ENGINEERING BY TRENCO
A MiTek Affiliate

RE: J0822-4068
Lot 6 Liberty Meadows

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: Benjamin Stout Real Estate
Lot/Block: 6
Address: 128 Solomon Drive
City:

Project Name: J0822-4068
Model: Caroline
Subdivision: Liberty Meadows
State: NC

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

Design Code: IRC2015/TPI2014
Wind Code: ASCE 7-10
Roof Load: 40.0 psf

Design Program: MiTek 20/20 8.4
Wind Speed: 130 mph
Floor Load: N/A psf

This package includes 22 individual, dated Truss Design Drawings and 0 Additional Drawings.

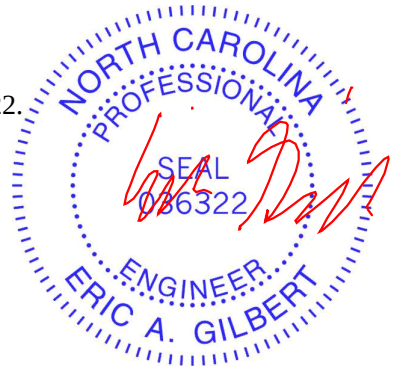
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I53588288	A1	8/11/2022	21	I53588308	PB1	8/11/2022
2	I53588289	A1GE	8/11/2022	22	I53588309	PB1GE	8/11/2022
3	I53588290	B1	8/11/2022				
4	I53588291	B1SG	8/11/2022				
5	I53588292	B2	8/11/2022				
6	I53588293	B3	8/11/2022				
7	I53588294	B4	8/11/2022				
8	I53588295	B5	8/11/2022				
9	I53588296	B6	8/11/2022				
10	I53588297	B7	8/11/2022				
11	I53588298	C1GE	8/11/2022				
12	I53588299	D1	8/11/2022				
13	I53588300	D1GE	8/11/2022				
14	I53588301	J1	8/11/2022				
15	I53588302	J1GE	8/11/2022				
16	I53588303	J2	8/11/2022				
17	I53588304	J2GE	8/11/2022				
18	I53588305	M1	8/11/2022				
19	I53588306	M1GE	8/11/2022				
20	I53588307	M2	8/11/2022				

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: Gilbert, Eric

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.

August 11, 2022

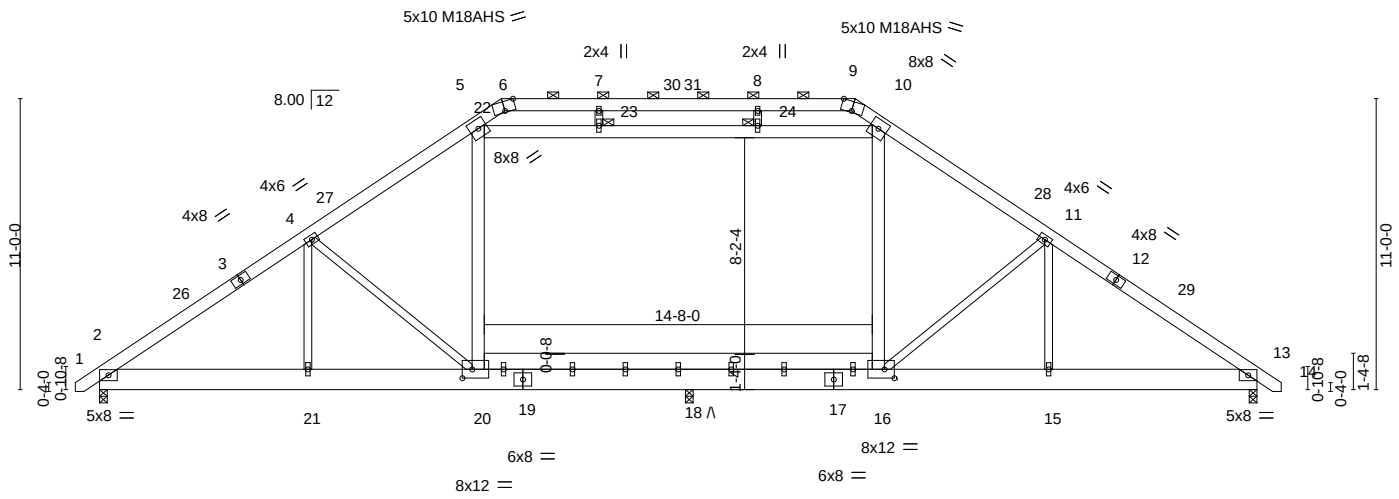
Gilbert, Eric

Job	Truss	Truss Type	Qty	Ply	Lot 6 Liberty Meadows
J0822-4068	A1	ATTIC	11	1	I53588288
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:16 2022 Page 1
ID:Mxo2zT_1o8v8ClEXCBvR1ayxNUw-s9EZkEZYncrsx2km?Qnk7Z28UnErbi744Dtfi4ypGnT

-0-11-0 7-10-8 14-3-12 15-2-4 18-10-8 24-10-8 28-6-12 29-5-4 35-10-8 43-9-0 44-8-0
0-11-0 7-10-8 6-5-4 0-10-8 3-8-4 6-0-0 3-8-4 0-10-8 6-5-4 7-10-8 0-11-0

Scale = 1:87.1



7-10-8 14-3-12 22-5-4 29-5-4 35-10-8 43-9-0
7-10-8 6-5-4 8-1-8 7-0-0 6-5-4 7-10-8

Plate Offsets (X,Y)-- [6:0-5-0,Edge], [9:0-5-0,Edge], [16:0-4-8,0-4-0], [20:0-4-8,0-4-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.20	20-21	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.30	20-21	>898	240	M18AHS	186/179
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.05	13	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.14	20-21	>999	240	Weight: 457 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP No.1 *Except*
16-20: 2x8 SP No.1
WEBS 2x4 SP No.2 *Except*
10-22,5-20,10-16: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-5-11 oc purlins, except
2-0-0 oc purlins (4-0-3 max.): 6-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 23, 24

REACTIONS. (size) 2=0-3-8, 13=0-3-8, 18=0-3-8
Max Horz 2=211(LC 11)
Max Uplift 18=REL
Max Grav 2=1839(LC 1), 13=1827(LC 1), 18=1317(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2745/52, 4-5=-2249/93, 5-6=-1813/194, 9-10=-1814/201, 10-11=-2244/94, 11-13=-2719/57, 6-7=-1867/185, 7-8=-1867/185, 8-9=-1867/185
BOT CHORD 2-21=0/2272, 20-21=0/2272, 18-20=0/1789, 16-18=0/1789, 15-16=0/2112, 13-15=0/2112
WEBS 22-23=-282/330, 23-24=-282/330, 10-24=-285/338, 20-22=0/556, 5-22=0/637, 10-16=0/459, 4-21=0/383, 11-15=-26/378, 4-20=-670/179, 11-16=-654/187

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 B; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 15-3-1, Exterior(2) 15-3-1 to 21-5-12, Interior(1) 21-5-12 to 28-5-15, Exterior(2) 28-5-15 to 34-8-10, Interior(1) 34-8-10 to 44-6-1 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) All plates are 2x6 MT20 unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Ceiling dead load (10.0 psf) on member(s). 22-23, 23-24, 10-24; Wall dead load (5.0psf) on member(s).20-22, 10-16
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 18-20, 16-18
10) "/\" indicates Released bearing: allow for upward movement at joint(s) 18.
11) 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.
12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Attic room checked for L/360 deflection.

August 11,2022

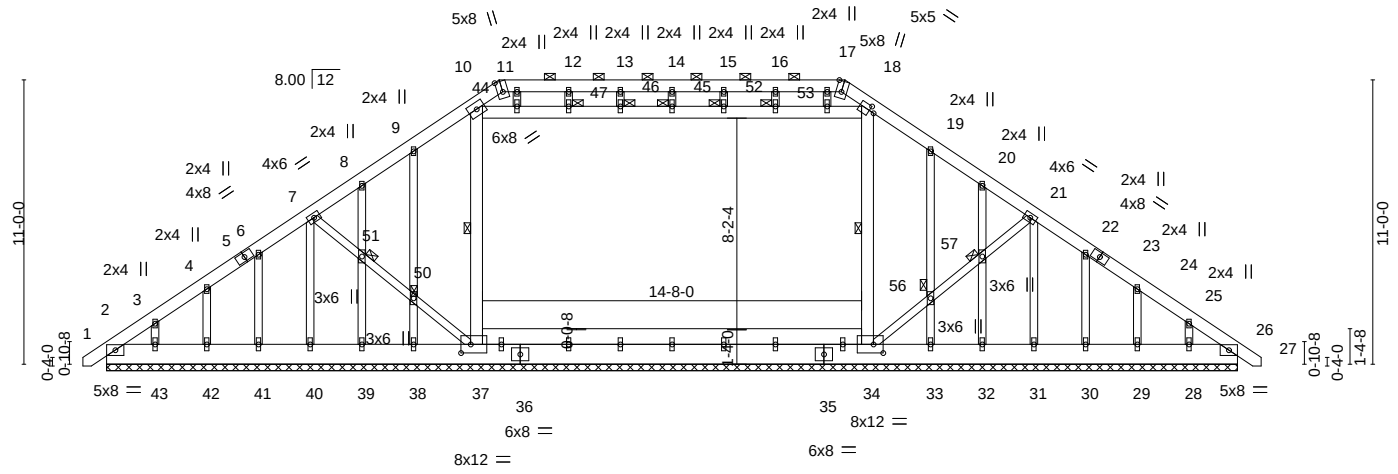
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 6 Liberty Meadows
J0822-4068	A1GE	GABLE	1	1	I53588289
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:19 2022 Page 1
ID:Mxo2zT_1o8v8ClEXCBvR1ayxNUw-GkvhNGbR4XDQoVSLgYLRlCgj1_Kvo71XmB5JJPypGnQ

-0-11-0 16-1-4 29-5-12 44-8-0 45-7-0
0-11-0 15-2-4 13-4-8 15-2-4 0-11-0

Scale = 1:89.1



-0-11-0 44-8-0 45-7-0
0-11-0 43-9-0 0-11-0

Plate Offsets (X,Y)-- [11:0-5-0,Edge], [17:0-5-0,Edge], [18:0-2-5,0-2-4], [34:0-4-8,0-4-0], [37:0-4-8,0-4-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	0.00	26	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	0.00	26	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.01	26	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 521 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP No.1 *Except*
34-37: 2x8 SP No.1
WEBS 2x4 SP No.2 *Except*
18-44,10-37,18-34: 2x6 SP No.1
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-6-9 oc purlins, except 2-0-0 oc purlins (5-9-11 max.): 11-17.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 37-44, 18-34
JOINTS 1 Brace at Jt(s): 45, 46, 47, 50, 51, 52, 53, 56, 57

REACTIONS. All bearings 43-9-0.
(lb) - Max Horz 2=264(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 40, 31, 26, 39, 41, 42, 43, 32, 30, 29, 28 except 38=-970(LC 18), 33=-929(LC 18)
Max Grav All reactions 250 lb or less at joint(s) 31, 41, 42, 43, 30, 29, 28 except 2=318(LC 1), 37=1671(LC 18), 34=1701(LC 18), 40=258(LC 1), 26=297(LC 1), 39=445(LC 20), 32=439(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-415/168, 3-4=-369/157, 4-6=-344/151, 6-7=-353/149, 7-8=-453/171, 8-9=-469/171, 9-10=-395/206, 10-11=-1421/329, 17-18=-1394/326, 18-19=-355/203, 19-20=-415/146, 20-21=-404/94, 21-22=-319/88, 22-24=-313/58, 24-25=-315/67, 25-26=-342/74, 11-12=-1348/322, 12-13=-1348/322, 13-14=-1348/322, 14-15=-1348/322, 15-16=-1348/322, 16-17=-1348/322
BOT CHORD 2-43=-114/327, 42-43=-114/327, 41-42=-114/327, 40-41=-114/327, 39-40=-114/327, 38-39=-114/327, 37-38=-114/327, 34-37=-89/383, 33-34=-52/276, 32-33=-52/276, 31-32=-52/276, 30-31=-52/276, 29-30=-52/276, 28-29=-52/276, 26-28=-52/276
WEBS 44-47=-180/1038, 46-47=-180/1038, 45-46=-180/1038, 45-52=-180/1038, 52-53=-180/1038, 18-53=-183/1045, 37-44=-633/104, 10-44=-511/121, 18-34=-685/0, 12-47=-7/295

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 B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x6 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

August 11,2022

Continued on page 2

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

NOTES-

9) * 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.
10) Ceiling dead load (10.0 psf) on member(s). 44-47, 46-47, 45-46, 45-52, 52-53, 18-53; Wall dead load (5.0psf) on member(s).37-44, 18-34, 33-56, 22-30
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 40, 31, 26, 39, 41, 42, 43, 32, 30, 29, 28 except (jt=lb) 38=970, 33=929.
12) 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.
13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) Attic room checked for L/360 deflection.

