

RE: J0823-4522

Lot 4 Turlington Acres

Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Project Name: J0823-4522

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

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

Design Code: IRC2015/TPl2014 Design Program: MiTek 20/20 8.4

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

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

No.	Seal#	Truss Name	Date
1	159880563	A1	8/2/2023
2	159880564	A2	8/2/2023
3	159880565	A3	8/2/2023
4	159880566	A4	8/2/2023
5	159880567	A5	8/2/2023
6	159880568	A6	8/2/2023
7	159880569	A7	8/2/2023
8	159880570	B1	8/2/2023
9	159880571	B2	8/2/2023
10	159880572	B3	8/2/2023
11	159880573	C1	8/2/2023
12	159880574	C2	8/2/2023
13	159880575	C3	8/2/2023

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision

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

Truss Design Engineer's Name: Gilbert, Eric

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

North Carolina COA: C-0844

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



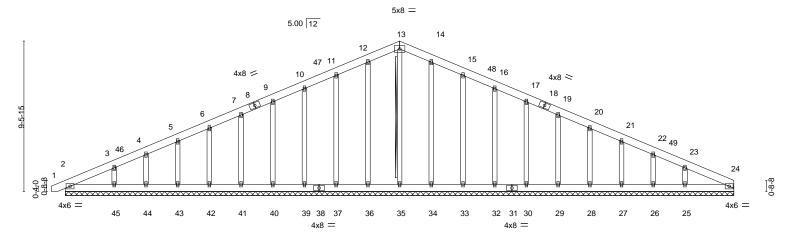
August 02, 2023

Job Truss Truss Type Qty Ply Lot 4 Turlington Acres 159880563 J0823-4522 **GABLE** A1 Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Aug 1 12:54:07 2023 Page 1 Comtech, Inc.

Fayetteville, NC - 28314,

ID:BbYn2flZx7QTBCZMOb5ZtVzDvdq-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 42-2-0

Scale = 1:72.7



42-2-0 42-2-0 GRIP LOADING (psf) SPACING-2-0-0 CSI. DEFL in (loc) I/defI L/d **PLATES TCLL** 20.0 Plate Grip DOL 1.15 TC 0.05 Vert(LL) -0.00 n/r 120 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 вс 0.03 Vert(CT) 0.00 n/r 120 WB **BCLL** 0.0 Rep Stress Incr YES 0.14 Horz(CT) 0.01 24 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Weight: 340 lb FT = 20%

LUMBER-

-0-10₇8 0-10-8

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.

2x4 SPF No.2 - 13-35 T-Brace:

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

REACTIONS. All bearings 42-2-0.

(lb) -Max Horz 2=184(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 2, 36, 37, 39, 40, 41, 42, 43, 44, 34, 33, 32, 30, 29, 28, 27,

26 except 45=-111(LC 12), 25=-109(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 24, 35, 36, 37, 39, 40, 41, 42, 43, 44, 45, 34, 33, 32, 30, 29, 28, 27, 26, 25

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

TOP CHORD $10 - 11 = -93/275, \ 11 - 12 = -111/325, \ 12 - 13 = -123/359, \ 13 - 14 = -123/362, \ 14 - 15 = -111/328, \ 12 - 12 = -111/328, \ 13 - 14 = -123/362, \ 14 - 15 = -111/328, \$

15-16=-93/278

WEBS 23-25=-179/259

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-2 to 3-8-10, Exterior(2) 3-8-10 to 21-1-0, Corner(3) 21-1-0 to 25-5-13, Exterior(2) 25-5-13 to 42-2-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 36, 37, 39, 40, 41, 42, 43, 44, 34, 33, 32, 30, 29, 28, 27, 26 except (jt=lb) 45=111, 25=109. 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



