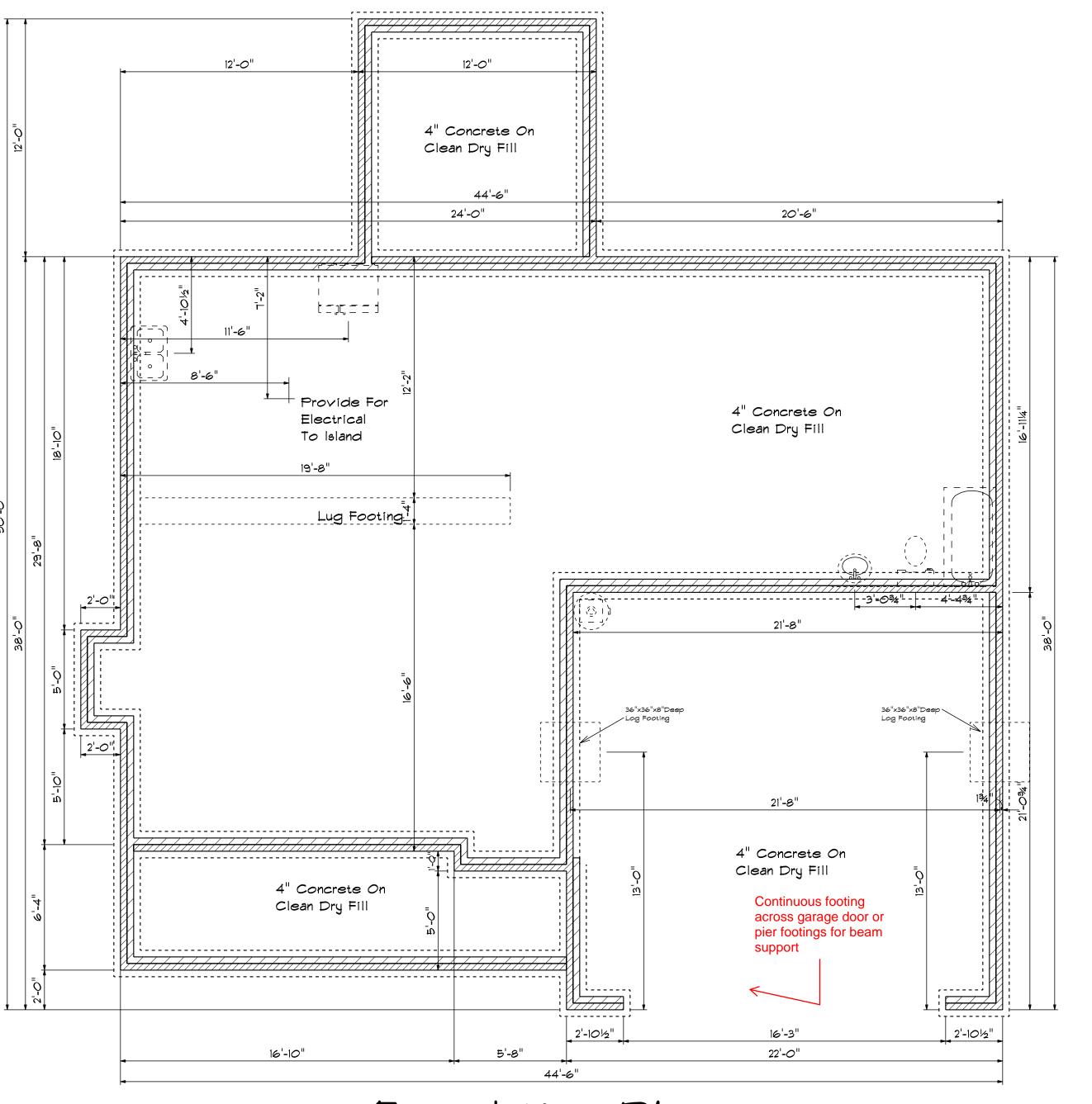


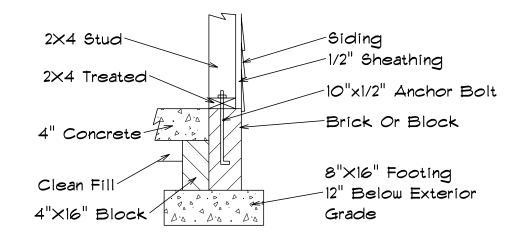
SECOND FLOOR	PENING SCH	EDULE		
PRODUCT CODE	SIZE	HINGE	COUNT	
1-6 Door Unit	1'-4"	R	1	
2-0 Door Unit	2'-0"	R	1	
2-4 Door Unit	2'-4"	R	1	
2-4 Door Unit	2'-4"	L	2	
2-6 Door Unit	2'-6"	R	2	
2-6 Door Unit	2'-6"	L	1	
2-8 Door Unit	2'-8"	R	2	
3-0 Doublehung Door Unit	3'-0"	LR	2	
20x32 single	2'-0" x 3'-2"	N	2	
28x52 single	2'-8" x 5'-2"	N	5	
28x52 triple	8'-0" x 5'-2"	NA	1	

Second Floor Plan

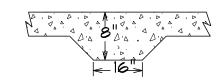
Scale: 1/4"= 1'-0"

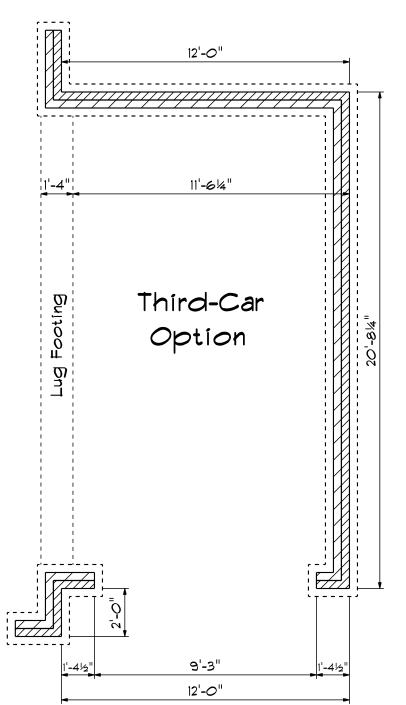


# Foundation Detail Siding

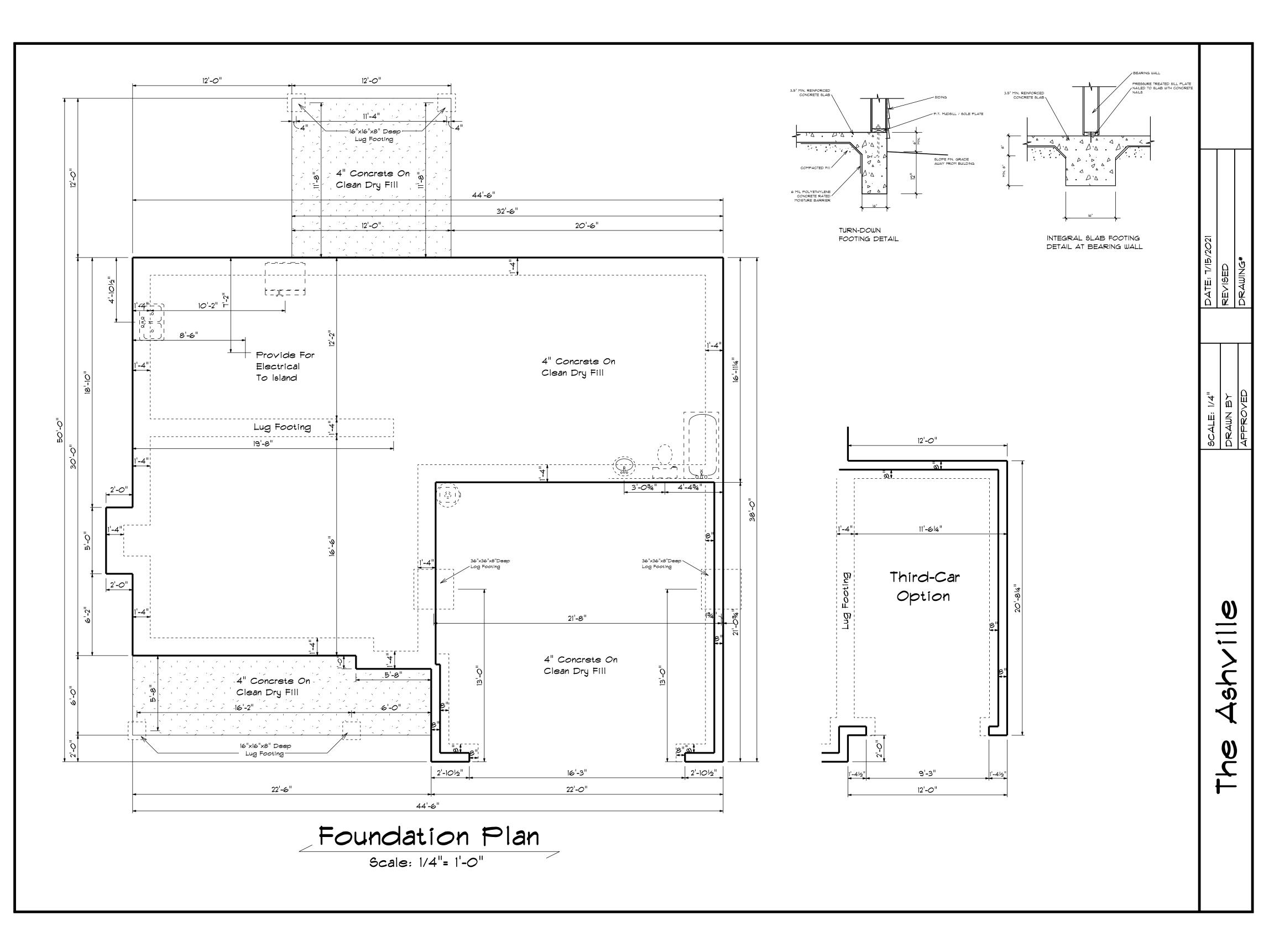


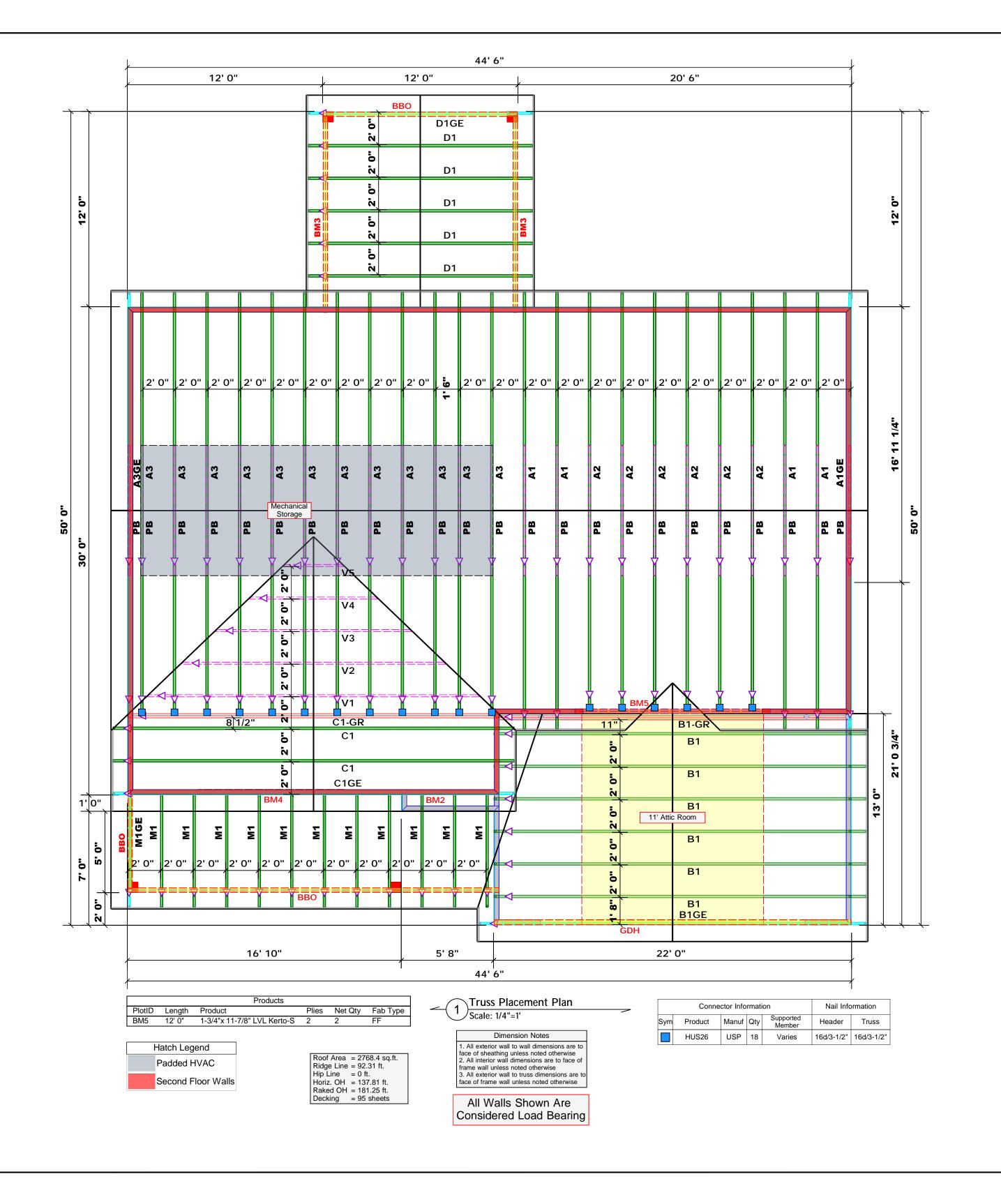
# Lug Footing Detail





# Foundation Plan Scale: 1/4"= 1'-0"







Reilly Road Industrial Park Fayetteville, N.C. 28309 Phone: (910) 864-8787 Fax: (910) 864-4444

Bearing reactions less than or equal to 3000# ar deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables ( derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained design the support system for all reactions that exceed 15000#.

Signature\_

David Landry

LO.	LOAD CHART FOR JACK STUDS										
	(BASED ON TABLES R502 5(1) & (b))										
NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER											
END REACTION (UP TO)	REQ'D STUDS FOR (2) PLY HEADER		END REACTION (UP TO)	REQ15 STUDS FOR (3) PLY HEADER		END REACTION (OF TU)	REQ'D STUDS FOR (4) PLY HEADER				
1700	1		2550	1		3400	1				
3400	2		5100	2		6800	2				
5100	3		7650	3		10200	3				
6800	4		10200	4		13600	4				
8500	5		12750	5		17000	5				
10200	6		15300	6							
11900	7										
13600	8										
15300	9										

BUILDER Benjamin Stout Real Estate JOB NAME Lot 46 Liberty Meadows PLAN The Ashville / 2GRF, CP SEAL DATE N/A JOB# J0822-4072	ate	COUNTY ADDRESS MODEL DATE REV. DRAWN BY SALESMAN	COUNTYHarnett Co. / HarnettADDRESS24 Melvill LaneMODELRoofDATE REV.08/10/22DRAWN BYDavid LandrySALESMANMarshall Naylor
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These trusses are designed as individual building components to be incorporated into the building design at the specification of the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com



RE: J0822-4072

Lot 46 Liberty Meadows

Trenco

818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Benjamin Stout Real Estate Project Name: J0822-4072 Lot/Block: 46 Model: Ashville

Address: 24 Melvill Lane Subdivision: Liberty Meadows

State: NC

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

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.4

Wind Code: ASCE 7-10 Wind Speed: 130 mph Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 21 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	E16391025	A1	11/9/2021	21	E16391045	V5	11/9/2021
2	E16391026	A1GE	11/9/2021				
3	E16391027	A2	11/9/2021				
4	E16391028	A3	11/9/2021				
5	E16391029	A3GE	11/9/2021				
6	E16391030	B1	11/9/2021				
7	E16391031	B1-GR	11/9/2021				
8	E16391032	B1GE	11/9/2021				
9	E16391033	C1	11/9/2021				
10	E16391034	C1-GR	11/9/2021				
11	E16391035	C1GE	11/9/2021				
12	E16391036	D1	11/9/2021				
13	E16391037	D1GE	11/9/2021				
14	E16391038	M1	11/9/2021				
15	E16391039	M1GE	11/9/2021				
16	E16391040	PB	11/9/2021				
17	E16391041	V1	11/9/2021				
18	E16391042	V2	11/9/2021				
19	E16391043	V3	11/9/2021				
20	E16391044	V4	11/9/2021				

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

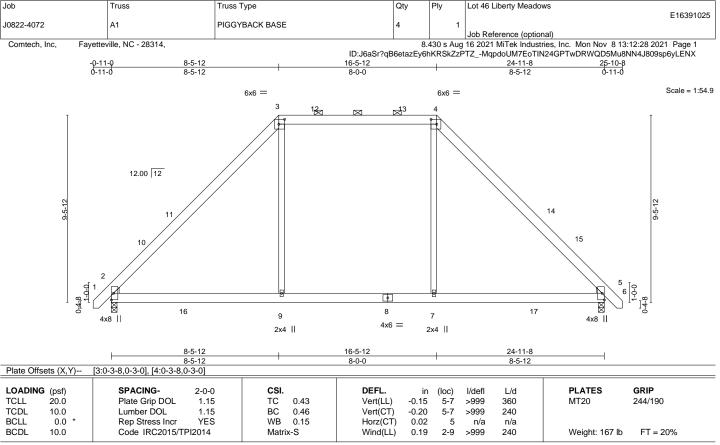
My license renewal date for the state of North Carolina is December 31, 2022

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.



