

Trenco

818 Soundside Rd
Edenton, NC 27932

Re: J1220-5657
Precision/Lot 58 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: E15304809 thru E15304824

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

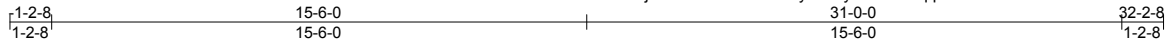
North Carolina COA: C-0844



January 13, 2021

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.



Scale = 1:66.7

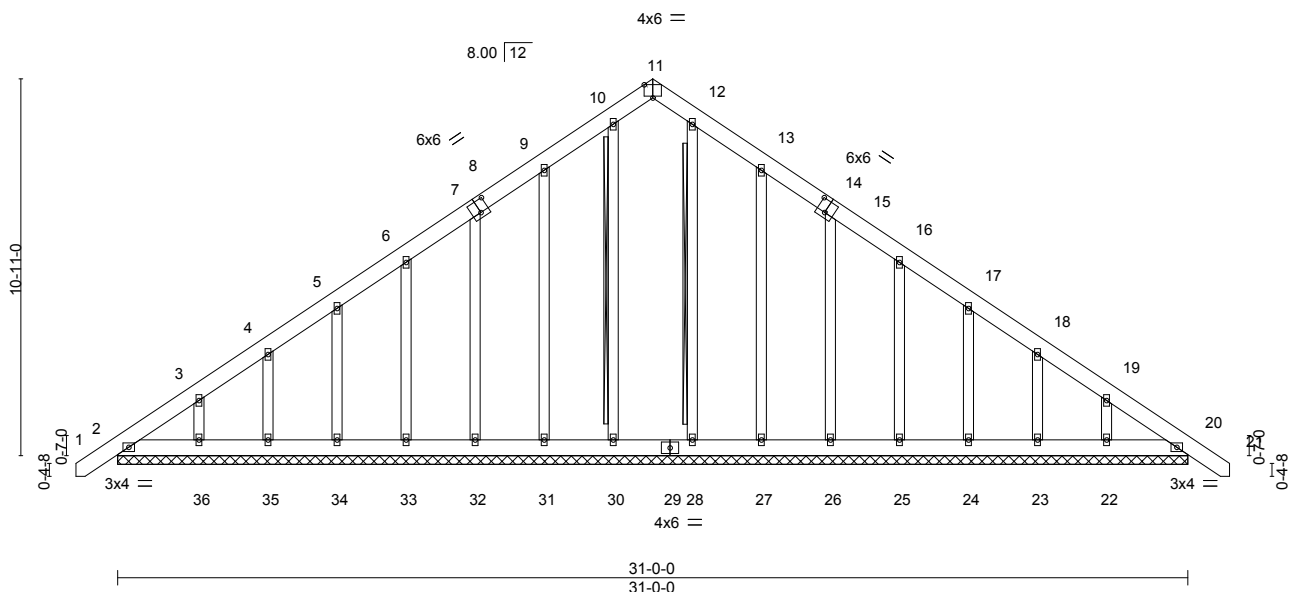


Plate Offsets (X,Y)-- [7:0-2-2,0-0-0], [8:0-3-0,0-4-4], [8:0-0-0,0-2-12], [11:0-3-0,Edge], [14:0-3-0,0-4-4], [14:0-0-0,0-2-12], [15:0-2-2,0-0-0]

LOADING (psf)	SPACING-	CS.I.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.07	Vert(LL) -0.00	20	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) 0.00	20	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.19	Horz(CT) 0.01	20	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 276 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	WEBS T-Brace: 2x4 SPF No.2 - 10-30, 12-28
	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 31-0-0.
 (lb) - Max Horz 2=-331(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 32, 33, 34, 35, 26, 25, 24, 23 except 31=-104(LC 12), 36=-103(LC 12), 27=-109(LC 13), 22=-101(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 2, 20, 30, 31, 32, 33, 34, 35, 36, 28, 27, 26, 25, 24, 23, 22

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-350/234, 3-4=-262/198, 19-20=-286/206
 BOT CHORD 2-36=-193/294, 35-36=-193/294, 34-35=-193/294, 33-34=-193/294, 32-33=-193/294, 31-32=-193/294, 30-31=-193/294, 28-30=-193/294, 27-28=-193/294, 26-27=-193/294, 25-26=-193/294, 24-25=-193/294, 23-24=-193/294, 22-23=-193/294, 20-22=-193/294

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=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
 - 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.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20, 32, 33, 34, 35, 26, 25, 24, 23 except (jt=lb) 31=104, 36=103, 27=109, 22=101.
 - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



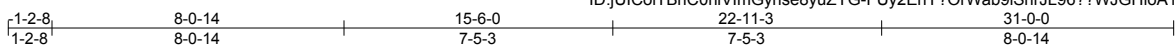
January 13, 2021

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304810
J1220-5657	A2	COMMON	6	1		

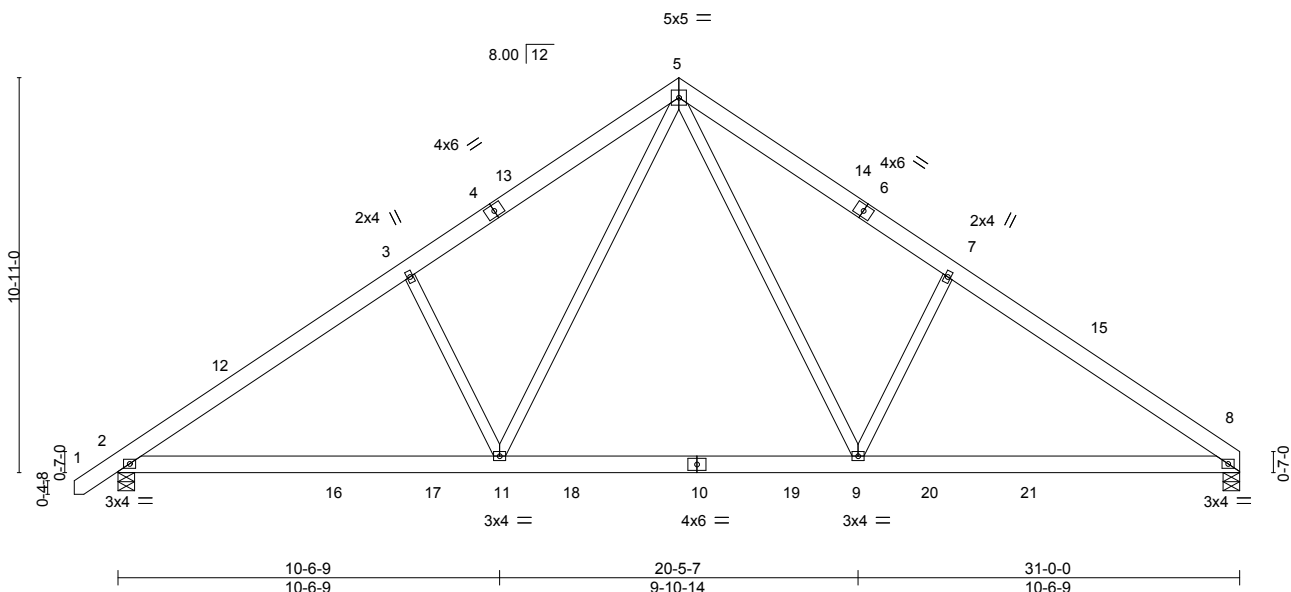
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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:09 2021 Page 1

ID:jUICoITBhC0nIVmGynse8yuZYG-FUY2EnY?OrWab9iShrJL96??WJGHloA1NwKNEYzvnOm



Scale: 3/16"=1'



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.27	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.49	Vert(LL) -0.13 9-11 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.39	Vert(CT) -0.19 9-11 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.04 8 n/a n/a	Weight: 214 lb	FT = 20%
	Code IRC2015/TPI2014		Wind(LL) 0.04 2-11 >999 240		

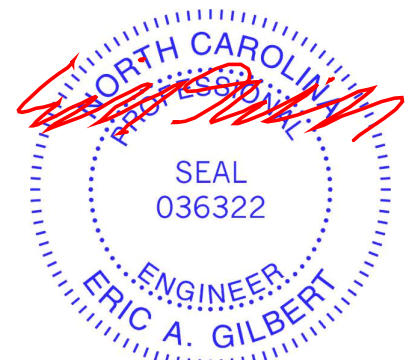
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-3-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-5-8, 8=0-5-8
Max Horz 2=260(LC 9)
Max Uplift 2=-83(LC 12), 8=-64(LC 13)
Max Grav 2=1471(LC 19), 8=1395(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2001/363, 3-5=-1870/457, 5-7=-1877/473, 7-8=-2007/376
BOT CHORD 2-11=-179/1748, 9-11=0/1138, 8-9=-182/1577
WEBS 5-9=-170/976, 7-9=-513/308, 5-11=-167/967, 3-11=-513/303

- 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 15-6-0, Exterior(2) 15-6-0 to 19-10-13, Interior(1) 19-10-13 to 30-9-4 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.



January 13, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

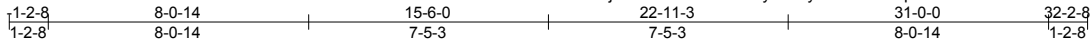


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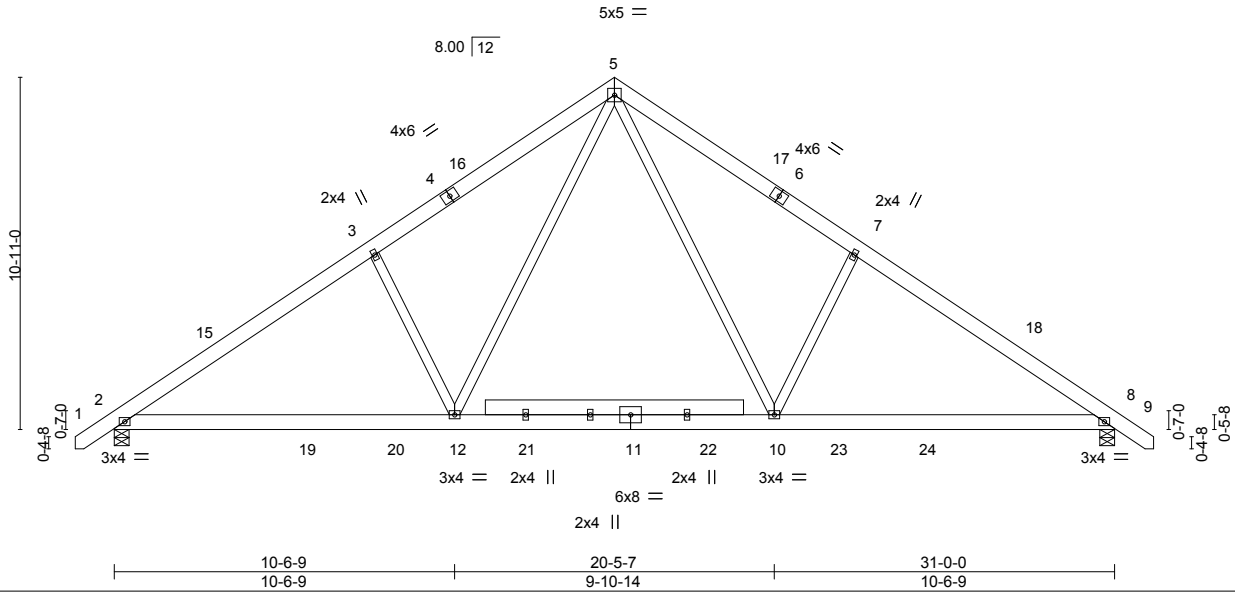
Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304811
J1220-5657	A3	COMMON	7	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:12 2021 Page 1



Scale = 1:71.4



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 0.26	Vert(LL)	-0.13 10-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.48	Vert(CT)	-0.18 10-12	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.38	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: 235 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 5-4-4 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-5-8, 8=0-5-8
 Max Horz 2=-265(LC 10)
 Max Uplift 2=-83(LC 12), 8=-83(LC 13)
 Max Grav 2=1459(LC 19), 8=1459(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1980/362, 3-5=-1849/455, 5-7=-1849/455, 7-8=-1980/362
 BOT CHORD 2-12=-143/1738, 10-12=0/1133, 8-10=-156/1564
 WEBS 5-10=-166/956, 7-10=-512/302, 5-12=-166/955, 3-12=-512/302

- 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 15-6-0, Exterior(2) 15-6-0 to 19-10-13, Interior(1) 19-10-13 to 32-0-15 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.

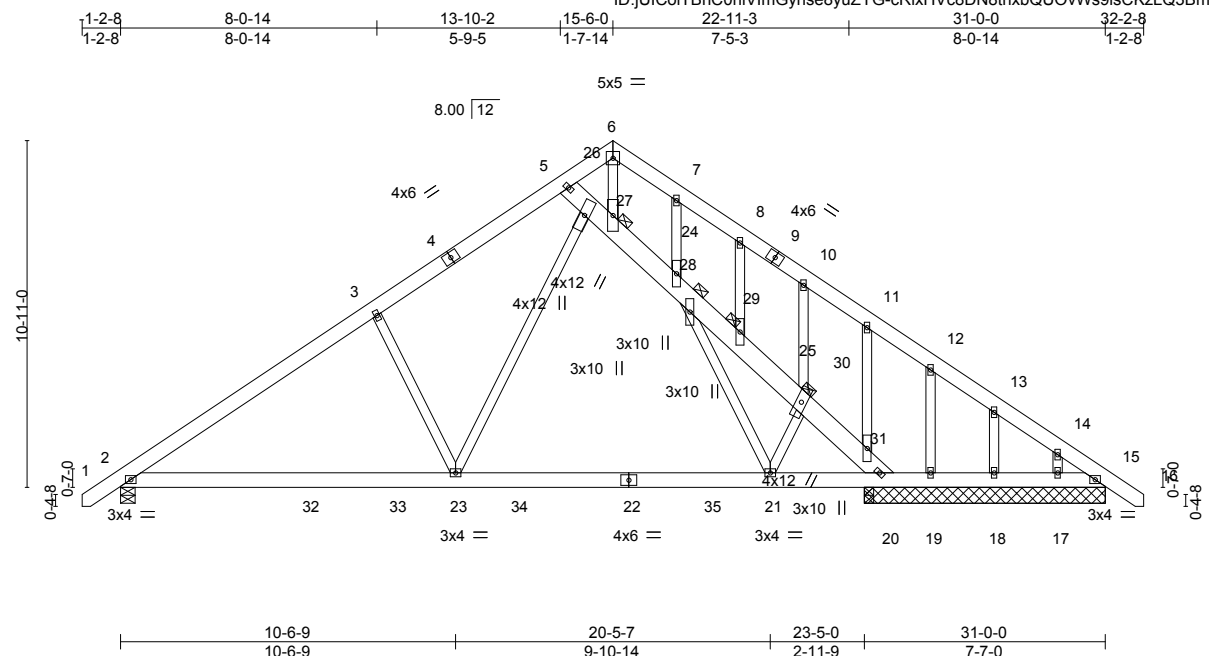


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304812
J1220-5657	A4-GE	GABLE	1	1		

Comtech, Inc. Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:14 2021 Page 1



Scale = 1:72.5

Plate Offsets (X,Y)--	[25:0-0-8,0-1-12], [30:0-0-10,0-2-5]
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LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.27	Vert(LL) -0.14	21-23	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.50	Vert(CT) -0.21	21-23	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.34	Horz(CT) 0.03	15	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05	2-23	>999	240		
							Weight: 275 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-7-2 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 5-20: 2x8 SP No.1	JOINTS 1 Brace at Jt(s): 24, 25, 27, 29
OTHERS 2x4 SP No.2	

REACTIONS. All bearings 7-7-0 except (jt=length) 2=0-5-8.
 (lb) - Max Horz 2=-331(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 19, 18, 17 except 2=-226(LC 12), 20=-199(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 19, 18, 17 except 2=1298(LC 19), 15=619(LC 19), 20=690(LC 1), 20=690(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1700/342, 3-5=-1538/431, 5-6=-996/377, 6-7=-855/324, 7-8=-901/273, 8-10=-915/220, 10-11=-891/138, 11-12=-864/66, 12-13=-872/0, 13-14=-913/0, 14-15=-934/0
 BOT CHORD 2-23=-263/1526, 21-23=-13/945, 20-21=-38/1227, 19-20=0/760, 18-19=0/760, 17-18=0/760, 15-17=0/760
 WEBS 21-24=-88/629, 21-25=-323/217, 23-26=-221/945, 3-23=-447/355, 5-26=-445/222, 26-27=-715/285, 24-29=-584/141, 29-30=-615/176, 25-30=-655/263, 25-31=-598/201, 20-31=-698/273, 6-27=-323/887

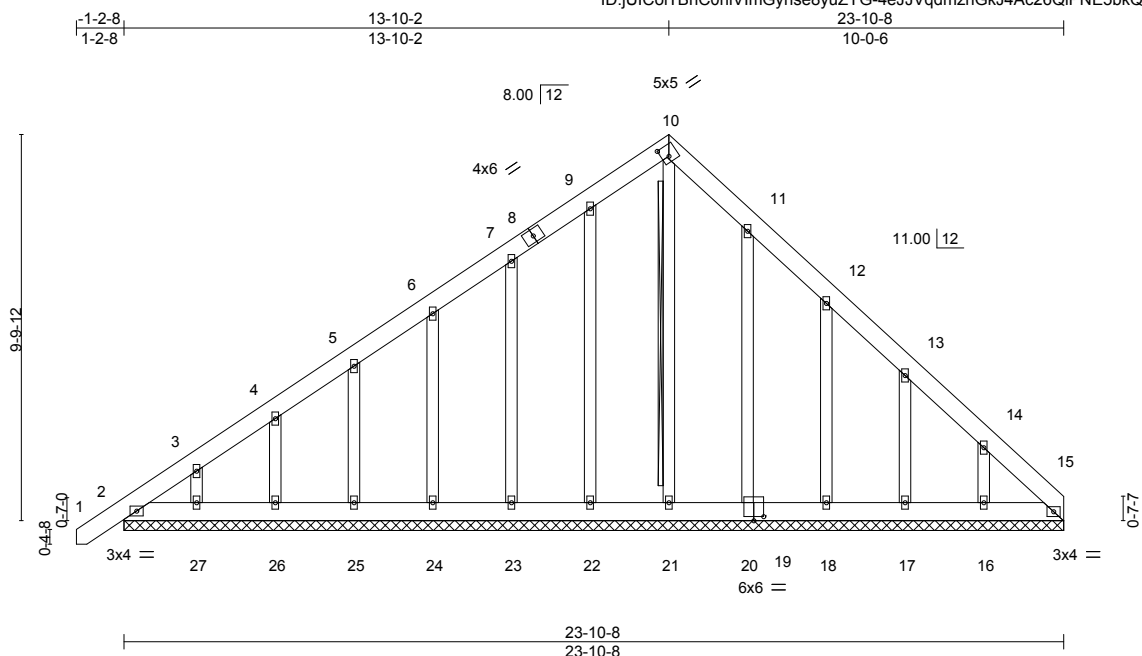
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 18, 17 except (jt=lb) 2=226, 20=199.



