ENGINEERING BY TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0920-4408
Wellco/Lot 90 Hidden Lakes/Harnett

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Pages or sheets covered by this seal: E14903803 thru E14903813

My license renewal date for the state of North Carolina is December 31, 2020.

North Carolina COA: C-0844

September 24,2020

Gilbert, Eric

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 90 Hidden Lakes/Harnett
J0920-4408	F01	Floor	5	1	E14903803
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Thu Sep 24 11:08:58 2020 Page 1
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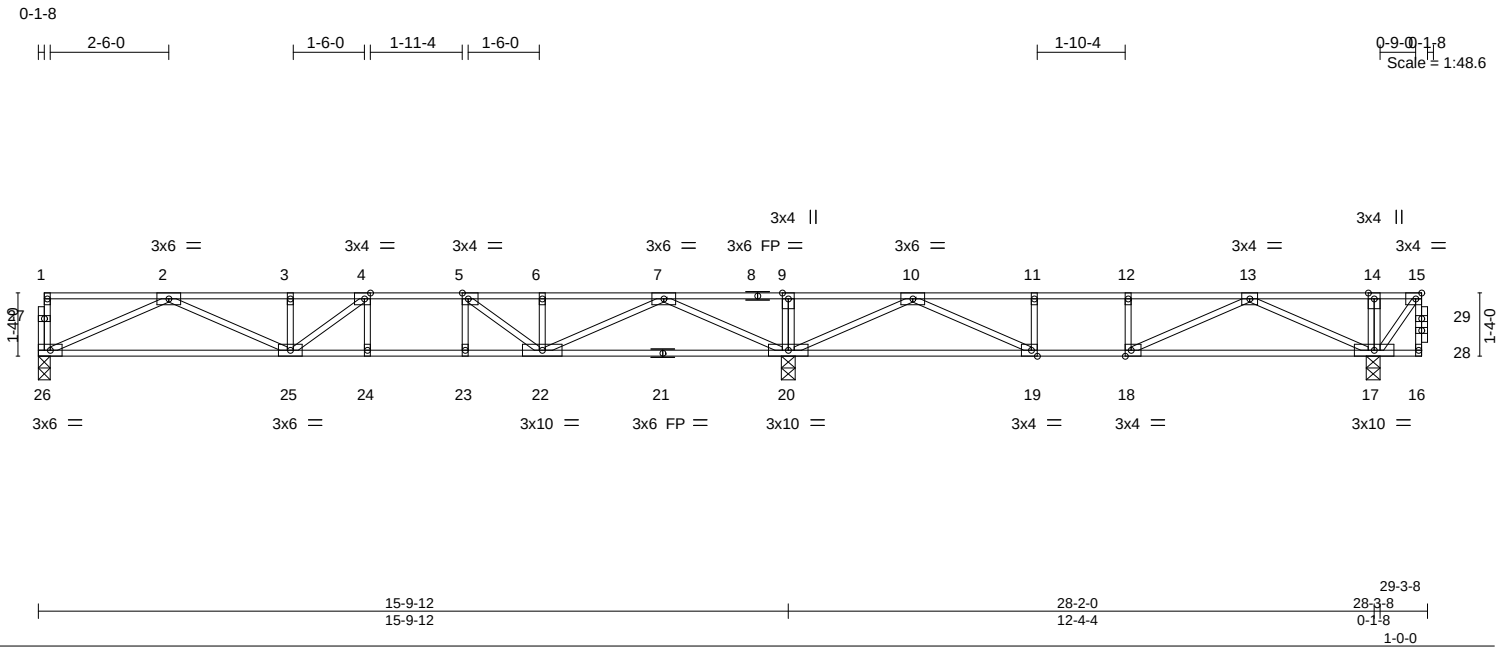

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge], [15:0-1-8,Edge], [18:0-1-8,Edge], [19:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.61	Vert(LL)	-0.15	24-25	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.83	Vert(CT)	-0.21	24-25	>909	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.61	Horz(CT)	0.04	17	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 148 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) 26=0-3-0, 20=0-3-8, 17=0-3-8
Max Grav 26=785(LC 14), 20=1735(LC 3), 17=1257(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2222/0, 3-4=-2222/0, 4-5=-2304/0, 5-6=-1888/0, 6-7=-1888/0, 7-9=0/1462, 9-10=0/1462, 10-11=-1146/273, 11-12=-1146/273, 12-13=-1146/273, 13-14=0/414, 14-15=0/411
BOT CHORD 25-26=0/1443, 24-25=0/2304, 23-24=0/2304, 22-23=0/2304, 20-22=-193/825, 19-20=-615/533, 18-19=-273/1146, 17-18=-262/700
WEBS 9-20=-282/0, 2-26=-1583/0, 2-25=0/861, 3-25=-278/0, 7-20=-1946/0, 7-22=0/1276, 5-22=-775/0, 4-25=-275/232, 10-20=-1438/0, 10-19=0/881, 11-19=-305/0, 13-17=-1168/0, 13-18=-12/503, 15-17=-653/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) 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.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 16-26=-10, 1-15=-100
Concentrated Loads (lb)
Vert: 15=-500