November 09, 2021



**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

REACTIONS. (size) 2=0-3-8, 5=0-3-8

Max Horz 2=223(LC 11)

Max Uplift 2=-35(LC 12), 5=-35(LC 13) Max Grav 2=1309(LC 2), 5=1309(LC 2)

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

2-3=-1465/308, 3-4=-908/350, 4-5=-1465/308 2-9=-36/930, 7-9=-33/938, 5-7=-33/928 TOP CHORD BOT CHORD

3-9=0/653, 4-7=0/653 **WEBS** 

# NOTES-

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-6 to 3-7-7, Interior(1) 3-7-7 to 8-5-12, Exterior(2) 8-5-12 to 14-8-7, Interior(1) 14-8-7 to 16-5-12, Exterior(2) 16-5-12 to 22-8-7, Interior(1) 22-8-7 to 25-8-14 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5. 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 6-0-0 oc purlins, except

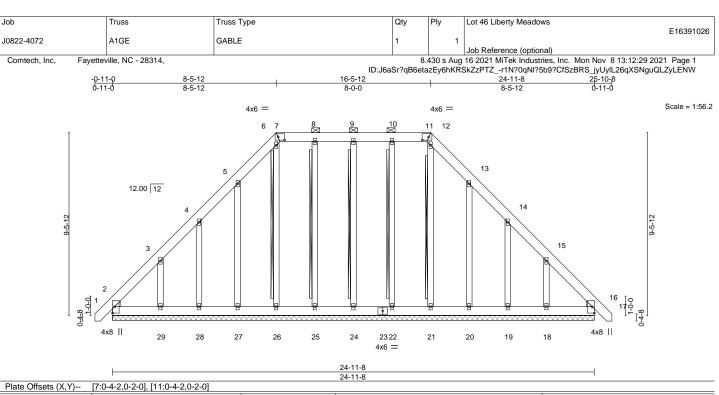
2-0-0 oc purlins (6-0-0 max.): 3-4.

Rigid ceiling directly applied or 10-0-0 oc bracing

November 9,2021







LOADING (psf) SPACING-CSI. DEFL **PLATES** GRIP 2-0-0 I/defl L/d (loc) **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.04 Vert(LL) 0.00 16 n/r 120 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 ВС 0.03 Vert(CT) 0.00 16 120 n/r **BCLL** 0.0 Rep Stress Incr YES WB 0.13 Horz(CT) 0.01 16 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Weight: 245 lb FT = 20%

LUMBER-

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

OTHERS 2x4 SP No 2 WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

**BRACING-**TOP CHORD

BOT CHORD WEBS

Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 7-11.

Rigid ceiling directly applied or 10-0-0 oc bracing. T-Brace:

2x4 SPF No.2 - 9-24, 8-25, 6-26, 10-22,

12-21

Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS. All bearings 24-11-8.

(lb) - Max Horz 2=280(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 24, 25, 26, 22, 16 except 2=-114(LC 8), 27=-130(LC 12), 28=-135(LC 12), 29=-221(LC 12), 20=-125(LC 13),

19=-136(LC 13), 18=-214(LC 13)

All reactions 250 lb or less at joint(s) 2, 24, 25, 26, 27, 28, 22, 21, 20, Max Grav 19, 18, 16 except 29=254(LC 19)

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

TOP CHORD 2-3=-311/246

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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
- 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 2x4 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.
- 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 25, 26, 22, 16 except (jt=lb) 2=114, 27=130, 28=135, 29=221, 20=125, 19=136, 18=214.
- 11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 16.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



November 9,2021

ameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building designs. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss experts.

\*\*Start Property Amage Corp general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Lot 46 Liberty Meadows F16391027 J0822-4072 A2 PIGGYBACK BASE Job Reference (optional) Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:30 2021 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-JDxNDAONmPj0cMEfXuyhWxVZW9ZXrlvbcKezu?yLENV 8-2-4 8-2-4 8-0-0 Scale = 1:53.9 6x6 =5x5 = 12  $\bowtie$  3 12.00 12 4x4 // 4x4 // 14 15 1-3-8 6 5 8 16 9 7 3x10 4x8 || 4x6 = 2x4 || 2x4 || 8-2-4 16-2-4 24-8-0 8-2-4 [1:Edge,0-0-0], [3:0-3-8,0-3-0], [4:0-2-12,0-2-12] Plate Offsets (X,Y)--LOADING (psf) SPACING-DEFL. **PLATES** GRIP 2-0-0 CSI I/defl L/d (loc) **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.44 Vert(LL) -0.29 5-7 >999 360 MT20 244/190 TCDL Vert(CT) 10.0 Lumber DOL 1.15 ВС 0.53 -0.34 5-7 >861 240 0.13 **BCLL** 0.0 Rep Stress Incr YES WB Horz(CT) 0.02 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Wind(LL) 0.19 5-7 >999 240 Weight: 176 lb FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE

Right: 2x4 SP No.2

SLIDER Left 2x6 SP No.1 5-11-1

REACTIONS. (size) 1=Mechanical, 5=0-3-8

Max Horz 1=-221(LC 8)

Max Uplift 1=-20(LC 12), 5=-35(LC 13)

Max Grav 1=1087(LC 2), 5=1249(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 1-3=-1337/307, 3-4=-815/353, 4-5=-1306/303 TOP CHORD

**BOT CHORD** 1-9=-36/838, 7-9=-32/844, 5-7=-33/836

WEBS 3-9=0/518, 4-7=0/562

# 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 C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 8-2-4, Exterior(2) 8-2-4 to 14-4-15, Interior(1) 14-4-15 to 16-2-4, Exterior(2) 16-2-4 to 22-4-15, Interior(1) 22-4-15 to 25-5-6 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) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 6-0-0 oc purlins, except

2-0-0 oc purlins (6-0-0 max.): 3-4.

Rigid ceiling directly applied or 10-0-0 oc bracing

November 9,2021





Job Truss Truss Type Qty Ply Lot 46 Liberty Meadows F16391028 J0822-4072 АЗ PIGGYBACK BASE 12 Job Reference (optional) Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:31 2021 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-nPVIQWP?XjrtEVpr5cTw381jxZujaknlq\_NXQRyLENU 24-11-8 8-0-0 8-5-12 Scale = 1:57.7 6x6 =6x6 =2 12.00 12 13 1-0-0 T 15 16 6 4x8 || 4x8 II 3x4 || 3x4 || 3x10 =4x8 = 4x6 = 4x4 = 16-5-12 [2:0-3-8,0-3-0], [3:0-3-8,0-3-0] Plate Offsets (X,Y)--LOADING (psf) SPACING-CSI. DEFL. **PLATES** GRIP 2-0-0 I/defl L/d **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.46 Vert(LL) -0.14 1-8 >999 360 MT20 244/190 TCDL Vert(CT) 10.0 Lumber DOL 1.15 ВС 0.53 -0.19 1-8 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.15 Horz(CT) 0.02 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Wind(LL) 0.17 1-8 >999 240 Weight: 181 lb FT = 20% LUMBER-**BRACING-**TOP CHORD

BOT CHORD

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

2x4 SP No.2 WFBS

WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

REACTIONS. (size) 1=Mechanical, 4=0-3-8

Max Horz 1=-221(LC 8)

Max Uplift 1=-22(LC 12), 4=-35(LC 13) Max Grav 1=1263(LC 2), 4=1314(LC 2)

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

1-2=-1449/307, 2-3=-925/359, 3-4=-1489/315 1-8=-35/947, 6-8=-37/955, 4-6=-32/944 TOP CHORD

BOT CHORD

2-8=0/660, 3-6=0/667 **WEBS** 

# 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; BCDL=6.0psf; L=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 8-5-12, Exterior(2) 8-5-12 to 14-8-7, Interior(1) 14-8-7 to 16-5-12, Exterior(2) 16-5-12 to 22-8-7, Interior(1) 22-8-7 to 25-8-14 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) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 5-11-9 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

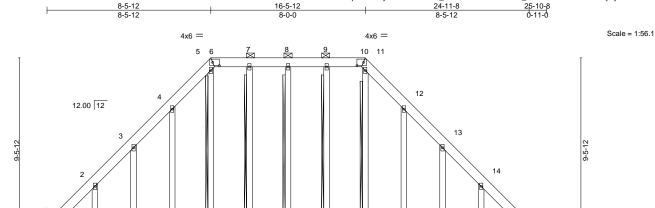
2-0-0 oc purlins (6-0-0 max.): 2-3.

November 9,2021





Job Truss Truss Type Qty Ply Lot 46 Liberty Meadows F16391029 J0822-4072 GABLE A3GE Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:32 2021 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-Fc37esQdl0zksfN1eJ\_9bMa?CzMIJAGu3e74yuyLENT Comtech, Inc. Fayetteville, NC - 28314,



24-11-8 24-11-8

23

Plate Off	sets (X,Y)	[6:0-4-2,0-2-0], [10:0-4-2	,0-2-0]										
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	0.00	15	n/r	120	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	15	n/r	120			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	15	n/a	n/a			
BCDL	10.0	Code IRC2015/TI	PI2014	Matri	x-S						Weight: 242 lb	FT = 20%	

LUMBER-

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

OTHERS 2x4 SP No 2

WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

9

4x8 | |

28

27

26

25

BRACING-TOP CHORD

4x6 =

BOT CHORD WEBS

Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-10.

Rigid ceiling directly applied or 10-0-0 oc bracing. T-Brace:

2x4 SPF No.2 - 8-23, 7-24, 5-25, 9-21, 11-20

4x8 II

17

Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS. All bearings 24-11-8.

(lb) - Max Horz 1=-277(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 23, 24, 25, 21, 15 except

26=-129(LC 12), 27=-134(LC 12), 28=-228(LC 12), 19=-125(LC 13), 18=-136(LC

13), 17=-214(LC 13), 1=-120(LC 10)

Max Grav All reactions 250 lb or less at joint(s) 23, 24, 25, 26, 27, 21, 20, 19,

18, 17, 1, 15 except 28=266(LC 19)

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

TOP CHORD 1-2=-317/250 **WEBS** 2-28=-252/242

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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 2x4 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.
- 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 24, 25, 21, 15 except (jt=lb) 26=129, 27=134, 28=228, 19=125, 18=136, 17=214, 1=120.
- 11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 15.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



November 9,2021

rameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building designs. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss experts.

\*\*Start Property Amage Corp general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows
10000 4070	D4	ATTIC		,	E16391030
J0822-4072	B1	ATTIC	В	'	Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:33 2021 Page 1

Structural wood sheathing directly applied or 5-1-3 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

1 Brace at Jt(s): 13

		ID:J6a	Sr?qB6etazEy6	ShKRSkZzPTZjoo	dWrCQF3K6bT	pyDC1VO8Z7?ANYi2dV2I	IsdVKyLENS
5-5-8	9-1-13	10-11-8 12-9-3	16-5-8	21-11-0	22-10 <sub>T</sub> 0		
5-5-8	3-8-5	1-9-11 1-9-11	3-8-5	5-5-8	0-11-h		

Scale = 1:71.8 6x8 =

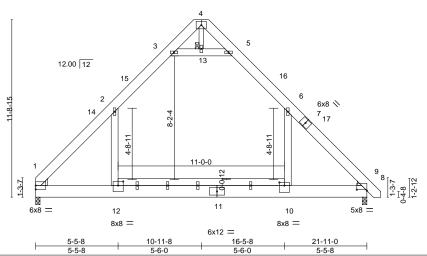


Plate Offsets (X,Y)-- [8:0-8-0,0-0-13], [10:0-4-0,0-2-8], [12:0-4-0,0-3-4]

LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.73	Vert(LL) -0.21 10-12 >999 360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.69	Vert(CT) -0.36 10-12 >720 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT) 0.01 8 n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.08 10-12 >999 240	Weight: 248 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

JOINTS

LUMBER-

TOP CHORD 2x8 SP No.1

2x10 SP No.1 \*Except\* 10-12: 2x6 SP No.1 BOT CHORD

2x6 SP No.1 \*Except\* WEBS

4-13: 2x4 SP No.2

WEDGE

Left: 2x6 SP No.2, Right: 2x4 SP No.3

REACTIONS. (size) 1=0-3-8, 8=0-3-8

Max Horz 1=-277(LC 8)

Max Grav 1=1413(LC 21), 8=1459(LC 21)

**BOT CHORD** 1-12=0/1085, 10-12=0/1085, 8-10=0/1085 WEBS 6-10=0/975, 2-12=0/889, 3-13=-1621/246, 5-13=-1621/246

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 10-11-8, Exterior(2) 10-11-8 to 15-4-5, Interior(1) 15-4-5 to 22-7-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x6 MT20 unless otherwise indicated.
- 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) Ceiling dead load (10.0 psf) on member(s). 2-3, 5-6, 3-13, 5-13; Wall dead load (5.0psf) on member(s).6-10, 2-12 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
- 8) Attic room checked for L/360 deflection.



November 9,2021

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSITPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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



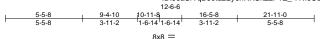
Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows
J0822-4072	B1-GR	ATTIC	1		E16391031
				3	Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:36 2021 Page 1  $ID: J6aSr? qB6etazEy6hKRSkZzPTZ\_-7NIeUDT8LFUAKHhot 935mCIWcaZIFxRU\_G5I5 fyLENPART AND STANDARD STAND$ 

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

1 Brace at Jt(s): 11



Scale = 1:77.0

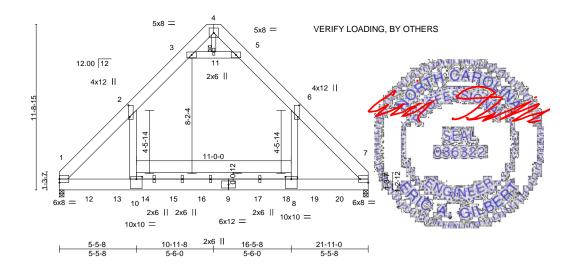


Plate Offsets (X	late Offsets (X,Y) [2:0-9-12,0-1-4], [6:0-9-12,0-1-4], [7:Edge,0-3-0], [8:0-5-0,0-2-0], [10:0-5-0,0-2-0]											
LOADING (psf	f)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Ó	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.29	8-1Ó	>905	360	MT20	244/190
TCDL 10.0	0	Lumber DOL	1.15	ВС	0.76	Vert(CT)	-0.39	8-10	>666	240		
BCLL 0.0	0 *	Rep Stress Incr	NO	WB	0.38	Horz(CT)	0.02	7	n/a	n/a		
BCDL 10.0	0	Code IRC2015/TP	12014	Matri	x-S	Wind(LL)	0.01	10	>999	240	Weight: 801 lb	FT = 20%

BRACING-

JOINTS

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x10 SP 2400F 2.0E BOT CHORD 2x10 SP No.1 \*Except\* 8-10: 2x6 SP No.1 **WEBS** 

2x6 SP No.1 \*Except\* 4-11: 2x4 SP No.2

REACTIONS. (size) 1=0-4-0, 7=0-4-0

Max Horz 1=271(LC 5)

Max Grav 1=9588(LC 14), 7=9573(LC 14)

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

TOP CHORD 1-2=-10113/0, 2-3=-4213/35, 3-4=-19/3638, 4-5=-20/3649, 5-6=-4203/35, 6-7=-10124/0

**BOT CHORD** 1-10=0/5656, 8-10=0/5720, 7-8=0/5656

**WEBS** 6-8=0/8207, 2-10=0/8177, 3-11=-11296/4, 5-11=-11296/4, 4-11=0/835

# NOTES-

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x10 - 5 rows staggered at 0-4-0 oc.

Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

3) Unbalanced roof live loads have been considered for this design.

