

Trenco

818 Soundside Rd
Edenton, NC 27932

Re: J0920-4362
Precision/Lot 60 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: E14941232 thru E14941244

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

North Carolina COA: C-0844



October 5, 2020

Gilbert, Eric

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

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941232
J0920-4362	ET1	GABLE	1	1	Job Reference (optional)	

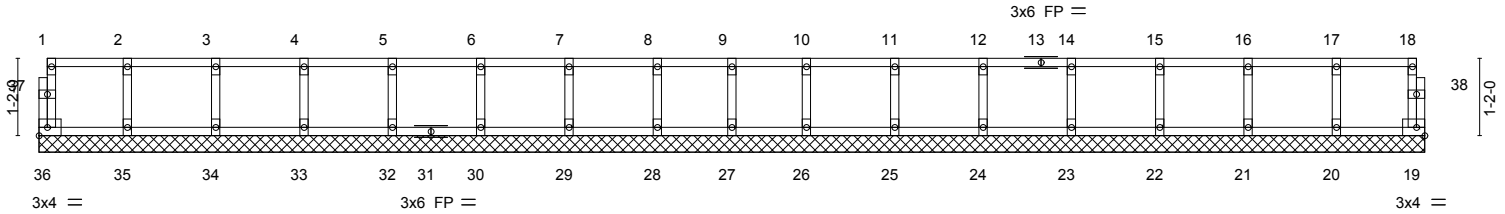
Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Jul 22 2020 MiTek Industries, Inc. Mon Oct 5 13:35:21 2020 Page 1
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0-1/8

0-1/8

Scale = 1:34.8



1-4-0	2-8-0	4-0-0	5-4-0	6-8-0	8-0-0	9-4-0	10-5-8	11-7-0	12-11-0	14-3-0	15-7-0	16-11-0	18-3-0	19-7-0	20-11-0	
1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-1-8	1-1-8	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP						
TCLL 40.0	Plate Grip DOL	1.00	TC 0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190						
TCDL 10.0	Lumber DOL	1.00	BC 0.01	Vert(CT)	n/a	-	n/a	999								
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	19	n/a	n/a								
BCDL 5.0	Code IRC2015/TPI2014		Matrix-R													
											Weight: 87 lb	FT = 20%F, 11%E				

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 20-11-0.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 36, 19, 27, 20, 21, 22, 23, 24, 25, 26, 35, 34, 33, 32, 30, 29, 28

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

NOTES-

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



October 5, 2020

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 60 Summerlin/Harnett	E14941233
J0920-4362	ET2	FLOOR SUPPORTED GABL	2	1	Job Reference (optional)	

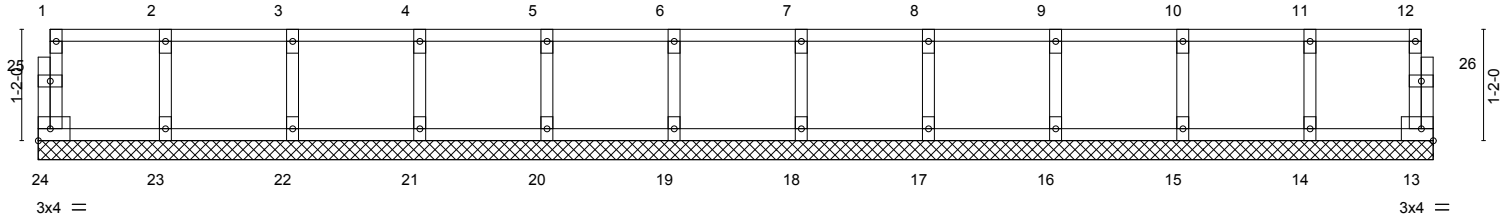
Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Jul 22 2020 MiTek Industries, Inc. Mon Oct 5 13:35:23 2020 Page 1
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0-1-8

0-1-8

Scale: 1/2"=1'



LOADING (psf)		SPACING-		CSI.		DEFL.				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	Weight: 62 lb FT = 20%F, 11%E		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	13	n/a	n/a			
BCDL	5.0	Code IRC2015/TPI2014		Matrix-R									

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 14-7-8.
 (lb) - Max Grav All reactions 250 lb or less at joint(s) 24, 13, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14

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

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



October 5, 2020

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 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941234
J0920-4362	ET3	GABLE	1	1	Job Reference (optional)	

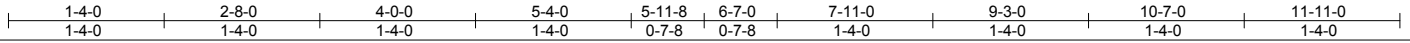
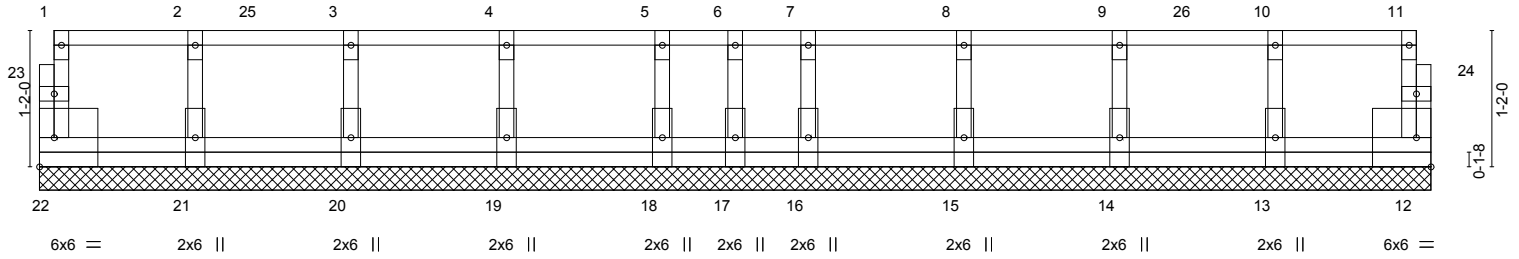
Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Jul 22 2020 MiTek Industries, Inc. Mon Oct 5 13:35:26 2020 Page 1
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0-1-8

0-1-8

Scale = 1:19.7



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.09	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.00	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	NO	WB 0.04	Horz(CT)	0.00	12	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-R						
								Weight: 68 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)
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 11-11-0.

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

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.

LOAD CASE(S) Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 12-22=-10, 1-11=-100
Concentrated Loads (lb)
Vert: 6=-48 8=-48 4=-48 25=-48 26=-48



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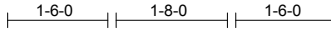
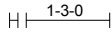
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941235
J0920-4362	F1	FLOOR	12	1		

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8.330 s Jul 22 2020 MiTek Industries, Inc. Mon Oct 5 13:35:29 2020 Page 1
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0-1-8



0-1-8
Scale = 1:34.5

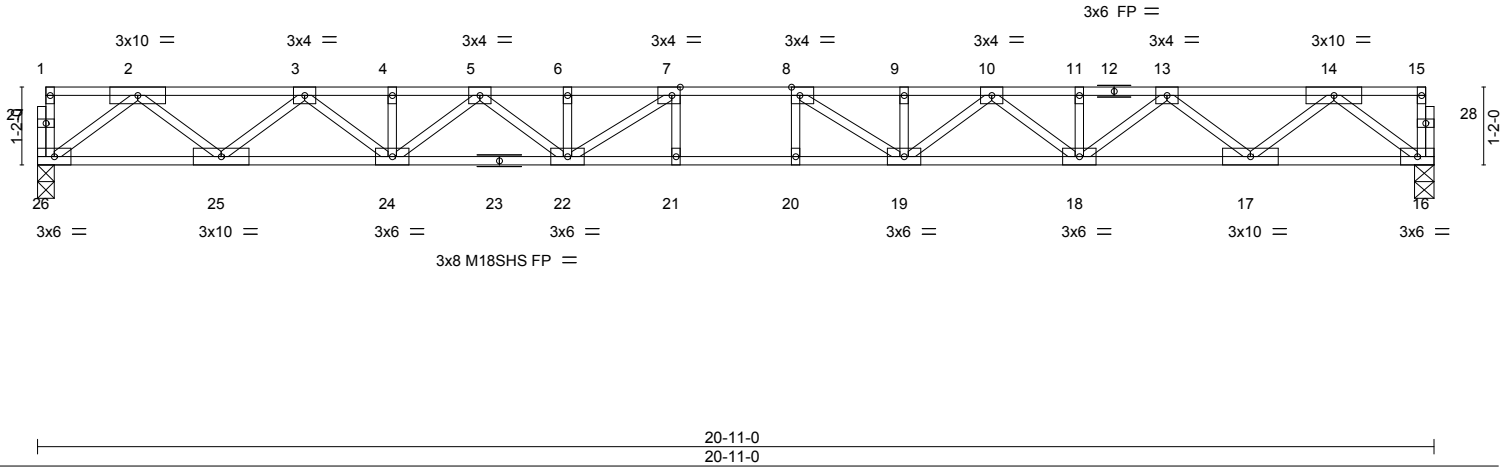


Plate Offsets (X,Y)-- [7:0-1-8,Edge], [8:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.24	Vert(LL)	-0.34	20-21	>728	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.49	Vert(CT)	-0.47	20-21	>529	M18SHS	244/190
BCLL 0.0	Rep Stress Incr YES	WB 0.51	Horz(CT)	0.07	16	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 108 lb	FT = 20%F, 11%E

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

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

REACTIONS. (size) 26=0-3-0, 16=0-3-8
Max Grav 26=904(LC 1), 16=904(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1967/0, 3-4=-3381/0, 4-5=-3381/0, 5-6=-4234/0, 6-7=-4234/0, 7-8=-4472/0,
8-9=-4234/0, 9-10=-4234/0, 10-11=-3381/0, 11-13=-3381/0, 13-14=-1967/0
BOT CHORD 25-26=0/1143, 24-25=0/2764, 22-24=0/3877, 21-22=0/4472, 20-21=0/4472, 19-20=0/4472,
18-19=0/3877, 17-18=0/2764, 16-17=0/1143
WEBS 2-26=-1431/0, 2-25=0/1073, 3-25=-1038/0, 3-24=0/788, 14-16=-1431/0, 14-17=0/1073,
13-17=-1038/0, 13-18=0/788, 10-18=-633/0, 10-19=0/456, 5-24=-633/0, 5-22=0/456,
7-22=-625/148, 8-19=-625/148

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All plates are MT20 plates unless otherwise indicated.
 - 3) All plates are 1.5x3 MT20 unless otherwise indicated.
 - 4) Plates checked for a plus or minus 1 degree rotation about its center.
 - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



October 5, 2020

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941236
J0920-4362	F2	FLOOR	15	1		

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Jul 22 2020 MiTek Industries, Inc. Mon Oct 5 13:35:31 2020 Page 1
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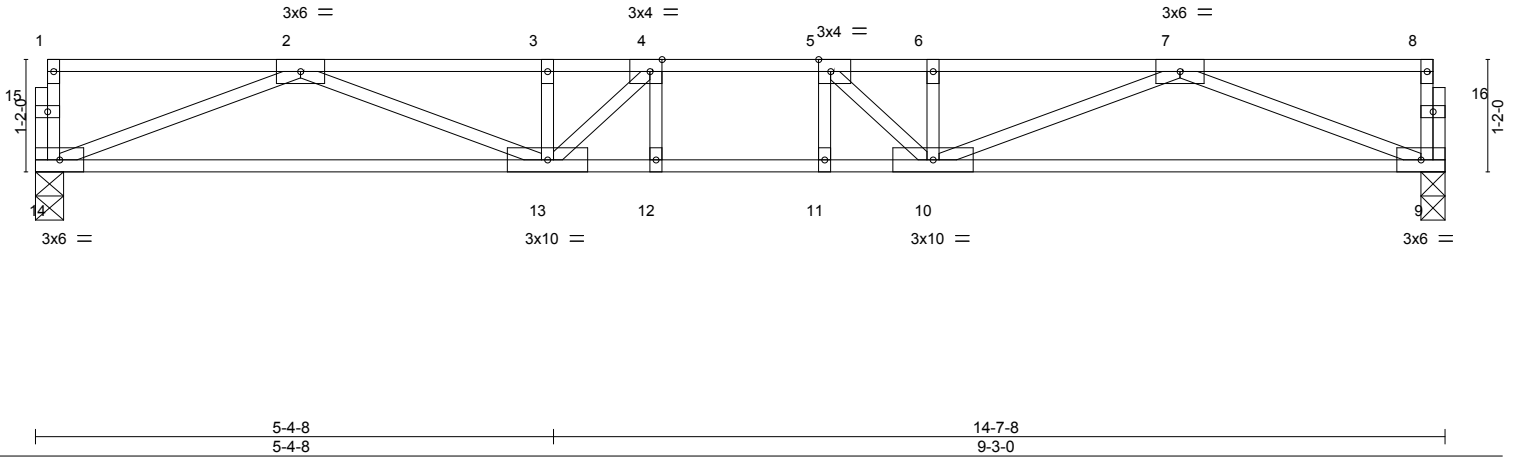
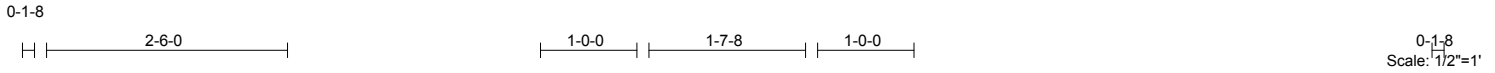


Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.32	Vert(LL)	-0.15 11-12	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.59	Vert(CT)	-0.21 11-12	>832	360		
BCLL 0.0	Rep Stress Incr	YES	WB 0.49	Horz(CT)	0.04 9	n/a	n/a		
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 73 lb	FT = 20%F, 11%E

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

REACTIONS. (size) 14=0-3-8, 9=0-3-0
 Max Grav 14=784(LC 1), 9=784(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2556/0, 3-4=-2556/0, 4-5=-2689/0, 5-6=-2556/0, 6-7=-2556/0
 BOT CHORD 13-14=0/1669, 12-13=0/2689, 11-12=0/2689, 10-11=0/2689, 9-10=0/1669
 WEBS 2-14=-1790/0, 2-13=0/957, 7-9=-1790/0, 7-10=0/957, 5-10=-454/124, 4-13=-454/124

- 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.



Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941238
J0920-4362	F4	FLOOR	3	1		

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Jul 22 2020 MiTek Industries, Inc. Mon Oct 5 13:35:34 2020 Page 1
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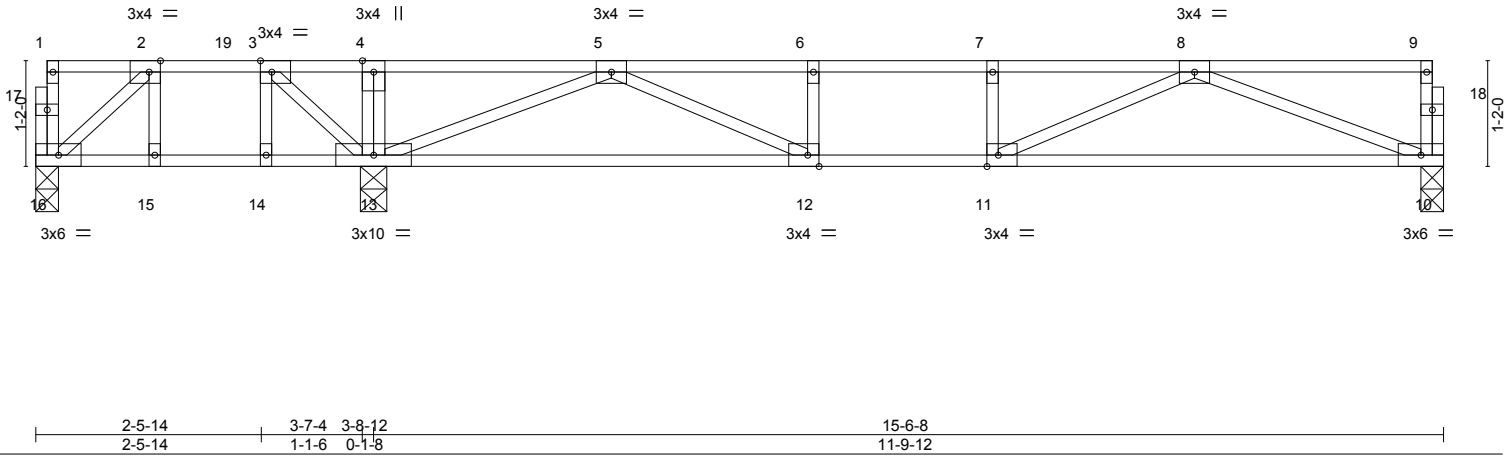
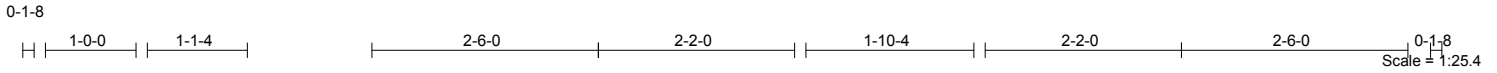


Plate Offsets (X,Y)-- [2:0-1-8,Edge], [3:0-1-8,Edge], [11:0-1-8,Edge], [12:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.44	Vert(LL) -0.12	10-11	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.48	Vert(CT) -0.18	10-11	>772	360		
BCLL 0.0	Rep Stress Incr NO	WB 0.38	Horz(CT) 0.02	10	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 78 lb	FT = 20%F, 11%E

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

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) 16=0-3-0, 10=0-3-0, 13=0-3-8
Max Grav 16=341(LC 10), 10=603(LC 7), 13=1139(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-269/12, 3-4=0/430, 4-5=0/440, 5-6=-1601/0, 6-7=-1601/0, 7-8=-1601/0
BOT CHORD 15-16=-12/269, 14-15=-12/269, 13-14=-12/269, 12-13=0/997, 11-12=0/1601, 10-11=0/1207
WEBS 4-13=-260/0, 8-10=-1292/0, 8-11=0/498, 5-13=-1396/0, 5-12=0/688, 2-16=-350/23, 3-13=-619/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All plates are 1.5x3 MT20 unless otherwise indicated.
 - 3) Plates checked for a plus or minus 1 degree rotation about its center.
 - 4) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
 - 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.

