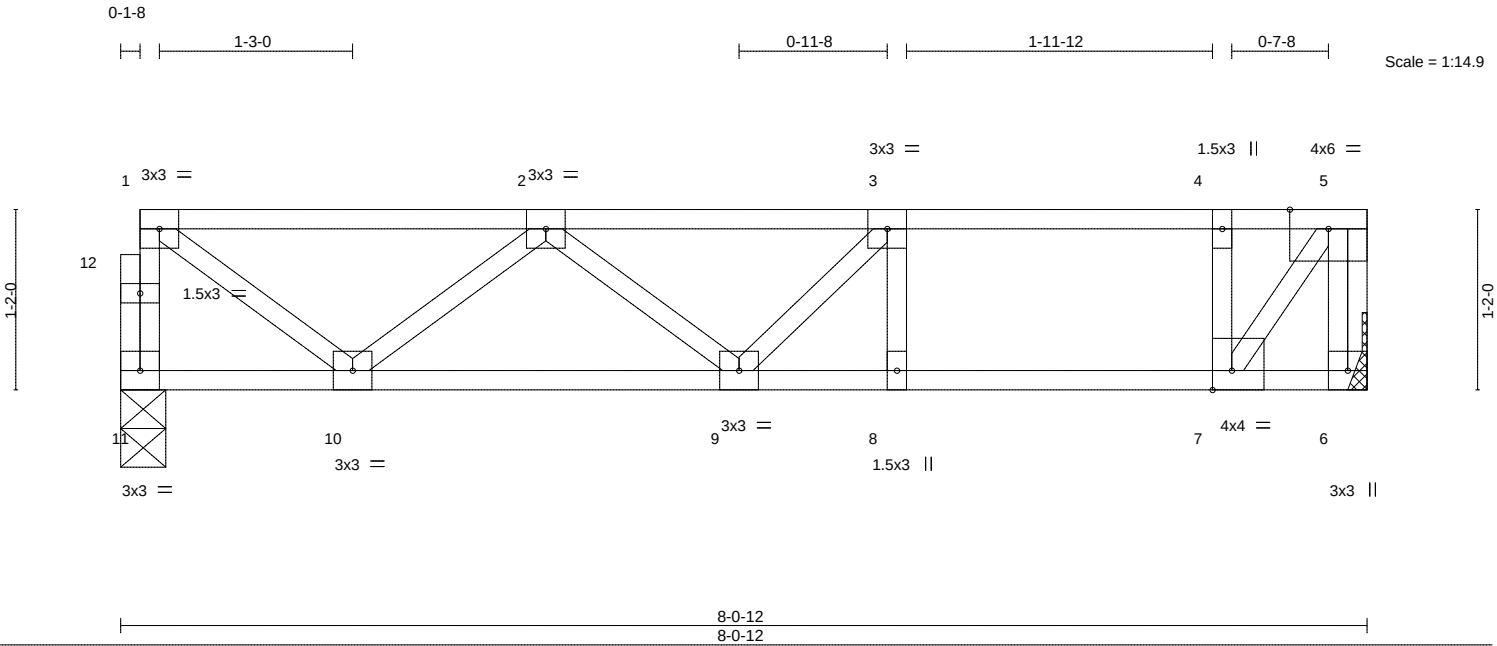

Plate Offsets (X,Y)-- [7:0-1-8,Edge]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.64	Vert(LL)	-0.10	8-9	>959	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.84	Vert(CT)	-0.13	8-9	>704	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.00	6	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-S							Weight: 42 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) 11=339/0-3-8, 6=344/Mechanical

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-11=-331/0, 5-6=-474/0, 1-2=-341/0, 2-3=-616/0, 3-4=-458/0, 4-5=-458/0
BOT CHORD 9-10=0/640, 8-9=0/458, 7-8=0/458
WEBS 5-7=0/744, 4-7=-341/0, 1-10=0/409, 2-10=-390/0

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.

