

RE: J0822-3955

Lot 163 Ballard Woods

Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Project Name: J0822-3955

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

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

Design Code: IRC2015/TPl2014 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 20 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	150504794	A1	3/2/2022
2	150504795	A1-GE	3/2/2022
3	150504796	A2	3/2/2022
4	150504797	A2-GE	3/2/2022
5	150504798	B1	3/2/2022
6	150504799	B1-GE	3/2/2022
7	150504800	B2	3/2/2022
8	150504801	B2-GE	3/2/2022
9	150504802	C1	3/2/2022
10	150504803	D1	3/2/2022
11	150504804	D1-GE	3/2/2022
12	150504805	D2	3/2/2022
13	150504806	D2A	3/2/2022
14	150504807	D3	3/2/2022
15	150504808	VA-1	3/2/2022
16	150504809	VA-2	3/2/2022
17	150504810	VA-3	3/2/2022
18	150504811	VA-4	3/2/2022
19	150504812	VA-5	3/2/2022
20	150504813	VA-6	3/2/2022

The truss drawing(s) referenced above have been prepared by

Truss Engineering Co. under my direct supervision

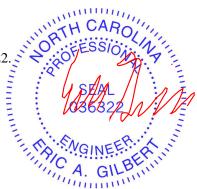
based on the parameters provided by Comtech, Inc - Fayetteville.

Truss Design Engineer's Name: Gilbert, Eric

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

North Carolina COA: C-0844

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



March 02, 2022

Job Truss Truss Type Qty Ply Lot 163 Ballard Woods 150504794 J0822-3955 **ROOF SPECIAL** 2 A1 Job Reference (optional)

10-4-11

21-6-13

5-7-10

15-11-3

5-9-7

10-1-12

Fayetteville, NC - 28314, Comtech, Inc.

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Mar 1 09:56:51 2022 Page 1 ID:2W3hk9latme7Qcxb7tDGi8zptHE-8De5dPPjIBXL2rKIyq7NS?2In23I7z95c0lNp3zfK8w 31-11-8 41-3-8 50-11-0

Structural wood sheathing directly applied or 5-8-7 oc purlins.

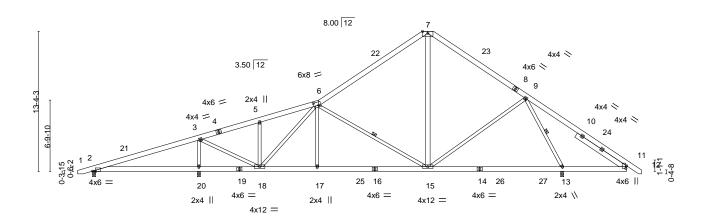
6-15. 9-13

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

1 Row at midpt

Scale = 1:109.8

6x12 M18AHS =



	10-1-12	15-9-7 15-11-3 21-6-13	31-11-8	44-7-8	44 <sub>7</sub> 9-4 50-11-0
	10-1-12	5-7-11 0-1 <sup>  </sup> 12 5-7-10	10-4-11	12-8-0	0-1 <sup>11</sup> 12 6-1-12
Plate Offsets (X,Y)	[2:0-3-5,Edge], [6:0-5-8,0-3-12],	[11:0-2-15,0-1-0]			

BRACING-

TOP CHORD

**BOT CHORD** 

WFBS

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 0.57	Vert(LL) -0.26 13-15 >999 360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.55	Vert(CT) -0.38 13-15 >999 240	M18AHS 186/179
BCLL	0.0 *	Rep Stress Incr YES	WB 0.89	Horz(CT) 0.02 13 n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.11 2-20 >999 240	Weight: 389 lb FT = 20%

LUMBER-

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

2x4 SP No.2 \*Except\* WFBS 7-15: 2x6 SP No.1

**SLIDER** Right 2x6 SP No.1 5-8-1

REACTIONS. (size) 2=0-3-8, 13=0-3-8, 20=0-3-8

Max Horz 2=330(LC 11)

Max Uplift 2=-209(LC 8), 13=-122(LC 13), 20=-191(LC 12) Max Grav 2=313(LC 23), 13=1984(LC 20), 20=1965(LC 1)

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

TOP CHORD 2-3=-149/491, 3-5=-1230/159, 5-6=-1181/201, 6-7=-1172/287, 7-9=-1112/292,

9-11=-485/704

BOT CHORD 2-20=-452/121, 18-20=-452/121, 17-18=-96/1606, 15-17=-98/1599, 13-15=0/516,

11-13=-473/519

**WEBS** 3-20=-1712/366, 6-17=0/357, 6-15=-850/277, 7-15=-29/627, 9-15=-40/467,

9-13=-1880/741, 3-18=-95/1567, 6-18=-781/136

- 1) Unbalanced roof live loads have been considered for this design.
- 17) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-15 to 3-2-14, Interior(1) 3-2-14 to 31-11-8, Exterior(2) 31-11-8 to 36-4-5, Interior(1) 36-4-5 to 52-2-7 zone; cantilever right exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=209, 13=122, 20=191.



March 2,2022

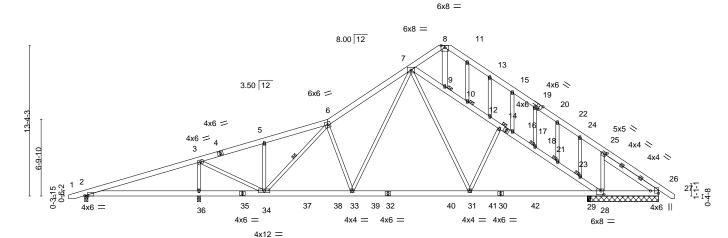


Job Truss Truss Type Qty Ply Lot 163 Ballard Woods 150504795 J0822-3955 A1-GE **GABLE** 1 Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Mar 1 09:56:55 2022 Page 1

Fayetteville, NC - 28314, Comtech, Inc.

ID:2W3hk9latme7Qcxb7tDGi8zptHE-0\_tbTnSEMQ1nWSd3BgBJcrC?ZfRl3qNhXejayqzfK8s 21-6-13 31-11-8 36-9-8 41-3-8 50-11-0 10-1-12 15-11-3 10-1-12 5-9-7 5-7-10 10-4-11 4-10-0 4-6-0

Scale = 1:102.2



	10-1-12	15-9-7 15-11-3 21-6-13	23-8-13 31-11-8	34-2-3	44-7-8	44 <sub>1</sub> 9-4 50-11-0
	10-1-12	5-7-11 0-1 <sup>!!</sup> 12 5-7-10	2-2-0 8-2-11	2-2-11	10-5-5	0-1 <sup>  </sup> 12 6-1-12

	(1.1, 1.)	[,	,,, [	, [====================================	
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.45	Vert(LL) -0.18 31-33 >999 360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.51	Vert(CT) -0.28 31-33 >999 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.69	Horz(CT) 0.03 26 n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.12 2-36 >999 240	Weight: 453 lb FT = 20%

LUMBER-

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

2x4 SP No.2 WFBS **OTHERS** 2x4 SP No.2 \*Except\*

8-9: 2x6 SP No.1

**SLIDER** Right 2x6 SP No.1 5-9-15 **BRACING-**TOP CHORD

WFBS

Structural wood sheathing directly applied or 5-3-2 oc purlins. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-0-0 oc bracing: 2-36,34-36. 1 Row at midpt 6-34

JOINTS 1 Brace at Jt(s): 14, 9, 10, 18, 21, 23

REACTIONS. All bearings 0-3-8 except (jt=length) 28=6-3-8, 26=6-3-8.

