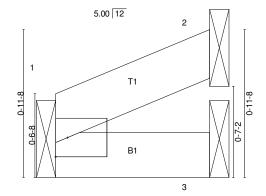
Job	Truss	Truss Type	Qty	Ply	REED - OFFICE BLDG
3661678	CJ01	Jack-Open	8	1	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055, Kim Holloway

8.530 s Jan 6 2022 MTek Industries, Inc. Wed Sep 6 13:21:20 2023 Page 1 ID:39IADgRZQQgc\_y6?es8dwBygMZE-0S8SGuyK7o25AGNslkPfYWyUC5gPShg5Gw5yscygM?







3x4 =

LOADING (psf)	SPACING- 2-0-0	CSI.	<b>DEFL.</b> in (loc) I/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.01	Vert(LL) -0.00 6 >999 240	MT20 244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.01	Vert(CT) -0.00 6 >999 180	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00 3 n/a n/a	
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MP		Weight: 3 lb $FT = 20\%$

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

## **BRACING-**

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 1-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=37/Mechanical, 2=24/Mechanical, 3=13/Mechanical

Max Horz 2=14(LC 12)

Max Uplift1=-13(LC 12), 2=-7(LC 12)

Max Grav 1=37(LC 1), 2=24(LC 1), 3=18(LC 3)

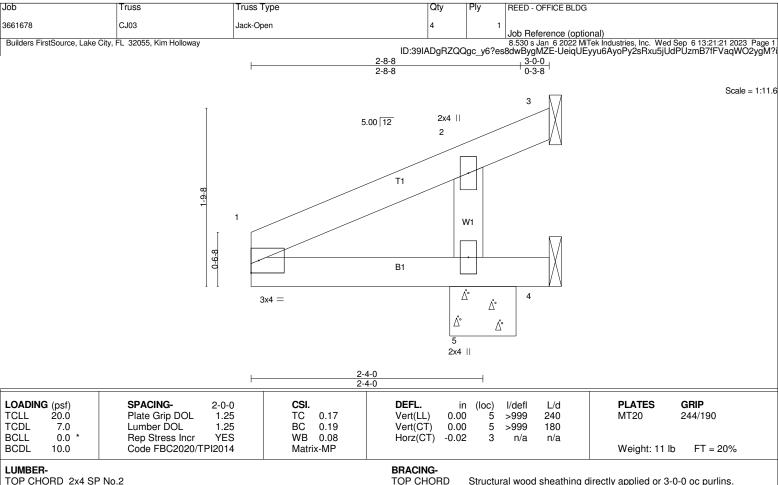
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

## NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 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
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 20.0psf 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.

- 6) Refer to girder(s) for truss to truss connections.
  7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 1 and 7 lb uplift at joint 2.



TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 TOP CHORD BOT CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 3=-96/Mechanical, 4=-112/Mechanical, 5=426/0-8-0

Max Horz 5=42(LC 12)

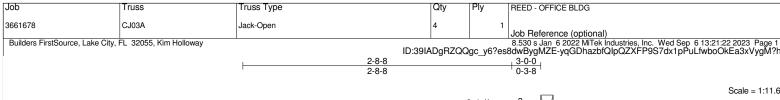
Max Uplift3=-96(LC 1), 4=-112(LC 1), 5=-113(LC 8) Max Grav 3=19(LC 8), 4=28(LC 8), 5=426(LC 1)

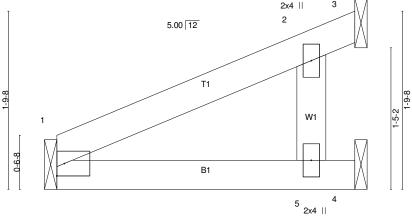
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

WEBS 2-5=-230/274

#### NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 20.0psf 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 96 lb uplift at joint 3, 112 lb uplift at joint 4 and 113 lb uplift at joint 5.





3x4 =

LOADING (psf)	SPACING- 2-0-0	CSI.	<b>DEFL.</b> in (loc) I/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.09	Vert(LL) 0.01 5-8 >999 240	MT20 244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.09	Vert(CT) -0.01 5-8 >999 180	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.02	Horz(CT) 0.00 1 n/a n/a	
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MP	, ,	Weight: 11 lb FT = 20%

## LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3

## BRACING-

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 1=109/Mechanical, 3=37/Mechanical, 4=71/Mechanical

Max Horz 4=42(LC 12)

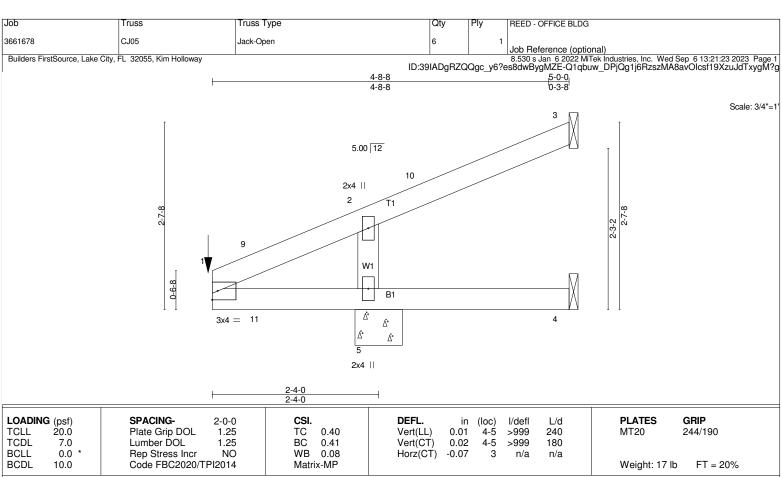
Max Uplift1=-17(LC 12), 3=-4(LC 12), 4=-37(LC 12) Max Grav 1=109(LC 1), 3=48(LC 3), 4=71(LC 1)

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

## NOTES-

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 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
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 20.0psf 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
- between the bottom chord and any other members.

  5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 1, 4 lb uplift at joint 3 and 37 lb uplift at joint 4.



TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 BRACING-

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 3=10/Mechanical, 4=-32/Mechanical, 5=463/0-8-0

Max Horz 5=71(LC 12)

Max Uplift3=-43(LC 16), 4=-32(LC 1), 5=-93(LC 12) Max Grav 3=10(LC 1), 4=12(LC 8), 5=463(LC 1)

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

WEBS 2-5=-275/269

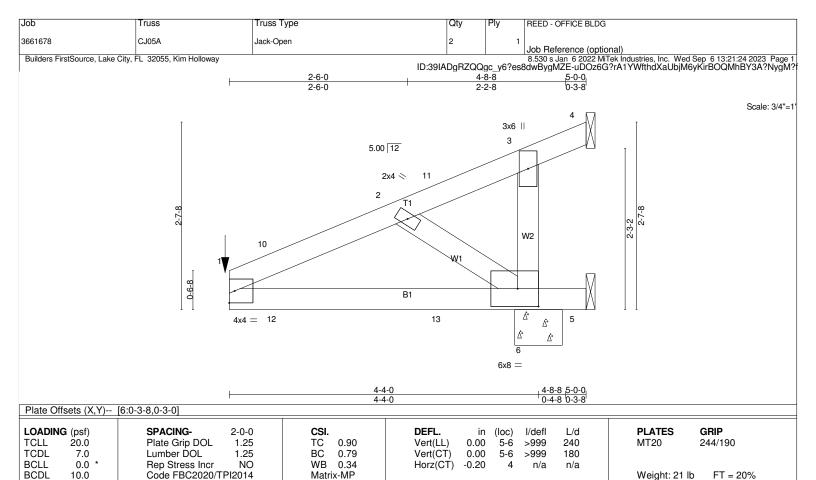
#### NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 4-11-4 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 20.0psf 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 3, 32 lb uplift at joint 4 and 93 lb uplift at joint 5.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 75 lb down and 46 lb up at 0-0-0 on top 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=1.25, Plate Increase=1.25 Uniform Loads (plf)