August 2,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



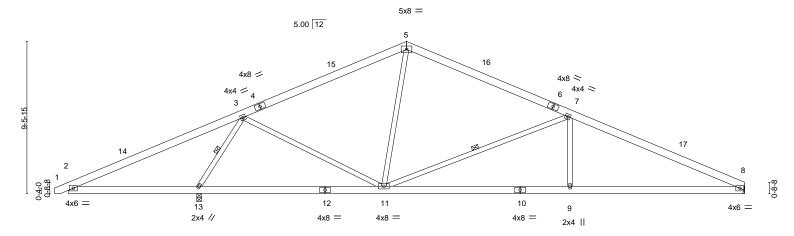
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						I5988	30564
J0823-4522	A2	COMMON	6	1			
					Job Reference (optional)	
Comtech, Inc, Fayette	eville, NC - 28314,			8.430 s Ja	n 6 2022 MiTek I	ndustries, Inc. Tue Aug 1 12:54:08 2023 Page	1
•		II	D:BbYn2flZx7QTE	3CZMOb5	ZtVzDvdq-RfC?Ps	sB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?	?f
-Q-10 ₁ 8	10-10-10	21-1-0		31-3-6		42-2-0	
0-10-8	10-10-10	10-2-6		10-2-6		10-10-10	

Qtv

Plv

Lot 4 Turlington Acres

Scale = 1:71.9



<u> </u>	8-1-12 8-1-12		19-8-0 11-6-4	+	31-3-6 11-7-6		42-2-0 10-10-10	
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2015/	2-0-0 1.15 1.15 YES TPI2014	CSI. TC 0.62 BC 0.49 WB 0.88 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in (loc) -0.10 8-9 -0.24 8-9 0.05 8 0.07 8-9	>999 360 >999 240 n/a n/a	_	GRIP 244/190 FT = 20%

BRACING-

WFBS

TOP CHORD

BOT CHORD

LUMBER-

Job

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

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

Max Horz 13=109(LC 16)

Truss

Truss Type

Max Uplift 13=-220(LC 8), 8=-105(LC 13) Max Grav 13=2130(LC 1), 8=1279(LC 1)

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

2-3=-777/992, 3-5=-1253/226, 5-7=-1196/264, 7-8=-2396/404 TOP CHORD **BOT CHORD** 2-13=-773/789, 11-13=-65/379, 9-11=-244/2116, 8-9=-244/2116

WEBS 3-13=-2174/906, 3-11=-202/773, 5-11=0/487, 7-11=-1245/342, 7-9=0/490

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-2 to 3-8-10, Interior(1) 3-8-10 to 21-1-0, Exterior(2) 21-1-0 to 25-5-13, Interior(1) 25-5-13 to 42-1-4 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=220, 8=105.



Structural wood sheathing directly applied or 4-0-10 oc purlins.

3-13, 7-11

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

6-0-0 oc bracing: 2-13.

1 Row at midpt

August 2,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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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 and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job Truss Truss Type Qty Ply Lot 4 Turlington Acres 159880565 J0823-4522 **ROOF SPECIAL** A3 Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Aug 1 12:54:10 2023 Page 1 Comtech, Inc. ID:BbYn2flZx7QTBCZMOb5ZtVzDvdq-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

29-7-8

8-6-8

. 38-2-0

8-6-8

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

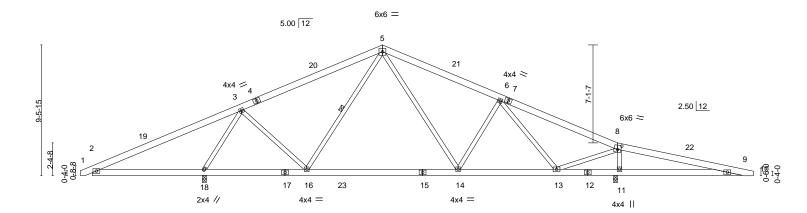
21-1-0

10-2-15

Scale = 1:83.7

47-2-0

9-0-0



LOADING (not)	CDA CINI	^	0.00	001	DEEL	:- /I) 1/-1-41	1 /4	DI ATEO	ODID	
Plate Offsets (X,Y	") [8:0-3-0,0-3-8]										
	8-0-0	0-1 [!] 12	7-5-4		11-0-0	1 7	'-1-13	4-5-3	9-	0-0	_
1	8-0-0	8-1 ₁₁ 12	15- <i>7-</i> 0	1	26-7-0	1 3	3-8-13	1 38-2-0	1 47	-2-0	1

LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl	L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.62	Vert(LL) -0.22 14-16 >999	360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.52	Vert(CT) -0.31 14-16 >999	240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.97	Horz(CT) 0.01 11 n/a	n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) -0.02 16-18 >999	240	Weight: 308 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WFBS

LUMBER-

REACTIONS.