- 4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 5) Concentrated loads from layout are not present in Load Case(s): #3 Dead + Uninhabitable Attic Without Storage; #4 Dead + 0.6 MWFRS Wind (Pos. Internal) Left; #5 Dead + 0.6 MWFRS Wind (Pos. Internal) Right; #6 Dead + 0.6 MWFRS Wind (Neg. Internal) Left; #7 Dead + 0.6 MWFRS Wind (Neg. Internal) Right; #8 Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel; #9 Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel; #10 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #11 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #12 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #13 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #14 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #15 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #16 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #17 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #18 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #19 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #10 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #18 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #19 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #19 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #10 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #10 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #19 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #10 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #10 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #10 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #10 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #10 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #10 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #10 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #10 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #10 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #10 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #10 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #10 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #10 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #10 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #10 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #10 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #10 Dead + 0.6 MWFRS Wind (Pos. In (Pos. Internal) 4th Parallel; #12 Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel; #13 Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel; #20 Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left); #21 Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right); #22 Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel); #23 Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel); #23 Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel); Int) 2nd Parallel).

November 9,2021

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Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows
J0822-4072	B1-GR	ATTIC	1	3	E16391031  Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:36 2021 Page 2 ID:J6aSr?qB6etazEy6hKRŠkZzPTZ\_-7NIeUDT8LFUAKHhot935mClWcaZlFxRU\_G5l5fyLENP

# NOTES-

- 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). 2-3, 5-6, 3-11, 5-11; Wall dead load (5.0psf) on member(s).6-8, 2-10
- 9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 8-10
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1726 lb down at 1-11-12, 1726 lb down at 3-11-12, 3826 lb down at 5-2-12, 376 lb down and 34 lb up at 5-11-12, 376 lb down and 34 lb up at 7-11-12, 376 lb down and 34 lb up at 9-11-12, 376 lb down and 34 lb up at 11-11-12, 376 lb down and 34 lb up at 13-11-12, 376 lb down and 34 lb up at 15-11-12, 3826 lb down at 16-8-4, and 1726 lb down at 17-11-12, and 1726 lb down at 19-9-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others. 11) Attic room checked for L/360 deflection.

# LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-60, 2-3=-80, 3-4=-60, 4-5=-60, 5-6=-80, 6-7=-60, 1-10=-20, 8-10=-40, 7-8=-20, 3-5=-20

Drag: 6-8=-10, 2-10=-10

Concentrated Loads (lb)

Vert: 9=-62(B) 8=-1029(B) 10=-1029(B) 12=-430(B) 13=-430(B) 14=-62(B) 15=-62(B) 16=-62(B) 17=-62(B) 18=-62(B) 19=-430(B) 20=-430(B)

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

Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows
J0822-4072	B1GE	GABLE	1	1	E16391032
00022 4072	5.02	O'NEEL	l'		Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:34 2021 Page 1 WycB1myLENR

			ID:J6a5r?qt	36etaz⊑y6nK⊦	(SKZZPTZB_BU3X	RtqeE55ZX	QmkuanntA4mvzn4HBvv
-Q-11 <sub>1</sub> 0	5-5-8	9-1-13	10-11-8, 12-9-3	16-5-8	21-11-0	22-10 <sub>T</sub> 0	
0-11-0	5-5-8	3-8-5	1-9-11 1-9-11	3-8-5	5-5-8	0-11-0	

Scale = 1:73.2 6x8 =

Structural wood sheathing directly applied or 5-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

1 Brace at Jt(s): 23

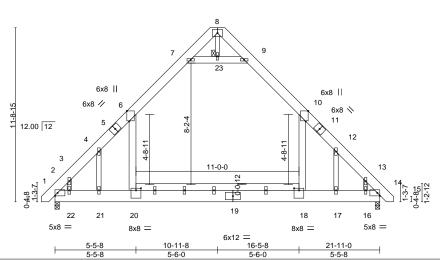


Plate Offsets (X,Y)	[6:0-8-6,Edge], [10:0-8-6,Edge], [18:0-4	-0,0-1-12], [20:0-4-0,0-1-12]

LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.72	Vert(LL) -0.17 18-20 >999 360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.63	Vert(CT) -0.30 18-20 >855 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.17	Horz(CT) 0.01 14 n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.08 18-20 >999 240	Weight: 261 lb FT = 20%

BRACING-

JOINTS

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x8 SP No.1

2x10 SP No.1 \*Except\* **BOT CHORD** 18-20: 2x6 SP No.1

2x6 SP No.1 \*Except\* WEBS

8-23: 2x4 SP No.2

**OTHERS** 2x4 SP No.2

REACTIONS. (size) 2=0-3-8, 14=0-3-8

Max Horz 2=349(LC 11)

Max Grav 2=1443(LC 20), 14=1443(LC 21)

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

TOP CHORD 2-3=-1821/0, 3-4=-1558/0, 4-6=-1957/23, 6-7=-1028/184, 7-8=-60/389, 8-9=-61/390, 9-10=-1028/184, 10-12=-1956/22, 12-13=-1557/0, 13-14=-1821/0

**BOT CHORD** 2-22=0/1098, 21-22=0/1110, 20-21=0/1095, 18-20=0/1095, 17-18=0/1095, 16-17=0/1109, 14-16=0/1092

**WEBS** 10-18=0/1192, 6-20=0/1192, 7-23=-1506/324, 9-23=-1506/324, 4-21=-717/135,

3-22=0/341, 12-17=-717/135, 13-16=0/341

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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
- 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 2x6 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) Ceiling dead load (10.0 psf) on member(s). 6-7, 9-10, 7-23, 9-23; Wall dead load (5.0psf) on member(s).10-18, 6-20
- 9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 18-20
- 10) Attic room checked for L/360 deflection.



November 9,2021



	Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows
	J0822-4072	C1	COMMON	2	1	E16391033
	00022 1012	0.				Job Reference (optional)
Comtech, Inc, Fayetteville, NC - 28314,				8.	430 s Aug	16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:37 2021 Page 1

ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-cZs0hZTm6Zc1yQG?RsaKIPHqn\_?J\_PKdDwqre5yLENO 11-4-12 17-4-12 0-11-0 6-0-0 6-0-0

> Scale = 1:68.6 5x8 =

> > Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

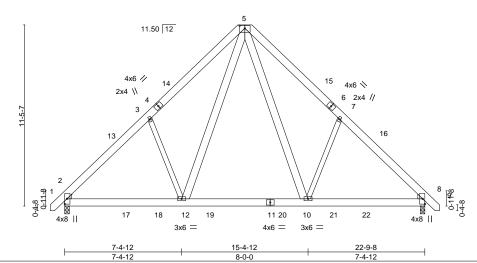


Plate Offsets (X,Y)--[5:0-4-0,0-2-0] LOADING (psf) SPACING-CSI. DEFL. **PLATES** GRIP 2-0-0 (loc) I/defl L/d **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.18 Vert(LL) -0.05 10-12 >999 360 MT20 244/190 TCDL -0.07 10-12 10.0 Lumber DOL 1.15 ВС 0.26 Vert(CT) >999 240 0.27 **BCLL** 0.0 Rep Stress Incr YES WB Horz(CT) 0.01 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Wind(LL) 0.01 2-12 >999 240 Weight: 204 lb FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

2x6 SP No.1 \*Except\* WEBS 7-10,3-12: 2x4 SP No.2

WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

REACTIONS. (size) 2=0-3-8, 8=0-3-8

Max Horz 2=-280(LC 10)

Max Uplift 2=-42(LC 12), 8=-42(LC 13) Max Grav 2=1057(LC 19), 8=1057(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1210/251, 3-5=-1109/415, 5-7=-1110/415, 7-8=-1210/251

**BOT CHORD** 2-12=-91/943, 10-12=0/619, 8-10=-42/811

WEBS 5-10=-201/658, 7-10=-406/304, 5-12=-201/657, 3-12=-406/304

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-6 to 3-7-7, Interior(1) 3-7-7 to 11-4-12, Exterior(2) 11-4-12 to 15-9-9, Interior(1) 15-9-9 to 23-6-14 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.



November 9,2021

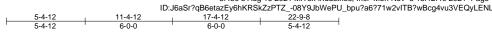
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



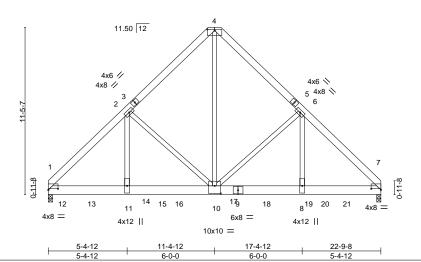
1	Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows
						E16391034
	J0822-4072	C1-GR	COMMON GIRDER	1	2	
						Job Reference (optional)
	Comtech, Inc, Fayettev	ille, NC - 28314,		8.	430 s Aug	16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:40 2021 Page 1
			ID: 10-0-	0	- OF KDOL	7-DT7 00\(0.15\M-DL1 b0-00740-1TD0D40\(1EO-1EMI



Scale = 1:74.3 5x12 =

Structural wood sheathing directly applied or 5-5-14 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.



[1:0-8-0,0-0-15], [4:0-6-0,0-1-0], [7:0-8-0,0-0-15], [10:0-5-0,0-6-4] Plate Offsets (X,Y)--LOADING (psf) SPACING-CSI DEFL **PLATES** GRIP 2-0-0 in I/defl L/d (loc) TCLL 20.0 Plate Grip DOL 1.15 TC 0.28 Vert(LL) -0.10 8-10 >999 360 MT20 244/190

> **BRACING-**TOP CHORD

BOT CHORD

TCDL 10.0 Lumber DOL 1.15 ВС 0.40 Vert(CT) -0.17 8-10 >999 240 **BCLL** 0.0 Rep Stress Incr NO WB 0.94 Horz(CT) 0.04 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Wind(LL) 0.05 8-10 >999 240 Weight: 396 lb FT = 20%

LUMBER-

REACTIONS.

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

2x4 SP No 2

(size) 1=0-3-8, 7=0-3-8 Max Horz 1=-270(LC 23)

Max Uplift 1=-225(LC 9), 7=-237(LC 8) Max Grav 1=7977(LC 2), 7=8527(LC 2)

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

TOP CHORD 1-2=-8698/296, 2-4=-5745/316, 4-6=-5744/316, 6-7=-8803/299 **BOT CHORD** 1-11=-233/5962, 10-11=-233/5971, 8-10=-139/6041, 7-8=-139/6032

**WEBS**  $4\text{-}10\text{=-}299/7498, \, 6\text{-}10\text{=-}2640/260, \, 6\text{-}8\text{=-}42/3902, \, 2\text{-}10\text{=-}2545/257, \, 2\text{-}11\text{=-}37/3758}$ 

# NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-6-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  6) \* 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=225, 7=237.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1246 lb down and 39 lb up at 0-10-4, 1243 lb down and 42 lb up at 2-10-4, 1243 lb down and 42 lb up at 4-10-4, 1243 lb down and 42 lb up at 6-10-4, 1243 lb down and 42 lb up at 8-10-4, 1243 lb down and 42 lb up at 10-10-4, 1243 lb down and 42 lb up at 12-10-4, 1243 lb down and 42 lb up at 14-10-4, 1243 lb down and 42 lb up at 16-10-4, 1243 lb down and 42 lb up at 18-10-4, and 1243 lb down and 42 lb up at 20-4-4, and 1250 lb down and 35 lb up at 22-7-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

# LOAD CASE(S) Standard

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



November 9,2021

ameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building designs. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss experts.

\*\*Start Property Amage Corp general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows
J0822-4072	C1-GR	COMMON GIRDER	1		E16391034
				2	Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:40 2021 Page 2 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_08Y9JbWePU\_bpu?a6?71w2vITB?wBcg4vu3VEQyLENL

# LOAD CASE(S) Standard

Uniform Loads (plf)

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

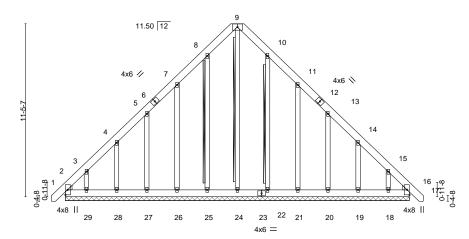
Concentrated Loads (lb)

Vert: 9=-969(B) 7=-976(B) 12=-972(B) 13=-969(B) 14=-969(B) 15=-969(B) 16=-969(B) 17=-969(B) 18=-969(B) 19=-969(B) 20=-969(B) 21=-969(B)

Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows	
						E16391035
J0822-4072	C1GE	COMMON SUPPORTED GAB	1	1		
					Job Reference (optional)	
Comtech, Inc,	Fayetteville, NC - 28314,		8	.430 s Aug	16 2021 MiTek Industries, Inc	. Mon Nov 8 13:12:38 2021 Page 1
	•		ID. IC. C.O. DC. 44	-FUCKION	1.7-DT7 4OD I Otal ta a sD	On EZHARA ODZINA DOGO AVNI ENNI

ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-4mQPuvUOtsktaarB?a5Zrdq1aOP7ju1nRaaOAXyLENN 22-9-8 0-11-0 11-4-12 11-4-12

Scale = 1:71.8 5x8 =



22-9-8 22-9-8 LOADING (psf) SPACING-CSI. DEFL. 2-0-0 in (loc) I/defl L/d Plate Grip DOL Vert(LL) **TCLL** 20.0 1.15 TC 0.05 -0.00 120 16 n/r TCDL 10.0 Lumber DOL 1.15 вс 0.03 Vert(CT) -0.00 16 n/r 120 WB **BCLL** 0.0 Rep Stress Incr YES 0.18 Horz(CT) 0.01 16 n/a n/a BCDL Code IRC2015/TPI2014

244/190 Weight: 227 lb FT = 20%

LUMBER-

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

Left: 2x4 SP No.2 , Right: 2x4 SP No.2

BRACING-

TOP CHORD **BOT CHORD** WFBS

Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing. 2x4 SPF No.2 - 9-24, 8-25, 10-22 T-Brace:

**PLATES** 

MT20

GRIP

Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS. All bearings 22-9-8.

Max Horz 2=-350(LC 10) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 25, 22 except 2=-170(LC 10), 26=-147(LC 12), 27=-130(LC 12),

28=-137(LC 12), 29=-210(LC 12), 21=-150(LC 13), 20=-130(LC 13), 19=-136(LC 13), 18=-200(LC 13),

16=-103(LC 11)

Max Grav All reactions 250 lb or less at joint(s) 24, 25, 26, 27, 28, 29, 22, 21, 20, 19, 18 except 2=362(LC 12), 16=317(LC 13)

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

2-3=-506/298, 3-4=-336/228, 14-15=-285/175, 15-16=-449/302 TOP CHORD

**BOT CHORD** 2-29=-218/336, 28-29=-220/337, 27-28=-220/337, 26-27=-221/337, 25-26=-221/337,

24-25=-221/337, 22-24=-221/337, 21-22=-221/337, 20-21=-221/337, 19-20=-220/337,

18-19=-220/336, 16-18=-218/335

# NOTES-

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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
- 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) 25, 22 except  $(jt=lb)\ 2=170,\ 26=147,\ 27=130,\ 28=137,\ 29=210,\ 21=150,\ 20=130,\ 19=136,\ 18=200,\ 16=103.$
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



November 9,2021

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



Job	Truss	Truss Type		Qty	Ply	Lot 46 Liberty Meado	WS	
				1_				E16391036
J0822-4072	D1	COMMON		5	1	Joh Deference (antice	1\	
Comtech, Inc, Fa	ayetteville, NC - 28314,				130 e Aug	Job Reference (option	nal) ries, Inc. Mon Nov 8 13:1	12:41 2021 Page 1
Connecin, Inc., Fe	ayottoviile, INO - 20014,		ID:J6aSr?				SSR2ZmgifGTFSV8bPHw	
-0-11-0 0-11-0	)	5-11-8		,		11-11-0 5-11-8	<b>J</b>	12-10-0
0-11-0	I	5-11-8	'			5-11-8		0-11-0
								Scale: 1/2"=1'
			5x5 =					Scale: 1/2 =1
			3					
Ī								
			<u>/</u> h>					
		_ /						
	6.00 12		/\\\	_				
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3-8-15		/ /						
8							10	
`]	7						,,,	
								4
1 2	/ /							_ 5 T
9 1								6
0.3.12								0-9-3
1 福 1 🖳								
-	$\bowtie$		6				X	
3:	x4 =		2x4				3x4 =	
		5-11-8				11-11-0		1
	1	5-11-8				5-11-8		<u> </u>
Plate Offsets (X,Y)	[2:0-2-0,0-1-12], [4:0-2-0,0-	1-12]						
LOADING (==f)	SPACING-	200	DET		(1)	1/-141 1 /-1	DIATES	
LOADING (psf) TCLL 20.0		2-0-0 <b>CSI.</b> 1.15 TC 0.16	DEFL.	in		l/defl L/d >999 240		GRIP 244/190
TCDL 20.0			Vert(LL				IVI12U 2	144/190
BCLL 10.0 *		1.15 BC 0.13 YES WB 0.06	Vert(CT Horz(C		2-6 4	>999 240 n/a n/a		
BCLL U.U	Rep Siless incr	1E3   VVD U.U6	HOIZ(C	0.01	4	11/d 11/d	1	

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

BCDL

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

10.0

WFBS 2x4 SP No.2

**REACTIONS.** (size) 2=0-3-0, 4=0-3-0

Max Horz 2=43(LC 11) Max Uplift 2=-106(LC 9), 4=-106(LC 8)

Max Grav 2=517(LC 1), 4=517(LC 1)

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

Code IRC2015/TPI2014

TOP CHORD 2-3=-626/654, 3-4=-626/654 BOT CHORD 2-6=-466/475, 4-6=-466/475

WEBS 3-6=-364/279

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 5-11-8, Exterior(2) 5-11-8 to 10-4-5, Interior(1) 10-4-5 to 12-7-10 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=106, 4=106.