Max Horz 2=435(LC 11) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) except 28=-725(LC 13), 2=-274(LC 8),

36=-517(LC 12)

Max Grav All reactions 250 lb or less at joint(s) except 28=1147(LC 20), 2=287(LC

23), 26=395(LC 22), 29=669(LC 20), 29=495(LC 1), 29=495(LC 1), 36=2151(LC 2)

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

TOP CHORD 2-3=-279/646, 3-5=-1353/273, 5-6=-1303/341, 6-7=-2031/567, 7-8=-323/133,

7-9=-1643/595, 9-10=-1576/564, 10-12=-1605/590, 12-14=-1691/680, 14-17=-1642/631, 17-18=-1736/715, 18-21=-1763/734, 21-23=-1802/765, 23-28=-1799/766, 8-11=-263/108,

11-13=-281/68, 15-19=-274/11, 19-22=-322/16, 22-24=-376/38, 24-25=-441/16,

25-26=-561/345

2-36=-654/247, 34-36=-654/247, 33-34=-286/1804, 31-33=-84/1320, 29-31=-151/1676. **BOT CHORD** 

28-29=-151/1676, 26-28=-282/506

WEBS 3-36=-1908/656, 25-28=-597/443, 3-34=-322/1950, 6-34=-898/148, 6-33=-513/350,

7-33=-257/979, 7-31=-186/894, 14-31=-399/335

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 725 lb uplift at joint 28, 274 lb uplift at joint 2 and 517 lb uplift at joint 36.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Lot 163 Ballard Woods 150504796 J0822-3955 A2 COMMON 9 Job Reference (optional)

18-11-8

9-4-0

Fayetteville, NC - 28314, Comtech, Inc.

9-7-8 9-7-8

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Mar 1 09:56:56 2022 Page 1 ID:2W3hk9latme7Qcxb7tDGi8zptHE-UAR\_g7Ts7k9e8cCFlNjY93lAZ3nColAqlIT8UGzfK8r 37-11-0 39-4-0 1-5-0 28-3-8 9-7-8

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

4-14, 8-12

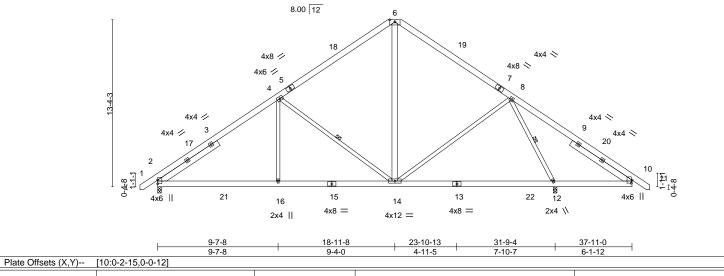
Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-0-0 oc bracing: 10-12.

1 Row at midpt

5x10 M18AHS =

Scale = 1:92.1



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LOADING (psf) TCLL 20.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.50	<b>DEFL.</b> in (loc) I/defl L/d Vert(LL) -0.27 12-14 >999 360	PLATES GRIP MT20 244/190
	· ·		, ,	
TCDL 10.0	Lumber DOL 1.15	BC 0.56	Vert(CT) -0.39 12-14 >973 240	M18AHS 186/179
BCLL 0.0 *	Rep Stress Incr YES	WB 0.59	Horz(CT) 0.03 12 n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) -0.03 12-14 >999 240	Weight: 313 lb FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

WEBS

LUMBER-

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

2x4 SP No.2 \*Except\* **WEBS** 6-14: 2x6 SP No.1

**SLIDER** Left 2x6 SP No.1 5-8-14, Right 2x6 SP No.1 5-9-1

REACTIONS.

(size) 2=0-3-8, 12=0-3-8 Max Horz 2=324(LC 11)

Max Uplift 2=-92(LC 12), 12=-115(LC 13)

Max Grav 2=1530(LC 19), 12=1998(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-4=-1954/286, 4-6=-1131/304, 6-8=-1159/287, 8-10=-492/707 TOP CHORD **BOT CHORD** 2-16=-120/1713, 14-16=-120/1713, 12-14=0/505, 10-12=-472/521 WEBS 4-16=0/593, 4-14=-987/309, 6-14=-71/651, 8-14=-48/521, 8-12=-1808/751

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-3-7 to 3-1-6, Interior(1) 3-1-6 to 18-11-8, Exterior(2) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 39-2-7 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 92 lb uplift at joint 2 and 115 lb uplift at



March 2,2022



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

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

ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Lot 163 Ballard Woods 150504797 J0822-3955 FINK A2-GE Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Mar 1 09:56:57 2022 Page 1 Comtech, Inc.

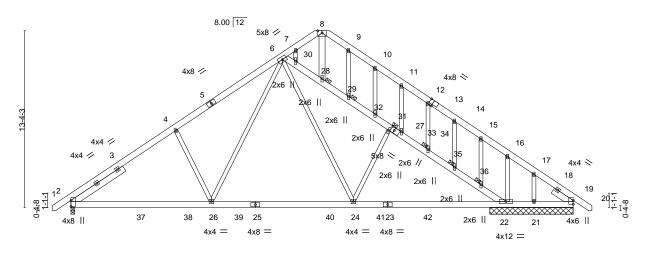
ID:2W3hk9latme7Qcxb7tDGi8zptHE-zN?MtTTUu1HVmmnRJ5EniGIPYT6mXk4\_\_yCh0jzfK8q 15-11-8 18-11-8 23-11-15 37-11-0 8-0-7 3-0-0 5-0-7

> Scale = 1:87.0 5x8 =

> > Structural wood sheathing directly applied or 5-4-7 oc purlins.

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

1 Brace at Jt(s): 28, 29, 31, 34, 35, 36



21-3-13 10-7-3 10-8-10 16-7-3 Plate Offsets (X,Y)-- [2:Edge,0-0-0], [13:0-3-4,Edge], [27:0-3-2,0-2-8]

BOT CHORD

JOINTS

	0010 (71, 1)	[=:=ago;o o o]; [:o:o o :;=ago]; [=::o o	, <u> </u>		
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.23	Vert(LL) -0.18 24-26 >999 360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.54	Vert(CT) -0.25 24-26 >999 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.67	Horz(CT) 0.04 19 n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05 24-26 >999 240	Weight: 369 lb FT = 20%

LUMBER-**BRACING-**TOP CHORD 2x6 SP No 1 TOP CHORD

BOT CHORD 2x6 SP No.1 WFBS 2x4 SP No.2 \*Except\*

6-27,8-28,22-27: 2x6 SP No.1

**SLIDER** Left 2x6 SP No.1 4-8-12, Right 2x6 SP No.1 1-8-13

REACTIONS. (size) 2=0-3-8, 22=6-3-8, 21=6-3-8, 19=6-3-8

Max Horz 2=404(LC 11)

Max Uplift 2=-268(LC 12), 22=-541(LC 13), 21=-232(LC 22) Max Grav 2=1631(LC 19), 22=1850(LC 20), 19=434(LC 22)

