

Trenco

818 Soundside Rd
Edenton, NC 27932

Re: J1120-5410
Precision/Lot 56 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: E15293411 thru E15293424

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

North Carolina COA: C-0844



January 11, 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.

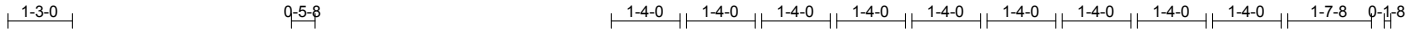
Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293411
J1120-5410	ET1	FLOOR SUPPORTED GABL	1	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:49 2021 Page 1

ID:qH4S_SyHXXrmAJJVJ6MTTvyngLu-F4xttVE8vTAU1XgjDj9uhHjkw83cxhHLDPAwzTWq

Job Reference (optional)



Scale = 1:44.7

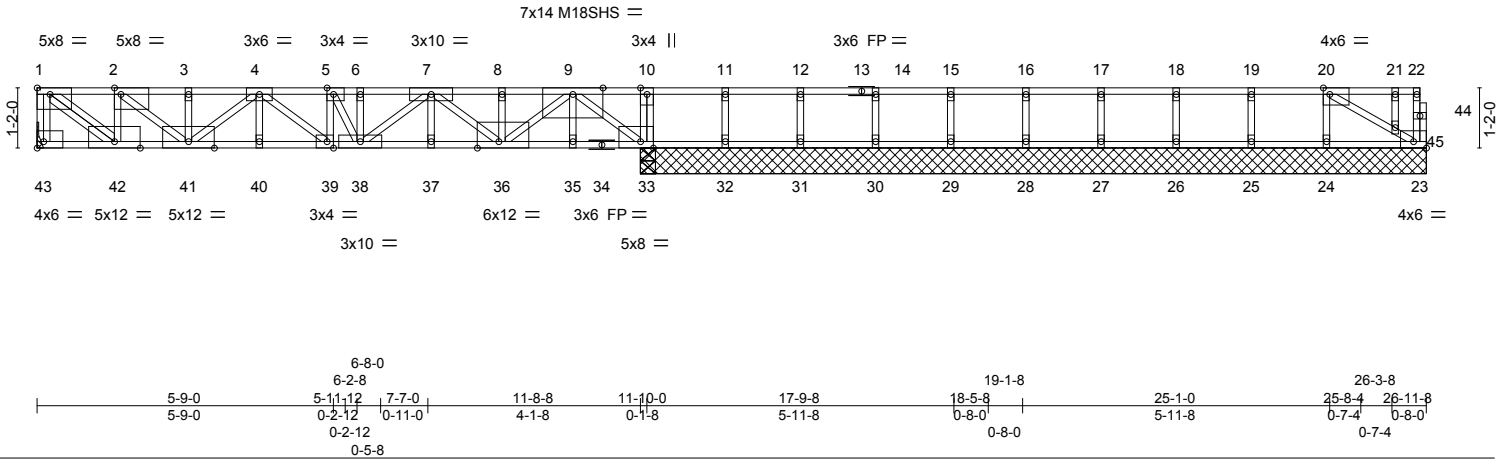


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [2:0-1-8,Edge], [5:0-1-8,Edge], [20:0-1-8,Edge], [23:Edge,0-1-8], [33:0-3-0,Edge], [36:0-5-0,Edge], [39:0-1-8,Edge], [43:Edge,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.72	Vert(LL) -0.20	39	>715	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.77	Vert(CT) -0.27	39	>520	360	M18SHS	244/190
BCLL 0.0	Rep Stress Incr NO	WB 0.98	Horz(CT) 0.06	33	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 137 lb	FT = 20%F, 11%E

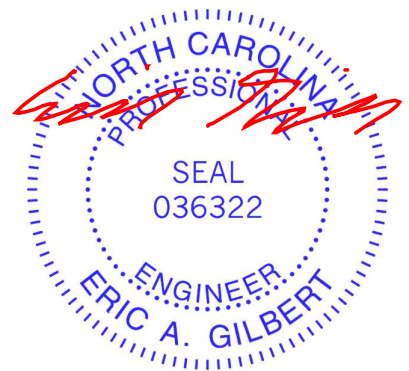
LUMBER-	BRACING-
TOP CHORD 2x4 SP 2400F 2.0E(flat) *Except* 13-22: 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 5-4-10 oc purlins, except end verticals.
BOT CHORD 2x4 SP 2400F 2.0E(flat) *Except* 23-34: 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3(flat) *Except* 2-41,9-36: 2x4 SP No.2(flat)	

REACTIONS. All bearings 15-3-0 except (jt=length) 43=Mechanical.
 (b) - Max Uplift All uplift 100 lb or less at joint(s) 32 except 23=-642(LC 1)
 Max Grav All reactions 250 lb or less at joint(s) 31, 30, 29, 28, 27, 26, 25 except 43=4161(LC 1), 33=3180(LC 1), 33=3180(LC 1), 24=918(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-43=-4152/0, 1-2=-3284/0, 2-3=-5399/0, 3-4=-5399/0, 4-5=-7136/0, 5-6=-7054/0,
 6-7=-7054/0, 7-8=-4657/0, 8-9=-4657/0, 9-10=0/1257, 10-11=0/1257, 11-12=0/1257,
 12-14=0/1257, 14-15=0/1257, 15-16=0/1257, 16-17=0/1257, 17-18=0/1257, 18-19=0/1257,
 19-20=0/1257
 BOT CHORD 41-42=0/3284, 40-41=0/6726, 39-40=0/6726, 38-39=0/7136, 37-38=0/6305, 36-37=0/6305,
 35-36=0/2104, 33-35=0/2104, 32-33=-1257/0, 31-32=-1257/0, 30-31=-1257/0,
 29-30=-1257/0, 28-29=-1257/0, 27-28=-1257/0, 26-27=-1257/0, 25-26=-1257/0,
 24-25=-1257/0, 23-24=-1257/0
 WEBS 10-33=-584/0, 1-42=0/4056, 2-42=-2355/0, 2-41=0/2653, 3-41=-597/0, 4-41=-1664/0,
 4-39=0/515, 5-39=-295/0, 9-33=-4151/0, 9-36=0/3203, 8-36=-643/0, 7-36=-2067/0,
 7-38=0/939, 6-38=-418/0, 20-24=-898/0, 20-45=0/1460, 23-45=0/1427

- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 32 except (jt=lb) 23=642.
 - 7) 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.
 - 8) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



January 11,2021

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-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 56 Summerlin/Harnett
J1120-5410	ET1	FLOOR SUPPORTED GABL	1	1	E15293411

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8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:50 2021 Page 2
 ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-kGUF4rFmgnLeS6tHwFOQvquUKDNo3AqV?zy6MzwTWp

LOAD CASE(S) Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
- Uniform Loads (plf)
 - Vert: 23-43=-10, 1-10=-467, 10-22=-100
- Concentrated Loads (lb)
 - Vert: 1=-1500



January 11, 2021

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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293412
J1120-5410	ET2	GABLE	1	1	Job Reference (optional)	

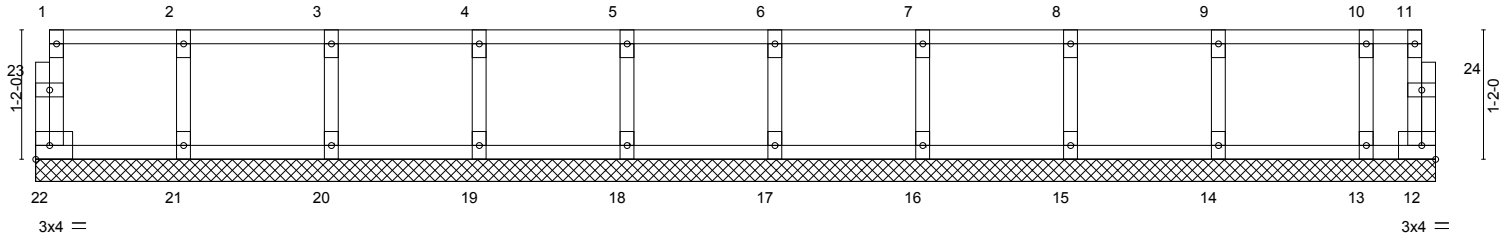
Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:50 2021 Page 1
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0₁/8

0₁/8

Scale = 1:20.8



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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.01	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	12	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-R						Weight: 54 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.

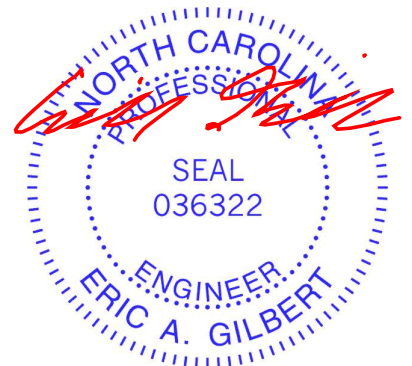
All bearings 12-7-8.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 22, 12, 21, 20, 19, 18, 17, 16, 15, 14, 13

FORCES.

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

NOTES-

- All plates are 1.5x3 MT20 unless otherwise indicated.
- Plates checked for a plus or minus 1 degree rotation about its center.
- 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 1-4-0 oc.
- 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 11, 2021

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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293413
J1120-5410	ET3	GABLE	1	1	Job Reference (optional)	

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8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:52 2021 Page 1
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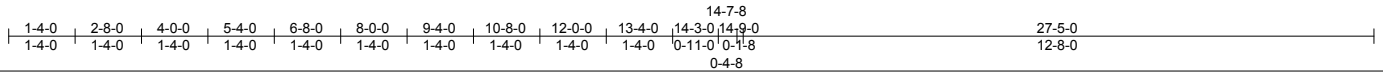
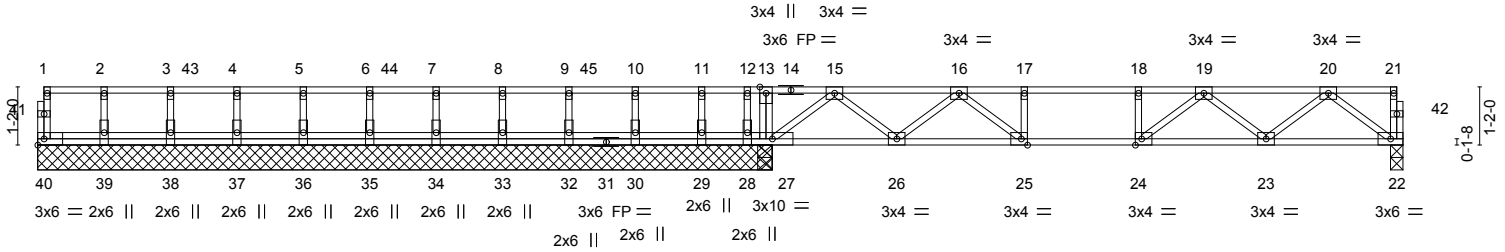
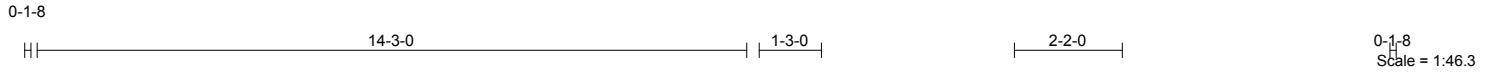


Plate Offsets (X,Y)-- [24-0-1-8,Edge], [25-0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.27	Vert(LL) -0.08	24-25	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.40	Vert(CT) -0.11	24-25	>999	360		
BCLL 0.0	Rep Stress Incr YES	WB 0.31	Horz(CT) 0.03	22	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 144 lb	FT = 20%F, 11%E

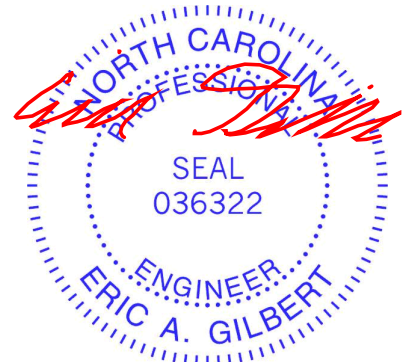
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	
OTHERS 2x4 SP No.3(flat)	

REACTIONS. All bearings 14-9-0 except (jt=length) 22=0-3-0.
 (lb) - Max Uplift All uplift 100 lb or less at joint(s) except 28=-187(LC 4)
 Max Grav All reactions 250 lb or less at joint(s) 40, 39, 38, 37, 36, 35, 34, 33, 32, 30, 29 except 27=930(LC 1), 27=930(LC 1), 22=692(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 15-16=-1363/0, 16-17=-2085/0, 17-18=-2085/0, 18-19=-2085/0, 19-20=-1360/0
 BOT CHORD 26-27=0/904, 25-26=0/1838, 24-25=0/2085, 23-24=0/1830, 22-23=0/856
 WEBS 15-27=-1056/0, 15-26=0/599, 16-26=-619/0, 16-25=0/316, 20-22=-1072/0, 20-23=0/656, 19-23=-612/0, 19-24=0/325

- 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) Gable studs spaced at 1-4-0 oc.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 187 lb uplift at joint 28.
 - 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 7) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard
 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (plf)
 Vert: 22-40=-10, 1-21=-100
 Concentrated Loads (lb)
 Vert: 2=-92 5=-91 8=-91 11=-91 43=-91 44=-91 45=-91



January 11, 2021

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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293414
J1120-5410	F1	Floor	5	1	Job Reference (optional)	

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8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:53 2021 Page 1
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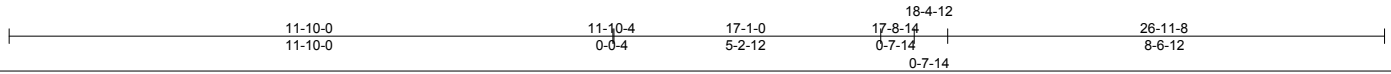
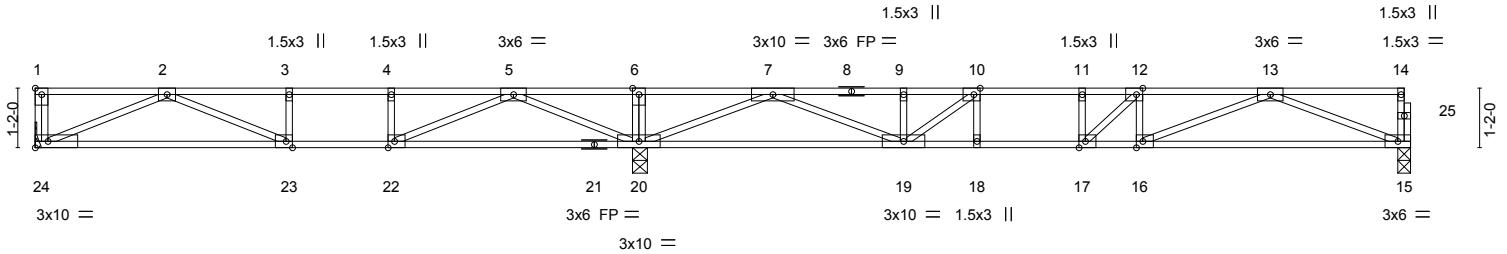


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [10:0-1-8,Edge], [12:0-1-8,Edge], [16:0-1-8,Edge], [17:0-1-8,Edge], [22:0-1-8,Edge], [23:0-1-8,Edge]

LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.76	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.80	Vert(LL) -0.17 23-24 >840 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.63	Vert(CT) -0.25 23-24 >554 360		
BCDL 5.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.04 15 n/a n/a		
	Code IRC2015/TPI2014			Weight: 131 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)

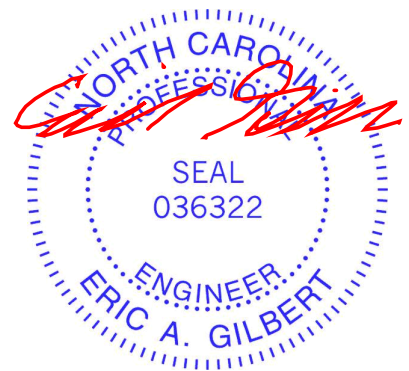
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 24=Mechanical, 20=0-3-8, 15=0-3-0
Max Grav 24=2280(LC 3), 20=1698(LC 1), 15=747(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-24=-1794/0, 2-3=-1437/52, 3-4=-1437/52, 4-5=-1437/52, 5-6=0/1515, 6-7=0/1517, 7-9=-2044/0, 9-10=-2044/0, 10-11=-2418/0, 11-12=-2418/0, 12-13=-2377/0
BOT CHORD 23-24=0/1085, 22-23=-52/1437, 20-22=-557/667, 19-20=-139/899, 18-19=0/2418, 17-18=0/2418, 16-17=0/2377, 15-16=0/1576
WEBS 6-20=-284/0, 2-24=-1179/0, 2-23=-152/384, 5-20=-1566/0, 5-22=0/1078, 4-22=-348/0, 13-15=-1689/0, 13-16=0/865, 12-17=-284/274, 7-20=-2081/0, 7-19=0/1333, 10-19=-740/0

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
 - All plates are 3x4 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: 15-24=-10, 1-14=-100
Concentrated Loads (lb)
Vert: 1=-1700



January 11, 2021

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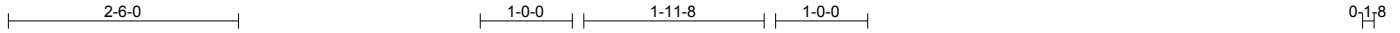


Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293415
J1120-5410	F2	Floor	3	1		

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8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:54 2021 Page 1