Job	Truss	Truss Type	Qty	Ply	Lot 6 Liberty Meadows
J0822-4068	B1	COMMON	5	1	I53588290
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:20 2022 Page 1
ID:Mxo2zT_1o8v8ClEXCBvR1ayxNUw-lxT3acc3rrLHPf1YEFsgIPCqWOgHXeog?rrsrrypGnP

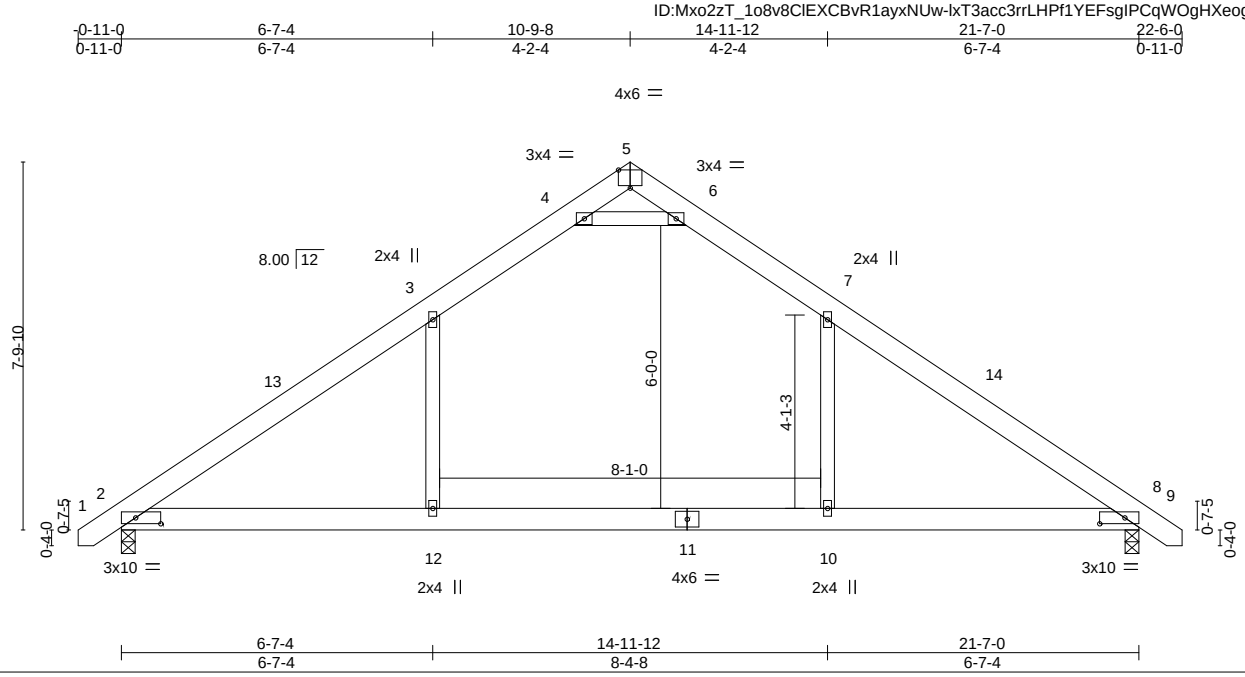


Plate Offsets (X,Y)-- [2:0-6-6,0-1-8], [5:0-3-0,Edge], [8:0-6-6,0-1-8]

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	0.71	Vert(LL)	-0.21	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.33	10-12	>765	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.10	12	>999	240	Weight: 133 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-10-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-152(LC 10)
Max Uplift 2=-1(LC 12), 8=-1(LC 13)
Max Grav 2=1022(LC 19), 8=1022(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1369/120, 3-4=-941/191, 4-5=-147/961, 5-6=-147/962, 6-7=-941/191, 7-8=-1369/120
BOT CHORD 2-12=0/1014, 10-12=0/1014, 8-10=0/1014
WEBS 7-10=0/467, 3-12=0/467, 4-6=-2102/392

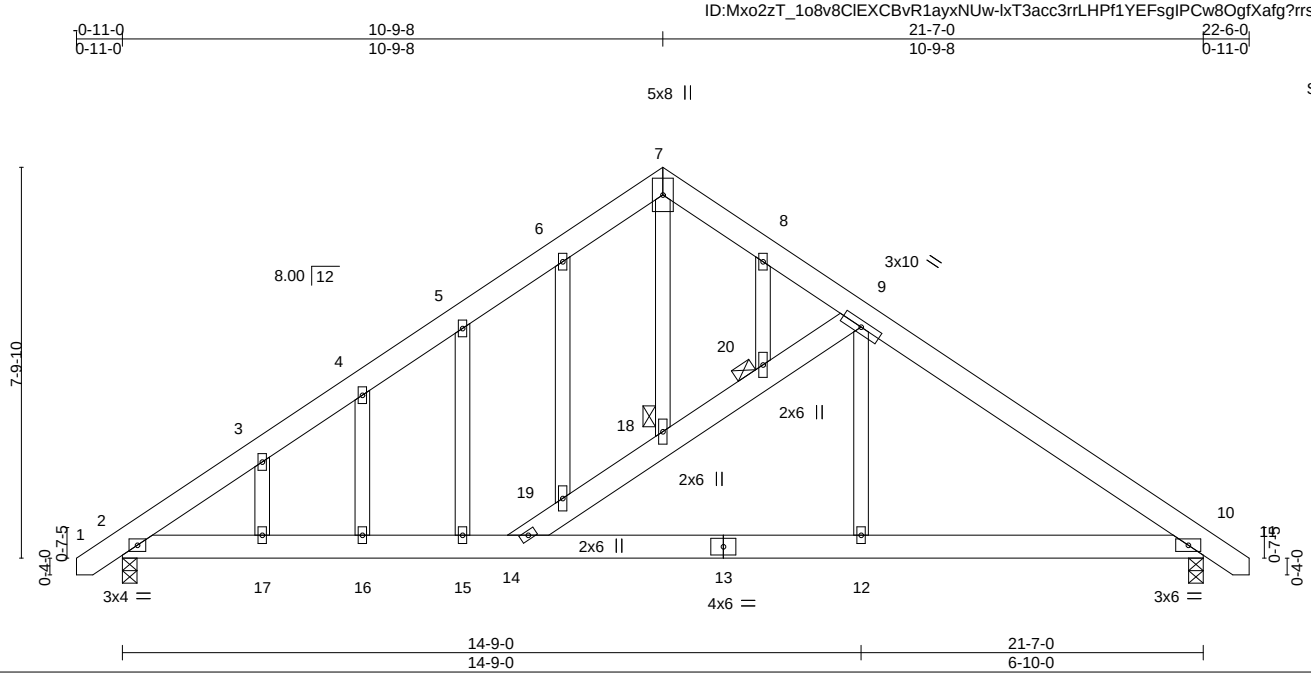
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 10-9-8, Exterior(2) 10-9-8 to 14-11-12, Interior(1) 14-11-12 to 22-4-1 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.
6) 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.

August 11,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 6 Liberty Meadows
J0822-4068	B1SG	GABLE	1	1	I53588291
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:20 2022 Page 1
ID:Mxo2zT_1o8v8ClEXCBvR1ayxNUw-lxT3acc3rrLHPf1YEFsgIPCw8OgfXafg?rrsrrypGnP



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	0.35	Vert(LL)	-0.11	15-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.23	15-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.02	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.14	16	>999	240	Weight: 173 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x6 SP No.1 *Except* 9-12: 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.
JOINTS	1 Brace at Jt(s): 18, 20

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=190(LC 11)
Max Uplift 2=-110(LC 12), 10=-110(LC 13)
Max Grav 2=906(LC 1), 10=906(LC 1)

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

TOP CHORD	2-3=-1023/86, 3-4=-921/135, 4-5=-963/193, 5-6=-834/221, 6-7=-773/264, 7-8=-862/285, 8-9=-825/244, 9-10=-1153/184
BOT CHORD	2-17=-56/763, 16-17=-56/763, 15-16=-56/763, 14-15=-56/763, 12-14=-31/833, 10-12=-31/833
WEBS	18-20=-335/146, 9-20=-270/136, 9-12=0/332, 7-18=-165/506

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 B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=110, 10=110.
9) 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.

August 11,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 6 Liberty Meadows
J0822-4068	B2	COMMON	4	1	I53588292
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:21 2022 Page 1
ID:Mxo2zT_1o8v8ClEXCBvR1ayxNUw-D71Snydhc8T81pcknzNvqdl?9o?RG40pDVaQNHypGnO

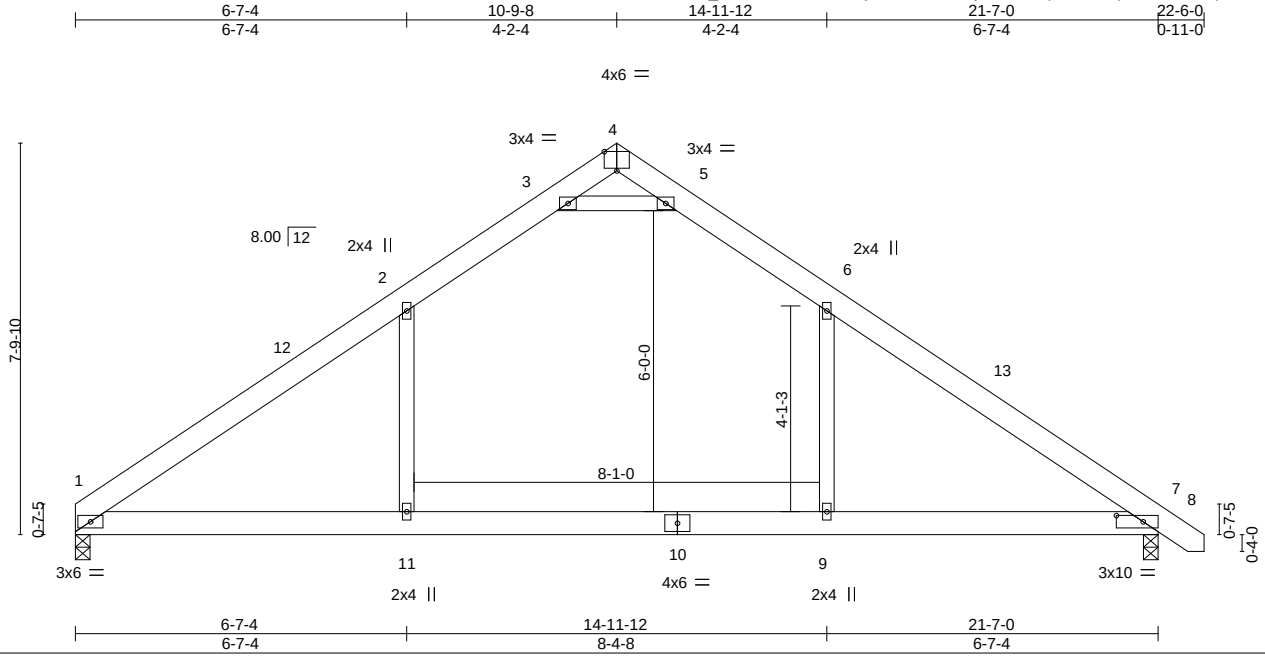


Plate Offsets (X,Y)-- [4:0-3-0,Edge], [7:0-6-6,0-1-8]

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	0.72	Vert(LL)	-0.21	9-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.34	9-11	>755	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.10	11	>999	240	Weight: 130 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-7-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 7=0-3-8
Max Horz 1=-150(LC 8)
Max Uplift 7=-1(LC 13)
Max Grav 1=971(LC 19), 7=1022(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1365/121, 2-3=-943/196, 3-4=-149/970, 4-5=-159/971, 5-6=-941/192, 6-7=-1372/121
BOT CHORD 1-11=0/1017, 9-11=0/1017, 7-9=0/1017
WEBS 6-9=0/470, 2-11=0/458, 3-5=-2115/411

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 B; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 10-9-8, Exterior(2) 10-9-8 to 14-11-12, Interior(1) 14-11-12 to 22-4-1 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7.
6) 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.