- LOAD CASE(S)** Standard
- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 10-16=-10, 1-19=-200, 3-19=-100, 3-4=-200, 4-9=-100
 - 2) Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 10-16=-10, 1-19=-200, 3-19=-100, 3-4=-200, 4-9=-100
 - 3) 1st Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 10-16=-10, 1-19=-200, 3-19=-100, 3-4=-200, 4-9=-20
 - 4) 2nd Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 10-16=-10, 1-19=-120, 3-19=-20, 3-4=-120, 4-9=-100
 - 5) 3rd unbalanced Dead: Lumber Increase=1.00, Plate Increase=1.00



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Continued on page 2

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

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941238
J0920-4362	F4	FLOOR	3	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Jul 22 2020 MiTek Industries, Inc. Mon Oct 5 13:35:34 2020 Page 2
 ID:PQVbflGVTT1lOnQ611pZG_z1SF7-7GwuFNA9XS0RWp6hJFzvsADwZTbJ?TvPy?U7fCyWS67

LOAD CASE(S) Standard

- Uniform Loads (plf)
 - Vert: 10-16=-10, 1-19=-200, 3-19=-100, 3-4=-200, 4-9=-20
- 6) 4th unbalanced Dead: Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 10-16=-10, 1-19=-120, 3-19=-20, 3-4=-120, 4-9=-100
- 7) 1st chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 10-16=-10, 1-19=-200, 3-19=-100, 3-4=-120, 4-9=-100
- 8) 2nd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 10-16=-10, 1-2=-120, 2-19=-200, 3-19=-100, 3-4=-200, 4-9=-100
- 9) 3rd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 10-16=-10, 1-19=-200, 3-19=-100, 3-4=-200, 4-7=-100, 7-9=-20
- 10) 4th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 10-16=-10, 1-19=-200, 3-19=-100, 3-4=-200, 4-6=-20, 6-9=-100
- 11) 5th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 10-16=-10, 1-19=-200, 3-19=-100, 3-4=-120, 4-9=-100
- 12) 6th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 10-16=-10, 1-2=-120, 2-19=-200, 3-19=-100, 3-4=-200, 4-9=-100
- 13) 7th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 10-16=-10, 1-19=-200, 3-19=-100, 3-4=-200, 4-7=-100, 7-9=-20
- 14) 8th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 10-16=-10, 1-19=-200, 3-19=-100, 3-4=-200, 4-6=-20, 6-9=-100

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

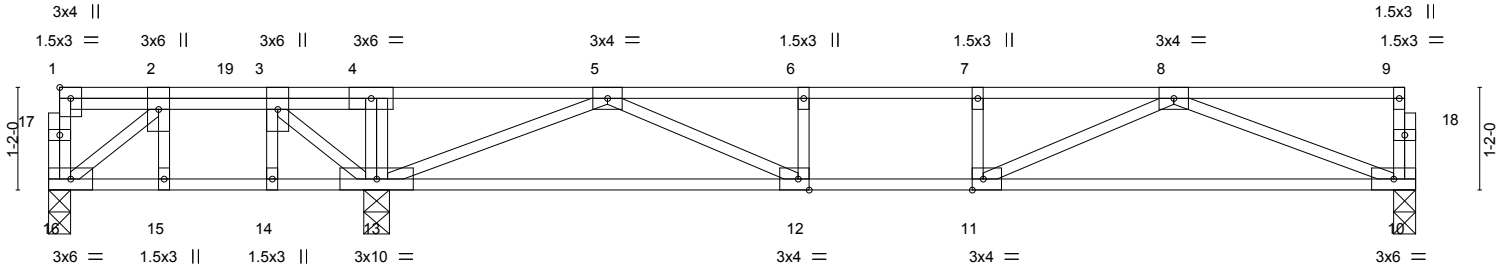


818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941239
J0920-4362	F4-GR	FLOOR GIRDER	1	1		

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Jul 22 2020 MiTek Industries, Inc. Mon Oct 5 13:35:35 2020 Page 1
ID:PQVbflGVTT1lOnQ611pZG_z1SF7-cSUGSjBnlI8l8zhttyU8PNI3ltXSkvnYBfDhBeyWS66



2-5-14	3-7-4	3-8-12	15-6-8
2-5-14	1-1-6	0-1-8	11-9-12

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [11:0-1-8,Edge], [12:0-1-8,Edge]					
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.48	Vert(LL) -0.12 10-11 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.49	Vert(CT) -0.19 10-11 >739 360		
BCLL 0.0	Rep Stress Incr NO	WB 0.40	Horz(CT) 0.02 10 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 82 lb	FT = 20%F, 11%E

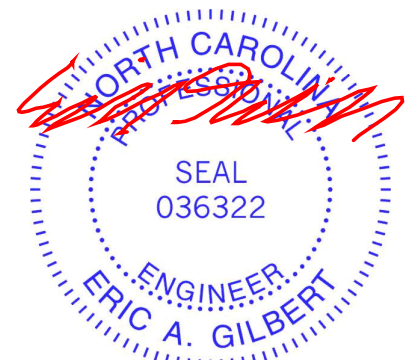
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1 (flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1 (flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 (flat)	

REACTIONS. (size) 16=0-3-0, 10=0-3-0, 13=0-3-8
Max Grav 16=476(LC 10), 10=579(LC 7), 13=1471(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-572/0, 3-4=0/748, 4-5=0/772, 5-6=-1467/0, 6-7=-1467/0, 7-8=-1467/0
BOT CHORD 15-16=0/572, 14-15=0/572, 13-14=0/572, 12-13=0/788, 11-12=0/1467, 10-11=0/1147
WEBS 8-10=-1227/0, 5-13=-1480/0, 5-12=0/759, 6-12=-268/0, 8-11=0/410, 2-16=-742/0, 3-13=-1266/0

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
 - Plates checked for a plus or minus 1 degree rotation about its center.
 - 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) 805 lb down at 2-1-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 10-16=-10, 1-9=-100
Concentrated Loads (lb)
Vert: 19=-725(B)



October 5, 2020

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941240
J0920-4362	F5	FLOOR	4	1		

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8.330 s Jul 22 2020 MiTek Industries, Inc. Mon Oct 5 13:35:35 2020 Page 1
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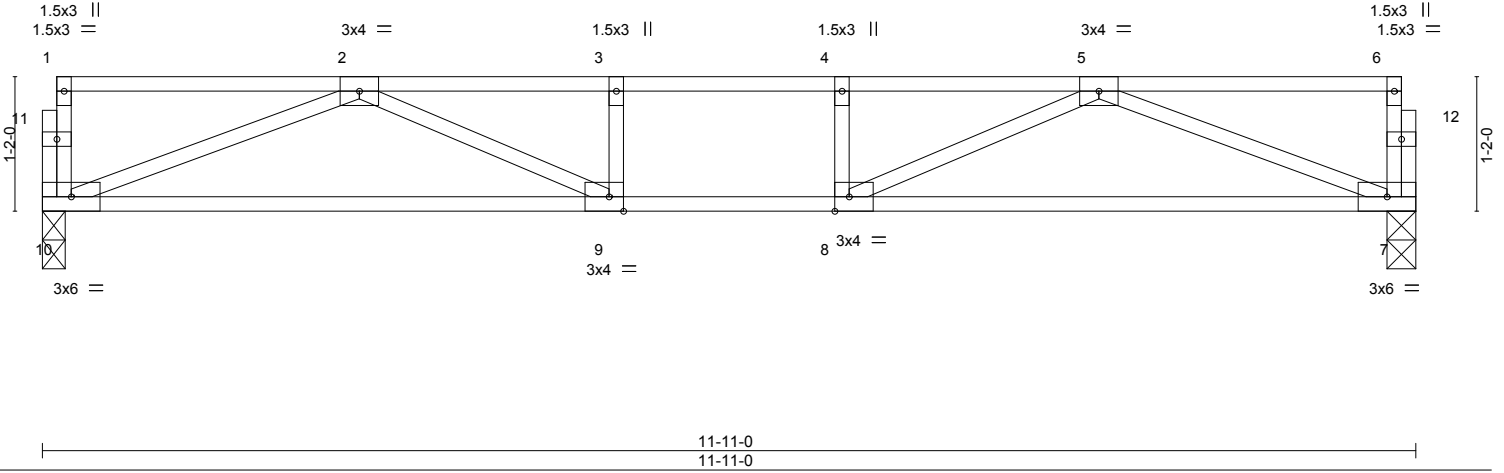
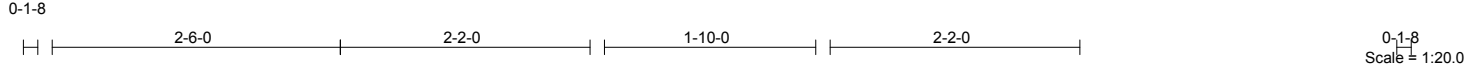


Plate Offsets (X,Y)-- [8:0-1-8,Edge], [9:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.35	Vert(LL)	-0.12	7-8	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.44	Vert(CT)	-0.18	9-10	>797		
BCLL 0.0	Lumber DOL 1.00	WB 0.38	Horz(CT)	0.02	7	n/a		
BCDL 5.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2015/TPI2014						Weight: 58 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=0-2-6, 7=0-3-0
Max Grav 10=635(LC 1), 7=635(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1782/0, 3-4=-1782/0, 4-5=-1782/0
BOT CHORD 9-10=0/1288, 8-9=0/1782, 7-8=0/1288
WEBS 5-7=-1379/0, 2-10=-1379/0, 2-9=0/658, 5-8=0/658

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



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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 60 Summerlin/Harnett	E14941241
J0920-4362	F6-GR	FLOOR GIRDER	1	1		

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8.330 s Jul 22 2020 MiTek Industries, Inc. Mon Oct 5 13:35:36 2020 Page 1
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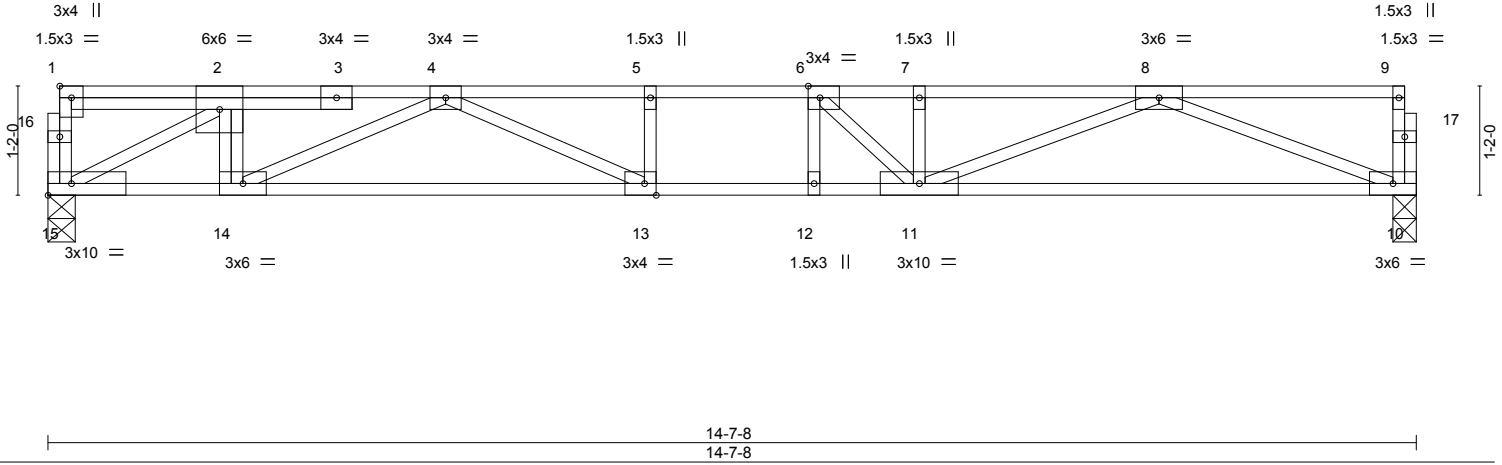
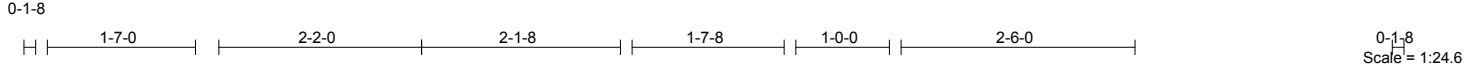


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [6:0-1-8,Edge], [13:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.75	Vert(LL) -0.21	13-14	>811	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.99	Vert(CT) -0.31	13-14	>557	360		
BCLL 0.0	Rep Stress Incr NO	WB 0.65	Horz(CT) 0.05	10	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 78 lb	FT = 20%F, 11%E

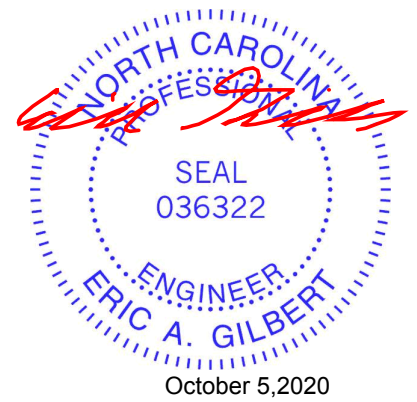
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1 (flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1 (flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 (flat)	

REACTIONS. (size) 15=0-3-8, 10=0-3-0
Max Grav 15=1389(LC 1), 10=873(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2392/0, 4-5=-3325/0, 5-6=-3325/0, 6-7=-2980/0, 7-8=-2980/0
BOT CHORD 14-15=0/2389, 13-14=0/3105, 12-13=0/3325, 11-12=0/3325, 10-11=0/1891
WEBS 8-10=-2028/0, 8-11=0/1176, 6-11=-766/0, 2-15=-2701/0, 2-14=0/375, 4-14=-786/0, 4-13=-103/377

- 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) 773 lb down at 1-11-12 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).

