

Trenco 818 Soundside Rd Edenton, NC 27932

Re: J0723-3606 Lot 3 Micro Tower

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Pages or sheets covered by this seal: I59595288 thru I59595299

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

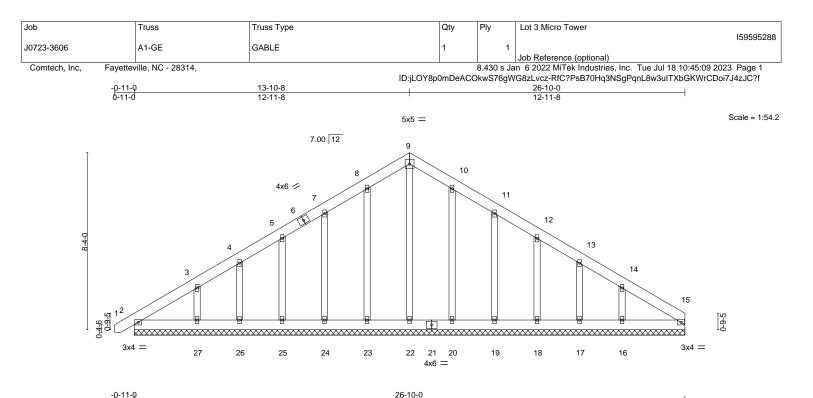
North Carolina COA: C-0844



July 19,2023

Gilbert, Eric

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 MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or 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.



<u> </u>				25-11-0								
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	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	0.13	Horz(CT)	0.00	15	n/a	n/a		
BCDL	10.0	Code IRC2015/TF	PI2014	Matri	x-S						Weight: 204 lb	FT = 20%

BOT CHORD

LUMBER-BRACING-

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

2x4 SP No.2

All bearings 25-11-0. Max Horz 2=238(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 2, 23, 24, 25, 26, 20, 19, 18, 17 except 27=-133(LC 12),

16=-134(LC 13)

All reactions 250 lb or less at joint(s) 15, 2, 22, 23, 24, 25, 26, 20, 19, 18, 17 except 27=261(LC Max Grav

19), 16=267(LC 20)

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

REACTIONS.

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 23, 24, 25, 26, 20, 19, 18, 17 except (jt=lb) 27=133, 16=134.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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

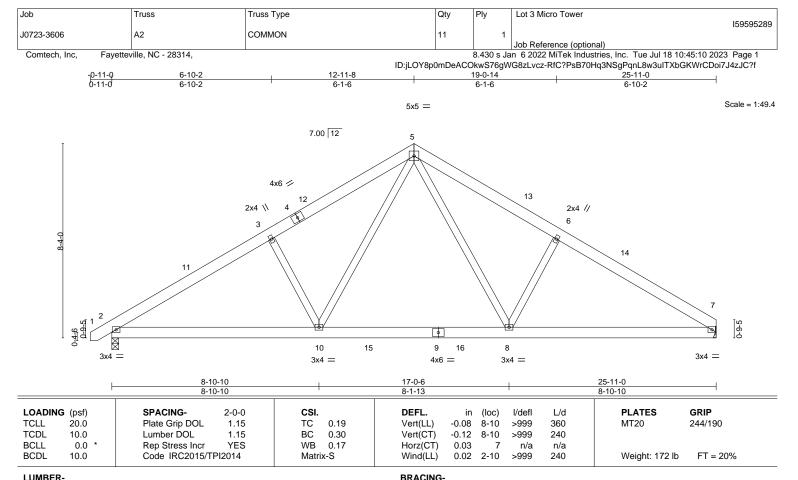
Rigid ceiling directly applied or 10-0-0 oc bracing.

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

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

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





BOT CHORD

LUMBER-

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

REACTIONS.