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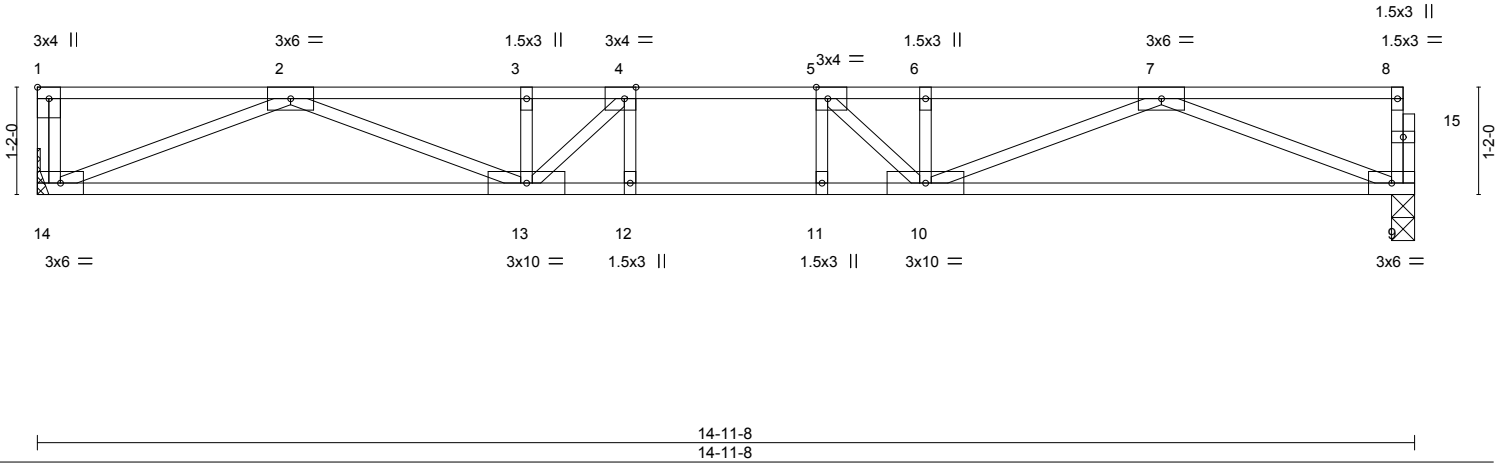


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [4:0-1-8,Edge], [5:0-1-8,Edge]

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.36	Vert(LL) -0.16	11-12	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.65	Vert(CT) -0.23	11-12	>783	360		
BCLL 0.0	Rep Stress Incr YES	WB 0.51	Horz(CT) 0.04	9	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 75 lb	FT = 20%F, 11%E

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

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

REACTIONS. (size) 14=Mechanical, 9=0-3-0
 Max Grav 14=809(LC 1), 9=803(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2645/0, 3-4=-2645/0, 4-5=-2810/0, 5-6=-2645/0, 6-7=-2645/0
 BOT CHORD 13-14=0/1718, 12-13=0/2810, 11-12=0/2810, 10-11=0/2810, 9-10=0/1716
 WEBS 2-14=-1849/0, 2-13=0/1000, 7-9=-1839/0, 7-10=0/1004, 5-10=-516/101, 4-13=-516/100

- 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 11, 2021

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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293417
J1120-5410	F4-GRD	FLOOR GIRDER	1	1		

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8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:56 2021 Page 1
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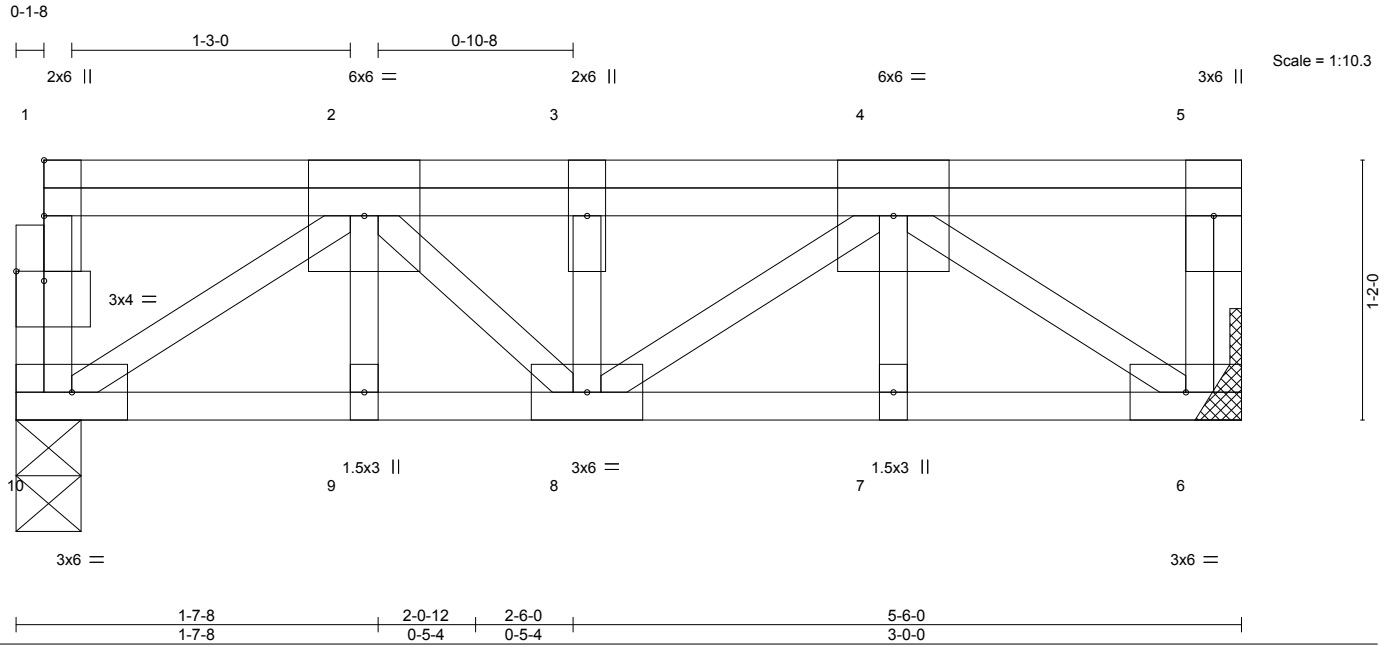


Plate Offsets (X,Y)-- [11:0-1-8,0-0-8]

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 0.09	Vert(LL)	-0.01	8	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.30	Vert(CT)	-0.02	8	>999	360		
BCLL 0.0	Rep Stress Incr	NO	WB 0.38	Horz(CT)	0.01	6	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-P						Weight: 41 lb	FT = 20%F, 11%E

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

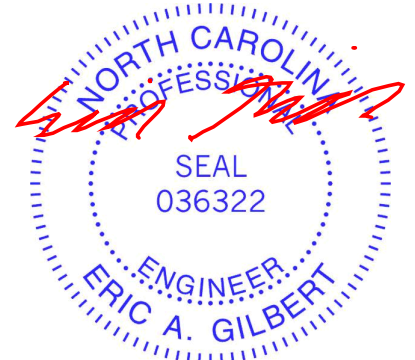
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 5-6-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 10=0-3-8, 6=Mechanical
 Max Grav 10=1072(LC 1), 6=1086(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1528/0, 3-4=-1528/0
 BOT CHORD 9-10=0/1328, 8-9=0/1328, 7-8=0/1345, 6-7=0/1345
 WEBS 4-6=-1628/0, 3-8=-297/0, 2-10=-1595/0, 2-8=0/280

- 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) 482 lb down at 1-7-12, and 482 lb down at 3-7-12 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=-220
 Concentrated Loads (lb)
 Vert: 4=-482(F) 2=-482(F)



January 11, 2021

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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293418
J1120-5410	F5	Floor	1	1		

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8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:57 2021 Page 1
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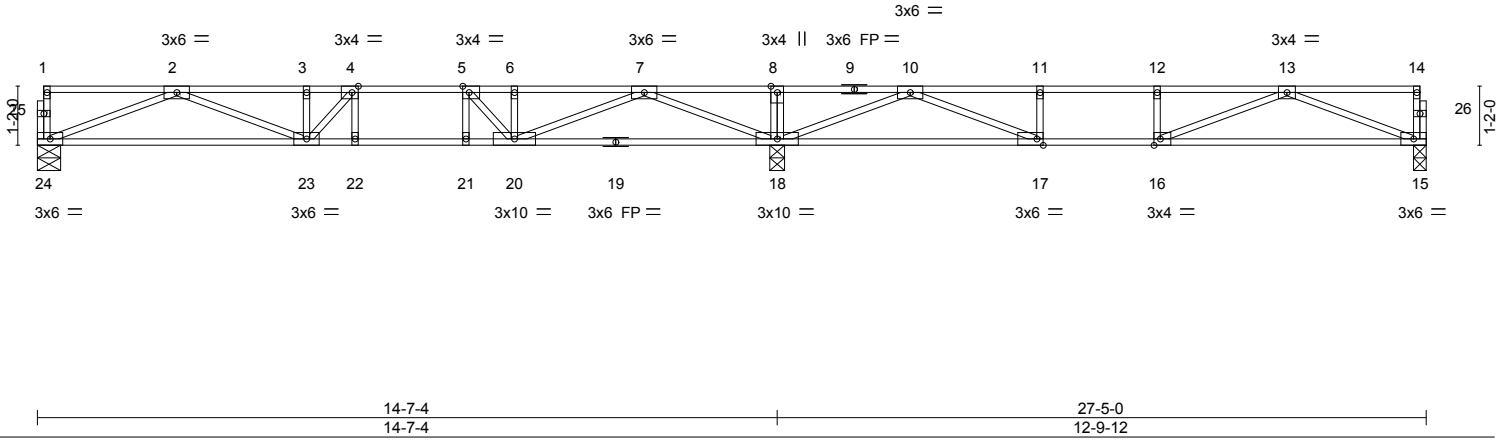


Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge], [16:0-1-8,Edge], [17:0-1-8,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.71	Vert(LL)	-0.22 15-16	>703	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.73	Vert(CT)	-0.33 15-16	>467	360		
BCLL 0.0	Rep Stress Incr	YES	WB 0.60	Horz(CT)	0.05 15	n/a	n/a		
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-S						
								Weight: 132 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, Except: 6-0-0 oc bracing: 18-20,17-18.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (size) 24=0-5-8, 18=0-3-8, 15=0-3-0
Max Grav 24=732(LC 10), 18=1700(LC 1), 15=630(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2301/0, 3-4=-2301/0, 4-5=-2316/0, 5-6=-2057/0, 6-7=-2057/0, 7-8=0/1462, 8-10=0/1462, 10-11=-1730/0, 11-12=-1730/0, 12-13=-1730/0
BOT CHORD 23-24=0/1538, 22-23=0/2316, 21-22=0/2316, 20-21=0/2316, 18-20=-174/1015, 17-18=-374/840, 16-17=0/1730, 15-16=0/1277
WEBS 8-18=-291/0, 2-24=-1648/0, 2-23=0/823, 3-23=-277/12, 7-18=-2002/0, 7-20=0/1256, 5-20=-721/0, 4-23=-224/325, 10-18=-1726/0, 10-17=0/1155, 11-17=-356/0, 13-15=-1367/0, 13-16=-64/490

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All plates are 1.5x3 MT20 unless otherwise indicated.
 - 3) Plates checked for a plus or minus 1 degree rotation about its center.
 - 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 5) CAUTION, Do not erect truss backwards.



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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293419
J1120-5410	F5-GRD	Floor Girder	1	1		

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8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:58 2021 Page 1
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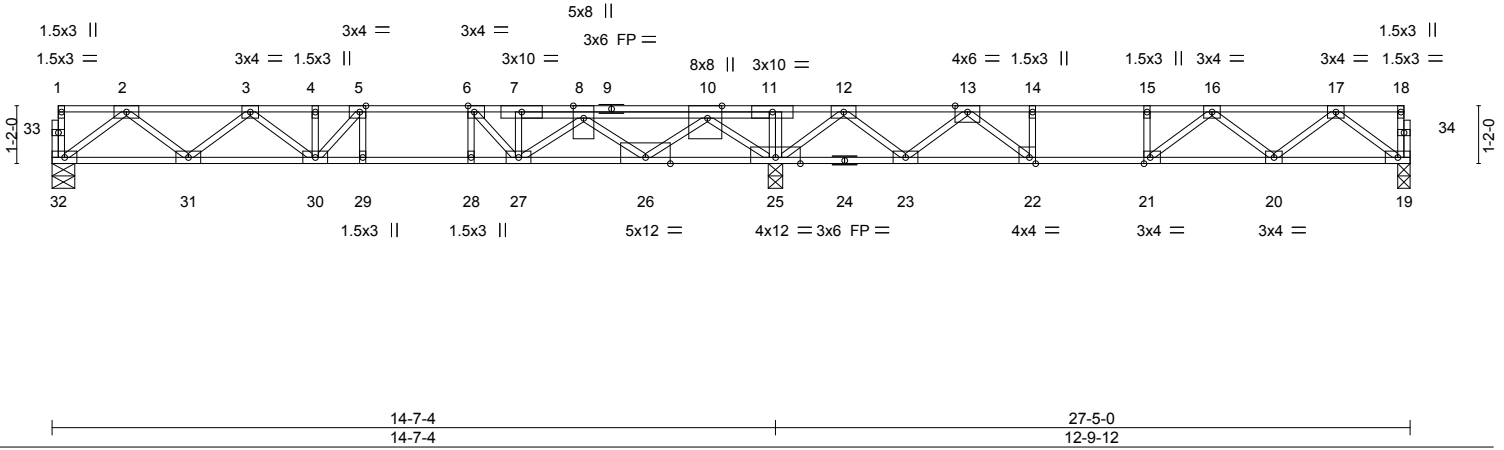


Plate Offsets (X,Y)-- [5:0-1-8,Edge], [6:0-1-8,Edge], [10:0-3-0,Edge], [21:0-1-8,Edge], [22:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.81	Vert(LL) -0.19	28	>935	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.97	Vert(CT) -0.25	28	>700	360		
BCLL 0.0	Rep Stress Incr NO	WB 0.66	Horz(CT) 0.04	25	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 145 lb	FT = 20%F, 11%E

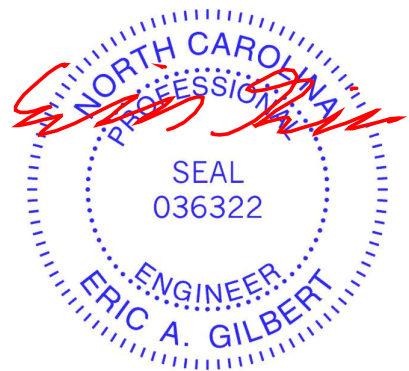
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat) *Except* 9-18: 2x4 SP 2400F 2.0E(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3(flat) *Except* 10-26: 2x4 SP No.2(flat)	

REACTIONS. (size) 32=0-5-8, 25=0-3-8, 19=0-3-0
Max Uplift 19=-6(LC 3)
Max Grav 32=882(LC 3), 25=2653(LC 1), 19=508(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1841/0, 3-4=-2971/0, 4-5=-2971/0, 5-6=-3361/0, 6-7=-3377/0, 7-8=-3382/0,
8-10=-1525/0, 10-11=0/3026, 11-12=0/3033, 12-13=0/1532, 13-14=-968/615,
14-15=-968/615, 15-16=-968/615, 16-17=-924/84
BOT CHORD 31-32=0/1104, 30-31=0/2538, 29-30=0/3361, 28-29=0/3361, 26-27=0/3259,
25-26=-763/0, 23-25=-1884/0, 22-23=-1146/286, 21-22=-615/968, 20-21=-231/1146,
19-20=-28/616
WEBS 2-32=-1382/0, 2-31=0/960, 3-31=-908/0, 3-30=0/553, 10-25=-2809/0, 10-26=0/2287,
8-26=-2265/0, 6-27=-219/339, 5-30=-762/0, 12-25=-1596/0, 12-23=0/966,
13-23=-1028/0, 13-22=0/1125, 14-22=-516/0, 17-19=-769/36, 17-20=-73/402,
16-20=-288/192, 16-21=-524/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All plates are 3x6 MT20 unless otherwise indicated.
 - 3) Plates checked for a plus or minus 1 degree rotation about its center.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint 19.
 - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 6) CAUTION, Do not erect truss backwards.
 - 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1066 lb down at 10-11-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
 - 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 19-32=-10, 1-18=-100



January 11, 2021

Continued on page 2

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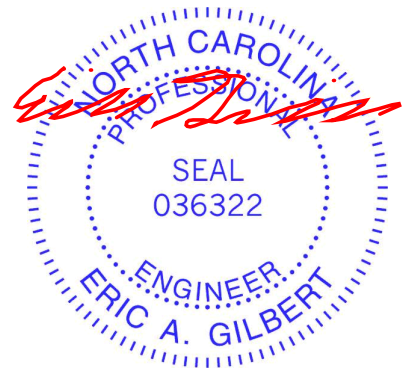


Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett
J1120-5410	F5-GRD	Floor Girder	1	1	E15293419

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8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:58 2021 Page 2
 ID:qH4S_SYhXXrmAJJV6MTTvyngLu-VozHmaLnoEJCchjPlcOGIb9E2YvCgl9?LFvNOvzwTWh

LOAD CASE(S) Standard
 Concentrated Loads (lb)
 Vert: 8=-986(B)



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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293420
J1120-5410	F6	Floor	7	1	Job Reference (optional)	

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8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:59 2021 Page 1
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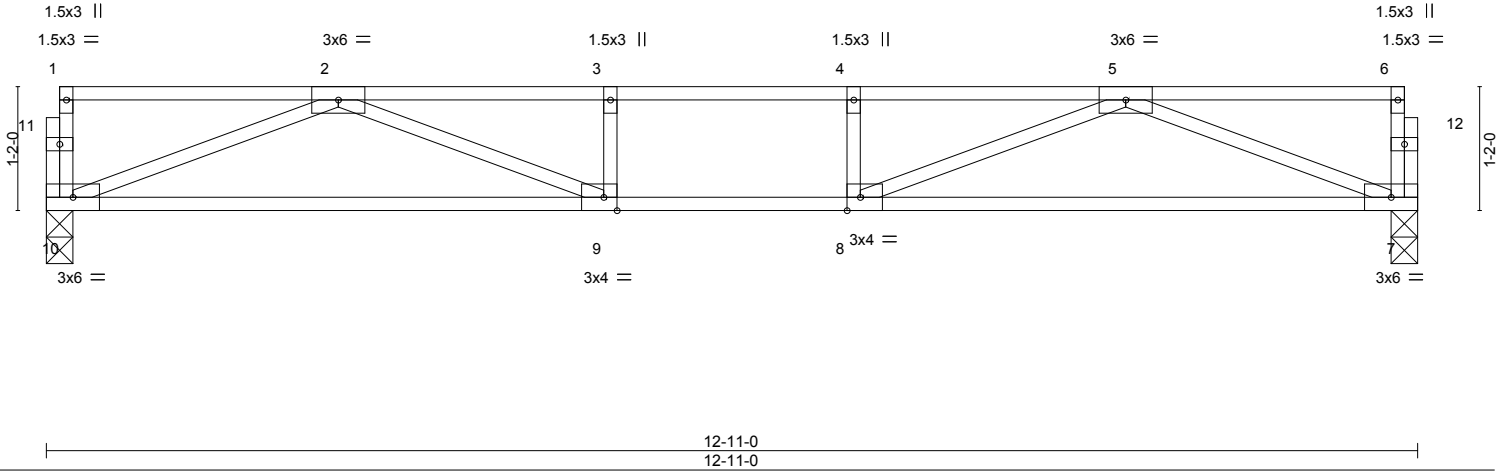
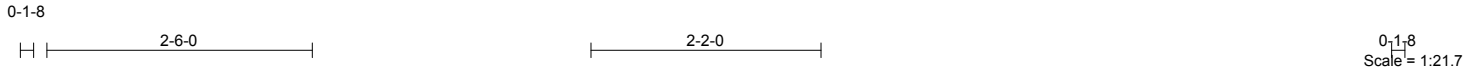


Plate Offsets (X,Y)-- [8:0-1-8,Edge], [9:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.46	Vert(LL) -0.18	9-10	>854	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.54	Vert(CT) -0.25	9-10	>602	360		
BCLL 0.0	Rep Stress Incr YES	WB 0.42	Horz(CT) 0.03	7	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 62 lb	FT = 20%F, 11%E

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

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

REACTIONS. (size) 10=0-3-0, 7=0-3-0
Max Grav 10=690(LC 1), 7=690(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2099/0, 3-4=-2099/0, 4-5=-2099/0
BOT CHORD 9-10=0/1428, 8-9=0/2099, 7-8=0/1428
WEBS 2-10=-1530/0, 2-9=0/829, 5-7=-1530/0, 5-8=0/829

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.



