

RE: J0723-3471

Lot 30 Liberty Meadows

**Trenco** 

Truss Name

M1GE

PB

**PBA** 

**PGBE** 

Date

2/15/2023

2/15/2023

2/15/2023

2/15/2023

818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Project Name: J0723-3471

Lot/Block: Model:
Address: Subdivision:
City: State:

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

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

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

This package includes 24 individual, dated Truss Design Drawings and 0 Additional Drawings.

No. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	Seal# 156654210 156654211 156654212 156654213 156654214 156654215 156654216 156654217 156654218 156654219 156654220 156654221 156654222 156654222 156654223 156654224	Truss Name A1 A1-GR A1GE A2 A2-GR A2A-GR A3 A3GE B1 B1GE C1 C1SG C2 C2GE D1 D1SG	Date 2/15/2023 2/15/2023 2/15/2023 2/15/2023 2/15/2023 2/15/2023 2/15/2023 2/15/2023 2/15/2023 2/15/2023 2/15/2023 2/15/2023 2/15/2023 2/15/2023 2/15/2023 2/15/2023 2/15/2023	No. 21 22 23 24	Seal# 156654230 156654231 156654232 156654233
17	156654226	D2	2/15/2023		
18	156654227	G1	2/15/2023		
19	156654228	G1GE	2/15/2023		
20	156654229	M1	2/15/2023		

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, 2023

North Carolina COA: C-0844

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



February 15, 2023

Job Truss Truss Type Qty Lot 30 Liberty Meadows 156654210 ATTIC J0723-3471 Α1 3 Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:03 2023 Page 1 ID:0HpugN1S QSTWxS0z0zGz9z5iCa-RU?yj1QAfdGSWleuQvKts4l4fQ0CwrhtDmH802zkyAc

40-5-8

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

27-28, 27-29

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9.

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

44-11-0

4-5-8

46-2-0 44-5-8 32-6-13 34-7-12 2-1-5 2-0-15 22-5-8 44<sub>1</sub>11-0

1-3-0 Scale = 1:86.3

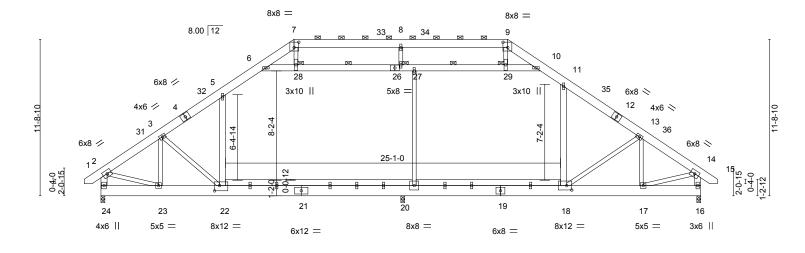


Plate Off	sets (X,Y)	[7:0-4-4,0-4-12], [9:0-4-4,	0-4-12], [18:0	-4-8,0-4-0], [2	22:0-4-8,0-4	-12]					
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.Ó	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.29 20-22	>921	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.40 20-22	>672	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.03 16	n/a	n/a		
BCDL	10.0	Code IRC2015/TF	PI2014	Matri	x-S	Wind(LL)	0.22 18-20	>999	240	Weight: 547 lb	FT = 20%

0-10-4

TOP CHORD

**BOT CHORD** 

**WEBS** 

**JOINTS** 

11-2-4

1 Row at midpt

1 Brace at Jt(s): 27, 28, 29

22-7-4

13-6-0

LUMBER-BRACING-

TOP CHORD 2x8 SP 2400F 2.0E **BOT CHORD** 2x10 SP 2400F 2.0E \*Except\*

4-5-8

22-25,18-25: 2x6 SP No.1 2x4 SP No.2 \*Except\*

WEBS 5-22,11-18,6-26,2-24,14-16,10-26: 2x6 SP No.1

REACTIONS. (size) 24=0-3-8, 16=0-3-8, 20=0-3-8

Max Horz 24=299(LC 11)

Max Grav 24=2234(LC 2), 16=2157(LC 2), 20=1817(LC 18)

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

4-7-12

TOP CHORD 2-3=-2432/199, 3-5=-2785/211, 5-6=-2309/356, 6-7=-1823/473, 7-8=-1566/452, 8-9=-1566/452, 9-10=-1820/476, 10-11=-2262/362, 11-13=-2712/247, 13-14=-2334/222,

2-24=-2097/244, 14-16=-2019/257

**BOT CHORD** 23-24=-224/433, 22-23=-95/2157, 20-22=0/2151, 18-20=0/2151, 17-18=-81/1885 **WEBS** 

5-22=0/730, 11-18=0/576, 6-28=-1169/0, 27-28=-1143/0, 27-29=-1143/0, 10-29=-1175/0,

2-23=-45/1839, 7-28=0/474, 9-29=-5/470, 3-23=-839/74, 3-22=-246/450,

13-18=-244/562, 13-17=-784/101, 14-17=-76/1744

### 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) -0-11-7 to 3-6-7, Interior(1) 3-6-7 to 14-5-8, Exterior(2) 14-5-8 to 20-9-12, Interior(1) 20-9-12 to 30-5-8, Exterior(2) 30-5-8 to 36-9-12, Interior(1) 36-9-12 to 45-10-7 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x6 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Ceiling dead load (10.0 psf) on member(s). 5-6, 10-11, 6-28, 27-28, 27-29, 10-29; Wall dead load (5.0psf) on member(s).5-22, 11-18
- 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 20-22, 18-20
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) Attic room checked for L/360 deflection.



February 15,2023



Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:09 2023 Page 1

40-5-8

2-0-0 oc purlins (6-0-0 max.), except end verticals

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

(Switched from sheeted: Spacing > 2-8-0).

1 Brace at Jt(s): 7, 9, 2, 14, 27, 28, 29

ID:0HpugN1S QSTWxS0z0zGz9z5iCa-GeNDz5VxFT1bED51mARH5L?2Oq2XKaDlcikSEizkyAW 46-2-0 44-5-8

32-6-13 34-7-12 2-1-5 2-0-15 22-5-8 0-5-8 0-5 1-3-0 Scale = 1:86.3

8x8 =8x8 = 8.00 12 10 3x10 || 28 26 29 6x8 / 3x10 II 5x8 3x10 | 6x8 < 12 4x6 🖊 4x6 < 8-2-4 13 3 7-2-4 6-4-14 6x8 / 6x8 < 25-1-0 0-4-0 2-0-15 2 -21 19 20 24 23 22 18 17 16 5x8 || 5x8 = 8x12 = 8x8 = 8x12 = 5x5 = 4x6 || 8x12 = 6x8 =

4-5-8 4-7-12 13-6-0 0-10-4 4-5-8 11-2-4 5-9-12 Plate Offsets (X,Y)-[7:0-4-4,0-4-12], [9:0-4-4,0-4-12], [18:0-4-8,0-4-12], [22:0-4-8,0-4-12], [23:0-3-8,0-2-8] LOADING (psf) SPACING-CSI DEFL. in (loc) I/def L/d **PLATES** GRIP -0.45 20-22 TCLL 20.0 Plate Grip DOL 1.15 TC 0.55 Vert(LL) >598 360 244/190 MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.52 Vert(CT) -0.61 20-22 >441 240 **BCLL** 0.0 Rep Stress Incr NO WB 0.64 Horz(CT) 0.04 16 n/a n/a Code IRC2015/TPI2014 FT = 20% **BCDL** 10.0 Wind(LL) 0.22 18-20 >999 240 Weight: 1094 lb Matrix-S

**BRACING-**

TOP CHORD

**BOT CHORD** 

**JOINTS** 

22-7-4

LUMBER-

TOP CHORD 2x8 SP 2400F 2.0E

**BOT CHORD** 2x10 SP 2400F 2.0E \*Except\* 22-25,18-25: 2x6 SP No.1

2x4 SP No.2 \*Except\*

WEBS

5-22,11-18,6-26,2-24,14-16,10-26: 2x6 SP No.1

REACTIONS. (size) 24=0-3-8, 16=0-3-8, 20=0-3-8

Max Horz 24=-494(LC 6)

Max Grav 24=5742(LC 2), 16=4452(LC 2), 20=3642(LC 14)

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

TOP CHORD  $2-3 = -6103/0, \ 3-5 = -6141/0, \ 5-6 = -4906/0, \ 6-7 = -3604/579, \ 7-8 = -3092/535, \ 8-9 = -3092/535,$ 

9-10=-3620/551, 10-11=-4855/0, 11-13=-5822/0, 13-14=-4736/0, 2-24=-5193/0,

14-16=-4098/0

**BOT CHORD** 23-24=-353/928, 22-23=0/5333, 20-22=0/4674, 18-20=0/4674, 17-18=0/3809,

16-17=0/531

WFBS 5-22=0/2100, 11-18=0/1303, 6-28=-2970/0, 27-28=-2926/0, 27-29=-2926/0,

10-29=-2984/0, 2-23=0/4670, 8-27=-177/256, 7-28=-7/934, 9-29=0/961, 3-23=-1069/342,

3-22=-950/672, 13-18=-374/1539, 13-17=-1906/106, 14-17=0/3485

### NOTES-

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

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

Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 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) Provide adequate drainage to prevent water ponding.
- 6) All plates are 2x6 MT20 unless otherwise indicated.
- 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) Ceiling dead load (10.0 psf) on member(s). 5-6, 10-11, 6-28, 27-28, 27-29, 10-29; Wall dead load (5.0psf) on member(s). 5-22, 11-18
- 10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 20-22, 18-20
- 11) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this

ORTH February 15,2023

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIL-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 chore 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/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 30 Liberty Meadows	
J0723-3471	A1-GR	ATTIC	1			156654211
00720 0471	AT OIL	7.1.10	l	2	Job Reference (optional)	

Fayetteville, NC - 28314, Comtech, Inc.

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:09 2023 Page 2 ID:0HpugN1S QSTWxS0z0zGz9z5iCa-GeNDz5VxFT1bED51mARH5L?2Oq2XKaDlcikSEizkyAW

### NOTES-

- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) 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=-120, 2-5=-120, 5-6=-160, 6-7=-120, 7-9=-120, 9-10=-120, 10-11=-160, 11-14=-120, 14-15=-120, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40 Drag: 5-22=-20, 11-18=-20

2) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-100, 2-5=-100, 5-6=-140, 6-7=-100, 7-9=-100, 9-10=-100, 10-11=-140, 11-14=-100, 14-15=-100, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40 Drag: 5-22=-20, 11-18=-20

3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-40, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-120(F=-40), 16-22=-80, 6-10=-40 Drag: 5-22=-20, 11-18=-20

4) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=5, 2-5=-26, 5-6=-50, 6-7=-26, 7-9=41, 9-10=22, 10-11=-2, 11-14=22, 14-15=8, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24 Horz: 1-2=-29, 2-7=2, 9-14=46, 14-15=32

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

5) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=8, 2-5=22, 5-6=-2, 6-7=22, 7-9=41, 9-10=-26, 10-11=-50, 11-14=-26, 14-15=5, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24 Horz: 1-2=-32, 2-7=-46, 9-14=-2, 14-15=29 Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

6) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-56, 2-5=-69, 5-6=-109, 6-7=-69, 7-9=-2, 9-10=-21, 10-11=-61, 11-14=-21, 14-15=-8, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40 Horz: 1-2=16, 2-7=29, 9-14=19, 14-15=32

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20 7) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-8, 2-5=-21, 5-6=-61, 6-7=-21, 7-9=-2, 9-10=-69, 10-11=-109, 11-14=-69, 14-15=-56, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40 Horz: 1-2=-32, 2-7=-19, 9-14=-29, 14-15=-16

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20 8) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=28, 2-5=41, 5-6=17, 6-7=41, 7-9=17, 9-10=17, 10-11=-7, 11-14=17, 14-15=4, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24 Horz: 1-2=-52, 2-7=-65, 9-14=41, 14-15=28 Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

9) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=4, 2-5=17, 5-6=-7, 6-7=17, 7-9=17, 9-10=41, 10-11=17, 11-14=41, 14-15=28, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24 Horz: 1-2=-28, 2-7=-41, 9-14=65, 14-15=52 Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

10) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=28, 2-5=41, 5-6=17, 6-7=41, 7-9=17, 9-10=17, 10-11=-7, 11-14=17, 14-15=4, 22-24=-64(F=-40), 18-22=-48,

16-18=-24, 6-10=-24

Horz: 1-2=-52, 2-7=-65, 9-14=41, 14-15=28

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

11) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=4, 2-5=17, 5-6=-7, 6-7=17, 7-9=17, 9-10=41, 10-11=17, 11-14=41, 14-15=28, 22-24=-64(F=-40), 18-22=-48,

16-18=-24, 6-10=-24

Horz: 1-2=-28, 2-7=-41, 9-14=65, 14-15=52

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

12) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=12, 2-5=-2, 5-6=-42, 6-7=-2, 7-9=-26, 9-10=-26, 10-11=-66, 11-14=-26, 14-15=-12, 22-24=-80(F=-40), 18-22=-80,

16-18=-40, 6-10=-40

Horz: 1-2=-52, 2-7=-38, 9-14=14, 14-15=28

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

13) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-12, 2-5=-26, 5-6=-66, 6-7=-26, 7-9=-26, 9-10=-2, 10-11=-42, 11-14=-2, 14-15=12, 22-24=-80(F=-40), 18-22=-80, 16-18=-40. 6-10=-40

Horz: 1-2=-28, 2-7=-14, 9-14=38, 14-15=52

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

14) Dead + Attic Floor: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-40, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-240(F=-200),

18-22=-240, 16-18=-40, 6-10=-40

Drag: 5-22=-20, 11-18=-20

15) Dead: Lumber Increase=1.00, Plate Increase=1.00

### Continued on page 3





Job	Truss	Truss Type	Qty	Ply	Lot 30 Liberty Meadows	
J0723-3471	A1-GR	ATTIC	1			156654211
00720 0471	AT OIL	7.1.10	l	2	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:09 2023 Page 3 ID:0HpugN1S QSTWxS0z0zGz9z5iCa-GeNDz5VxFT1bED51mARH5L?2Oq2XKaDlcikSEizkyAW

### LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-40, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-240(F=-200), 18-22=-240, 16-18=-40, 6-10=-40 Drag: 5-22=-20, 11-18=-20

16) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)
Vert: 1-2=-112, 2-5=-122, 5-6=-162, 6-7=-122, 7-9=-71, 9-10=-86, 10-11=-126, 11-14=-86, 14-15=-76, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40

Horz: 1-2=12, 2-7=22, 9-14=14, 14-15=24 Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

17) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-76, 2-5=-86, 5-6=-126, 6-7=-86, 7-9=-71, 9-10=-122, 10-11=-162, 11-14=-122, 14-15=-112, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40 Horz: 1-2=-24, 2-7=-14, 9-14=-22, 14-15=-12

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

18) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=-61, 2-5=-71, 5-6=-111, 6-7=-71, 7-9=-89, 9-10=-89, 10-11=-129, 11-14=-89, 14-15=-79, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40 Horz: 1-2=-39, 2-7=-29, 9-14=11, 14-15=21

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20
19) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-79, 2-5=-89, 5-6=-129, 6-7=-89, 7-9=-89, 9-10=-71, 10-11=-111, 11-14=-71, 14-15=-61, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40 Horz: 1-2=-21, 2-7=-11, 9-14=29, 14-15=39

Horz: 1-2=-21, 2-7=-11, 9-14=29, 14-15=3 Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

20) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-120, 2-5=-120, 5-6=-160, 6-7=-120, 7-9=-120, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40 Drag: 5-22=-20, 11-18=-20

21) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-120, 9-10=-120, 10-11=-160, 11-14=-120, 14-15=-120, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40 Drag: 5-22=-20, 11-18=-20

22) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-100, 2-5=-100, 5-6=-140, 6-7=-100, 7-9=-100, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40 Drag: 5-22=-20, 11-18=-20

23) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-100, 9-10=-100, 10-11=-140, 11-14=-100, 14-15=-100, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40 Drag: 5-22=-20, 11-18=-20

24) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=5, 2-5=-26, 5-6=-50, 6-7=-26, 7-9=41, 9-10=22, 10-11=-2, 11-14=22, 14-15=8, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24 Horz: 1-2=-29, 2-7=2, 9-14=46, 14-15=32