Vert: 1-3=-54, 4-6=-20 Concentrated Loads (lb) Vert: 1=-75



TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 2x4 SP No.3 WFBS

**BRACING-**

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 5-0-0 oc purlins. Rigid ceiling directly applied or 6-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 4=-705/Mechanical, 5=-551/Mechanical, 6=1696/0-8-0

Max Horz 6=71(LC 12)

Max Uplift4=-705(LC 1), 5=-551(LC 1), 6=-412(LC 8) Max Grav 4=146(LC 8), 5=135(LC 8), 6=1696(LC 1)

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

TOP CHORD 1-10=-347/272, 2-10=-341/314, 3-4=-287/278 1-12=-297/367, 12-13=-297/367, 6-13=-297/367 3-6=-1145/1141, 2-6=-308/356 **BOT CHORD** 

WFBS

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-Č Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 4-11-4 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 20.0psf 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.

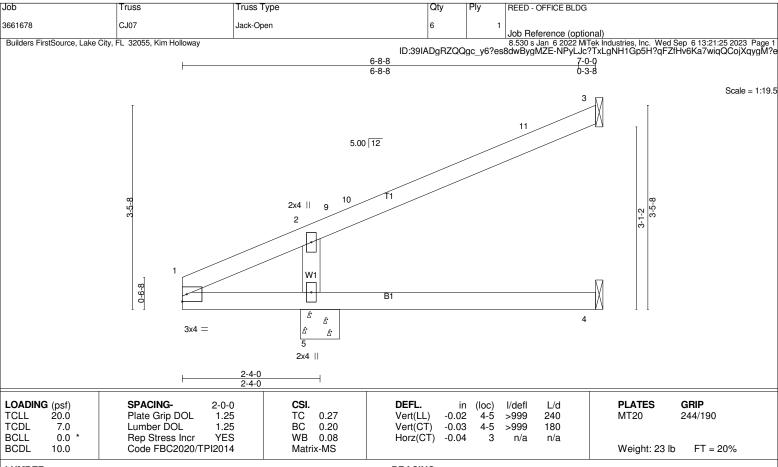
  5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 705 lb uplift at joint 4, 551 lb uplift at joint 5 and 412 lb uplift at joint 6.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 75 lb down and 46 lb up at 0-0-0 on top 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=1.25, Plate Increase=1.25 Uniform Loads (plf)

Vert: 1-4=-54, 5-7=-20

Concentrated Loads (lb) Vert: 1=-75



TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3

### BRACING-

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 3=102/Mechanical, 4=37/Mechanical, 5=375/0-8-0

Max Horz 5=95(LC 12)

Max Uplift3=-62(LC 12), 5=-71(LC 8)

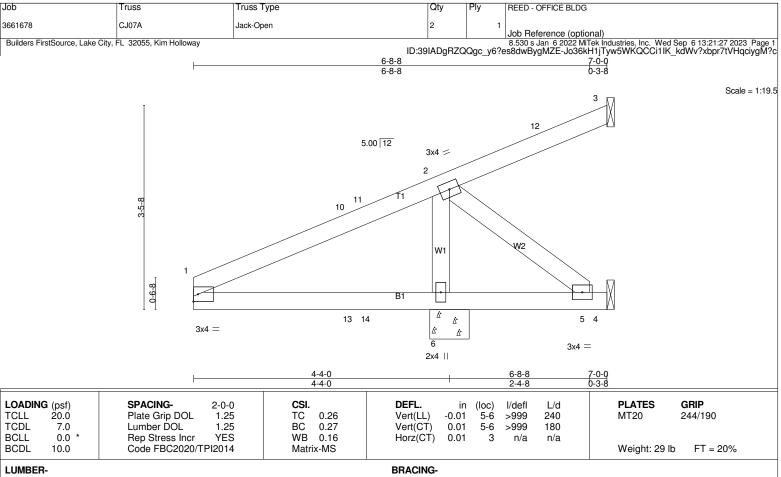
Max Grav 3=102(LC 1), 4=75(LC 3), 5=375(LC 1)

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

WEBS 2-5=-275/260

#### NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 6-11-4 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 20.0psf 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 62 lb uplift at joint 3 and 71 lb uplift at joint 5.



TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 **WFBS** 2x4 SP No.3

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.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 3=37/Mechanical, 4=-171/Mechanical, 6=648/0-8-0

Max Horz 6=95(LC 12)

Max Uplift3=-17(LC 12), 4=-171(LC 1), 6=-168(LC 8) Max Grav 3=37(LC 1), 4=41(LC 8), 6=648(LC 1)

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

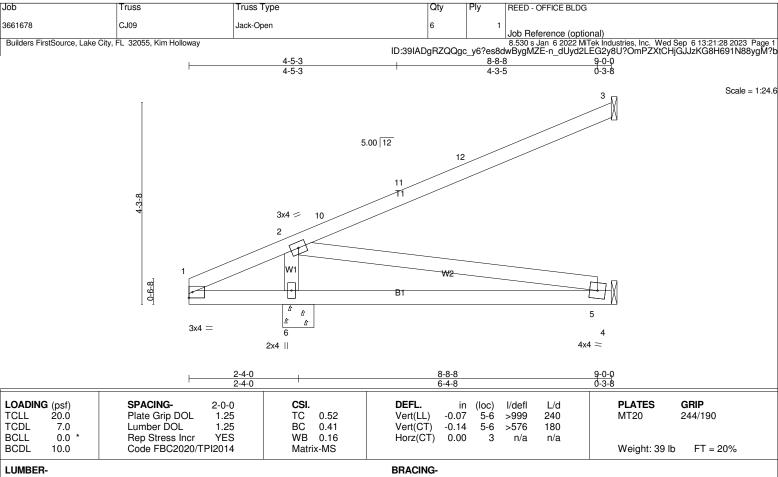
TOP CHORD

1-10=-399/266, 10-11=-392/287, 2-11=-389/318 1-13=-245/397, 13-14=-245/397, 6-14=-245/397, 5-6=-245/262 **BOT CHORD** 

**WEBS** 2-6=-544/552. 2-5=-333/312

### NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-Č Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 6-11-4 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 20.0psf 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 3, 171 lb uplift at joint 4 and 168 lb uplift at joint 6.



TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 TOP CHORD BOT CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 3=148/Mechanical, 4=76/Mechanical, 6=438/0-8-0

Max Horz 6=115(LC 12)

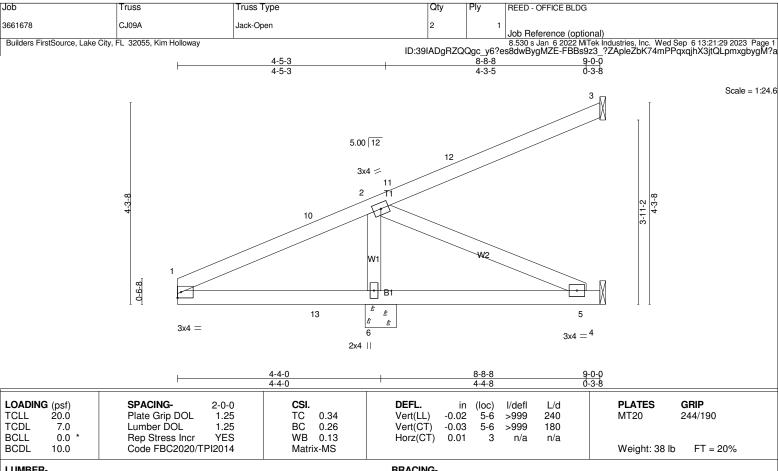
Max Uplift3=-61(LC 12), 4=-8(LC 12), 6=-78(LC 12) Max Grav 3=148(LC 1), 4=123(LC 3), 6=438(LC 1)

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

WEBS 2-6=-325/285

#### NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 8-11-4 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 20.0psf 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 61 lb uplift at joint 3, 8 lb uplift at joint 4 and 78 lb uplift at joint 6.



TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 **WFBS** 2x4 SP No.3

**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.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 3=98/Mechanical, 4=-59/Mechanical, 6=622/0-8-0

Max Horz 6=115(LC 12)

Max Uplift3=-37(LC 12), 4=-59(LC 1), 6=-145(LC 8) Max Grav 3=98(LC 1), 4=22(LC 10), 6=622(LC 1)

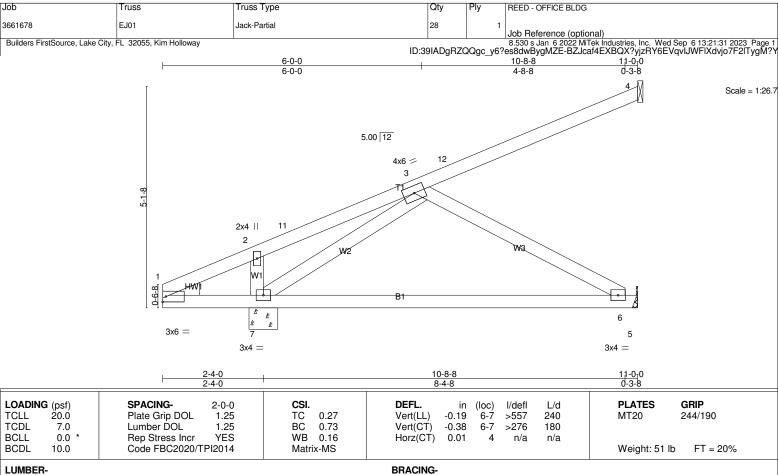
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-10=-384/239, 2-10=-373/297 **BOT CHORD** 1-13=-221/377, 6-13=-221/377

**WEBS** 2-6=-497/436

## NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 8-11-4 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 20.0psf 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 3, 59 lb uplift at joint 4 and 145 lb uplift at joint 6.



TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 2x4 SP No.3 WFBS

WFDGF

Left: 2x4 SP No.3

**BRACING-**

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 4=111/Mechanical, 5=192/Mechanical, 7=506/0-8-0

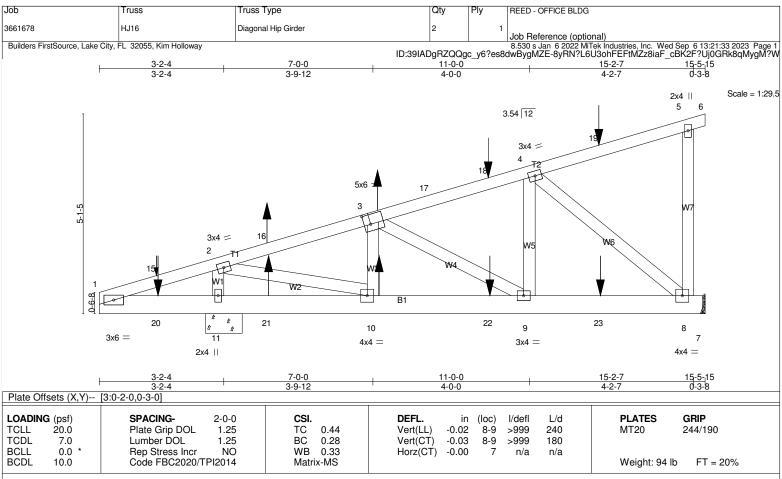
Max Horz 7=135(LC 12)

Max Uplift4=-42(LC 8), 5=-41(LC 12), 7=-86(LC 12)

**FORCES.** (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. WEBS 3-6=-259/186, 3-7=-262/180

## NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 10-11-4 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 20.0psf 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 4, 41 lb uplift at joint 5 and 86 lb uplift at joint 7.



TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.2 2x4 SP No.3 WFBS

**BRACING-**

TOP CHORD

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

**BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 7=592/Mechanical, 11=461/0-11-5

Max Horz 11=135(LC 4)

Max Uplift7=-254(LC 10), 11=-429(LC 4) Max Grav 7=592(LC 1), 11=552(LC 35)

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

TOP CHORD 1-15=-143/361, 2-15=-135/381, 2-16=-392/379, 3-16=-368/360, 3-17=-553/240,

17-18=-526/246, 4-18=-482/219

**BOT CHORD** 1-20=-362/153, 11-20=-362/153, 11-21=-362/18, 10-21=-362/18, 10-22=-395/334,

9-22=-395/334, 9-23=-265/505, 8-23=-265/505

2-11=-427/287, 2-10=-308/598, 3-10=-294/70, 3-9=0/358, 4-9=-91/271, 4-8=-631/335

# **WEBS** NOTES-

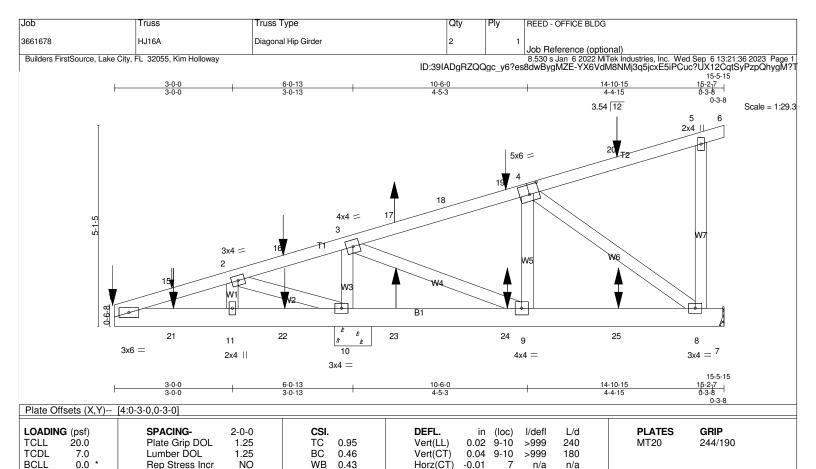
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; cantilever left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 20.0psf 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 254 lb uplift at joint 7 and 429 lb uplift at joint
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 9 lb down and 9 lb up at 1-6-1, 9 lb down and 9 lb up at 1-6-1, 55 lb down and 172 lb up at 4-4-0, 55 lb down and 172 lb up at 4-4-0, 65 lb up at 7-1-15, 65 lb up at 7-1-15, 34 lb down and 70 lb up at 9-11-14, 34 lb down and 70 lb up at 9-11-14, and 71 lb down and 74 lb up at 12-9-13, and 71 lb down and 74 lb up at 12-9-13 on top chord, and 3 lb down and 3 lb up at 1-6-1, 3 lb down and 3 lb up at 1-6-1, 21 lb down and 140 lb up at 4-4-0, 21 lb down and 140 lb up at 4-4-0, 5 lb down and 61 lb up at 7-1-15, 5 lb down and 61 lb up at 7-1-15, 29 lb down at 9-11-14, 29 lb down at 9-11-14, and 67 lb down and 29 lb up at 12-9-13, and 67 lb down and 29 lb up at 12-9-13 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 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