Weight: 69 lb

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

FT = 20%

November 9,2021

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818 Soundside Road

Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows	
						E16391037
J0822-4072	D1GE	GABLE	1	1		
					Job Reference (optional)	
Comtech, Inc, Fayette	ville, NC - 28314,		8.	430 s Aug	16 2021 MiTek Industries, Inc. Mon Nov 8 13:12	:42 2021 Page 1
ID:J6aSr?qB6etazEy6hKRSkZzPTZyXfvkGXvx5EJ3C8yEQAV?T?hV?IPfksMMCYcJJyLENJ					3MMCYcJJyLENJ	
0-11-0		5-11-8			11-11-0	12-10-0
0-11-0		5-11-8			5-11-8	0-11-0

Scale: 1/2"=1"

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

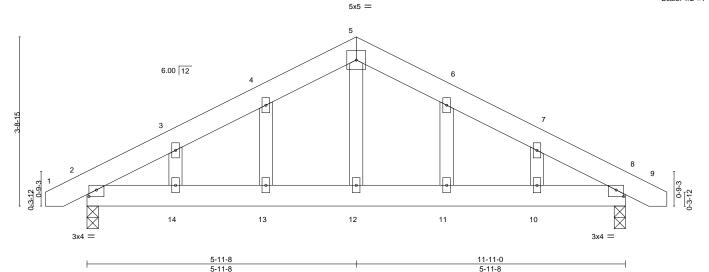


Plate Offsets (X,	[2:0-2-0,0-1-12], [8:0-2-0,0-1-12]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.12	Vert(LL) -0.01 13-14 >999 360	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.14	Vert(CT) -0.02 13-14 >999 240	
BCLL 0.0	Rep Stress Incr YES	WB 0.06	Horz(CT) 0.01 8 n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.02 10-11 >999 240	Weight: 77 lb FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.2 WFBS 2x4 SP No.2 OTHERS

REACTIONS.

(size) 2=0-3-0, 8=0-3-0 Max Horz 2=68(LC 12)

Max Uplift 2=-137(LC 9), 8=-137(LC 8) Max Grav 2=517(LC 1), 8=517(LC 1)

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

TOP CHORD 2-3=-623/674, 3-4=-555/669, 4-5=-530/694, 5-6=-530/694, 6-7=-555/669, 7-8=-623/674  $2\textbf{-}14\textbf{=}\textbf{-}490/476,\ 13\textbf{-}14\textbf{=}\textbf{-}490/476,\ 12\textbf{-}13\textbf{=}\textbf{-}490/476,\ 11\textbf{-}12\textbf{=}\textbf{-}490/476,\ 10\textbf{-}11\textbf{=}\textbf{-}490/476,$ BOT CHORD

8-10=-490/476 **WEBS** 5-12=-372/227

- 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; BCDL=6.0psf; L=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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=137, 8=137.



November 9,2021

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Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows
J0822-4072	M1	MONOPITCH	11	1	E16391038
00022 1012		Interversion			Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16-

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:42 2021 Page 1
ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-yXfvkGXvx5EJ3C8yEQAV?T?gN?mffkrMMCYcJJyLENJ
6-0-0

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

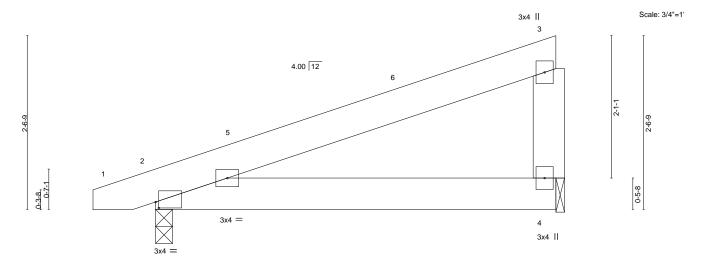


Plate Offsets (X,Y)	Plate Offsets (X,Y) [2:0-0-9,0-1-1]							
LOADING (psf)	SPACING- 2-0-0	CSI.	<b>DEFL</b> . ir	(loc)	I/defl L/d	PLATES GRIP		
TCLL 20.0	Plate Grip DOL 1.15	TC 0.19	Vert(LL) -0.01	2-4	>999 360	MT20 244/190		
TCDL 10.0	Lumber DOL 1.15	BC 0.12	Vert(CT) -0.03	2-4	>999 240			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00		n/a n/a			
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL) 0.03	2-4	>999 240	Weight: 34 lb FT = 20%		

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x6 SP No.1

**REACTIONS.** (size) 2=0-3-0, 4=0-1-8

Max Horz 2=71(LC 8)

Max Uplift 2=-104(LC 8), 4=-97(LC 8)

Max Grav 2=274(LC 1), 4=223(LC 1)

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

# NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-7-9 to 3-9-4, Interior(1) 3-9-4 to 5-9-4 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) 4 except (jt=lb) 2=104.



November 9,2021





Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows
					E16391039
J0822-4072	M1GE	GABLE	1	1	
					Job Reference (optional)
Comtech, Inc, Fayette	/ille, NC - 28314,		8.	430 s Aug	16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:43 2021 Page 1
		ID:Je	SaSr?qB6e	tazEy6hK	RSkZzPTZQjDlycYXiPMAgLj8o7hkYgXsbP5KOBuWbrH9rlyLENI
	-0-11-0	6-0-	0		
	0-11-0	6-0-	-0		٦

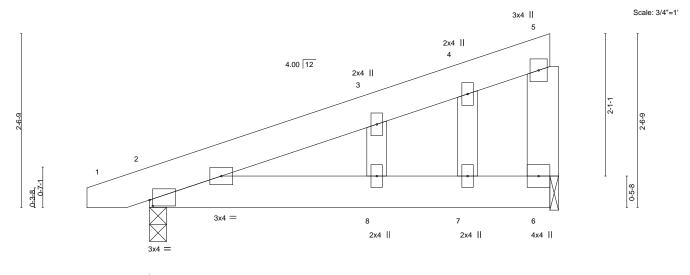


Plate Off	sets (X,Y)	[2:0-0-9,0-1-1]											
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	0.02	2-8	>999	240	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.02	8	>999	240			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	-0.00	6	n/a	n/a			
BCDL	10.0	Code IRC2015/TI	PI2014	Matri	x-S						Weight: 37 lb	FT = 20%	

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

2x6 SP No.1 WFBS 2x4 SP No.2 **OTHERS** 

REACTIONS.

(size) 2=0-3-0, 6=0-1-8

Max Horz 2=101(LC 8)

Max Uplift 2=-151(LC 8), 6=-142(LC 8) Max Grav 2=274(LC 1), 6=223(LC 1)

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

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable acone 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 1-4-0 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) except (jt=lb) 2=151, 6=142.



Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

November 9,2021





Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows
J0822-4072	PB	Piggyback	24	1	E16391040
		1.1997-1.111			Job Reference (optional)
Occupied land	1			100 - 1	40 0004 MT-1: Industrian Inc. Mars Nov. 0 40 40 44 0004 Percent

4-0-0 4-0-0

Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc.  $ID: J6aSr? qB6etazEy6 \hbox{\r{$h$}} KRSkZzPTZ\_-uvng9yZ9TiU1IVILLrCz5u4? doRi7evfqV1jNByLENH$ 

Scale = 1:25.9 4x4 =

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

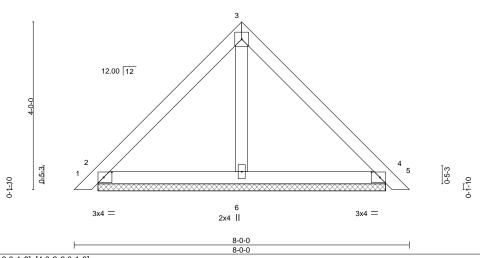


Plate Offsets (X,Y)	[2:0-2-6,0-1-8], [4:0-2-6,0-1-8]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP	
TCLL 20.0	Plate Grip DOL 1.15	TC 0.20	Vert(LL) 0.01 5 n/r 120 MT20 244/190	
TCDL 10.0	Lumber DOL 1.15	BC 0.09	Vert(CT) 0.01 5 n/r 120	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00 4 n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Weight: 32 lb FT = 20%	

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.2 OTHERS

REACTIONS. (size) 2=6-10-6, 4=6-10-6, 6=6-10-6

Max Horz 2=-114(LC 10)

Max Uplift 2=-65(LC 13), 4=-71(LC 13)

Max Grav 2=190(LC 1), 4=190(LC 1), 6=214(LC 3)

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

# NOTES-

- Unbalanced roof live loads have been considered for this design.
   Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



November 9,2021



Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows
					E16391041
J0822-4072	V1	VALLEY	1	1	
					Job Reference (optional)
Comtech, Inc, Faye	etteville, NC - 28314,	·		.430 s Aug	16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:45 2021 Page 1
			ID:J6aSr?qB6etaz	Ey6hKRSk	kZzPTZN6L2MlanE0cuwftXvYjCd5dB6CmNs2Jp29mGwdyLENG
		10-2-8	1	20-5-	<u>1</u> _
		10-2-8	1	10-2-9	9
			—		Scale = 1:50 5

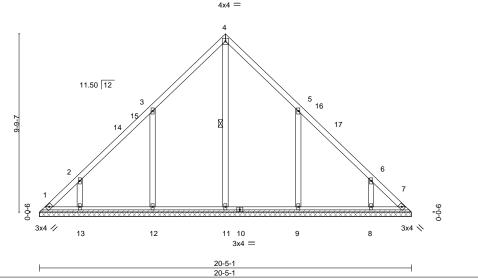


Plate Off	sets (X,Y)	[5:0-0-0,0-0-0], [6:0-0-0,0	0-0-0]									
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	n/a	` -	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TI	PI2014	Matri	x-S						Weight: 105 lb	FT = 20%

LUMBER-

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

OTHERS 2x4 SP No.1

BRACING-

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

WEBS 1 Row at midpt 4-11

**REACTIONS.** All bearings 20-5-1.

(lb) - Max Horz 1=226(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 12=-173(LC 12), 13=-126(LC 12), 9=-173(LC 13),

8=-126(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=440(LC 22), 12=486(LC 19), 13=285(LC 19),

9=485(LC 20), 8=285(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. WEBS 3-12=-393/294, 2-13=-299/243, 5-9=-393/294, 6-8=-299/243

WEBS 3-12=-393/294, 2-13=-299/243, 5-9=-393/294, 6-8=-299/243

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-6 to 4-9-2, Interior(1) 4-9-2 to 10-2-8, Exterior(2) 10-2-8 to 14-7-5, Interior(1) 14-7-5 to 20-0-11 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 12=173, 13=126, 9=173, 8=126.



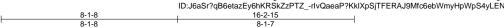
November 9,2021



Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows
J0822-4072	V2	VALLEY	1	1	E16391042
00022 1072		7,122			Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:46 2021 Page 1  $ID: J6aSr? qB6etazEy6hKR\mathring{S}kZzPTZ\_-rIvQaeaP?KklXpSjTFERAJ9Mfc6ebWmyHpWpS4yLENFALAMART AND STANDARD AND STA$ 

Scale = 1:49.9



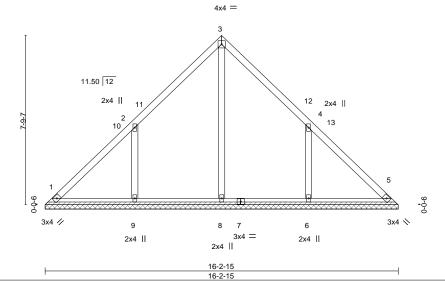


Plate Offsets (X,Y)--[4:0-0-0,0-0-0] LOADING (psf) SPACING-CSI. DEFL. **PLATES GRIP** 2-0-0 I/defI L/d Plate Grip DOL 244/190 **TCLL** 20.0 1.15 TC 0.17 Vert(LL) n/a n/a 999 MT20 TCDL Lumber DOL 10.0 1.15 ВС 0.19 Vert(CT) n/a n/a 999 0.13 0.00 BCLL 0.0 Rep Stress Incr YES WB Horz(CT) n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Weight: 77 lb FT = 20%

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

**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 16-2-15.

2x4 SP No.2

(lb) - Max Horz 1=-178(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-182(LC 12), 6=-182(LC 13)

All reactions 250 lb or less at joint(s) 1, 5 except 8=418(LC 22), 9=503(LC 19), 6=503(LC 20)

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

**WEBS** 2-9=-406/302, 4-6=-406/302

# NOTES-

OTHERS

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-6 to 4-9-2, Interior(1) 4-9-2 to 8-1-8, Exterior(2) 8-1-8 to 12-6-4, Interior(1) 12-6-4 to 15-10-9 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, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=182, 6=182,



November 9,2021



Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows
J0822-4072	V3	VALLEY	1	1	E16391043
00022 4072		V/1000			Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:47 2021 Page 1  $ID: J6aSr? qB6etazEy6hKRS\check{k}ZzPTZ\_-JUTon\_b1mdsc9z1w1zlgiWiXz0TMK\_y6WTFN\_WyLENE$ 

12-0-14 6-0-7 6-0-7 6-0-7

> Scale = 1:36.2 4x4 =

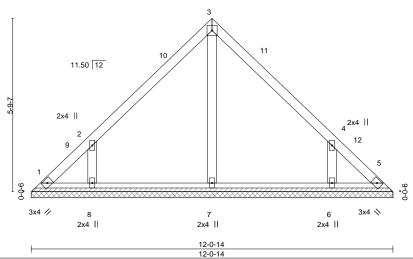


Plate Offsets (X,Y)	[4:0-0-0,0-0-0]						
LOADING (psf) TCLL 20.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.13	DEFL. Vert(LL)	in (loc)	l/defl	L/d 999	PLATES GRIP MT20 244/190
TCDL 20.0	Lumber DOL 1.15	BC 0.09	Vert(CT)	n/a - n/a -	n/a n/a	999	W1120 244/190
BCLL 0.0 *	Rep Stress Incr YES	WB 0.07	Horz(CT)	0.00 5	n/a	n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 53 lb FT = 20%

LUMBER-

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

2x4 SP No.2 OTHERS

**BRACING-**

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

REACTIONS. All bearings 12-0-14.