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

25) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=8, 2-5=22, 5-6=-2, 6-7=22, 7-9=41, 9-10=-26, 10-11=-50, 11-14=-26, 14-15=5, 22-24=-64(F=-40), 18-22=-48,

16-18=-24, 6-10=-24

Horz: 1-2=-32, 2-7=-46, 9-14=-2, 14-15=29

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

26) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-56, 2-5=-69, 5-6=-109, 6-7=-69, 7-9=-2, 9-10=-21, 10-11=-61, 11-14=-21, 14-15=-8, 22-24=-80(F=-40),

18-22=-80, 16-18=-40, 6-10=-40

Horz: 1-2=16, 2-7=29, 9-14=19, 14-15=32

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

27) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-8, 2-5=-21, 5-6=-61, 6-7=-21, 7-9=-2, 9-10=-69, 10-11=-109, 11-14=-69, 14-15=-56, 22-24=-80(F=-40),

18-22=-80, 16-18=-40, 6-10=-40

Horz: 1-2=-32, 2-7=-19, 9-14=-29, 14-15=-16

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

28) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=28, 2-5=41, 5-6=17, 6-7=41, 7-9=17, 9-10=17, 10-11=-7, 11-14=17, 14-15=4, 22-24=-64(F=-40), 18-22=-48,

16-18=-24, 6-10=-24

Horz: 1-2=-52, 2-7=-65, 9-14=41, 14-15=28

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

29) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

### Continued on page 4



Job	Truss	Truss Type	Qty	Ply	Lot 30 Liberty Meadows	
10700 0474	44.0D	ATTIO	_			156654211
J0723-3471	A1-GR	ATTIC	1	2	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:09 2023 Page 4 ID:0HpugN1S QSTWxS0z0zGz9z5iCa-GeNDz5VxFT1bED51mARH5L?2Oq2XKaDlcikSEizkyAW

### LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2-4, 2-5=17, 5-6=-7, 6-7=17, 7-9=17, 9-10=41, 10-11=17, 11-14=41, 14-15=28, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24

Horz: 1-2=-28, 2-7=-41, 9-14=65, 14-15=52

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

30) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=28, 2-5=41, 5-6=17, 6-7=41, 7-9=17, 9-10=17, 10-11=-7, 11-14=17, 14-15=4, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24

Horz: 1-2=-52, 2-7=-65, 9-14=41, 14-15=28

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

31) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Horz: 1-2=-28 2-7=-41 9-14=65 14-15=52

Vert: 1-2=4, 2-5=17, 5-6=-7, 6-7=17, 7-9=17, 9-10=41, 10-11=17, 11-14=41, 14-15=28, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

32) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=12, 2-5=-2, 5-6=-42, 6-7=-2, 7-9=-26, 9-10=-26, 10-11=-66, 11-14=-26, 14-15=-12, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40

Horz: 1-2=-52, 2-7=-38, 9-14=14, 14-15=28 Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

33) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-12, 2-5=-26, 5-6=-66, 6-7=-26, 7-9=-26, 9-10=-2, 10-11=-42, 11-14=-2, 14-15=12, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40

Horz: 1-2=-28, 2-7=-14, 9-14=38, 14-15=52 Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

34) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-112, 2-5=-122, 5-6=-162, 6-7=-122, 7-9=-71, 9-10=-86, 10-11=-126, 11-14=-86, 14-15=-76, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40

Horz: 1-2=12, 2-7=22, 9-14=14, 14-15=24 Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

35) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-76, 2-5=-86, 5-6=-126, 6-7=-86, 7-9=-71, 9-10=-122, 10-11=-162, 11-14=-122, 14-15=-112, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40

Horz: 1-2=-24, 2-7=-14, 9-14=-22, 14-15=-12

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

36) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-61, 2-5=-71, 5-6=-111, 6-7=-71, 7-9=-89, 9-10=-89, 10-11=-129, 11-14=-89, 14-15=-79, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40

Horz: 1-2=-39, 2-7=-29, 9-14=11, 14-15=21

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

37) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=-79, 2-5=-89, 5-6=-129, 6-7=-89, 7-9=-89, 9-10=-71, 10-11=-111, 11-14=-71, 14-15=-61, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40

Horz: 1-2=-21, 2-7=-11, 9-14=29, 14-15=39 Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

Job Truss Truss Type Qty Lot 30 Liberty Meadows 156654212 J0723-3471 A1GE **GABLE** Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:06 2023 Page 1 ID:0HpugN1S QSTWxS0z0zGz9z5iCa-r3h4L3T3yYf0NIMS51uaUjNbtd267DKJvkVodNzkyAZ

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

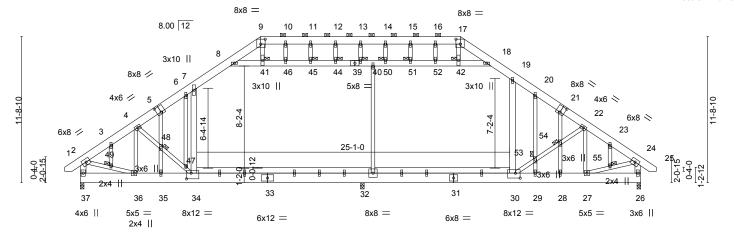
except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 9-17.

1 Brace at Jt(s): 40, 41, 42, 44, 45, 48, 49, 50, 51, 53, 54, 55

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

46-2-0 44-5-8 44-11-0 32-6-13 34-7-12 2-1-5 2-0-15 22-5-8 0-5-8 1-3-0

Scale = 1:92.3



	4-5-8 9-1-4 4-5-8 4-7-12	22-7-4 13-6-0	23-5 <sub>7</sub> 8 0-10-4	34-7-12 11-2-4	40-5-8 5-9-12	44-11-0 4-5-8	
Plate Offsets (X,Y)	[5:0-4-0,0-6-0], [9:0-4-4,0-4-12], [17:0-4	-4,0-4-12], [21:0-4-0,0-6-0	0], [30:0-4-8,0-4-1	2], [34:0-4-8,0-5-8]			
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.31 BC 0.44 WB 0.58 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in (loc) I/defl -0.28 32-34 >956 -0.38 32-34 >699 0.03 26 n/a 0.27 30-32 >983	L/d 360 240 n/a 240	PLATES MT20 Weight: 596 lb	<b>GRIP</b> 244/190 FT = 20%

**BOT CHORD** 

**JOINTS** 

LUMBER-BRACING-TOP CHORD

TOP CHORD 2x8 SP 2400F 2.0E **BOT CHORD** 2x10 SP 2400F 2.0E \*Except\*

34-38,30-38: 2x6 SP No.1

2x4 SP No.2 \*Except\* WEBS

7-34,19-30,8-39,2-37,24-26,18-39: 2x6 SP No.1

2x4 SP No.2 **OTHERS** 

REACTIONS. (size) 37=0-3-8, 26=0-3-8, 32=0-3-8

Max Horz 37=374(LC 11)

Max Uplift 37=-89(LC 12), 26=-93(LC 13)

Max Grav 37=2252(LC 2), 26=2176(LC 2), 32=1780(LC 18)

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

TOP CHORD 2-3=-2532/306, 3-4=-2381/316, 4-5=-2664/309, 5-6=-2869/322, 6-7=-2827/345, 7-8=-2332/478, 8-9=-1898/615, 9-10=-1650/569, 10-11=-1645/569, 11-12=-1645/569,

12-13=-1645/569, 13-14=-1645/569, 14-15=-1645/569, 15-16=-1645/569,

16-17=-1650/569, 17-18=-1891/609, 18-19=-2282/478, 19-20=-2752/386,

20-21=-2663/348, 21-22=-2648/311, 22-23=-2281/345, 23-24=-2426/336, 2-37=-2145/338,

24-26=-2065/361 36-37=-303/527, 35-36=-243/2160, 34-35=-243/2160, 32-34=-45/2177, 30-32=-45/2177,

29-30=-180/1906, 28-29=-180/1906, 27-28=-180/1906, 26-27=-38/298

7-34=0/974, 19-30=0/812, 8-41=-1224/52, 41-46=-1198/60, 45-46=-1198/60,

44-45=-1198/60, 40-44=-1198/60, 40-50=-1198/60, 50-51=-1198/60, 51-52=-1198/60,

42-52=-1198/60, 18-42=-1237/67, 2-49=-122/1773, 36-49=-125/1830, 9-41=-206/679, 17-42=-227/667, 4-36=-534/188, 4-48=-346/496, 47-48=-344/471, 34-47=-419/490,

30-53=-376/597, 53-54=-341/556, 22-54=-356/585, 22-27=-632/181, 27-55=-153/1735,

24-55=-149/1682, 10-46=-277/144, 5-48=-549/9, 35-48=-538/7, 16-52=-270/156,

20-53=-306/47, 29-53=-338/31

### NOTES-

BOT CHORD

WEBS

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; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x6 MT20 unless otherwise indicated
- 6) Gable 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.

Continued on page 2



February 15,2023

Job	Truss	Truss Type	Qty	Ply	Lot 30 Liberty Meadows	
J0723-3471	A1GE	GABLE	1	1		156654212
30723-3471	AIGE	GABLE	'		Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:07 2023 Page 2 ID:0HpugN1S QSTWxS0z0zGz9z5iCa-JFFSZPThjrnt vxfflPp0wwmd1OLsgZS8OFL9qzkyAY

### NOTES.

- 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) Ceiling dead load (10.0 psf) on member(s). 7-8, 18-19, 8-41, 41-46, 45-46, 44-45, 40-44, 40-50, 50-51, 51-52, 42-52, 18-42; Wall dead load (5.0psf) on member(s).7-34, 19-30
- 10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 32-34, 30-32
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 37, 26.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Attic room checked for L/360 deflection.

Job Truss Truss Type Qty Lot 30 Liberty Meadows 156654213 ATTIC J0723-3471 A2 Job Reference (optional)

22-5-8

Comtech, Inc, Fayetteville, NC - 28314,

10-7-0

12-4-3 14-5-8 1-9-3 2-1-5

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:11 2023 Page 1

ID:0HpugN1S QSTWxS0z0zGz9z5iCa-C0UzOnWBm4HJTWFQuaUlAm5TQeljoTf230DZJbzkyAU 46-2-0 44-5-8 32-6-13 34-7-12 2-1-5 2-0-15 44<sub>1</sub>11-0

1-3-0 Scale = 1:86.3

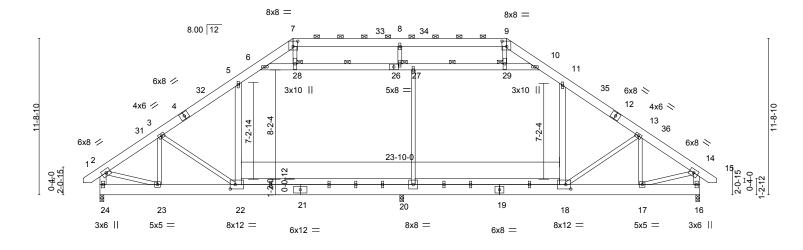


Plate Offset	ts (X,Y)	[7:0-4-4,0-4-12], [9:0-4-4,	0-4-12], [18:0-	-4-8,0-4-0], [	22:0-4-8,0-4	-0]					
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL :	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.23 20-22	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.29 20-22	>916	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.03 16	n/a	n/a		
BCDL	10.0	Code IRC2015/TF	PI2014	Matri	x-S	Wind(LL)	0.22 20-22	>999	240	Weight: 548 lb	FT = 20%

0-10-4

12-0-4

LUMBER-

TOP CHORD 2x8 SP 2400F 2.0E **BOT CHORD** 

2x10 SP 2400F 2.0E \*Except\* 22-25,18-25: 2x6 SP No.1

4-5-8

2x4 SP No.2 \*Except\* WEBS

5-22,11-18,6-26,2-24,14-16,10-26: 2x6 SP No.1

BRACING-TOP CHORD

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

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9.

40-5-8

5-9-12

4-5-8

**BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. **WEBS** 1 Row at midpt 27-28, 27-29

1 Brace at Jt(s): 27, 28, 29 **JOINTS** 

11-2-4

REACTIONS.

(size) 24=0-3-8, 16=0-3-8, 20=0-3-8

Max Horz 24=-247(LC 10)

Max Grav 24=2179(LC 2), 16=2174(LC 2), 20=1721(LC 18)

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

TOP CHORD 2-3=-2370/206, 3-5=-2728/233, 5-6=-2261/352, 6-7=-1845/460, 7-8=-1591/434,

8-9=-1591/434, 9-10=-1847/458, 10-11=-2267/352, 11-13=-2726/233, 13-14=-2360/208, 2-24=-2051/249, 14-16=-2043/251

**BOT CHORD** 23-24=-183/405, 22-23=-76/2093, 20-22=0/2154, 18-20=0/2154, 17-18=-91/1909 5-22=0/606, 11-18=0/596, 6-28=-1081/0, 27-28=-1051/0, 27-29=-1051/0, 10-29=-1084/0, **WEBS** 

2-23=-84/1792, 7-28=-1/467, 9-29=0/471, 3-23=-752/71, 3-22=-223/510,

13-18=-223/526, 13-17=-766/75, 14-17=-86/1776

### 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) -0-11-7 to 3-6-7, Interior(1) 3-6-7 to 14-5-8, Exterior(2) 14-5-8 to 20-9-12, Interior(1) 20-9-12 to 30-5-8, Exterior(2) 30-5-8 to 36-9-12, Interior(1) 36-9-12 to 45-10-7 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding
- 4) All plates are 2x6 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Ceiling dead load (10.0 psf) on member(s). 5-6, 10-11, 6-28, 27-28, 27-29, 10-29; Wall dead load (5.0psf) on member(s).5-22, 11-18
- 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 20-22, 18-20
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) Attic room checked for L/360 deflection.



February 15,2023



Job Truss Truss Type Qty Ply Lot 30 Liberty Meadows 156654214 J0723-3471 A2-GR ATTIC Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:17 2023 Page 1 ID:0HpugN1S QSTWxS0z0zGz9z5iCa-1AsEfqbyMw1SBRiaEra9Q1KRt3oACAkwRxgtWFzkyAO

40-5-8

2-0-0 oc purlins (6-0-0 max.), except end verticals

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

(Switched from sheeted: Spacing > 2-8-0).

1 Brace at Jt(s): 7, 9, 2, 14, 27, 28, 29

44-11-0

46-2-0 44-11-0 0-5-8 10-7-0 12-4-3 14-5-8 1-9-3 2-1-5 32-6-13 34-7-12 2-1-5 2-0-15 44-5-8 22-5-8 1-3-0 Scale = 1:86.3

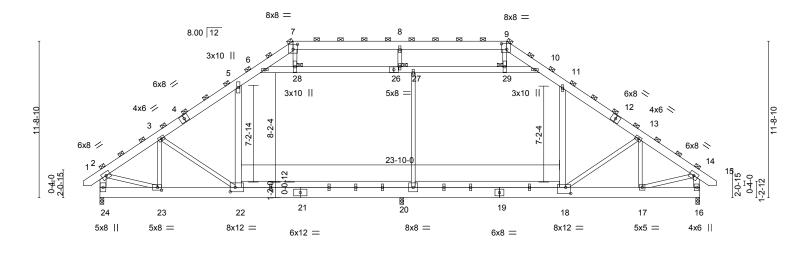


Plate Off	sets (X,Y)	[7:0-4-0,0-4-8], [9:0-4-12	,0-5-0], [18:0-	4-8,0-5-8], [22	2:0-4-8,0-4-0	0], [23:0-3-8,0-2-8]					
LOADIN	G (psf)	SPACING-	4-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.41 20-22	>652	360	MT20	244/190
ΓCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.54 20-22	>496	240		
3CLL	0.0 *	Rep Stress Incr	NO	WB	0.67	Horz(CT)	0.04 16	n/a	n/a		
BCDL	10.0	Code IRC2015/TI	PI2014	Matri	(-S	Wind(LL)	0.22 20-22	>999	240	Weight: 1095 lb	FT = 20%

23-5<sub>7</sub>8

TOP CHORD

**BOT CHORD** 

**JOINTS** 

BRACING-LUMBER-

2x8 SP 2400F 2.0E TOP CHORD **BOT CHORD** 2x10 SP 2400F 2.0E \*Except\*

4-5-8

22-25,18-25: 2x6 SP No.1 2x4 SP No.2 \*Except\*

WEBS 5-22,11-18,6-26,2-24,14-16,10-26: 2x6 SP No.1

REACTIONS. (size) 24=0-3-8, 16=0-3-8, 20=0-3-8

Max Horz 24=-494(LC 6)

Max Grav 24=5786(LC 2), 16=4525(LC 2), 20=3460(LC 14)

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

10-7-0

TOP CHORD 2-3=-6237/0, 3-5=-6111/0, 5-6=-4873/0, 6-7=-3651/530, 7-8=-3153/463, 8-9=-3153/464,

9-10=-3689/494, 10-11=-4949/0, 11-13=-5951/0, 13-14=-4815/0, 2-24=-5318/0, 14-16=-4167/0

**BOT CHORD** 23-24=-339/916, 22-23=0/5449, 20-22=0/4769, 18-20=0/4769, 17-18=0/3877, 16-17=0/538

5-22=0/1895, 11-18=0/1379, 6-28=-2843/0, 27-28=-2804/0, 27-29=-2804/0,

10-29=-2865/0, 2-23=0/4804, 8-27=-176/258, 7-28=-23/912, 9-29=0/980, 3-23=-931/369,

3-22=-919/681, 13-18=-321/1550, 13-17=-1956/44, 14-17=0/3556

### NOTES-

WFBS

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

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

Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 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) Provide adequate drainage to prevent water ponding.
- 6) All plates are 2x6 MT20 unless otherwise indicated.
- 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) Ceiling dead load (10.0 psf) on member(s). 5-6, 10-11, 6-28, 27-28, 27-29, 10-29; Wall dead load (5.0psf) on member(s).5-22, 11-18
- 10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 20-22, 18-20
- 11) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this



February 15,2023

Edenton, NC 27932

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Lot 30 Liberty Meadows	
J0723-3471	A2-GR	ATTIC	1			156654214
00.20 0	7.2 3.3	76		2	Job Reference (optional)	

Fayetteville, NC - 28314, Comtech, Inc.