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

-0₋10₋8 0-10-8

10-10-1

10-10-1

WFBS 2x4 SP No.2

> 18=0-3-8, 11=0-3-8 (size) Max Horz 18=-109(LC 17)

Max Uplift 18=-225(LC 8), 11=-337(LC 9) Max Grav 18=1876(LC 1), 11=1972(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-750/1009, 3-5=-869/119, 5-6=-1129/156, 6-8=-698/63, 8-9=-1351/1626 TOP CHORD

BOT CHORD 2-18=-789/766, 16-18=-62/388, 14-16=0/772, 13-14=0/1018, 11-13=-1408/1314, 9-11=-1534/1362

WEBS 3-18=-1925/739, 3-16=-65/600, 5-14=-33/464, 6-13=-915/561, 8-13=-751/1849,

8-11=-1711/621

NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-2 to 4-0-7, Interior(1) 4-0-7 to 21-1-0, Exterior(2) 21-1-0 to 25-9-10, Interior(1) 25-9-10 to 47-8-10 zone; cantilever left and 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 4x6 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) 18=225, 11=337.



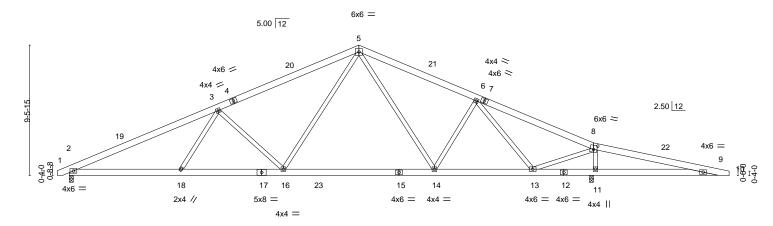
August 2,2023



Job Truss Truss Type Qty Ply Lot 4 Turlington Acres 159880566 J0823-4522 **ROOF SPECIAL** A4 Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Aug 1 12:54:11 2023 Page 1 Comtech, Inc.

ID:BbYn2flZx7QTBCZMOb5ZtVzDvdq-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f -0₋10₋8 0-10-8 10-10-1 21-1-0 29-7-8 . 38-2-0 47-2-0 10-10-1 10-2-15 8-6-8 8-6-8 9-0-0

Scale = 1:83.9



<u> </u>	8-1-12	15-7-0	26	6-7-0	33-8-13	1 38-2-0	47-2-0	
	8-1-12	7-5-4	11	1-0-0	7-1-13	4-5-3	9-0-0	<u> </u>
Plate Offsets (X,Y)	[8:0-3-0,0-3-8]							
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2015/TI	2-0-0 1.15 1.15 YES PI2014	CSI. TC 0.50 BC 0.57 WB 0.92 Matrix-S	- ' '	in (loc) I/defl -0.23 14-16 >999 -0.38 14-16 >999 0.05 11 n/a 0.07 16 >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 308 lb	GRIP 244/190 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.2

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

Max Horz 2=-109(LC 13)

Max Uplift 2=-119(LC 12), 11=-330(LC 9) Max Grav 2=1487(LC 1), 11=2358(LC 1)

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

TOP CHORD 2-3=-2863/454, 3-5=-2216/441, 5-6=-1825/300, 6-8=-1139/103, 8-9=-1349/1621

BOT CHORD 2-18=-283/2514, 16-18=-320/2405, 14-16=-31/1451, 13-14=-27/1550, 11-13=-1386/1305,

9-11=-1529/1360

WEBS 3-18=0/360, 3-16=-797/332, 5-16=-131/954, 5-14=-34/359, 6-13=-1143/619,

8-13=-872/2318, 8-11=-2091/719

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-2 to 4-0-7, Interior(1) 4-0-7 to 21-1-0, Exterior(2) 21-1-0 to 25-9-10, Interior(1) 25-9-10 to 47-8-10 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=119. 11=330.



