

RE: J1020-4945

Lot 114 Ballard Woods

Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Project Name: J1020-4945

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

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.3

Wind Code: N/A Wind Speed: 120 mph Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 30 individual, dated Truss Design Drawings and 1 Additional Drawings.

Na	Cool#	Truss Name	Doto	No	Cool#	Truss Name	Doto
No.	Seal#	rruss mame	Date	No.	Seal#		Date
1	E15040880	A1	11/1/2020	21	E15040900	C2	11/1/2020
2	E15040881	A1GE	11/1/2020	22	E15040901	C3	11/1/2020
3	E15040882	A2	11/1/2020	23	E15040902	C4	11/1/2020
4	E15040883	A3	11/1/2020	24	E15040903	D1GE	11/1/2020
5	E15040884	A4	11/1/2020	25	E15040904	VC1	11/1/2020
6	E15040885	A5	11/1/2020	26	E15040905	VC2	11/1/2020
7	E15040886	A5A	11/1/2020	27	E15040906	VC3	11/1/2020
8	E15040887	A6	11/1/2020	28	E15040907	VC4	11/1/2020
9	E15040888	A7	11/1/2020	29	E15040908	VC5	11/1/2020
10	E15040889	A8	11/1/2020	30	E15040909	<b>Z</b> 1	11/1/2020
11	E15040890	A9	11/1/2020				
12	E15040891	A10	11/1/2020				
13	E15040892	A11	11/1/2020				
14	E15040893	B1	11/1/2020				
15	E15040894	B1GE	11/1/2020				
16	E15040895	B2	11/1/2020				

11/1/2020

11/1/2020

11/1/2020

11/1/2020

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.

**B**3

C1

B3GE

C1GE

Truss Design Engineer's Name: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2020.

North Carolina COA: C-0844

E15040896

E15040897

E15040898

E15040899

17

18

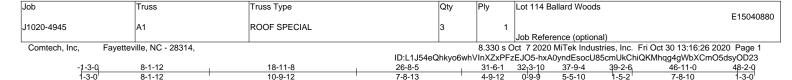
19

20

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



November 01, 2020



Scale = 1:84.6

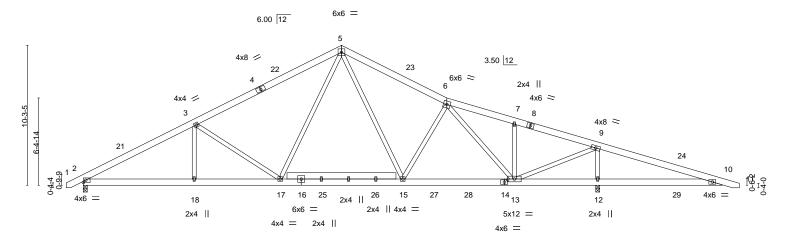


Plate Offsets (	<,Y)	[14:0-2-13,0-2-0]									
LOADING (ps	f)	SPACING-	2-0-0	CSI.		DEFL.	in (lo	c) I/defl	L/d	PLATES	GRIP
TCLL 20.	0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.16 15-1	7 >999	360	MT20	244/190
TCDL 10.	0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.25 15-1	7 >999	240		
BCLL 0.	0 *	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.05 1	2 n/a	n/a		
BCDL 10.	0	Code IRC2018/TI	PI2014	Matrix	x-S	Wind(LL)	0.05 1	7 >999	240	Weight: 341 lb	FT = 20%

22-11-8 23<sub>г</sub>5<sub>г</sub>8 26-8-5

0-6-0 3-2-13

**BRACING-**

TOP CHORD

**BOT CHORD** 

4-9-12

5-5-10

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

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

4-0-0

LUMBER-

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

2x4 SP No.2 \*Except\* 19-20: 2x6 SP No.1

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

Max Horz 2=-113(LC 10)

8-1-12

Max Uplift 2=-30(LC 12), 12=-222(LC 9) Max Grav 2=1649(LC 2), 12=2660(LC 2)

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

TOP CHORD  $2\text{-}3\text{=-}2784/448,\ 3\text{-}5\text{=-}2186/407,\ 5\text{-}6\text{=-}2062/384,\ 6\text{-}7\text{=-}1397/114,\ 7\text{-}9\text{=-}1456/65,}$ 

9-10=-669/1312

BOT CHORD 2-18=-307/2465, 17-18=-307/2465, 15-17=-24/1531, 13-15=-61/1905, 12-13=-1184/682,

6-3-12

10-12=-1184/682

**WEBS** 3-18=0/294, 9-13=-545/2669, 9-12=-2296/651, 3-17=-736/300, 5-17=-88/834,

5-15=-7/698, 6-13=-917/318

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 47-11-1 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

14-11-8 18-11-8

4-0-0

0-6-0

- 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)
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

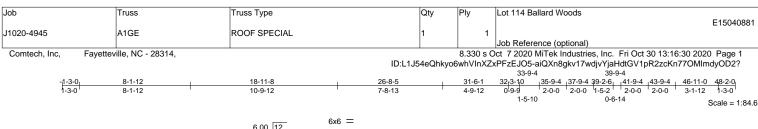


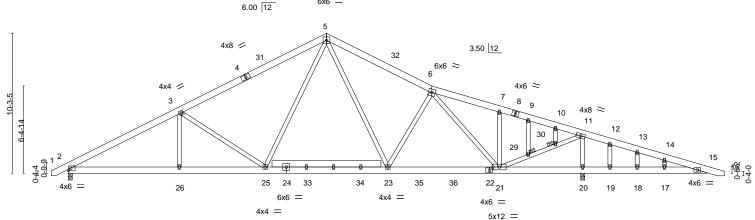
46-11-0

9-1-12

October 30,2020







'	8-1-12 ' 6-3-12	0-6-0 4-0-0 ' 4	<u>-0-0 0-6-0 3-2-13 4-9-12 0-9-9 5-5-10</u>	'2-0-0 '2-0-0 '2-0-0 ' 3-1-12 '
Plate Offsets (X,Y)	- [22:0-2-13,0-2-0]			
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 0.48	Vert(LL) -0.16 23-25 >999 360	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.48	Vert(CT) -0.25 23-25 >999 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.92	Horz(CT) 0.05 20 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.06 25 >999 240	Weight: 352 lb FT = 20%

**BRACING-**

JOINTS

TOP CHORD

**BOT CHORD** 

31-6-1

32<sub>T</sub>3-10

1 Brace at Jt(s): 29, 30

37-9-4

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

Structural wood sheathing directly applied or 4-4-12 oc purlins.

14-11-8 18-11-8 | 22-11-8 23<sub>г</sub>5<sub>г</sub>8 26-8-5

LUMBER-

REACTIONS.

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

2x4 SP No.2 \*Except\* WFBS 27-28: 2x6 SP No.1

(size) 2=0-3-8, 20=0-3-8

Max Horz 2=-173(LC 17)

Max Uplift 2=-224(LC 12), 20=-508(LC 9) Max Grav 2=1649(LC 2), 20=2660(LC 2)

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

2-3=-2784/362, 3-5=-2186/308, 5-6=-2062/283, 6-7=-1357/190, 7-9=-1347/154, TOP CHORD

9-10=-1407/147, 10-11=-1410/139, 11-12=-575/1291, 12-13=-582/1277, 13-14=-595/1244,

14-15=-617/1228

BOT CHORD 2-26=-390/2420, 25-26=-390/2420, 23-25=-78/1518, 21-23=-95/1877, 20-21=-1177/630, 19-20=-1177/630, 18-19=-1177/630, 17-18=-1177/630, 15-17=-1177/630

3-26=0/294, 11-20=-2235/439, 3-25=-736/326, 5-25=-106/825, 5-23=-81/687,

WEBS 7-21=-313/163, 6-21=-905/171, 21-29=-276/2690, 29-30=-274/2639, 11-30=-277/2676

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 47-11-1 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 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 100 lb uplift at joint(s) except (jt=lb) 2=224, 20=508.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



39-9-4 41-9-4 43-9-4 46-11-0

October 30,2020



818 Soundside Road

Edenton, NC 27932

Job Truss Truss Type Qty Ply Lot 114 Ballard Woods E15040882 J1020-4945 A2 ROOF SPECIAL 1 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:31 2020 Page 1 Comtech, Inc. ID:L1J54eQhkyo6whVInXZxPFzEJO5-2u\_v?UhMgLFnFsUkHHosPT1B0rOfLqNGM25sl3yOD2\_ 26<u>-8-5</u> 9-7-14 18-11-8 32-11-5 37-9-4 46-11-<u>0</u>

7-8-13

6-3-1

4-9-15

8-10-1

19-10-12

11-10-12

Scale = 1:82.1

7-8-10

46-11-0

9-1-12

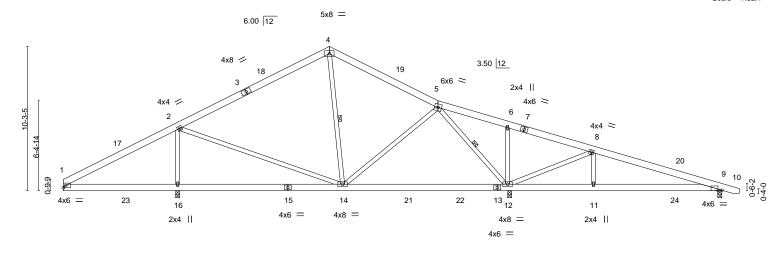


Plate Off	Plate Offsets (X,Y) [9:0-3-5,Edge]									
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP					
TCLL	20.0	Plate Grip DOL 1.15	TC 0.52	Vert(LL) -0.19 12-14 >999 360	MT20 244/190					
TCDL	10.0	Lumber DOL 1.15	BC 0.46	Vert(CT) -0.27 12-14 >999 240						
BCLL	0.0 *	Rep Stress Incr YES	WB 0.77	Horz(CT) 0.01 9 n/a n/a						
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.07 9-11 >999 240	Weight: 313 lb FT = 20%					

LUMBER-

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

31-9-9

11-10-12

TOP CHORD **BOT CHORD** WERS

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

Rigid ceiling directly applied or 6-0-0 oc bracing. 1 Row at midpt 5-12, 4-14

5-11-11

REACTIONS.