January 13, 2021

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304813
J1220-5657	B1-GE	GABLE	1	1		

Comtech, Inc. Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:15 2021 Page 1
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Scale = 1:58.5

Plate Offsets (X,Y)--	[10:0-2-3,0-3-4], [19:0-3-0,0-1-4], [19:0-0-0,0-2-12], [20:0-1-12,0-0-0]
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LOADING (psf)	SPACING-	CS.I.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.04	Vert(LL) -0.00	1	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) -0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.15	Horz(CT) 0.01	15	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 208 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	WEBS T-Brace: 2x4 SPF No.2 - 10-21
	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 23-10-8.
 (lb) - Max Horz 2=291(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 15, 22, 23, 24, 25, 26, 27, 20 except 18=139(LC 13), 17=119(LC 13), 16=149(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 2, 15, 21, 22, 23, 24, 25, 26, 27, 20, 18, 17, 16

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=310/205, 14-15=276/178

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=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, 15, 22, 23, 24, 25, 26, 27, 20 except (jt=lb) 18=139, 17=119, 16=149.
 - 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



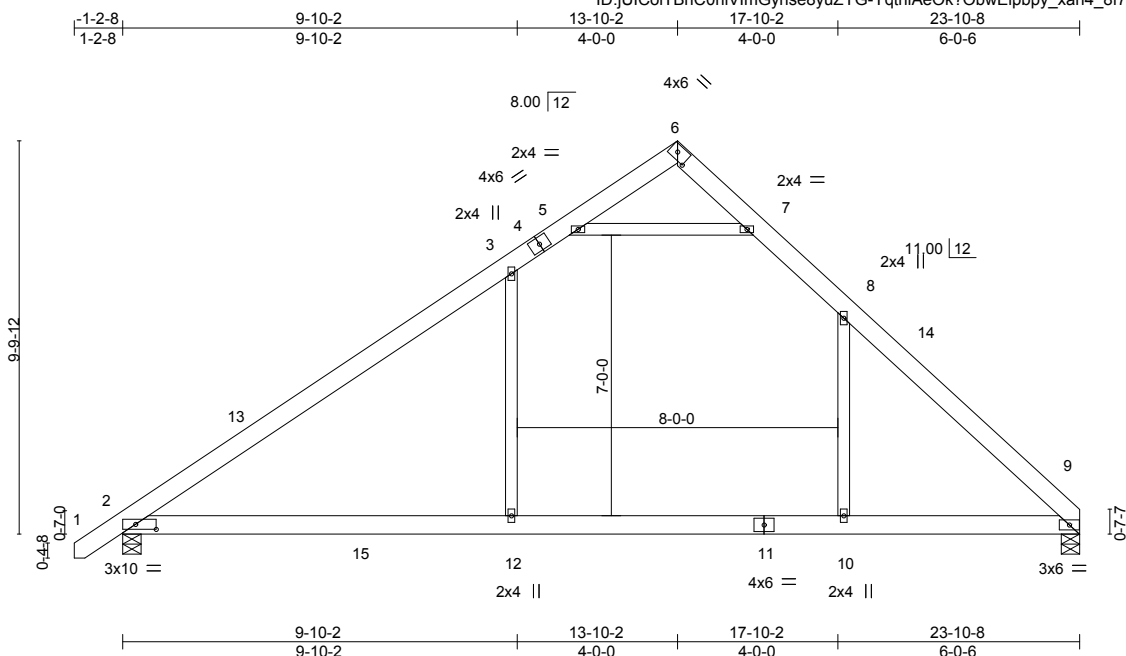
January 13, 2021

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304814
J1220-5657	B2	ROOF SPECIAL	9	1		

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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:16 2021 Page 1

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Scale = 1:57.5

Plate Offsets (X,Y)--	[2:0-6-2,0-1-8], [6:0-3-11,0-2-0]
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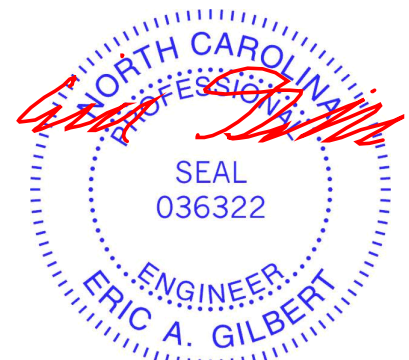
LOADING (psf)	SPACING-	CS.I.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.83	Vert(LL) -0.31	2-12	>910	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.48	Vert(CT) -0.48	2-12	>589	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.55	Horz(CT) 0.02	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.19	2-12	>999	240	Weight: 155 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-9-13 oc purlins.
BOT CHORD 2x6 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	

REACTIONS.	(size)
	2=0-5-8, 9=0-5-8
	Max Horz 2=233(LC 9)
	Max Uplift 2=-73(LC 12), 9=-31(LC 13)
	Max Grav 2=1225(LC 19), 9=1114(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1458/236, 3-5=-912/303, 5-6=-123/537, 6-7=-87/274, 7-8=-1044/293, 8-9=-1664/228
BOT CHORD 2-12=-20/1119, 10-12=-20/1119, 9-10=-20/1118
WEBS 3-12=0/570, 8-10=0/629, 5-7=-1580/500

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=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 13-10-2, Exterior(2) 13-10-2 to 18-0-0, Interior(1) 18-0-0 to 23-7-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 9.



January 13, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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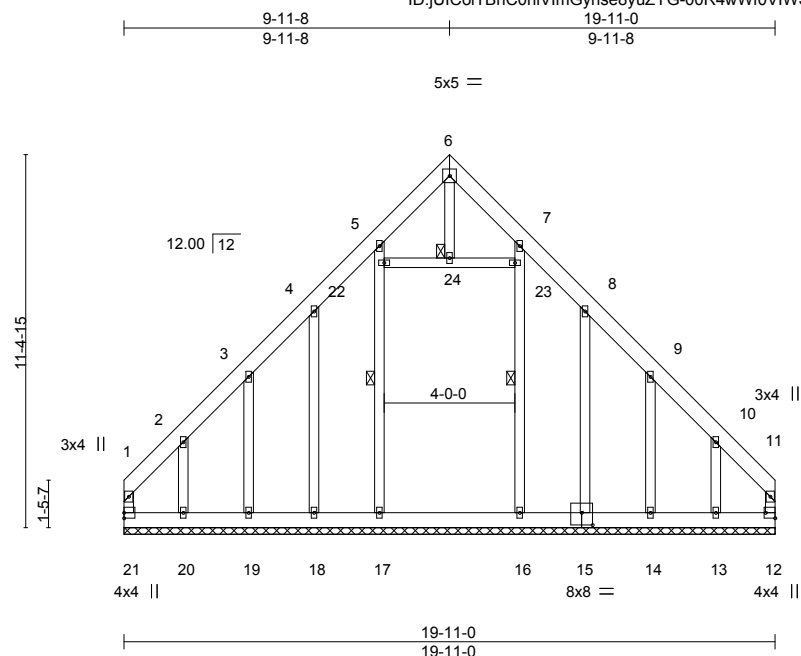
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304815
J1220-5657	C1-GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:17 2021 Page 1

ID:JUICoLTbHC0nVImGynse8yuZYG-00R4wWf0VWSYQJ?9XTEUnKO4Y5NdTmCDAGoXVzvnOe



Scale = 1:70.5

Plate Offsets (X,Y)-- [12:Edge,0-3-8], [15:0-4-0,0-4-8]

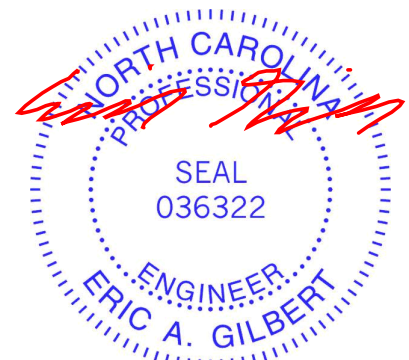
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.16	Horz(CT)	0.00	12	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 189 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 5-17, 7-16
OTHERS 2x4 SP No.2	JOINTS 1 Brace at Jt(s): 24

REACTIONS. All bearings 19-11-0.
 (lb) - Max Horz 21=-295(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 19, 14 except 21=-206(LC 10), 12=-186(LC 11), 18=-194(LC 12), 20=-368(LC 12), 15=-200(LC 13), 13=-361(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 18, 19, 15, 14 except 21=415(LC 12), 12=397(LC 13), 17=388(LC 19), 20=274(LC 10), 16=380(LC 20), 13=264(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-395/238, 10-11=-379/218, 1-21=-292/156, 11-12=-279/140
 BOT CHORD 20-21=-138/257, 19-20=-139/258, 18-19=-140/258, 17-18=-140/258, 16-17=-137/255, 15-16=-140/258, 14-15=-136/254, 13-14=-136/254, 12-13=-134/252
 WEBS 2-20=-235/258, 10-13=-235/256

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=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
 - 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.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 14 except (jt=lb) 21=206, 12=186, 18=194, 20=368, 15=200, 13=361.



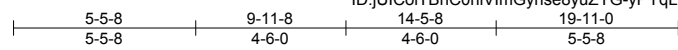
January 13, 2021

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304816
J1220-5657	C2	COMMON	2	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:19 2021 Page 1

ID: jUICoITBhC0nVImGynse8yuZYG-yPYqLcGg1wm9niTNHxViZCPi6Lj45JHvGUiVbNzvnOc



4x6 =

Scale = 1:69.0

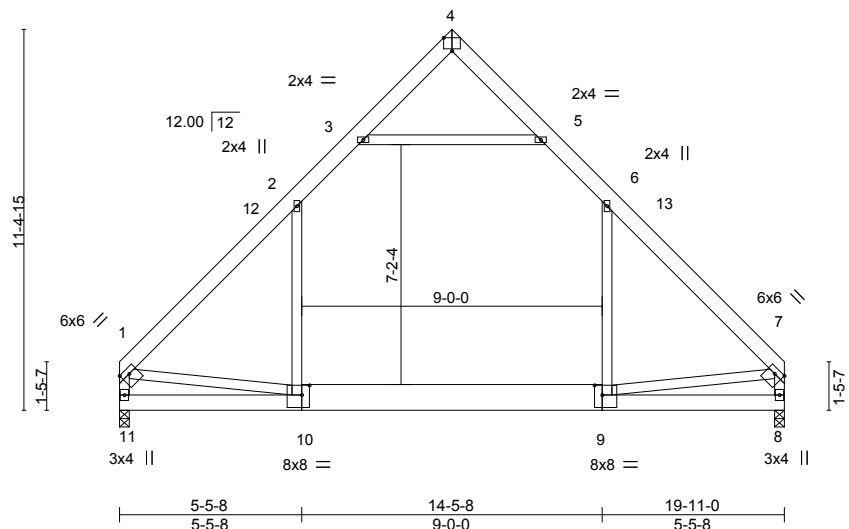


Plate Offsets (X,Y)-- [4:0-3-0,Edge], [9:0-2-12,0-3-8], [10:0-2-12,0-3-8]

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 0.33	Vert(LL)	-0.08 9-10	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.27	Vert(CT)	-0.12 9-10	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.41	Horz(CT)	0.01 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.09 10-11	>999	240	Weight: 171 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	

REACTIONS. (size) 11=0-3-8, 8=0-3-8
 Max Horz 11=-236(LC 8)
 Max Uplift 11=-32(LC 13), 8=-32(LC 12)
 Max Grav 11=919(LC 20), 8=919(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-1054/184, 2-3=-632/261, 5-6=-635/261, 6-7=-1060/184, 1-11=-916/192, 7-8=-922/192
 BOT CHORD 10-11=-300/379, 9-10=-14/683
 WEBS 6-9=-13/378, 2-10=-7/378, 1-10=-86/595, 7-9=-97/604, 3-5=-760/356

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - 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) 0-2-1 to 4-6-14, Interior(1) 4-6-14 to 10-0-0, Exterior(2) 10-0-0 to 14-7-15, Interior(1) 14-7-15 to 19-9-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 8.



January 13, 2021

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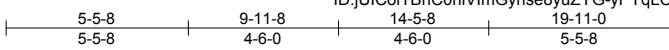
ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304817
J1220-5657	C3	COMMON	4	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:19 2021 Page 1

ID: jUICoITBhCOnIVImGynse8yuZYG-yPYqLcG1wm9niTNHxViZCPI3LjV5JPVgUlvbNzvnOc



4x6 =

Scale = 1:69.0

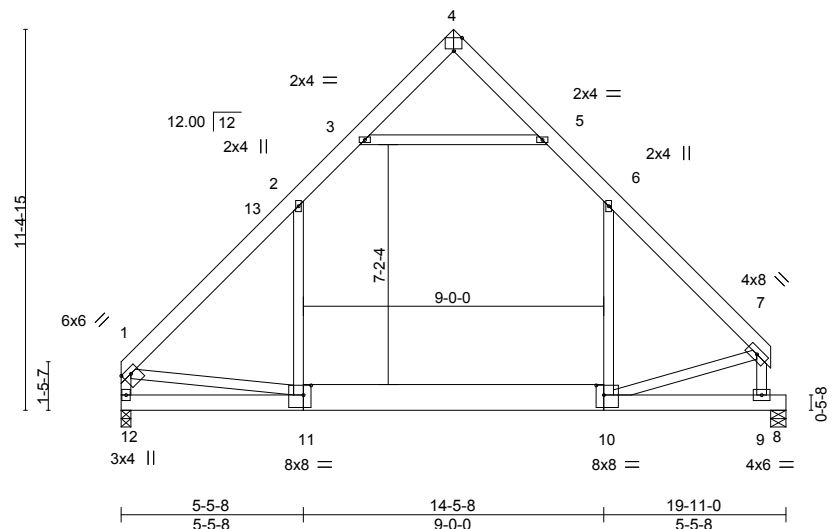


Plate Offsets (X,Y)-- [4:0-3-0,Edge], [10:0-2-12,0-3-8], [11:0-2-12,0-3-8]

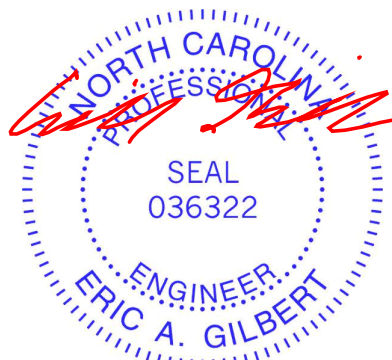
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.33	Vert(LL)	-0.08 10-11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.31	Vert(CT)	-0.12 10-11	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.41	Horz(CT)	0.01 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.08 11-12	>999	240	Weight: 170 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	

REACTIONS. (size) 12=0-3-8, 8=0-5-8
 Max Horz 12=235(LC 9)
 Max Uplift 12=-30(LC 13), 8=-29(LC 12)
 Max Grav 12=914(LC 20), 8=896(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-1047/180, 2-3=-632/261, 5-6=-630/260, 6-7=-1051/196, 1-12=-909/189, 7-9=-1000/197
 BOT CHORD 11-12=-298/372, 10-11=-18/678
 WEBS 6-10=-7/396, 2-11=-6/372, 1-11=-83/591, 7-10=-75/591, 3-5=-745/353

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - 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) 0-2-1 to 4-6-14, Interior(1) 4-6-14 to 10-0-0, Exterior(2) 10-0-0 to 14-7-15, Interior(1) 14-7-15 to 19-2-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 8.