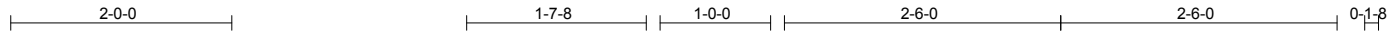
LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 10-15=-10, 1-9=-100
Concentrated Loads (lb)
Vert: 2=-693(F)



Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941242
J0920-4362	F7	FLOOR	2	1		

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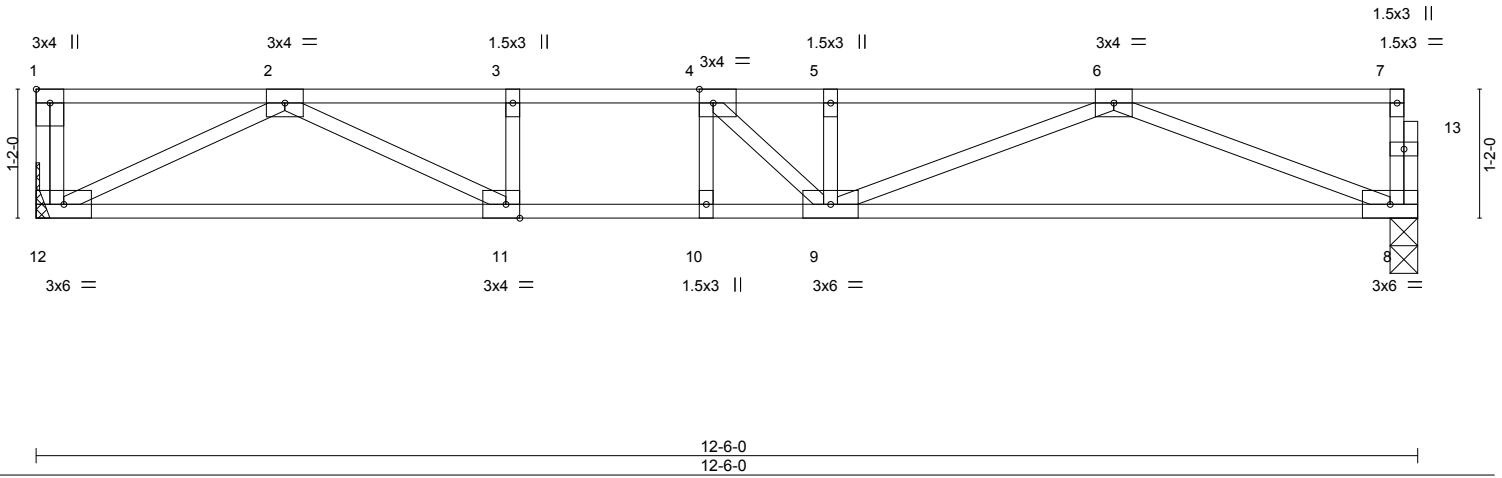


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [4:0-1-8,Edge], [11:0-1-8,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.42	Vert(LL)	-0.12 9-10	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.67	Vert(CT)	-0.16 9-10	>939	360		
BCLL 0.0	Rep Stress Incr	YES	WB 0.40	Horz(CT)	0.02 8	n/a	n/a		
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 63 lb	FT = 20%F, 11%E

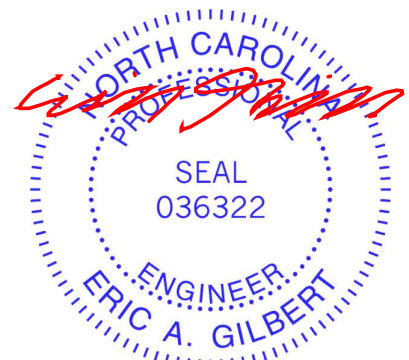
LUMBER-
TOP CHORD 2x4 SP No.1 (flat)
BOT CHORD 2x4 SP No.1 (flat)
WEBS 2x4 SP No.3 (flat)

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

REACTIONS. (size) 12=Mechanical, 8=0-3-0
Max Grav 12=674(LC 1), 8=668(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1882/0, 3-4=-1882/0, 4-5=-1991/0, 5-6=-1991/0
BOT CHORD 11-12=0/1164, 10-11=0/1882, 9-10=0/1882, 8-9=0/1377
WEBS 6-8=-1474/0, 6-9=0/663, 5-9=-277/0, 4-9=-207/328, 2-12=-1296/0, 2-11=0/827, 3-11=-270/0

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



October 5, 2020

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941243
J0920-4362	F8-GR	FLOOR GIRDER	1	1		

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8.330 s Jul 22 2020 MiTek Industries, Inc. Mon Oct 5 13:35:37 2020 Page 1
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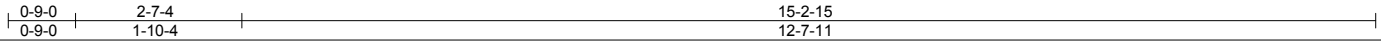
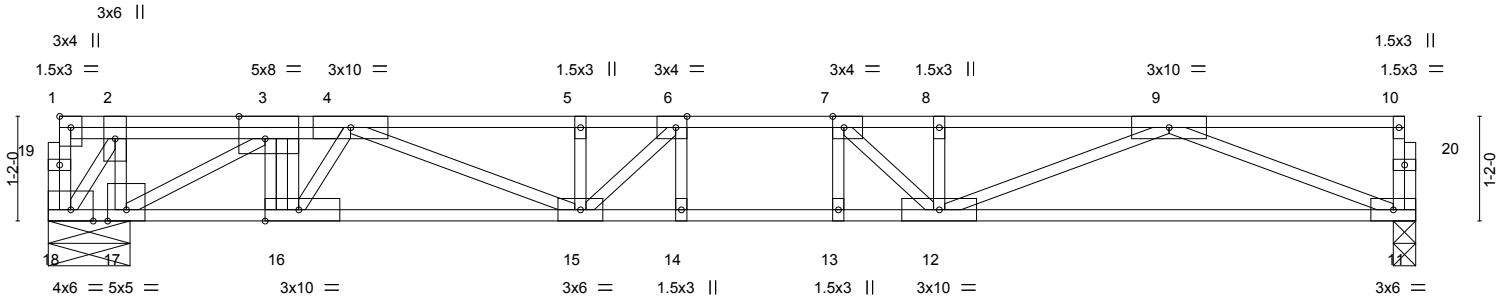
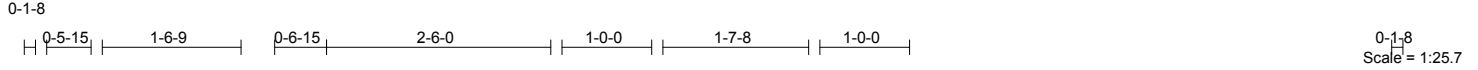


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [3:0-3-8,Edge], [6:0-1-8,Edge], [7:0-1-8,Edge], [16:0-4-8,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.72	Vert(LL)	-0.22 14-15	>817	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.70	Vert(CT)	-0.31 14-15	>587	360		
BCLL 0.0	Rep Stress Incr	NO	WB 0.63	Horz(CT)	0.05 11	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S					Weight: 86 lb	FT = 20%F, 11%E

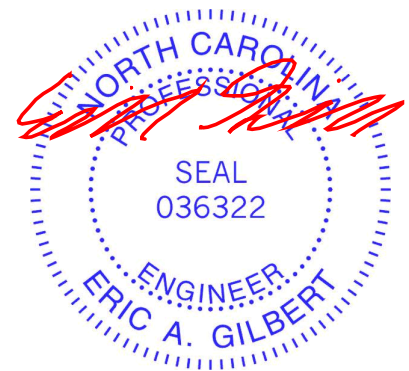
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP 2400F 2.0E(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (size) 18=0-10-15, 11=0-3-0
Max Grav 18=1400(LC 1), 11=930(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1023/0, 3-4=-3102/0, 4-5=-3845/0, 5-6=-3840/0, 6-7=-3689/0, 7-8=-3258/0, 8-9=-3258/0
BOT CHORD 17-18=0/1023, 16-17=0/3036, 15-16=0/3477, 14-15=0/3689, 13-14=0/3689, 12-13=0/3689, 11-12=0/2034
WEBS 9-11=-2182/0, 9-12=0/1321, 7-12=-845/0, 6-15=-91/504, 4-15=0/387, 3-17=-2314/0, 3-16=0/616, 4-16=-704/0, 2-17=0/1162, 2-18=-1798/0

- 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) 773 lb down at 2-7-3 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: 11-18=-10, 1-10=-100
Concentrated Loads (lb)
Vert: 3=-693(B)



October 5, 2020

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941244
J0920-4362	F9-GR	FLOOR GIRDER	1	1		

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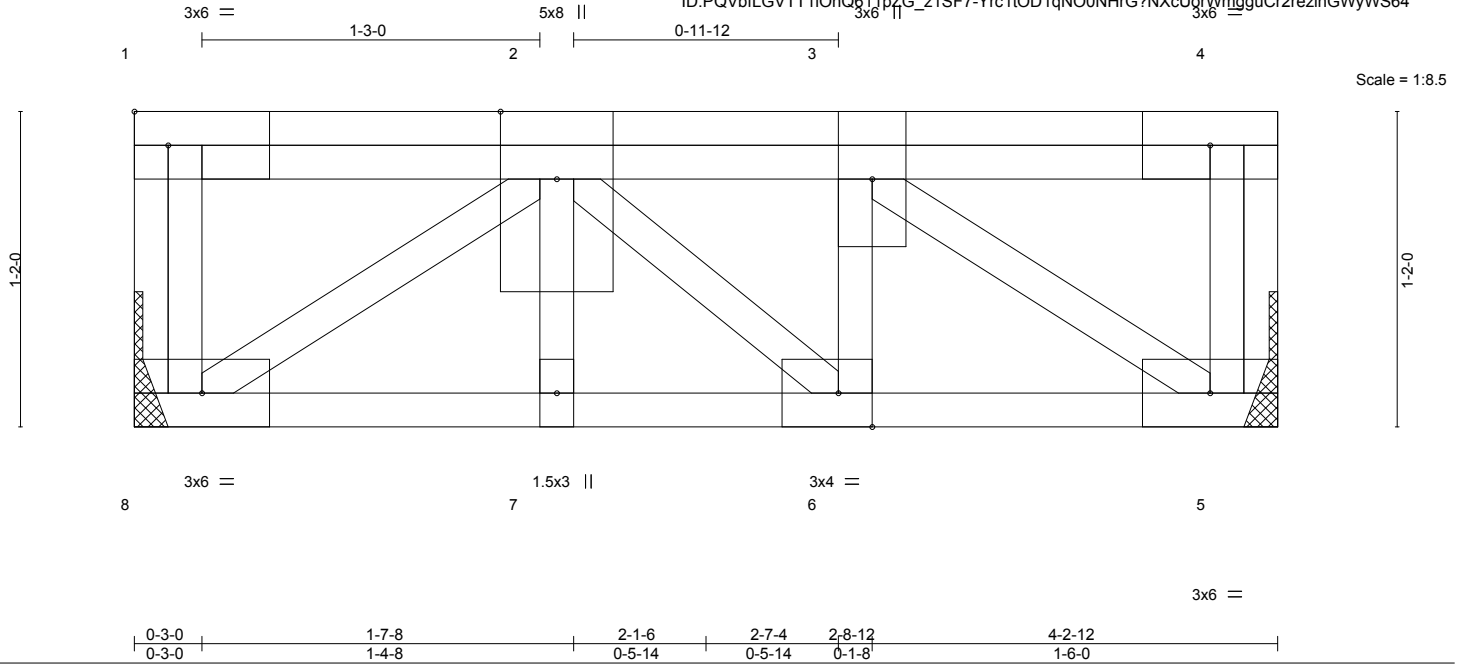


Plate Offsets (X,Y)-- [6:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.06	Vert(LL) -0.01	7	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.23	Vert(CT) -0.01	7	>999	360		
BCLL 0.0	Rep Stress Incr NO	WB 0.29	Horz(CT) 0.01	5	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-P					Weight: 32 lb	FT = 20%F, 11%E

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-2-12 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

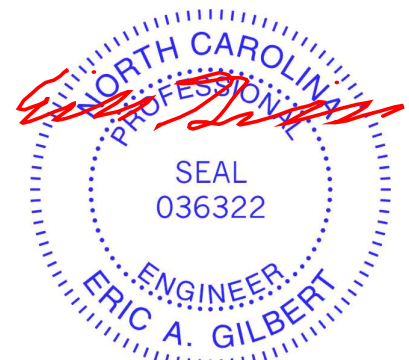
REACTIONS. (size) 8=Mechanical, 5=Mechanical
 Max Grav 8=793(LC 1), 5=793(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1028/0
 BOT CHORD 7-8=0/1022, 6-7=0/1022, 5-6=0/1028
 WEBS 2-8=-1237/0, 3-5=-1244/0

- NOTES-**
- Plates checked for a plus or minus 1 degree rotation about its center.
 - Refer to girder(s) for truss to truss connections.
 - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 574 lb down at 1-4-4, and 574 lb down at 2-10-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

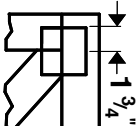
- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (plf)
 Vert: 5-8=-10, 1-4=-100
 Concentrated Loads (lb)
 Vert: 2=-574(B) 3=-574(B)



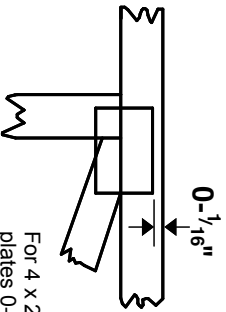
October 5, 2020

Symbols

PLATE LOCATION AND ORIENTATION



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



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



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

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

PLATE SIZE

4 X 4

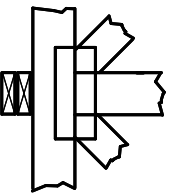
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



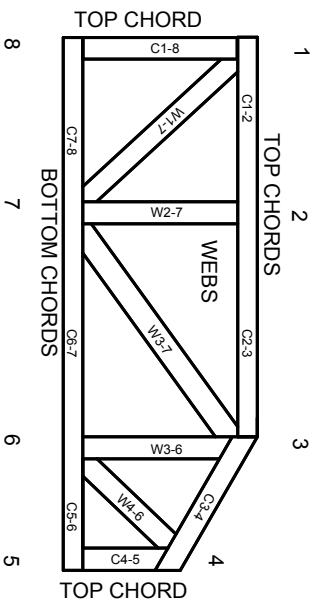
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1: 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/TP1 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 T or 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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 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: J0920-4361

Precision/Lot 60 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: E14941213 thru E14941231

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

North Carolina COA: C-0844



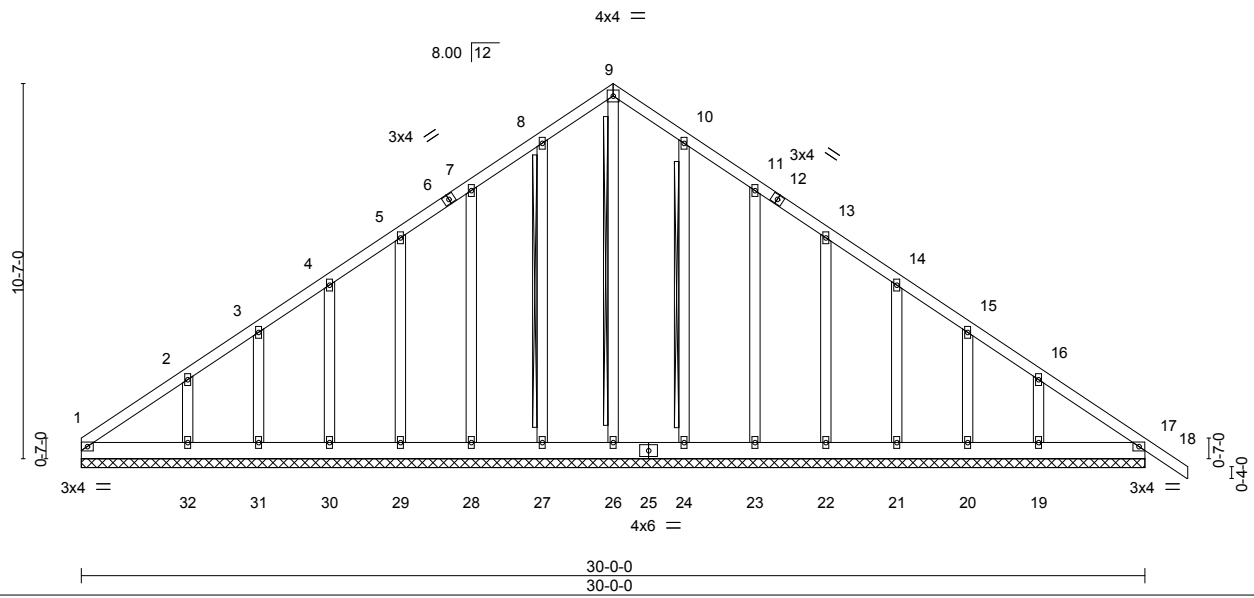
October 5, 2020

Gilbert, Eric

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

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941213
J0920-4361	A1-GE	COMMON SUPPORTED GAB	2	1		

Comtech, Inc., Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Mon Oct 5 13:35:13 2020 Page 1
 ID:PQVbflGVTT1lOnQ611pZG_z1SF7-Ds1ituSqWEOexQfVp5q1NlrPU?XPa1PJ7EuWQvyWS6S
 30-0-0 31-2-8 15-0-0 1-2-8