16=0-3-8, 12=0-3-8, 9=0-3-8 (size)

Max Horz 16=-113(LC 8)

8-0-0

8-0-0

9-7-14

Max Uplift 16=-34(LC 12), 12=-177(LC 9), 9=-171(LC 9) Max Grav 16=1706(LC 2), 12=1938(LC 2), 9=508(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-326/623 2-4=-612/159 4-5=-575/136 5-6=-214/613 6-8=-272/613 8-9=-509/308

**BOT CHORD** 1-16=-437/331, 14-16=-437/330, 12-14=0/284, 11-12=-226/420, 9-11=-226/420 WFBS 2-16=-1352/531, 2-14=-125/925, 5-14=0/335, 8-12=-1015/685, 8-11=-206/297,

6-12=-297/140, 5-12=-1131/342

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph, TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 47-11-1 zone; cantilever left exposed; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16 except (jt=lb) 12=177. 9=171.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 30,2020

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

Design valid for use only with MTI-sky 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/PTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information, pushed from Trus Plate persons. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSVTP/1 Qu Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Lot 114 Ballard Woods E15040883 ROOF SPECIAL GIRDER J1020-4945 A3 1 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:33 2020 Page 1 Comtech, Inc. ID:L1J54eQhkyo6whVlnXZxPFzEJO5-\_H5fQAidCyVVUAe7PiqKUu7XCf3SpjlZpMazMyyOD1y 2-10-11

24-9-14

5x8 = 6.00 12 6 4x8 / 3.50 12 6x6 = 2x4 || 4x6 = 4x8 / 8 4 q 4x4 = 4.00 12 10 6-4-14 1112 18 17 16 19 13 4x6 =4x8 = 4x6 = 4x4 = 2x4 4x8 = 2x4 ||

2-10-11									
<sub>1</sub> 2-4-12 3-1 <sub>F</sub> 11	7-7-11	10-0-0	21-10-12	- 1	33-9-4	38-0-14	39-9-4	48-11-0	1
2-4-12 0-3-0	4-6-1	2-4-5	11-10-12	1	11-10-8	4-3-10	1-8-6	9-1-12	
0-5-15									
Plate Offsets (X Y) [2:0-2-8 Fc	del [3:0:	1-0 0-3-01 [1	1:0-3-5 Edgel						

1 late Oil	riate Onsets (X, 1)== [2:0-2-0, Luge], [0:0-1-0,0-0-0], [11:0-0-0, Luge]										
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 0.54	Vert(LL) -0.18 14-17 >999 360	MT20 244/190						
TCDL	10.0	Lumber DOL 1.15	BC 0.50	Vert(CT) -0.26 14-17 >999 240							
BCLL	0.0 *	Rep Stress Incr NO	WB 0.77	Horz(CT) 0.01 11 n/a n/a							
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.07 11-13 >999 240	Weight: 339 lb FT = 20%						

LUMBER-

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

**BRACING-**

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

38-0-14 4-8-5

Scale = 1:89.9

**BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing. WERS 1 Row at midpt 7-14, 6-17

4x6 =

REACTIONS. All bearings 0-3-8.

(lb) - Max Horz 2=-103(LC 30)

1-3-0 2-4-12 3-1-1

0-5-15

Max Uplift All uplift 100 lb or less at joint(s) 2, 19 except 14=-160(LC 26), 11=-169(LC 26)

Max Grav All reactions 250 lb or less at joint(s) except 2=349(LC 1), 14=1979(LC 2), 19=1522(LC 2), 11=513(LC

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

TOP CHORD  $2\text{-}3\text{=-}431/96,\ 3\text{-}4\text{=-}497/146,\ 4\text{-}6\text{=-}708/98,\ 6\text{-}7\text{=-}652/77,\ 7\text{-}8\text{=-}64/586,\ 8\text{-}10\text{=-}112/587,}$ 

10-11=-522/189

BOT CHORD  $2\hbox{-}20\hbox{-}-31/403,\ 14\hbox{-}17\hbox{-}0/361,\ 13\hbox{-}14\hbox{-}-120/433,\ 11\hbox{-}13\hbox{-}-120/433$ 

WEBS 4-17=0/648, 7-17=0/358, 7-14=-1188/47, 10-14=-1019/360, 10-13=-87/299,

3-20=-276/80, 4-19=-1167/196, 8-14=-299/99, 4-20=-211/637

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); porch left and right exposed; 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, 19 except (jt=lb) 14=160, 11=169.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 35 lb down and 26 lb up at 2-4-12 on top chord, and 13 lb down and 29 lb up at 2-4-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

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

Vert: 1-3=-60, 3-6=-60, 6-7=-60, 7-12=-60, 2-11=-20

Concentrated Loads (lb) Vert: 22=-2(F)



October 30,2020

🗥 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 Design Valid for use only with will leave connectors. This based only upon parameters shown, and is not an individual component, now 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/TP/1 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 114 Ballard Woods E15040884 ROOF SPECIAL J1020-4945 A4 1 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:34 2020 Page 1 Comtech, Inc. ID:L1J54eQhkyo6whVlnXZxPFzEJO5-STf1dWjFzFdM6KDJyQLZ16fjE2PJYA\_i20KWuOyOD1x 4-4-12 4-5<sub>1</sub>11 4-4-12 0-0-15 12-1-12 7-8-1 12<sub>7</sub>8<sub>7</sub>9 0-6-13 20-11-8 28-8-5 34-11-5 39-9-4 48-11-0

8-2-15

7-8-13

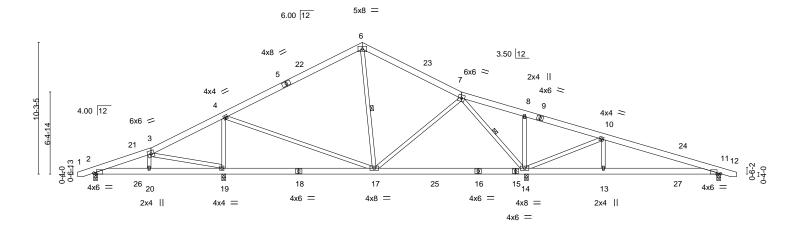
6-3-1

4-9-15

Scale = 1:89.9

7-8-10

48-11-0



	4-4-12 0-0-15 5-6-5	11-10-12	11-10-8	' 6-0-0	9-1-12
Plate Offsets (X,Y)	[2:0-2-8,Edge], [11:0-3-5,Edge]				
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 0.46	Vert(LL) -0.18 14-17	>999 360	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.46	Vert(CT) -0.25 14-17	>999 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.78	Horz(CT) 0.01 11	n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.07 11-13	>999 240	Weight: 336 lb FT = 20%

LUMBER-

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

**BRACING-**

33-9-4

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, Except:

39-9-4

6-0-0 oc bracing: 17-19.

1 Row at midpt 7-14, 6-17

REACTIONS. All bearings 0-3-8.

Max Horz 2=-103(LC 17) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 19 except 2=-118(LC 8), 14=-162(LC 9), 11=-169(LC 9) Max Grav All reactions 250 lb or less at joint(s) except 2=399(LC 2), 19=1446(LC 2), 14=1996(LC 2), 11=516(LC

21-10-12

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

TOP CHORD  $2\hbox{-}3\hbox{-}476/222, \, 4\hbox{-}6\hbox{-}728/171, \, 6\hbox{-}7\hbox{-}-678/163, \, 7\hbox{-}8\hbox{-}-210/574, \, 8\hbox{-}10\hbox{-}-268/576, \, 3\hbox{-}10$ 

10-11=-530/314

2-20=-170/430, 19-20=-157/418, 14-17=0/377, 13-14=-232/441, 11-13=-232/441 BOT CHORD WEBS 3-19=-437/341, 4-17=-4/572, 7-17=0/365, 10-14=-1019/686, 10-13=-206/299,

4-19=-1020/385, 8-14=-299/141, 7-14=-1212/352

### NOTES-

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

4-4-12 4-5<sub>1</sub>11 10-0-0

- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-5 to 3-4-8, Interior(1) 3-4-8 to 20-11-8, Exterior(2R) 20-11-8 to 25-4-5, Interior(1) 25-4-5 to 49-11-1 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.
- \* 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) 19 except (jt=lb)
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

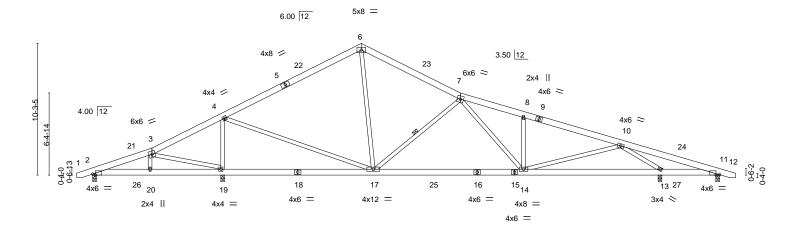


October 30,2020



Job Truss Truss Type Qty Ply Lot 114 Ballard Woods E15040885 J1020-4945 ROOF SPECIAL A5 1 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:36 2020 Page 1 Comtech, Inc. ID:L1J54eQhkyo6whVInXZxPFzEJO5-Psno2ClVVtt4LeNh4rO16Xl3hs3S040?VKpdzHyOD1v 44-3-4 20-11-8 28-8-5 33-7-8 41-2-6 48-11-0 7-6-4 3-0-14 8-2-0 7-8-13 7-6-14 4-7-12

Scale = 1:89.9



<u>·</u>	4-7-8 5-4-8	11-10-12	11-8-12	<u> </u>	0-7-12 ' 4	-7-12
Plate Offsets (X,Y)	[2:0-2-8,Edge], [11:0-3-5,Edge]					
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 *	SPACING-         2-0-0           Plate Grip DOL         1.15           Lumber DOL         1.15           Rep Stress Incr         YES	CSI. TC 0.46 BC 0.61 WB 0.74	DEFL. in (loc) Vert(LL) -0.22 14-17 Vert(CT) -0.35 14-17 Horz(CT) 0.03 13	I/defl L/d >999 360 >999 240 n/a n/a		GRIP 44/190
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.06 14-17	>999 240	Weight: 340 lb	FT = 20%

LUMBER-

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

**BRACING-**

TOP CHORD **BOT CHORD** WFBS 1 Row at midpt

33-7-8

Structural wood sheathing directly applied or 4-9-13 oc purlins.