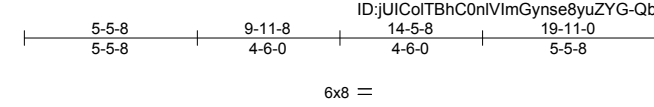


January 13, 2021

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304818
J1220-5657	C4	COMMON	1	2		

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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:20 2021 Page 1



Scale = 1:72.7

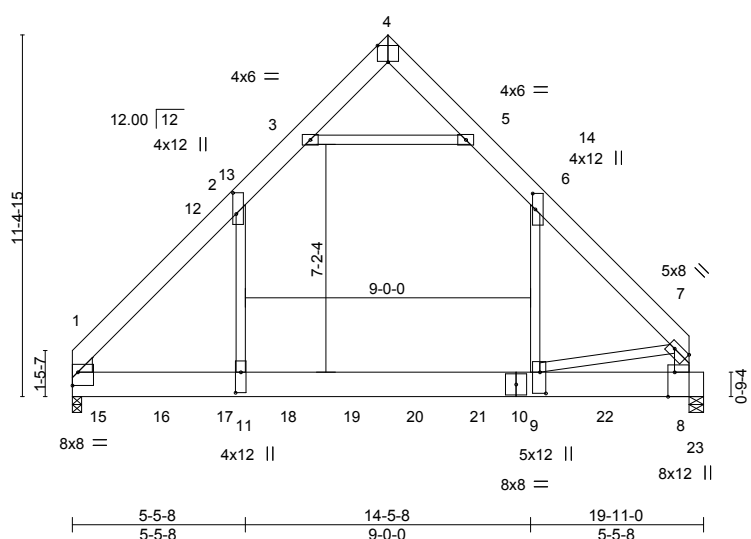


Plate Offsets (X,Y)-- [1:Edge,0-5-1], [1:0-4-6,0-2-1], [1:0-1-1,0-1-1], [2:0-8-0,0-1-4], [4:0-4-0,Edge], [6:0-6-0,0-1-0], [7:0-5-8,Edge], [8:0-9-4,Edge], [9:0-8-0,0-2-4], [11:0-7-12,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.66	Vert(LL)	-0.17	9-11	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.51	Vert(CT)	-0.35	9-11	>658		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.72	Horz(CT)	0.02	8	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Wind(LL)	0.19	9-11	>999		
	Code IRC2015/TPI2014						Weight: 399 lb	FT = 20%

LUMBER-
TOP CHORD 2x8 SP 2400F 2.0E
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except*
7-8: 2x6 SP No.1

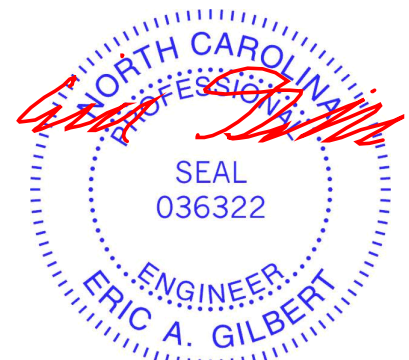
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

WEDGE
Left: 2x6 SP No.1

REACTIONS. (size) 8=0-5-8, 1=0-3-8
Max Horz 1=253(LC 9)
Max Uplift 8=850(LC 12), 1=807(LC 13)
Max Grav 8=8603(LC 19), 1=8235(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-8201/1925, 2-3=-3600/998, 3-4=-335/1393, 4-5=-330/1350, 5-6=-3640/1005,
6-7=-7677/1837, 7-8=-7101/1711
BOT CHORD 1-11=-1044/4833, 9-11=-1059/4903, 8-9=-303/1115
WEBS 6-9=-1213/5544, 2-11=-1340/6218, 7-9=-784/3927, 3-5=-6731/1853

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-5-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - 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.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-4 to 4-7-1, Interior(1) 4-7-1 to 10-0-0, Exterior(2) 10-0-0 to 14-4-13, Interior(1) 14-4-13 to 19-3-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=850, 1=807.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1467 lb down and 366 lb up at 0-9-0, 1467 lb down and 366 lb up at 2-9-0, 1467 lb down and 366 lb up at 4-9-0, 1467 lb down and 366 lb up at 6-9-0, 1467 lb down and 366 lb up at 8-9-0, 1467 lb down and 366 lb up at 10-9-0, 1467 lb down and 366 lb up at 12-9-0, 1467 lb down and 366 lb up at 14-9-0, and 1467 lb down and 366 lb up at 16-9-0, and 1822 lb down and 455 lb up at 18-9-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



January 13, 2021

Continued on page 2
LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304818
J1220-5657	C4	COMMON	1	2	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:20 2021 Page 2
 ID:jUICoITBhC0nIVmGynse8yuZYG-Qb6CYhuoDu0Ps2aqf0x6Qyohl0Zqhhev8US7pznOb

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-4=-60, 4-7=-60, 1-8=-20

Concentrated Loads (lb)

Vert: 9=-1450(B) 15=-1450(B) 16=-1450(B) 17=-1450(B) 18=-1450(B) 19=-1450(B) 20=-1450(B) 21=-1450(B) 22=-1450(B) 23=-1800(B)

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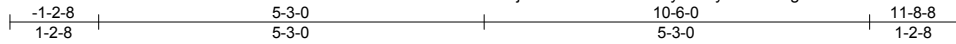
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304819
J1220-5657	D1-GE	GABLE	1	1		

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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:21 2021 Page 1

ID:jUICoITBhC0nIvImGynse8yuZYG-vogaluiXZX0t1?dmOMXAedU7G9TVZJno8oE0gZvvnOa



4x6 =

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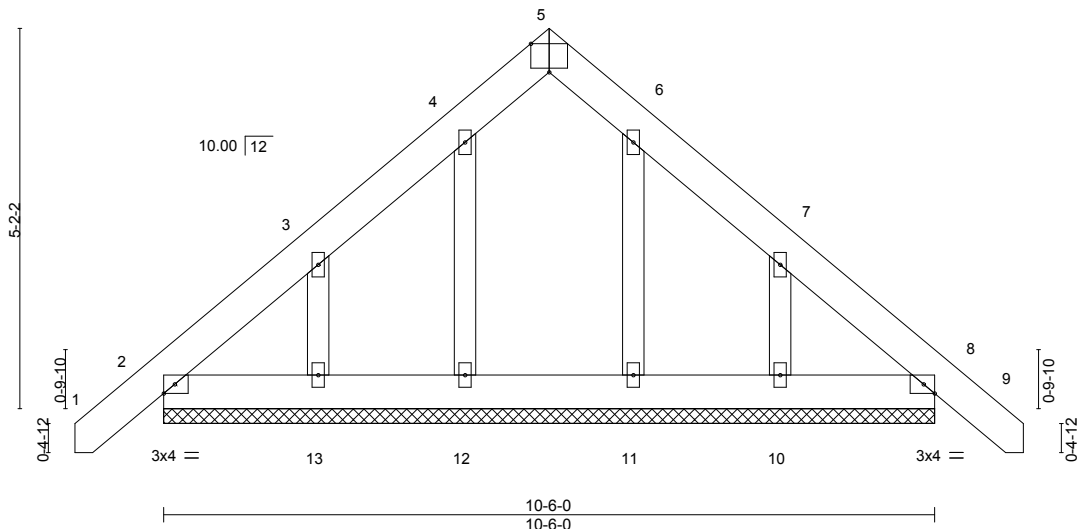


Plate Offsets (X,Y)-- [5:0-3-0,Edge], [8:0-1-13,Edge]

LOADING (psf)	SPACING-	CS.I.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.03	Vert(LL)	-0.00	8	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(CT)	-0.00	8	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	8	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 80 lb	FT = 20%
	Code IRC2015/TPI2014							

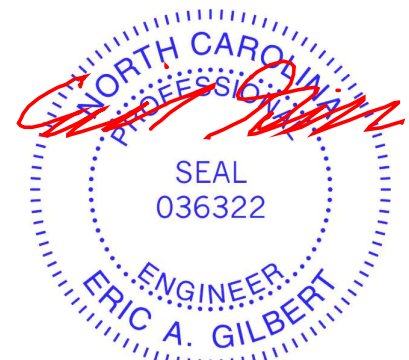
LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 OTHERS 2x4 SP No.2

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 10-6-0.
 (lb) - Max Horz 2=158(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 12, 11 except 13=146(LC 12), 10=148(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 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; TC DL=6.0psf; BC DL=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, 12, 11 except (jt=lb) 13=146, 10=148.



January 13, 2021

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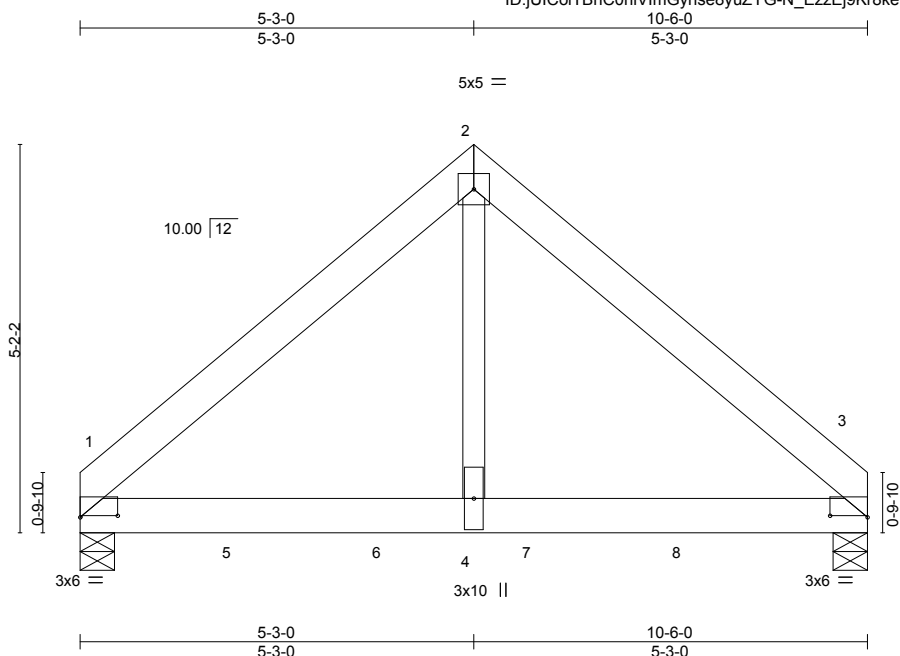


818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304820
J1220-5657	D2	Common Girder	1	2		

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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:22 2021 Page 1
 ID:jUICoITBhC0nIVImGynse8yuZYG-N_EzzEj9Kr8ke9Cyy42PBr1FuZcfff4xMSzZCizvNZ



Scale = 1:30.7

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

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 0.16	Vert(LL)	-0.04	1-4	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.85	Vert(CT)	-0.08	1-4	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.48	Horz(CT)	0.01	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.03	1-4	>999		
								Weight: 129 lb	FT = 20%

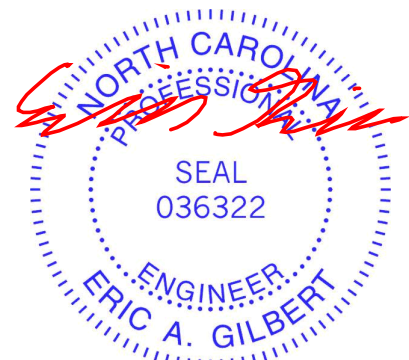
LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	

REACTIONS. (size) 1=0-5-8, 3=0-5-8
 Max Horz 1=112(LC 26)
 Max Uplift 1=-173(LC 8), 3=-233(LC 9)
 Max Grav 1=3064(LC 2), 3=4185(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-3160/219, 2-3=-3166/219
 BOT CHORD 1-4=-112/2308, 3-4=-112/2308
 WEBS 2-4=-164/3875

- NOTES-**
- 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: 2x6 - 2 rows staggered at 0-7-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - 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.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDD=6.0psf; BCDD=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=173, 3=233.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1308 lb down and 84 lb up at 2-0-12, 1308 lb down and 84 lb up at 4-0-12, 1308 lb down and 84 lb up at 6-0-12, and 1308 lb down and 84 lb up at 8-0-12, and 1316 lb down and 76 lb up at 10-3-4 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



January 13, 2021

Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304820
J1220-5657	D2	Common Girder	1	2	Job Reference (optional)	

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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:22 2021 Page 2
 ID:jUICoITBhC0nIVImGynse8yuZYG-N_EzzEj9Kr8ke9Cyy42PBr1FuZcff4xMSzZCizvnOZ

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 3--1208(B) 5--1200(B) 6--1200(B) 7--1200(B) 8--1200(B)

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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304821
J1220-5657	P1-GE	GABLE	1	1		

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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:23 2021 Page 1

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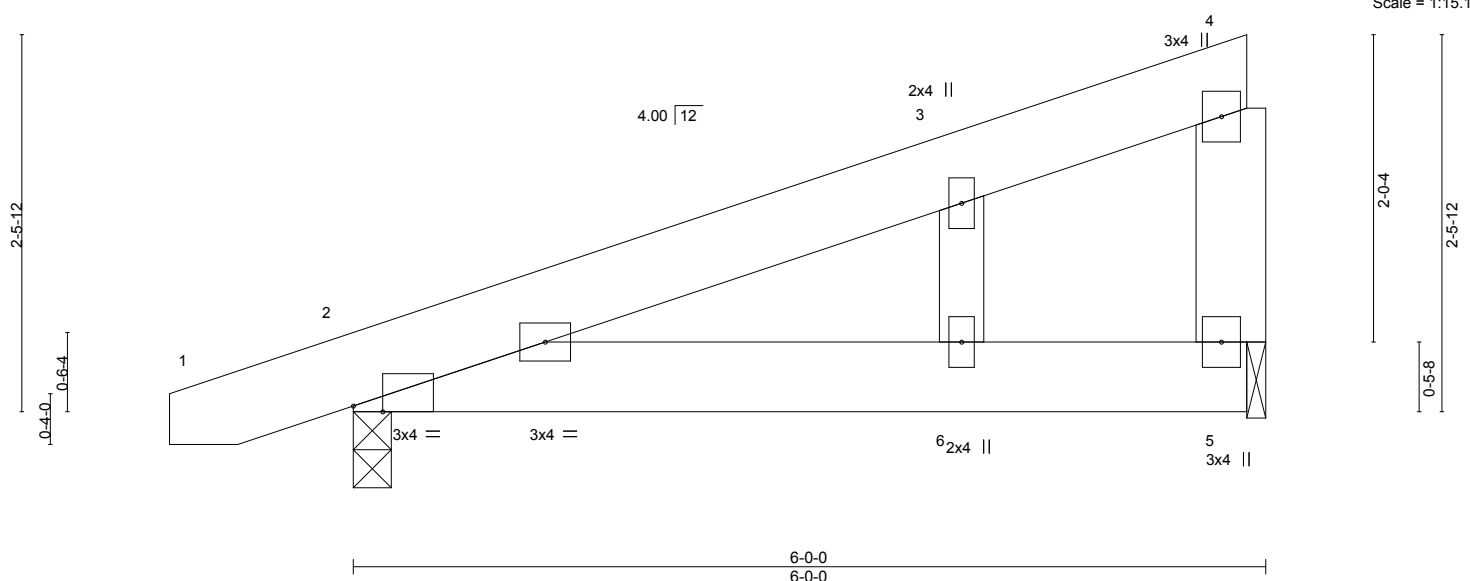


Plate Offsets (X,Y)-- [2:0-2-5,Edge]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.09	Vert(LL)	0.02	2-6	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.09	Vert(CT)	-0.02	2-6	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Horz(CT)	-0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2015/TPI2014						Weight: 36 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1	
OTHERS 2x4 SP No.2	

REACTIONS. (size) 2=0-3-0, 5=0-1-8
 Max Horz 2=110(LC 8)
 Max Uplift 2=173(LC 8), 5=138(LC 8)
 Max Grav 2=299(LC 1), 5=219(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) 5 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) except (it=lb) 2=173, 5=138.



