

RE: J0323-1214

Lot 43 Liberty Meadow

Trenco

Truss Name

V4

V5

V6

Date

3/1/2023

3/1/2023

3/1/2023

818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Project Name: J0323-1214

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 23 individual, dated Truss Design Drawings and 0 Additional Drawings.

No. 1	Seal# I56917876	Truss Name A1	Date 3/1/2023	No. 21	Seal# I56917896
2	156917877	A1GE	3/1/2023	22	156917897
3	I56917878	A2	3/1/2023	23	156917898
4	I56917879	A3	3/1/2023		
5	156917880	A3GE	3/1/2023		
6	156917881	B1GE	3/1/2023		
7	156917882	B2	3/1/2023		
8	156917883	C1	3/1/2023		
9	156917884	C1-GR	3/1/2023		
10	156917885	C1GE	3/1/2023		
11	156917886	G1	3/1/2023		
12	156917887	G1GE	3/1/2023		
13	156917888	J1	3/1/2023		
14	156917889	J2	3/1/2023		
15	156917890	J2GE	3/1/2023		
16	156917891	J3	3/1/2023		
17	156917892	J3GE	3/1/2023		
18	156917893	V1	3/1/2023		
19	156917894	V2	3/1/2023		
20	156917895	V3	3/1/2023		

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

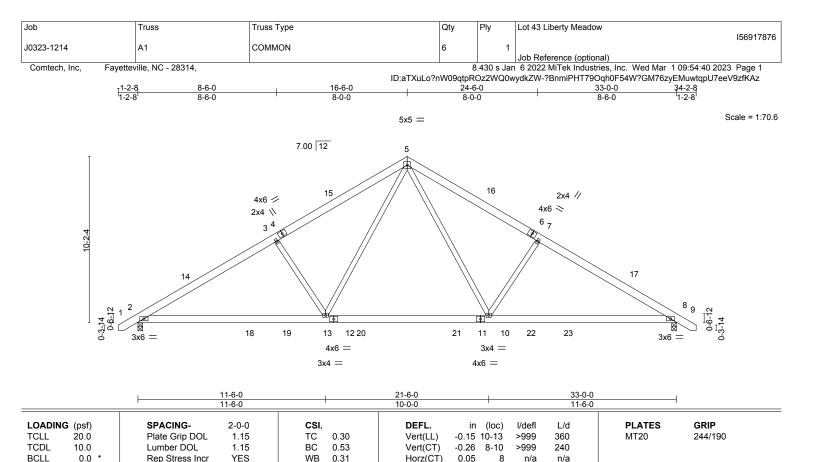
My license renewal date for the state of North Carolina is December 31, 2023

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.



March 01, 2023



Wind(LL)

BRACING-TOP CHORD

BOT CHORD

0.05

2-13

>999

240

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

Structural wood sheathing directly applied or 4-11-2 oc purlins.

Weight: 221 lb

FT = 20%

LUMBER-

10.0

BCDL

WEBS

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

REACTIONS.

2=0-3-8, 8=0-3-8 (size) Max Horz 2=245(LC 11)

Max Uplift 2=-91(LC 12), 8=-91(LC 13) Max Grav 2=1525(LC 19), 8=1525(LC 20)

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

Code IRC2015/TPI2014

2-3=-2295/423, 3-5=-2090/464, 5-7=-2091/464, 7-8=-2296/423 TOP CHORD

BOT CHORD 2-13=-222/2070, 10-13=-9/1347, 8-10=-233/1886

WEBS 3-13=-544/300, 5-13=-140/991, 5-10=-139/991, 7-10=-544/300

NOTES-

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

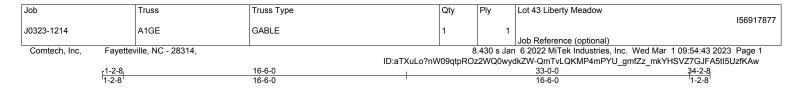
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-6 to 3-4-7, Interior(1) 3-4-7 to 16-6-0, Exterior(2) 16-6-0 to 20-10-13, Interior(1) 20-10-13 to 34-0-6 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

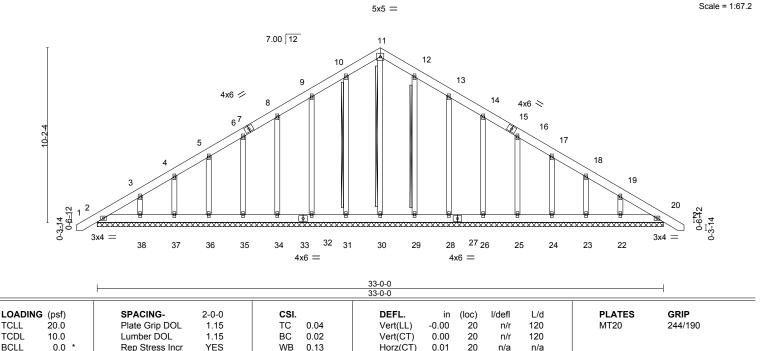
Matrix-S

- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 91 lb uplift at joint 2 and 91 lb uplift at joint 8.









LUMBER-

Code IRC2015/TPI2014

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

10.0

BRACING-TOP CHORD **BOT CHORD WEBS**

Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing. T-Brace: 2x4 SPF No.2 - 11-30, 10-31, 12-29 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

Weight: 283 lb

FT = 20%

REACTIONS. All bearings 33-0-0.

Max Horz 2=306(LC 11) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 31, 32, 34, 35, 36, 37, 38, 29, 28, 26, 25, 24, 23, 22 Max Grav All reactions 250 lb or less at joint(s) 2, 20, 30, 31, 32, 34, 35, 36, 37, 38, 29, 28, 26, 25, 24, 23. 22

Matrix-S

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

TOP CHORD 2-3=-277/226, 10-11=-242/277, 11-12=-242/277

NOTES-

BCDL

- 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) 2, 20, 31, 32, 34, 35, 36, 37, 38, 29, 28, 26, 25, 24, 23, 22.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



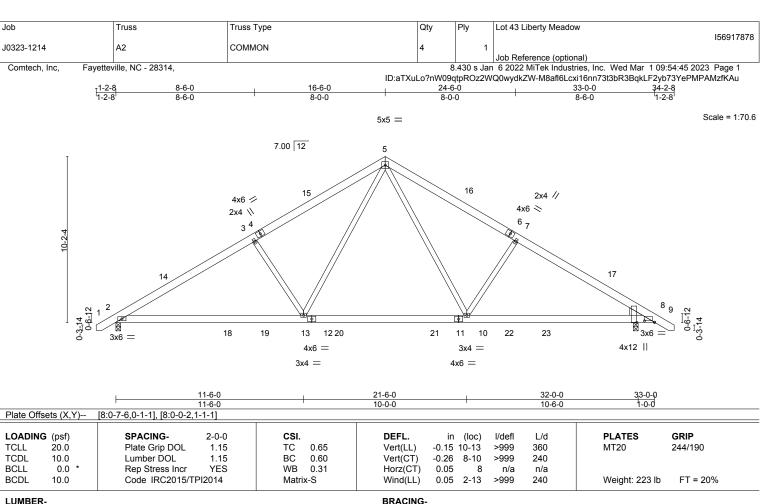
March 1,2023

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

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





BOT CHORD

LUMBER-

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

WEDGE

Right: 2x6 SP No.1

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

Max Horz 2=245(LC 11)

Max Uplift 2=-91(LC 12), 8=-91(LC 13) Max Grav 2=1525(LC 19), 8=1525(LC 20)

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

2-3=-2295/423, 3-5=-2090/464, 5-7=-2091/464, 7-8=-2296/423 **BOT CHORD** 2-13=-222/2070, 10-13=-9/1347, 8-10=-233/1886

WEBS 3-13=-544/300, 5-13=-140/991, 5-10=-139/991, 7-10=-544/300

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) -1-0-6 to 3-4-7, Interior(1) 3-4-7 to 16-6-0, Exterior(2) 16-6-0 to 20-10-13, Interior(1) 20-10-13 to 34-0-6 zone; cantilever 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



Structural wood sheathing directly applied or 4-11-2 oc purlins.

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

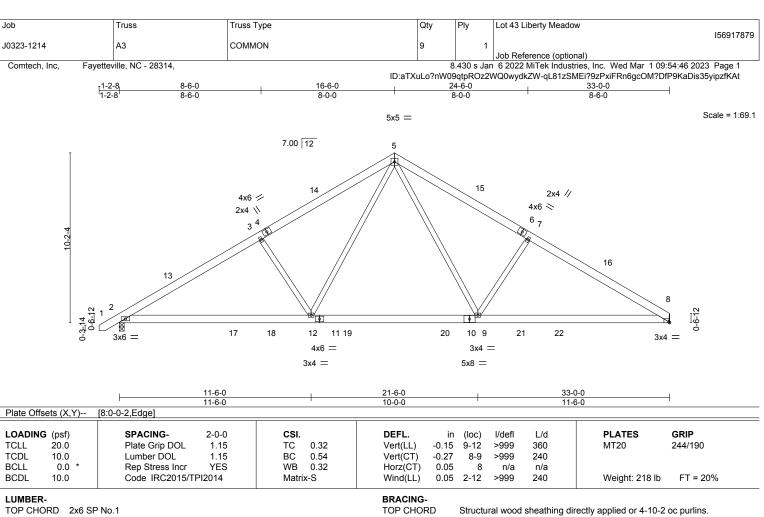
March 1,2023

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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





BOT CHORD

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

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

REACTIONS.

(size) 2=0-3-8, 8=Mechanical

Max Horz 2=241(LC 11)

Max Uplift 2=-91(LC 12), 8=-75(LC 13) Max Grav 2=1529(LC 19), 8=1461(LC 20)

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

TOP CHORD 2-3=-2303/425, 3-5=-2098/466, 5-7=-2112/480, 7-8=-2319/440

BOT CHORD 2-12=-255/2070, 9-12=-30/1348, 8-9=-260/1916

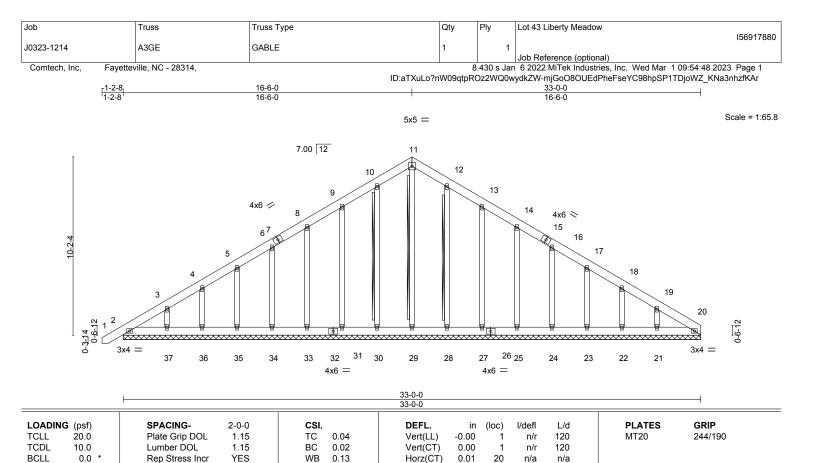
3-12=-545/300, 5-12=-141/990, 5-9=-144/1011, 7-9=-555/308 WFBS

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) -1-0-6 to 3-4-7, Interior(1) 3-4-7 to 16-6-0, Exterior(2) 16-6-0 to 20-10-13, Interior(1) 20-10-13 to 32-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.







LUMBER-

BCDL

2x6 SP No.1

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

10.0

BRACING-

TOP CHORD **BOT CHORD WEBS**

Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing. T-Brace: 2x4 SPF No.2 - 11-29, 10-30, 12-28 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

Weight: 280 lb

FT = 20%

REACTIONS. All bearings 33-0-0.