September 24,2020

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 90 Hidden Lakes/Harnett
J0920-4408	F02	FLOOR	1	1	E14903804
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Thu Sep 24 11:08:59 2020 Page 1
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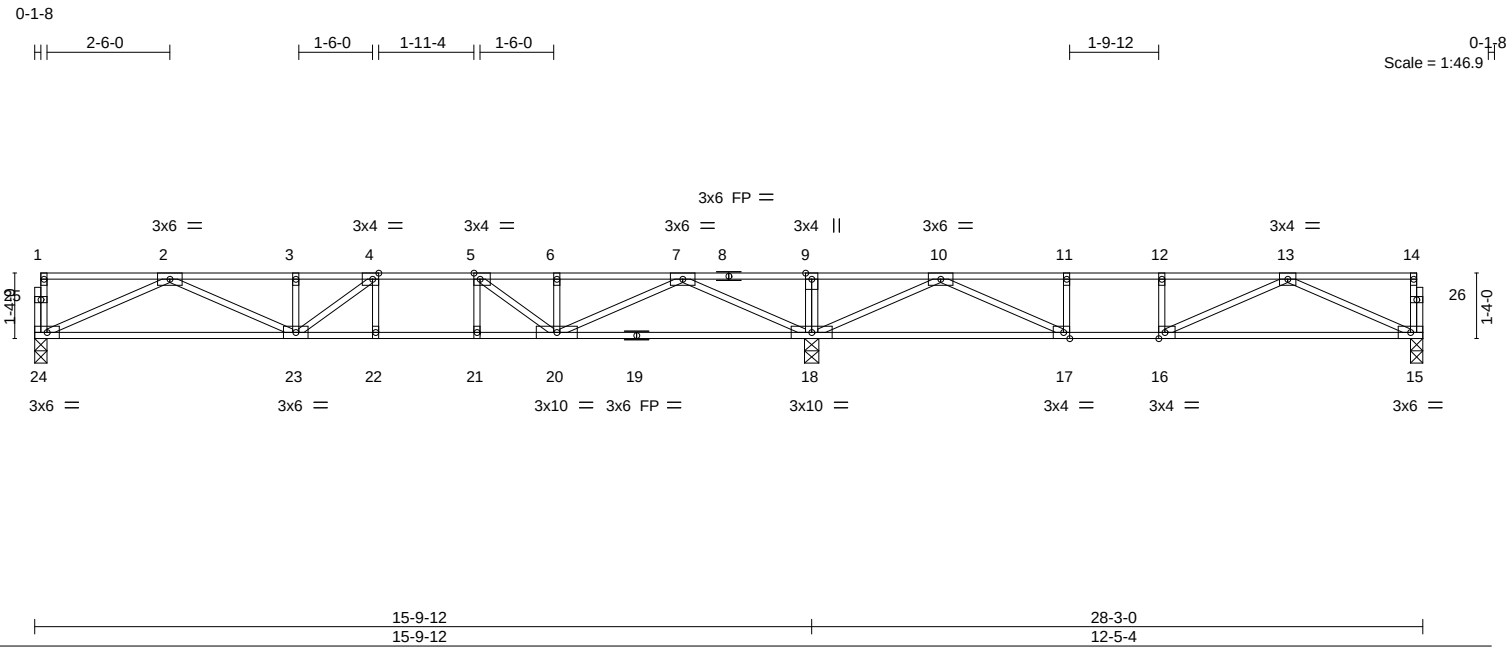

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge], [16:0-1-8,Edge], [17:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.64	Vert(LL)	-0.18	15-16	>842	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.75	Vert(CT)	-0.27	15-16	>539	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.04	15	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 140 lb	FT = 20%F, 11%E

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 18-20,17-18.

REACTIONS. (size) 24=0-3-0, 18=0-3-8, 15=0-3-0
Max Grav 24=793(LC 10), 18=1760(LC 1), 15=609(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2252/0, 3-4=-2252/0, 4-5=-2351/0, 5-6=-1952/0, 6-7=-1952/0, 7-9=0/1360, 9-10=0/1360, 10-11=-1406/0, 11-12=-1406/0, 12-13=-1406/0
BOT CHORD 23-24=0/1459, 22-23=0/2351, 21-22=0/2351, 20-21=0/2351, 18-20=-110/902, 17-18=-442/696, 16-17=0/1406, 15-16=0/1058
WEBS 2-24=-1600/0, 2-23=0/877, 3-23=-274/0, 7-18=-1927/0, 7-20=0/1262, 4-23=-296/210, 5-20=-752/0, 10-18=-1513/0, 10-17=0/990, 11-17=-343/0, 13-15=-1160/0, 13-16=-111/384, 9-18=-286/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) 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	Wellco/Lot 90 Hidden Lakes/Harnett
J0920-4408	F03	FLOOR	5	1	E14903805
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Thu Sep 24 11:09:00 2020 Page 1
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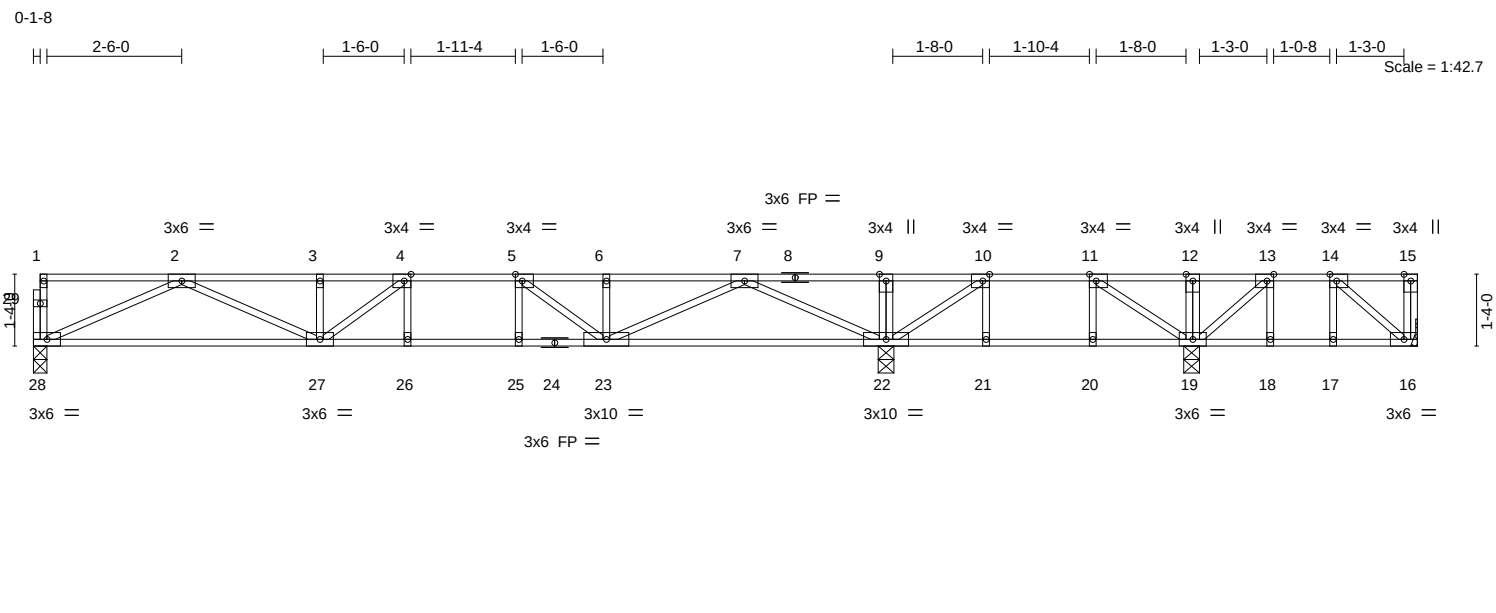

