ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0820-3992
Precision/Lot 47 Summerlin/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: E15217445 thru E15217460

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

North Carolina COA: C-0844

December 16,2020

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	Precision/Lot 47 Summerlin/Harnett
J0820-3992	ET1	Floor Supported Gable	1	1	E15217445
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:28 2020 Page 1
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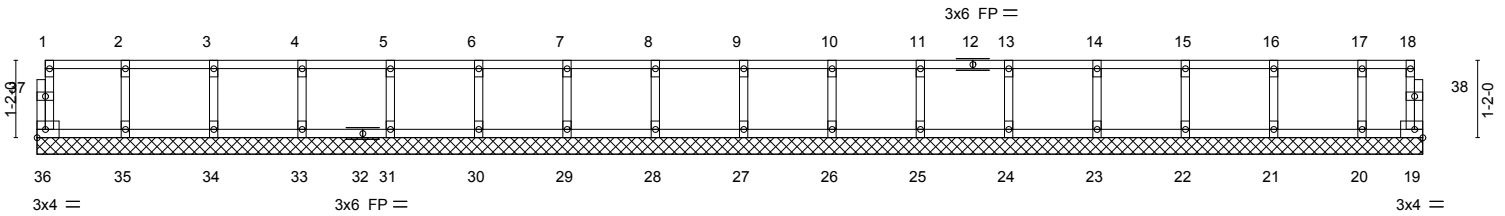

20-11-0
20-11-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	19	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 87 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 20-11-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 36, 19, 35, 34, 33, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21, 20

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	Precision/Lot 47 Summerlin/Harnett
J0820-3992	ET2	GABLE	1	1	E15217446
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:29 2020 Page 1
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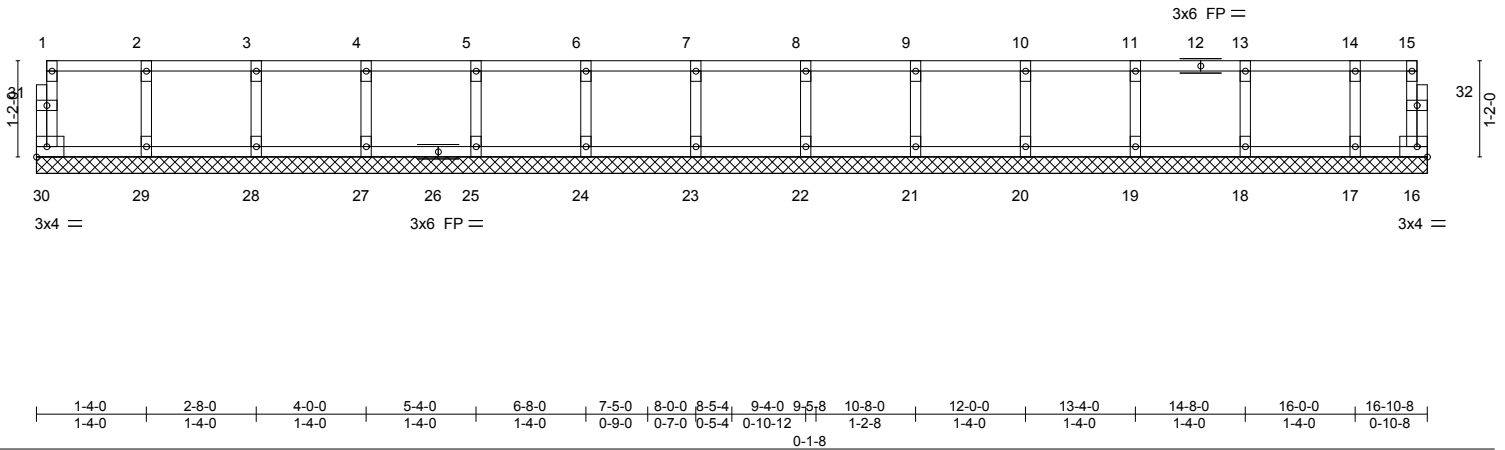

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	16	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 71 lb	FT = 20%F, 11%E

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 16-10-8.
(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) 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	Precision/Lot 47 Summerlin/Harnett
J0820-3992	ET3	GABLE	1	1	E15217447
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:29 2020 Page 1
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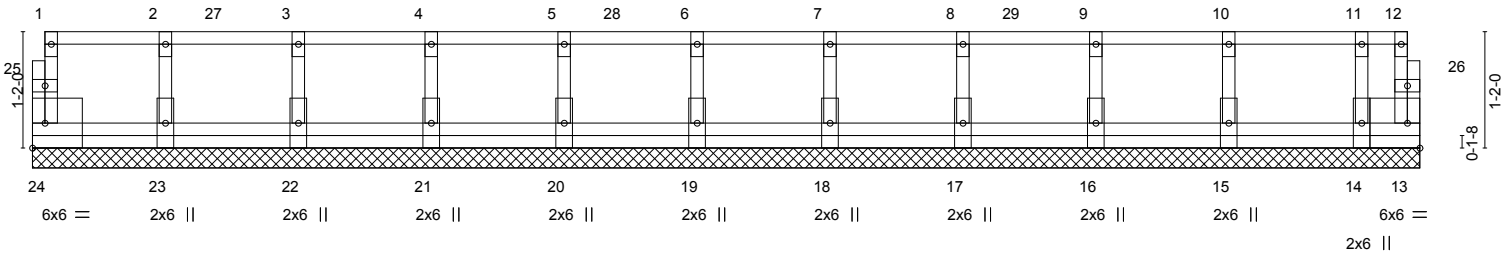

1-4-0	2-8-0	4-0-0	5-4-0	6-8-0	8-0-0	9-4-0	10-8-0	11-10-0	12-0-0	13-4-0	13-11-0
1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-2-0	0-2-0	1-4-0	0-7-0

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	NO	WB	0.04	Horz(CT)	0.00	13	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 78 lb	FT = 20%F, 11%E

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 13-11-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 24, 13, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14

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.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 13-24=-10, 1-12=-100
Concentrated Loads (lb)
Vert: 4=-48 7=-48 10=-48 27=-48 28=-48 29=-48

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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3992	ET4	FLOOR SUPPORTED GABL	1	1	E15217448
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:30 2020 Page 1
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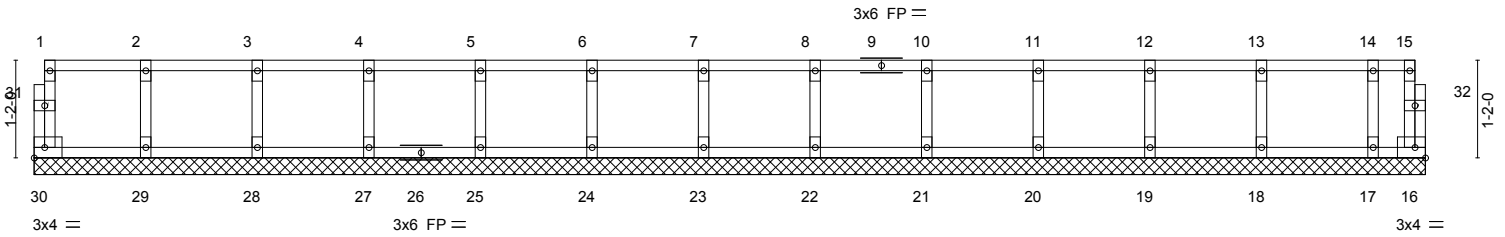

16-7-8
16-7-8

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	16	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 70 lb	FT = 20%F, 11%E

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

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

REACTIONS. All bearings 16-7-8.
(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) 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	Precision/Lot 47 Summerlin/Harnett
J0820-3992	F1	FLOOR	12	1	E15217449
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:31 2020 Page 1
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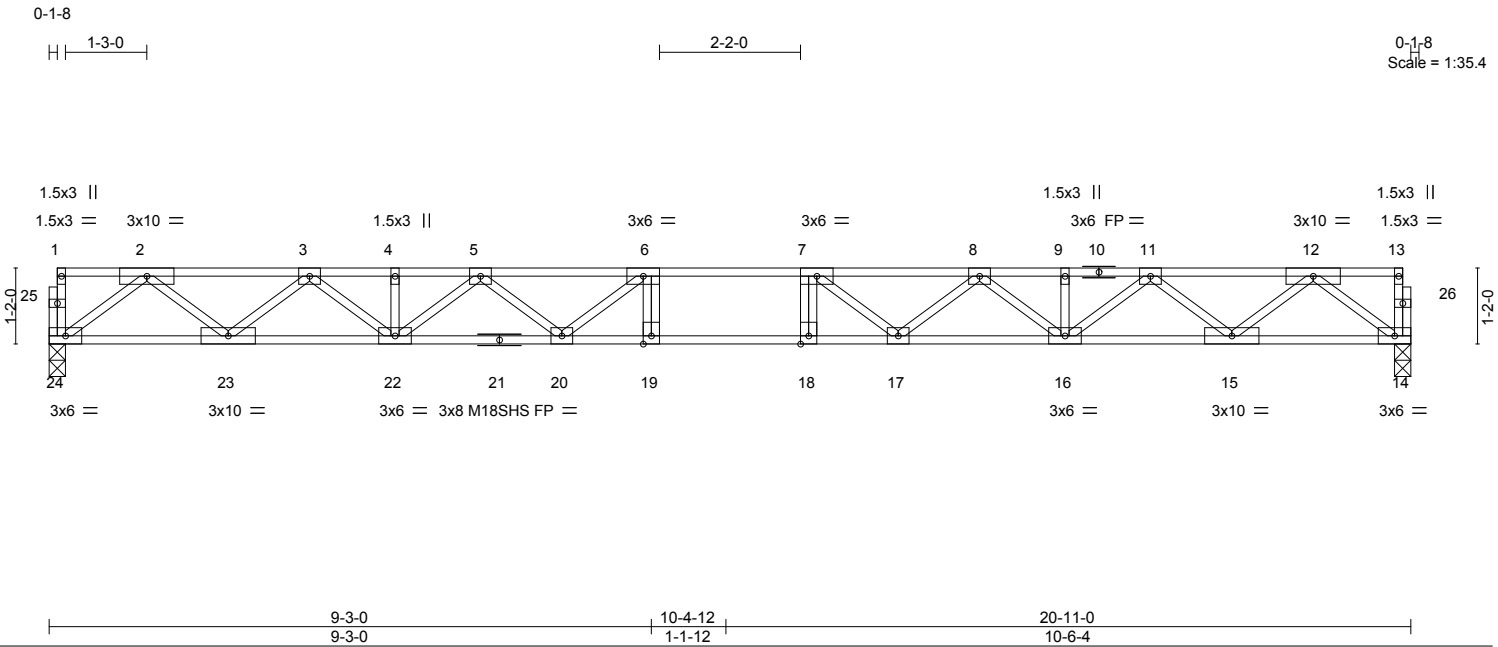

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.32	Vert(LL)	-0.34	18-19	>728	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.61	Vert(CT)	-0.47	18-19	>528	360	M18SHS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.07	14	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 107 lb	FT = 20%F, 11%E

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

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

REACTIONS. (size) 24=0-3-0, 14=0-3-0
Max Grav 24=904(LC 1), 14=904(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1967/0, 3-4=-3375/0, 4-5=-3375/0, 5-6=-4180/0, 6-7=-4467/0, 7-8=-4180/0, 8-9=-3375/0, 9-11=-3375/0, 11-12=-1967/0
BOT CHORD 23-24=0/1142, 22-23=0/2765, 20-22=0/3900, 19-20=0/4467, 18-19=0/4467, 17-18=0/4467, 16-17=0/3900, 15-16=0/2765, 14-15=0/1142
WEBS 2-24=-1431/0, 2-23=0/1074, 3-23=-1039/0, 3-22=0/779, 12-14=-1431/0, 12-15=0/1074, 11-15=-1039/0, 11-16=0/779, 8-16=-670/0, 8-17=0/485, 5-22=-670/0, 5-20=0/485, 6-20=-640/46, 7-17=-640/46

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 3x4 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	Precision/Lot 47 Summerlin/Harnett
J0820-3992	F2	Floor	7	1	E15217450
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:33 2020 Page 1
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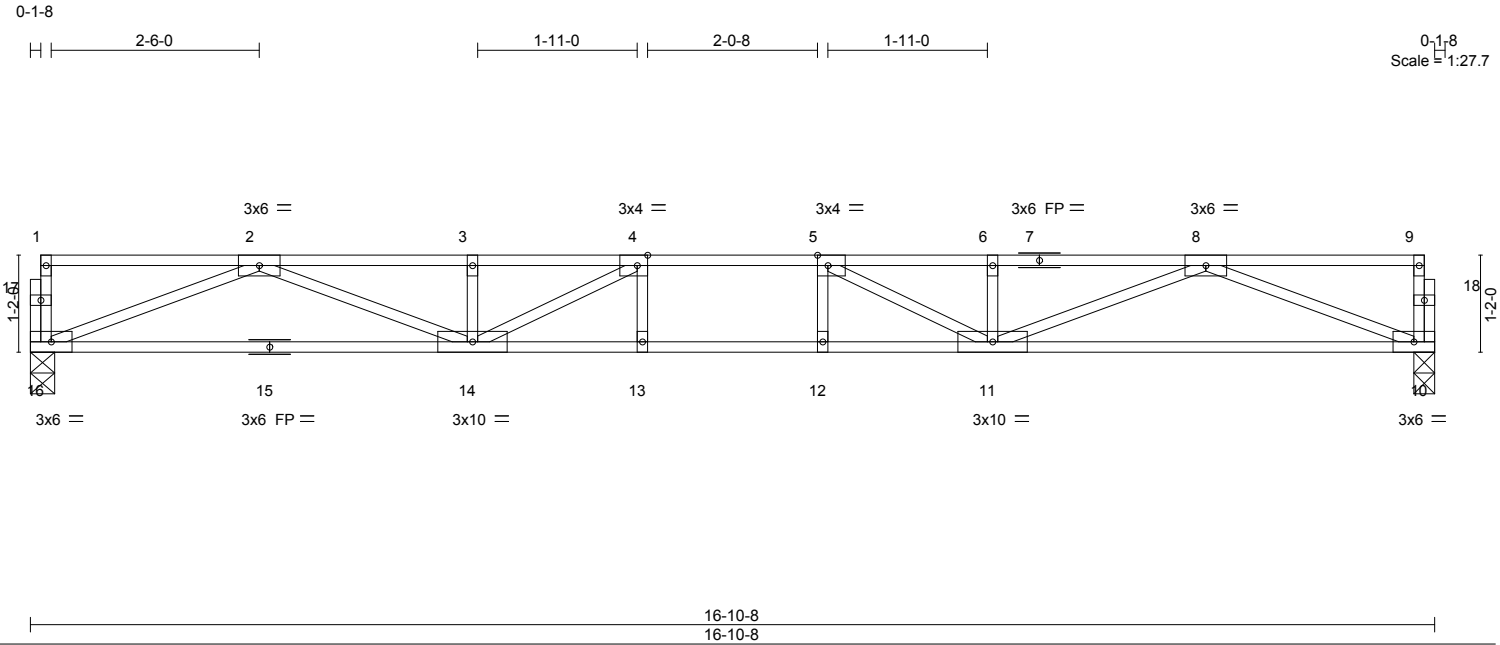

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge]

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	0.45	Vert(LL)	-0.25	12-13	>791	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.83	Vert(CT)	-0.35	12-13	>569	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.06	10	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 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. (size) 16=0-3-8, 10=0-3-0
Max Grav 16=908(LC 1), 10=908(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3175/0, 3-4=-3175/0, 4-5=-3602/0, 5-6=-3175/0, 6-8=-3175/0
BOT CHORD 14-16=0/1977, 13-14=0/3602, 12-13=0/3602, 11-12=0/3602, 10-11=0/1977
WEBS 2-16=-2120/0, 2-14=0/1293, 3-14=-268/21, 8-10=-2120/0, 8-11=0/1293, 6-11=-268/21, 5-11=-781/0, 4-14=-781/0

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.