Max Horz 2=301(LC 9) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 30, 31, 33, 34, 35, 36, 37, 28, 27, 25, 24, 23, 22 except

Matrix-S

21=-107(LC 13)

All reactions 250 lb or less at joint(s) 2, 20, 29, 30, 31, 33, 34, 35, 36, 37, 28, 27, 25, 24, 23, Max Grav 22. 21

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

Code IRC2015/TPI2014

TOP CHORD 2-3=-280/222, 10-11=-236/265, 11-12=-236/265

- 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20, 30, 31, 33, 34, 35, 36, 37, 28, 27, 25, 24, 23, 22 except (jt=lb) 21=107.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



March 1,2023

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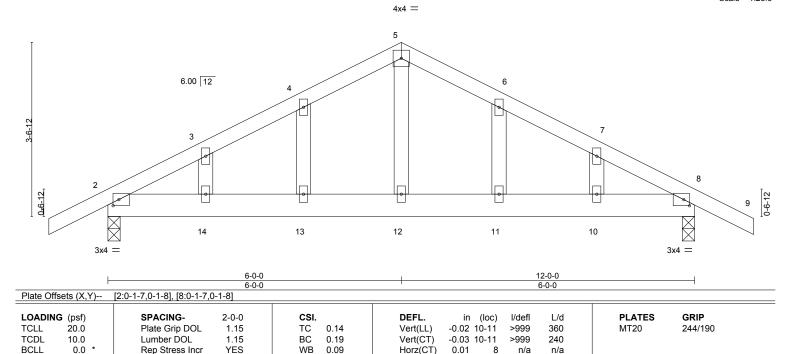


Job Truss Truss Type Qty Ply Lot 43 Liberty Meadow 156917881 J0323-1214 B1GE **GABLE** Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:50 2023 Page 1 Comtech, Inc, Fayetteville, NC - 28314, ID:aTXuLo?nW09qtpROz2WQ0wydkZW-j6OYpqPlmEfPuZ00gdBcmEXj_GsaGRmHng3ArazfKAp 13-2-8

Scale = 1:23.6

1-2-8

FT = 20%



LUMBER-

BCDL

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

10.0

1-2-8

Wind(LL) **BRACING-** 0.03 10-11

>999

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

Weight: 65 lb

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

240

6-0-0

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

Max Horz 2=-73(LC 17)

Max Uplift 2=-143(LC 9), 8=-143(LC 8) Max Grav 2=550(LC 1), 8=550(LC 1)

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

Code IRC2015/TPI2014

2-3=-617/666, 3-4=-570/687, 4-5=-561/740, 5-6=-561/740, 6-7=-570/688, 7-8=-617/666 TOP CHORD **BOT CHORD** $2 - 14 = -494/491,\ 13 - 14 = -494/491,\ 12 - 13 = -494/491,\ 11 - 12 = -494/491,\ 10 - 11 = -494/491,$ 8-10=-494/491

6-0-0

WEBS 5-12=-513/328

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; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-S

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=143, 8=143,



March 1,2023



Job Truss Truss Type Qty Ply Lot 43 Liberty Meadow 156917882 J0323-1214 COMMON B2 Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:51 2023 Page 1 Comtech, Inc, Fayetteville, NC - 28314, ID:aTXuLo?nW09qtpROz2WQ0wydkZW-Blxw09QNXYnGVibDEKirJS4rMgCN?uKR0KpjN0zfKAo 13-2-8 1-2-8 6-0-0 6-0-0 1-2-8 Scale = 1:23.7 4x4 = 3 6.00 12 0-6-12 6 2x4 || 3x4 / 3x4 > 6-0-0 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defl L/d **PLATES** GRIP (loc) 20.0 Plate Grip DOL 1.15 Vert(LL) -0.01 >999 360 244/190 **TCLL** TC 0.29 MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.15 Vert(CT) -0.02 4-6 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.07 Horz(CT) 0.01 n/a n/a Code IRC2015/TPI2014 **BCDL** 10.0 Matrix-S Wind(LL) 0.03 4-6 >999 240 Weight: 57 lb FT = 20%

> 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=0-3-0, 4=0-3-0 (size) Max Horz 2=-47(LC 10) Max Uplift 2=-109(LC 9), 4=-109(LC 8) Max Grav 2=550(LC 1), 4=550(LC 1)

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

2-3=-640/667, 3-4=-640/667 TOP CHORD **BOT CHORD** 2-6=-457/485, 4-6=-457/485

WEBS 3-6=-394/296

NOTES-

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



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

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



Job Truss Truss Type Qty Ply Lot 43 Liberty Meadow 156917883 J0323-1214 C₁ COMMON 5

Fayetteville, NC - 28314, Comtech, Inc.

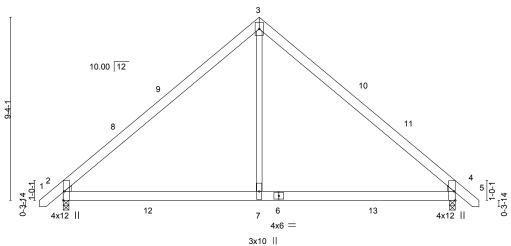
Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:52 2023 Page 1 ID:aTXuLo?nW09qtpROz2WQ0wydkZW-fVVJDVR?Irv77sAPn2D4rfcz_4SakKkaF_YHwSzfKAn

20-0-0 10-0-0 10-0-0

> Scale = 1:58.8 5x8 ||

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

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



10-0-0 20-0-0 10-0-0

Plate Offse	ets (X,Y)	[2:Eage,0-0-11], [4:Eage,0-0-11]			
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 0.49	Vert(LL) -0.10 4-7 >999 360 MT20 244/190	
TCDL	10.0	Lumber DOL 1.15	BC 0.54	Vert(CT) -0.17 4-7 >999 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.19	Horz(CT) 0.01 4 n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.06 2-7 >999 240 Weight: 129 lb FT = 20%	

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE

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

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

Max Horz 2=-221(LC 10)

Max Uplift 4=-48(LC 13), 2=-48(LC 12) Max Grav 4=1044(LC 20), 2=1044(LC 19)

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

TOP CHORD 2-3=-1118/210, 3-4=-1118/210

BOT CHORD 2-7=0/784, 4-7=0/784

WEBS 3-7=0/822

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) -1-0-8 to 3-4-4, Interior(1) 3-4-4 to 10-0-0, Exterior(2) 10-0-0 to 14-4-13, Interior(1) 14-4-13 to 21-0-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.



March 1,2023

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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 Ply Lot 43 Liberty Meadow 156917884 J0323-1214 C1-GR COMMON GIRDER Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:56 2023 Page 1

ID:aTXuLo?nW09qtpROz2WQ0wydkZW-XGlp3tUVM4PYcUTA0tl00Vnd5hqqgzOA9cWU3DzfKAj 20-0-0 5-0-0 5-0-0 15-0-0 5-0-0 5-0-0 5-0-0

> Scale = 1:58.8 5x8 |

> > Structural wood sheathing directly applied or 5-7-9 oc purlins.

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

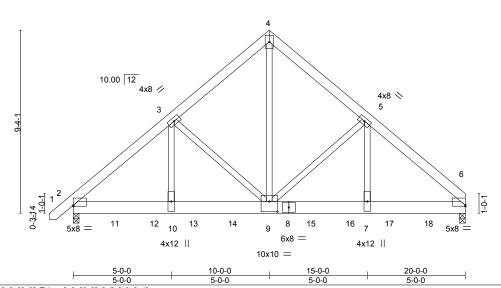


Plate Offsets (X,Y)-- [2:0-0-0,0-0-9], [6:Edge,0-0-9], [9:0-5-0,0-6-4]

BCLL 0.0 * Rep Stress Incr NO WB 0.85 Horz(CT) 0.03 6 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Wind/LL 0.05 9-10 5999 240 Weight: 341 lb ET = 20%	LOADING (psf) TCLL 20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	CSI. TC 0.61 BC 0.45	DEFL. in (loc) I/defl L/d Vert(LL) -0.07 9-10 >999 360 Vert(CT) -0.13 9-10 >999 240	PLATES GRIP MT20 244/190
DODE 10.0 Code 11.02010/11 12017 Waltin O Willia(LE) 0.00 3-10 7333 240 Weight. 04110 11 - 20/0	BCLL 0.0 * BCDL 10.0	Rep Stress Incr NO Code IRC2015/TPI2014	WB 0.85 Matrix-S	Horz(CT) 0.03 6 n/a n/a Wind(LL) 0.05 9-10 >999 240	Weight: 341 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP No.1 **BOT CHORD** 2x8 SP 2400F 2.0E **WEBS** 2x4 SP No.2

REACTIONS. (size) 6=0-3-8, 2=0-3-8 Max Horz 2=217(LC 26)

Max Uplift 6=-424(LC 9), 2=-437(LC 8) Max Grav 6=6844(LC 2), 2=6838(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-8399/550, 3-4=-5693/462, 4-5=-5691/461, 5-6=-8413/547 **BOT CHORD** 2-10=-410/6080, 9-10=-410/6081, 7-9=-340/6084, 6-7=-340/6083

WFBS 4-9=-485/6901, 5-9=-2367/286, 5-7=-162/3485, 3-9=-2363/282, 3-10=-164/3461

NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-7-0 oc.
- Webs connected as follows: 2x4 1 row at 0-9-0 oc. 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to
- ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated. 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=424, 2=437.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1360 lb down and 95 lb up at 2-0-12, 1360 lb down and 95 lb up at 4-0-12, 1360 lb down and 95 lb up at 6-0-12, 1360 lb down and 95 lb up at 8-0-12, 1360 lb down and 95 lb up at 10-0-12, 1360 lb down and 95 lb up at 12-0-12, 1360 lb down and 95 lb up at 14-0-12, and 1360 lb down and 95 lb up at 16-0-12, and 1360 lb down and 95 lb up at 18-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Vert: 1-4=-60, 4-6=-60, 2-6=-20



March 1,2023

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

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Job Truss Truss Type Qty Ply Lot 43 Liberty Meadow 156917884 J0323-1214 C1-GR COMMON GIRDER

Comtech, Inc, Fayetteville, NC - 28314, Job Reference (optional)

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:56 2023 Page 2
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LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 9=-1290(F) 11=-1290(F) 12=-1290(F) 13=-1290(F) 14=-1290(F) 15=-1290(F) 16=-1290(F) 17=-1290(F) 18=-1290(F)

818 Soundside Road Edenton, NC 27932

Job Truss Truss Type Qty Ply Lot 43 Liberty Meadow 156917885 J0323-1214 C1GE **GABLE**

5x8 ||

Fayetteville, NC - 28314, Comtech, Inc.

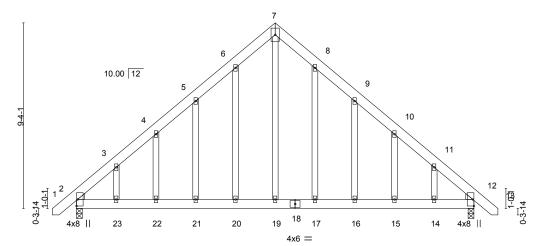
Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:54 2023 Page 1 ID:aTXuLo?nW09qtpROz2WQ0wydkZW-btd3eBSFqT9rMAJovSFYx4hN?tAECAttil1O LzfKAl

20-0-0 10-0-0 10-0-0

Scale = 1:58.0

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

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



10-0-0 20-0-0 10-0-0 LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) L/d **PLATES GRIP** I/def 20.0 -0.09 15-16 360 244/190 **TCLL** Plate Grip DOL 1.15 TC 0.20 Vert(LL) >999 MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.40 Vert(CT) -0.14 15-16 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.40 Horz(CT) 0.01 12 n/a n/a Code IRC2015/TPI2014 BCDL 10.0 Matrix-S Wind(LL) 0.15 21-22 >999 240 Weight: 180 lb FT = 20%

> BRACING-TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE

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

REACTIONS. (size) 12=0-3-8, 2=0-3-8

Max Horz 2=-276(LC 10)

Max Uplift 12=-169(LC 13), 2=-169(LC 12) Max Grav 12=860(LC 1), 2=860(LC 1)

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

TOP CHORD 2-3=-870/130, 3-4=-749/172, 4-5=-705/231, 5-6=-739/304, 6-7=-776/383, 7-8=-776/383,

8-9=-739/304, 9-10=-705/231, 10-11=-749/172, 11-12=-870/129

BOT CHORD 2-23=-39/567, 22-23=-39/567, 21-22=-39/567, 20-21=-39/567, 19-20=-39/567,

17-19=-39/567, 16-17=-39/567, 15-16=-39/567, 14-15=-39/567, 12-14=-39/567

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
- 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.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=169, 2=169



March 1,2023

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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	Ply	Lot 43 Liberty Meadow
			_		156917886
J0323-1214	G1	COMMON	6	1	
					Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

4-10-10

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:57 2023 Page 1 ID:aTXuLo?nW09qtpROz2WQ0wydkZW-?SJBHDV86OXPDe2MabpFYjJtO5BGPXLJOGG2bgzfKAi 34-10-10 27-10-10 40-10-10 46-0-0 7-0-0 5-1-6 4-10-10 6-0-0 5-1-6

Scale = 1:94.1 4x6 =

Structural wood sheathing directly applied or 3-11-0 oc purlins.

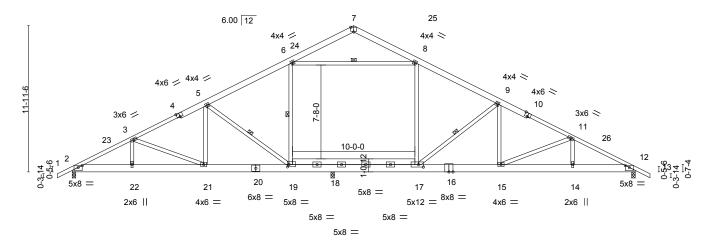
9-17, 6-19, 5-19, 6-8

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

8-5-9 oc bracing: 18-19

7-9-4 oc bracing: 17-18.