(lb) - Max Horz 1=-130(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-150(LC 12), 6=-150(LC 13) All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=334(LC 19), 6=334(LC 20)

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

**WEBS** 2-8=-344/282, 4-6=-344/282

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-6 to 4-9-2, Interior(1) 4-9-2 to 6-0-7, Exterior(2) 6-0-7 to 10-5-4, Interior(1) 10-5-4 to 11-8-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=150, 6=150,



November 9,2021



Job	Truss	Truss	Туре		Qty	Ply	Lot 46	Liberty Meado	ws	E40004044
J0822-4072	V4	VALLE	Υ		1	1				E16391044
								eference (option		
Comtech, Inc,	Fayetteville, NC - 28314,			ID: I6aSr					ries, Inc. Mon Nov 8 1; _Tn7c6agHvFkFhXQpW	
			3-11-6	10.36831	ЧБоегаг	7-10-1	2	IIII I D ! NCI / X_	_III/coagnvrkriiAQpW	335FIT !WVVYYLEIND
			3-11-6			3-11-	6			
				4x4 =						Scale = 1:25.3
	ī			2						
			/							
		1	1.50 12	/     `						
	9									
	3-9-6									
			/					3		
		1//								
	9-6-0	<u> </u>			//////	//////	7////		9-0-0	
	ō		***************************************	*************	×××××	×××××	×××××	***************************************	ō	
		3x4 //		4				3x4 📏		
		OAT /		2x4				O.A. (		
				7-10-12						
			1	7-10-12						
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0 BCLL 0.0 *	Lumber DOL * Rep Stress Incr	1.15 YES	BC 0.10 WB 0.03	Vert(CT) Horz(CT)	n/a 0.00		n/a n/a	999 n/a		
BCDL 10.0	Code IRC2015/		Matrix-P	11012(01)	0.00	3	II/a	II/a	Weight: 31 lb	FT = 20%

LUMBER-

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

**BRACING-**

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=7-10-12, 3=7-10-12, 4=7-10-12

Max Horz 1=-82(LC 8)

Max Uplift 1=-30(LC 13), 3=-31(LC 13)

Max Grav 1=173(LC 1), 3=173(LC 1), 4=228(LC 1)

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

# NOTES-

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



November 9,2021



Job Truss Truss Type Qty Ply Lot 46 Liberty Meadows F16391045 J0822-4072 V5 VALLEY Job Reference (optional) Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:48 2021 Page 1  $ID: J6aSr? qB6etazEy6hKRSkZzPTZ\_-nh1B?KcfXx\_Tn7c6agHvFkFkIQqk3SEFI7?wWyyLEND\\$ 1-10-5 1-10-5 Scale = 1:11.7 4x4 = 2 11.50 12 3 9-0-0 9-0-0 3x4 // 2x4 || 3x4 📏 3-8-11 LOADING (psf) SPACING-2-0-0 CSI. DEFL. **PLATES GRIP** in (loc) I/defl L/d 20.0 Plate Grip DOL TC Vert(LL) 244/190 **TCLL** 1.15 0.03 n/a 999 MT20 n/a ВС TCDL 10.0 Lumber DOL 1.15 0.02 Vert(CT) n/a n/a 999 WB **BCLL** 0.0 Rep Stress Incr YES 0.01 Horz(CT) 0.00 3 n/a n/a BCDL Code IRC2015/TPI2014 Weight: 13 lb FT = 20%

LUMBER-

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

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 3-8-11 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=3-8-11, 3=3-8-11, 4=3-8-11

Max Horz 1=34(LC 9)

Max Uplift 1=-12(LC 13), 3=-13(LC 13)

Max Grav 1=72(LC 1), 3=72(LC 1), 4=95(LC 1)

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

# NOTES-

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



November 9,2021



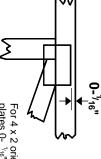


# Symbols

# PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss

ω

O

S

required direction of slots in connector plates This symbol indicates the

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

# **PLATE SIZE**



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

# LATERAL BRACING LOCATION



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

# BEARING



number where bearings occur.

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

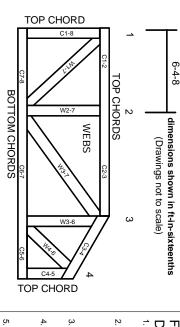
# Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction

DSB-89:

Installing & Bracing of Metal Plate Connected Wood Trusses. Guide to Good Practice for Handling, Building Component Safety Information Design Standard for Bracing.

# **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

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

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

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

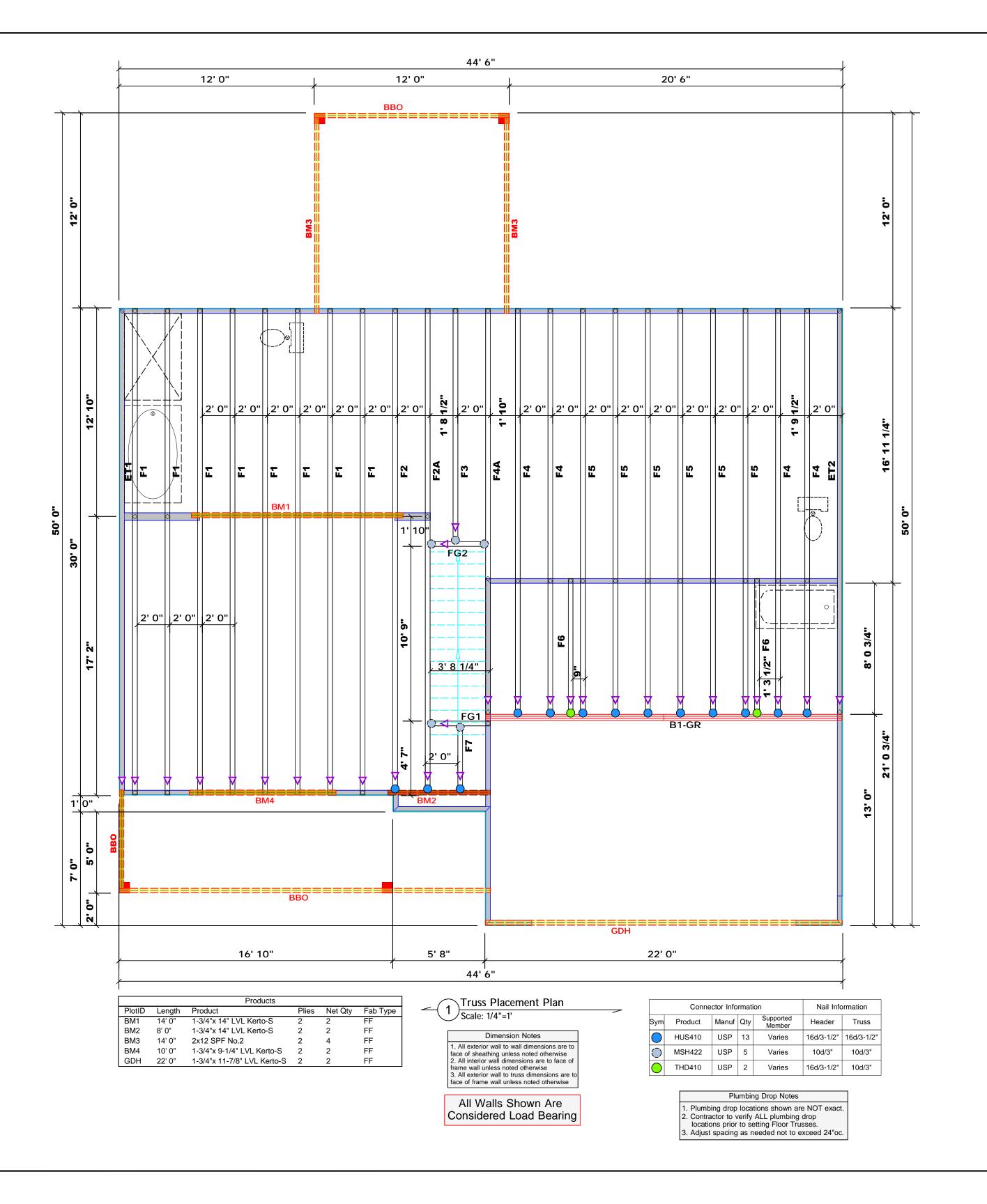
# **General Safety Notes**

# Damage or Personal Injury Failure to Follow Could Cause Property

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.
- 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.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the esponsibility of truss fabricator. General practice is to
- Plate type, size, orientation and location dimensions camber for dead load deflection.

indicated are minimum plating requirements.

- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- 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
- Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- 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.





Reilly Road Industrial Park Fayetteville, N.C. 28309 Phone: (910) 864-8787 Fax: (910) 864-4444

Bearing reactions less than or equal to 3000# ar deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables ( derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000#. A registered design but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained design the support system for all reactions that exceed 15000#.

Signature\_

David Landry

LO.	AD (	CHAR	T FO	RJ	ACK :	STUD	S
	(8	ASED O	N TABLE:	S R502	5(1) 4 (1	b)))	
NU	MBER C		STUDS R HEADER/V			A END OF	
END REACTION (UP TO)	REQ'D STUDS FOR (3) PLY HEADER		END REACTION (UP T0)	REQ15 STUDS FOR (3) RLY HEADER		END REACTION (UP TO)	REQ'D STUDS FOR (4) PLY HEADER
1700	1		2550	1		3400	1
3400	2		5100	2		6800	2
5100	3		7650	3		10200	3
6800	4		10200	4		13600	4
8500	5		12750	5		17000	5
10200	6		15300	6			
11900	7						
13600	8						
15300	9						
	1						

THIS IS	BUILDER	Benjamin Stout Real Estate	COUNTY	Harnett Co. / Harnett
A TRUSS	JOB NAME	JOB NAME Lot 46 Liberty Meadows	ADDRESS	24 Melvill Lane
PLACEM	PLAN	The Ashville / 2GRF, CP	MODEL	Floor
ENT DIAG	SEAL DATE N/A	N/A	<b>DATE REV</b> . 08/10/22	08/10/22
GRAM ON	QUOTE #		DRAWN BY	DRAWN BY David Landry
LY.	JOB#	J0822-4073	SALESMAN	SALESMAN Marshall Naylor

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.
These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com



Benjamin Stout Real Estate Client:

Project: The Ashville Address: 24 Melvill Lane

8/10/2022 Date:

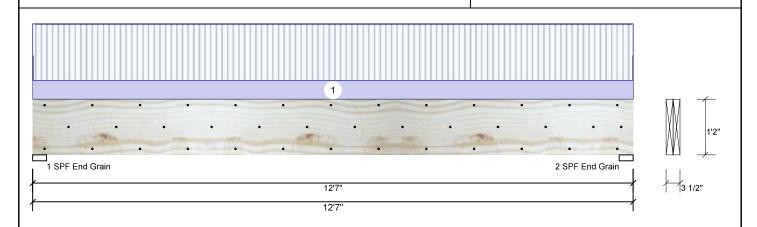
Input by: David Landry Job Name: Lot 46 Liberty Meadows Page 1 of 1

J0822-4073 Project #:

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

Level: Level

Reactions UNPATTERNED lb (Uplift)



				_						
Type:	Girder	Application:	Floor	Brg	Direction	Live	Dead	Snow	Wind	Const
Plies:	2	Design Method:	ASD	1	Vertical	4568	1591	0	0	0
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015	2	Vertical	4568	1591	0	0	0
Deflection LL:	480	Load Sharing:	No							
Deflection TL:	360	Deck:	Not Checked							
Importance:	Normal - II									
Temperature:	Temp <= 100°F									

# **Analysis Results**

**Member Information** 

	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
l	Moment	17989 ft-lb	6'3 1/2"	26999 ft-lb	0.666 (67%)	D+L	L
	Unbraced	17989 ft-lb	6'3 1/2"	18014 ft-lb	0.999 (100%)	D+L	L
l	Shear	4744 lb	11'1 1/2"	10453 lb	0.454 (45%)	D+L	L
l	LL Defl inch	0.252 (L/578)	6'3 1/2"	0.303 (L/480)	0.831 (83%)	L	L
	TL Defl inch	0.340 (L/428)	6'3 1/2"	0.404 (L/360)	0.840 (84%)	D+L	L

# Bearings

ı	Dearing	•						
ı	Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
	1 - SPF End Grain	3.500"	Vert	60%	1591 / 4568	6159	L	D+L
	2 - SPF End Grain	3.500"	Vert	60%	1591 / 4568	6159	L	D+L

# **Design Notes**

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

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Тор	242 PLF	726 PLF	0 PLF	0 PLF	0 PLF	F1
	Self Weight				11 PLF					

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

# Lumber

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

# chemicals Handling & Installation

- Handling & Installation

  1. IVL beams must not be cut or drilled

  2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code approvals

  3. Damaged Beams must not be used

  4. Design assumes top edge is laterally restrained

  5. Provide lateral support at bearing points to avoid lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

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

Manufacturer Info

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





isDesign

Client: Benjamin Stout Real Estate

Project: The Ashville Address: 24 Melvill Lane

8/10/2022 Date: Input by: David Landry

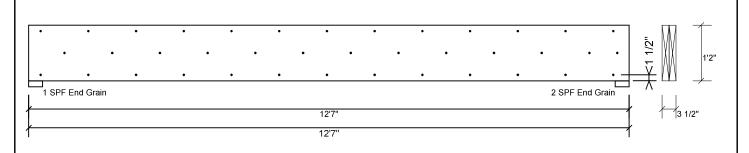
Job Name: Lot 46 Liberty Meadows

Page 2 of 1

J0822-4073 Project #:

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

Level: Level



# **Multi-Ply Analysis**

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

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

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

# Lumber

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

# chemicals

# Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

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Benjamin Stout Real Estate Client:

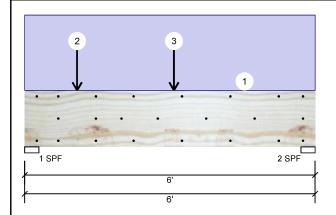
Project: The Ashville Address: 24 Melvill Lane

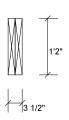
8/10/2022 Date:

Input by: David Landry Job Name: Lot 46 Liberty Meadows

1.750" X 14.000" **Kerto-S LVL** 2-Ply - PASSED BM<sub>2</sub>

J0822-4073 Project #: Level: Level





Page 3 of 1

# **Member Information**

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

Floor Application: Design Method: ASD **Building Code:** IBC/IRC 2015

Load Sharing: No

Deck: Not Checked

# **Reactions UNPATTERNED lb (Uplift)**

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	678	709	0	0	0
2	Vertical	189	546	0	0	0

# Bearings

Bearing Le	ength Dir.	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF 3.5	500" Vert	27%	709 / 678	1387	L	D+L
2 - SPF 3.5	500" Vert	14%	546 / 189	734	L	D+L

# **Analysis Results**

ſ	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
l	Moment	1305 ft-lb	2'8 7/16"	26999 ft-lb	0.048 (5%)	D+L	L
l	Unbraced	1305 ft-lb	2'8 7/16"	17702 ft-lb	0.074 (7%)	D+L	L
l	Shear	1165 lb	1'5 1/2"	10453 lb	0.111 (11%)	D+L	L
l	LL Defl inch	0.003 (L/21799)	2'7 3/8"	0.139 (L/480)	0.022 (2%)	L	L
I	TL Defl inch	0.008 (L/8727)	2'10 1/16"	0.185 (L/360)	0.041 (4%)	D+L	L

# **Design Notes**

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

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Тор	150 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above
2	Point	1-1-0		Far Face	238 lb	714 lb	0 lb	0 lb	0 lb	F2A
3	Point	3-1-0		Far Face	51 lb	153 lb	0 lb	0 lb	0 lb	F7
	Self Weight				11 PLF					

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

# Lumber

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

# chemicals Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

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

Manufacturer Info

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Client: Benjamin Stout Real Estate

The Ashville 24 Melvill Lane

8/10/2022 Date: Input by: David Landry

Job Name: Lot 46 Liberty Meadows J0822-4073 Project #:

**Kerto-S LVL** BM<sub>2</sub>

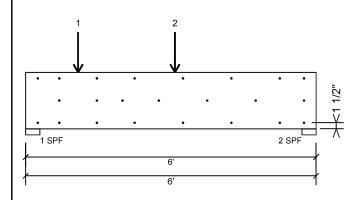
1.750" X 14.000"

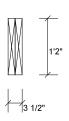
Project:

Address:

2-Ply - PASSED

Level: Level





Page 4 of 1

### **Multi-Ply Analysis**

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. except for regions covered by concentrated load fastening. Maximum end distance not to exceed 6".