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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3992	F3	Floor	1	1	E15217451
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:33 2020 Page 1
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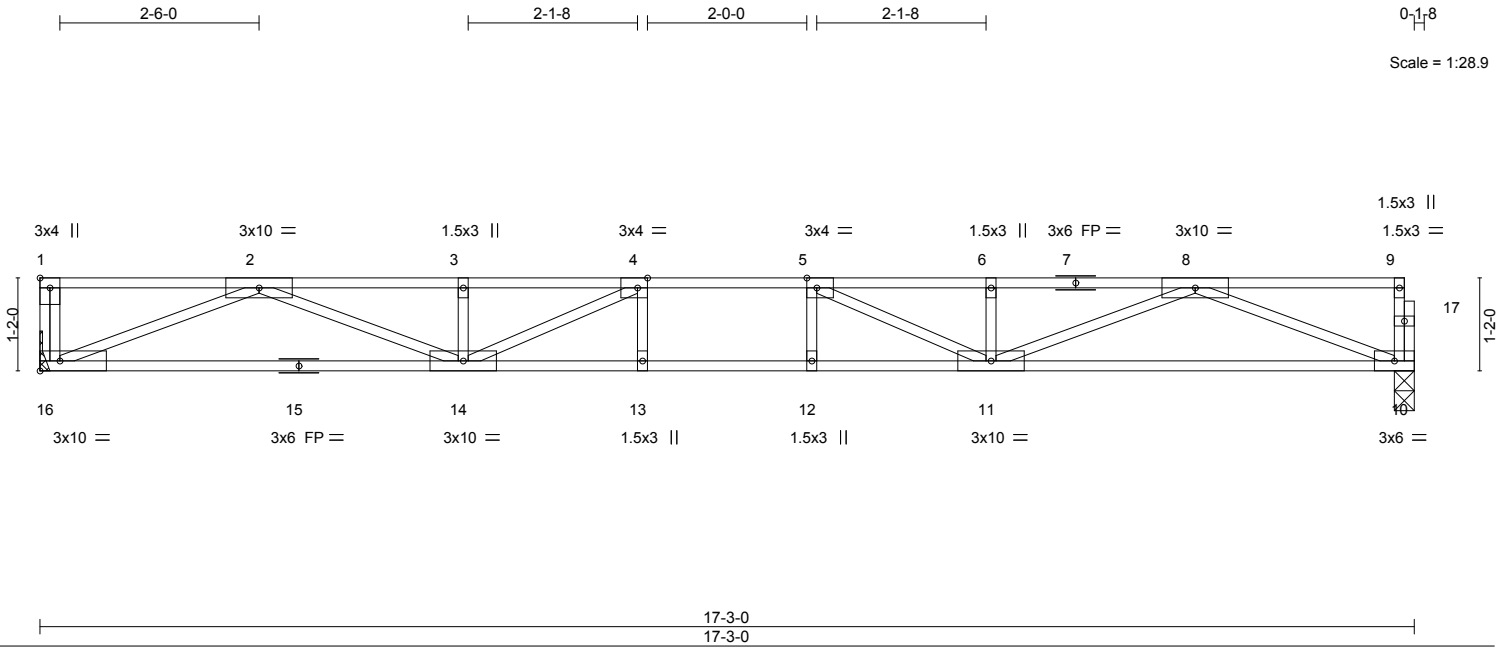

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [4:0-1-8,Edge], [5:0-1-8,Edge]

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	0.46	Vert(LL)	-0.27	12-13	>743	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.87	Vert(CT)	-0.38	12-13	>536	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.07	10	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	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)

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

REACTIONS. (size) 16=Mechanical, 10=0-3-0
Max Grav 16=935(LC 1), 10=929(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3282/0, 3-4=-3282/0, 4-5=-3772/0, 5-6=-3282/0, 6-8=-3282/0
BOT CHORD 14-16=0/2030, 13-14=0/3772, 12-13=0/3772, 11-12=0/3772, 10-11=0/2028
WEBS 2-16=-2184/0, 2-14=0/1351, 3-14=-278/14, 8-10=-2175/0, 8-11=0/1354, 6-11=-280/14, 5-11=-843/0, 4-14=-843/0

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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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3992	F4	Floor	2	1	E15217452
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:34 2020 Page 1
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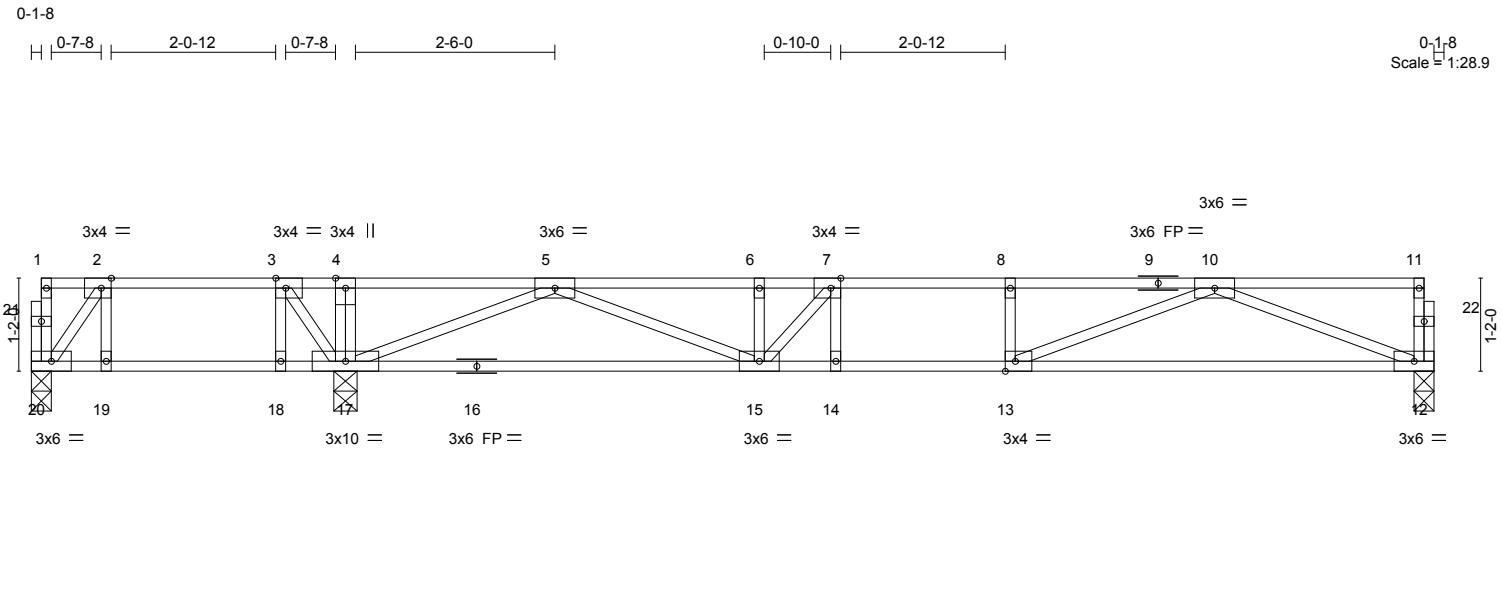

Plate Offsets (X,Y)-- [2:0-1-8,Edge], [3:0-1-8,Edge], [7:0-1-8,Edge], [13:0-1-8,Edge]

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	0.44	Vert(LL)	-0.13	12-13	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.59	Vert(CT)	-0.21	12-13	>770	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.03	12	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 87 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) 20=0-3-0, 17=0-3-8, 12=0-3-0
Max Uplift 20=-42(LC 4)
Max Grav 20=179(LC 3), 17=1084(LC 1), 12=707(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=0/352, 4-5=0/357, 5-6=-2076/0, 6-7=-2076/0, 7-8=-2186/0, 8-10=-2186/0
BOT CHORD 15-17=0/1236, 14-15=0/2186, 13-14=0/2186, 12-13=0/1472
WEBS 3-17=-491/0, 10-12=-1577/0, 10-13=0/814, 5-17=-1661/0, 5-15=0/916, 7-15=-476/115

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 20.
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 16,2020

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

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3992	F4-GR	Floor	1	1	E15217453
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:35 2020 Page 1
ID:PQVbfLGVTT1lOnQ611pZG_z1SF7-PVtQUTgQycwBqa8lKa3neM7tVF_Vnd5cSC6XCxy8RQc

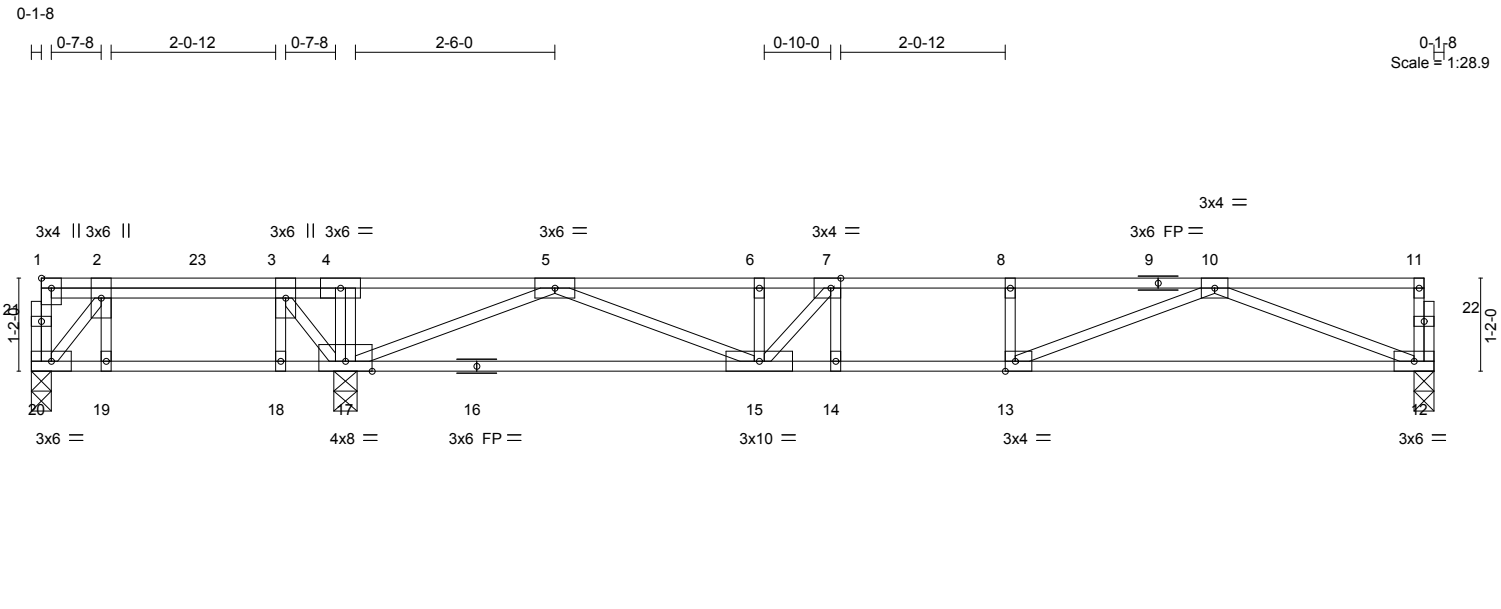

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [7:0-1-8,Edge], [13:0-1-8,Edge]

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	0.67	Vert(LL)	-0.14	12-13	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.61	Vert(CT)	-0.22	12-13	>735	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.48	Horz(CT)	0.03	12	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	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)

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) 20=0-3-0, 17=0-3-8, 12=0-3-0
Max Grav 20=530(LC 3), 17=1662(LC 1), 12=675(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-553/0, 3-4=0/873, 4-5=0/823, 5-6=-1815/0, 6-7=-1815/0, 7-8=-2002/0, 8-10=-2002/0
BOT CHORD 19-20=0/553, 18-19=0/553, 17-18=0/553, 15-17=0/901, 14-15=0/2002, 13-14=0/2002, 12-13=0/1391
WEBS 4-17=0/312, 2-20=-882/0, 3-17=-1710/0, 10-12=-1490/0, 10-13=0/697, 5-17=-1772/0, 5-15=0/992, 7-15=-532/0

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.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 915 lb down at 2-1-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
7) 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: 12-20=-10, 1-11=-100
Concentrated Loads (lb)
Vert: 23=-835(B)

December 16,2020

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

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3992	F5	Floor	5	1	E15217454
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:36 2020 Page 1
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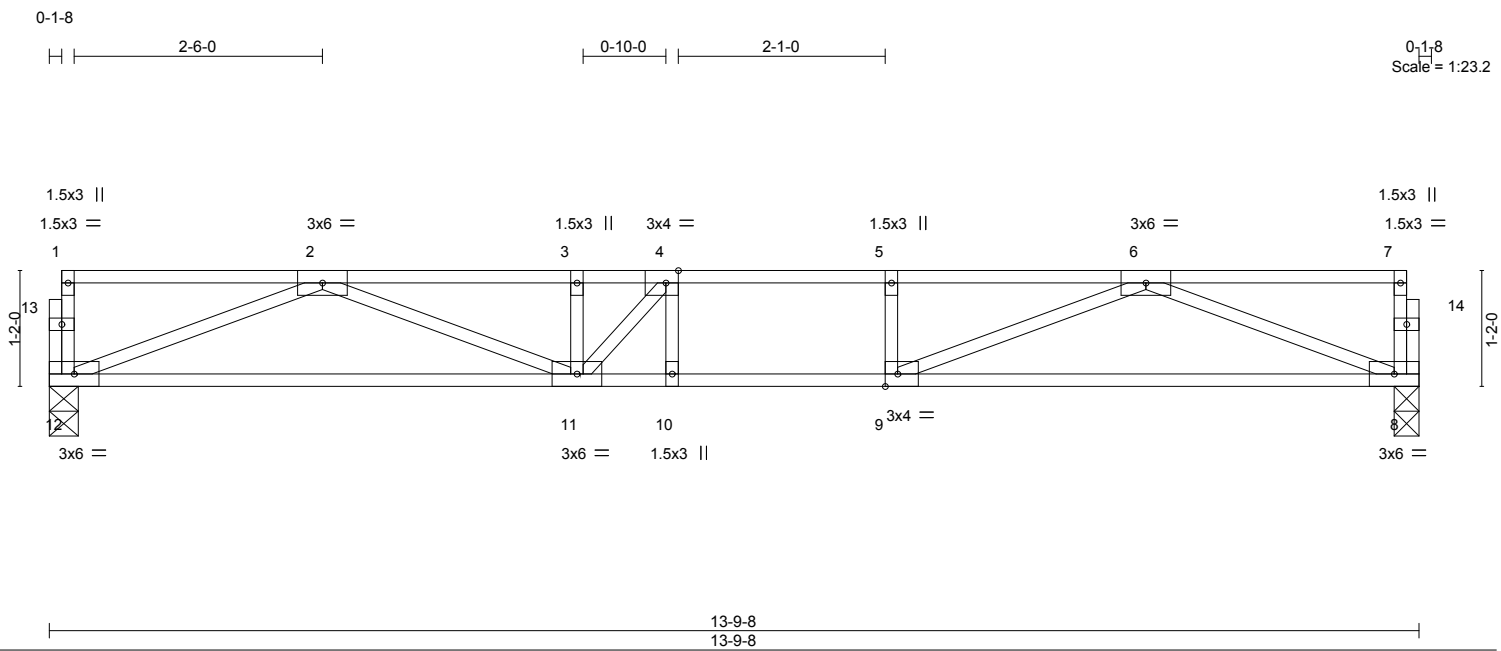

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [9:0-1-8,Edge]

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	0.44	Vert(LL)	-0.16	10-11	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.74	Vert(CT)	-0.20	8-9	>796	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.03	8	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 67 lb	FT = 20%F, 11%E

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

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

REACTIONS. (size) 12=0-3-8, 8=0-3-0
Max Grav 12=739(LC 1), 8=739(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2333/0, 3-4=-2333/0, 4-5=-2367/0, 5-6=-2367/0
BOT CHORD 11-12=0/1555, 10-11=0/2367, 9-10=0/2367, 8-9=0/1551
WEBS 2-12=-1667/0, 2-11=0/840, 3-11=-263/71, 6-8=-1662/0, 6-9=0/938, 5-9=-262/0, 4-11=-422/240

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

December 16,2020

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

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3992	F6-GR	Floor	1	1	E15217455
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:36 2020 Page 1
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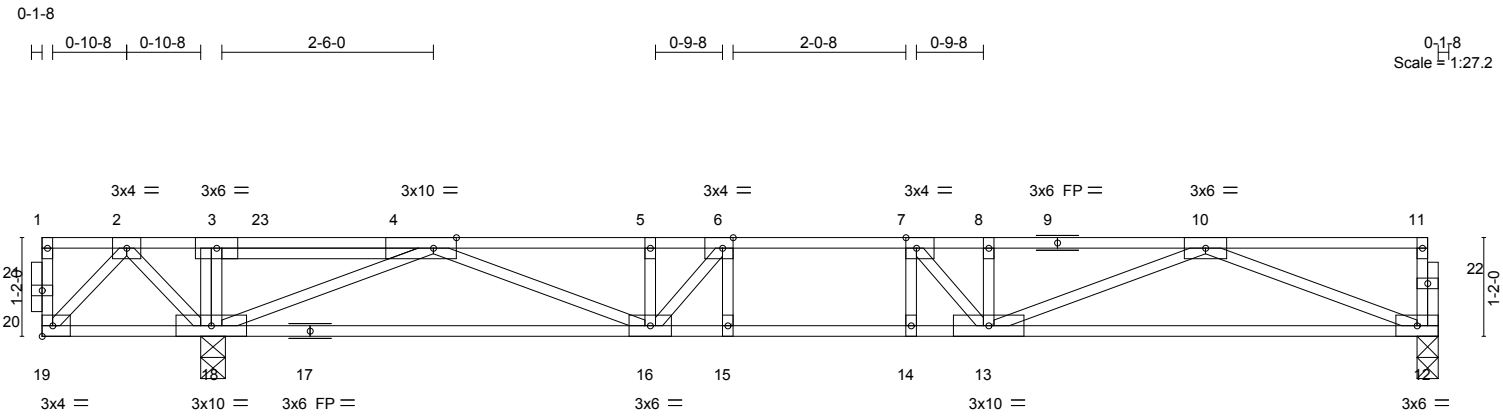

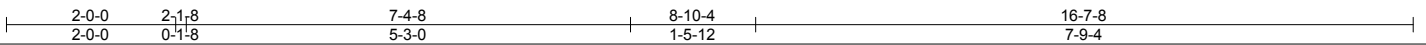

Plate Offsets (X,Y)-- [4:0-3-4,Edge], [6:0-1-8,Edge], [7:0-1-8,Edge]

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)	-0.16	15	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.79	Vert(CT)	-0.22	14-15	>767	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.54	Horz(CT)	0.04	12	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 88 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: 18-19.