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge], [10:0-1-8,Edge], [11:0-1-8,Edge], [13:0-1-8,Edge], [14:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.46	Vert(LL)	-0.15	26-27	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.71	Vert(CT)	-0.21	26-27	>914	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.04	22	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 134 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 0-3-8 except (jt=length) 28=0-3-0, 16=Mechanical.
(lb) - Max Uplift All uplift 100 lb or less at joint(s) 16
Max Grav All reactions 250 lb or less at joint(s) 16 except 28=794(LC 14), 22=1323(LC 13), 19=626(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2256/0, 3-4=-2256/0, 4-5=-2358/0, 5-6=-1959/0, 6-7=-1959/0, 7-9=0/877, 9-10=0/873, 10-11=-121/562, 11-12=0/528, 12-13=0/527
BOT CHORD 27-28=0/1461, 26-27=0/2358, 25-26=0/2358, 23-25=0/2358, 22-23=0/920, 21-22=-562/121, 20-21=-562/121, 19-20=-562/121
WEBS 2-28=-1603/0, 2-27=0/879, 3-27=-263/1, 7-22=-1858/0, 7-23=0/1174, 5-23=-678/0, 4-27=-378/134, 11-19=-336/118, 10-22=-574/0, 13-19=-564/0, 14-16=-119/268

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16.
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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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 90 Hidden Lakes/Harnett
J0920-4408	F03A	Floor	1	1	E14903806
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Thu Sep 24 11:09:02 2020 Page 1
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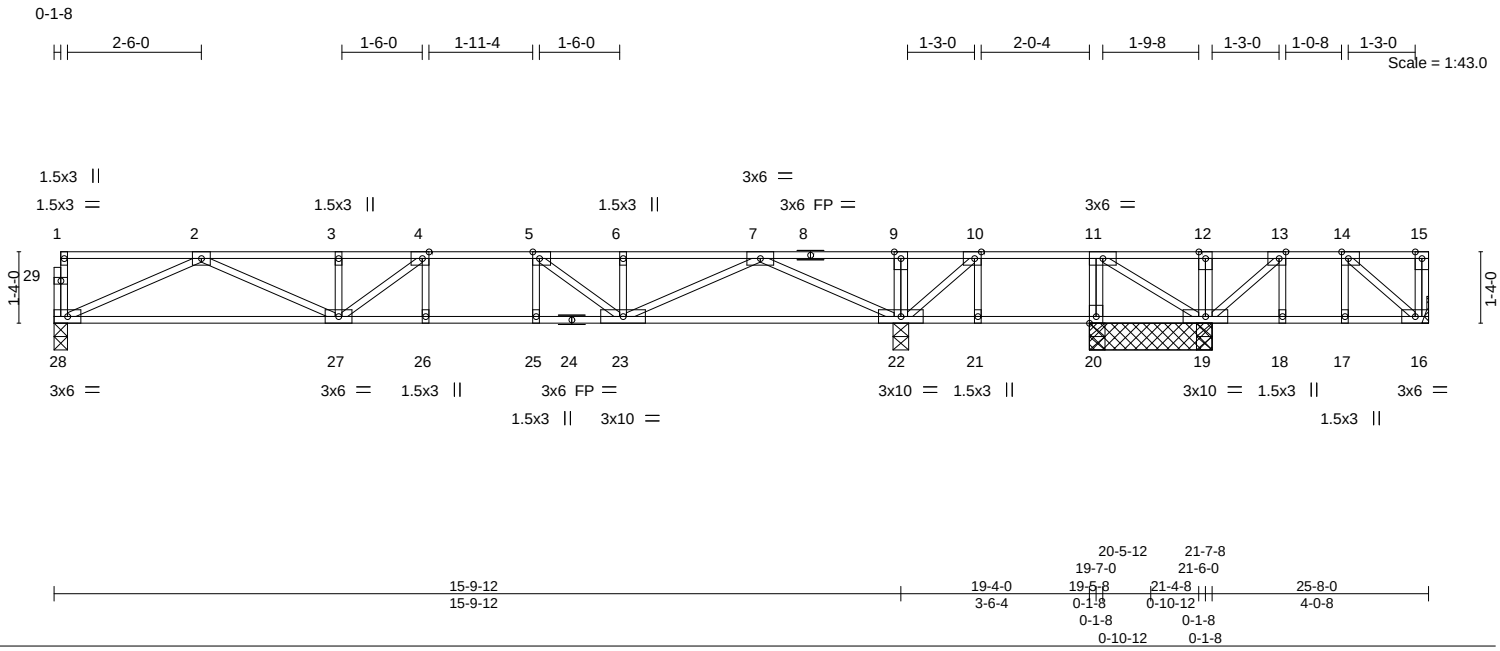