August 11,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 6 Liberty Meadows
J0822-4068	B3	HIP	1	1	I53588293
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:22 2022 Page 1
ID:Mxo2zT_1o8v8ClEXCBvR1ayxNUw-hJbq?leJNSb?fzBwLgu8NqHFmCKM?aJzS9KzvjypGnN

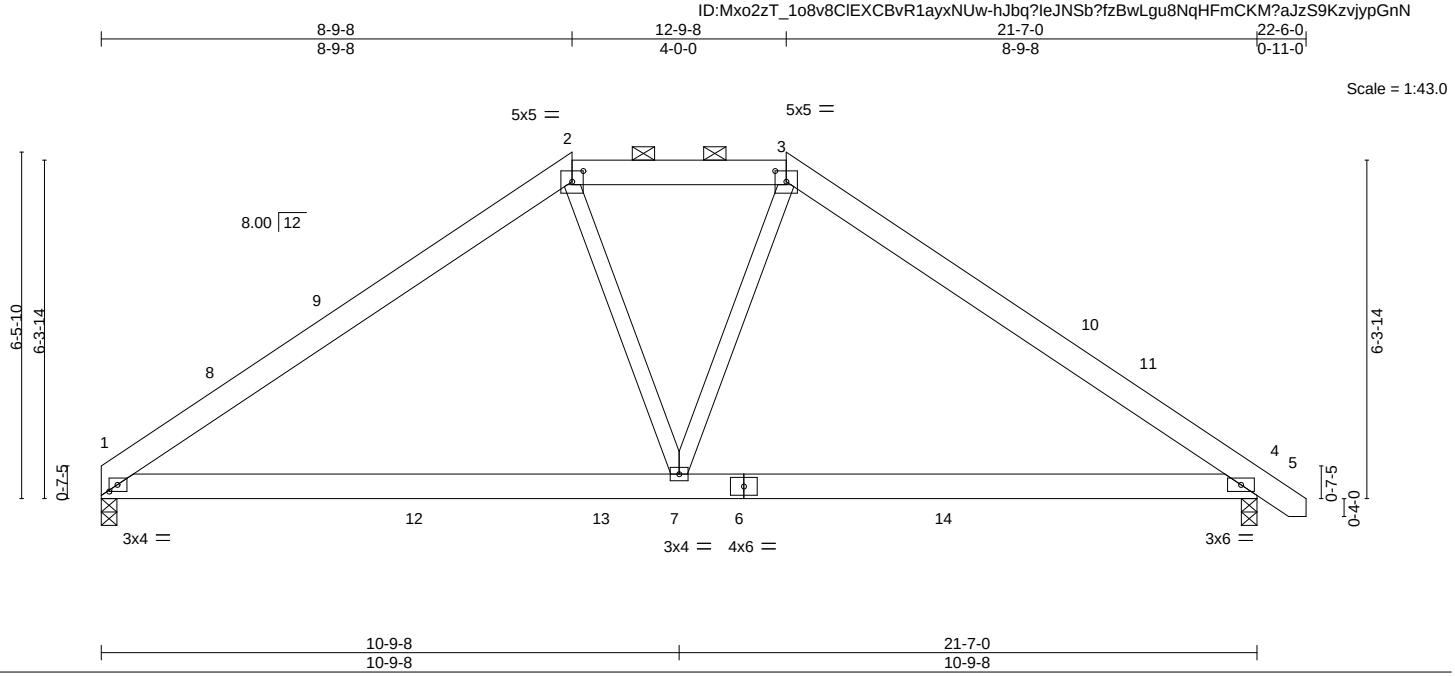


Plate Offsets (X,Y)-- [1:0-1-14,0-1-8], [2:0-2-8,0-2-6], [3:0-2-8,0-2-6]

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	0.41	Vert(LL)	-0.08	4-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.16	4-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.02	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.03	4-7	>999	240	Weight: 130 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, except 2-0-0 oc purlins (6-0-0 max.): 2-3.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 4=0-3-8
Max Horz 1=-122(LC 10)
Max Grav 1=923(LC 19), 4=975(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1170/186, 2-3=-986/207, 3-4=-1170/182
BOT CHORD 1-7=-14/931, 4-7=-15/892
WEBS 2-7=0/369, 3-7=0/370

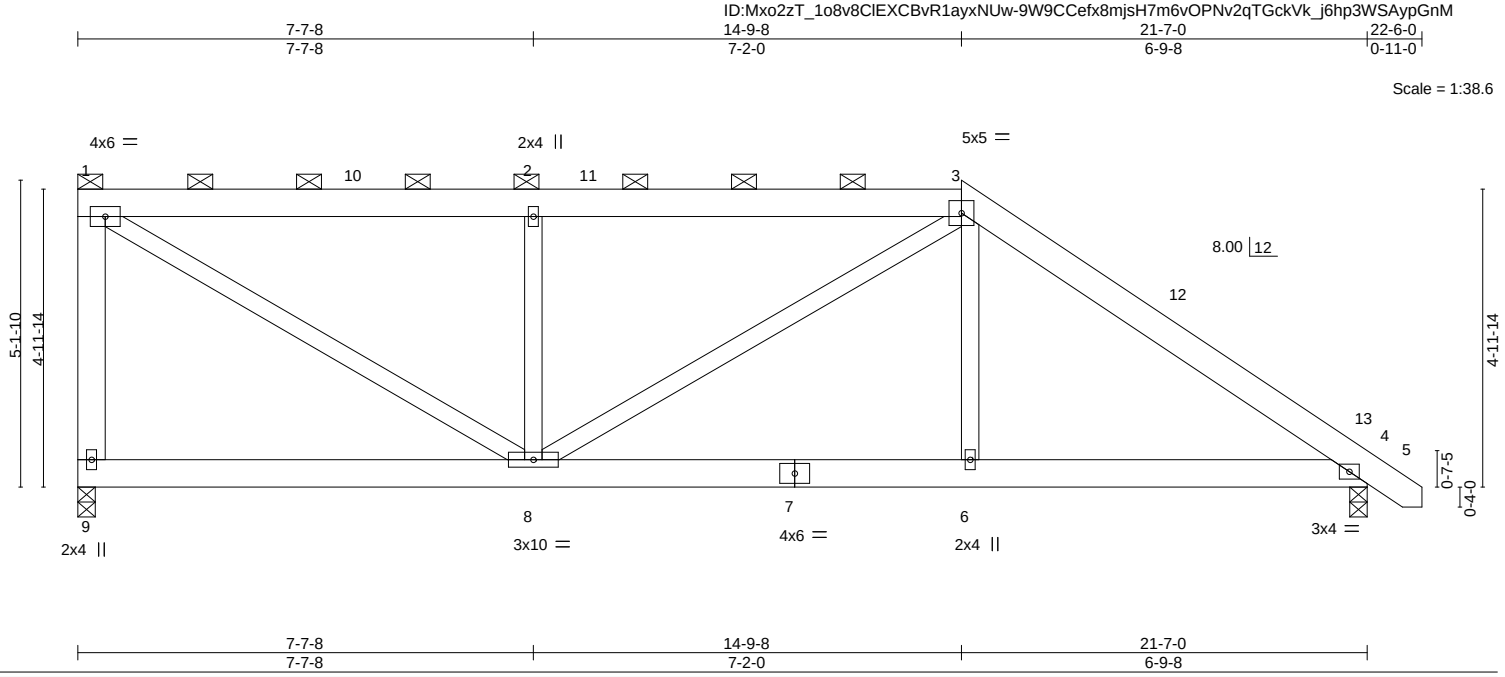
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 8-9-8, Exterior(2) 8-9-8 to 19-0-3, Interior(1) 19-0-3 to 22-4-1 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) 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.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

August 11,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 6 Liberty Meadows
J0822-4068	B4	HALF HIP	1	1	I53588294
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:23 2022 Page 1
ID:Mxo2zT_1o8v8ClEXCBvR1ayxNUw-9W9CCefx8mjsH7m6vOPNv2qTGckVk_j6hp3WSAypGnM



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.02	8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.05	6-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.02	8	>999	240	Weight: 153 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-3.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 9=0-3-8, 4=0-3-8
Max Horz 9=-131(LC 13)
Max Uplift 9=-31(LC 8)
Max Grav 9=847(LC 1), 4=903(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-9=-774/180, 1-2=-981/167, 2-3=-983/169, 3-4=-1200/155
BOT CHORD 6-8=-7/892, 4-6=-5/898
WEBS 1-8=-191/1106, 2-8=-503/194, 3-6=0/299

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 B; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 14-9-8, Exterior(2) 14-9-8 to 21-0-3, Interior(1) 21-0-3 to 22-4-1 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) 9.
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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

August 11,2022

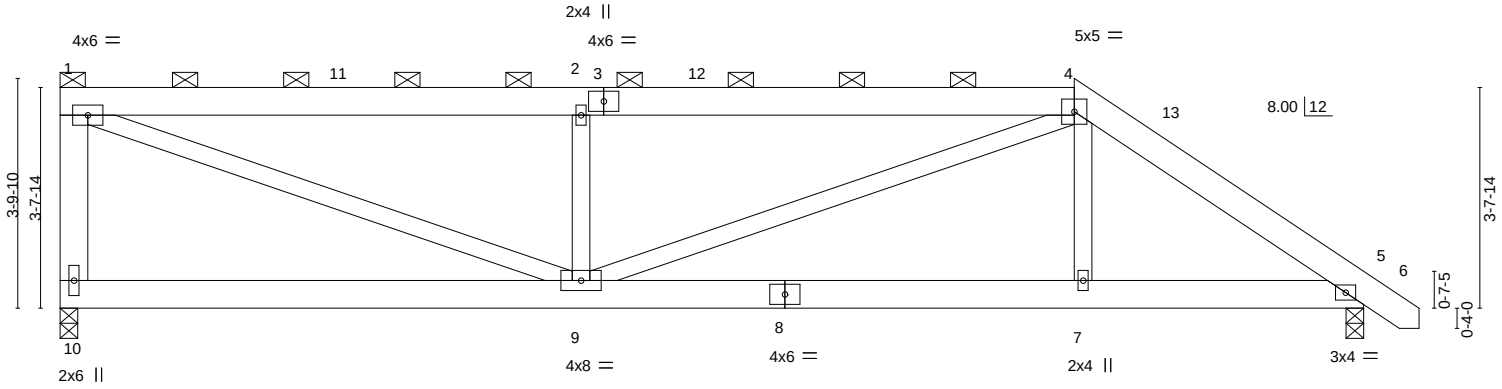
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 6 Liberty Meadows
J0822-4068	B5	HALF HIP	1	1	I53588295
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:23 2022 Page 1
ID:Mxo2zT_1o8v8ClEXCBvR1ayxNUw-9W9CCefx8mjsH7m6vOPNv2qSPckxkzC6hp3WSAypGnM

8-7-8 | 16-9-8 | 21-7-0 | 22-6-0
8-7-8 | 8-2-0 | 4-9-8 | 0-11-0

Scale = 1:38.1



8-7-8 | 16-9-8 | 21-7-0
8-7-8 | 8-2-0 | 4-9-8

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	0.29	Vert(LL)	-0.05	9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.10	7-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.03	9	>999	240	Weight: 146 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 10=0-3-8, 5=0-3-8
Max Horz 10=-95(LC 13)
Max Uplift 10=-31(LC 8)
Max Grav 10=847(LC 1), 5=903(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-10=-760/174, 1-2=-1484/235, 2-4=-1486/236, 4-5=-1307/181
BOT CHORD 7-9=-59/1008, 5-7=-56/1015
WEBS 1-9=-241/1500, 2-9=-565/220, 4-9=-71/574, 4-7=0/286

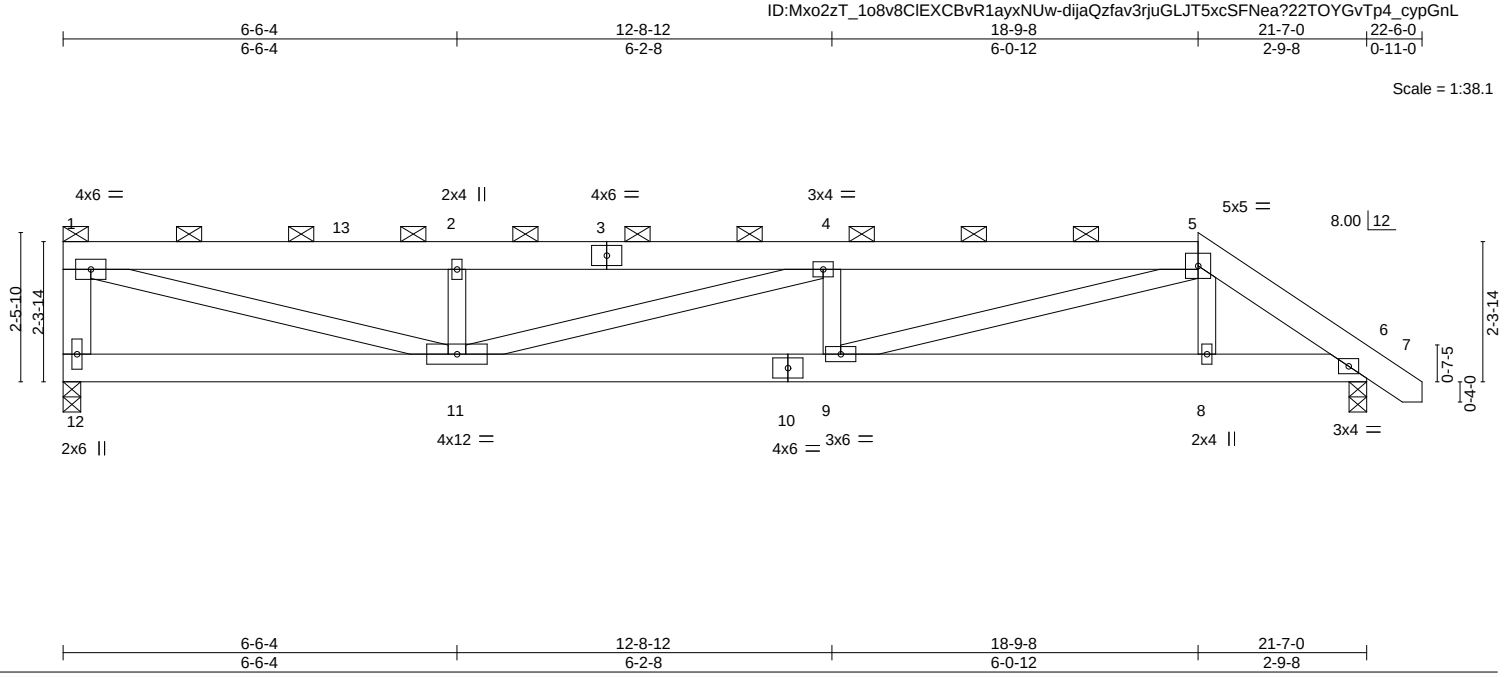
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 16-9-8, Exterior(2) 16-9-8 to 22-4-1 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) 10.
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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