7=Mechanical, 2=0-3-8 (size) Max Horz 2=191(LC 11)

Max Uplift 7=-58(LC 13), 2=-70(LC 12) Max Grav 7=1049(LC 20), 2=1102(LC 19)

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

2-3=-1600/328, 3-5=-1450/384, 5-6=-1461/395, 6-7=-1594/339 TOP CHORD

BOT CHORD 2-10=-182/1405, 8-10=-17/938, 7-8=-185/1281

WEBS 5-8=-126/690, 6-8=-399/244, 5-10=-123/672, 3-10=-388/237

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) -0-9-5 to 3-7-8, Interior(1) 3-7-8 to 12-11-8, Exterior(2) 12-11-8 to 17-4-5, Interior(1) 17-4-5 to 25-10-4 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) 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) 7, 2.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building



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

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

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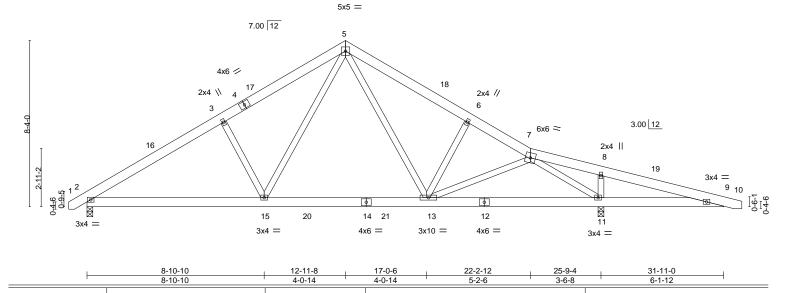
818 Soundside Road Edenton, NC 27932

Job Truss Truss Type Qty Lot 3 Micro Tower 159595290 J0723-3606 **A3** Roof Special 10 Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Jul 18 10:45:11 2023 Page 1

ID:jLOY8p0mDeACOkwS76gWG8zLvcz-RfC?PsB70Hq3NSqPqnL8w3uITXbGKWrCDoi7J4zJC?f 31-11-0 32-10-0 0-11-0 19-0-14 22-2-12 25-9-4 26_r2₇10 -0-11-0 0-11-0 6-10-2 6-1-6 6-1-6 3-1-14 3-6-8 0-5-6 5-8-6

Scale = 1:57.8



DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-TOP CHORD

BOT CHORD

(loc)

11

2-15

-0.09 13-15

0.02

0.02

-0.13 13-15

I/defl

>999

>999

>999

6-0-0 oc bracing: 9-11.

n/a

L/d

360

240

n/a

240

PLATES

Weight: 217 lb

MT20

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

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

GRIP

244/190

FT = 20%

LUMBER-

LOADING (psf)

TCLL

TCDL

BCLL

BCDL

20.0

10.0

0.0

10.0

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

WEBS 2x4 SP No.2

REACTIONS. (size) 2=0-3-8, 11=0-3-8 Max Horz 2=-192(LC 10)

Max Uplift 2=-72(LC 12), 11=-135(LC 9) Max Grav 2=1046(LC 19), 11=1627(LC 1)

SPACING-

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 $2\text{-}3\text{=-}1500/242,\ 3\text{-}5\text{=-}1350/298,\ 5\text{-}6\text{=-}1278/193,\ 6\text{-}7\text{=-}1315/136,\ 7\text{-}8\text{=-}848/854,}$

2-0-0

1.15

1.15

YES

8-9--925/911

BOT CHORD 2-15=-106/1322, 13-15=0/846, 11-13=-30/933, 9-11=-829/931

WFBS 5-13=-48/512, 6-13=-353/212, 5-15=-132/690, 3-15=-388/241, 8-11=-435/249,

7-13=-340/417, 7-11=-1750/662

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) -0-9-5 to 3-7-8, Interior(1) 3-7-8 to 12-11-8, Exterior(2) 12-11-8 to 17-4-5, Interior(1) 17-4-5 to 32-7-7 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

CSI.