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

TOP CHORD 2-4=-2139/423, 4-6=-1988/527, 12-14=-265/69, 14-15=-318/89, 15-16=-350/108,

16-17=-443/275, 17-19=-533/309

BOT CHORD 2-26=-372/1925, 24-26=-95/1352, 22-24=-160/1720, 21-22=-283/486, 19-21=-283/486 **WEBS**  $6-30 = -1709/593,\ 28-30 = -1697/578,\ 28-29 = -1687/562,\ 29-32 = -1708/586,\ 31-32 = -1751/666,\ 31-32 = -1709/593,\ 28-30 = -1697/578,\ 28-29 = -1687/562,\ 29-32 = -1708/586,\ 31-32 = -1709/593,\ 28-30 = -1697/578,\ 28-29 = -1687/562,\ 29-32 = -1708/586,\ 31-32 = -1709/593,\ 28-30 = -1697/578,\ 28-29 = -1687/562,\ 29-32 = -1708/586,\ 31-32 = -1709/593,\ 28-30 = -1697/578,\ 28-29 = -1687/562,\ 29-32 = -1708/586,\ 31-32 = -1709/593,\ 28-30 = -1697/578,\ 28-29 = -1687/562,\ 29-32 = -1708/586,\ 31-32 = -1709/593,\ 28-30 = -109/593,\ 28-30$ 

31-33=-1730/623, 33-34=-1782/719, 34-35=-1797/738, 35-36=-1823/767,

22-36=-1870/793, 4-26=-465/394, 24-31=-399/346, 6-26=-250/949, 6-24=-197/915,

16-22=-401/300

### 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) 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) All plates are 2x4 MT20 unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 268 lb uplift at joint 2, 541 lb uplift at joint 22 and 232 lb uplift at joint 21.



March 2,2022

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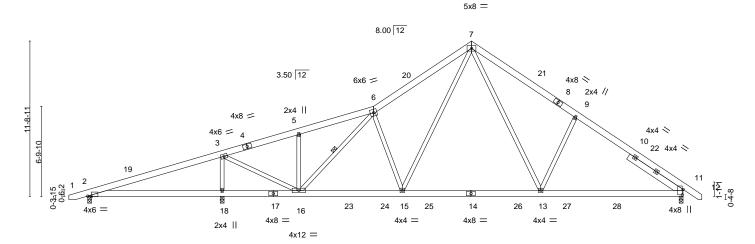
ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Lot 163 Ballard Woods 150504798 J0822-3955 В1 **ROOF SPECIAL** 3 Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Mar 1 09:56:58 2022 Page 1 Comtech, Inc.

ID:2W3hk9latme7Qcxb7tDGi8zptHE-RZZk5pU6fLPMOwMetol0EUqWusSoGEb7DcyFZ9zfK8p 10-1-12 15-11-3 21-6-13 28-11-8 44-11-0 7-10-0 10-1-12 5-9-7 5-7-11 7-4-11 8-1-8

Scale = 1:86.9



	10-1-12	15-11-3	23-8-13	34-2-3	44-11-0	
	10-1-12	5-9-7	7-9-11	10-5-5	10-8-13	
Plate Offsets (X Y)	[2:0-3-5 Edge] [11:0-4-15 0-0-12]	]				

LOADING (psf) TCLL 20.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.45	<b>DEFL.</b> in (loc) I/defl L/d Vert(LL) -0.17 13-15 >999 360	<b>PLATES GRIP</b> MT20 244/190
TCDL 10.0 BCLL 0.0 *	Lumber DOL 1.15	BC 0.56	Vert(CT) -0.26 13-15 >999 240	191120 24-4/100
BCDL 10.0	Rep Stress Incr YES Code IRC2015/TPI2014	WB 0.46 Matrix-S	Horz(CT) 0.03 11 n/a n/a Wind(LL) 0.11 2-18 >999 240	Weight: 328 lb FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

WFBS

LUMBER-

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

SLIDER Right 2x6 SP No.1 4-10-4

REACTIONS. (size) 2=0-3-8, 18=0-3-8, 11=0-3-8

Max Horz 2=282(LC 11)

Max Uplift 2=-200(LC 8), 18=-176(LC 12), 11=-91(LC 13) Max Grav 2=301(LC 23), 18=2100(LC 2), 11=1644(LC 20)

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

TOP CHORD 2-3=-117/601, 3-5=-1375/202, 5-6=-1340/249, 6-7=-2030/467, 7-9=-2017/467,

9-11=-2165/368

**BOT CHORD**  $2\text{-}18\text{=-}576/130,\ 16\text{-}18\text{=-}576/130,\ 15\text{-}16\text{=-}103/1737,\ 13\text{-}15\text{=}0/1200,\ 11\text{-}13\text{=-}149/1648}$ WEBS 7-13=-154/966, 3-18=-1859/400, 9-13=-473/305, 7-15=-162/978, 6-15=-530/261,

3-16=-148/1883, 6-16=-817/149

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-15 to 3-2-14, Interior(1) 3-2-14 to 28-11-8, Exterior(2) 28-11-8 to 33-4-5, Interior(1) 33-4-5 to 46-2-7 zone; porch left 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 200 lb uplift at joint 2, 176 lb uplift at joint 18 and 91 lb uplift at joint 11.



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

6-16

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

1 Row at midpt

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

ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Lot 163 Ballard Woods 150504799 J0822-3955 B1-GE **GABLE** Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Mar 1 09:57:00 2022 Page 1 Comtech, Inc. ID:2W3hk9latme7Qcxb7tDGi8zptHE-NygUWUWMByf3dDW0\_DnUJvvuPg8tk7UQgwRLd1zfK8n 2<u>1-6-13</u>

8-5-1

26-11-8

5-4-11

28-11-8

2-0-0

33-9-8

4-10-0

Scale = 1:88.8

44-11-0

11-1-8

12-6-13

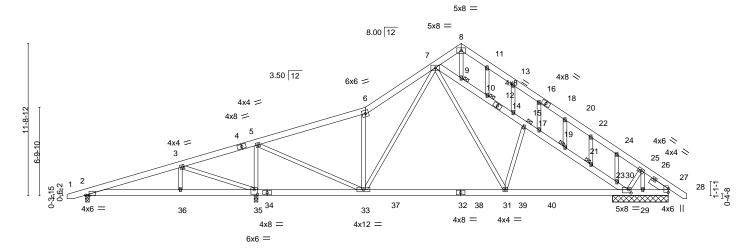


Plate Off	rsets (X,Y)	[2:0-3-5,Edge], [30:0-2-4,0-3-	-0], [35:0-3	3-0,0-4-4]							
LOADIN	IG (psf)	SPACING- 2-	-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1	1.15	TC	0.32	Vert(LL)	-0.22 31-33	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL 1	1.15	BC	0.52	Vert(CT)	-0.32 31-33	>999	240		
BCLL	0.0 *	Rep Stress Incr Y	/ES	WB	0.57	Horz(CT)	0.02 27	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI20	14	Matri	x-S	Wind(LL)	0.04 2-36	>999	240	Weight: 383 lb	FT = 20%

21-6-13

LUMBER-**BRACING-**

5-10-1

13-1-12

5-10-1

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

**OTHERS** 2x4 SP No.2

SLIDER Right 2x6 SP No.1 1-6-13 TOP CHORD

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

6-0-0 oc bracing: 33-35 **JOINTS** 1 Brace at Jt(s): 15, 9, 10, 19, 21

10-9-6

REACTIONS. All bearings 4-3-8 except (jt=length) 2=0-3-8, 35=0-3-8.

