ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0818-3889
Lot 16 Persimmon Hill

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: E12134397 thru E12134407

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

North Carolina COA: C-0844

August 24,2018

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	Lot 16 Persimmon Hill
J0818-3889	ET1	Floor Supported Gable	1	1	E12134397
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Aug 24 07:27:46 2018 Page 1
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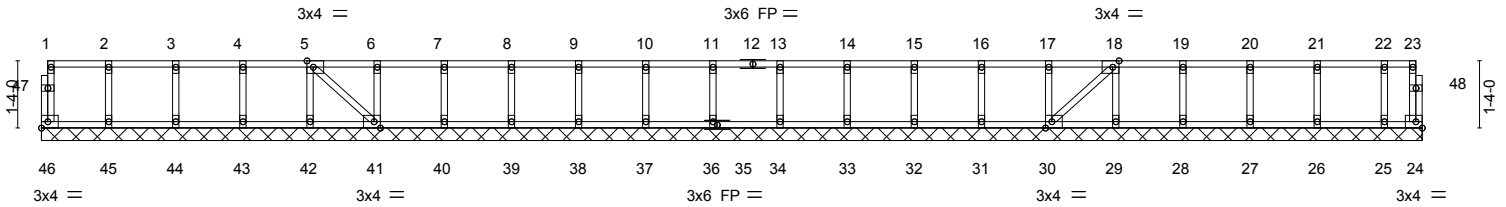

27-5-0
27-5-0

Plate Offsets (X,Y)-- [5:0-1-8,Edge], [18:0-1-8,Edge], [30:0-1-8,Edge], [41:0-1-8,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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(TL)	-0.00	30	n/a	n/a		
BCDL	5.0	Code	IRC2009/TPI2007	Matrix-S							Weight: 124 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 27-5-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 46, 24, 45, 44, 43, 42, 41, 40, 39, 38, 37, 36, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25

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

NOTES-
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) Gable requires continuous bottom chord bearing.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) Gable studs spaced at 1-4-0 oc.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

August 24,2018

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Job	Truss	Truss Type	Qty	Ply	Lot 16 Persimmon Hill
J0818-3889	ET2	Floor Supported Gable	1	1	E12134398
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Aug 24 07:27:47 2018 Page 1
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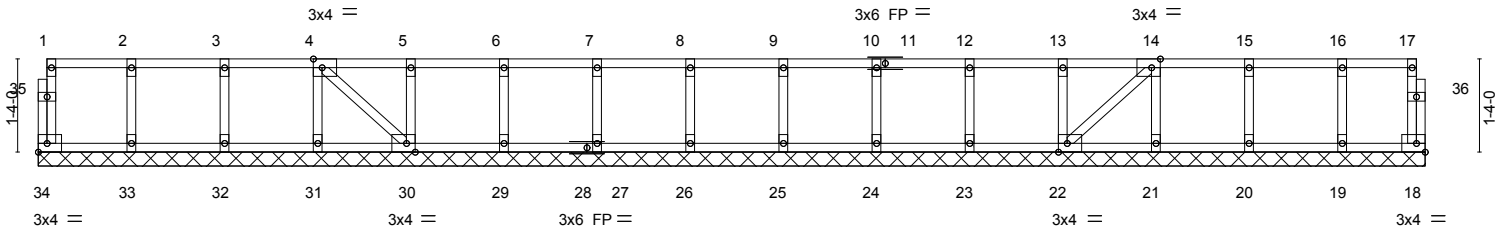

19-10-4
19-10-4

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [14:0-1-8,Edge], [22:0-1-8,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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(TL)	-0.00	22	n/a	n/a		
BCDL	5.0	Code	IRC2009/TPI2007	Matrix-S							Weight: 92 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 19-10-4.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 34, 18, 33, 32, 31, 30, 29, 27, 26, 25, 24, 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) 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.

August 24,2018

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Job	Truss	Truss Type	Qty	Ply	Lot 16 Persimmon Hill
J0818-3889	ET3	Floor Supported Gable	1	1	E12134399
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Aug 24 07:27:48 2018 Page 1
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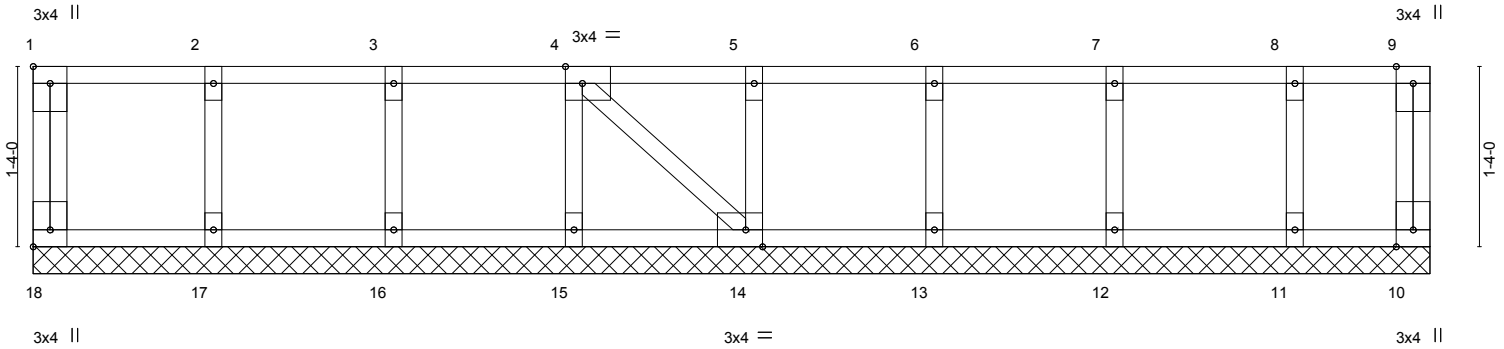

10-4-0
10-4-0

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [4:0-1-8,Edge], [14:0-1-8,Edge], [18: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(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(TL)	0.00	14	n/a	n/a		
BCDL	5.0	Code	IRC2009/TPI2007	Matrix-S							Weight: 51 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 10-0-0 oc bracing.