Structural wood sheathing directly applied or 4-0-1 oc purlins.

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

August 2,2023



Job Truss Truss Type Qty Ply Lot 4 Turlington Acres 159880567 J0823-4522 **ROOF SPECIAL** 5 A5 Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Aug 1 12:54:12 2023 Page 1 Comtech, Inc. ID:BbYn2flZx7QTBCZMOb5ZtVzDvdq-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

29-7-8

8-6-8

. 38-2-0

8-6-8

Structural wood sheathing directly applied or 3-7-8 oc purlins.

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

8-12

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

1 Row at midpt

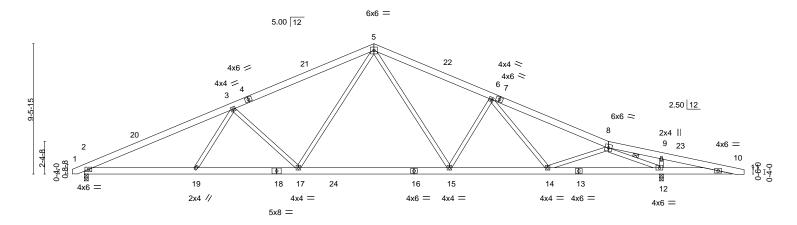
21-1-0

10-2-15

0-10-8 Scale = 1:83.9

47-2-0

9-0-0



—	8-1-12 8-1-12	15-7-0 7-5-4		6-7-0 1-0-0	33-8-13 7-1-13	42-2-0 8-5-3	47-2-0 5-0-0
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2015/I	2-0-0 1.15 1.15 YES	CSI. TC 0.51 BC 0.63 WB 0.62 Matrix-S	DEFL. Vert(LL)	in (loc) I/defl -0.29 15-17 >999 -0.49 15-17 >999 0.10 12 n/a	L/d PLATES 360 MT20 240 n/a 240 Weight: 31:	GRIP 244/190

BRACING-

WFBS

TOP CHORD

BOT CHORD

LUMBER-

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

-0₋10₋8 0-10-8

10-10-1

10-10-1

2x4 SP No.2

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

Max Horz 2=-109(LC 17)

Max Uplift 12=-221(LC 9), 2=-118(LC 12) Max Grav 12=2149(LC 1), 2=1695(LC 1)

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

TOP CHORD 2-3=-3372/617, 3-5=-2703/607, 5-6=-2662/587, 6-8=-2895/439, 8-9=-754/657, 9-10=-812/692

2-19=-431/2979, 17-19=-470/2873, 15-17=-185/1904, 14-15=-353/2592, 12-14=-223/2472,

10-12=-634/816 WEBS $3-19=0/355,\ 3-17=-787/326,\ 5-17=-127/950,\ 5-15=-109/921,\ 6-15=-595/229,\ 5-15=-109/921,\ 6-15=-595/229,\ 5-15=-109/921,\ 6-15=-595/229,\ 5-15=-109/921,\ 6-15=-595/229,\ 5-15=-109/921,\ 6-15=-595/229,\ 5-15=-109/921,\ 6-15=-595/229,\ 5-15=-109/921,\ 6-15=-595/229,\ 5-15=-109/921,\ 6-15=-595/229,\ 5-15=-109/921,\ 6-15=-595/229,\ 5-15=-109/921,\ 6-15=-595/229,\ 5-15=-109/921,\ 6-15=-595/229,\ 5-15=-109/921,\ 6-15=-595/229,\ 5-15=-109/921,\ 6-15=-595/229,\$

8-12=-3439/970, 9-12=-406/222

NOTES-

BOT CHORD

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-2 to 4-0-7, Interior(1) 4-0-7 to 21-1-0, Exterior(2) 21-1-0 to 25-9-10, Interior(1) 25-9-10 to 47-8-10 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=221, 2=118,



August 2,2023



Job Truss Truss Type Qty Ply Lot 4 Turlington Acres 159880568 J0823-4522 COMMON 10 A6 Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Aug 1 12:54:13 2023 Page 1 Comtech, Inc.