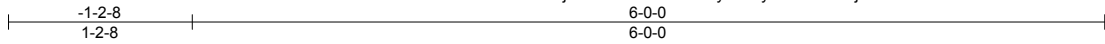
January 13, 2021

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304822
J1220-5657	P2	MONOPITCH	6	1		

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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:24 2021 Page 1

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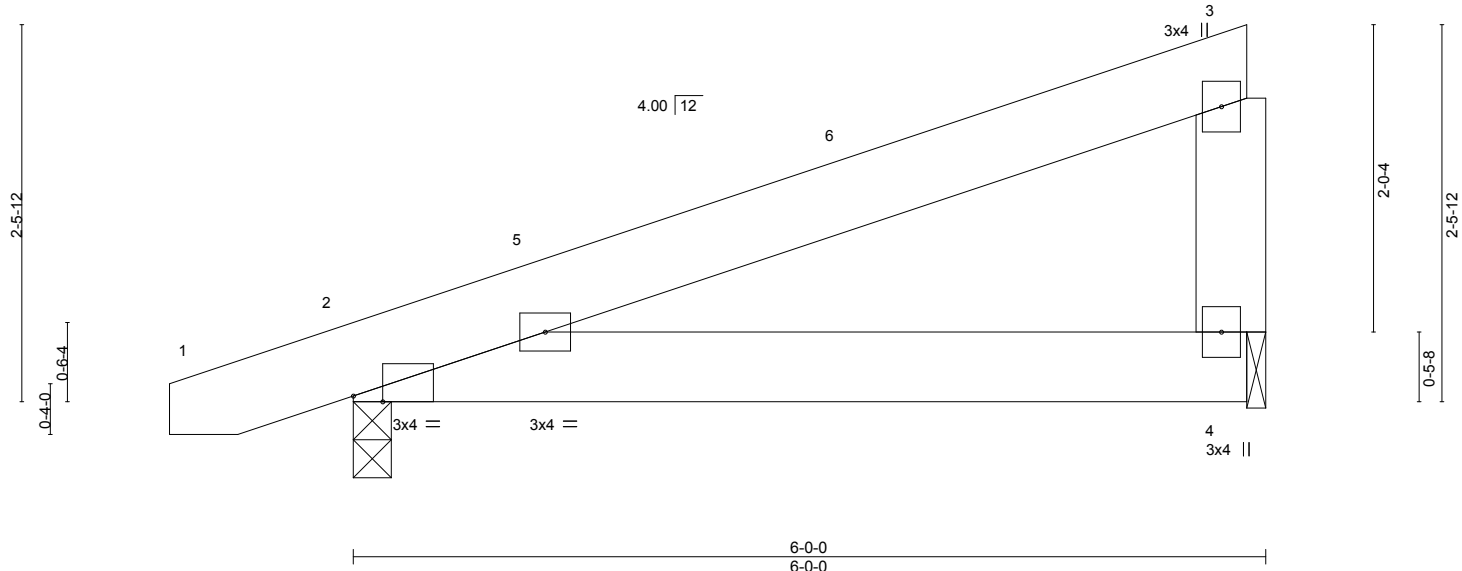


Plate Offsets (X,Y)--	[2:0-2-5,Edge]
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LOADING (psf)	SPACING-	CS.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.18	Vert(LL) -0.01	2-4	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.12	Vert(CT) -0.03	2-4	>999	240		
BCLL 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) 0.03	2-4	>999	240	Weight: 35 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1	

REACTIONS. (size) 2=0-3-0, 4=0-1-8
 Max Horz 2=78(LC 8)
 Max Uplift 2=-120(LC 8), 4=-94(LC 8)
 Max Grav 2=299(LC 1), 4=219(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) -0-11-13 to 3-5-0, Interior(1) 3-5-0 to 5-9-4 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=120.



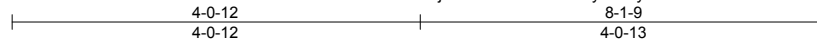
January 13, 2021

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304823
J1220-5657	VD1	VALLEY	1	1		

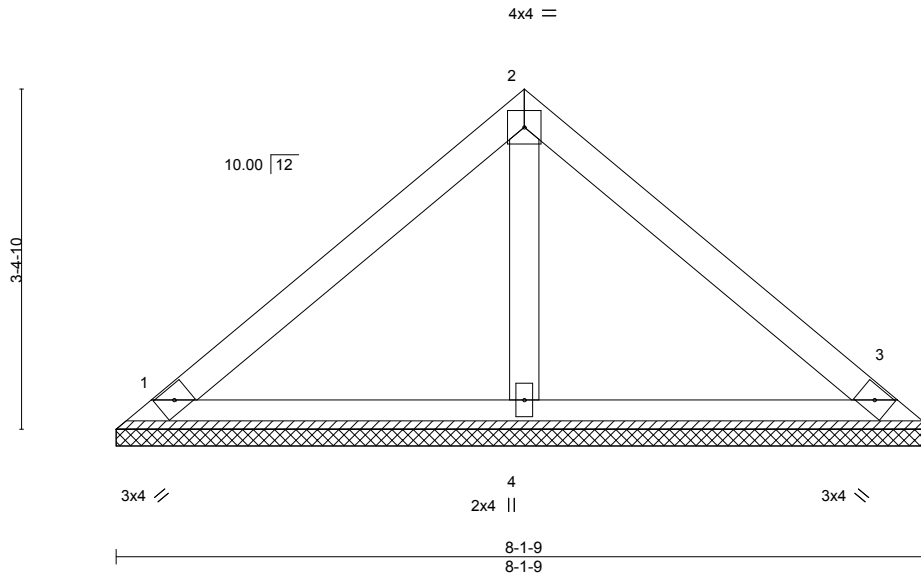
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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:25 2021 Page 1

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Scale = 1:22.9



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 0.20	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 31 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=8-1-9, 3=8-1-9, 4=8-1-9
Max Horz 1=-73(LC 8)
Max Uplift 1=-26(LC 13), 3=-32(LC 13)
Max Grav 1=169(LC 1), 3=169(LC 1), 4=247(LC 1)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - 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
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
 - Non Standard bearing condition. Review required.



January 13, 2021

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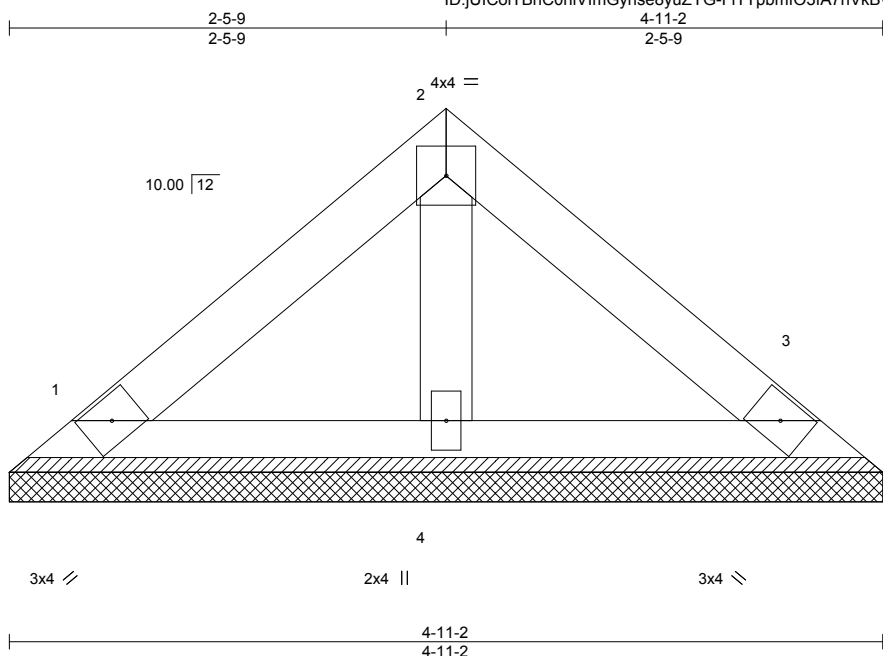


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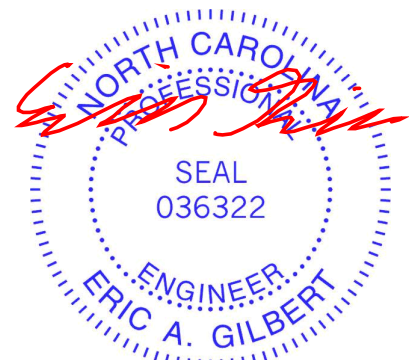
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 18 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-11-2 oc purlins.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	

REACTIONS. (size) 1=4-11-2, 3=4-11-2, 4=4-11-2
 Max Horz 1=41(LC 10)
 Max Uplift 1=14(LC 13), 3=18(LC 13)
 Max Grav 1=95(LC 1), 3=95(LC 1), 4=139(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.



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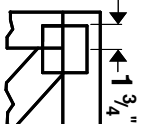
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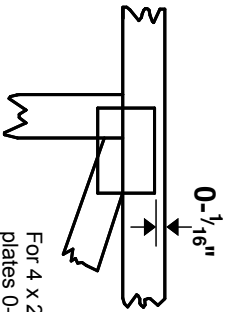
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Symbols

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 **MITrak 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



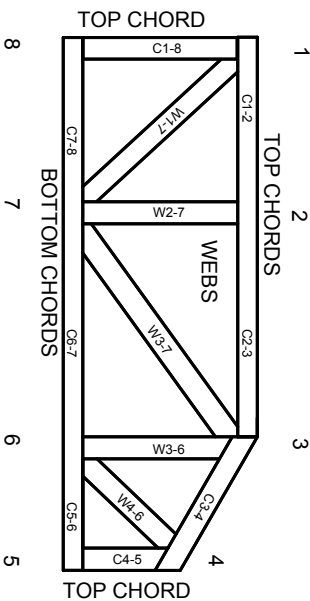
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TFP 1: 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

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)



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/TFP 1 section 6.3 These truss designs rely on lumber values established by others.

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MITteK Engineering Reference Sheet: Mill-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/TFP 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TFP 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/TFP 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

Trenco

818 Soundside Rd
Edenton, NC 27932

Re: J1220-5658

Precision/Lot 58 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: E15304825 thru E15304840

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

North Carolina COA: C-0844



January 13, 2021

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	58 Summerlin/Harnett	E15304825
J1220-5658	ET1	Floor Supported Gable	1	1	Job Reference (optional)		

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:12 2021 Page 1
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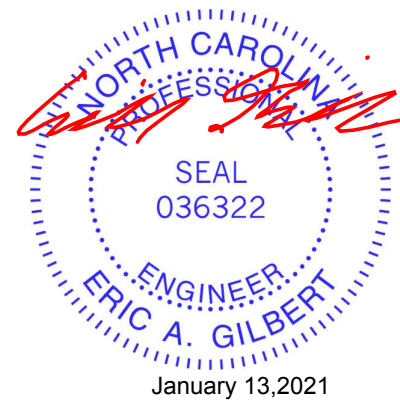
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	in	(loc)	l/defl	L/d	MT20	244/190		
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(LL)	n/a	-	n/a	Weight: 127 lb FT = 20%F, 11%E			
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Vert(CT)	n/a	-	n/a				
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R		Horz(CT)	0.00	26	n/a				

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1(flat)	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.1(flat)	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3(flat)		
OTHERS	2x4 SP No.3(flat)		

REACTIONS. All bearings 30-11-0.
 (lb) - Max Grav All reactions 250 lb or less at joint(s) 50, 26, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27

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.



Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304826
J1220-5658	ET2	Floor Supported Gable	1	1	Job Reference (optional)	

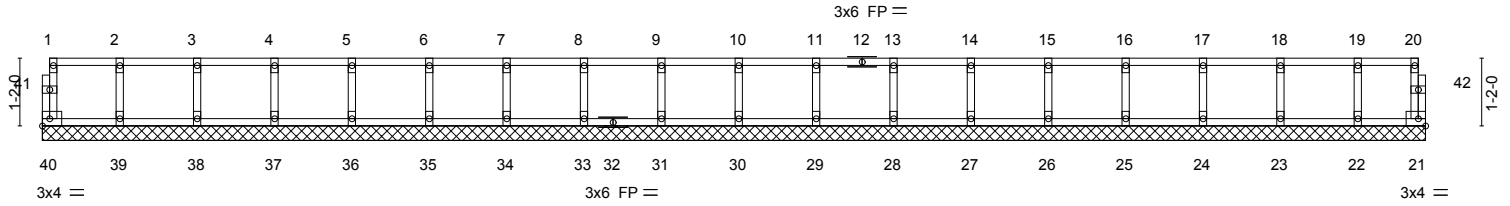
Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:15 2021 Page 1
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0-1-8

0-1-8

Scale = 1:39.7



23-10-0
23-10-0

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	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.01	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	21	n/a		
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-R					Weight: 99 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 23-10-0.
 (lb) - Max Grav All reactions 250 lb or less at joint(s) 40, 21, 39, 38, 37, 36, 35, 34, 33, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22

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.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304827
J1220-5658	ET3	Floor Supported Gable	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:15 2021 Page 1
 ID:1NaocfdXFgYT90ywZp05ZYwAzd-4eJJVqdmzhGk4Ac26QIPNE_ikMv9ajvlnshSczvnOg

0:1-8

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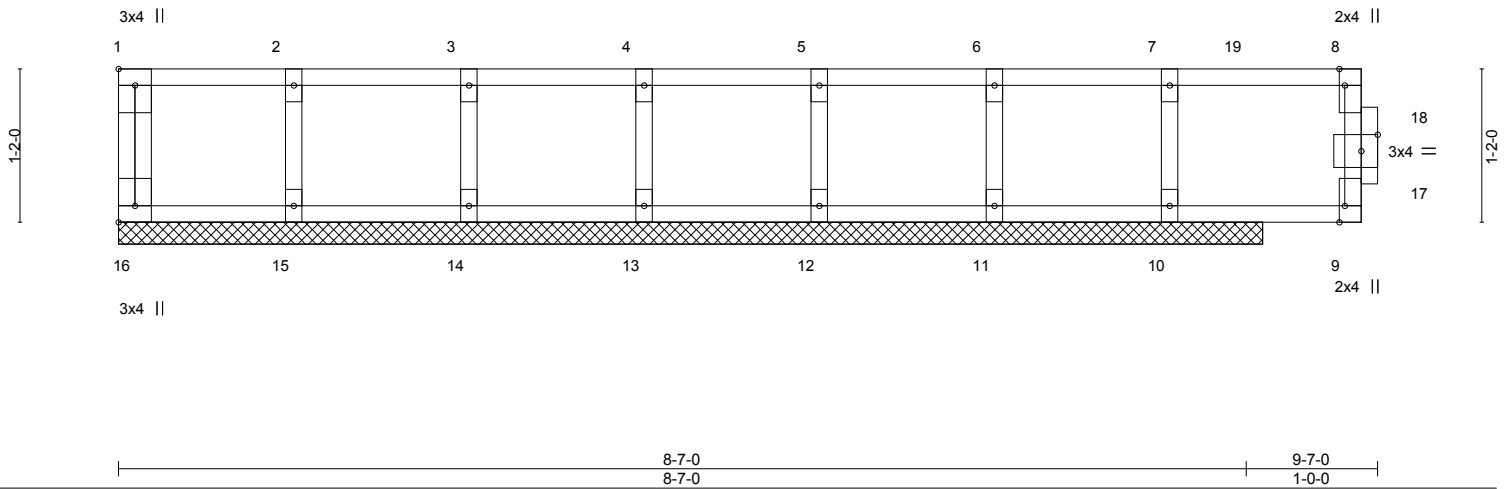


Plate Offsets (X,Y)--	[1:Edge,0-1-8], [8:0-1-8,Edge], [9:0-1-8,Edge], [16:Edge,0-1-8], [17:0-1-8,0-1-8]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.51	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.29	Vert(CT) n/a - n/a 999		
BCLL 0.0	Rep Stress Incr NO	WB 0.07	Horz(CT) -0.00 10 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-R		Weight: 41 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 9-7-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	
OTHERS 2x4 SP No.3(flat)	

REACTIONS. All bearings 8-8-8.
 (lb) - Max Uplift All uplift 100 lb or less at joint(s) 16 except 11=110(LC 4)
 Max Grav All reactions 250 lb or less at joint(s) 16, 15, 14, 13, 12, 11 except 10=436(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 7-10=298/0

- 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) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16 except (t=lb) 11=110.
 - 7) Non Standard bearing condition. Review required.
 - 8) 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.
 - 9) 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: 9-16=-10, 1-19=-100, 8-19=-220



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304828
J1220-5658	ET4	Floor Supported Gable	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:16 2021 Page 1
 ID:1NaocfdXFgYT90ywZp05ZYzwAzd-YqthiAeOk?ObwElpbpy_xanG28mQu2X3_WWF_2zvnOf

0'-1-8

0'-1-8

Scale = 1:16.3

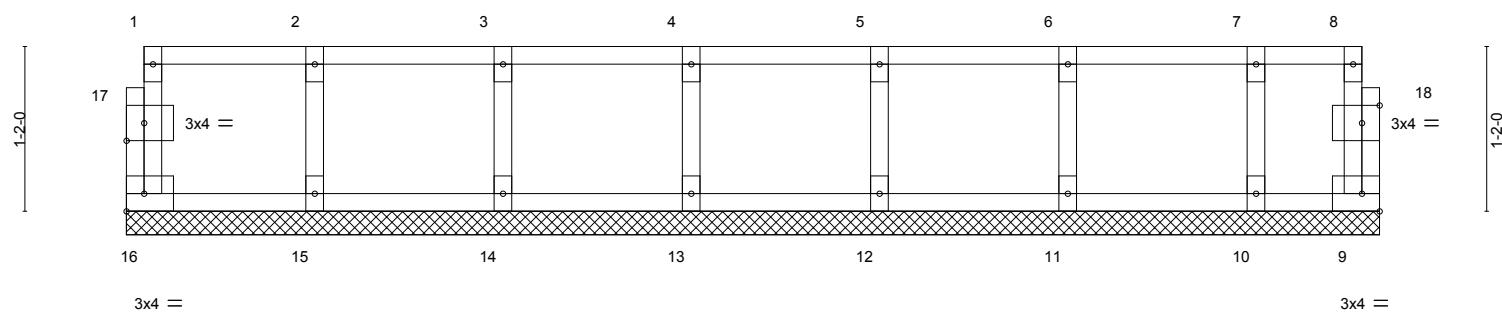


Plate Offsets (X,Y)-- [17:0-1-8,0-1-8], [18:0-1-8,0-1-8]

LOADING (psf)	SPACING-	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	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.01	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr YES	WB 0.03	Horz(CT)	0.00	9	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-R					Weight: 39 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	
OTHERS 2x4 SP No.3(flat)	

REACTIONS. All bearings 8-10-8.
 (lb) - Max Grav All reactions 250 lb or less at joint(s) 16, 9, 15, 14, 13, 12, 11, 10

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

- NOTES-**
- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
 - 2) 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.