December 21,2018

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES-ROLLINS 2ND FLR
1621630	F9E	Floor Supported Gable	1	1	E12546412 Job Reference (optional)

Builders First Source, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:24 2018 Page 1
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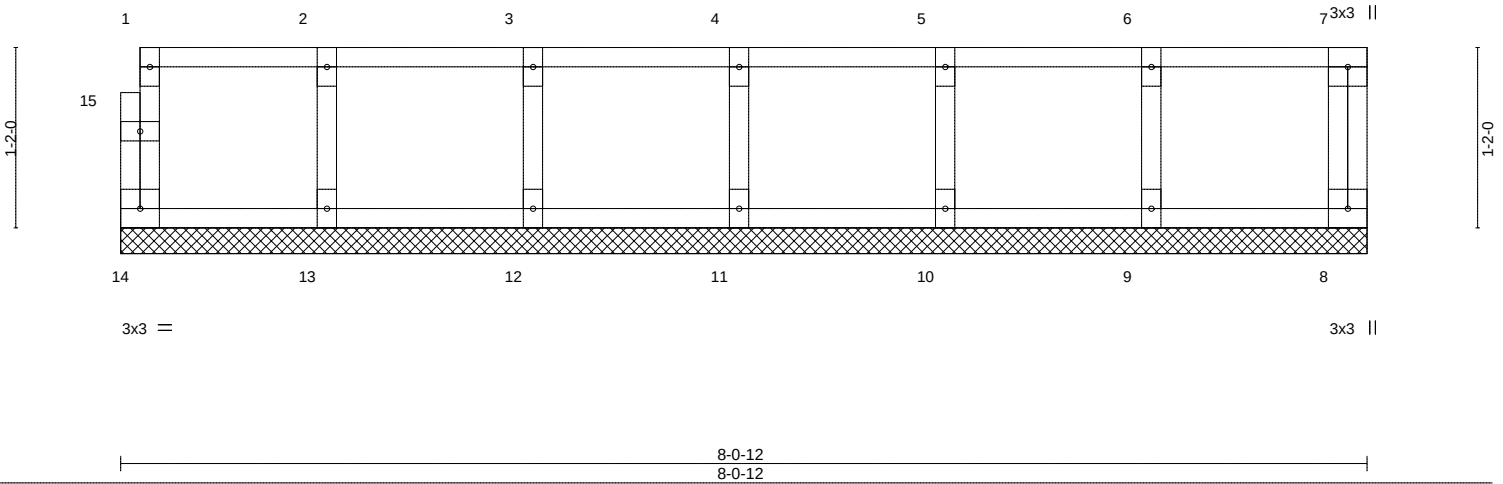
0-1-8

Scale = 1:14.9



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	8	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-R							Weight: 36 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 8-0-12.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 14, 8, 13, 12, 11, 10, 9

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.
6) CAUTION, Do not erect truss backwards.

December 21,2018

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

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES-ROLLINS 2ND FLR
1621630	F10	Floor	1	1	E12546413 Job Reference (optional)

Builders First Source, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:11 2018 Page 1
ID:o4ssQVnCuCZBoXusHbZGawyWRuY-Oc16lpyXHt0AQWtztPdt5UpyXpyPG6PBcbeNxZy71f2

