

RE: J0823-4516

Lot 7 Turlington Acres

Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Project Name: J0823-4516

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

No.	Seal#	Truss Name	Date
1	159853553	A1	8/1/2023
2	159853554	A2	8/1/2023
3	159853555	A3	8/1/2023
4	159853556	A4	8/1/2023
5	159853557	A5	8/1/2023
6	159853558	A6	8/1/2023
7	159853559	A7	8/1/2023
8	159853560	B1	8/1/2023
9	159853561	B2	8/1/2023
10	159853562	B3	8/1/2023

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

Truss Engineering Co. under my direct supervision

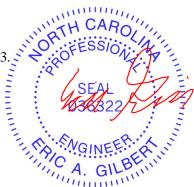
based on the parameters provided by Comtech, Inc - Fayetteville.

Truss Design Engineer's Name: Gilbert, Eric

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

North Carolina COA: C-0844

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



August 01, 2023

Job Truss Truss Type Qty Lot 7 Turlington Acres 159853553 J0823-4516 Α1 **GABLE** Job Reference (optional) Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 31 13:55:41 2023 Page 1 ID:BbYn2flZx7QTBCZMOb5ZtVzDvdq-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

10-2-15

31-3-15

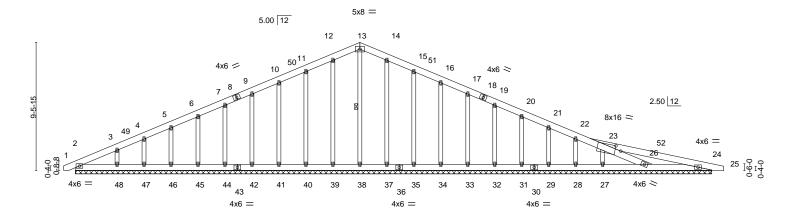
10-2-15

48-0₋8 0-10-8

47-2-0

9-0-0

Scale = 1:85.4



<u> </u>	8-3-8 8-3-8	16-1-0 7-9-8		-1-0 -0-0	34-10-2 8-9-2	47-2-0 12-3-14	
Plate Offsets (X,Y)	[23:0-5-2,0-3-12]		•••		• • • •		
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2015/	1.15 YES	CSI. TC 0.24 BC 0.15 WB 0.14 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) l/defl 0.01 25 n/r 0.01 25 n/r 0.01 24 n/a	L/d PLATES 120 MT20 120 n/a Weight: 376 lb	GRIP 244/190 FT = 20%

LUMBER-BRACING-

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

OTHERS 2x4 SP No.2

REACTIONS.

-0₋10₋8 0-10-8

10-10-1

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

37-0-10

5-8-11

38-2-0 1-1-6

6-0-0 oc bracing: 22-23

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

All bearings 47-2-0.

Max Horz 2=-184(LC 13) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 39, 40, 41, 42, 44, 45, 46, 47, 37, 35, 34, 33, 32, 31, 29,

28 except 24=-107(LC 9), 48=-111(LC 12), 27=-154(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 26, 24, 38, 39, 40, 41, 42, 44, 45, 46, 47, 48, 37, 35,

34, 33, 32, 31, 29, 28 except 27=346(LC 1)

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

TOP CHORD 10-11=-91/277, 11-12=-109/327, 12-13=-121/361, 13-14=-121/348, 14-15=-109/311,

15-16=-91/262 WEBS 23-27=-312/266

- 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 4-0-7, Exterior(2) 4-0-7 to 21-1-0, Corner(3) 21-1-0 to 25-9-10, Exterior(2) 25-9-10 to 47-8-10 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, 39, 40, 41, 42, 44, 45, 46, 47, 37, 35, 34, 33, 32, 31, 29, 28 except (jt=lb) 24=107, 48=111, 27=154.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 1,2023

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

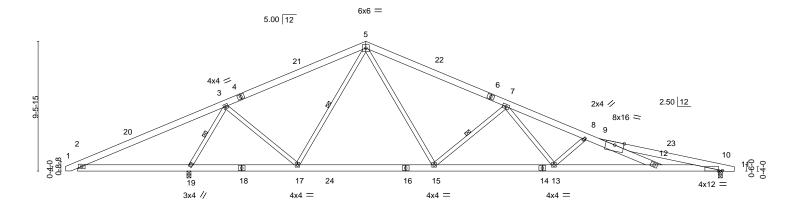
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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)