Continued on page 2

)	Truss	Truss Type	Qty	Ply	REED - OFFICE BLDG
31678	HJ16	Diagonal Hip Girder	2		1 Joh Reference (ontional)
lders FirstSource, La	ke City, FL 32055, Kim Hollowa	ky	ID-0014 D - D700		Job Reference (optional)  8.530 s Jan 6 2022 MiTek Industries, Inc. Wed Sep 6 13:21:33 2023 Pag 88dwBygMZE-8yRN?L6U3ohFEFtMZz8iaF_cBK2F?Uj0GRk8qMygÑ
Uniform Loads () Vert: 1-5 Concentrated Lo Vert: 10=	e (balanced): Lumber Inc plf) =-54, 5-6=-54, 7-12=-20 pads (lb)	rease=1.25, Plate Increase=1.25 =27, B=27) 16=129(F=64, B=64) 18=-			s8dwBygMZE-8yRN?L6U3ohFEFtMZz8iaF_cBK2F?Uj0GRk8qMygN



BCDL

TOP CHORD 2x4 SP No.2 \*Except\*

T1: 2x4 SP No.1

BOT CHORD 2x6 SP No.2 **WEBS** 2x4 SP No.3 **BRACING-**

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 5-4-12 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

Weight: 93 lb

FT = 20%

**REACTIONS.** (lb/size) 7=65/Mechanical, 10=703/0-11-5

Max Horz 10=135(LC 8)

Max Uplift7=-262(LC 18), 10=-1039(LC 4) Max Grav 7=180(LC 22), 10=1139(LC 35)

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

TOP CHORD 1-15=-270/620, 2-15=-267/651, 2-16=-386/1400, 3-16=-366/1428, 3-17=-354/752,

17-18=-303/524, 18-19=-300/544, 4-19=-283/570

Code FBC2020/TPI2014

**BOT CHORD**  $1-21=-594/277,\ 11-21=-594/277,\ 11-22=-594/277,\ 10-22=-594/277,\ 10-23=-1385/276,$ 

23-24=-1385/276, 9-24=-1385/276, 9-25=-560/245, 8-25=-560/245

**WEBS** 2-10=-891/213, 3-10=-855/704, 3-9=-455/1136, 4-9=-674/212, 4-8=-305/697

## NOTES-

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; cantilever left exposed; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-MS

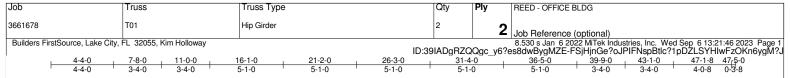
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- This truss has been designed for a live load of 20.0psf 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 262 lb uplift at joint 7 and 1039 lb uplift at joint 10.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 150 lb down and 41 lb up at 0-0-0, 9 lb down and 9 lb up at 1-6-1, 9 lb down and 9 lb up at 1-6-1, 28 lb down and 9 lb up at 4-4-0, 28 lb down and 9 lb up at 4-4-0, 183 lb down and 782 lb up at 7-1-15, 65 lb up at 7-1-15, 11 lb down and 15 lb up at 9-11-14, 34 lb down and 70 lb up at 9-11-14, and 30 lb down and 45 lb up at 12-9-13, and 71 lb down and 74 lb up at 12-9-13 on top chord, and 3 lb down and 3 lb up at 1-6-1, 3 lb down and 3 lb up at 1-6-1, 47 lb down and 49 lb up at 4-4-0, 47 lb down and 49 lb up at 4-4-0, 128 lb down and 579 lb up at 7-1-15, 6 lb down and 61 lb up at 7-1-15, 32 lb down and 199 lb up at 9-11-14, 29 lb down at 9-11-14, and 13 lb down and 87 lb up at 12-9-13, and 67 lb down and 29 lb up at 12-9-13 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 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

Continued on page 2

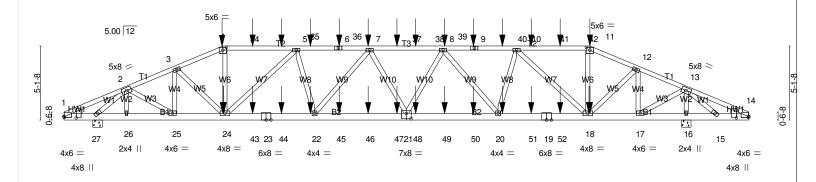
ob	Truss	Truss Type	Qty	Ply	REED - OFFICE BLDG
661678	HJ16A	Diagonal Hip Girder	2		1   Job Reference (optional)
Builders FirstSource, Lak	ke City, FL 32055, Kim Holloway	I	ID:0014D 577	0== : 00	Job Reference (optional) 8.530 s Jan 6 2022 MiTek Industries, Inc. Wed Sep 6 13:21:36 2023 Page es8dwBygMZE-YX6VdM8NMj3q5jcxE5iPCuc?UX12CqtSyPzpQhygM
Uniform Loads (p Vert: 1-6: Concentrated Loa Vert: 1=-	e (balanced): Lumber Incre olf) =-54, 7-12=-20 ads (lb)	ease=1.25, Plate Increase=1.25 7=362(F=27, B=335) 19=-26(F) 20=			s=-3) 22=-95(F=-47, B=-47) 23=322(F=31, B=291) 24=88(F=-9,



Scale = 1:79.8

47-5-0

Structural wood sheathing directly applied or 3-11-10 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 16-17,15-16,14-15.



2-4-0   4-4-   2-4-0   2-0-	0 3-4-0 3-4-0 6-4-4	23-8-8 6-4-4	6-4-4 6-4-4	39-9-0
Plate Offsets (A, Y)	[1.0-1-0,0-10-4], [1.0-0-5,0-0-10], [4.0-	3-0,0-2-4], [11.0-3-0,0-2-	4], [14:0-1-0,0-10-4], [14:0-0-5,0-0-10], [21:0-4-0,0	J-4-8]
LOADING (psf) TCLL 20.0 TCDL 7.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25	<b>CSI.</b> TC 0.49 BC 0.84	<b>DEFL.</b> in (loc) I/defl L/d Vert(LL) -0.29 21-22 >999 240 Vert(CT) -0.52 21-22 >946 180	PLATES         GRIP           MT20         244/190
BCLL 0.0 * BCDL 10.0	Rep Stress Incr NO Code FBC2020/TPI2014	WB 0.69 Matrix-MS	Horz(CT) 0.13 16 n/a n/a	Weight: 619 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.2 2x4 SP No.3 WFBS

WEDGE

Left: 2x4 SP No.3, Right: 2x4 SP No.3

**REACTIONS.** (lb/size) 16=3699/0-8-0, 27=3624/0-8-0

Max Horz 27=68(LC 34)

Max Uplift16=-1207(LC 5), 27=-1081(LC 8)

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

1-2=-387/142, 2-3=-5820/1791, 3-4=-6424/1998, 4-34=-5969/1882, 34-35=-5969/1882, 5-35=-5969/1882, 5-36=-7970/2440, 6-36=-7970/2440, 6-7=-7970/2440, 7-37=-8407/2588, TOP CHORD

37-38=-8407/2588, 38-39=-8407/2588, 8-39=-8407/2588, 8-9=-7165/2280, 9-40=-7165/2280.