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	-0.00	18	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	18	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.14	Horz(CT)	0.01	17	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 234 lb	FT = 20%

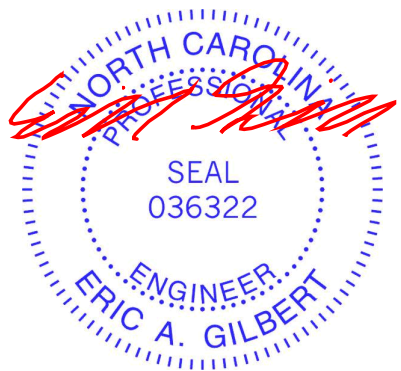
LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x6 SP No.1
 OTHERS 2x4 SP No.2

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 - 9-26, 8-27, 10-24
 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 30-0-0.
 (lb) - Max Horz 1=317(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 27, 28, 29, 30, 31, 24, 23, 22, 21, 20, 17 except
 32=154(LC 12), 19=134(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 26, 27, 28, 29, 30, 31, 24, 23, 22, 21, 20, 17 except
 32=281(LC 19), 19=251(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-317/232, 8-9=-236/267, 9-10=-236/267, 16-17=-254/177
 BOT CHORD 1-32=-179/275, 31-32=-179/275, 30-31=-179/275, 29-30=-179/275, 28-29=-179/275,
 27-28=-179/275, 26-27=-179/275, 24-26=-179/275, 23-24=-179/275, 22-23=-179/275,
 21-22=-179/275, 20-21=-179/275, 19-20=-179/275, 17-19=-179/275

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable 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) 1, 27, 28, 29, 30, 31, 24, 23, 22, 21, 20, 17 except (jt=lb) 32=154, 19=134.
 - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941214
J0920-4361	A2	FINK	10	1		

Comtech, Inc., Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Mon Oct 5 13:35:14 2020 Page 1
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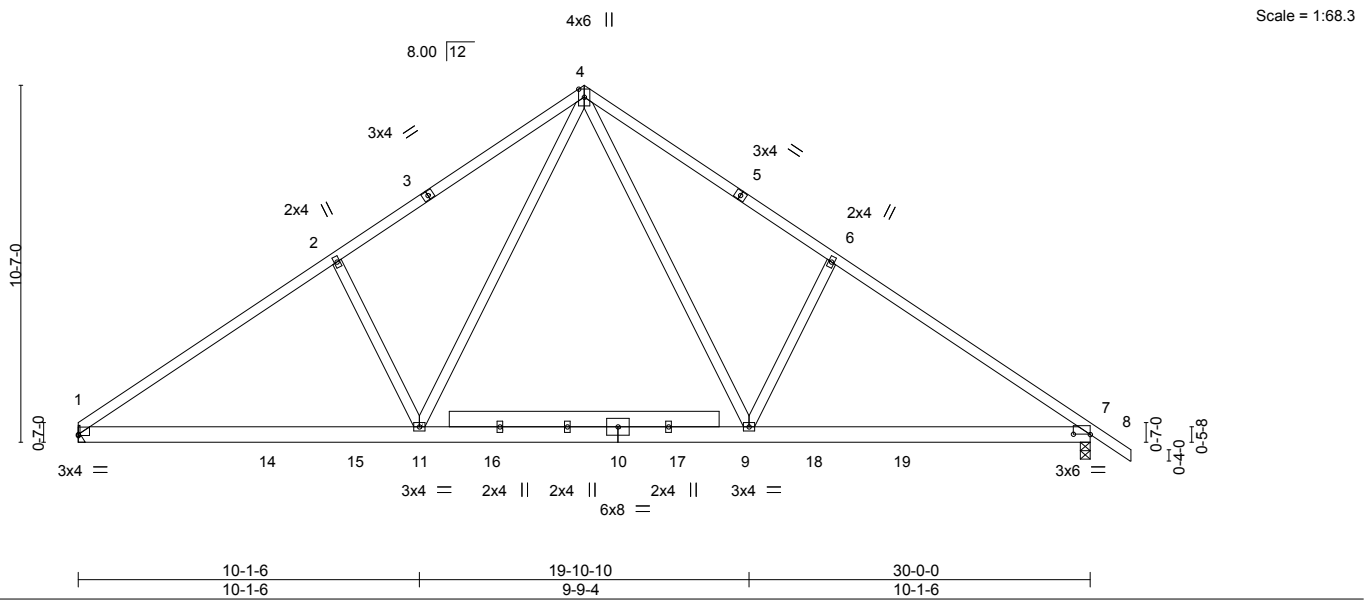


Plate Offsets (X,Y)-- [1:0-0-0,0-0-6], [7:0-6-0,0-0-2]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.60	Vert(LL) -0.13	9-11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.47	Vert(CT) -0.19	9-11	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.34	Horz(CT) 0.04	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) -0.05	7-9	>999	240	Weight: 194 lb	FT = 20%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 3-6-3 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=Mechanical, 7=0-3-8
 Max Horz 1=-254(LC 8)
 Max Uplift 1=-62(LC 12), 7=-81(LC 13)
 Max Grav 1=1346(LC 19), 7=1424(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-1954/318, 2-4=-1805/411, 4-6=-1795/409, 6-7=-1945/317
 BOT CHORD 1-11=-134/1693, 9-11=0/1100, 7-9=-128/1510
 WEBS 2-11=-489/286, 4-11=-153/939, 4-9=-149/923, 6-9=-473/275

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



October 5, 2020

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941215
J0920-4361	A3	FINK	2	1		

Comtech, Inc., Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Mon Oct 5 13:35:16 2020 Page 1

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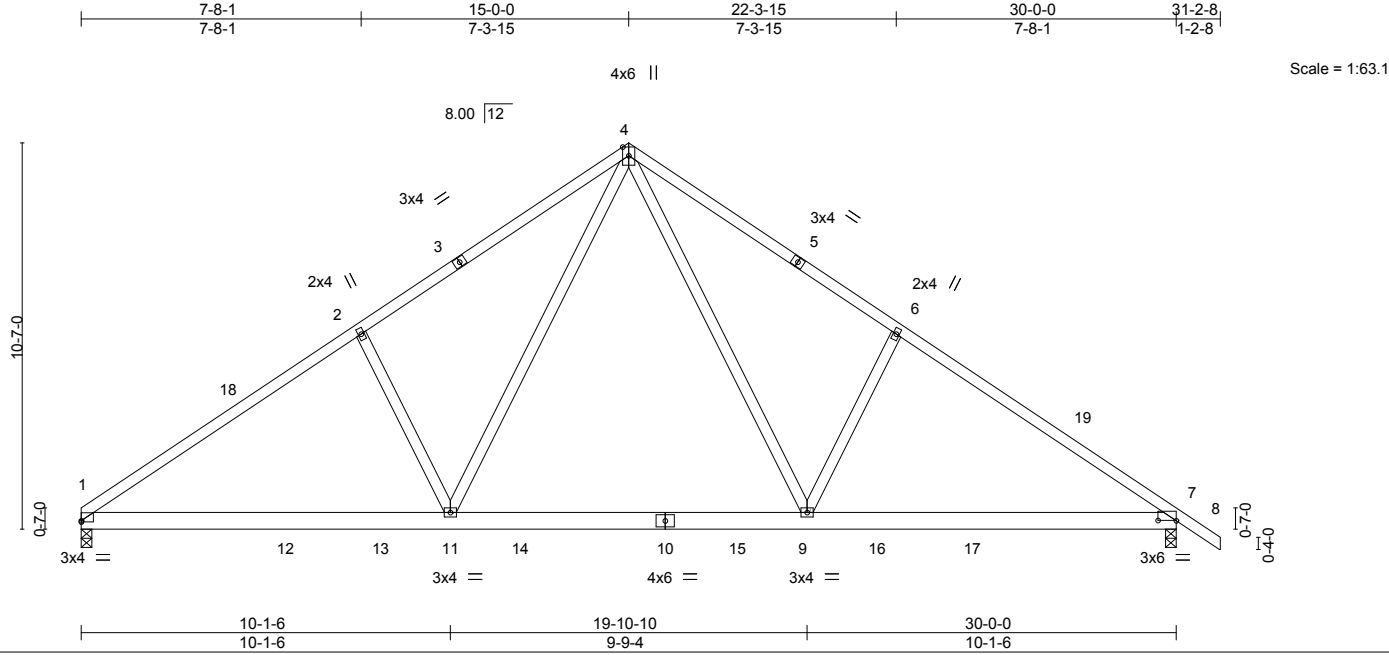


Plate Offsets (X,Y)-- [1:0-0-0,0-0-6], [7:0-6-0,0-0-2]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.59	Vert(LL)	-0.14 9-11	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.48	Vert(CT)	-0.20 9-11	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.37	Horz(CT)	0.04 7	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	-0.05 7-9	>999	240		
	Code IRC2015/TPI2014						Weight: 175 lb	FT = 20%

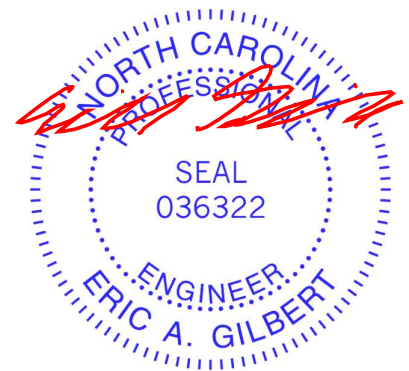
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-6-5 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=-254(LC 8)
Max Uplift 1=-62(LC 12), 7=-81(LC 13)
Max Grav 1=1355(LC 19), 7=1432(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1966/368, 2-4=-1818/463, 4-6=-1811/446, 6-7=-1962/355
BOT CHORD 1-11=-158/1701, 9-11=0/1108, 7-9=-156/1523
WEBS 2-11=-484/301, 4-11=-166/944, 4-9=-164/936, 6-9=-473/292

- 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 15-0-0, Exterior(2) 15-0-0 to 19-4-13, Interior(1) 19-4-13 to 31-2-6 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.



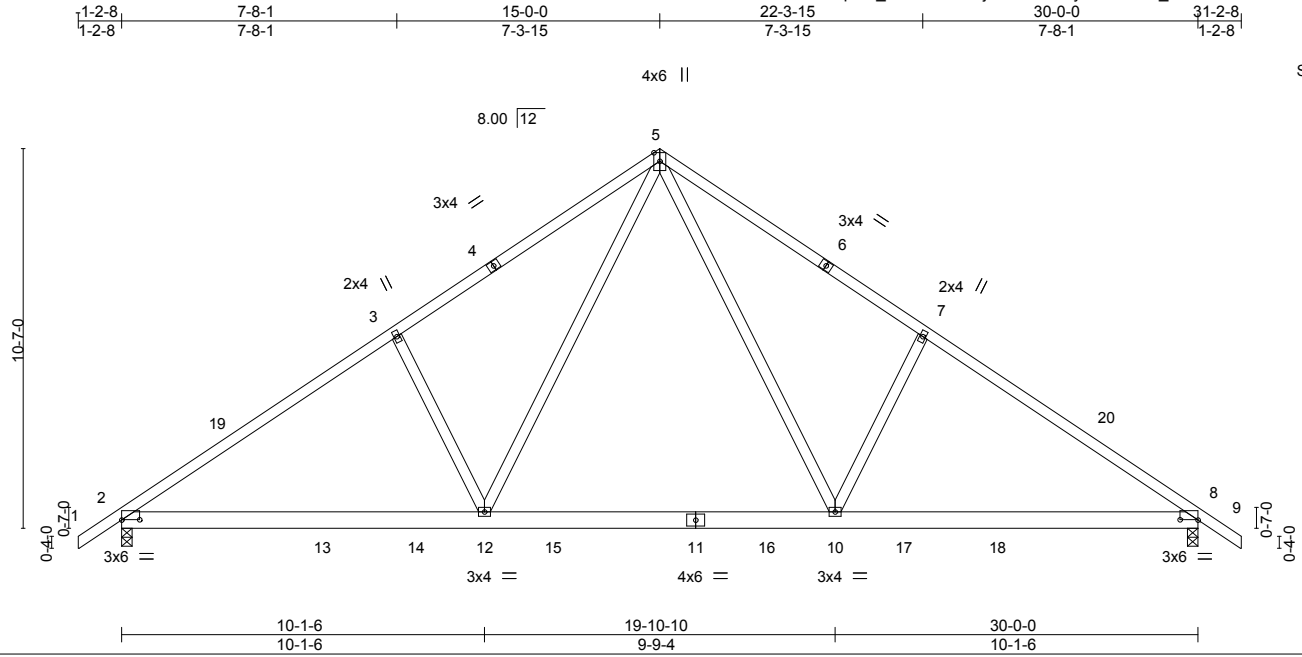
October 5, 2020

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941216
J0920-4361	A4	FINK	2	1		

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8.330 s Jul 22 2020 MiTek Industries, Inc. Mon Oct 5 13:35:17 2020 Page 1

ID:PQVbflGVTT1lOnQ611pZG_z1SF7-5dGDjGVKacI3P1yG2xvzXa0_3dnQWnzv2sskZhyWS60



Scale: 3/16"=1'

Plate Offsets (X,Y)-- [2:0-6-0,0-0-2], [6:0-0-0,0-0-0], [8:0-6-0,0-0-2]

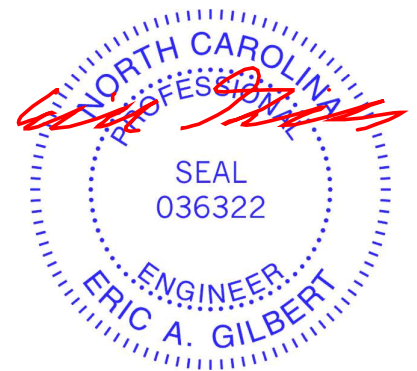
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.55	Vert(LL) -0.14	10-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.47	Vert(CT) -0.20	10-12	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.36	Horz(CT) 0.04	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05	2-12	>999	240		
							Weight: 177 lb	FT = 20%

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

REACTIONS. (size) 2=0-3-8, 8=0-3-8
 Max Horz 2=-259(LC 10)
 Max Uplift 2=-81(LC 12), 8=-81(LC 13)
 Max Grav 2=1431(LC 19), 8=1431(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1960/353, 3-5=-1809/444, 5-7=-1809/444, 7-8=-1960/353
 BOT CHORD 2-12=-135/1690, 10-12=0/1106, 8-10=-150/1521
 WEBS 3-12=-473/291, 5-12=-163/935, 5-10=-163/935, 7-10=-473/291

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-6 to 3-2-7, Interior(1) 3-2-7 to 15-0-0, Exterior(2) 15-0-0 to 19-4-13, Interior(1) 19-4-13 to 31-2-6 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



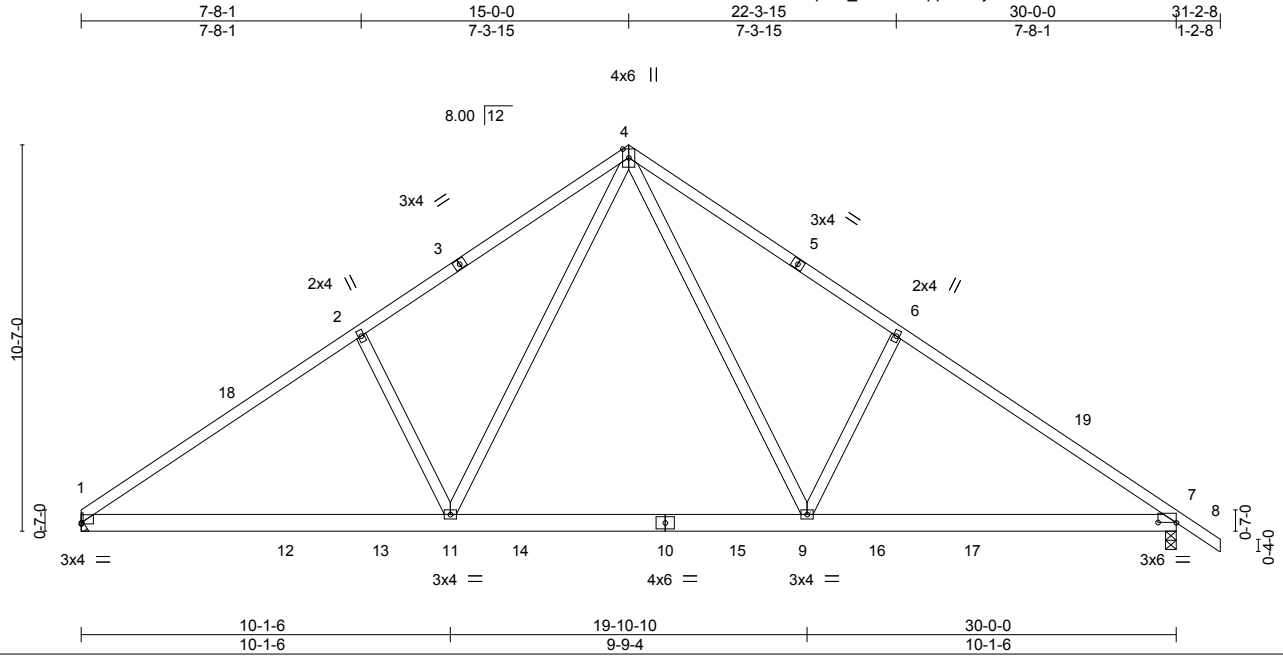
October 5, 2020

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941217
J0920-4361	A5	FINK	5	1		

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Jul 22 2020 MiTek Industries, Inc. Mon Oct 5 13:35:18 2020 Page 1

ID:PQVbflGVTT1lOnQ611pZG_z1SF7-ZqpbxcWyKwtw1BXsbfQC4oY8107dFE22HWcH57yWS6N



Scale = 1:63.1

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.60	Vert(LL)	-0.14 9-11	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.48	Vert(CT)	-0.20 9-11	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.37	Horz(CT)	0.04 7	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	-0.05 7-9	>999	240		
	Code IRC2015/TPI2014						Weight: 175 lb	FT = 20%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 3-5-13 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=Mechanical, 7=0-3-8
 Max Horz 1=-254(LC 10)
 Max Uplift 1=-62(LC 12), 7=-81(LC 13)
 Max Grav 1=1356(LC 19), 7=1434(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-1974/370, 2-4=-1825/464, 4-6=-1814/447, 6-7=-1965/355
 BOT CHORD 1-11=-159/1709, 9-11=0/1111, 7-9=-157/1526
 WEBS 2-11=-489/302, 4-11=-167/951, 4-9=-164/935, 6-9=-473/292

- 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) 0-1-4 to 4-6-1, Interior(1) 4-6-1 to 15-0-0, Exterior(2) 15-0-0 to 19-4-13, Interior(1) 19-4-13 to 31-2-6 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) 1, 7.