REACTIONS. (size) 18=0-3-8, 12=0-3-0
Max Grav 18=1745(LC 1), 12=809(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-5=-2781/0, 5-6=-2777/0, 6-7=-2852/0, 7-8=-2675/0, 8-10=-2675/0
BOT CHORD 16-18=0/1924, 15-16=0/2852, 14-15=0/2852, 13-14=0/2852, 12-13=0/1732
WEBS 3-18=-856/0, 4-18=-1987/0, 4-16=0/939, 10-12=-1857/0, 10-13=0/1018, 7-13=-575/72, 6-16=-466/209

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.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 818 lb down at 2-9-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
7) 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: 12-19=-10, 1-11=-100
Concentrated Loads (lb)
Vert: 23=-755(F)

December 16,2020

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

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3992	F7	Floor	2	1	E15217456
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:37 2020 Page 1
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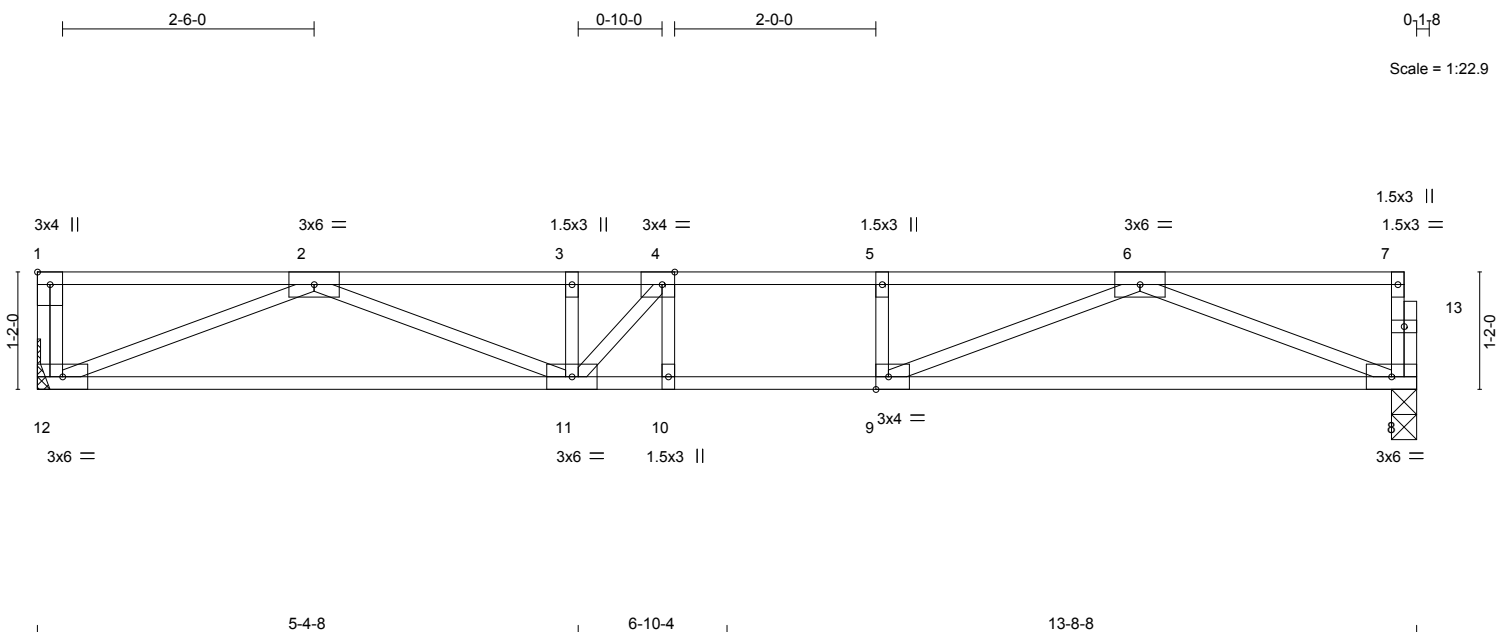

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [4:0-1-8,Edge], [9:0-1-8,Edge]

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	0.42	Vert(LL)	-0.15	10-11	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.72	Vert(CT)	-0.20	8-9	>809	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.03	8	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 68 lb	FT = 20%F, 11%E

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

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

REACTIONS. (size) 12=Mechanical, 8=0-3-0
Max Grav 12=740(LC 1), 8=734(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2310/0, 3-4=-2310/0, 4-5=-2341/0, 5-6=-2341/0
BOT CHORD 11-12=0/1546, 10-11=0/2341, 9-10=0/2341, 8-9=0/1540
WEBS 2-12=-1664/0, 2-11=0/824, 3-11=-260/68, 6-8=-1650/0, 6-9=0/920, 5-9=-257/0, 4-11=-411/241

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.

December 16,2020

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

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3992	F8-GR	Floor	1	1	E15217457
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:37 2020 Page 1
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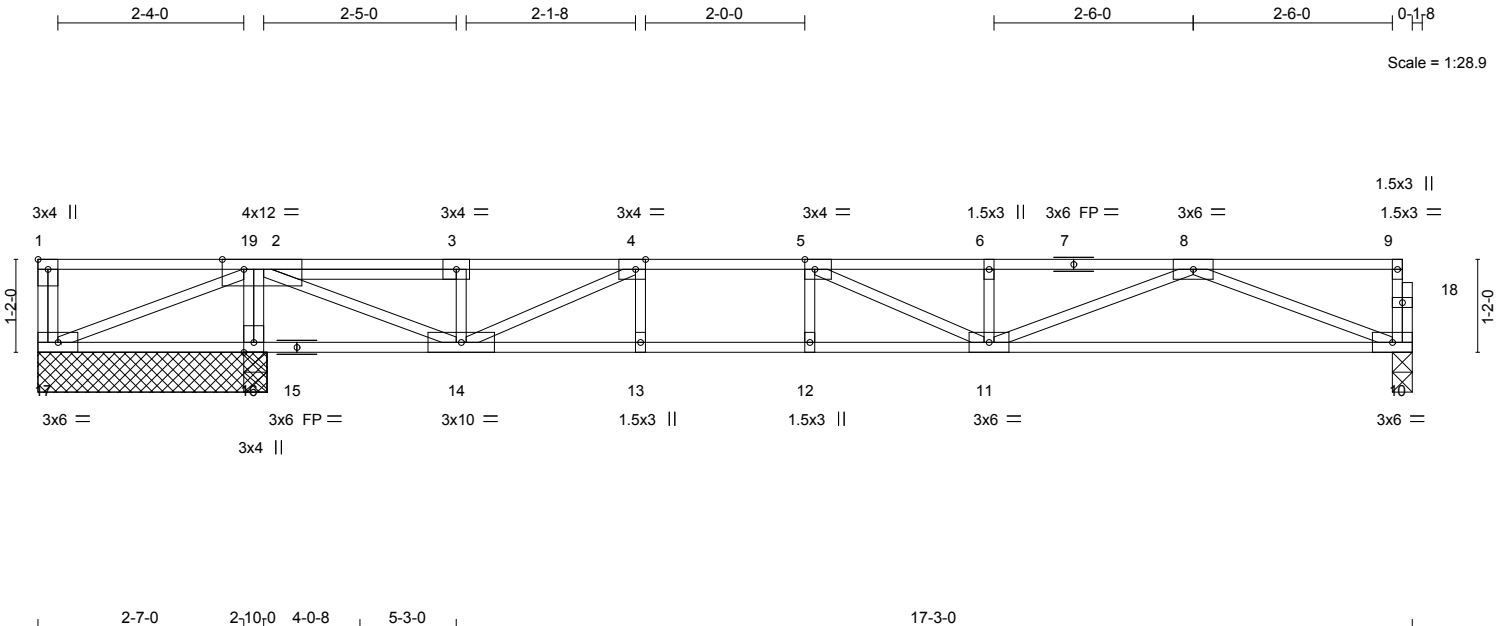

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [2:0-3-4,Edge], [4:0-1-8,Edge], [5:0-1-8,Edge]

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	0.70	Vert(LL)	-0.22	11-12	>790	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.65	Vert(CT)	-0.29	11-12	>591	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.70	Horz(CT)	0.02	10	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 90 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat) *Except*
10-15: 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. (size) 17=Mechanical, 10=0-3-0, 16=Mechanical, 16=Mechanical
Max Uplift 17=-278(LC 4)
Max Grav 10=751(LC 4), 16=2051(LC 1), 16=2051(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1197/0, 3-4=-1192/0, 4-5=-2330/0, 5-6=-2430/0, 6-8=-2430/0
BOT CHORD 16-17=-998/0, 13-14=0/2330, 12-13=0/2330, 11-12=0/2330, 10-11=0/1584
WEBS 2-17=0/1050, 2-14=0/1467, 8-10=-1697/0, 8-11=0/914, 6-11=-299/0, 5-11=-249/253, 4-14=-1267/0, 2-16=-2152/0

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 278 lb uplift at joint 17.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 813 lb down at 3-4-11 on top chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 10-17=-10, 1-9=-100
Concentrated Loads (lb)
Vert: 2=-753(B)

December 16,2020

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3992	F9-GR	FLOOR GIRDER	1	1	E15217458
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:38 2020 Page 1
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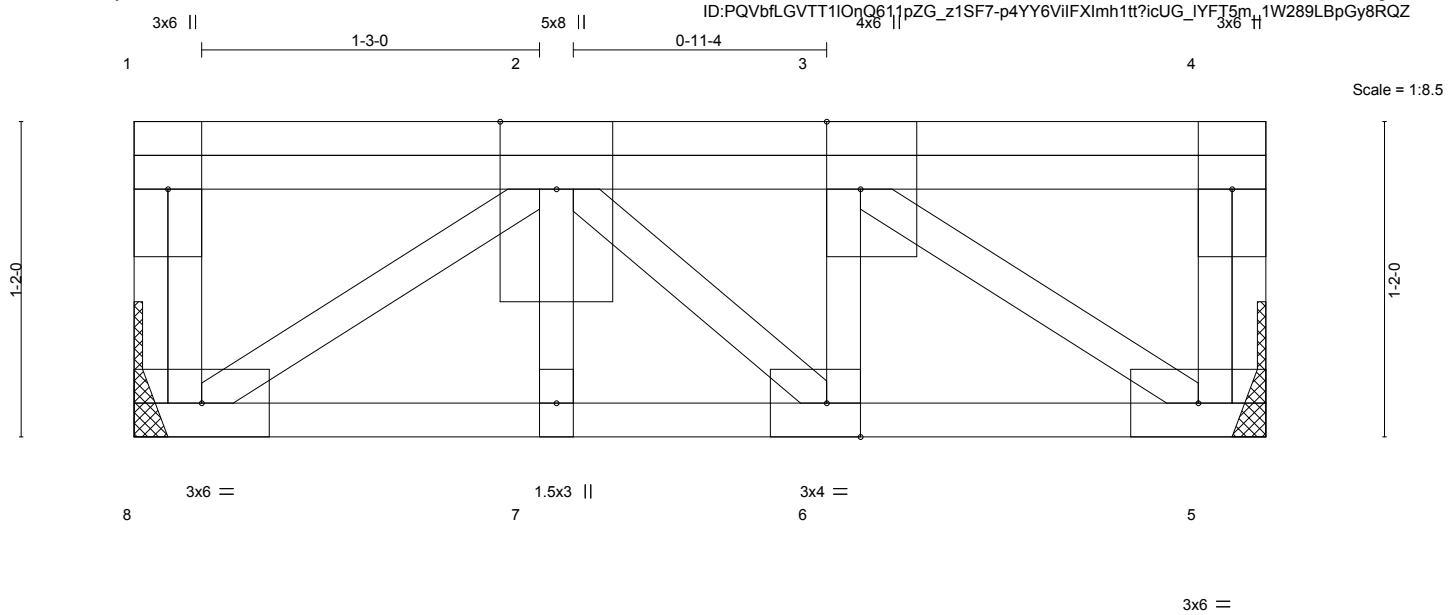

Plate Offsets (X,Y)-- [3:0-3-0,Edge], [6:0-1-8,Edge]

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	0.06	Vert(LL)	-0.01	7	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.25	Vert(CT)	-0.01	7	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.31	Horz(CT)	0.01	5	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 32 lb	FT = 20%F, 11%E

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-2-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=Mechanical, 5=Mechanical
Max Grav 8=833(LC 1), 5=833(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1103/0
BOT CHORD 7-8=0/1097, 6-7=0/1097, 5-6=0/1103
WEBS 3-5=-1335/0, 2-8=-1328/0

NOTES-
1) Plates checked for a plus or minus 1 degree rotation about its center.
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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 660 lb down at 1-4-4, and 660 lb down at 2-10-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
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: 5-8=-8, 1-4=-80
Concentrated Loads (lb)
Vert: 3=-660(B) 2=-660(B)

December 16,2020

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3992	F10	Floor	8	1	E15217459
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:31 2020 Page 1
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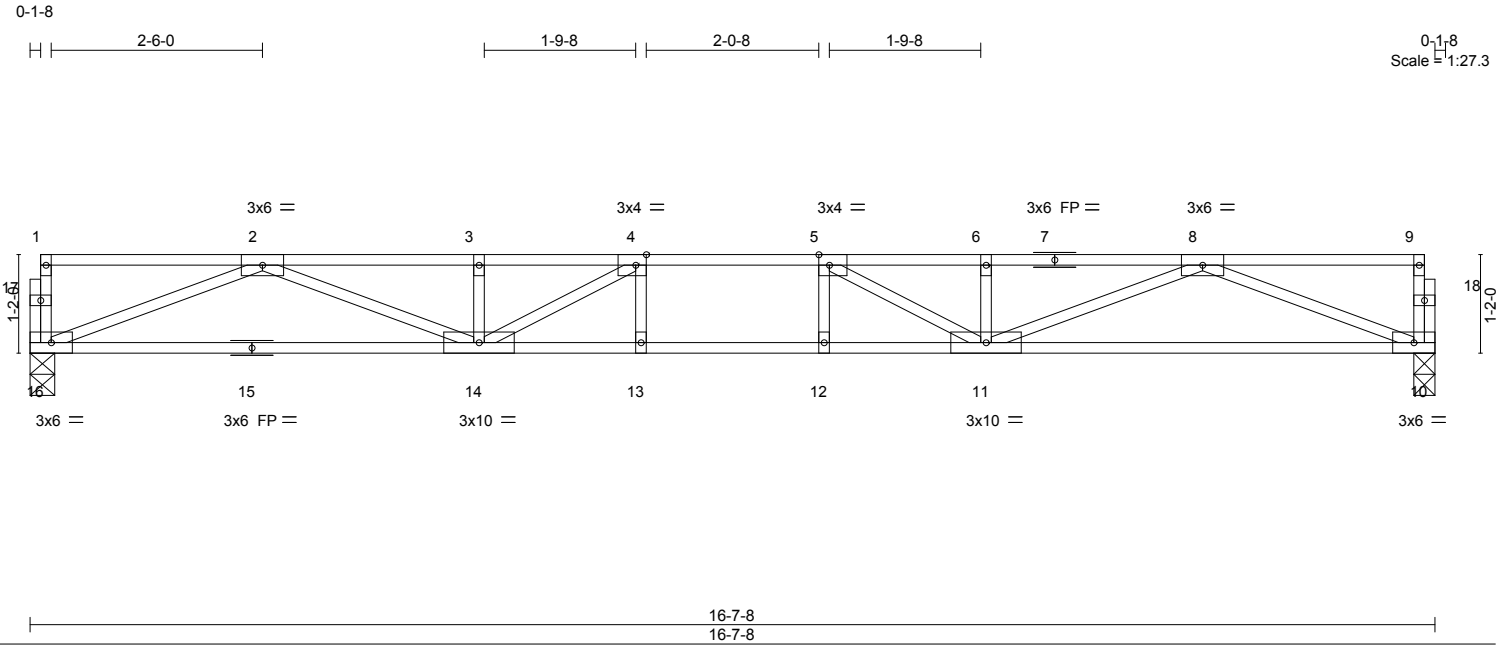

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge]

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	0.44	Vert(LL)	-0.24	12-13	>824	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.81	Vert(CT)	-0.33	12-13	>593	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.06	10	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) 16=0-3-8, 10=0-3-0
Max Grav 16=894(LC 1), 10=894(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3105/0, 3-4=-3105/0, 4-5=-3492/0, 5-6=-3105/0, 6-8=-3105/0
BOT CHORD 14-16=0/1943, 13-14=0/3492, 12-13=0/3492, 11-12=0/3492, 10-11=0/1943
WEBS 2-16=-2084/0, 2-14=0/1254, 3-14=-262/25, 8-10=-2084/0, 8-11=0/1254, 6-11=-262/25, 5-11=-740/0, 4-14=-740/0

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.

December 16,2020

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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3992	F10-A	Floor	1	1	E15217460
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:32 2020 Page 1
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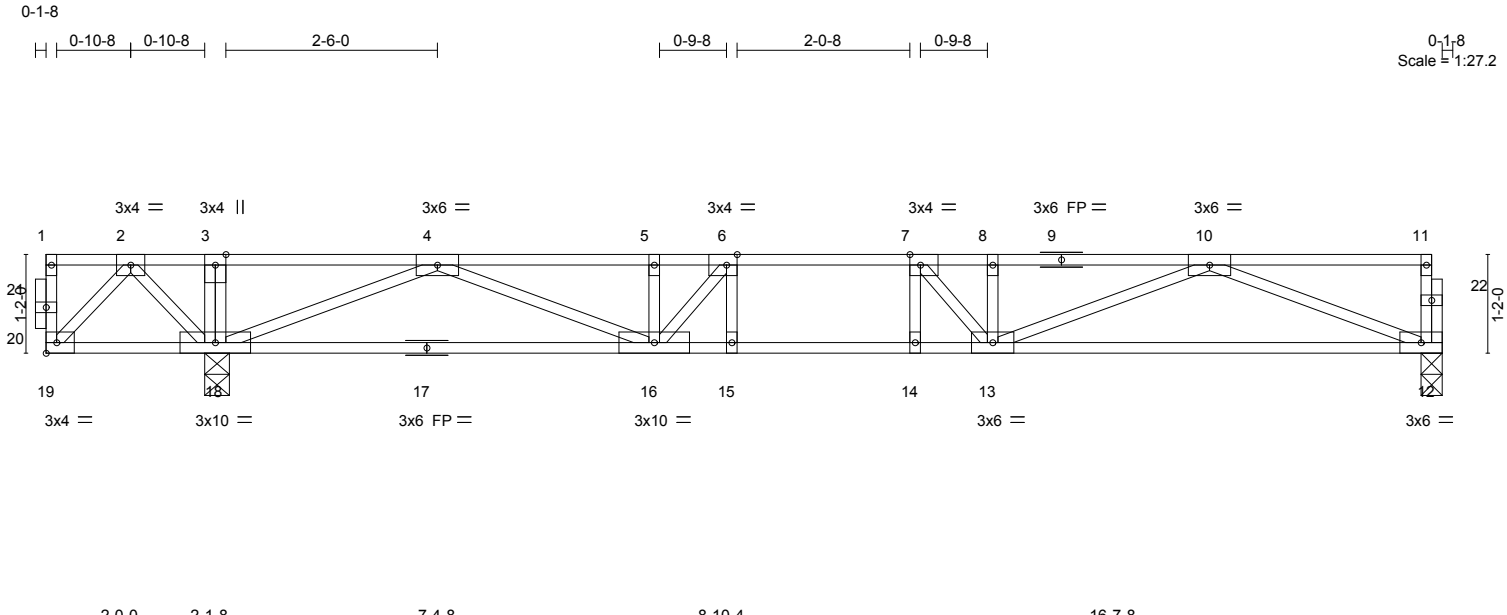


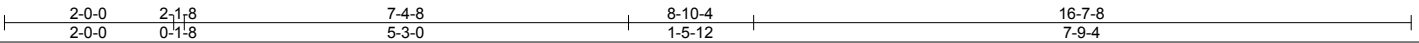


Plate Offsets (X,Y)-- [6:0-1-8,Edge], [7:0-1-8,Edge]

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	0.39	Vert(LL)	-0.15	14-15	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.65	Vert(CT)	-0.20	14-15	>848	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.04	12	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 85 lb	FT = 20%F, 11%E

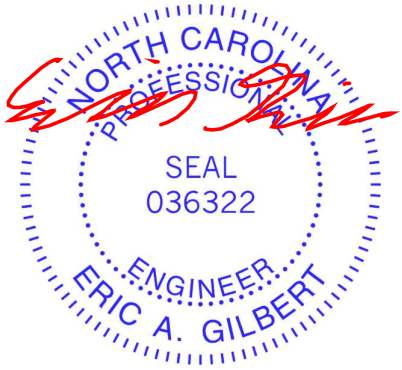
LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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: 18-19.