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:17 2023 Page 2 ID:0HpugN1S QSTWxS0z0zGz9z5iCa-1AsEfqbyMw1SBRiaEra9Q1KRt3oACAkwRxgtWFzkyAO

### NOTES-

- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) 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=-120, 2-5=-120, 5-6=-160, 6-7=-120, 7-9=-120, 9-10=-120, 10-11=-160, 11-14=-120, 14-15=-120, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40 Drag: 5-22=-20, 11-18=-20

2) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-100, 2-5=-100, 5-6=-140, 6-7=-100, 7-9=-100, 9-10=-100, 10-11=-140, 11-14=-100, 14-15=-100, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40 Drag: 5-22=-20, 11-18=-20

3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-40, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-120(F=-40), 16-22=-80, 6-10=-40 Drag: 5-22=-20, 11-18=-20

4) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=5, 2-5=-26, 5-6=-50, 6-7=-26, 7-9=41, 9-10=22, 10-11=-2, 11-14=22, 14-15=8, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24 Horz: 1-2=-29, 2-7=2, 9-14=46, 14-15=32

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

5) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=8, 2-5=22, 5-6=-2, 6-7=22, 7-9=41, 9-10=-26, 10-11=-50, 11-14=-26, 14-15=5, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24 Horz: 1-2=-32, 2-7=-46, 9-14=-2, 14-15=29 Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

6) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-56, 2-5=-69, 5-6=-109, 6-7=-69, 7-9=-2, 9-10=-21, 10-11=-61, 11-14=-21, 14-15=-8, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40 Horz: 1-2=16, 2-7=29, 9-14=19, 14-15=32

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

7) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-8, 2-5=-21, 5-6=-61, 6-7=-21, 7-9=-2, 9-10=-69, 10-11=-109, 11-14=-69, 14-15=-56, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40 Horz: 1-2=-32, 2-7=-19, 9-14=-29, 14-15=-16

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20 8) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=28, 2-5=41, 5-6=17, 6-7=41, 7-9=17, 9-10=17, 10-11=-7, 11-14=17, 14-15=4, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24 Horz: 1-2=-52, 2-7=-65, 9-14=41, 14-15=28

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

9) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=4, 2-5=17, 5-6=-7, 6-7=17, 7-9=17, 9-10=41, 10-11=17, 11-14=41, 14-15=28, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24 Horz: 1-2=-28, 2-7=-41, 9-14=65, 14-15=52 Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

10) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=28, 2-5=41, 5-6=17, 6-7=41, 7-9=17, 9-10=17, 10-11=-7, 11-14=17, 14-15=4, 22-24=-64(F=-40), 18-22=-48,

16-18=-24, 6-10=-24

Horz: 1-2=-52, 2-7=-65, 9-14=41, 14-15=28

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

11) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=4, 2-5=17, 5-6=-7, 6-7=17, 7-9=17, 9-10=41, 10-11=17, 11-14=41, 14-15=28, 22-24=-64(F=-40), 18-22=-48,

16-18=-24, 6-10=-24

Horz: 1-2=-28, 2-7=-41, 9-14=65, 14-15=52

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

12) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=12, 2-5=-2, 5-6=-42, 6-7=-2, 7-9=-26, 9-10=-26, 10-11=-66, 11-14=-26, 14-15=-12, 22-24=-80(F=-40), 18-22=-80,

16-18=-40, 6-10=-40

Horz: 1-2=-52, 2-7=-38, 9-14=14, 14-15=28

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

13) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-12, 2-5=-26, 5-6=-66, 6-7=-26, 7-9=-26, 9-10=-2, 10-11=-42, 11-14=-2, 14-15=12, 22-24=-80(F=-40), 18-22=-80,

16-18=-40. 6-10=-40

Horz: 1-2=-28, 2-7=-14, 9-14=38, 14-15=52

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

14) Dead + Attic Floor: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-40, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-240(F=-200),

18-22=-240, 16-18=-40, 6-10=-40

Drag: 5-22=-20, 11-18=-20

15) Dead: Lumber Increase=1.00, Plate Increase=1.00

### Continued on page 3

👠 WARNING - 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 30 Liberty Meadows	
J0723-3471	A2-GR	ATTIC	1			156654214
00720 0471	7.E OIT	7.1.10	l	2	Job Reference (optional)	

Fayetteville, NC - 28314, Comtech, Inc.

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:17 2023 Page 3 ID:0HpugN1S QSTWxS0z0zGz9z5iCa-1AsEfqbyMw1SBRiaEra9Q1KRt3oACAkwRxgtWFzkyAO

### LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-40, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-240(F=-200), 18-22=-240, 16-18=-40, 6-10=-40 Drag: 5-22=-20, 11-18=-20

16) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=-112, 2-5=-122, 5-6=-162, 6-7=-122, 7-9=-71, 9-10=-86, 10-11=-126, 11-14=-86, 14-15=-76, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40

Horz: 1-2=12, 2-7=22, 9-14=14, 14-15=24 Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

17) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-76, 2-5=-86, 5-6=-126, 6-7=-86, 7-9=-71, 9-10=-122, 10-11=-162, 11-14=-122, 14-15=-112, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40 Horz: 1-2=-24, 2-7=-14, 9-14=-22, 14-15=-12

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

18) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-61, 2-5=-71, 5-6=-111, 6-7=-71, 7-9=-89, 9-10=-89, 10-11=-129, 11-14=-89, 14-15=-79, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40 Horz: 1-2=-39, 2-7=-29, 9-14=11, 14-15=21

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

19) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=-79, 2-5=-89, 5-6=-129, 6-7=-89, 7-9=-89, 9-10=-71, 10-11=-111, 11-14=-71, 14-15=-61, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40 Horz: 1-2=-21, 2-7=-11, 9-14=29, 14-15=39

Drag: 7-8=-0 8-9=0 5-22=-20 11-18=-20

20) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-120, 2-5=-120, 5-6=-160, 6-7=-120, 7-9=-120, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40 Drag: 5-22=-20, 11-18=-20

21) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-120, 9-10=-120, 10-11=-160, 11-14=-120, 14-15=-120, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40 Drag: 5-22=-20, 11-18=-20

22) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-100, 2-5=-100, 5-6=-140, 6-7=-100, 7-9=-100, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40 Drag: 5-22=-20, 11-18=-20

23) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-100, 9-10=-100, 10-11=-140, 11-14=-100, 14-15=-100, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40 Drag: 5-22=-20, 11-18=-20

24) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=5, 2-5=-26, 5-6=-50, 6-7=-26, 7-9=41, 9-10=22, 10-11=-2, 11-14=22, 14-15=8, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24 Horz: 1-2=-29, 2-7=2, 9-14=46, 14-15=32

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

25) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=8, 2-5=22, 5-6=-2, 6-7=22, 7-9=41, 9-10=-26, 10-11=-50, 11-14=-26, 14-15=5, 22-24=-64(F=-40), 18-22=-48,

16-18=-24, 6-10=-24

Horz: 1-2=-32, 2-7=-46, 9-14=-2, 14-15=29

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

26) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-56, 2-5=-69, 5-6=-109, 6-7=-69, 7-9=-2, 9-10=-21, 10-11=-61, 11-14=-21, 14-15=-8, 22-24=-80(F=-40),

18-22=-80, 16-18=-40, 6-10=-40

Horz: 1-2=16, 2-7=29, 9-14=19, 14-15=32

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

27) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-8, 2-5=-21, 5-6=-61, 6-7=-21, 7-9=-2, 9-10=-69, 10-11=-109, 11-14=-69, 14-15=-56, 22-24=-80(F=-40),

18-22=-80, 16-18=-40, 6-10=-40

Horz: 1-2=-32, 2-7=-19, 9-14=-29, 14-15=-16

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

28) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=28, 2-5=41, 5-6=17, 6-7=41, 7-9=17, 9-10=17, 10-11=-7, 11-14=17, 14-15=4, 22-24=-64(F=-40), 18-22=-48,

16-18=-24, 6-10=-24

Horz: 1-2=-52, 2-7=-65, 9-14=41, 14-15=28

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

29) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

### Continued on page 4



Job	Truss	Truss Type	Qty	Ply	Lot 30 Liberty Meadows	
J0723-3471	A2-GR	ATTIC	1	_		156654214
30723-3471	AZ-GR	ATTIC	'	2	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:17 2023 Page 4 ID:0HpugN1S QSTWxS0z0zGz9z5iCa-1AsEfqbyMw1SBRiaEra9Q1KRt3oACAkwRxgtWFzkyAO

### LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2-4, 2-5=17, 5-6=-7, 6-7=17, 7-9=17, 9-10=41, 10-11=17, 11-14=41, 14-15=28, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24

Horz: 1-2=-28, 2-7=-41, 9-14=65, 14-15=52

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

30) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=28, 2-5=41, 5-6=17, 6-7=41, 7-9=17, 9-10=17, 10-11=-7, 11-14=17, 14-15=4, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24

Horz: 1-2=-52, 2-7=-65, 9-14=41, 14-15=28

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

31) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=4, 2-5=17, 5-6=-7, 6-7=17, 7-9=17, 9-10=41, 10-11=17, 11-14=41, 14-15=28, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24

Horz: 1-2=-28 2-7=-41 9-14=65 14-15=52 Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

32) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=12, 2-5=-2, 5-6=-42, 6-7=-2, 7-9=-26, 9-10=-26, 10-11=-66, 11-14=-26, 14-15=-12, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40

Horz: 1-2=-52, 2-7=-38, 9-14=14, 14-15=28

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

33) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-12, 2-5=-26, 5-6=-66, 6-7=-26, 7-9=-26, 9-10=-2, 10-11=-42, 11-14=-2, 14-15=12, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40

Horz: 1-2=-28, 2-7=-14, 9-14=38, 14-15=52

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

34) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=-112, 2-5=-122, 5-6=-162, 6-7=-122, 7-9=-71, 9-10=-86, 10-11=-126, 11-14=-86, 14-15=-76, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40

Horz: 1-2=12, 2-7=22, 9-14=14, 14-15=24

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

35) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=-76, 2-5=-86, 5-6=-126, 6-7=-86, 7-9=-71, 9-10=-122, 10-11=-162, 11-14=-122, 14-15=-112, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40

Horz: 1-2=-24, 2-7=-14, 9-14=-22, 14-15=-12

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

36) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=-61, 2-5=-71, 5-6=-111, 6-7=-71, 7-9=-89, 9-10=-89, 10-11=-129, 11-14=-89, 14-15=-79, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40

Horz: 1-2=-39, 2-7=-29, 9-14=11, 14-15=21

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

37) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=-79, 2-5=-89, 5-6=-129, 6-7=-89, 7-9=-89, 9-10=-71, 10-11=-111, 11-14=-71, 14-15=-61, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40

Horz: 1-2=-21, 2-7=-11, 9-14=29, 14-15=39

Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

Job Truss Truss Type Qty Ply Lot 30 Liberty Meadows 156654215 ATTIC J0723-3471 A2A-GR

Fayetteville, NC - 28314, Comtech, Inc.

Job Reference (optional)
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:15 2023 Page 1 ID:0HpugN1S QSTWxS0z0zGz9z5iCa-4okUE8aiqJnly8YB7QYhLcF7GF7JkJNe dBnSMzkyAQ

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

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9.

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

1 Brace at Jt(s): 27, 28, 29

46-2-0 44-5-8 10-7-0 12-4-3 14-5-8 1-9-3 2-1-5 32-6-13 34-7-12 2-1-5 2-0-15 22-5-8 44-11-0 0-5-8 0-5 1-3-0 Scale = 1:86.3

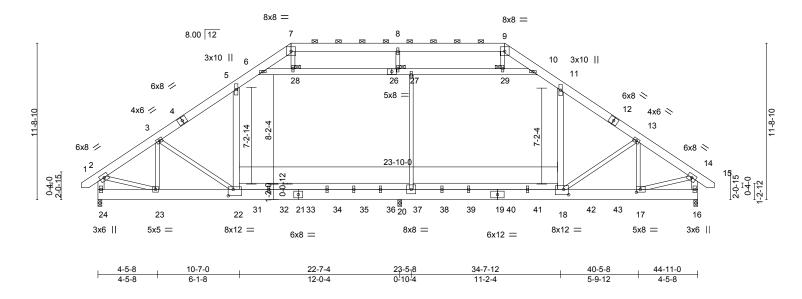


Plate Off	Plate Offsets (X,Y) [17:0-3-8,0-2-8], [18:0-4-8,0-4-12], [22:0-4-8,0-5-12]											
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.ó	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.21 1	<b>8-20</b>	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.30 1	8-20	>876	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.53	Horz(CT)	0.03	16	n/a	n/a		
BCDL	10.0	Code IRC2015/TI	PI2014	Matri	x-S	Wind(LL)	0.07 2	0-22	>999	240	Weight: 1643 lb	FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

**JOINTS** 

LUMBER-

TOP CHORD 2x8 SP 2400F 2.0E **BOT CHORD** 2x10 SP 2400F 2.0E \*Except\*

22-25.18-25: 2x6 SP No.1 WEBS 2x4 SP No.2 \*Except\*

5-22,11-18,6-26,2-24,14-16,10-26: 2x6 SP No.1

REACTIONS. (size) 24=0-3-8, 16=0-3-8, 20=0-3-8

Max Horz 24=-247(LC 6)

Max Grav 24=4333(LC 2), 16=6344(LC 14), 20=4983(LC 14)

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

2-3=-4887/0, 3-5=-6016/0, 5-6=-4428/0, 6-7=-1709/246, 7-8=-1386/218, 8-9=-1386/218,

9-10=-1680/244, 10-11=-4391/0, 11-13=-6162/0, 13-14=-7218/0, 2-24=-4091/0,

14-16=-5915/0

23-24=-183/485, 22-23=-31/4002, 20-22=0/4845, 18-20=0/4845, 17-18=0/5997, BOT CHORD 16-17=0/667

**WEBS** 5-22=0/2848, 11-18=0/3199, 6-28=-5018/0, 27-28=-4980/0, 27-29=-4980/0,

 $10-29 = -5005/0, \ 2-23 = 0/3734, \ 7-28 = -1/563, \ 9-29 = 0/470, \ 3-23 = -1566/71, \ 3-22 = -223/1121$ 

13-18=-1429/457, 13-17=-766/946, 14-17=0/5642

### NOTES-

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

Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x10 - 4 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) Provide adequate drainage to prevent water ponding.

6) All plates are 2x6 MT20 unless otherwise indicated.



