

RE: J0422-2179
 Precision/Lot 1 Liberty Meadows/Harnett

Trenco
 818 Soundside Rd
 Edenton, NC 27932

Site Information:

Customer: Project Name: J0422-2179
 Lot/Block: Model:
 Address: Subdivision:
 City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.4
 Wind Code: N/A Wind Speed: N/A mph
 Roof Load: N/A psf Floor Load: 55.0 psf

This package includes 16 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	I50320773	ET1	2/19/2022
2	I50320774	ET2	2/19/2022
3	I50320775	ET3	2/19/2022
4	I50320776	ET4	2/19/2022
5	I50320777	F1	2/19/2022
6	I50320778	F2	2/19/2022
7	I50320779	F3	2/19/2022
8	I50320780	F4	2/19/2022
9	I50320781	F5	2/19/2022
10	I50320782	F6	2/19/2022
11	I50320783	F7	2/19/2022
12	I50320784	FG1	2/19/2022
13	I50320785	FG2	2/19/2022
14	I50320786	FG3	2/19/2022
15	I50320787	FG4	2/19/2022
16	I50320788	FG5	2/19/2022

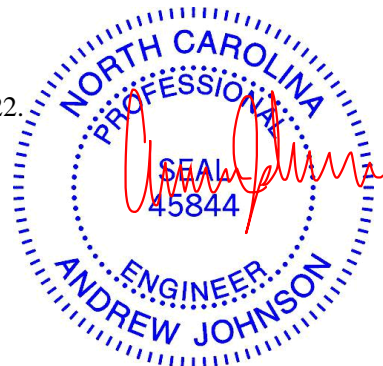
The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Truss Design Engineer's Name: Johnson, Andrew

My license renewal date for the state of North Carolina is December 31, 2022.

North Carolina COA: C-0844

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 TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. 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.



February 19, 2022

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 1 Liberty Meadows/Harnett	150320773
J0422-2179	ET1	Floor Supported Gable	1	1	Job Reference (optional)	

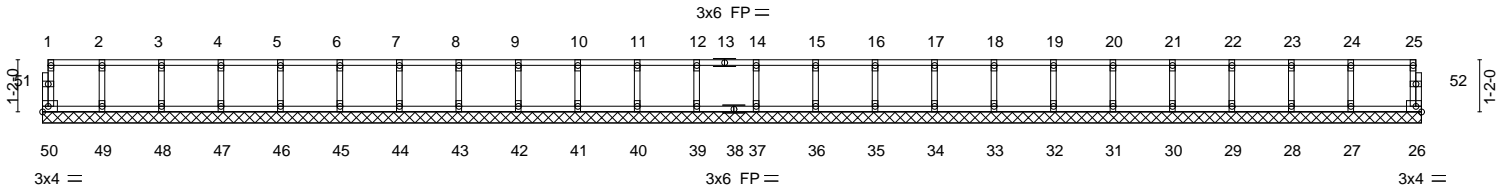
Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Feb 18 10:10:28 2022 Page 1
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0-1-8
H

0-1-8
H

Scale = 1:51.7



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	40.0	Plate Grip DOL	2-0-0	TC	0.08	in	(loc)	l/defl	L/d	MT20	244/190		
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(LL)	n/a	-	n/a				
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Vert(CT)	n/a	-	n/a				
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R		Horz(CT)	0.00	26	n/a			Weight: 127 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 30-11-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 50, 26, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27

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

- NOTES-**
- 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.
 - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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.
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 1 Liberty Meadows/Harnett	150320774
J0422-2179	ET2	Floor Supported Gable	1	1	Job Reference (optional)	

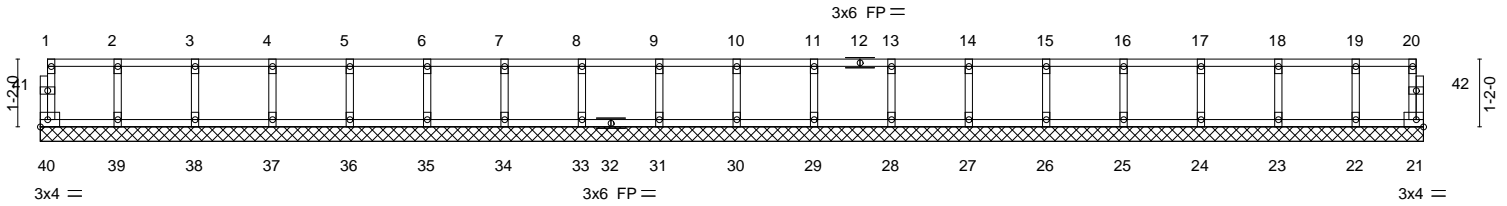
Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Feb 18 10:10:29 2022 Page 1
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0-1-8

0-1-8

Scale = 1:39.7



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	40.0	Plate Grip DOL	2-0-0	TC	0.06	in	(loc)	l/defl	L/d	MT20	244/190		
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(LL)	n/a	-	n/a	Weight: 99 lb FT = 20%F, 11%E			
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Vert(CT)	n/a	-	n/a				
BCDL	5.0	Code IRC2015/TPI2014		Matrix-R		Horz(CT)	0.00	21	n/a				

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

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

REACTIONS. All bearings 23-10-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 40, 21, 39, 38, 37, 36, 35, 34, 33, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22

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

- NOTES-**
- 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.
 - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 1 Liberty Meadows/Harnett	150320775
J0422-2179	ET3	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Feb 18 10:10:30 2022 Page 1
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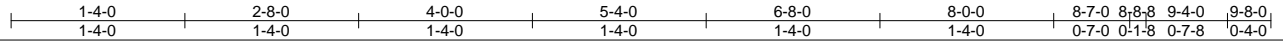
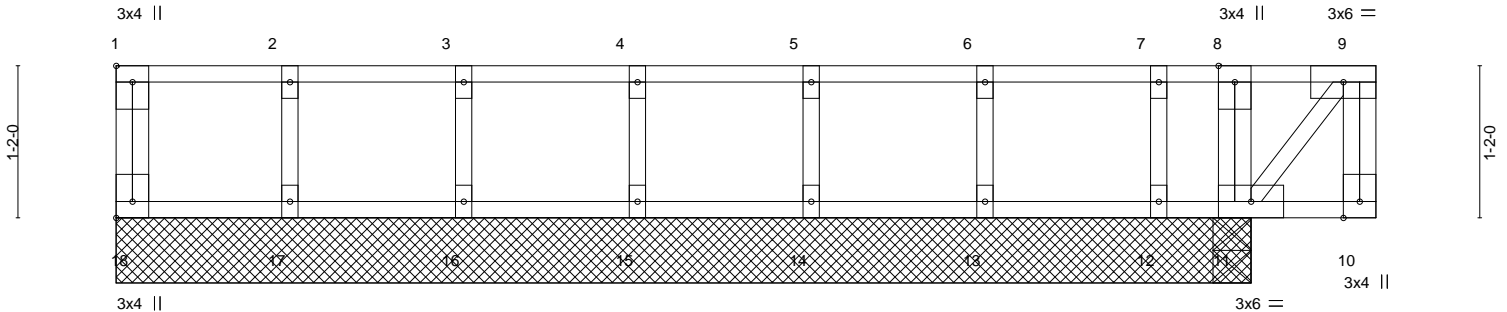


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [18:Edge,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.26	Vert(LL)	0.00	12	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.22	Vert(CT)	0.00	12	>999	360		
BCLL 0.0	Rep Stress Incr	NO	WB 0.05	Horz(CT)	-0.00	11	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						Weight: 47 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 9-8-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 8-8-8.
 (lb) - Max Uplift All uplift 100 lb or less at joint(s) except 12=-190(LC 4)
 Max Grav All reactions 250 lb or less at joint(s) 18, 17, 16, 15, 14, 13 except 11=441(LC 1), 11=441(LC 1)

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

WEBS 8-11=-294/0

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 1.5x3 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 1-4-0 oc.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 190 lb uplift at joint 12.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 9) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (plf)
 Vert: 10-18=-10, 1-8=-100, 8-9=-220



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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



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 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 1 Liberty Meadows/Harnett	150320776
J0422-2179	ET4	Floor Supported Gable	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Feb 18 10:31 2022 Page 1
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0'-1'-8"

0'-1'-8"

Scale = 1:16.3

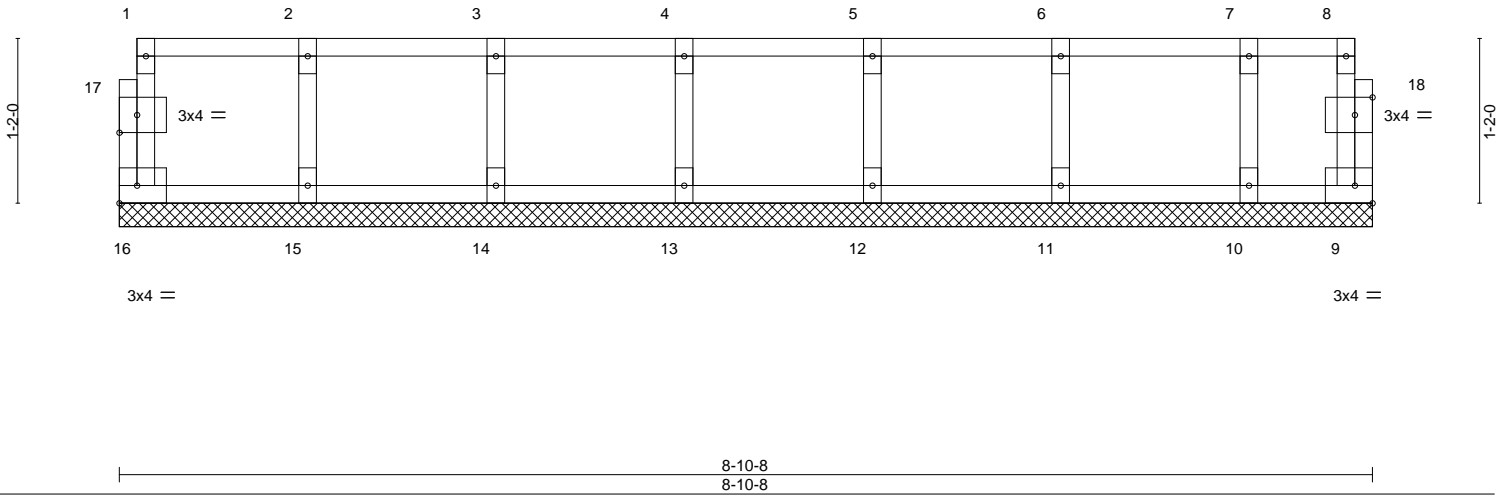


Plate Offsets (X,Y)-- [17:0-1-8,0-1-8], [18:0-1-8,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.06	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.01	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr YES	WB 0.03	Horz(CT)	0.00	9	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-R					Weight: 39 lb	FT = 20%F, 11%E

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

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

- NOTES-**
- 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.
 - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 1 Liberty Meadows/Harnett	150320777
J0422-2179	F1	Floor	6	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Feb 18 10:10:32 2022 Page 1
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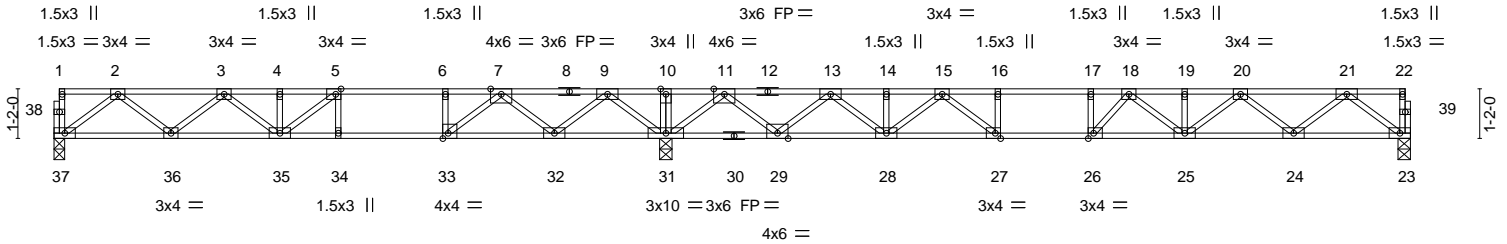


Plate Offsets (X,Y)--	[5:0-1-8,Edge], [26:0-1-8,Edge], [27:0-1-8,Edge], [33:0-1-8,Edge]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.76	Vert(LL) -0.23	26	>904	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.86	Vert(CT) -0.32	25-26	>662	360		
BCLL 0.0	Rep Stress Incr YES	WB 0.61	Horz(CT) 0.05	23	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 160 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat) *Except* 1-8: 2x4 SP 2400F 2.0E(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP 2400F 2.0E(flat) *Except* 23-30: 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (size) 37=0-3-0, 31=0-3-8, 23=0-3-8
Max Grav 37=703(LC 3), 31=2043(LC 1), 23=839(LC 4)

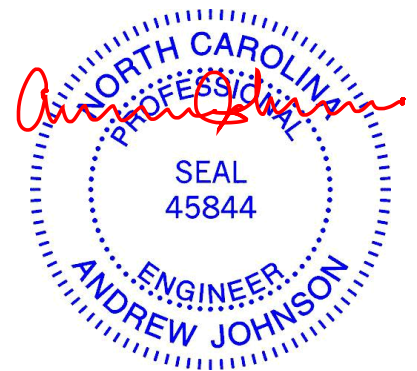
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-1385/0, 3-4=-2146/0, 4-5=-2146/0, 5-6=-2042/312, 6-7=-2042/312, 7-9=-710/1107, 9-10=0/2317, 10-11=0/2317, 11-13=-432/318, 13-14=-2032/0, 14-15=-2032/0, 15-16=-3035/0, 16-17=-3035/0, 17-18=-3035/0, 18-19=-2791/0, 19-20=-2791/0, 20-21=-1728/0

BOT CHORD 36-37=0/868, 35-36=0/1878, 34-35=-312/2042, 33-34=-312/2042, 32-33=-760/1412, 31-32=-1420/41, 29-31=-964/0, 28-29=-43/1344, 27-28=0/2566, 26-27=0/3035, 25-26=0/3027, 24-25=0/2381, 23-24=0/1046

WEBS 2-37=-1087/0, 2-36=0/673, 3-36=-642/15, 3-35=-45/341, 4-35=-290/0, 9-31=-1439/0, 9-32=0/992, 11-31=-1698/0, 11-29=0/1271, 13-29=-1233/0, 13-28=0/925, 21-23=-1310/0, 21-24=0/887, 20-24=-851/0, 7-32=-1085/0, 7-33=0/1179, 6-33=-499/0, 5-35=0/623, 5-34=-270/0, 20-25=0/524, 18-25=-300/0, 15-28=-732/0, 15-27=0/864, 16-27=-392/0, 18-26=-317/303

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All plates are 3x6 MT20 unless otherwise indicated.
 - 3) Plates checked for a plus or minus 1 degree rotation about its center.
 - 4) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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.