REACTIONS. All bearings 10-4-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 18, 10, 17, 16, 15, 14, 13, 12, 11

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

NOTES-
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) Gable requires continuous bottom chord bearing.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) Gable studs spaced at 1-4-0 oc.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

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Job	Truss	Truss Type	Qty	Ply	Lot 16 Persimmon Hill
J0818-3889	F1	Floor	4	1	E12134400
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Aug 24 07:27:49 2018 Page 1
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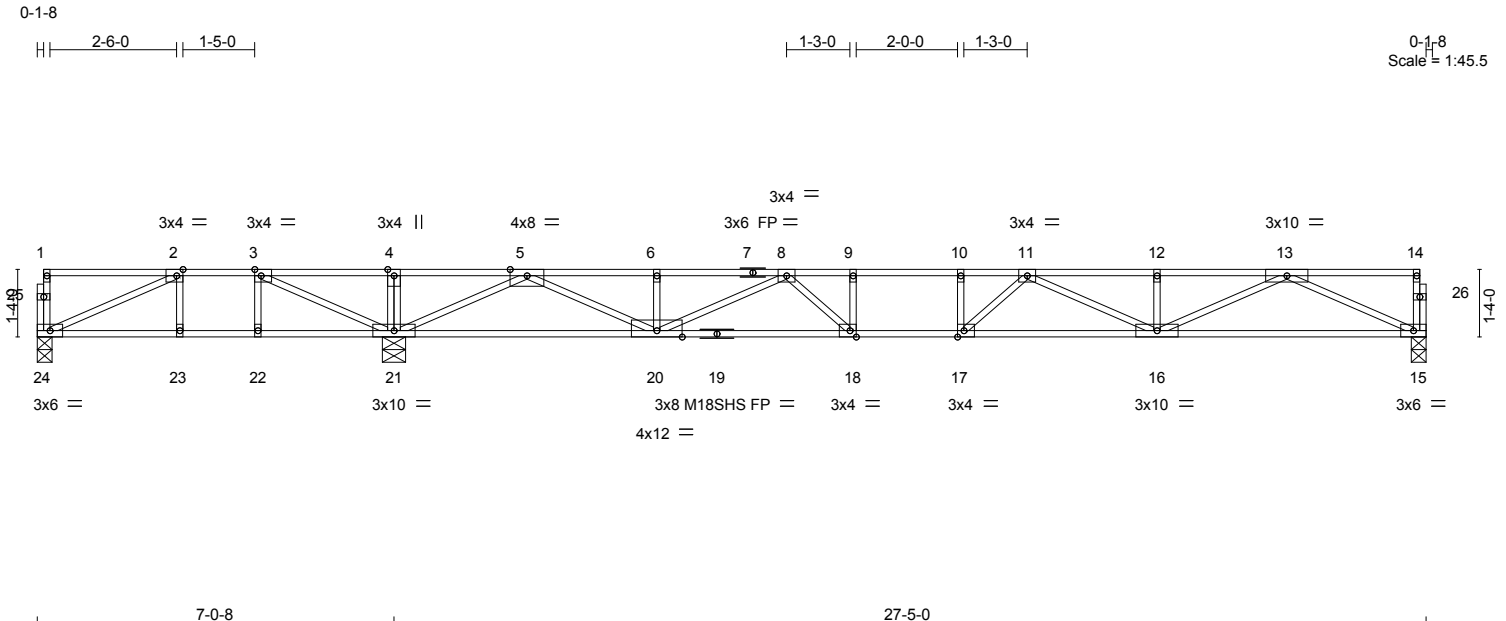

Plate Offsets (X,Y)-- [2:0-1-8,Edge], [3:0-1-8,Edge], [17:0-1-8,Edge], [18:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.55	Vert(LL)	-0.30	16-17	>799	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.53	Vert(TL)	-0.48	16-17	>512	360	M18SHS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.89	Horz(TL)	0.07	15	n/a	n/a		
BCDL	5.0	Code	IRC2009/TPI2007	Matrix-S							Weight: 137 lb	FT = 20%F, 11%E

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

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

REACTIONS. (lb/size) 24=100/0-3-8, 21=1861/0-5-8, 15=1014/0-3-8
Max Uplift 24=-165(LC 3)
Max Grav 24=294(LC 2), 21=1861(LC 1), 15=1024(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-329/614, 3-4=0/1661, 4-5=0/1661, 5-6=-2571/0, 6-8=-2571/0, 8-9=-3929/0, 9-10=-3929/0, 10-11=-3929/0, 11-12=-3254/0, 12-13=-3254/0
BOT CHORD 23-24=-614/329, 22-23=-614/329, 21-22=-614/329, 20-21=0/924, 18-20=0/3567, 17-18=0/3929, 16-17=0/3882, 15-16=0/1959
WEBS 2-24=-353/677, 3-21=-1411/0, 5-21=-2538/0, 5-20=0/1873, 6-20=-273/0, 8-20=-1148/0, 13-15=-2150/0, 13-16=0/1433, 12-16=-251/0, 11-16=-694/0, 11-17=-266/445, 8-18=0/786, 9-18=-412/0