February 15,2023

### Continued on page 2



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

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 chore members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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



Job	Truss	Truss Type	Qty	Ply	Lot 30 Liberty Meadows	.=
J0723-3471	A2A-GR	ATTIC	1	3	Job Reference (optional)	156654215

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:15 2023 Page 2 ID:0HpugN1S\_QSTWxS0z0zGz9z5iCa-4okUE8aiqJnly8YB7QYhLcF7GF7JkJNe\_dBnSMzkyAQ

### NOTES-

- 7) 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) 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) Left); #21 Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left); 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) 2nd Parallel); #36 Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left; #37 Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right; #38 Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left; #39 Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right; #40 Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel; #41 Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel; #42 Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #43 Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel; #44 Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel; #45 Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel; #46 Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left); #47 Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right); #48 Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right); 1st Parallel); #49 Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel).
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members
- 10) Ceiling dead load (10.0 psf) on member(s). 5-6, 10-11, 6-28, 27-28, 27-29, 10-29; Wall dead load (5.0psf) on member(s).5-22, 11-18
- 11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 20-22, 18-20
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2488 lb down at 10-4-12, 142 lb down and 119 lb up at 11-9-4, 142 lb down and 119 lb up at 13-9-4, 142 lb down and 119 lb up at 15-9-4, 142 lb down and 119 lb up at 17-9-4, 142 lb down and 119 lb up at 19-9-4, 142 lb down and 119 lb up at 21-9-4, 899 lb down at 23-9-4, 899 lb down at 25-9-4, 899 lb down at 25-9-4, 899 lb down at 27-9-4, 243 lb down at 30-9-4, 243 lb d at 34-9-4, 243 lb down at 36-9-4, and 243 lb down at 38-9-4, and 3158 lb down at 40-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others
- 14) 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, 2-5=-60, 5-6=-80, 6-7=-60, 7-9=-60, 9-10=-60, 10-11=-80, 11-14=-60, 14-15=-60, 22-24=-20, 18-22=-40, 16-18=-20, 6-10=-20

Drag: 5-22=-10, 11-18=-10

Concentrated Loads (lb)

Vert: 22=-767(B) 18=-40(B) 19=-40(B) 17=-1083(B) 37=-231(B) 38=-231(B) 39=-231(B) 40=-40(B) 41=-40(B) 42=-40(B) 43=-40(B)

Job Truss Truss Type Qty Ply Lot 30 Liberty Meadows 156654216 J0723-3471 A3 MONOPITCH 2

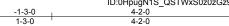
Fayetteville, NC - 28314, Comtech, Inc.

| Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:19 2023 Page 1 ID:0HpugN1S QSTWxS0z0zGz9z5iCa-zZz?4WdCuXHAQlsyMGddVSQs2saCgExDvF9 b7zkyAM

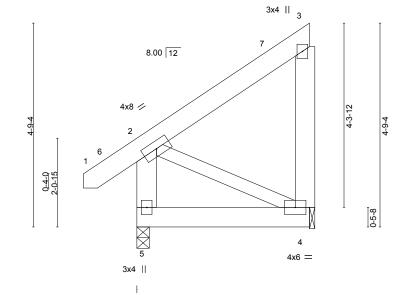
Structural wood sheathing directly applied or 4-2-0 oc purlins,

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

except end verticals.



Scale = 1:27.0



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	0.09	Vert(LL)	-0.00	4-5	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TP	12014	Matri	x-P	Wind(LL)	0.00	5	****	240	Weight: 42 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** 

2-4: 2x4 SP No.2

REACTIONS. (size) 5=0-3-8, 4=0-1-8

Max Horz 5=106(LC 9) Max Uplift 4=-81(LC 12)

Max Grav 5=241(LC 1), 4=167(LC 19)

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

### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-1 to 3-3-12, Interior(1) 3-3-12 to 3-11-0 zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.



Job Truss Truss Type Qty Ply Lot 30 Liberty Meadows 156654217 J0723-3471 A3GE **GABLE** 

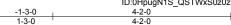
Fayetteville, NC - 28314, Comtech, Inc.

Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:20 2023 Page 1 ID:0HpugN1S QSTWxS0z0zGz9z5iCa-RIXNHsdrfrP12vR9vz8s2gy2SGwZPhGN7vuY7ZzkyAL

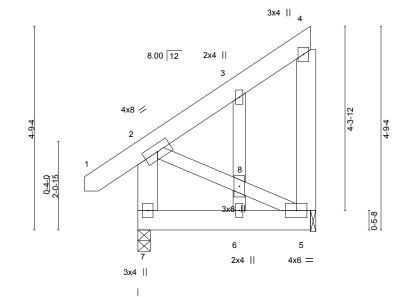
Structural wood sheathing directly applied or 4-2-0 oc purlins,

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

except end verticals.



Scale = 1:27.0



LOADING (psf	f)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	-0.00	6	>999	360	MT20	244/190
TCDL 10.0	0	Lumber DOL	1.15	BC	0.04	Vert(CT	-0.00	6	>999	240		
BCLL 0.0	0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT	-0.00	5	n/a	n/a		
BCDL 10.0	0	Code IRC2015/TF	PI2014	Matri	x-S	Wind(LL	0.00	6	>999	240	Weight: 46 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

2-5: 2x4 SP No.2

**OTHERS** 2x4 SP No.2

REACTIONS. (size) 7=0-3-8, 5=0-1-8

Max Horz 7=150(LC 12) Max Uplift 5=-139(LC 12)

Max Grav 7=241(LC 1), 5=165(LC 19)

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

### NOTES-

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



February 15,2023



Job Truss Truss Type Qty Ply Lot 30 Liberty Meadows 156654218 J0723-3471 **B1 ROOF SPECIAL** Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:21 2023 Page 1 Fayetteville, NC - 28314, Comtech, Inc. ID:0HpugN1S QSTWxS0z0zGz9z5iCa-vx5IVBeTQ9Yug30LThf5atV5Mg8B81pWMZe5f0zkyAK 30-6-0 31-9-0 1-3-0 18-8-8 25-0-0 8-2-0 3-5-8 6-3-8 5-6-0

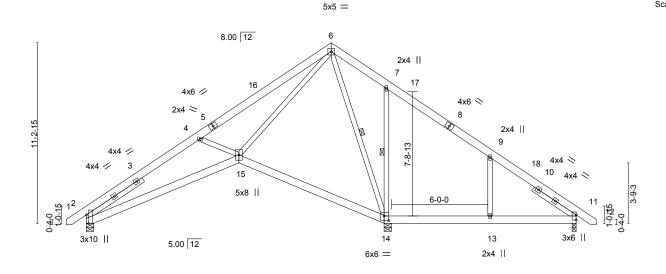


Plate Offsets (X,Y)	Plate Offsets (X,Y) [2:0-6-5,Edge], [14:0-3-8,0-3-8]											
LOADING (psf) TCLL 20.0 TCDL 10.0	SPACING-         2-0-0           Plate Grip DOL         1.15           Lumber DOL         1.15	CSI. TC 0.55 BC 0.53	DEFL. in (loc) I/defl L/d Vert(LL) -0.25 13-14 >574 360 Vert(CT) -0.42 13-14 >338 240	PLATES         GRIP           MT20         244/190								
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2015/TPI2014	BC 0.53 WB 0.47 Matrix-S	Vert(CT) -0.42 13-14 >338 240 Horz(CT) 0.09 14 n/a n/a Wind(LL) 0.32 13-14 >451 240	Weight: 230 lb FT = 20%								

BRACING-

TOP CHORD

**BOT CHORD** 

**WEBS** 

18<sub>T</sub>9-4

0-2-12

25-0-0

6-2-12

10-0-0 oc bracing: 2-15.

1 Row at midpt

30-6-0

5-6-0

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

7-14, 6-14

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

LUMBER-

REACTIONS.

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

Left 2x4 SP No.2 4-3-8, Right 2x4 SP No.2 3-2-0 SLIDER

(size) 2=0-5-8, 14=0-5-8, 11=0-3-0

Max Horz 2=-262(LC 10)

Max Uplift 2=-95(LC 13), 14=-71(LC 12), 11=-375(LC 8) Max Grav 2=727(LC 1), 14=1553(LC 19), 11=631(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-4=-1447/716, 4-6=-1074/633, 6-7=-419/769, 7-9=-258/492, 9-11=-438/453 2-15=-498/1305, 13-14=-303/231, 11-13=-303/231 TOP CHORD

9-6-0

**BOT CHORD** 

WEBS 4-15=-495/289, 6-15=-232/1121, 7-14=-699/516, 6-14=-849/141

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-1 to 3-3-12, Interior(1) 3-3-12 to 15-3-0, Exterior(2) 15-3-0 to 19-7-13, Interior(1) 19-7-13 to 31-7-1 zone; porch 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, with BCDL = 10.0psf.
- 5) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14 except
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer



Scale = 1:71.7

February 15,2023

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

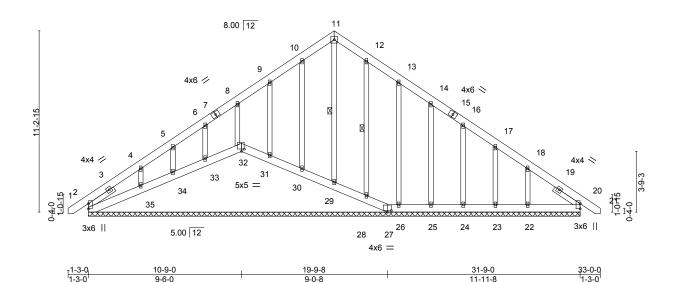
Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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



Job Truss Truss Type Qty Lot 30 Liberty Meadows 156654219 J0723-3471 B1GE **GABLE** Job Reference (optional) Fayetteville, NC - 28314, Comtech, Inc, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:23 2023 Page 1 ID:0HpugN1S\_QSTWxS0z0zGz9z5iCa-rKDWwtgjymocvM9kb6hZglaYMTyKc0ypqt7CkuzkyAl 15-3-0

5x5 =



		1-3-0	9-6-0			9-0-8	1			11-8	1-3-0	
Plate Offs	sets (X,Y)	[27:0-3-0,0-1-4], [32:0-2	2-0,0-1-12]									
LOADING	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	0.07	Vert(LL)	0.00	20	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	20	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	20	n/a	n/a		
BCDL	10.0	Code IRC2015/	ΓPI2014	Matr	ix-S						Weight: 266 lb	FT = 20%

31-9-0

19-9-8

LUMBER-**BRACING-**

10-9-0

2x6 SP No.1 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. TOP CHORD **BOT CHORD** 2x6 SP No.1 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. **OTHERS** 2x4 SP No.2 **WEBS** 1 Row at midpt 11-29, 12-28 SLIDER Left 2x4 SP No.2 1-11-14, Right 2x4 SP No.2 1-10-13

REACTIONS. All bearings 30-6-0.

Max Horz 2=-327(LC 10) (lb) -

1-3-0

Max Uplift All uplift 100 lb or less at joint(s) 32, 27, 20, 30, 31, 33, 34, 28, 25, 24, 23 except 2=-181(LC 8),

35=-230(LC 12), 26=-109(LC 13), 22=-190(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 27, 20, 30, 31, 33, 34, 28, 26, 25, 24, 23 except 2=324(LC

20), 32=268(LC 19), 29=254(LC 13), 35=296(LC 19), 22=284(LC 20)

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

TOP CHORD  $2\text{-}4\text{--}292/240, \, 9\text{-}10\text{--}260/286, \, 10\text{-}11\text{--}293/319, \, 11\text{-}12\text{--}294/319, \, 12\text{-}13\text{--}260/273}$ **BOT CHORD** 31-32=-142/251, 30-31=-143/253, 29-30=-143/253, 28-29=-143/253, 27-28=-138/253

WEBS 4-35=-251/239, 18-22=-250/206

- 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 DOI = 1 60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 32, 27, 20, 30, 31, 33, 34, 28, 25, 24, 23 except (jt=lb) 2=181, 35=230, 26=109, 22=190.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



Scale = 1:71.4

February 15,2023

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

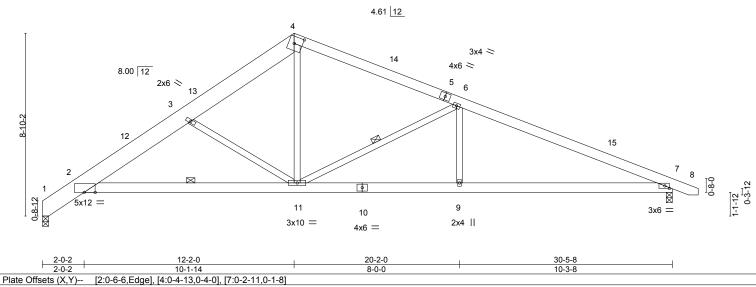


Job Truss Truss Type Qty Ply Lot 30 Liberty Meadows 156654220 J0723-3471 C<sub>1</sub> **ROOF SPECIAL** | Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:25 2023 Page 1 Comtech, Inc, Fayetteville, NC - 28314,

8x8 <

ID:0HpugN1S\_QSTWxS0z0zGz9z5iCa-ojLGKZhzTN2K8gJ6iXk1ljgksHW04q86HBclonzkyAG 31-8-8 1-3-0 5-0-0 8-0-0 10-3-8

Scale = 1:55.7



LOADING (psf) SPACING-CSI DEFL. in (loc) I/def L/d **PLATES** GRIP TCLL 20.0 Plate Grip DOL 1.15 TC 0.71 Vert(LL) -0.11 2-11 >999 360 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 ВС 0.47 Vert(CT) -0.28 2-11 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.51 Horz(CT) 0.12 n/a n/a Code IRC2015/TPI2014 FT = 20% **BCDL** 10.0 Wind(LL) 0.08 2-11 >999 240 Weight: 212 lb Matrix-S

**BRACING-**

**WEBS** 

TOP CHORD

**BOT CHORD** 

LUMBER-

**BOT CHORD** 

REACTIONS.

**WEBS** 

2x6 SP No.1 \*Except\* TOP CHORD

1-4: 2x10 SP No.1 2x6 SP No.1

2x4 SP No.2 (size) 1=0-3-8, 7=0-3-8

Max Horz 1=-201(LC 10) Max Uplift 1=-48(LC 12), 7=-104(LC 13) Max Grav 1=1210(LC 1), 7=1278(LC 1)

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

1-2=-569/121, 2-3=-2092/501, 3-4=-1644/425, 4-6=-1467/377, 6-7=-2383/481 2-11=-353/1874, 9-11=-346/2112, 7-9=-346/2112 **BOT CHORD** 

**WEBS** 3-11=-791/296, 4-11=-169/1036, 6-11=-960/266, 6-9=0/375

### 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) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 12-2-0, Exterior(2) 12-2-0 to 16-6-13, Interior(1) 16-6-13 to 31-5-11 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb)



Structural wood sheathing directly applied or 4-5-9 oc purlins.

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

10-0-0 oc bracing: 2-11

1 Row at midpt

February 15,2023



Job Truss Truss Type Qty Ply Lot 30 Liberty Meadows 156654221 J0723-3471 C1SG ROOF SPECIAL STRUCTU Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:26 2023 Page 1 Comtech, Inc, Fayetteville, NC - 28314,

5-0-0

ID:0HpugN1S QSTWxS0z0zGz9z5iCa-GvueYvibEhABmquIGEFGHxCvchsFpHNFWrLsKDzkyAF 20-2-0 8-0-0 10-3-8 1-3-0

30-5-8

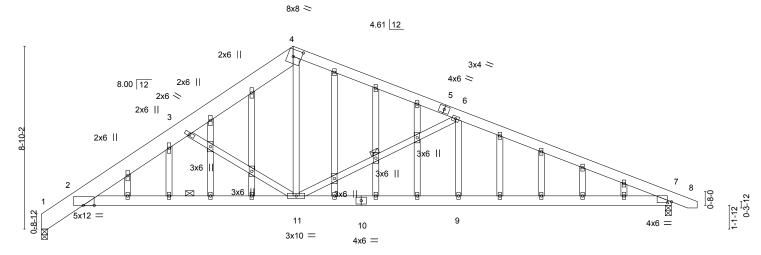
Structural wood sheathing directly applied or 4-4-5 oc purlins.