44-3-4

48-11-0

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

REACTIONS. All bearings 0-3-8.

(lb) - Max Horz 2=-103(LC 13)

4-7-8

Max Uplift All uplift 100 lb or less at joint(s) 19, 13 except 2=-132(LC 8), 11=-111(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 11 except 2=328(LC 25), 19=2188(LC 2), 13=1908(LC 2)

21-10-12

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

10-0-0

TOP CHORD 2-3=-254/169, 3-4=-149/458, 4-6=-1338/328, 6-7=-1356/329, 7-8=-2490/488,

8-10=-2515/423, 10-11=-163/754

BOT CHORD 17-19=-319/208, 14-17=-212/1934, 13-14=-324/1585, 11-13=-666/195

**WEBS** 3-19=-378/328, 4-17=-187/1492, 7-17=-1056/326, 4-19=-1739/534, 8-14=-356/175,

7-14=-70/677, 10-14=0/823, 10-13=-2725/624, 6-17=-2/703

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-5 to 3-4-8, Interior(1) 3-4-8 to 20-11-8, Exterior(2R) 20-11-8 to 25-4-5, Interior(1) 25-4-5 to 49-11-1 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.
- \* 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) 19, 13 except
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 30,2020



Edenton, NC 27932

Job Truss Truss Type Qty Ply Lot 114 Ballard Woods E15040886 J1020-4945 ROOF SPECIAL A5A 1 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:38 2020 Page 1 Comtech, Inc. ID:L1J54eQhkyo6whVlnXZxPFzEJO5-LEvYTtml1U7naxX4BFQVByqPDgnFUzzIzelj19yOD1t 20-11-8 28-8-5 33-7-8 39-9-4 44-3-4 48-11-0

7-8-13

6-1-12

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

7-14, 6-17

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

6-0-0 oc bracing: 17-19.

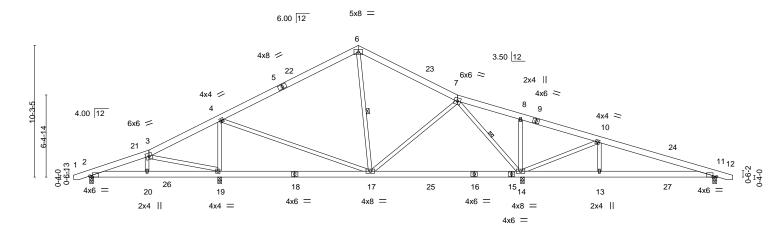
1 Row at midpt

4-6-0

8-2-0

Scale = 1:89.9

4-7-12



⊢	4-7-8 10-0-0	21-10-12	33-7-8	39-9-4	44-3-4 48-11-0
	4-7-8 5-4-8	11-10-12	11-8-12	6-1-12	4-6-0 4-7-12
Plate Offsets (X,Y)	[2:0-2-8,Edge], [11:0-3-5,Edge]				
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 0.46	Vert(LL) -0.18 14-17 >999	360	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.46	Vert(CT) -0.25 14-17 >999	240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.78	Horz(CT) 0.01 11 n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.07 11-13 >999	240	Weight: 336 lb FT = 20%

**BRACING-**

**WEBS** 

TOP CHORD

**BOT CHORD** 

LUMBER-

WFBS

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

2x4 SP No.2

REACTIONS. All bearings 0-3-8.

(lb) - Max Horz 2=-103(LC 13)

Max Uplift All uplift 100 lb or less at joint(s) 19 except 2=-120(LC 8), 14=-162(LC 9), 11=-169(LC 9) Max Grav All reactions 250 lb or less at joint(s) except 2=401(LC 2), 19=1442(LC 2), 14=1997(LC 2), 11=516(LC

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

TOP CHORD 2-3=-467/214, 4-6=-729/177, 6-7=-680/168, 7-8=-210/574, 8-10=-267/575,

7-6-4

10-11=-530/315

BOT CHORD 2-20=-163/420, 19-20=-151/409, 14-17=0/378, 13-14=-232/441, 11-13=-232/441 WEBS 3-19=-425/330, 4-17=-3/569, 7-17=0/366, 4-19=-1014/387, 8-14=-299/141,

7-14=-1213/358, 10-14=-1019/687, 10-13=-206/299

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-5 to 3-10-6, Interior(1) 3-10-6 to 20-11-8, Exterior(2R) 20-11-8 to 25-10-3, Interior(1) 25-10-3 to 49-11-1 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.
- \* 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) 19 except (jt=lb)
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 30,2020



Job Truss Truss Type Qty Ply Lot 114 Ballard Woods E15040887 J1020-4945 ROOF SPECIAL A6 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:39 2020 Page 1 Comtech, Inc. ID:L1J54eQhkyo6whVlnXZxPFzEJO5-pRSwgDnNooFeC55Glzxkk9Naw34CDUXSCI1HacyOD1s 44-5-0 4-4-12 4-5<sub>1</sub>11 4-4-12 0-0-15 12-1-12 12<sub>-</sub>8<sub>-</sub>9 0-6-13 20-11-8 28-8-5 36-4-14 41-2-6

7-8-13

2-9-6

Structural wood sheathing directly applied or 4-7-12 oc purlins,

7-15

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

except end verticals.

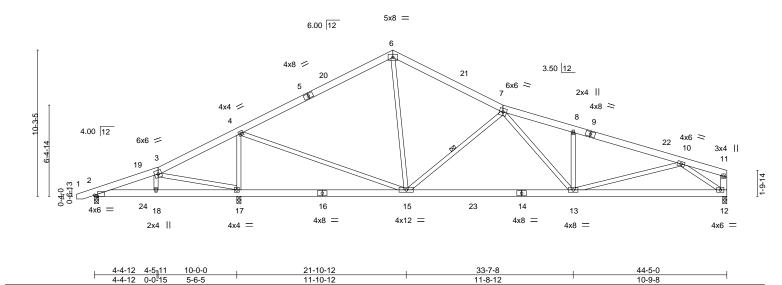
1 Row at midpt

4-9-8

8-2-15

Scale = 1:80.9

3-2-10



LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 *	SPACING-         2-0-0           Plate Grip DOL         1.15           Lumber DOL         1.15           Rep Stress Incr         YES	CSI. TC 0.46 BC 0.60 WB 0.56	DEFL.         in (loc)         l/defl         L/d           Vert(LL)         -0.22 13-15         >999         360           Vert(CT)         -0.34 13-15         >999         240           Horz(CT)         0.04         12         n/a         n/a	PLATES GRIP MT20 244/190
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.05 13-15 >999 240	Weight: 317 lb FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

**WEBS** 

LUMBER-

REACTIONS.

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

Plate Offsets (X,Y)-- [2:0-2-8,Edge]

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

11-12: 2x6 SP No.1

(size) 2=0-3-8, 17=0-3-8, 12=0-3-8

Max Horz 2=130(LC 12)

Max Uplift 2=-124(LC 8), 17=-23(LC 9), 12=-38(LC 13) Max Grav 2=332(LC 25), 17=2189(LC 2), 12=1440(LC 2)

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

TOP CHORD 2-3=-278/148, 3-4=-178/427, 4-6=-1365/319, 6-7=-1385/318, 7-8=-2600/481,

8-10=-2616/411

BOT CHORD 15-17=-292/164, 13-15=-261/1992, 12-13=-338/1710

WEBS 3-17=-392/330, 4-15=-205/1489, 7-15=-1097/322, 4-17=-1738/549, 8-13=-389/189,

7-8-1

7-13=-76/744, 6-15=0/727, 10-13=0/784, 10-12=-1957/461

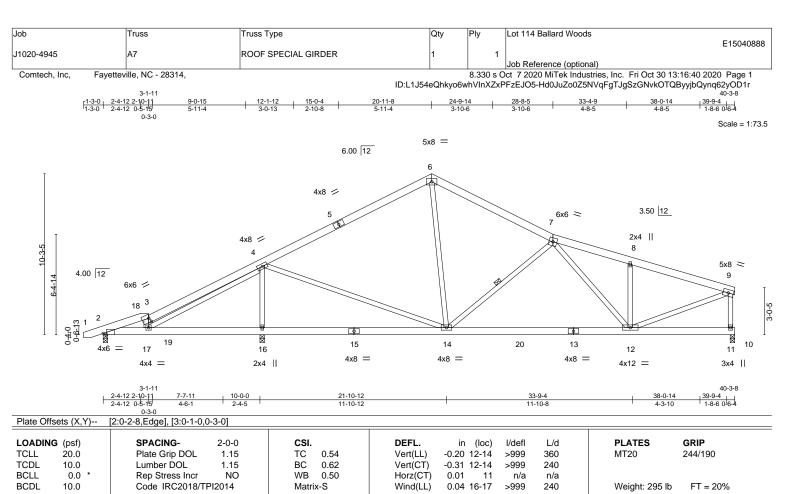
### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-5 to 3-4-8, Interior(1) 3-4-8 to 20-11-8, Exterior(2R) 20-11-8 to 25-4-5, Interior(1) 25-4-5 to 44-2-4 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.
- \* 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) 17, 12 except
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Edenton, NC 27932



**BRACING-**

TOP CHORD

BOT CHORD

**WEBS** 

LUMBER-

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

WFBS 2x4 SP No.2

REACTIONS. 2=0-3-8, 16=0-3-8, 11=0-3-8 (size)

Max Horz 2=152(LC 8)

Max Uplift 2=-90(LC 4), 16=-60(LC 8), 11=-26(LC 30) Max Grav 2=327(LC 21), 16=1976(LC 2), 11=1281(LC 2)

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

TOP CHORD 2-3=-342/89, 3-4=-409/138, 4-6=-1159/98, 6-7=-1158/78, 7-8=-1633/86, 8-9=-1640/39,

9-11=-1216/51

BOT CHORD 2-17=-87/300, 12-14=-11/1454

**WEBS** 4-14=0/1207, 7-14=-667/139, 9-12=0/1625, 3-17=-263/77, 4-16=-1598/181,

8-12=-363/128, 4-17=-209/616, 6-14=0/547

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); porch left exposed; 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, 16, 11.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 35 lb down and 26 lb up at 2-4-12 on top chord, and 13 lb down and 29 lb up at 2-4-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

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

Vert: 1-3=-60, 3-6=-60, 6-7=-60, 7-9=-60, 2-10=-20

Concentrated Loads (lb) Vert: 19=-2(B)



Structural wood sheathing directly applied or 5-10-15 oc purlins,

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

except end verticals.