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge], [10:0-1-8,Edge], [13:0-1-8,Edge], [14:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.48	Vert(LL)	-0.15	26-27	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.73	Vert(CT)	-0.21	26-27	>912	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.03	22	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 135 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.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 2-3-8 except (jt=length) 28=0-3-0, 22=0-3-8, 16=Mechanical.
(lb) - Max Uplift All uplift 100 lb or less at joint(s) 19 except 19=-227(LC 3)
Max Grav All reactions 250 lb or less at joint(s) 16 except 28=772(LC 5), 20=695(LC 16), 20=657(LC 1), 22=1242(LC 15), 19=269(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2165/0, 3-4=-2165/0, 4-5=-2216/0, 5-6=-1764/0, 6-7=-1764/0, 7-9=0/1098, 9-10=0/1093, 10-11=0/962
BOT CHORD 27-28=0/1413, 26-27=0/2216, 25-26=0/2216, 23-25=0/2216, 22-23=0/681, 21-22=-962/0, 20-21=-962/0, 19-20=-962/0
WEBS 11-20=-681/0, 2-28=-1550/0, 2-27=0/831, 3-27=-268/0, 7-22=-1891/0, 7-23=0/1211, 5-23=-712/0, 4-27=-317/166, 10-22=-310/0, 11-19=0/933, 13-19=-339/0

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=227.
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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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 90 Hidden Lakes/Harnett
J0920-4408	F04	Floor	3	1	E14903807
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Thu Sep 24 11:09:03 2020 Page 1
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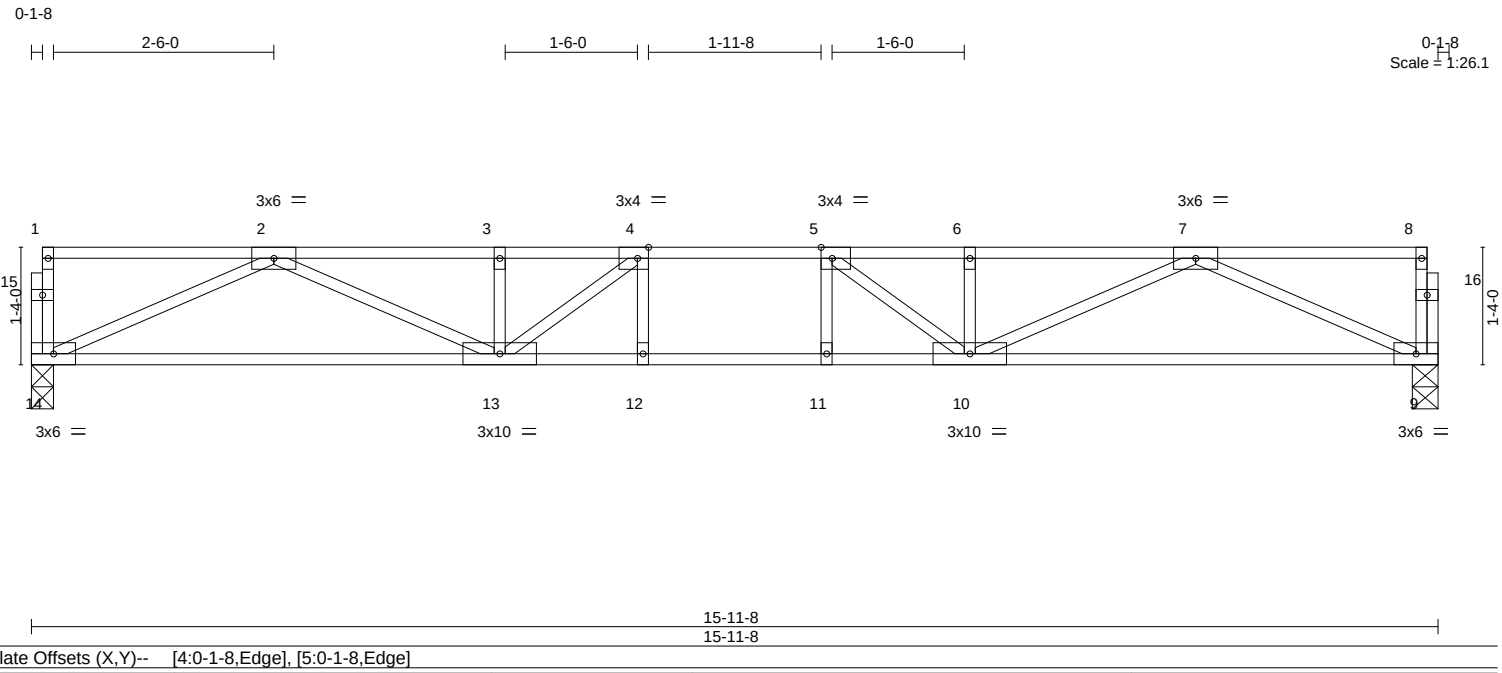

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge]

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	0.40	Vert(LL)	-0.15	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.67	Vert(CT)	-0.22	11-12	>875	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.04	9	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 81 lb	FT = 20%F, 11%E

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

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

REACTIONS. (size) 14=0-3-0, 9=0-3-8
Max Grav 14=858(LC 1), 9=858(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2521/0, 3-4=-2521/0, 4-5=-2771/0, 5-6=-2521/0, 6-7=-2521/0
BOT CHORD 13-14=0/1599, 12-13=0/2771, 11-12=0/2771, 10-11=0/2771, 9-10=0/1599
WEBS 2-14=-1755/0, 2-13=0/1019, 7-9=-1755/0, 7-10=0/1019, 5-10=-575/35, 4-13=-575/35

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) 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.