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

10-0-0 oc bracing: 2-11

1 Row at midpt

Scale = 1:55.7



2-0-2	10-1-14	'	8-0-0		10-3-8	
Plate Offsets (X,Y)	[2:0-6-6,Edge], [4:0-4-13,0-4-0], [7:0-2-	4,0-0-9]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc) I/def	l L/d P	LATES GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.71	Vert(LL) -0.1	11 2-11 >999	9 360 M	T20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.47	Vert(CT) -0.2	28 2-11 >999	9 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.51	Horz(CT) 0.1	12 7 n/a	a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.1	11 2-11 >999	9 240 W	/eight: 263 lb FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

**WEBS** 

20-2-0

LUMBER-

2x6 SP No.1 \*Except\* TOP CHORD

1-4: 2x10 SP No.1 2x6 SP No.1

**BOT CHORD WEBS** 2x4 SP No.2

**OTHERS** 2x4 SP No.2

REACTIONS. (size) 1=0-3-8, 7=0-3-8

Max Horz 1=-273(LC 10)

Max Uplift 1=-208(LC 12), 7=-307(LC 13) Max Grav 1=1210(LC 1), 7=1278(LC 1)

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

TOP CHORD 1-2=-569/212, 2-3=-2092/687, 3-4=-1644/583, 4-6=-1467/531, 6-7=-2383/765

12-2-0

**BOT CHORD** 2-11=-471/1874, 9-11=-577/2112, 7-9=-577/2112

3-11=-791/393, 4-11=-299/1036, 6-11=-960/461, 6-9=0/375 **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) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=208, 7=307,



February 15,2023



Job Truss Truss Type Qty Ply Lot 30 Liberty Meadows 156654222 J0723-3471 C2 **ROOF SPECIAL** Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:28 2023 Page 1 Comtech, Inc, Fayetteville, NC - 28314, ID:0HpugN1S QSTWxS0z0zGz9z5iCa-Cl0PzbksmlQv072hNfHkNMlJCUR1H5RYz9qzP6zkyAD 18-4-5 29-1-8 1-3-0 9-7-0 21-2-12 27-10-8 4-11-4 5-0-0 3-9-5 2-10-7 6-7-12 Scale = 1:55.8 4x6 < 4.61 12 2x4 =6 8.00 12 2x4 || Ш 2x4 4 18 4x8 > 3 8 16 4x4 3x4 > 5-0-0 8-0-0 1-3-11 0 0 • 15 13 12 3x10 || 3x6 = 3x4 3x4 || 4x12 =4x8 =2x4 || 4x6 =3x4 || 14-7-0 21-2-12 27-10-8 6-7-0 3-0-0 5-0-0 2-10-7 6-7-12 3-9-5 Plate Offsets (X,Y)--[1:0-4-4,0-0-4], [5:0-4-7,0-2-0], [13:0-1-8,0-1-12] LOADING (psf) SPACING-CSI DEFL. in (loc) I/def L/d **PLATES** GRIP TCLL 20.0 Plate Grip DOL 1.15 TC 0.51 Vert(LL) -0.31 12-13 >999 360 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 ВС 0.90 Vert(CT) -0.56 12-13 >598 240 BCLL 0.0 Rep Stress Incr YES WB 0.92 Horz(CT) 0.04 10 n/a n/a Code IRC2015/TPI2014 0.23 12-13 FT = 20% **BCDL** 10.0 Wind(LL) >999 240 Weight: 205 lb Matrix-S **BRACING-**TOP CHORD 2x6 SP No.1 TOP CHORD Structural wood sheathing directly applied or 4-11-7 oc purlins. BOT CHORD **BOT CHORD** 2x6 SP No.1 Rigid ceiling directly applied or 9-2-13 oc bracing.

LUMBER-

**WEBS** 2x4 SP No.1 \*Except\*

9-12,9-13: 2x4 SP No.2 SLIDER Left 2x6 SP No.1 3-11-6

REACTIONS. (size) 1=Mechanical, 10=0-3-8

Max Horz 1=-189(LC 10)

Max Uplift 1=-37(LC 12), 10=-104(LC 13) Max Grav 1=1108(LC 1), 10=1180(LC 1)

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

TOP CHORD 1-3=-1685/375, 3-4=-1221/401, 5-6=-39/275, 6-7=-1215/378, 7-9=-1449/349,

9-10=-2434/469

1-15=-153/1243, 13-15=-161/1248, 12-13=-366/2187, 10-12=-366/2187 **BOT CHORD** WEBS 3-15=0/525, 7-13=0/385, 4-6=-1466/447, 9-12=0/375, 9-13=-1095/232

- 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 9-7-0, Exterior(2) 9-7-0 to 13-11-13, Interior(1) 13-11-13 to 28-10-11 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 10=104



February 15,2023

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

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



Job Truss Truss Type Qty Lot 30 Liberty Meadows 156654223 J0723-3471 C2GE ROOF SPECIAL SUPPORT Job Reference (optional) Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:30 2023 Page 1 ID:0HpugN1S QSTWxS0z0zGz9z5iCa-8g89OGl6lwgcFRC4V4JCSnNlUlK2lCYrRTJ3U zkyAB 27-10-8

18-3-8

Scale = 1:52.2

1-3-0

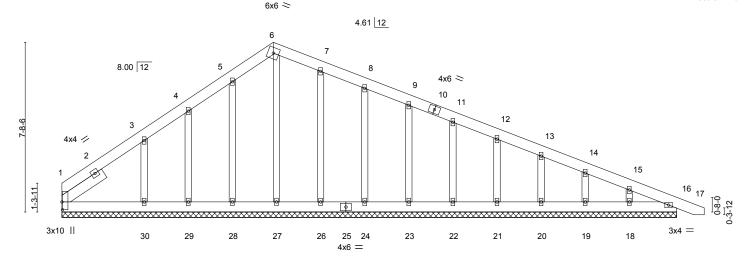


Plate Offsets (X,Y)--[1:0-4-4,0-0-4] LOADING (psf) SPACING-CSI DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL 20.0 Plate Grip DOL 1.15 TC 0.07 Vert(LL) -0.00 16 120 244/190 n/r MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.03 Vert(CT) -0.00 16 n/r 120 **BCLL** 0.0 Rep Stress Incr YES WB 0.12 Horz(CT) 0.00 16 n/a n/a Code IRC2015/TPI2014 FT = 20% **BCDL** 10.0 Weight: 215 lb Matrix-S

27-10-8 27-10-8

LUMBER-**BRACING-**

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

SLIDER Left 2x6 SP No.1 2-3-13

REACTIONS. All bearings 27-10-8. Max Horz 1=-260(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 28, 29, 26, 24, 23, 22, 21, 20, 19, 18, 16 except

30=-206(LC 12)

All reactions 250 lb or less at joint(s) 1, 27, 28, 29, 26, 24, 23, 22, 21, 20, 19, 18, 16 except Max Grav

30=346(LC 19)

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

TOP CHORD 5-6=-158/274, 6-7=-157/257

**WEBS** 3-30=-281/228

### 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) 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) 1, 28, 29, 26, 24, 23, 22, 21, 20, 19, 18, 16 except (it=lb) 30=206.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1.



February 15,2023



Job Truss Truss Type Qty Ply Lot 30 Liberty Meadows 156654224 J0723-3471 D1 **ROOF SPECIAL** 2 Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:31 2023 Page 1 Fayetteville, NC - 28314, Comtech, Inc. ID:0HpugN1S QSTWxS0z0zGz9z5iCa-ctiXbcmk3DoTtbnG3nrR wn?icxUfd f73d0RzkyAA 16-4-0 15-1-0 4-11-5 4-10-2 5-3-9 1-3-0 Scale = 1:49.5 8x8 = 3 10.00 12 10 2 5 5x8 = I44 6 3x4 2x4 || 9-9-7

4-10-2

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

**BRACING-**

TOP CHORD

BOT CHORD

5-3-9

2

I/def

>999

>597

>999

n/a

(loc)

-0.15

-0.30

0.23

0.15

L/d

360

240

n/a

240

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

**PLATES** 

Weight: 102 lb

MT20

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

**GRIP** 

244/190

FT = 20%

**BCLL** 0.0 **BCDL** 10.0

20.0

10.0

LOADING (psf)

**TCLL** 

TCDL

LUMBER-2x10 SP No.1 \*Except\* TOP CHORD

3-5: 2x6 SP No.1 **BOT CHORD** 2x6 SP No.1 **WEBS** 2x4 SP No.2

REACTIONS. (size) 1=0-3-8, 4=0-3-8 Max Horz 1=179(LC 9)

Max Uplift 1=-6(LC 12), 4=-46(LC 12) Max Grav 1=610(LC 1), 4=674(LC 1)

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2015/TPI2014

Lumber DOL

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

1-2=-394/97, 2-3=-530/150, 3-4=-768/205 TOP CHORD

**BOT CHORD** 2-6=-14/550, 4-6=-13/557

WFBS 3-6=0/284

### 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) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 9-9-7, Exterior(2) 9-9-7 to 14-2-4, Interior(1) 14-2-4 to 16-2-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.

4-11-5

CSI.

0.66

0.31

0.06

TC

ВС

WB

Matrix-S

2-0-0

1.15

1.15

YES





Job Truss Truss Type Qty Ply Lot 30 Liberty Meadows 156654225 J0723-3471 D1SG **GABLE** Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:32 2023 Page 1 Comtech, Inc, Fayetteville, NC - 28314, ID:0HpugN1S QSTWxS0z0zGz9z5iCa-53GvoynMqXwKUIMScVMgXCSyl6yAD6s8unoAYtzkyA9 16-4-0 15-1-0 4-11-5 4-10-2 1-3-0 Scale = 1:49.5 8x8 = 3 2x6 II 2x4 || 10.00 12 2x4 || 5x8 = I44 2x4 || 6 2x4 || 3x4 =2x4 || 2x4 ||

		ı	4-11-	-5	1	4-10-2	'		5-3-9	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	0.66		Vert(LL)	-0.15	2	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.31		Vert(CT)	-0.30	2	>597	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06		Horz(CT)	0.23	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TI	PI2014	Matri	x-S		Wind(LL)	0.22	2	>814	240	Weight: 110 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

9-9-7

15-1-0

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

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

LUMBER-

2x10 SP No.1 \*Except\* TOP CHORD

3-5: 2x6 SP No.1 **BOT CHORD** 2x6 SP No.1 **WEBS** 2x4 SP No.2 **OTHERS** 2x4 SP No.2

REACTIONS.

(size) 1=0-3-8, 4=0-3-8 Max Horz 1=247(LC 12)

Max Uplift 1=-83(LC 12), 4=-145(LC 12) Max Grav 1=610(LC 1), 4=674(LC 1)

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

1-2=-415/127, 2-3=-530/161, 3-4=-783/245 TOP CHORD

**BOT CHORD** 2-6=-93/570, 4-6=-93/577

**WEBS** 3-6=0/284

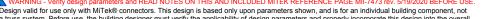
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

4-11-5

- 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.
- Gable studs spaced at 2-0-0 oc.
- 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) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 4=145.



February 15,2023



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

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

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

Job Truss Truss Type Qty Ply Lot 30 Liberty Meadows 156654226 J0723-3471 D2 **ROOF SPECIAL** 2 Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:34 2023 Page 1 Fayetteville, NC - 28314, Comtech, Inc. ID:0HpugN1S\_QSTWxS0z0zGz9z5iCa-1SNgDeodM8A2k2VrkwO8cdYHAvebh0MRL5HHdlzkyA7 4-11-5 4-10-2 Scale = 1:49.5 8x8 = 3 9 10.00 12 2 8-11-0

5

2x4 ||

0.24

0.16

n/a

>999

n/a

240

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

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

Weight: 99 lb

FT = 20%

3x4 =

4-11-5 9-9-7 4-11-5 4-10-2 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defl L/d **PLATES** GRIP (loc) 20.0 Plate Grip DOL Vert(LL) 244/190 **TCLL** 1.15 TC 0.67 -0.15 >999 360 MT20 2 TCDL 10.0 Lumber DOL 1.15 ВС 0.31 Vert(CT) -0.30 >594 240

Horz(CT)

Wind(LL)

**BRACING-**

TOP CHORD

BOT CHORD

5x8 =

LUMBER-

**BCLL** 

**BCDL** 

2x10 SP No.1 \*Except\* TOP CHORD

3-4: 2x6 SP No.1 **BOT CHORD** 2x6 SP No.1 **WEBS** 2x4 SP No.2

0.0

10.0

REACTIONS. (size) 1=0-3-8, 4=0-3-8 Max Horz 1=191(LC 9)

Max Uplift 1=-3(LC 12), 4=-47(LC 12)

Max Grav 1=613(LC 1), 4=596(LC 1)

Rep Stress Incr

Code IRC2015/TPI2014

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

1-2=-391/85, 2-3=-540/159, 3-4=-774/241 TOP CHORD

**BOT CHORD** 2-5=-71/542, 4-5=-70/549 WFBS 3-5=0/287

### 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) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 9-9-7, Exterior(2) 9-9-7 to 14-2-4, Interior(1) 14-2-4 to 14-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

WB

Matrix-S

0.06

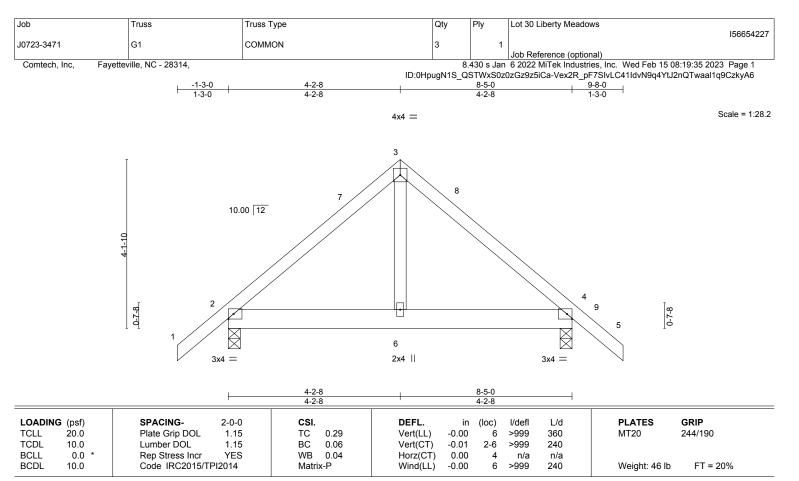
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

YES

- 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) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.







**BRACING-**TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS.

2=0-3-8, 4=0-3-8 (size) Max Horz 2=109(LC 11) Max Uplift 2=-34(LC 12), 4=-34(LC 13) Max Grav 2=409(LC 1), 4=409(LC 1)

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

TOP CHORD 2-3=-321/71, 3-4=-321/71

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-3-0 to 3-1-13, Interior(1) 3-1-13 to 4-2-8, Exterior(2) 4-2-8 to 8-7-5, Interior(1) 8-7-5 to 9-8-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



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

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

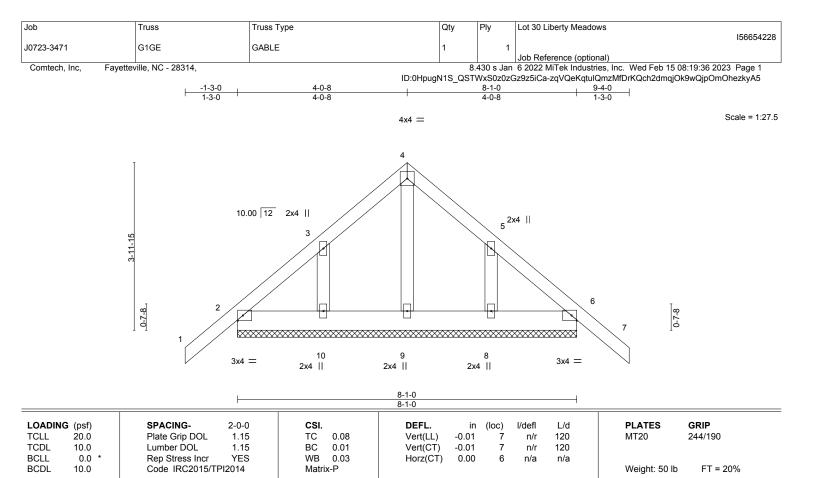


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

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





**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD

2x4 SP No.1

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

REACTIONS. All bearings 8-1-0.

Max Horz 2=132(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=-126(LC 12), 8=-124(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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

### NOTES-

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

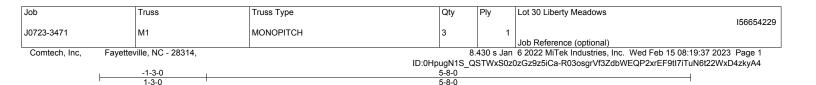
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
- 3) Truss designed for wind loads in the plane of the 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) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 10=126, 8=124.