10-40=-7165/2280, 10-41=-4385/1548, 41-42=-4385/1548, 11-42=-4385/1548,

11-12=-4726/1647, 12-13=-3277/1135, 13-14=-78/304

BOT CHORD 1-27 = -101/336, 26-27 = -1144/3666, 25-26 = -1144/3666, 24-25 = -1631/5347, 24-43 = -2256/7654, 24-25 = -1631/534, 24-25 = -1631

23-43=-2256/7654, 23-44=-2256/7654, 22-44=-2256/7654, 22-45=-2480/8370, 45-46=-2480/8370, 46-47=-2480/8370, 21-47=-2480/8370, 21-48=-2416/8048, 48-49=-2416/8048, 49-50=-2416/8048, 20-50=-2416/8048, 20-51=-2064/6690,

19-51=-2064/6690, 19-52=-2064/6690, 18-52=-2064/6690, 17-18=-983/2982

2-26=-266/120, 2-25=-589/1951, 3-25=-951/319, 3-24=-297/896, 4-24=-643/2153, 5-24=-2388/690, 5-22=-317/1257, 7-22=-679/245, 8-21=-189/774, 8-20=-1422/395,

10-20=-437/1850, 10-18=-3215/864, 11-18=-513/1503, 12-18=-636/1884, 12-17=-2016/688,

13-17=-1187/3636, 13-16=-3342/1118, 2-27=-4475/1327

#### NOTES-

**WEBS** 

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row 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.

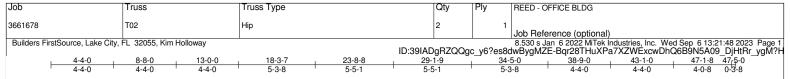
3) Unbalanced roof live loads have been considered for this design.

- 4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; cantilever left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

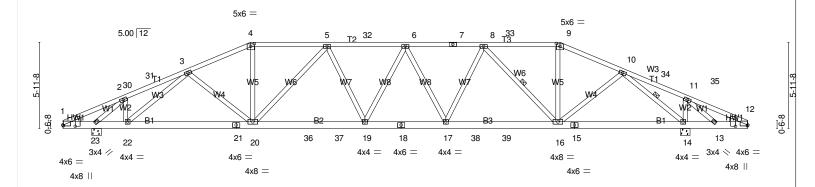
  5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to
- the use of this truss component.
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are 3x6 MT20 unless otherwise indicated.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply		REED - OFFICE BLDG
3661678	T01	Hip Girder	2		2	
Builders FirstSource, L	ake City, FL 32055, Kim Hollowa	y	ID:20IAD~	70000	ve2.	8.530 s Jan 6 2022 MiTek Industries, Inc. Wed Sep 6 13:21:46 2023 Page 2 es8dwBygMZE-FSjHjnGe?oJPIFNspBtlc?1pDZLSYHIwFzOKn6ygM?
NOTES-			iD.39IADGF	ızaayı_	yor	esouwbyginize-i Sji ijiide:00Fii Nspbilc:1pbze311iiwi zokiioygiii:
		oad of 20.0psf on the bottom chord	in all areas where a rec	tangle 3	-6-0	tall by 2-0-0 wide will fit between the bottom chord and any
other members		crushing capacity of 565 psi.				
		s) of truss to bearing plate capable	of withstanding 1207 lb	uplift at	ioin	nt 16 and 1081 lb uplift at joint 27.
12) Hanger(s) or c	other connection device(s)	shall be provided sufficient to suppo	ort concentrated load(s)	76 lb do	wn	and 47 lb up at 11-0-0, 57 lb down and 47 lb up at 13-0-12, 57
						b down and 47 lb up at 21-0-12, 57 lb down and 44 lb up at 4-4, 57 lb down and 47 lb up at 30-4-4, 57 lb down and 47 lb
						736 lb down and 343 lb up at 11-0-0, 172 lb down and 61 lb
up at 13-0-12	, 172 lb down and 61 lb up	at 15-0-12, 172 lb down and 61 lb	up at 17-0-12, 172 lb c	own and	61	lb up at 19-0-12, 172 lb down and 61 lb up at 21-0-12, 172 lb
						down and 61 lb up at 28-4-4, 172 lb down and 61 lb up at buy by at 36-4-4 on bottom chord. The design/selection of suc
	vice(s) is the responsibility		11 34-4-4, and 291 10 uc	wii aliu	337	ib up at 30-4-4 on bottom chord. The design/selection of such
	, , , ,					
LOAD CASE(S) S		rease=1.25, Plate Increase=1.25				
Uniform Loads		ease=1.25, 1 late ilicrease=1.25				
	Ä=-54, 4-11=-54, 11-14=-5	4, 28-31=-20				
Concentrated L	` ,	) 24736(R) 22172(R) 757(R) 8	857(B) 20172(B) 18	200/R	a_	-57(B) 34=-57(B) 35=-57(B) 36=-57(B) 37=-57(B) 39=-57(B)
						49=-172(B) 50=-172(B) 51=-172(B) 52=-172(B)
		, , , , , , , , , , , , , , , , , , , ,	, , , , , ,		,	



Scale = 1:79.8



$+\frac{2-4-0}{2-4-0} + \frac{4-4}{2-0}$ Plate Offsets (X,Y)		20-10-14 7-10-14 1:0-3-0,0-2-4], [9:0-3-0,0	26-6-2 5-7-4 -2-4], [12:0-0-5,0	34-5-0 7-10-14 -0-10], [12:0-1-0,0-10-4]	43-1-0 8-8-0	45-1-0 47-1-8 2-0-0 2-0-80-3-8
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES Code FBC2020/TPI2014	CSI. TC 0.33 BC 0.63 WB 0.81 Matrix-MS	DEFL. Vert(LL Vert(C7 Horz(C	) -0.35 19-20 >999	L/d PLA 240 MT2 180 n/a Weig	

**BRACING-**

WFBS

TOP CHORD

BOT CHORD

1 Row at midpt

Installation guide.

Structural wood sheathing directly applied or 3-3-3 oc purlins. Rigid ceiling directly applied or 6-0-0 oc bracing.

8-16, 10-14

MiTek recommends that Stabilizers and required cross bracing

be installed during truss erection, in accordance with Stabilizer

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.2 2x4 SP No.3 WFBS

WEDGE

Left: 2x4 SP No.3, Right: 2x4 SP No.3

**REACTIONS.** (lb/size) 14=1850/0-8-0, 23=1659/0-8-0

Max Horz 23=-81(LC 13)

Max Uplift14=-440(LC 9), 23=-378(LC 12) Max Grav 14=2009(LC 2), 23=1801(LC 2)

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

TOP CHORD 2-30=-1903/413, 30-31=-1896/419, 3-31=-1870/427, 3-4=-2607/575, 4-5=-2389/549,

5-32=-2963/700, 6-32=-2963/700, 6-7=-2863/680, 7-33=-2863/680, 8-33=-2863/680,

8-9=-1988/471, 9-10=-2175/492, 10-34=-288/272, 34-35=-294/191, 11-35=-295/182,

11-12=-136/252

**BOT CHORD** 22-23=-377/1726, 21-22=-499/2321, 20-21=-499/2321, 20-36=-571/2847, 36-37=-571/2847,

19-37=-571/2847, 18-19=-600/2971, 17-18=-600/2971, 17-38=-532/2645, 38-39=-532/2645,

16-39=-532/2645, 15-16=-286/1506, 14-15=-286/1506, 13-14=-212/351

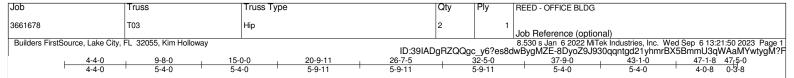
2-22=-56/631, 3-22=-788/210, 4-20=-125/798, 5-20=-738/218, 5-19=-65/319, 6-17=-293/144, 8-17=-102/533, 8-16=-1000/274, 9-16=-96/635, 10-16=-108/637,