REACTIONS. (size) 18=0-3-8, 12=0-3-0
Max Grav 18=1021(LC 1), 12=778(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-5=-2489/0, 5-6=-2489/0, 6-7=-2635/0, 7-8=-2522/0, 8-10=-2522/0
BOT CHORD 16-18=0/1591, 15-16=0/2635, 14-15=0/2635, 13-14=0/2635, 12-13=0/1653
WEBS 4-18=-1734/0, 4-16=0/998, 10-12=-1772/0, 10-13=0/938, 7-13=-478/177, 6-16=-561/100

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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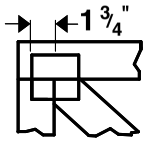
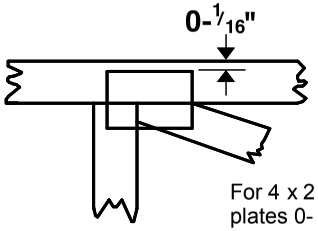
Symbols

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.

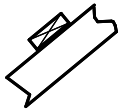
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

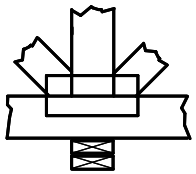
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

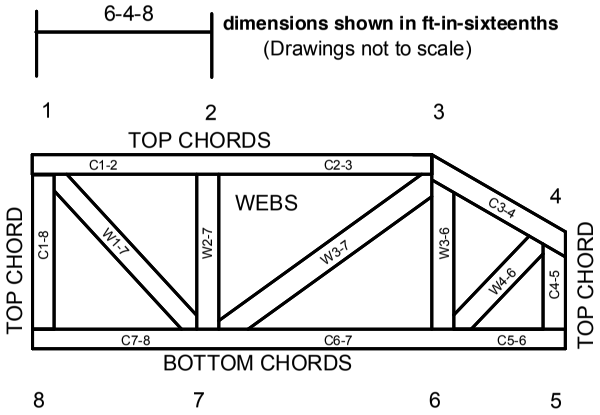


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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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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.

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Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0820-3991
Precision/Lot 47 Summerlin/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: E15217423 thru E15217444

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

North Carolina COA: C-0844

December 16,2020

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	Precision/Lot 47 Summerlin/Harnett
J0820-3991	A1-GE	GABLE	2	1	E15217423
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:26 2020 Page 1
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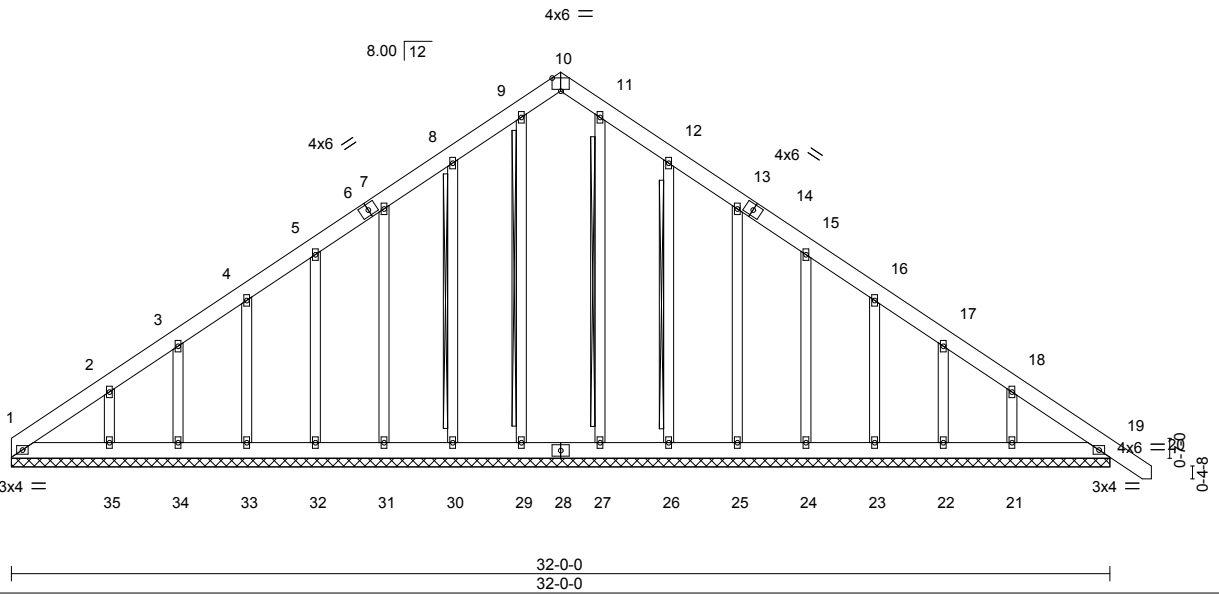

Plate Offsets (X,Y)-- [10:0-3-0,Edge]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	-0.00	19	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	19	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	19	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 285 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS T-Brace: 2x4 SP No.3 - 9-29
2x4 SPF No.2 - 8-30, 11-27, 12-26
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS. All bearings 32-0-0.
(lb) - Max Horz 1=-335(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 10, 19, 29, 30, 31, 32, 33, 34, 27, 26, 25, 24, 23, 22 except 35=-134(LC 12), 21=-117(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 19, 29, 30, 31, 32, 33, 34, 27, 26, 25, 24, 23, 22, 21 except 10=341(LC 13), 35=263(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-291/280, 5-7=-166/258, 7-8=-223/301, 8-9=-285/343, 9-10=-306/380, 10-11=-306/380, 11-12=-285/341, 12-13=-223/269

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 10, 19, 29, 30, 31, 32, 33, 34, 27, 26, 25, 24, 23, 22 except (jt=lb) 35=134, 21=117.
11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

December 16,2020

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3991	A2	FINK	10	1	E15217424
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:27 2020 Page 1
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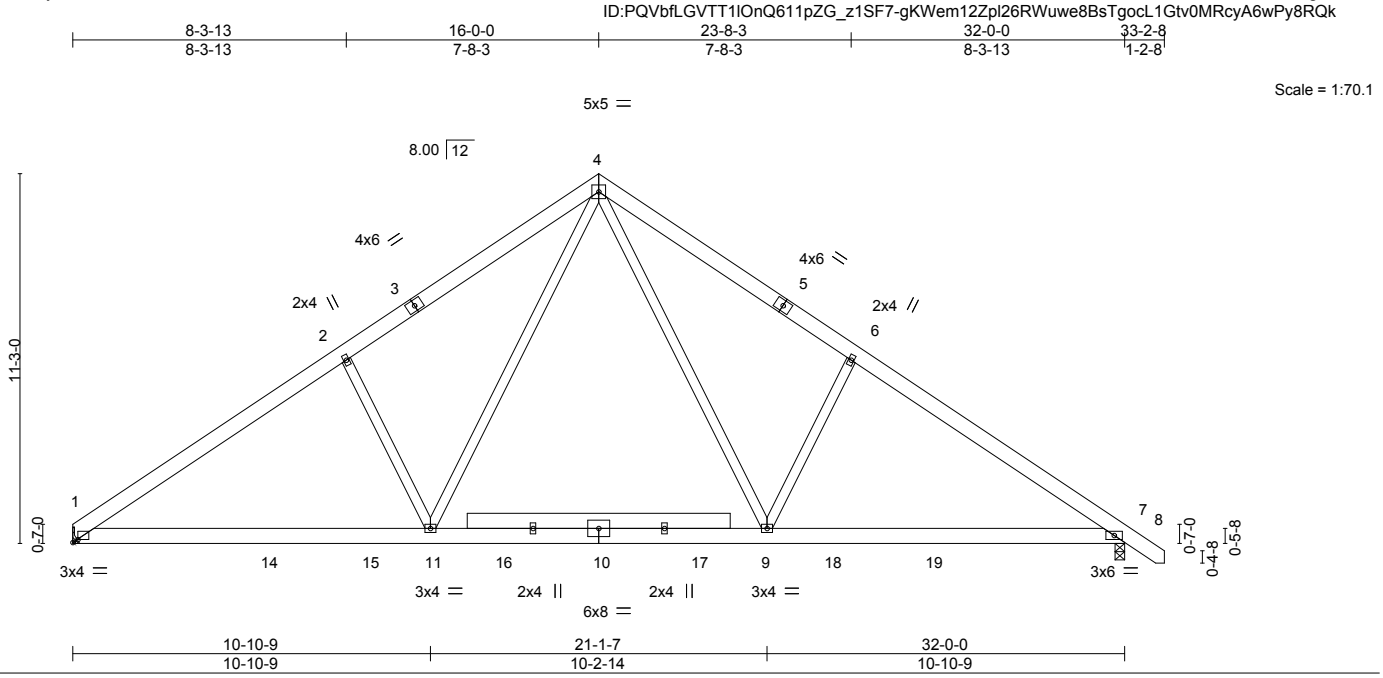

Plate Offsets (X,Y)-- [1:0-1-14,0-1-1]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.14	9-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.21	1-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.04	7-9	>999	240	Weight: 239 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-1-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=Mechanical, 7=0-3-8
Max Horz 1=-268(LC 10)
Max Uplift 1=-67(LC 12), 7=-84(LC 13)
Max Grav 1=1453(LC 19), 7=1523(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2102/343, 2-4=-1968/440, 4-6=-1959/438, 6-7=-2094/341
BOT CHORD 1-11=-149/1854, 9-11=0/1198, 7-9=-145/1662
WEBS 2-11=-547/308, 4-11=-165/1030, 4-9=-162/1015, 6-9=-541/301

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Interior(1) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.

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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3991	A3	FINK	2	1	E15217425
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:27 2020 Page 1
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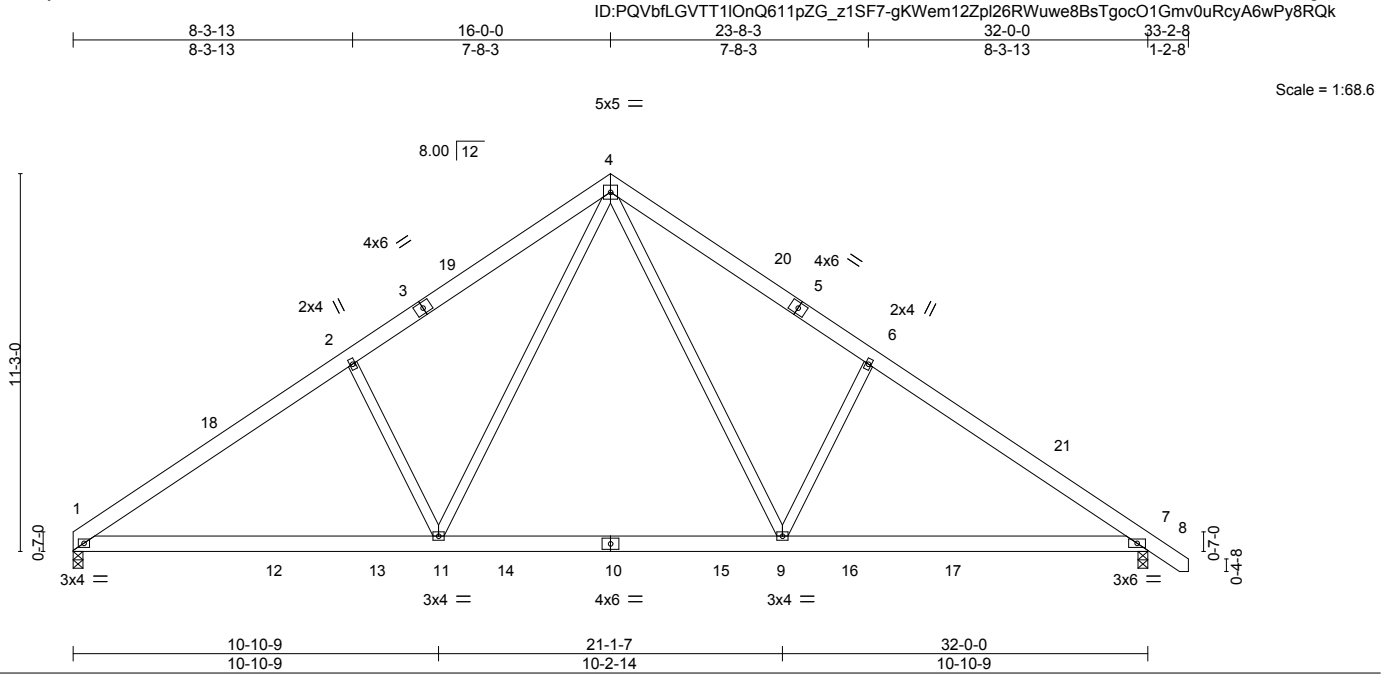


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.15	9-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.21	1-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.04	7-9	>999	240	Weight: 220 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-1-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 7=0-3-8
Max Horz 1=-268(LC 8)
Max Uplift 1=-67(LC 12), 7=-84(LC 13)
Max Grav 1=1461(LC 19), 7=1532(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2115/391, 2-4=-1981/490, 4-6=-1976/475, 6-7=-2110/379
BOT CHORD 1-11=-173/1862, 9-11=0/1207, 7-9=-171/1675
WEBS 2-11=-542/321, 4-11=-177/1035, 4-9=-175/1028, 6-9=-541/315

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 16-0-0, Exterior(2) 16-0-0 to 20-4-13, Interior(1) 20-4-13 to 33-0-15 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.

December 16,2020

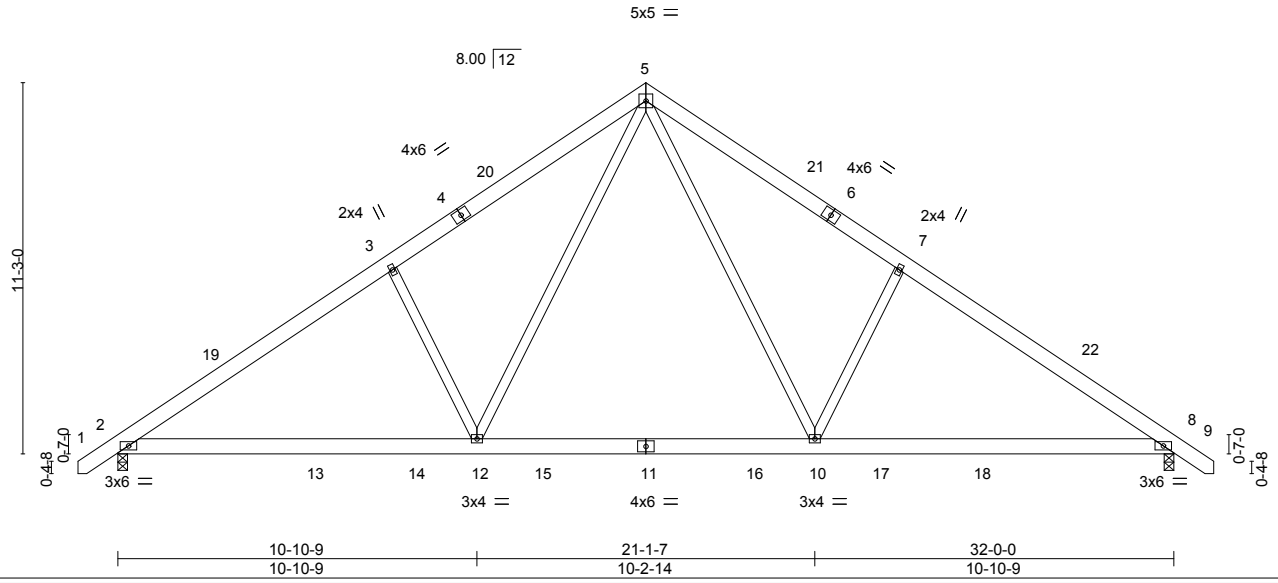
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3991	A4	FINK	2	1	E15217426
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:28 2020 Page 1
ID:PQVbfLGVTT1IOnQ611pZG_z1SF7-8W40zN3Ba3Az3gT6Bri5?tLnIRc2eTGarcwfSry8RQj

1-2-8 | 8-3-13 | 16-0-0 | 23-8-3 | 32-0-0 | 33-2-8
1-2-8 | 8-3-13 | 7-8-3 | 7-8-3 | 8-3-13 | 1-2-8

Scale = 1:69.8



10-10-9 | 21-1-7 | 32-0-0
10-10-9 | 10-2-14 | 10-10-9

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.15	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.20	10-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.04	2-12	>999	240	Weight: 223 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-1-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-273(LC 10)
Max Uplift 2=-84(LC 12), 8=-84(LC 13)
Max Grav 2=1531(LC 19), 8=1531(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2109/378, 3-5=-1974/474, 5-7=-1974/474, 7-8=-2109/378
BOT CHORD 2-12=-154/1854, 10-12=0/1205, 8-10=-166/1673
WEBS 3-12=-541/314, 5-12=-174/1028, 5-10=-174/1028, 7-10=-541/314

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 16-0-0, Exterior(2) 16-0-0 to 20-4-13, Interior(1) 20-4-13 to 33-0-15 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.