0.30

0.30

0.56

TC

ВС

WB

Matrix-S

- 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) 2 except (jt=lb)
- 6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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

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Job Truss Truss Type Qty Lot 3 Micro Tower 159595291 J0723-3606 A4-GE **GABLE** Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Jul 18 10:45:12 2023 Page 1 Fayetteville, NC - 28314, Comtech, Inc. ID:jLOY8p0mDeACOkwS76gWG8zLvcz-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 14-11-12 6-11-12 5-11-12 2-0-4 10-11-4 5x12 || Scale = 1:50.0 7.00 12 5x8 || 3x4 =10 4x6 / **P** 12 0-6-12 • 16 17 15 3x10 = 3x6 > 3x10 =4x6 = 13 14 14-11-12 6-11-12 6-11-12 10-11-4 Plate Offsets (X,Y)--[2:0-5-10,0-1-8], [12:0-5-10,0-1-8]

LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.87 BC 0.47 WB 0.28 Matrix-S	DEFL. in (loc) l/deft Vert(LL) -0.24 15-17 >999 Vert(CT) -0.37 15-17 >733 Horz(CT) 0.03 12 n/a Wind(LL) 0.18 17 >999	360 240 n/a	PLATES GRIP MT20 244/190 Weight: 194 lb FT = 20%
LUMBER			DD 4 01110		

LUMBER-BRACING-

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

Structural wood sheathing directly applied or 4-10-7 oc purlins.

1 Row at midpt

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

11-14

6-0-0 oc bracing: 13-14. **JOINTS** 1 Brace at Jt(s): 11

REACTIONS. All bearings 3-11-8 except (jt=length) 2=0-3-8.

Max Horz 2=236(LC 9) (lb) -

2x4 SP No.2

2x4 SP No.2

Max Uplift All uplift 100 lb or less at joint(s) 12 except 2=-219(LC 12), 14=-193(LC 12), 13=-107(LC 13)

Max Grav All reactions 250 lb or less at joint(s) except 12=556(LC 20), 2=1171(LC 19), 14=356(LC 19), 13=528(LC

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

TOP CHORD 2-3=-1621/317, 3-5=-1259/381, 5-6=-352/835, 6-8=-589/186, 8-10=-668/311,

10-12=-867/127, 6-7=-539/1520, 7-9=-810/339, 9-11=-810/435, 11-14=-1021/392

BOT CHORD 2-17=-195/1383, 15-17=-195/1383, 14-15=-195/1383, 13-14=-576/0, 12-13=0/576 **WEBS**

5-7=-2307/849, 3-17=0/422, 11-15=0/473, 9-10=-292/339

NOTES-

WEBS

OTHERS

- 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 12-11-8, Corner(3) 12-11-8 to 17-4-5, Exterior(2) 17-4-5 to 25-11-0 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 studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12 except (jt=lb) 2=219. 14=193. 13=107.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Truss Type Qty 159595292 J0723-3606 B1GE Common Supported Gable 2 Job Reference (optional)
8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Jul 18 10:45:13 2023 Page 1 Comtech, Inc, Fayetteville, NC - 28314, ID:jLOY8p0mDeACOkwS76gWG8zLvcz-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 12-10-0 . 11-11-0 5-11-8 5-11-8 0-11-0 Scale = 1:25.8 5x5 = 7.00 12 13 12 10 9 11 3x4 = 3x4 = 11-11-0 11-11-0 LOADING (psf) SPACING-CSI. DEFL. L/d **PLATES** GRIP 2-0-0 (loc) I/def 20.0 Plate Grip DOL Vert(LL) -0.00 120 244/190 **TCLL** 1.15 TC 0.02 n/r MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.01 Vert(CT) 0.00 n/r 120 **BCLL** 0.0 Rep Stress Incr YES WB 0.02 Horz(CT) 0.00 n/a n/a Code IRC2015/TPI2014 BCDL 10.0 Matrix-S Weight: 78 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

Lot 3 Micro Tower

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

REACTIONS. All bearings 11-11-0.