January 13, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot	58 Summerlin/Harnett	E15304829
J1220-5658	F1	Floor	6	1	Job Reference (optional)		

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:17 2021 Page 1
 ID:1NaocfdXFgYT90yWZp05ZYzwAzd-00R4wWf0VIWSYOJ?9XTEUnKEUYtBdJMCDAGoXVzvnOe

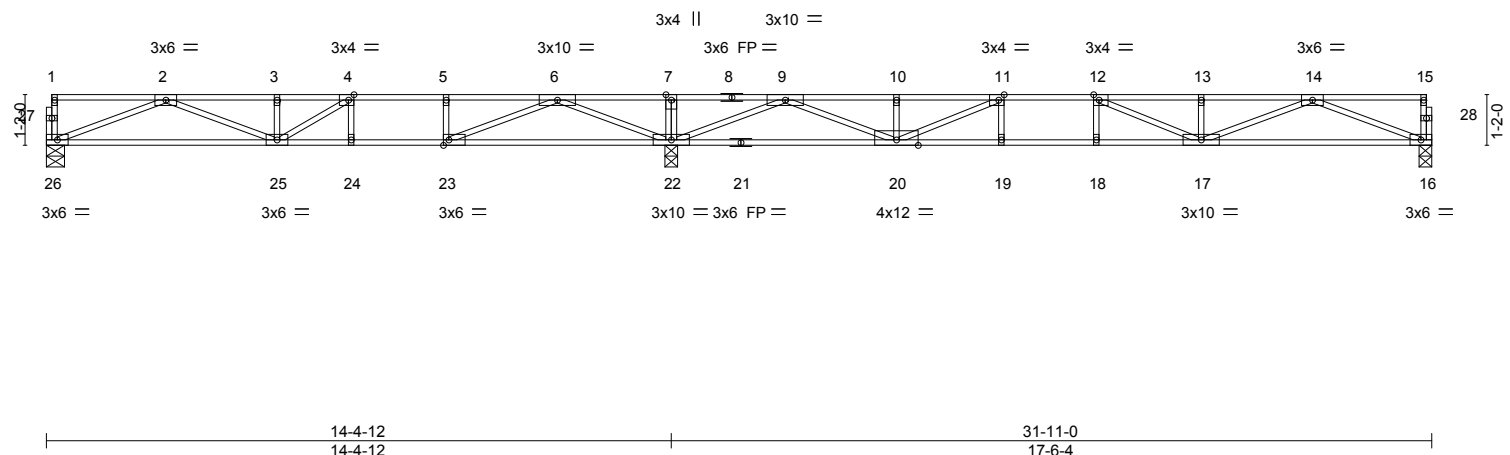


Plate Offsets (X,Y)-- [4:0-1-8,Edge], [11:0-1-8,Edge], [12:0-1-8,Edge], [23:0-1-8,Edge]					
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.85	Vert(LL) -0.29 17-18 >727 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 1.00	Vert(CT) -0.39 17-18 >536 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.83	Horz(CT) 0.06 16 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 153 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP 2400F 2.0E(flat) *Except* 16-21: 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 1-4-12 oc bracing.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (size) 26=0-5-0, 22=0-3-8, 16=0-3-8
 Max Grav 26=706(LC 3), 22=2020(LC 1), 16=849(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2199/0, 3-4=-2199/0, 4-5=-2038/252, 5-6=-2038/252, 6-7=0/2066, 7-9=0/2066,
 9-10=-2184/0, 10-11=-2184/0, 11-12=-3109/0, 12-13=-2912/0, 13-14=-2912/0
 BOT CHORD 25-26=0/1474, 24-25=-252/2038, 23-24=-252/2038, 22-23=-943/852, 20-22=-295/644,
 19-20=0/3109, 18-19=0/3109, 17-18=0/3109, 16-17=0/1827
 WEBS 7-22=-303/0, 2-26=-1580/0, 2-25=-4/783, 3-25=-335/0, 6-22=-2088/0, 6-23=0/1575,
 5-23=-422/0, 4-25=0/654, 4-24=-271/0, 9-22=-2472/0, 9-20=0/1736, 10-20=-260/30,
 14-16=-1959/0, 14-17=0/1171, 13-17=-317/0, 11-20=-1220/0, 12-17=-450/216

- 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.



<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY TRENCO A MITEK Affiliate 818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	Precision/Lot	58 Summerlin/Harnett	E15304830
J1220-5658	F2	Floor	3	1	Job Reference (optional)		

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:18 2021 Page 1
 ID:1NaocfdXFgYT90ywZp05ZYzwAzd-UD_S7sfeGceJAYuBjE_T1?sQryE9MnvMSq?L3xznOd

0-1-8

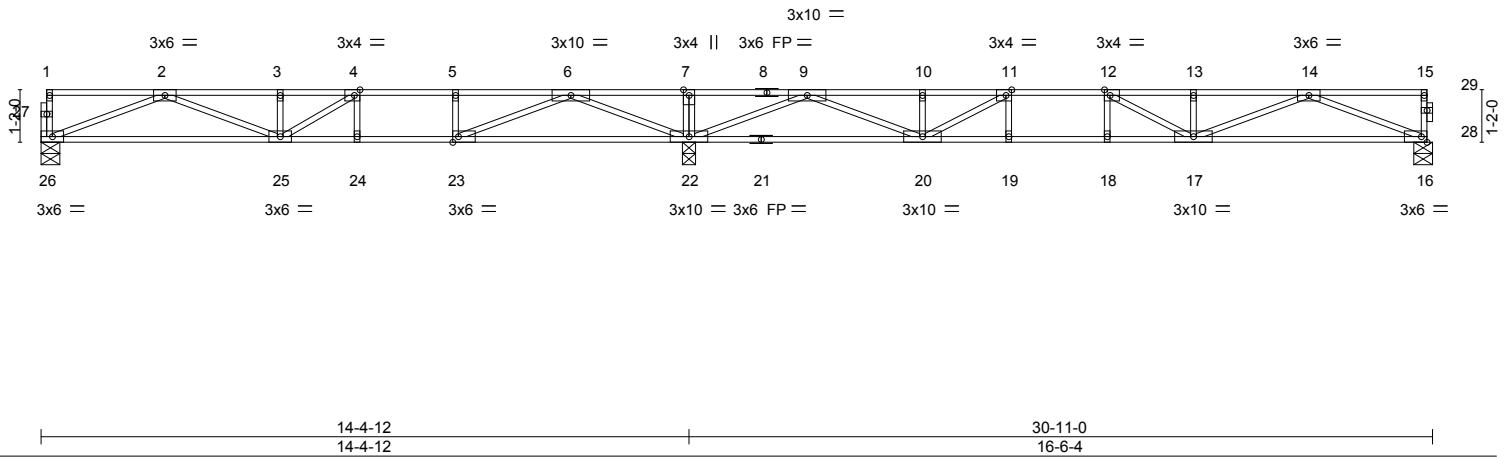


Plate Offsets (X,Y)--		[4:0-1-8,Edge], [11:0-1-8,Edge], [12:0-1-8,Edge], [23:0-1-8,Edge]
LOADING (psf)	SPACING-	CSI.
TCLL 40.0	2-0-0	TC 0.81
TCDL 10.0	Plate Grip DOL 1.00	BC 0.89
BCLL 0.0	Lumber DOL 1.00	WB 0.74
BCDL 5.0	Rep Stress Incr YES	Matrix-S
	Code IRC2015/TPI2014	
		DEFL.
		in (loc) l/defl L/d
		Vert(LL) -0.22 17-18 >878 480
		Vert(CT) -0.30 17-18 >645 360
		Horz(CT) 0.05 16 n/a n/a
		PLATES
		MT20
		GRIP
		244/190
		Weight: 148 lb FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP 2400F 2.0E(flat) *Except*	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
16-21: 2x4 SP No.1(flat)	
WEBS 2x4 SP No.3(flat)	

REACTIONS. (size) 26=0-5-0, 16=0-5-0, 22=0-3-8
 Max Grav 26=710(LC 3), 16=804(LC 4), 22=1941(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2215/0, 3-4=-2215/0, 4-5=-2064/127, 5-6=-2064/127, 6-7=0/1863, 7-9=0/1863,
 9-10=-2069/0, 10-11=-2069/0, 11-12=-2742/0, 12-13=-2629/0, 13-14=-2629/0
 BOT CHORD 25-26=0/1483, 24-25=-127/2064, 23-24=-127/2064, 22-23=-766/889, 20-22=-287/701,
 19-20=0/2742, 18-19=0/2742, 17-18=0/2742, 16-17=0/1672
 WEBS 7-22=-299/0, 2-26=-1589/0, 2-25=0/791, 3-25=-327/0, 6-22=-2048/0, 6-23=0/1521,
 5-23=-410/0, 4-25=0/597, 4-24=-256/0, 9-22=-2307/0, 9-20=0/1559, 14-16=-1805/0,
 14-17=0/1033, 13-17=-292/0, 11-20=-1007/0, 12-17=-348/247

- 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.



January 13, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304831
J1220-5658	F3	Floor	9	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:19 2021 Page 1
 ID:1NaocfdXFgYT90ywZp05ZYwAzd-yPYqLCgG1wm9niTNHxViZCPfSLbN5GDVgUlvbNzvnOc

0-1-8

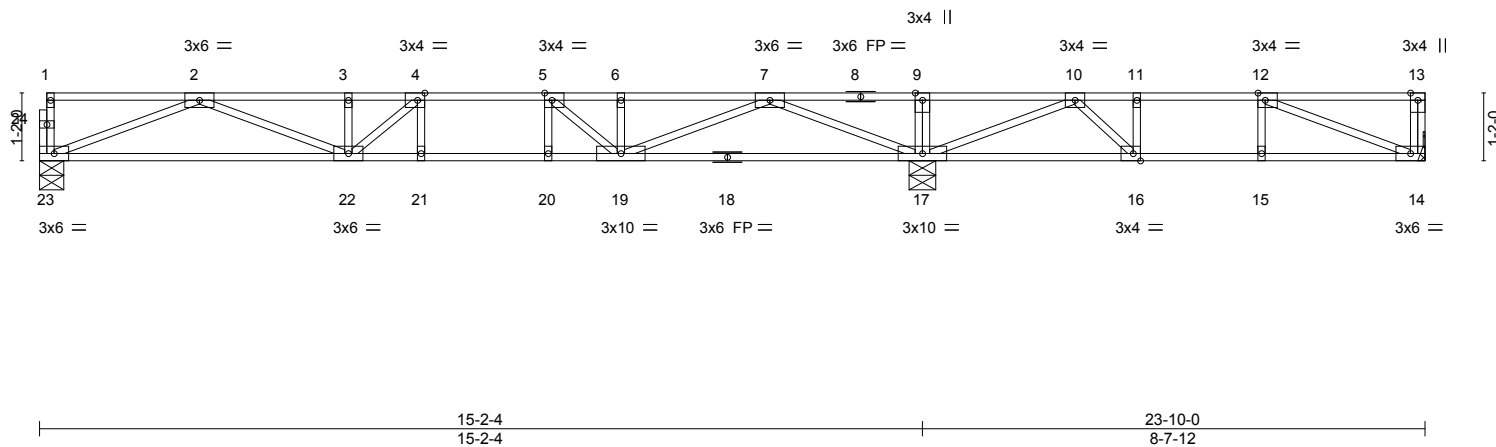


Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge], [12:0-1-8,Edge], [16:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.56	Vert(LL)	-0.17	21	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.83	Vert(CT)	-0.23	21	>784		
BCLL 0.0	Lumber DOL 1.00	WB 0.61	Horz(CT)	0.04	14	n/a		
BCDL 5.0	Rep Stress Incr NO	Matrix-S						
	Code IRC2015/TPI2014						Weight: 117 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)

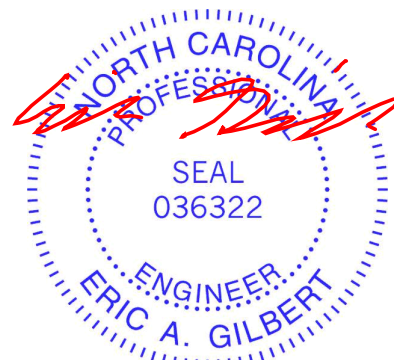
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 23=0-5-0, 17=0-5-8, 14=Mechanical
 Max Grav 23=765(LC 10), 17=1506(LC 1), 14=1810(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 13-14=-1536/0, 2-3=-2464/0, 3-4=-2464/0, 4-5=-2531/0, 5-6=-2187/0, 6-7=-2187/0, 7-9=0/1166, 9-10=0/1166, 10-11=-715/140, 11-12=-715/140
 BOT CHORD 22-23=0/1620, 21-22=0/2531, 20-21=0/2531, 19-20=0/2531, 17-19=0/1072, 16-17=-402/525, 15-16=-140/715, 14-15=-140/715
 WEBS 9-17=-295/0, 2-23=-1736/0, 2-22=0/911, 3-22=-260/14, 7-17=-2021/0, 7-19=0/1282, 5-19=-710/0, 4-22=-339/219, 10-17=-1182/0, 12-14=-766/150, 10-16=0/574, 11-16=-306/0

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
 - All plates are 1.5x3 MT20 unless otherwise indicated.
 - Plates checked for a plus or minus 1 degree rotation about its center.
 - Refer to girder(s) for truss to truss connections.
 - 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.
 - 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: 14-23=-10, 1-13=-100
 Concentrated Loads (lb)
 Vert: 13=-1400



January 13, 2021

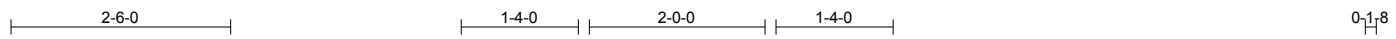
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304832
J1220-5658	F4	Floor	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:20 2021 Page 1
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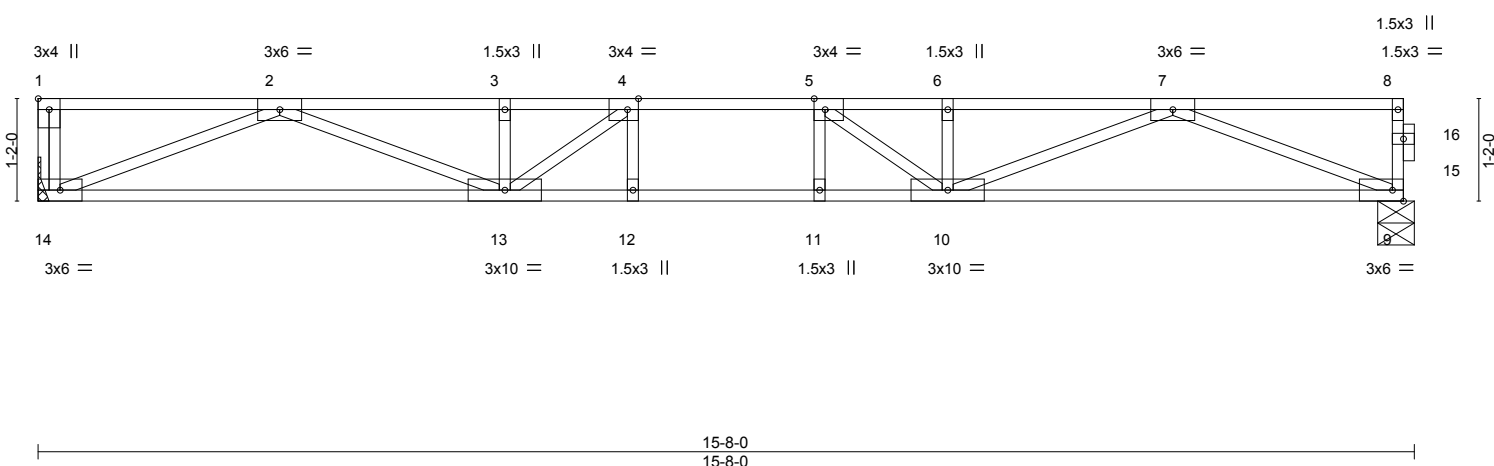


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [4:0-1-8,Edge], [5:0-1-8,Edge]

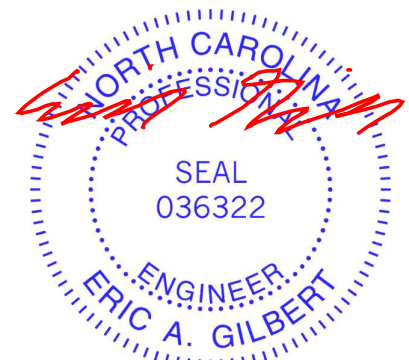
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.40	Vert(LL)	-0.19 11-12	>979	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.72	Vert(CT)	-0.26 11-12	>703	360		
BCLL 0.0	Rep Stress Incr	YES	WB 0.53	Horz(CT)	0.05 9	n/a	n/a		
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 77 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (size) 14=Mechanical, 9=0-5-0
 Max Grav 14=844(LC 1), 9=844(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2822/0, 3-4=-2822/0, 4-5=-3064/0, 5-6=-2804/0, 6-7=-2804/0
 BOT CHORD 13-14=0/1807, 12-13=0/3064, 11-12=0/3064, 10-11=0/3064, 9-10=0/1772
 WEBS 2-14=-1944/0, 2-13=0/1096, 7-9=-1912/0, 7-10=0/1115, 5-10=-606/45, 4-13=-590/59

- 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.