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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293421
J1120-5410	F7	Floor	8	1	Job Reference (optional)	

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8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:23:00 2021 Page 1
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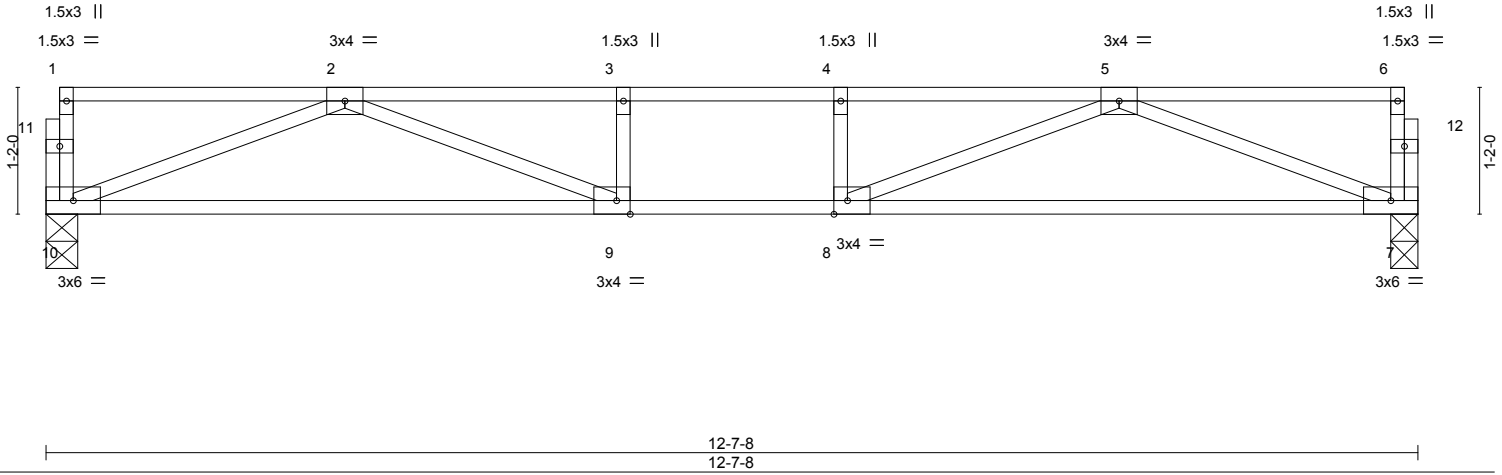
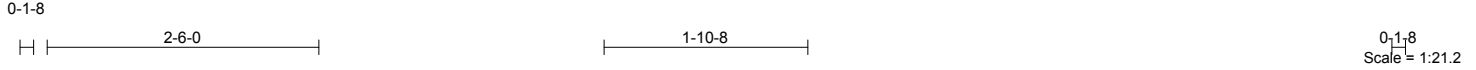


Plate Offsets (X,Y)-- [8:0-1-8,Edge], [9:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.40	Vert(LL) -0.15	9-10	>965	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.51	Vert(CT) -0.23	9-10	>655	360		
BCLL 0.0	Rep Stress Incr YES	WB 0.41	Horz(CT) 0.03	7	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 61 lb	FT = 20%F, 11%E

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

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

REACTIONS. (size) 10=0-3-8, 7=0-3-0
 Max Grav 10=674(LC 1), 7=674(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2014/0, 3-4=-2014/0, 4-5=-2014/0
 BOT CHORD 9-10=0/1390, 8-9=0/2014, 7-8=0/1390
 WEBS 2-10=-1489/0, 2-9=0/774, 5-7=-1489/0, 5-8=0/774

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.



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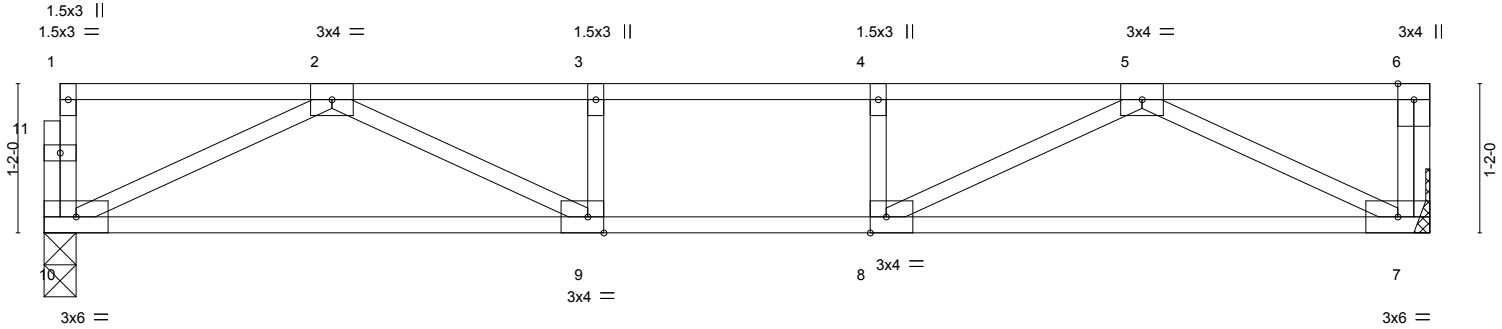
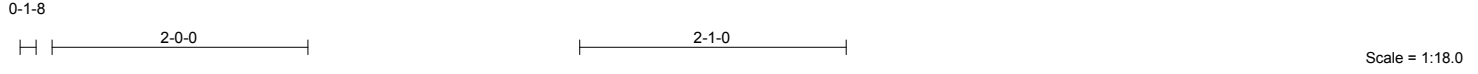


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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293422
J1120-5410	F8	FLOOR	2	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:23:00 2021 Page 1
ID:qH4S_SYhXXmAJJVVJ6MTTvyngLu-RB51BGN2KsZwr_tos1Qkq0FhkMlo8LIpZOUTnzwTWF



5-3-12	5-4-12	6-3-0	6-5-0	10-10-0
5-3-12	0-1-0	0-10-4	0-2-0	4-5-0

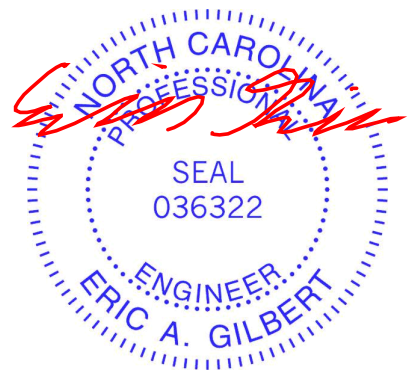
Plate Offsets (X,Y)--	[8:0-1-8,Edge], [9:0-1-8,Edge]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.35	Vert(LL) -0.09 9-10 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.38	Vert(CT) -0.13 9-10 >999 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.29	Horz(CT) 0.02 7 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 53 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) 10=0-3-0, 7=Mechanical
Max Grav 10=576(LC 1), 7=582(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1453/0, 3-4=-1453/0, 4-5=-1453/0
BOT CHORD 9-10=0/970, 8-9=0/1453, 7-8=0/972
WEBS 2-10=-1075/0, 2-9=0/618, 5-7=-1083/0, 5-8=0/617

- 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 11, 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 56 Summerlin/Harnett	E15293423
J1120-5410	F9	FLOOR	3	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:23:01 2021 Page 1
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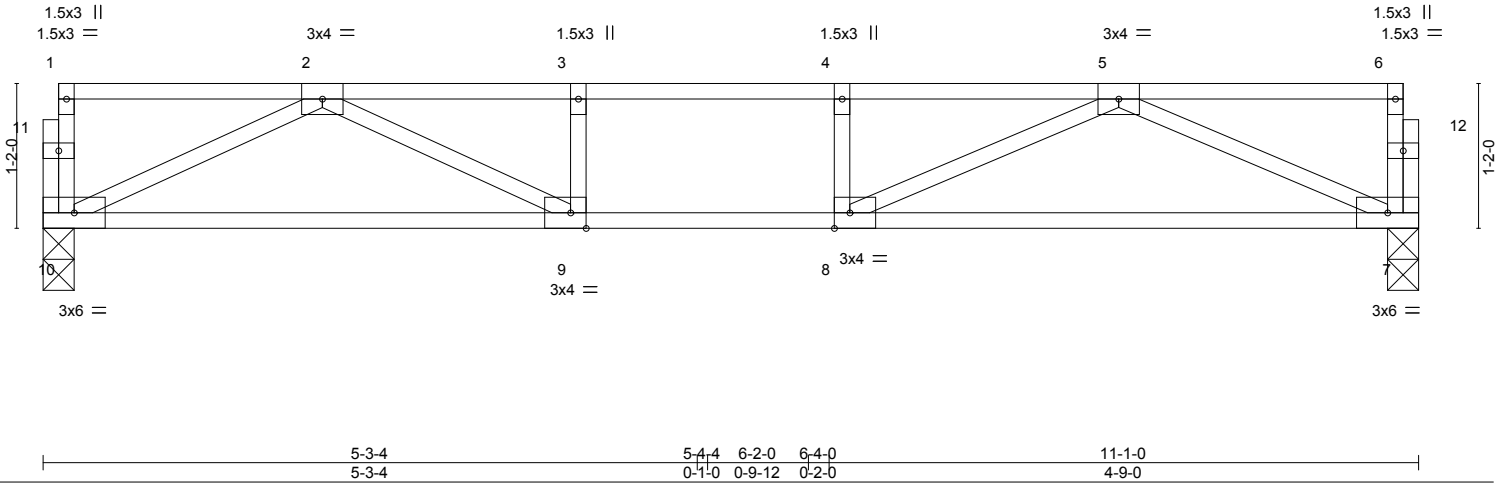


Plate Offsets (X,Y)--	[8:0-1-8,Edge], [9:0-1-8,Edge]	5-3-4 5-3-4	5-4-4 0-1-0	6-2-0 0-9-12	6-4-0 0-2-0	11-1-0 4-9-0
-----------------------	--------------------------------	----------------	----------------	-----------------	----------------	-----------------

LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.40	Vert(LL) -0.11 7-8 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.42	Vert(CT) -0.16 7-8 >813 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.32	Horz(CT) 0.02 7 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 54 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) 10=0-3-0, 7=0-3-0
Max Grav 10=590(LC 1), 7=590(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1527/0, 3-4=-1527/0, 4-5=-1527/0
BOT CHORD 9-10=0/999, 8-9=0/1527, 7-8=0/1060
WEBS 2-10=-1107/0, 2-9=0/662, 5-7=-1159/0, 5-8=0/606

- 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 11, 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 56 Summerlin/Harnett	E15293424
J1120-5410	F10-GRD	FLOOR GIRDER	1	1		

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:54 2021 Page 1
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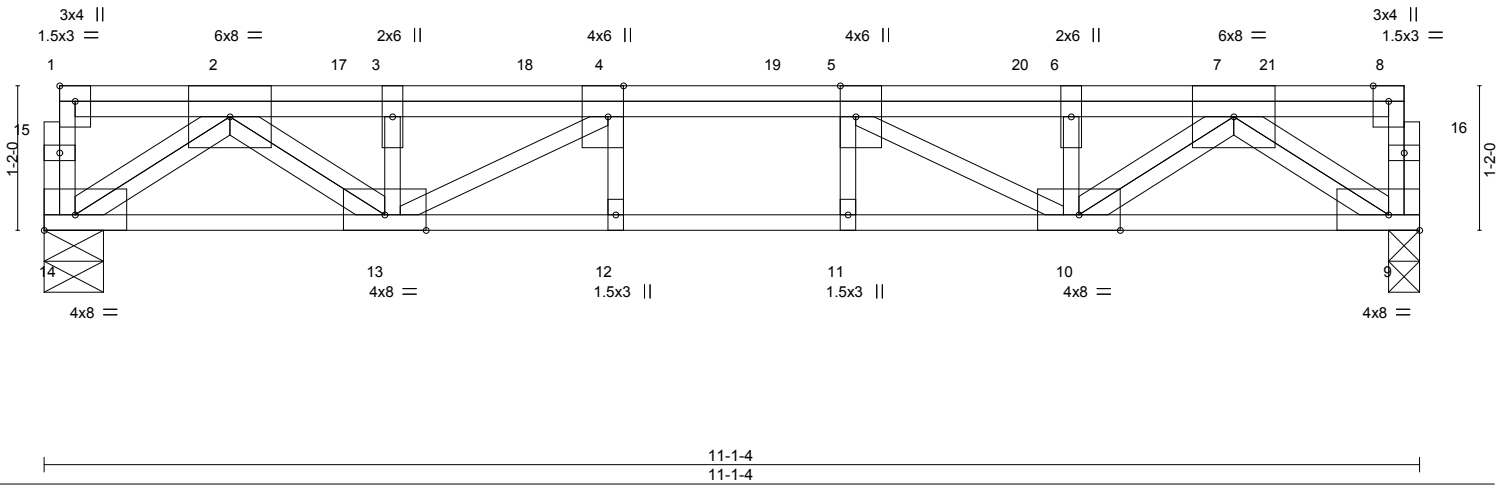
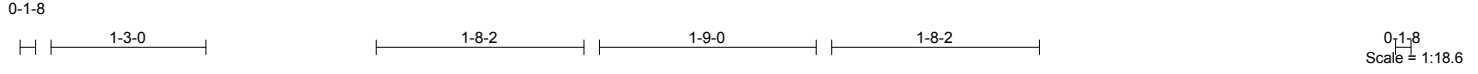


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [4:0-3-0,Edge], [5:0-3-0,Edge], [9:Edge,0-1-8], [14:Edge,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.77	Vert(LL)	-0.13 12-13	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.72	Vert(CT)	-0.18 12-13	>741	360		
BCLL 0.0	Rep Stress Incr	NO	WB 0.57	Horz(CT)	0.04 9	n/a	n/a		
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 81 lb	FT = 20%F, 11%E

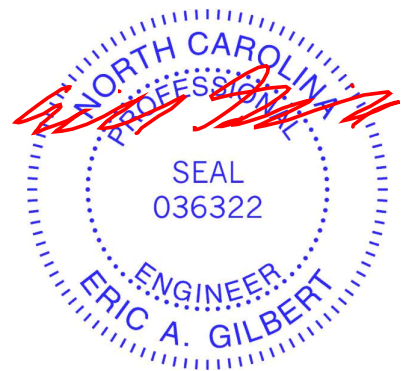
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP 2400F 2.0E(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (size) 14=0-5-12, 9=0-3-0
Max Grav 14=2423(LC 1), 9=1211(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-14=-816/0, 2-3=-4187/0, 3-4=-4247/0, 4-5=-4299/0, 5-6=-2677/0, 6-7=-2676/0
BOT CHORD 13-14=0/2298, 12-13=0/4299, 11-12=0/4299, 10-11=0/4299, 9-10=0/1563
WEBS 2-14=-2762/0, 2-13=0/2386, 7-9=-1913/0, 7-10=0/1406, 5-10=-1902/0, 3-13=-1375/0

- 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) 796 lb down at 0-2-4, 789 lb down at 2-5-12, 774 lb down at 3-11-12, 115 lb down at 5-11-12, and 175 lb down at 7-11-12, and 176 lb down at 9-11-12 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).

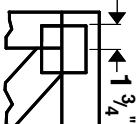
LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 9-14=-10, 1-8=-100
Concentrated Loads (lb)
Vert: 1=-744(B) 17=-709(B) 18=-709(B) 19=-95(B) 20=-95(B) 21=-99(B)



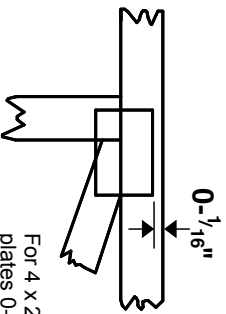
January 11, 2021

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



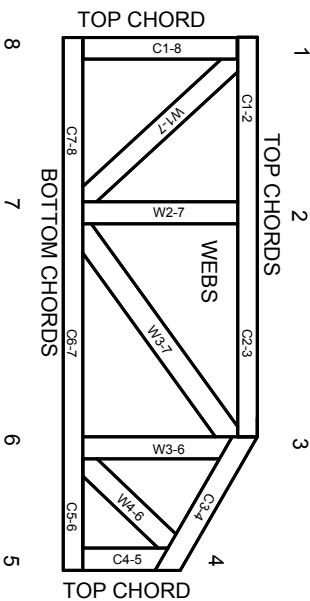
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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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MITek 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: J1120-5409
Precision/Lot 56 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: E15293390 thru E15293410

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

North Carolina COA: C-0844



January 11, 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.