September 24,2020

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TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 90 Hidden Lakes/Harnett
J0920-4408	F05	Floor	4	1	E14903808
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Thu Sep 24 11:09:04 2020 Page 1
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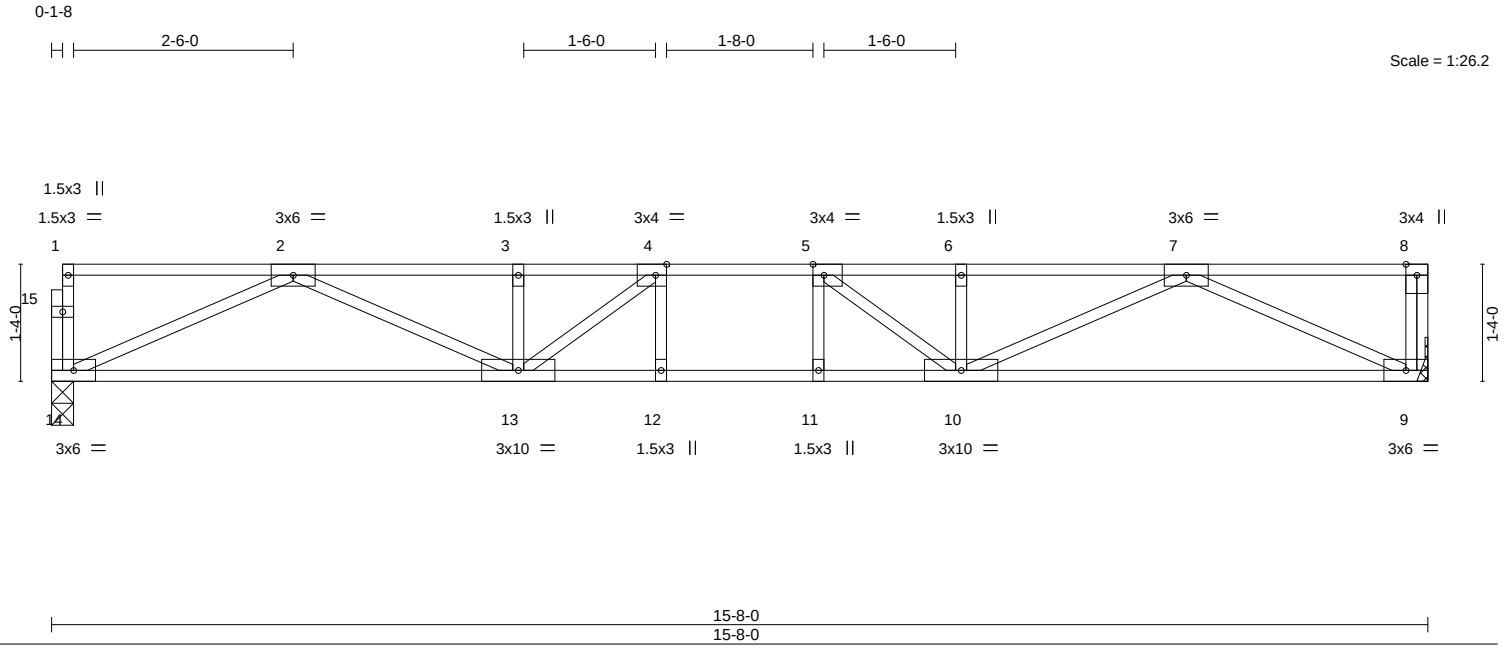

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge]

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	0.33	Vert(LL)	-0.14	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.62	Vert(CT)	-0.20	11-12	>921	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.04	9	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 81 lb	FT = 20%F, 11%E

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

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

REACTIONS. (size) 14=0-3-0, 9=Mechanical
Max Grav 14=842(LC 1), 9=848(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2454/0, 3-4=-2454/0, 4-5=-2675/0, 5-6=-2454/0, 6-7=-2454/0
BOT CHORD 13-14=0/1564, 12-13=0/2675, 11-12=0/2675, 10-11=0/2675, 9-10=0/1567
WEBS 2-14=-1716/0, 2-13=0/984, 7-9=-1725/0, 7-10=0/981, 5-10=-524/57, 4-13=-524/58

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) 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.