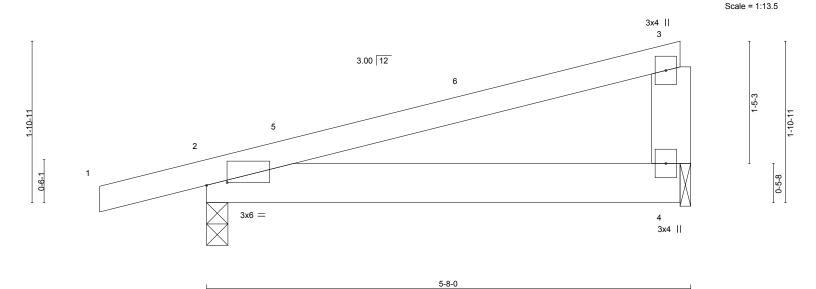


Structural wood sheathing directly applied or 6-0-0 oc purlins.

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







	• • •											
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	0.36	Vert(LL)	-0.01	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.02	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2015/TF	PI2014	Matri	x-P	Wind(LL)	0.02	2-4	>999	240	Weight: 26 lb	FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

Plate Offsets (X Y)-- [2:0-2-14 0-0-6]

**WEBS** 2x6 SP No.1

REACTIONS. (size) 2=0-3-0, 4=0-1-8 Max Horz 2=57(LC 8)

Max Uplift 2=-132(LC 8), 4=-82(LC 8) Max Grav 2=306(LC 1), 4=202(LC 1)

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

### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-3-0 to 3-1-13, Interior(1) 3-1-13 to 5-5-4 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 = 132



Structural wood sheathing directly applied or 5-8-0 oc purlins,

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

except end verticals.



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 chore members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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



Job Truss Truss Type Qty Ply Lot 30 Liberty Meadows 156654230 J0723-3471 M1GE **GABLE** Job Reference (optional) Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:38 2023 Page 1

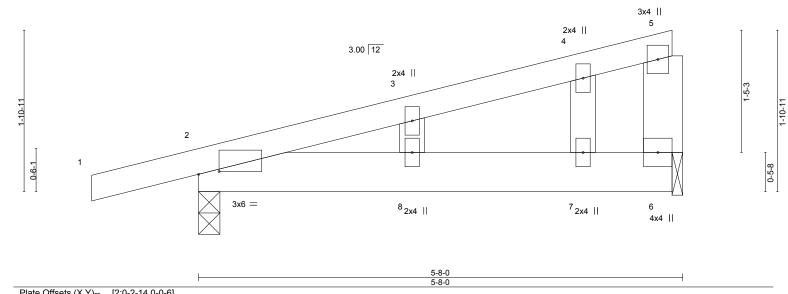
ID:0HpugN1S QSTWxS0z0zGz9z5iCa-vDdA3?r7QNhUCgpczIT4nTi6sW2Xdq70GiFUmXzkyA3 5-8-0

Structural wood sheathing directly applied or 5-8-0 oc purlins,

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

except end verticals.

Scale = 1:13.5



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 0.11	Vert(LL) 0.02 8 >999 240	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.12	Vert(CT) -0.02 8 >999 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.02	Horx(CT) -0.00 6 n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	, ,	Weight: 28 lb FT = 20%

TOP CHORD

**BOT CHORD** 

LUMBER-BRACING-

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

2x4 SP No.2 (size) 2=0-3-0, 6=0-1-8

Max Horz 2=81(LC 8)

Max Uplift 2=-189(LC 8), 6=-120(LC 8) Max Grav 2=306(LC 1), 6=202(LC 1)

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

### NOTES-

**OTHERS** 

REACTIONS.

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left 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.
- Gable studs spaced at 2-0-0 oc.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=189, 6=120.



February 15,2023



156654231 J0723-3471 PB **GABLE** 5 Job Reference (optional) Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:40 2023 Page 1 ID:0HpugN1S\_QSTWxS0z0zGz9z5iCa-sblxUhtOx\_xCSzz?4AVYsunRtKkd5jjJk0kbqPzkyA1 8-0-0 8-0-0 Scale = 1:34.0 4x4 = 8.00 12 13 2x4 || 2x4 || 3 14  $\overline{\boxtimes}$ 3x4 = 3x4 =10 9 8 2x4 | 2x4 || 2x4 II 16-0-0 LOADING (psf) SPACING-CSI. DEFL. L/d **PLATES** GRIP 2-0-0 (loc) I/defl 20.0 Vert(LL) 0.00 120 244/190 **TCLL** Plate Grip DOL 1.15 TC 0.14 6 n/r MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.08 Vert(CT) 0.00 n/r 120 **BCLL** 0.0 Rep Stress Incr YES WB 0.07 Horz(CT) 0.00 6 n/a n/a Code IRC2015/TPI2014 **BCDL** 10.0 Matrix-S Weight: 63 lb FT = 20% **BRACING-**

TOP CHORD

BOT CHORD

Qty

Ply

Lot 30 Liberty Meadows

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

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

LUMBER-

Job

Truss

Truss Type

TOP CHORD 2x4 SP No.1

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

REACTIONS. All bearings 14-5-12

Max Uplift All uplift 100 lb or less at joint(s) 2 except 10=-104(LC 12), 8=-104(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 6 except 9=252(LC 1), 10=363(LC 19), 8=362(LC 20)

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

3-10=-309/207, 5-8=-310/207 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) 0-3-2 to 4-7-15, Interior(1) 4-7-15 to 8-0-0, Exterior(2) 8-0-0 to 12-4-13, Interior(1) 12-4-13 to 15-8-14 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.
- Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 4-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 10=104, 8=104
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



February 15,2023



Truss Truss Type Qty Ply Lot 30 Liberty Meadows 156654232 J0723-3471 PBA **GABLE** 2 Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:41 2023 Page 1 Fayetteville, NC - 28314, Comtech, Inc. ID:0HpugN1S\_QSTWxS0z0zGz9z5iCa-KolJh1u0il3237YBeu0nO5Kc8k2Sq9eTygU9MszkyA0 16-0-0 8-0-0 8-0-0 Scale = 1:34.0 5x5 =8.00 12 2x4 || 2x4 || 5 3 0-1-10 3x4 = 3x4 =10 9 8 2x4 2x4 || 2x4 || 16-0-0 LOADING (psf) SPACING-DEFL. **PLATES** GRIP 5-0-0 CSI (loc) I/def L/d 20.0 0.00 244/190 **TCLL** Plate Grip DOL 1.15 TC 0.17 Vert(LL) n/r 120 MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.23 Vert(CT) 0.00 n/r 120 **BCLL** 0.0 Rep Stress Incr NO WB 0.16 Horz(CT) 0.00 6 n/a n/a **BCDL** 10.0 Code IRC2015/TPI2014 Matrix-S Weight: 77 lb FT = 20% LUMBER-**BRACING-**TOP CHORD 2-0-0 oc purlins (6-0-0 max.)

**BOT CHORD** 

TOP CHORD 2x6 SP No.1

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

2x4 SP No.2

REACTIONS. All bearings 13-10-9 Max Horz 2=-303(LC 10) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2 except 10=-253(LC 12), 8=-249(LC 13)

Max Grav All reactions 250 lb or less at joint(s) except 2=392(LC 1), 6=392(LC 1), 9=617(LC 1), 10=864(LC 19),

8=858(LC 20)

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

2-3=-326/230, 3-4=-389/340, 4-5=-388/348 TOP CHORD WEBS 4-9=-411/0, 3-10=-756/503, 5-8=-757/504

### NOTES-

Job

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) 0-4-15 to 4-9-12, Interior(1) 4-9-12 to 8-0-0, Exterior(2) 8-0-0 to 12-4-13, Interior(1) 12-4-13 to 15-7-1 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) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 4-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 10=253, 8=249.
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



(Switched from sheeted: Spacing > 2-8-0).

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

February 15,2023



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

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

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



156654233 J0723-3471 **PGBE GABLE** Job Reference (optional) Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:43 2023 Page 1 ID:0HpugN1S QSTWxS0z0zGz9z5iCa-GAQ36jvGEvJmJRhamJ2FTWP oXmFl5ulQ zFRkzkyA 8-0-0 8-0-0 8-0-0 Scale = 1:32.4 4x4 = 5 8.00 12 8 9 10 3x4 =3x4 =17 16 15 12 16-0-0 LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) I/def 20.0 Vert(LL) -0.00 120 244/190 **TCLL** Plate Grip DOL 1.15 TC 0.03 10 n/r MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.02 Vert(CT) -0.00 10 n/r 120 **BCLL** 0.0 Rep Stress Incr YES WB 0.05 Horz(CT) 0.00 10 n/a n/a Code IRC2015/TPI2014 **BCDL** 10.0 Matrix-S Weight: 75 lb FT = 20% **BRACING-**

TOP CHORD

BOT CHORD

Qty

Ply

Lot 30 Liberty Meadows

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

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

LUMBER-

Job

Truss

Truss Type

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

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

REACTIONS. All bearings 14-5-12 Max Horz 2=-155(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 16, 17, 18, 14, 13, 12 Max Grav All reactions 250 lb or less at joint(s) 2, 10, 15, 16, 17, 18, 14, 13, 12

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) 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.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 16, 17, 18,
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



February 15,2023

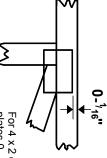


### Symbols

## PLATE LOCATION AND ORIENTATION



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



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

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

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

### PLATE SIZE

4 × 4

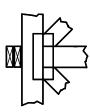
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

### **BEARING**



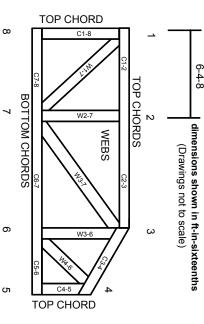
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

### Industry Standards:

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

ANSI/TPI1: DSB-89:

## **Numbering System**



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

# **General Safety Notes**

# Failure to Follow Could Cause Property Damage or Personal Injury

- 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.

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Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.

4

- 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.

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- 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.

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- 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 responsibility of truss fabricator. General practice is to camber for dead load deflection.
- 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 specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- 15. Connections not shown are the responsibility of others
- 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 and pictures) before use. Reviewing pictures alone is not sufficient.
- 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.



Client: Project: Address: **Precision Custom Homes** 

Anconia Mod.

7/24/2023

Input by: David Landry Job Name: Lot 30 Liberty Meadows Page 1 of 10

Project #: J0723-3472

1.750" X 18.000" **Kerto-S LVL** 2-Ply - PASSED BM<sub>1</sub>

Design Method:

**Building Code:** 

Load Sharing:

Deck:

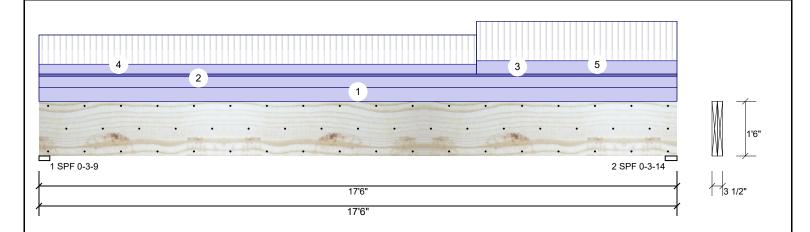
ASD

No

**IBC/IRC 2015** 

Not Checked

Level: Level



### **Member Information**

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	360
Importance:	Normal -

- II Temperature: Temp <= 100°F

### Reactions UNPATTERNED Ib (Uplift) Application: Floor

В	rg	Direction	Live	Dead	Snow	Wind	Const
	1	Vertical	2318	2907	87	0	0
	2	Vertical	2674	3033	88	0	0

### **Bearings**

Bearing Le	ngth Dir.	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF 3.5	563" Vert	99%	2907 / 2318	5226	L	D+L
2 - SPF 3.8	375" Vert	99%	3033 / 2674	5707	L	D+L

### **Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	22105 ft-lb	8'10 13/16"	42981 ft-lb	0.514 (51%)	D+L	L
Unbraced	22105 ft-lb	8'10 13/16"	42981 ft-lb	0.514 (51%)	D+L	L
Shear	4439 lb	15'8 1/8"	13440 lb	0.330 (33%)	D+L	L
LL Defl inch	0.172 (L/1190)	8'9 15/16"	0.426 (L/480)	0.403 (40%)	L	L
TL Defl inch	0.381 (L/536)	8'9 1/2"	0.568 (L/360)	0.671 (67%)	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 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 continuously laterally braced.
- 7 Bottom must be laterally braced at bearings.
- 8 Lateral slenderness ratio based on single ply width

o Lateral sienderness 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	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above
2	Uniform			Тор	100 PLF	0 PLF	0 PLF	0 PLF	0 PLF	C2GE
3	Tie-In	0-0-0 to 17-6-0	0-6-0	Тор	20 PSF	0 PSF	20 PSF	0 PSF	0 PSF	Roof Load
4	Part. Uniform	0-0-0 to 12-0-0		Тор	86 PLF	257 PLF	0 PLF	0 PLF	0 PLF	F3
5	Part. Uniform	12-0-0 to 17-6-0		Тор	116 PLF	347 PLF	0 PLF	0 PLF	0 PLF	F2
	Self Weight				14 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.

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

### Handling & Installation

- LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals Damaged Beams must not be used
- Design assumes top edge is laterally restrained
  Provide lateral support at bearing points to avoid
  lateral displacement and rotation
- 6. 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

Comtech, Inc. 1001 S Reilly Rd., NC 28314 (910) 864-8787



This design is valid until 5/29/2026

isDesign

Client: Project: Address: **Precision Custom Homes** 

Anconia Mod.

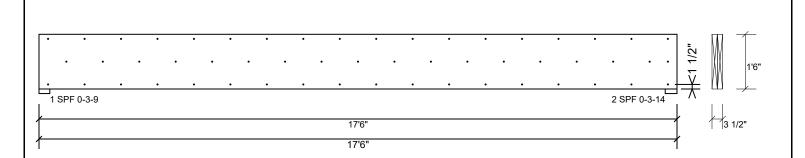
7/24/2023

Input by: David Landry Job Name: Lot 30 Liberty Meadows Page 2 of 10

Project #: J0723-3472

1.750" X 18.000" **Kerto-S LVL** 2-Ply - PASSED BM<sub>1</sub>

Level: Level



### Multi-Ply Analysis

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

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

### Notes

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

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

### Handling & Installation

- Handling & Installation

  1. UVI beams must not be cut or drilled

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

  3. Damaged Beams must not be used

  4. Design assumes top edge is laterally restrained

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

For flat roofs provide proper drainage to prevent ponding

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Manufacturer Info

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This design is valid until 5/29/2026



**Precision Custom Homes** 

Anconia Mod.

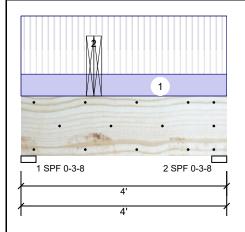
Date: 7/24/2023

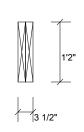
Input by: David Landry Job Name: Lot 30 Liberty Meadows

Project #: J0723-3472

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

Level: Level





Page 3 of 10

### **Member Information**

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	360
Importance:	Normal

- II Temperature: Temp <= 100°F

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

### Reactions UNPATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	80	1806	1701	0	0
2	Vertical	80	937	858	0	0

### **Bearings**

Bearing	Length	Dir.	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	67%	1806 / 1701	3507	L	D+S
2 - SPF	3.500"	Vert	34%	937 / 858	1795	L	D+S

### **Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4138 ft-lb	1'5"	31049 ft-lb	0.133 (13%)	D+S	L
Unbraced	4138 ft-lb	1'5"	31049 ft-lb	0.133 (13%)	D+S	L
Shear	3296 lb	1'5 1/2"	12021 lb	0.274 (27%)	D+S	L
LL Defl inch	0.007 (L/6271)	1'5"	0.089 (L/480)	0.077 (8%)	S	L
TL Defl inch	0.014 (L/3057)	1'5"	0.118 (L/360)	0.118 (12%)	D+S	L

### **Design Notes**

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

6 Editoral Sichaemess ratio based on single pry Watth.												
I	ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments	
ı	1	Tie-In	0-0-0 to 4-0-0	1-0-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	Floor Load	
l	2	Point	1-5-0		Тор	2640 lb	0 lb	2559 lb	0 lb	0 lb	B3 Brg 2	
ı		Bearing Length	0-3-8									
ı		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.