1 Row at midpt

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not Design Valid for use only with will leave connectors. This based only upon parameters shown, and is not an individual component, now 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/TP/1 Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANS/TPI1 Qu Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Qty E15040889 J1020-4945 ROOF SPECIAL A8 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:41 2020 Page 1 Comtech, Inc. ID:L1J54eQhkyo6whVlnXZxPFzEJO5-lpah5vpeKPVMSPFftOzCpaSvUtozhJ9kfcWOeUyOD1q 9-7-14 9-7-14 18-11-8 26-8-5 32-11-5 37-9-4 8-10-1 6-3-1 4-9-15 Scale = 1:66.9 5x8 = 6.00 12 4x8 / 3.50 12 6x6 = 5 2x4 || 4x4 / 10-3-5 6 2 5x8 = 6-4-14 6-6-0 **⊠** 14 × × 4x6 13 12 19 11 10 98 2x4 || 4x8 = 4x8 = 4x8 = 4x8 = 3x4 П 8-0-0 19-10-12 31-9-9 37-9-4 38-3-8 8-0-0 11-10-12 11-10-13 5-11-11 0-6-4 CSI. LOADING (psf) SPACING-2-0-0 DEFL in (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.52 Vert(LL) -0.18 10-12 >999 360 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 вс 0.46 Vert(CT) -0.25 10-12 >999 240 WB **BCLL** 0.0 Rep Stress Incr YES 0.88 Horz(CT) -0.00 10 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-S Wind(LL) 0.01 12 >999 240 Weight: 269 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WFBS

Ply

Lot 114 Ballard Woods

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

5-12, 4-12

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

except end verticals.

1 Row at midpt

LUMBER-

Job

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

REACTIONS. (size) 14=0-3-8, 10=0-3-8, 9=0-3-8

Truss

Truss Type

Max Horz 14=146(LC 12)

Max Uplift 14=-25(LC 12), 10=-34(LC 13), 9=-16(LC 9) Max Grav 14=1776(LC 19), 10=1505(LC 2), 9=124(LC 26)

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

TOP CHORD 1-2=-111/633, 2-4=-681/228, 4-5=-630/236 **BOT CHORD** 1-14=-448/149, 12-14=-443/63, 10-12=-73/392

**WEBS** 2-14=-1423/439, 2-12=-49/987, 6-10=-393/192, 5-10=-864/210

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 38-0-4 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.
- \* 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) 14, 10, 9.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

Design valid for use only with 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

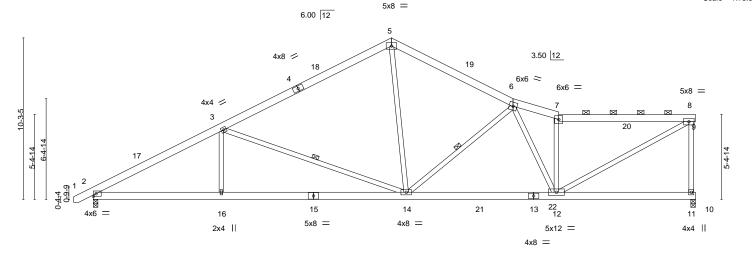
\*\*ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component\*\* fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSVTP/1 Qu Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





ID:L1J54eQhkyo6whVlnXZxPFzEJO5-D083JFpG4jdD3ZqrQ5VRMo??5H6CQo9uuGGxAxyOD1p 18-11-8 26-8-5 7-8-13 29-7-2 38-3-8 10-9-12 2-10-13 8-8-6

Scale = 1:73.3



	8-1-12	11-9-0	9-8-6	8-8-6
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 IRC2018/TPI2014	TC 0.85 Vert(LI BC 0.59 Vert(C	L) -0.16 12-14 >999 360 T) -0.34 14-16 >999 240 CT) 0.07 11 n/a n/a	PLATES GRIP MT20 244/190  Weight: 278 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WFBS

29-7-2

1 Row at midpt

19-10-12

LUMBER-

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

2x4 SP No.2 WFBS

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

Max Horz 2=192(LC 12)

Max Uplift 11=-19(LC 13), 2=-16(LC 12) Max Grav 11=1683(LC 2), 2=1700(LC 2)

8-1-12

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

2-3=-2935/505, 3-5=-1946/434, 5-6=-2026/458, 6-7=-2407/443, 7-8=-2305/406, TOP CHORD

8-11=-1544/342

**BOT CHORD** 2-16=-562/2548, 14-16=-562/2548, 12-14=-425/2251

 $3-16=0/433,\ 3-14=-1002/303,\ 6-14=-699/201,\ 7-12=-985/286,\ 8-12=-458/2618,$ WFBS

5-14=-103/1221

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 38-3-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 2.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



38-3-8

Structural wood sheathing directly applied or 4-4-15 oc purlins,

3-14, 6-14

except end verticals, and 2-0-0 oc purlins (4-6-12 max.): 7-9.

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

Edenton, NC 27932

Job Truss Truss Type Qty Ply Lot 114 Ballard Woods E15040891 J1020-4945 ROOF SPECIAL A10 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:28 2020 Page 1 Comtech, Inc. ID:L1J54eQhkyo6whVlnXZxPFzEJO5-eJlmNTfUNQsCOPm9c9E9nrQi4eJM8Urqg4tCilyOD21 25-4-10 31-7-9 18-11-8 6-7-15 8-1-12 10-9-12 6-2-15 Scale = 1:68.5 5x8 = 6.00 12 5 4x8 / 19 18 2x4 || 5x8 = 20 4x4 / 3 6-10-14 X 15 14 21 13 22 10 4x6 =16 12 11

	8-1-12	1	11-9-0		5-5-14	6-2-15		6-7-15	
LOADING (psf)	SPACING- Plate Grip DOL	2-0-0 1.15	<b>CSI.</b> TC 0.50	DEFL. Vert(L	( /	l/defl >999	L/d 360	PLATES MT20	<b>GRIP</b> 244/190
TCDL 10.0 BCLL 0.0	Lumber DOL	1.15 1.15 YES	BC 0.69 WB 0.69	Vert(C Horz(C	CT) -0.40 12-14	>999 n/a	240 n/a	WITZO	244/190
BCDL 10.0	Code IRC2018/TPI2	-	Matrix-S	Wind(I	. ,	>999	240	Weight: 283 lb	FT = 20%

5x8 =

19-10-12

LUMBER-

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

BRACING-

WFBS

4x8 =

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied or 4-4-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-9.

5x12 =

38-3-8

Rigid ceiling directly applied or 10-0-0 oc bracing. 1 Row at midpt 8-11, 3-14, 6-14 T-Brace: 2x4 SPF No.2 - 6-12

5x8 =

31-7-9

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.

(size) 11=0-3-8, 2=0-3-0 Max Horz 2=218(LC 12)

8-1-12

Max Uplift 11=-25(LC 13), 2=-12(LC 12) Max Grav 11=1791(LC 2), 2=1721(LC 2)

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

TOP CHORD 2-3=-2973/306, 3-5=-2006/289, 5-6=-2089/308, 6-7=-1530/167, 7-8=-1528/166,

2x4 II

8-11=-1673/228

**BOT CHORD** 2-16=-417/2580, 14-16=-417/2580, 12-14=-293/2202

**WEBS** 3-16=0/419, 3-14=-981/220, 6-14=-634/149, 6-12=-973/186, 7-12=-453/155,

8-12=-232/2159, 5-14=-36/1327

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 38-3-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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) 11, 2.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



3x4 ||

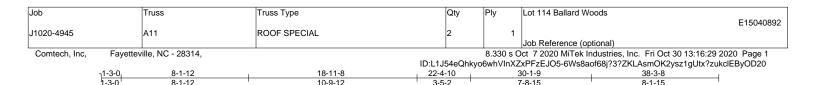
October 30,2020

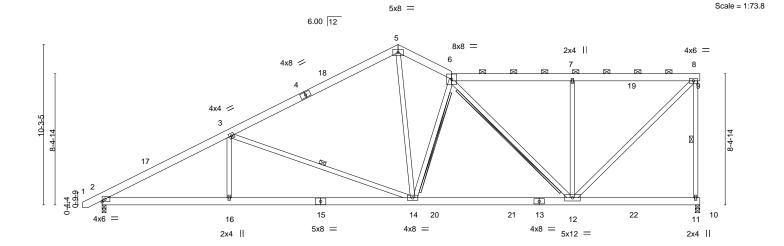
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MTI-sky 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/PTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information, pushed from Trus Plate persons. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSVTP/1 Qu Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601







	7-8-6 7-8-6	0-5-6	11-9-0	2-5-14	7-8-15	8-1-15	<del></del>
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/		CSI. TC 0.49 BC 0.63 WB 0.70 Matrix-S	DEFL.         in           Vert(LL)         -0.18           Vert(CT)         -0.31           Horz(CT)         0.07           Wind(LL)         0.06	14-16 >999 240 11 n/a n/a	PLATES MT20 Weight: 293 lb	<b>GRIP</b> 244/190 FT = 20%

LUMBER-

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

BRACING-

WFBS

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 4-4-3 oc purlins, except

2-0-0 oc purlins (6-0-0 max.): 6-9.