January 13, 2021

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304833
J1220-5658	F5	Floor	2	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:20 2021 Page 1
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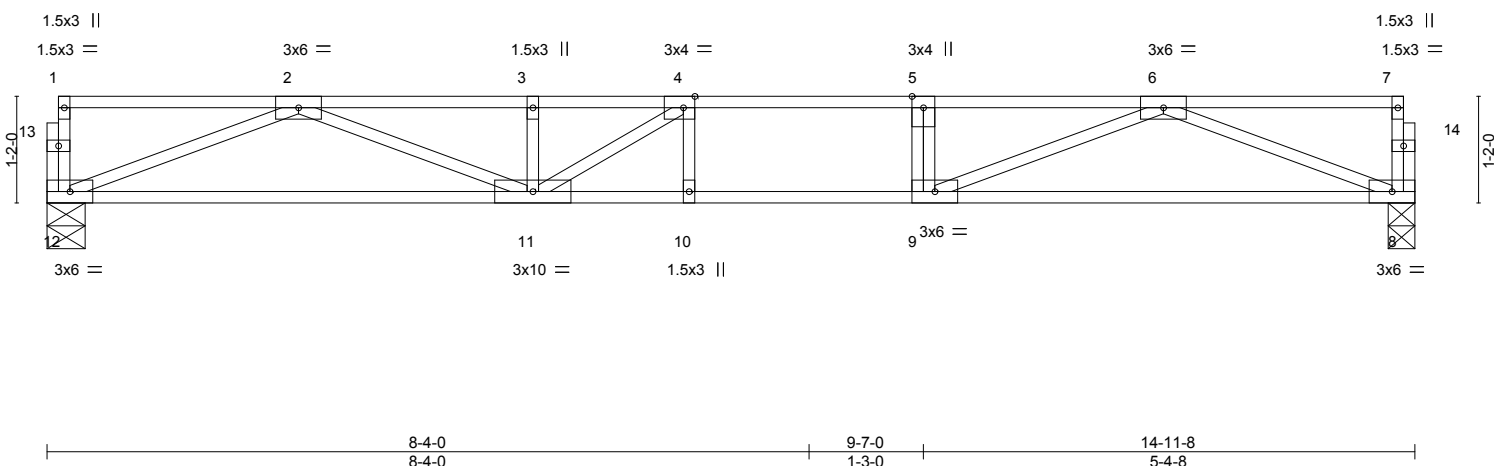
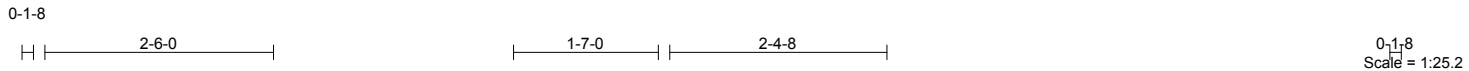


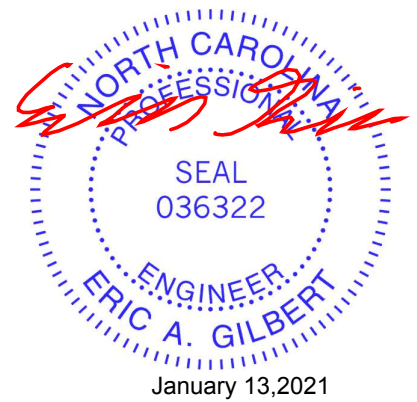
Plate Offsets (X,Y)-- [4:0-1-8,Edge]		8-4-0		9-7-0		14-11-8			
		8-4-0		1-3-0		5-4-8			
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.73	Vert(LL)	-0.28 10-11	>638	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.98	Vert(CT)	-0.35 10-11	>507	360		
BCLL 0.0	Rep Stress Incr	YES	WB 0.56	Horz(CT)	0.04 8	n/a	n/a		
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 73 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (size) 12=0-5-0, 8=0-3-8
Max Grav 12=803(LC 1), 8=803(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2664/0, 3-4=-2664/0, 4-5=-2760/0, 5-6=-2760/0
BOT CHORD 11-12=0/1715, 10-11=0/2760, 9-10=0/2760, 8-9=0/1713
WEBS 2-12=-1838/0, 2-11=0/1024, 3-11=-286/22, 4-11=-509/185, 6-8=-1836/0, 6-9=0/1180, 5-9=-324/0

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) 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.



January 13, 2021

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304834
J1220-5658	F6	Floor	2	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:21 2021 Page 1
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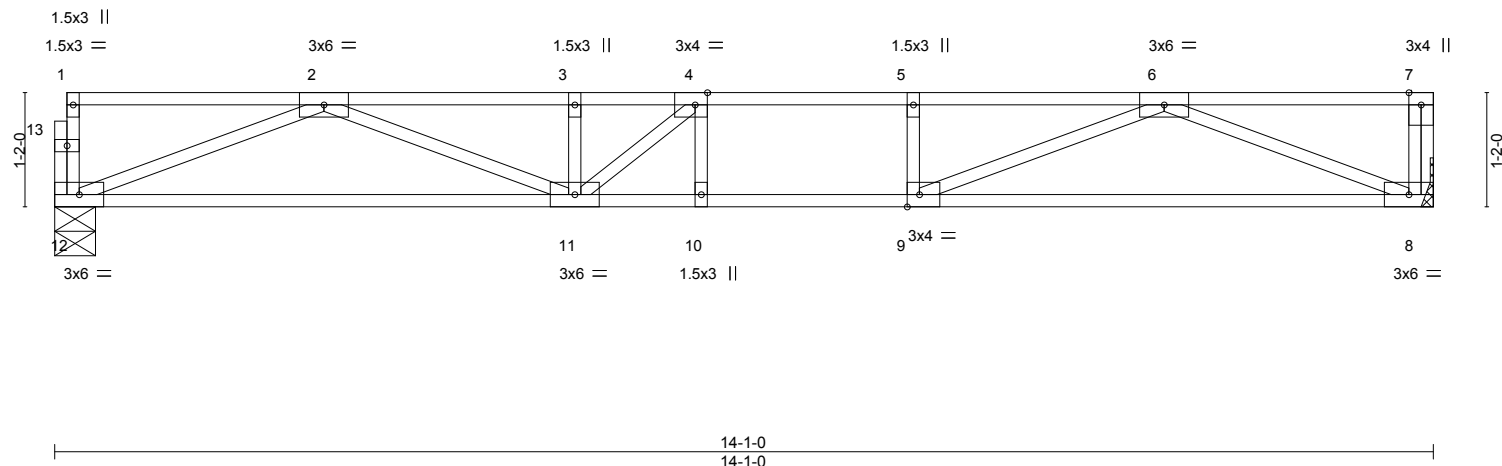


Plate Offsets (X,Y)-- [4:0-1-8,Edge], [9:0-1-8,Edge]

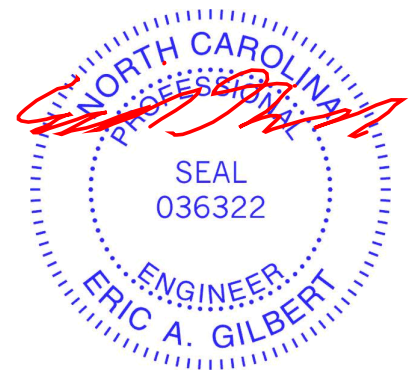
LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.49	Vert(LL)	-0.18 10-11	>916	480	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.79	Vert(CT)	-0.23 10-11	>719	360		
BCLL 0.0	Lumber DOL 1.00	WB 0.47	Horz(CT)	0.04 8	n/a	n/a		
BCDL 5.0	Rep Stress Incr YES	Matrix-S					Weight: 69 lb	FT = 20%F, 11%E
	Code IRC2015/TPI2014							

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (size) 12=0-5-0, 8=Mechanical
 Max Grav 12=755(LC 1), 8=761(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2417/0, 3-4=-2417/0, 4-5=-2461/0, 5-6=-2461/0
 BOT CHORD 11-12=0/1595, 10-11=0/2461, 9-10=0/2461, 8-9=0/1595
 WEBS 2-12=-1709/0, 2-11=0/887, 3-11=-267/36, 6-8=-1716/0, 6-9=0/990, 5-9=-274/0, 4-11=-419/220

- 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 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.



January 13, 2021

Job J1220-5658	Truss F7	Truss Type Floor	Qty 2	Ply 1	Precision/Lot 58 Summerlin/Harnett Job Reference (optional)	E15304835
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Comtech, Inc. Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:21 2021 Page 1
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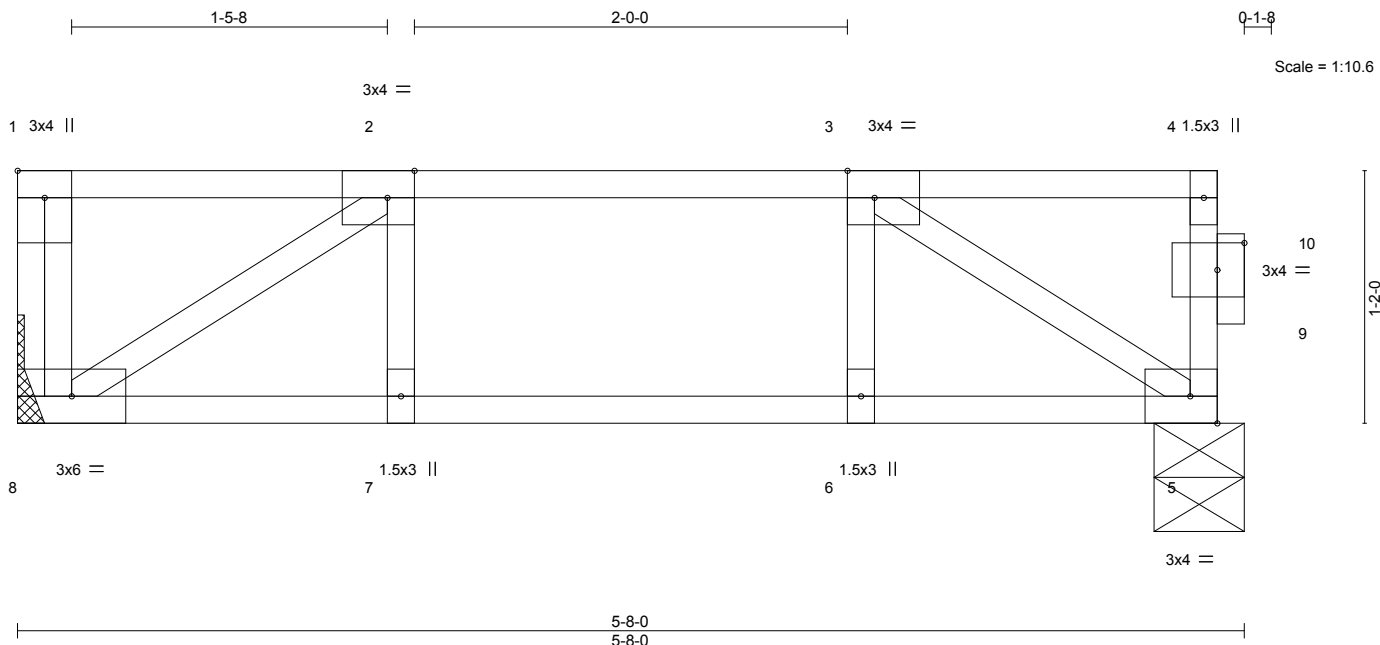


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [2:0-1-8,Edge], [3:0-1-8,Edge], [9:0-1-8,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.17	Vert(LL)	-0.01	7	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.14	Vert(CT)	-0.02	7	>999		
BCLL 0.0	Lumber DOL 1.00	WB 0.10	Horz(CT)	0.00	5	n/a		
BCDL 5.0	Rep Stress Incr YES	Matrix-S					Weight: 29 lb	FT = 20%F, 11%E
	Code IRC2015/TPI2014							

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 5-8-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (size) 8=Mechanical, 5=0-5-0
 Max Grav 8=294(LC 1), 5=294(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-353/0
 BOT CHORD 7-8=0/353, 6-7=0/353, 5-6=0/353
 WEBS 2-8=-418/0, 3-5=-423/0

- 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.



Job	Truss	Truss Type	Qty	Ply	Precision/Lot	58 Summerlin/Harnett	E15304836
J1220-5658	FG1	Floor	1	1	Job Reference (optional)		

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:22 2021 Page 1
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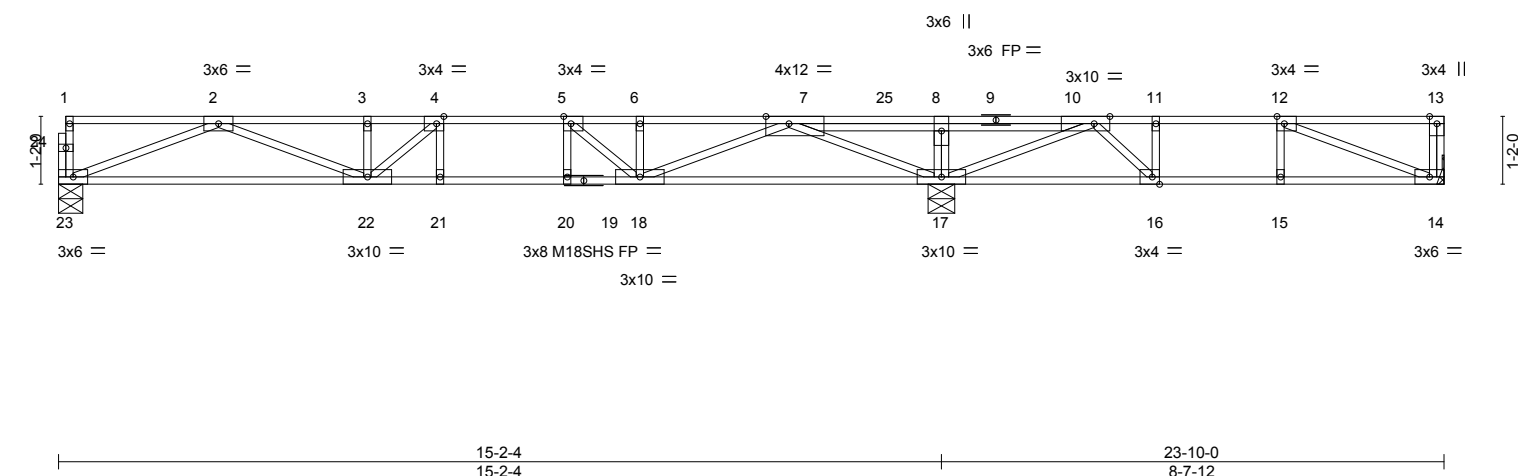


Plate Offsets (X,Y)--	[4:0-1-8,Edge], [5:0-1-8,Edge], [7:0-4-12,Edge], [10:0-3-4,Edge], [12:0-1-8,Edge], [16:0-1-8,Edge]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.73	Vert(LL) -0.17 21 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.78	Vert(CT) -0.24 20-21 >756 360	M18SHS	244/190
BCLL 0.0	Rep Stress Incr NO	WB 0.71	Horz(CT) 0.04 17 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 124 lb	FT = 20%F, 11%E

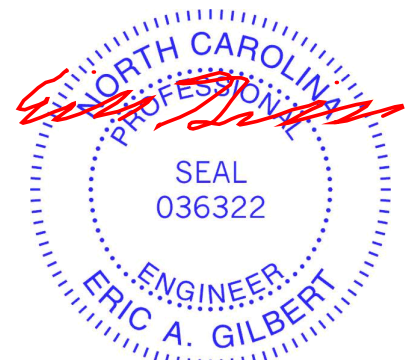
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (size) 23=0-5-0, 17=0-5-8, 14=Mechanical
 Max Grav 23=795(LC 10), 17=2385(LC 9), 14=1764(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 13-14=-1544/0, 2-3=-2613/0, 3-4=-2613/0, 4-5=-2753/0, 5-6=-2486/0, 6-7=-2490/0, 7-8=0/1432, 8-10=0/1432, 10-11=-556/295, 11-12=-556/289
 BOT CHORD 22-23=0/1698, 21-22=0/2753, 20-21=0/2753, 18-20=0/2753, 17-18=0/1369, 16-17=-798/108, 15-16=-289/556, 14-15=-289/556
 WEBS 8-17=-962/0, 2-23=-1820/0, 2-22=0/988, 7-17=-2592/0, 7-18=0/1289, 5-18=-624/0, 4-22=-429/115, 10-17=-953/0, 12-14=-596/310, 10-16=0/828, 11-16=-357/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All plates are MT20 plates unless otherwise indicated.
 - 3) All plates are 1.5x3 MT20 unless otherwise indicated.
 - 4) Plates checked for a plus or minus 1 degree rotation about its center.
 - 5) Refer to girder(s) for truss to truss connections.
 - 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.
 - 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 941 lb down at 14-2-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
 - 9) 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: 14-23=-10, 1-13=-100
 Concentrated Loads (lb)
 Vert: 13=-1400 25=-861(F)