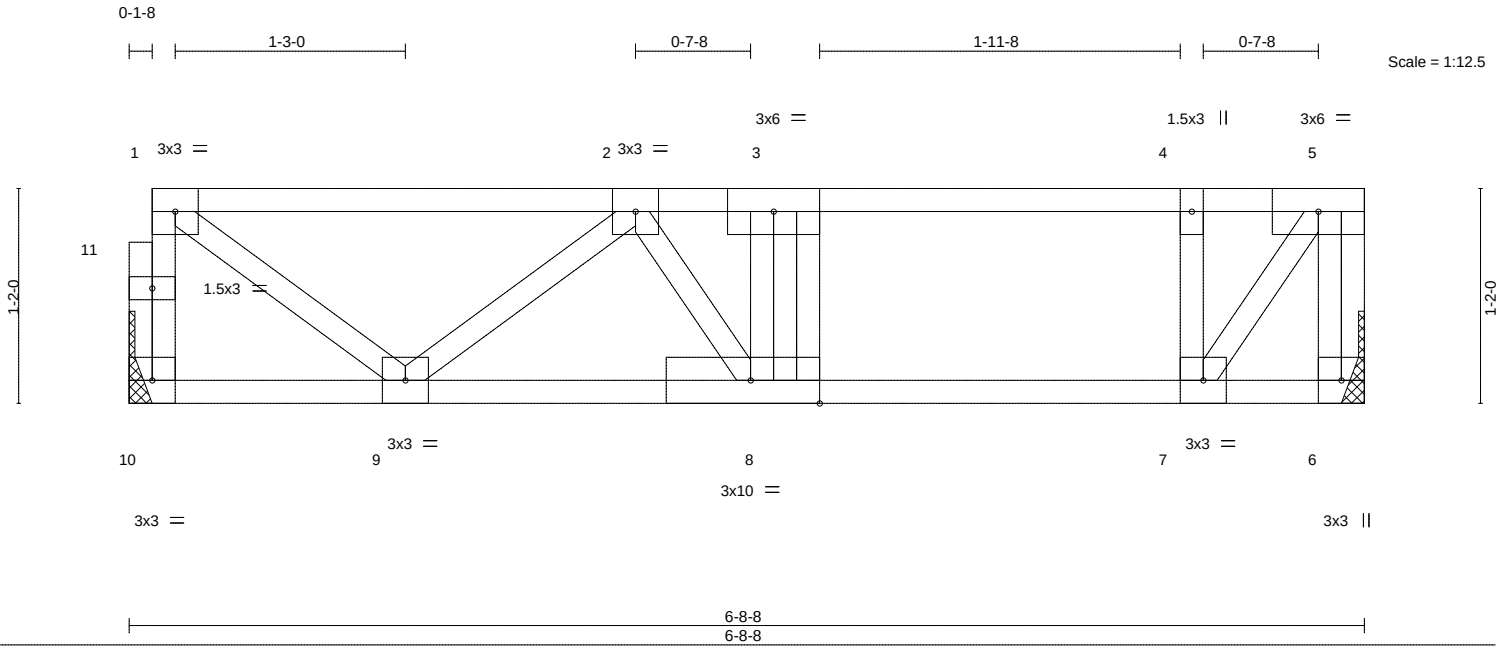


Plate Offsets (X,Y)-- [8:0-4-8,Edge]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.53	Vert(LL)	-0.06	8-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.51	Vert(CT)	-0.08	8-9	>992	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.00	6	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-S							Weight: 38 lb	FT = 20%F, 11%E

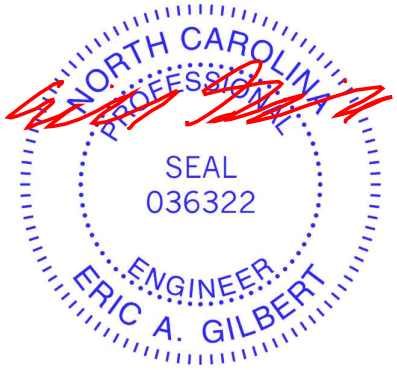
LUMBER-
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

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) 10=279/Mechanical, 6=284/Mechanical

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-10=-285/0, 5-6=-356/0, 1-2=-274/0, 2-3=-348/0, 3-4=-345/0, 4-5=-345/0
BOT CHORD 8-9=0/451, 7-8=0/345
WEBS 5-7=0/562, 4-7=-306/0, 1-9=0/328

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.



December 21,2018

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES-ROLLINS 2ND FLR
1621630	F11	Floor	1	1	E12546414 Job Reference (optional)