Job	Truss	Truss Type	Qty	Ply	Lot 7 Turlington Acres
					159853554
J0823-4516	A2	ROOF SPECIAL	6	1	
					Job Reference (optional)
Comtech, Inc. Favette	ville. NC - 28314.			8.430 s Jai	n 6 2022 MiTek Industries, Inc. Mon Jul 31 13:55:42 2023 Page 1

ID:BbYn2flZx7QTBCZMOb5ZtVzDvdq-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f -0₋10₋8 0-10-8 37-0-10 10-10-1 31-3-15 47-2-0 38-2-0 10-10-1 10-2-15 10-2-15 5-8-11 9-0-0

Scale = 1:84.3



		8-0-0	8-3-8	16-1-0	1		26-1-0	34-1	10-2	1	47-2-0	
		8-0-0	0-3 ^l -8	7-9-8	1		10-0-0	8-9	9-2	1	12-3-14	<u> </u>
Plate Offse	ets (X,Y)	[10:0-3-5,Edge]										
LOADING	(psf)	SPACING-		2-0-0	CSI.		DEFL.	in (loc)	I/defl L	/d	PLATES	GRIP
TCLL	20.0	Plate Grip D	OOL	1.15	TC	0.73	Vert(LL)	-0.28 12-13	>999 3	60	MT20	244/190
TCDL	10.0	Lumber DO)L	1.15	BC	0.85	Vert(CT)	-0.58 12-13	>803 2	40		
BCLL	0.0 *	Rep Stress	Incr	YES	WB	0.40	Horz(CT)	0.09 10	n/a r	/a		
BCDL	10.0	Code IRC2	2015/TF	PI2014	Matr	ix-S	Wind(LL)	0.22 12-13	>999 2	40	Weight: 314 lb	FT = 20%
							` ′					

BRACING-TOP CHORD

WEBS

BOT CHORD

LUMBER-

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

REACTIONS. (size) 19=0-3-8, 10=0-3-8 Max Horz 19=-109(LC 17)

Max Uplift 19=-220(LC 8), 10=-141(LC 13) Max Grav 19=2325(LC 1), 10=1519(LC 1)

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

2-3=-761/1013, 3-5=-1349/190, 5-7=-2209/420, 7-8=-4107/672, 8-9=-4680/777, TOP CHORD

9-12=0/498, 9-10=-5270/767

BOT CHORD 2-19=-792/776, 17-19=-52/520, 15-17=-11/1317, 13-15=-371/2880, 12-13=-705/4725,

3-19=-2402/881, 3-17=-182/945, 5-17=-494/313, 5-15=-178/1295, 7-15=-1336/392,

7-13=-161/1434, 8-13=-1367/328

WEBS

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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 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.
- * 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) 19=220, 10=141.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

3-19, 5-17, 7-15

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

1 Row at midpt

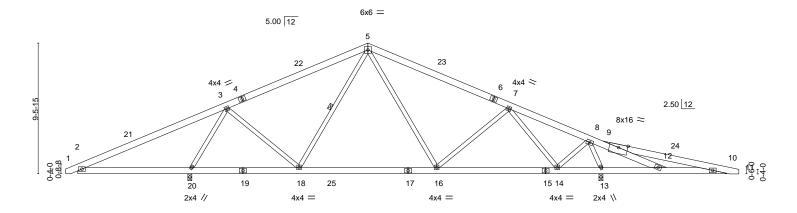
August 1,2023



Job Truss Truss Type Qty Lot 7 Turlington Acres 159853555 J0823-4516 **A3 ROOF SPECIAL** Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 31 13:55:44 2023 Page 1 Comtech, Inc, Fayetteville, NC - 28314,

ID:BbYn2flZx7QTBCZMOb5ZtVzDvdq-RfC?PsB70Hq3NSqPqnL8w3ulTXbGKWrCDoi7J4zJC?f 10-10-1 10-10-1 31-3-15 10-2-15 37-0-10 5-8-11 47-2-0 9-0-0 21-1-0 10-2-15

Scale = 1:83.7



	8-0-0 8-3 ₇ 8 8-0-0 0-3-8	16-1-0 7-9-8		6-1-0 0-0-0	34-10-2 8-9-2			7-2-0 9-0-0
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	Plate Grip DOL 1 Lumber DOL 1	-0-0 CS 1.15 TC 1.15 BC YES W	0.62 0.45	Vert(CT) Horz(CT)	in (loc) I/de -0.16 16-18 >99 -0.23 16-18 >99 0.01 13 n -0.03 18-20 >99	99 360 99 240 /a n/a	PLATES MT20 Weight: 317	GRIP 244/190 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

REACTIONS.