September 24,2020

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 90 Hidden Lakes/Harnett
J0920-4408	F06	Floor	1	1	E14903809
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Thu Sep 24 11:09:05 2020 Page 1
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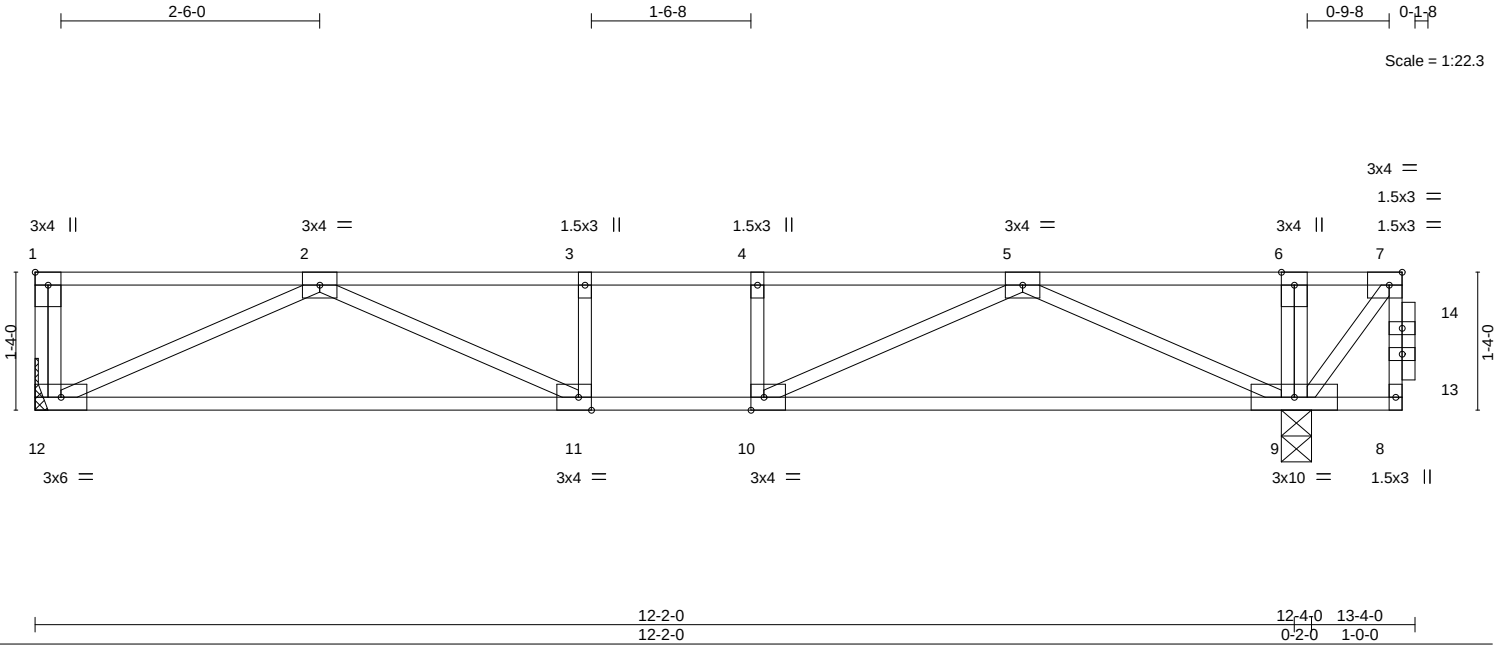

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [7:0-1-8,Edge], [10:0-1-8,Edge], [11:0-1-8,Edge]

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	0.53	Vert(LL)	-0.14	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.50	Vert(CT)	-0.22	11-12	>668	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.37	Horz(CT)	0.02	9	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)

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 9-10.

REACTIONS. (size) 12=Mechanical, 9=0-3-8
Max Grav 12=616(LC 3), 9=1319(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1427/0, 3-4=-1427/0, 4-5=-1427/0, 5-6=0/444, 6-7=0/440
BOT CHORD 11-12=0/1065, 10-11=0/1427, 9-10=-70/801
WEBS 2-12=-1172/0, 2-11=0/484, 5-9=-1308/0, 5-10=0/783, 4-10=-253/0, 7-9=-683/0

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) 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.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 8-12=-10, 1-7=-100
Concentrated Loads (lb)
Vert: 7=-500

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

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 90 Hidden Lakes/Harnett
J0920-4408	F07	FLOOR	1	1	E14903810
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Thu Sep 24 11:09:05 2020 Page 1
ID:Y00d0fPlrGAvbyL8pdsQc4yen15-4lks4w_jFahZ51Hh98eSBbaC_BapEIus7UcKidyaRNS