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 165 lb uplift at joint 24.
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	Lot 16 Persimmon Hill
J0818-3889	F2	Floor	3	1	E12134401
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Aug 24 07:27:50 2018 Page 1
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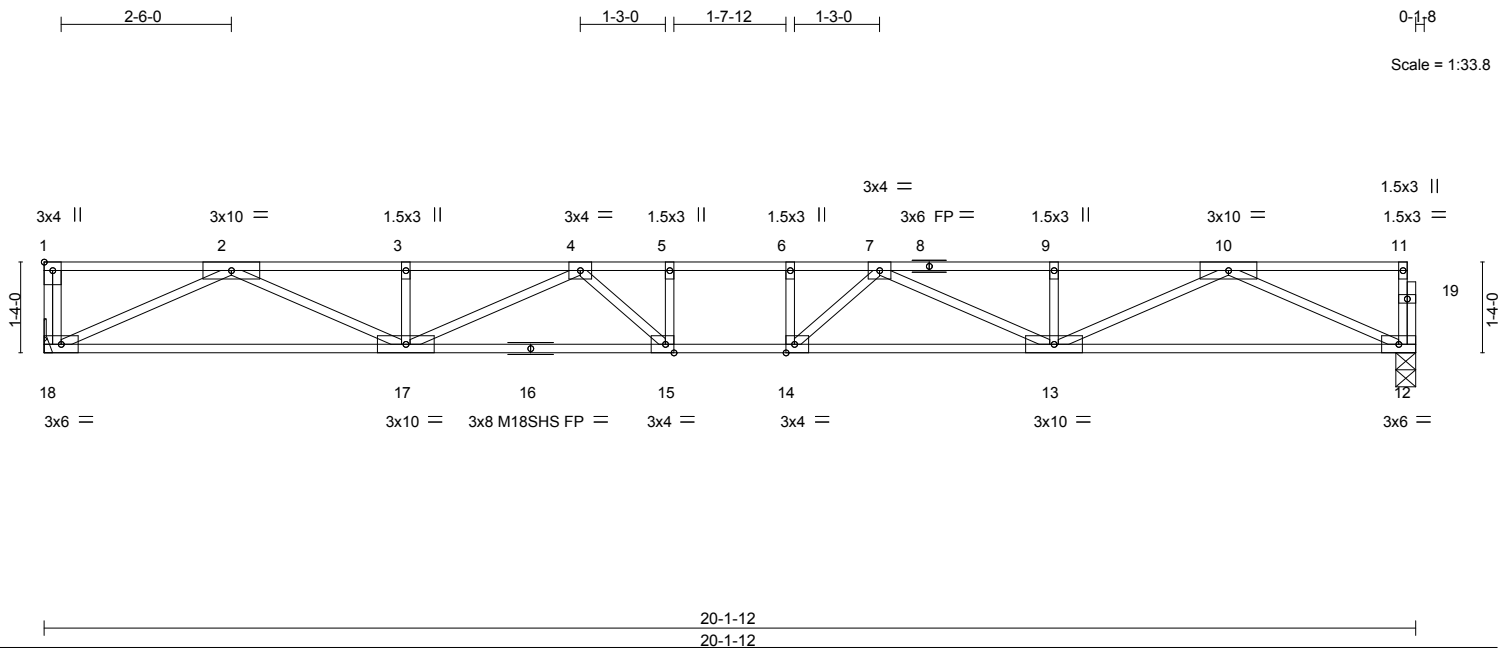

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [14:0-1-8,Edge], [15:0-1-8,Edge]

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)	-0.30	14-15	>787	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.46	Vert(TL)	-0.47	14-15	>505	360	M18SHS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.75	Horz(TL)	0.08	12	n/a	n/a		
BCDL	5.0	Code	IRC2009/TPI2007	Matrix-S							Weight: 102 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. (lb/size) 18=1094/Mechanical, 12=1088/0-3-8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3523/0, 3-4=-3523/0, 4-5=-4470/0, 5-6=-4470/0, 6-7=-4470/0, 7-9=-3524/0, 9-10=-3524/0
BOT CHORD 17-18=0/2095, 15-17=0/4296, 14-15=0/4470, 13-14=0/4296, 12-13=0/2093
WEBS 2-18=-2307/0, 2-17=0/1578, 3-17=-255/0, 4-17=-854/0, 10-12=-2298/0, 10-13=0/1582, 9-13=-256/0, 7-13=-853/0, 7-14=-159/593, 6-14=-311/62, 4-15=-160/593, 5-15=-311/62