10-14=-2260/599, 11-14=-254/206, 11-13=-262/45, 2-23=-2219/398

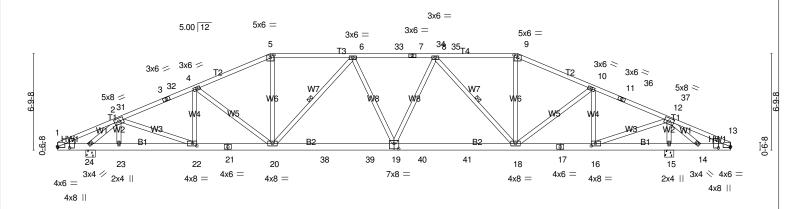
#### NOTES-

**WEBS** 

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 4-8-14, Interior(1) 4-8-14 to 13-0-0, Exterior(2R) 13-0-0 to 19-8-8, Interior(1) 19-8-8 to 34-5-0, Exterior(2R) 34-5-0 to 41-1-8, Interior(1) 41-1-8 to 47-5-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 3x6 MT20 unless otherwise indicated.
- 6) 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 20.0psf 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 440 lb uplift at joint 14 and 378 lb uplift at joint 23.



Scale = 1:81.1



2-4-0	4-4-0 2-0-0 9-8-0 5-4-0	15-0-0 5-4-0	23-8-8 8-8-8	32-5-0 8-8-8	37-9-0 5-4-0	5-4-0	47-5-0 45-1-0 47-1-8 2-0-0 2-0-80-3-8
Plate Offsets (X,Y)	[1:0-1-0,0-10-4], [1:0-0-	<u>5,0-0-10], [5:0-3</u>	3-0,0-2-4], [9:0-3-0,0-2-4	<u>], [13:0-1-0,0-10-4], [13:0-0-5,0-</u>	0-10], [16:0-3-8,0-2	-0], [19:0-4-0,0-4-8	], [22:0-3-8,0-2-0]
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code FBC2020/	2-0-0 1.25 1.25 YES TPI2014	CSI. TC 0.37 BC 0.63 WB 0.79 Matrix-MS	DEFL.         in (loc)           Vert(LL)         -0.20 19-20           Vert(CT)         -0.34 19-20           Horz(CT)         0.08         15	l/defl L/d >999 240 >999 180 n/a n/a	PLATES MT20 Weight: 309	<b>GRIP</b> 244/190 Ib FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.2 2x4 SP No.3 WFBS

WEDGE

Left: 2x4 SP No.3, Right: 2x4 SP No.3

**BRACING-**

**WEBS** 

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 3-4-15 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 15-16,14-15,13-14.

1 Row at midpt 6-20 8-18

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 15=1850/0-8-0, 24=1659/0-8-0

Max Horz 24=-93(LC 17)

Max Uplift15=-418(LC 9), 24=-377(LC 12)

Max Grav 15=2025(LC 2), 24=1816(LC 2)

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

2-31=-2680/539, 3-31=-2673/547, 3-32=-2623/549, 4-32=-2598/556, 4-5=-2538/538, TOP CHORD

5-6=-2313/518, 6-33=-2662/593, 33-34=-2662/593, 7-34=-2662/593, 7-35=-2662/593,

8-35=-2662/593, 8-9=-2036/462, 9-10=-2240/481, 10-36=-1826/381, 11-36=-1851/374,

11-37=-1900/372, 12-37=-1907/364, 12-13=-149/272

**BOT CHORD** 23-24=-406/1707, 22-23=-406/1707, 21-22=-500/2435, 20-21=-500/2435, 20-38=-472/2623,

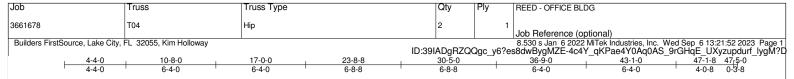
38-39=-472/2623, 19-39=-472/2623, 19-40=-453/2529, 40-41=-453/2529, 18-41=-453/2529,

17-18=-275/1719, 16-17=-275/1719, 15-16=-219/328, 14-15=-219/328

**WEBS** 2-22=-145/776, 5-20=-97/737, 6-20=-554/153, 8-19=-72/368, 8-18=-799/202, 9-18=-79/621,

10-18=-91/438, 10-16=-603/216, 12-16=-486/2062, 12-15=-1739/559, 2-24=-2186/429

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 4-8-14, Interior(1) 4-8-14 to 15-0-0, Exterior(2R) 15-0-0 to 21-8-8, Interior(1) 21-8-8 to 32-5-0, Exterior(2R) 32-5-0 to 39-1-8, Interior(1) 39-1-8 to 47-5-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf. 7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 418 lb uplift at joint 15 and 377 lb uplift at ioint 24.



Scale = 1:81.1

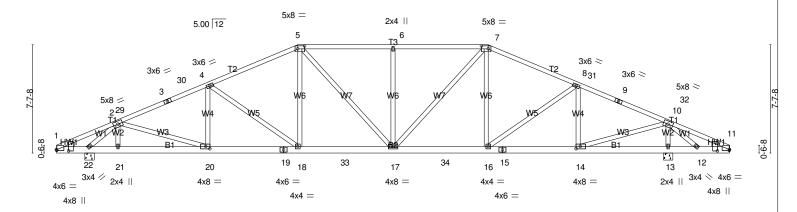
47-5-0

Structural wood sheathing directly applied or 3-3-5 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 13-14,12-13,11-12.

Installation guide.

MiTek recommends that Stabilizers and required cross bracing

be installed during truss erection, in accordance with Stabilizer



2-4-0 4-4-0		17-0-0 6-4-0	23-8-8 6-8-8	30-5-0 6-8-8	36-9-0 6-4-0	43-1-0 6-4-0 45-1-0 2-0-0 2-0-80-3-8
Plate Offsets (X,Y) [1:	:0-1-0,0-10-4], [1:0-0-5,0	)-0-10], [5:0-5-12,0-2	2-8], [7:0-5-12,0-2-8], [	[11:0-1-0,0-10-4], [11:0	-0-5,0-0-10], [14:0-3-	8,0-2-0], [20:0-3-8,0-2-0]
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code FBC2020/TPI	1.25 T 1.25 B YES W	SI. C 0.52 C 0.48 /B 0.81 latrix-MS	DEFL.         in (low control (low control))           Vert(LL)         -0.17 17-1           Vert(CT)         -0.29 17-1           Horz(CT)         0.07         1	8 >999 240 8 >999 180	PLATES GRIP MT20 244/190  Weight: 312 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.2 2x4 SP No.3 WFBS

WEDGE

Left: 2x4 SP No.3, Right: 2x4 SP No.3

**REACTIONS.** (lb/size) 13=1850/0-8-0, 22=1659/0-8-0

Max Horz 22=106(LC 16)

Max Uplift13=-407(LC 13), 22=-375(LC 12) Max Grav 13=2023(LC 2), 22=1814(LC 2)

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

TOP CHORD 2-29=-2708/533, 3-29=-2701/542, 3-30=-2649/552, 4-30=-2601/554, 4-5=-2417/505,

5-6=-2354/529, 6-7=-2354/529, 7-8=-2216/455, 8-31=-1948/403, 9-31=-1996/402,

9-32=-2048/392. 10-32=-2055/382. 10-11=-153/283

**BOT CHORD**  $21 - 22 = -426/1735, \ 20 - 21 = -426/1735, \ 19 - 20 = -502/2455, \ 18 - 19 = -502/2455, \ 18 - 33 = -361/2185, \ 18 - 19 = -502/2455,$ 

17-33=-361/2185, 17-34=-277/1994, 16-34=-277/1994, 15-16=-264/1848, 14-15=-264/1848,

13-14=-195/322, 12-13=-195/322

2-20=-140/754, 4-18=-356/175, 5-18=-64/478, 5-17=-127/383, 6-17=-413/199, **WEBS** 7-17=-171/608, 8-16=-53/269, 8-14=-490/205, 10-14=-505/2135, 10-13=-1720/565,

2-22=-2232/441

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

- To Undaranced fool live loads have been considered for finis design.