Job	Truss	Truss Type	Qty	Ply	Precision/Lot 1 Liberty Meadows/Harnett	150320778
J0422-2179	F2	Floor	3	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Feb 18 10:10:33 2022 Page 1
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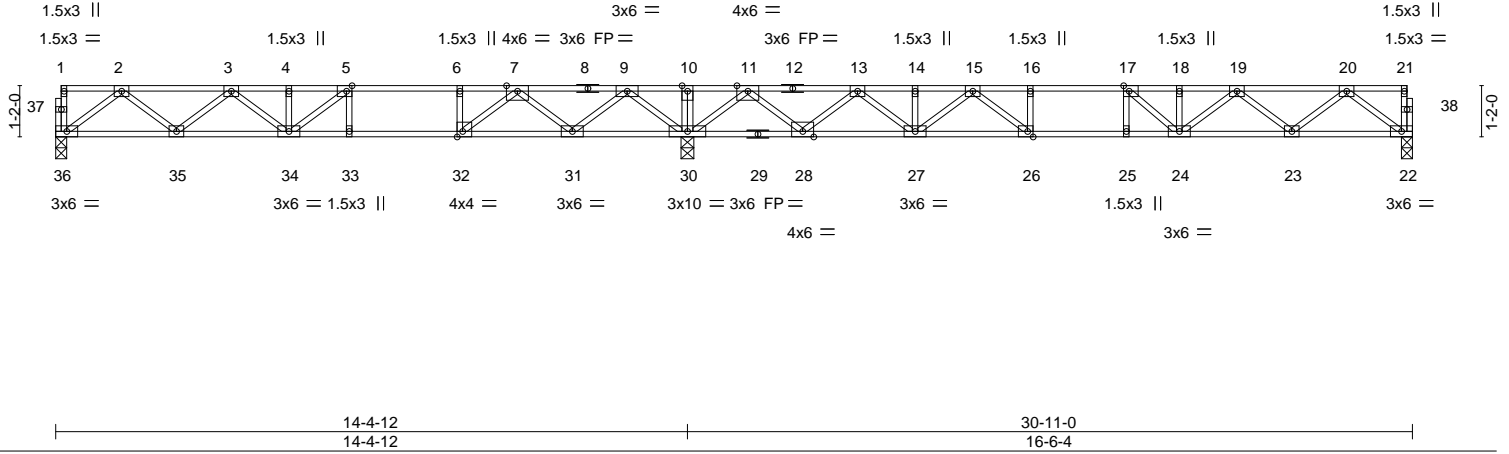


Plate Offsets (X,Y)-- [5:0-1-8,Edge], [17:0-1-8,Edge], [26:0-1-8,Edge], [32:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.69	Vert(LL) -0.17	33-34	>984	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.74	Vert(CT) -0.23	33-34	>730	360		
BCLL 0.0	Rep Stress Incr YES	WB 0.56	Horz(CT) 0.05	22	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 155 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat) *Except* 1-8: 2x4 SP 2400F 2.0E(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP 2400F 2.0E(flat) *Except* 22-29: 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (size) 36=0-3-0, 30=0-3-8, 22=0-3-0
Max Grav 36=706(LC 3), 30=1977(LC 1), 22=787(LC 4)

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

TOP CHORD 2-3=-1391/0, 3-4=-2157/0, 4-5=-2157/0, 5-6=-2060/228, 6-7=-2060/228, 7-9=-737/982, 9-10=0/2173, 10-11=0/2173, 11-13=-437/319, 13-14=-1900/0, 14-15=-1900/0, 15-16=-2696/0, 16-17=-2696/0, 17-18=-2525/0, 18-19=-2525/0, 19-20=-1599/0

BOT CHORD 35-36=0/871, 34-35=0/1887, 33-34=-228/2060, 32-33=-228/2060, 31-32=-650/1436, 30-31=-1283/71, 28-30=-893/0, 27-28=-59/1284, 26-27=0/2360, 25-26=0/2696, 24-25=0/2696, 23-24=0/2186, 22-23=0/978

WEBS 2-36=-1091/0, 2-35=0/677, 3-35=-646/0, 3-34=-31/344, 4-34=-282/0, 5-34=0/583, 5-33=-259/0, 6-32=-486/0, 9-30=-1423/0, 9-31=0/978, 7-31=-1065/0, 7-32=0/1146, 11-30=-1606/0, 11-28=0/1184, 13-28=-1151/0, 13-27=0/836, 15-27=-641/0, 15-26=0/714, 16-26=-317/0, 20-22=-1225/0, 20-23=0/807, 19-23=-764/0, 19-24=0/433, 17-24=-420/180

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All plates are 3x4 MT20 unless otherwise indicated.
 - 3) Plates checked for a plus or minus 1 degree rotation about its center.
 - 4) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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.



Job	Truss	Truss Type	Qty	Ply	Precision/Lot 1 Liberty Meadows/Harnett	150320780
J0422-2179	F4	Floor	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Feb 18 10:10:35 2022 Page 1
ID:1NaocfdXFgYT90ywZp05ZYzwAzd-svQC6sk5jowHvtsfbXfpeKC5O5VisXNr?KIGbYzjxG2

1-3-0

2-2-8 1-1-0

0-1-8

Scale = 1:26.2

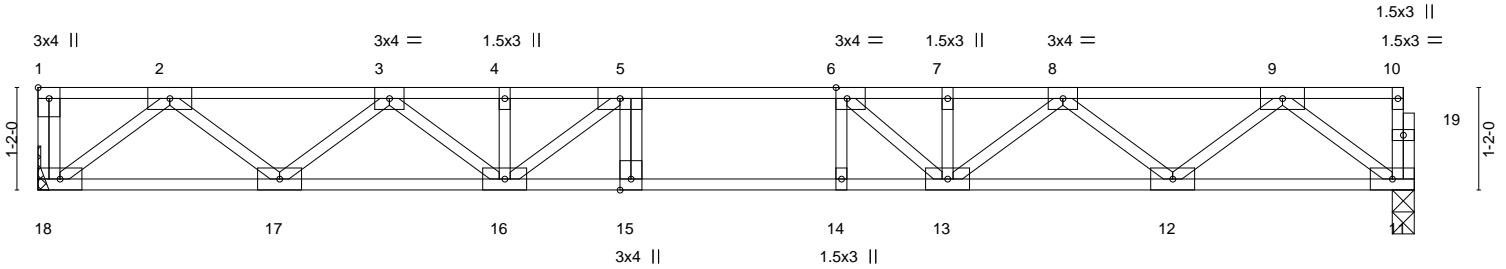


Plate Offsets (X,Y)--	[1:Edge,0-1-8], [6:0-1-8,Edge]
-----------------------	--------------------------------

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.48	Vert(LL)	-0.17 15-16	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.76	Vert(CT)	-0.24 15-16	>778	360		
BCLL 0.0	Rep Stress Incr YES	WB 0.43	Horz(CT)	0.05 11	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 81 lb	FT = 20%F, 11%E

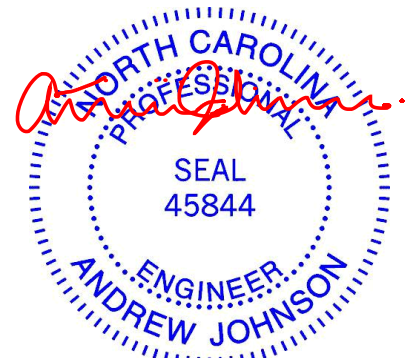
LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS. (size) 18=Mechanical, 11=0-3-0
Max Grav 18=848(LC 1), 11=842(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1737/0, 3-4=-2796/0, 4-5=-2796/0, 5-6=-3087/0, 6-7=-2786/0, 7-8=-2786/0, 8-9=-1738/0
BOT CHORD 17-18=0/1051, 16-17=0/2388, 15-16=0/3087, 14-15=0/3087, 13-14=0/3087, 12-13=0/2389, 11-12=0/1051
WEBS 9-11=-1315/0, 9-12=0/895, 8-12=-847/0, 8-13=0/507, 6-13=-687/0, 2-18=-1319/0, 2-17=0/892, 3-17=-848/0, 3-16=0/521, 5-16=-656/1

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All plates are 3x6 MT20 unless otherwise indicated.
 - 3) Plates checked for a plus or minus 1 degree rotation about its center.
 - 4) Refer to girder(s) for truss to truss connections.
 - 5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 7) CAUTION, Do not erect truss backwards.



February 19, 2022

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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



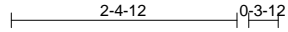
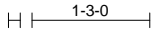
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 1 Liberty Meadows/Harnett	150320781
J0422-2179	F5	Floor	2	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Feb 18 10:10:36 2022 Page 1
ID:1NaocfdXFgYT90ywZp05ZYzWzAzd-K5_aJCljU6286pRr9FA2BYkE1Vqzb_3_D_2q8?zjxG1

0-1-8



0-1-8
Scale = 1:24.5

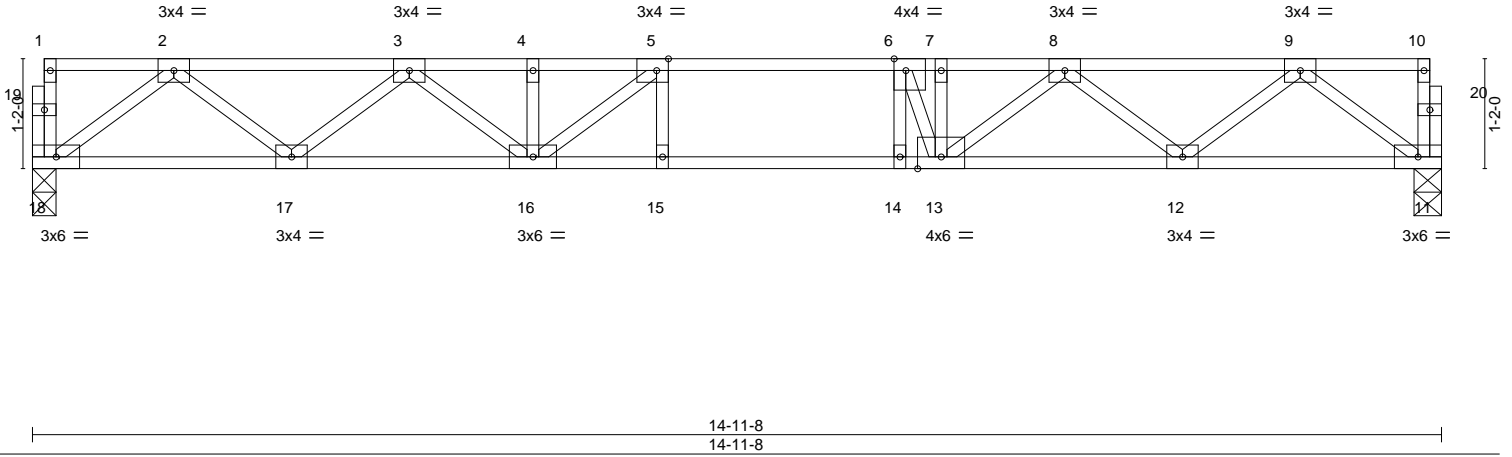


Plate Offsets (X,Y)-- [5:0-1-8,Edge], [6:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.62	Vert(LL) -0.17	15-16	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.82	Vert(CT) -0.23	15-16	>779	360		
BCLL 0.0	Rep Stress Incr YES	WB 0.40	Horz(CT) 0.04	11	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 77 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) 18=0-3-0, 11=0-3-8
Max Grav 18=803(LC 1), 11=803(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1638/0, 3-4=-2609/0, 4-5=-2609/0, 5-6=-2798/0, 6-7=-2590/0, 7-8=-2590/0, 8-9=-1640/0
BOT CHORD 17-18=0/999, 16-17=0/2245, 15-16=0/2798, 14-15=0/2798, 13-14=0/2798, 12-13=0/2245, 11-12=0/999
WEBS 2-18=-1251/0, 2-17=0/831, 3-17=-790/0, 3-16=0/466, 5-16=-544/50, 6-14=-134/298, 9-11=-1251/0, 9-12=0/834, 8-12=-788/0, 8-13=0/473, 7-13=-42/345, 6-13=-915/8

- 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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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.



February 19, 2022

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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



818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 1 Liberty Meadows/Harnett	150320782
J0422-2179	F6	Floor	2	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Feb 18 10:10:37 2022 Page 1
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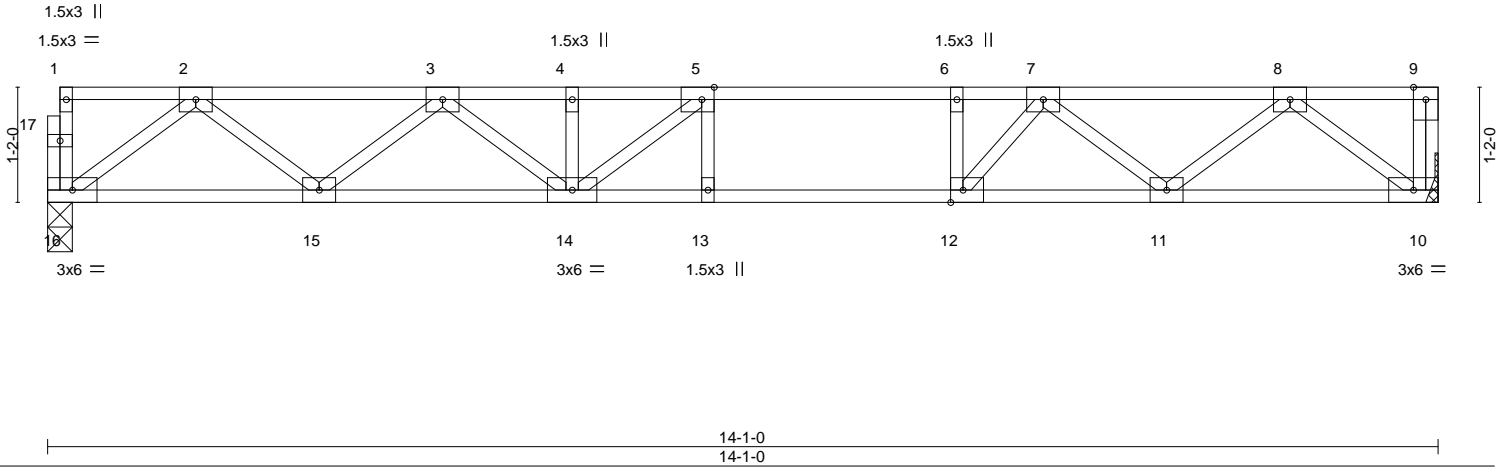


Plate Offsets (X,Y)-- [5:0-1-8,Edge], [12:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.67	Vert(LL) -0.18	13-14	>906	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.84	Vert(CT) -0.24	13-14	>679	360		
BCLL 0.0	Rep Stress Incr YES	WB 0.36	Horz(CT) 0.03	10	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 71 lb	FT = 20%F, 11%E

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

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

REACTIONS. (size) 16=0-3-0, 10=Mechanical
 Max Grav 16=755(LC 1), 10=761(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1515/0, 3-4=-2385/0, 4-5=-2385/0, 5-6=-2431/0, 6-7=-2431/0, 7-8=-1501/0
 BOT CHORD 15-16=0/936, 14-15=0/2067, 13-14=0/2431, 12-13=0/2431, 11-12=0/2079, 10-11=0/936
 WEBS 2-16=-1172/0, 2-15=0/754, 3-15=-718/0, 3-14=0/406, 5-14=-408/169, 6-12=-424/0, 8-10=-1173/0, 8-11=0/737, 7-11=-752/0, 7-12=0/745

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All plates are 3x4 MT20 unless otherwise indicated.
 - 3) Plates checked for a plus or minus 1 degree rotation about its center.
 - 4) Refer to girder(s) for truss to truss connections.
 - 5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 7) CAUTION, Do not erect truss backwards.



February 19, 2022

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 1 Liberty Meadows/Harnett	150320783
J0422-2179	F7	Floor	2	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Feb 18 10:10:37 2022 Page 1
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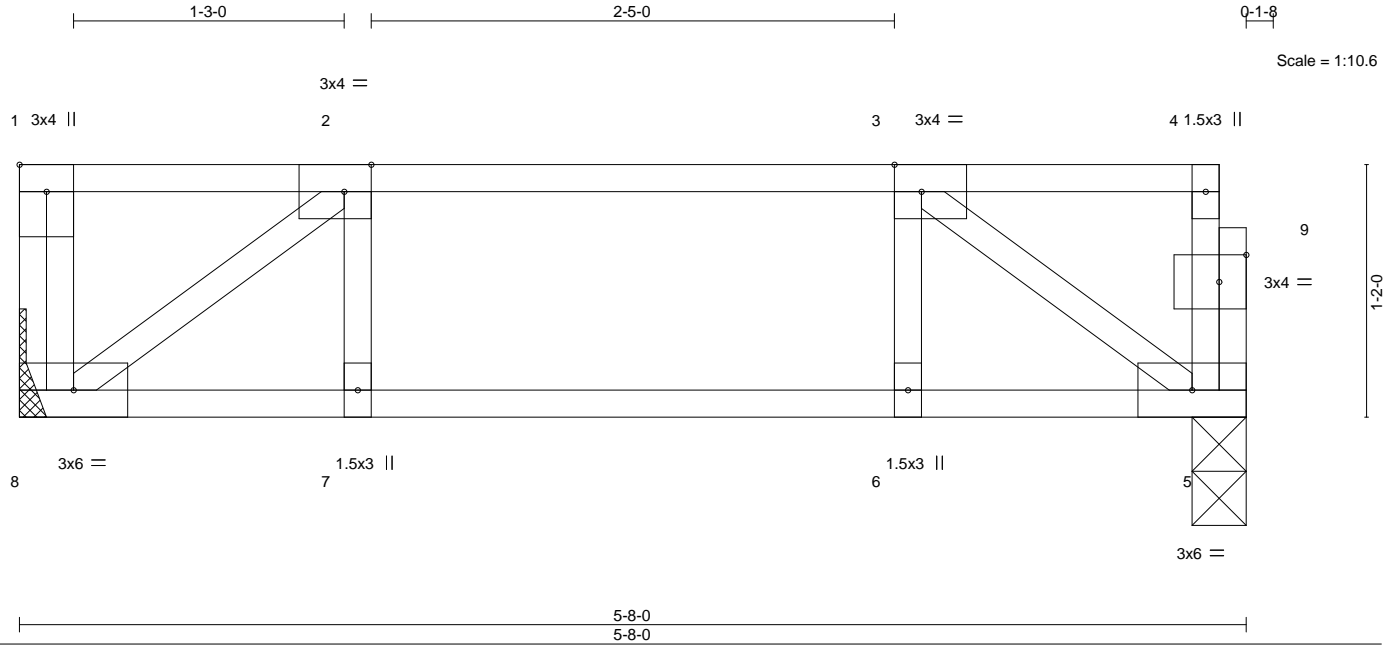


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [2:0-1-8,Edge], [3:0-1-8,Edge], [9:0-1-8,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.21	Vert(LL)	-0.01	7	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.12	Vert(CT)	-0.01	7	>999	360		
BCLL 0.0	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.00	5	n/a	n/a		
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-S						Weight: 29 lb	FT = 20%F, 11%E

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-8-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=Mechanical, 5=0-3-0
Max Grav 8=298(LC 1), 5=292(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-347/0
BOT CHORD 7-8=0/347, 6-7=0/347, 5-6=0/347
WEBS 2-8=-429/0, 3-5=-426/0

- 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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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.