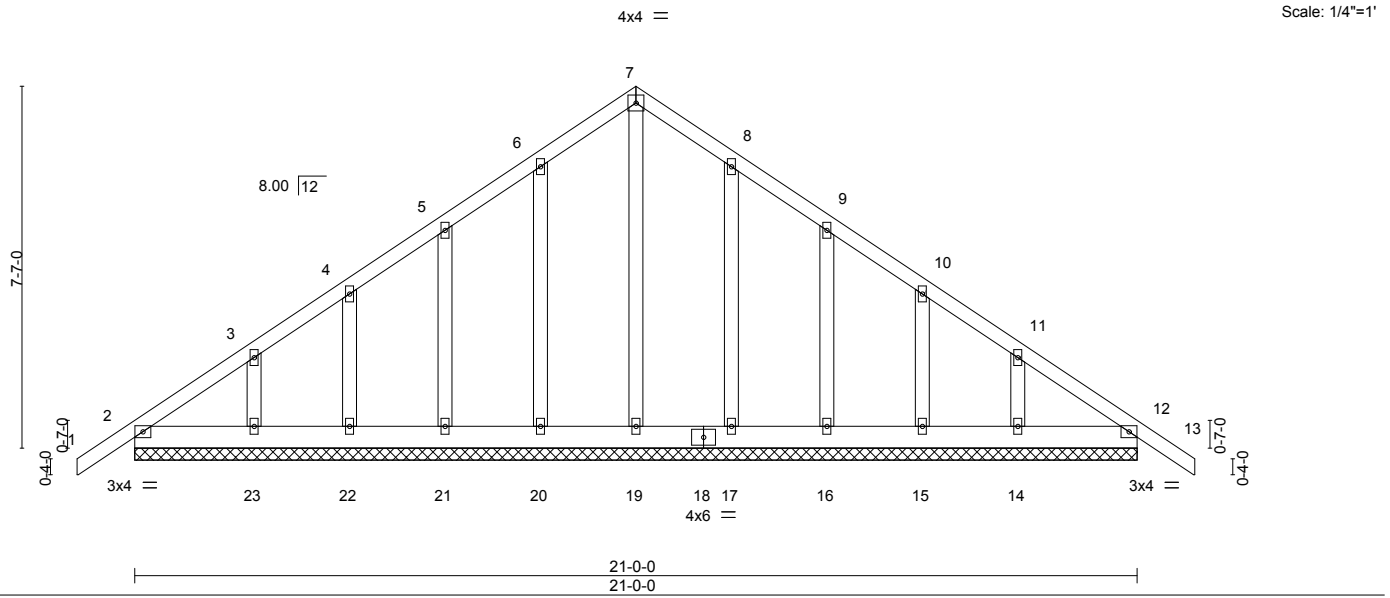
October 5, 2020

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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941218
J0920-4361	B1-GE	GABLE	1	1		

Comtech, Inc., Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Mon Oct 5 13:35:20 2020 Page 1
 ID:PQVbflGVTT11OnQ611pZG_z1SF7-WCyLMHYDsX7eGVhrj3Sg9DebsqwCjCYLkq5OA0yWS6L
 21-0-0 22-2-8
 10-6-0 1-2-8



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.07	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(LL) -0.00 13 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.12	Vert(CT) -0.00 13 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 12 n/a n/a		
	Code IRC2015/TPI2014			Weight: 144 lb	FT = 20%

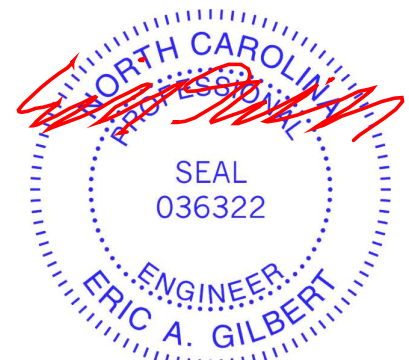
LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x6 SP No.1
 OTHERS 2x4 SP No.2

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

REACTIONS. All bearings 21-0-0.
 (lb) - Max Horz 2=234(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 21, 22, 17, 16, 15, 12 except 23=-112(LC 12), 14=-110(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 2, 19, 20, 21, 22, 23, 17, 16, 15, 12, 14

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) All plates are 2x4 MT20 unless otherwise indicated.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Gable studs spaced at 2-0-0 oc.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20, 21, 22, 17, 16, 15, 12 except (jt=lb) 23=112, 14=110.



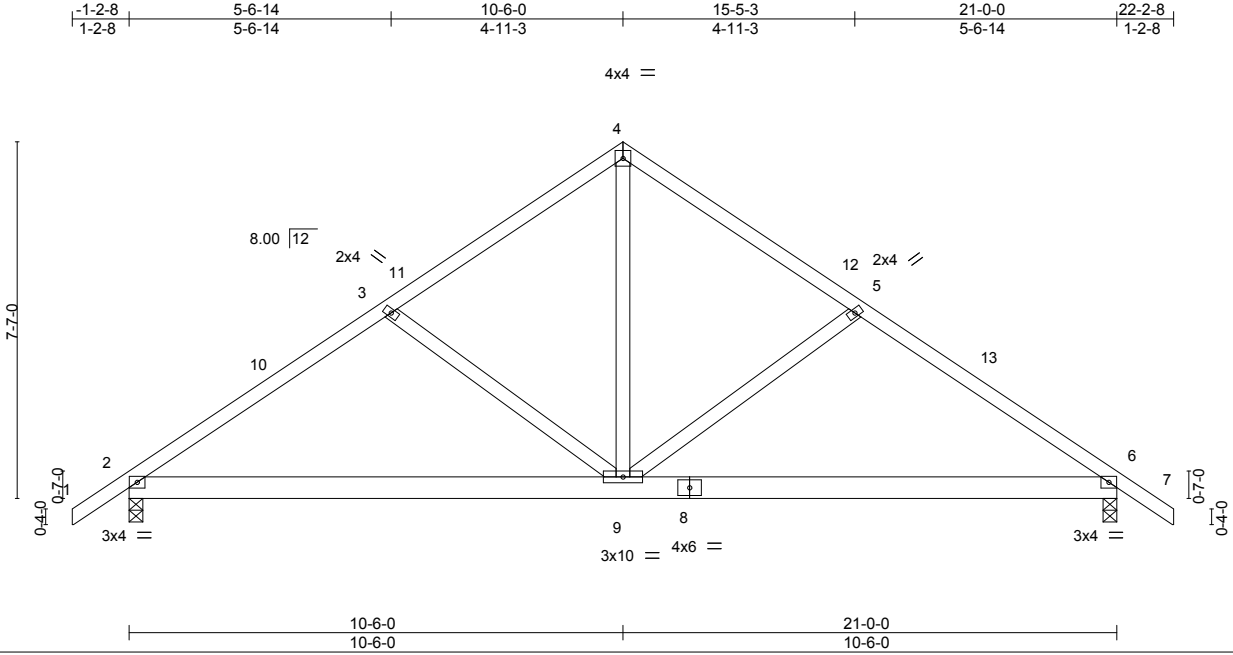
October 5, 2020

Job	Truss	Truss Type	Qty	Ply	Precision/Lot	60 Summerlin/Harnett	E14941219
J0920-4361	B2	QUEENPOST	2	1	Job Reference (optional)		

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ID:PQVbflLGVTT11OnQ611pZG_z1SF7-_PWkZdYrdrFVufG1HnzvhQAjfEBqSd1VzUqxiSyWS6K



Scale = 1:49.0

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.26	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.38	Vert(LL) -0.06 2-9 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.23	Vert(CT) -0.14 6-9 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 6 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) -0.02 6-9 >999 240	Weight: 119 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-8-1 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

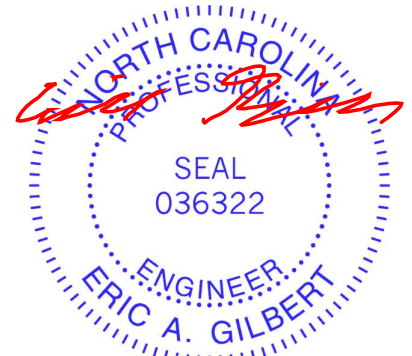
(size) 6=0-3-8, 2=0-3-8
 Max Horz 2=187(LC 11)
 Max Uplift 6=-62(LC 13), 2=-62(LC 12)
 Max Grav 6=909(LC 1), 2=909(LC 1)

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

TOP CHORD 2-3=-1126/266, 3-4=-870/238, 4-5=-870/238, 5-6=-1126/266
 BOT CHORD 2-9=-94/884, 6-9=-110/847
 WEBS 4-9=-111/682, 5-9=-346/217, 3-9=-346/217

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) -1-2-6 to 3-2-7, Interior(1) 3-2-7 to 10-6-0, Exterior(2) 10-6-0 to 14-10-13, Interior(1) 14-10-13 to 22-2-6 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.



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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941220
J0920-4361	B3-2PLY	FINK	1	2		

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ID:PQVbflGVTT11OnQ611pZG_z1SF7-O_BsBfbjwmd416_cyvXcJ3o7kRBAft1xfS3bJnyWS6H



5x8 M18SHS =

Scale = 1:46.5

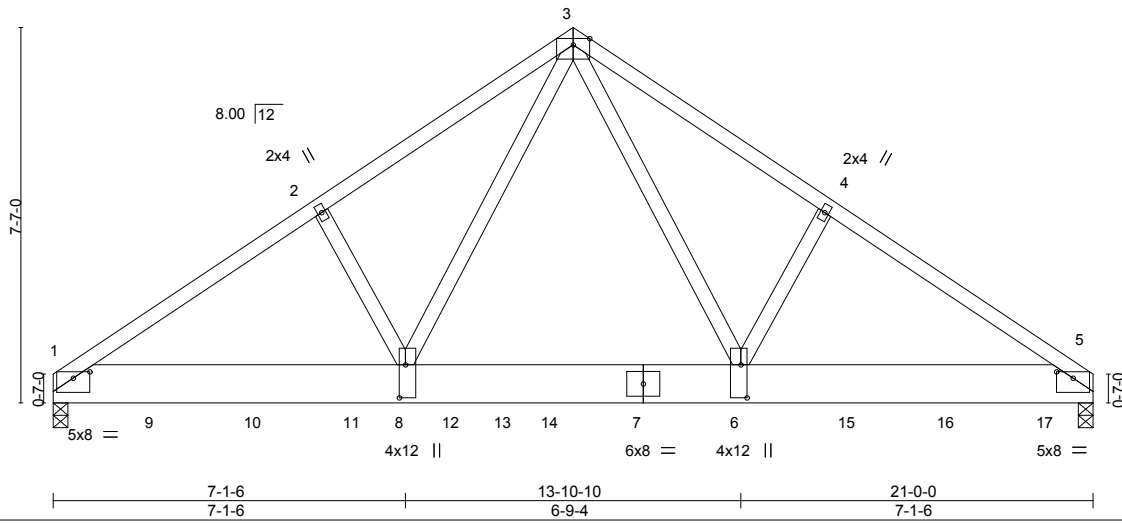


Plate Offsets (X,Y)-- [1:0-4-0,0-1-9], [5:0-4-0,0-1-9], [6:0-8-0,0-1-8], [8:0-8-0,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.72	Vert(LL) -0.12	6-8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.40	Vert(CT) -0.23	6-8	>999	240	M18SHS	244/190
BCLL 0.0 *	Rep Stress Incr NO	WB 0.66	Horz(CT) 0.03	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.08	6-8	>999	240		
							Weight: 306 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
 BOT CHORD 2x10 SP 2400F 2.0E
 WEBS 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-11-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=0-3-9, 5=0-3-9
 Max Horz 1=-168(LC 23)
 Max Uplift 1=-396(LC 8), 5=-433(LC 9)
 Max Grav 1=6735(LC 2), 5=7383(LC 2)

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

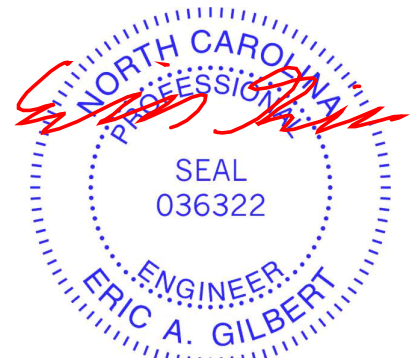
TOP CHORD 1-2=-9190/559, 2-3=-9068/616, 3-4=-9059/616, 4-5=-9181/559
 BOT CHORD 1-8=-477/7522, 6-8=-244/5143, 5-6=-400/7515
 WEBS 3-6=-367/5382, 4-6=-302/253, 3-8=-368/5400, 2-8=-302/253

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
 Bottom chords connected as follows: 2x10 - 2 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; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates 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) except (it=lb) 1=396, 5=433.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1260 lb down and 82 lb up at 2-0-12, 1260 lb down and 82 lb up at 4-0-12, 1260 lb down and 82 lb up at 6-0-12, 1260 lb down and 82 lb up at 8-0-12, 1216 lb down and 82 lb up at 10-0-12, 1242 lb down and 82 lb up at 12-0-12, 1260 lb down and 82 lb up at 14-0-12, 1260 lb down and 82 lb up at 16-0-12, and 1260 lb down and 82 lb up at 18-0-12, and 1262 lb down and 80 lb up at 20-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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



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Continued on page 2

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 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941220
J0920-4361	B3-2PLY	FINK	1	2	Job Reference (optional)	

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8.330 s Jul 22 2020 MiTek Industries, Inc. Mon Oct 5 13:35:24 2020 Page 2
 ID:PQVbfLGVTT1IOnQ611pZG_z1SF7-O_BsBfbjwmd4I6_cyvXcJ3o7kRBAft1xfS3bJnyWS6H

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-3=-60, 3-5=-60, 1-5=-20

Concentrated Loads (lb)

Vert: 7=-1168(B) 6=-1168(B) 9=-1168(B) 10=-1168(B) 11=-1168(B) 12=-1168(B) 14=-1168(B) 15=-1168(B) 16=-1168(B) 17=-1170(B)