Max Horz 1=-93(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 12, 13, 10, 9

Max Grav All reactions 250 lb or less at joint(s) 1, 7, 11, 12, 13, 10, 9

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

NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3) 0-0-0 to 4-4-13, Exterior(2) 4-4-13 to 5-11-8, Corner(3) 5-11-8 to 10-4-5, Exterior(2) 10-4-5 to 12-8-5 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 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.
- * 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) 1, 12, 13, 10, 9.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1.

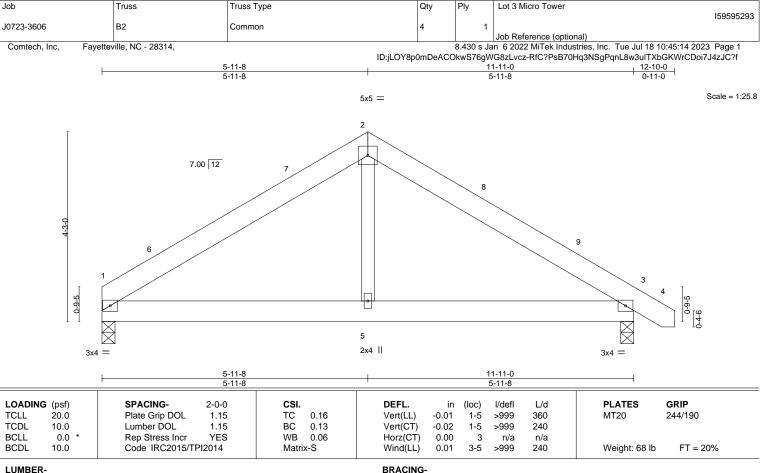


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BOT CHORD

LUMBER-

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

REACTIONS.

(size) 1=0-3-8, 3=0-3-8 Max Horz 1=-93(LC 8)

Max Uplift 1=-25(LC 12), 3=-39(LC 13) Max Grav 1=463(LC 1), 3=522(LC 1)

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

TOP CHORD 1-2=-580/156, 2-3=-583/152 **BOT CHORD** 1-5=-26/413, 3-5=-26/413

WEBS 2-5=0/281

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) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 5-11-8, Exterior(2) 5-11-8 to 10-4-5, Interior(1) 10-4-5 to 12-8-5 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



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

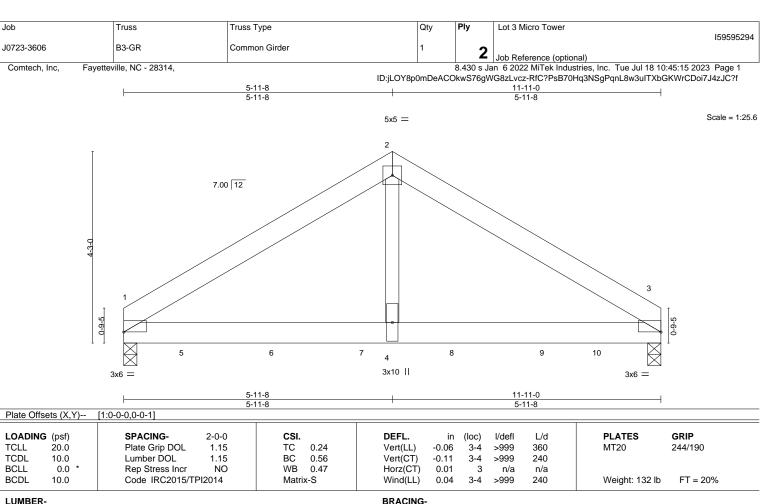
Rigid ceiling directly applied or 10-0-0 oc bracing.