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

2x4 SP No.2

20=0-3-8, 13=0-3-8 (size) Max Horz 20=-109(LC 13)

Max Uplift 20=-229(LC 8), 13=-345(LC 9) Max Grav 20=1873(LC 1), 13=1974(LC 1)

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

2-3=-761/1014, 3-5=-827/120, 5-7=-1040/122, 7-8=-697/132, 8-9=-1513/1903, TOP CHORD

9-12=-600/640, 9-10=-927/1216

BOT CHORD 2-20=-794/777, 18-20=-58/412, 16-18=0/748, 14-16=0/884, 13-14=-1047/1218,

12-13=-1746/1510. 10-12=-1135/948

WEBS 3-20=-1884/743, 3-18=-89/616, 5-16=0/371, 7-14=-1112/673, 8-14=-619/1433,

8-13=-2010/814

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 DOI = 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.
- * 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) 20=229, 13=345.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

5-18

Rigid ceiling directly applied or 5-10-13 oc bracing.

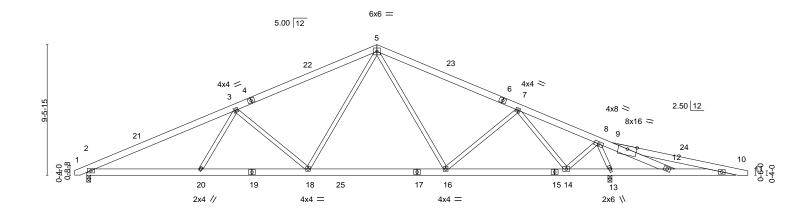
1 Row at midpt



Job Truss Truss Type Qty Lot 7 Turlington Acres 159853556 J0823-4516 A4 **ROOF SPECIAL** Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 31 13:55:45 2023 Page 1 Comtech, Inc, Fayetteville, NC - 28314,

ID:BbYn2flZx7QTBCZMOb5ZtVzDvdq-RfC?PsB70Hq3NSqPqnL8w3ulTXbGKWrCDoi7J4zJC?f 10-10-1 10-10-1 31-3-15 10-2-15 37-0-10 5-8-11 47-2-0 9-0-0 21-1-0 10-2-15

Scale = 1:83.7



	8-3-8 8-3-8	16-1-0 7-9-8		26-1-0 10-0-0		10-2 9-2	38-0-4 38-2-0 3-2-2 0-1-12	47-2-0 9-0-0
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/		CSI. TC 0.50 BC 0.50 WB 0.83 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in (loc) -0.19 16-18 -0.31 16-18 0.06 13 0.06 18	l/defl L/c >999 360 >999 240 n/a n/a >999 240	MT20	244/190

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

WEBS 2x4 SP No.2

> 2=0-3-8, 13=0-3-8 (size) Max Horz 2=-109(LC 17)

Max Uplift 2=-119(LC 12), 13=-336(LC 9) Max Grav 2=1475(LC 1), 13=2369(LC 1)

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

2-3=-2832/441, 3-5=-2118/422, 5-7=-1746/254, 7-8=-813/97, 8-9=-1511/1897, TOP CHORD

9-12=-597/632, 9-10=-928/1220

BOT CHORD 2-20=-270/2485, 18-20=-310/2375, 16-18=-22/1426, 14-16=-41/1371, 13-14=-957/1177,

12-13=-1740/1508, 10-12=-1139/949

WEBS 3-20=0/385, 3-18=-826/328, 5-18=-123/895, 5-16=0/259, 7-16=-131/341,

7-14=-1397/743, 8-14=-702/1756, 8-13=-2422/921

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) 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) 2=119, 13=336
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 4-0-3 oc purlins.