August 11,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 6 Liberty Meadows
J0822-4068	B6	HALF HIP	1	1	I53588296
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:24 2022 Page 1
ID:Mxo2zT_1o8v8ClEXCBvR1ayxNUw-dijaQzfav3rjuGLJT5xcSFNea?22TOYGvTp4_cypGnL



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.10	9-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.20	9-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.07	9-11	>999	240	Weight: 142 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
1-12: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-10-13 max.): 1-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 12=0-3-8, 6=0-3-8
Max Horz 12=-59(LC 13)
Max Uplift 12=-31(LC 8), 6=-11(LC 8)
Max Grav 12=847(LC 1), 6=903(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-12=-763/156, 1-2=-2060/281, 2-4=-2060/281, 4-5=-2380/369, 5-6=-1400/198
BOT CHORD 9-11=-278/2378, 8-9=-104/1101, 6-8=-99/1111
WEBS 1-11=-273/1998, 2-11=-369/149, 5-9=-183/1359, 4-9=-303/134, 4-11=-332/90

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 B; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 18-9-8, Exterior(2) 18-9-8 to 22-4-1 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) 12, 6.
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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

August 11,2022

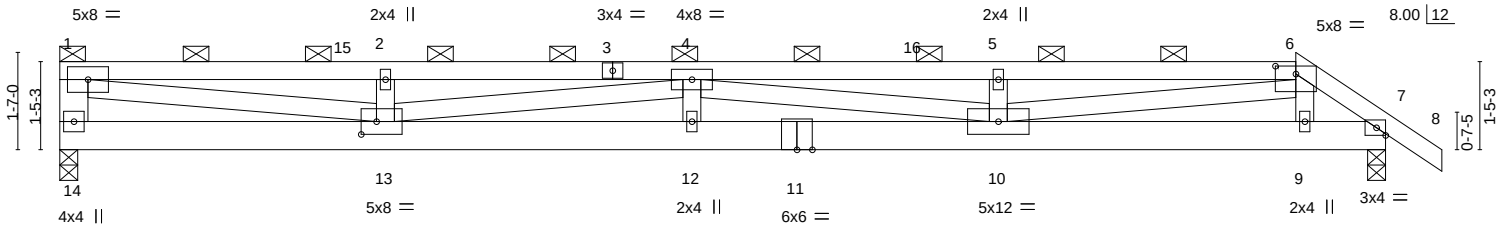
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 6 Liberty Meadows
J0822-4068	B7	HALF HIP	1	1	I53588297
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:25 2022 Page 1
ID:Mxo2zT_1o8v8ClEXCBvR1ayxNUw-5uHydJgCgNzaWQwV0pSr?TvlOPJ8CoHP87YdW2ypGnK

5-3-10	10-3-8	15-3-6	20-1-8	21-7-0	22-6-0
5-3-10	4-11-14	4-11-14	4-10-2	1-5-8	0-11-0

Scale = 1:37.5



5-3-10	10-3-8	15-3-6	20-1-8	21-7-0
5-3-10	4-11-14	4-11-14	4-10-2	1-5-8

Plate Offsets (X,Y)-- [6:0-4-0,0-1-9], [13:0-3-0,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	-0.29	12	>891	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.57	10-12	>445	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.19	12	>999	240	Weight: 119 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
1-14: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-3 oc purlins, except end verticals, and 2-0-0 oc purlins (3-1-4 max.): 1-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 14=0-3-8, 7=0-3-8
Max Horz 14=-37(LC 13)
Max Uplift 14=-31(LC 8), 7=-21(LC 8)
Max Grav 14=847(LC 1), 7=914(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-14=-706/138, 1-2=-2910/386, 2-4=-2910/386, 4-5=-3292/487, 5-6=-3292/487, 6-7=-1560/199
BOT CHORD 13-14=-9/310, 12-13=-507/4180, 10-12=-507/4180, 9-10=-123/1192, 7-9=-118/1230
WEBS 1-13=-341/2655, 4-13=-1298/198, 4-10=-907/121, 6-10=-310/2149, 6-9=0/325, 2-13=-288/124, 5-10=-290/134

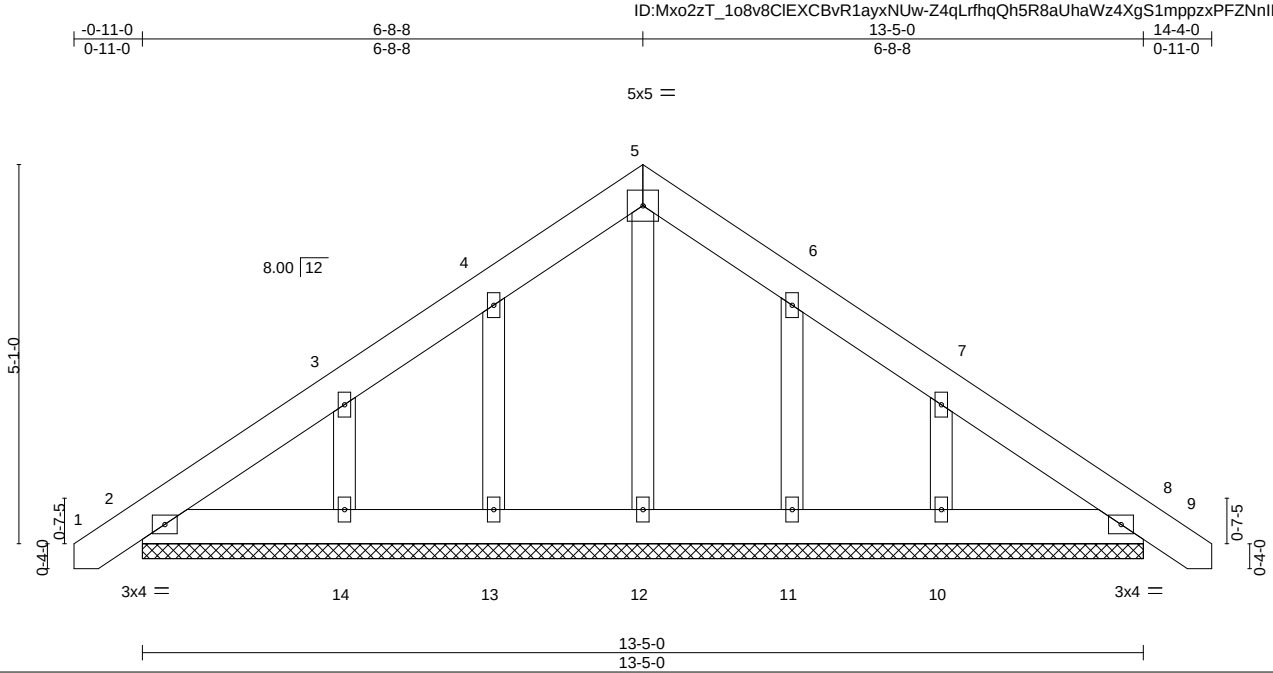
NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 20-1-8, Exterior(2) 20-1-8 to 22-6-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
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) 14, 7.
6) 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.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

August 11,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 6 Liberty Meadows
J0822-4068	C1GE	COMMON SUPPORTED GAB	1	1	I53588298
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:26 2022 Page 1
ID:Mxo2zT_1o8v8ClEXCBvR1ayxNUw-Z4qLrfhqQh5R8aUhaWz4XgS1mppzxPFZNnIB3VypGnJ



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	0.02	Vert(LL)	0.00	8	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	8	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 94 lb	FT = 20%

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

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

REACTIONS. All bearings 13-5-0.
(lb) - Max Horz 2=-123(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

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

August 11,2022

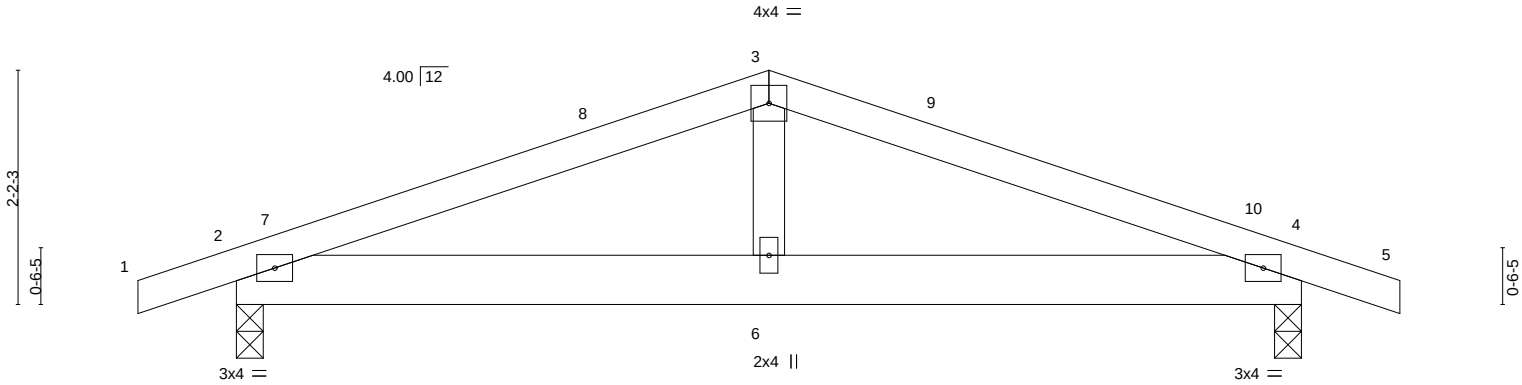
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 6 Liberty Meadows
J0822-4068	D1	COMMON	4	1	I53588299
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:27 2022 Page 1
ID:Mxo2zT_1o8v8ClEXCBvR1ayxNUw-1HOj2?iSB_DIlk3u8DUJ4u?9tD6Qgs8icR1kbxypGnI

-0-11-0 4-11-8 9-11-0 10-10-0
0-11-0 4-11-8 4-11-8 0-11-0

Scale = 1:21.5



4-11-8 9-11-0
4-11-8 4-11-8

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	0.19	Vert(LL)	-0.01	6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.02	2-6	>999	240	Weight: 44 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 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-0, 4=0-3-0
Max Horz 2=-19(LC 17)
Max Uplift 2=-124(LC 8), 4=-124(LC 9)
Max Grav 2=449(LC 1), 4=449(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-653/587, 3-4=-653/587
BOT CHORD 2-6=-485/562, 4-6=-485/562

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 B; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-0 to 3-5-13, Interior(1) 3-5-13 to 4-11-8, Exterior(2) 4-11-8 to 9-4-5, Interior(1) 9-4-5 to 10-10-0 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=124, 4=124.
6) 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.