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

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 16 Persimmon Hill
J0818-3889	F3	Floor	3	1	E12134402
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Aug 24 07:27:50 2018 Page 1
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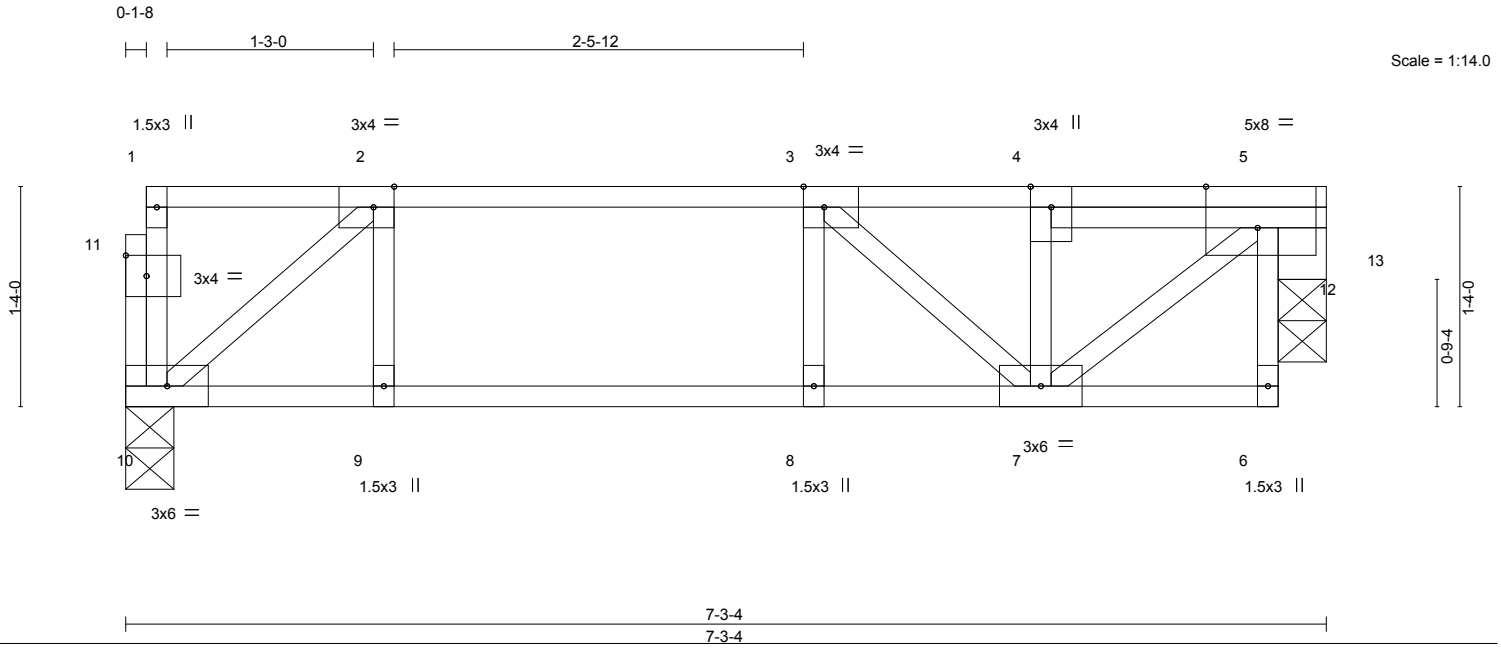

Plate Offsets (X,Y)-- [2:0-1-8,Edge], [3:0-1-8,Edge], [5:0-3-12,Edge], [11:0-1-8,0-1-8]

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	0.43	Vert(LL)	-0.06	8	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.39	Vert(TL)	-0.08	8	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.23	Horz(TL)	-0.01	13	n/a	n/a		
BCDL	5.0	Code IRC2009/TPI2007		Matrix-P							Weight: 41 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 4x4 SP No.2(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=374/0-3-8, 13=367/0-3-8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-482/0, 3-4=-399/0, 4-5=-401/0
BOT CHORD 9-10=0/482, 8-9=0/482, 7-8=0/482
WEBS 5-7=0/487, 2-10=-629/0, 5-13=-376/0

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) Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
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	Lot 16 Persimmon Hill
J0818-3889	F4	Floor	4	1	E12134403
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Aug 24 07:27:51 2018 Page 1
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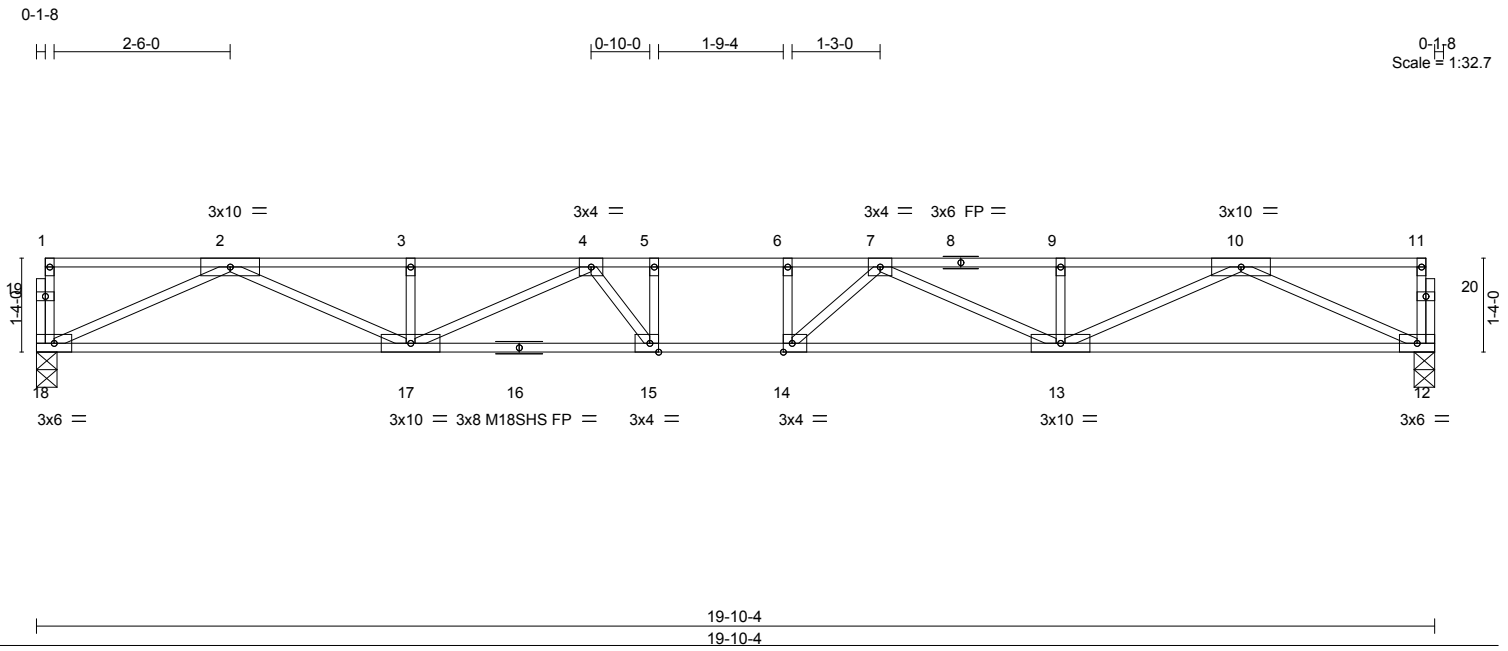