1 Row at midpt



	4-10-10	10-10-10	, 17	'-10-10	₁ 21-1-10	_ı 28-1-5	34-10	0-10	40-10-10	46-0-0	
	4-10-10	6-0-0		7-0-0	3-3-0	6-11-11	6-9	-5	6-0-0	5-1-6	
Plate Offsets (X,	[2:0-4-0,0-1-15]	[4:0-3-0,Edg	je], [7:0-3-0,E	Edge], [10:	:0-3-0,Edge],	[12:0-4-0,0-1-15],	[17:0-4-12,0-2	!-8], [19:0·	-1-8,0-2-4]		
LOADING (psf)	SPACING	3- 2	-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Gri	DOL	.15	TC	0.26	Vert(LL)	-0.24 15-17	>999	360	MT20	244/190
TCDL 10.0	Lumber [OL	.15	BC	0.44	Vert(CT)	-0.40 15-17	>739	240		
BCLL 0.0	Rep Stre	ss Incr '	'ES	WB	0.42	Horz(CT)	0.03 12	n/a	n/a		
BCDL 10.0	Code IR	C2015/TPI20	14	Matri	x-S	Wind(LL)	0.16 15-17	>999	240	Weight: 376 lb	FT = 20%

TOP CHORD

BOT CHORD

WEBS

LUMBER-**BRACING-**

8-8-12 10-10-10 3-10-2 2-1-14

7-0-0

2x6 SP No.1 *Except* TOP CHORD 1-4,10-13: 2x4 SP No.1

2x8 SP 2400F 2.0E *Except*

BOT CHORD 17-19: 2x6 SP No.1

WEBS 2x4 SP No.2

REACTIONS. (size) 2=0-3-8, 12=0-3-8, 18=0-3-8

Max Horz 2=156(LC 11)

Max Uplift 2=-66(LC 12), 12=-168(LC 13), 18=-120(LC 12) Max Grav 2=1250(LC 1), 12=1365(LC 24), 18=1447(LC 19)

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

2-3=-2175/456, 3-5=-1759/445, 5-6=-1250/413, 6-7=-378/186, 7-8=-350/181, TOP CHORD

8-9=-1235/382, 9-11=-2082/468, 11-12=-2367/451

BOT CHORD 2-22=-304/1880, 21-22=-304/1880, 19-21=-194/1515, 18-19=-52/1043, 17-18=-48/1031,

15-17=-245/1812, 14-15=-325/2045, 12-14=-325/2045

9-17=-1058/260, 9-15=-26/593, 5-19=-875/234, 5-21=-23/446, 3-21=-393/120, WFBS

11-15=-281/104, 6-8=-846/319

NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-7 to 3-2-5, Interior(1) 3-2-5 to 23-0-0, Exterior(2) 23-0-0 to 27-4-13, Interior(1) 27-4-13 to 47-2-7 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 12=168, 18=120.





Job Truss Truss Type Qty Lot 43 Liberty Meadow 156917887 J0323-1214 G1GE COMMON SUPPORTED GAB Job Reference (optional) Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:55:00 2023 Page 1

ID:aTXuLo?nW09qtpROz2WQ0wydkZW-Q1_KvEX0PJw_45nxFjMyALxRZIJPcyol4EUiC?zfKAf 23-0-0 23-0-0 23-0-0

Scale = 1:81.7

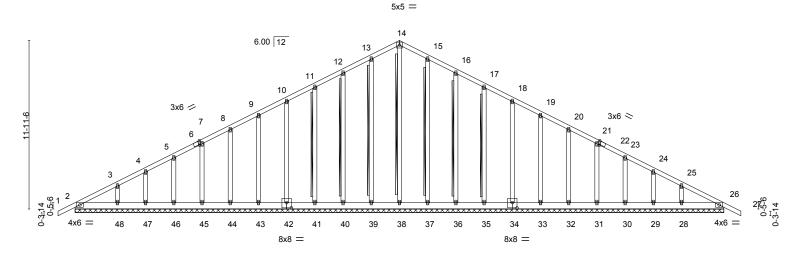


Plate Offsets (X,Y)--[6:0-1-9,Edge], [22:0-1-9,Edge], [34:0-4-0,0-4-8], [42:0-4-0,0-4-8] LOADING (psf) SPACING-DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL 20.0 Plate Grip DOL 1.15 TC 0.07 Vert(LL) -0.00 27 120 244/190 n/r MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.03 Vert(CT) -0.00 27 n/r 120 **BCLL** 0.0 Rep Stress Incr YES WB 0.18 Horz(CT) 0.01 26 n/a n/a Code IRC2015/TPI2014 **BCDL** 10.0 Weight: 376 lb FT = 20% Matrix-S

46-0-0

LUMBER-

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

1-2-8 1-2-8

BRACING-

TOP CHORD **BOT CHORD WEBS**

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

Rigid ceiling directly applied or 10-0-0 oc bracing. 2x4 SPF No.2 - 14-38, 13-39, 12-40, 11-41

15-37, 16-36, 17-35

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

REACTIONS. All bearings 46-0-0.

Max Horz 2=245(LC 16) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 39, 40, 41, 42, 43, 44, 45, 46,

47, 48, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 26

Max Grav All reactions 250 lb or less at joint(s) 2, 38, 39, 40, 41, 42, 43, 44, 45,

46, 47, 48, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 26

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

TOP CHORD 2-3=-322/96, 11-12=-106/275, 12-13=-127/337, 13-14=-146/387, 14-15=-146/387,

15-16=-127/337, 16-17=-106/275

BOT CHORD 2-48=-82/271, 47-48=-82/271, 46-47=-82/271, 45-46=-82/271, 44-45=-82/271, 43-44=-82/271, 42-43=-82/271, 41-42=-82/271, 40-41=-82/271, 39-40=-82/271,

38-39=-82/271, 37-38=-82/271, 36-37=-82/271, 35-36=-82/271, 34-35=-82/271,

33-34=-82/271, 32-33=-82/271, 31-32=-82/271, 30-31=-82/271, 29-30=-82/271,

28-29=-82/271, 26-28=-82/271

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.
- All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 26.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required

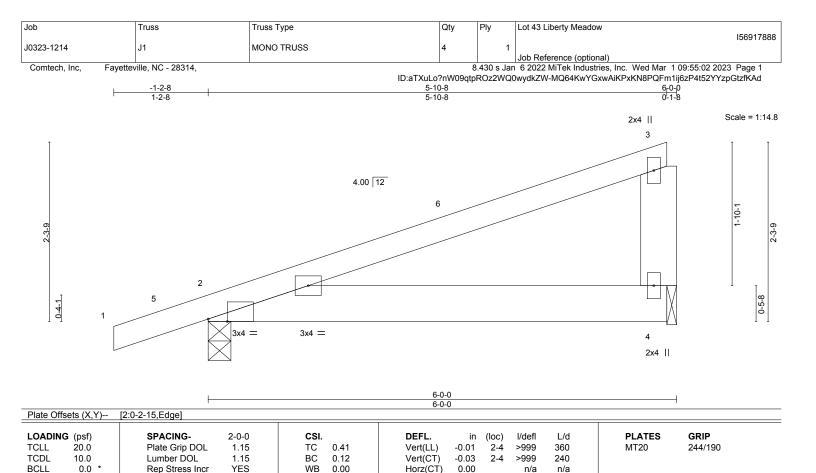


March 1,2023

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Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

0.03

2-4

>999

except end verticals.

240

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

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

LUMBER-

BCDL

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

10.0

WEBS 2x6 SP No.1

REACTIONS. (size) 2=0-3-8, 4=0-1-8 Max Horz 2=83(LC 8)

Max Uplift 2=-132(LC 8), 4=-90(LC 8) Max Grav 2=316(LC 1), 4=215(LC 1)

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

Code IRC2015/TPI2014

NOTES-

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

Matrix-P

- 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



Weight: 29 lb

FT = 20%

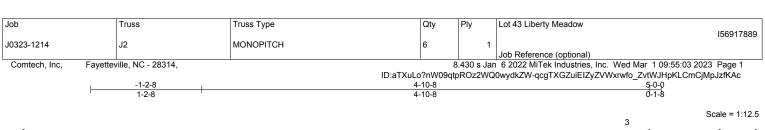


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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





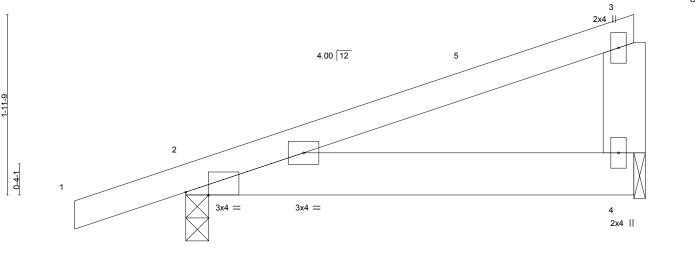


Plate Offsets (X,Y) [2:0-2-15,Edg	ge]		5-0-0		
TCDL 10.0 Lumbe BCLL 0.0 * Rep S	ING- 2-0-0 Grip DOL 1.15 or DOL 1.15 tress Incr YES IRC2015/TPI2014	CSI. TC 0.26 BC 0.08 WB 0.00 Matrix-P	DEFL. in (Vert(LL) -0.01 Vert(CT) -0.01 Horz(CT) 0.00 Wind(LL) 0.01	loc) I/defl L/d 2-4 >999 360 2-4 >999 240 n/a n/a 2-4 >999 240	PLATES GRIP MT20 244/190 Weight: 24 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

5-0-0

LUMBER-

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

WEBS 2x6 SP No.1

REACTIONS. (size) 2=0-3-0, 4=0-1-8 Max Horz 2=72(LC 8)

Max Uplift 2=-119(LC 8), 4=-72(LC 8) Max Grav 2=277(LC 1), 4=174(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 4-9-4 zone; porch left 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 = 119



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

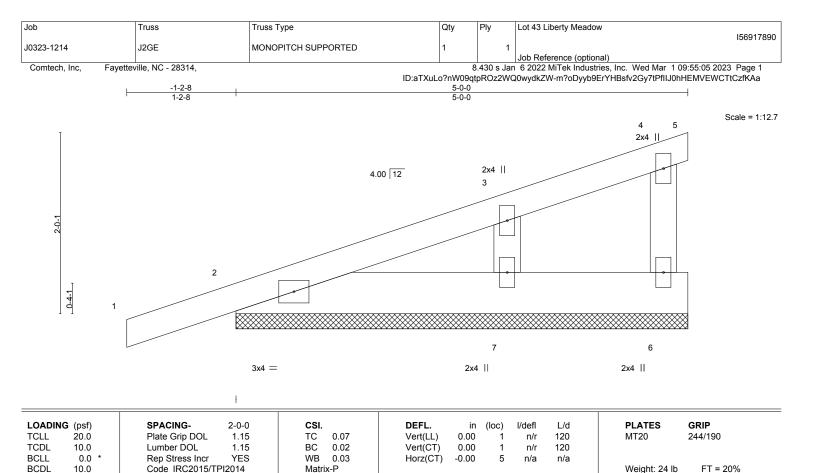
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

March 1,2023

9





BOT CHORD

BRACING-LUMBER-

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

OTHERS 2x4 SP No.2

REACTIONS. All bearings 5-0-0. Max Horz 2=104(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 5, 6, 2, 7 Max Grav All reactions 250 lb or less at joint(s) 5, 6, 2, 7

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 requires continuous bottom chord bearing.
- 4) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6, 2, 7.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

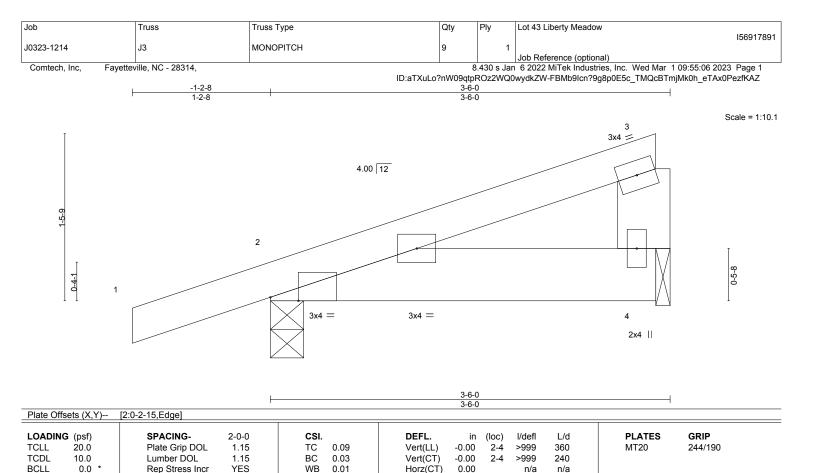


Structural wood sheathing directly applied or 5-0-0 oc purlins,

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

except end verticals.





Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

0.00

240

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

Structural wood sheathing directly applied or 3-6-0 oc purlins.