August 11,2022

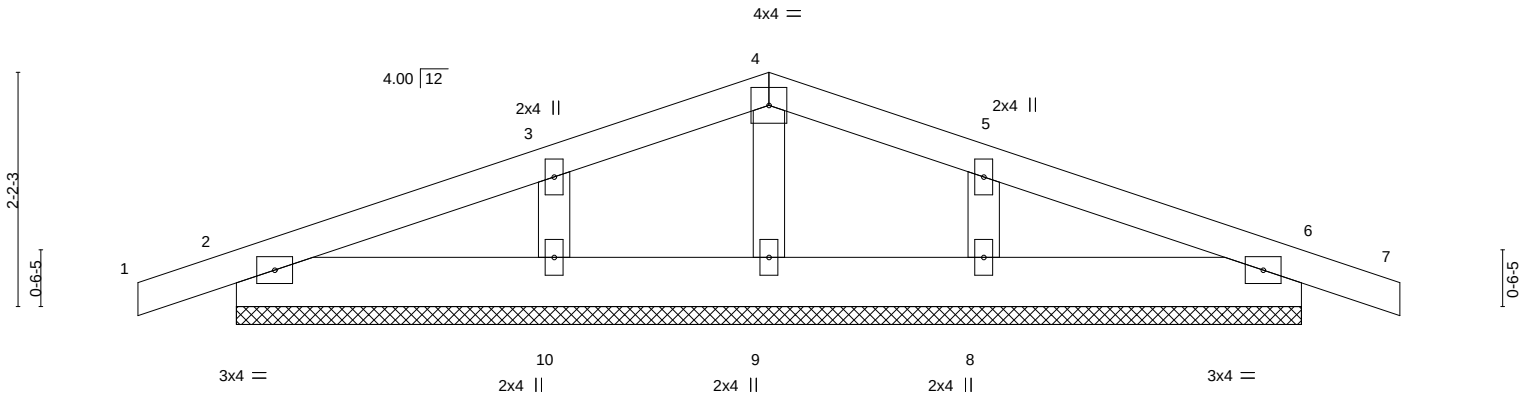
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 6 Liberty Meadows
J0822-4068	D1GE	COMMON SUPPORTED GAB	1	1	I53588300 Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:28 2022 Page 1
ID:Mxo2zT_1o8v8ClEXCBvR1ayxNUw-WTy5FLi4yIL9Nue4ix?Yc5XMjdUNPJtrq5nH7NypGnH

-0-11-0 4-11-8 9-11-0 10-10-0
0-11-0 4-11-8 4-11-8 0-11-0

Scale = 1:21.5



9-11-0
9-11-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	0.00	6	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	6	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 46 lb	FT = 20%

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

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

REACTIONS. All bearings 9-11-0.
(lb) - Max Horz 2=-33(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 10, 8
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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

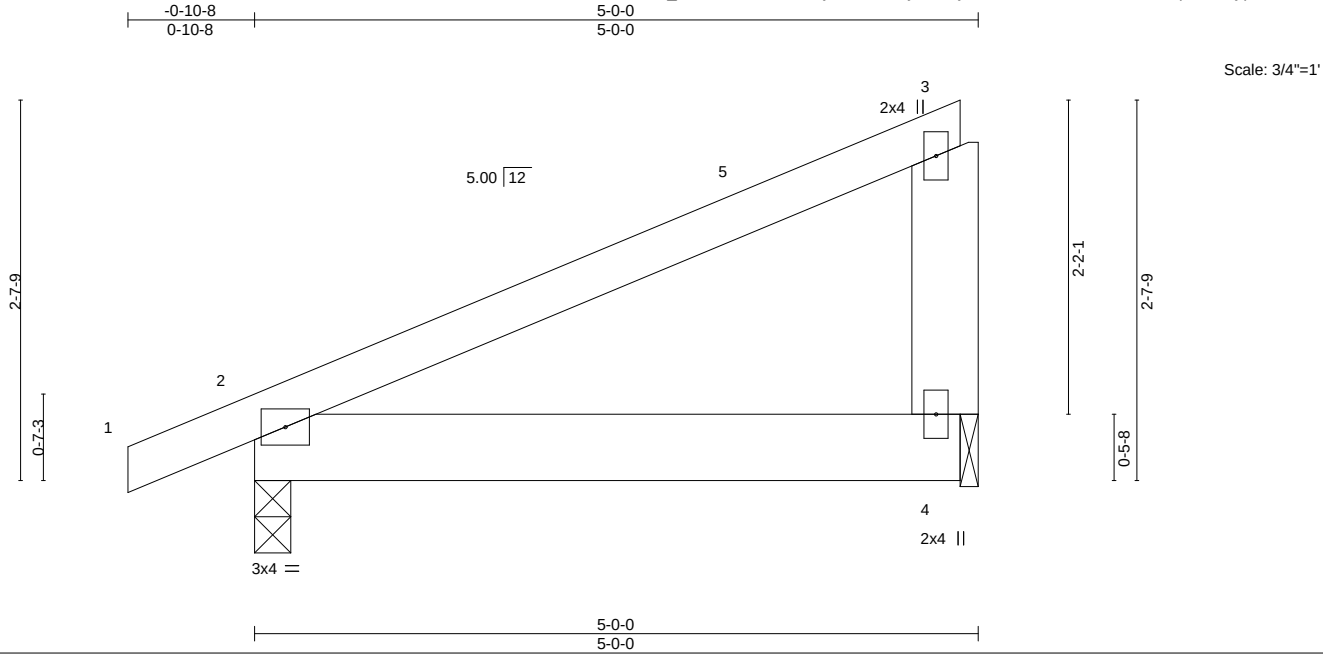
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed;C-C for members and forces & MWFRS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

August 11,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 6 Liberty Meadows
J0822-4068	J1	MONOPITCH	6	1	I53588301
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:28 2022 Page 1
ID:Mxo2zT_1o8v8ClEXCBvR1ayxNUw-WTy5FLi4yIL9Nue4ix?Yc5XIFdTSPJCrq5nH7NypGnH



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.01	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P		Wind(LL)	0.01	2-4	>999	240	Weight: 25 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 5-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-0, 4=0-1-8
Max Horz 2=62(LC 12)
Max Uplift 2=-45(LC 8), 4=-41(LC 8)
Max Grav 2=252(LC 1), 4=179(LC 1)

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

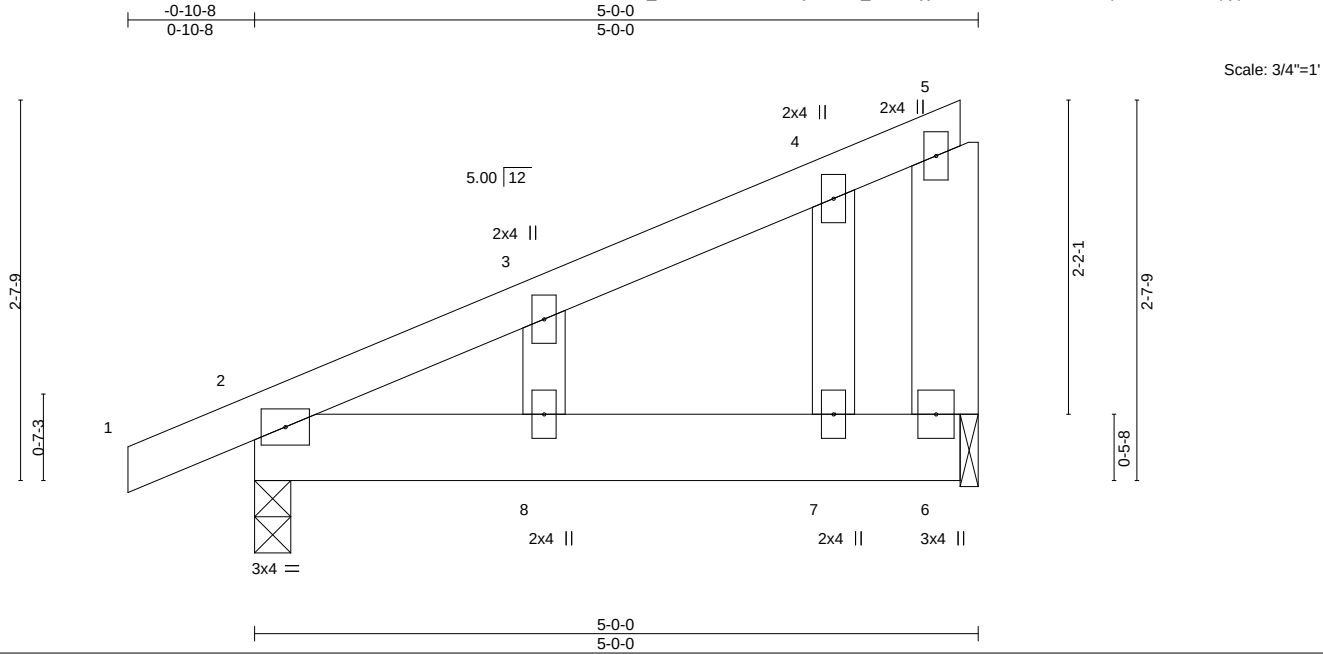
NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 4-9-4 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip 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) 2, 4.
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.

August 11,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 6 Liberty Meadows
J0822-4068	J1GE	GABLE	1	1	I53588302
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:29 2022 Page 1
ID:Mxo2zT_1o8v8ClEXCBvR1ayxNUw-_fWTThjijcT0?2DGFeWn9J4WF0pW8mD?3lWrfpypGnG



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.01	8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	-0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.01	8	>999	240	Weight: 29 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 5-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-0, 6=0-1-8
Max Horz 2=90(LC 12)
Max Uplift 2=-69(LC 8), 6=-63(LC 8)
Max Grav 2=252(LC 1), 6=179(LC 1)

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

NOTES-

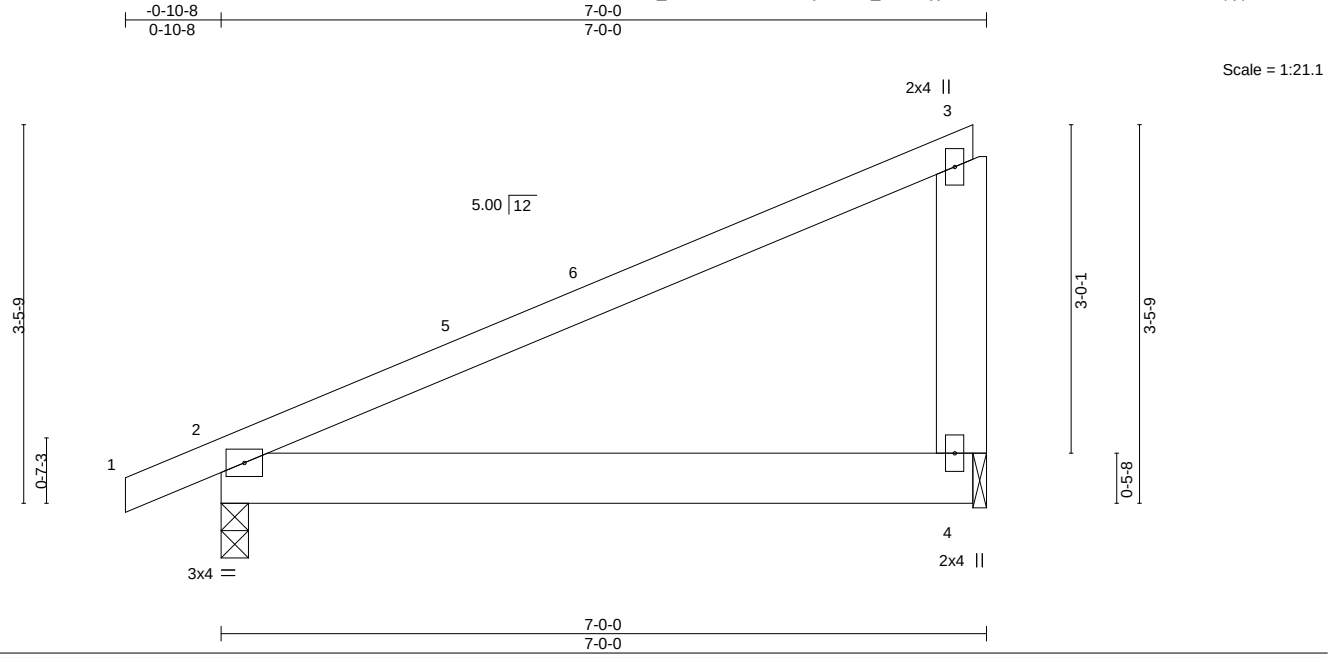
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind 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) 6 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) 6.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
9) 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.