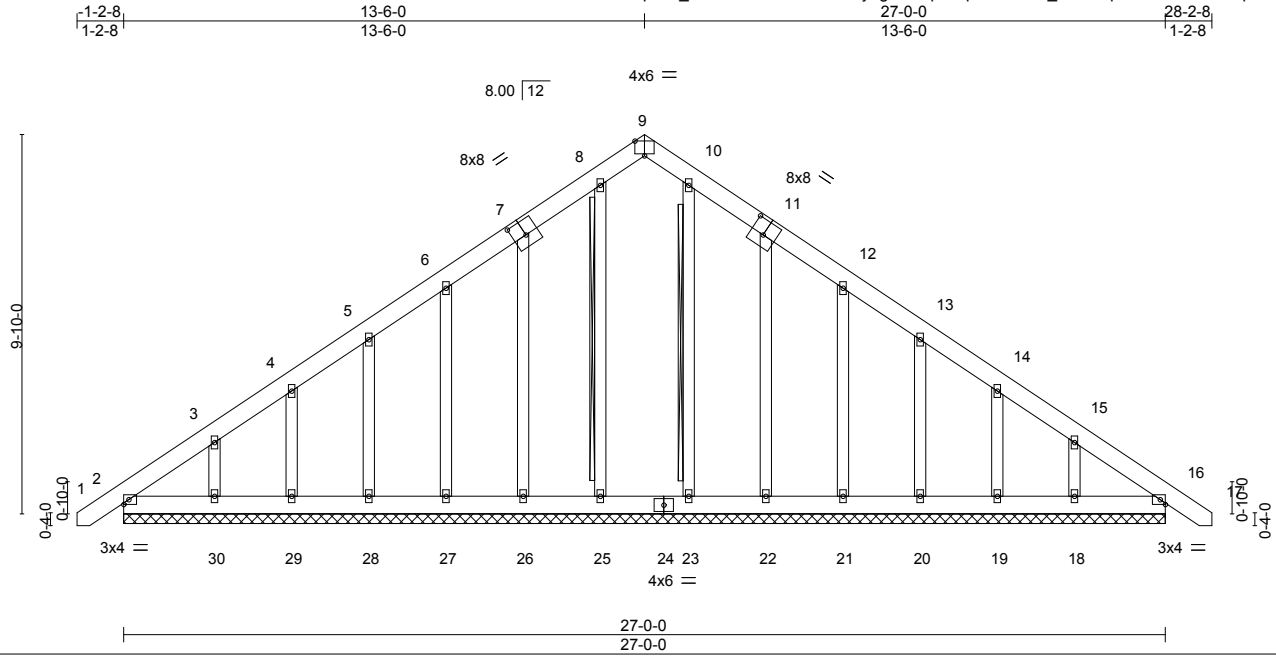
Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293390
J1120-5409	A1-GE	GABLE	1	1		

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8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:47 2021 Page 1

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Job Reference (optional)



Scale = 1:59.7

Plate Offsets (X,Y)-- [7:0-4-0,0-4-8], [9:0-3-0,Edge], [11:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) -0.00	16	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) 0.00	16	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT) 0.01	16	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 233 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS T-Brace: 2x4 SPF No.2 - 8-25, 10-23
 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.

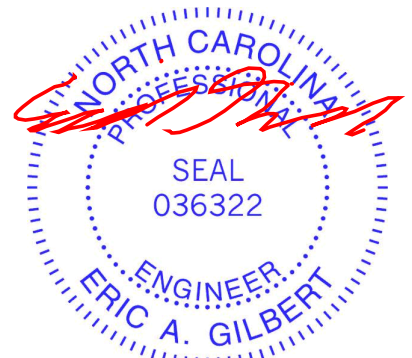
All bearings 27-0-0.
 (lb) - Max Horz 2=291(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 25, 27, 28, 29, 21, 20, 19, 16 except 26=104(LC 12), 30=137(LC 12), 22=109(LC 13), 18=132(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 2, 25, 26, 27, 28, 29, 30, 23, 22, 21, 20, 19, 18, 16

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

TOP CHORD 2-3=320/213, 15-16=264/182
 BOT CHORD 2-30=166/260, 29-30=166/260, 28-29=166/260, 27-28=166/260, 26-27=166/260, 25-26=168/260, 23-25=168/260, 22-23=168/260, 21-22=166/259, 20-21=166/259, 19-20=166/259, 18-19=166/259, 16-18=166/259

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) 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
- 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, 25, 27, 28, 29, 21, 20, 19, 16 except (jt=lb) 26=104, 30=137, 22=109, 18=132.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



January 11, 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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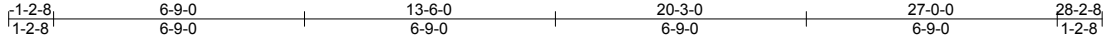
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293391
J1120-5409	A2	COMMON	5	1		

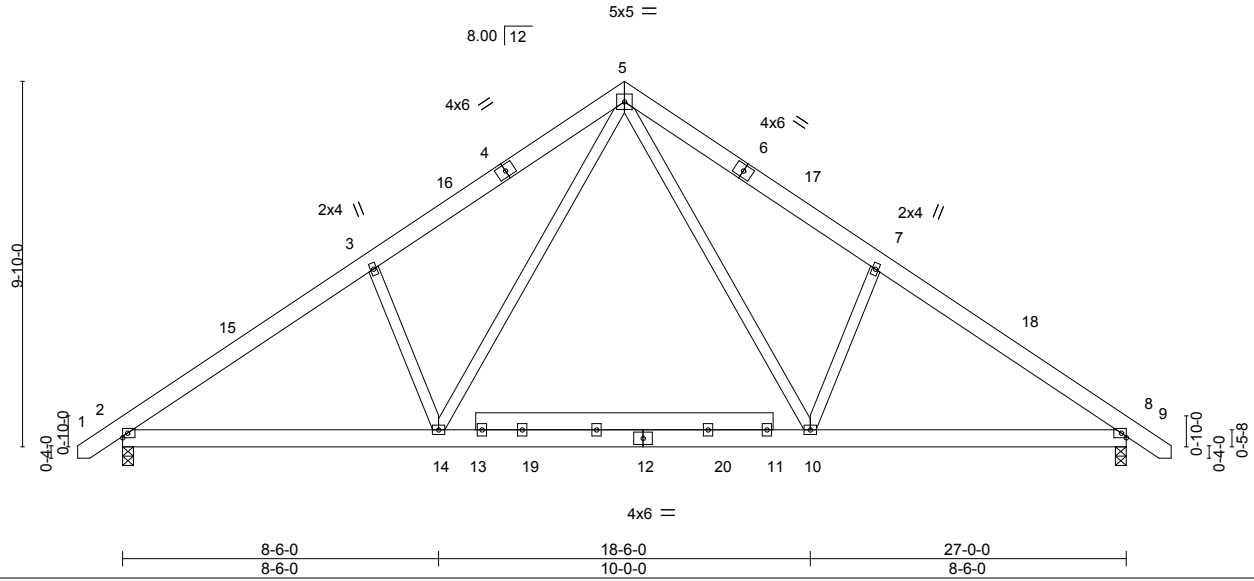
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8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:48 2021 Page 1

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Scale = 1:62.0



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.19	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.29	Vert(LL) -0.08 10-14 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.30	Vert(CT) -0.12 10-14 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.03 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.02 10-14 >999 240	Weight: 209 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

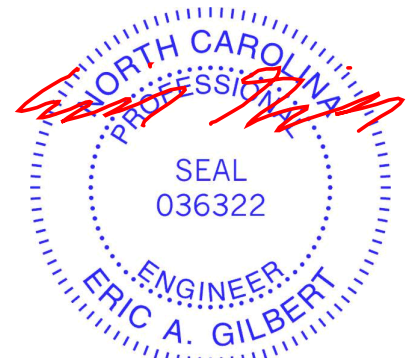
(size) 2=0-3-8, 8=0-3-8
 Max Horz 2=-232(LC 10)
 Max Uplift 2=-72(LC 12), 8=-72(LC 13)
 Max Grav 2=1175(LC 19), 8=1175(LC 20)

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

TOP CHORD 2-3=-1582/313, 3-5=-1474/419, 5-7=-1474/419, 7-8=-1581/313
 BOT CHORD 2-14=-125/1360, 10-14=0/877, 8-10=-135/1205
 WEBS 5-10=-157/752, 7-10=-417/268, 5-14=-157/751, 3-14=-417/268

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) -1-0-9 to 3-4-4, Interior(1) 3-4-4 to 13-6-0, Exterior(2) 13-6-0 to 17-10-13, Interior(1) 17-10-13 to 28-0-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 3x4 MT20 unless otherwise indicated.
- 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, 8.



January 11, 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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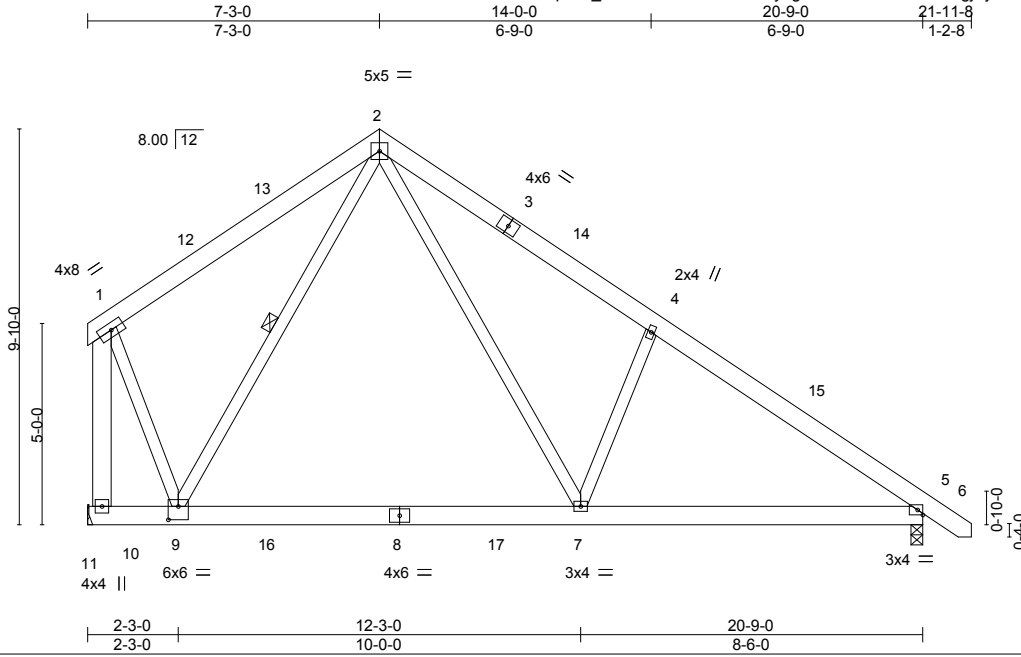
Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293392
J1120-5409	A3	COMMON	14	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:49 2021 Page 1

ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-F4xttVE8vTAU1IXgJ9uhHrdwzz3nbhHLDPAwzWTWq

Job Reference (optional)



Scale = 1:57.3

Plate Offsets (X,Y)-- [9:0-3-0,0-4-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.21	Vert(LL)	-0.13	7-9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.40	Vert(CT)	-0.18	7-9	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.30	Horz(CT)	0.01	5	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S	Wind(LL)	0.02	5-7	>999	240		
									Weight: 166 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2 *Except*
 1-10: 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.
 WEBS 1 Row at midpt 2-9

REACTIONS.

(size) 10=Mechanical, 5=0-3-8
 Max Horz 10=-224(LC 8)
 Max Uplift 10=-51(LC 13), 5=-53(LC 13)
 Max Grav 10=926(LC 20), 5=920(LC 20)

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

TOP CHORD 1-2=-473/155, 2-4=-1067/308, 4-5=-1171/199, 1-10=-1112/148
 BOT CHORD 7-9=0/508, 5-7=-52/857
 WEBS 2-7=-154/787, 4-7=-433/268, 2-9=-364/116, 1-9=0/825

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) 0-4-4 to 4-9-1, Interior(1) 4-9-1 to 7-3-0, Exterior(2) 7-3-0 to 11-7-13, Interior(1) 11-7-13 to 21-9-9 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 5.



January 11, 2021

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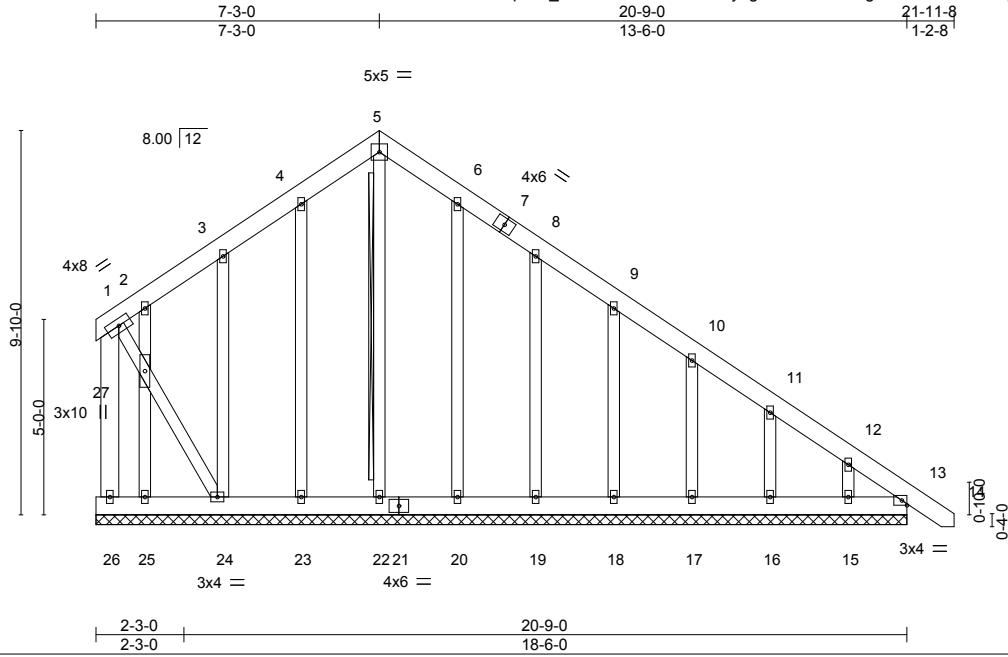
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293393
J1120-5409	A4-GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:50 2021 Page 1

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Scale = 1:59.0

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.03	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) -0.00 13 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.15	Vert(CT) -0.00 13 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 13 n/a n/a		
	Code IRC2015/TPI2014			Weight: 208 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2 *Except*
 1-26: 2x6 SP No.1
 OTHERS 2x4 SP No.2

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.
 WEBS T-Brace: 2x4 SP No.2 - 5-22
 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 20-9-0.
 (lb) - Max Horz 26=-329(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) 13, 23, 25, 20, 19, 18, 17, 16 except 26=-140(LC 8),
 24=-180(LC 12), 15=-124(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 26, 13, 22, 23, 24, 25, 20, 19, 18, 17, 16, 15

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

TOP CHORD 12-13=-320/208
 BOT CHORD 25-26=-220/328, 24-25=-220/328, 23-24=-177/285, 22-23=-177/285, 20-22=-177/285,
 19-20=-177/285, 18-19=-177/285, 17-18=-177/285, 16-17=-177/285, 15-16=-177/285,
 13-15=-177/285

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) 13, 23, 25, 20, 19, 18, 17, 16 except (jt=lb) 26=140, 24=180, 15=124.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



January 11, 2021

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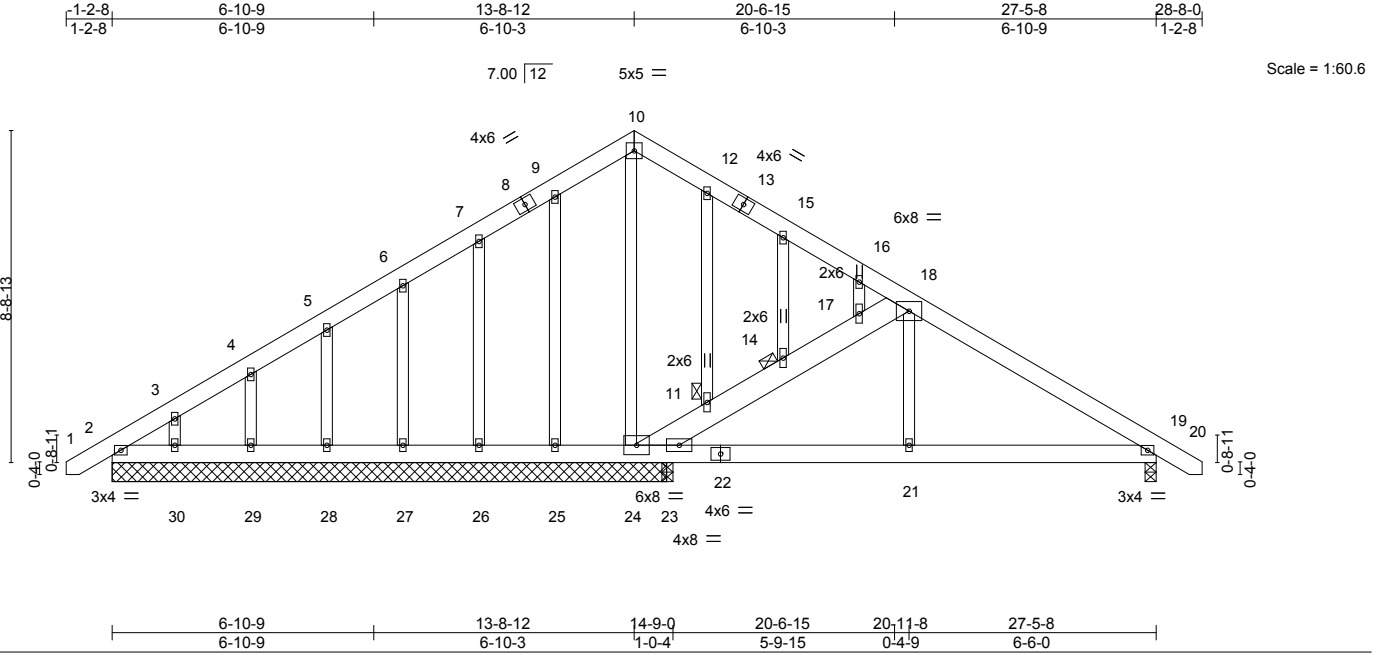
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293394
J1120-5409	B1-GE	GABLE	1	1	Job Reference (optional)	

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8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:52 2021 Page 1

ID:qH4S_SyHXXrmAJJVJ6MTTvyngLu-gfc?VXH0COY3umGFOLHsWKvNP83kG8I7zJS3BFzwTwn



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.18	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.14	Vert(LL) -0.01 19-21 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.30	Vert(CT) -0.03 19-21 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 19 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.01 19-21 >999 240	Weight: 235 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 18-24: 2x8 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 6-0-0 oc bracing. Except: 10-0-0 oc bracing: 23-24,21-23,19-21.
WEBS 2x4 SP No.2	JOINTS 1 Brace at Jt(s): 11, 14
OTHERS 2x4 SP No.2	