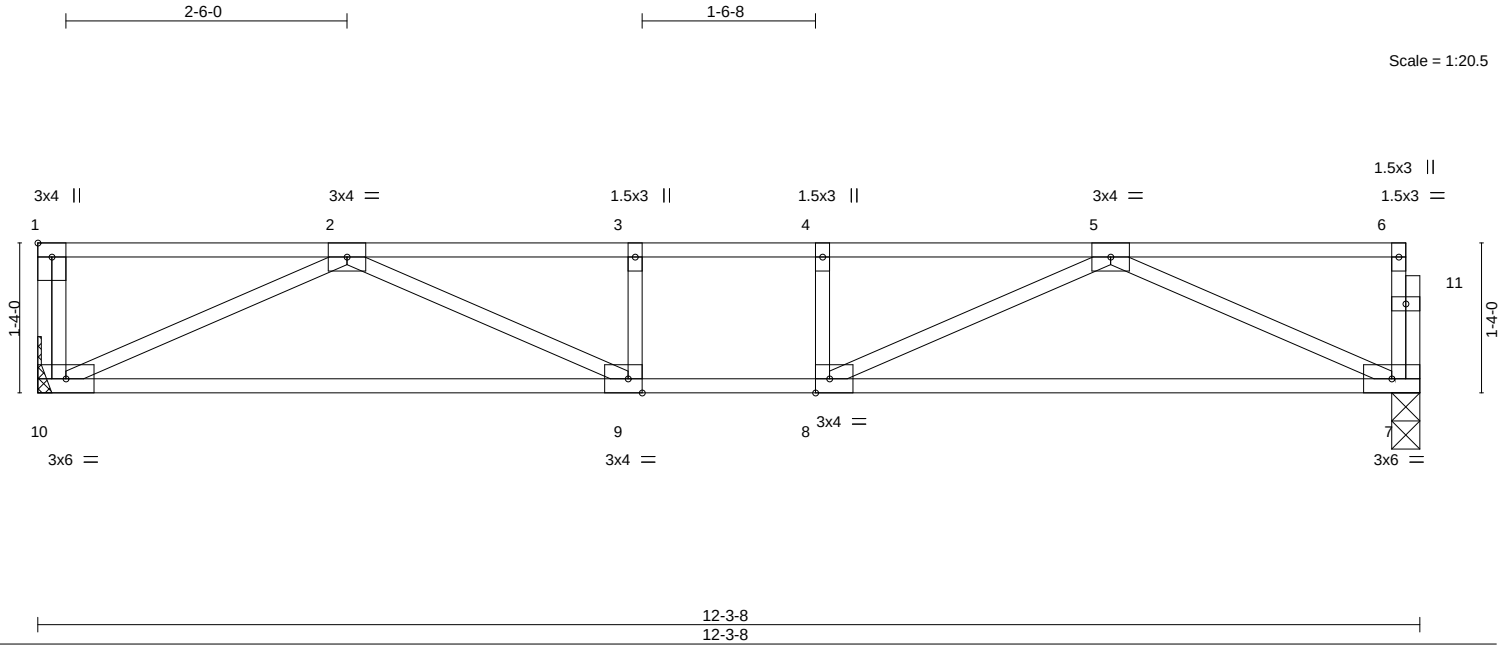

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [8:0-1-8,Edge], [9:0-1-8,Edge]

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	0.34	Vert(LL)	-0.12	7-8	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.44	Vert(CT)	-0.18	7-8	>783	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.02	7	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 62 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) 10=Mechanical, 7=0-3-0
Max Grav 10=662(LC 1), 7=656(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1657/0, 3-4=-1657/0, 4-5=-1657/0
BOT CHORD 9-10=0/1164, 8-9=0/1657, 7-8=0/1162
WEBS 2-10=-1281/0, 2-9=0/629, 5-7=-1273/0, 5-8=0/630

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) 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	Wellco/Lot 90 Hidden Lakes/Harnett
J0920-4408	F08	FLOOR	5	1	E14903811
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Thu Sep 24 11:09:07 2020 Page 1
ID:Y00d0fPlrGAvbyL8pdsQc4yen15-18sdVb?_nCxGKLQ4HZhwG0ga9?KQiG09bo5QmVyaRNQ

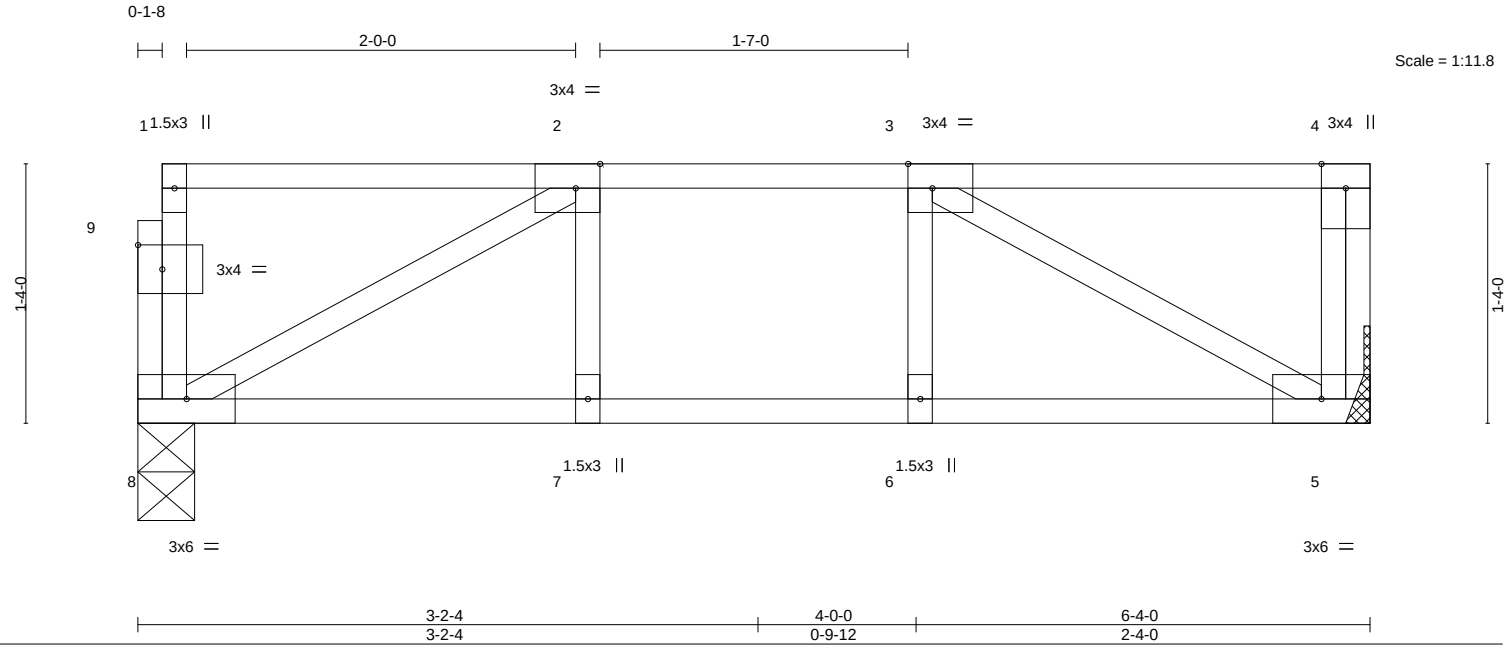


Plate Offsets (X,Y)-- [2:0-1-8,Edge], [3:0-1-8,Edge], [9:0-1-8,0-1-8]