Rigid ceiling directly applied or 10-0-0 oc bracing. 1 Row at midpt 8-11. 3-14

T-Brace: 2x4 SPF No.2 - 6-12, 6-14 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. (size) 11=0-3-8, 2=0-3-0

Max Horz 2=245(LC 12)

Max Uplift 11=-33(LC 13), 2=-7(LC 12) Max Grav 11=1830(LC 2), 2=1735(LC 2)

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

2-3=-3008/279, 3-5=-2027/252, 5-6=-2077/302, 6-7=-1473/179, 7-8=-1471/177 TOP CHORD

BOT CHORD 2-16=-446/2607, 14-16=-446/2607, 12-14=-274/2007

**WEBS** 8-11=-1641/252, 3-14=-991/216, 6-12=-774/140, 7-12=-580/196, 8-12=-251/2088,

3-16=0/431, 6-14=-624/116, 5-14=-45/1405

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 18-11-8, Exterior(2E) 18-11-8 to 22-4-10, Interior(1) 22-4-10 to 38-3-8 zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) 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, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 2.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



October 30,2020

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

Design valid for use only with 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/TP11 Quality Criteria, DSB-89 and BCSI Building Component\*\* fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSVTP/1 Qu Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





18-11-8

10-9-12

Fayetteville, NC - 28314, Comtech, Inc.

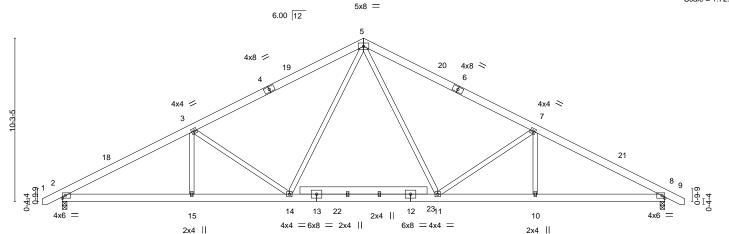
8-1-12

ID:L1J54eQhkyo6whVlnXZxPFzEJO5-iCiRWbqur0l4hiP2\_p0gu?XGKhUj9FD16w?UjNyOD1o 29-9-4 37-11-0 10-9-12 8-1-12

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

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

Scale = 1:72.5



	8-1-12 8-1-12	+	14-3-8 6-1-12	14 <sub>T</sub> 11 <sub>F</sub> 8 18-11-8 0-8-0 4-0-0	22-11-8 4-0-0	3 23-7-8 0-8-0	29-9-4 6-1-12		37-11-0 8-1-12	
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TP	2-0-0 1.15 1.15 YES 12014	CSI. TC BC WB Matr	0.50 0.50 0.71	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in (loc) -0.19 11-14 -0.31 11-14 0.08 8 0.05 14	I/defI >999 >999 n/a >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 278 lb	<b>GRIP</b> 244/190 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.2 \*Except\* **WEBS** 16-17: 2x6 SP No.1

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

Max Horz 2=-111(LC 10)

Max Uplift 2=-22(LC 12), 8=-22(LC 13) Max Grav 2=1736(LC 2), 8=1736(LC 2)

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

2-3=-2958/352, 3-5=-2392/360, 5-7=-2392/360, 7-8=-2958/352 TOP CHORD

**BOT CHORD** 2-15=-228/2600, 14-15=-228/2600, 11-14=-36/1677, 10-11=-220/2551, 8-10=-220/2551 WFBS 7-10=0/280, 3-15=0/280, 3-14=-720/217, 5-14=-35/861, 5-11=-35/861, 7-11=-720/217

### NOTES-

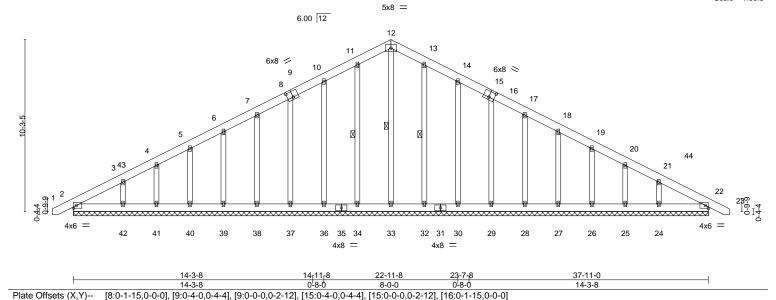
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 39-0-2 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, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type Qty Ply Lot 114 Ballard Woods E15040894 J1020-4945 B1GE GABLE Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:45 2020 Page 1 Comtech, Inc. ID:L1J54eQhkyo6whVlnXZxPFzEJO5-ebqCxHs8Ne0ow0ZQ6E28zQdivUGidJtKaEUbnGyOD1m 37-11-0 18-11-8

Scale = 1:68.8



LOADING (psf) SPACING-2-0-0 DEFL (loc) L/d **PLATES** GRIP TCLL 20.0 Plate Grip DOL 1.15 TC 0.04 Vert(LL) 0.00 22 n/r 120 MT20 244/190 TCDL вс 22 10.0 Lumber DOL 1.15 0.02 Vert(CT) 0.00 n/r 120 **BCLL** 0.0 Rep Stress Incr YES WB 0.12 0.01 22 Horz(CT) n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-S Weight: 325 lb FT = 20%

LUMBER-

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

**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. 1 Row at midpt 12-33, 11-34, 13-32

18-11-8

REACTIONS. All bearings 37-11-0.

Max Horz 2=173(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 2, 34, 36, 37, 38, 39, 40, 41, 42, 32, 30, 29, 28, 27, 26, 25,

Max Grav All reactions 250 lb or less at joint(s) 2, 22, 33, 34, 36, 37, 38, 39, 40, 41, 42, 32, 30, 29, 28, 27, 26, 25, 24

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 10-11=-103/268, 11-12=-115/302, 12-13=-115/302, 13-14=-103/268

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-1-2 to 3-3-11, Exterior(2N) 3-3-11 to 18-11-8, Corner(3R) 18-11-8 to 23-4-5, Exterior(2N) 23-4-5 to 39-0-2 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.

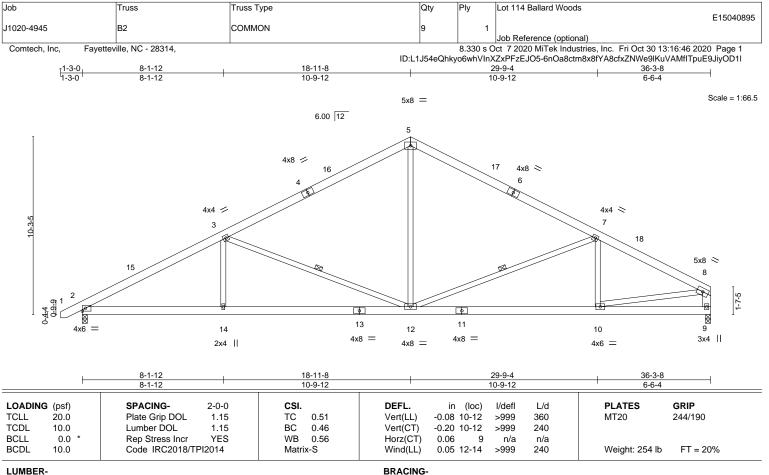
18-11-8

- \* 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, 34, 36, 37, 38, 39, 40, 41, 42, 32, 30, 29, 28, 27, 26, 25, 24.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 30,2020





TOP CHORD

BOT CHORD

WFBS

LUMBER-

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

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

8-9: 2x6 SP No.1

REACTIONS. (size) 2=0-3-8, 9=0-3-8

Max Horz 2=127(LC 12)

Max Uplift 2=-25(LC 12), 9=-4(LC 13) Max Grav 2=1512(LC 1), 9=1435(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-2573/324, 3-5=-1688/312, 5-7=-1686/316, 7-8=-2102/294, 8-9=-1370/211

**BOT CHORD** 2-14=-258/2180, 12-14=-258/2180, 10-12=-203/1830

WFBS 3-14=0/394, 3-12=-913/216, 5-12=-7/832, 7-12=-586/173, 8-10=-197/1719

### NOTES-

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

- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 36-0-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 9.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 4-8-6 oc purlins,

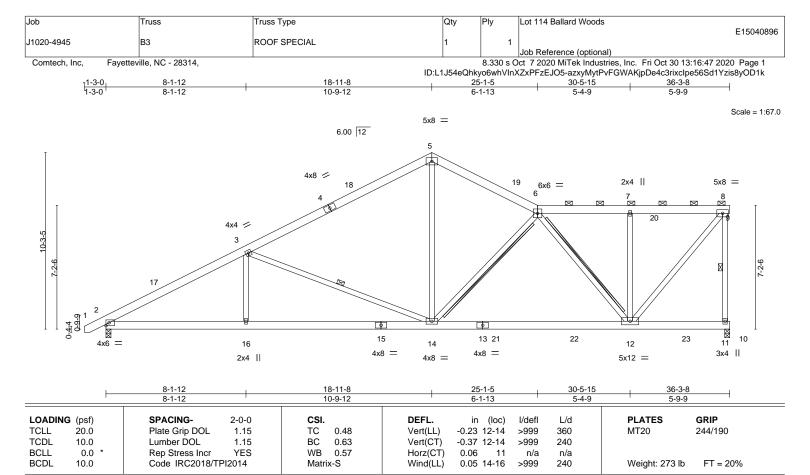
3-12, 7-12

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

except end verticals.

1 Row at midpt





LUMBER-

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

BRACING-

WFBS

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied or 4-6-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-9. Rigid ceiling directly applied or 10-0-0 oc bracing.