REACTIONS. All bearings 14-7-0 except (jt=length) 19=0-3-8, 23=0-3-8.
 (lb) - Max Horz 2=-258(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 25, 26, 27, 28, 29, 30, 23 except 24=-158(LC 13),
 19=-159(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 2, 25, 26, 27, 28, 29, 30 except 24=509(LC 20), 19=536(LC 1),
 23=350(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-268/285, 18-19=-563/169, 11-24=-712/338, 11-14=-668/312, 14-17=-619/273,
 17-18=-597/257
 BOT CHORD 23-24=-31/399, 21-23=-31/399, 19-21=-29/402
 WEBS 10-24=-265/0, 18-21=0/277

- 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 studs spaced at 2-0-0 oc.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) * 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.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 25, 26, 27, 28, 29, 30, 23 except (jt=lb) 24=158, 19=159.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



January 11, 2021

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293395
J1120-5409	B2	COMMON	1	1		

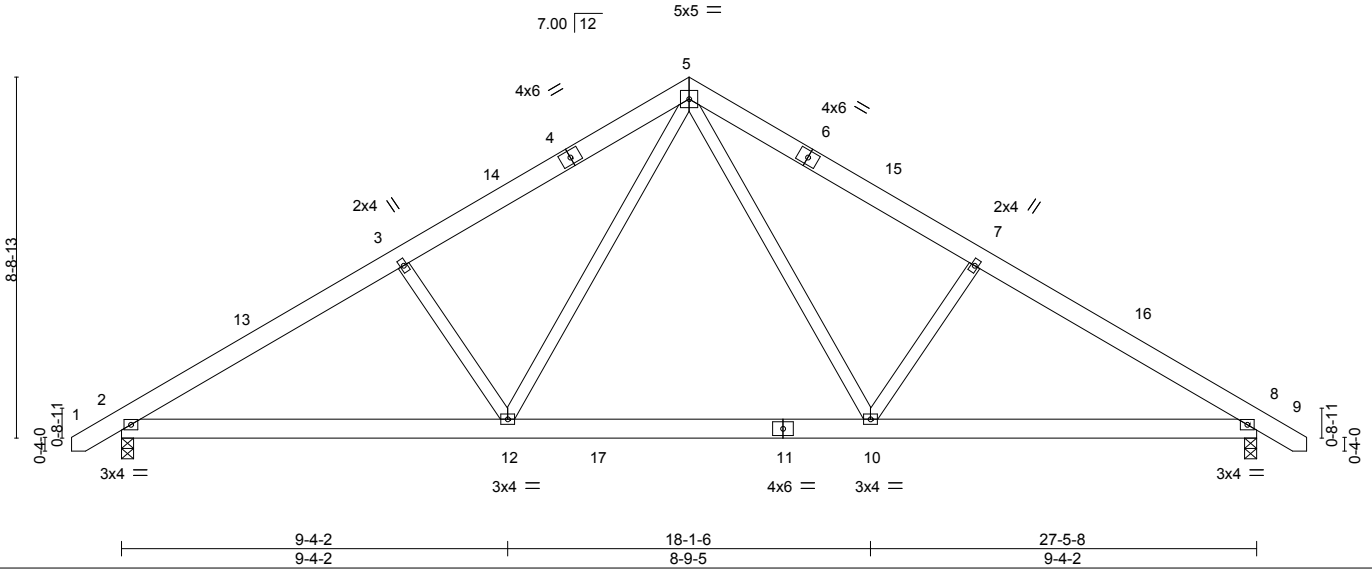
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8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:52 2021 Page 1

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Scale = 1:55.7



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.20	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.34	Vert(LL) -0.11 10-12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.17	Vert(CT) -0.15 10-12 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.03 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.03 12 >999 240	Weight: 186 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-10-4 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) 2=0-3-8, 8=0-3-8
 Max Horz 2=-207(LC 10)
 Max Uplift 2=-78(LC 12), 8=-78(LC 13)
 Max Grav 2=1184(LC 19), 8=1184(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1740/349, 3-5=-1556/386, 5-7=-1557/386, 7-8=-1741/349
 BOT CHORD 2-12=-182/1543, 10-12=-6/1010, 8-10=-192/1389
 WEBS 5-10=-1117/710, 7-10=-417/248, 5-12=-1117/708, 3-12=-417/248

- 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) -1-0-8 to 3-4-5, Interior(1) 3-4-5 to 13-8-12, Exterior(2) 13-8-12 to 18-1-9, Interior(1) 18-1-9 to 28-6-0 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, 8.

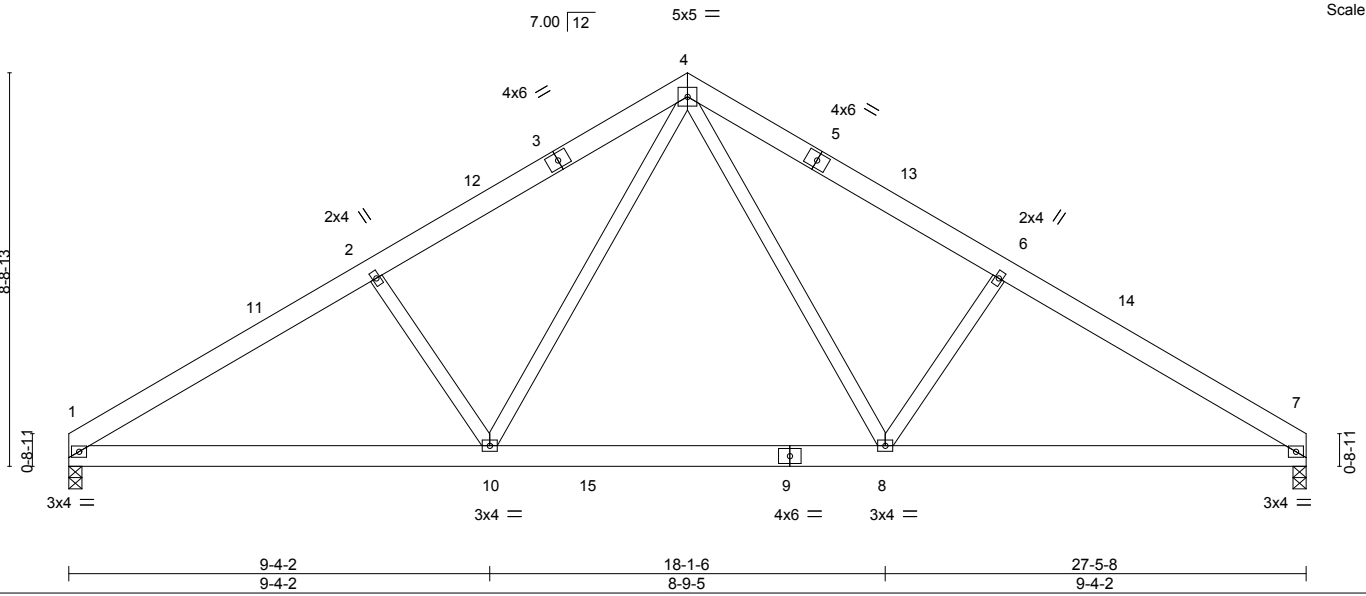
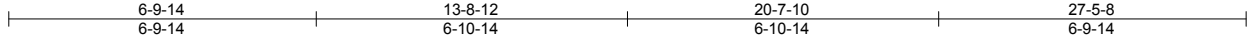


Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293396
J1120-5409	B3	COMMON	3	1	Job Reference (optional)	

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8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:53 2021 Page 1

ID:qH4S_SyhXXrmAJVJ6MTTvyngLu-8rAOjtHfzigwVvrSy2o52XSWIXMs?dXGCzBdjhwTWm



Scale = 1:51.1

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.20	Vert(LL) -0.11 8-10 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.34	Vert(CT) -0.15 8-10 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.17	Horz(CT) 0.03 7 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.03 10 >999 240	Weight: 180 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-10-1 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=0-3-8, 7=0-3-8
 Max Horz 1=-198(LC 8)
 Max Uplift 1=-61(LC 12), 7=-61(LC 13)
 Max Grav 1=1117(LC 19), 7=1118(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-1732/366, 2-4=-1565/403, 4-6=-1566/403, 6-7=-1733/366
 BOT CHORD 1-10=-212/1549, 8-10=-23/1009, 7-8=-213/1402
 WEBS 4-8=-115/717, 6-8=-416/253, 4-10=-115/715, 2-10=-416/253

- 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) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 13-8-12, Exterior(2) 13-8-12 to 18-1-9, Interior(1) 18-1-9 to 27-3-12 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) 1, 7.

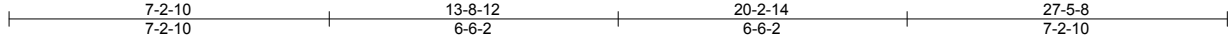


Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293397
J1120-5409	B4	HOWE	1	2	Job Reference (optional)	

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8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:55 2021 Page 1

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Scale = 1:51.9

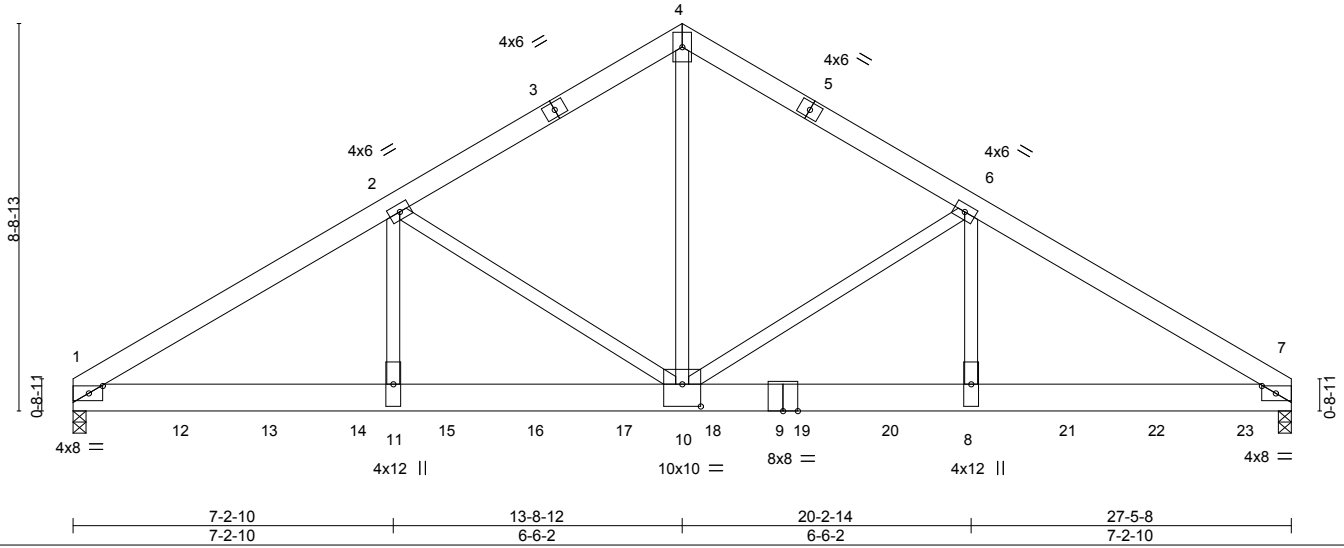


Plate Offsets (X,Y)-- [1:0-3-12,0-2-0], [7:0-3-12,0-2-0], [10:0-5-0,0-6-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.43	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.50	Vert(LL) -0.12 8-10 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.80	Vert(CT) -0.23 8-10 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.06 7 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.08 10-11 >999 240	Weight: 409 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-10-14 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=0-3-8, 7=0-3-8
 Max Horz 1=-196(LC 6)
 Max Uplift 1=-507(LC 8), 7=-488(LC 9)
 Max Grav 1=7162(LC 2), 7=6833(LC 2)

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

TOP CHORD 1-2=-10036/725, 2-4=-6878/561, 4-6=-6879/561, 6-7=-10097/730
 BOT CHORD 1-11=-631/8490, 10-11=-631/8490, 8-10=-537/8544, 7-8=-537/8544
 WEBS 2-11=-140/3212, 4-10=-455/6503, 6-8=-146/3275, 2-10=-3161/353, 6-10=-3227/359

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: 2x8 - 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; TCDL=6.0psf; BCDL=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=507, 7=488.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 871 lb down and 63 lb up at 0-1-12, 863 lb down and 71 lb up at 2-4-12, 863 lb down and 71 lb up at 4-4-12, 863 lb down and 71 lb up at 6-4-12, 863 lb down and 71 lb up at 8-4-12, 863 lb down and 71 lb up at 10-4-12, 863 lb down and 71 lb up at 12-4-12, 863 lb down and 71 lb up at 14-4-12, 863 lb down and 71 lb up at 16-4-12, 863 lb down and 71 lb up at 18-4-12, 863 lb down and 71 lb up at 20-4-12, 863 lb down and 71 lb up at 22-4-12, and 863 lb down and 71 lb up at 24-4-12, and 864 lb down and 70 lb up at 26-4-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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



January 11, 2021

Continued on page 2

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 56 Summerlin/Harnett	E15293397
J1120-5409	B4	HOWE	1	2	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:55 2021 Page 2
 ID:qH4S_SYhXXrmAJJVJ6MTTvngLu-4EI88ZJvVJwdID_q4TqZ7yXphL?rTNFZFhgjoazwTWk

LOAD CASE(S) Standard

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 1=-803(B) 8=-795(B) 12=-795(B) 13=-795(B) 14=-795(B) 15=-795(B) 16=-795(B) 17=-795(B) 18=-795(B) 19=-795(B) 20=-795(B) 21=-795(B) 22=-795(B) 23=-796(B)

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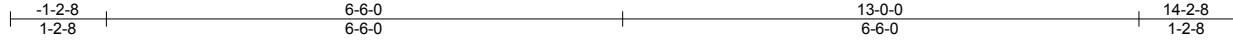
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293398
J1120-5409	C1-GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

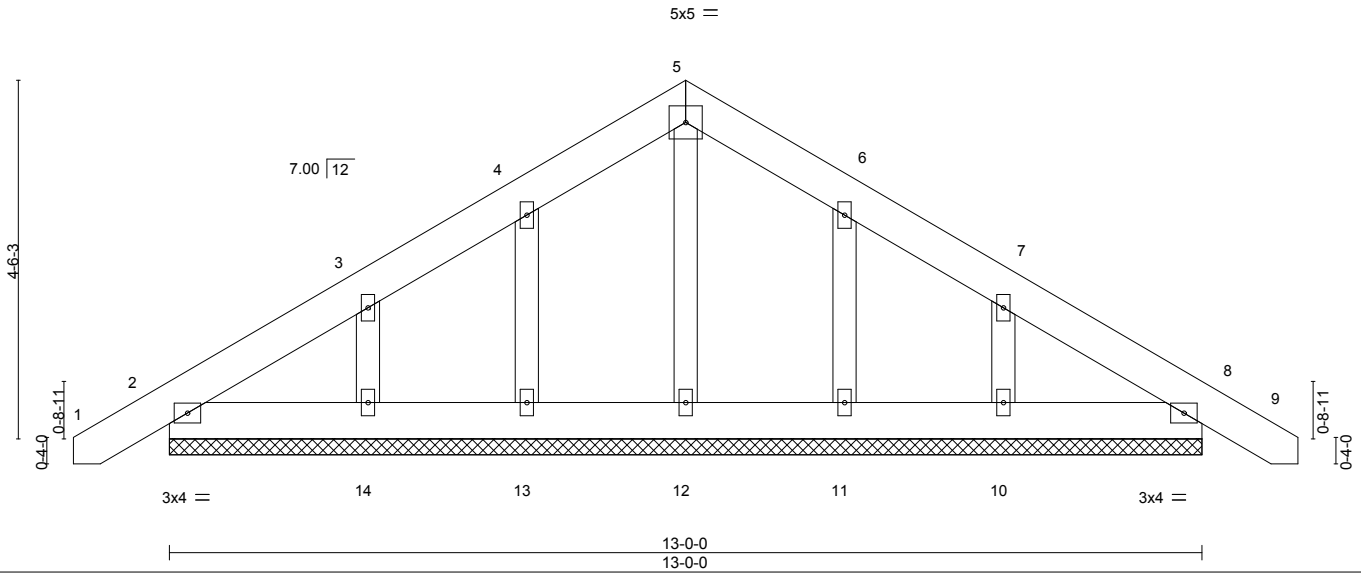
Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:56 2021 Page 1

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Scale = 1:29.0



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.02	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(LL) -0.00 8 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Vert(CT) 0.00 8 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 8 n/a n/a		
	Code IRC2015/TPI2014			Weight: 89 lb	FT = 20%

LUMBER-

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

BRACING-

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

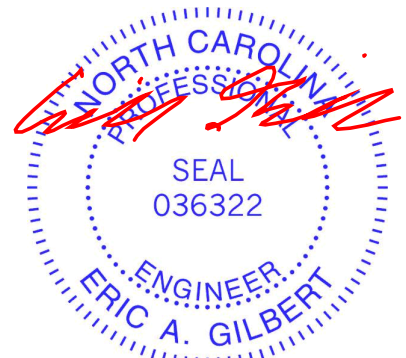
REACTIONS.

All bearings 13-0-0.
 (lb) - Max Horz 2=132(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 11 except 14=-103(LC 12), 10=-101(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

NOTES-

- 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) 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 11 except (jt=lb) 14=103, 10=101.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8.