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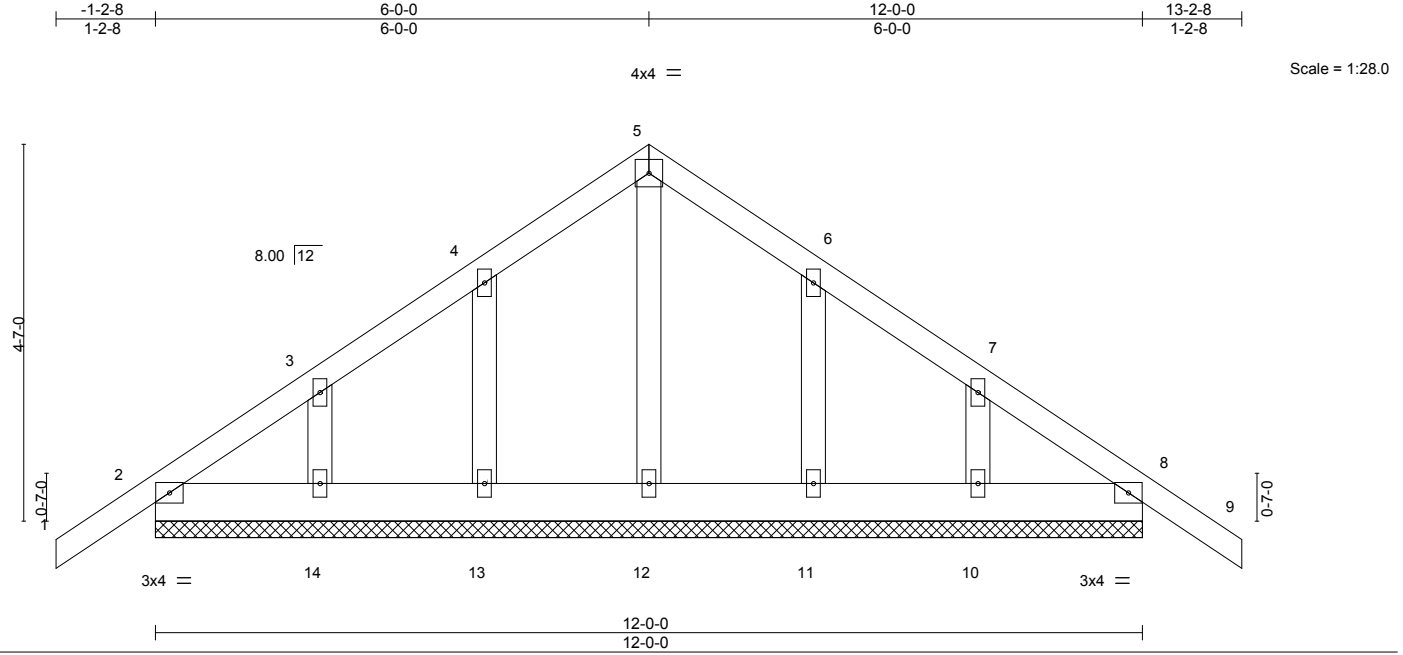
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941221
J0920-4361	C1-GE	COMMON SUPPORTED GAB	1	1		

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 ID:PQVbflGVTT11OnQ611pZG_z1SF7-sAIEP?bMh4ixNGZoWd2rsGLSZrdNOUD4u6o9rDyWS6G



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 9 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) -0.00 9 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00 8 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 71 lb	FT = 20%

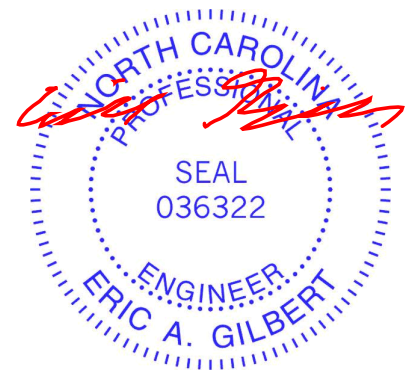
LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x6 SP No.1
 OTHERS 2x4 SP No.2

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 12-0-0.
 (lb) - Max Horz 2=144(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

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

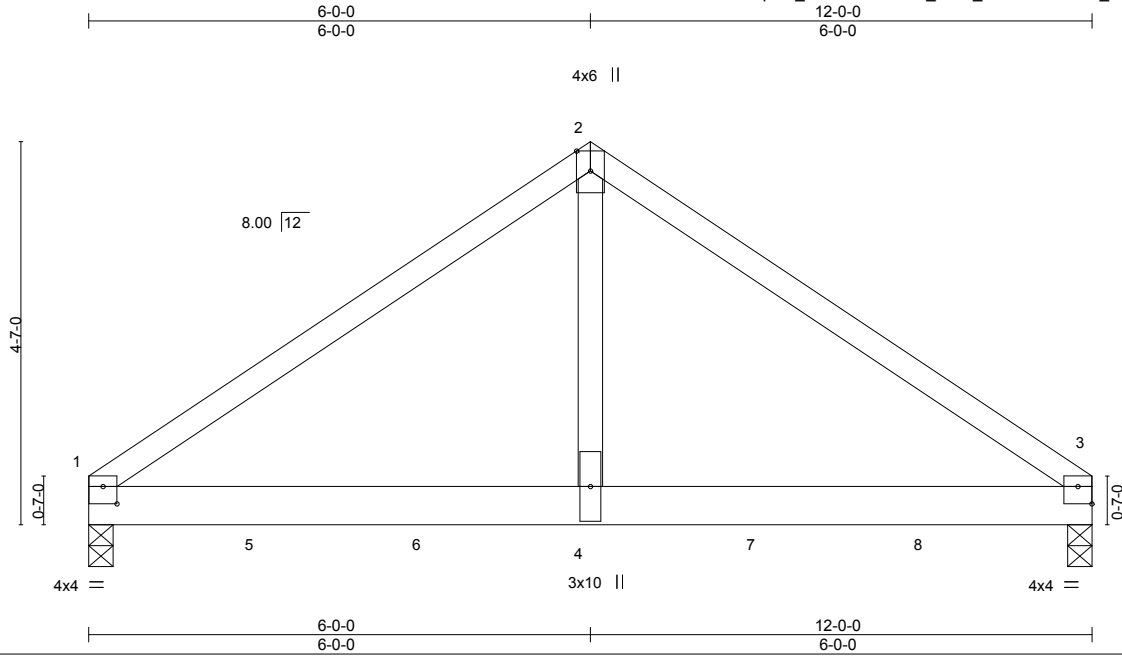


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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941222
J0920-4361	C2-2PLY	COMMON GIRDER	1	2	Job Reference (optional)	

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 ID:PQVbflGVTT1OnQ611pZG_z1SF7-KMJccLc_SNto_Q8?3KZ4OUuX_FqK7puE6iYiNfyWS6F



Scale = 1:27.6

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.48	Vert(LL)	-0.07	1-4	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.62	Vert(CT)	-0.13	1-4	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.58	Horz(CT)	0.02	3	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Wind(LL)	0.04	1-4	>999		
	Code IRC2015/TPI2014						Weight: 111 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-9-6 oc purlins.
BOT CHORD 2x6 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	

REACTIONS. (size) 1=0-3-8, 3=0-3-8
 Max Horz 1=-100(LC 6)
 Max Uplift 1=-209(LC 8), 3=-212(LC 9)
 Max Grav 1=3570(LC 2), 3=3623(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-4472/288, 2-3=-4472/288
 BOT CHORD 1-4=-179/3628, 3-4=-179/3628
 WEBS 2-4=-199/4692

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=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=209, 3=212.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1271 lb down and 82 lb up at 2-0-12, 1271 lb down and 82 lb up at 4-0-12, 1271 lb down and 82 lb up at 6-0-12, and 1271 lb down and 82 lb up at 8-0-12, and 1271 lb down and 82 lb up at 10-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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



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Continued on page 2

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

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941222
J0920-4361	C2-2PLY	COMMON GIRDER	1	2	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Jul 22 2020 MiTek Industries, Inc. Mon Oct 5 13:35:26 2020 Page 2
 ID:PQVbflGVTT1OnQ611pZG_z1SF7-KMJcclc_SNto_Q8?3KZ4OUuX_FqK7puE6IYiNfyWS6F

LOAD CASE(S) Standard
 Concentrated Loads (lb)
 Vert: 4--1168(B) 5--1168(B) 6--1168(B) 7--1168(B) 8--1168(B)

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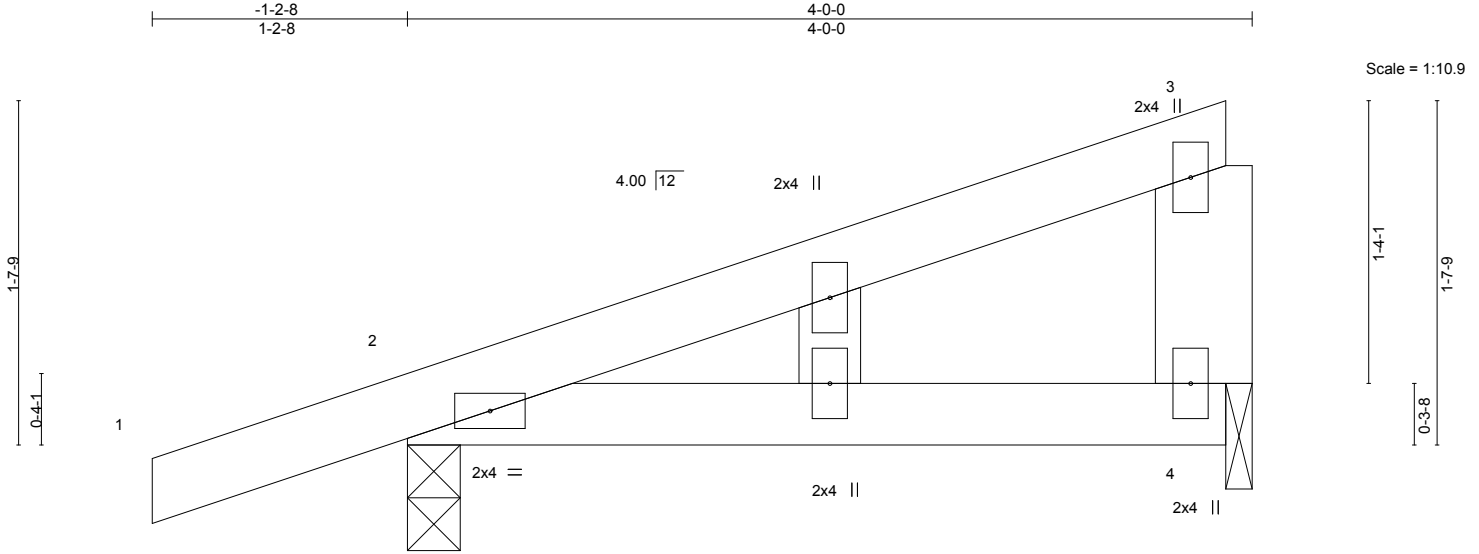
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941223
J0920-4361	M1-GE	GABLE	1	1		

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ID:PQVbflGVTT1lOnQ611pZG_z1SF7-pZt?qhdcDh?fcAjBd24JxhQn3fMmsO7NLPHGv6yWS6E



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

LUMBER-

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

BRACING-

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

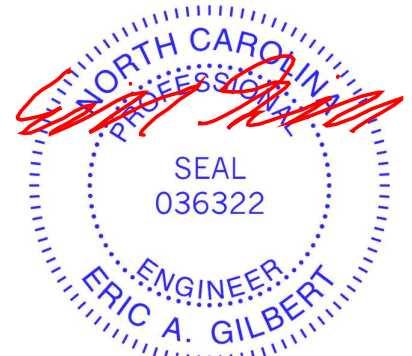
REACTIONS.

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

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

NOTES-

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



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Job	Truss	Truss Type	Qty	Ply	Precision/Lot	60 Summerlin/Harnett	E14941224
J0920-4361	M2	MONOPITCH	5	1	Job Reference (optional)		

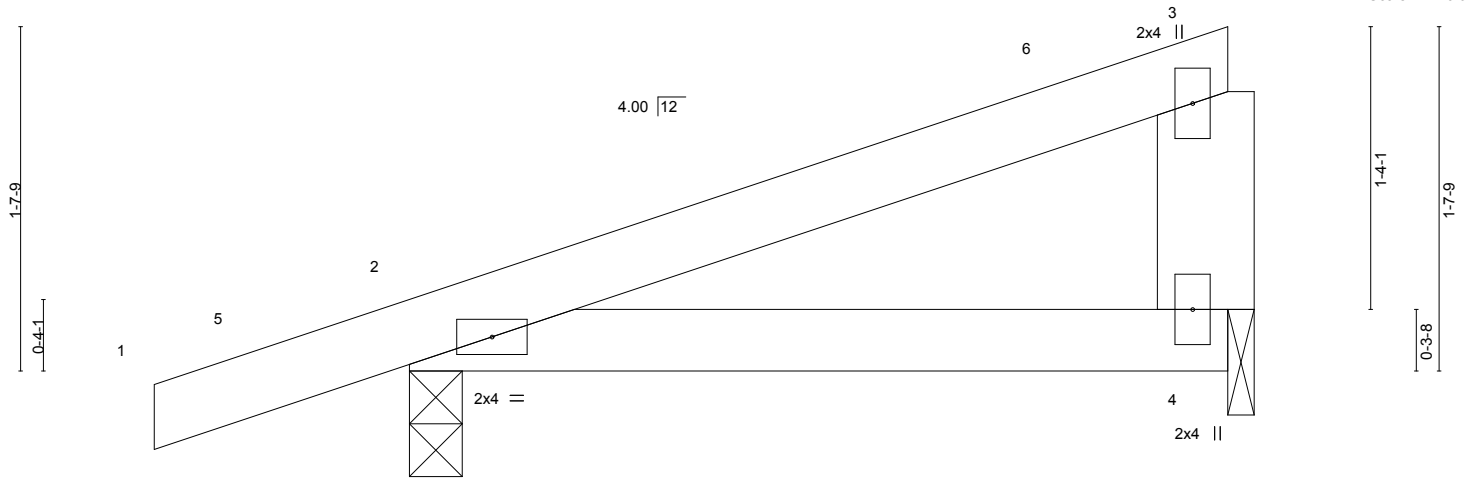
Comtech, Inc., Fayetteville, NC - 28314,

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ID:PQVbflGVTT1OnQ611pZG_z1SF7-HIRN11eE_?7WEjNBibYUvzyp2ebbrNXa31pSYyWS6D



Scale = 1:10.9



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

LUMBER-

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

BRACING-

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

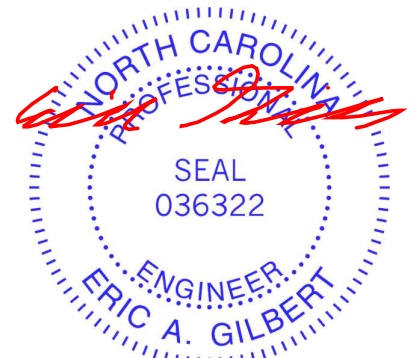
REACTIONS.

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

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 3-9-4 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=107.



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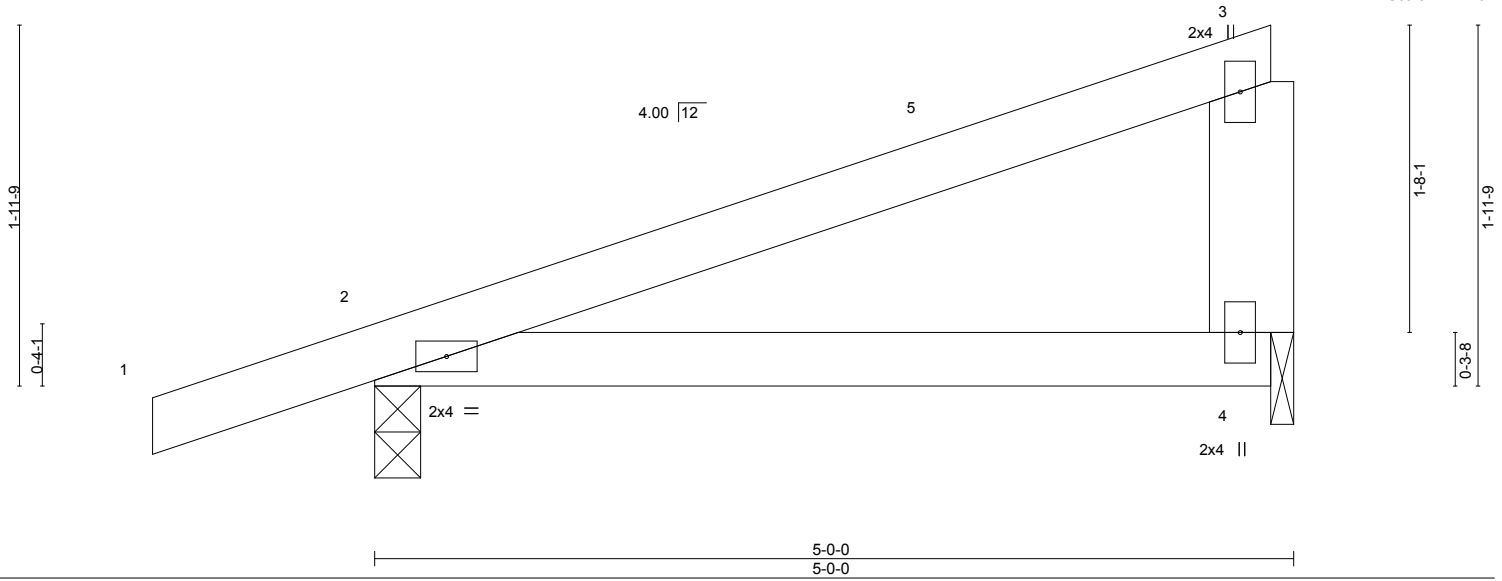
Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941225
J0920-4361	M3	MONOPITCH	4	1	Job Reference (optional)	

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 ID:PQVbflGVTT1iOnQ611pZG_z1SF7-lx?lEMfslIFNrtalS6n06W5fSxaKlcojM_yWS6C



Scale = 1:12.5



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

LUMBER-

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

BRACING-

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

REACTIONS.