1 Row at midpt 8-11. 3-14

T-Brace: 2x4 SPF No.2 - 6-14, 6-12 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. (size) 11=0-3-8, 2=0-3-8 Max Horz 2=224(LC 12)

Max Uplift 11=-21(LC 13), 2=-14(LC 12) Max Grav 11=1699(LC 2), 2=1632(LC 2)

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

TOP CHORD 2-3=-2773/286, 3-5=-1867/266, 5-6=-1790/284, 6-7=-1227/135, 7-8=-1227/135,

**BOT CHORD** 2-16=-408/2408, 14-16=-408/2408, 12-14=-253/1813

**WEBS** 3-16=0/390, 3-14=-935/225, 5-14=-15/1116, 6-14=-432/107, 6-12=-937/192,

7-12=-374/135, 8-12=-210/1927

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 36-3-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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) 11, 2.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



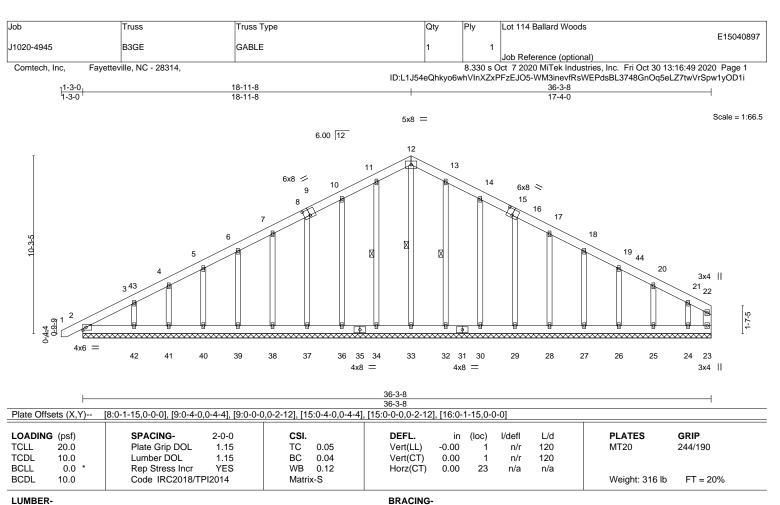


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with 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/PTI Quality Criteria, DSB-89 and BCSI Building Component Settle Management and Component Settle Management fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSVTP/1 Qu Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





TOP CHORD

BOT CHORD

**WEBS** 

LUMBER-TOP CHORD

REACTIONS.

2x6 SP No 1

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

**OTHERS** 2x4 SP No.2

All bearings 36-3-8

(lb) -Max Horz 2=205(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 2, 34, 36, 37, 38, 39, 40, 41, 42, 32, 30, 29, 28, 27, 26, 25 except 24=-169(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 23, 33, 34, 36, 37, 38, 39, 40, 41, 42, 32, 30, 29, 28,

27, 26, 25, 24

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 10-11=-107/295, 11-12=-118/327, 12-13=-118/327, 13-14=-107/295

### NOTES-

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

- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-1-2 to 3-3-11, Exterior(2N) 3-3-11 to 18-11-8, Corner(3R) 18-11-8 to 23-4-5, Exterior(2N) 23-4-5 to 36-0-12 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.

referenced standard ANSI/TPI 1.

- 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, 34, 36, 37, 38, 39, 40, 41, 42, 32, 30, 29, 28, 27, 26, 25 except (jt=lb) 24=169. 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and



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

12-33, 11-34, 13-32

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

except end verticals.

1 Row at midpt



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not Design Valid to tise only with with the conflictors. This design is assessing to 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 fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANS/TPI1 Qu Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Lot 114 Ballard Woods E15040898 J1020-4945 C1 ROOF SPECIAL 6 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:50 2020 Page 1 Comtech, Inc. 10-11-8

13-8-5 21-10-8 33-11-0 2-8-13 8-2-3 5-5-8

9

Structural wood sheathing directly applied or 3-10-9 oc purlins.

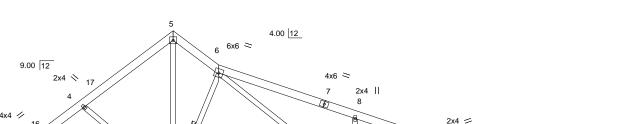
6-15

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

18

Scale = 1:69.1

<sup>10</sup> 11



13

12  $4x6 = {}_{4x12} =$ 

1 Row at midpt



**BRACING-**

WFBS

TOP CHORD

**BOT CHORD** 

20

Plate Offsets (X,Y)	[2:0-6-13,Eage]			
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 0.37	Vert(LL) -0.24 12-15 >999 360	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.72	Vert(CT) -0.37 12-15 >999 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.50	Horz(CT) 0.07 10 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.09 12 >999 240	Weight: 245 lb FT = 20%

LUMBER-

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

SLIDER Left 2x4 SP No.2 -H 3-6-1

REACTIONS. (size) 2=0-3-8, 10=0-3-8

Max Horz 2=-194(LC 10) Max Uplift 10=-59(LC 9)

Max Grav 2=1586(LC 19), 10=1552(LC 2)

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

TOP CHORD 2-4=-1957/411, 4-5=-1746/401, 5-6=-1721/454, 6-8=-3240/658, 8-9=-3211/552,

9-10=-3552/685

BOT CHORD 2-15=-216/1543, 12-15=-186/1873, 10-12=-569/3314

**WEBS** 5-15=-364/1777, 6-15=-1318/378, 6-12=-255/1517, 8-12=-464/237, 9-12=-411/205

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-1-8 to 3-3-5, Interior(1) 3-3-5 to 10-11-8, Exterior(2E) 10-11-8 to 13-8-5, Interior(1) 13-8-5 to 34-11-5 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) 10.

5-4-0

5x5 =

19 14

4x6 =

15

3x10

6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 30,2020

Job Truss Truss Type Qty Ply Lot 114 Ballard Woods E15040899 J1020-4945 C1GE GABLE Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:52 2020 Page 1 Comtech, Inc. ID:L1J54eQhkyo6whVlnXZxPFzEJO5-xxlrPgxXknuoG5bm0CgnmuPtiJavmSfMBphTXMyOD1f

21-10-8 27-4-0 33-11-0 5-7-0 5-5-8

Scale: 3/16"=1"

5x5 =

16-3-8

5-4-0

10-11-8

5-4-0

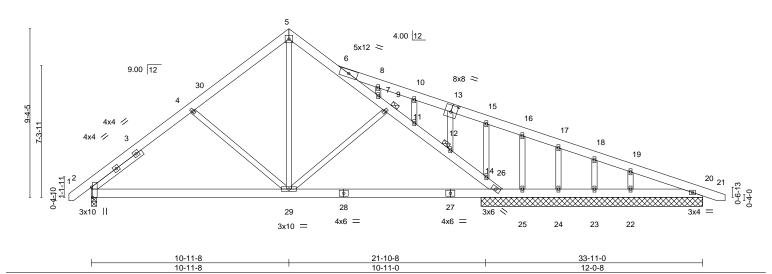


Plate Offsets (X,Y)	[2:0-6-13,Eage], [13:0-4-0,0-4-8]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.14	Vert(LL) -0.07 2-29 >999 360	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.37	Vert(CT) -0.14 2-29 >999 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.25	Horz(CT) 0.02 26 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.02 2-29 >999 240	Weight: 264 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

SLIDER Left 2x4 SP No.2 -H 3-6-1 **BRACING-**

JOINTS

TOP CHORD **BOT CHORD** 

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

10-0-0 oc bracing: 2-29,26-29.

1 Brace at Jt(s): 9, 12

REACTIONS. All bearings 12-3-8 except (jt=length) 2=0-3-8.

(lb) - Max Horz 2=-264(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 20, 22, 23, 24 except 26=-104(LC 13), 2=-118(LC 12),

25=-369(LC 3) Max Grav All reactions 250 lb or less at joint(s) 20, 23, 24 except 26=1365(LC 1), 2=947(LC 1), 22=311(LC 26)

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

2-4=-1061/155, 4-5=-824/155, 5-6=-724/173, 6-7=-838/95, 7-9=-959/125,

9-11=-1019/160, 11-12=-1093/203, 12-14=-1092/211, 14-26=-1220/268

**BOT CHORD** 2-29=-154/835, 26-29=-25/786

**WEBS** 4-29=-276/244, 5-29=-62/589, 9-29=-285/193

### NOTES-

TOP CHORD

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-1-8 to 3-3-5, Interior(1) 3-3-5 to 10-11-8, Exterior(2E) 10-11-8 to 13-7-0, Interior(1) 13-7-0 to 34-11-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 22, 23, 24 except (it=lb) 26=104, 2=118, 25=369.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

Design valid for use only with 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 fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Qu Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Lot 114 Ballard Woods E15040900 J1020-4945 C2 ROOF SPECIAL 3 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:53 2020 Page 1 Comtech, Inc. ID:L1J54eQhkyo6whVInXZxPFzEJO5-P7JDc0y9V50fuFAzavB0l6y?qjqjVrxVQTQ03oyOD1e

20-0-11



33-11-0

6-6-2

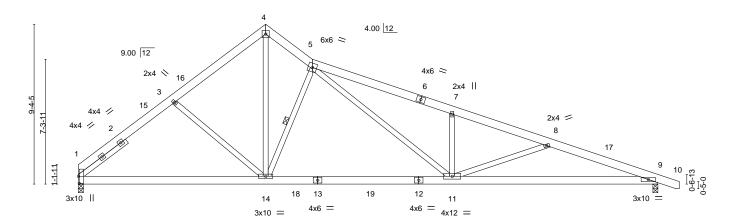
Structural wood sheathing directly applied or 3-10-11 oc purlins.