Rigid ceiling directly applied or 5-10-13 oc bracing.

August 1,2023

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/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)



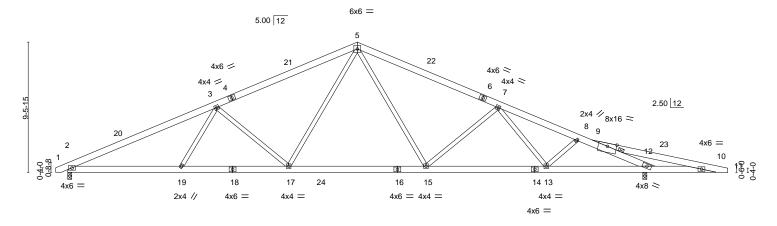
Job		Truss	Truss Type	Qty	Ply	Lot 7 Turlington Acres
						159853557
J0823-4516		A5	ROOF SPECIAL	5	1	
						Job Reference (optional)
Comtook Inc	Foyetto	/illo NC 20214			0 420 0 10	on 6 2022 MiTok Industrios Inc. Mon Jul 21 12:55:47 2022 Page 1

Comtech, Inc.

10-2-15

ID: BbYn2flZx7QTBCZMOb5ZtVzDvdq-RfC? PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC? full filter for the property of the property of38-2-0 1-1-6 31-3-15 . 37-0-10 47-2-0 10-2-15 5-8-11 9-0-0

Scale = 1:83.9



H	8-3-8 8-3-8	16-1-0 7-9-8		26-1-0 10-0-0	34-10-2 8-9-2	42-0-4 42 ₇ 2-0 7-2-2 0-1-12	47-2-0 5-0-0
LOADING (==f)							
LOADING (psf) TCLL 20.0	SPACING- Plate Grip DOI	2-0-0 _ 1.15	CSI. TC 0.52	DEFL. Vert(LL)	in (loc) I/defl L/d -0.25 15-17 >999 360	PLATES MT20	GRIP 244/190
TCDL 10.0 BCLL 0.0	Lumber DOL Rep Stress Inc	1.15 r YES	BC 0.88 WB 0.71	Vert(CT) Horz(CT)	-0.42 15-17 >999 240 0.10 12 n/a n/a		
BCDL 10.0	Code IRC201:	-	Matrix-S	Wind(LL)	0.10 12 n/a n/a 0.10 17 >999 240	Weight: 314 lb	FT = 20%

LUMBER-**BRACING-**

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

-0₋10₋8 0-10-8

10-10-1

BOT CHORD

WEBS 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 3-7-2 oc purlins.

Except:

1 Row at midpt 9-12

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

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

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

Max Horz 2=-109(LC 13)

Max Uplift 2=-118(LC 12), 12=-219(LC 9) Max Grav 2=1701(LC 1), 12=2144(LC 1)

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

2-3=-3383/617, 3-5=-2643/601, 5-7=-2604/548, 7-8=-2986/442, 8-9=-2967/395, TOP CHORD

9-12=-4131/1246, 9-10=-978/1140

BOT CHORD 2-19=-431/2988, 17-19=-473/2880, 15-17=-190/1916, 13-15=-396/2726, 12-13=-249/2646,

10-12=-1061/997

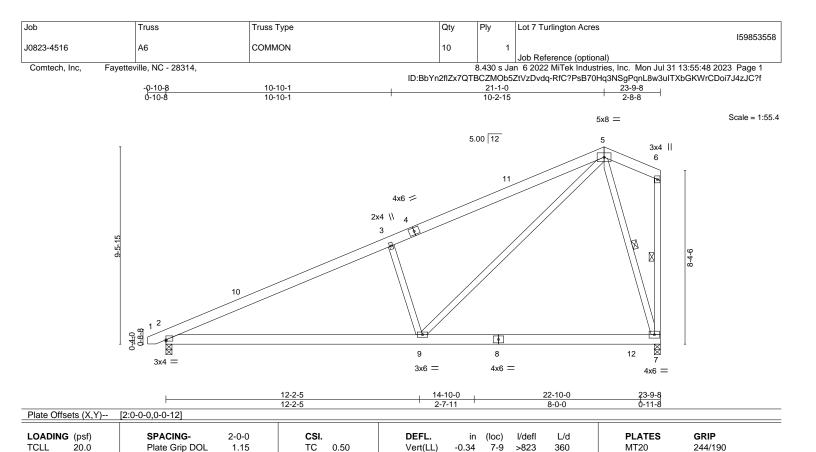
3-19=0/381, 3-17=-815/322, 5-17=-117/888, 5-15=-57/820, 7-15=-656/240 **WEBS**

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-2 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)
- 6) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.