December 16,2020

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3991	A5	FINK	6	1	E15217427
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:29 2020 Page 1
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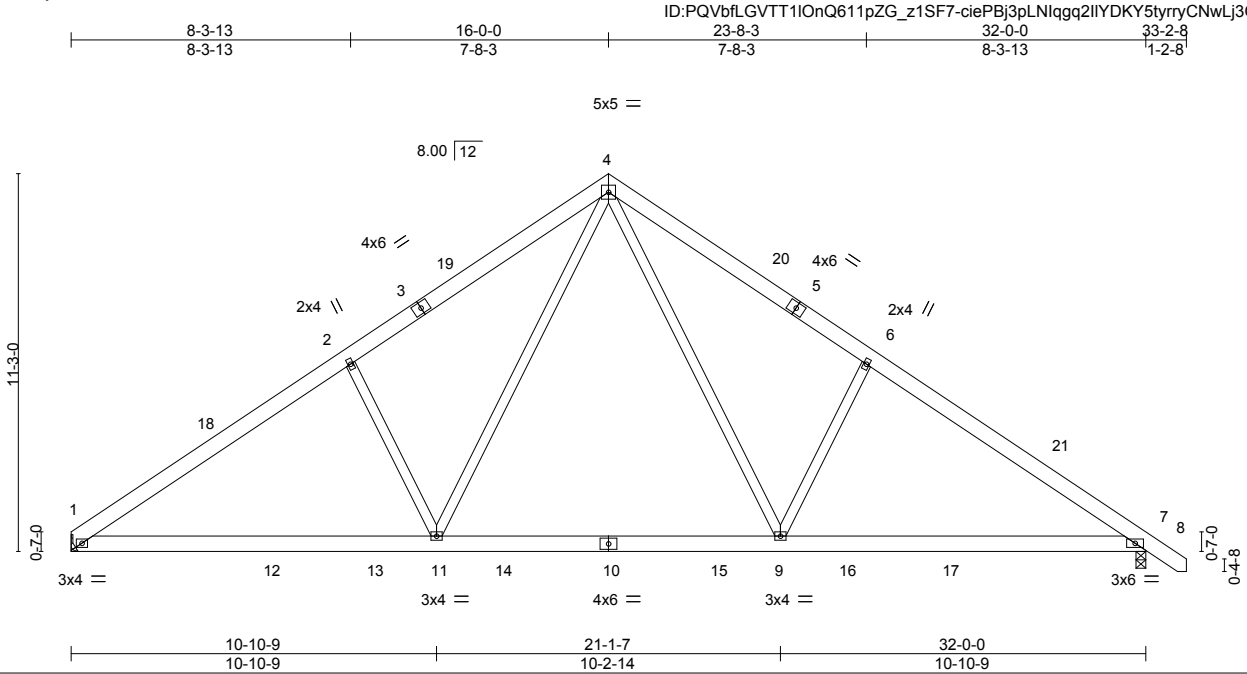

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.15	9-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.21	1-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.04	7-9	>999	240	Weight: 220 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=Mechanical, 7=0-3-8
Max Horz 1=-268(LC 10)
Max Uplift 1=-67(LC 12), 7=-84(LC 13)
Max Grav 1=1463(LC 19), 7=1534(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2122/392, 2-4=-1988/491, 4-6=-1979/476, 6-7=-2114/380
BOT CHORD 1-11=-174/1870, 9-11=0/1210, 7-9=-171/1678
WEBS 2-11=-547/322, 4-11=-178/1042, 4-9=-175/1027, 6-9=-541/315

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-4 to 4-6-1, Interior(1) 4-6-1 to 16-0-0, Exterior(2) 16-0-0 to 20-4-13, Interior(1) 20-4-13 to 33-0-15 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.

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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3991	B1-GE	GABLE	1	1	E15217428
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:30 2020 Page 1
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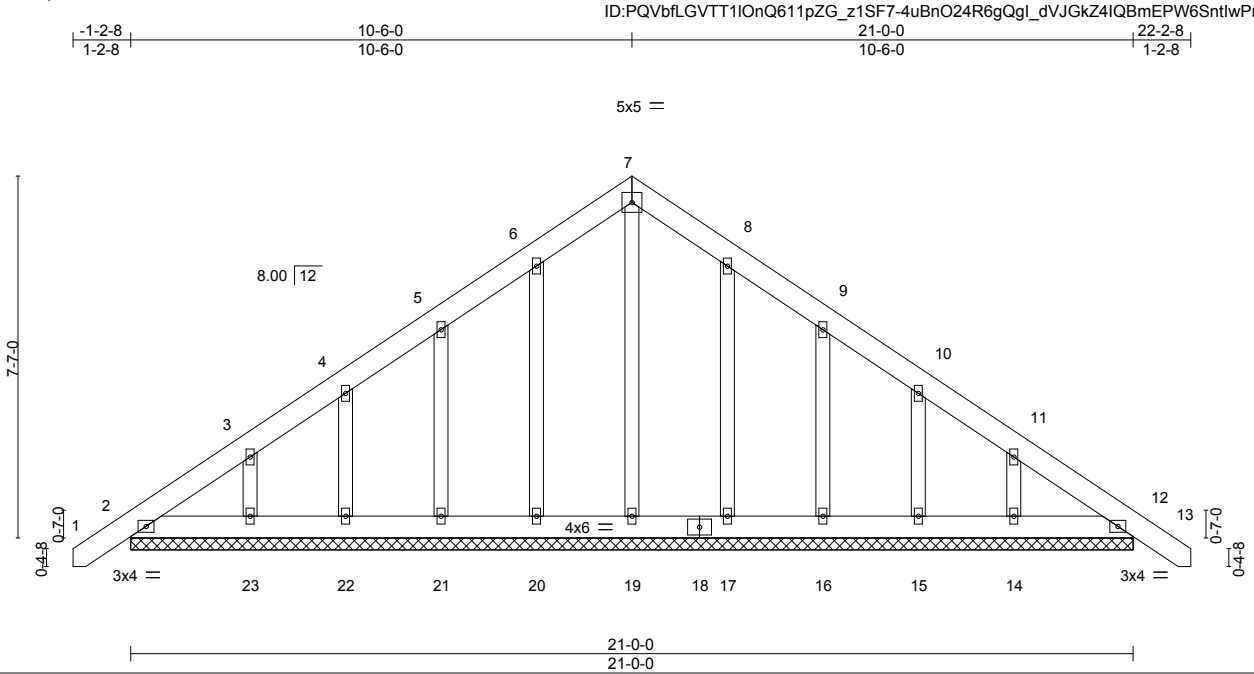

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	-0.00	12	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	12	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 165 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. All bearings 21-0-0.
(lb) - Max Horz 2=-231(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 21, 22, 17, 16, 15, 12 except 23=-104(LC 12), 14=-103(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 19, 20, 21, 22, 23, 17, 16, 15, 12, 14

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20, 21, 22, 17, 16, 15, 12 except (jt=lb) 23=104, 14=103.

December 16,2020

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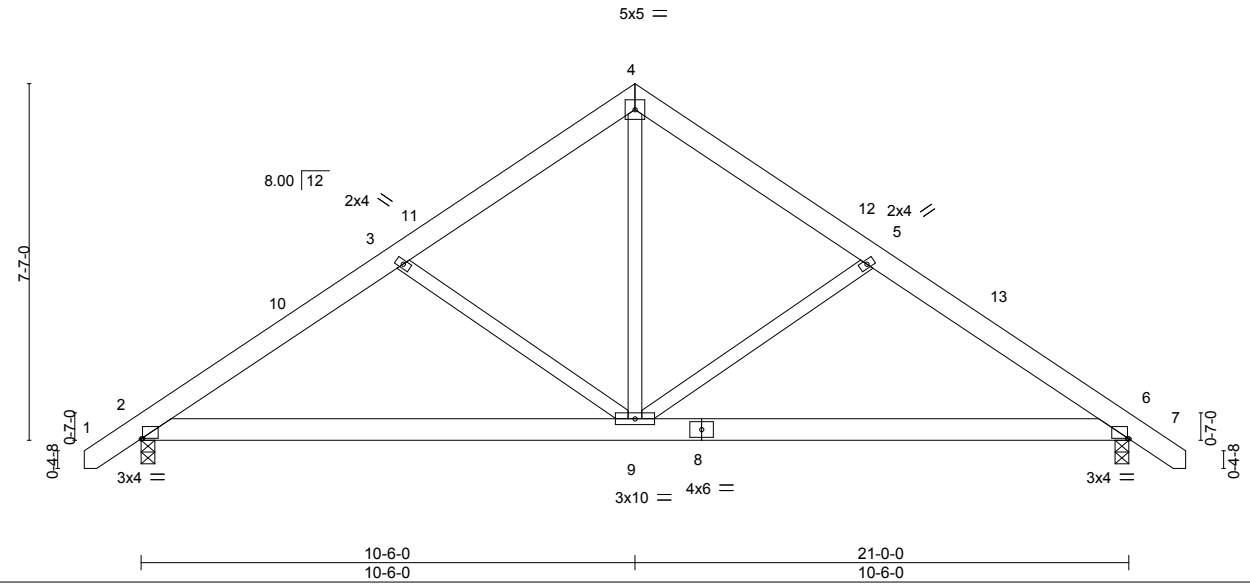
Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3991	B2	QUEENPOST	2	1	E15217429
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:31 2020 Page 1
ID:PQVbfLGVTT1lOnQ611pZG_z1SF7-Z5l9bO53t_YXw7ChtzFodWzLDegMrtw0Xa8J3Ay8RQg

-1-2-8	5-6-14	10-6-0	15-5-3	21-0-0	22-2-8
1-2-8	5-6-14	4-11-3	4-11-3	5-6-14	1-2-8

Scale = 1:49.0



10-6-0	21-0-0
10-6-0	10-6-0

Plate Offsets (X,Y)-- [2:0-0-6,0-0-2], [6:0-0-6,0-0-2]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	-0.06	6-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.12	6-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	-0.01	6-9	>999	240	Weight: 143 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

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

REACTIONS. (size) 6=0-3-8, 2=0-3-8
Max Horz 2=-185(LC 10)
Max Uplift 6=-61(LC 13), 2=-61(LC 12)
Max Grav 6=902(LC 1), 2=902(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1127/271, 3-4=-872/237, 4-5=-872/237, 5-6=-1127/272
BOT CHORD 2-9=-103/913, 6-9=-119/878
WEBS 4-9=-104/674, 5-9=-372/219, 3-9=-372/219

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 10-6-0, Exterior(2) 10-6-0 to 14-10-13, Interior(1) 14-10-13 to 22-0-15 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

December 16,2020

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3991	B3-2PLY	FINK	1	2	E15217430
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:32 2020 Page 1
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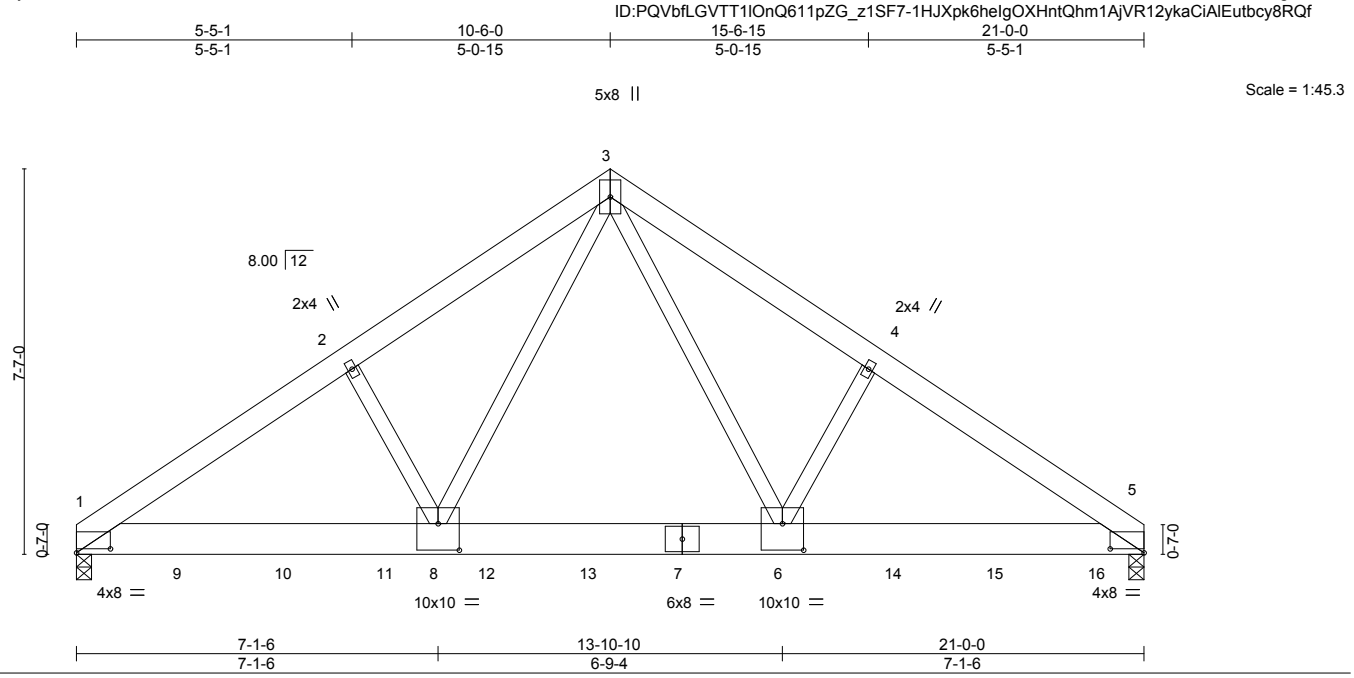

Plate Offsets (X,Y)-- [1:0-8-0,0-0-15], [5:0-8-0,0-0-15], [6:0-5-0,0-6-4], [8:0-5-0,0-6-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.11	6-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.20	6-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.72	Horz(CT)	0.04	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.07	6-8	>999	240	Weight: 314 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-9, 5=0-3-9
Max Horz 1=-168(LC 25)
Max Uplift 1=-418(LC 8), 5=-458(LC 9)
Max Grav 1=7186(LC 2), 5=7887(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-9954/601, 2-3=-9819/656, 3-4=-9809/656, 4-5=-9943/601
BOT CHORD 1-8=-514/8182, 6-8=-269/5602, 5-6=-434/8177
WEBS 3-6=-390/5826, 4-6=-303/243, 3-8=-391/5847, 2-8=-303/247

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=418, 5=458.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1362 lb down and 87 lb up at 2-0-12, 1362 lb down and 87 lb up at 4-0-12, 1362 lb down and 87 lb up at 6-0-12, 1362 lb down and 87 lb up at 8-0-12, 1362 lb down and 87 lb up at 10-0-12, 1362 lb down and 87 lb up at 12-0-12, 1362 lb down and 87 lb up at 14-0-12, 1362 lb down and 87 lb up at 16-0-12, and 1362 lb down and 87 lb up at 18-0-12, and 1364 lb down and 85 lb up at 20-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-5=-60, 1-5=-20

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Continued on page 2

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LOAD CASE(S) Standard

Concentrated Loads (lb)

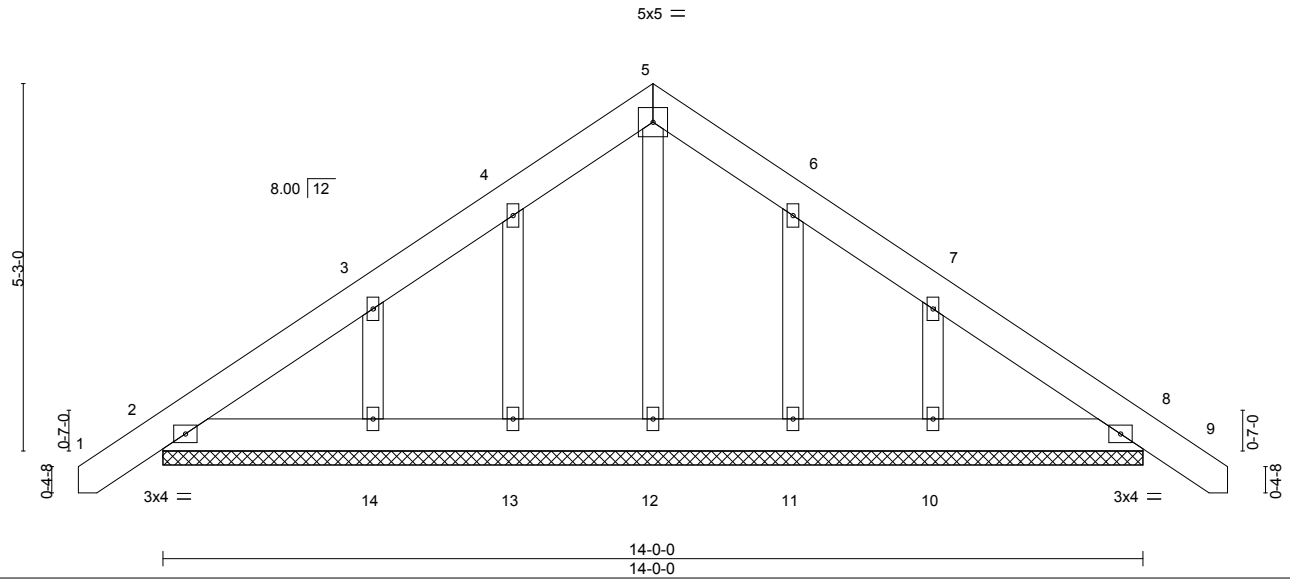
Vert: 7=-1249(B) 6=-1249(B) 9=-1249(B) 10=-1249(B) 11=-1249(B) 12=-1249(B) 13=-1249(B) 14=-1249(B) 15=-1249(B) 16=-1251(B)

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3991	C1-GE	GABLE	1	1	E15217431
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:33 2020 Page 1
ID:PQVbfLGVTT1lOnQ611pZG_z1SF7-VTtv047KPboF9RM4_OHGix2h?SRAJqcJ_udQ82y8RQe

-1-2-8 / 1-2-8 | 7-0-0 / 7-0-0 | 14-0-0 / 7-0-0 | 15-2-8 / 1-2-8

Scale = 1:32.9



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	0.00	8	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	8	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 100 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. All bearings 14-0-0.
(lb) - Max Horz 2=-161(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 11 except 14=-125(LC 12), 10=-125(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 11 except (jt=lb) 14=125, 10=125.