5-14

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

1 Row at midpt

27-4-14



	10-11-8	21-10-8	33-11-0		
	10-11-8	10-11-0	12-0-8		
Y)	[1:0-5-0 0-0-9]				

Plate Off	fsets (X,Y)	[1:0-5-0,0-0-9]									
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	0.37	Vert(LL)	-0.24 11-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.37 11-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.07 9	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matri	x-S	Wind(LL)	0.09 11	>999	240	Weight: 241 lb	FT = 20%

**BRACING-**

WERS

TOP CHORD

**BOT CHORD** 

LUMBER-

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

SLIDER Left 2x4 SP No.2 -H 3-6-1

REACTIONS. (size) 1=0-3-8, 9=0-3-8

Max Horz 1=-193(LC 8) Max Uplift 9=-63(LC 9)

Max Grav 1=1523(LC 19), 9=1559(LC 2)

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

TOP CHORD  $1\hbox{-}3\hbox{--}1961/413,\ 3\hbox{-}4\hbox{--}1749/402,\ 4\hbox{-}5\hbox{--}1725/455,\ 5\hbox{-}7\hbox{--}3242/658,\ 7\hbox{-}8\hbox{--}3213/552,}$ 

10-11-8

5-4-0

13-8-5

2-8-13

8-9=-3554/683

BOT CHORD 1-14=-216/1548, 11-14=-183/1877, 9-11=-565/3315

**WEBS** 4-14=-365/1781, 5-14=-1318/378, 5-11=-255/1516, 7-11=-467/239, 8-11=-410/205

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 10-11-8, Exterior(2E) 10-11-8 to 13-8-5, Interior(1) 13-8-5 to 35-0-13 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) 9.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type Qty Ply Lot 114 Ballard Woods E15040901 J1020-4945 СЗ ROOF SPECIAL Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:54 2020 Page 1 Comtech, Inc. ID:L1J54eQhkyo6whVlnXZxPFzEJO5-tJsbqLzoGP8WVPl97ciFrJU9o6BEEHBfe7AacEyOD1d 18-6-3 25-10-6 32-4-8 12-1-13 2-8-13 6-6-2 Scale = 1:66.2 5x5 = 2 4.00 |12 6x6 > 9.00 12 3 15 4x6 > 2x4 || 2x4 = 16 2-3-9 **⊠** 13 17 11 10 12 3x6 3x4 || 4x6 = 4x6 = 3x4 = 4x8 = 4x12 = 9-5-0 20-4-0 9-5-0 10-11-0 12-0-8 Plate Offsets (X,Y)--[1:0-1-8,0-2-0], [7:0-0-4,0-0-8] LOADING (psf) SPACING-CSI. DEFL. (loc) I/defl L/d **PLATES** GRIP TCLL 20.0 Plate Grip DOL 1.15 TC 0.42 Vert(LL) -0.22 9-12 >999 360 MT20 244/190 TCDL вс 10.0 Lumber DOL 1.15 0.70 Vert(CT) -0.35 9-12 >999 240

Horz(CT)

Wind(LL)

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

0.05

0.08

n/a

240

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

Structural wood sheathing directly applied or 4-0-6 oc purlins,

3-12

Weight: 235 lb

FT = 20%

n/a

except end verticals.

1 Row at midpt

9 >999

LUMBER-

**BCLL** 

BCDL

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

0.0

10.0

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

1-13: 2x6 SP No.1 REACTIONS.

(size) 13=0-3-8, 7=0-3-8 Max Horz 13=-191(LC 8) Max Uplift 7=-61(LC 9)

Max Grav 13=1437(LC 19), 7=1473(LC 2)

Rep Stress Incr

Code IRC2018/TPI2014

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

TOP CHORD  $1-2 = -1585/311, \ 2-3 = -1456/396, \ 3-5 = -3007/612, \ 5-6 = -2978/505, \ 6-7 = -3329/641,$ 

YES

1-13=-1310/292

BOT CHORD 12-13=-81/326, 9-12=-142/1635, 7-9=-528/3104

**WEBS** 2-12=-177/1399, 3-12=-1221/321, 3-9=-255/1533, 5-9=-467/240, 6-9=-420/207,

1-12=0/1009

### NOTES-

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

2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 9-5-0, Exterior(2E) 9-5-0 to 12-1-13, Interior(1) 12-1-13 to 33-4-13 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

WB

Matrix-S

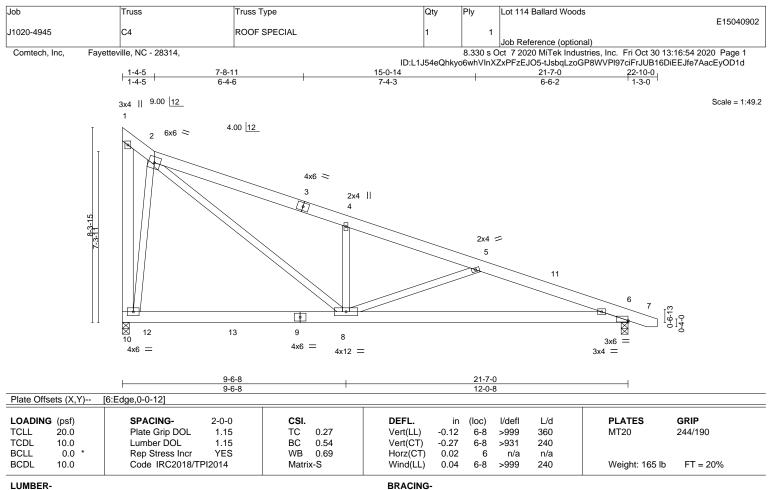
0.50

- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Edenton, NC 27932



TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.2 \*Except\* **WEBS** 1-10: 2x6 SP No.1

REACTIONS.

(size) 10=0-3-8, 6=0-3-8 Max Horz 10=-218(LC 13) Max Uplift 10=-78(LC 13), 6=-44(LC 9) Max Grav 10=996(LC 2), 6=975(LC 2)

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

TOP CHORD 2-4=-1485/188, 4-5=-1459/83, 5-6=-1872/239

**BOT CHORD** 8-10=-48/265, 6-8=-158/1735

**WEBS** 4-8=-459/235, 5-8=-479/231, 2-10=-869/283, 2-8=-258/1539

### NOTES-

- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-2-12 to 1-4-7, Interior(1) 1-4-7 to 22-7-5 zone; 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, with BCDL = 10.0psf.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 6.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

except end verticals.

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

Design valid for use only with MTI-sky 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/PTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information, pushed from Trus Plate persons. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSVTP/1 Qu Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

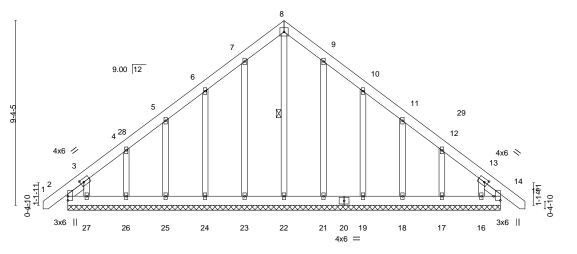


Job Truss Truss Type Qty Ply Lot 114 Ballard Woods E15040903 J1020-4945 D1GE COMMON SUPPORTED GAB 1 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:56 2020 Page 1 Comtech, Inc.

5x5 =

ID:L1J54eQhkyo6whVInXZxPFzEJO5-pi\_MF1\_2n0OElivXF1ljwkabGw1liHey6Rfgg7yOD1b 10-11-8 21-11-0 10-11-8

Scale = 1:58.4



21-11-0

Plate Of	Plate Offsets (X,Y) [3:0-2-1,0-2-0], [13:0-2-1,0-2-0], [14:Edge,0-4-2]												
LOADIN	IG (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	-0.00	14	n/r	120	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	14	n/r	120			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	14	n/a	n/a			
BCDL	10.0	Code IRC2018/TI	PI2014	Matri	x-S						Weight: 198 lb	FT = 20%	

LUMBER-

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

2x4 SP No 2 OTHERS

SLIDER Left 2x4 SP No.2 -H 1-0-15, Right 2x4 SP No.2 -H 1-0-15 **BRACING-**TOP CHORD

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

WFBS 1 Row at midpt 8-22

REACTIONS. All bearings 21-11-0.

(lb) -Max Horz 2=-231(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 23, 24, 25, 26, 21, 19, 18, 17, 14 except 2=-118(LC 8),

27=-174(LC 12), 16=-154(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 22, 23, 24, 25, 26, 27, 21, 19, 18, 17, 16, 14

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

TOP CHORD 2-3=-318/207. 13-14=-261/123

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-1-8 to 3-3-5, Exterior(2N) 3-3-5 to 10-11-8, Corner(3R) 10-11-8 to 15-4-5, Exterior(2N) 15-4-5 to 23-0-8 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) 23, 24, 25, 26, 21, 19, 18, 17, 14 except (jt=lb) 2=118, 27=174, 16=154.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 30,2020

Job	Truss	Truss Type		Qty	Ply	Lot 114 Balla	rd Woods		
				G.iy	,	Lot 114 Dalla	a vvoodo		E15040904
J1020-4945	VC1	GABLE		1	1	Job Referenc	o (antional)		
Comtech, Inc,	Fayetteville, NC - 28314,		ID:L1J54e 14-7-1 14-7-1	Qhkyo6wh	8.330 s NVInXZxP	Oct 7 2020 MiT	ek Industries, Inc.	Fri Oct 30 13:16:57 GyTy6dXKl3Rkc5K5	2020 Page 1 GOECZyOD1a
	ī							3x4	Scale = 1:28.8
			4.00 12					8	
φ				2x4    2	7				
- 4 6-01-		6							
	1							•	
	3x4 =		2:	5 (4				4 3x4	
	ł								
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 *	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 CSI. 1.15 TC 1.15 BC YES WB	0.58 Vert(LL) 0.37 Vert(CT 0.08 Horz(CT	) n/a	· -	I/defl L/d n/a 999 n/a 999 n/a n/a	) MT	<b>ATES GRIP</b> Γ20 244/1	

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

BCDL

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

10.0

2x4 SP No.1 **WEBS OTHERS** 2x4 SP No.2

REACTIONS. (size) 1=14-7-1, 4=14-7-1, 5=14-7-1

Max Horz 1=125(LC 8)

Max Uplift 4=-14(LC 8), 5=-58(LC 8)

Max Grav 1=249(LC 1), 4=157(LC 1), 5=678(LC 1)

Code IRC2018/TPI2014

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

WEBS 2-5=-496/277

### NOTES-

1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-10-13 to 5-3-9, Interior(1) 5-3-9 to 14-5-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-S

- 2) Gable requires continuous bottom chord bearing.
- 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) 4, 5. 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Weight: 53 lb

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

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

except end verticals.