LUMBER-

BCDL

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

10.0

REACTIONS. (size) 2=0-3-8, 4=0-1-8 Max Horz 2=56(LC 8)

Max Uplift 2=-69(LC 8), 4=-14(LC 12) Max Grav 2=224(LC 1), 4=107(LC 1)

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

Code IRC2015/TPI2014

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) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-P

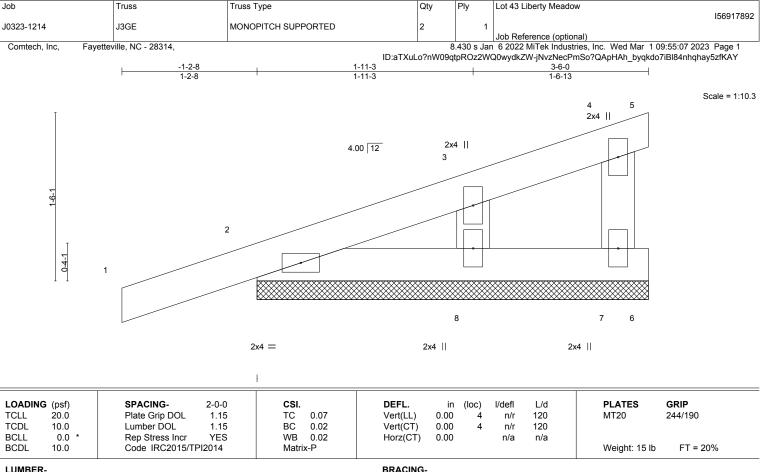
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



FT = 20%

Weight: 17 lb





BOT CHORD

LUMBER-TOP CHORD

REACTIONS.

2x4 SP No.1 2x4 SP No.1

BOT CHORD WEBS 2x4 SP No.2

7=3-6-0, 2=3-6-0, 8=3-6-0 (size) Max Horz 2=79(LC 8)

Max Uplift 7=-26(LC 8), 2=-91(LC 8), 8=-38(LC 12) Max Grav 7=52(LC 1), 2=164(LC 1), 8=125(LC 1)

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

NOTES-

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



Structural wood sheathing directly applied or 3-6-0 oc purlins,

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

except end verticals.





Job Truss Truss Type Qty Ply Lot 43 Liberty Meadow 156917893 J0323-1214 V1 VALLEY Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:55:08 2023 Page 1 Comtech, Inc, Fayetteville, NC - 28314, ID: aTXuLo?nW09qtpROz2WQ0wydkZW-BaTMazd1Xmwr2KOUjPVqV1Hm3X0zUZWxwUQ7UXzfKAX9-3-1

> Scale = 1:48.8 4x4 = 3 10.00 12 2x4 || 2x4 || 2 11 10

9-3-2

3x4 // 9 8 6 7 2x4 || 2x4 || 3x4 =2x4 || 18-6-3 0-0-7

	0-0-7		18-5-12		
Plate Offsets (X,Y)	[4:0-0-0,0-0-0]				
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 0.23 BC 0.18 WB 0.13 Matrix-S	Vert(LL) n/a - r Vert(CT) n/a - r	efl L/d n/a 999 n/a 999 n/a n/a	PLATES GRIP MT20 244/190 Weight: 84 lb FT = 20%

LUMBER-2x4 SP No.1 TOP CHORD

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

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

9-0-0

3x4 💉

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

REACTIONS. All bearings 18-5-5.

(lb) -Max Horz 1=177(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-172(LC 12), 6=-172(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=411(LC 22), 9=560(LC 19), 6=560(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-9=-428/293, 4-6=-428/292 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) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 9-3-1, Exterior(2) 9-3-1 to 13-7-14, Interior(1) 13-7-14 to 18-1-6 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=172, 6=172,





Job Truss Truss Type Qty Ply Lot 43 Liberty Meadow 156917894 J0323-1214 V2 VALLEY Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:55:10 2023 Page 1 Comtech, Inc, Fayetteville, NC - 28314, ID:aTXuLo?nW09qtpROz2WQ0wydkZW-7yb6?ffl3NAZHdYsrqYlaSM7mKhayUWENovEYPzfKAV 7-10-5 7-10-5 7-10-4 Scale = 1:41.4 4x4 =3 10.00 12 11 10 2x4 II 2x4 || 4 2 12 9 3x4 3x4 N 7 8 13 14 6 2x4 || 2x4 || 2x4 || Plate Offsets (X,Y)--[4:0-0-0,0-0-0]

10.0 BCLL 0.0 **BCDL** 10.0

20.Ó

LOADING (psf)

TCLL

TCDL

LUMBER-

OTHERS

BRACING-

DEFL

Vert(LL)

Vert(CT)

Horz(CT)

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

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

L/d

999

999

n/a

PLATES

Weight: 69 lb

MT20

GRIP

244/190

FT = 20%

BOT CHORD

5

I/defl

n/a

n/a

n/a

in (loc)

n/a

n/a

0.00

REACTIONS. All bearings 15-7-11.

2x4 SP No.2

Max Horz 1=-149(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-143(LC 12), 6=-142(LC 13)

2-0-0

1.15

1.15

YES

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=411(LC 19), 8=429(LC 19), 6=429(LC 20)

CSI.

TC

ВС

WB

Matrix-S

0.15

0.17

0.10

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

2-8=-356/254, 4-6=-356/254 WEBS

NOTES-

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

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2015/TPI2014

Lumber DOL

- 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) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 7-10-5, Exterior(2) 7-10-5 to 12-3-1, Interior(1) 12-3-1 to 15-3-12 zone, C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=143, 6=142,





Job Truss Truss Type Qty Ply Lot 43 Liberty Meadow 156917895 J0323-1214 V3 VALLEY Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:55:11 2023 Page 1 Fayetteville, NC - 28314, Comtech, Inc. ID:aTXuLo?nW09qtpROz2WQ0wydkZW-b99UD?fwphIQvn73PX3X7gvlsk22hxFNcSfn5szfKAU 6-5-8 6-5-8 6-5-8 Scale = 1:34.2 4x4 = 3 11 10.00 12 10 2x4 II 2x4 ||

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3x4 //	8 2x4	7 2x4	6 2x4	3x4 ≫
0- 0-7 0-0-7		12-11-0 12-10-9		

				12 10 0						
Plate Offsets (X	Y) [4:0-0-0,0-0-0]									
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 0.1	Vert(LL)	n/a	` -	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.0	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	* Rep Stress Incr	YES	WB 0.0	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/	TPI2014	Matrix-S						Weight: 54 lb	FT = 20%

LUMBER-

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

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

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

4

12

REACTIONS. All bearings 12-10-1.

Max Horz 1=-121(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-124(LC 12), 6=-124(LC 13) Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=330(LC 19), 6=330(LC 20)

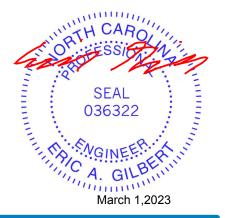
2

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

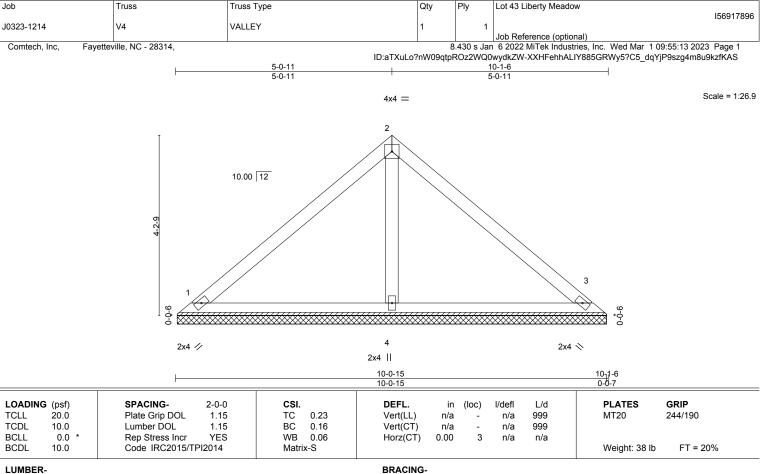
2-8=-314/239, 4-6=-314/239

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 6-5-8, Exterior(2) 6-5-8 to 10-10-5, Interior(1) 10-10-5 to 12-6-3 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=124, 6=124
- 6) Non Standard bearing condition. Review required.







BOT CHORD

LUMBER-

REACTIONS.

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

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

> 1=10-0-8, 3=10-0-8, 4=10-0-8 (size)

Max Horz 1=93(LC 11) Max Uplift 1=-22(LC 13), 3=-30(LC 13)

Max Grav 1=199(LC 1), 3=199(LC 1), 4=347(LC 1)

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

NOTES-

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

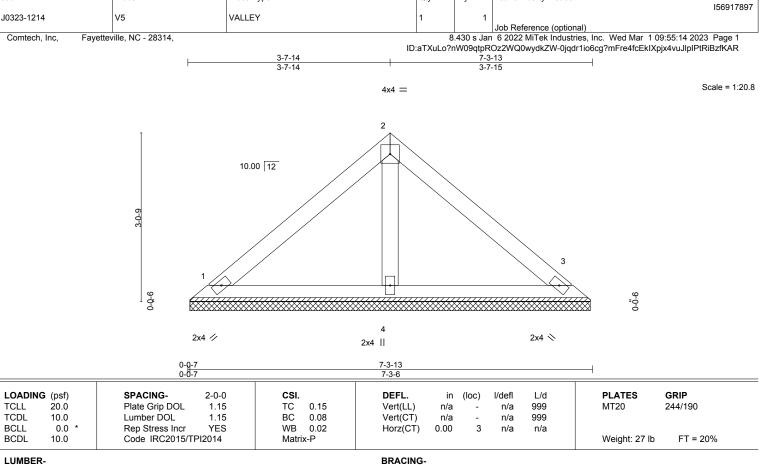
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This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



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

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





BOT CHORD

Qty

Ply

Lot 43 Liberty Meadow

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

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

LUMBER-

REACTIONS.

Job

Truss

Truss Type

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

OTHERS 2x4 SP No.2

(size)

Max Horz 1=-65(LC 8) Max Uplift 1=-23(LC 13), 3=-29(LC 13)

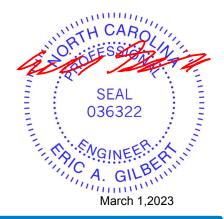
Max Grav 1=151(LC 1), 3=151(LC 1), 4=220(LC 1)

1=7-2-14, 3=7-2-14, 4=7-2-14

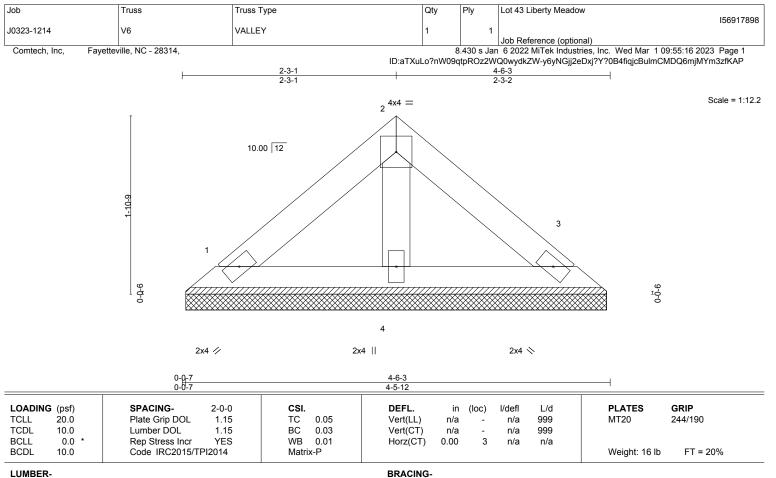
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

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







BOT CHORD

LUMBER-

REACTIONS.

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

OTHERS 2x4 SP No.2

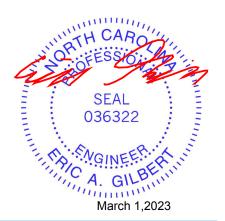
> 1=4-5-5, 3=4-5-5, 4=4-5-5 (size) Max Horz 1=-37(LC 8) Max Uplift 1=-13(LC 13), 3=-16(LC 13)

Max Grav 1=86(LC 1), 3=86(LC 1), 4=125(LC 1)

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

NOTES-

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



Structural wood sheathing directly applied or 4-6-3 oc purlins.

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

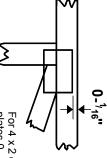


Symbols

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

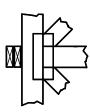
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



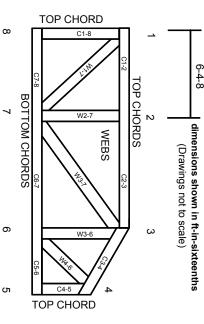
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.

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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.
- 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.