August 11,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 6 Liberty Meadows
J0822-4068	J2	MONOPITCH	4	1	I53588303
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:29 2022 Page 1
ID:Mxo2zT_1o8v8ClEXCBvR1ayxNUw-_fWTThjijcT0?2DGFeWn9J4NN0oC8mR?3lWrfpypGnG



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	0.64	Vert(LL)	-0.03	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.05	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P		Wind(LL)	0.05	2-4	>999	240	Weight: 35 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=85(LC 12)
Max Uplift 2=-55(LC 8), 4=-59(LC 8)
Max Grav 2=330(LC 1), 4=261(LC 1)

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

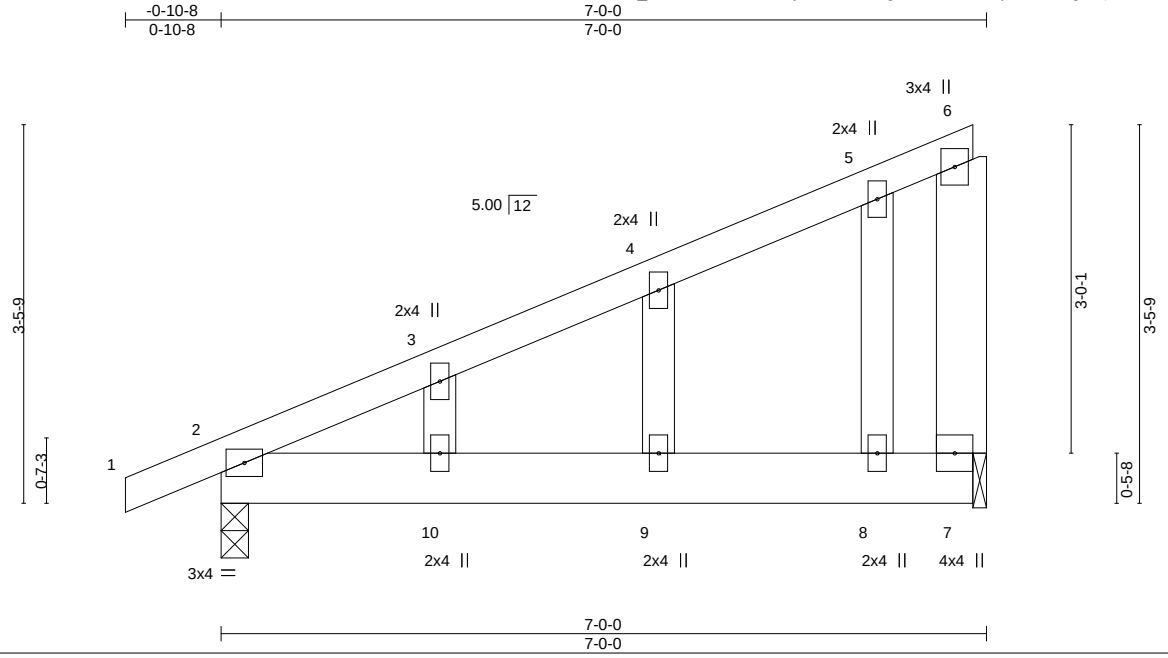
NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 6-9-4 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip 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) 2, 4.
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.

August 11,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 6 Liberty Meadows
J0822-4068	J2GE	GABLE	1	1	I53588304
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:30 2022 Page 1
ID:Mxo2zT_1o8v8ClEXCBvR1ayxNUw-Ss4rg1kKUvcscBoTpM10iWdgWQ7BtDU8IPGOCGypGnF



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	0.17	Vert(LL)	-0.02	9-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.05	9-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	-0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.05	9-10	>999	240	Weight: 42 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, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-0, 7=0-1-8
Max Horz 2=122(LC 12)
Max Uplift 2=-86(LC 8), 7=-91(LC 8)
Max Grav 2=330(LC 1), 7=261(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 B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left 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) 7 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) 7.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.
9) 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.

August 11,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 6 Liberty Meadows
J0822-4068	M1	ROOF SPECIAL	9	1	I53588305
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:31 2022 Page 1
ID:Mxo2zT_1o8v8ClEXCBvR1ayxNUw-w2eEuNlzFDkjELNfN3ZFEk9lUqNMcUdlW3?ykiypGnE

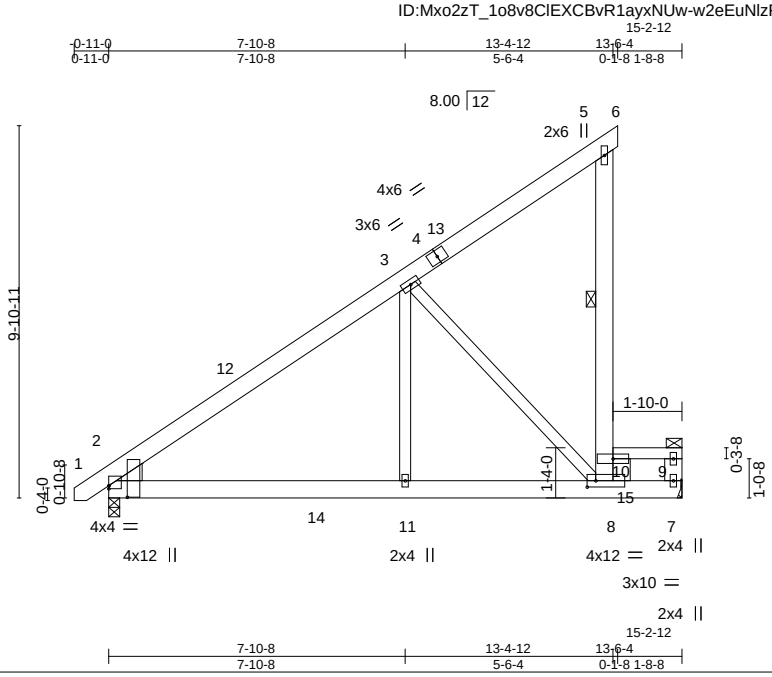


Plate Offsets (X,Y)-- [2:0-3-10,0-5-15], [2:0-0-0,0-0-15], [8:0-2-12,0-2-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.08	8-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.18	8-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.79	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.07	8-11	>999	240	Weight: 123 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP 2400F 2.0E *Except*
9-10: 2x4 SP No.1
WEBS 2x6 SP No.1 *Except*
3-8,3-11: 2x4 SP No.2
WEDGE
Left: 2x6 SP No.1

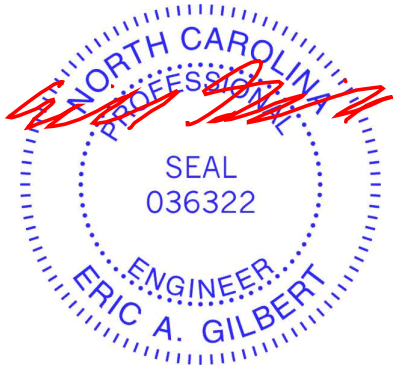
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. Except:
6-0-0 oc bracing: 5-10
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-10

REACTIONS. (size) 2=0-3-8, 7=Mechanical
Max Horz 2=254(LC 12)
Max Uplift 7=-39(LC 12)
Max Grav 2=724(LC 19), 7=1197(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-845/0, 8-10=-533/109
BOT CHORD 2-11=-164/658, 8-11=-164/658
WEBS 3-8=-810/207, 7-9=-254/6, 3-11=0/540

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 B; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 13-6-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7.
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) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard



August 11,2022

Continued on page 2

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

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-5=-60, 5-6=-60, 2-7=-20, 9-10=-40
   Concentrated Loads (lb)
   Vert: 15=-500
2) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-5=-50, 5-6=-50, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100
   Concentrated Loads (lb)
   Vert: 15=-438
3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-5=-20, 5-6=-20, 2-7=-40, 9-10=-60
   Concentrated Loads (lb)
   Vert: 15=-375
4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=45, 2-12=26, 5-12=20, 5-6=45, 2-7=-12, 9-10=-32
   Horz: 1-2=-57, 2-12=-38, 5-12=-32, 5-6=-57
   Concentrated Loads (lb)
   Vert: 15=86
5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=14, 2-13=20, 5-13=26, 5-6=20, 2-7=-12, 9-10=-32
   Horz: 1-2=-26, 2-13=-32, 5-13=-38, 5-6=-32
   Concentrated Loads (lb)
   Vert: 15=86
6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=5, 2-5=-51, 5-6=5, 2-7=-20, 9-10=-40
   Horz: 1-2=-25, 2-5=31, 5-6=-25
   Concentrated Loads (lb)
   Vert: 15=-444
7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-45, 2-5=-51, 5-6=-45, 2-7=-20, 9-10=-40
   Horz: 1-2=25, 2-5=31, 5-6=25
   Concentrated Loads (lb)
   Vert: 15=-444
8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-0, 2-5=-13, 5-6=-18, 2-7=-12, 9-10=-32
   Horz: 1-2=-12, 2-5=1, 5-6=6
   Concentrated Loads (lb)
   Vert: 15=-115
9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=1, 2-5=7, 5-6=20, 2-7=-12, 9-10=-32
   Horz: 1-2=-13, 2-5=-19, 5-6=-32
   Concentrated Loads (lb)
   Vert: 15=-32
10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=-26, 2-5=-32, 5-6=-26, 2-7=-20, 9-10=-40
    Horz: 1-2=6, 2-5=12, 5-6=6
    Concentrated Loads (lb)
    Vert: 15=-325
11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=-7, 2-5=-12, 5-6=-7, 2-7=-20, 9-10=-40
    Horz: 1-2=-13, 2-5=-8, 5-6=-13
    Concentrated Loads (lb)
    Vert: 15=-285
12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=9, 2-5=15, 5-6=9, 2-7=-12, 9-10=-32
    Horz: 1-2=-21, 2-5=-27, 5-6=-21
    Concentrated Loads (lb)
    Vert: 15=18
13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=-1, 2-5=5, 5-6=-1, 2-7=-12, 9-10=-32
    Horz: 1-2=-11, 2-5=-17, 5-6=-11
    Concentrated Loads (lb)
    Vert: 15=-44

Continued on page 3

LOAD CASE(S) Standard

14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=9, 2-5=15, 5-6=9, 2-7=-12, 9-10=-32
Horz: 1-2=-21, 2-5=-27, 5-6=-21
Concentrated Loads (lb)
Vert: 15=18

15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-1, 2-5=5, 5-6=-1, 2-7=-12, 9-10=-32
Horz: 1-2=-11, 2-5=-17, 5-6=-11
Concentrated Loads (lb)
Vert: 15=-44

16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=1, 2-5=-4, 5-6=1, 2-7=-20, 9-10=-40
Horz: 1-2=-21, 2-5=-16, 5-6=-21
Concentrated Loads (lb)
Vert: 15=-285

17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-9, 2-5=-14, 5-6=-9, 2-7=-20, 9-10=-40
Horz: 1-2=-11, 2-5=-6, 5-6=-11
Concentrated Loads (lb)
Vert: 15=-285

18) Dead + Uninhabitable Attic Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-5=-20, 5-6=-20, 2-14=-20, 11-14=-80, 7-11=-20, 9-10=-120
Concentrated Loads (lb)
Vert: 15=-250

19) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-55, 2-5=-59, 5-6=-55, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100
Horz: 1-2=5, 2-5=9, 5-6=5
Concentrated Loads (lb)
Vert: 15=-494

20) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-40, 2-5=-44, 5-6=-40, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100
Horz: 1-2=-10, 2-5=-6, 5-6=-10
Concentrated Loads (lb)
Vert: 15=-464

21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-34, 2-5=-38, 5-6=-34, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100
Horz: 1-2=-16, 2-5=-12, 5-6=-16
Concentrated Loads (lb)
Vert: 15=-464

22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-41, 2-5=-46, 5-6=-41, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100
Horz: 1-2=-9, 2-5=-4, 5-6=-9
Concentrated Loads (lb)
Vert: 15=-464

23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-60, 5-6=-60, 2-7=-20, 9-10=-40
Concentrated Loads (lb)
Vert: 15=-500

24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-20, 5-6=-20, 2-7=-20, 9-10=-40
Concentrated Loads (lb)
Vert: 15=-250

25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-50, 5-6=-50, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100
Concentrated Loads (lb)
Vert: 15=-438

26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-20, 5-6=-20, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100

Continued on page 4

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 15=-250

Job	Truss	Truss Type	Qty	Ply	Lot 6 Liberty Meadows
J0822-4068	M1GE	GABLE	1	1	I53588306
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:32 2022 Page 1
ID:Mxo2zT_1o8v8ClEXCBvR1ayxNUw-OECc5jlb0XsasVyrxn4UnxiwkEi1L4XRljlVG8ypGnD

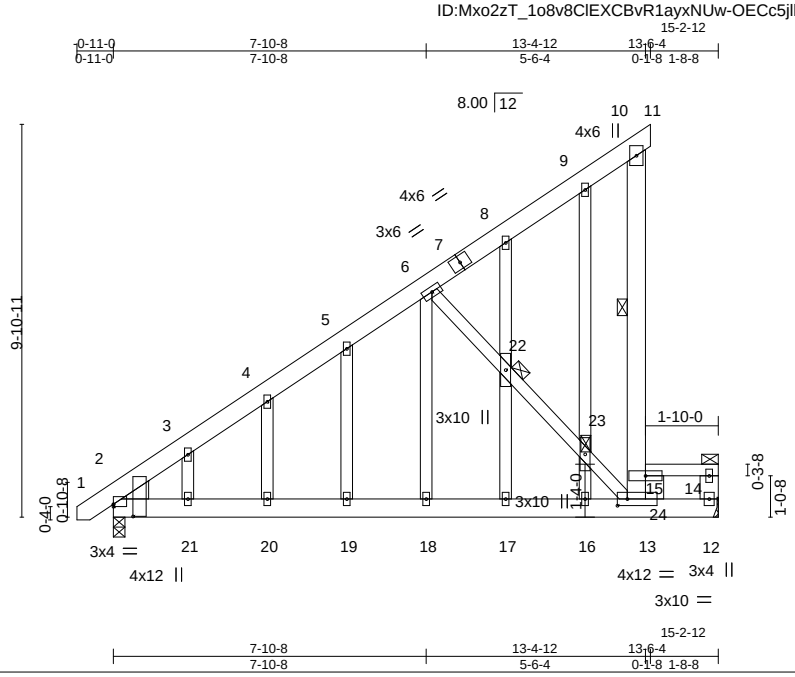


Plate Offsets (X,Y)-- [2:0-3-10,0-5-15], [2:0-0-0,0-0-11], [13:0-3-0,0-2-0]