ID:BbYn2flZx7QTBCZMOb5ZtVzDvdq-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 10-10-10 21-1-0 23-9-8 10-10-10 10-2-6 2-8-8

4x6 =

22-10-0

except end verticals.

1 Row at midpt

14-10-0

5x8 = 5.00 12 3x4 || 4x6 = 2x4 \\ 4 7 8 12 13 9

3x6 =

BRACING-

TOP CHORD

BOT CHORD

WEBS

	<u> </u>	12-2-5	2-7-11	8-0-0	0-11-8
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	l/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.51	Vert(LL) -0.35 7-9	>816 360	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.66	Vert(CT) -0.46 7-9	>617 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.74	Horz(CT) 0.02 7	n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.07 2-9	>999 240	Weight: 168 lb FT = 20%

LUMBER-

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

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

Max Horz 2=273(LC 12) Max Uplift 2=-62(LC 12), 7=-120(LC 12)

3x6 =

Max Grav 2=990(LC 1), 7=1052(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1536/194, 3-5=-1384/286

BOT CHORD 2-9=-379/1329

WEBS $3-9=-647/359,\ 5-9=-261/1330,\ 5-7=-879/357$

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-2 to 3-8-10, Interior(1) 3-8-10 to 21-1-0, Exterior(2) 21-1-0 to 23-7-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

12-2-5

- 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) 7=120.



4x6 =

23-9-8

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

6-7.5-7

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

Scale = 1:55.4

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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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 and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job Truss Truss Type Qty Ply Lot 4 Turlington Acres 159880569 J0823-4522 **GABLE** A7 Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Aug 1 12:54:14 2023 Page 1 Comtech, Inc. ID:BbYn2flZx7QTBCZMOb5ZtVzDvdq-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 23-9-8 2-8-8 21-1-0 Scale = 1:55.5 5x5 = 5.00 12 13 14 12 15 30 10 4x6 = 8 5 29 0-4-0 0-8-8 28 27 26 25 24 23 22 21 20 19 18 17 16 4x6 = 14-10-0 22-10-0 23-9-8

			14-10-0		8-0-0	0-11-8
LOADING	(psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	l/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.03	Vert(LL) 0.00 1	n/r 120	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) 0.00 1	n/r 120	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT) -0.01 15	n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S			Weight: 202 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 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: 17-18,16-17.

REACTIONS. All bearings 23-9-8.

Max Horz 2=394(LC 12) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 15, 18, 19, 20, 21, 23, 24, 25, 26, 27, 17 except 28=-122(LC

Max Grav All reactions 250 lb or less at joint(s) 15, 2, 18, 19, 20, 21, 23, 24, 25, 26, 27, 28, 17

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-443/159, 3-4=-357/120, 4-5=-315/108, 5-6=-267/91

WEBS 3-28=-172/251

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-2 to 3-8-10, Exterior(2) 3-8-10 to 21-1-0, Corner(3) 21-1-0 to 23-9-8 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) 15, 18, 19, 20, 21, 23, 24, 25, 26, 27, 17 except (jt=lb) 28=122.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



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159880570 J0823-4522 **GABLE** В1 Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Aug 1 12:54:16 2023 Page 1 Comtech, Inc. ID:BbYn2flZx7QTBCZMOb5ZtVzDvdq-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f -0-10-8 0-10-8 10-6-0 21-0-0 10-6-0 10-6-0 Scale = 1:48.5 5x5 = 7 6 8.00 12 5 10 11 12 0-4-0 0-11-8 0-11-8 4x8 || 4x8 || 22 20 18 15 13 4x6 = 21-0-0 21-0-0 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 0.03 Vert(LL) -0.00 n/r 120 MT20 244/190 TCDL Lumber DOL 1.15 вс 0.02 Vert(CT) 0.00 n/r 120 WB **BCLL** 0.0 Rep Stress Incr YES 0.11 Horz(CT) 0.00 12 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Weight: 167 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

Qty

Ply

Lot 4 Turlington Acres

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

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

LUMBER-

Job

Truss

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

WEDGE

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

REACTIONS. All bearings 21-0-0.