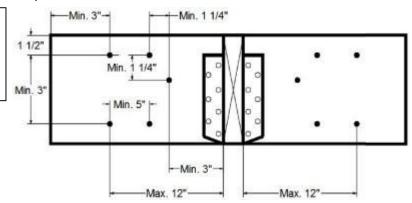
0.0 %
0.0 PLF
245.6 PLF
81.9 lb.
IV
1 1/2"
3"
1.00

### **Concentrated Load**

Fasten at concentrated side load at 1-1-0 with a minimum of (6) – 10d Box nails (.128x3") in the lpattern shown

pattern snown.		
Capacity Load	96.9 %	
Load	476.0lb.	
Total Yield Limit	491.0 lb.	
Cg	0.9998	
Yield Limit per Fastener	81.9 lb.	
Yield Mode	IV	
Load Combination	D+L	
Duration Factor	1.00	

### Min/Max fastener distances for Concentrated Side Loads



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

### Lumber

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

### chemicals

### Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

5. Provide lateral support at bearing points to avoid lateral displacement and rotation

This design is valid until 11/3/2024

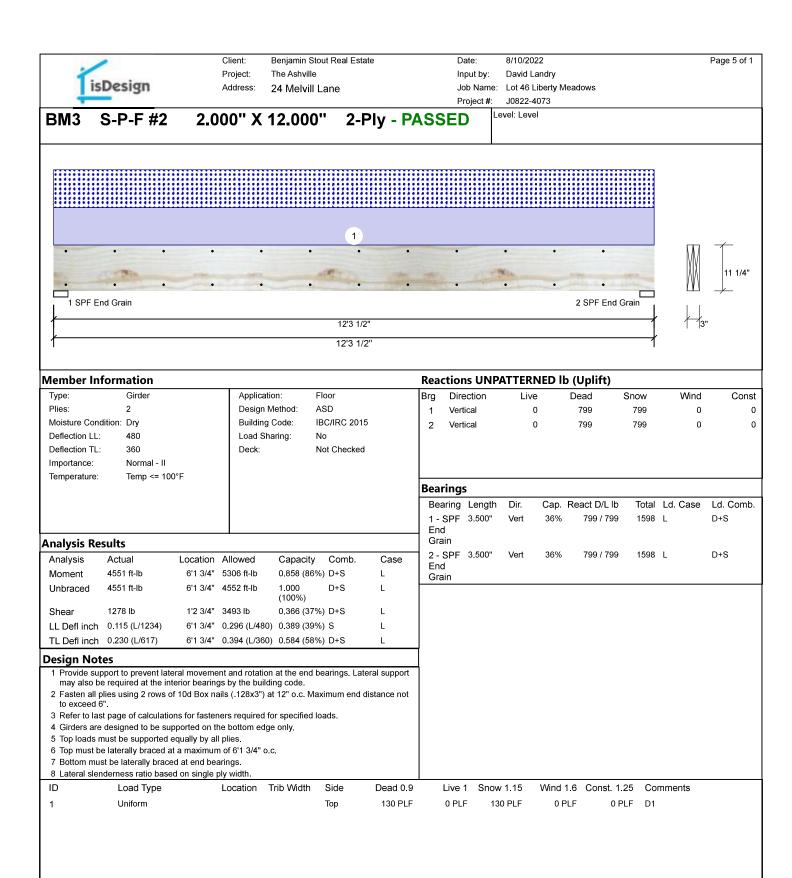
6. For flat roofs provide proper drainage to prevent ponding

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Manufacturer Info







This design is valid until 11/3/2024



Manufacturer Info





Client: Benjamin Stout Real Estate

Project: The Ashville
Address: 24 Melvill Lane

Date: 8/10/2022

Input by: David Landry

Job Name: Lot 46 Liberty Meadows

Page 6 of 1

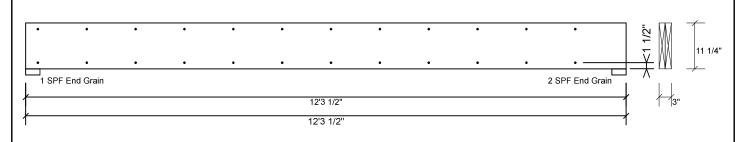
Project #: J0822-4073

BM3 S-P-F #2

2.000" X 12.000"

2-Ply - PASSED

Level: Level



### Multi-Ply Analysis

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

0.0 % Capacity 0.0 PLF Load Yield Limit per Foot 157.4 PLF Yield Limit per Fastener 78.7 lb. Yield Mode IV Edge Distance 1 1/2" Min. End Distance 3" Load Combination 1.00 Duration Factor



Benjamin Stout Real Estate Client:

Project: The Ashville Address: 24 Melvill Lane

8/10/2022 Date: Input by: David Landry

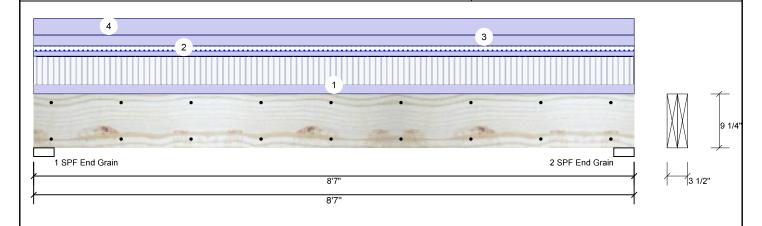
Job Name: Lot 46 Liberty Meadows Project #: J0822-4073

**Kerto-S LVL** BM4

1.750" X 9.250"

2-Ply - PASSED

Level: Level



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

Floor Application: Design Method: ASD **Building Code:** IBC/IRC 2015 Load Sharing: Deck: Not Checked

Reactions UNPATTERNED Ib (Uplift) Live Dead Brg Direction Snow Wind Const 1330 2005 Vertical 240 0 0 1330 2005 0 0 2 Vertical 240

Page 7 of 1

### **Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	6413 ft-lb	4'3 1/2"	12542 ft-lb	0.511 (51%)	D+L	L
Unbraced	6413 ft-lb	4'3 1/2"	8468 ft-lb	0.757 (76%)	D+L	L
Shear	2515 lb	1' 3/4"	6907 lb	0.364 (36%)	D+L	L
LL Defl inch	0.075 (L/1301)	4'3 9/16"	0.203 (L/480)	0.369 (37%)	L	L
TL Defl inch	0.188 (L/519)	4'3 9/16"	0.271 (L/360)	0.694 (69%)	D+L	L

### Bearings

•	- ca 9-	<u> </u>						
	Bearing	Length	Dir.	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
	1 - SPF End Grain	3.500"	Vert	32%	2005 / 1330	3335	L	D+L
	2 - SPF End Grain	3.500"	Vert	32%	2005 / 1330	3335	L	D+L

### **Design Notes**

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

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Тор	104 PLF	310 PLF	0 PLF	0 PLF	0 PLF	F1
2	Uniform			Тор	56 PLF	0 PLF	56 PLF	0 PLF	0 PLF	M1
3	Uniform			Тор	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above
4	Uniform			Тор	180 PLF	0 PLF	0 PLF	0 PLF	0 PLF	C1GE
	Self Weight				7 PLF					

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

### Lumber

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

### Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

5. Provide lateral support at bearing points to avoid lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

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**Manufacturer Info** 





isDesign

Client: Benjamin Stout Real Estate

The Ashville

24 Melvill Lane

Date: 8/10/2022

Input by: David Landry Job Name: Lot 46 Liberty Meadows Page 8 of 1

J0822-4073 Project #:

**Kerto-S LVL** BM4

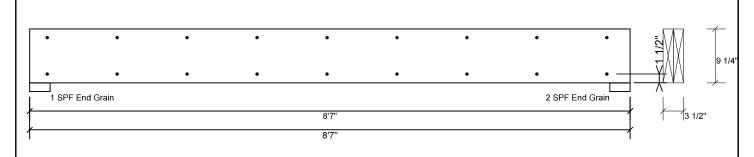
1.750" X 9.250"

Project:

Address:

2-Ply - PASSED

Level: Level



### Multi-Ply Analysis

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

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

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

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### chemicals

### Handling & Installation

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### Manufacturer Info 6. For flat roofs provide proper drainage to prevent ponding

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Benjamin Stout Real Estate Client:

Project: The Ashville Address: 24 Melvill Lane

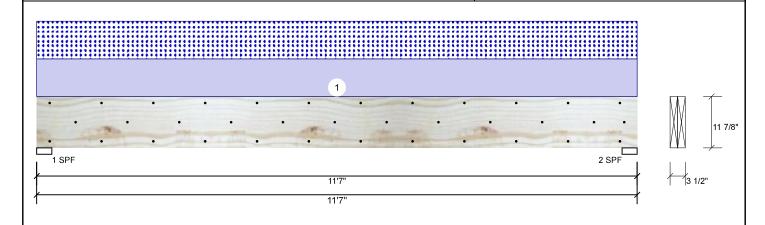
8/10/2022 Date:

Input by: David Landry Job Name: Lot 46 Liberty Meadows Page 9 of 1

J0822-4073 Project #:

**Kerto-S LVL** 1.750" X 11.875" 2-Ply - PASSED BM<sub>5</sub>

Level: Level



### **Member Information** Reactions UNPATTERNED lb (Uplift) Girder Floor Live Application: Brg Direction Dead Wind Type: Snow Const Plies: 2 Design Method: ASD 1559 1506 Vertical 0 0 1 0 Moisture Condition: Dry **Building Code:** IBC/IRC 2015 0 1559 1506 0 0 2 Vertical Deflection LL: 480 Load Sharing: No Deflection TL: 360 Deck: Not Checked Normal - II Importance: Temp <= 100°F Temperature: **Bearings** Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 3.500" Vert 59% 1559 / 1506 3065 L D+S

2 - SPF 3.500"

Vert

59%

1559 / 1506

3065 L

D+S

### **Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	8188 ft-lb	5'9 1/2"	22897 ft-lb	0.358 (36%)	D+S	L
Unbraced	8188 ft-lb	5'9 1/2"	8589 ft-lb	0.953 (95%)	D+S	L
Shear	2911 lb	1'3 3/8"	10197 lb	0.285 (29%)	D+S	L
LL Defl inch	0.103 (L/1298)	5'9 1/2"	0.278 (L/480)	0.370 (37%)	S	L
TL Defl inch	0.209 (L/637)	5'9 1/2"	0.371 (L/360)	0.565 (56%)	D+S	L

### **Design Notes**

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

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Far Face	260 PLF	0 PLF	260 PLF	0 PLF	0 PLF	A2
	Self Weight				9 PLF					

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

### Lumber

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

### chemicals Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

5. Provide lateral support at bearing points to avoid lateral displacement and rotation

This design is valid until 11/3/2024

For flat roofs provide proper drainage to prevent ponding

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

Manufacturer Info





isDesign

Client: Benjamin Stout Real Estate

The Ashville

Project: Address: 24 Melvill Lane

8/10/2022 Date:

Input by: David Landry Job Name: Lot 46 Liberty Meadows

Level: Level

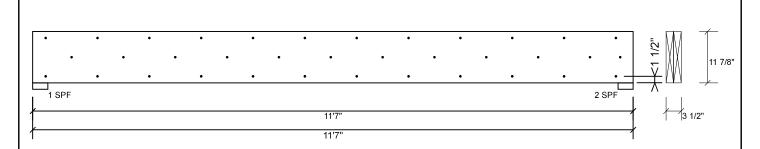
Page 10 of 1

J0822-4073 Project #:

**Kerto-S LVL** BM<sub>5</sub>

1.750" X 11.875"

2-Ply - PASSED



### **Multi-Ply Analysis**

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

Capacity 92.1 % 260.0 PLF Load Yield Limit per Foot 282.4 PLF Yield Limit per Fastener 94.1 lb. IV Yield Mode Edge Distance 1 1/2" 3" Min. End Distance D+S Load Combination Duration Factor 1.15

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

### Lumber

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

### chemicals

### Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

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

Manufacturer Info







**Member Information** 

Client: Benjamin Stout Real Estate

Project: The Ashville Address: 24 Melvill Lane

8/10/2022 Date: Input by: David Landry

Job Name: Lot 46 Liberty Meadows

Page 11 of 1

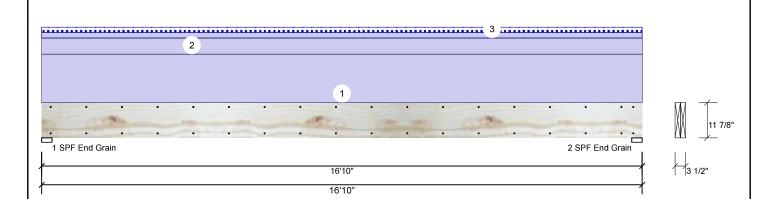
J0822-4073 Project #:

Level: Level

Reactions UNPATTERNED lb (Uplift)

**Kerto-S LVL** 1.750" X 11.875" **GDH** 

2-Ply - PASSED



Type:	Girder	Application:	Floor		Brg	Direction	Live	Dead	Snow	Wind	Const
Plies:	2	Design Method:	ASD		1	Vertical	0	2266	168	0	0
Moisture Cond	ition: Dry	Building Code:	IBC/IRC 2015	5	2	Vertical	0	2266	168	0	0
Deflection LL:	480	Load Sharing:	No								
Deflection TL:	360	Deck:	Not Checked								
Importance:	Normal - II										
Temperature:	Temp <= 100°F										
					Bear	ings					
					Bea	ring Length	Dir. (	Cap. React D/L	b Total	Ld. Case	Ld. Comb.
					1 - S End	SPF 3.500"	Vert	24% 2266 / 16	8 2434	L	D+S
Analysis Res	sults				Grai	n					
Analysis	Actual Location	Allowed Capac	city Comb.	Case	2-8		Vert	24% 2266 / 16	8 2434	L	D+S
Moment	9024 ft-lb 8'5"	17919 ft-lb 0.504 (	(50%) D	Uniform	End Grai						

Uniform

L

### **Design Notes**

Unbraced

1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.

8'5" 9704 ft-lb

8'5 1/16" 0.409 (L/480) 0.085 (9%) S

8'5 1/16" 0.546 (L/360) 0.927 (93%) D+S

15'6 5/8" 7980 lb

0.999 (100%)

0.242 (24%) D

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

9694 ft-lb

1930 lb

LL Defl inch 0.035 (L/5617)

TL Defl inch 0.506 (L/388)

- 6 Top must be laterally braced at a maximum of 9'6 3/4" o.c.
- 7 Bottom must be laterally braced at end bearings.
- 8 Lateral slenderness ratio based on single ply width

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Тор	180 PLF	0 PLF	0 PLF	0 PLF	0 PLF	B1GE
2	Uniform			Тор	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above
3	Tie-In	0-0-0 to 16-10-0	1-0-0	Тор	20 PSF	0 PSF	20 PSF	0 PSF	0 PSF	Roof Load
	Self Weight				9 PLF					

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

### Lumber

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

### chemicals Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

5. Provide lateral support at bearing points to avoid lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

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

**Manufacturer Info** 





isDesign

Client: Benjamin Stout Real Estate

The Ashville Address: 24 Melvill Lane

8/10/2022 Date:

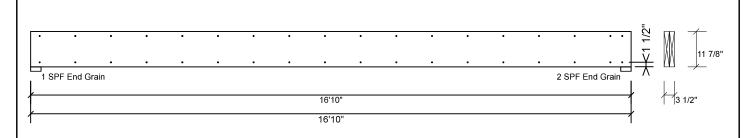
Input by: David Landry Job Name: Lot 46 Liberty Meadows Page 12 of 1

J0822-4073 Project #:

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

Project:

Level: Level



### **Multi-Ply Analysis**

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

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

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

### Lumber

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

chemicals

### Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850

Manufacturer Info

www.metsawood.com/us







RE: J0822-4073

Lot 46 Liberty Meadows

Trenco

818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Benjamin Stout Real Estate Project Name: J0822-4073 Lot/Block: 46 Model: Ashville

Address: 24 Melvill Lane Subdivision: Liberty Meadows

State: NC

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

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.4

Wind Code: N/A Wind Speed: N/A mph Roof Load: N/A psf Floor Load: 55.0 psf

This package includes 13 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	E16391095	ET1	11/9/2021
2	E16391096	ET2	11/9/2021
3	E16391097	F1	11/9/2021
4	E16391098	F2	11/9/2021
5	E16391099	F2A	11/9/2021
6	E16391100	F3	11/9/2021
7	E16391101	F4	11/9/2021
8	E16391102	F4A	11/9/2021
9	E16391103	F5	11/9/2021
10	E16391104	F6	11/9/2021
11	E16391105	F7	11/9/2021
12	E16391106	FG1	11/9/2021
13	E16391107	FG2	11/9/2021

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.



November 09, 2021

Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows
J0822-4073	CT4	GABLE	1	,	E16391095
30022-4073	E11	GABLE	'	'	Job Reference (optional)

0-<u>1</u>-8

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:13:25 2021 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-ComAmz3tpJfDjpxDFyRbFXH3ZKSZEB?hFOTOJJyLEMe

0-1-8

Scale = 1:50.0



Plate Offs	sets (X,Y)	[6:0-1-8,Edge], [18:0-1-8	,Edge], [34:0-	1-8,Edge], [4	4:0-1-8,Edg	e]						
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.ó	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	· -	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	ВС	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00	26	n/a	n/a		
BCDL	5.0	Code IRC2015/TI	PI2014	Matr	x-S						Weight: 128 lb	FT = 20%F, 11%E

BRACING-

 TOP CHORD
 2x4 SP No.1(flat)
 TOP CHORD

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

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

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

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:

10-0-0 oc bracing: 49-50,48-49,47-48,46-47,45-46,44-45.

All bearings 29-11-0.

Max Uplift All uplift 100 lb or less at joint(s) 26

Max Grav All reactions 250 lb or less at joint(s) 50, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27

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

### NOTES-

LUMBER-

REACTIONS.