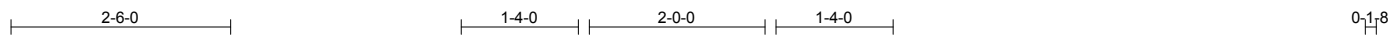


January 13, 2021

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304837
J1220-5658	FG2	Floor	1	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:23 2021 Page 1
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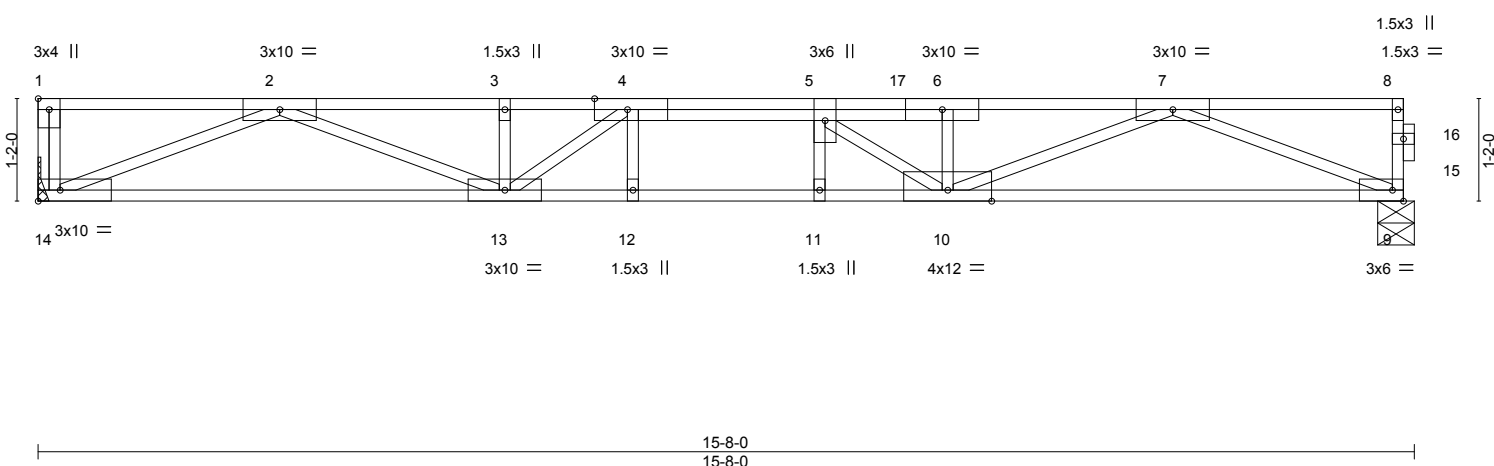


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [4:0-4-8,Edge]

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 0.96	Vert(LL)	-0.26 10-11	>706	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.77	Vert(CT)	-0.36 10-11	>505	360		
BCLL 0.0	Rep Stress Incr	NO	WB 0.88	Horz(CT)	0.05 9	n/a	n/a		
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 82 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 5-5-7 oc purlins, except end verticals.
BOT CHORD 2x4 SP 2400F 2.0E(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (size) 14=Mechanical, 9=0-5-0
 Max Grav 14=998(LC 1), 9=1110(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-3550/0, 3-4=-3550/0, 4-5=-4237/0, 5-6=-4144/0, 6-7=-4141/0
 BOT CHORD 13-14=0/2193, 12-13=0/4238, 11-12=0/4238, 10-11=0/4238, 9-10=0/2421
 WEBS 2-14=-2359/0, 2-13=0/1465, 7-9=-2613/0, 7-10=0/1857, 6-10=-605/0, 5-10=-368/287,
 4-13=-1069/0

- 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.
 - 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 498 lb down at 9-10-4 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: 9-14=-10, 1-8=-100

Concentrated Loads (lb)
 Vert: 17=-420(B)



Job	Truss	Truss Type	Qty	Ply	Precision/Lot 58 Summerlin/Harnett	E15304838
J1220-5658	FG3	Floor	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:24 2021 Page 1
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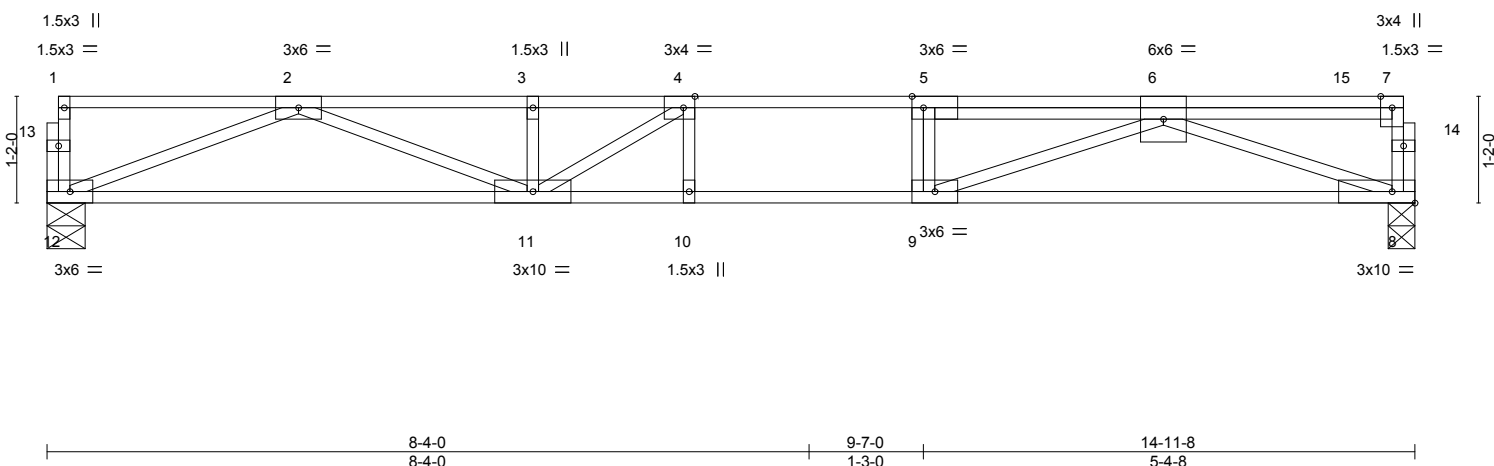
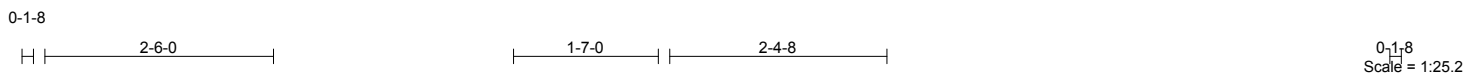


Plate Offsets (X,Y)--	[4:0-1-8,Edge], [5:0-1-8,Edge]				
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.94	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.82	Vert(LL) -0.23 8-9 >752 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.66	Vert(CT) -0.34 8-9 >518 360		
BCDL 5.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.05 8 n/a n/a		
	Code IRC2015/TPI2014			Weight: 80 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (size) 12=0-5-0, 8=0-3-8
 Max Grav 12=839(LC 1), 8=1650(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 7-8=-776/0, 2-3=-2820/0, 3-4=-2820/0, 4-5=-3145/0, 5-6=-3176/0
 BOT CHORD 11-12=0/1806, 10-11=0/3141, 9-10=0/3141, 8-9=0/2326
 WEBS 2-12=-1937/0, 2-11=0/1094, 4-11=-716/0, 6-8=-2433/0, 6-9=0/981, 5-9=-277/0

- 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) 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) 946 lb down at 14-2-12 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).

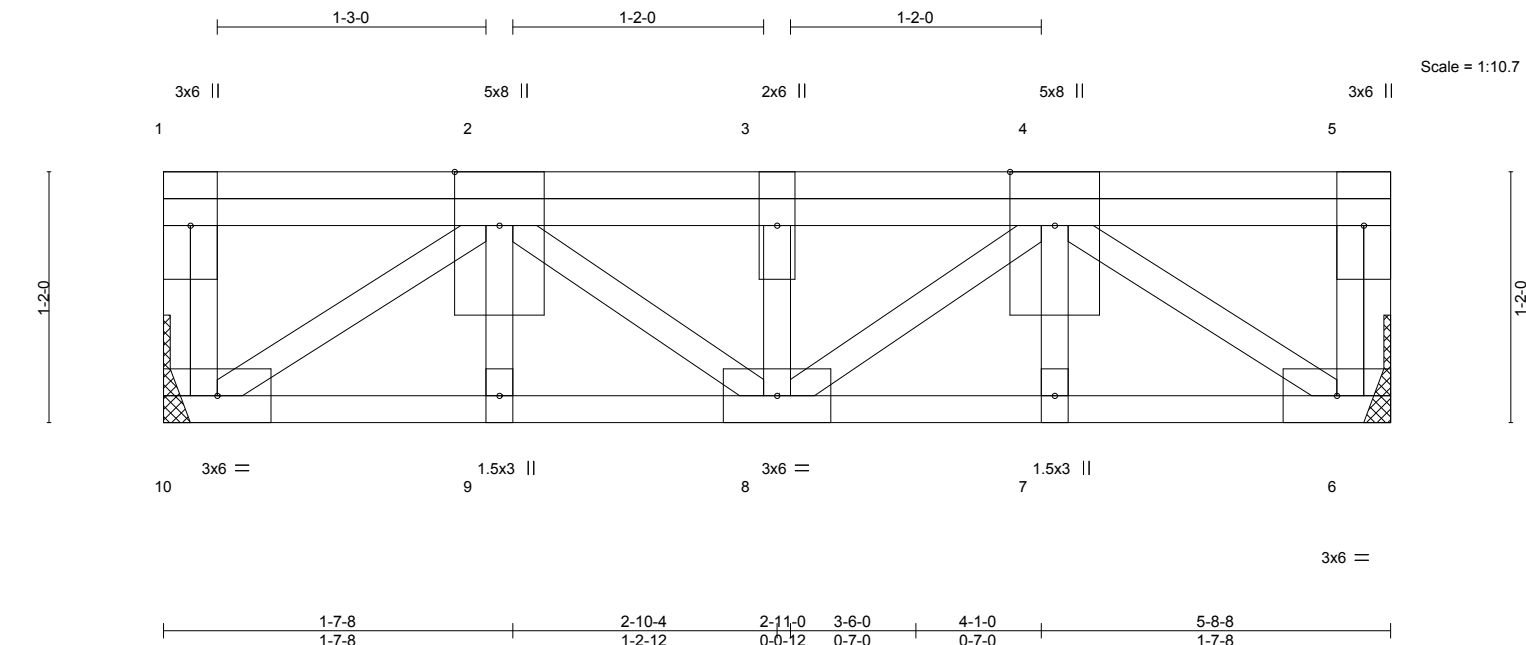
LOAD CASE(S) Standard
 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (plf)
 Vert: 8-12=-10, 1-7=-100
 Concentrated Loads (lb)
 Vert: 15=-884(B)



Job	Truss	Truss Type	Qty	Ply	Precision/Lot	8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:24 2021 Page 1	E15304839
J1220-5658	FG4	FLOOR GIRDER	1	1	58 Summerlin/Harnett	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

ID:1NaocfdXFgYT90ywZp05ZYzwAzd-JMMjOvkPsSOSuTML3V5tGG6cxMQ3mbPEqmSgGbzvnxOX



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/def	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.06	Vert(LL) -0.01	8	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.28	Vert(CT) -0.02	8	>999	360		
BCLL 0.0	Rep Stress Incr NO	WB 0.36	Horz(CT) 0.01	6	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-P					Weight: 42 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 5-8-8 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (size) 10=Mechanical, 6=Mechanical
Max Grav 10=961(LC 1), 6=961(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1402/0, 3-4=-1402/0
BOT CHORD 9-10=0/1259, 8-9=0/1259, 7-8=0/1259, 6-7=0/1259
WEBS 2-10=-1524/0, 4-6=-1524/0

- NOTES-**
- Plates checked for a plus or minus 1 degree rotation about its center.
 - Refer to girder(s) for truss to truss connections.
 - 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.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 661 lb down at 1-10-4, and 661 lb down at 3-10-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
 - 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: 6-10=-10, 1-5=-100
Concentrated Loads (lb)
Vert: 2=-661(B) 4=-661(B)



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job	Truss	Truss Type	Qty	Ply	Precision/Lot	58 Summerlin/Harnett	E15304840
J1220-5658	FG5	FLOOR GIRDER	1	1	Job Reference (optional)		

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 13 11:35:25 2021 Page 1
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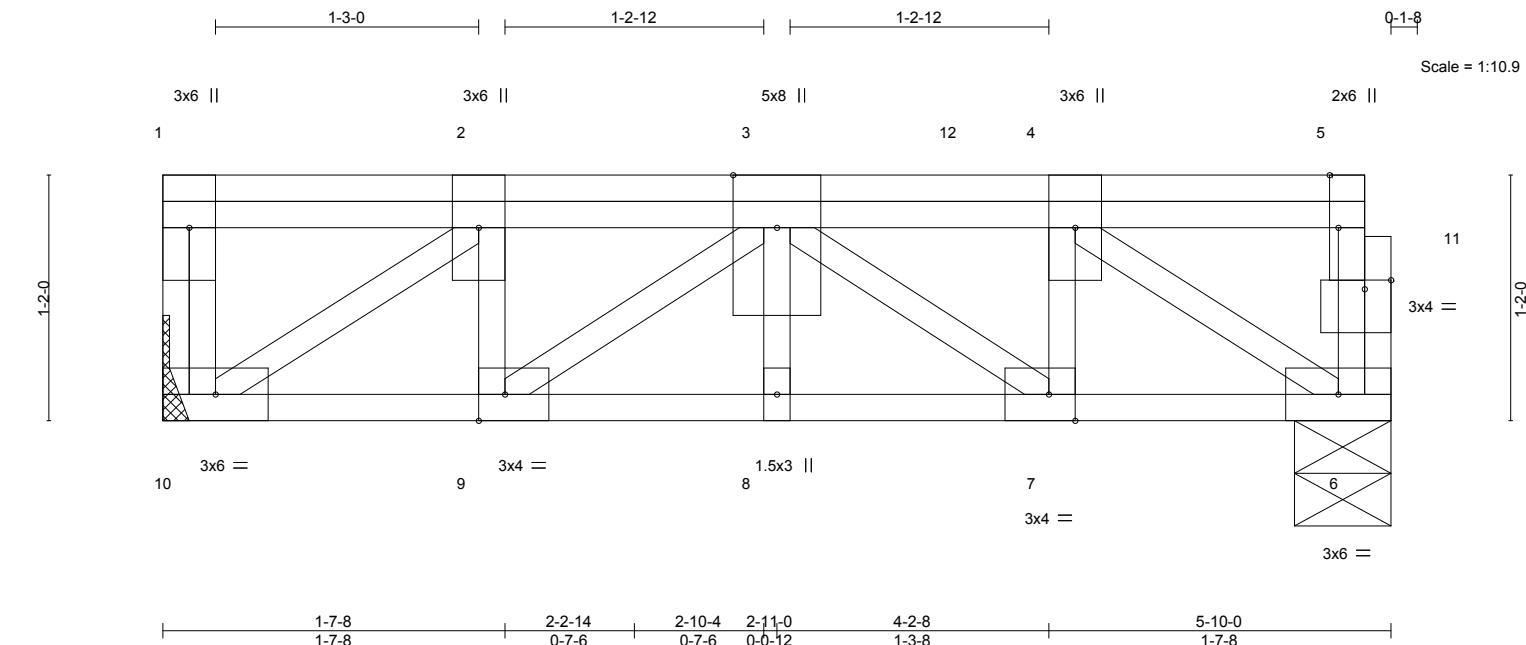


Plate Offsets (X,Y)--	[5:0-3-0,Edge], [7:0-1-8,Edge], [9:0-1-8,Edge], [11:0-1-8,0-0-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.09	Vert(LL)	-0.01	8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.17	Vert(CT)	-0.01	8	>999		
BCLL 0.0	Rep Stress Incr	NO	WB 0.18	Horz(CT)	0.01	6	n/a		
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-P					Weight: 43 lb	FT = 20%F, 11%E

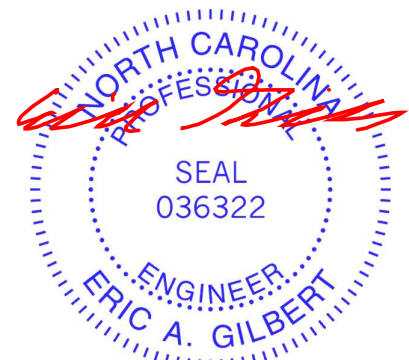
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 5-10-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (size) 10=Mechanical, 6=0-5-8
 Max Grav 10=520(LC 1), 6=484(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-647/0, 3-4=-627/0
 BOT CHORD 9-10=0/647, 8-9=0/781, 7-8=0/781, 6-7=0/627
 WEBS 2-10=-783/0, 4-6=-755/0

- NOTES-**
- Plates checked for a plus or minus 1 degree rotation about its center.
 - Refer to girder(s) for truss to truss connections.
 - 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.
 - CAUTION, Do not erect truss backwards.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 198 lb down at 1-10-4, and 198 lb down at 3-10-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
 - 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: 6-10=-10, 1-5=-100
 Concentrated Loads (lb)
 Vert: 2=-198(F) 12=-198(F)



January 13, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

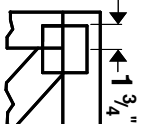
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



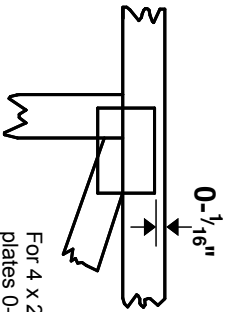
818 Soundside Road
 Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ " from outside edge of truss.