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

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

NOTES-

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



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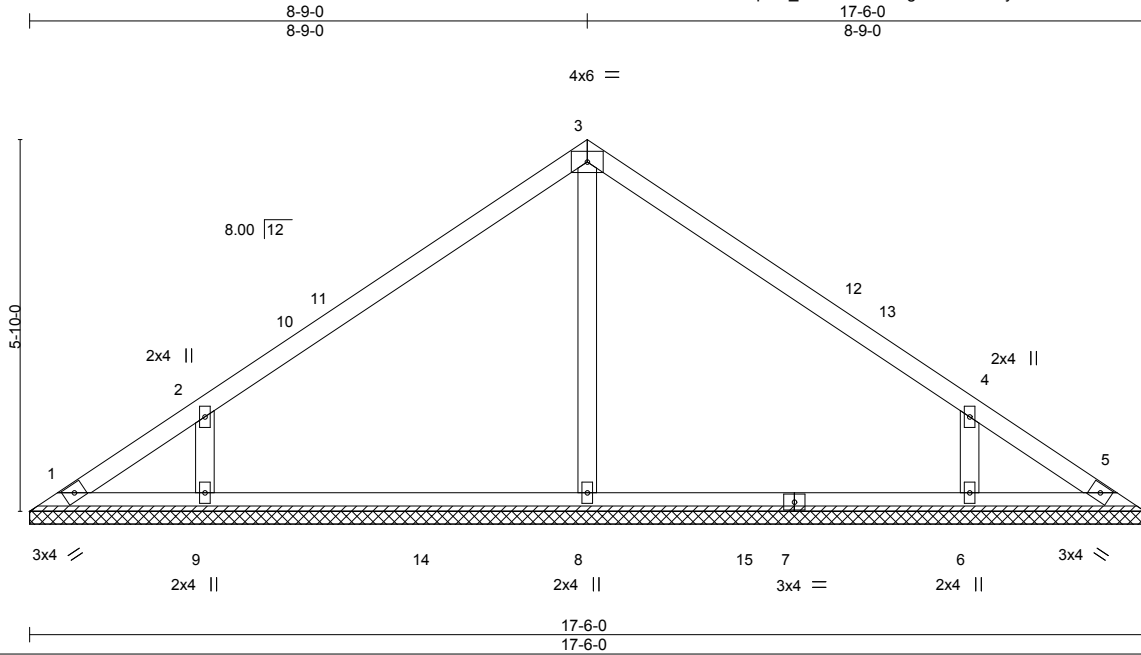


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 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941226
J0920-4361	VB1	GABLE	1	1	Job Reference (optional)	

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 ID:PQVbflGVTT11OnQ611pZG_z1SF7-hK6Vf2g6HwW45B1yst9F5XbRBGc4oAvzG1FT2tyWS6A



Scale = 1:36.2

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

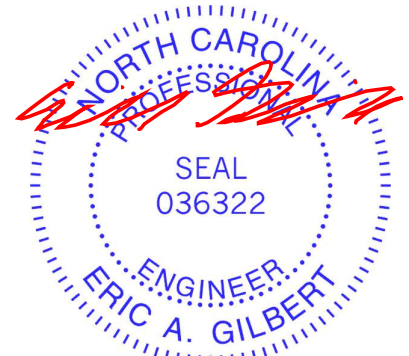
LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x4 SP No.1
 OTHERS 2x4 SP No.2

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

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

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

- NOTES-**
- 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) 0-5-12 to 4-10-9, Interior(1) 4-10-9 to 8-9-0, Exterior(2) 8-9-0 to 13-1-13, Interior(1) 13-1-13 to 17-0-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 9=141, 6=141.



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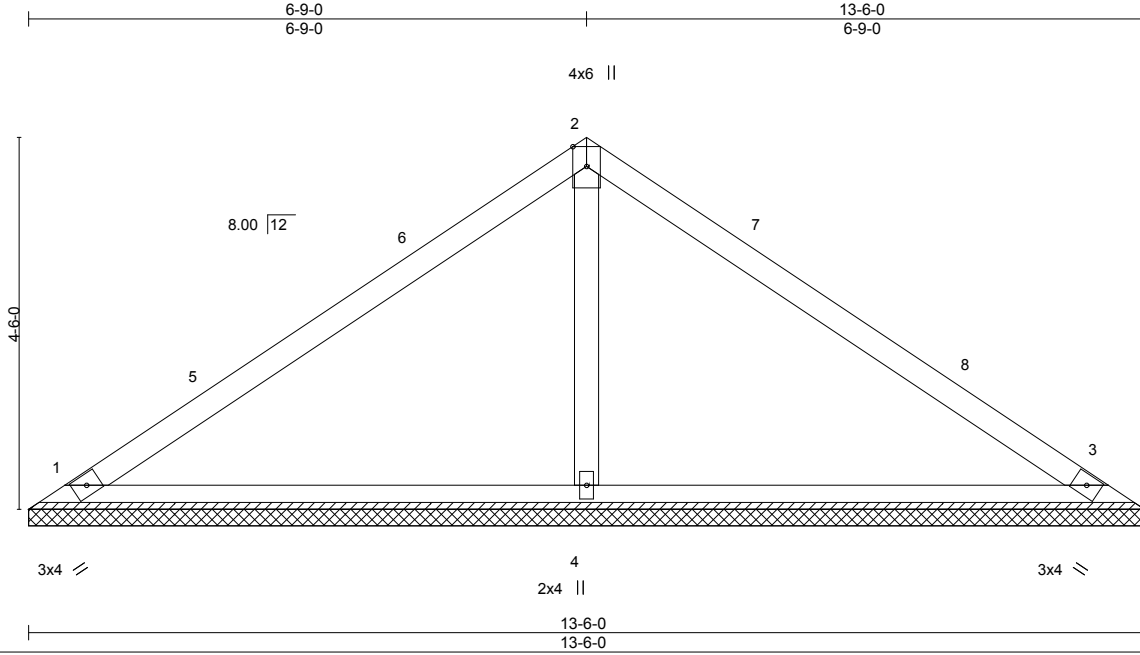
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 60 Summerlin/Harnett	E14941227
J0920-4361	VB2	GABLE	1	1	Job Reference (optional)	

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ID:PQVbflGVTT1lOnQ611pZG_z1SF7-9WgutOh1DexJLc8QbgUel7aCgysXdp6Vh?0bJyWS69



Scale = 1:27.9

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

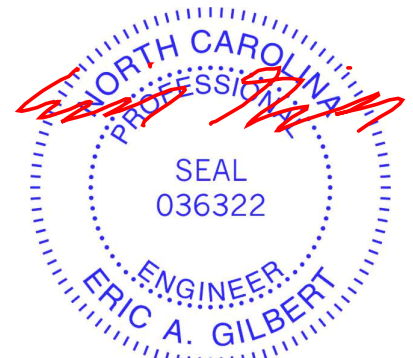
LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x4 SP No.1
 OTHERS 2x4 SP No.2

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

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

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

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



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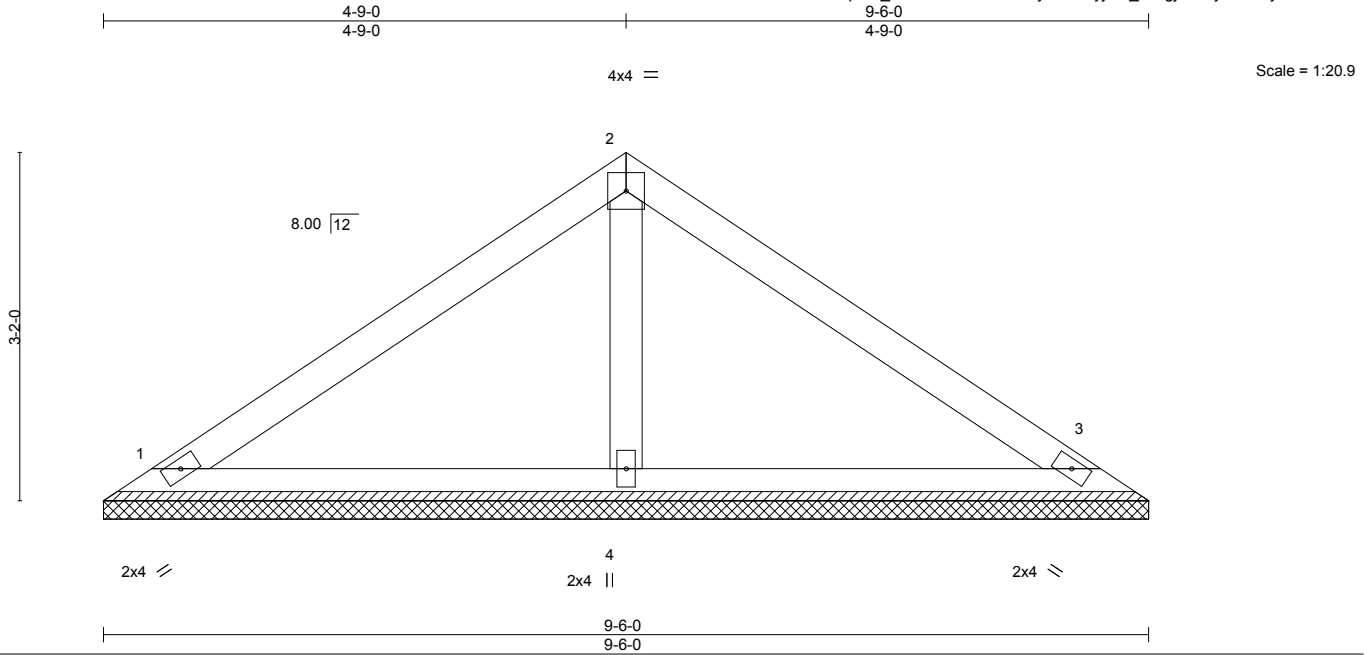


818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot	60 Summerlin/Harnett	E14941228
J0920-4361	VB3	VALLEY	1	1	Job Reference (optional)		

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 ID:PQVbflGVTT1lOnQ611pZG_z1SF7-5voel4i?ZruffyelXX0iyjAD_WTgj?YIPy?U7fCyWS67



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 0.13	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.04	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 33 lb	FT = 20%

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

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

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

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

NOTES-

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



October 5, 2020

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 60 Summerlin/Harnett	E14941229
J0920-4361	VB4	VALLEY	1	1		

Comtech, Inc., Fayetteville, NC - 28314, 8.330 s Jul 22 2020 MiTek Industries, Inc. Mon Oct 5 13:35:35 2020 Page 1
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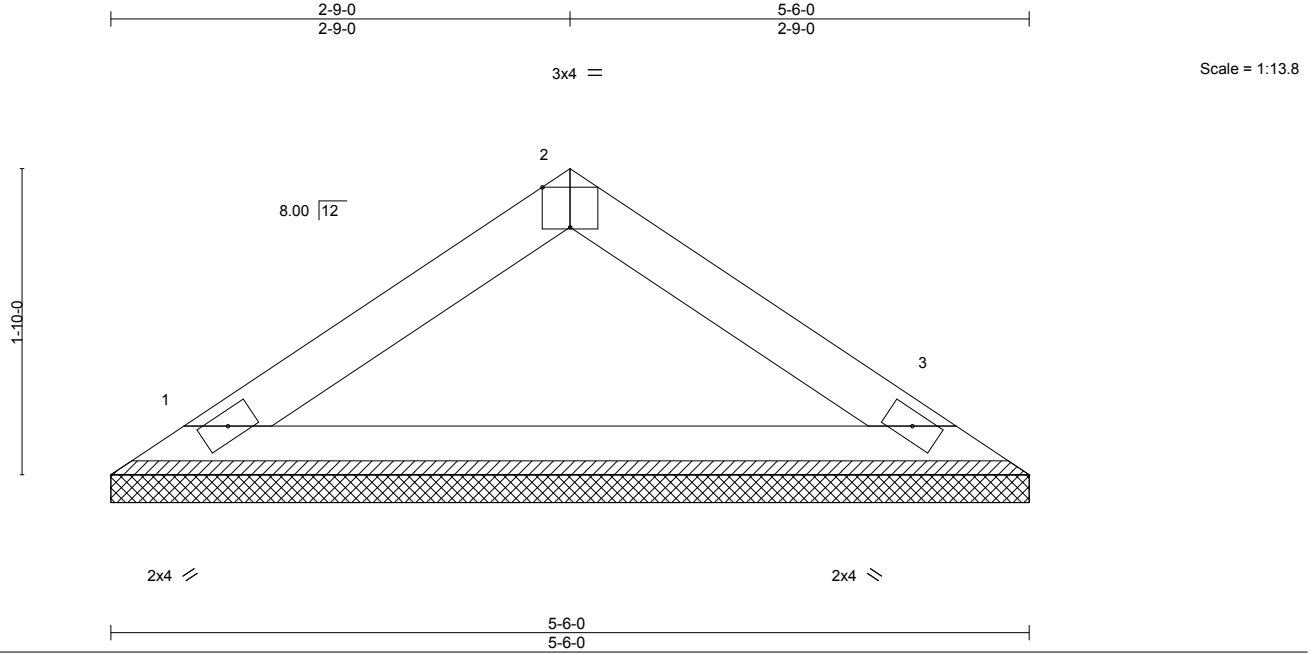


Plate Offsets (X,Y)-- [2:0-2:0,Edge] 5-6-0 5-6-0

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 0.07	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 16 lb	FT = 20%

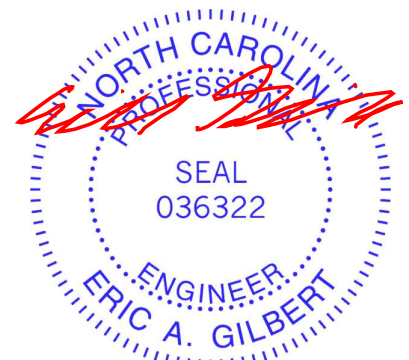
LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x4 SP No.1