January 11, 2021

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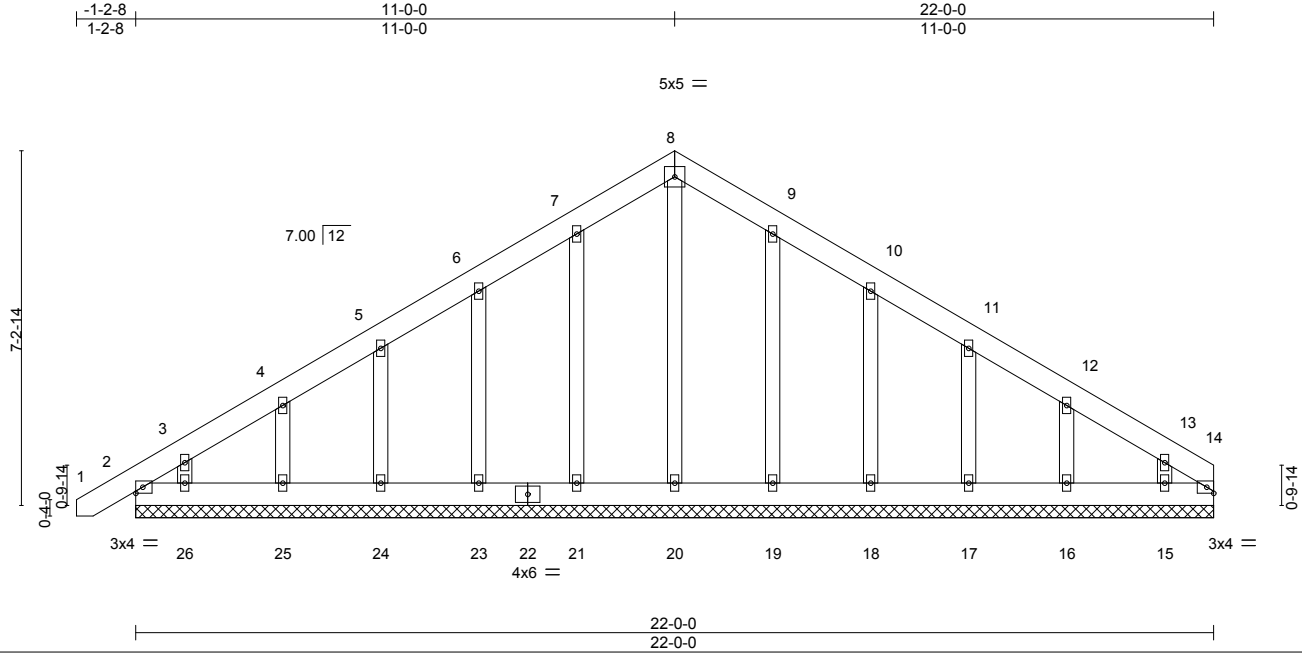
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293399
J1120-5409	D1-GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:57 2021 Page 1

ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-0cQuYEK91xBL_X8DBut1DNdFW9osxRps6b9qsSzwTWi



Scale = 1:47.0

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.03	Vert(LL)	-0.00	1	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	-0.00	1	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00	14	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 167 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 22-0-0.
 (lb) - Max Horz 2=208(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 14, 2, 21, 23, 24, 25, 26, 19, 18, 17, 16 except 15=107(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 14, 2, 20, 21, 23, 24, 25, 26, 19, 18, 17, 16, 15

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; 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
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 2, 21, 23, 24, 25, 26, 19, 18, 17, 16 except (jt=lb) 15=107.



January 11, 2021

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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 56 Summerlin/Harnett	E15293400
J1120-5409	D2	QUEENPOST	4	1		

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8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:58 2021 Page 1

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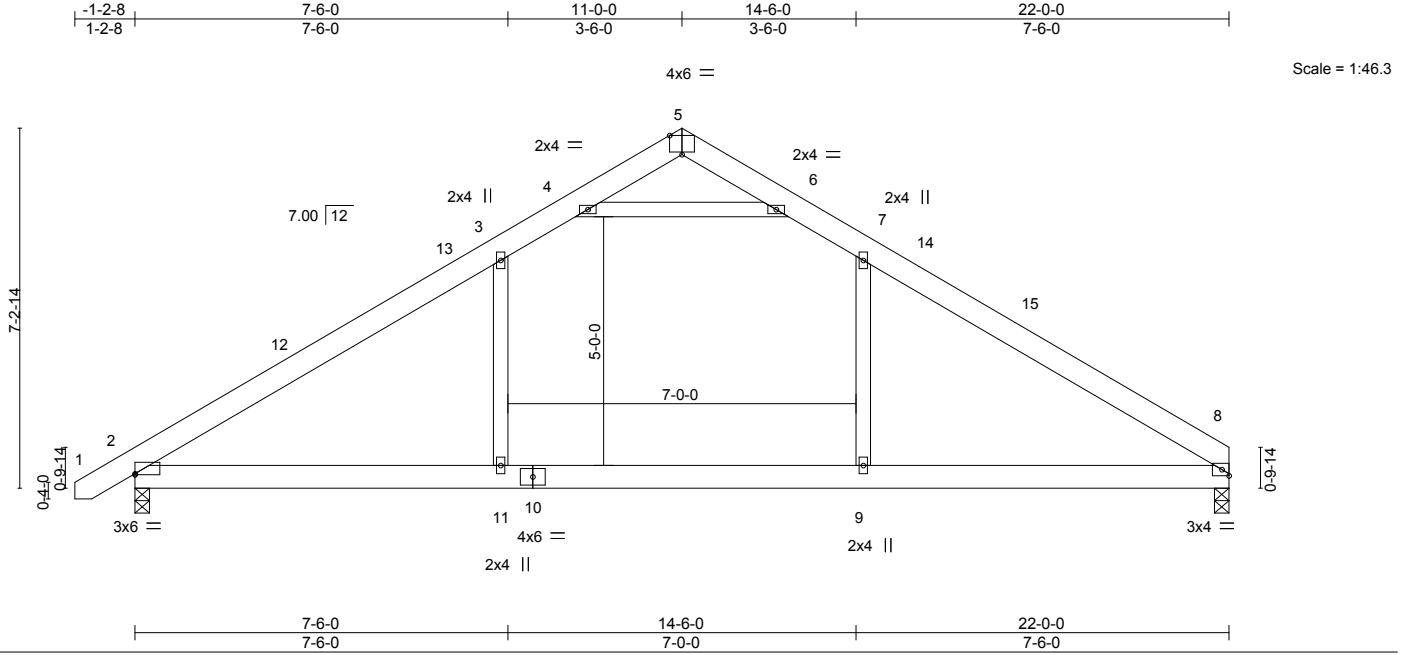


Plate Offsets (X,Y)-- [2:0-0-0,0-0-4], [5:0-3-0,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.42	Vert(LL) -0.12	8-9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.35	Vert(CT) -0.16	8-9	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.43	Horz(CT) 0.02	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.10	2-11	>999	240		
							Weight: 134 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-11-10 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) 2=0-3-8, 8=0-3-8
 Max Horz 2=166(LC 9)
 Max Uplift 2=-65(LC 12), 8=-48(LC 13)
 Max Grav 2=1043(LC 19), 8=974(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1453/243, 3-4=-1057/292, 4-5=-90/348, 5-6=-81/351, 6-7=-1056/301, 7-8=-1446/246
 BOT CHORD 2-11=-88/1142, 9-11=-88/1142, 8-9=-88/1142
 WEBS 3-11=0/411, 7-9=0/404, 4-6=-1483/437

- 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) -1-0-8 to 3-4-5, Interior(1) 3-4-5 to 11-0-0, Exterior(2) 11-0-0 to 15-4-13 to 21-10-4 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) 2, 8.



January 11, 2021

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293401
J1120-5409	D3-3PLY	COMMON GIRDER	1	3		

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8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:59 2021 Page 1

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Scale = 1:43.6

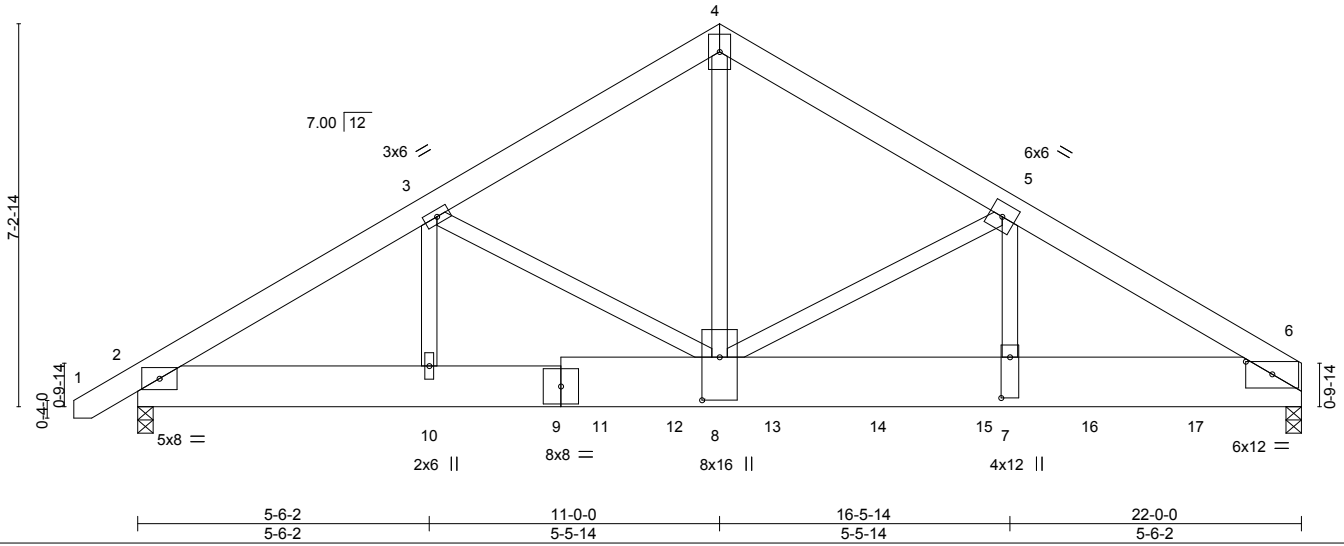


Plate Offsets (X,Y)-- [6:0-6-0,0-2-14], [7:0-9-4,0-2-0], [8:0-9-12,0-4-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.40	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.52	Vert(LL) -0.11 7-8 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.77	Vert(CT) -0.16 7-8 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.03 6 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.02 8-10 >999 240	Weight: 589 lb	FT = 20%

LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x10 SP No.1 *Except*
 6-9: 2x12 SP 2400F 2.0E
 WEBS 2x4 SP No.2 *Except*
 4-8: 2x4 SP No.1

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

REACTIONS. (size) 6=0-3-8, 2=0-3-8
 Max Horz 2=165(LC 5)
 Max Uplift 6=-287(LC 9), 2=-429(LC 8)
 Max Grav 6=10892(LC 14), 2=6194(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-11113/781, 3-4=-11118/615, 4-5=-11110/616, 5-6=-16142/490
 BOT CHORD 2-10=-672/9350, 8-10=-682/9480, 7-8=-354/13712, 6-7=-354/13712
 WEBS 4-8=-520/10946, 5-8=-4788/303, 5-7=-181/5315, 3-8=-800/303, 3-10=-162/652

- NOTES-**
- 3-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: 2x10 - 2 rows staggered at 0-9-0 oc, 2x12 - 6 rows staggered at 0-4-0 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, BCDL=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) 6=287, 2=429.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1740 lb down and 610 lb up at 8-9-0, 4141 lb down at 10-1-12, 2260 lb down at 12-0-0, 2260 lb down at 14-0-0, 2260 lb down at 16-0-0, and 2260 lb down at 18-0-0, and 2260 lb down at 20-0-0 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



January 11, 2021

Continued on page 2

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818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293401
J1120-5409	D3-3PLY	COMMON GIRDER	1	3	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:22:59 2021 Page 2
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LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-4=-60, 4-6=-60, 2-6=-20

Concentrated Loads (lb)

Vert: 11=-1740(B) 12=-1115(B) 13=-585(B) 14=-585(B) 15=-585(B) 16=-585(B) 17=-585(B)

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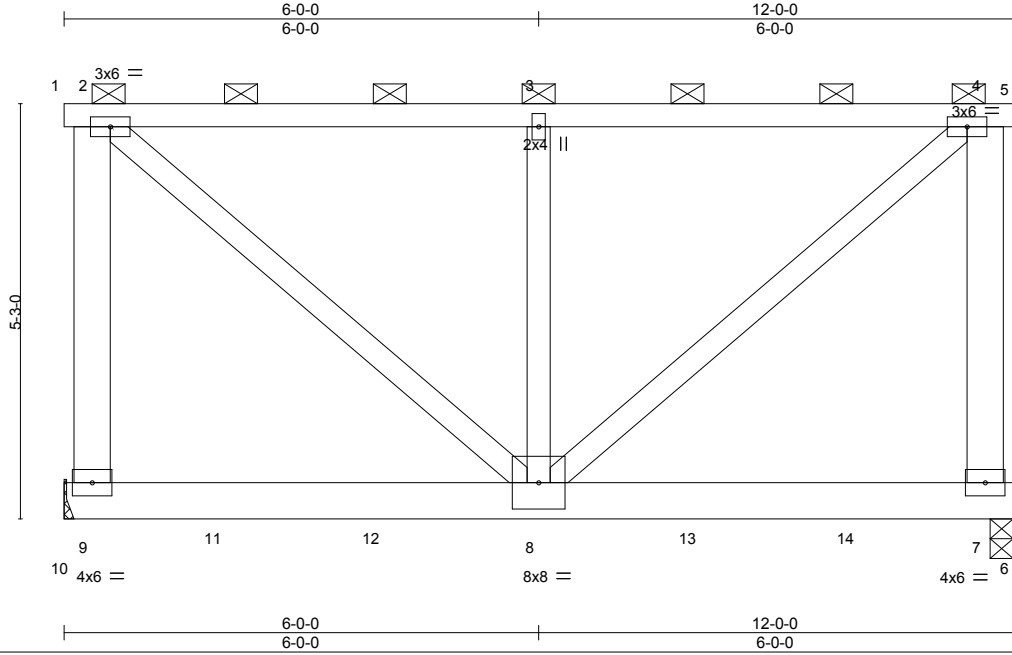
818 Soundside Road
 Edenton, NC 27932

Job J1120-5409	Truss G1-2PLY	Truss Type Flat Girder	Qty 1	Ply 2	Precision/Lot 56 Summerlin/Harnett	E15293402
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8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:23:00 2021 Page 1

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12-0-0
6-0-0



Scale = 1:29.1

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.14	Vert(LL) -0.03	7-8	>999	360		MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.30	Vert(CT) -0.05	7-8	>999	240			
BCLL 0.0 *	Rep Stress Incr NO	WB 0.19	Horz(CT) 0.00	7	n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.03	7-8	>999	240			
								Weight: 188 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2 *Except*
 2-9,4-7: 2x6 SP No.1

BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-5, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 9=Mechanical, 7=0-3-8
 Max Uplift 9=-590(LC 4), 7=-707(LC 5)
 Max Grav 9=1760(LC 1), 7=1922(LC 1)

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

TOP CHORD 2-9=-1226/425, 2-3=-1290/441, 3-4=-1290/441, 4-7=-1409/552
 WEBS 2-8=-540/1578, 3-8=-332/145, 4-8=-540/1579

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, 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 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.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=590, 7=707.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 184 lb down and 142 lb up at 11-7-12 on top chord, and 508 lb down and 219 lb up at 1-11-4, 508 lb down and 219 lb up at 3-11-4, 508 lb down and 219 lb up at 5-11-4, and 508 lb down and 219 lb up at 7-11-4, and 508 lb down and 219 lb up at 9-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-2=-60, 2-4=-60, 4-5=-60, 6-10=-20



January 11, 2021

Continued on page 2

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 56 Summerlin/Harnett	E15293402
J1120-5409	G1-2PLY	Flat Girder	1	2	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:23:00 2021 Page 2
 ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-RB51BGN2KsZwr_tos1Qkq0FkxMm18mwlpZOUtnzwTWf

LOAD CASE(S) Standard
 Concentrated Loads (lb)
 Vert: 4=-184 8=-508(B) 11=-508(B) 12=-508(B) 13=-508(B) 14=-508(B)

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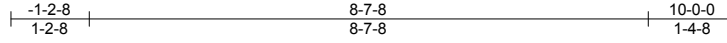
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293403
J1120-5409	J1-GE	GABLE	1	1	Job Reference (optional)	

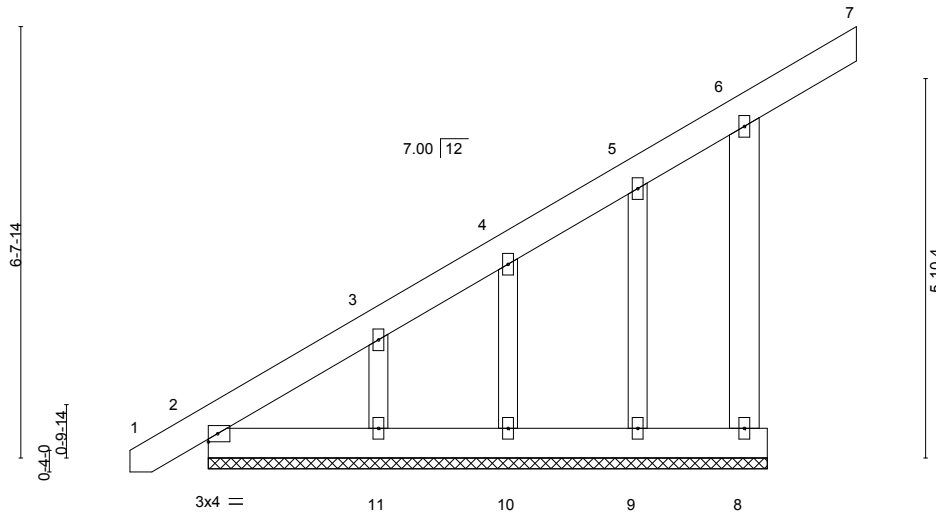
Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:23:01 2021 Page 1

ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-vNfPOcNg59hnT8S_QkxzNDnwmAltGUS1D72?DzwTWe



Scale = 1:35.5



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	0.00	7	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	0.00	6	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00		n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P						Weight: 74 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

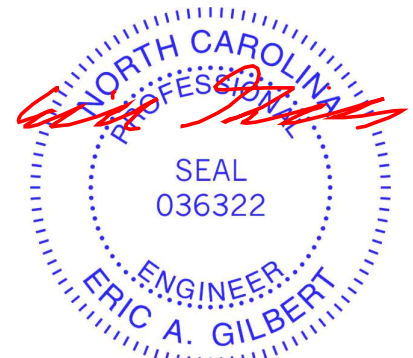
All bearings 8-7-8.
 (lb) - Max Horz 2=293(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) 9, 10 except 8=-141(LC 12), 11=-130(LC 12)
 Max Grav All reactions 250 lb or less at joint(s) 8, 2, 9, 10, 11

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

TOP CHORD 2-3=-348/259, 6-8=-221/265

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; 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) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 10 except (jt=lb) 8=141, 11=130.