Builders First Source, 8.220 s Nov 16 2018 MiTek Industries, Inc. Thu Dec 20 15:08:12 2018 Page 1
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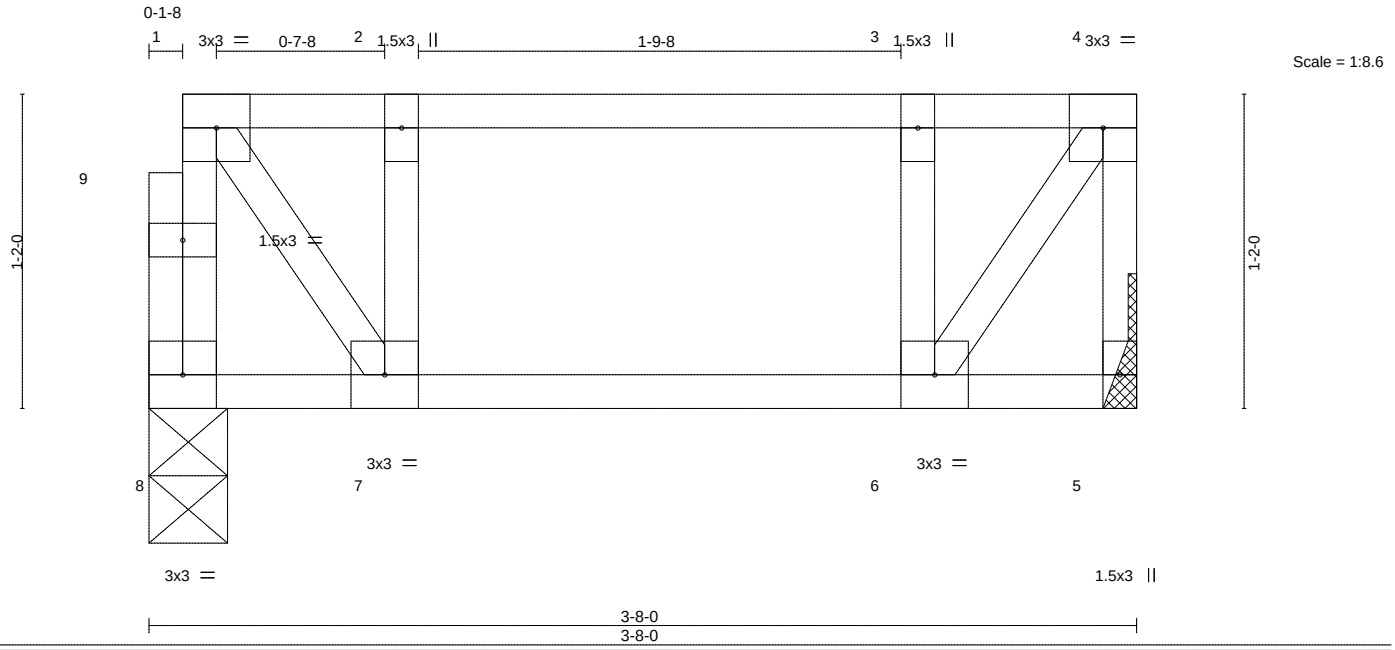


LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.12	Vert(LL)	-0.00	7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.05	Vert(CT)	-0.00	7	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-S							Weight: 21 lb	FT = 20%F, 11%E

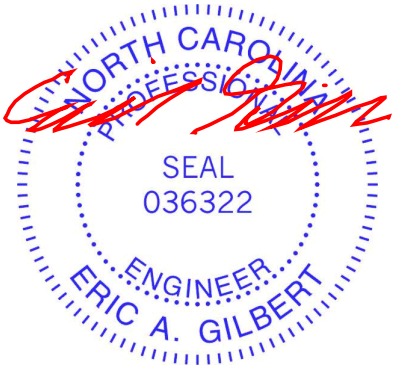
LUMBER-
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS. (lb/size) 8=148/0-3-8, 5=153/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.



December 21,2018

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TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES-ROLLINS 2ND FLR
1621630	F12	Floor	1	1	E12546415
					Job Reference (optional)