7-3-11

Max Horz 2=375(LC 11) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) except 30=-734(LC 13), 2=-296(LC 8), 35=-485(LC 12),

29=-374(LC 20)

Max Grav All reactions 250 lb or less at joint(s) 29 except 30=1612(LC 20), 2=435(LC 23), 35=1917(LC 1),

27=366(LC 22)

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

TOP CHORD 2-3=-399/361, 3-5=-350/546, 5-6=-1203/206, 6-7=-1366/378, 7-8=-344/164

7-9=-1239/402, 9-10=-1135/357, 10-14=-1172/382, 14-15=-1276/469, 15-17=-1176/382,

17-19=-1269/458, 19-21=-1301/480, 21-23=-1314/498, 23-30=-1494/610, 8-11=-313/140,

11-13=-337/98, 13-16=-283/0, 16-20=-296/0, 20-22=-343/0, 22-24=-408/0,

24-25=-396/104, 25-27=-411/116

**BOT CHORD** 2-36=-343/326, 35-36=-343/326, 33-35=-477/448, 31-33=-9/917, 30-31=-53/1282,

29-30=-105/311, 27-29=-105/311

WEBS 7-31=-197/896, 5-35=-1521/628, 15-31=-370/311, 7-33=-158/460, 5-33=-397/1615,

6-33=-720/396, 3-36=-229/267, 3-35=-808/808, 23-24=-325/211

### 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 exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 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, with BCDL = 10.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 734 lb uplift at joint 30, 296 lb uplift at joint 2, 485 lb uplift at joint 35 and 374 lb uplift at joint 29.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 2,2022

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Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not Design Valid to its 90 mly with win New Commercials. This design is based only upon parameters shown, and is 10 at an individual outlining 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/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Lot 163 Ballard Woods 150504800 J0822-3955 B2 COMMON 4 Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Mar 1 09:57:01 2022 Page 1 Comtech, Inc.

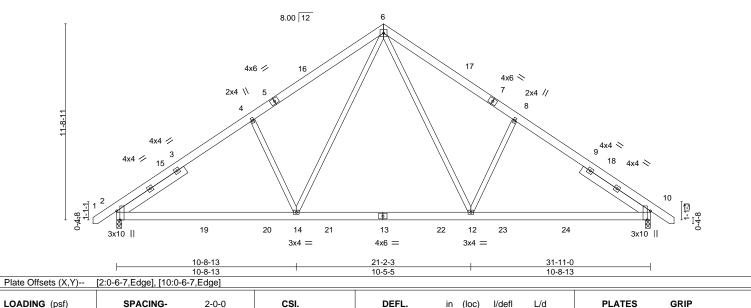
5x5 =

ID:2W3hk9latme7Qcxb7tDGi8zptHE-r8EtjqX?yGnwFN5DYwljs6S4C4UuTcpZvaAvAUzfK8m 15-11-8 23-9-8 7-10-0 31-11-0 33-4-0 1-5-0 7-10-0 8-1-8

Scale = 1:68.9

Structural wood sheathing directly applied or 5-5-15 oc purlins.

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



LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.25 Vert(LL) -0.15 12-14 >999 360 MT20 244/190 TCDL Vert(CT) 10.0 Lumber DOL 1.15 BC 0.53 -0.21 12-14 >999 240 WB **BCLL** 0.0 Rep Stress Incr YES 0.43 Horz(CT) 0.04 10 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Wind(LL) 0.03 14 >999 240 Weight: 249 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

SLIDER Left 2x6 SP No.1 4-10-4, Right 2x6 SP No.1 4-10-4

REACTIONS.

(size) 2=0-3-8, 10=0-3-8 Max Horz 2=-276(LC 10) Max Uplift 2=-84(LC 12), 10=-84(LC 13) Max Grav 2=1578(LC 19), 10=1578(LC 20)

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

TOP CHORD 2-4=-2051/369, 4-6=-1904/468, 6-8=-1904/468, 8-10=-2051/369

**BOT CHORD** 2-14=-142/1764, 12-14=0/1195, 10-12=-149/1586

**WEBS**  $6-12=-163/958,\ 8-12=-477/306,\ 6-14=-163/957,\ 4-14=-477/306$ 

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-3-7 to 3-1-6, Interior(1) 3-1-6 to 15-11-8, Exterior(2) 15-11-8 to 20-4-5, Interior(1) 20-4-5 to 33-2-7 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 84 lb uplift at joint 2 and 84 lb uplift at joint 10.

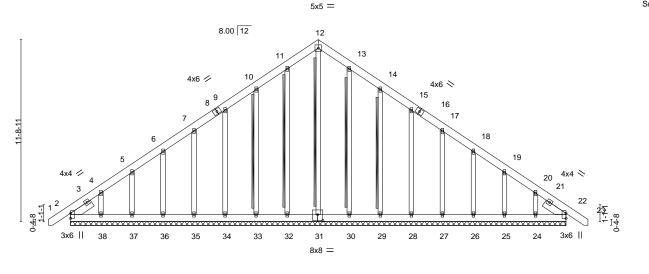




Job Truss Truss Type Qty Ply Lot 163 Ballard Woods 150504801 J0822-3955 COMMON SUPPORTED GAB B2-GE Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Mar 1 09:57:02 2022 Page 1 Comtech, Inc.

ID:2W3hk9latme7Qcxb7tDGi8zptHE-JKoFxAXdiavnsXgP6epyPK?I5UyxC7dj8EwSiwzfK8l 33-4-0 1-5-0 15-11-8 15-11-8 15-11-8

Scale = 1:74.2



31-11-0 Plate Offsets (X-Y)-- [2:Edge 0-0-0] [22:Edge 0-0-0] [31:0-4-0 0-4-8]

I late Offsets	5 (A, I )	[z.Luge,0-0-0], [zz.Luge,	0-0-0], [31.0-4	F-0,0- <del>4</del> -0j								
LOADING (	psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 2	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00	22	n/r	120	MT20	244/190
TCDL 1	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	23	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.01	22	n/a	n/a		
BCDL 1	10.0	Code IRC2015/TF	PI2014	Matri	x-S						Weight: 310 lb	FT = 20%

LUMBER-TOP CHORD 2x6 SP No 1

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

SLIDER Left 2x6 SP No.1 1-6-14, Right 2x6 SP No.1 1-6-14

**BRACING-**TOP CHORD **BOT CHORD** WFBS

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

T-Brace: 2x4 SPF No.2 - 12-31, 11-32, 10-33, 13-30

, 14-29

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.

REACTIONS. All bearings 31-11-0.