January 11, 2021

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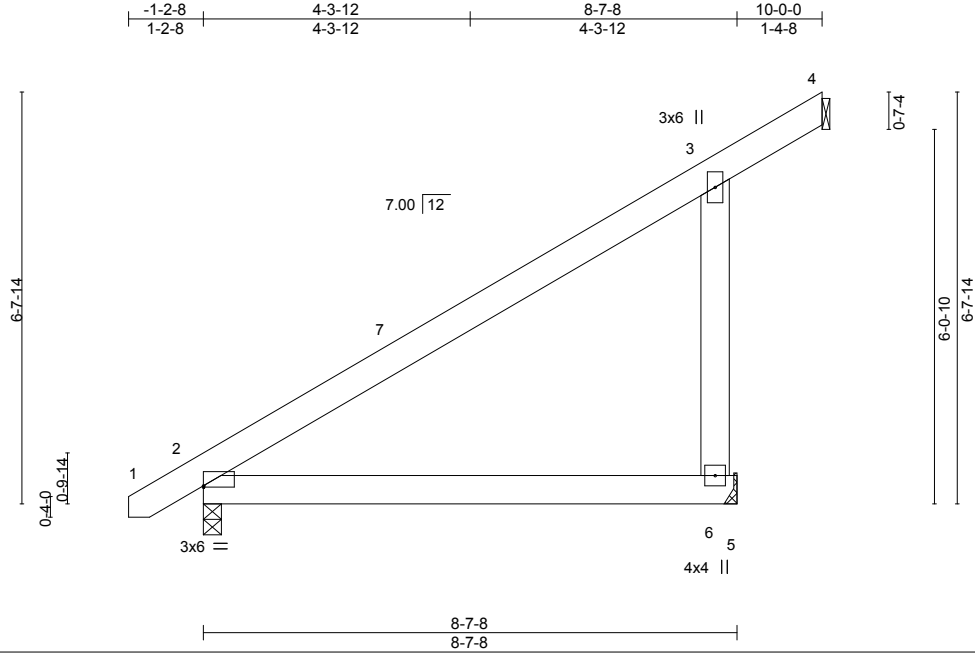
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293404
J1120-5409	J2	JACK-CLOSED	5	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:23:01 2021 Page 1

ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-vNfPocNg59hnT8S_QkxzNDntwm8QtGBS1D72?DzwTWe



Scale = 1:37.2

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

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	2-0-0	TC 0.26	Vert(LL) -0.03	2-6	>999	360		MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.17	Vert(CT) -0.06	2-6	>999	240			
BCLL 0.0 *	Rep Stress Incr YES		WB 0.00	Horz(CT) -0.00	4	n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL) 0.02	2-6	>999	240		Weight: 62 lb	FT = 20%

LUMBER-

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

REACTIONS.

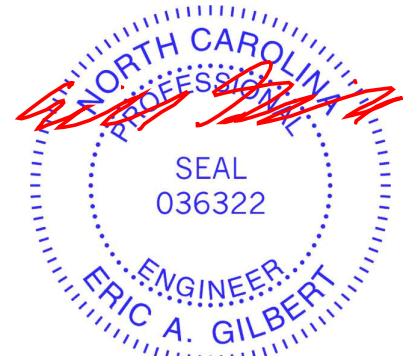
(size) 4=Mechanical, 6=Mechanical, 2=0-3-8
 Max Horz 2=207(LC 12)
 Max Uplift 4=-82(LC 19), 6=-199(LC 12)
 Max Grav 4=47(LC 12), 6=568(LC 19), 2=375(LC 1)

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

TOP CHORD 3-6=-510/326

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-8 to 3-4-5, Interior(1) 3-4-5 to 9-11-4 zone;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) Refer to girder(s) for truss to truss connections.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 6=199.



January 11, 2021

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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 56 Summerlin/Harnett	E15293405
J1120-5409	M1-GE	GABLE	1	1		

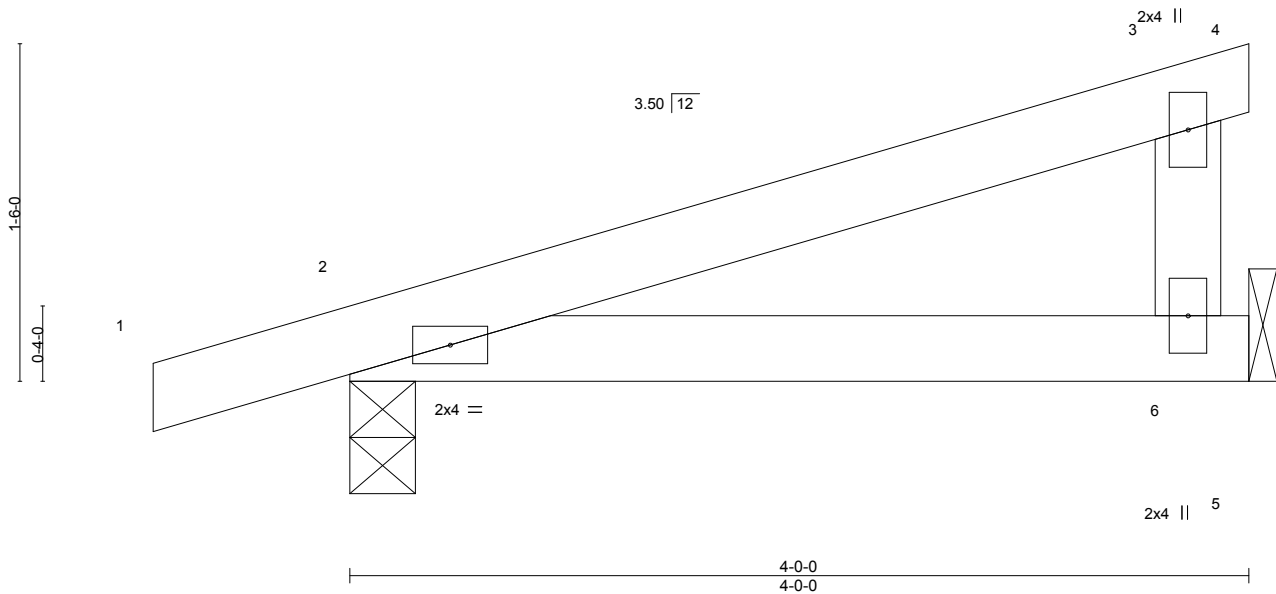
Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:23:02 2021 Page 1

ID:qH4S_SYhXXrmAJJV6MTTvyngLu-NaNdcyOlrTpe511A_RSCwRk4OAUvcjRbGttbXgzwTWd



Scale = 1:10.3



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.15	Vert(LL) -0.01	2-6	>999	360		MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.11	Vert(CT) -0.02	2-6	>999	240			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00		n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL) 0.02	2-6	>999	240			
								Weight: 15 lb	FT = 20%

LUMBER-

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

BRACING-

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

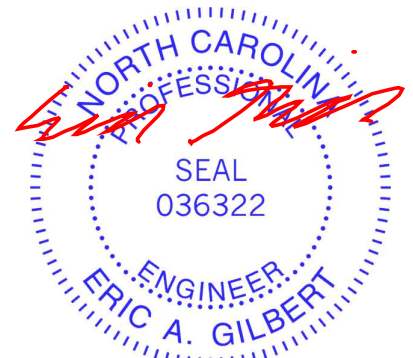
REACTIONS.

(size) 6=Mechanical, 2=0-3-8
 Max Horz 2=69(LC 8)
 Max Uplift 6=-87(LC 8), 2=-131(LC 8)
 Max Grav 6=146(LC 1), 2=213(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) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 2=131.



January 11, 2021

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818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293406
J1120-5409	M2	Monopitch	7	1	Job Reference (optional)	

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8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:23:02 2021 Page 1

ID:qH4S_SyHXXrmAJJVJ6MTTvyngLu-NaDncyOlrTpe511A_RSCwRK0rARbcjRbGttbXgzwtWd
6-0-0
6-0-0

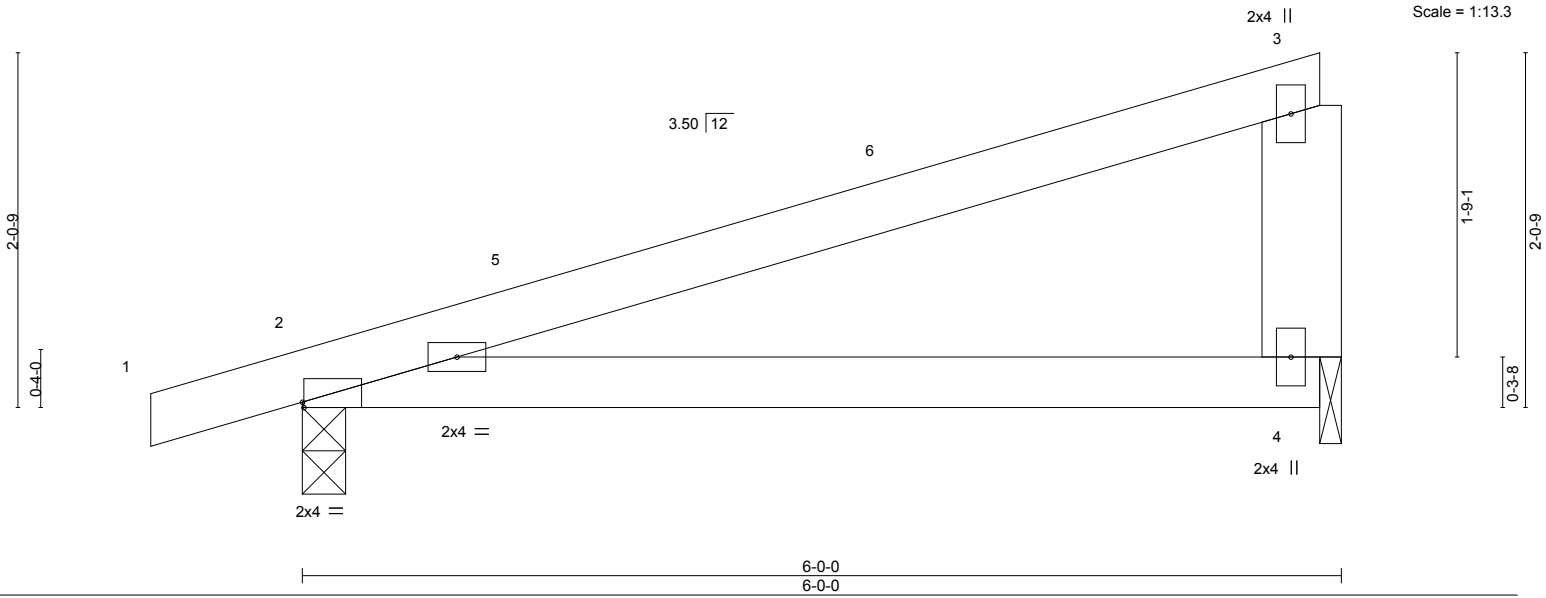


Plate Offsets (X,Y)-- [2:0-0-2,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.44	Vert(LL)	-0.05	2-4	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	-0.11	2-4	>635	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)	0.12	2-4	>573	240	Weight: 23 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-0, 4=0-1-8
Max Horz 2=67(LC 8)
Max Uplift 2=-118(LC 8), 4=-92(LC 8)
Max Grav 2=291(LC 1), 4=221(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; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 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=118.



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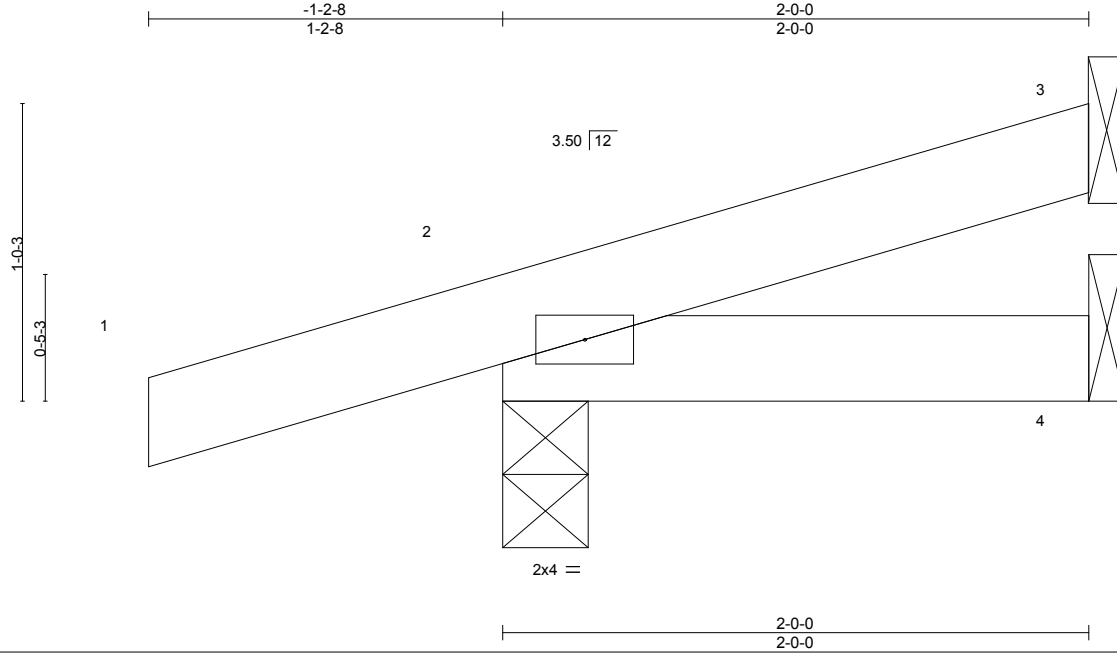


818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293407
J1120-5409	M3-GE	MONOPITCH	1	1		

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8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:23:03 2021 Page 1
ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-rmnAplPwcnxViScNY9zRSetGJzr1LAGkVXc846zwTWc



Scale = 1:7.9

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.07	Vert(LL) -0.00	2	>999	360		MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) -0.00	2-4	>999	240			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00	3	n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL) 0.00	2	****	240		Weight: 8 lb	FT = 20%

LUMBER-

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

BRACING-

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

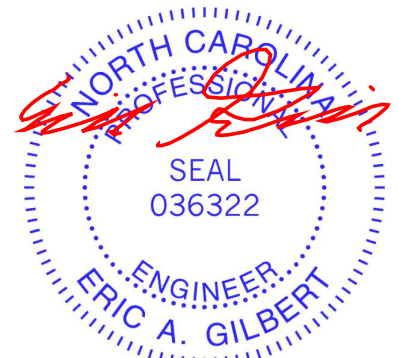
REACTIONS.

(size) 2=0-3-8, 4=Mechanical, 3=Mechanical
Max Horz 2=47(LC 8)
Max Uplift 2=-99(LC 8), 3=-29(LC 12)
Max Grav 2=176(LC 1), 4=39(LC 3), 3=35(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; 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) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 3.



January 11, 2021

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TRENCO
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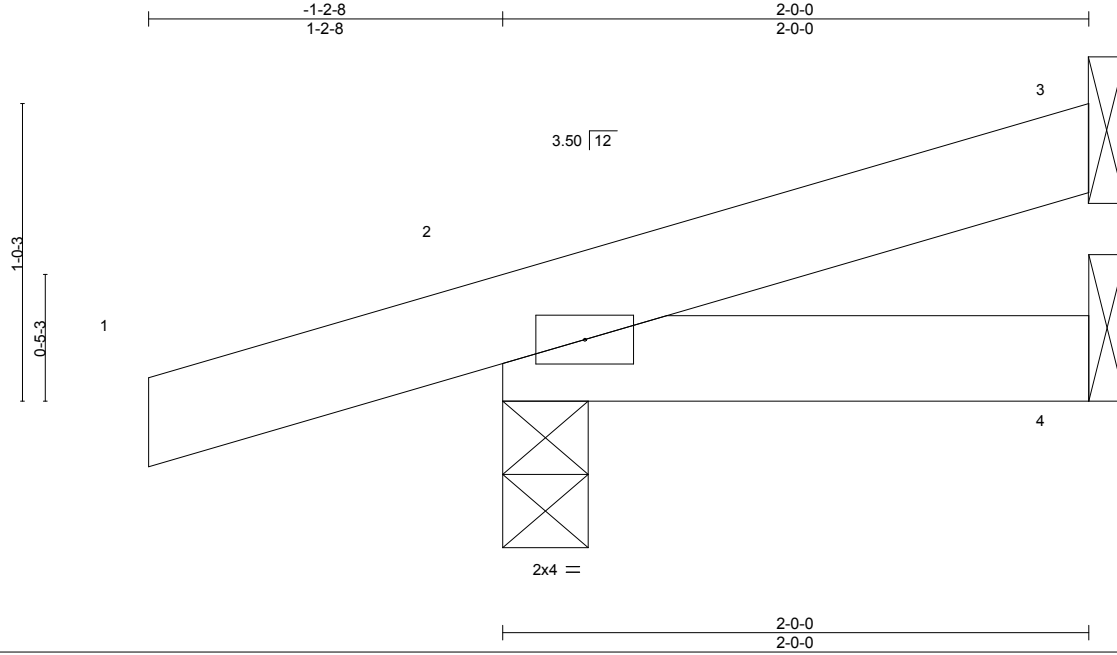
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293408
J1120-5409	M4	MONOPITCH	6	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:23:04 2021 Page 1

ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-JyLY0eQYN43MKcAZ5sVg?sPR3zBG4dwukBMicYzwTWb



Scale = 1:7.9

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 0.07	Vert(LL)	-0.00	2	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	2-4	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL)	0.00	2	****	240	Weight: 8 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 4=Mechanical, 3=Mechanical
Max Horz 2=34(LC 8)
Max Uplift 2=-64(LC 8), 3=-19(LC 12)
Max Grav 2=176(LC 1), 4=39(LC 3), 3=35(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) zone;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) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 3.