December 16,2020

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3991	C2-2PLY	COMMON GIRDER	1	2	E15217432
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:33 2020 Page 1
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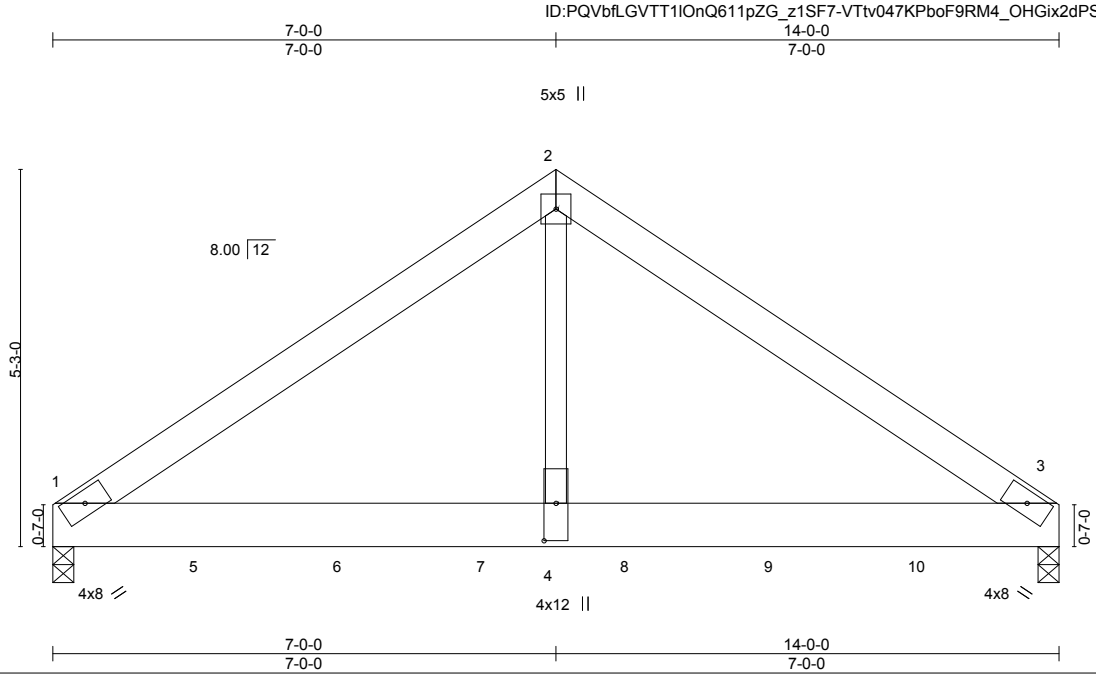

Plate Offsets (X,Y)-- [4:0-6-4,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.06	3-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.12	3-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.70	Horz(CT)	0.02	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.04	3-4	>999	240	Weight: 177 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.2

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

REACTIONS. (size) 1=0-3-8, 3=0-3-8
Max Horz 1=-112(LC 25)
Max Uplift 1=-264(LC 8), 3=-268(LC 9)
Max Grav 1=4560(LC 2), 3=4634(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-5555/349, 2-3=-5554/349
BOT CHORD 1-4=-225/4555, 3-4=-225/4555
WEBS 2-4=-243/5742

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-7-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=264, 3=268.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1372 lb down and 87 lb up at 2-0-12, 1372 lb down and 87 lb up at 4-0-12, 1372 lb down and 87 lb up at 6-0-12, 1372 lb down and 87 lb up at 8-0-12, and 1372 lb down and 87 lb up at 10-0-12, and 1372 lb down and 87 lb up at 12-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-60, 1-3=-20

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Continued on page 2

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LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 5=-1249(B) 6=-1249(B) 7=-1249(B) 8=-1249(B) 9=-1249(B) 10=-1249(B)

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3991	M1-GE	GABLE	1	1	E15217433
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:34 2020 Page 1
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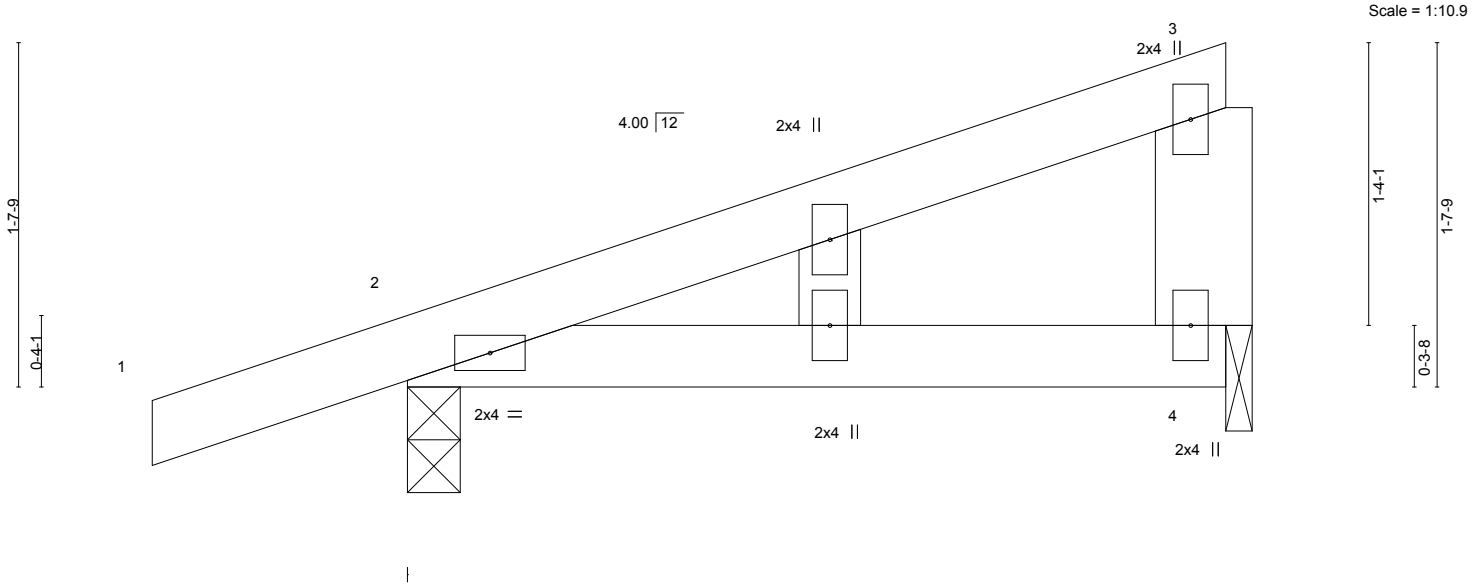

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.01	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P		Wind(LL)	0.02	2-4	>999	240	Weight: 17 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.1
BOT CHORD	2x4 SP No.1
WEBS	2x6 SP No.1
OTHERS	2x4 SP No.2

BRACING-

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

REACTIONS. (size) 2=0-3-0, 4=0-1-8
Max Horz 2=83(LC 8)
Max Uplift 2=-152(LC 8), 4=-80(LC 8)
Max Grav 2=240(LC 1), 4=131(LC 1)

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

NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable studs spaced at 2-0-0 oc.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=152.

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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3991	M2	MONOPITCH	6	1	E15217434
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:35 2020 Page 1
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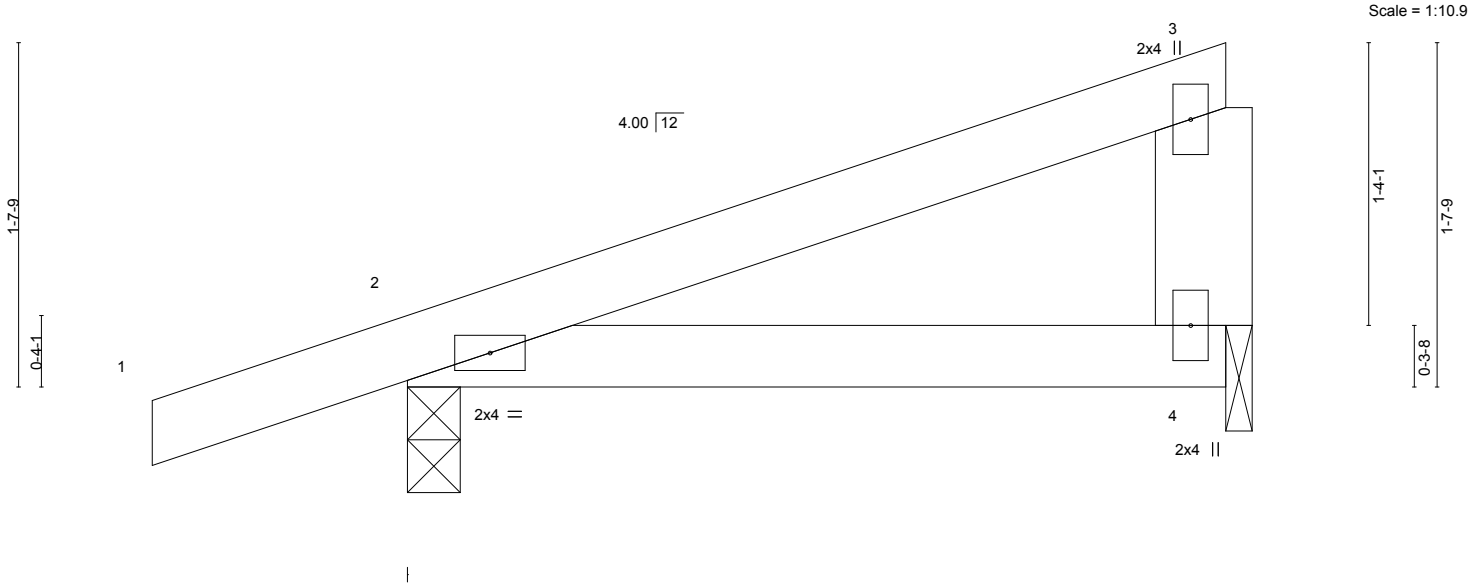
-1-2-8 / 1-2-8 | 4-0-0 / 4-0-0

Scale = 1:10.9



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.01	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P		Wind(LL)	0.02	2-4	>999	240	Weight: 16 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x6 SP No.1

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

REACTIONS. (size) 2=0-3-0, 4=0-1-8
Max Horz 2=60(LC 8)
Max Uplift 2=-107(LC 8), 4=-54(LC 8)
Max Grav 2=240(LC 1), 4=131(LC 1)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Interior(1) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=107.

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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3991	M3	MONOPITCH	4	1	E15217435
					Job Reference (optional)

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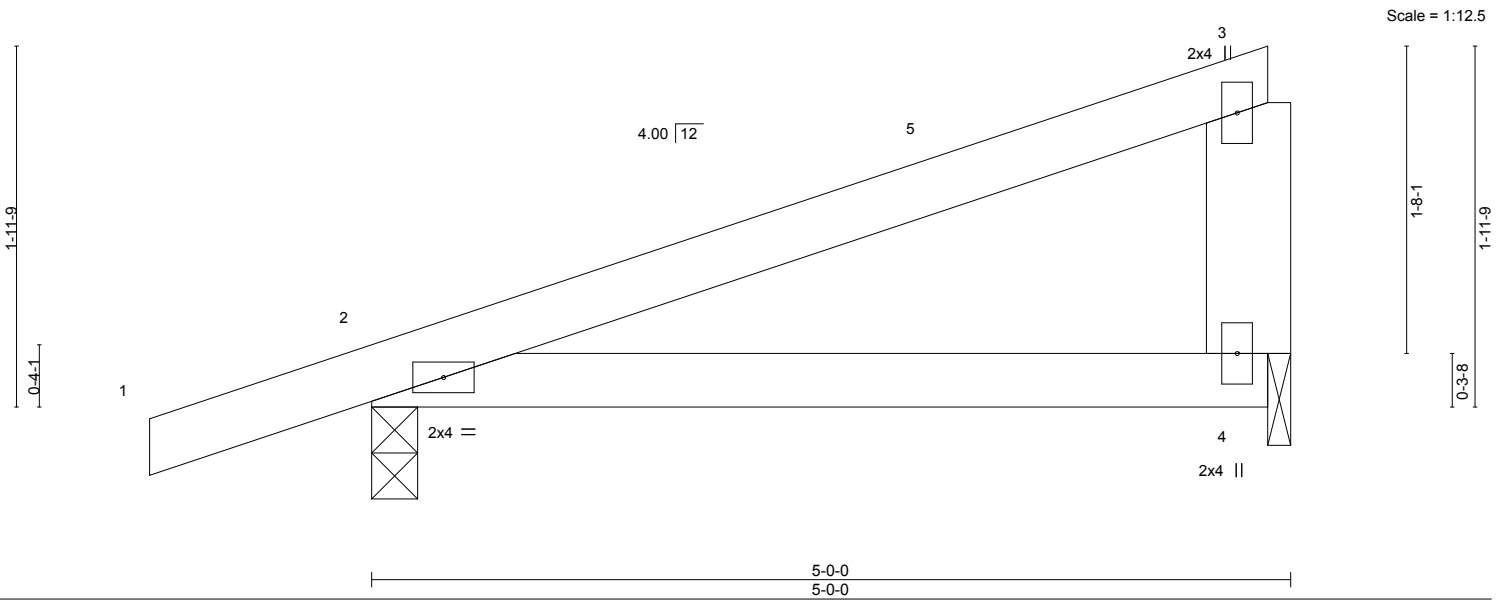

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.02	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.05	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P		Wind(LL)	0.05	2-4	>999	240	Weight: 20 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-0, 4=0-1-8
Max Horz 2=71(LC 8)
Max Uplift 2=-118(LC 8), 4=-73(LC 8)
Max Grav 2=277(LC 1), 4=174(LC 1)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 4-9-4 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=118.

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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3991	P1-SG	GABLE	1	1	E15217436
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:36 2020 Page 1
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-1-2-8 / 1-2-8 | 5-0-0 / 5-0-0 | 10-0-0 / 5-0-0 | 11-2-8 / 1-2-8

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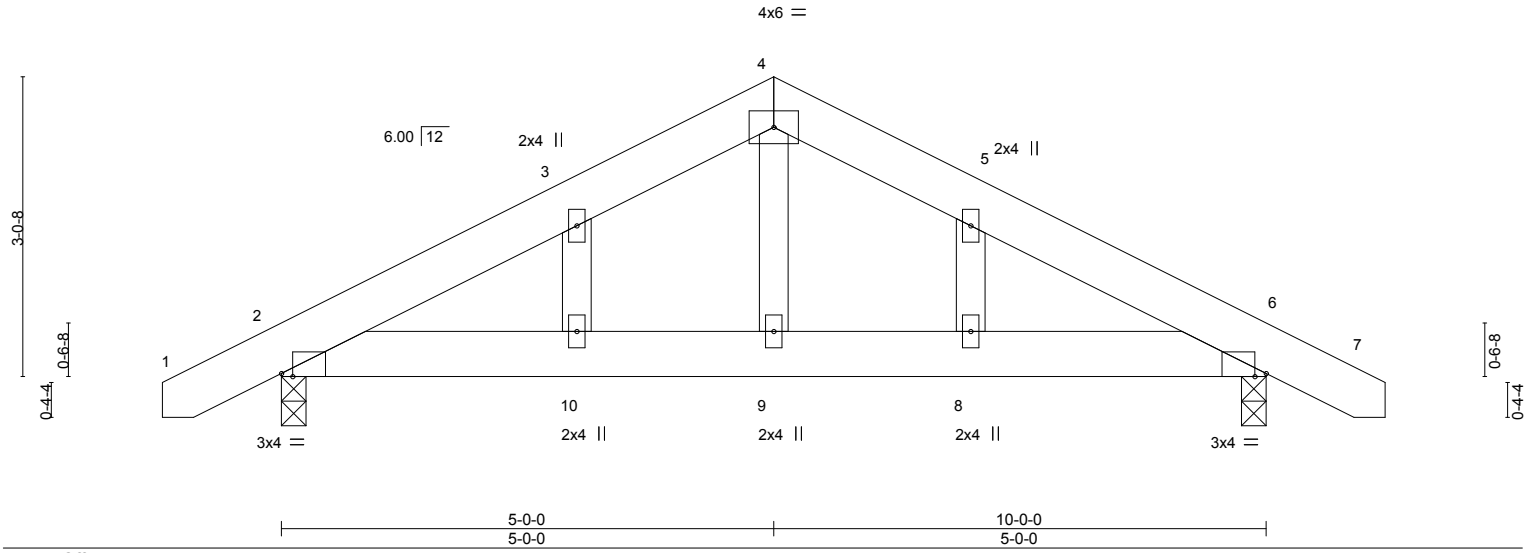

Plate Offsets (X,Y)-- [2:0-1-6,Edge], [6:0-1-6,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.01	8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.01	8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.01	8	>999	240	Weight: 63 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2

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

REACTIONS. (size) 2=0-3-0, 6=0-3-0
Max Horz 2=-61(LC 13)
Max Uplift 2=-119(LC 9), 6=-119(LC 8)
Max Grav 2=461(LC 1), 6=461(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-523/590, 3-4=-461/615, 4-5=-461/615, 5-6=-523/590
BOT CHORD 2-10=-425/413, 9-10=-425/413, 8-9=-425/413, 6-8=-425/413
WEBS 4-9=-325/196

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=119, 6=119.

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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3991	P2	COMMON	4	1	E15217437
					Job Reference (optional)

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1-2-8 5-0-0 5-0-0 1-2-8

Scale = 1:23.4

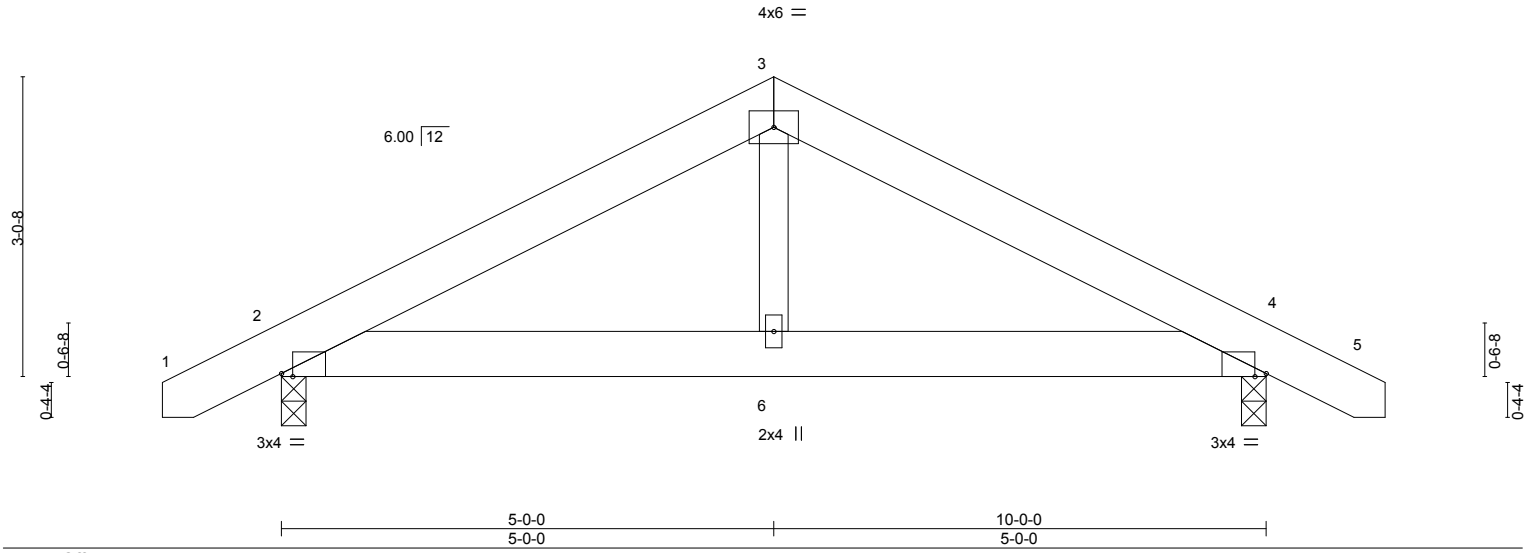

Plate Offsets (X,Y)-- [2:0-1-6,Edge], [4:0-1-6,Edge]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.00	4-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	4-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.01	4-6	>999	240	Weight: 60 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

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

REACTIONS. (size) 2=0-3-0, 4=0-3-0
Max Horz 2=-39(LC 10)
Max Uplift 2=-91(LC 9), 4=-91(LC 8)
Max Grav 2=461(LC 1), 4=461(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-524/470, 3-4=-524/470
BOT CHORD 2-6=-341/404, 4-6=-341/404
WEBS 3-6=-286/228

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Interior(1) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.