February 19, 2022

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 1 Liberty Meadows/Harnett	150320784
J0422-2179	FG1	Floor	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Feb 18 10:10:38 2022 Page 1
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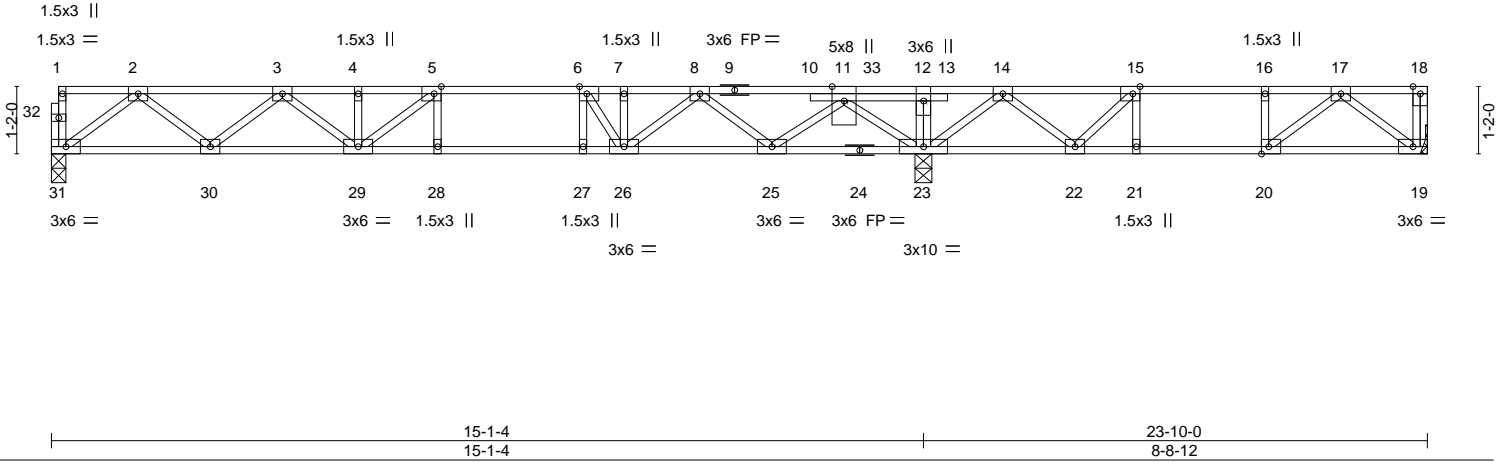


Plate Offsets (X,Y)-- [5:0-1-8,Edge], [6:0-1-8,Edge], [15:0-1-8,Edge], [20:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.74	Vert(LL) -0.17	28-29	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.93	Vert(CT) -0.24	28-29	>760	360		
BCLL 0.0	Rep Stress Incr NO	WB 0.51	Horz(CT) 0.04	23	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 123 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)

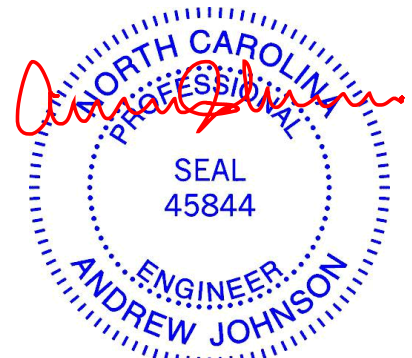
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 31=0-3-0, 23=0-3-8, 19=Mechanical
Max Grav 31=784(LC 10), 23=2392(LC 1), 19=1760(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 18-19=-1452/0, 2-3=-1591/0, 3-4=-2522/0, 4-5=-2522/0, 5-6=-2659/0, 6-7=-2349/0,
7-8=-2349/0, 8-11=-1315/0, 11-12=0/1493, 12-14=0/1490, 14-15=-160/608,
15-16=-527/274, 16-17=-527/274
BOT CHORD 30-31=0/975, 29-30=0/2176, 28-29=0/2659, 27-28=0/2659, 26-27=0/2659, 25-26=0/1922,
23-25=0/622, 22-23=-908/0, 21-22=-274/527, 20-21=-274/527, 19-20=-63/380
WEBS 12-23=-595/0, 2-31=-1220/0, 2-30=0/802, 3-30=-762/0, 3-29=0/442, 5-29=-406/103,
11-23=-2163/0, 11-25=0/917, 8-25=-848/0, 8-26=0/580, 6-26=-826/0, 14-23=-846/0,
14-22=0/663, 17-19=-477/79, 17-20=-270/187, 15-22=-704/0

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
 - All plates are 3x4 MT20 unless otherwise indicated.
 - Plates checked for a plus or minus 1 degree rotation about its center.
 - Refer to girder(s) for truss to truss connections.
 - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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) 941 lb down at 14-2-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 19-31=-10, 1-18=-100
Concentrated Loads (lb)
Vert: 18=-1400 33=-861(F)



February 19, 2022

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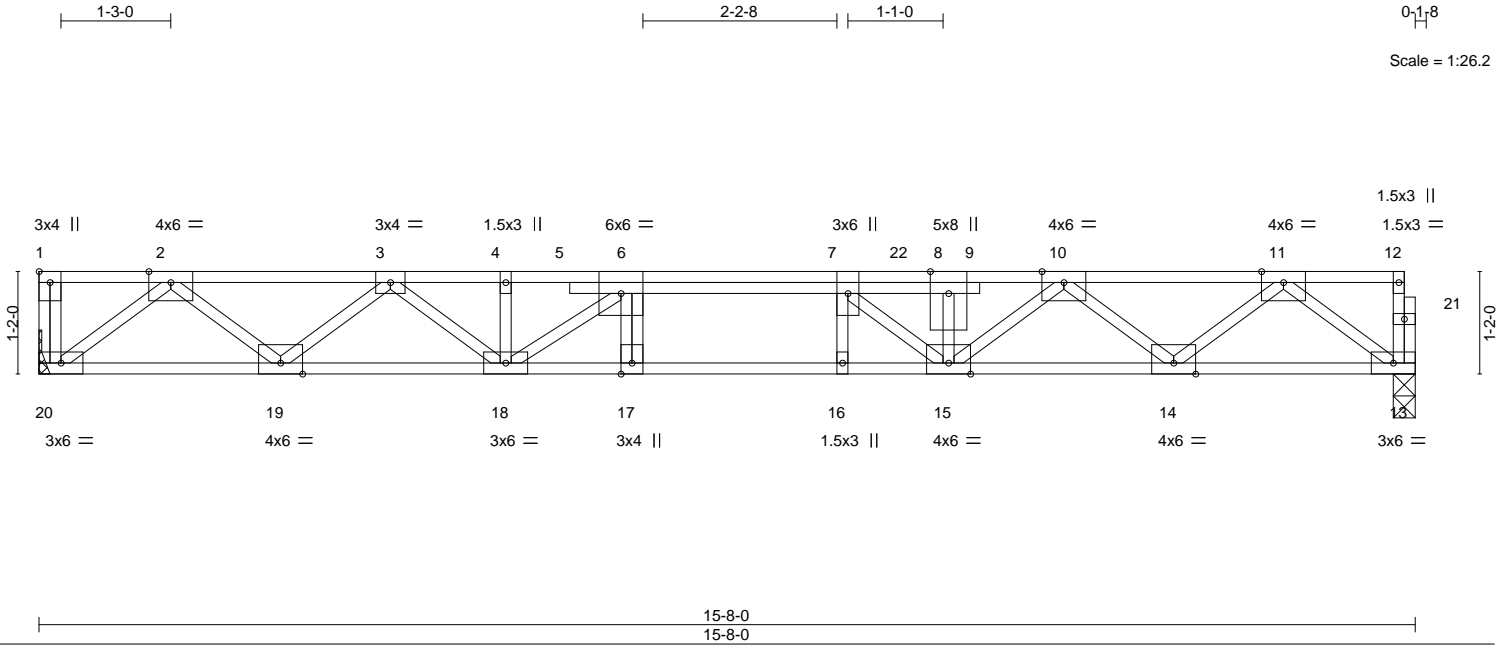


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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 1 Liberty Meadows/Harnett	150320785
J0422-2179	FG2	Floor	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Feb 18 10:10:39 2022 Page 1
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LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.75	Vert(LL)	-0.21	16	>878	480	MT20	244/190	
TCDL	10.0	Lumber DOL	1.00	BC	0.64	Vert(CT)	-0.30	16	>627	360	Weight: 87 lb FT = 20%F, 11%E		
BCLL	0.0	Rep Stress Incr	NO	WB	0.60	Horz(CT)	0.05	13	n/a	n/a			
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S									

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1(flat)	TOP CHORD	Structural wood sheathing directly applied or 5-7-14 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) 20=Mechanical, 13=0-3-0
Max Grav 20=994(LC 1), 13=1091(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2108/0, 3-4=-3466/0, 4-6=-3482/0, 6-7=-4399/0, 7-8=-4150/0, 8-10=-4150/0, 10-11=-2356/0
BOT CHORD 19-20=0/1241, 18-19=0/2934, 17-18=0/4399, 16-17=0/4399, 15-16=0/4399, 14-15=0/3299, 13-14=0/1383
WEBS 11-13=-1733/0, 11-14=0/1266, 10-14=-1227/0, 10-15=0/1095, 8-15=-524/0, 7-15=-526/90, 2-20=-1557/0, 2-19=0/1128, 3-19=-1075/0, 3-18=0/680, 4-18=0/324, 6-18=-1339/0

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
 - Plates checked for a plus or minus 1 degree rotation about its center.
 - Refer to girder(s) for truss to truss connections.
 - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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) 464 lb down at 9-10-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 13-20=-10, 1-12=-100
Concentrated Loads (lb)
Vert: 22=-396(B)

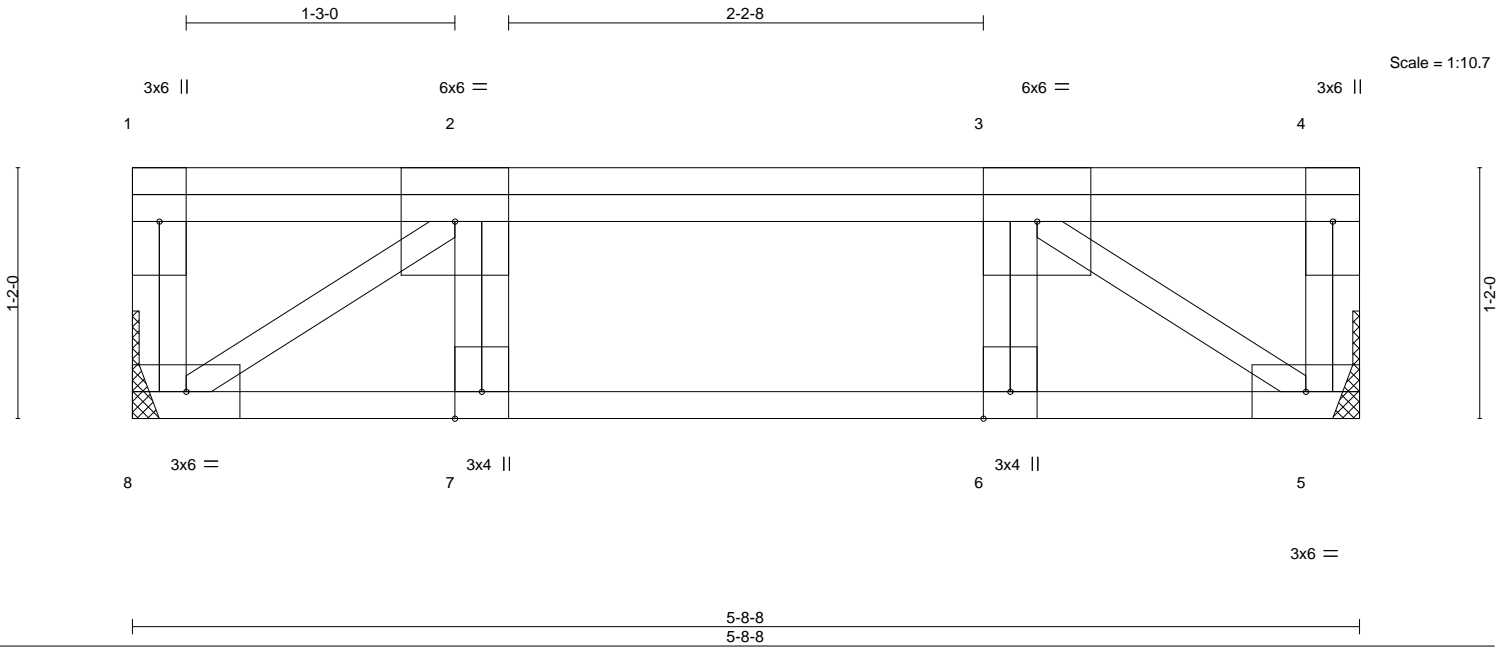


Job	Truss	Truss Type	Qty	Ply	Precision/Lot 1 Liberty Meadows/Harnett	150320787
J0422-2179	FG4	FLOOR GIRDER	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Feb 18 10:10:41 2022 Page 1

ID:1NaocfdXFgYT90ywZp05ZYwAzd-g3nTMwpslehRDajpyomDubSCUWf5GGakNlboCzjxFy



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 0.12	Vert(LL) -0.02 6-7 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.31	Vert(CT) -0.03 6-7 >999 360		
BCLL 0.0	Rep Stress Incr	NO	WB 0.38	Horz(CT) 0.01 5 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S		Weight: 39 lb	FT = 20%F, 11%E

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-8-8 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=961(LC 1), 5=961(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1355/0
BOT CHORD 7-8=0/1355, 6-7=0/1355, 5-6=0/1355
WEBS 2-8=-1618/0, 3-5=-1618/0

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
 - Plates checked for a plus or minus 1 degree rotation about its center.
 - Refer to girder(s) for truss to truss connections.
 - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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) 692 lb down at 1-10-4, and 692 lb down at 3-10-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 5-8=-10, 1-4=-100
Concentrated Loads (lb)
Vert: 2=-661(B) 3=-661(B)



February 19, 2022

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

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

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 1 Liberty Meadows/Harnett	150320788
J0422-2179	FG5	FLOOR GIRDER	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Feb 18 10:10:42 2022 Page 1
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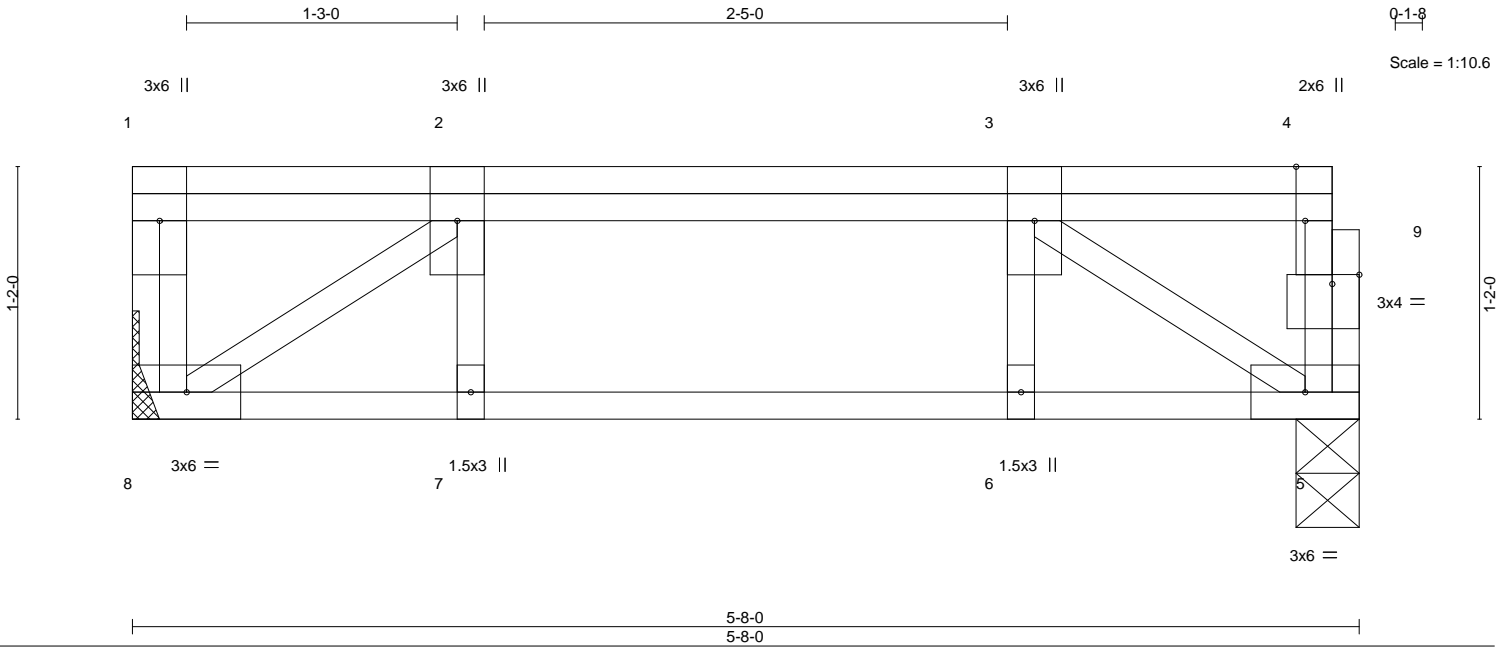