(lb) -Max Horz 2=-345(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 32, 33, 34, 35, 36, 37, 30, 28, 27,

26, 25, 22 except 2=-129(LC 8), 38=-191(LC 12), 29=-103(LC 13), 24=-168(LC

Max Grav All reactions 250 lb or less at joint(s) 31, 32, 33, 34, 35, 36, 37, 38,

30, 29, 28, 27, 26, 25, 24, 22 except 2=276(LC 20)

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

2-4=-382/275, 4-5=-250/215, 10-11=-230/267, 11-12=-263/293, 12-13=-262/292,

20-22=-297/191

**BOT CHORD** 2-38=-171/272, 37-38=-171/272, 36-37=-171/272, 35-36=-171/272, 34-35=-171/272,

33-34=-171/272, 32-33=-171/272, 31-32=-171/272, 30-31=-172/273, 29-30=-172/273, 28-29=-172/273, 27-28=-172/273, 26-27=-172/273, 25-26=-172/273, 24-25=-172/273,

22-24=-172/273

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 32, 33, 34, 35, 36, 37, 30, 28, 27, 26, 25, 22 except (jt=lb) 2=129, 38=191, 29=103, 24=168.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



March 2,2022

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ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Lot 163 Ballard Woods 150504802 J0822-3955 C1 **ROOF SPECIAL** 3 Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Mar 1 09:57:03 2022 Page 1 Comtech, Inc. ID:2W3hk9latme7Qcxb7tDGi8zptHE-nXMd8WYFTt1eUhFbfLLBxXXPht9dxUlsMuf?EMzfK8k

26-11-8

10-9-6

6-0-0 oc bracing: 15-17.

33-9-8

6-10-0

21-6-13

8-5-1

13-1-12

13-1-12

5-10-1

5-10-1

Scale = 1:78.1

42-4-0 1-5-0

40-11-0

7-1-8

8-6-13

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

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

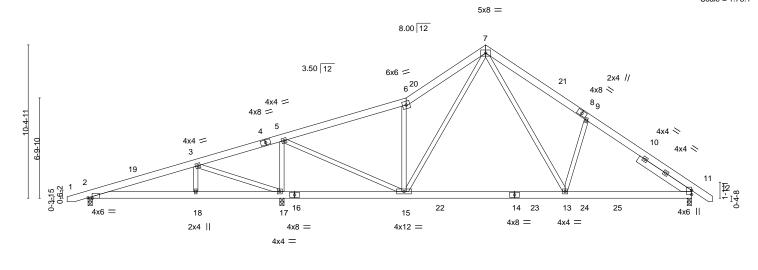


Plate Off	sets (X,Y)	[2:0-3-5,Edge]										
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.22 1	l3-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.32 1	13-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.02	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI	2014	Matri	x-S	Wind(LL)	0.04	2-18	>999	240	Weight: 299 lb	FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

21-6-13

8-5-1

LUMBER-

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

SLIDER Right 2x6 SP No.1 4-3-0

REACTIONS.

(size) 2=0-3-8, 17=0-3-8, 11=0-3-8

7-3-11

7-3-11

Max Horz 2=250(LC 11)

Max Uplift 2=-213(LC 8), 17=-247(LC 8), 11=-84(LC 13) Max Grav 2=440(LC 23), 17=1873(LC 1), 11=1279(LC 20)

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

TOP CHORD 2-3=-415/355, 3-5=-238/527, 5-6=-1171/144, 6-7=-1334/303, 7-9=-1582/374,

9-11=-1667/244

**BOT CHORD**  $2\text{-}18\text{=-}262/341,\ 17\text{-}18\text{=-}262/341,\ 15\text{-}17\text{=-}444/350,\ 13\text{-}15\text{=}0/813,\ 11\text{-}13\text{=-}62/1242}$ **WEBS** 3-18=-226/267, 3-17=-809/653, 5-17=-1473/416, 5-15=-281/1543, 6-15=-699/298,

7-13=-178/910, 9-13=-428/289, 7-15=-89/476

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-15 to 3-2-14, Interior(1) 3-2-14 to 26-11-8, Exterior(2) 26-11-8 to 31-4-5, Interior(1) 31-4-5 to 42-2-7 zone; porch left 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) 11 except (jt=lb) 2=213, 17=247.



March 2,2022

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

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



Job Truss Truss Type Qty Ply Lot 163 Ballard Woods 150504803 J0822-3955 D1 ATTIC 5 Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Mar 1 09:57:04 2022 Page 1

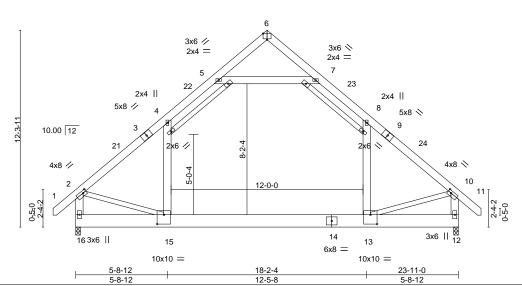
Structural wood sheathing directly applied or 2-8-10 oc purlins,

Rigid ceiling directly applied or 8-11-2 oc bracing.

except end verticals.

ID:2W3hk9latme7Qcxb7tDGi8zptHE-Fjw?LsZtEB9V6rpoD3sQUI4R1HRGgze0bYPZmpzfK8j 5-8-12 8-11-2 11-11-8 14-11-14 18-2-4 23-11-0 5-8-12 3-2-6 3-0-6 3-0-6 3-2-6 5-8-12

Scale = 1:72.0



4x6 =

Plate Offsets (X,Y)-- [2:0-2-8,0-1-12], [6:0-3-0,Edge], [10:0-2-8,0-1-12], [13:0-5-0,0-7-0], [15:0-5-0,0-7-0]

LOADING	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l	/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.85	Vert(LL) -0.27 13-15 >	999 360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.81	Vert(CT) -0.45 13-15 >	620 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.43	Horz(CT) 0.01 12	n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.08 13-15 >	999 240	Weight: 256 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP No 1 \*Except\* 17-18,19-20: 2x4 SP No.2

**BOT CHORD** 2x10 SP No.1

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

2-15,10-13: 2x4 SP No.2

REACTIONS. (size) 16=0-3-8, 12=0-3-8

Max Horz 16=330(LC 11)

Max Grav 16=1617(LC 20), 12=1617(LC 21)

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

TOP CHORD 2-4=-1751/0, 4-5=-1171/137, 5-6=-58/279, 6-7=-58/279, 7-8=-1171/137, 8-10=-1751/0,

2-16=-1699/62. 10-12=-1700/63

**BOT CHORD** 15-16=-282/506, 13-15=0/1215, 12-13=-40/311

WEBS 5-7=-1397/118, 4-15=0/678, 8-13=0/678, 2-15=0/1045, 10-13=0/1048

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design. 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope)
- and C-C Exterior(2) -1-3-11 to 3-1-2, Interior(1) 3-1-2 to 11-11-8, Exterior(2) 11-11-8 to 16-4-5, Interior(1) 16-4-5 to 25-2-11 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-15, 8-13
- 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
- 7) Attic room checked for L/360 deflection.



March 2,2022

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

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

ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Lot 163 Ballard Woods 150504804 J0822-3955 ATTIC 2 D1-GE Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Mar 1 09:57:06 2022 Page 1 ID:2W3hk9latme7Qcxb7tDGi8zptHE-C52mmYa7moQDL8zALUuuZA9nW57k8wDl3sugrhzfK8h

5-8-12 8-11-2 11-11-8 14-11-14 18-2-4 23-11-0 5-8-12 3-2-6 3-0-6 3-0-6 3-2-6 5-8-12

5x8 =

Scale = 1:71.0

23-11-0

5-8-12

except end verticals.

1 Brace at Jt(s): 21

Structural wood sheathing directly applied or 2-8-10 oc purlins,

Rigid ceiling directly applied or 8-11-2 oc bracing.