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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3991	VB1	GABLE	1	1	E15217438
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:37 2020 Page 1
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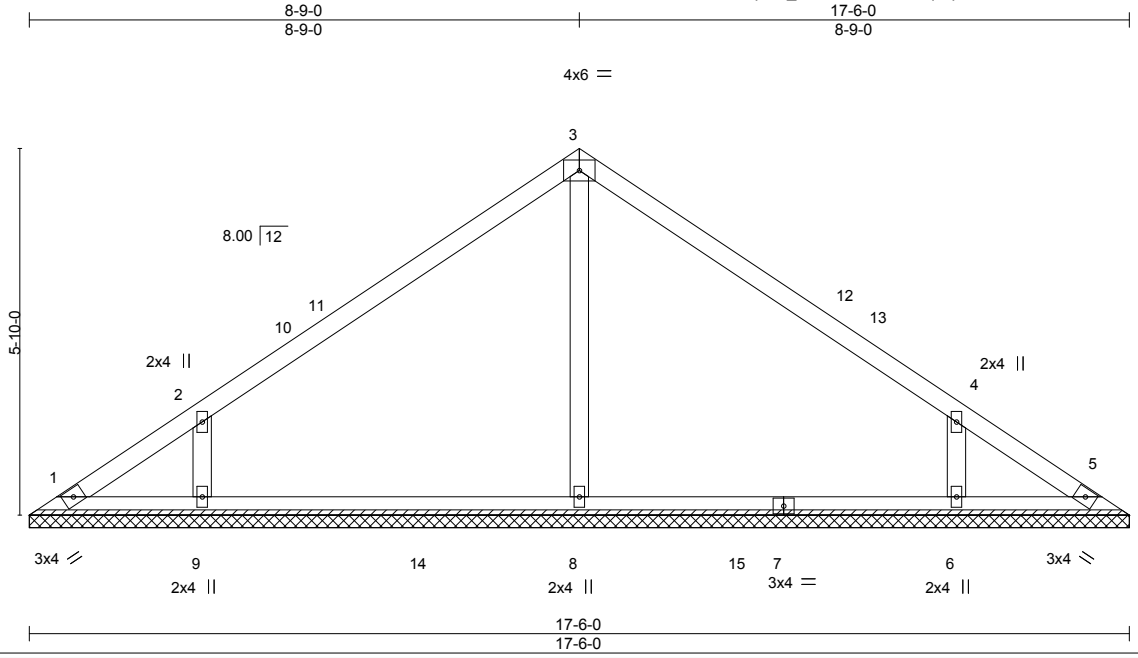

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 67 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. All bearings 17-6-0.
(lb) - Max Horz 1=-132(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=-141(LC 12), 6=-141(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=576(LC 19), 9=493(LC 19), 6=493(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-8=-267/44, 2-9=-412/268, 4-6=-412/268

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-12 to 4-10-9, Interior(1) 4-10-9 to 8-9-0, Exterior(2) 8-9-0 to 13-1-13, Interior(1) 13-1-13 to 17-0-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 9=141, 6=141.

December 16,2020

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

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3991	VB2	GABLE	1	1	E15217439
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:38 2020 Page 1
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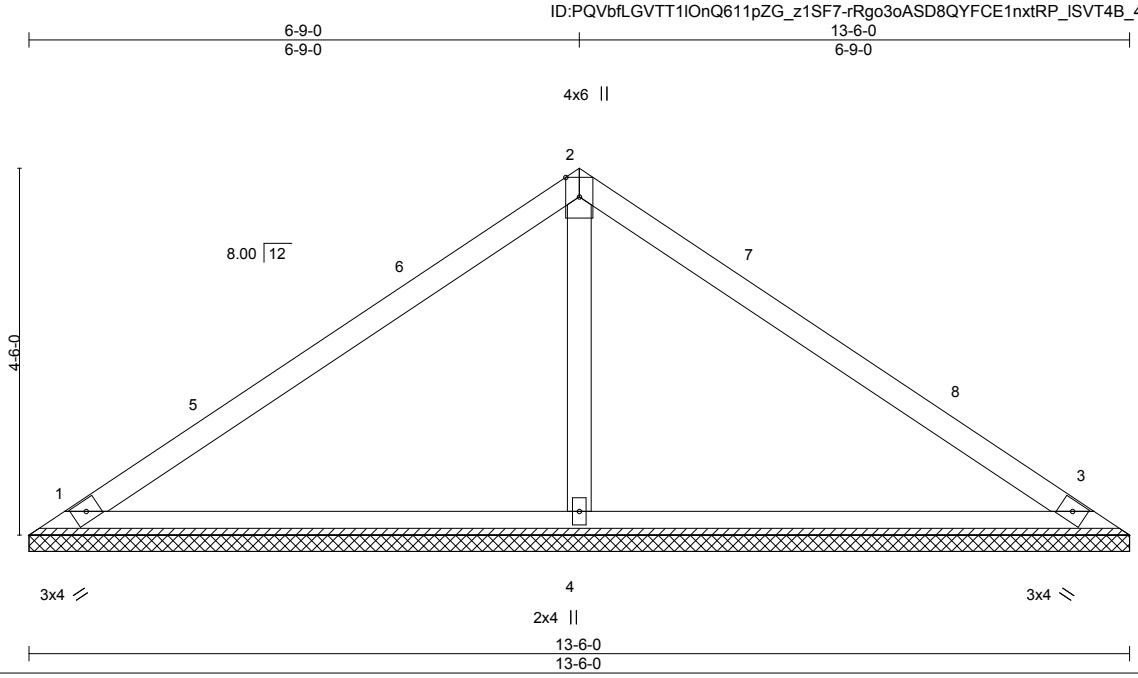

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 48 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. (size) 1=13-6-0, 3=13-6-0, 4=13-6-0
Max Horz 1=100(LC 9)
Max Uplift 1=-31(LC 12), 3=-41(LC 13)
Max Grav 1=249(LC 1), 3=249(LC 1), 4=506(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-320/134

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-12 to 4-10-9, Interior(1) 4-10-9 to 6-9-0, Exterior(2) 6-9-0 to 11-1-13, Interior(1) 11-1-13 to 13-0-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

December 16,2020

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A MiTek Affiliate
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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3991	VB3	VALLEY	1	1	E15217440
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:39 2020 Page 1
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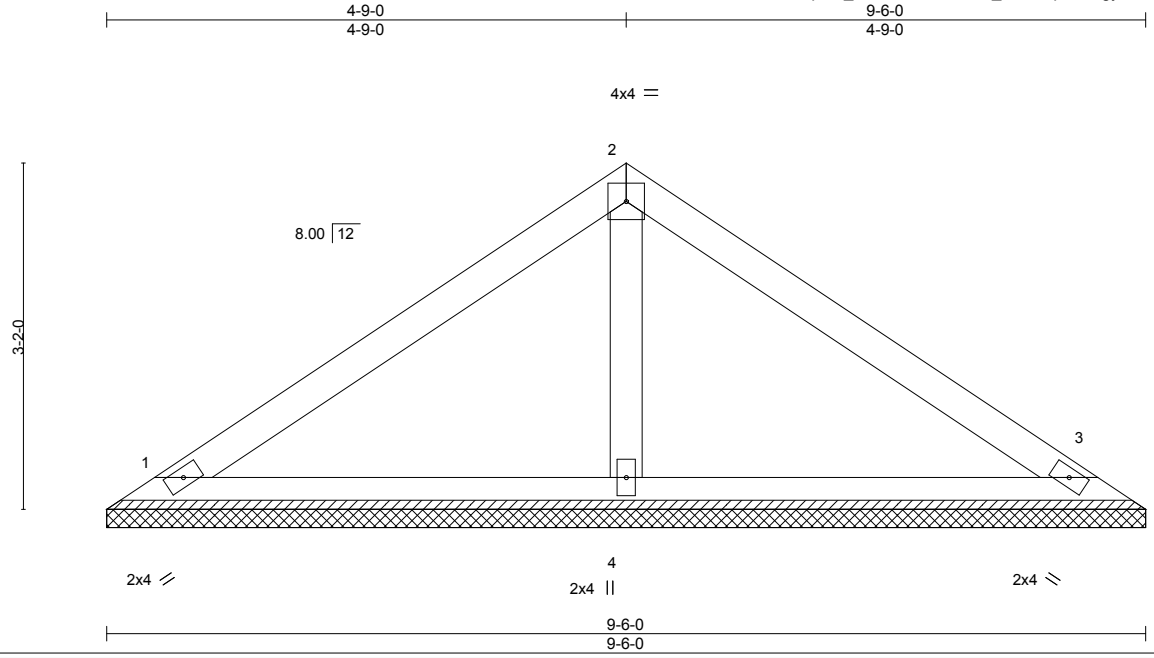

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 33 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. (size) 1=9-6-0, 3=9-6-0, 4=9-6-0
Max Horz 1=-68(LC 10)
Max Uplift 1=-21(LC 12), 3=-28(LC 13)
Max Grav 1=169(LC 1), 3=169(LC 1), 4=344(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

December 16,2020

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A MiTek Affiliate
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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3991	VB4	VALLEY	1	1	E15217441
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:39 2020 Page 1
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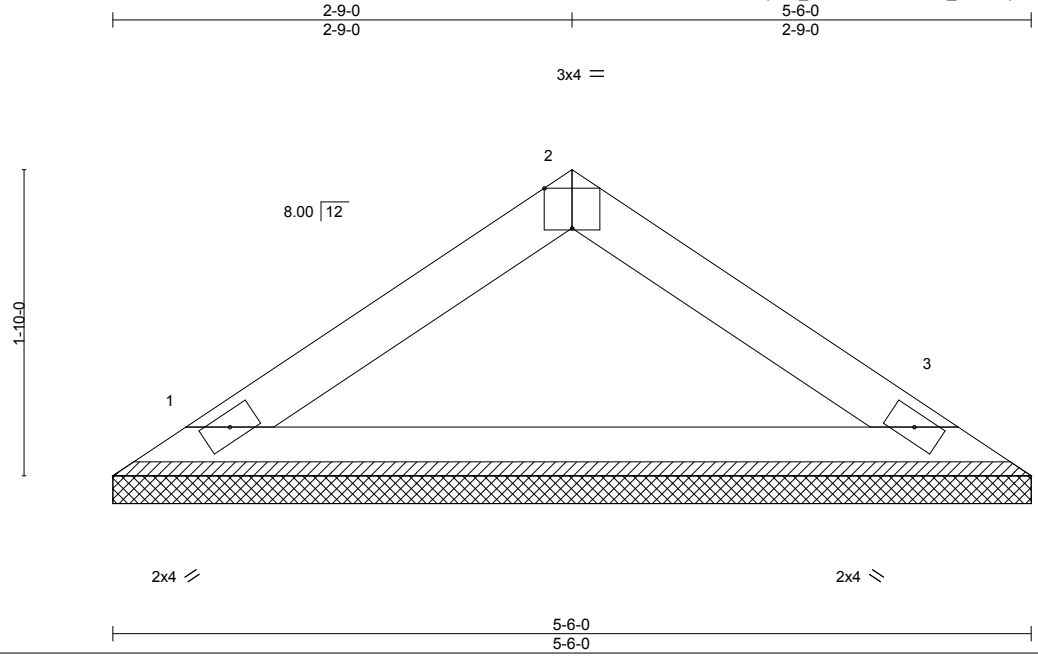

Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	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	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 16 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-6-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-6-0, 3=5-6-0
Max Horz 1=-36(LC 8)
Max Uplift 1=-10(LC 12), 3=-10(LC 13)
Max Grav 1=181(LC 1), 3=181(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

December 16,2020

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TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3991	VC1	VALLEY	1	1	E15217442
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:40 2020 Page 1
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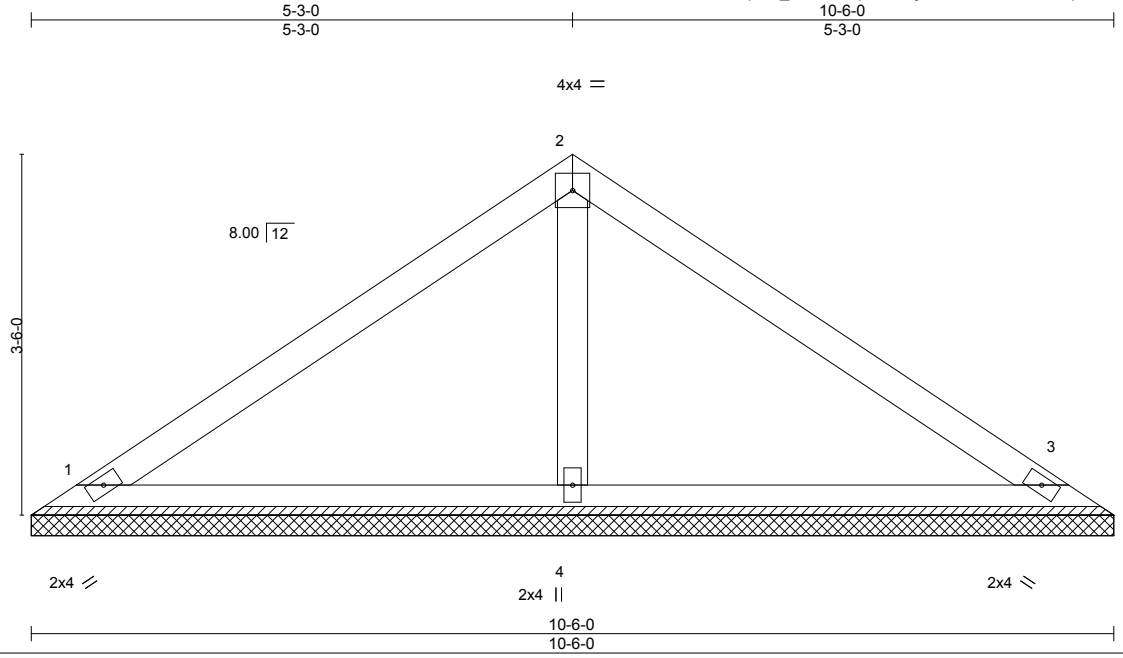

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 37 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. (size) 1=10-6-0, 3=10-6-0, 4=10-6-0
Max Horz 1=-76(LC 8)
Max Uplift 1=-24(LC 12), 3=-31(LC 13)
Max Grav 1=189(LC 1), 3=189(LC 1), 4=385(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Interior(1) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

December 16,2020

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3991	VC2	VALLEY	1	1	E15217443
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:40 2020 Page 1
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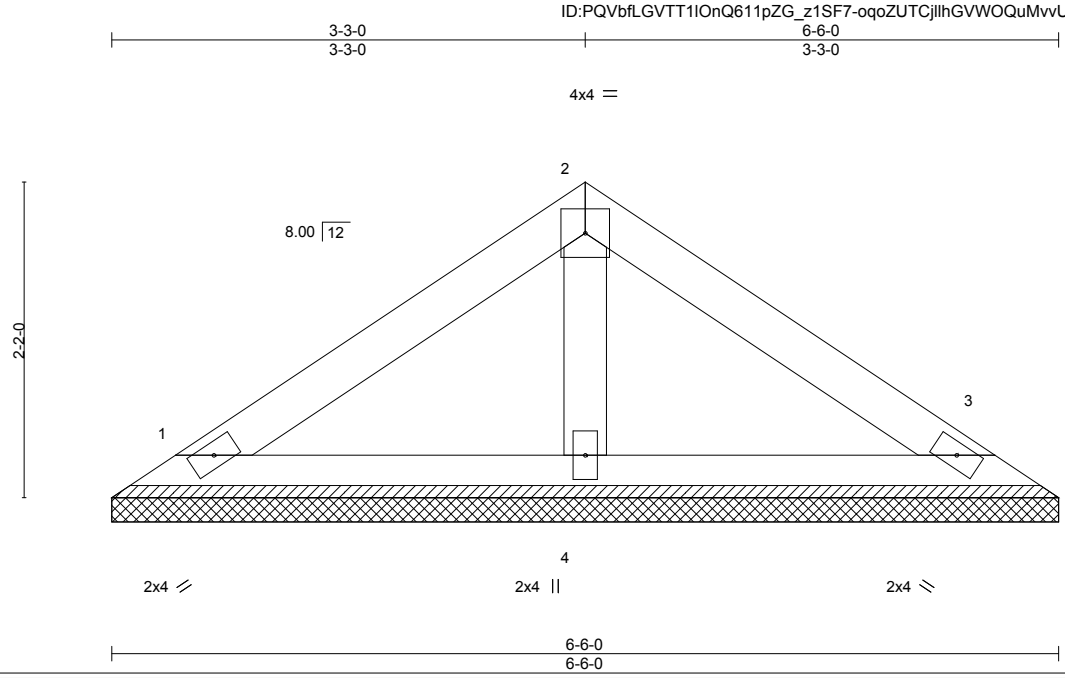

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 22 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. (size) 1=6-6-0, 3=6-6-0, 4=6-6-0
Max Horz 1=-44(LC 8)
Max Uplift 1=-19(LC 12), 3=-23(LC 13)
Max Grav 1=120(LC 1), 3=120(LC 1), 4=202(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Interior(1) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

December 16,2020

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 47 Summerlin/Harnett
J0820-3991	VC3	VALLEY	1	1	E15217444
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Dec 16 08:59:41 2020 Page 1
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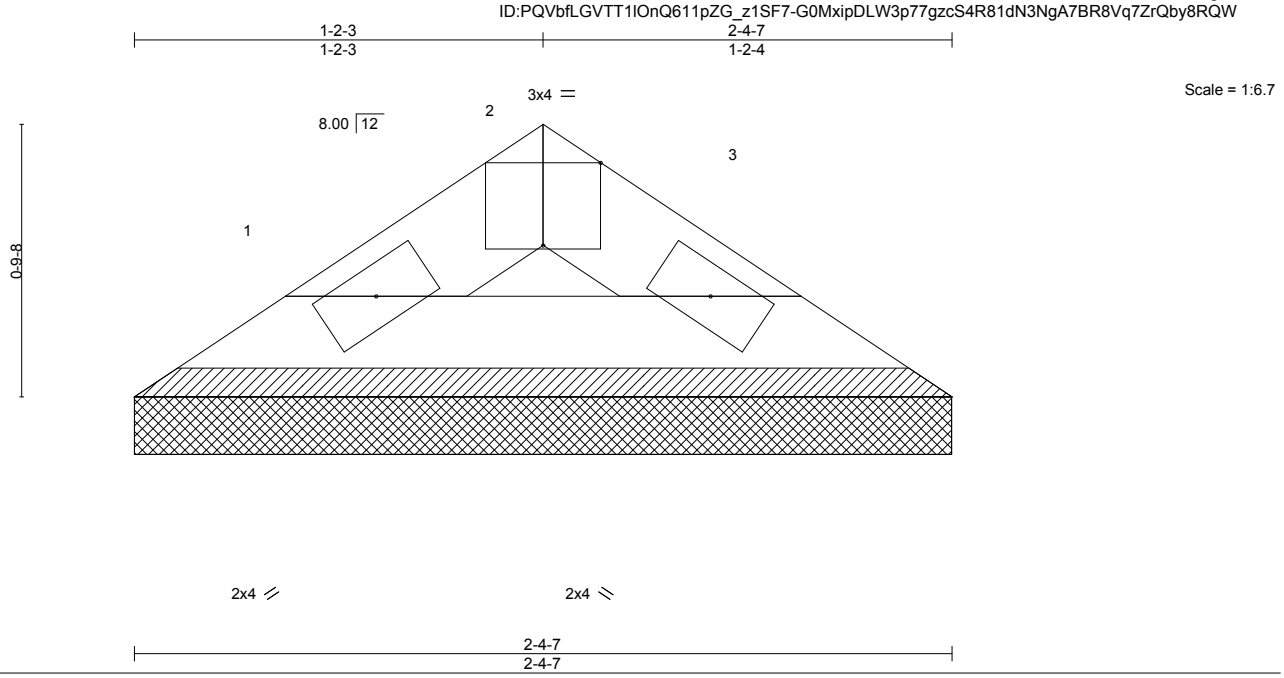

Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.01	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	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	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 6 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-4-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-4-7, 3=2-4-7
Max Horz 1=-11(LC 8)
Max Uplift 1=-3(LC 12), 3=-3(LC 13)
Max Grav 1=56(LC 1), 3=56(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Interior(1) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) Non Standard bearing condition. Review required.