Plate Offsets (X,Y)-- [4:0-3-0,Edge], [9:0-1-8,0-0-8]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.09	Vert(LL) -0.01	7	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.16	Vert(CT) -0.01	6-7	>999	360		
BCLL 0.0	Rep Stress Incr NO	WB 0.18	Horz(CT) 0.00	5	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 36 lb	FT = 20%F, 11%E

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 5-8-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=Mechanical, 5=0-3-8
 Max Grav 8=496(LC 1), 5=490(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=644/0
 BOT CHORD 7-8=0/644, 6-7=0/644, 5-6=0/644
 WEBS 2-8=780/0, 3-5=776/0

- 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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 6) CAUTION, Do not erect truss backwards.
 - 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 226 lb down at 1-10-4, and 228 lb down at 3-10-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
 - 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (plf)
 Vert: 5-8=-10, 1-4=-100
 Concentrated Loads (lb)
 Vert: 2=-198(F) 3=-198(F)



February 19, 2022

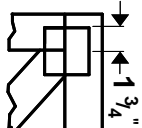
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use,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



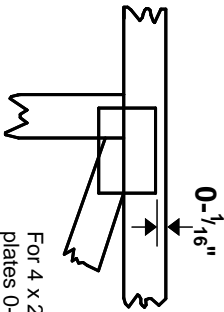
818 Soundside Road
 Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- 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

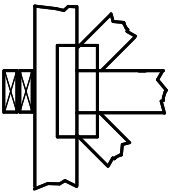
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



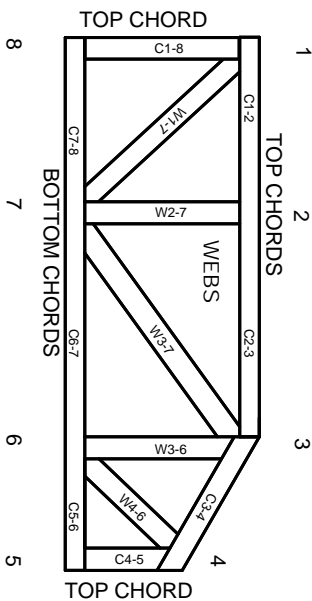
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0422-2178
Precision/Lot 1 Liberty Meadows/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: I52789475 thru I52789492

My license renewal date for the state of North Carolina is December 31, 2022.

North Carolina COA: C-0844



June 28, 2022

Gilbert, Eric

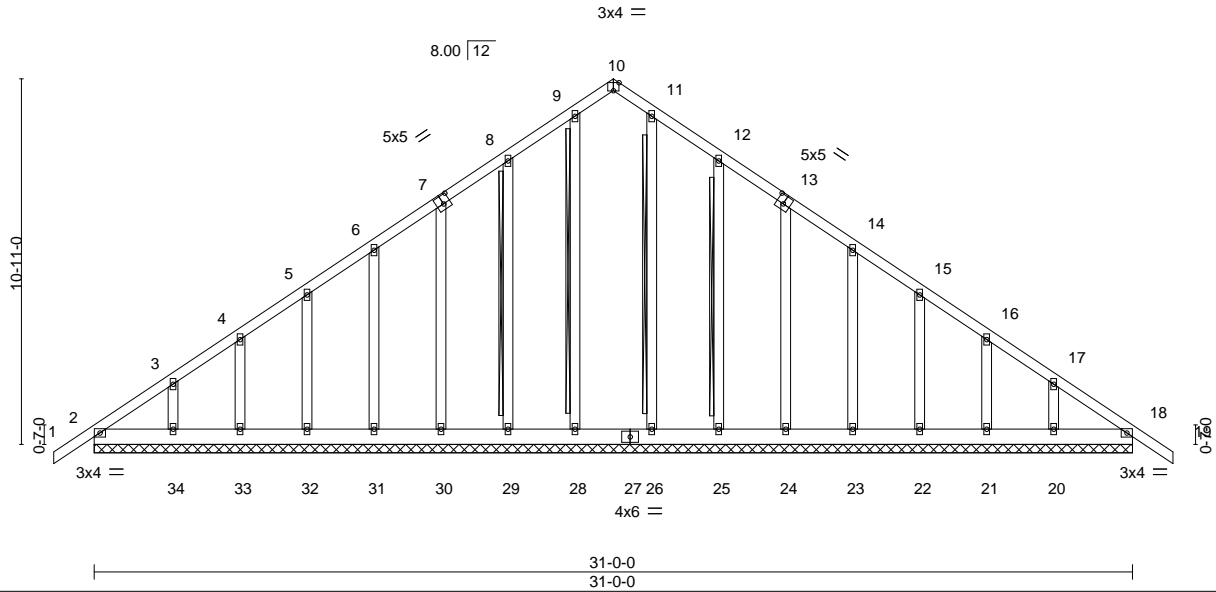
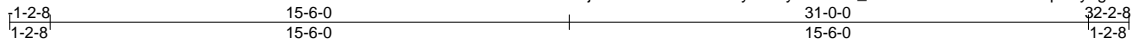
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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 J0422-2178	Truss A1-GE	Truss Type GABLE	Qty 1	Ply 1	Precision/Lot 1 Liberty Meadows/Harnett	152789475
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jun 28 07:01:32 2022 Page 1

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Scale = 1:68.8

Plate Offsets (X,Y)-- [7:0-2-8,0-3-0], [10:0-2-0,Edge], [13:0-2-8,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.09	Vert(LL) -0.00	19	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) -0.00	19	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.12	Horz(CT) 0.01	18	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 246 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 - 9-28, 8-29, 11-26, 12-25
 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.
 Brace must cover 90% of web length.

REACTIONS.

All bearings 31-0-0.
 (lb) - Max Horz 2=334(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 18, 28, 30, 31, 32, 33, 24, 23, 22, 21 except 29=112(LC 12), 34=119(LC 12), 25=118(LC 13), 20=116(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 2, 18, 28, 29, 30, 31, 32, 33, 34, 26, 25, 24, 23, 22, 21, 20

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

TOP CHORD 2-3=409/264, 3-4=309/185, 16-17=273/184, 17-18=373/269
 BOT CHORD 2-34=249/361, 33-34=249/361, 32-33=249/361, 31-32=249/361, 30-31=249/361, 29-30=249/361, 28-29=249/361, 26-28=249/361, 25-26=249/361, 24-25=249/361, 23-24=249/361, 22-23=249/361, 21-22=249/361, 20-21=249/361, 18-20=249/361

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 18, 28, 30, 31, 32, 33, 24, 23, 22, 21 except (jt=lb) 29=112, 34=119, 25=118, 20=116.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



June 28, 2022

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

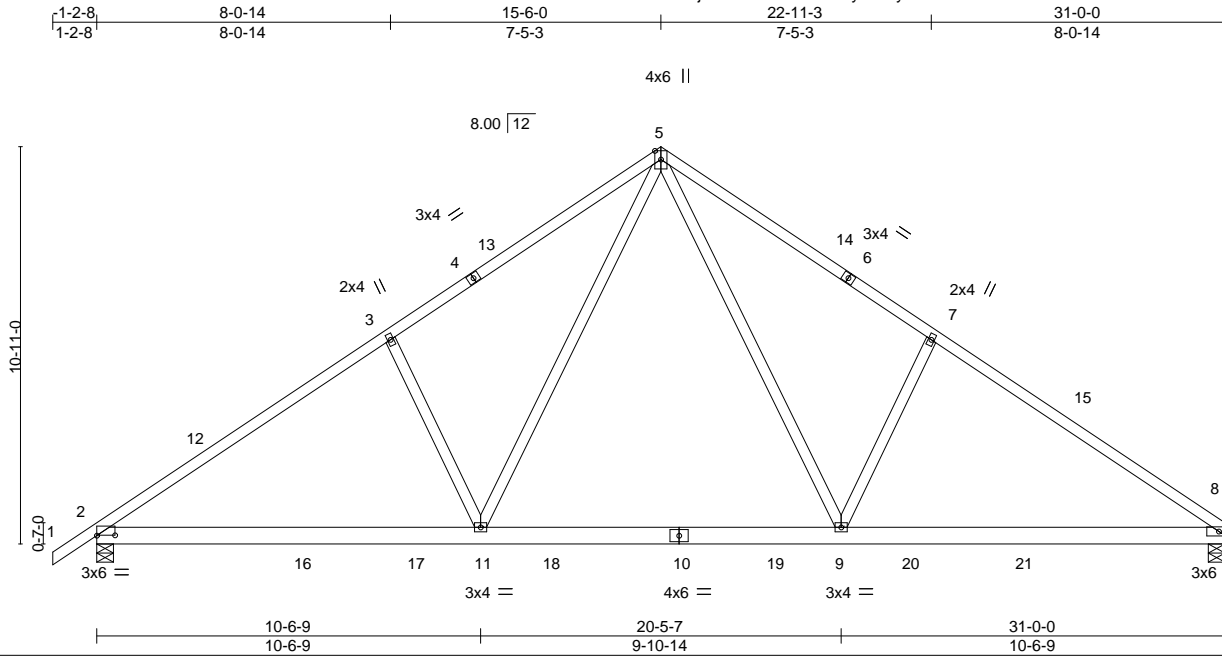
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
 Edenton, NC 27932

Job J0422-2178	Truss A2	Truss Type COMMON	Qty 6	Ply 1	Precision/Lot 1 Liberty Meadows/Harnett	152789476
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Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jun 28 07:01:33 2022 Page 1
 ID:jUICoITBhC0nIVmGynse8yuZYG-34YeTwARXoY6carax2d2RPV3un9v8prx6l4fELz1qLW



Scale = 1:63.3

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

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	L/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.70	Vert(LL) -0.14 9-11 >999	360		MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.51	Vert(CT) -0.21 2-11 >999	240			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.41	Horz(CT) 0.04 8 n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.06 2-11 >999	240		Weight: 181 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 2-2-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

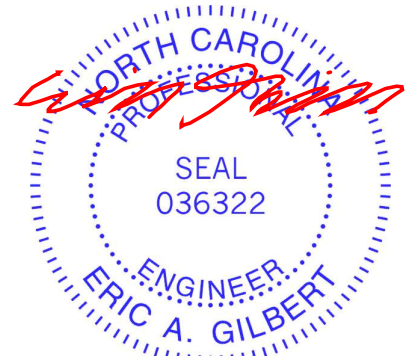
(size) 2=0-5-8, 8=0-5-8
 Max Horz 2=262(LC 9)
 Max Uplift 2=84(LC 12), 8=64(LC 13)
 Max Grav 2=1496(LC 19), 8=1412(LC 20)

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

TOP CHORD 2-3=-2025/359, 3-5=-1871/456, 5-7=-1879/474, 7-8=-2030/373
 BOT CHORD 2-11=-169/1731, 9-11=0/1142, 8-9=-173/1566
 WEBS 5-9=-172/980, 7-9=-494/307, 5-11=-169/970, 3-11=-483/297

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph 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 15-6-0, Exterior(2) 15-6-0 to 19-10-13, Interior(1) 19-10-13 to 30-9-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



June 28, 2022

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

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

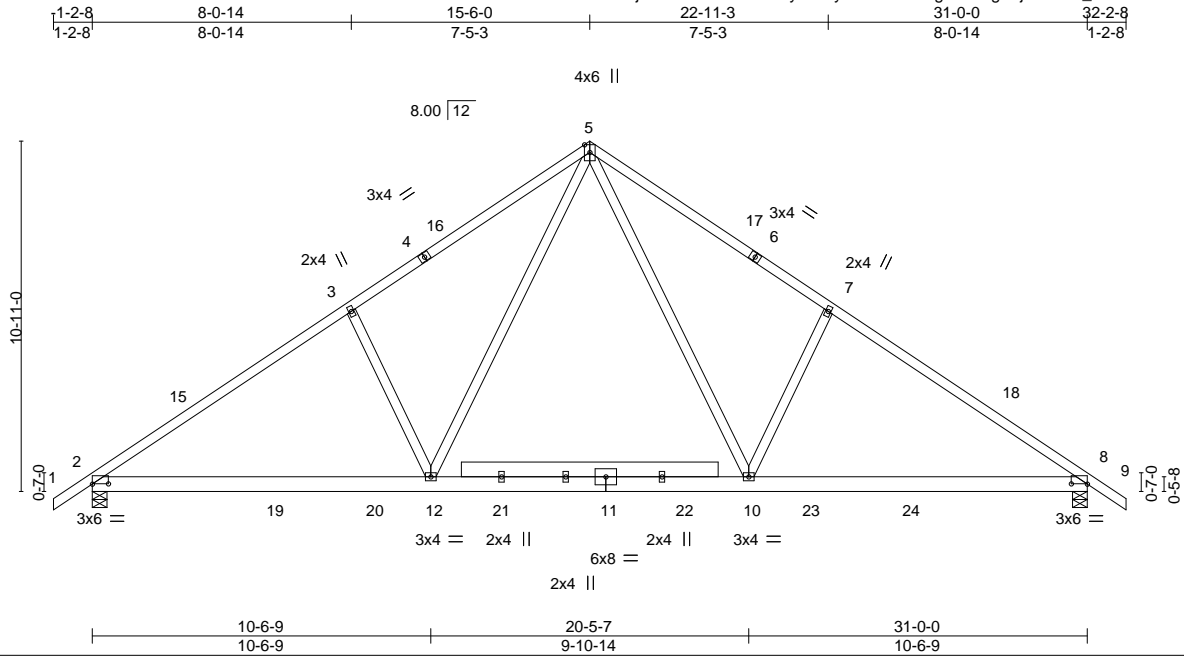


818 Soundside Road
 Edenton, NC 27932

Job J0422-2178	Truss A3	Truss Type COMMON	Qty 7	Ply 1	Precision/Lot 1 Liberty Meadows/Harnett 152789477
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jun 28 07:01:34 2022 Page 1
ID:jUICoITBhC0nIVImGynse8yuZYG-XG61gGB3l6gzEjQnVI8H_d2FVBVtEtGF4LPpCnoz1qLV



Scale = 1:71.8

Plate Offsets (X,Y)-- [2:0-6-0,0-0-2], [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 0.58	Vert(LL) -0.13	10-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.50	Vert(CT) -0.22	2-12	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.40	Horz(CT) 0.04	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.06	2-12	>999	240		
							Weight: 202 lb	FT = 20%

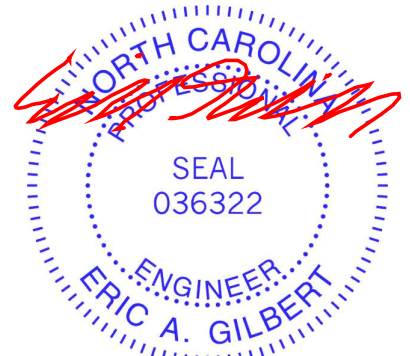
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-5-8, 8=0-5-8
Max Horz 2=-267(LC 10)
Max Uplift 2=-84(LC 12), 8=-84(LC 13)
Max Grav 2=1485(LC 19), 8=1485(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2004/357, 3-5=-1850/454, 5-7=-1850/454, 7-8=-2004/357
BOT CHORD 2-12=-132/1722, 10-12=0/1137, 8-10=-146/1551
WEBS 5-10=-168/959, 7-10=-482/297, 5-12=-168/959, 3-12=-482/297

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph 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 15-6-0, Exterior(2) 15-6-0 to 19-10-13, Interior(1) 19-10-13 to 32-2-8 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.