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BOT CHORD

LUMBER-

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

REACTIONS. (size) 1=0-3-8, 3=0-3-8 Max Horz 1=-90(LC 23)

Max Uplift 1=-224(LC 8), 3=-245(LC 9) Max Grav 1=3332(LC 1), 3=3642(LC 1)

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

1-2=-4020/289, 2-3=-4010/288 TOP CHORD **BOT CHORD** 1-4=-192/3347, 3-4=-192/3347

WFBS 2-4=-184/3809

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: 2x6 - 2 rows staggered at 0-8-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=224, 3=245.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1007 lb down and 78 lb up at 1-4-12, 1007 lb down and 78 lb up at 3-4-12, 1007 lb down and 78 lb up at 5-4-12, 1007 lb down and 78 lb up at 7-4-12, and 1007 lb down and 78 lb up at 9-4-12, and 1007 lb down and 78 lb up at 10-6-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

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



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

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

July 19,2023

Continued on page 2

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

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

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



Job Truss Truss Type Qty Ply Lot 3 Micro Tower 159595294 J0723-3606 B3-GR Common Girder

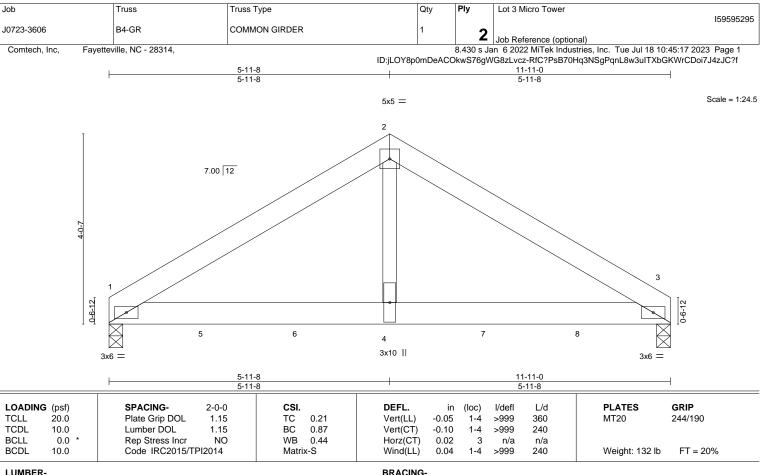
Comtech, Inc, Fayetteville, NC - 28314,

Z Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Jul 18 10:45:16 2023 Page 2 ID:jLOY8p0mDeACOkwS76gWG8zLvcz-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 5=-1007(B) 6=-1007(B) 7=-1007(B) 8=-1007(B) 9=-1007(B) 10=-1007(B)



BOT CHORD

LUMBER-

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

REACTIONS.

(size) 1=0-3-8, 3=0-3-8 Max Horz 1=85(LC 26) Max Uplift 1=-198(LC 8), 3=-203(LC 9)

Max Grav 1=2947(LC 1), 3=3020(LC 1)

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

TOP CHORD 1-2=-3939/281, 2-3=-3938/280 **BOT CHORD** 1-4=-191/3335, 3-4=-191/3335

WEBS 2-4=-166/3564

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: 2x6 - 2 rows staggered at 0-9-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1007 lb down and 78 lb up at 2-0-12, 1007 lb down and 78 lb up at 4-0-12, 1007 lb down and 78 lb up at 6-0-12, and 1007 lb down and 78 lb up at 8-0-12, and 1007 lb down and 78 lb up at 10-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others

LOAD CASE(S) Standard

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

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

Vert: 4=-1007(B) 5=-1007(B) 6=-1007(B) 7=-1007(B) 8=-1007(B)





Edenton, NC 27932

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

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

Job Truss Truss Type Qty Lot 3 Micro Tower 159595296 J0723-3606 D01GE Common Supported Gable Job Reference (optional)
8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Jul 18 10:45:18 2023 Page 1 Comtech, Inc, Fayetteville, NC - 28314, ID:jLOY8p0mDeACOkwS76gWG8zLvcz-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 22-10-0 0-11-0