December 16,2020

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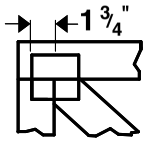
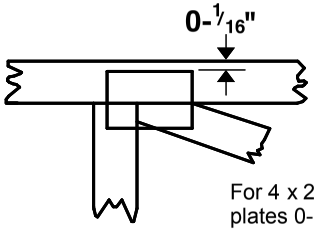
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

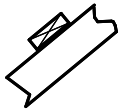
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

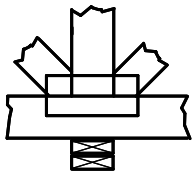
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

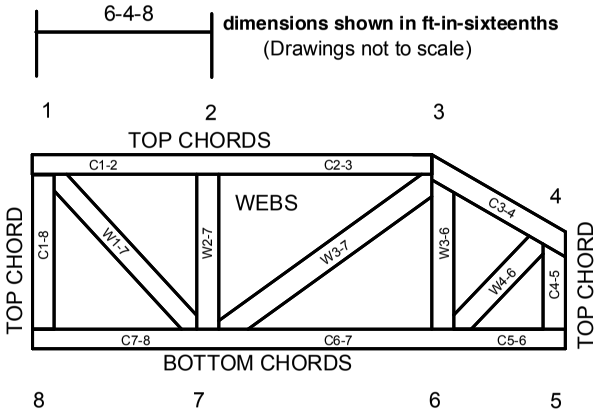


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

MiTek

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

General Safety Notes

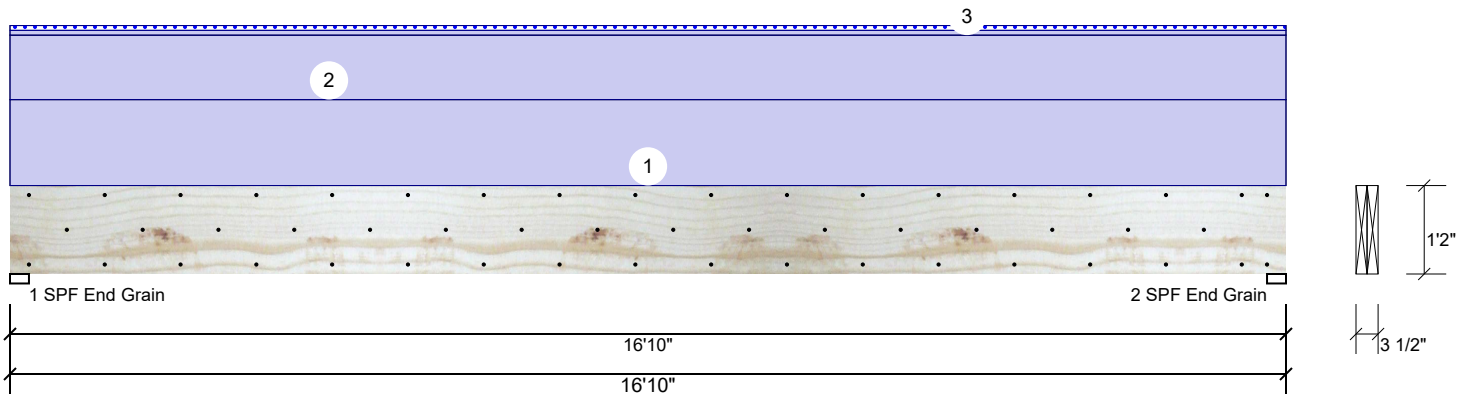
Failure to Follow Could Cause Property Damage or Personal Injury

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.

Client:		Date:	12/16/2020
Project:		Input by:	Neal Baggett
Address:		Job Name:	Lot 47 SUMMERLIN
		Project #:	

GDH Kerto-S LVL 1.750" X 14.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	0	2827	84	0	0
2	0	2827	84	0	0

Bearings

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	32%	2827 / 84	2911	L	D+S
2 - SPF End Grain	3.000"	32%	2827 / 84	2911	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	11373 ft-lb	8'5"	24299 ft-lb	0.468 (47%)	D	Uniform
Unbraced	11712 ft-lb	8'5"	11723 ft-lb	0.999 (100%)	D+S	L
Shear	2372 lb	1'4 1/4"	9408 lb	0.252 (25%)	D	Uniform
LL Defl inch	0.011 (L/17777)	8'5 1/16"	0.411 (L/480)	0.030 (3%)	S	L
TL Defl inch	0.384 (L/514)	8'5 1/16"	0.549 (L/360)	0.700 (70%)	D+S	L

Design Notes

1 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
2 Refer to last page of calculations for fasteners required for specified loads.
3 Girders are designed to be supported on the bottom edge only.
4 Top loads must be supported equally by all plies.
5 Top must be laterally braced at a maximum of 9' 3/8" o.c.
6 Bottom braced at bearings.
7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	180 PLF	0 PLF	0 PLF	0 PLF	0 PLF	WALL & ET1
2	Uniform			Top	135 PLF	0 PLF	0 PLF	0 PLF	0 PLF	B1-GE
3	Tie-In	0-0-0 to 16-10-0	0-6-0	Top	20 PSF	0 PSF	20 PSF	0 PSF	0 PSF	RAKE OH
	Self Weight				11 PLF					

Notes

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Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/27/2023

Manufacturer Info

Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us
ICC-ES: ESR-3633

Comtech, Inc.
1001 S. Reilly Road, Suite #639
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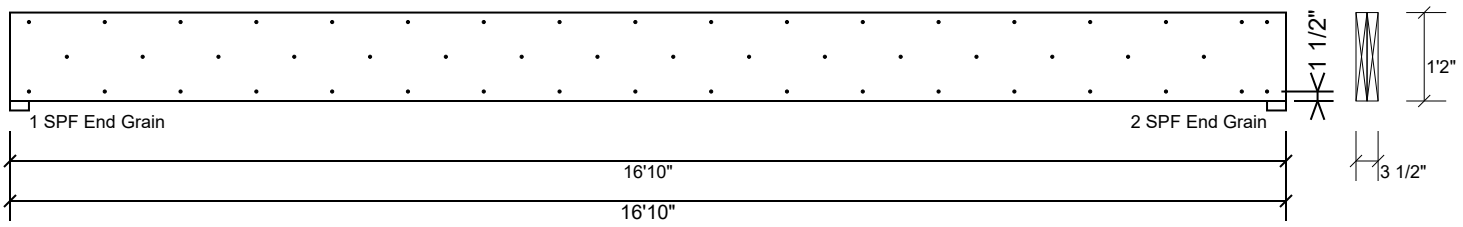
USA
28314
910-864-TRUS

Client:		Date:	12/16/2020
Project:		Input by:	Neal Baggett
Address:		Job Name:	Lot 47 SUMMERLIN
		Project #:	

GDH Kerto-S LVL 1.750" X 14.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	245.6 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Notes

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Lumber

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Handling & Installation

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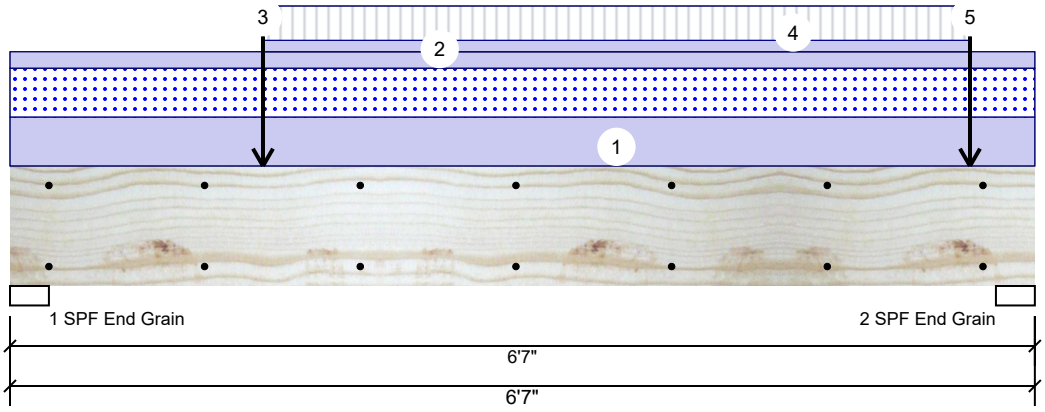
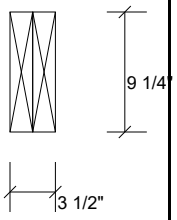
Client:		Date:	12/16/2020
Project:		Input by:	Neal Baggett
Address:		Job Name:	Lot 47 SUMMERLIN
		Project #:	

BM2 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level





Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	986	1918	1172	0	0
2	1501	2090	1172	0	0

Bearings

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	39%	1918 / 1618	3536	L	D+0.75(L+S)
2 - SPF End Grain	3.000"	45%	2090 / 2005	4094	L	D+0.75(L+S)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5374 ft-lb	3'2 7/16"	14423 ft-lb	0.373 (37%)	D+0.75(L+S)	L
Unbraced	5374 ft-lb	3'2 7/16"	10370 ft-lb	0.518 (52%)	D+0.75(L+S)	L
Shear	2817 lb	11 1/2"	7943 lb	0.355 (35%)	D+0.75(L+S)	L
LL Defl inch	0.047 (L/1583)	3'3"	0.155 (L/480)	0.300 (30%)	0.75(L+S)	L
TL Defl inch	0.101 (L/741)	3'3 3/16"	0.207 (L/360)	0.490 (49%)	D+0.75(L+S)	L

Design Notes

1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
2 Refer to last page of calculations for fasteners required for specified loads.
3 Girders are designed to be supported on the bottom edge only.
4 Top loads must be supported equally by all plies.
5 Top braced at bearings.
6 Bottom braced at bearings.
7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	356 PLF	0 PLF	356 PLF	0 PLF	0 PLF	A2
2	Uniform			Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	WALL
3	Point	1-7-8		Top	218 lb	654 lb	0 lb	0 lb	0 lb	F6-GR
4	Part. Uniform	1-7-8 to 6-2-0		Top	83 PLF	250 PLF	0 PLF	0 PLF	0 PLF	F7
5	Point	6-2-0		Top	232 lb	697 lb	0 lb	0 lb	0 lb	F8-GR
	Self Weight				7 PLF					

Notes

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Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/27/2023

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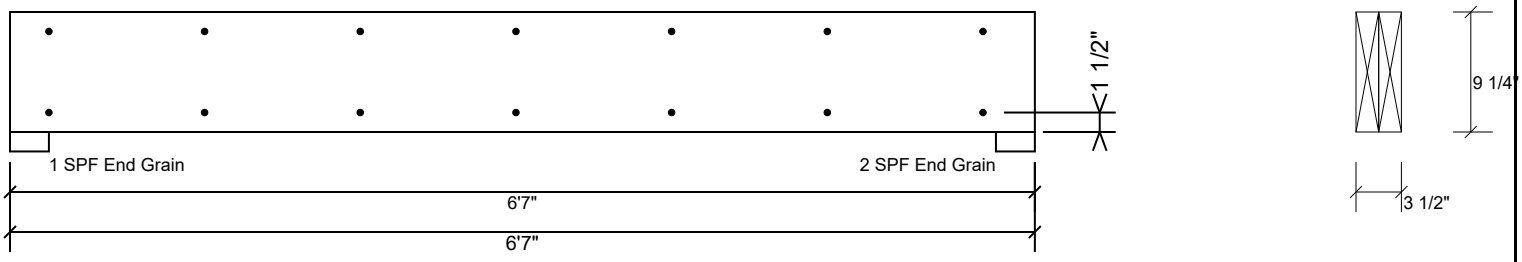
BM2 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	163.7 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
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Client:		Date:	12/16/2020
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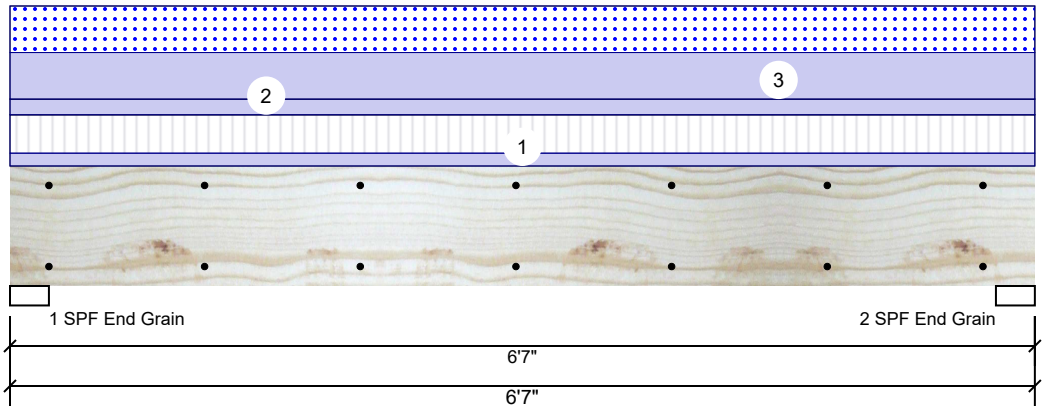
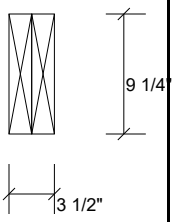
Address:		Job Name:	Lot 47 SUMMERLIN
		Project #:	

BM3 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level





Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	968	1913	1172	0	0
2	968	1913	1172	0	0

Bearings

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	39%	1913 / 1605	3518	L	D+0.75(L+S)
2 - SPF End Grain	3.000"	39%	1913 / 1605	3518	L	D+0.75(L+S)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5149 ft-lb	3'3 1/2"	14423 ft-lb	0.357 (36%)	D+0.75(L+S)	L
Unbraced	5149 ft-lb	3'3 1/2"	10370 ft-lb	0.497 (50%)	D+0.75(L+S)	L
Shear	2494 lb	11 1/2"	7943 lb	0.314 (31%)	D+0.75(L+S)	L
LL Defl inch	0.044 (L/1707)	3'3 1/2"	0.155 (L/480)	0.280 (28%)	0.75(L+S)	L
TL Defl inch	0.096 (L/779)	3'3 1/2"	0.207 (L/360)	0.460 (46%)	D+0.75(L+S)	L

Design Notes

1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
2 Refer to last page of calculations for fasteners required for specified loads.
3 Girders are designed to be supported on the bottom edge only.
4 Top loads must be supported equally by all plies.
5 Top braced at bearings.
6 Bottom braced at bearings.
7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	98 PLF	294 PLF	0 PLF	0 PLF	0 PLF	F2
2	Uniform			Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	WALL
3	Uniform			Top	356 PLF	0 PLF	356 PLF	0 PLF	0 PLF	A2
	Self Weight				7 PLF					

Notes

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Lumber

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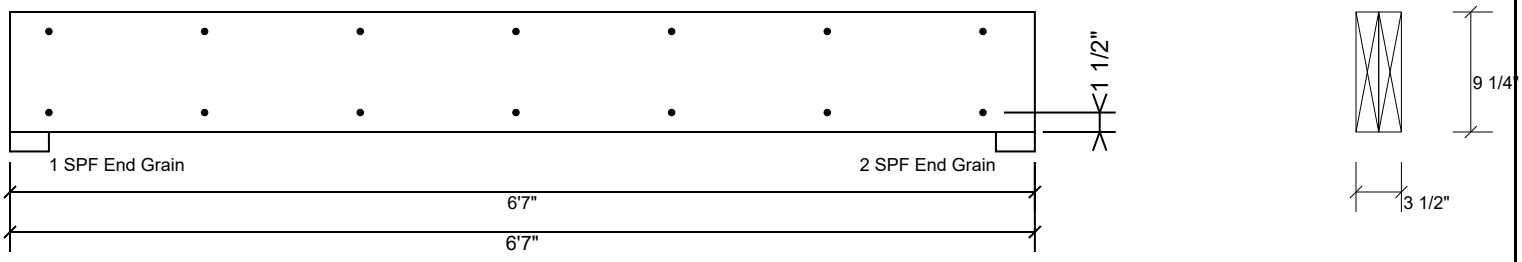
BM3 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity	0.0 %
Load	0.0 PLF
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Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Notes

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