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

* Plate location details available in **MITrak 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



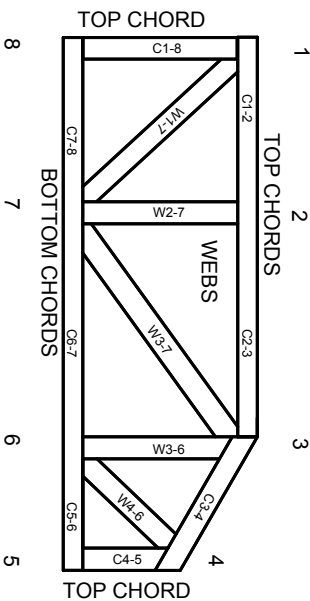
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TFP 1: 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

6-4-8
dimensions shown in ft-in-sixteenths
(Drawings not to scale)



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/TFP 1 section 6.3 These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: MIT-7473 rev. 5/19/2020

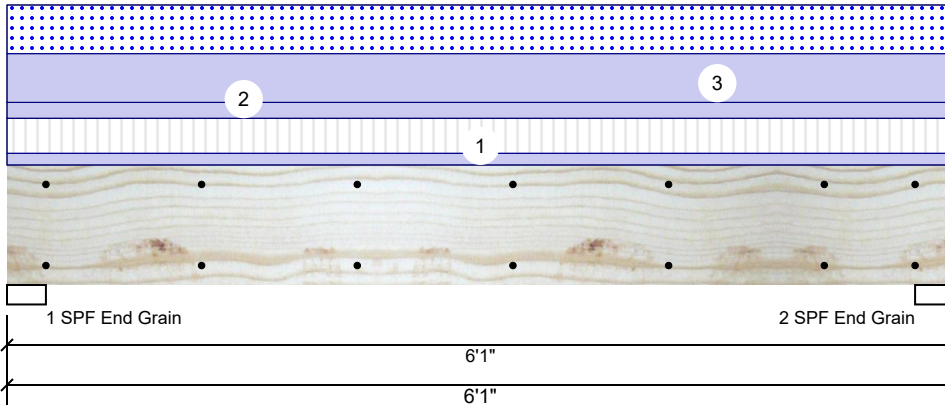
General Safety Notes

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/TFP 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TFP 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/TFP 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

BM1 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	360
Importance:	Normal - II
Temperature:	Temp <= 100°F

Application:	Floor
Design Method:	ASD
Building Code:	IBC/IRC 2015
Load Sharing:	No
Deck:	Not Checked

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	803	1771	1116	0	0
2	803	1771	1116	0	0

Bearings

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	35%	1771 / 1439	3210	L	D+0.75(L+S)
2 - SPF End Grain	3.000"	35%	1771 / 1439	3210	L	D+0.75(L+S)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4299 ft-lb	3' 1/2"	14423 ft-lb	0.298 (30%)	D+0.75(L+S)	L
Unbraced	4299 ft-lb	3' 1/2"	10861 ft-lb	0.396 (40%)	D+0.75(L+S)	L
Shear	2199 lb	11 1/2"	7943 lb	0.277 (28%)	D+0.75(L+S)	L
LL Defl inch	0.031 (L/2185)	3' 1/2"	0.143 (L/480)	0.220 (22%)	0.75(L+S)	L
TL Defl inch	0.070 (L/980)	3' 1/2"	0.190 (L/360)	0.370 (37%)	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	88 PLF	264 PLF	0 PLF	0 PLF	0 PLF	F1
2	Uniform			Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	WALL
3	Uniform			Top	367 PLF	0 PLF	367 PLF	0 PLF	0 PLF	
	Self Weight				7 PLF					

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
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

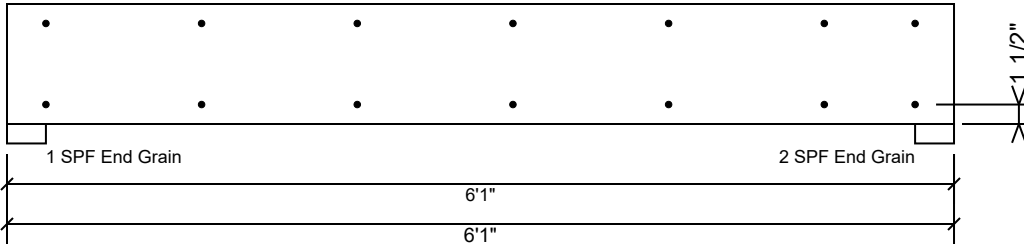
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us
ICC-ES: ESR-3633

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



BM1 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
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

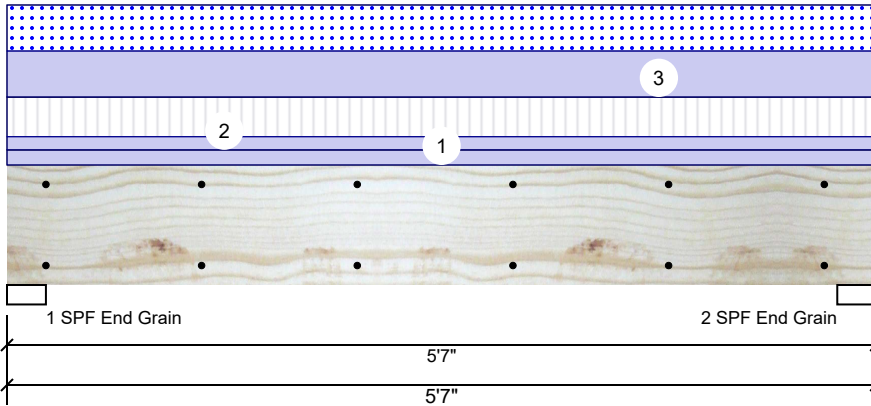
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us
ICC-ES: ESR-3633

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1001 S. Reilly Road, Suite #639
Fayetteville, NC
USA
28314
910-864-TRUS



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	877	1662	1016	0	0
2	877	1662	1016	0	0

Bearings

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	34%	1662 / 1420	3081	L	D+0.75(L+S)
2 - SPF End Grain	3.000"	34%	1662 / 1420	3081	L	D+0.75(L+S)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3742 ft-lb	2'9 1/2"	14423 ft-lb	0.259 (26%)	D+0.75(L+S)	L
Unbraced	3742 ft-lb	2'9 1/2"	11402 ft-lb	0.328 (33%)	D+0.75(L+S)	L
Shear	2023 lb	4'7 1/2"	7943 lb	0.255 (25%)	D+0.75(L+S)	L
LL Defl inch	0.024 (L/2564)	2'9 1/2"	0.130 (L/480)	0.190 (19%)	0.75(L+S)	L
TL Defl inch	0.053 (L/1182)	2'9 1/2"	0.174 (L/360)	0.300 (30%)	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	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	WALL
2	Uniform			Top	104 PLF	314 PLF	0 PLF	0 PLF	0 PLF	FG3
3	Uniform			Top	364 PLF	0 PLF	364 PLF	0 PLF	0 PLF	A3
	Self Weight				7 PLF					

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
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

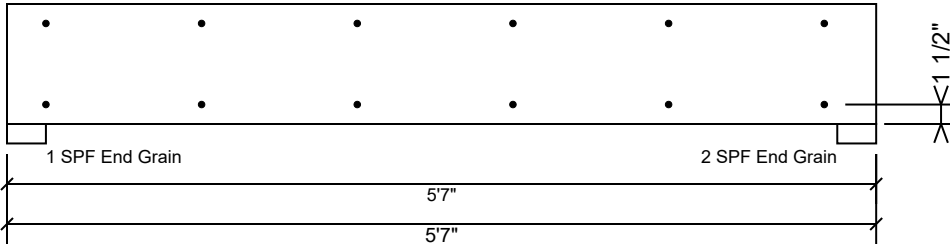
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BM2 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

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
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

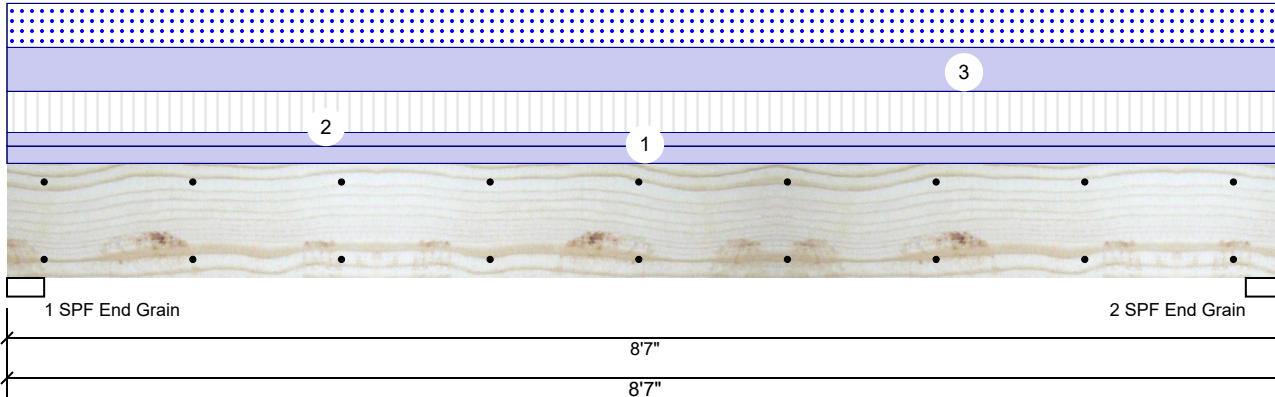
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BM3 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

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	1227	2267	1313	0	0
2	1227	2267	1313	0	0

Bearings

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	46%	2267 / 1906	4172	L	D+0.75(L+S)
2 - SPF End Grain	3.000"	46%	2267 / 1906	4172	L	D+0.75(L+S)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	8188 ft-lb	4'3 1/2"	14423 ft-lb	0.568 (57%)	D+0.75(L+S)	L
Unbraced	8188 ft-lb	4'3 1/2"	8625 ft-lb	0.949 (95%)	D+0.75(L+S)	L
Shear	3241 lb	11 1/2"	7943 lb	0.408 (41%)	D+0.75(L+S)	L
LL Defl inch	0.112 (L/883)	4'3 9/16"	0.205 (L/480)	0.540 (54%)	0.75(L+S)	L
TL Defl inch	0.244 (L/403)	4'3 9/16"	0.274 (L/360)	0.890 (89%)	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	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	WALL
2	Uniform			Top	95 PLF	286 PLF	0 PLF	0 PLF	0 PLF	F3
3	Uniform			Top	306 PLF	0 PLF	306 PLF	0 PLF	0 PLF	B2
	Self Weight				7 PLF					

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

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

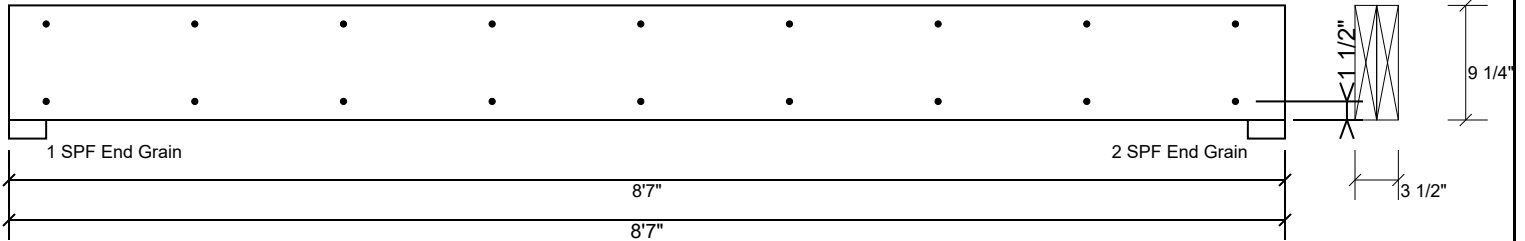
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BM3 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

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
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
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

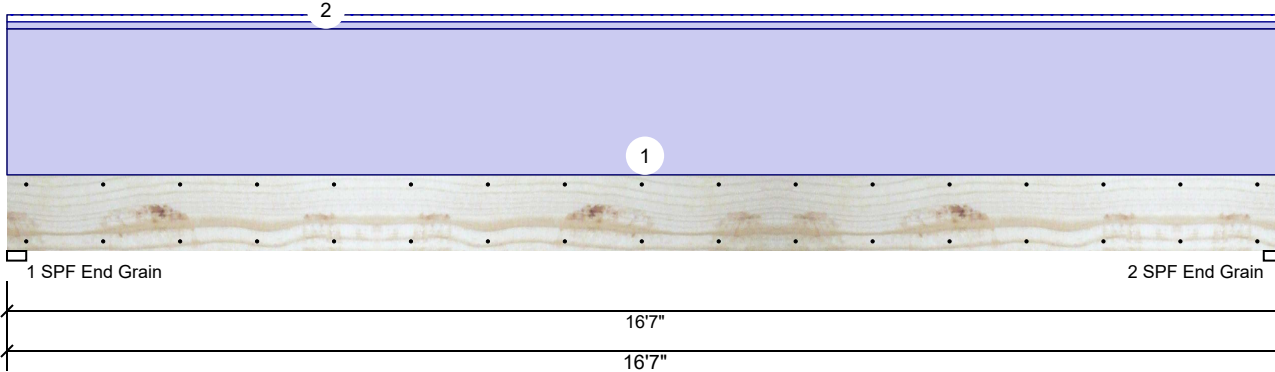
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GDH Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

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	1901	83	0	0
2	0	1901	83	0	0

Bearings

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	22%	1901 / 83	1984	L	D+S
2 - SPF End Grain	3.000"	22%	1901 / 83	1984	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	7528 ft-lb	8'3 1/2"	17919 ft-lb	0.420 (42%)	D	Uniform
Unbraced	7856 ft-lb	8'3 1/2"	7862 ft-lb	0.999 (100%)	D+S	L
Shear	1631 lb	15'4 7/8"	7980 lb	0.204 (20%)	D	Uniform
LL Defl inch	0.017 (L/11572)	8'3 9/16"	0.405 (L/480)	0.040 (4%)	S	L
TL Defl inch	0.402 (L/484)	8'3 9/16"	0.540 (L/360)	0.740 (74%)	D+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 must be laterally braced at a maximum of 12'4 1/2" 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	210 PLF	0 PLF	0 PLF	0 PLF	0 PLF	C1-GE
2	Tie-In	0-0-0 to 16-7-0	0-6-0	Top	20 PSF	0 PSF	20 PSF	0 PSF	0 PSF	RAKE OH
	Self Weight				9 PLF					

Notes

Calculated Structural 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
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
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6. For flat roofs provide proper drainage to prevent ponding

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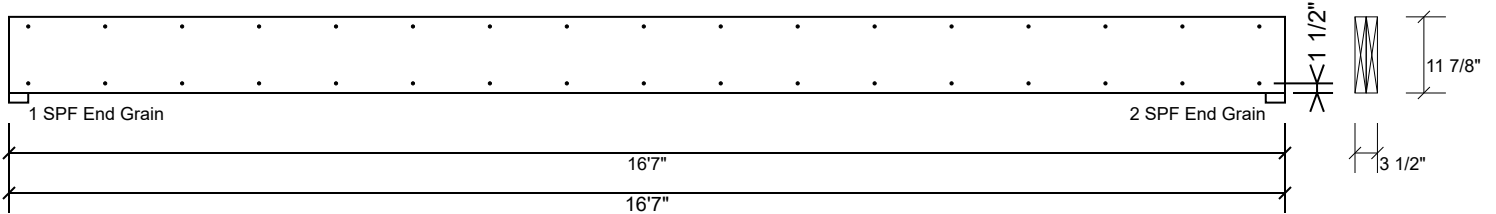
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This design is valid until 11/27/2023

GDH Kerto-S LVL 1.750" X 11.875" 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
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chemicals

Handling & Installation

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