D				~													DATE	03/21/23	PAGE 1
Reaction	1 Sum	ıma	ry or c	Orae	r		REQ.	QUOT	TE DAT	ΓΕ	//	1			ORD	ER#		J0323	3-1215
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Fayetteville, N							SUPE	RINTE	ENDAN	IT.	Sha	un Garderne	r		SALE		ΞP	Neil E	Baggett
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	_	01-	04-00									Joint 17	Joint	18	Joint 1	9	Joint 20	Joi	nt 21
	<u>"</u> 1		ET2	18-04-	-00	18-04-00	ш					32.7 lbs.	134	.3 lbs.	150.	0 lbs.	145.8 lbs	. 1	46.9 lbs.
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	" 1		ET3	19-04-	-08	19-04-08	╩					35.3 lbs.		.7 lbs.		5 lbs.	145.9 lbs		46.9 lbs.
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	7		F1	32-11-	-00	32-11-00		<u> </u>				882.3 lbs.).2 lbs.		4 lbs.			
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	_	01-	04-00					=				Joint 22	Joint	30	Joint 3	6			
V PVVVVVVVVV	3		F2	31-11-	-00	31-11-00						794.9 lbs.	2078	3.8 lbs.	719.	4 lbs.			
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× × × × × × × × × × × × × × × × × × ×		01-	04-00									Joint 14	Joint	24					
	9		F3	19-11-	-00	19-11-00	—					1075.4 lbs.		5.4 lbs.					
												522.5 lbs.	522	.5 lbs.					
			04-00									Joint 16	Joint						
*** * IV W V	10		F4	19-08-	-00	19-08-00	_					1067.9 lbs.		1.7 lbs.					
												512.1 lbs.	567	.4 lbs.					
	_	01-	04-00					7				Joint 16	Joint	20	Joint 3	1			
	1		-4A	19-08-	-00	19-08-00	—					275.1 lbs.		7.1 lbs.		4 lbs.			
												3.8 lbs.	526	.1 lbs.	198.	6 lbs.			
	-		04-00					置				Joint 4	Joint						
	1		F5	05-10-	-08	05-10-08	_					294.4 lbs.		.3 lbs.					
												198.6 lbs.	193	.7 lbs.					

Floor Order

PLY

ID

DATE BUILDING DEPARTMENT OVERHANG INFO HEEL HEIGHT 00-06-08 QUOTE DTL 03/17/23 **REQ. LAYOUTS REQ. ENGINEERING** END CUT RETURN LAYOUT DTL 03/21/23 GABLE STUDS **CUTTING** DTL 03/17/23 24 IN. OC JOBSITE JOBSITE

FLOOR TRUSSES FLOOR TRUSS SPACING: 24.0 IN. O.C. (TYP.) **INFORMATION** 40.0,10.0,0.0,5.0 1.00 FLOOR QTY DEPTH BASE O/A **END TYPE INT BEARING** SPAN **PROFILE SPAN**

LOADING

REACTIONS

414.3 lbs.

377.0 lbs.

Joint 5 01-01-00 Joint 8 05-06-00 456.2 lbs. FG1 478.3 lbs.

LEFT RIGHT

TCLL-TCDL-BCLL-BCDL

STRESS INCR.

SIZE LOCATION

ITEMS

QTY	ITEM TYPE	SIZE	LENGTH FT-IN-16	PART NUMBER	NOTES
8	Hangers, USP	HUS 410			SIMPSON (HUS410)
2	LVL Beams (Sized)	LVL, 1-3/4" x 9-1/4" (S)	07-00-00		BM4
2	LVL Beams (Sized)	LVL, 1-3/4" x 11-7/8" (S)	09-00-00		BM5
2	LVL Beams (Sized)	LVL, 1-3/4" x 11-7/8" (S)	20-00-00		GDH
2	LVL Beams (Sized)	LVL, 1-3/4" x 16" (S)	17-00-00		BM1
2	LVL Beams (Sized)	LVL, 1-3/4" x 16" (S)	20-00-00		BM2



Precision Custom Homes

Liberty 2.0

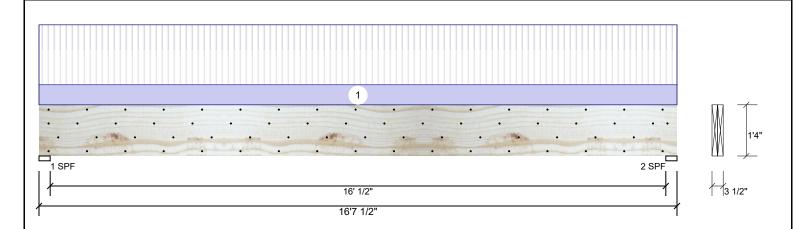
Date: 3/21/2023

Input by: David Landry Job Name: Lot 43 Liberty Meadow Page 1 of 14

Project #: J0323-1215

1.750" X 16.000" 2-Ply - PASSED **Kerto-S LVL** BM₁

Level: Level



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 2012

Load Sharing: No Deck: Not Checked Reactions UNPATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	3333	1217	0	0	0
2	Vertical	3333	1217	0	0	0

Bearings

Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 1-SPF 3.500" D+L Vert 1217 / 3333 4551 L 2 - SPF 3.500" Vert 87% 1217 / 3333 4551 L D+I

Analysis Results

•						
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	17931 ft-lb	8'3 3/4"	34565 ft-lb	0.519 (52%)	D+L	L
Unbraced	17931 ft-lb	8'3 3/4"	17951 ft-lb	0.999 (100%)	D+L	L
Shear	4391 lb	15'	11947 lb	0.368 (37%)	D+L	L
LL Defl inch	0.286 (L/678)	8'3 13/16"	0.405 (L/480)	0.707 (71%)	L	L
TL Defl inch	0.391 (L/497)	8'3 13/16"	0.809 (L/240)	0.483 (48%)	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 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 laterally braced at a maximum of 6'5 3/4" o.c.
- 6 Bottom must be laterally braced at end bearings.
- 7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Near Face	134 PLF	401 PLF	0 PLF	0 PLF	0 PLF	F4
	Self Weight				12 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
- For flat roofs provide proper drainage to prevent ponding

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

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



This design is valid until 11/3/2024





Precision Custom Homes

Liberty 2.0

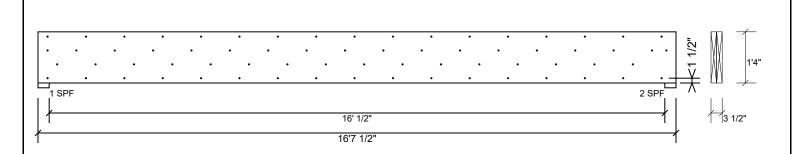
Date: 3/21/2023

Input by: David Landry Job Name: Lot 43 Liberty Meadow Page 2 of 14

Project #: J0323-1215

1.750" X 16.000" **Kerto-S LVL** 2-Ply - PASSED BM₁

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	81.7 %		
Load	267.5 PLF		
Yield Limit per Foot	327.4 PLF		
Yield Limit per Fastener	81.9 lb.		
Yield Mode	IV		
Edge Distance	1 1/2"		
Min. End Distance	3"		
Load Combination	D+L		
Duration Factor	1.00		

Notes

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

This design is valid until 11/3/2024

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

Manufacturer Info







Precision Custom Homes

Liberty 2.0

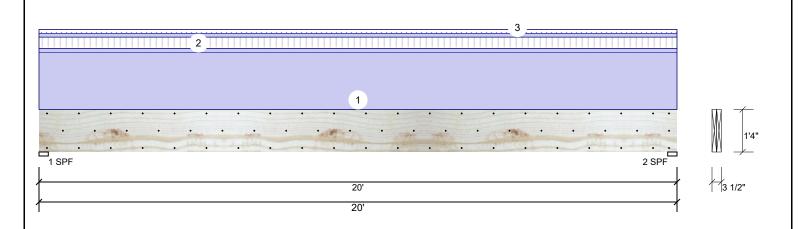
Date: 3/21/2023

Input by: David Landry Job Name: Lot 43 Liberty Meadow Page 3 of 14

Project #: J0323-1215

2-Ply - PASSED Kerto-S LVL 1.750" X 16.000" BM₂

Level: Level



Member Information Reactions UNPATTERNED Ib (Uplift) Wind Type: Application: Floor Brg Direction Live Dead Snow Const Plies: 2 Design Method: ASD 400 2409 Vertical 135 0 0 1 Moisture Condition: Dry **Building Code:** IBC 2012 2 Vertical 400 2409 135 0 0 Deflection LL: 480 Load Sharing: No Deflection TL: 240 Deck: Not Checked Importance: Normal - II Temp <= 100°F Temperature: **Bearings** Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. D+0.75(L+S) 1 - SPF 3.500" Vert 54% 2409 / 401 2811 L

2 - SPF 3.500"

Vert

54%

2409 / 401

2811 L

D+0.75(L+S)

Analysis Results

•						
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	13439 ft-lb	10'	34565 ft-lb	0.389 (39%)	D+L	L
Unbraced	13439 ft-lb	10'	13492 ft-lb	0.996 (100%)	D+L	L
Shear	2461 lb	18'4 1/2"	11947 lb	0.206 (21%)	D+L	L
LL Defl inch	0.059 (L/3960)	10' 1/16"	0.489 (L/480)	0.121 (12%)	0.75(L+S)	L
TL Defl inch	0.415 (L/565)	10' 1/16"	0.978 (L/240)	0.425 (42%)	D+0.75(L+S)	L

Design Notes

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

U Laterar s	sieriuerriess ratio baseu										
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	200 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above, C1GE	
2	Tie-In	0-0-0 to 20-0-0	1-0-0	Far Face	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	Floor Load	
3	Tie-In	0-0-0 to 20-0-0	0-6-0	Near Face	27 PSF	0 PSF	27 PSF	0 PSF	0 PSF	J3	
	Self Weight				12 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

This design is valid until 11/3/2024

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

Manufacturer Info





isDesign

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

Liberty 2.0

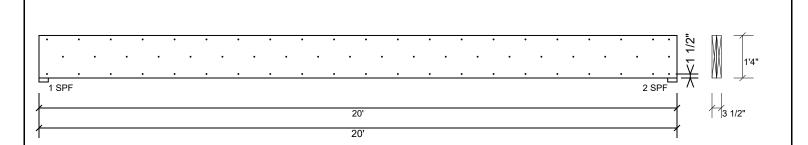
Date: 3/21/2023

Input by: David Landry Job Name: Lot 43 Liberty Meadow Page 4 of 14

Project #: J0323-1215

1.750" X 16.000" **Kerto-S LVL** 2-Ply - PASSED BM₂

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	11.2 %		
Load	27.5 PLF		
Yield Limit per Foot	245.6 PLF		
Yield Limit per Fastener	81.9 lb.		
Yield Mode	IV		
Edge Distance	1 1/2"		
Min. End Distance	3"		
Load Combination	D+L		
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

This design is valid until 11/3/2024

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

Manufacturer Info







Precision Custom Homes

Liberty 2.0

Date: 3/21/2023

Input by: David Landry

Job Name: Lot 43 Liberty Meadow

Page 5 of 14

Wind

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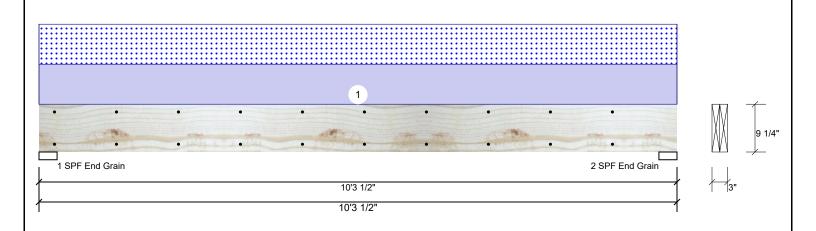
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Project #: J0323-1215

BM3 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED

Level: Level

Reactions UNPATTERNED Ib (Uplift)



					reactions of the first country					
Type:	Girder	Application:	Floor	Brg	Direction	Live	Dead	Snow		
Plies:	2	Design Method:	ASD	1	Vertical	0	607	607		
Moisture Condition	on: Dry	Building Code:	IBC 2012	2	Vertical	0	607	607		
Deflection LL:	480	Load Sharing:	No							
Deflection TL:	360	Deck:	Not Checked							
Importance:	Normal - II	Ceiling:	Gypsum 1/2"							
Temperature:	Temp <= 100°F									
'	,			Bea	rings					

Analysis Results

Member Information

Analysis	Actual	Location	Allowed	Conceity	Comb.	Case
Arialysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2852 ft-lb	5'1 3/4"	3946 ft-lb	0.723 (72%)	D+S	L
Unbraced	2852 ft-lb	5'1 3/4"	2937 ft-lb	0.971 (97%)	D+S	L
Shear	964 lb	1' 3/4"	2872 lb	0.336 (34%)	D+S	L
LL Defl inch	0.090 (L/1317)	5'1 3/4"	0.246 (L/480)	0.365 (36%)	S	L
TL Defl inch	0.179 (L/658)	5'1 3/4"	0.328 (L/360)	0.547 (55%)	D+S	L

Design Notes

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

	Bearing	Length	Dir.	Cap. Re	act D/L lb	Total	Ld. Case	Ld. Comb.
1	1 - SPF End Grain	3.500"	Vert	27%	607 / 607	1214	L	D+S
	2 - SPF End Grain	3.500"	Vert	27%	607 / 607	1214	L	D+S