Plate Offsets (X,Y)-- [14:0-1-8,Edge], [15:0-1-8,Edge]

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)	-0.29	14	>808	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.47	Vert(TL)	-0.46	14	>516	360	M18SHS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.74	Horz(TL)	0.08	12	n/a	n/a		
BCDL	5.0	Code	IRC2009/TPI2007	Matrix-S							Weight: 100 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. (lb/size) 18=1072/0-3-8, 12=1072/0-3-8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3454/0, 3-4=-3454/0, 4-5=-4334/0, 5-6=-4334/0, 6-7=-4334/0, 7-9=-3456/0, 9-10=-3456/0
BOT CHORD 17-18=0/2057, 15-17=0/4197, 14-15=0/4334, 13-14=0/4192, 12-13=0/2059
WEBS 2-18=-2259/0, 2-17=0/1544, 3-17=-258/0, 4-17=-822/0, 10-12=-2261/0, 10-13=0/1544, 9-13=-255/0, 7-13=-814/0, 7-14=-176/561, 6-14=-297/72, 4-15=-179/607, 5-15=-395/102

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

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 16 Persimmon Hill
J0818-3889	F4A	Floor	2	1	E12134404
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Aug 24 07:27:52 2018 Page 1
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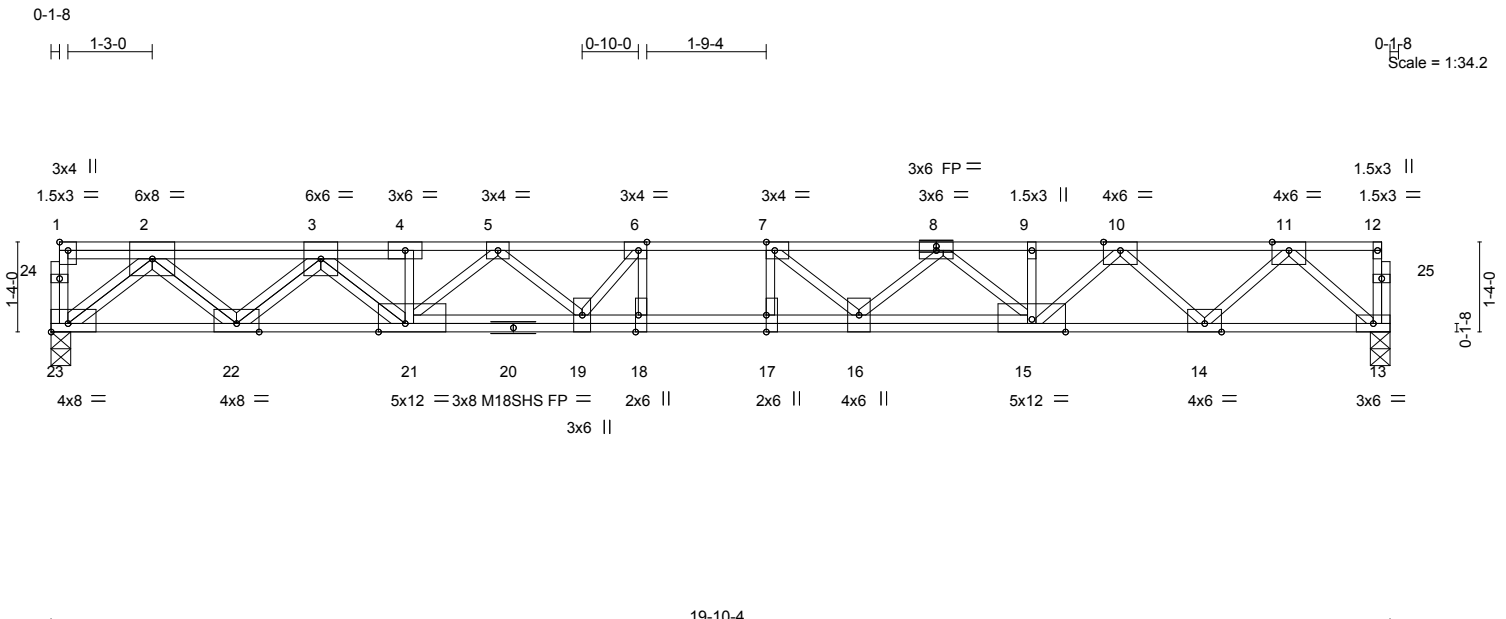


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [6:0-1-8,Edge], [7:0-1-8,Edge], [17:0-3-0,0-0-0], [18:0-3-0,Edge], [21:0-4-12,Edge], [23:Edge,0-1-8]

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	0.62	Vert(LL)	-0.32	18	>736	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.63	Vert(TL)	-0.50	18	>471	360	M18SHS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.69	Horz(TL)	0.09	13	n/a	n/a		
BCDL	5.0	Code	IRC2009/TPI2007	Matrix-S							Weight: 134 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)