(lb) -

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Gable requires continuous bottom chord bearing.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 1-4-0 oc.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 26.
- 7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



November 9,2021





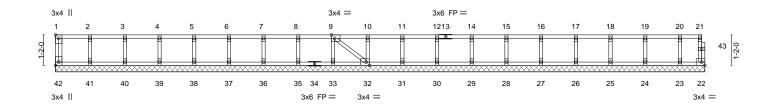
818 Soundside Road

Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows
J0822-4073	ET2	GABLE	1	1	E16391096
30022-4073	E12	GABLE	'	'	Joh Reference (ontional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:13:26 2021 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-g?KYzJ3Vacn4KyWPpfyqnlpEHkoozeErU2CxrlyLEMd

0-<u>1</u>-8

Scale = 1:41.7



_	1-4-0 2-8-0	) 4-0-0 5-4-0 6	5-8-0   8-0-0	9-4-0 10-8-0	12-0-0 13-4	-0 14-8-0	16-0-0	17-4-0	18-8-0	20-0-0	21-4-0 22-8-0	24-0-0 24-11-8
	1-4-0 1-4-0	)	1-4-0	1-4-0 1-4-0	1-4-0 1-4-	0 1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0 1-4-0	1-4-0 '0-11-8'
Plate Off	sets (X,Y)	[1:Edge,0-1-8], [9:0-1-8	,Edge], [32:0-1-8	3,Edge], [42:Edge,0-	-1-8]							
LOADIN	G (psf)	SPACING-	2-0-0	CSI.	[	EFL.	in (lo	oc) I/defl	L/d		PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC 0.06	\	ert(LL)	n/a	- n/a	999		MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC 0.01	\	ert(CT)	n/a	- n/a	999			
BCLL	0.0	Rep Stress Incr	YES	WB 0.03	H	lorz(CT)	0.00	22 n/a	n/a			
BCDL	5.0	Code IRC2015/7	ΓPI2014	Matrix-S							Weight: 106 lb	FT = 20%F, 11%E

 LUMBER BRACING 

 TOP CHORD
 2x4 SP No.1(flat)
 TOP CHORD
 Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

 BOT CHORD
 2x4 SP No.3(flat)
 BOT CHORD
 Rigid ceiling directly applied or 10-0-0 oc bracing.

 OTHERS
 2x4 SP No.3(flat)
 BOT CHORD
 Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 24-11-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 42, 22, 41, 40, 39, 38, 37, 36, 35, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24, 23

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

### NOTES-

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Gable requires continuous bottom chord bearing.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 1-4-0 oc.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 7) CAUTION, Do not erect truss backwards.



November 9,2021





818 Soundside Road

Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows
10000 4070	F4	Floor		,	E16391097
J0822-4073	FI	Floor	8	'	Job Reference (optional)

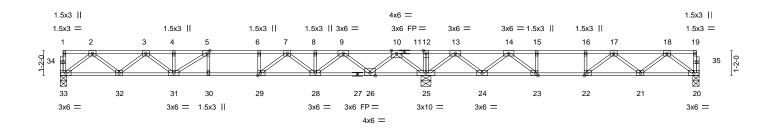
8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:13:28 2021 Page 1 ID:J6aSr?qB6etazEy6hKRŠkZzPTZ\_-cNRIO?5l6E1naGfow4\_ltAvMLYG4RO68xMh2weyLEMb

0-1-8

H-1-3-0 1-6-0 2-3-0

2-2-0

0-1-8 Scale = 1:50.8



L			17-1-8				1			29-	11-0	
	17-1-8									12	!-9-8	1
Plate Offs	sets (X,Y)	[5:0-1-8,Edge], [22:0-1-8,	Edge], [23:0-	1-8,Edge], [29	9:0-1-8,Edge	·]						
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.86	Vert(LL)	-0.20	30	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	ВС	0.85	Vert(CT)	-0.28	30	>735	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.05	20	n/a	n/a		
BCDL	5.0	Code IRC2015/TP	12014	Matri	k-S	, ,					Weight: 149 lb	FT = 20%F, 11%E
											-	

LUMBER-TOP CHORD

BOT CHORD

2x4 SP No.1(flat)

BOT CHORD 2x4 SP No.1(flat)

2x4 SP No.3(flat) WFBS

**BRACING-**TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals.

Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 33=0-3-8, 25=0-5-8, 20=0-3-8

Max Grav 33=826(LC 3), 25=1934(LC 1), 20=608(LC 4)

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

TOP CHORD 2-3=-1695/0, 3-4=-2732/0, 4-5=-2732/0, 5-6=-2963/0, 6-7=-2963/0, 7-8=-2067/0,

 $8-9 = -2067/0, \ 9-10 = -539/303, \ 10-12 = 0/2152, \ 12-13 = 0/2152, \ 13-14 = -551/972,$ 14-15=-1575/269, 15-16=-1575/269, 16-17=-1575/269, 17-18=-1162/0

 $32 - 33 = 0/1030,\ 31 - 32 = 0/2330,\ 30 - 31 = 0/2963,\ 29 - 30 = 0/2963,\ 28 - 29 = 0/2561,$ 

 $26 - 28 = -37/1417, \ 25 - 26 = -833/0, \ 24 - 25 = -1263/0, \ 23 - 24 = -662/1135, \ 22 - 23 = -269/1575,$ 21-22=-24/1515, 20-21=0/747

2-33=-1290/0, 2-32=0/866, 3-32=-826/0, 3-31=0/514, 10-25=-1655/0, 10-26=0/1228, **WEBS** 

9-26=-1188/0, 9-28=0/878, 7-28=-685/0, 7-29=0/807, 6-29=-359/0, 5-31=-475/153, 13-25=-1321/0, 13-24=0/882, 14-24=-926/0, 14-23=0/942, 18-20=-935/0, 18-21=0/540,

17-21=-460/99, 17-22=-345/76, 15-23=-417/0

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means. 5) CAUTION, Do not erect truss backwards.



November 9,2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, rerection and bracing of trusses and truss systems, see 

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



Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows
J0822-4073	E2	Floor	1	1	E16391098
30022-4073	F2		'	'	Job Reference (optional)

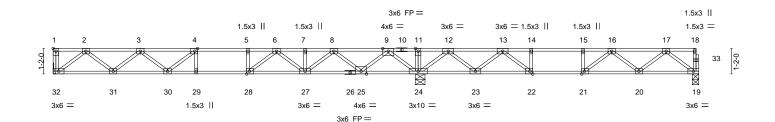
1-3-0

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:13:29 2021 Page 1  $ID: J6aSr? qB6etazEy6hKRSkZzPTZ\_-4a?hcL6NtX9eBQE\_UnWXPNRXuxcHAsbHA?RbS4yLEMa$ 

Structural wood sheathing directly applied or 6-0-0 oc purlins,

2-3-0

Scale = 1:49.8



	16-7-8		1619-0	29-7-8		
	16-7-8		0-1-8	12-10-8	3	<u> </u>
Plate Offsets (X,)	[1:Edge,0-1-8], [4:0-1-8,Edge], [21:0-1	-8,Edge], [22:0-1-8,Edge],	, [28:0-1-8,Edge]			
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES	CSI. TC 0.87 BC 0.85 WB 0.57	DEFL. in (loc) Vert(LL) -0.18 28-29 Vert(CT) -0.25 28-29 Horz(CT) 0.05 19	l/defl L/d >999 480 >810 360 n/a n/a	PLATES MT20	<b>GRIP</b> 244/190
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S			Weight: 146 lb	FT = 20%F, 11%E

BRACING-LUMBER-TOP CHORD TOP CHORD

2-3-0

2x4 SP No.1(flat) BOT CHORD 2x4 SP No.1(flat)

2x4 SP No.3(flat) WFBS

except end verticals. BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 32=Mechanical, 19=0-3-8, 24=0-5-4

Max Grav 32=814(LC 3), 19=615(LC 4), 24=1907(LC 1)

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

2-3=-1658/0, 3-4=-2582/0, 4-5=-2848/0, 5-6=-2848/0, 6-7=-2034/0, 7-8=-2034/0,  $8-9 = -563/296, \ 9-11 = 0/2082, \ 11-12 = 0/2082, \ 12-13 = -578/905, \ 13-14 = -1611/221,$ 

14-15=-1611/221, 15-16=-1611/221, 16-17=-1179/0

BOT CHORD 31-32=0/1002, 30-31=0/2282, 29-30=0/2848, 28-29=0/2848, 27-28=0/2500,

 $25 - 27 = -36/1414,\ 24 - 25 = -810/0,\ 23 - 24 = -1188/0,\ 22 - 23 = -602/1165,\ 21 - 22 = -221/1611,$ 

20-21=0/1540, 19-20=0/756

**WEBS** 2-32=-1257/0, 2-31=0/854, 3-31=-813/0, 3-30=0/392, 4-30=-431/27, 9-24=-1619/0,

9-25=0/1194, 8-25=-1155/0, 8-27=0/843, 6-27=-652/0, 6-28=0/750, 5-28=-323/0, 17-19=-946/0, 17-20=0/550, 16-20=-470/84, 16-21=-317/90, 12-24=-1316/0,

12-23=0/876, 13-23=-920/0, 13-22=0/936, 14-22=-417/0

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.



November 9,2021





ĺ	Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows	П
	10000 4070	504				E16391099	Э
	J0822-4073	F2A	Floor	1	1	Joh Reference (entional)	
	J0822-4073	F2A	Floor	1	1	Job Reference (optional)	

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:13:31 2021 Page 1

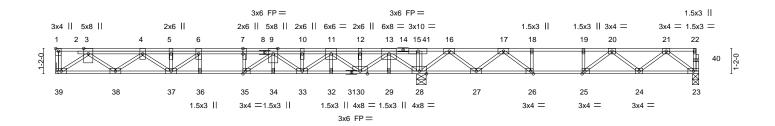
Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 6-0-0 oc bracing.

except end verticals.

 $ID: J6aSr? qB6etazEy6hKRSk\\ \bar{Z}zPTZ\_-0y7R017eP9PMRkONcCY? UoWwalOYekCadJwiXzyLEMY\\ ID: J6aSr? qB6etazEy6hKRSk\\ \bar{Z}zPTZ\_-0y7R017eP9PMRkONcCY? UoWwalOYekCadJwiXzyLEMY\\ \bar{Z}zPTZ\_-0y7R017eP9PMRkONcCY$ 1-2-8 1-1-10 1-2-8 1-2-8 1-2-8 1-2-8 1-2-8 1-2-8 1-3-0 2-3-0

Scale = 1:50.0



L			16-7-8		16 <sub>1</sub> 9-	0		29-7-8		
			16-7-8		o-1 <sup>1</sup> -8	3		12-10-8		1
Plate Off	sets (X,Y)	[1:Edge,0-1-8], [7:0-3-0,E	dge], [25:0-1-	8,Edge], [26:0-1-8,Ed	dge], [35:0-1-8,Edge]					
LOADIN TCLL TCDL	<b>G</b> (psf) 40.0 10.0	SPACING- Plate Grip DOL Lumber DOL	2-0-0 1.00 1.00	<b>CSI.</b> TC 0.66 BC 0.48	DEFL. Vert(LL) Vert(CT)	in (loc) -0.15 35 -0.20 35-36		L/d 480 360	PLATES MT20	<b>GRIP</b> 244/190
BCLL BCDL	0.0 5.0	Rep Stress Incr Code IRC2015/TF	NO	WB 0.69 Matrix-S	Horz(CT)	0.04 23	n/a	n/a	Weight: 173 lb	FT = 20%F, 11%E

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD 2x4 SP 2400F 2.0E(flat)

BOT CHORD 2x4 SP 2400F 2.0E(flat)

2x4 SP No 3(flat) WFBS

REACTIONS. (size) 39=Mechanical, 28=0-5-4, 23=0-3-8

Max Grav 39=951(LC 3), 28=2436(LC 1), 23=579(LC 4)

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

3-4=-2099/0, 4-5=-3320/0, 5-6=-3320/0, 6-7=-3521/0, 7-9=-3521/0, 9-10=-2750/0,

 $10\text{-}11\text{=-}2750/0,\ 11\text{-}12\text{=-}1201/0,\ 12\text{-}13\text{=-}1201/0,\ 13\text{-}15\text{=-}0/2484,\ 15\text{-}16\text{=-}0/2500,}$ 

16-17=-224/1085, 17-18=-1394/330, 18-19=-1394/330, 19-20=-1394/330, 20-21=-1095/0 38-39=0/1255, 37-38=0/2907, 36-37=0/3521, 35-36=0/3521, 34-35=0/3180, 33-34=0/3180, BOT CHORD

32-33=0/2041, 30-32=0/2041, 29-30=-501/77, 28-29=-501/77, 27-28=-1403/0, 26-27=-753/865, 25-26=-330/1394, 24-25=-59/1406, 23-24=0/710

**WEBS** 3-39=-1541/0, 3-38=0/1072, 4-38=-1027/0, 4-37=0/515, 5-37=-259/12, 13-28=-2425/0,

13-30=0/1449, 11-30=-1115/0, 11-33=0/936, 9-33=-593/0, 9-35=0/799, 7-35=-397/0, 16-28=-1479/0, 6-37=-372/209, 16-27=0/905, 17-27=-970/0, 17-26=0/989, 18-26=-436/0,

21-23=-888/0, 21-24=-6/501, 20-24=-405/117, 20-25=-370/0

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x6 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION. Do not erect truss backwards.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 222 lb down at 4-1-4, and 576 lb down at 15-1-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 23-39=-10, 1-22=-100

Concentrated Loads (lb)

Vert: 4=-142(F) 13=-496(F)



November 9,2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSITPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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



Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows
J0822-4073	F3	Floor	1	1	E16391100
00022 4070	10	11001	ľ	·	Job Reference (optional)

Fayetteville, NC - 28314,

1-3-0

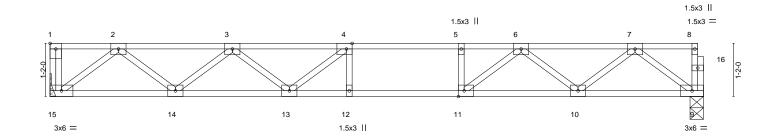
8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:13:32 2021 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-U8hpEN8G9SXD2tzZ9w3E1036M9egNGIjszfF3PyLEMX 2-4-0 <sup>0</sup>11<sup>8</sup>

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

Scale: 1/2"=1'



14-4-0 [1:Edge,0-1-8], [4:0-1-8,Edge], [11:0-1-8,Edge] Plate Offsets (X,Y)--LOADING (psf) SPACING-CSI. DEFL. **PLATES GRIP** 2-0-0 (loc) I/defl L/d 1.00 0.60 244/190 **TCLL** 40.Ó Plate Grip DOL TC Vert(LL) -0.19 12-13 >906 480 MT20 TCDL -0.25 12-13 10.0 Lumber DOL 1.00 ВС 0.87 Vert(CT) >687 360 BCLL 0.0 Rep Stress Incr YES WB 0.38 Horz(CT) 0.04 n/a BCDL Code IRC2015/TPI2014 Matrix-S Weight: 71 lb FT = 20%F, 11%E

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.1(flat)

BOT CHORD 2x4 SP No.1(flat)

2x4 SP No.3(flat) WFBS

REACTIONS.

(size) 15=Mechanical, 9=0-3-8 Max Grav 15=775(LC 1), 9=768(LC 1)

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

TOP CHORD 2-3=-1559/0, 3-4=-2384/0, 4-5=-2550/0, 5-6=-2550/0, 6-7=-1538/0

**BOT CHORD**  $14 - 15 = 0/947,\ 13 - 14 = 0/2143,\ 12 - 13 = 0/2550,\ 11 - 12 = 0/2550,\ 10 - 11 = 0/2118,\ 9 - 10 = 0/954$ **WEBS** 

2-15=-1188/0, 2-14=0/797, 3-14=-761/0, 3-13=0/398, 7-9=-1194/0, 7-10=0/760,

 $6\text{-}10\text{=-}755/0,\ 6\text{-}11\text{=-}0/740,\ 5\text{-}11\text{=-}317/0,\ 4\text{-}13\text{=-}437/18}$ 

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.