(lb) -Max Horz 2=224(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 2, 12, 19, 20, 21, 16, 15, 14 except 22=-149(LC 12),

13=-147(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 12, 18, 19, 20, 21, 22, 16, 15, 14, 13

Truss Type

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-9 to 3-8-4, Exterior(2) 3-8-4 to 10-6-0, Corner(3) 10-6-0 to 14-10-13, Exterior(2) 14-10-13 to 21-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12, 19, 20, 21, 16, 15, 14 except (jt=lb) 22=149, 13=147.



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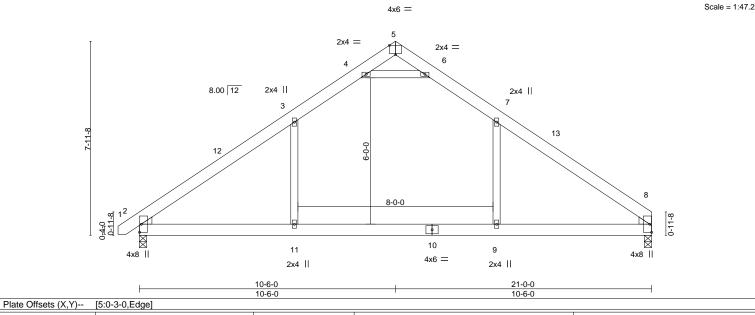
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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Job Truss Truss Type Qty Ply Lot 4 Turlington Acres 159880571 J0823-4522 B2 COMMON 2 Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Aug 1 12:54:17 2023 Page 1 Comtech, Inc. ID:BbYn2flZx7QTBCZMOb5ZtVzDvdq-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 10-6-0 21-0-0 5-2-3



LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.58 Vert(LL) -0.17 9-11 >999 360 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 BC 0.40 Vert(CT) -0.27 9-11 >934 240 WB **BCLL** 0.0 Rep Stress Incr YES 0.27 Horz(CT) 0.02 8 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Wind(LL) 0.10 2-11 >999 240 Weight: 130 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE

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

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

Max Horz 2=179(LC 11) Max Uplift 2=-54(LC 12), 8=-42(LC 13)

Max Grav 2=1003(LC 19), 8=953(LC 20)

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

TOP CHORD 2-3=-1329/201, 3-4=-892/270, 4-5=-175/690, 5-6=-166/692, 6-7=-893/275,

7-8=-1321/200

BOT CHORD 2-11=-35/959, 9-11=-35/959, 8-9=-35/959 **WEBS** 3-11=0/465, 7-9=0/455, 4-6=-1713/523

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 10-6-0, Exterior(2) 10-6-0 to 14-7-12, Interior(1) 14-7-12 to 20-10-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



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

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

August 2,2023

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Job Truss Truss Type Qty Ply Lot 4 Turlington Acres 159880572 J0823-4522 ВЗ COMMON 9 Job Reference (optional)

4x6 =

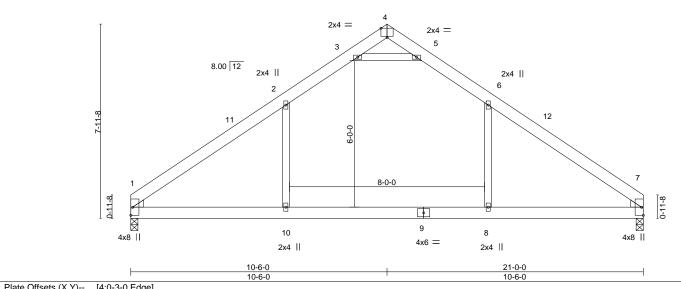
Fayetteville, NC - 28314, Comtech, Inc.