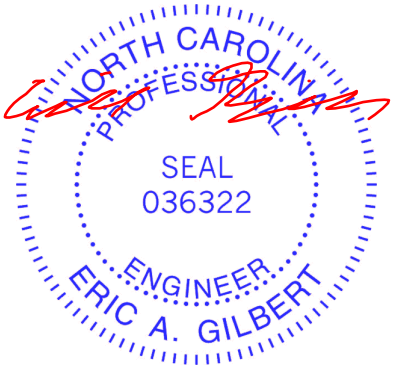
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 23=1874/0-3-8, 13=1270/0-3-8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3905/0, 3-4=-6069/0, 4-5=-6070/0, 5-6=-6365/0, 6-7=-6272/0, 7-8=-5644/0, 8-9=-4501/0, 9-10=-4504/0, 10-11=-2427/0
BOT CHORD 22-23=0/2188, 21-22=0/5738, 19-21=0/6338, 18-19=0/6272, 17-18=0/6272, 16-17=0/6272, 15-16=0/5193, 14-15=0/3517, 13-14=0/1392
WEBS 2-23=-2845/0, 2-22=0/2330, 3-22=-2484/0, 3-21=0/481, 11-13=-1851/0, 11-14=0/1439, 10-14=-1514/0, 10-15=0/1287, 8-15=-939/0, 8-16=0/728, 7-16=-1139/0, 7-17=-192/567, 5-21=-417/0, 5-19=-210/393, 6-19=-533/624, 6-18=-631/289

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1000 lb down at 3-10-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.
6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 13-23=-10, 1-12=-100
Concentrated Loads (lb)
Vert: 3=-1000(F)



August 24,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 16 Persimmon Hill
J0818-3889	F5	Floor	3	1	E12134405
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Aug 24 07:27:53 2018 Page 1
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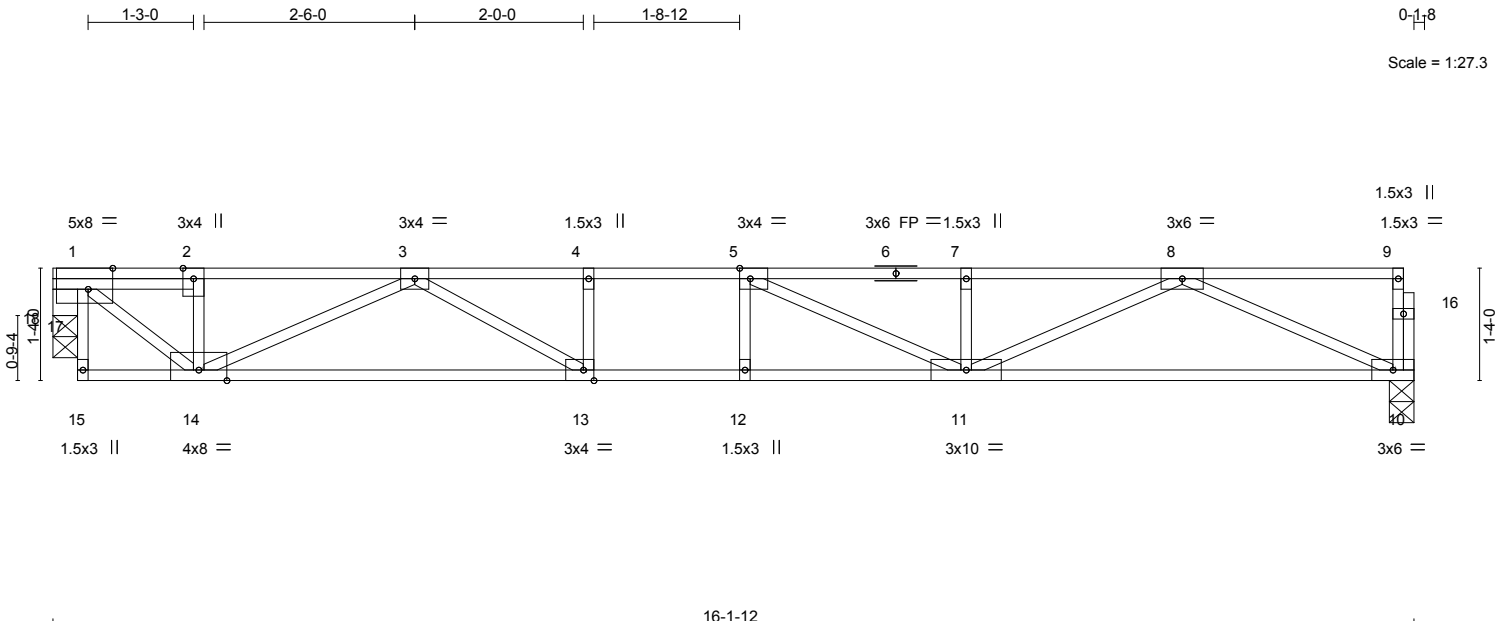

Plate Offsets (X,Y)-- [1:0-3-8,Edge], [5:0-1-8,Edge], [13:0-1-8,Edge]

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	0.59	Vert(LL)	-0.22	11-12	>848	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.85	Vert(TL)	-0.32	11-12	>584	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.61	Horz(TL)	0.03	10	n/a	n/a		
BCDL	5.0	Code IRC2009/TPI2007		Matrix-S							Weight: 84 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 4x4 SP No.2(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=862/0-3-8, 18=855/0-3-8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1029/0, 2-3=-1029/0, 3-4=-2787/0, 4-5=-2787/0, 5-7=-2574/0, 7-8=-2574/0
BOT CHORD 13-14=0/2188, 12-13=0/2787, 11-12=0/2787, 10-11=0/1605
WEBS 1-14=0/1277, 8-10=-1761/0, 8-11=0/1072, 7-11=-315/0, 5-11=-547/96, 3-14=-1282/0, 3-13=0/835, 4-13=-274/0, 1-18=-868/0