June 28, 2022

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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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

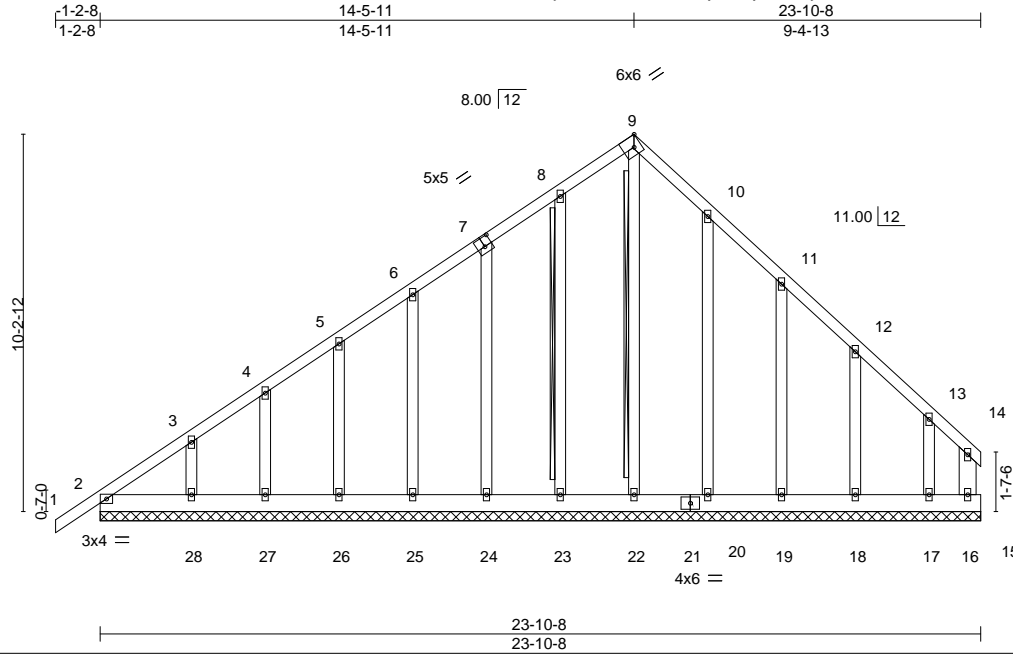
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
Edenton, NC 27932

Job J0422-2178	Truss B1-GE	Truss Type GABLE	Qty 1	Ply 1	Precision/Lot 1 Liberty Meadows/Harnett Job Reference (optional)	152789479
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Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jun 28 07:01:37 2022 Page 1
 ID:jUICoITBhConlVImGynse8yuZYG-ym9JIExb13Y5B9MAui_cFfuW0dT4gEW1M2sN7z1qLS



Scale = 1:62.5

Plate Offsets (X,Y)-- [7:0-2-8,0-3-0], [9:0-2-5,Edge]

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.08	Vert(LL) 0.00	1	n/r	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) -0.00	1	n/r		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.26	Horz(CT) -0.00	15	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					
						Weight: 193 lb	FT = 20%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS T-Brace: 2x4 SPF No.2 - 9-22, 8-23
 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.
 Brace must cover 90% of web length.

REACTIONS. All bearings 23-10-8.
 (lb) - Max Horz 2=302(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 23, 24, 25, 26, 27, 16 except
 2=-159(LC 8), 22=-120(LC 11), 28=-113(LC 12), 20=-106(LC 13), 19=-135(LC 13),
 18=-126(LC 13), 17=-107(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 15, 23, 24, 25, 26, 27, 28, 20,
 19, 18, 17, 16 except 2=259(LC 20), 22=509(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-335/333, 3-4=-295/301, 4-5=-271/296, 5-6=-253/327, 6-7=-231/366, 7-8=-292/413,
 8-9=-343/441, 9-10=-378/471, 10-11=-294/366
 WEBS 9-22=-485/307

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph 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) 23, 24, 25, 26, 27, 16 except (jt=lb) 2=159, 22=120, 28=113, 20=106, 19=135, 18=126, 17=107.
 - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



June 28, 2022

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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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



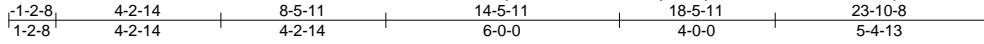
818 Soundside Road
 Edenton, NC 27932

Job J0422-2178	Truss B2	Truss Type ROOF SPECIAL	Qty 9	Ply 1	Precision/Lot 1 Liberty Meadows/Harnett	152789480
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jun 28 07:01:38 2022 Page 1

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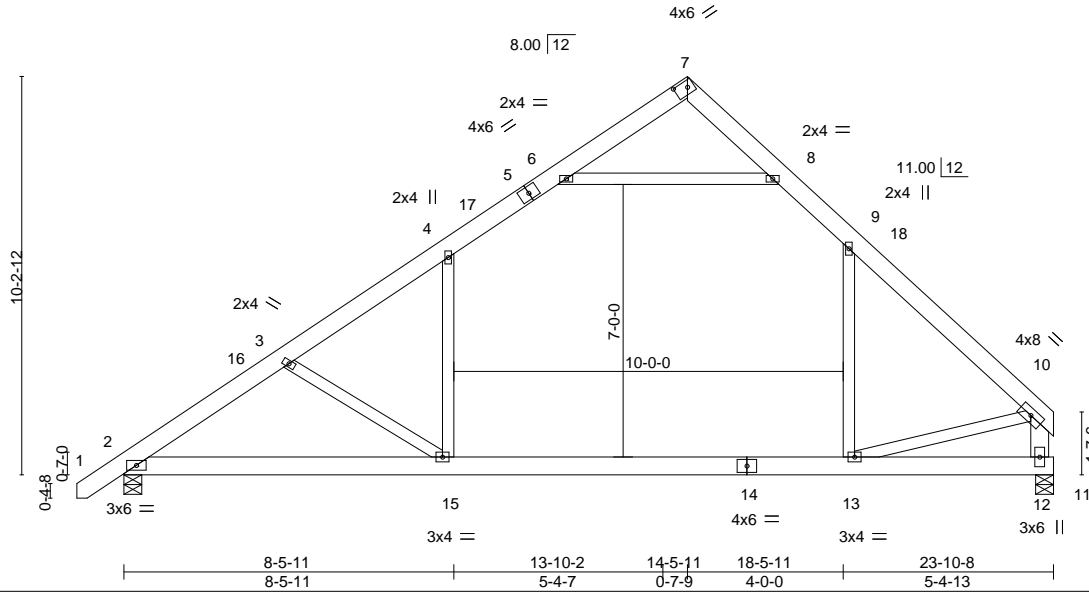


Plate Offsets (X,Y)-- [7:0-4-0,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.67	Vert(LL) -0.29	13-15	>979	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.47	Vert(CT) -0.46	13-15	>611	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.63	Horz(CT) 0.01	12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.19	15	>999	240	Weight: 172 lb	FT = 20%

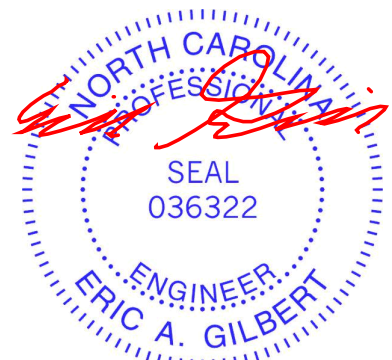
LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP 2400F 2.0E
 WEBS 2x4 SP No.2 *Except*
 10-12: 2x6 SP No.1

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, Except: 6-0-0 oc bracing: 12-13.

REACTIONS. (size) 2=0-5-8, 12=0-5-8
 Max Horz 2=242(LC 9)
 Max Uplift 2=-73(LC 12), 12=-33(LC 12)
 Max Grav 2=1150(LC 19), 12=1116(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1594/290, 3-4=-1319/240, 4-6=-897/279, 6-7=-30/279, 8-9=-928/295,
 9-10=-1416/226, 10-12=-1330/224
 BOT CHORD 2-15=-213/1453, 13-15=-49/991
 WEBS 4-15=0/585, 9-13=0/524, 6-8=-1167/355, 10-13=-56/1147, 3-15=-549/196

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 14-5-11, Exterior(2) 14-5-11 to 18-7-9, Interior(1) 18-7-9 to 23-6-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12.

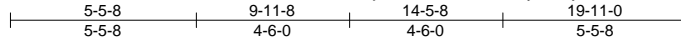


June 28, 2022

Job J0422-2178	Truss C2	Truss Type COMMON	Qty 2	Ply 1	Precision/Lot 1 Liberty Meadows/Harnett Job Reference (optional)	152789482
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jun 28 07:01:42 2022 Page 1
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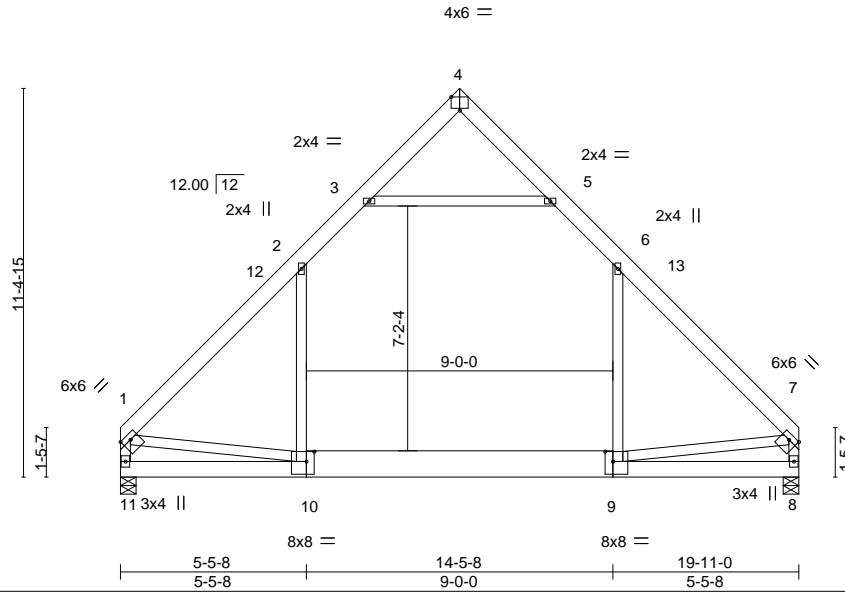


Plate Offsets (X,Y)-- [4:0-3-0,Edge], [9:0-2-12,0-3-8], [10:0-2-12,0-3-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.33	Vert(LL)	-0.08 9-10	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.27	Vert(CT)	-0.12 9-10	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.41	Horz(CT)	0.01 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.09 10-11	>999	240	Weight: 171 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1 *Except*
 9-10: 2x10 SP No.1
 WEBS 2x4 SP No.2

BRACING-

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

REACTIONS.

(size) 11=0-5-8, 8=0-5-8
 Max Horz 11=-272(LC 8)
 Max Uplift 11=-31(LC 13), 8=-31(LC 12)
 Max Grav 11=920(LC 20), 8=920(LC 19)

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

TOP CHORD 1-2=-1054/183, 2-3=-632/261, 5-6=-635/262, 6-7=-1061/185, 1-11=-917/193,
 7-8=-923/196
 BOT CHORD 10-11=-325/400, 9-10=-29/689
 WEBS 6-9=-13/378, 2-10=-7/378, 1-10=-93/598, 7-9=-106/607, 3-5=-761/358

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-1 to 4-6-14, Interior(1) 4-6-14 to 10-0-0, Exterior(2) 10-0-0 to 14-7-15, Interior(1) 14-7-15 to 19-9-15 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 8.



June 28, 2022

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

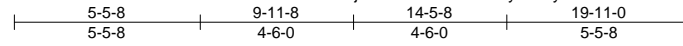
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
 Edenton, NC 27932

Job J0422-2178	Truss C3	Truss Type COMMON	Qty 4	Ply 1	Precision/Lot 1 Liberty Meadows/Harnett	152789483
Comtech, Inc., Fayetteville, NC - 28314,					8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jun 28 07:01:43 2022 Page 1	
					Job Reference (optional)	

ID: jUICoITBhC0nIVImGynse8yuZYG-m?8QZLiAtpip6cVX8oOrWvsApcQUKLPQIVBbmz1qLM



4x6 =

Scale = 1:67.6

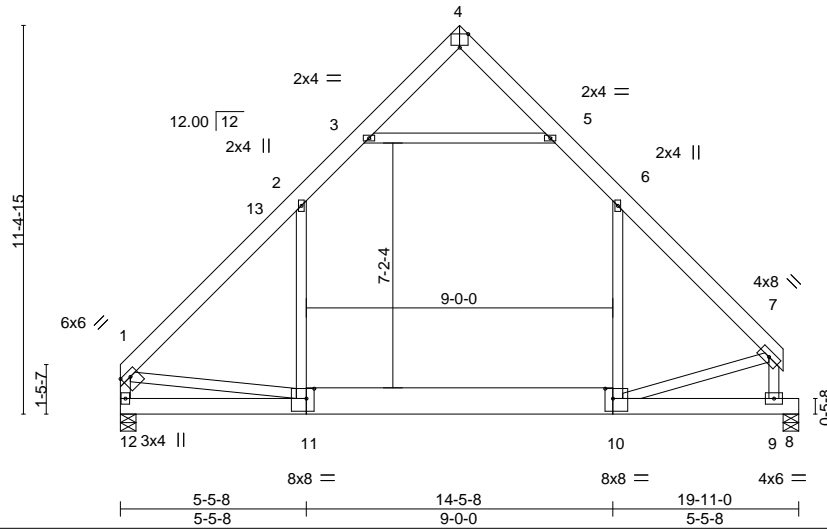


Plate Offsets (X,Y)-- [4:0-3-0,Edge], [10:0-2-12,0-3-8], [11:0-2-12,0-3-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.33	Vert(LL)	-0.08 10-11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.31	Vert(CT)	-0.12 10-11	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.41	Horz(CT)	0.01 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL)	0.09 11-12	>999	240		
							Weight: 170 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1 *Except*
 10-11: 2x10 SP No.1
 WEBS 2x4 SP No.2

BRACING-

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

REACTIONS.

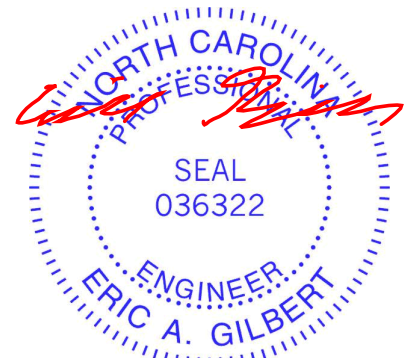
(size) 12=0-5-8, 8=0-5-8
 Max Horz 12=279(LC 9)
 Max Uplift 12=-29(LC 13), 8=-27(LC 12)
 Max Grav 12=916(LC 20), 8=897(LC 19)

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

TOP CHORD 1-2=-1048/182, 2-3=-633/263, 5-6=-631/260, 6-7=-1051/195, 1-12=-911/192,
 7-9=-1002/202
 BOT CHORD 11-12=-331/397, 10-11=-52/687
 WEBS 6-10=-6/396, 2-11=-6/372, 1-11=-91/594, 7-10=-87/596, 3-5=-747/353

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-1 to 4-6-14, Interior(1) 4-6-14 to 10-0-0, Exterior(2) 10-0-0 to 14-7-15, Interior(1) 14-7-15 to 19-2-15 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 8.