Vert(CT)

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

WEBS

-0.45

0.02

0.07

7-9

2-9

>626

>999

except end verticals.

1 Row at midpt

n/a

240

n/a

240

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

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

6-7, 5-7

Weight: 168 lb

FT = 20%

TCDL

BCLL

BCDL

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

10.0

0.0

10.0

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) Max Grav 2=990(LC 1), 7=1054(LC 2)

Lumber DOL

Rep Stress Incr

Code IRC2015/TPI2014

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

2-3=-1537/197, 3-5=-1374/280 TOP CHORD

BOT CHORD 2-9=-382/1331 WFBS

3-9=-645/357, 5-9=-255/1321, 5-7=-882/357

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

BC

WB

Matrix-S

0.66

0.71

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

1.15

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, 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

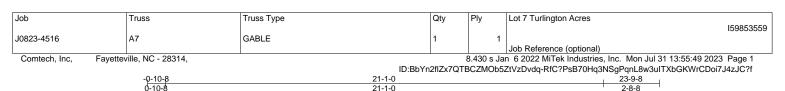


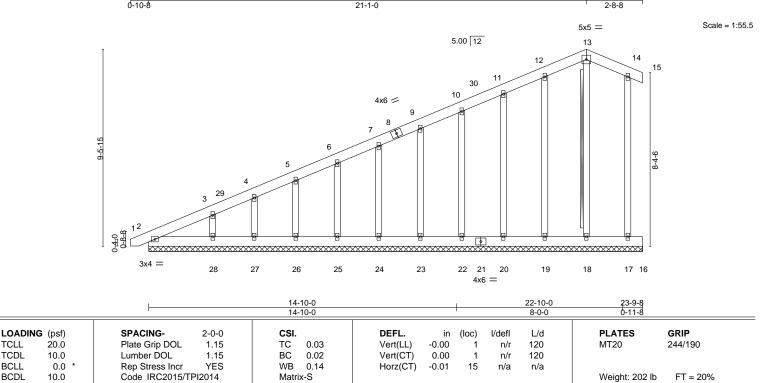


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LUMBER-

TCLL

TCDL

BCLL

BCDL

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

TOP CHORD BOT CHORD **WEBS**

Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing. 2x4 SPF No.2 - 13-18 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 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, 22, 23, 24, 25, 26, 27, 17 except 28=-122(LC

12)

Max Grav All reactions 250 lb or less at joint(s) 15, 2, 18, 19, 20, 22, 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=-268/91

WEBS 3-28=-172/251

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
- 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, 22, 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.



August 1,2023

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159853560 J0823-4516 **B1 GABLE** Job Reference (optional) Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 31 13:55:50 2023 Page 1 ID:BbYn2flZx7QTBCZMOb5ZtVzDvdq-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 10-6-0 10-6-0 Scale = 1:48.5 5x5 = 8.00 12 10 11 12 0-11-8 4x8 || 4x8 || 17 16 21 20 19 18 15 14 13 4x6 = 21-0-0 LOADING (psf) SPACING-CSI. DEFL. L/d **PLATES GRIP** 2-0-0 (loc) I/def 20.0 Plate Grip DOL -0.00 120 244/190 **TCLL** 1.15 TC 0.03 Vert(LL) n/r MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.02 Vert(CT) 0.00 n/r 120 **BCLL** 0.0 Rep Stress Incr YES WB 0.11 Horz(CT) 0.00 12 n/a n/a Code IRC2015/TPI2014 BCDL 10.0 Matrix-S Weight: 168 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

Qty

Lot 7 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 **OTHERS** 2x4 SP No.2

WEDGE

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

REACTIONS. All bearings 21-0-0.

Max Horz 2=225(LC 9) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 12, 19, 20, 21, 16, 15, 14 except 22=-148(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) -0-9-5 to 3-7-8, Exterior(2) 3-7-8 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.
- Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12, 19, 20, 21, 16, 15, 14 except (jt=lb) 22=148, 13=147.