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) Bearing at joint(s) 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
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	Lot 16 Persimmon Hill
J0818-3889	F6	Floor	2	1	E12134406
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Aug 24 07:27:53 2018 Page 1
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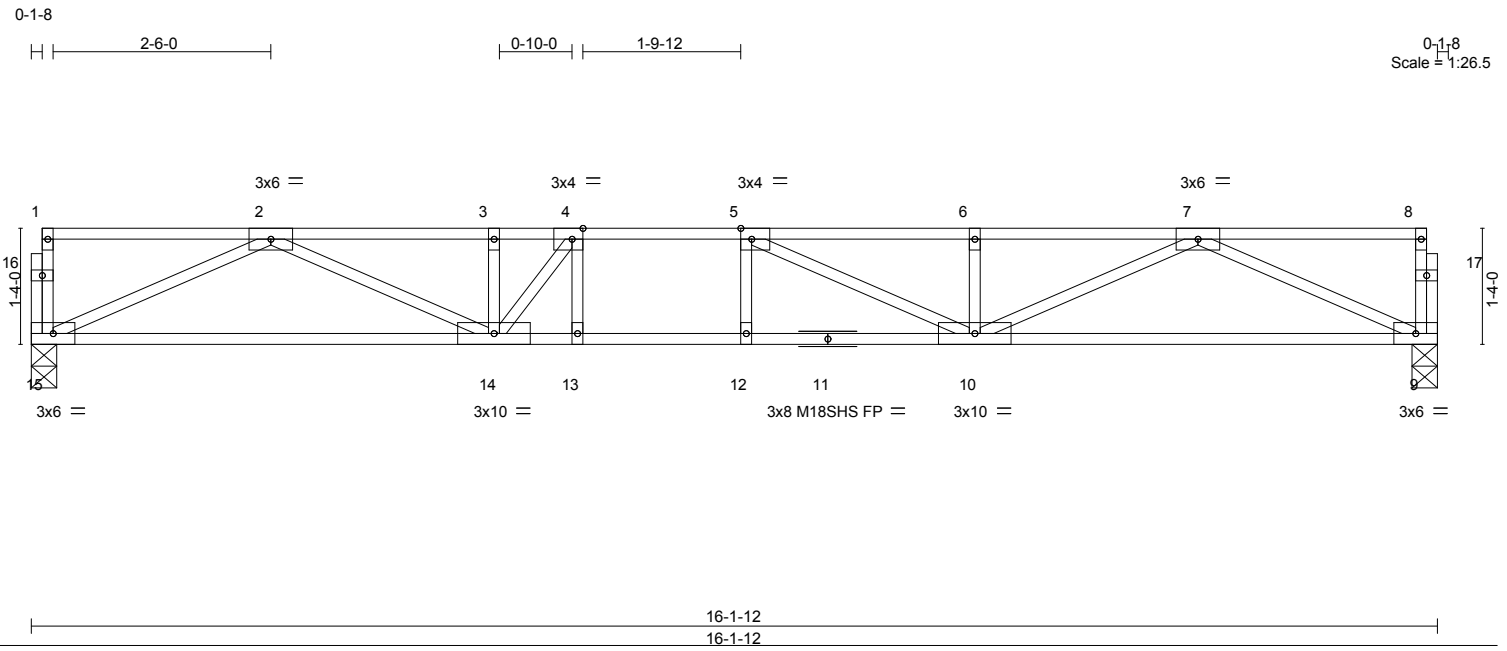

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge]

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)	-0.20	10-12	>933	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.89	Vert(TL)	-0.31	10-12	>608	360	M18SHS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(TL)	0.05	9	n/a	n/a		
BCDL	5.0	Code	IRC2009/TPI2007	Matrix-S							Weight: 82 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. (lb/size) 15=868/0-3-8, 9=868/0-3-8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2555/0, 3-4=-2555/0, 4-5=-2830/0, 5-6=-2598/0, 6-7=-2598/0
BOT CHORD 14-15=0/1623, 13-14=0/2830, 12-13=0/2830, 10-12=0/2830, 9-10=0/1618
WEBS 2-15=-1780/0, 2-14=0/1031, 7-9=-1775/0, 7-10=0/1083, 6-10=-306/0, 5-10=-541/55, 4-14=-708/25