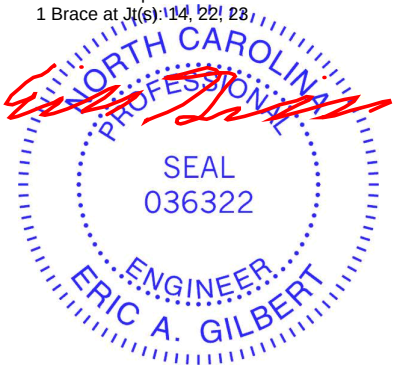
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.08	16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.17	16	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.23	Horz(CT)	0.01	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.09	16	>999	240	Weight: 155 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP 2400F 2.0E *Except*
14-15: 2x4 SP No.1
WEBS 2x6 SP No.1 *Except*
6-13,6-18: 2x4 SP No.2
OTHERS 2x4 SP No.2
WEDGE
Left: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. Except:
6-0-0 oc bracing: 10-15
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 10-15
JOINTS 1 Brace at Jt(s): 14, 22, 23

REACTIONS. (size) 2=0-3-8, 12=Mechanical
Max Horz 2=366(LC 12)
Max Uplift 2=-20(LC 12), 12=-271(LC 12)
Max Grav 2=713(LC 1), 12=1499(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-826/0, 3-4=-727/0, 4-5=-697/0, 5-6=-644/30, 6-8=-263/0, 13-15=-856/157, 10-15=-436/140
BOT CHORD 2-21=-219/618, 20-21=-219/618, 19-20=-219/618, 18-19=-219/618, 17-18=-219/618, 16-17=-219/618, 13-16=-219/618
WEBS 6-22=-747/285, 22-23=-715/274, 13-23=-724/270, 12-14=-267/13, 6-18=-113/394, 9-23=-57/411, 16-23=-51/427



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 B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 12=271.
10) 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.
11) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.

August 11,2022

Continued on page 2

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

NOTES-

12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-10=-60, 10-11=-60, 2-13=-20, 12-13=-236, 14-15=-40
   Concentrated Loads (lb)
   Vert: 24=-500
2) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-10=-50, 10-11=-50, 2-13=-20, 12-13=-209, 14-15=-100
   Concentrated Loads (lb)
   Vert: 24=-438
3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-10=-20, 10-11=-20, 2-13=-40, 12-13=-202, 14-15=-60
   Concentrated Loads (lb)
   Vert: 24=-375
4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=45, 2-10=26, 10-11=45, 2-13=-12, 12-13=25, 14-15=-32
   Horz: 1-2=-57, 2-10=-38, 10-11=-57
   Concentrated Loads (lb)
   Vert: 24=86
5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=20, 2-10=26, 10-11=20, 2-13=-12, 12-13=25, 14-15=-32
   Horz: 1-2=-32, 2-10=-38, 10-11=-32
   Concentrated Loads (lb)
   Vert: 24=86
6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=5, 2-10=-51, 10-11=5, 2-13=-20, 12-13=-212, 14-15=-40
   Horz: 1-2=-25, 2-10=31, 10-11=-25
   Concentrated Loads (lb)
   Vert: 24=-444
7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-45, 2-10=-51, 10-11=-45, 2-13=-20, 12-13=-212, 14-15=-40
   Horz: 1-2=25, 2-10=31, 10-11=25
   Concentrated Loads (lb)
   Vert: 24=-444
8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-2, 2-10=-15, 10-11=-20, 2-13=-12, 12-13=-62, 14-15=-32
   Horz: 1-2=-10, 2-10=3, 10-11=8
   Concentrated Loads (lb)
   Vert: 24=-115
9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=4, 2-10=10, 10-11=23, 2-13=-12, 12-13=-18, 14-15=-32
   Horz: 1-2=-16, 2-10=-22, 10-11=-35
   Concentrated Loads (lb)
   Vert: 24=-13
10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-28, 2-10=-34, 10-11=-28, 2-13=-20, 12-13=-166, 14-15=-40
   Horz: 1-2=8, 2-10=14, 10-11=8
   Concentrated Loads (lb)
   Vert: 24=-337
11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-4, 2-10=-9, 10-11=-4, 2-13=-20, 12-13=-143, 14-15=-40
   Horz: 1-2=-16, 2-10=-11, 10-11=-16
   Concentrated Loads (lb)
   Vert: 24=-285
12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=21, 2-10=27, 10-11=21, 2-13=-12, 12-13=28, 14-15=-32
   Horz: 1-2=-33, 2-10=-39, 10-11=-33
   Concentrated Loads (lb)
   Vert: 24=92
13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Continued on page 3

LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-2=4, 2-10=10, 10-11=4, 2-13=-12, 12-13=-18, 14-15=-32
Horz: 1-2=-16, 2-10=-22, 10-11=-16
Concentrated Loads (lb)
Vert: 24=-13

14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=21, 2-10=27, 10-11=21, 2-13=-12, 12-13=28, 14-15=-32
Horz: 1-2=-33, 2-10=-39, 10-11=-33
Concentrated Loads (lb)
Vert: 24=92

15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=4, 2-10=10, 10-11=4, 2-13=-12, 12-13=-18, 14-15=-32
Horz: 1-2=-16, 2-10=-22, 10-11=-16
Concentrated Loads (lb)
Vert: 24=-13

16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=13, 2-10=8, 10-11=13, 2-13=-20, 12-13=-143, 14-15=-40
Horz: 1-2=-33, 2-10=-28, 10-11=-33
Concentrated Loads (lb)
Vert: 24=-285

17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-4, 2-10=-9, 10-11=-4, 2-13=-20, 12-13=-143, 14-15=-40
Horz: 1-2=-16, 2-10=-11, 10-11=-16
Concentrated Loads (lb)
Vert: 24=-285

18) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 1-10=-20, 10-11=-20, 2-13=-20, 12-13=-128, 14-15=-120
Concentrated Loads (lb)
Vert: 24=-250

19) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-56, 2-10=-60, 10-11=-56, 2-13=-20, 12-13=-237, 14-15=-100
Horz: 1-2=6, 2-10=10, 10-11=6
Concentrated Loads (lb)
Vert: 24=-503

20) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-38, 2-10=-42, 10-11=-38, 2-13=-20, 12-13=-220, 14-15=-100
Horz: 1-2=-12, 2-10=-8, 10-11=-12
Concentrated Loads (lb)
Vert: 24=-464

21) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-25, 2-10=-29, 10-11=-25, 2-13=-20, 12-13=-220, 14-15=-100
Horz: 1-2=-25, 2-10=-21, 10-11=-25
Concentrated Loads (lb)
Vert: 24=-464

22) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-38, 2-10=-42, 10-11=-38, 2-13=-20, 12-13=-220, 14-15=-100
Horz: 1-2=-12, 2-10=-8, 10-11=-12
Concentrated Loads (lb)
Vert: 24=-464

23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-10=-60, 10-11=-60, 2-13=-20, 12-13=-236, 14-15=-40
Concentrated Loads (lb)
Vert: 24=-500

24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-10=-20, 10-11=-20, 2-13=-20, 12-13=-128, 14-15=-40
Concentrated Loads (lb)
Vert: 24=-250

25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-10=-50, 10-11=-50, 2-13=-20, 12-13=-209, 14-15=-100
Concentrated Loads (lb)
Vert: 24=-438

26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Continued on page 4

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-10=-20, 10-11=-20, 2-13=-20, 12-13=-128, 14-15=-100

Concentrated Loads (lb)

Vert: 24=-250

Job	Truss	Truss Type	Qty	Ply	Lot 6 Liberty Meadows
J0822-4068	M2	ROOF SPECIAL	2	1	I53588307
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:33 2022 Page 1
ID:Mxo2zT_1o8v8ClEXCBvR1ayxNUw-sRm_J2mDnq_RTfX1UUbjJ9F4Ve254Ofa_MU2obypGnC

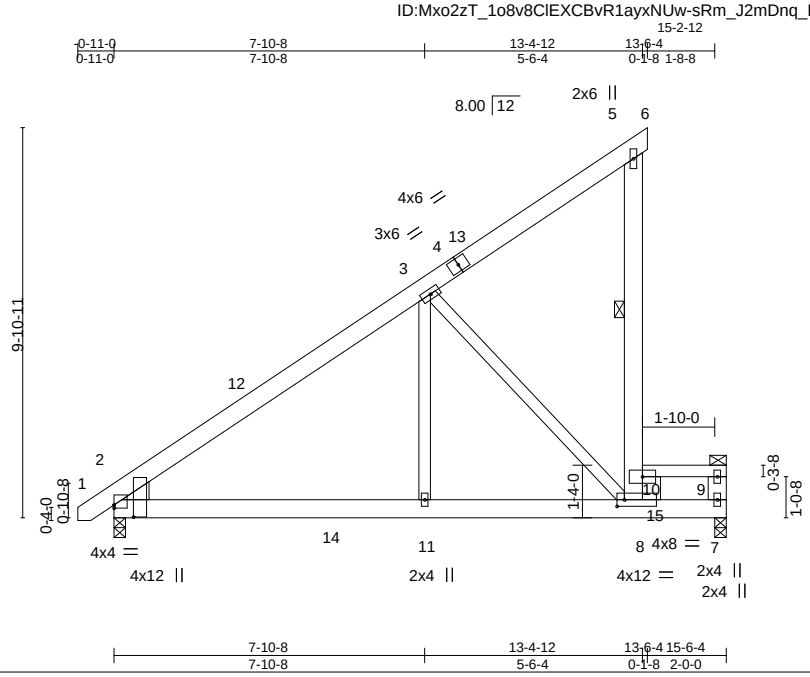


Plate Offsets (X,Y)-- [2:0-3-10,0-5-15], [2:0-0-0,0-0-15], [8:0-2-4,0-2-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.11	8-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.24	8-11	>759	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.82	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.10	8-11	>999	240	Weight: 124 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP 2400F 2.0E *Except*
9-10: 2x4 SP No.1
WEBS 2x6 SP No.1 *Except*
3-8,3-11: 2x4 SP No.2
WEDGE
Left: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. Except:
6-0-0 oc bracing: 5-10
BOT CHORD Rigid ceiling directly applied or 9-10-10 oc bracing.
WEBS 1 Row at midpt 5-10

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=254(LC 12)
Max Uplift 7=-25(LC 12)
Max Grav 2=747(LC 19), 7=1209(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-893/0, 8-10=-559/107
BOT CHORD 2-11=-169/696, 8-11=-169/696
WEBS 3-8=-841/212, 7-9=-255/0, 3-11=0/587

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 B; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 13-6-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7.
6) 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.
7) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

August 11,2022

Continued on page 2

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

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-5=-60, 5-6=-60, 2-7=-20, 9-10=-40
   Concentrated Loads (lb)
   Vert: 15=-500
2) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-5=-50, 5-6=-50, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100
   Concentrated Loads (lb)
   Vert: 15=-438
3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-5=-20, 5-6=-20, 2-7=-40, 9-10=-60
   Concentrated Loads (lb)
   Vert: 15=-375
4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=45, 2-12=26, 5-12=20, 5-6=45, 2-7=-12, 9-10=-32
   Horz: 1-2=-57, 2-12=-38, 5-12=-32, 5-6=-57
   Concentrated Loads (lb)
   Vert: 15=86
5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=14, 2-13=20, 5-13=26, 5-6=20, 2-7=-12, 9-10=-32
   Horz: 1-2=-26, 2-13=-32, 5-13=-38, 5-6=-32
   Concentrated Loads (lb)
   Vert: 15=86
6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=5, 2-5=-51, 5-6=5, 2-7=-20, 9-10=-40
   Horz: 1-2=-25, 2-5=31, 5-6=-25
   Concentrated Loads (lb)
   Vert: 15=-444
7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-45, 2-5=-51, 5-6=-45, 2-7=-20, 9-10=-40
   Horz: 1-2=25, 2-5=31, 5-6=25
   Concentrated Loads (lb)
   Vert: 15=-444
8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-0, 2-5=-13, 5-6=-18, 2-7=-12, 9-10=-32
   Horz: 1-2=-12, 2-5=1, 5-6=6
   Concentrated Loads (lb)
   Vert: 15=-115
9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=1, 2-5=7, 5-6=20, 2-7=-12, 9-10=-32
   Horz: 1-2=-13, 2-5=-19, 5-6=-32
   Concentrated Loads (lb)
   Vert: 15=-32
10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=-26, 2-5=-32, 5-6=-26, 2-7=-20, 9-10=-40
    Horz: 1-2=6, 2-5=12, 5-6=6
    Concentrated Loads (lb)
    Vert: 15=-325
11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=-7, 2-5=-12, 5-6=-7, 2-7=-20, 9-10=-40
    Horz: 1-2=-13, 2-5=-8, 5-6=-13
    Concentrated Loads (lb)
    Vert: 15=-285
12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=9, 2-5=15, 5-6=9, 2-7=-12, 9-10=-32
    Horz: 1-2=-21, 2-5=-27, 5-6=-21
    Concentrated Loads (lb)
    Vert: 15=18
13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
    Uniform Loads (plf)
    Vert: 1-2=-1, 2-5=5, 5-6=-1, 2-7=-12, 9-10=-32
    Horz: 1-2=-11, 2-5=-17, 5-6=-11
    Concentrated Loads (lb)
    Vert: 15=-44