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	0.23	Vert(LL)	-0.02	5-6	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.18	Vert(CT)	-0.02	5-6	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.12	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

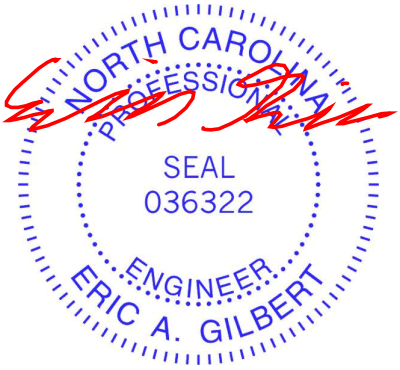
LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS. (size) 5=Mechanical, 8=0-3-8
Max Grav 5=335(LC 1), 8=328(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-420/0
BOT CHORD 7-8=0/420, 6-7=0/420, 5-6=0/420
WEBS 3-5=-480/0, 2-8=-475/0

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) 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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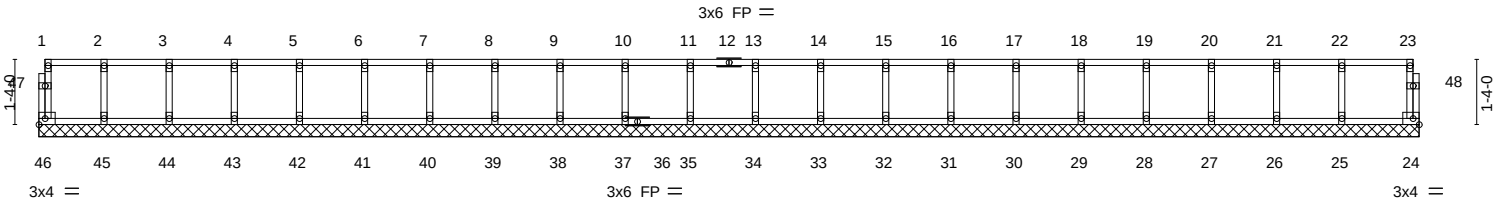
Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 90 Hidden Lakes/Harnett
J0920-4408	KW1	Floor Supported Gable	1	1	E14903812
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Thu Sep 24 11:09:08 2020 Page 1
ID:Y00d0fPlrGAvbyL8pdsQc4yen15-VKQ?jx0cYV37yU?GrGC9pDCn5PiCRkfIqSr_IyyaRNP

0-1-8 0-1-8

Scale = 1:47.2



28-3-0
28-3-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.09	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	24	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 122 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 28-3-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 46, 24, 45, 44, 43, 42, 41, 40, 39, 38, 37, 35, 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.

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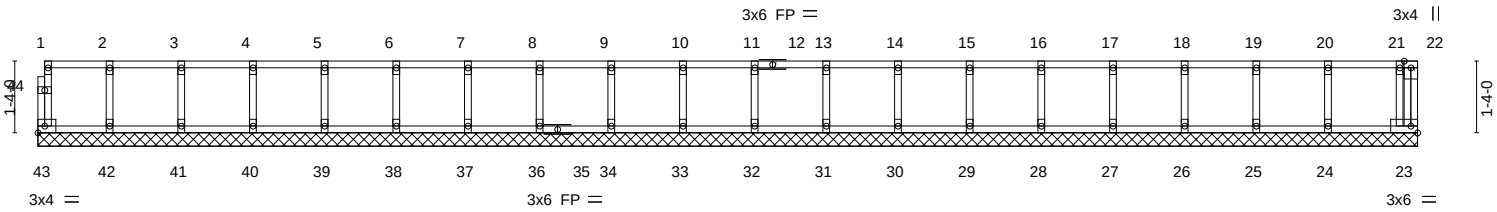
Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 90 Hidden Lakes/Harnett
J0920-4408	KW2	Floor Supported Gable	1	1	E14903813
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Thu Sep 24 11:09:09 2020 Page 1
ID:Y00d0fPlrGAvbyL8pdsQc4yen15-zWzNwH1EJpB_aeaSO_jOMRly8o1NABwR26aXrOyaRNO

0-1-8

Scale = 1:42.9



25-8-0
25-8-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.07	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	23	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 113 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 25-8-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 23, 43, 42, 41, 40, 39, 38, 37, 36, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24

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.
7) CAUTION, Do not erect truss backwards.

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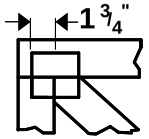
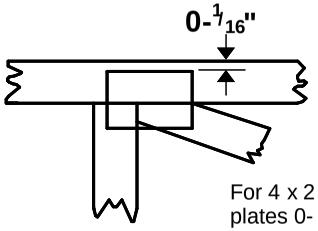
Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

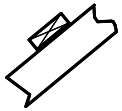
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

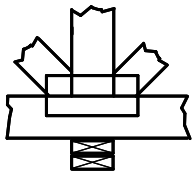
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

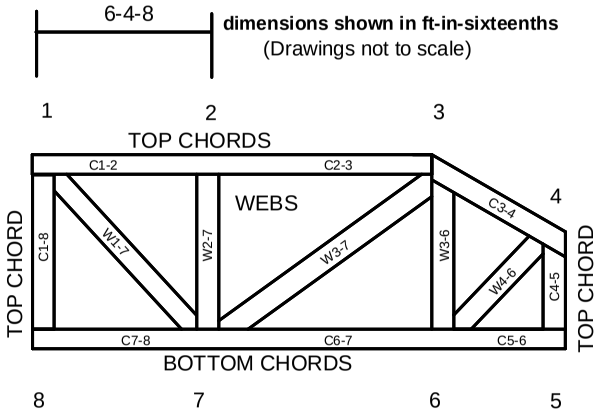


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

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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.