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) 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	Lot 16 Persimmon Hill
J0818-3889	F7	Floor	8	1	E12134407
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Fri Aug 24 07:27:54 2018 Page 1
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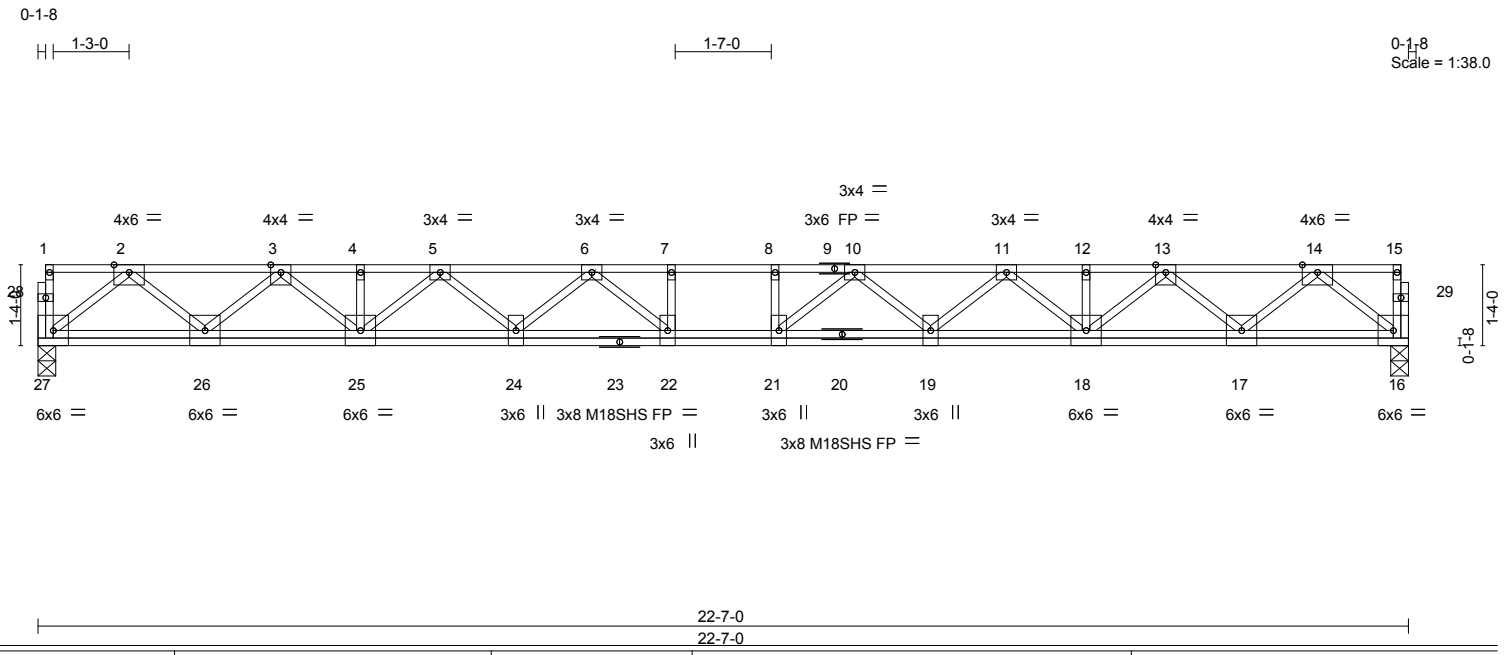


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.42	Vert(LL)	-0.36	21-22	>736	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.35	Vert(TL)	-0.57	21-22	>471	360	M18SHS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.67	Horz(TL)	0.06	16	n/a	n/a		
BCDL	5.0	Code	IRC2009/TPI2007	Matrix-S							Weight: 149 lb	FT = 20%F, 11%E

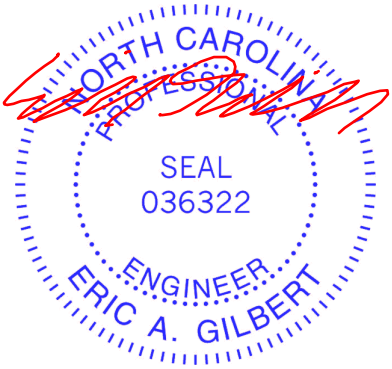
LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

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. (lb/size) 27=1222/0-3-8, 16=1222/0-3-8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2435/0, 3-4=-4228/0, 4-5=-4228/0, 5-6=-5352/0, 6-7=-5910/0, 7-8=-5910/0, 8-10=-5910/0, 10-11=-5352/0, 11-12=-4228/0, 12-13=-4228/0, 13-14=-2435/0
BOT CHORD 26-27=0/1402, 25-26=0/3439, 24-25=0/4933, 22-24=0/5742, 21-22=0/5910, 19-21=0/5742, 18-19=0/4933, 17-18=0/3439, 16-17=0/1402
WEBS 14-16=-1823/0, 2-27=-1823/0, 14-17=0/1401, 2-26=0/1401, 13-17=-1362/0, 3-26=-1362/0, 13-18=0/1047, 3-25=0/1047, 11-18=-936/0, 5-25=-936/0, 11-19=0/569, 5-24=0/569, 10-19=-589/0, 6-24=-589/0, 10-21=-205/616, 6-22=-205/616

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) 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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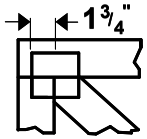
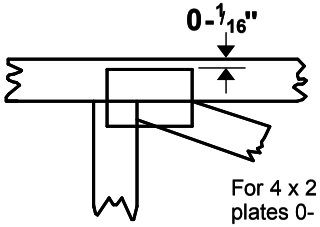
Symbols

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.

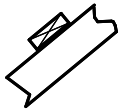
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

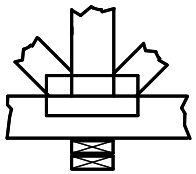
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

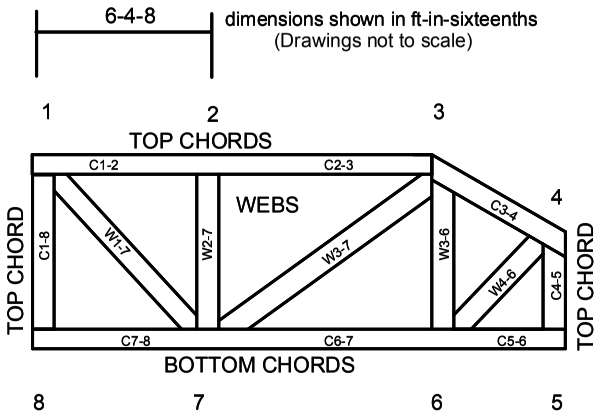


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.

MiTek

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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.