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	118 PLF	0 PLF	118 PLF	0 PLF	0 PLF	B2

This design is valid until 11/3/2024

Manufacturer Info

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

isDesign BM3 S-P-F #

Client: Project: Address: Precision Custom Homes

Liberty 2.0

Date: 3/21/2023

Input by: David Landry

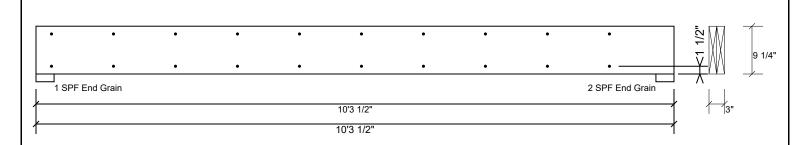
Job Name: Lot 43 Liberty Meadow

Page 6 of 14

Project #: J0323-1215



Level: Level



Multi-Ply Analysis

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

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

Manufacturer Info

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





Precision Custom Homes

Liberty 2.0

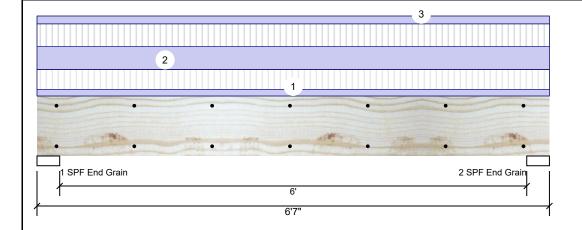
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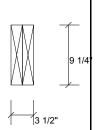
3/21/2023 David Landry Job Name: Lot 43 Liberty Meadow

Project #: J0323-1215

1.750" X 9.250" **Kerto-S LVL** 2-Ply - PASSED BM4

Level: Level





Page 7 of 14

Member Information

Deflection TL:	360
Deflection LL:	480
Moisture Condition:	Drv
Plies:	2
Type:	Girder

al - II

Temp <= 100°F

Application: Floor Design Method: ASD **Building Code:** IBC 2012 No

Load Sharing: Deck:

Not Checked

Reactions UNPATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	2149	1903	0	0	0
2	Vertical	2149	1903	0	0	0

Bearings

Grain

Bearing	Length	Dir.	Cap. I	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	39%	1903 / 2149	4053	L	D+L
2 - SPF End	3.500"	Vert	39%	1903 / 2149	4053	L	D+L

Analysis Results

Temperature:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5774 ft-lb	3'3 1/2"	12542 ft-lb	0.460 (46%)	D+L	L
Unbraced	5774 ft-lb	3'3 1/2"	9934 ft-lb	0.581 (58%)	D+L	L
Shear	2750 lb	1' 3/4"	6907 lb	0.398 (40%)	D+L	L
LL Defl inch	0.056 (L/1320)	3'3 1/2"	0.153 (L/480)	0.364 (36%)	L	L
TL Defl inch	0.105 (L/700)	3'3 1/2"	0.204 (L/360)	0.514 (51%)	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 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at end bearings.
- 7 Bottom must be laterally braced at end bearings.
- 8 Lateral slenderness ratio based on single ply width

o Eutoral olonic	ionnoco ratio bacca on origio	pry 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	102 PLF	304 PLF	0 PLF	0 PLF	0 PLF	F2
2	Uniform			Тор	349 PLF	349 PLF	0 PLF	0 PLF	0 PLF	A1
3	Uniform			Тор	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above
	Self Weight				7 PLF					

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

- 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 11/3/2024

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Manufacturer Info







Precision Custom Homes

Liberty 2.0

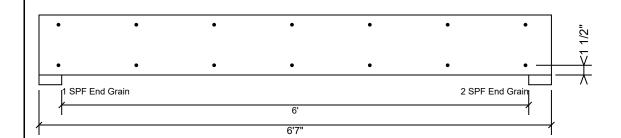
Date: 3/21/2023

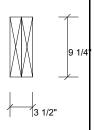
Input by: David Landry Job Name: Lot 43 Liberty Meadow

Project #: J0323-1215

1.750" X 9.250" **Kerto-S LVL** 2-Ply - PASSED BM4

Level: Level





Page 8 of 14

Multi-Ply Analysis

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

rasterrain pries asing E ro	vis or roa box mans (. 120x5) at
Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	163.7 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Notes

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

This design is valid until 11/3/2024

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Manufacturer Info







Precision Custom Homes

Liberty 2.0

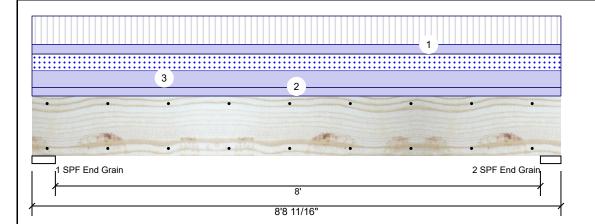
Date: 3/21/2023 Input by: David Landry

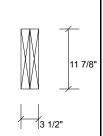
Job Name: Lot 43 Liberty Meadow

evel: Level

Project #: J0323-1215

1.750" X 11.875" 2-Ply - PASSED **Kerto-S LVL** BM₅





Page 9 of 14

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 2012

Load Sharing: No

Deck: Not Checked

Reactions UNPATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	1772	2203	1044	0	0
2	Vertical	1753	2179	1033	0	0

Bearings

Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. D+0.75(L+S) 1 - SPF 4.625" Vert 2203 / 2112 4314 L End

Grain

Grain

2 - SPF 4.063" 2179 / 2089 D+0.75(L+S) Vert 4268 L End

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	7478 ft-lb	4'4 5/8"	19911 ft-lb	0.376 (38%)	D+L	L
Unbraced	8118 ft-lb	4'4 5/8"	11006 ft-lb	0.738 (74%)	D+0.75(L+S)	L
Shear	2737 lb	1'4 1/2"	8867 lb	0.309 (31%)	D+L	L
LL Defl inch	0.059 (L/1643)	4'4 11/16"	0.203 (L/480)	0.292 (29%)	0.75(L+S)	L
TL Defl inch	0.121 (L/804)	4'4 11/16"	0.406 (L/240)	0.298 (30%)	D+0.75(L+S)	L

Design Notes

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

_		3 1 7									
ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments	
1	Part. Uniform	0-0-0 to 8-8-11		Тор	135 PLF	404 PLF	0 PLF	0 PLF	0 PLF	F3	
2	Uniform			Тор	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above	
3	Uniform			Тор	238 PLF	0 PLF	238 PLF	0 PLF	0 PLF	C1	
	Self Weight				9 PI F						

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

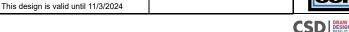
 Damaged Beams must not be used
- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation
- 6. For flat roofs provide proper drainage to prevent ponding

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 Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS







Precision Custom Homes

Liberty 2.0

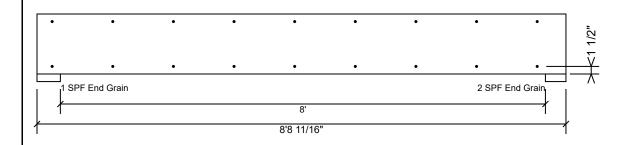
Date: 3/21/2023

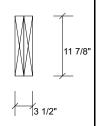
Input by: David Landry Job Name: Lot 43 Liberty Meadow

Project #: J0323-1215

1.750" X 11.875" **Kerto-S LVL** 2-Ply - PASSED BM5

evel: Level





Page 10 of 14

Multi-Ply Analysis

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

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

Notes

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 11/3/2024



Precision Custom Homes

Liberty 2.0

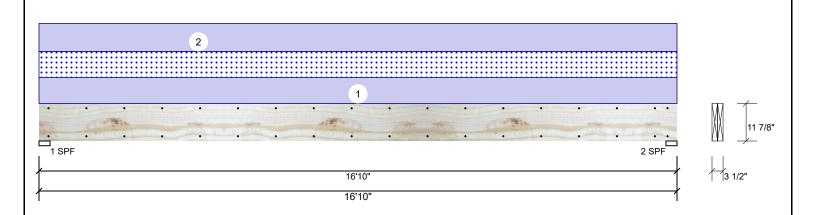
Date: 3/21/2023

Input by: David Landry Job Name: Lot 43 Liberty Meadow Page 11 of 14

Project #: J0323-1215

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

Level: Level



Member Information

Туре:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	240
Inches and a second	N1 1

Importance: Normal - II Temperature: Temp <= 100°F

Application: Floor Design Method: ASD **Building Code:** IBC 2012 Load Sharing: No Deck: Not Checked

Reactions UNPATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	1054	471	0	0
2	Vertical	0	1054	471	0	0

Bearings

Bearing	Length	Dir.	Cap. R	eact D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	29%	1054 / 471	1525	L	D+S
2 SDE	3 500"	Vert	29%	1054 / 471	1525	1	D+S

Analysis Results

•						
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	6075 ft-lb	8'5"	22897 ft-lb	0.265 (27%)	D+S	L
Unbraced	6075 ft-lb	8'5"	6086 ft-lb	0.998 (100%)	D+S	L
Shear	1413 lb	1'3 3/8"	10197 lb	0.139 (14%)	D+S	L
LL Defl inch	0.098 (L/2006)	8'5 1/16"	0.409 (L/480)	0.239 (24%)	S	L
TL Defl inch	0.317 (L/620)	8'5 1/16"	0.819 (L/240)	0.387 (39%)	D+S	L

Design Notes

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

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Near Face	56 PLF	0 PLF	56 PLF	0 PLF	0 PLF	J3
2	Uniform			Тор	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above
	Self Weight				0 DI E					

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 11/3/2024

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Manufacturer Info

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Precision Custom Homes

Liberty 2.0

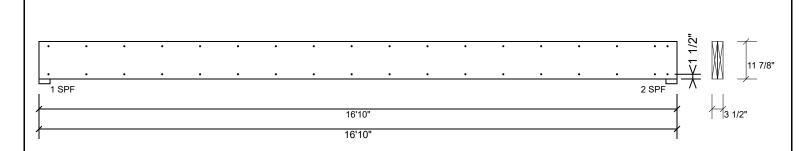
Date: 3/21/2023

Input by: David Landry Job Name: Lot 43 Liberty Meadow Page 12 of 14

Project #: J0323-1215

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

Level: Level



Multi-Ply Analysis

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

1 3		`	,
Capacity	29.7 %		
Load	56.0 PLF		
Yield Limit per Foot	188.3 PLF		
Yield Limit per Fastener	94.1 lb.		
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

- 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

This design is valid until 11/3/2024

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CSD DESIGN



Precision Custom Homes

Liberty 2.0

Date: 3/21/2023

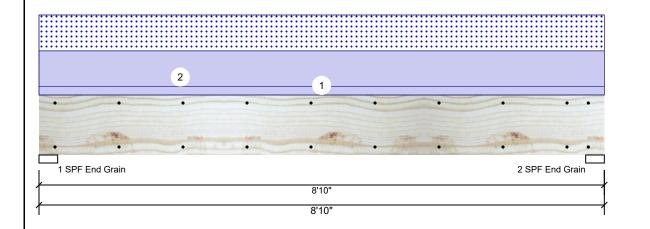
Input by: David Landry

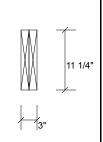
Job Name: Lot 43 Liberty Meadow

Project #: J0323-1215

GDH2 S-P-F #2 2.000" X 12.000" 2-Ply - PASSED

Level: Level





Page 13 of 14

Member Information

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

Application: Floor
Design Method: ASD
Building Code: IBC 2012
Load Sharing: No

Deck: Not Checked

Reactions UNPATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	1413	1148	0	0
2	Vertical	0	1413	1148	0	0

Analysis Results

Temperature:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5085 ft-lb	4'5"	5306 ft-lb	0.958 (96%)	D+S	L
Unbraced	5085 ft-lb	4'5"	5088 ft-lb	0.999 (100%)	D+S	L
Shear	1849 lb	7'7 1/4"	3493 lb	0.529 (53%)	D+S	L
LL Defl inch	0.058 (L/1740)	4'5 1/16"	0.209 (L/480)	0.276 (28%)	S	L
TL Defl inch	0.129 (L/780)	4'5 1/16"	0.279 (L/360)	0.461 (46%)	D+S	L

Bearings

Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 1-SPF 3.500" 1413 / 1148 2562 L D+S Vert End Grain 2 - SPF 3.500" Vert 1413 / 1148 2562 L D+S End Grain

Design Notes

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

Temp <= 100°F

- 6 Top must be laterally braced at a maximum of 3'3 5/8" o.c.
- 7 Bottom must be laterally braced at end bearings.
- 8 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Тор	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above
2	Uniform			Тор	260 PLF	0 PLF	260 PLF	0 PLF	0 PLF	G1

This design is valid until 11/3/2024

Manufacturer Info

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



Precision Custom Homes Liberty 2.0

3/21/2023

Date:

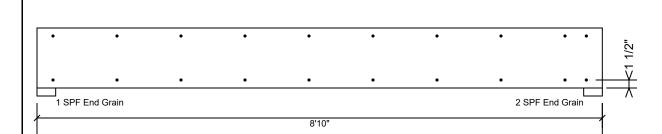
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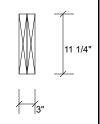
David Landry

Job Name: Lot 43 Liberty Meadow Project #: J0323-1215 Level: Level

GDH₂ S-P-F #2 2.000" X 12.000"

2-Ply - PASSED





Page 14 of 14

Multi-Ply Analysis

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

8'10"

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

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RE: J0323-1215

Lot 43 Liberty Meadow

Trenco

818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Project Name: J0323-1215

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 10 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	156917899	ET1	3/1/2023
2	156917900	ET2	3/1/2023
3	156917901	ET3	3/1/2023
4	156917902	F1	3/1/2023
5	156917903	F2	3/1/2023
6	156917904	F3	3/1/2023
7	156917905	F4	3/1/2023
8	156917906	F4A	3/1/2023
9	156917907	F5	3/1/2023
10	156917908	FG1	3/1/2023

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.