- Dry service conditions, unless noted otherwise
   LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals Damaged Beams must not be used
- Design assumes top edge is laterally restrained
  Provide lateral support at bearing points to avoid
  lateral displacement and rotation
- 6. For flat roofs provide proper drainage to prevent ponding

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Manufacturer Info

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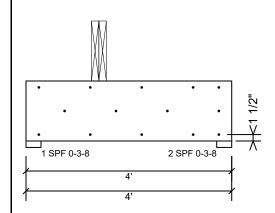
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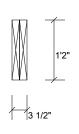
Job Name: Lot 30 Liberty Meadows

Project #: J0723-3472

1.750" X 14.000" 2-Ply - PASSED **Kerto-S LVL BM2** 

Level: Level





Page 4 of 10

### Multi-Ply Analysis

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

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

### Notes

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

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

### Handling & Installation

- Informing & Installation

  I. VIL beams must not be cut or drilled

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

  Damaged Beams must not be used

  Design assumes top edge is laterally restrained

  Design assumes top edge is laterally restrained is provide lateral support at bearing points to avoid lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

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Manufacturer Info

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**Precision Custom Homes** 

Anconia Mod.

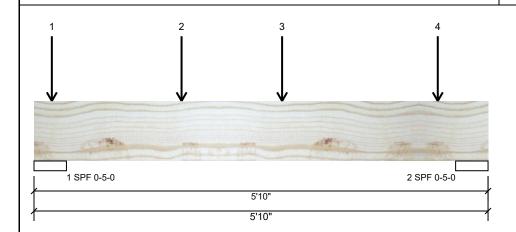
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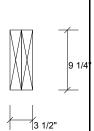
Job Name: Lot 30 Liberty Meadows

Project #: J0723-3472

1.750" X 9.250" **Kerto-S LVL** 2-Ply - PASSED BM<sub>3</sub>

Level: Level





Page 5 of 10

### **Member Information**

Type: Plies: 2 Moisture Condition: Dry Deflection LL: 480 Deflection TL: 240 Importance: Normal - II Temp <= 100°F Temperature:

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

Reactions UNPATTERNED Ib (Uplift) Wind Brg Direction Live Dead Snow Const 0 3107 3086 Vertical 0 0 2 Vertical 0 2835 2814 0 0

### **Bearings**

Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. D+S 1-SPF 5.000" Vert 3107 / 3086 6193 L 2 - SPF 5.000" Vert 76% 2835 / 2814 5649 L D+S

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	9142 ft-lb	1'10 3/4"	14423 ft-lb	0.634 (63%)	D+S	L
Unbraced	9142 ft-lb	1'10 3/4"	11505 ft-lb	0.795 (79%)	D+S	L
Shear	5936 lb	1'2 1/4"	7943 lb	0.747 (75%)	D+S	L
LL Defl inch	0.058 (L/1065)	2'8 7/16"	0.128 (L/480)	0.451 (45%)	S	L
TL Defl inch	0.116 (L/531)	2'8 7/16"	0.256 (L/240)	0.452 (45%)	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 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 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	Point	0-2-12		Тор	127 lb	0 lb	127 lb	0 lb	0 lb	A2
	Bearing Length	0-3-8								
2	Point	1-10-12		Тор	3363 lb	0 lb	3363 lb	0 lb	0 lb	A1-GR
	Bearing Length	0-3-8								
3	Point	3-2-4		Тор	1205 lb	0 lb	1205 lb	0 lb	0 lb	A1
	Bearing Length	0-3-8								

Continued on page 2...

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.

- Dry service conditions, unless noted otherwise
   LVL not to be treated with fire retardant or corrosive
- Handling & Installation
  - LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code

  - Damaged Beams must not be used

  - Design assumes top edge is laterally restrained
    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 5/29/2026

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 Rd., NC 28314 (910) 864-8787



CSD DESIGN



**Precision Custom Homes** 

Anconia Mod.

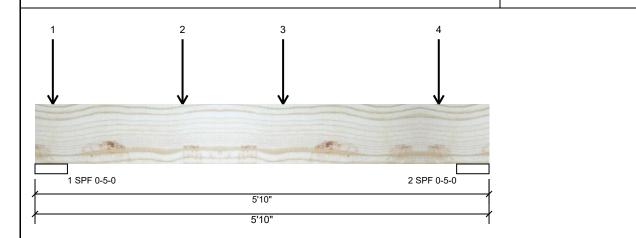
Date: 7/24/2023

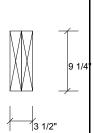
Input by: David Landry Job Name: Lot 30 Liberty Meadows

Project #: J0723-3472

1.750" X 9.250" 2-Ply - PASSED Kerto-S LVL BM<sub>3</sub>

Level: Level





Page 6 of 10

ID Load Type Location Trib Width Side Dead 0.9 Snow 1.15 Wind 1.6 Const. 1.25 Comments Live 1 4 Point 5-2-4 Тор 1205 lb 0 lb 1205 lb 0 lb 0 lb A1

> Bearing Length 0-3-8

7 PLF Self Weight

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

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

### Handling & Installation

- Handling & Installation

  1. IVI beams must not be out or drilled

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

  3. Damaged Beams must not be used

  4. Design assumes top edge is laterally restrained

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

For flat roofs provide proper drainage to prevent ponding

This design is valid until 5/29/2026

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Manufacturer Info

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**Precision Custom Homes** 

Anconia Mod.

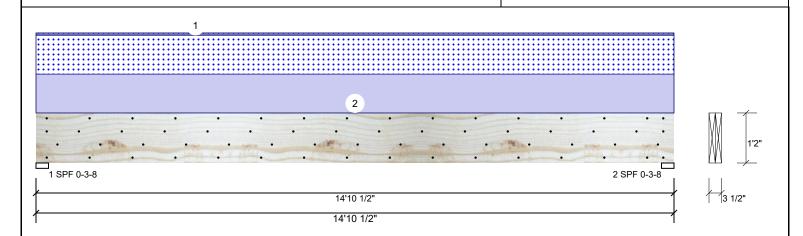
Date: 7/24/2023

Input by: David Landry Job Name: Lot 30 Liberty Meadows Page 7 of 10

Project #: J0723-3472

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

Level: Level



### Member Information Type: Application: Roof Brg Plies: 2 Slope: 0/12 1 Moisture Condition: Dry Design Method: ASD 2 Deflection LL: 360 **Building Code: IBC/IRC 2015**

Deck:

Load Sharing:

No

Not Checked

Reactions UNPATTERNED Ib (Uplift) Wind Direction Live Dead Snow Const 0 2639 2559 Vertical 0 0 Vertical 0 2639 2559 0 0

### Bearings Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. D+S 1 - SPF 3.500" Vert 100% 2639 / 2559 5198 L 2 - SPF 3.500" Vert 100% 2639 / 2559 5198 L D+S

### Analysis Results

Deflection TL:

Importance:

Temperature:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	18157 ft-lb	7'5 1/4"	31049 ft-lb	0.585 (58%)	D+S	L
Unbraced	18157 ft-lb	7'5 1/4"	31049 ft-lb	0.585 (58%)	D+S	L
Shear	4994 lb	1'5 1/2"	12021 lb	0.415 (42%)	D+S	L
LL Defl inch	0.230 (L/753)	7'5 5/16"	0.481 (L/360)	0.478 (48%)	S	L
TL Defl inch	0.467 (L/370)	7'5 5/16"	0.721 (L/240)	0.648 (65%)	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 4 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top must be continuously laterally braced.

240

Normal - II

Temp <= 100°F

- 6 Bottom must be laterally braced at bearings.
- 7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Tie-In	0-0-0 to 14-10-8	0-6-0	Near Face	20 PSF	0 PSF	20 PSF	0 PSF	0 PSF	Roof Load
2	Uniform			Far Face	334 PLF	0 PLF	334 PLF	0 PLF	0 PLF	C2
	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.

- Dry service conditions, unless noted otherwise
   LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code
- Damaged Beams must not be used
- Design assumes top edge is laterally restrained
  Provide lateral support at bearing points to avoid
  lateral displacement and rotation
- 6. For flat roofs provide proper drainage to prevent ponding

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**Manufacturer Info** 

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**Precision Custom Homes** 

Anconia Mod.

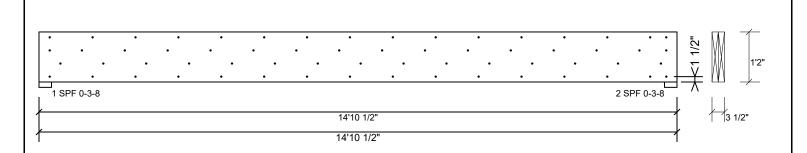
Date: 7/24/2023

Input by: David Landry Job Name: Lot 30 Liberty Meadows Page 8 of 10

Project #: J0723-3472

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

Level: Level



### Multi-Ply Analysis

Fasten all plies using 4 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

	•	
Capacity	88.7 %	
Load	334.0 PLF	
Yield Limit per Foot	376.5 PLF	
Yield Limit per Fastener	94.1 lb.	
См	1	
Yield Mode	IV	
Edge Distance	1 1/2"	
Min. End Distance	3"	
Load Combination	D+S	
Duration Factor	1.15	

### Notes

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

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

### Handling & Installation

- IARIGHING & INSTAILATION.

  LVL beams must not be cut or drilled.
  Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beams trength values, and code approvals.

  Damaged Beams must not be used.
  Design assumes top edge is laterally restrained.
  Provide lateral support at bearing points to avoid lateral displacement and rotation

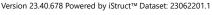
For flat roofs provide proper drainage to prevent ponding

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Manufacturer Info

Comtech, Inc. 1001 S Reilly Rd., NC 28314 (910) 864-8787







**Precision Custom Homes** 

Anconia Mod.

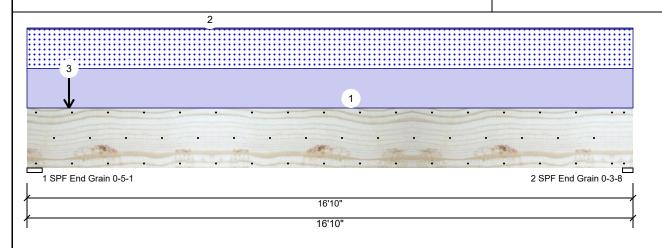
Date: 7/24/2023

Input by: David Landry Job Name: Lot 30 Liberty Meadows

Project #: J0723-3472

**Kerto-S LVL** 2-Ply - PASSED 1.750" X 20.000" **GDH** 

Level: Level



Page 9 of 10

### Member Information

Type:	Header
Plies:	2
Moisture Condition	on: Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal - II
Temperature:	Temp <= 100°

°F

### Application: Floor Design Method: ASD

**Building Code: IBC/IRC 2015** Load Sharing: No

**Header Supports** No Glass:

Deck: Not Checked

### Reactions UNPATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	7562	7303	0	0
2	Vertical	0	5273	5017	0	0

### **Bearings**

Grain

Bearing	Length	Dir.	Cap. F	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	5.063"	Vert	100%	7562 / 7303	14865	L	D+S
2 - SPF End	3.500"	Vert	100%	5273 / 5017	10290	L	D+S

### **Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	41804 ft-lb	8'3 5/16"	60066 ft-lb	0.696 (70%)	D+S	L
Unbraced	41804 ft-lb	8'3 5/16"	60066 ft-lb	0.696 (70%)	D+S	L
Shear	9662 lb	2'1 1/16"	17173 lb	0.563 (56%)	D+S	L
LL Defl inch	0.244 (L/801)	8'4 13/16"	0.542 (L/360)	0.449 (45%)	S	L
TL Defl inch	0.499 (L/391)	8'4 13/16"	0.813 (L/240)	0.614 (61%)	D+S	L

### **Design Notes**

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

o Laterarsi	lenderness ratio based on si	rigie 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	586 PLF	0 PLF	586 PLF	0 PLF	0 PLF	A1
2	Uniform			Тор	15 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above
3	Point	1-2-0		Тор	2456 lb	0 lb	2456 lb	0 lb	0 lb	A1-GR
	Bearing Length	0-3-8								
	Self Weight				16 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.

- Dry service conditions, unless noted otherwise
   LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code
- approvals

  Damaged Beams must not be used
- Design assumes top edge is laterally restrained
  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 5/29/2026

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**Precision Custom Homes** 

Anconia Mod.

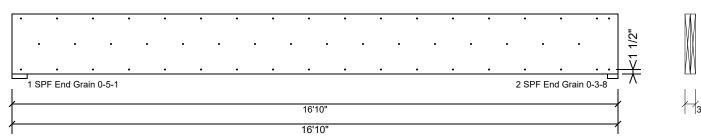
Date: 7/24/2023 Input by:

David Landry Job Name: Lot 30 Liberty Meadows

Project #: J0723-3472

2-Ply - PASSED **Kerto-S LVL** 1.750" X 20.000" **GDH** 

Level: Level





Page 10 of 10

### Multi-Ply Analysis

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

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

### Notes

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

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

### Handling & Installation

- Informing & Installation

  I. VIL beams must not be cut or drilled

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

  Damaged Beams must not be used

  Design assumes top edge is laterally restrained

  Design assumes top edge is laterally restrained is 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 5/29/2026

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Manufacturer Info

Comtech, Inc. 1001 S Reilly Rd., NC 28314 (910) 864-8787





RE: J0723-3472

Lot 30 Liberty Meadows

**Trenco** 

818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Project Name: J0723-3472

Lot/Block: Model:
Address: Subdivision:
City: State:

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

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

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

This package includes 5 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	156654234	F1	2/15/2023
2	156654235	F1A	2/15/2023
3	156654236	F2	2/15/2023
4	156654237	F3	2/15/2023
5	156654238	F4	2/15/2023

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, 2023

North Carolina COA: C-0844

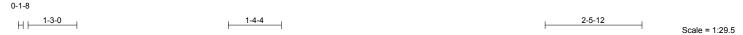
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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.

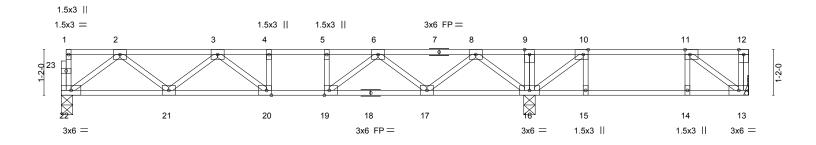


Job	Truss	Truss Type	Qty	Ply	Lot 30 Liberty Meadows
		5,005			I56654234
J0723-3472	F1	FLOOR	6	1	
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:02 2023 Page 1 ID:0HpugN1S\_QSTWxS0z0zGz9z5iCa-uSwCy810ukmjg3kc3JB3FNDuv0i8BUnj\_6XbUczkyAd





		I	17-7-0			
		5-7-4	<u> </u>			
Plate Offsets (X,Y)-	[10:0-1-8,Edge], [11:0-1-8,Edge], [19:0	-1-8,Edge], [20:0-1-8,Edge				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/de	efl L/d	PLATES G	RIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.37	Vert(LL) -0.06 20-21 >99	99 480	MT20 24	14/190
TCDL 10.0	Lumber DOL 1.00	BC 0.37	Vert(CT) -0.09 20-21 >99	99 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.30	Horz(CT) 0.02 13 n	/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S	, ,		Weight: 89 lb	FT = 20%F, 11%E

LUMBER-BRACING-

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

BOT CHORD 2x4 SP No.1(flat) except end verticals.

**WEBS** 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 22=0-3-8, 16=0-3-8, 13=Mechanical Max Grav 22=628(LC 10), 16=1033(LC 9), 13=284(LC 4)

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

TOP CHORD 2-3=-1204/0, 3-4=-1732/0, 4-5=-1732/0, 5-6=-1732/0, 6-8=-1092/0, 8-9=0/336, 9-10=0/336, 10-11=-309/29

BOT CHORD 21-22=0/771, 20-21=0/1597, 19-20=0/1732, 17-19=0/1529, 16-17=0/624, 15-16=-29/309,

14-15=-29/309, 13-14=-29/309 2-22=-965/0, 2-21=0/562, 3-21=-512/0, 3-20=-39/343, 8-16=-1043/0, 8-17=0/628, WFBS

6-17=-593/0, 6-19=0/430, 10-16=-600/0, 11-13=-382/36

### 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.



Job Truss Truss Type Qty Ply Lot 30 Liberty Meadows 156654235 **FLOOR** J0723-3472 F1A | Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:04 2023 Page 1

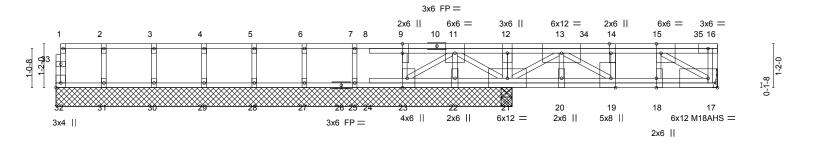
Fayetteville, NC - 28314, Comtech, Inc.