5x5 =

Scale = 1:46.5

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

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

10-11-8

7.00 12 9 10 11 3x4 = 3x4 = 23 22 21 20 19 18 17 16 15 14 4x6 =

21-11-0								
LOADING (psf) TCLL 20.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.03	DEFL. Vert(LL) 0	in (loc)	l/defl L/d n/r 120	PLATES MT20	GRIP 244/190	
TCDL 10.0 BCLL 0.0 * BCDL 10.0	Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	BC 0.02 WB 0.08 Matrix-S	Vert(CT) 0	0.00 12 0.00 12	n/r 120 n/a n/a	Weight: 162 lb	FT = 20%	

BOT CHORD

LUMBER-BRACING-TOP CHORD

10-11-8

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

REACTIONS. All bearings 21-11-0.

Max Horz 2=-205(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 21, 22, 17, 16, 15 except 23=-113(LC 12), 14=-112(LC 13) All reactions 250 lb or less at joint(s) 2, 19, 20, 21, 22, 17, 16, 15, 12 except 23=253(LC 19), Max Grav

14=252(LC 20)

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 10-11-8, Corner(3) 10-11-8 to 15-4-5, Exterior(2) 15-4-5 to 22-8-5 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 requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20, 21, 22, 17, 16, 15 except (jt=lb) 23=113, 14=112.



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

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

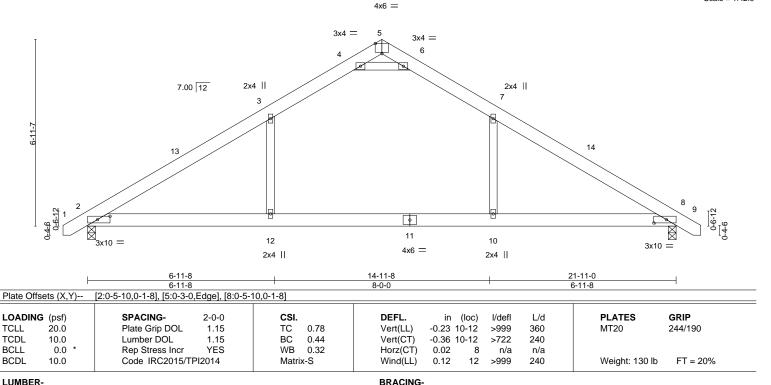
AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Lot 3 Micro Tower 159595297 J0723-3606 D02 Common 6 Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Jul 18 10:45:20 2023 Page 1 Comtech, Inc, Fayetteville, NC - 28314,

ID:jLOY8p0mDeACOkwS76gWG8zLvcz-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 22-10-0 0-11-0 14-11-8 21-11-0 T0-11-0 0-11-0 16-0-14 5-10-2 1-1-6 4-0-0 4-0-0 1-1-6 5-10-2

Scale = 1:42.9



TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (size) 2=0-3-8, 8=0-3-8 Max Horz 2=-164(LC 10)

Max Uplift 2=-62(LC 12), 8=-62(LC 13) Max Grav 2=1048(LC 19), 8=1048(LC 20)