6 3x6 // 3x6 📏 2x4 = 2x4 = 2x4 || 2x6 II 5x8 // 8 5x8 💉 9 10.00 12 4x8 🚿 4x8 // 10 12-0-0 3x6 Ⅱ 🖁 14 วี63x6 II 15 13 6x8 = 10x10 = 10x10 =

18-2-4

12-5-8

BRACING-

TOP CHORD

BOT CHORD

JOINTS

5-8-12 Plate Offsets (X,Y)-- [2:0-2-8,0-1-12], [10:0-2-8,0-1-12], [13:0-5-0,0-7-0], [15:0-5-0,0-7-0]

5-8-12

LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl	L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.85	Vert(LL) -0.27 13-15 >999	360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.81	Vert(CT) -0.45 13-15 >620	240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.23	Horz(CT) 0.01 12 n/a	n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.11 13-15 >999	240	Weight: 260 lb FT = 20%

LUMBER-

TOP CHORD 2x6 SP No 1 \*Except\* 17-18.19-20: 2x4 SP No.2

**BOT CHORD** 2x10 SP No.1

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

2-15,10-13,6-21: 2x4 SP No.2

REACTIONS. (size) 16=0-3-8, 12=0-3-8

Max Horz 16=-412(LC 10)

Max Grav 16=1613(LC 20), 12=1613(LC 21)

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

TOP CHORD  $2\text{-}4\text{=-}1766/12,\ 4\text{-}5\text{=-}1173/184,\ 7\text{-}8\text{=-}1172/184,\ 8\text{-}10\text{=-}1766/12,\ 2\text{-}16\text{=-}1707/97,}$ 

10-12=-1707/97

**BOT CHORD** 15-16=-374/571, 13-15=0/1244, 12-13=-91/311

**WEBS** 5-21=-1330/231, 7-21=-1330/231, 4-15=-18/678, 8-13=-17/678, 2-15=0/1081,

10-13=0/1086

### 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; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-21, 7-21; Wall dead load (5.0psf) on member(s).4-15, 8-13
- 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
- 7) Attic room checked for L/360 deflection.





Job Truss Truss Type Qty Ply Lot 163 Ballard Woods 150504805 J0822-3955 D2 ATTIC 13 Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

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Structural wood sheathing directly applied or 2-2-1 oc purlins,

Rigid ceiling directly applied or 8-10-3 oc bracing.

except end verticals.

ID:2W3hk9latme7Qcxb7tDGi8zptHE-C52mmYa7moQDL8zALUuuZA9nQ57g8t5l3sugrhzfK8h 5-8-12 5-8-12 8-11-2 11-11-8 14-11-14 18-2-4 23-11-0 3-2-6 3-0-6 3-0-6 3-2-6 5-8-12

4x6 =

Scale = 1:71.0

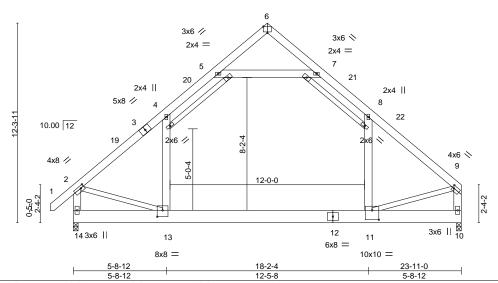


Plate Offsets (X,Y)-- [2:0-2-8,0-1-12], [6:0-3-0,Edge], [9:0-1-4,0-2-0], [11:0-5-0,0-7-0], [13:0-4-0,0-4-12]

LOADING	G (psf)	SPACING- 2-0-0	CSI.	<b>DEFL</b> . in	(loc) I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.86	Vert(LL) -0.27 11	1-13 >999	360	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.81	Vert(CT) -0.46 11	1-13 >613	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.43	Horz(CT) 0.01	10 n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.08 1	1-13 >999	240	Weight: 252 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP No 1 \*Except\* 15-16,17-18: 2x4 SP No.2

**BOT CHORD** 2x10 SP No.1

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

2-13,9-11: 2x4 SP No.2

REACTIONS. (size) 14=0-3-8, 10=0-3-8

Max Horz 14=-296(LC 10)

Max Grav 14=1620(LC 20), 10=1531(LC 21)

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

TOP CHORD  $2\text{-}4\text{=-}1755/0,\ 4\text{-}5\text{=-}1171/131,\ 5\text{-}6\text{=-}52/284,\ 6\text{-}7\text{=-}54/281,\ 7\text{-}8\text{=-}1176/142,\ 8\text{-}9\text{=-}1739/0,\ 8\text{-}9\text{=-}1739/0,\$ 

2-14=-1703/56, 9-10=-1633/0 **BOT CHORD** 13-14=-275/482, 11-13=0/1195

WEBS 5-7=-1409/130, 4-13=0/683, 8-11=0/649, 2-13=0/1046, 9-11=0/1101

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-3-11 to 3-1-2, Interior(1) 3-1-2 to 11-11-8, Exterior(2) 11-11-8 to 16-4-5, Interior(1) 16-4-5 to 23-8-4 zone; end vertical left 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) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-13, 8-11
- 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
- 7) Attic room checked for L/360 deflection.





Job Truss Truss Type Qty Ply Lot 163 Ballard Woods 150504806 J0822-3955 D2A ATTIC 3 Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

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ID:2W3hk9latme7Qcxb7tDGi8zptHE-glb8\_ublX6Y4zIYMuBP76NiyaVT1tKYSHWdDN7zfK8g 8-7-10 11-8-0 14-8-6 17-10-12 23-7-8 3-2-6 3-0-6 3-0-6 3-2-6 5-8-12

> Scale = 1:72.0 4x6 =

> > Structural wood sheathing directly applied or 3-6-8 oc purlins,

Rigid ceiling directly applied or 8-11-9 oc bracing.

except end verticals.

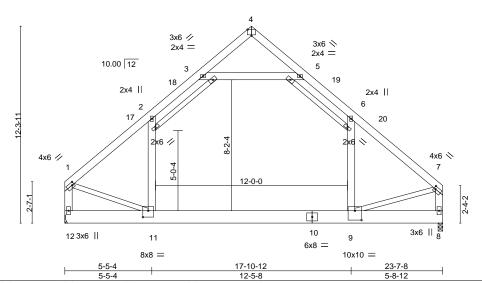


Plate Offsets (X,Y)-- [1:0-1-8,0-2-0], [4:0-3-0,Edge], [7:0-1-4,0-2-0], [9:0-5-0,0-7-0], [11:0-4-0,0-4-12]

LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (lo	c) I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.83	Vert(LL)	-0.27 9-1	11 >999	360	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.80	Vert(CT)	-0.45 9-1	11 >622	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.42	Horz(CT)	0.01	8 n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL)	0.08 9-	11 >999	240	Weight: 247 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP No 1 \*Except\* 13-14,15-16: 2x4 SP No.2

**BOT CHORD** 2x10 SP No.1

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

1-11,7-9: 2x4 SP No.2

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

Max Horz 12=-289(LC 10)

Max Grav 12=1530(LC 21), 8=1514(LC 21)