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0-1-8



Scale = 1:30.6



_	12-0-0							12	1-8		17-7-0	
			1	2-0-0				0- <sub>r</sub>	1-8		5-5-8	1
Plate Off	sets (X,Y)	[9:0-3-0,0-0-0], [14:0-3-0,	Edge], [15:0-	1-8,Edge], [18	3:0-3-0,0-0-	0], [19:0-3-0,Edge],	[23:0-3-	0,Edge	], [32:Ed	ge,0-1-8]		
			, , , , , , , , , , , , , , , , , , , ,	1		1 7 9 1						
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.67	Vert(LL)	-0.02	19	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.47	Vert(CT)	-0.04	19	>999	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	NO	WB	0.82	Horz(CT)	0.01	17	n/a	n/a		
BCDL	5.0	Code IRC2015/TF	PI2014	Matri	x-S	, ,					Weight: 110 lb	FT = 20%F, 11%E

LUMBER-BRACING-

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

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

**BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 22-23,21-22.

REACTIONS. All bearings 12-1-8 except (jt=length) 17=Mechanical.

(lb) - Max Uplift All uplift 100 lb or less at joint(s) except 22=-286(LC 4), 23=-289(LC 4)

Max Grav All reactions 250 lb or less at joint(s) 32, 23, 25, 27, 28, 29, 30, 31 except 21=2863(LC 1),

21=2863(LC 1), 17=2966(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 16-17=-1087/0, 11-12=0/1454, 12-13=0/1455, 13-14=-2946/0, 14-15=-2946/0

**BOT CHORD** 22-23=-606/0, 21-22=-606/0, 20-21=0/1599, 19-20=0/1599, 18-19=0/2946, 17-18=0/2946 WFBS

11-21=-1014/0, 13-21=-3440/0, 13-19=0/1624, 14-19=-864/0, 15-17=-3494/0,

15-18=-276/245, 11-23=0/739, 12-21=-274/0

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 1.5x3 MT20 unless otherwise indicated. 4) Plates checked for a plus or minus 1 degree rotation about its center.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 286 lb uplift at joint 22 and 289 lb uplift at joint 23.
- 7) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this
- 8) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 9) CAUTION, Do not erect truss backwards.

### LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

2) Dead: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100



February 15,2023

Continued on page 2

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

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 chore members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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



.loh Truss Truss Type Qty Lot 30 Liberty Meadows 156654235 J0723-3472 F1A **FLOOR** Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:05 2023 Page 2 ID:0HpugN1S QSTWxS0z0zGz9z5iCa-I0bLb93uBf8HXWSBkSlmt?rKWDhIOjS9h4mF5xzkyAa

### LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

3) 1st Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-140, 16-35=-20

Concentrated Loads (lb)

Vert: 15=-397 34=-397 35=-341

4) 2nd Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-20, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

5) 3rd unbalanced Dead: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-140, 16-35=-20

Concentrated Loads (lb)

Vert: 15=-397 34=-397 35=-341

6) 4th unbalanced Dead: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-20, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

7) 1st chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

8) 2nd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

9) 3rd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

10) 4th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

11) 5th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

12) 6th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

13) 7th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

14) 8th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

15) 9th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

16) 10th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

17) 11th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

### Continued on page 3



.loh Truss Truss Type Qty Lot 30 Liberty Meadows 156654235 F1A J0723-3472 **FLOOR** Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:05 2023 Page 3 ID:0HpugN1S QSTWxS0z0zGz9z5iCa-I0bLb93uBf8HXWSBkSlmt?rKWDhIOjS9h4mF5xzkyAa

### LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

18) 12th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

19) 13th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

20) 14th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

21) 15th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-15=-220, 15-35=-140, 16-35=-20

Concentrated Loads (lb)

Vert: 15=-397 34=-1306 35=-341

22) 16th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-14=-140, 14-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-397 35=-1250

23) 17th chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

24) 18th chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

25) 19th chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

26) 20th chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

27) 21st chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

28) 22nd chase Dead: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

29) 23rd chase Dead: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

30) 24th chase Dead: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

31) 25th chase Dead: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf) Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb) Vert: 15=-1306 34=-1306 35=-1250

32) 26th chase Dead: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Continued on page 4



Job	Truss	Truss Type	Qty	Ply	Lot 30 Liberty Meadows	٦
					I56654235	.
J0723-3472	F1A	FLOOR	1	1		
			1	1	Job Reference (optional)	

Fayetteville, NC - 28314, Comtech, Inc,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:05 2023 Page 4 ID:0HpugN1S QSTWxS0z0zGz9z5iCa-l0bLb93uBf8HXWSBkSlmt?rKWDhlOjS9h4mF5xzkyAa

### LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

33) 27th chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

34) 28th chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

35) 29th chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100 Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

36) 30th chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-1306 35=-1250

37) 31st chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-15=-220, 15-35=-140, 16-35=-20

Concentrated Loads (lb)

Vert: 15=-397 34=-1306 35=-341

38) 32nd chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 17-32=-10, 1-12=-100, 12-14=-140, 14-35=-220, 16-35=-100

Concentrated Loads (lb)

Vert: 15=-1306 34=-397 35=-1250



Job	Truss	Truss Type	Qty	Ply	Lot 30 Liberty Meadows
					156654236
J0723-3472	F2	FLOOR	3	1	
					Job Reference (optional)

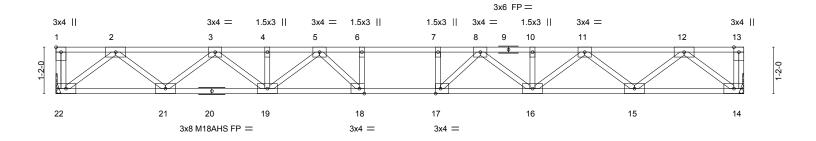
Comtech, Inc, Fayetteville, NC - 28314,

1-3-0

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:06 2023 Page 1 ID:0HpugN1S QSTWxS0z0zGz9z5iCa-mD9joV4XyzH89g1NI9G?QDNYLdzG7FnJvkVodNzkyAZ

1-0-0 1-9-8

Scale = 1:29.0



<u> </u>
GRIP
244/190
186/179
FT = 20%F, 11%E

17-3-8

LUMBER-**BRACING-**

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

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

REACTIONS. (size) 22=Mechanical, 14=Mechanical Max Grav 22=937(LC 1), 14=937(LC 1)

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

TOP CHORD 2-3=-1961/0, 3-4=-3242/0, 4-5=-3242/0, 5-6=-3793/0, 6-7=-3793/0, 7-8=-3793/0,

8-10=-3242/0, 10-11=-3242/0, 11-12=-1961/0 BOT CHORD 21-22=0/1169, 19-21=0/2719, 18-19=0/3607, 17-18=0/3793, 16-17=0/3607, 15-16=0/2719,

14-15=0/1169

2-22=-1467/0, 2-21=0/1031, 3-21=-986/0, 3-19=0/668, 12-14=-1467/0, 12-15=0/1031, WFBS

11-15=-986/0, 11-16=0/668, 5-19=-466/0, 8-16=-466/0, 8-17=-99/572, 7-17=-301/10,

5-18=-99/572, 6-18=-301/10

### NOTES-

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



February 15,2023

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 chore members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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



Job Truss Truss Type Qty Ply Lot 30 Liberty Meadows 156654237 J0723-3472 F3 **FLOOR** 6 Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:06 2023 Page 1

1-4-4

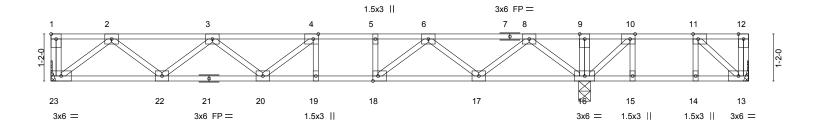
Fayetteville, NC - 28314, Comtech, Inc.

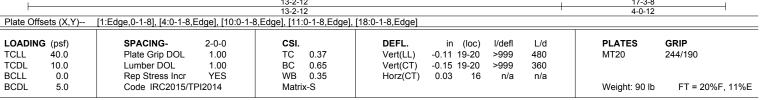
1-3-0

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1-0-0 1-5-4 —<u>| 1-0-0</u>

Scale = 1:28.6





BRACING-LUMBER-

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

BOT CHORD 2x4 SP No.1(flat) except end verticals.

**WEBS** 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 23=Mechanical, 13=Mechanical, 16=0-3-8

Max Uplift 13=-63(LC 3)

Max Grav 23=686(LC 10), 13=180(LC 4), 16=1100(LC 1)

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

2-3=-1338/0, 3-4=-1948/0, 4-5=-1992/0, 5-6=-1992/0, 6-8=-1059/0, 8-9=0/507, TOP CHORD

9-10=0/507

 $22-23=0/829,\ 20-22=0/1819,\ 19-20=0/1992,\ 18-19=0/1992,\ 17-18=0/1617,\ 16-17=0/498$ **BOT CHORD** WFBS

2-23=-1041/0, 2-22=0/662, 3-22=-626/0, 8-16=-1167/0, 8-17=0/740, 6-17=-739/0,

6-18=0/605, 10-16=-560/0

### 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 13.
- 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.





Job Truss Truss Type Qty Ply Lot 30 Liberty Meadows 156654238 J0723-3472 F4 **FLOOR** Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:08 2023 Page 1

1-4-4

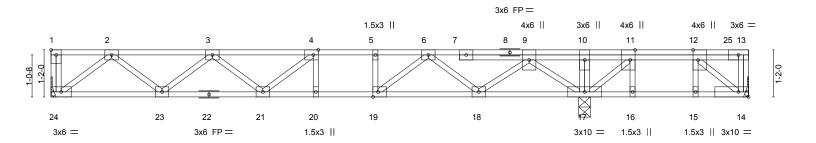
Fayetteville, NC - 28314, Comtech, Inc.

1-3-0

ID:0HpugN1S\_QSTWxS0z0zGz9z5iCa-jbHUDB5nUaXsO\_BmPalTVeTvrRg7b9ocN2\_viGzkyAX

1-0-0 1-5-4 

Scale = 1:28.6



	13-2-12									17-3-8	
13-2-12										4-0-12	
Plate Offs	sets (X,Y)	[1:Edge,0-1-8], [4:0-1-8,I	Edge], [11:0-3	-0,Edge], [12:0	0-3-0,Edge]	, [19:0-1-8,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	0.41	Vert(LL)	-0.10 20-21	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	ВС	0.66	Vert(CT)	-0.13 20-21	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.46	Horz(CT)	0.03 14	n/a	n/a		
BCDL	5.0	Code IRC2015/T	PI2014	Matrix	:-S	, ,				Weight: 99 lb	FT = 20%F. 11%E

LUMBER-BRACING-

2x4 SP 2400F 2.0E(flat) TOP CHORD TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, BOT CHORD 2x4 SP No.1(flat)

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

REACTIONS. (size) 24=Mechanical, 14=Mechanical, 17=0-3-8 Max Grav 24=700(LC 10), 14=2508(LC 4), 17=1748(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 13-14=-1282/0, 2-3=-1374/0, 3-4=-2016/0, 4-5=-2093/0, 5-6=-2093/0, 6-9=-1230/0,

9-10=-296/671, 10-11=-295/671, 11-12=-1522/0 BOT CHORD 23-24=0/848, 21-23=0/1871, 20-21=0/2093, 19-20=0/2093, 18-19=0/1719, 17-18=0/695,

16-17=0/1522, 15-16=0/1522, 14-15=0/1522

2-24=-1064/0, 2-23=0/684, 3-23=-647/0, 3-21=0/282, 9-17=-1207/0, 9-18=0/736, WFBS

6-18=-707/0, 6-19=0/558, 4-21=-284/37, 12-14=-1972/0, 11-17=-1955/0

### 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) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 7) CAUTION, Do not erect truss backwards.

### LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-10=-100, 10-25=-220, 13-25=-100, 14-24=-10

Concentrated Loads (lb)

Vert: 12=-1250 25=-1250

2) Dead: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 1-10=-100, 10-25=-220, 13-25=-100, 14-24=-10

Concentrated Loads (lb)

Vert: 12=-1250 25=-1250

3) 1st Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00



Continued on page 2

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

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 chore members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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



.loh Truss Truss Type Qty Lot 30 Liberty Meadows 156654238 F4 J0723-3472 **FLOOR** 

Comtech, Inc, Fayetteville, NC - 28314,

| Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:08 2023 Page 2 ID:0HpugN1S QSTWxS0z0zGz9z5iCa-jbHUDB5nUaXsO BmPalTVeTvrRg7b9ocN2 viGzkyAX

### LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-10=-100, 10-25=-140, 13-25=-20, 14-24=-10

Concentrated Loads (lb)

Vert: 12=-341 25=-341

4) 2nd Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 1-10=-20, 10-25=-220, 13-25=-100, 14-24=-10

Concentrated Loads (lb)

Vert: 12=-1250 25=-1250

5) 3rd unbalanced Dead: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 1-10=-100, 10-25=-140, 13-25=-20, 14-24=-10

Concentrated Loads (lb)

Vert: 12=-341 25=-341

6) 4th unbalanced Dead: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 1-10=-20, 10-25=-220, 13-25=-100, 14-24=-10

Concentrated Loads (lb)

Vert: 12=-1250 25=-1250

7) 1st chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 1-5=-100, 5-10=-20, 10-25=-220, 13-25=-100, 14-24=-10

Concentrated Loads (lb)

Vert: 12=-1250 25=-1250

8) 2nd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 1-4=-20, 4-10=-100, 10-25=-220, 13-25=-100, 14-24=-10

Concentrated Loads (lb)

Vert: 12=-1250 25=-1250

9) 3rd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 1-10=-100, 10-12=-220, 12-25=-140, 13-25=-20, 14-24=-10

Concentrated Loads (lb)

Vert: 12=-1250 25=-341

10) 4th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 1-10=-100, 10-11=-140, 11-25=-220, 13-25=-100, 14-24=-10

Concentrated Loads (lb)

Vert: 12=-1250 25=-1250

11) 5th chase Dead: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 1-5=-100, 5-10=-20, 10-25=-220, 13-25=-100, 14-24=-10

Concentrated Loads (lb)

Vert: 12=-1250 25=-1250

12) 6th chase Dead: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 1-4=-20, 4-10=-100, 10-25=-220, 13-25=-100, 14-24=-10

Concentrated Loads (lb)

Vert: 12=-1250 25=-1250

13) 7th chase Dead: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 1-10=-100, 10-12=-220, 12-25=-140, 13-25=-20, 14-24=-10

Concentrated Loads (lb)

Vert: 12=-1250 25=-341

14) 8th chase Dead: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 1-10=-100, 10-11=-140, 11-25=-220, 13-25=-100, 14-24=-10

Concentrated Loads (lb)

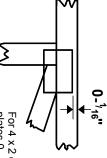
Vert: 12=-1250 25=-1250

### Symbols

# PLATE LOCATION AND ORIENTATION



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



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

connector plates required direction of slots in This symbol indicates the

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

### **PLATE SIZE**

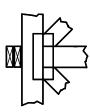
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

## LATERAL BRACING LOCATION



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

### **BEARING**



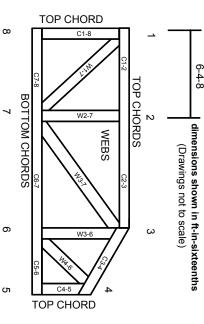
Min size shown is for crushing only number where bearings occur. reaction section indicates joint (supports) occur. Icons vary but Indicates location where bearings

## Industry Standards:

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

DSB-89: ANSI/TPI1:

# 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

established by others. section 6.3 These truss designs rely on lumber values 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
- Ņ Truss bracing must be designed by an engineer. For bracing should be considered. may require bracing, or alternative Tor I wide truss spacing, individual lateral braces themselves
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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designer, erection supervisor, property owner and all other interested parties. Provide copies of this truss design to the building

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- 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.

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- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- œ Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication
- 9 Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the camber for dead load deflection responsibility 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.
- 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 project engineer before use. environmental, health or performance risks. Consult with
- 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.