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

TOP CHORD 2-3=-1481/221, 3-4=-1086/286, 4-5=-260/1272, 5-6=-260/1274, 6-7=-1086/286,

7-8=-1480/221

BOT CHORD 2-12=-65/1164, 10-12=-65/1164, 8-10=-65/1164 WEBS 7-10=0/462, 3-12=0/462, 4-6=-2567/617

NOTES-

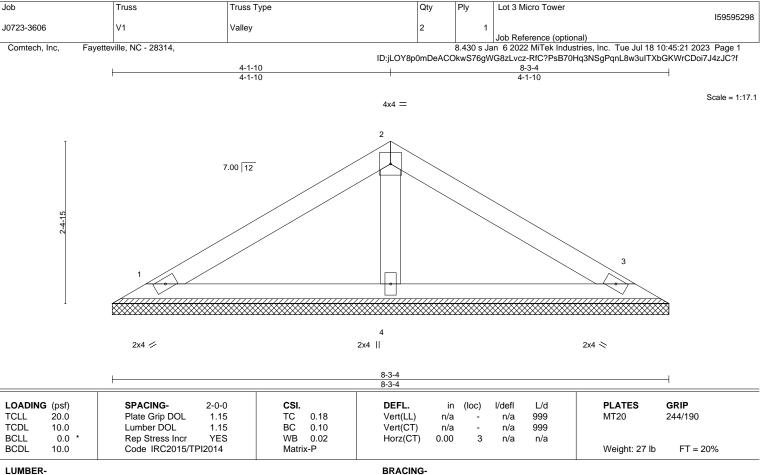
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-5 to 3-7-8, Interior(1) 3-7-8 to 10-11-8, Exterior(2) 10-11-8 to 15-1-4, Interior(1) 15-1-4 to 22-8-5 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.
- * 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 5-6-9 oc purlins.

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





BOT CHORD

LUMBER-

REACTIONS.

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

OTHERS 2x4 SP No.2

> 1=8-3-4, 3=8-3-4, 4=8-3-4 (size) Max Horz 1=-50(LC 10)

Max Uplift 1=-24(LC 12), 3=-29(LC 13)

Max Grav 1=151(LC 1), 3=151(LC 1), 4=273(LC 1)

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

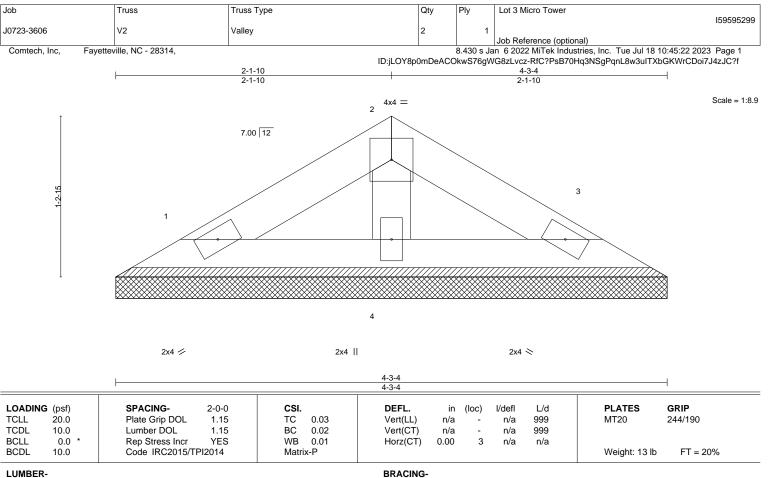
NOTES-

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



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

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



BOT CHORD

LUMBER-

REACTIONS.

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

OTHERS 2x4 SP No.2

> 1=4-3-4, 3=4-3-4, 4=4-3-4 (size) Max Horz 1=-22(LC 8)

Max Uplift 1=-11(LC 12), 3=-13(LC 13)

Max Grav 1=67(LC 1), 3=67(LC 1), 4=121(LC 1)

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

NOTES-

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



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

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



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. ndicated by symbol shown and/or

BEARING



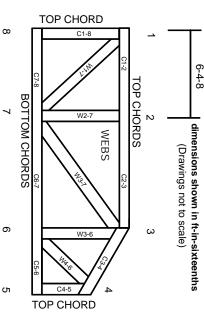
Min size shown is for crushing only number where bearings occur. reaction section indicates joint (supports) occur. Icons vary but Indicates location where bearings

Industry Standards:

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

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

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 bracing should be considered. may require bracing, or alternative Tor I wide truss spacing, individual lateral braces themselves
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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designer, erection supervisor, property owner and all other interested parties. Provide copies of this truss design to the building

4

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

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

9

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- 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
- 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.