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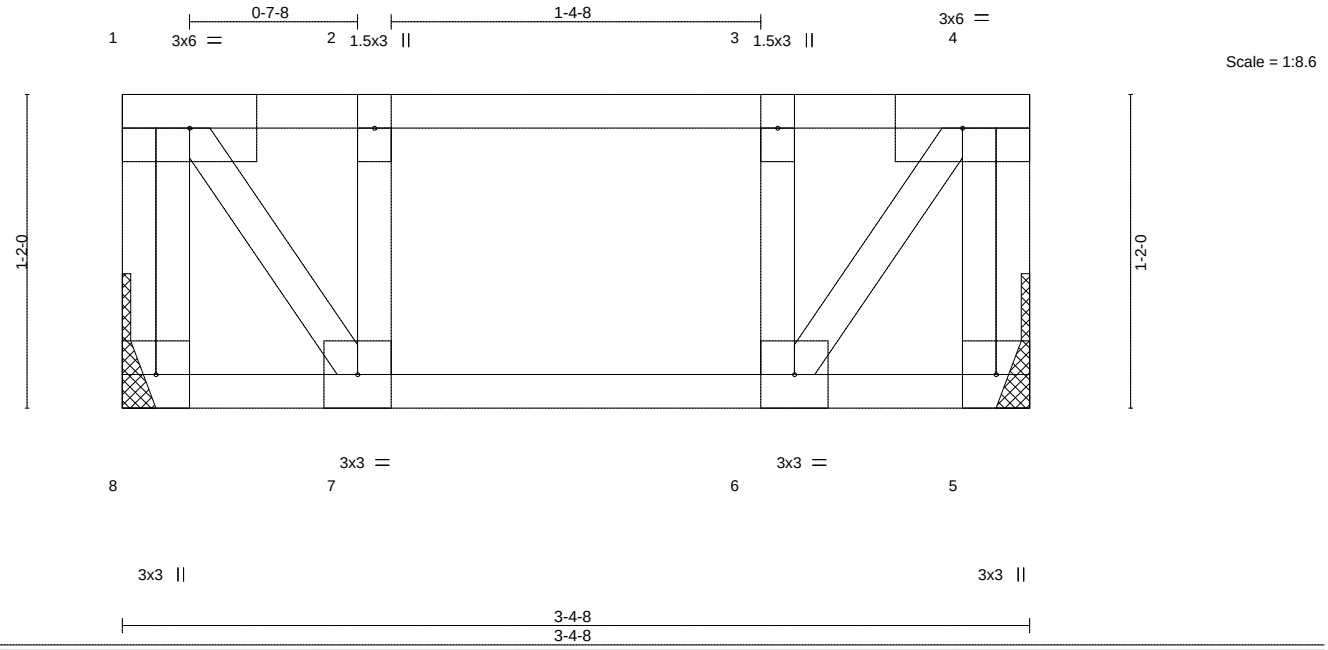
ID:o4ssQVnCuCZBoXusHbZGawyWRuY-spbUy9yA2B812gR9Q686dhMEQDP_?ckKrFOxT?y71f1



LOADING (psf)		SPACING-	1-7-3	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	7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.04	Vert(CT)	-0.00	7	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code IBC2015/TPI2014		Matrix-S							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)

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-4-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 8=137/Mechanical, 5=137/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.

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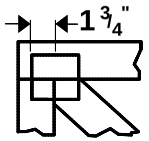
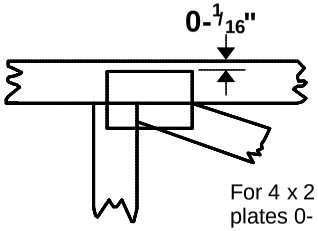
Symbols

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.

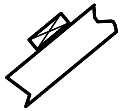
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

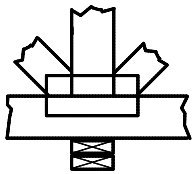
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

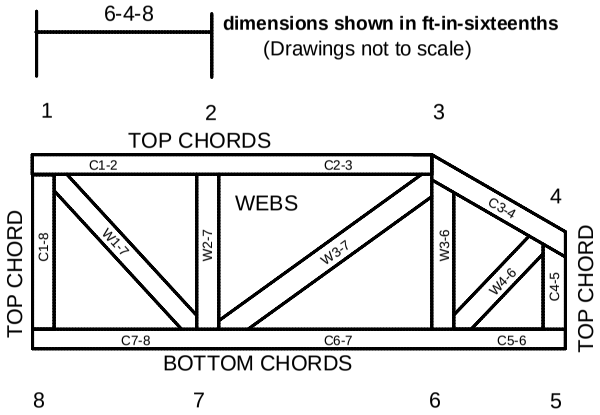


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.