June 28, 2022

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

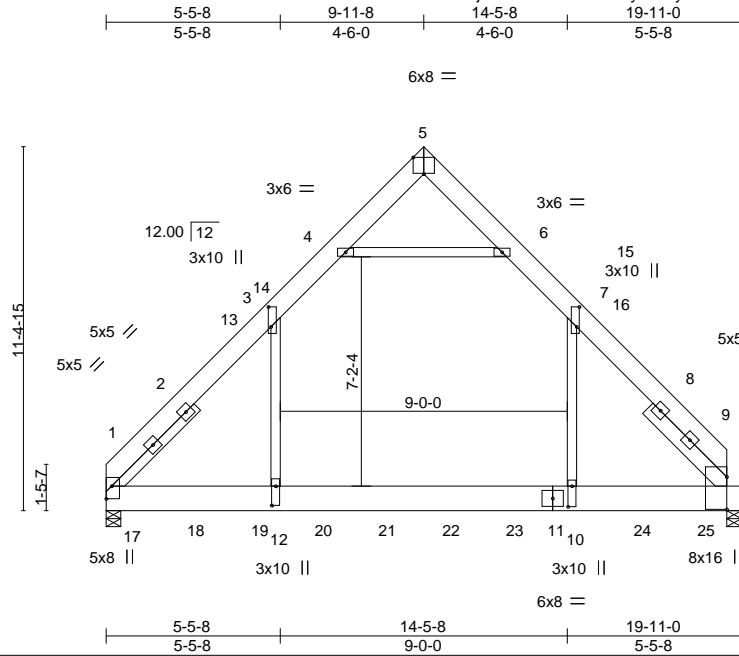


818 Soundside Road
 Edenton, NC 27932

Job J0422-2178	Truss C4	Truss Type COMMON	Qty 1	Ply 3	Precision/Lot 1 Liberty Meadows/Harnett	152789484
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jun 28 07:01:44 2022 Page 1
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Scale = 1:72.2

Plate Offsets (X,Y)-- [1:Edge,0-2-1], [3:0-7-8,0-1-0], [5:0-4-0,Edge], [7:0-7-8,0-1-0], [9:1-0-3,0-0-0], [10:0-7-12,0-1-8], [12:0-7-4,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.90	Vert(LL) -0.12	10-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.77	Vert(CT) -0.25	10-12	>939	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.52	Horz(CT) 0.02	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.13	10-12	>999	240		
							Weight: 611 lb	FT = 20%

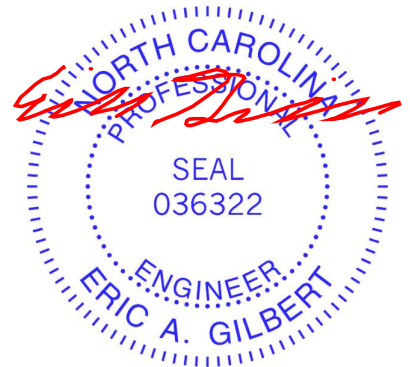
LUMBER-
TOP CHORD 2x8 SP No.1
BOT CHORD 2x10 SP 2400F 2.0E *Except*
1-11: 2x10 SP No.1
WEBS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 3-7-13, Right 2x6 SP No.1 3-5-11

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

REACTIONS. (size) 1=0-5-8, 9=0-5-8
Max Horz 1=254(LC 9)
Max Uplift 1=822(LC 13), 9=835(LC 12)
Max Grav 1=8369(LC 20), 9=8480(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-8406/1971, 3-4=-3682/1020, 4-5=-309/1260, 5-6=-312/1270, 6-7=-3673/1017,
7-9=-8628/2023
BOT CHORD 1-12=-1019/4923, 10-12=-1034/4994, 9-10=-1018/4917
WEBS 7-10=-1463/6668, 3-12=-1381/6346, 4-6=-6662/1845

- NOTES-**
- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
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 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-4 to 4-7-1, Interior(1) 4-7-1 to 10-0-0, Exterior(2) 10-0-0 to 14-4-13, Interior(1) 14-4-13 to 19-6-0 zone; end vertical left exposed; 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.
 - Solid blocking is required on both sides of the truss at joint(s), 1, 9.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=822, 9=835.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1467 lb down and 366 lb up at 0-9-0, 1467 lb down and 366 lb up at 2-9-0, 1467 lb down and 366 lb up at 4-9-0, 1467 lb down and 366 lb up at 6-9-0, 1467 lb down and 366 lb up at 8-9-0, 1467 lb down and 366 lb up at 10-9-0, 1467 lb down and 366 lb up at 12-9-0, 1467 lb down and 366 lb up at 14-9-0, and 1467 lb down and 366 lb up at 16-9-0, and 1822 lb down and 455 lb up at 18-9-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



LOAD CASE(S) Standard

June 28, 2022

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 J0422-2178	Truss C4	Truss Type COMMON	Qty 1	Ply 3	Precision/Lot 1 Liberty Meadows/Harnett 152789484 Job Reference (optional)
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jun 28 07:01:44 2022 Page 2
ID:jUICoITBhC0nIVImGynse8yuZYG-EBipnhJKxAxYRGBi5sKdOkSu2DrSDItYeyEk7Dz1qLL

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-5=-60, 5-9=-60, 1-9=-20

Concentrated Loads (lb)

Vert: 10=-1450(B) 17=-1450(B) 18=-1450(B) 19=-1450(B) 20=-1450(B) 21=-1450(B) 22=-1450(B) 23=-1450(B) 24=-1450(B) 25=-1800(B)

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 J0422-2178	Truss D1-GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Precision/Lot 1 Liberty Meadows/Harnett	152789485
					Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jun 28 07:01:45 2022 Page 1
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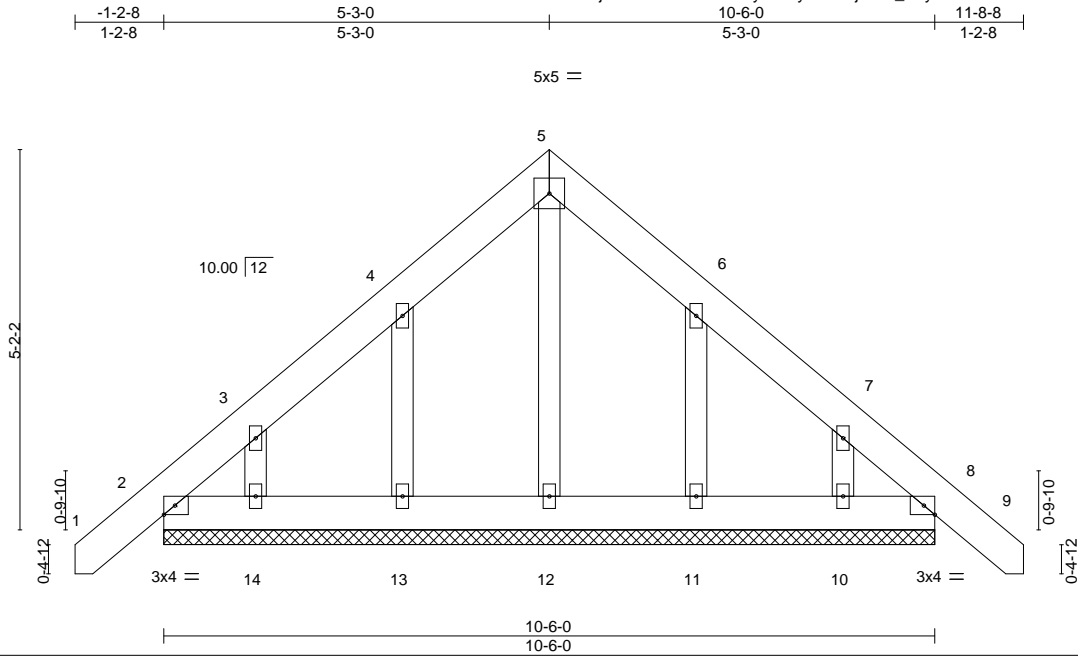


Plate Offsets (X,Y)-- [8:0-1-13,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.03	Vert(LL)	-0.00	8	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	8	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 82 lb	FT = 20%

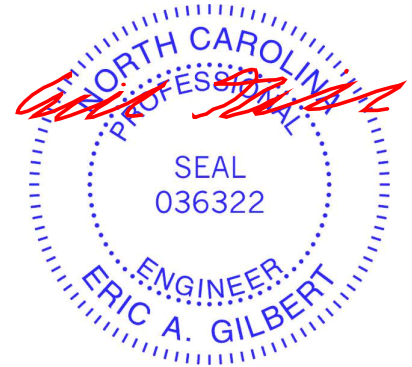
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. All bearings 10-6-0.
(lb) - Max Horz 2=158(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 8 except 13=112(LC 12), 14=106(LC 12), 11=109(LC 13), 10=103(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph 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) 2, 8 except (jt=lb) 13=112, 14=106, 11=109, 10=103.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.



June 28, 2022

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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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 J0422-2178	Truss D2	Truss Type Common Girder	Qty 1	Ply 2	Precision/Lot 1 Liberty Meadows/Harnett Job Reference (optional)	152789486
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jun 28 07:01:46 2022 Page 1
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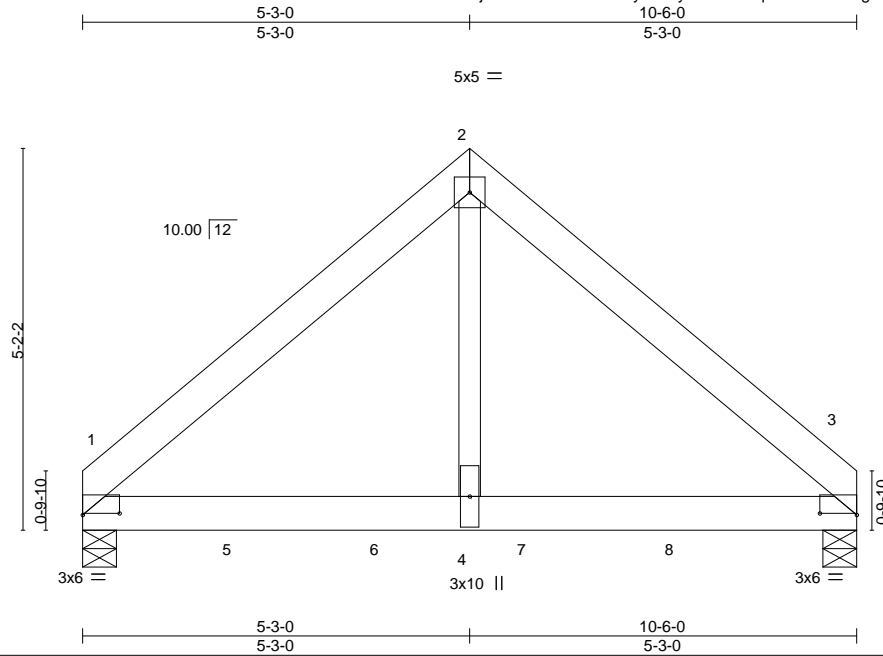


Plate Offsets (X,Y)-- [1:0-6-0,0-0-4], [3:0-6-0,0-0-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.17	Vert(LL) -0.04	1-4	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.86	Vert(CT) -0.08	1-4	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.48	Horz(CT) 0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.03	1-4	>999	240		
							Weight: 129 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=0-5-8, 3=0-5-8
Max Horz 1=112(LC 26)
Max Uplift 1=-172(LC 8), 3=-232(LC 9)
Max Grav 1=3102(LC 2), 3=4238(LC 2)

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

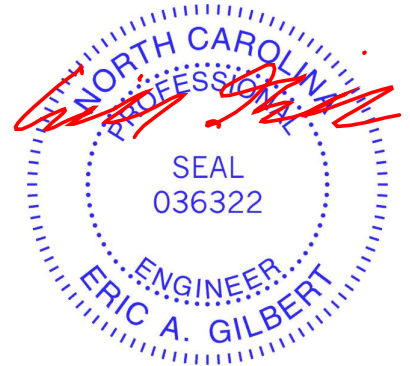
TOP CHORD 1-2=-3198/218, 2-3=-3205/218
BOT CHORD 1-4=-112/2336, 3-4=-112/2336
WEBS 2-4=-163/3926

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=172, 3=232.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1326 lb down and 84 lb up at 2-0-12, 1326 lb down and 84 lb up at 4-0-12, 1326 lb down and 84 lb up at 6-0-12, and 1326 lb down and 84 lb up at 8-0-12, and 1334 lb down and 76 lb up at 10-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 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



Continued on page 2

June 28, 2022

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 J0422-2178	Truss D2	Truss Type Common Girder	Qty 1	Ply 2	Precision/Lot 1 Liberty Meadows/Harnett Job Reference (optional)	152789486
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jun 28 07:01:47 2022 Page 2
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LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 3=-1208(B) 5=-1200(B) 6=-1200(B) 7=-1200(B) 8=-1200(B)

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

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



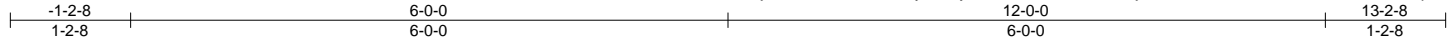
818 Soundside Road
Edenton, NC 27932

Job J0422-2178	Truss G1-SG	Truss Type GABLE	Qty 1	Ply 1	Precision/Lot 1 Liberty Meadows/Harnett	152789487
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jun 28 07:01:47 2022 Page 1
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Job Reference (optional)



Scale = 1:23.1

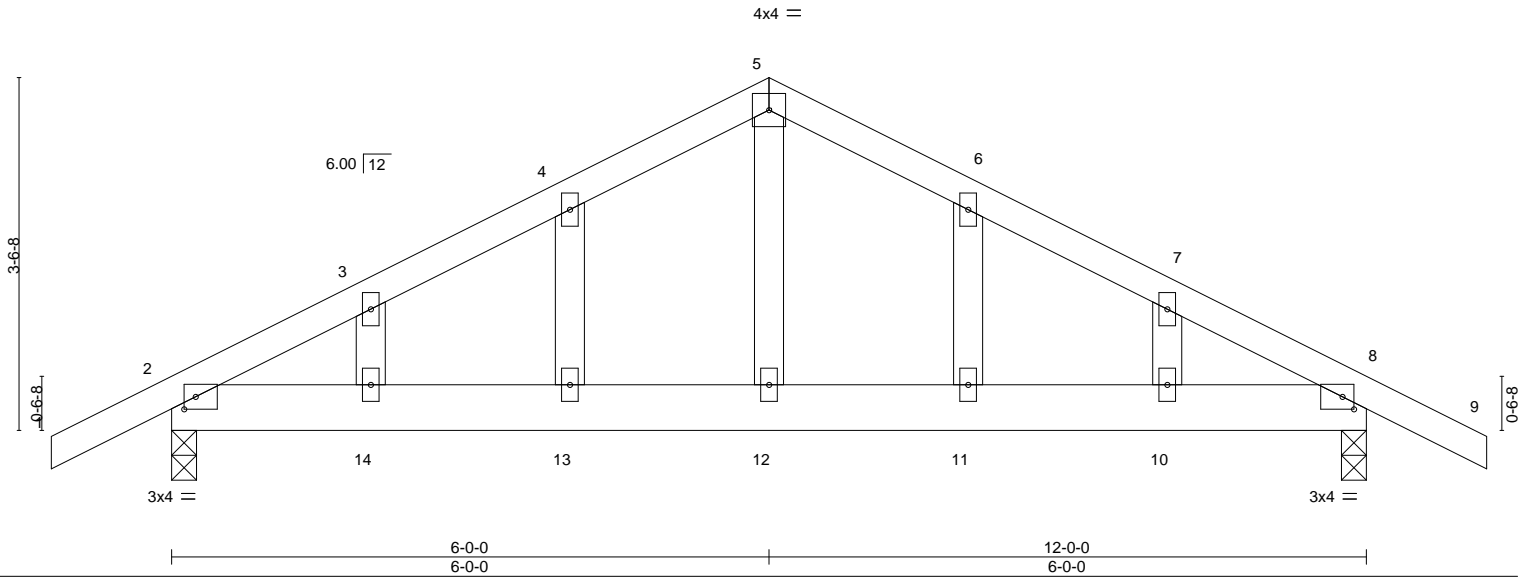


Plate Offsets (X,Y)--	[2:0-1-6,0-1-8], [8:0-1-6,0-1-8]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.14	Vert(LL) -0.02 13-14 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.19	Vert(CT) -0.03 13-14 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.09	Horz(CT) 0.01 8 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.03 10-11 >999 240	Weight: 64 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-3-0, 8=0-3-0
Max Horz 2=73(LC 12)
Max Uplift 2=-143(LC 9), 8=-143(LC 8)
Max Grav 2=550(LC 1), 8=550(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-619/669, 3-4=-574/691, 4-5=-565/744, 5-6=-565/744, 6-7=-574/691, 7-8=-619/669
BOT CHORD 2-14=-498/495, 13-14=-498/495, 12-13=-498/495, 11-12=-498/495, 10-11=-498/495,
8-10=-498/495
WEBS 5-12=-516/331

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph 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
 - 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 ANSITPI 1.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=143, 8=143.