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Aug 1 12:54:18 2023 Page 1 ID:BbYn2flZx7QTBCZMOb5ZtVzDvdq-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 10-6-0 15-8-3 5-2-3 5-2-3 5-3-13

Scale = 1:47.2

Structural wood sheathing directly applied or 5-11-14 oc purlins.

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



1 late On	3013 (71, 17	[+.0 0 0,Lugo]			
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 0.59	Vert(LL) -0.17 8-10 >999 360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.40	Vert(CT) -0.27 8-10 >921 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.27	Horz(CT) 0.02 7 n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.10 1-10 >999 240	Weight: 128 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE

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

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

Max Horz 1=-179(LC 8)

Max Uplift 1=-42(LC 12), 7=-42(LC 13) Max Grav 1=954(LC 19), 7=954(LC 20)

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

TOP CHORD 1-2=-1324/201, 2-3=-894/275, 3-4=-177/697, 4-5=-177/698, 5-6=-894/275,

6-7=-1324/201

BOT CHORD 1-10=-40/961, 8-10=-40/961, 7-8=-40/961 **WEBS** 2-10=0/457, 6-8=0/457, 3-5=-1721/527

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 10-6-0, Exterior(2) 10-6-0 to 14-7-12, Interior(1) 14-7-12 to 20-10-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.



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Job Truss Truss Type Qty Ply Lot 4 Turlington Acres 159880573 J0823-4522 C1 **GABLE** Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Aug 1 12:54:19 2023 Page 1 Comtech, Inc. ID:BbYn2flZx7QTBCZMOb5ZtVzDvdq-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f | -0-10-8 | 0-10-8 6-2-0 6-2-0 12-4-0 Scale = 1:30.3 5x5 = 5 8.00 12 3 8 13 10 9 12 11 4x8 || 4x8 || 6-2-0 12-4-0 6-2-0 6-2-0 LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-TOP CHORD

BOT CHORD

-0.02

-0.03

0.01

0.02

9-10

9-10

9-10

8

>999

>999

>999

n/a

360

240

n/a

240

MT20

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

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

Weight: 87 lb

244/190

FT = 20%

LUMBER-

TCLL

TCDL

BCLL

BCDL

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

20.0

0.0

10.0

WEDGE

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

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

Max Horz 2=137(LC 9)

Max Uplift 2=-183(LC 12), 8=-158(LC 13) Max Grav 2=776(LC 1), 8=721(LC 1)

Plate Grip DOL

Rep Stress Incr

Code IRC2015/TPI2014

Lumber DOL

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

TOP CHORD 2-3=-811/183, 3-4=-692/230, 4-5=-690/281, 5-6=-690/281, 6-7=-692/230, 7-8=-810/181

1.15

1.15

NO

TC

вс

WB

Matrix-S

0.15

0.24

0.10

BOT CHORD $2\text{-}13\text{=-}91/567,\ 12\text{-}13\text{=-}91/567,\ 11\text{-}12\text{=-}91/567,\ 10\text{-}11\text{=-}91/567,\ 9\text{-}10\text{=-}91/567,\ 10\text{-}11\text{=-}91/567,\ 10\text{-}11\text{=-}91/567,\$ 8-9=-91/567

WEBS 5-11=-164/471

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-9 to 3-8-4, Exterior(2) 3-8-4 to 6-2-0, Corner(3) 6-2-0 to 10-6-13, Exterior(2) 10-6-13 to 12-2-4 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) except (jt=lb) 2=183, 8=158.
- 9) 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: 1-5=-60, 5-8=-60, 2-8=-60(F=-40)