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

TOP CHORD  $1-2 = -1700/0, \ 2-3 = -1155/134, \ 3-4 = -60/275, \ 4-5 = -59/276, \ 5-6 = -1156/141, \ 6-7 = -1707/0, \ 3-4 = -60/275, \ 4-5 = -59/276, \ 5-6 = -1156/141, \ 6-7 = -1707/0, \ 3-4 = -60/275, \ 4-5 = -59/276, \ 5-6 = -1156/141, \ 6-7 = -1707/0, \ 3-4 = -60/275, \ 4-5 = -59/276, \ 5-6 = -1156/141, \ 6-7 = -1707/0, \ 3-4 = -60/275, \ 4-5 = -59/276, \ 5-6 = -1156/141, \ 6-7 = -1707/0, \ 3-4 = -60/275, \ 4-5 = -59/276, \ 5-6 = -1156/141, \ 6-7 = -1707/0, \ 3-4 = -60/275, \ 4-5 = -59/276, \ 5-6 = -1156/141, \ 6-7 = -1707/0, \ 3-4 = -60/275, \ 4-5 = -59/276, \ 5-6 = -1156/141, \ 6-7 = -1707/0, \ 3-6 = -10/276, \ 3-6$ 

1-12=-1679/0. 7-8=-1603/0 **BOT CHORD** 11-12=-260/365, 9-11=0/1171

WEBS 3-5=-1375/129, 2-11=-2/639, 6-9=-4/632, 1-11=0/1139, 7-9=0/1075

### 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) 0-6-4 to 4-11-1, Interior(1) 4-11-1 to 11-11-8, Exterior(2) 11-11-8 to 16-4-5, Interior(1) 16-4-5 to 23-8-4 zone; end vertical left 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) Ceiling dead load (10.0 psf) on member(s). 2-3, 5-6, 3-5; Wall dead load (5.0psf) on member(s).2-11, 6-9
- 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 9-11
- 7) Refer to girder(s) for truss to truss connections.
- 8) Attic room checked for L/360 deflection.



March 2,2022

Job Truss Truss Type Qty Ply Lot 163 Ballard Woods 150504807 J0822-3955 D3 ATTIC 2 2 Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Mar 1 09:57:08 2022 Page 1

ID:2W3hk9latme7Qcxb7tDGi8zptHE-8U9WBEcOlQgxaS7ZSvwMebF5suotcqPbWANmvazfK8f 5-8-12 8-11-2 11-11-8 14-11-14 18-2-4 23-11-0 5-8-12 3-2-6 3-0-6 3-0-6 3-2-6 5-8-12

Scale = 1:71.0

4x6 =

2-0-0 oc purlins (5-5-7 max.), except end verticals

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

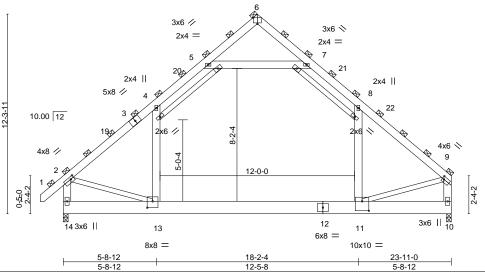


Plate Offsets (X,Y)-- [2:0-2-8,0-1-12], [6:0-3-0,Edge], [9:0-1-4,0-2-0], [11:0-5-0,0-7-0], [13:0-4-0,0-4-12]

LOADIN	G (psf)	SPACING- 4-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.99	Vert(LL) -0.27 11-13 >999 360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.89	Vert(CT) -0.46 11-13 >613 240	
BCLL	0.0 *	Rep Stress Incr NO	WB 0.25	Horz(CT) 0.01 10 n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.08 11-13 >999 240	Weight: 505 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP No 1 \*Except\* 15-16.17-18: 2x4 SP No.2

**BOT CHORD** 2x10 SP No.1

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

2-13,9-11: 2x4 SP No.2

REACTIONS. (size) 14=0-3-8, 10=0-3-8

Max Horz 14=639(LC 9)

Max Grav 14=3240(LC 20), 10=3058(LC 21)

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

TOP CHORD 2-4=-3516/0, 4-5=-2345/270, 5-6=-104/568, 6-7=-108/563, 7-8=-2351/280, 8-9=-3475/0,

2-14=-3412/122 9-10=-3268/0

BOT CHORD 13-14=-601/983, 11-13=0/2408, 10-11=-149/425

WEBS 5-7=-2817/252, 4-13=0/1365, 8-11=0/1298, 2-13=0/2097, 9-11=0/2211

### 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: 2x10 2 rows staggered at 0-9-0 oc.
  - Webs connected as follows: 2x6 2 rows staggered at 0-9-0 oc, 2x4 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-3-11 to 3-1-2, Interior(1) 3-1-2 to 11-11-8, Exterior(2) 11-11-8 to 16-4-5, Interior(1) 16-4-5 to 23-8-4 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-13, 8-11
- 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) Attic room checked for L/360 deflection.



March 2.2022



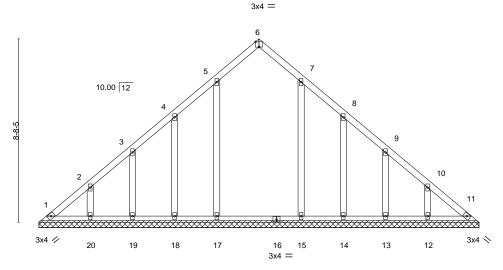
Job Truss Truss Type Qty Ply Lot 163 Ballard Woods 150504808 J0822-3955 **GABLE** VA-1 Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Mar 1 09:57:09 2022 Page 1 ID:2W3hk9latme7Qcxb7tDGi8zptHE-cgjuPZd03jooCcil0cRbBonV8lJxLJdllq6KS0zfK8e 20-10-6

10-5-3

Scale = 1:54.6



20-10-6 20-10-6 Plate Offsets (X,Y)-- [6:0-2-0,Edge], [7:0-0-0,0-0-0], [8:0-0-0,0-0-0], [9:0-0-0,0-0-0], [10:0-0-0,0-0-0]

		7 7 7 1							
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. is	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) n/a	ı -	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.14	Vert(CT) n/a		n/a	999		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.12	Horz(CT) 0.01	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 117 lb	FT = 20%

### LUMBER-

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

### **BRACING-**

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

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

### REACTIONS. All bearings 20-10-6.

(lb) -Max Horz 1=-250(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 17, 15 except 18=-128(LC 12), 19=-103(LC 12),

20=-127(LC 12), 14=-131(LC 13), 13=-102(LC 13), 12=-127(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 11, 18, 19, 20, 14, 13, 12 except 17=350(LC 19), 15=341(LC

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

TOP CHORD 1-2=-377/240, 2-3=-268/149, 9-10=-260/149, 10-11=-369/240

**BOT CHORD**  $1-20 = -199/313, \ 19-20 = -199/313, \ 18-19 = -199/313, \ 17-18 = -199/313, \ 15-17 = -199/313, \ 18-19$ 

14-15=-199/313, 13-14=-199/313, 12-13=-199/313, 11-12=-199/313

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11, 17, 15 except (jt=lb) 18=128, 19=103, 20=127, 14=131, 13=102, 12=127.



March 2,2022



Job Truss Truss Type Qty Ply Lot 163 Ballard Woods 150504809 J0822-3955 **GABLE** VA-2 Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Mar 1 09:57:10 2022 Page 1 Comtech, Inc. ID:2W3hk9latme7Qcxb7tDGi8zptHE-4tHGcveeq1wfqmHxaJzqj0Kctibm4jeu\_Tst\_SzfK8d 8-10-0 17-8-0 8-10-0 Scale: 1/4"=1 4x4 = 3 10.00 12 12 13 2x4 2x4 || 3x4 // 3x4 💉 9 6 3x4 = 2x4 || 2x4 || 2x4 ||

LOADING	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.32	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.35	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.20	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S						Weight: 74 lb	FT = 20%

17-8-0 17-8-0

LUMBER-

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

**BRACING-**

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

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

REACTIONS. All bearings 17-8-0.