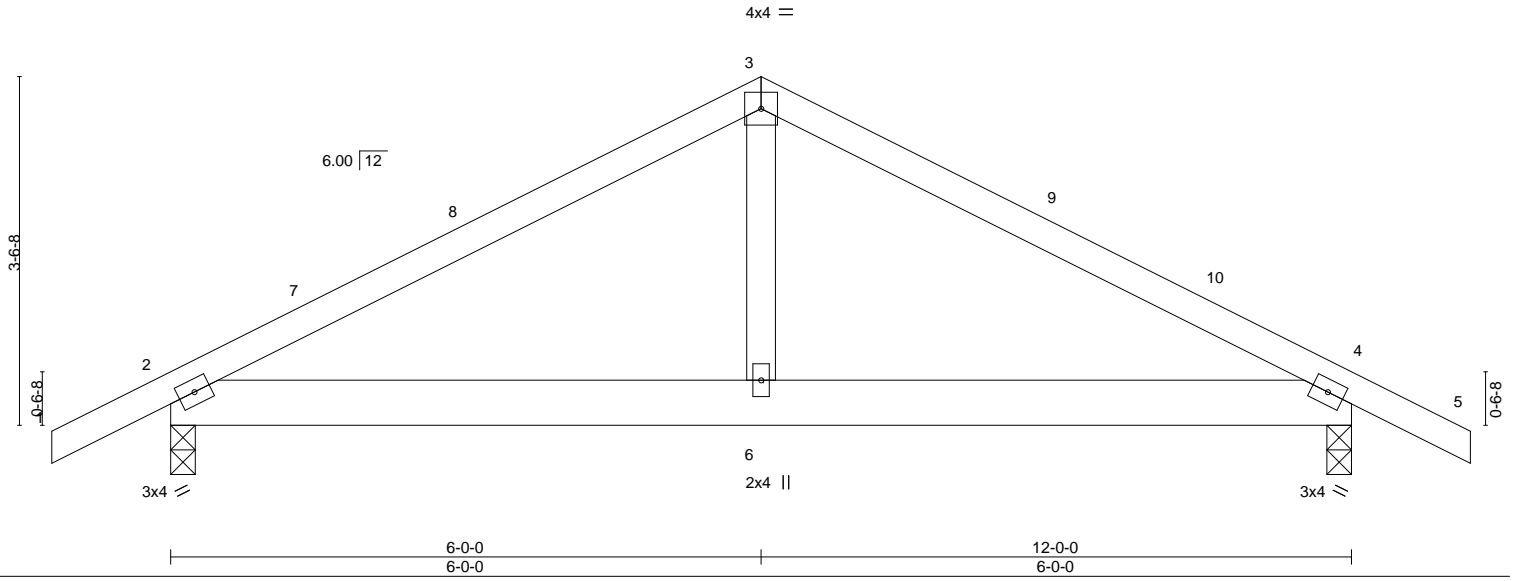
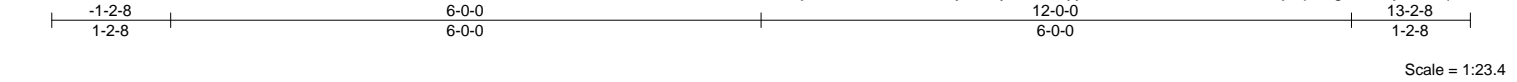


Job J0422-2178	Truss G2	Truss Type COMMON	Qty 4	Ply 1	Precision/Lot 1 Liberty Meadows/Harnett	152789488
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jun 28 07:01:48 2022 Page 1
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Job Reference (optional)



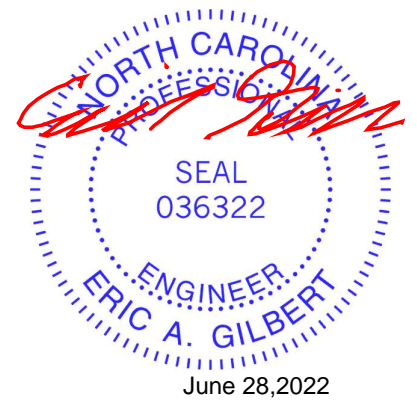
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.29	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.15	Vert(LL) -0.01 2-6 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.07	Vert(CT) -0.02 2-6 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 4 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.03 4-6 >999 240	Weight: 57 lb	FT = 20%

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

REACTIONS. (size) 2=0-3-0, 4=0-3-0
 Max Horz 2=47(LC 11)
 Max Uplift 2=-109(LC 9), 4=-109(LC 8)
 Max Grav 2=550(LC 1), 4=550(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-642/669, 3-4=-642/669
 BOT CHORD 2-6=-460/488, 4-6=-460/488
 WEBS 3-6=-393/296

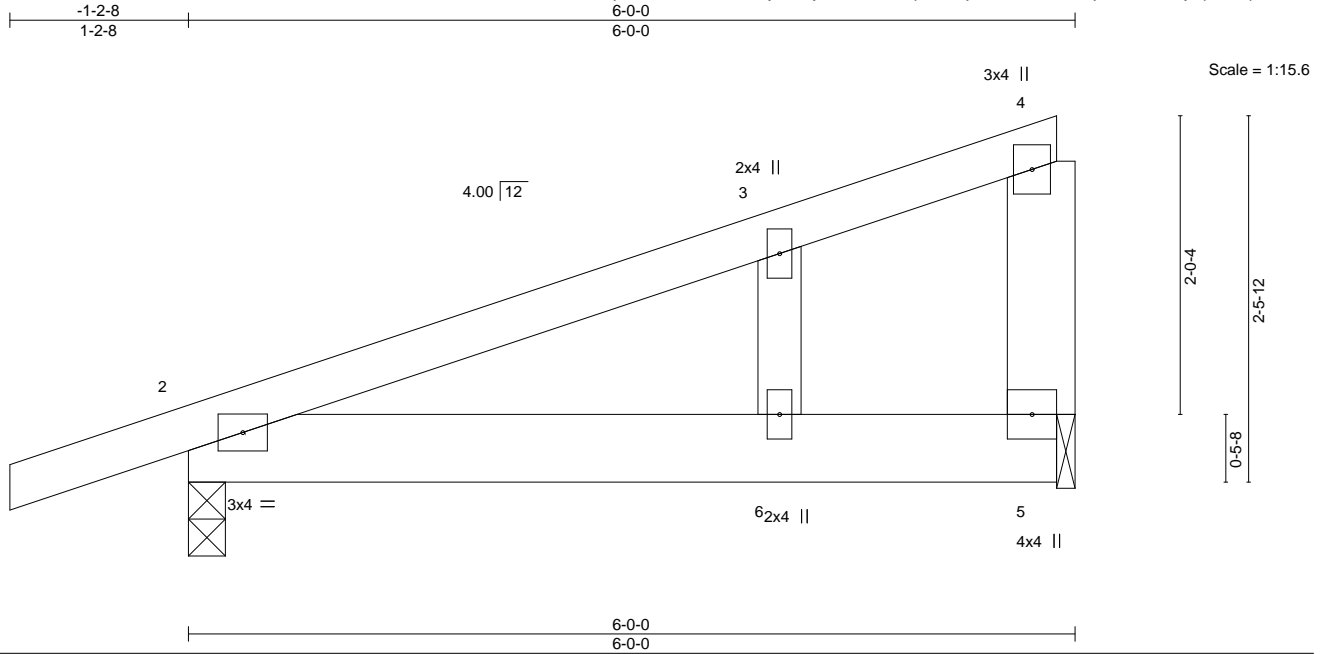
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 6-0-0, Exterior(2) 6-0-0 to 10-4-13, Interior(1) 10-4-13 to 13-2-8 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=109, 4=109.



Job J0422-2178	Truss P1-GE	Truss Type GABLE	Qty 1	Ply 1	Precision/Lot 1 Liberty Meadows/Harnett	152789489
					Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jun 28 07:01:49 2022 Page 1
ID:jUICoITBhC0nIVImGynse8yuZYG-b9WiqONTmjZrX14ftPvo5n9wjEhbu8tHoEyVpQz1qLG



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.13	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.13	Vert(LL) 0.03 2-6 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Vert(CT) -0.02 2-6 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) -0.00 5 n/a n/a	Weight: 31 lb	FT = 20%
	Code IRC2015/TPI2014				

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

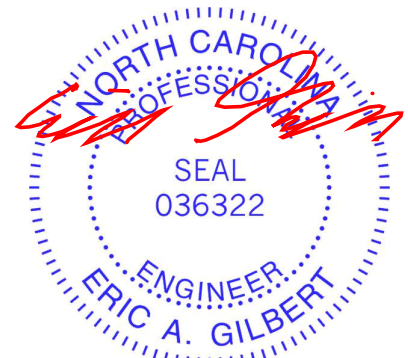
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-0, 5=0-1-8
Max Horz 2=113(LC 8)
Max Uplift 2=185(LC 8), 5=137(LC 8)
Max Grav 2=315(LC 1), 5=216(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 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable studs spaced at 2-0-0 oc.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=185, 5=137.



June 28, 2022

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

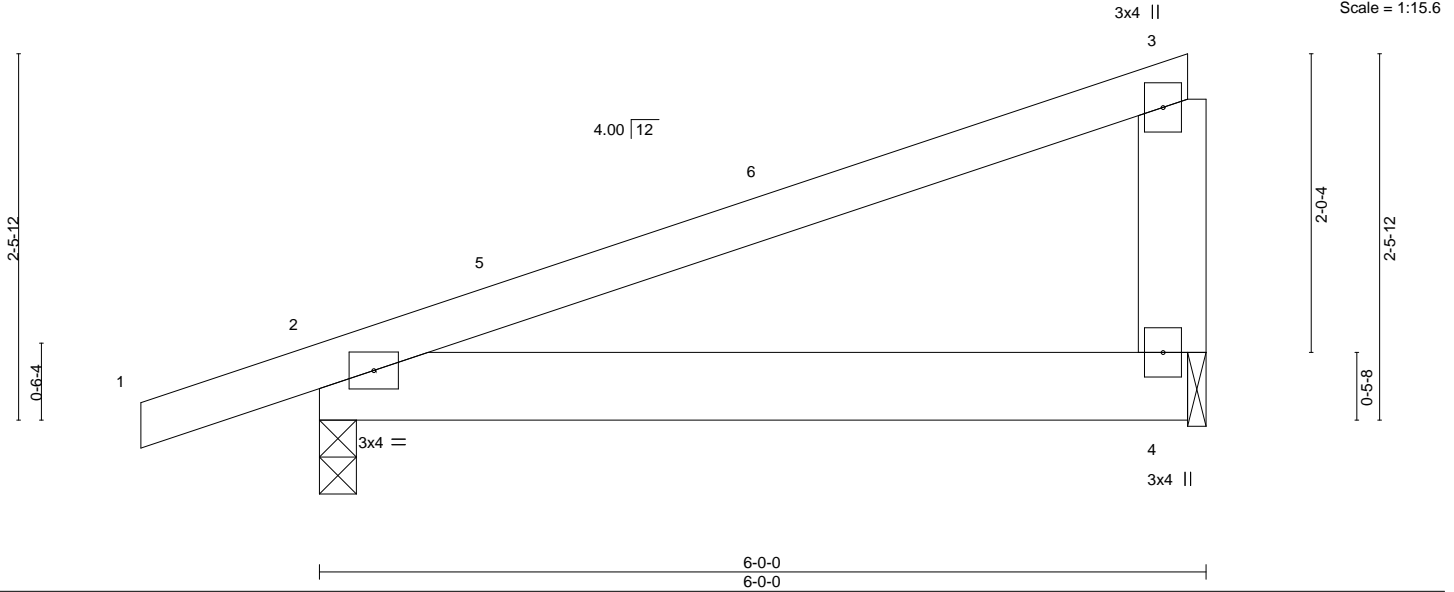


818 Soundside Road
Edenton, NC 27932

Job J0422-2178	Truss P2	Truss Type MONOPITCH	Qty 6	Ply 1	Precision/Lot 1 Liberty Meadows/Harnett Job Reference (optional)	152789490
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jun 28 07:01:49 2022 Page 1
ID:jUICoITBhC0nIVmGynse8yuZYG-b9WiqONTmjZrX14ftPvo5n9sHEifu8BHoEyVpQz1qLG



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.42	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.12	Vert(LL) -0.01 2-4 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.03 2-4 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.03 2-4 >999 240	Weight: 29 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-3-0, 4=0-1-8
Max Horz 2=80(LC 8)
Max Uplift 2=-129(LC 8), 4=-93(LC 8)
Max Grav 2=315(LC 1), 4=216(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 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 5-9-4 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=129.



June 28, 2022

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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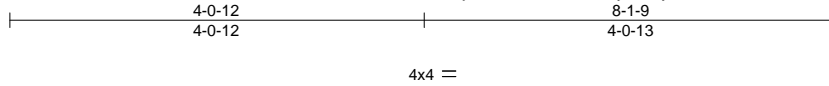


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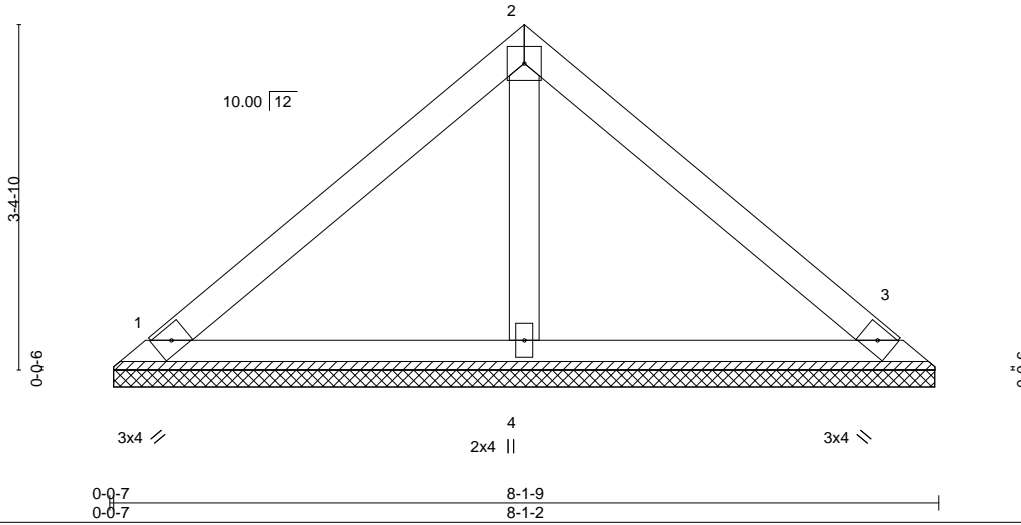
Job J0422-2178	Truss VD1	Truss Type VALLEY	Qty 1	Ply 1	Precision/Lot 1 Liberty Meadows/Harnett Job Reference (optional)	152789491
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jun 28 07:01:50 2022 Page 1
ID:jUICoITBhC0nIVImGynse8yuZYG-3L341kO5X0hi9BfsR6Q1d?i4Ue2Hdb?R1uh2Lsz1qLF



Scale = 1:22.6



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 0.10	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 30 lb	FT = 20%

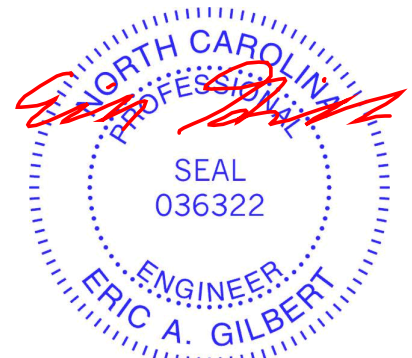
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. (size) 1=8-0-10, 3=8-0-10, 4=8-0-10
Max Horz 1=73(LC 9)
Max Uplift 1=-26(LC 13), 3=-32(LC 13)
Max Grav 1=169(LC 1), 3=169(LC 1), 4=247(LC 1)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
 - 6) Non Standard bearing condition. Review required.



June 28, 2022

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

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

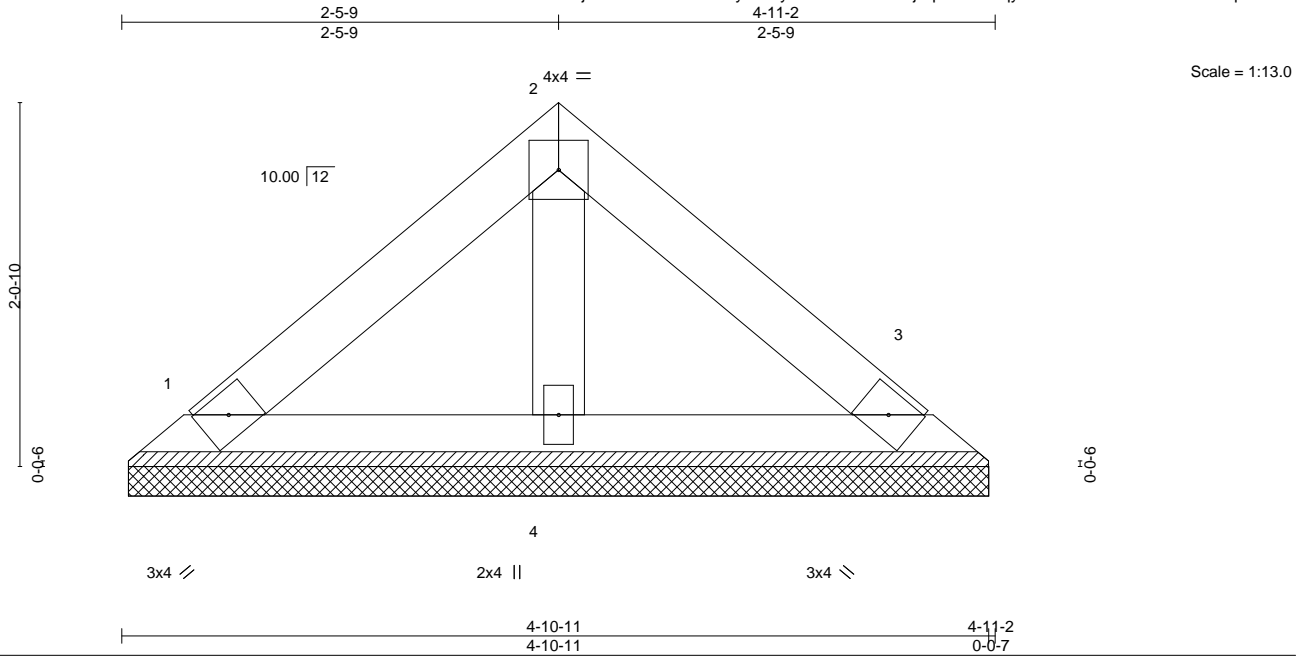


818 Soundside Road
Edenton, NC 27932

Job J0422-2178	Truss VD2	Truss Type VALLEY	Qty 1	Ply 1	Precision/Lot 1 Liberty Meadows/Harnett Job Reference (optional)	152789492
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jun 28 07:01:51 2022 Page 1
ID:jUICoITBhCOnIVImGynse8yuZYG-XXdSF4OjIKpZnLD2?yGACFIP1PZM2XaFYRctJz1qLE



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.06	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 17 lb	FT = 20%

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

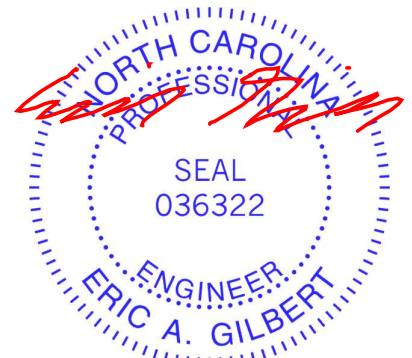
BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph 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.