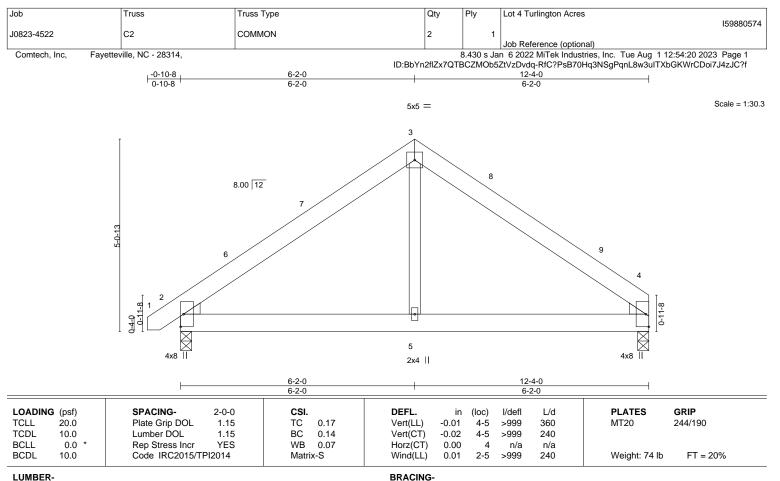
August 2,2023

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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 and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)





TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE

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

REACTIONS.

(size) 2=0-3-8, 4=0-3-8 Max Horz 2=110(LC 9) Max Uplift 2=-36(LC 12), 4=-23(LC 13) Max Grav 2=535(LC 1), 4=480(LC 1)

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

TOP CHORD 2-3=-565/152. 3-4=-562/153 **BOT CHORD** 2-5=-4/368, 4-5=-4/368

WEBS 3-5=0/293

NOTES-

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



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

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

August 2,2023

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Job Truss Truss Type Qty Ply Lot 4 Turlington Acres 159880575 J0823-4522 СЗ COMMON GIRDER 2 Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Aug 1 12:54:21 2023 Page 1 Comtech, Inc. ID:BbYn2flZx7QTBCZMOb5ZtVzDvdq-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 12-4-0 Scale = 1:30.3 5x5 = 8.00 12 0-11-8 5 6 7 8 4 4x8 = 4x8 = 4x12 || 6-2-0 6-2-0 GRIP LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defl L/d PLATES in **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.42 Vert(LL) -0.03 3-4 >999 360 MT20 244/190 TCDL Lumber DOL 1.15 вс 0.34 Vert(CT) -0.07 3-4 >999 240 WB **BCLL** 0.0 Rep Stress Incr NO 0.56 Horz(CT) 0.01 3 n/a n/a Wind(LL) BCDL 10.0 Code IRC2015/TPI2014 Matrix-S 0.03 1-4 >999 240 Weight: 160 lb FT = 20%LUMBER-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.

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

REACTIONS.

(size) 1=0-3-8, 3=0-3-8 Max Horz 1=108(LC 26)

Max Uplift 1=-320(LC 8), 3=-312(LC 9) Max Grav 1=3673(LC 1), 3=3586(LC 1)

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

TOP CHORD 1-2=-4256/403, 2-3=-4257/403 **BOT CHORD** 1-4=-263/3366. 3-4=-263/3366

WFBS 2-4=-343/4562

NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-7-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1259 lb down and 125 lb up at 2-0-12, 1259 lb down and 125 lb up at 4-0-12, 1259 lb down and 125 lb up at 6-0-12, and 1259 lb down and 125 lb up at 8-0-12, and 1259 lb down and 125 lb up at 10-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility

LOAD CASE(S) Standard

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

Vert: 1-2=-60, 2-3=-60, 1-3=-20

Vert: 4=-1259(B) 5=-1259(B) 6=-1259(B) 7=-1259(B) 8=-1259(B)



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Symbols

PLATE LOCATION AND ORIENTATION



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



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

₹

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

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

PLATE SIZE

4 × 4

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

LATERAL BRACING LOCATION



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

BEARING



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

Industry Standards: ANSI/TPI1: National Design Specification for Metal

DSB-22:

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

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-1988, ESR-2362, ESR-2685, ESR-3282 ESR-4722, ESL-1388

Design General Notes

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

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

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MITOK



MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

▲ General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.

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