November 9,2021





Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows
J0822-4073	ΕΛ	Floor	4	1	E16391101
30022-4073	14	1 1001	4	'	Job Reference (optional)

2-5-4

1-3-0

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:13:33 2021 Page 1  $ID: J6aSr? qB6etazEy6hKRSkZzPTZ\_-zLFBRj9uwmf4g1YljdaTaDcD9Z\_A6g4t5dPpbryLEMW\\$ 

2-3-4

Scale = 1:41.8

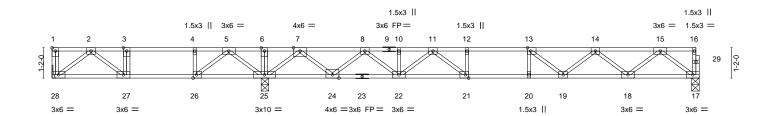


Plate Offsets (X.Y)	8-2-4	3-2-8 )-0-4	24-11-8 16-9-0	
Flate Offsets (A, I)	[1.Euge,0-1-6], [13.0-1-6,Euge], [21.0	- 1-6,Eugej, [26.0-1-6,Euge]		
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr NO	CSI. TC 0.85 BC 0.86 WB 0.54	DEFL.         in (loc)         l/defl         L/d           Vert(LL)         -0.21         21-22         >964         480           Vert(CT)         -0.28         21-22         >719         360           Horz(CT)         0.05         17         n/a         n/a	<b>PLATES GRIP</b> MT20 244/190
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 125 lb FT = 20%F, 11%E

LUMBER-TOP CHORD

2x4 SP No.1(flat) 2x4 SP No.1(flat)

BOT CHORD

2x4 SP No.3(flat) WFBS

**BRACING-**TOP CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals.

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 28=Mechanical, 25=0-3-8, 17=0-3-8

Max Grav 28=1746(LC 3), 25=1571(LC 1), 17=851(LC 7)

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

TOP CHORD  $1-28 = -1403/0, \ 2-3 = -629/297, \ 3-4 = -629/297, \ 4-5 = -629/297, \ 5-6 = 0/1219, \ 6-7$ 

7-8=-1123/0, 8-10=-2493/0, 10-11=-2493/0, 11-12=-3157/0, 12-13=-3157/0,

13-14=-2793/0, 14-15=-1763/0

**BOT CHORD** 27-28=-55/424, 26-27=-297/629, 25-26=-730/183, 24-25=-35/277, 22-24=0/1926,

21-22=0/2904, 20-21=0/3157, 19-20=0/3157, 18-19=0/2432, 17-18=0/1059 2-28=-532/70, 2-27=-303/257, 5-25=-823/0, 5-26=0/878, 4-26=-429/0, 15-17=-1326/0,

15-18=0/917, 14-18=-871/0, 14-19=0/501, 7-25=-1524/0, 7-24=0/1128, 8-24=-1076/0,

8-22=0/753, 11-22=-559/0, 11-21=0/624, 12-21=-277/0, 13-19=-602/0

### NOTES-

WEBS

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.

### LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 17-28=-10, 1-16=-100

Concentrated Loads (lb) Vert: 1=-1350



November 9,2021

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



Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows
10000 4070	E4A	Floor Olador	_		E16391102
J0822-4073	F4A	Floor Girder	1	1	Joh Deference (entire al)
					Job Reference (optional)

1-2-0 1-2-8 1-2-8 1-2-8 1-2-8 1-3-0

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:13:34 2021 Page 1  $ID: J6aSr? qB6etazEy6hK\ddot{R}SkZzPTZ\_-RXpaf2AWh4nxIB7yHL5i6R8QtyJ?r5R0JH8M7IyLEMV\\$ 

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

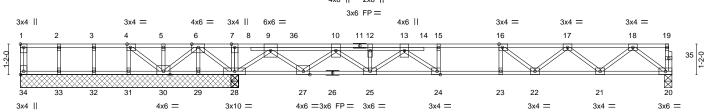
except end verticals.

6-0-0 oc bracing: 29-30,28-29,27-28.

2-3-0

Scale = 1:41.5





		8-2-8		8-4-4			24	-11-8			
		8-2-8	C	)-1-12			10	6-7-4			1
Plate Offs	sets (X,Y)	[1:Edge,0-1-8], [4:0-1-8,E	dge], [16:0-1-	8,Edge], [24:0-1-	-8,Edge], [34:Edge	e,0-1-8]					
LOADING	(psf)	SPACING-	2-0-0	CSI.	D	EFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC 0.7	.72 Ve	ert(LL)	-0.18 22-23	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC 0.8	.88 Ve	ert(CT)	-0.24 22-23	>825	360		
BCLL	0.0	Rep Stress Incr	NO	WB 0.6	.66 H	lorz(CT)	0.03 20	n/a	n/a		
BCDL	5.0	Code IRC2015/TF	PI2014	Matrix-S						Weight: 134 lb	FT = 20%F, 11%E

**BRACING-**

TOP CHORD 2x4 SP No.1(flat) TOP CHORD BOT CHORD 2x4 SP No.1(flat) BOT CHORD WFBS

2x4 SP No.3(flat)

All bearings 8-4-4 except (jt=length) 20=0-3-8. (lb) - Max Uplift All uplift 100 lb or less at joint(s) except 29=-516(LC 4), 30=-346(LC 4), 31=-239(LC 4)

Max Grav All reactions 250 lb or less at joint(s) 34, 30, 31, 32, 33 except 28=2681(LC 1), 28=2681(LC 1),

20=773(LC 4)

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

TOP CHORD 4-5=0/372, 5-6=0/372, 6-7=0/2805, 7-9=0/2806, 9-10=-255/233, 10-12=-1747/0,

12-13=-1747/0, 13-15=-2589/0, 15-16=-2589/0, 16-17=-2406/0, 17-18=-1570/0

29-30=-1225/0, 28-29=-1225/0, 27-28=-1194/0, 25-27=0/1076, 24-25=0/2211, BOT CHORD

23-24=0/2589, 22-23=0/2589, 21-22=0/2158, 20-21=0/952 **WEBS** 

6-28=-1983/0, 6-29=0/505, 6-30=0/1101, 4-30=-472/0, 4-31=0/251, 9-28=-2137/0, 9-27=0/1383, 10-27=-1347/0, 10-25=0/837, 18-20=-1191/0, 18-21=0/804, 17-21=-766/0,

17-22=0/375, 16-22=-401/0, 13-25=-579/0, 13-24=0/628, 15-24=-253/0

### NOTES-

LUMBER-

REACTIONS.

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 1.5x3 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 516 lb uplift at joint 29, 346 lb uplift at joint 30 and 239 lb uplift at joint 31.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION. Do not erect truss backwards.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 407 lb down at 10-5-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 20-34=-10, 1-19=-100

Concentrated Loads (lb)

Vert: 36=-327(B)



November 9,2021

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Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows
J0822-4073	EE	Elect	6	_	E16391103
J0822-4073	r5	Floor	О	'	Job Reference (optional)

2-5-4

1-3-0

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:13:36 2021 Page 1  $ID: J6aSr? qB6etazEy6hKRSkZzPTZ\_-NwwK4kBmDh1fXVHKOl8ABsEm8m05J1pJnbdTCAyLEMT\\$ 

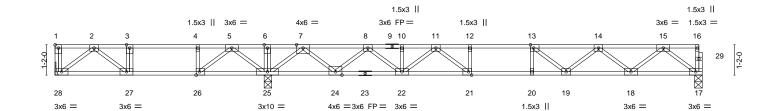
2-3-4

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 6-0-0 oc bracing.

except end verticals.

Scale = 1:41.8



	8-2-4	8	<b>4</b> -8		24-1	1-8			
	8-2-4	0-	b-4		16-9	9-0			1
Plate Offsets (X,Y)	[1:Edge,0-1-8], [13:0-1-8	,Edge], [21:0-1	-8,Edge], [26:0-1-8,Edge]						
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2015/TI	2-0-0 1.00 1.00 YES	CSI. TC 0.74 BC 0.78 WB 0.54 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.21 21-22 -0.28 21-22 0.05 17	l/defl >964 >719 n/a	L/d 480 360 n/a	PLATES MT20 Weight: 125 lb	<b>GRIP</b> 244/190  FT = 20%F. 11%E

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

TOP CHORD 2x4 SP No.1(flat)

BOT CHORD 2x4 SP No.1(flat)

2x4 SP No.3(flat) WFBS

(size) 28=Mechanical, 25=0-3-8, 17=0-3-8

Max Uplift 28=-14(LC 4)

Max Grav 28=396(LC 3), 25=1571(LC 1), 17=851(LC 7)

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

TOP CHORD  $2 - 3 = -629/297, \ 3 - 4 = -629/297, \ 4 - 5 = -629/297, \ 5 - 6 = 0/1219, \ 6 - 7 = 0/1219, \ 7 - 8 = -1123/0, \ 7 - 8 = -1$ 

8-10=-2493/0, 10-11=-2493/0, 11-12=-3157/0, 12-13=-3157/0, 13-14=-2793/0,

14-15=-1763/0

BOT CHORD  $27\text{-}28\text{-}56/423,\ 26\text{-}27\text{-}-297/629,\ 25\text{-}26\text{-}-730/184,\ 24\text{-}25\text{-}-34/277,\ 22\text{-}24\text{-}0/1927,}$ 21-22=0/2904, 20-21=0/3157, 19-20=0/3157, 18-19=0/2432, 17-18=0/1059

2-28=-531/70, 2-27=-302/259, 5-25=-823/0, 5-26=0/878, 4-26=-429/0, 15-17=-1326/0,

15-18=0/917, 14-18=-871/0, 14-19=0/501, 7-25=-1524/0, 7-24=0/1128, 8-24=-1076/0,

8-22=0/753, 11-22=-559/0, 11-21=0/624, 12-21=-277/0, 13-19=-603/0

### NOTES-

**WEBS** 

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 28.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 7) CAUTION, Do not erect truss backwards.



November 9,2021





Job	Truss	Truss Type	Qty	Ply	Lot 46 Liberty Meadows		
J0822-4073	F6	Floor	2	1	E16391104		
					Job Reference (optional)		
Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:13:36 2021 Page 1							

 $ID: J6aSr? qB6etazEy6hKRS \r{k} ZzPTZ\_-NwwK4kBmDh1fXVHKOl8ABsErcm8\_J6jJnbdTCAyLEMT$ 

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

0-1-8

Scale = 1:15.4

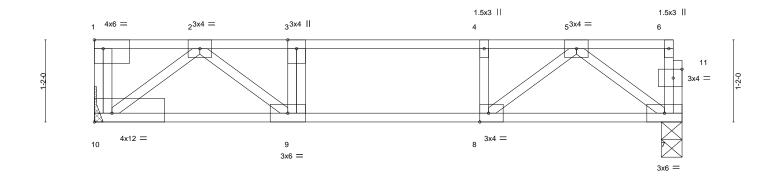


Plate Offsets (X,Y)--[1:Edge,0-1-8], [8:0-1-8,Edge], [10:Edge,0-1-8], [11:0-1-8,0-1-8] LOADING (psf) SPACING-CSI. DEFL. **PLATES GRIP** 2-0-0 (loc) I/defl L/d TCLL 9-10 40.Ó Plate Grip DOL 1.00 TC 0.39 Vert(LL) -0.04 >999 480 MT20 244/190 TCDL Vert(CT) 10.0 Lumber DOL 1.00 ВС 0.27 -0.05 9-10 >999 360 BCLL 0.0 Rep Stress Incr NO WB 0.22 Horz(CT) 0.01 n/a BCDL Code IRC2015/TPI2014 Matrix-S Weight: 43 lb FT = 20%F, 11%E

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

2x4 SP No.3(flat) WFBS

> (size) 10=Mechanical, 7=0-3-8 Max Grav 10=3846(LC 1), 7=440(LC 1)

1-3-0

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-10=-3459/0, 2-3=-821/0, 3-4=-821/0, 4-5=-821/0

**BOT CHORD** 9-10=0/493, 8-9=0/821, 7-8=0/489

**WEBS** 2-10=-619/0, 2-9=0/460, 5-7=-609/0, 5-8=0/469

### NOTES-

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

### LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 7-10=-10, 1-6=-100 Concentrated Loads (lb)

Vert: 1=-3400



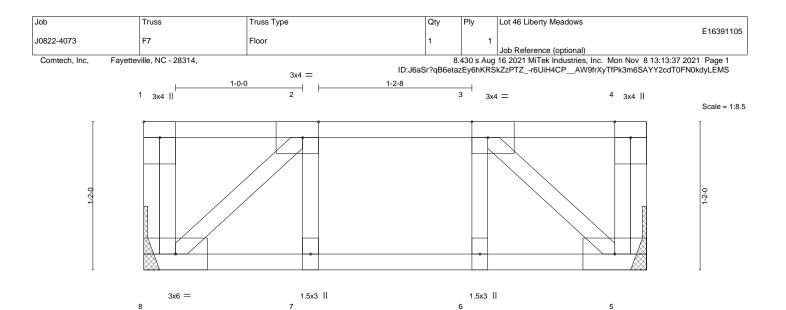
November 9,2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, rerection and bracing of trusses and truss systems, see 

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





3x6 =

Structural wood sheathing directly applied or 3-11-8 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

3-11-8 3-11-8

Plate Offs	Plate Offsets (X,Y) [1:Edge,0-1-8], [2:0-1-8,Edge]											
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	-0.00	7	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.06	Vert(CT)	-0.00	7	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code IRC2015/TF	PI2014	Matri	x-S						Weight: 24 lb	FT = 20%F, 11%E

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SP No.3(flat)

REACTIONS. (size) 8=Mecha

(size) 8=Mechanical, 5=Mechanical Max Grav 8=204(LC 1), 5=204(LC 1)

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

### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

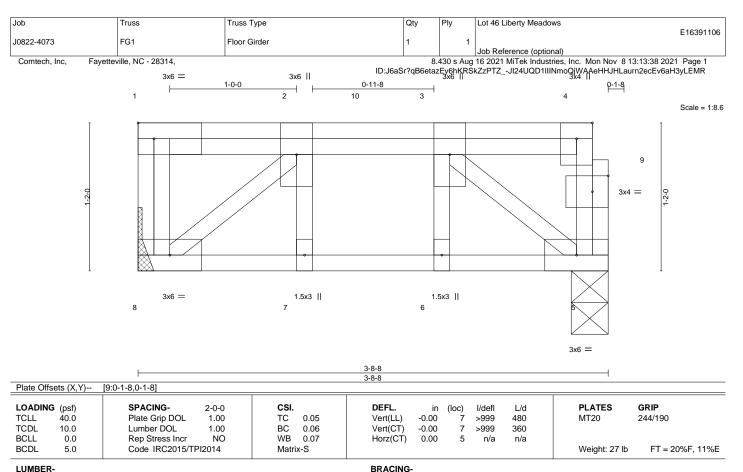


November 9,2021





818 Soundside Road



TOP CHORD

BOT CHORD

LUMBER-TOP CHORD

2x4 SP No.1(flat) 2x4 SP No.1(flat)

BOT CHORD 2x4 SP No.3(flat) WFBS

REACTIONS. (size) 8=Mechanical, 5=0-3-8

Max Grav 8=242(LC 1), 5=236(LC 1)

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

2-8=-294/0, 3-5=-291/0

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 122 lb down at 1-10-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 5-8=-10, 1-4=-100 Concentrated Loads (lb) Vert: 10=-104(F)



Structural wood sheathing directly applied or 3-8-8 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

November 9,2021





Job Truss Truss Type Qty Ply Lot 46 Liberty Meadows F16391107 J0822-4073 FG2 Floor Girder Job Reference (optional) Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:13:38 2021 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-JI24UQD1IIINmoQjWAAeHHJFkarVn1EcEv6aH3yLEMR 3x6 = 3x6 || 1-0-0 0-8-0 Scale = 1:8.6

3x6 =

5

LOADING (psf) SPACING-2-0-0 CSI. DEFL. **PLATES** GRIP in (loc) I/defl L/d Plate Grip DOL TC Vert(LL) 244/190 **TCLL** 40.0 1.00 0.16 -0.01 >999 480 MT20 **TCDL** 10.0 Lumber DOL 1.00 вс 0.21 Vert(CT) -0.01 >999 360 WB **BCLL** 0.0 Rep Stress Incr NO 0.16 Horz(CT) 0.00 5 n/a n/a BCDL Code IRC2015/TPI2014 Weight: 26 lb FT = 20%F, 11%E

3-5-0

1.5x3 II

LUMBER-

**WEBS** 

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

1.5x3 II

TOP CHORD Structural wood sheathing directly applied or 3-5-0 oc purlins,

except end verticals.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=Mechanical, 5=Mechanical

Max Grav 8=596(LC 1), 5=427(LC 1)

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

3x6 =

TOP CHORD 2-3=-528/0

**BOT CHORD** 7-8=0/528, 6-7=0/528, 5-6=0/528 **WEBS** 2-8=-684/0, 3-5=-684/0

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Refer to girder(s) for truss to truss connections.
- Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.
   Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 705 lb down at 1-6-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

Vert: 2=-675(B)

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



November 9,2021

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ANSITPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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

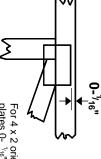


## Symbols

# PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss

ω

O

S

required direction of slots in connector plates This symbol indicates the

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

### **PLATE SIZE**



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

# LATERAL BRACING LOCATION



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

### BEARING



number where bearings occur.

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

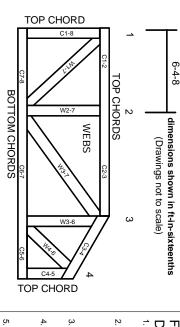
### Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction

DSB-89:

Installing & Bracing of Metal Plate Connected Wood Trusses. Guide to Good Practice for Handling, Building Component Safety Information Design Standard for Bracing.

# **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

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

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

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

# **General Safety Notes**

## Damage or Personal Injury Failure to Follow Could Cause Property

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.
- 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.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the camber for dead load deflection. esponsibility of truss fabricator. General practice is to
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- 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
- Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- 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.