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

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

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

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

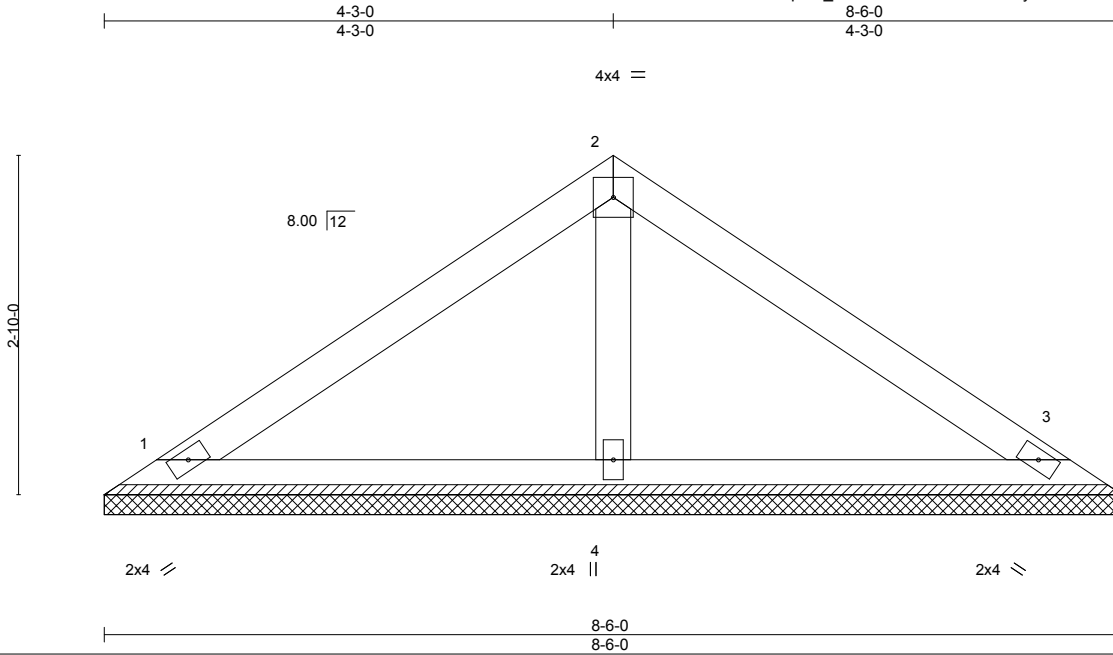


October 5, 2020

Job	Truss	Truss Type	Qty	Ply	Precision/Lot	60 Summerlin/Harnett	E14941230
J0920-4361	VC1	VALLEY	1	1	Job Reference (optional)		

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Jul 22 2020 MiTek Industries, Inc. Mon Oct 5 13:35:36 2020 Page 1
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Scale = 1:19.2

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 0.11	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	Weight: 30 lb	FT = 20%
	Code IRC2015/TPI2014				

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=8-6-0, 3=8-6-0, 4=8-6-0
 Max Horz 1=60(LC 9)
 Max Uplift 1=-26(LC 12), 3=-32(LC 13)
 Max Grav 1=164(LC 1), 3=164(LC 1), 4=275(LC 1)

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

NOTES-

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



October 5, 2020

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

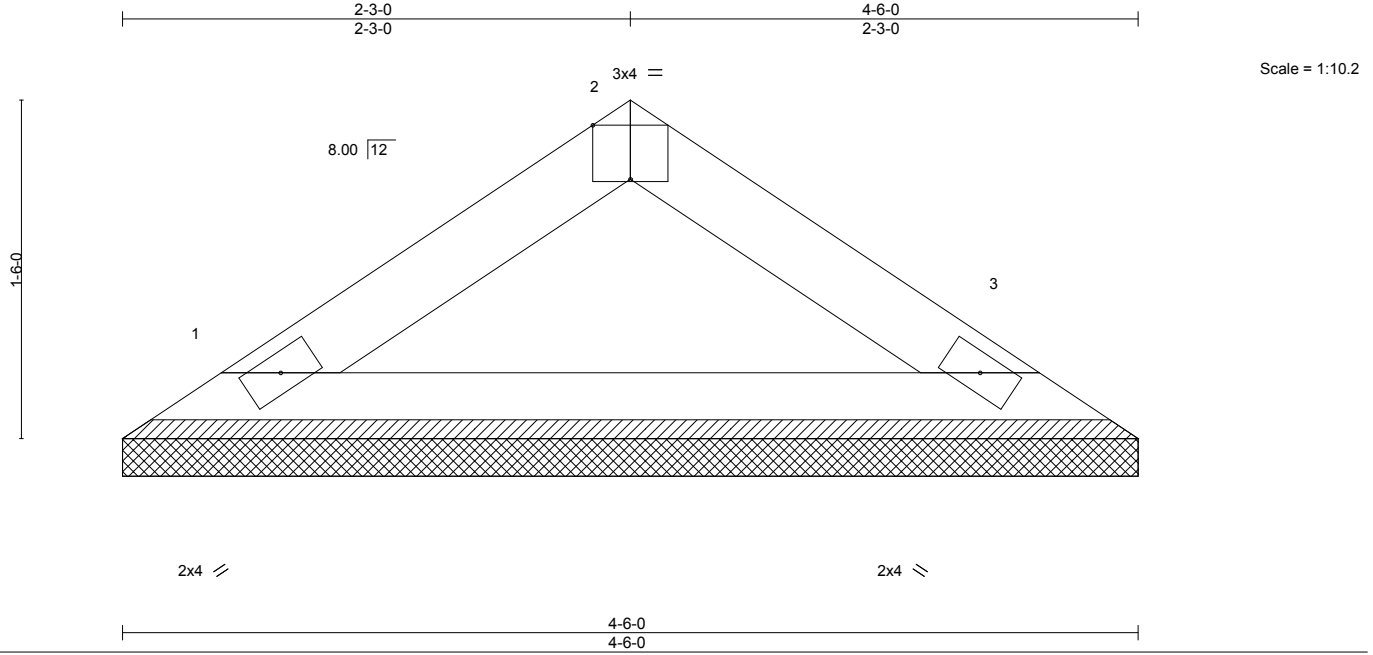
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 60 Summerlin/Harnett	E14941231
J0920-4361	VC2	VALLEY	1	1		

Comtech, Inc., Fayetteville, NC - 28314, ID:PQVbflGVTT11OnQ611pZG_z1SF7-WUUnw5tsmGEp6U6D8GfLorW3ginCvbrezinGWyWS64
 8.330 s Jul 22 2020 MiTek Industries, Inc. Mon Oct 5 13:35:37 2020 Page 1
 Job Reference (optional)



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999	Weight: 13 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									

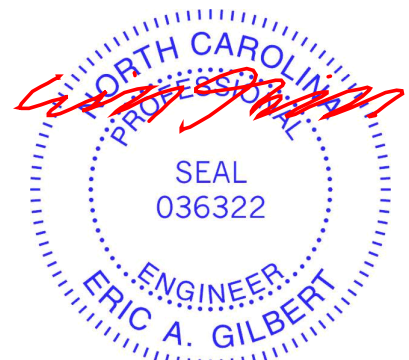
LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x4 SP No.1

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-6-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-6-0, 3=4-6-0
 Max Horz 1=-28(LC 8)
 Max Uplift 1=-8(LC 12), 3=-8(LC 13)
 Max Grav 1=141(LC 1), 3=141(LC 1)

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

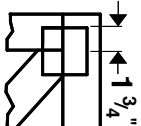
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown;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



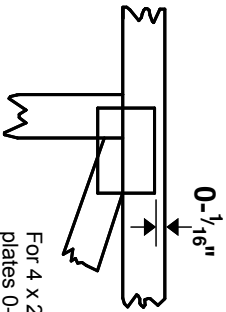
October 5,2020

Symbols

PLATE LOCATION AND ORIENTATION



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



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



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

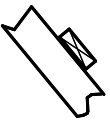
* Plate location details available in **MITek 20/20 software** or upon request.

PLATE SIZE

4 X 4

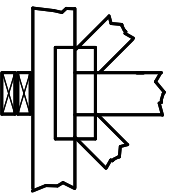
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



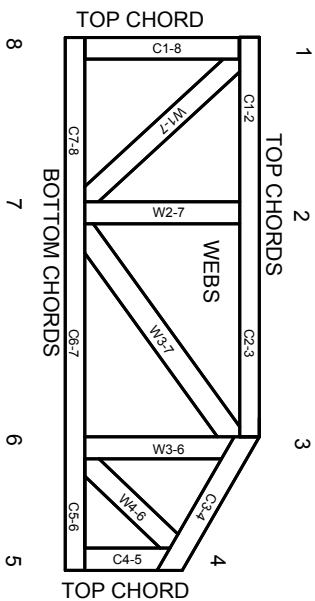
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1: 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/TP1 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



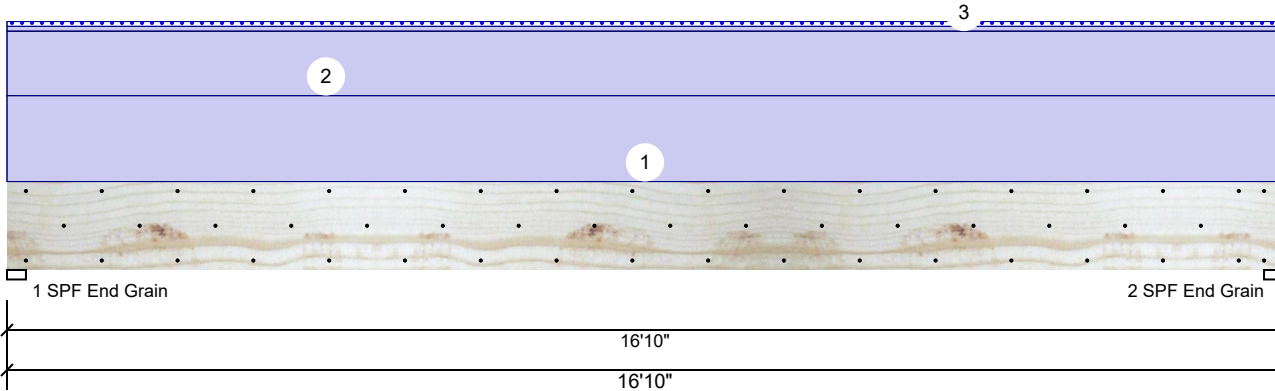
General Safety Notes

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 T or 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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

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

Level: Level



Member Information

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

Reactions UNPATTERNED lb (Uplift)

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

Bearings

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

Analysis Results

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

Design Notes

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

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

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

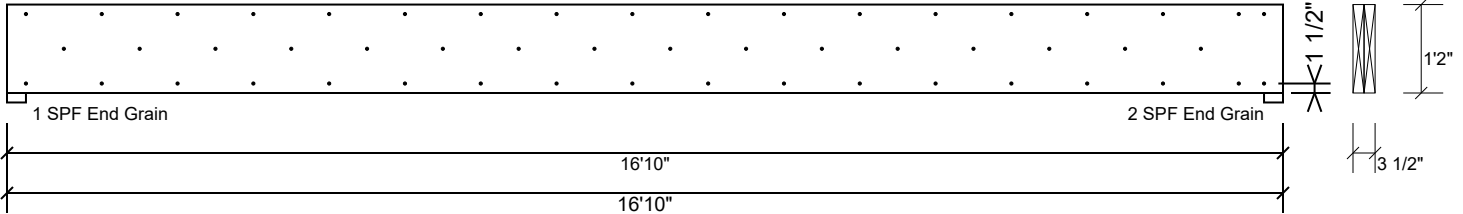


This design is valid until 12/11/2021



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
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 12/11/2021

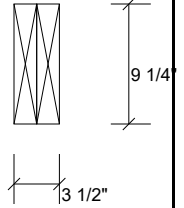
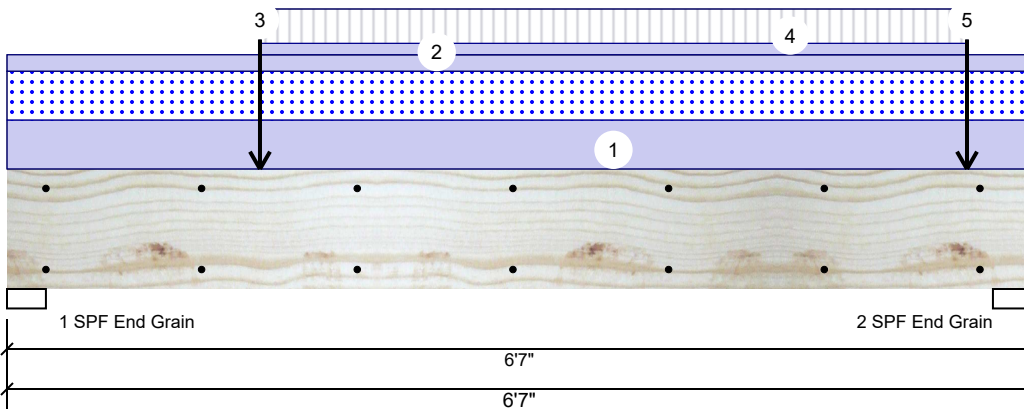
Manufacturer Info

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



Member Information

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

Reactions UNPATTERNED lb (Uplift)

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

Bearings

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

Analysis Results

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

Design Notes

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

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

Notes

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

Manufacturer Info

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

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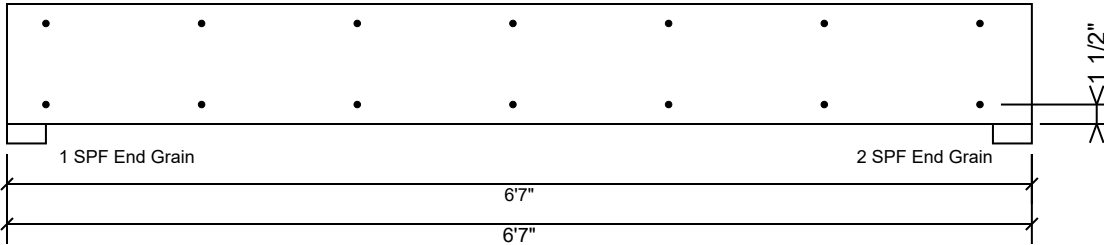


This design is valid until 12/11/2021



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

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Lumber

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2. LVL not to be treated with fire retardant or corrosive

chemicals

Handling & Installation

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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

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

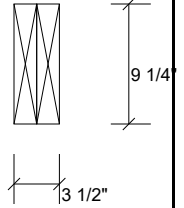
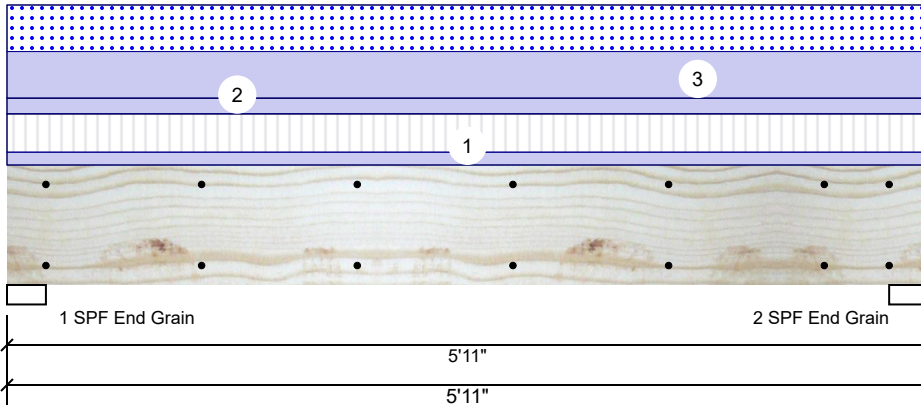


This design is valid until 12/11/2021



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

Level: Level



Member Information

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

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

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	870	1719	1053	0	0
2	870	1719	1053	0	0

Bearings

Bearing	Length	Cap.	React D/L	Ib	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	35%	1719 / 1442	3162	L	D+0.75(L+S)	
2 - SPF End Grain	3.000"	35%	1719 / 1442	3162	L	D+0.75(L+S)	

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4102 ft-lb	2'11 1/2"	14423 ft-lb	0.284 (28%)	D+0.75(L+S)	L
Unbraced	4102 ft-lb	2'11 1/2"	11027 ft-lb	0.372 (37%)	D+0.75(L+S)	L
Shear	2137 lb	11 1/2"	7943 lb	0.269 (27%)	D+0.75(L+S)	L
LL Defl inch	0.029 (L/2288)	2'11 1/2"	0.139 (L/480)	0.210 (21%)	0.75(L+S)	L
TL Defl inch	0.064 (L/1044)	2'11 1/2"	0.185 (L/360)	0.340 (34%)	D+0.75(L+S)	L

Design Notes

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

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

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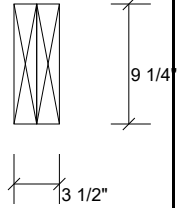
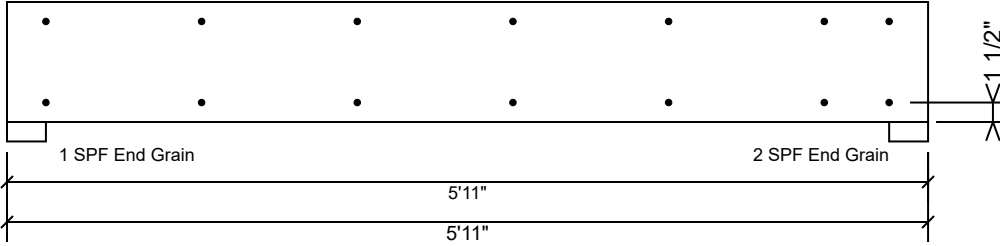
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BM3 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

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