March 01, 2023

Job	Truss	Truss Type	Qty	Ply	Lot 43 Liberty Meadow	7
J0323-1215	ET1	GABLE	1	1	I56917899	
00020-1213		GABLE	'	'	Job Reference (optional)	

0-11-8

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:46 2023 Page 1 ID:aTXuLo?nW09qtpROz2WQ0wydkZW-vFAMz0lokDfoj POPHmBiuM3HfXVKefis35yipzfKAt

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

Scale = 1:55.0

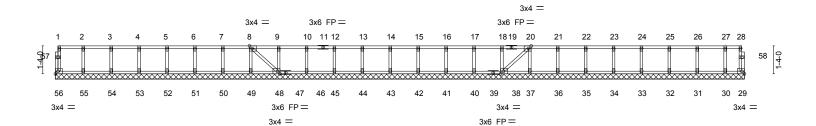


Plate Off	sets (X,Y)	[8:0-1-8,Eage], [20:0-1-8,Eage],	[38:0-1-8,Eage], [4	18:0-1-8, Eage							
LOADIN	G (psf)	SPACING- 2-0-	CSI		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL 1.0) TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL 1.0) BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr YES	S WB	0.03	Horz(CT)	-0.00	38	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014	Mat	rix-S						Weight: 147 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. **OTHERS** 2x4 SP No.3(flat)

REACTIONS. All bearings 32-11-0.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 56, 29, 55, 54, 53, 52, 51, 50, 49, 48, 46, 45, 44, 43, 42, 41, 40, 38, 37, 36, 35, 34, 33, 32, 31, 30

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

NOTES-

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





Job	Truss	Truss Type	Qty	Ply	Lot 43 Liberty Meadow	7
10222 1215	ETO	GABLE	4	1	I56917900	
J0323-1215	= 12	GABLE	'	'	Job Reference (optional)	

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:47 2023 Page 1 ID:aTXuLo?nW09qtpROz2WQ0wydkZW-NRkIAMJQVXnfL8 az HQE6vDv3tj35vr5jrWEFzfKAs

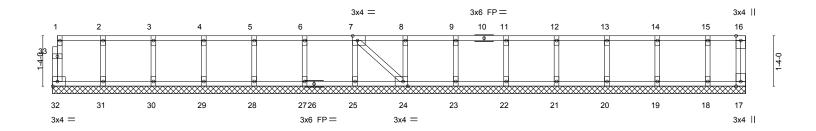
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

0-1-8

Scale = 1:30.5



1-4-0	2-8-0 4-0-0 1-4-0 1-4-0	5-4-0 1-4-0		-0-0 9-4- -4-0 1-4-		12-0-0 1-4-0	13-4-0 1-4-0	14-8-0		-4-0 18-4-0
Plate Offsets (X,Y) [7:0-1-8,Edge], [24:0-1	1-8,Edge]								
LOADING (psf) TCLL 40.0	SPACING-	2-0-0	CSI.	0.07	DEFL.	in (loc	,	L/d 999	PLATES MT20	GRIP 244/190
TCDL 10.0	Plate Grip DOL Lumber DOL	1.00	ВС	0.01	Vert(LL) Vert(CT)	n/a n/a	- n/a - n/a	999	IVI I ZU	244/190
BCLL 0.0 BCDL 5.0	Rep Stress Inci Code IRC2015		WB Matri	0.03 ix-S	Horz(CT)	0.00 1	7 n/a	n/a	Weight: 84 lb	FT = 20%F, 11%E
LUMBER-			'		BRACING-					

TOP CHORD

BOT CHORD

WEBS 2x4 SP No.3(flat) **OTHERS** 2x4 SP No.3(flat)

2x4 SP No.1(flat)

2x4 SP No.1(flat)

REACTIONS. All bearings 18-4-0. (lb) - Max Grav All reactions 250 lb or less at joint(s) 32, 17, 31, 30, 29, 28, 27, 25, 24, 23, 22, 21, 20, 19, 18

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

NOTES-

TOP CHORD

BOT CHORD

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



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 43 Liberty Meadow
					156917901
J0323-1215	ET3	GABLE	1	1	
					Job Reference (optional)

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:48 2023 Page 1 ID:aTXuLo?nW09qtpROz2WQ0wydkZW-rdI7OiK2GrvWyIZnWipfnJSPnTDzoY9 KNa3nhzfKAr

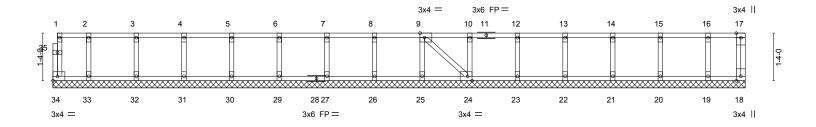
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

0-<u>11</u>-8

Scale: 3/8"=1"



1-0-0 2-4- 1-0-0 1-4-		7-8-0 9-0-0 1-4-0 1-4-0	10-4-0 1-4-0 1-4-0 1-4-0 13-0-0 1-4-0	14-4-0 15-8-0 1-4-0 1-4-0	17-0-0 18-4-0 19-4-8 1-4-0 1-0-8
Plate Offsets (X,Y)	[9:0-1-8,Edge], [24:0-1-8,Edge]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	I/defl L/d	PLATES GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.06	Vert(LL) n/a -	n/a 999	MT20 244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.01	Vert(CT) n/a -	n/a 999	
BCLL 0.0	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00 18	n/a n/a	
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S			Weight: 89 lb FT = 20%F, 11%E
LUMBER-	-	1	BRACING-		

TOP CHORD

BOT CHORD

2x4 SP No.1(flat)

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

> All bearings 19-4-8. (lb) - Max Grav All reactions 250 lb or less at joint(s) 34, 18, 33, 32, 31, 30, 29, 27, 26, 25, 24, 23, 22, 21, 20,

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

NOTES-

TOP CHORD

REACTIONS.

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



Job	Truss	Truss Type	Qty	Ply	Lot 43 Liberty Meadow
10000 4045	 		_		I56917902
J0323-1215	F1	Floor	1	1	
					Job Reference (optional)

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:50 2023 Page 1 ID:aTXuLo?nW09qtpROz2WQ0wydkZW-o0QtpOLJoS9ECcj9e7r7skXcJGilGJMHng3ArazfKAp

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

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

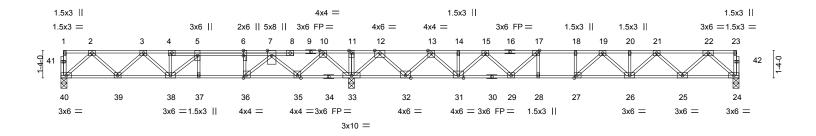
except end verticals.

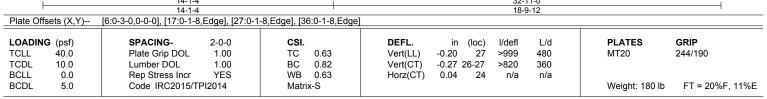
0-1-8

HI 1-3-0 2-1-4

1-8-4

0-1-8 Scale = 1:55.9





TOP CHORD

BOT CHORD

LUMBER-**BRACING-**

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

REACTIONS. (size) 40=0-3-8, 24=0-3-8, 33=0-3-8

Max Grav 40=662(LC 3), 24=882(LC 4), 33=2190(LC 1)

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

2-3=-1110/36, 3-4=-1659/212, 4-5=-1659/219, 5-6=-1602/621, 6-7=-1602/621, 7-10=-392/1404, 10-11=0/2571, 11-12=0/2571, 12-13=-40/475, 13-14=-1631/0, 14-15=-1631/0, 15-17=-2564/0, 17-18=-2931/0, 18-19=-2931/0, 19-20=-2592/0,

20-21=-2592/0, 21-22=-1586/0

39-40=0/704, 38-39=-106/1489, 37-38=-621/1602, 36-37=-621/1602, 35-36=-1086/1024, BOT CHORD

33-35=-1709/0, 32-33=-1291/0, 31-32=-200/935, 29-31=0/2220, 28-29=0/2931,

27-28=0/2931, 26-27=0/2856, 25-26=0/2193, 24-25=0/952

WEBS 2-40=-935/0, 2-39=-59/564, 3-39=-528/98, 4-38=-325/0, 5-38=0/648, 22-24=-1266/0,

22-25=0/881, 21-25=-845/0, 21-26=0/542, 19-26=-358/0, 19-27=-253/331,

12-33=-1704/0, 12-32=0/1314, 10-33=-1399/0, 10-35=0/993, 7-35=-1033/0, 7-36=0/1214, 6-36=-690/0, 13-32=-1288/0, 13-31=0/991, 15-31=-835/0, 15-29=0/579, 17-29=-718/0

NOTES-

WEBS

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



March 1,2023



Job	Truss	Truss Type	Qty	Ply	Lot 43 Liberty Meadow
10000 4045	F0				I56917903
J0323-1215	F2	Floor	3	1	
					Job Reference (optional)

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:52 2023 Page 1 ID:aTXuLo?nW09qtpROz2WQ0wydkZW-kPXeD3NZK3PyRvtYIYtbx9ctN4MlkEBaF YHwSzfKAn

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

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

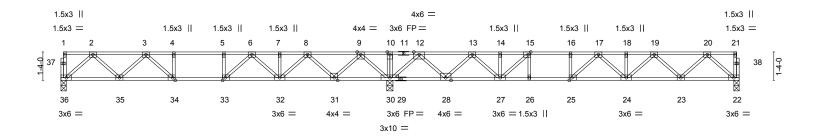
except end verticals.

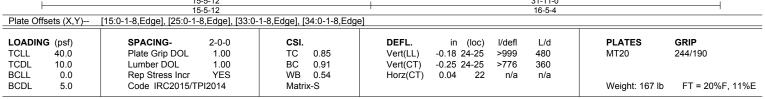
0-1-8

HI-3-0 2-2-12

1-9-12

0-1-8 Scale = 1:54.2





TOP CHORD

BOT CHORD

LUMBER-**BRACING-**

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

REACTIONS.