Max Horz 1=-168(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=-186(LC 12), 6=-186(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=612(LC 19), 9=548(LC 19), 6=548(LC 20)

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

**WEBS** 2-9=-461/322, 4-6=-461/322

### 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 8-10-0, Exterior(2) 8-10-0 to 13-2-13, Interior(1) 13-2-13 to 17-3-2 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, 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, 5 except (|t=|b|) 9=186, 6=186.





Job Truss Truss Type Qty Ply Lot 163 Ballard Woods 150504810 J0822-3955 **GABLE** VA-3 Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Mar 1 09:57:11 2022 Page 1 Comtech, Inc. ID:2W3hk9latme7Qcxb7tDGi8zptHE-Y3rfqFeGbL2WRvs871U3GDtjR6xrpBM1C7bRWvzfK8c 7-2-13 7-2-13 Scale = 1:38.3 4x6 || 2 10.00 12 6 3x4 // 3x4 💉 9 4 10 2x4 || 14-5-9 14-5-9 LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.52 Vert(LL) n/a n/a 999 MT20 244/190 TCDL Lumber DOL 1.15 вс 0.36 Vert(CT) n/a n/a 999 WB 0.17 **BCLL** 0.0 Rep Stress Incr YES Horz(CT) 0.00 3 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Weight: 56 lb FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS.

(size) 1=14-5-9, 3=14-5-9, 4=14-5-9

Max Horz 1=-136(LC 8)

Max Uplift 1=-32(LC 13), 3=-45(LC 13)

Max Grav 1=292(LC 1), 3=292(LC 1), 4=671(LC 19)

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

**WEBS** 2-4=-306/115

### 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 7-2-13, Exterior(2) 7-2-13 to 11-7-10, Interior(1) 11-7-10 to 14-0-12 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, 3.



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

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



Job Truss Type Qty Ply 150504811 J0822-3955 **GABLE** VA-4 Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Mar 1 09:57:12 2022 Page 1 Comtech, Inc. ID:2W3hk9latme7Qcxb7tDGi8zptHE-0FP11bfuMeAM33RKhk?lpRPynWJbYf4BRnL\_2LzfK8b <u>5-7-10</u> 5-7-10 Scale = 1:29.9 4x4 = 2 10.00 12 4 3x4 // 3x4 🚿 2x4 || 11-3-3 11-3-3 LOADING (psf) SPACING-2-0-0 CSI. DEFL in (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.29 Vert(LL) n/a n/a 999 MT20 244/190 TCDL Lumber DOL 1.15 вс 0.20 Vert(CT) n/a n/a 999 WB 0.08 **BCLL** 0.0 Rep Stress Incr YES Horz(CT) 0.00 3 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Weight: 43 lb FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

Lot 163 Ballard Woods

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

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

LUMBER-

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

REACTIONS.

(size) 1=11-3-3, 3=11-3-3, 4=11-3-3

Max Horz 1=-104(LC 8)

Truss

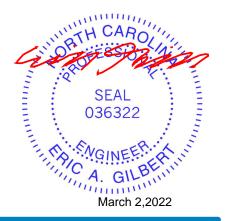
Max Uplift 1=-25(LC 13), 3=-34(LC 13)

Max Grav 1=223(LC 1), 3=224(LC 1), 4=390(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) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 5-7-10, Exterior(2) 5-7-10 to 10-0-6, Interior(1) 10-0-6 to 10-10-6 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.





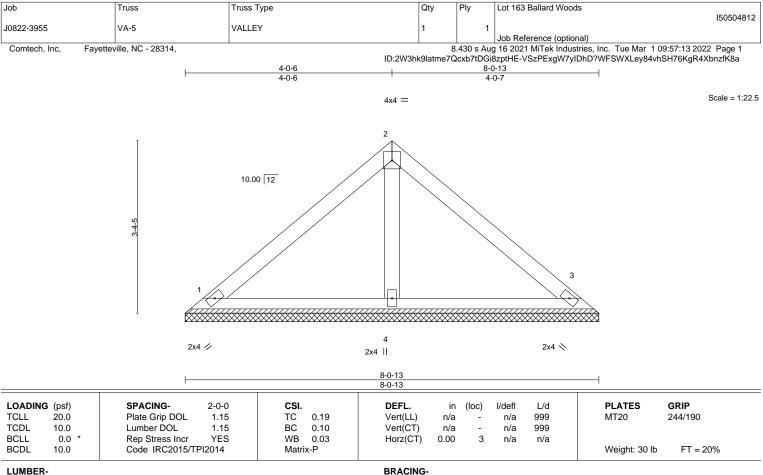


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

(size) 1=8-0-13, 3=8-0-13, 4=8-0-13

Max Horz 1=73(LC 9)

Max Uplift 1=-25(LC 13), 3=-32(LC 13)

Max Grav 1=168(LC 1), 3=168(LC 1), 4=245(LC 1)

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

### NOTES-

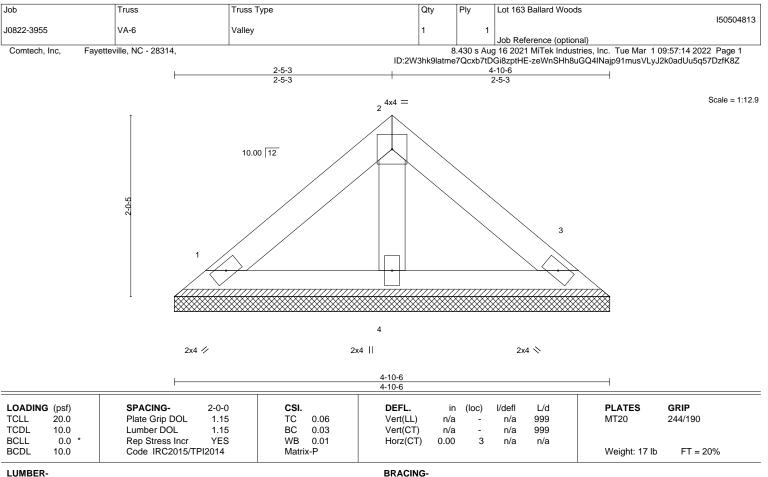
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip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



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

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





TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS.

(size) 1=4-10-6, 3=4-10-6, 4=4-10-6

Max Horz 1=-41(LC 8)

Max Uplift 1=-14(LC 13), 3=-18(LC 13) Max Grav 1=94(LC 1), 3=94(LC 1), 4=137(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 4-10-6 oc purlins.

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

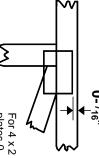


### Symbols

## 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

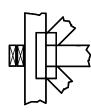
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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**



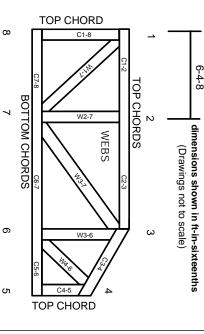
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only

### 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.

4.

- Cut members to bear tightly against each other.
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.

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- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.

9

- 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.