Continued on page 3

LOAD CASE(S) Standard

14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=9, 2-5=15, 5-6=9, 2-7=-12, 9-10=-32
Horz: 1-2=-21, 2-5=-27, 5-6=-21
Concentrated Loads (lb)
Vert: 15=18

15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-1, 2-5=5, 5-6=-1, 2-7=-12, 9-10=-32
Horz: 1-2=-11, 2-5=-17, 5-6=-11
Concentrated Loads (lb)
Vert: 15=-44

16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=1, 2-5=-4, 5-6=1, 2-7=-20, 9-10=-40
Horz: 1-2=-21, 2-5=-16, 5-6=-21
Concentrated Loads (lb)
Vert: 15=-285

17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-9, 2-5=-14, 5-6=-9, 2-7=-20, 9-10=-40
Horz: 1-2=-11, 2-5=-6, 5-6=-11
Concentrated Loads (lb)
Vert: 15=-285

18) Dead + Uninhabitable Attic Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-5=-20, 5-6=-20, 2-14=-20, 11-14=-80, 7-11=-20, 9-10=-120
Concentrated Loads (lb)
Vert: 15=-250

19) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-55, 2-5=-59, 5-6=-55, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100
Horz: 1-2=5, 2-5=9, 5-6=5
Concentrated Loads (lb)
Vert: 15=-494

20) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-40, 2-5=-44, 5-6=-40, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100
Horz: 1-2=-10, 2-5=-6, 5-6=-10
Concentrated Loads (lb)
Vert: 15=-464

21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-34, 2-5=-38, 5-6=-34, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100
Horz: 1-2=-16, 2-5=-12, 5-6=-16
Concentrated Loads (lb)
Vert: 15=-464

22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-41, 2-5=-46, 5-6=-41, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100
Horz: 1-2=-9, 2-5=-4, 5-6=-9
Concentrated Loads (lb)
Vert: 15=-464

23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-60, 5-6=-60, 2-7=-20, 9-10=-40
Concentrated Loads (lb)
Vert: 15=-500

24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-20, 5-6=-20, 2-7=-20, 9-10=-40
Concentrated Loads (lb)
Vert: 15=-250

25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-50, 5-6=-50, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100
Concentrated Loads (lb)
Vert: 15=-438

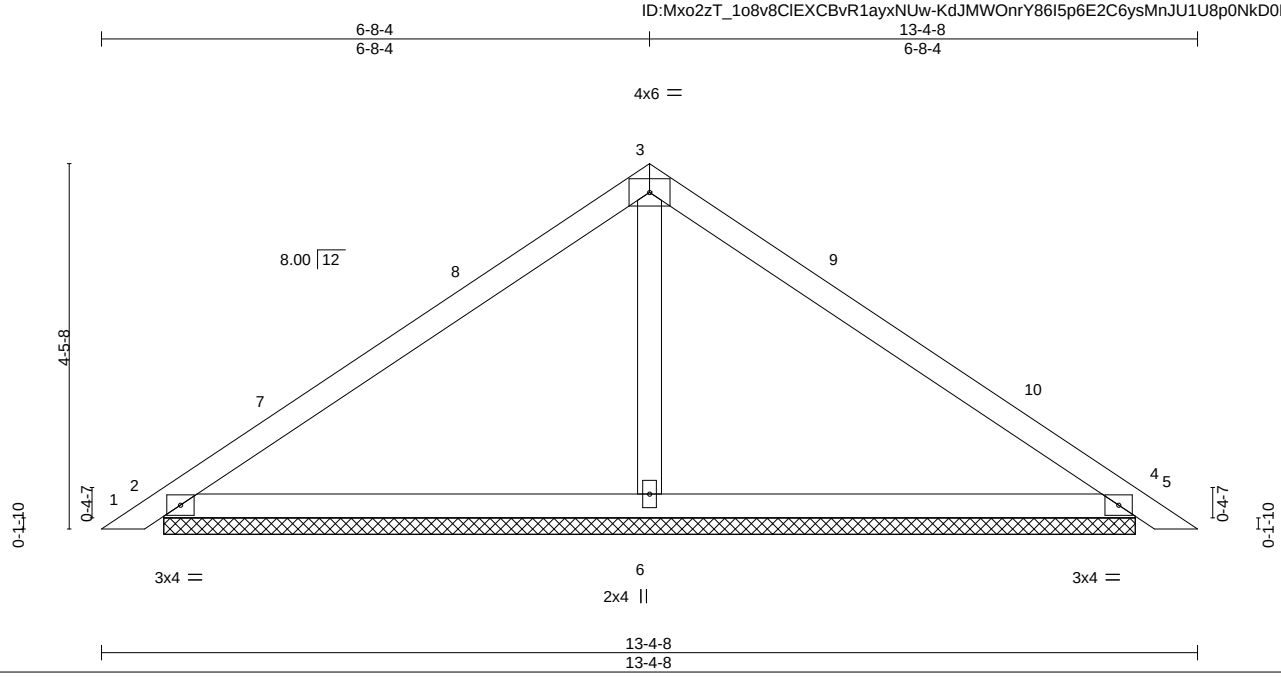
26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-20, 5-6=-20, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100

Continued on page 4

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 15=-250

Job	Truss	Truss Type	Qty	Ply	Lot 6 Liberty Meadows
J0822-4068	PB1	Piggyback	11	1	I53588308
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:34 2022 Page 1
ID:Mxo2zT_1o8v8ClEXCBvR1ayxNUw-KdJMWOnrY86I5p6E2C6ysMnJU1U8p0NkD0EcL1ypGnB



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	0.36	Vert(LL)	0.02	5	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	0.03	5	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 47 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) 2=11-10-4, 4=11-10-4, 6=11-10-4
Max Horz 2=-85(LC 10)
Max Uplift 2=-17(LC 12), 4=-25(LC 13)
Max Grav 2=265(LC 1), 4=265(LC 1), 6=478(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-294/85

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 B; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-2 to 4-7-15, Interior(1) 4-7-15 to 6-8-4, Exterior(2) 6-8-4 to 11-1-1, Interior(1) 11-1-1 to 13-1-6 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) 2, 4.
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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

August 11,2022

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

Job	Truss	Truss Type	Qty	Ply	Lot 6 Liberty Meadows
J0822-4068	PB1GE	GABLE	1	1	I53588309
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:34 2022 Page 1
ID:Mxo2zT_1o8v8ClEXCBvR1ayxNUw-KdJMWOnrY86I5p6E2C6ysMnKR1Tgp1hkD0EcL1ypGnB

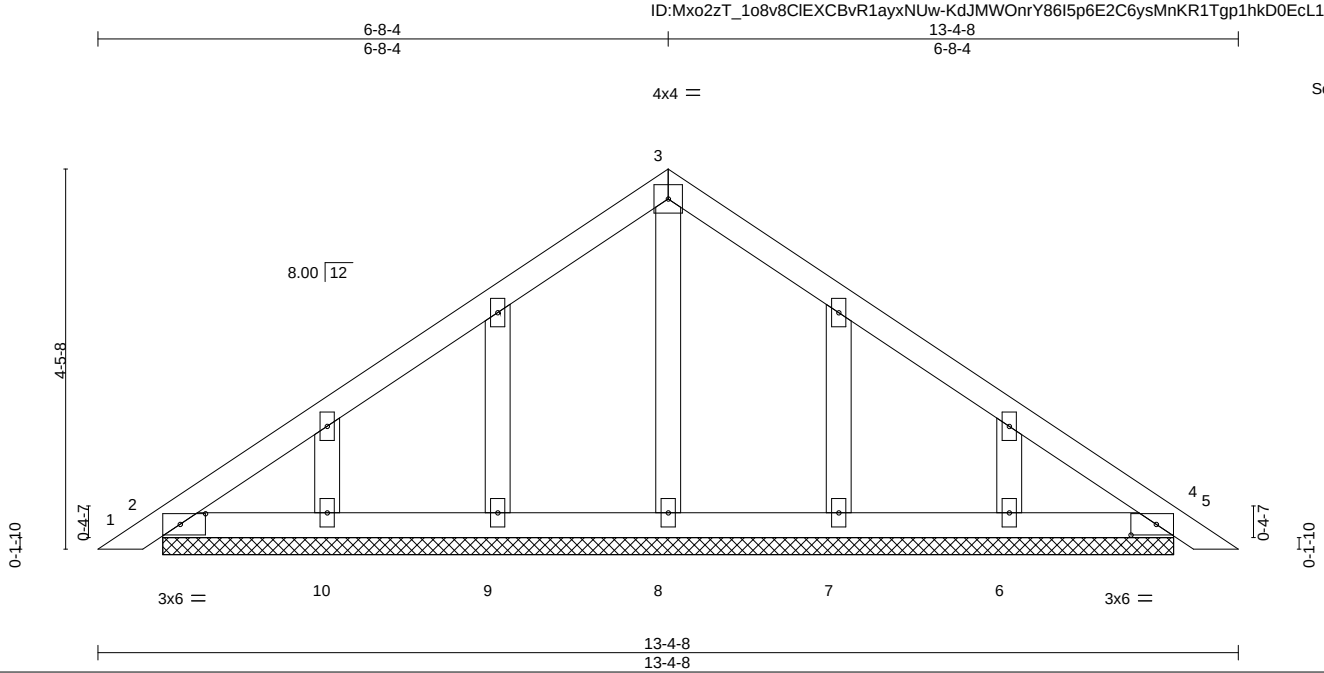


Plate Offsets (X,Y)-- [2:0-3-9,0-1-8], [4:0-3-9,0-1-8], [13:0-0-0,0-0-0], [14:0-0-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	0.01	5	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	0.01	5	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 58 lb	FT = 20%

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

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

REACTIONS. All bearings 11-10-4.
(lb) - Max Horz 2=-106(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 4, 10, 6
Max Grav All reactions 250 lb or less at joint(s) 8, 9, 10, 7, 6 except 2=307(LC 1), 4=307(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-408/154, 3-4=-408/154
BOT CHORD 2-10=-43/254, 9-10=-43/254, 8-9=-43/254, 7-8=-43/254, 6-7=-43/254, 4-6=-43/254

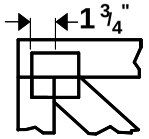
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60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

August 11,2022

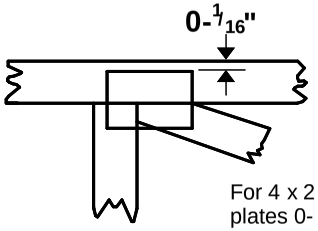
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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.

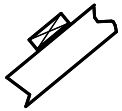
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

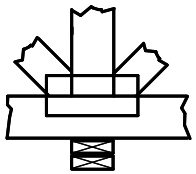
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

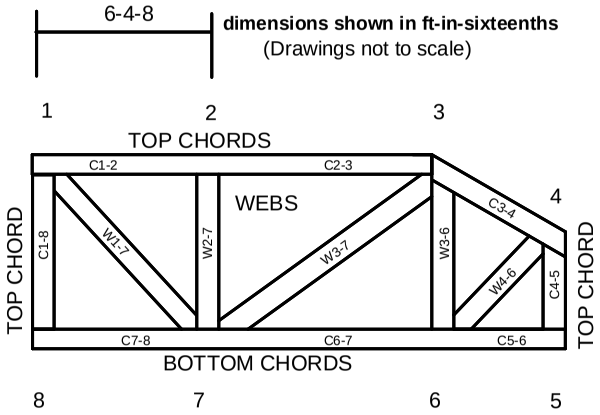


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

MiTek
ENGINEERING BY TRENCO
A MiTek Affiliate

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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