WEBS 2x4 SP No.3(flat)

(size) 36=0-3-0, 30=0-3-8, 22=0-3-0

Max Grav 36=719(LC 3), 30=2079(LC 1), 22=795(LC 4)

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

TOP CHORD 2-3=-1229/0, 3-4=-1941/0, 4-5=-1941/0, 5-6=-1941/0, 6-7=-1408/202, 7-8=-1408/202,

8-9=-241/659, 9-10=0/2218, 10-12=0/2218, 12-13=-523/817, 13-14=-1712/332, 14-15=-1712/332, 15-16=-2291/0, 16-17=-2291/0, 17-18=-2225/0, 18-19=-2225/0,

19-20=-1395/0

35-36=0/769, 34-35=0/1668, 33-34=0/1941, 32-33=-35/1748, 31-32=-414/927, BOT CHORD

30-31=-1214/0, 28-30=-1129/0, 27-28=-547/1232, 26-27=0/2291, 25-26=0/2291,

24-25=0/2385, 23-24=0/1918, 22-23=0/852

WEBS 2-36=-1022/0, 2-35=0/640, 3-35=-610/0, 3-34=-83/372, 9-30=-1439/0, 9-31=0/1062,

20-22=-1132/0, 20-23=0/755, 19-23=-728/0, 19-24=-1/417, 17-25=-477/33, 12-30=-1508/0, 8-31=-1027/0, 8-32=0/734, 6-32=-547/0, 6-33=0/628, 5-33=-320/0, 12-28=0/1134, 13-28=-1085/0, 13-27=0/740, 15-27=-1088/0, 15-26=0/273

NOTES-

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



March 1,2023



Job	Truss	Truss Type	Qty	Ply	Lot 43 Liberty Meadow
10202 4045	F2	Floor			I56917904
J0323-1215	F3	Floor	9	1	
					Job Reference (optional)

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:53 2023 Page 1 ID:aTXuLo?nW09qtpROz2WQ0wydkZW-Cb50RPNB5NXp33RkJFOqUN97gUiPThFjTelqSvzfKAm

Structural wood sheathing directly applied or 5-9-6 oc purlins,

0-1-8 H | 1-3-0

1-5-0

0-1-8 Scale = 1:32.8

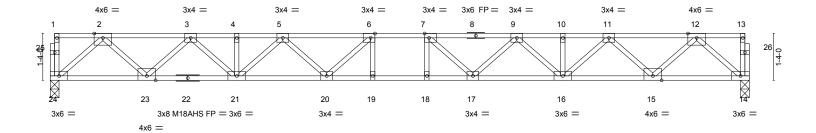


Plate Offsets (X,Y)--[6:0-1-8,Edge], [7:0-1-8,Edge] SPACING-**GRIP** LOADING (psf) CSI. DEFL. in (loc) I/defl L/d **PLATES** 244/190 TCLL 40.0 Plate Grip DOL 1.00 TC 0.56 Vert(LL) -0.33 18-19 >724 480 MT20 TCDL 10.0 Lumber DOL 1.00 ВС 0.95 Vert(CT) -0.45 18-19 >526 360 M18AHS 186/179 BCLL 0.0 Rep Stress Incr YES WB 0.55 Horz(CT) 0.08 14 n/a n/a Code IRC2015/TPI2014 FT = 20%F. 11%E **BCDL** 5.0 Weight: 106 lb Matrix-S

BRACING-LUMBER-

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

BOT CHORD 2x4 SP No.1(flat) except end verticals. **WEBS** 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS. (size) 24=0-3-0, 14=0-3-0

Max Grav 24=1075(LC 1), 14=1075(LC 1)

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

TOP CHORD 2-3=-2005/0, 3-4=-3408/0, 4-5=-3408/0, 5-6=-4160/0, 6-7=-4391/0, 7-9=-4160/0,

9-10=-3408/0, 10-11=-3408/0, 11-12=-2005/0 BOT CHORD

23-24=0/1172, 21-23=0/2810, 20-21=0/3918, 19-20=0/4391, 18-19=0/4391, 17-18=0/4391,

16-17=0/3918, 15-16=0/2810, 14-15=0/1172

2-24=-1557/0, 2-23=0/1160, 3-23=-1119/0, 3-21=0/814, 5-21=-693/0, 5-20=0/469, WFBS

6-20=-575/87, 12-14=-1557/0, 12-15=0/1160, 11-15=-1119/0, 11-16=0/814, 9-16=-693/0,

9-17=0/469, 7-17=-575/87

NOTES-

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



Job	Truss	Truss Type	Qty	Ply	Lot 43 Liberty Meadow
10202 4245	F4	Floor	10	1	I56917905
J0323-1215	F4	Floor	10	1	Job Reference (optional)

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:54 2023 Page 1 ID:aTXuLo?nW09qtpROz2WQ0wydkZW-gnfOelOpshfggD0xtyv31ahK0t3hC8etil1O LzfKAl



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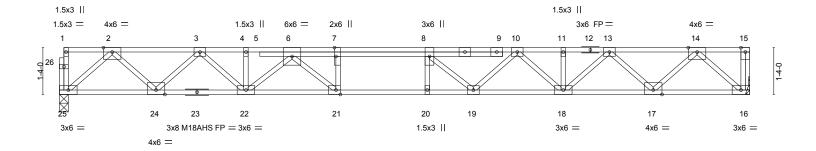


Plate Offsets (X,Y)--[7:0-3-0,Edge], [21:0-1-8,Edge] SPACING-**GRIP** LOADING (psf) CSI. DEFL. (loc) I/def L/d **PLATES** 244/190 TCLL 40.0 Plate Grip DOL 1.00 TC 0.39 Vert(LL) -0.29 20 >806 480 MT20 TCDL 10.0 Lumber DOL 1.00 ВС 0.88 Vert(CT) -0.40 20 >587 360 M18AHS 186/179 **BCLL** 0.0 Rep Stress Incr YES WB 0.54 0.08 16 Horz(CT) n/a n/a Code IRC2015/TPI2014 FT = 20%F. 11%E **BCDL** 5.0 Weight: 112 lb Matrix-S

19-8-0

LUMBER-**BRACING-**

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 10-0-0 oc bracing.

REACTIONS. (size) 25=0-3-0, 16=Mechanical Max Grav 25=1062(LC 1), 16=1068(LC 1)

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

TOP CHORD 2-3=-1976/0, 3-4=-3346/0, 4-6=-3350/0, 6-7=-4437/0, 7-8=-4437/0, 8-10=-4140/0,

10-11=-3354/0, 11-13=-3354/0, 13-14=-1976/0

BOT CHORD 24-25=0/1156, 22-24=0/2765, 21-22=0/3951, 20-21=0/4437, 19-20=0/4437, 18-19=0/3823,

17-18=0/2764, 16-17=0/1157

WFBS 2-25=-1537/0, 2-24=0/1140, 3-24=-1097/0, 3-22=0/790, 6-22=-803/0, 6-21=0/970,

7-21=-557/0, 14-16=-1541/0, 14-17=0/1139, 13-17=-1096/0, 13-18=0/802, 10-18=-637/0,

10-19=0/581, 8-19=-621/0

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 3x4 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.
- 7) CAUTION, Do not erect truss backwards.



March 1,2023



Job	Truss	Truss Type	Qty	Ply	Lot 43 Liberty Meadow	٦
10000 4045					I56917906	j
J0323-1215	F4A	Floor	1	1	Let Defende (college)	
				1	Job Reference (optional)	- 1

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:56 2023 Page 1 ID:aTXuLo?nW09qtpROz2WQ0wydkZW-cAn83RQ3OIvNwXAJ_NyX6?ngOhsyg5uA9cWU3DzfKAj

0-1-8 H - 1-2-8

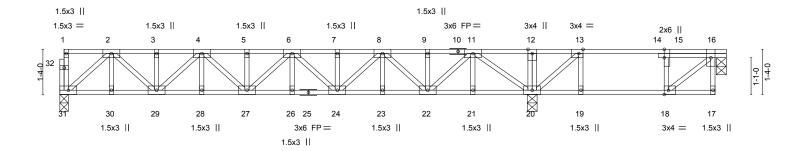
2-4-12 1-6-12 1-3-0 Scale = 1:34.0

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

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

except end verticals.

6-0-0 oc bracing: 19-20,18-19.



Edge], [15:0-3-0,0-0-0], [18:	0-1-8,Edge] CSI.	DEE!					
ACINC 200	CSI	DEE!					
ate Grip DOL 1.00 mber DOL 1.00 p Stress Incr YES	TC 0.40 BC 0.38 WB 0.37	Vert(LL) Vert(CT) Horz(CT)	-0.11 2	6 >999 6 >999	L/d 480 360 n/a	PLATES MT20	GRIP 244/190 b FT = 20%F. 11%E
р		Stress Incr YES WB 0.37	Stress Incr YES WB 0.37 Horz(CT)	Stress Incr YES WB 0.37 Horz(CT) 0.03 2	Stress Incr YES WB 0.37 Horz(CT) 0.03 20 n/a	Stress Incr YES WB 0.37 Horz(CT) 0.03 20 n/a n/a	Stress Incr YES WB 0.37 Horz(CT) 0.03 20 n/a n/a

TOP CHORD

BOT CHORD

LUMBER-**BRACING-**

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

> (size) 31=0-3-0, 16=0-3-8, 20=0-3-8 Max Grav 31=730(LC 8), 16=275(LC 4), 20=1157(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1331/0, 3-4=-1331/0, 4-5=-1969/0, 5-6=-1969/0, 6-7=-1961/0, 7-8=-1961/0,

8-9=-1306/0, 9-11=-1306/0, 11-12=0/365, 12-13=0/364, 13-15=-276/99, 15-16=-253/96 30-31=0/775, 29-30=0/775, 28-29=0/1732, 27-28=0/1732, 26-27=0/2047, 24-26=0/2047, BOT CHORD

23-24=0/1717, 22-23=0/1717, 21-22=0/750, 20-21=0/750, 19-20=-96/253, 18-19=-96/253 16-18=-125/330, 2-31=-1021/0, 2-29=0/751, 4-29=-541/0, 4-27=0/319, 8-24=0/345,

8-22=-569/0, 11-22=0/769, 11-20=-1229/0, 13-20=-575/0

NOTES-

WFBS

REACTIONS.

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x6 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 6) CAUTION, Do not erect truss backwards.





Job Truss Truss Type Qty Ply Lot 43 Liberty Meadow 156917907 J0323-1215 F5 FLOOR Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:57 2023 Page 1 Comtech, Inc, Fayetteville, NC - 28314, ID:aTXuLo?nW09qtpROz2WQ0wydkZW-4MLWHnRi8c1EXhlVY5TmeDJun5GPPb0JOGG2bgzfKAi 0-1-8 2-5-0 0-4-0 1-3-0 Scale = 1:11.4 3x4 = 3x6 || 3x4 | 11.5x3 || 2 3 9 3x4 =1-1-0 1.5x3 || 5 1.5x3 || 7 3x4 = 3x6 =

5-10-8 [2:0-1-8 Edge] [6:0-1-8 Edge] [0:0-1-8 0-1-8] Plate Offsets (X V)__

T late On	3013 (71, 1)	[2.0 1 0,Lugc], [0.0 1 0,Lugc],	0.0 1 0,0 1 0]								
LOADIN	G (psf)	SPACING- 2-0-	cs	ı.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL 1.0) TC	0.23	Vert(LL)	-0.01	6	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL 1.0) BC	0.11	Vert(CT)	-0.01	6	>999	360		
BCLL	0.0	Rep Stress Incr YE	S WB	0.18	Horz(CT)	-0.01	4	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014	Mat	trix-S						Weight: 32 lb	FT = 20%F, 11%E

TOP CHORD

BOT CHORD

LUMBER-BRACING-

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

WEBS 2x4 SP No.3(flat)

REACTIONS. (size) 8=0-3-8, 4=0-3-8 Max Grav 8=288(LC 1), 4=294(LC 1)

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

TOP CHORD 2-3=-294/0, 3-4=-296/0 **BOT CHORD** 7-8=0/294, 6-7=0/294 2-8=-382/0, 4-6=0/383 **WEBS**

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 4) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 5) CAUTION, Do not erect truss backwards.



Structural wood sheathing directly applied or 5-10-8 oc purlins,

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

except end verticals.



Job Truss Truss Type Qty Ply Lot 43 Liberty Meadow 156917908 J0323-1215 FG1 **FLOOR** Job Reference (optional) Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:58 2023 Page 1 ID:aTXuLo?nW09qtpROz2WQ0wydkZW-ZYvvU7RKvv959qKi6o ?BQs5FVbp82BTdw?b76zfKAh 0-1-8 2-3-0 1-3-0 0-1-8 Scale = 1:10.3 3x4 || 3x6 || 3x6 || 3x4 || 2 11 3 4 1 10 9 3x4 = 1.5x3 || 1.5x3 || 3x6 =Plate Offsets (X,Y)--[1:Edge,0-1-8], [9:0-1-8,0-1-8], [10:0-1-8,0-1-8] SPACING-**PLATES** LOADING (psf) CSI. DEFL. in (loc) I/defl L/d GRIP 1.00 TCLL 40.0 Plate Grip DOL TC 0.12 Vert(LL) -0.01 6 >999 480 244/190 MT20 TCDL 10.0 Lumber DOL 1.00 ВС 0.17 Vert(CT) -0.01 6-7 >999 360 BCLL 0.0 Rep Stress Incr NO WB 0.19 Horz(CT) 0.01 5 n/a n/a Code IRC2015/TPI2014 Weight: 34 lb FT = 20%F. 11%E **BCDL** 5.0 Matrix-S

LUMBER-

BRACING-TOP CHORD

TOP CHORD 2x4 SP No.1(flat) 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) 8=0-3-8, 5=0-3-8 Max Grav 8=455(LC 1), 5=476(LC 1)

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

TOP CHORD 2-3=-683/0

BOT CHORD 7-8=0/683, 6-7=0/683, 5-6=0/683

2-8=-802/0, 3-5=-801/0 WEBS

NOTES-

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

LOAD CASE(S) Standard

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

Vert: 5-8=-10. 1-4=-100

Concentrated Loads (lb) Vert: 3=-172 11=-194



Structural wood sheathing directly applied or 5-6-0 oc purlins,





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

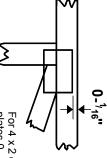


Symbols

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

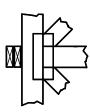
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



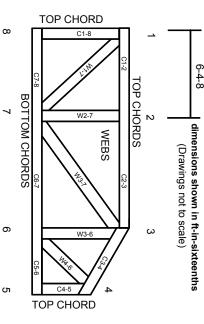
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.

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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.
- 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.