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Job Truss Truss Type Qty Ply Lot 7 Turlington Acres 159853561 J0823-4516 B2 COMMON 2 Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 31 13:55:52 2023 Page 1 Fayetteville, NC - 28314, Comtech, Inc. ID:BbYn2flZx7QTBCZMOb5ZtVzDvdq-RfC?PsB70Hq3NSqPqnL8w3ulTXbGKWrCDoi7J4zJC?f 21-0-0 -0-10-8 0-10-8 5-3-13 5-3-13 15-8-3 5-2-3 5-2-3 5-3-13 4x6 = Scale = 1:47.2 5 2x4 = 2x4 =8.00 12 2x4 || 2x4 || 3

0-0-9

8-0-0

13

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

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

8

10 9 11 4x8 || 4x8 || 4x6 =2x4 || 2x4 || 10-6-0 21-0-0 10-6-0 10-6-0 Plate Offsets (X Y)-- [5:0-3-0 Edge]

T late Oil	Tate Offices (A, 1) [0.0 5 0, Eage]												
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 0.58	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									
BCLL	0.0 *	Rep Stress Incr YES	WB 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 **WEBS** 2x4 SP No.2

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 9)

Max Uplift 2=-54(LC 12), 8=-42(LC 13) Max Grav 2=1005(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=-165/691, 6-7=-893/275,

12

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=-1712/522

- 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) -0-8-15 to 3-7-14, Interior(1) 3-7-14 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.



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Job Truss Truss Type Qty Ply Lot 7 Turlington Acres 159853562 J0823-4516 **B**3 COMMON 9 Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 31 13:55:53 2023 Page 1 Fayetteville, NC - 28314, Comtech, Inc.

ID:BbYn2flZx7QTBCZMOb5ZtVzDvdq-RfC?PsB70Hq3NSqPqnL8w3ulTXbGKWrCDoi7J4zJC?f 5-3-13 5-3-13 15-8-3 21-0-0 5-2-3 5-2-3 5-3-13

> Scale = 1:47.2 4x6 =

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

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

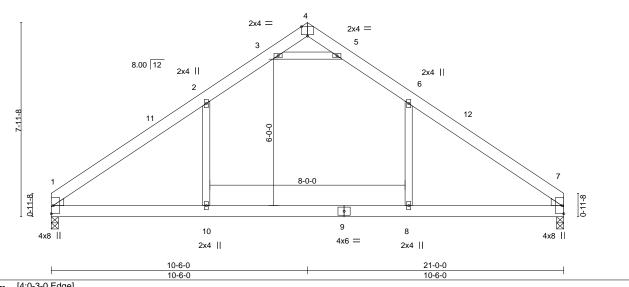


Plate Off	Plate Offsets (X,Y) [4:0-3-0,Edge]													
														_
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		D	EFL.	in	(loc)	I/defI	L/d	PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.59	V	/ert(LL)	-0.17	8-10	>999	360	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.40	V	/ert(CT)	-0.27	8-10	>921	240			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.27	H	lorz(CT)	0.02	7	n/a	n/a			
BCDL	10.0	Code IRC2015/TP	PI2014	Matri	x-S	\ v	Vind(LL)	0.10	1-10	>999	240	Weight: 128 lb	FT = 20%	

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE

Left: 2x4 SP No.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

1-10=-40/961, 8-10=-40/961, 7-8=-40/961 **BOT CHORD** 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.



August 1,2023

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Symbols

PLATE LOCATION AND ORIENTATION



offsets are indicated and fully embed teeth Center plate on joint unless x, y 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 software or upon request

PLATE SIZE

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

LATERAL BRACING LOCATION



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

BEARING



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

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

DSB-22:

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

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

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

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

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MiTek



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

General Safety Notes

Damage or Personal Injury Failure to Follow Could Cause Property

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Ņ Truss bracing must be designed by an engineer. For 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

'n

- joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1. Place plates on each face of truss at each
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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- 9 Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the camber for dead load deflection responsibility of truss fabricator. General practice is to
- 11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- 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 project engineer before use. environmental, health or performance risks. Consult with
- 19. 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.