January 11, 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

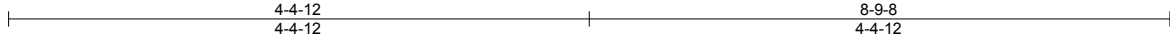


818 Soundside Road
Edenton, NC 27932

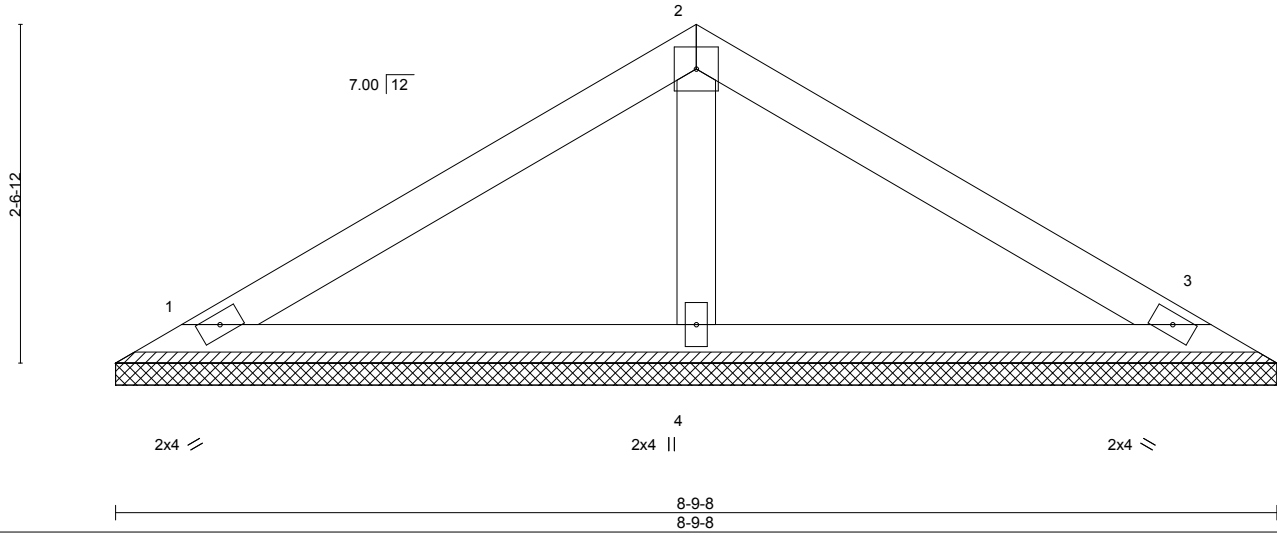
Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293409
J1120-5409	VB1	VALLEY	1	1		

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8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:23:05 2021 Page 1
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Scale = 1:17.4



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.21	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.11	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 29 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=8-9-8, 3=8-9-8, 4=8-9-8
 Max Horz 1=54(LC 11)
 Max Uplift 1=-26(LC 12), 3=-31(LC 13)
 Max Grav 1=162(LC 1), 3=162(LC 1), 4=293(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
- Gable requires continuous bottom chord bearing.
- 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.



January 11, 2021

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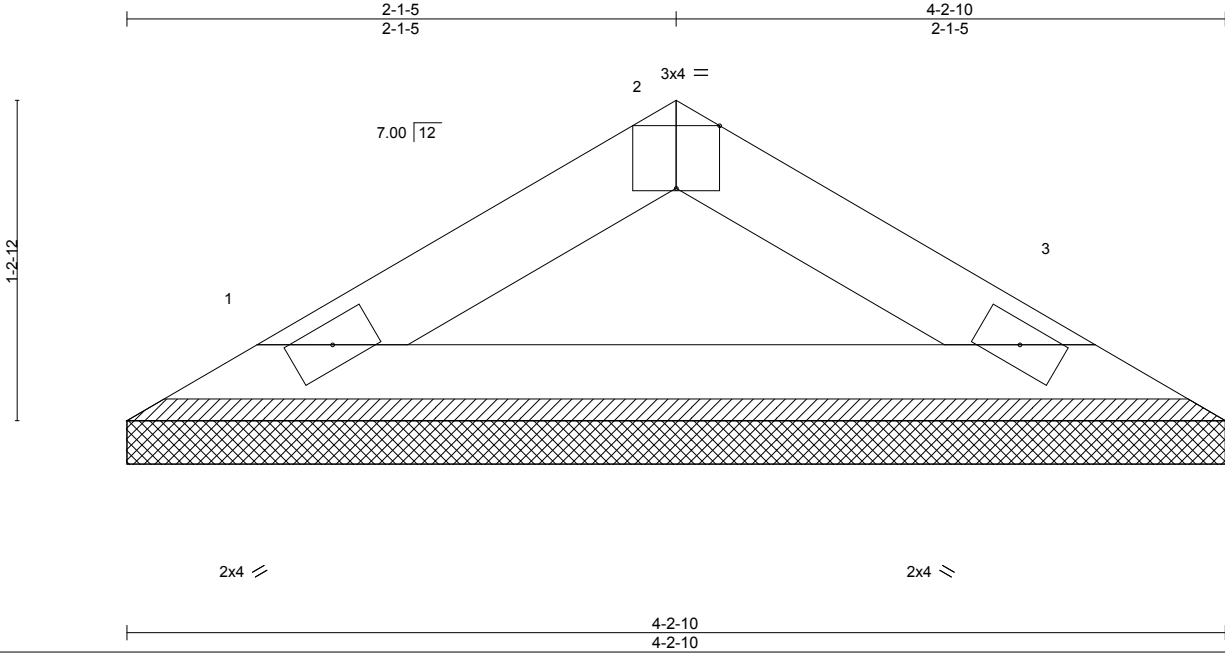
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 56 Summerlin/Harnett	E15293410
J1120-5409	VB2	VALLEY	1	1		

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8.330 s Oct 7 2020 MiTek Industries, Inc. Mon Jan 11 09:23:05 2021 Page 1

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Scale = 1:8.8

LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999	Weight: 12 lb FT = 20%		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a			
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P									

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

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

REACTIONS. (size) 1=4-2-10, 3=4-2-10
Max Horz 1=-22(LC 10)
Max Uplift 1=-7(LC 12), 3=-7(LC 13)
Max Grav 1=126(LC 1), 3=126(LC 1)

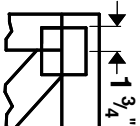
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- 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
 - Gable requires continuous bottom chord bearing.
 - 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.

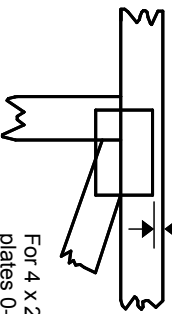


Symbols

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

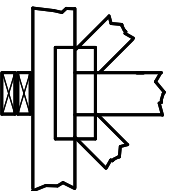
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



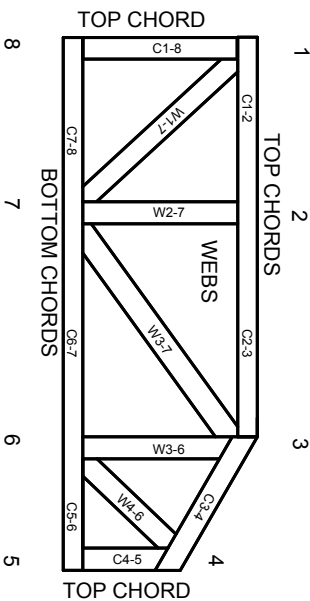
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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



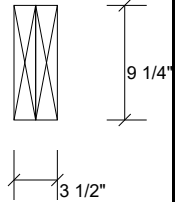
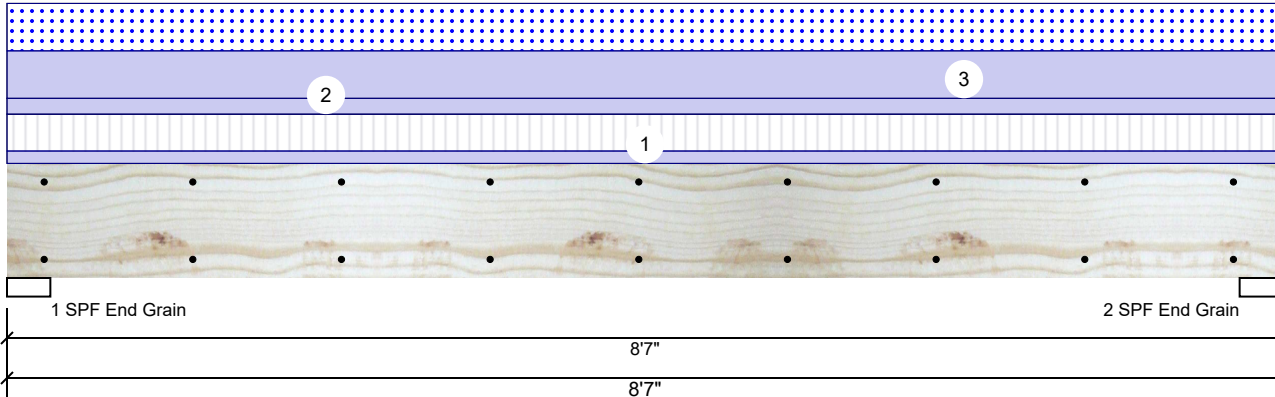
General Safety Notes

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.

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 2012
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	1202	2494	1545	0	0
2	1202	2494	1545	0	0

Bearings

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	43%	2494 / 2060	4554	L	D+0.75(L+S)
2 - SPF End Grain	3.500"	43%	2494 / 2060	4554	L	D+0.75(L+S)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	8757 ft-lb	4'3 1/2"	14423 ft-lb	0.607 (61%)	D+0.75(L+S)	L
Unbraced	8757 ft-lb	4'3 1/2"	14423 ft-lb	0.607 (61%)	D+0.75(L+S)	L
Shear	3493 lb	1'	7943 lb	0.440 (44%)	D+0.75(L+S)	L
LL Defl inch	0.116 (L/840)	4'3 9/16"	0.203 (L/480)	0.570 (57%)	0.75(L+S)	L
TL Defl inch	0.257 (L/380)	4'3 9/16"	0.271 (L/360)	0.950 (95%)	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 must be continuously braced.
- 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	94 PLF	280 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	360 PLF	0 PLF	360 PLF	0 PLF	0 PLF	A2
	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

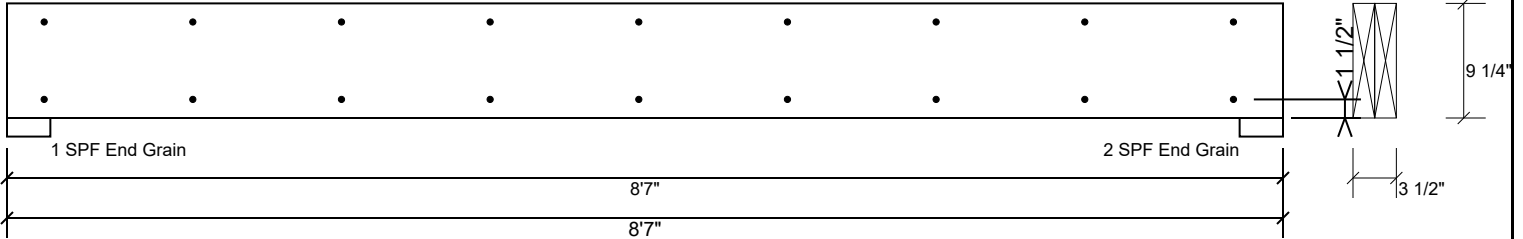
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us
ICC-ES: ESR-3633

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



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

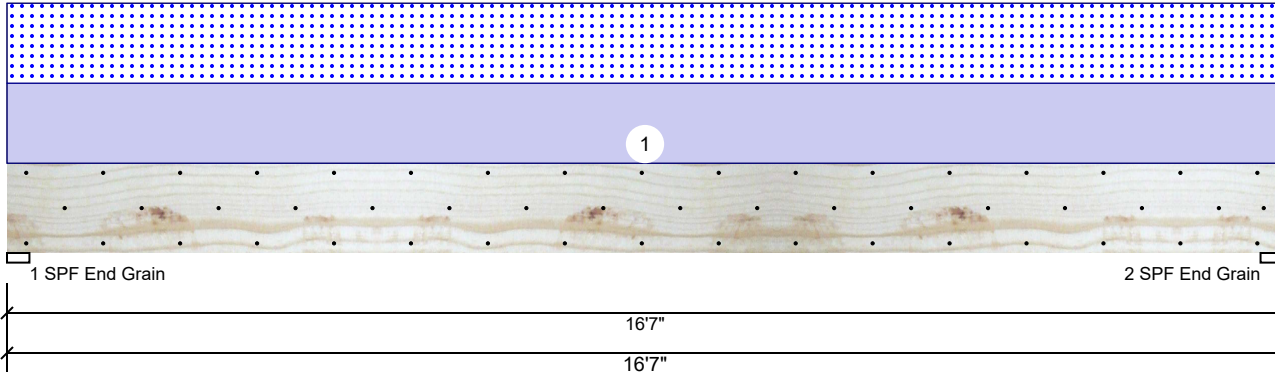
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GDH Kerto-S LVL 1.750" X 14.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC 2012
Deflection LL:	360	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	0	1127	1036	0	0
2	0	1127	1036	0	0

Bearings

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	20%	1127 / 1036	2163	L	D+S
2 - SPF End Grain	3.500"	20%	1127 / 1036	2163	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	8479 ft-lb	8'3 1/2"	31049 ft-lb	0.273 (27%)	D+S	L
Unbraced	8479 ft-lb	8'3 1/2"	8487 ft-lb	0.999 (100%)	D+S	L
Shear	1799 lb	15'2 1/4"	12021 lb	0.150 (15%)	D+S	L
LL Defl inch	0.128 (L/1508)	8'3 9/16"	0.538 (L/360)	0.240 (24%)	S	L
TL Defl inch	0.268 (L/722)	8'3 9/16"	0.806 (L/240)	0.330 (33%)	D+S	L

Design Notes

- 1 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 13'5 5/8" o.c.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	125 PLF	0 PLF	125 PLF	0 PLF	0 PLF	D1-GE
	Self Weight				11 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

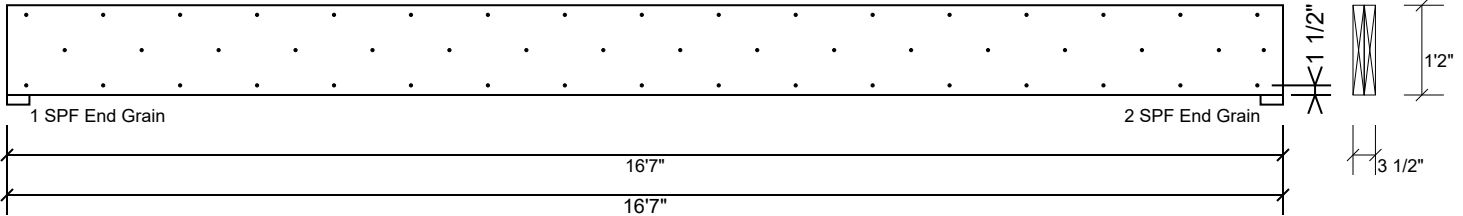
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GDH Kerto-S LVL 1.750" X 14.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

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

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

Notes

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
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6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/27/2023

Manufacturer Info

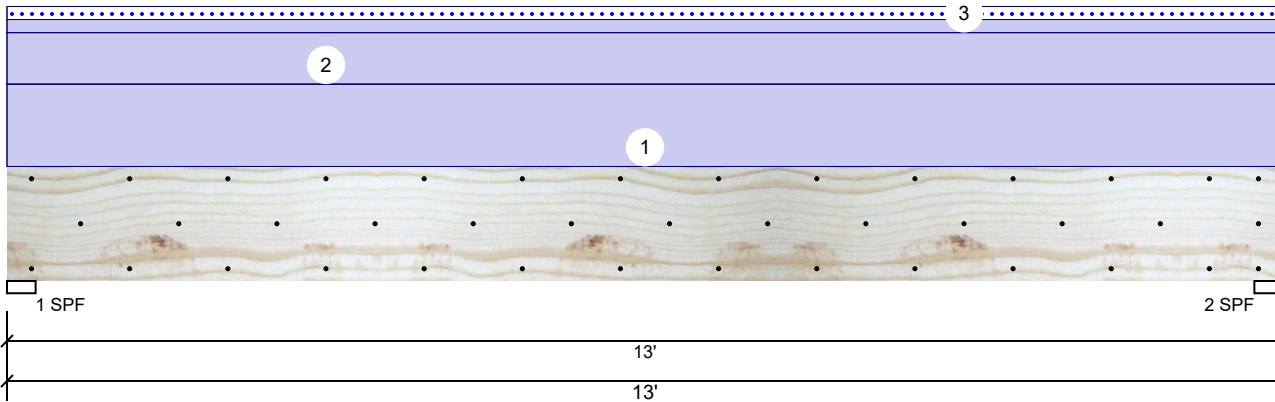
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28314
910-864-TRUS



BM1 Kerto-S LVL 1.750" X 14.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC 2012
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	1462	124	0	0
2	0	1462	124	0	0

Bearings

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	30%	1462 / 124	1585	L	D+S
2 - SPF	3.500"	30%	1462 / 124	1585	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4422 ft-lb	6'6"	24299 ft-lb	0.182 (18%)	D	Uniform
Unbraced	4795 ft-lb	6'6"	9008 ft-lb	0.532 (53%)	D+S	L
Shear	1170 lb	1'4 3/4"	9408 lb	0.124 (12%)	D	Uniform
LL Defl inch (L/20104)	0.007	6'6"	0.314 (L/480)	0.020 (2%)	S	L
TL Defl inch (L/1566)	0.096	6'6"	0.418 (L/360)	0.230 (23%)	D+S	L

Design Notes

- 1 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top 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	75 PLF	0 PLF	0 PLF	0 PLF	0 PLF	C1-GE
3	Uniform			Near Face	19 PLF	0 PLF	19 PLF	0 PLF	0 PLF	M4
	Self Weight				11 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

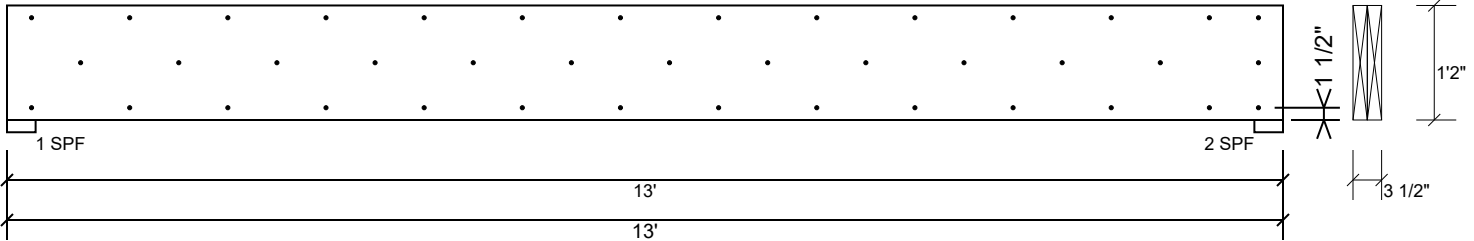
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Multi-Ply Analysis

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

Capacity	6.7 %
Load	19.0 PLF
Yield Limit per Foot	282.4 PLF
Yield Limit per Fastener	94.1 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	D+S
Duration Factor	1.15

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chemicals

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