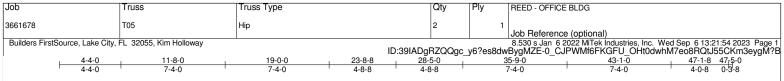
  2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 4-8-14, Interior(1) 4-8-14 to 17-0-0, Exterior(2R) 17-0-0 to 23-8-8, Interior(1) 23-8-8 to 30-5-0, Exterior(2R) 30-5-0 to 37-1-8, Interior(1) 37-1-8 to 47-5-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

4) Provide adequate drainage to prevent water ponding.

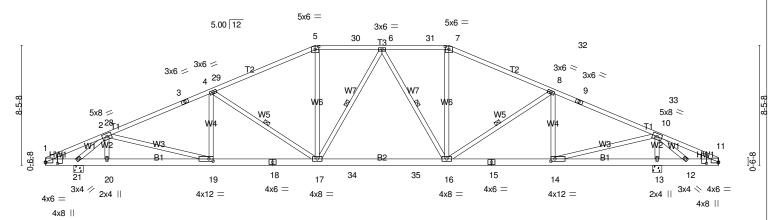
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 407 lb uplift at joint 13 and 375 lb uplift at joint 22







2-4-0	44-0 2-0-0 + 11-8-0 2-0-0 + 7-4-0 [1:0-1-0,0-10-4], [1:0-0-5,0-0-10], [5:0	19-0-0 7-4-0 -3-0,0-2-4], [7:0-3-0,0-2	28-5-0 9-5-0 2-4], [11:0-1-0,0-10-4]	35-9-0 7-4-0 , [11:0-0-5,0-0-10], [14:0-3-8,0-	47-5-0 43-1-0 7-4-0 +45-1-0 2-0-0 +47-1-8 2-0-0 +2-0-80 +8 2-0], [19:0-3-8,0-2-0]
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES Code FBC2020/TPI2014	CSI. TC 0.71 BC 0.58 WB 0.82 Matrix-MS	Vert(CT) -0	in (loc) I/defl L/d 0.20 16-17 >999 240 0.33 16-17 >999 180 0.07 13 n/a n/a	PLATES GRIP MT20 244/190  Weight: 311 lb FT = 20%

**BRACING-**

WFBS

TOP CHORD

**BOT CHORD** 

1 Row at midpt

Installation guide.

Structural wood sheathing directly applied or 2-2-0 oc purlins. Rigid ceiling directly applied or 6-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing

be installed during truss erection, in accordance with Stabilizer

4-17, 6-17, 6-16, 8-16

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.2 2x4 SP No.3 WFBS

WEDGE

Left: 2x4 SP No.3, Right: 2x4 SP No.3

**REACTIONS.** (lb/size) 13=1850/0-8-0, 21=1659/0-8-0

Max Horz 21=-118(LC 17)

Max Uplift13=-405(LC 13), 21=-372(LC 12) Max Grav 13=2010(LC 2), 21=1803(LC 2)

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

2-28=-2693/526, 3-28=-2686/537, 3-4=-2581/550, 4-29=-2279/447, 5-29=-2268/471, 5-30=-2049/471, 6-30=-2049/471, 6-31=-1934/435, 7-31=-1934/435, 7-32=-2144/433, TOP CHORD

8-32=-2155/409, 8-9=-2029/419, 9-33=-2134/407, 10-33=-2141/396, 10-11=-156/298

20-21=-445/1763, 19-20=-445/1763, 18-19=-503/2433, 17-18=-503/2433, 17-34=-289/2048, 34-35=-289/2048, 16-35=-289/2048, 15-16=-265/1922, 14-15=-265/1922, 13-14=-160/317,

12-13=-160/317

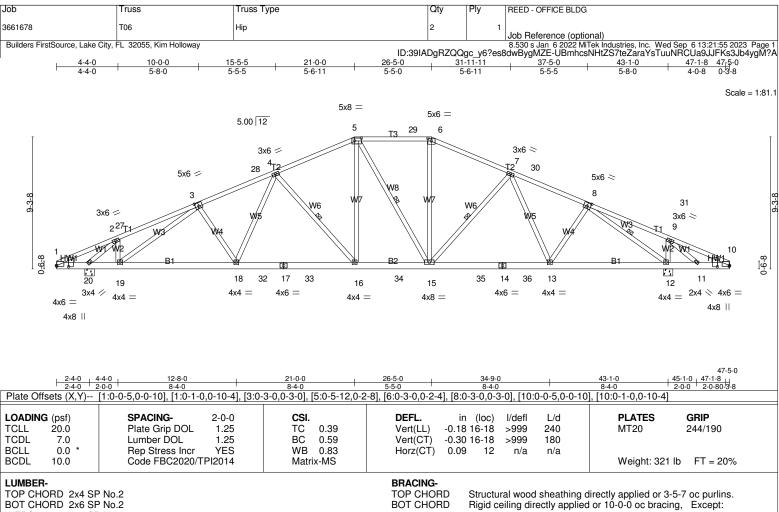
**WEBS** 2-19=-133/694, 4-17=-496/226, 5-17=-81/605, 6-16=-379/148, 7-16=-83/561,

8-14=-404/192, 10-14=-521/2149, 10-13=-1672/574, 2-21=-2283/452

### NOTES-

**BOT CHORD** 

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 4-8-14, Interior(1) 4-8-14 to 19-0-0, Exterior(2R) 19-0-0 to 25-8-8, Interior(1) 25-8-8 to 28-5-0, Exterior(2R) 28-5-0 to 35-1-8, Interior(1) 35-1-8 to 47-5-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 405 lb uplift at joint 13 and 372 lb uplift at ioint 21.



TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.2 2x4 SP No.3 WFBS

WEDGE

Left: 2x4 SP No.3, Right: 2x4 SP No.3

**BOT CHORD** 

**WEBS** 

6-0-0 oc bracing: 11-12,10-11. 4-16, 5-15, 7-15, 8-12 1 Row at midpt

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 12=1850/0-8-0, 20=1659/0-8-0

Max Horz 20=-130(LC 17)

Max Uplift12=-402(LC 13), 20=-370(LC 12)

Max Grav 12=2048(LC 2), 20=1839(LC 2)

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

TOP CHORD 2-27=-1962/428, 3-27=-1955/446, 3-28=-2695/538, 4-28=-2612/553, 4-5=-2144/451,

5-29=-1879/434, 6-29=-1879/434, 6-7=-2079/440, 7-30=-2126/440, 8-30=-2209/424,

8-31=-269/260, 9-31=-271/150, 9-10=-143/263

**BOT CHORD** 19-20=-432/1769, 18-19=-524/2452, 18-32=-423/2289, 17-32=-423/2289, 17-33=-423/2289,

16-33=-423/2289, 16-34=-271/1942, 15-34=-271/1942, 15-35=-237/2015, 14-35=-237/2015, 14-36=-237/2015, 13-36=-237/2015, 12-13=-246/1777, 11-12=-187/334

2-19=-23/599, 3-19=-859/172, 4-18=-72/424, 4-16=-560/235, 5-16=-137/693,

5-15=-257/112, 6-15=-86/551, 7-15=-273/173, 8-13=-38/422, 8-12=-2462/602,

9-12=-292/219, 2-20=-2268/412

## NOTES-

**WEBS** 

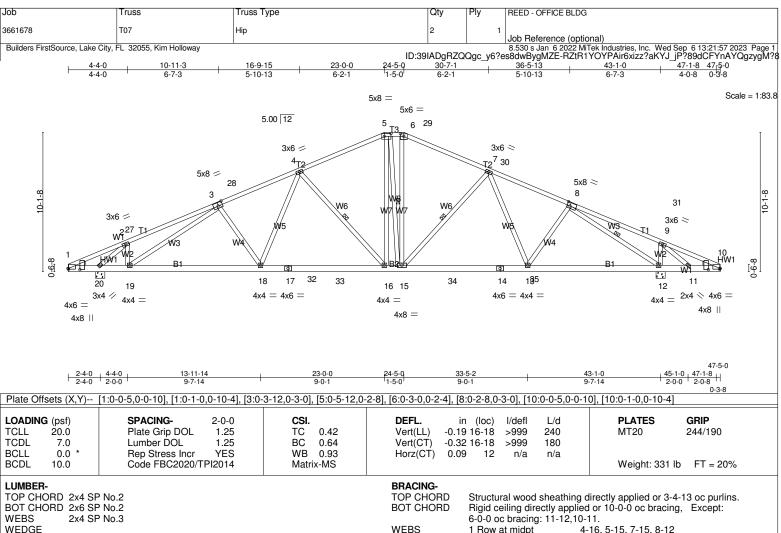
1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 4-8-14, Interior(1) 4-8-14 to 21-0-0, Exterior(2E) 21-0-0 to 26-5-0, Exterior(2R) 26-5-0 to 33-1-8, Interior(1) 33-1-8 to 47-5-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

4) Provide adequate drainage to prevent water ponding.

- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf. 7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 402 lb uplift at joint 12 and 370 lb uplift at ioint 20.



BOT CHORD 2x6 SP No.2

WEDGE

Left: 2x4 SP No.3, Right: 2x4 SP No.3

4-16, 5-15, 7-15, 8-12 1 Row at midpt

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 12=1850/0-8-0, 20=1659/0-8-0

Max Horz 20=143(LC 12)

Max Uplift12=-399(LC 13), 20=-367(LC 12)

Max Grav 12=2038(LC 2), 20=1828(LC 2)

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

TOP CHORD 2-27=-2010/436, 3-27=-2003/457, 3-28=-2632/537, 4-28=-2531/539, 4-5=-1962/417,

5-29=-1767/411, 6-29=-1767/411, 6-7=-1964/414, 7-30=-2142/444, 8-30=-2243/443,

8-31=-262/227, 9-31=-264/91, 9-10=-146/284

19-20=-447/1806, 18-19=-526/2432, 18-32=-399/2196, 17-32=-399/2196, 17-33=-399/2196, **BOT CHORD** 

16-33=-399/2196, 15-16=-222/1765, 15-34=-240/1991, 14-34=-240/1991, 14-35=-240/1991,

13-35=-240/1991, 12-13=-254/1853, 11-12=-148/331

**WEBS** 2-19=0/587, 3-19=-769/154, 4-18=-92/535, 4-16=-682/271, 5-16=-136/577, 6-15=-130/574,

7-15=-401/211, 8-13=-4/342, 8-12=-2437/600, 9-12=-312/236, 2-20=-2337/416

### NOTES-

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

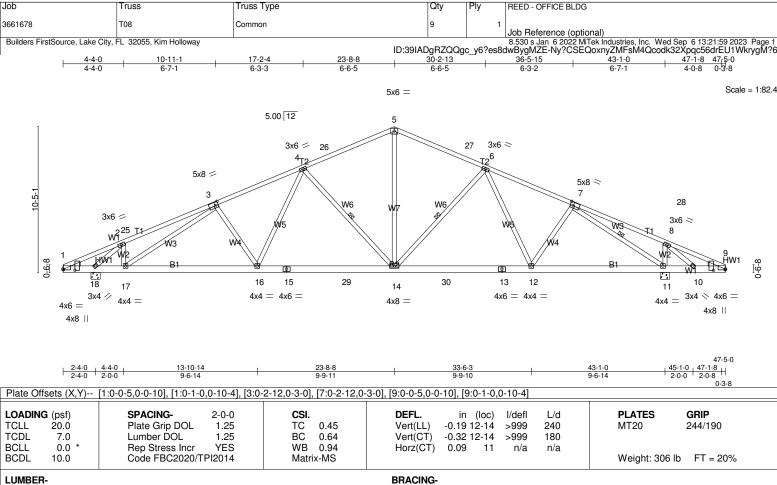
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-Č Exterior(2E) 0-0-0 to 4-8-14, Interior(1) 4-8-14 to 23-0-0, Exterior(2E) 23-0-0 to 24-5-0, Exterior(2R) 24-5-0 to 31-1-8, Interior(1) 31-1-8 to 47-5-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

4) Provide adequate drainage to prevent water ponding.

- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 399 lb uplift at joint 12 and 367 lb uplift at ioint 20.



TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.2 2x4 SP No.3 WFBS

WEDGE

Left: 2x4 SP No.3, Right: 2x4 SP No.3

**WEBS** 

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 3-4-7 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-0-0 oc bracing: 10-11,9-10.

6-14, 7-11, 4-14 1 Row at midpt

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 11=1850/0-8-0, 18=1659/0-8-0

Max Horz 18=147(LC 12)

Max Uplift11=-398(LC 13), 18=-366(LC 12)

Max Grav 11=2040(LC 2), 18=1830(LC 2)

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

2-25=-2008/435, 3-25=-2002/456, 3-4=-2638/538, 4-26=-1942/408, 5-26=-1882/427,

5-27=-1882/421, 6-27=-1942/402, 6-7=-2250/444, 7-28=-264/234, 8-28=-265/99,

8-9=-145/280

 $17 - 18 = -451/1806, \ 16 - 17 = -529/2437, \ 15 - 16 = -395/2177, \ 15 - 29 = -395/2177, \ 14 - 29 = -395/2177, \ 18 - 29 = -395/2177, \ 19 - 29 = -395/2177, \ 19 - 29 = -395/2177, \ 19 - 29 = -395/2177, \ 19 - 29 = -395/2177, \ 19 - 29 = -395/2177, \ 19 - 29 = -395/2177, \ 10 - 29 = -395/2177,$ 

14-30=-241/1985, 13-30=-241/1985, 12-13=-241/1985, 11-12=-253/1859, 10-11=-154/332 **WEBS** 5-14=-194/1183, 6-14=-436/229, 7-12=-3/343, 7-11=-2457/614, 8-11=-311/234,

4-14=-685/284, 4-16=-95/537, 3-17=-777/160, 2-17=-1/591, 2-18=-2335/416

### NOTES-

**BOT CHORD** 

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 4-8-14, Interior(1) 4-8-14 to 23-8-8, Exterior(2R) 23-8-8 to 28-5-6, Interior(1) 28-5-6 to 47-5-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 20.0psf 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 398 lb uplift at joint 11 and 366 lb uplift at joint 18.