June 28, 2022

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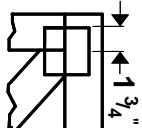
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

ENGINEERING BY
TRENCO
A MiTek Affiliate

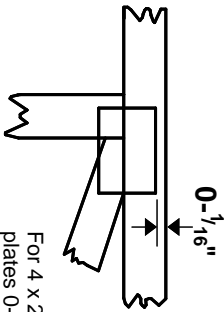
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- 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

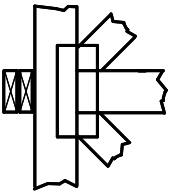
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



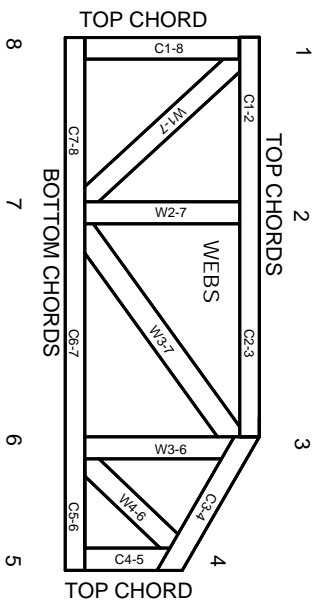
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TFP 1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing, Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



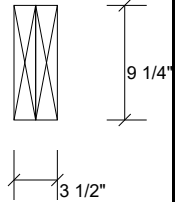
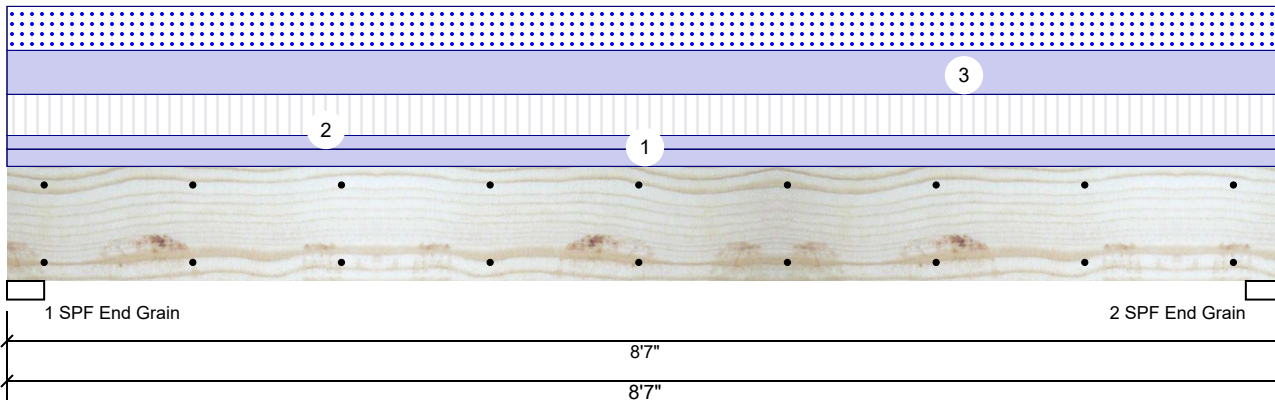
General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TFP 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TFP 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TFP 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

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

Level: Level



Member Information

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

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	1227	2267	1313	0	0
2	Vertical	1227	2267	1313	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	Vert	47%	2267 / 1906	4172	L	D+0.75(L+S)
2 - SPF End Grain	3.000"	Vert	47%	2267 / 1906	4172	L	D+0.75(L+S)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	8188 ft-lb	4'3 1/2"	14423 ft-lb	0.568 (57%)	D+0.75(L+S)	L
Unbraced	8188 ft-lb	4'3 1/2"	8625 ft-lb	0.949 (95%)	D+0.75(L+S)	L
Shear	3185 lb	7'6 3/4"	7943 lb	0.401 (40%)	D+0.75(L+S)	L
LL Defl inch	0.112 (L/883)	4'3 9/16"	0.205 (L/480)	0.544 (54%)	0.75(L+S)	L
TL Defl inch	0.244 (L/403)	4'3 9/16"	0.274 (L/360)	0.893 (89%)	D+0.75(L+S)	L

Design Notes

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

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	WALL
2	Uniform			Top	95 PLF	286 PLF	0 PLF	0 PLF	0 PLF	F3
3	Uniform			Top	306 PLF	0 PLF	306 PLF	0 PLF	0 PLF	B2
	Self Weight				7 PLF					

Notes

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

Lumber

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

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Manufacturer Info

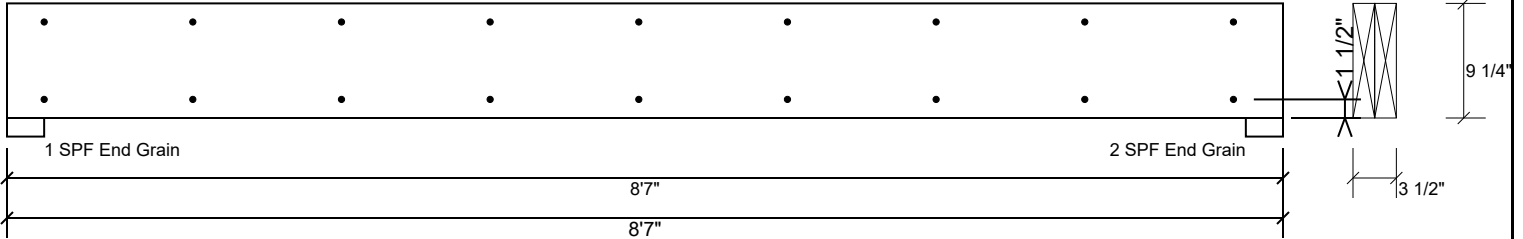
Metsä Wood
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www.metsawood.com/us

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

Level: Level



Multi-Ply Analysis

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

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

Notes

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

Lumber

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

chemicals

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Manufacturer Info

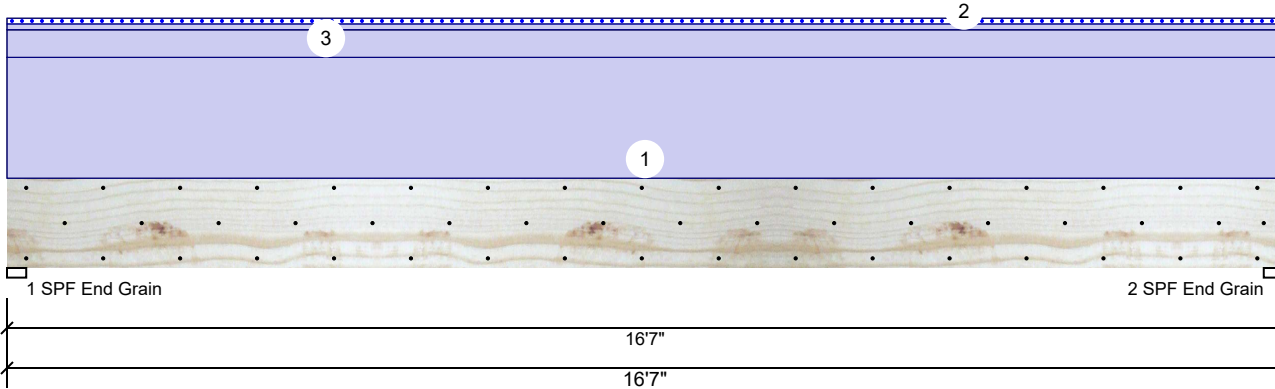
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GDH Kerto-S LVL 1.750" X 14.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	600	Load Sharing:	No
Deflection TL:	480	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	2312	83	0	0
2	Vertical	0	2312	83	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	Vert	27%	2312 / 83	2395	L	D+S
2 - SPF End Grain	3.000"	Vert	27%	2312 / 83	2395	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	9158 ft-lb	8'3 1/2"	24299 ft-lb	0.377 (38%)	D	Uniform
Unbraced	9487 ft-lb	8'3 1/2"	9495 ft-lb	0.999 (100%)	D+S	L
Shear	1930 lb	15'2"	9408 lb	0.205 (21%)	D	Uniform
LL Defl inch	0.010 (L/18571)	8'3 9/16"	0.324 (L/600)	0.032 (3%)	S	L
TL Defl inch	0.303 (L/643)	8'3 9/16"	0.405 (L/480)	0.747 (75%)	D+S	L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at a maximum of 11'9 5/16" o.c.
- 7 Bottom must be laterally braced at end bearings.
- 8 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	210 PLF	0 PLF	0 PLF	0 PLF	0 PLF	C1-GE
2	Tie-In	0-0-0 to 16-7-0	0-6-0	Top	20 PSF	0 PSF	20 PSF	0 PSF	0 PSF	RAKE OH
3	Uniform			Top	48 PLF	0 PLF	0 PLF	0 PLF	0 PLF	BRICK
	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

chemicals

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Manufacturer Info

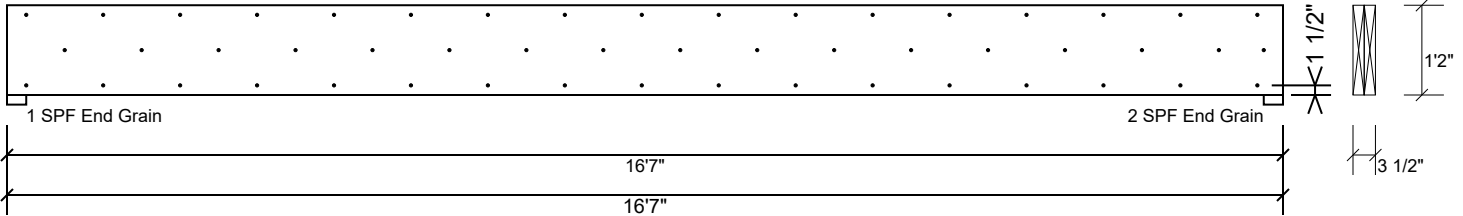
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GDH Kerto-S LVL 1.750" X 14.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

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

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

Notes

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

Lumber

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

chemicals

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Manufacturer Info

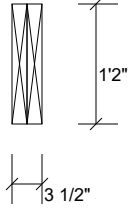
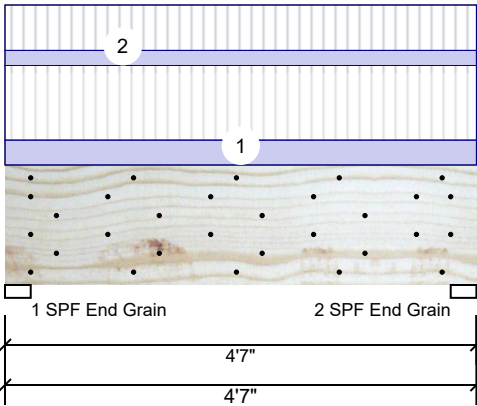
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BM4 Kerto-S LVL 1.750" X 14.000" 2-Ply - PASSED

Level: Level



Member Information

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

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	2278	783	0	0	0
2	Vertical	2278	783	0	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	Vert	35%	783 / 2278	3061	L	D+L
2 - SPF End Grain	3.000"	Vert	35%	783 / 2278	3061	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2957 ft-lb	2'3 1/2"	26999 ft-lb	0.110 (11%)	D+L	L
Unbraced	2957 ft-lb	2'3 1/2"	21560 ft-lb	0.137 (14%)	D+L	L
Shear	2727 lb	1'5"	10453 lb	0.261 (26%)	D+L	L
LL Defl inch	0.010 (L/5285)	2'3 9/16"	0.105 (L/480)	0.091 (9%)	L	L
TL Defl inch	0.013 (L/3932)	2'3 9/16"	0.140 (L/360)	0.092 (9%)	D+L	L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fasten all plies using 6 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top must be laterally braced at end bearings.
- 6 Bottom must be laterally braced at end 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			Far Face	206 PLF	618 PLF	0 PLF	0 PLF	0 PLF	FG3
2	Uniform			Near Face	125 PLF	376 PLF	0 PLF	0 PLF	0 PLF	FG2
	Self Weight				11 PLF					

Notes

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

Lumber

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

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Manufacturer Info

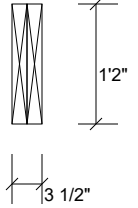
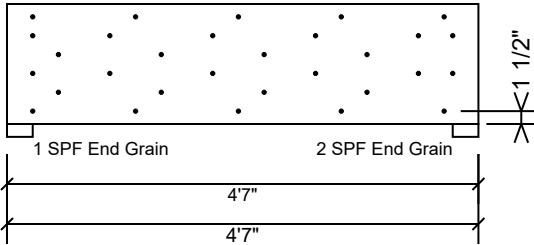
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BM4 Kerto-S LVL 1.750" X 14.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

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

Capacity	83.9 %
Load	412.0 PLF
Yield Limit per Foot	491.1 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	D+L
Duration Factor	1.00

Notes

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

Lumber

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

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Manufacturer Info

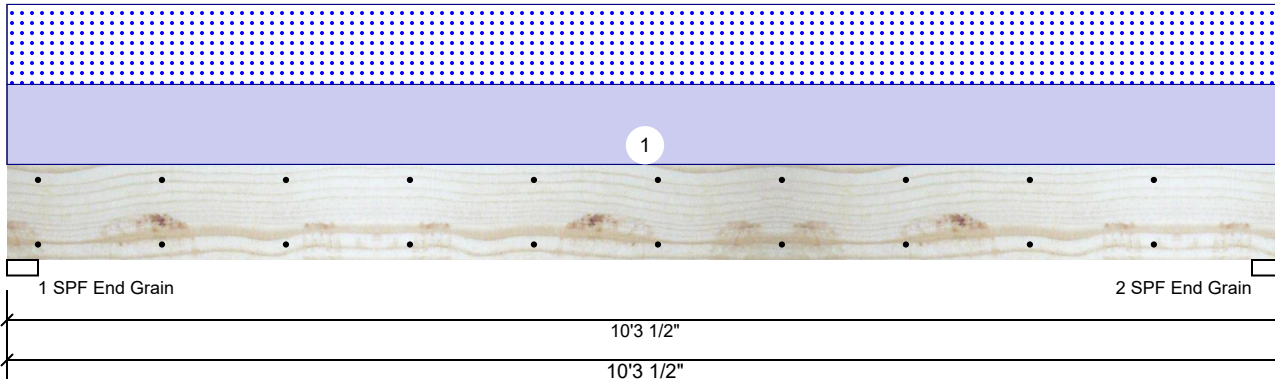
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BM5 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level



Member Information

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

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	742	705	0	0
2	Vertical	0	742	705	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	Vert	16%	742 / 705	1447	L	D+S
2 - SPF End Grain	3.000"	Vert	16%	742 / 705	1447	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3457 ft-lb	5'1 3/4"	14423 ft-lb	0.240 (24%)	D+S	L
Unbraced	3457 ft-lb	5'1 3/4"	7469 ft-lb	0.463 (46%)	D+S	L
Shear	1165 lb	9'3 1/4"	7943 lb	0.147 (15%)	D+S	L
LL Defl inch	0.071 (L/1686)	5'1 3/4"	0.248 (L/480)	0.285 (28%)	S	L
TL Defl inch	0.145 (L/822)	5'1 3/4"	0.331 (L/360)	0.438 (44%)	D+S	L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at end bearings.
- 7 Bottom must be laterally braced at end bearings.
- 8 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	137 PLF	0 PLF	137 PLF	0 PLF	0 PLF	G2
	Self Weight				7 PLF					

Notes

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Lumber

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

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

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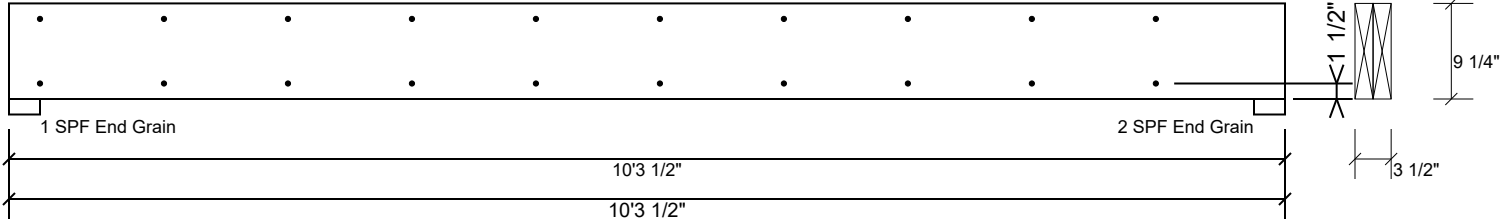
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BM5 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

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

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

Notes

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

Lumber

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

chemicals

Handling & Installation

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