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/TPI Quality Criteria, DSB-89 and BCSI Building Component Safaty Information, available from Truss Plate Institute 2670. Crain Hidnway. Suite 203 Waldorf MD 20601 Saffety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job		Truss	Truss Type		Qty	Ply	Lot 114	Ballard Woods		
J1020-4945		VC2	GABLE		1	1				E15040905
01020-4945		VOZ	GABLE			'	Job Ref	erence (optional	)	
Comtech, Inc, F	ayettevi	ille, NC - 28314,		ID:L1J54e 11-7-1 11-7-1 4.00 12			Oct 7 202	20 MiTek Industri	) ies, Inc. Fri Oct 30 13:16 5MsTkplGyTy6ipKKoRlv5	
3-10-6		1	6	2x4    2				*********		
		3x4 =	2)	5 4	××××××	×××××	······································	×××××××××××××××××××××××××××××××××××××××	4 3x4	II
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0		Plate Grip DOL 1 Lumber DOL 1	D-0 <b>CSI.</b> 1.15 TC 0.30 1.15 BC 0.20 ES WB 0.06 4 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT	in n/a n/a 0.00	(loc) - - 4	I/defl n/a n/a n/a	L/d 999 999 n/a		<b>HP</b> 4/190 FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

2x4 SP No.2 **WEBS OTHERS** 2x4 SP No.2

REACTIONS. (size) 1=11-7-1, 4=11-7-1, 5=11-7-1

Max Horz 1=98(LC 8)

Max Uplift 4=-17(LC 8), 5=-43(LC 8)

Max Grav 1=139(LC 1), 4=195(LC 1), 5=510(LC 1)

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

**WEBS** 2-5=-379/319

### NOTES-

- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-10-13 to 5-7-1, Interior(1) 5-7-1 to 11-5-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 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) 4, 5. 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

except end verticals.



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

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or 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 Safaty Information, available from Truss Plate Institute 2670 (Train Highway Suite 203 Waldorf MD 20601) Saffety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Lot 114 Ballard Woods E15040906 J1020-4945 VC3 GABLE Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:58 2020 Page 1 Comtech, Inc. ID:L1J54eQhkyo6whVInXZxPFzEJO5-l566gj0lJdey\_02wMSnB?9fkdkaOAC1FZl8nl?yOD1Z Scale = 1:17.9 3x4 || 2 4.00 12 3x4 II 3x4 = 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 0.88 Vert(LL) n/a n/a 999 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 вс 0.56 Vert(CT) n/a n/a 999

Horz(CT)

BRACING-

TOP CHORD

**BOT CHORD** 

0.00

n/a

except end verticals.

n/a

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

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

Weight: 28 lb

FT = 20%

LUMBER-

REACTIONS.

**BCLL** 

**BCDL** 

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

0.0

10.0

(size) 1=8-7-1, 3=8-7-1 Max Horz 1=70(LC 8)

Max Uplift 1=-3(LC 8), 3=-26(LC 8) Max Grav 1=302(LC 1), 3=302(LC 1)

Rep Stress Incr

Code IRC2018/TPI2014

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-226/252

### NOTES-

1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-10-13 to 5-3-9, Interior(1) 5-3-9 to 8-5-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

WB

Matrix-P

0.00

- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

YES

- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Design valid for use only with MTI-sky 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/PTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information, pushed from Trus Plate persons. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSVTP/1 Qu Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Lot 114 Ballard Woods E15040907 J1020-4945 VC4 VALLEY Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:58 2020 Page 1 Comtech, Inc. ID:L1J54eQhkyo6whVlnXZxPFzEJO5-I566gj0IJdey\_02wMSnB?9ftkkgBAC1FZl8nl?yOD1Z Scale = 1:12.5 3x4 || 2 4.00 12 3 3x4 = 3x4 || 5-7-1 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 10.0 Lumber DOL 1.15 вс 0.19 Vert(CT) n/a n/a 999 **BCLL** WB 0.00 0.0 Rep Stress Incr YES Horz(CT) 0.00 n/a n/a Code IRC2018/TPI2014 **BCDL** 10.0 Matrix-P Weight: 18 lb FT = 20% LUMBER-BRACING-TOP CHORD 2x4 SP No.1 TOP CHORD Structural wood sheathing directly applied or 5-7-1 oc purlins,

**WEBS** 

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

except end verticals.

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

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

Max Horz 1=42(LC 8)

Max Uplift 1=-2(LC 8), 3=-16(LC 8) Max Grav 1=182(LC 1), 3=182(LC 1)

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

### NOTES-

- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; 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.
- \* 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 5) Non Standard bearing condition. Review required.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





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

Design valid for use only with MTI-sky 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/PTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information, pushed from Trus Plate persons. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSVTP/1 Qu Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Lot 114 Ballard Woods E15040908 J1020-4945 VC5 VALLEY Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Fri Oct 30 13:16:59 2020 Page 1 Comtech, Inc. ID:L1J54eQhkyo6whVlnXZxPFzEJO5-EHgUt31w4xmpcAd6wAlQYNC6c722vfHOoPtLHSyOD1Y Scale = 1:7.0 4x8 = 2 4.00 12

3x4 =

2-7-1 2-7-1

**BRACING-**

TOP CHORD

BOT CHORD

3

Structural wood sheathing directly applied or 2-7-1 oc purlins,

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

except end verticals.

Plate Off	Plate Offsets (X,Y) [2:0-1-14,0-0-0], [2:0-11-7,0-1-12], [3:0-1-11,0-0-9]									
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 0.03	Vert(LL) n/a - n/a 999 MT20 244/190						
TCDL	10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) n/a - n/a 999						
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 n/a n/a						
BCDL	10.0	Code IRC2018/TPI2014	Matrix-P	Weight: 7 lb FT = 20%						

LUMBER-

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

WEBS 2x4 SP No.1

**REACTIONS.** (size) 1=2-7-1, 3=2-7-1

Max Horz 1=14(LC 8)

Max Uplift 1=-1(LC 8), 3=-5(LC 8) Max Grav 1=62(LC 1), 3=62(LC 1)

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

### NOTES-

- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 5) Non Standard bearing condition. Review required.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



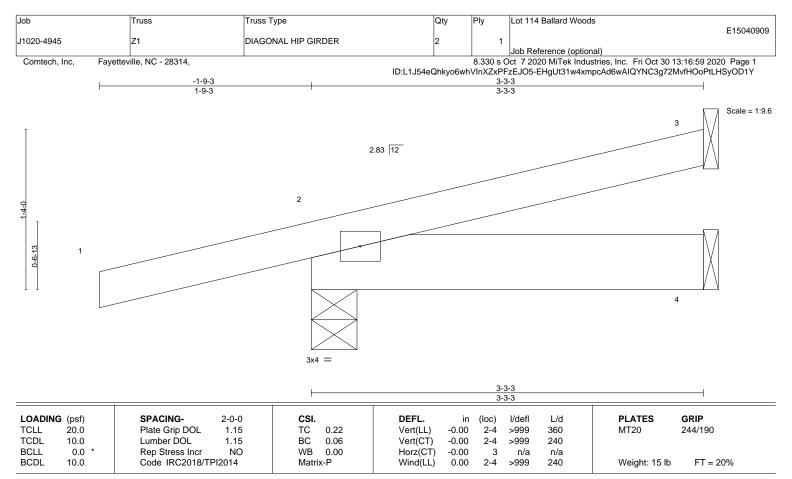
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with 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/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\*

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





LUMBER-

TOP CHORD 2x4 SP No.1 **BOT CHORD** 2x6 SP No 1 BRACING-

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

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

REACTIONS. (size) 3=Mechanical, 2=0-4-9, 4=Mechanical

Max Horz 2=36(LC 8)

Max Uplift 3=-21(LC 12), 2=-106(LC 8), 4=-11(LC 8) Max Grav 3=52(LC 1), 2=276(LC 1), 4=60(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3) 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
- 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) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=106.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



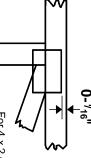


### **Symbols**

## PLATE LOCATION AND ORIENTATION



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



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

?

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

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

### PLATE SIZE



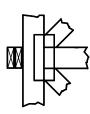
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

## LATERAL BRACING LOCATION



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

### **BEARING**



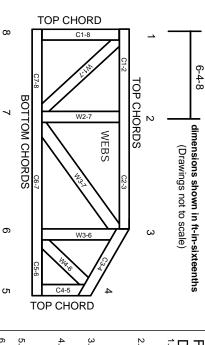
Min size shown is for crushing only number where bearings occur. reaction section indicates joint (supports) occur. Icons vary but Indicates location where bearings

### Industry Standards:

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

DSB-89: ANSI/TPI1:

## Numbering System



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

© 2012 MiTek® All Rights Reserved



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

# **General Safety Notes**

# Failure to Follow Could Cause Property

- Damage or Personal Injury

  1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.

Ņ

- ω Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building all other interested parties. designer, erection supervisor, property owner and
- Cut members to bear tightly against each other
- Place plates on each face of truss at each locations are regulated by ANSI/TPI 1. oint and embed fully. Knots and wane at joint

6 5

- 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

œ

7.

- 9 Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- 10. Camber is a non-structural consideration and is the camber for dead load deflection responsibility of truss fabricator. General practice is to
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- 13. Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted
- Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- 18. Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.