



RE: 2500817 - IC CONST. - MCKENZIE RES.

MiTek USA, Inc. 6904 Parke East Blvd. Tampa, FL 33610-4115

Site Information:

Customer Info: IC Construction Project Name: McKenzie Res. Model: Custom

Lot/Block: N/A Subdivision: N/A

Address: TBD, TBD

City: Columbia Cty State: FL

Name Address and License # of Structural Engineer of Record, If there is one, for the building.

Name: License #:

Address:

21 22

City: State:

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

Design Code: FBC2017/TPI2014 Design Program: MiTek 20/20 8.2

Wind Code: ASCE 7-10 Wind Speed: 130 mph Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 36 individual, Truss Design Drawings and 0 Additional Drawings. With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	T21529571	CJ01	10/8/20	23	T21529593	T10	10/8/20
ż	T21529572	CJ02	10/8/20	24	T21529594	T11	10/8/20
3	T21529573	CJ02A	10/8/20	25	T21529595	T11G	10/8/20
	T21529574	CJ03	10/8/20	26	T21529596	T12	10/8/20
4 5 6	T21529575	CJ04	10/8/20	27	T21529597	T12G	10/8/20
	T21529576	CJ05	10/8/20	28	T21529598	<u>T</u> 13	10/8/20
7	T21529577	EJ01	10/8/20	29	T21529599	<u>T14</u>	10/8/20
8	T21529578	EJ02	10/8/20	30	T21529600	<u>T</u> 15	10/8/20
9	T21529579	EJ03	10/8/20	31	T21529601	T16	10/8/20
10	T21529580	HJ08	10/8/20	32	T21529602	V01	10/8/20
11	T21529581	HJ09	10/8/20	33	T21529603	V02	10/8/20
12	T21529582	T01	10/8/20	34	T21529604	V03	10/8/20
13	T21529583	T01G	10/8/20	35	T21529605	V04	10/8/20
14	T21529584	T02 T02G	10/8/20	36	T21529606	V05	10/8/20
15	T21529585 T21529586	T02G	10/8/20				
16 17	T21529586	T03	10/8/20				
18	T21529587	T04 T05	10/8/20 10/8/20				
19	T21529589	T06	10/8/20				
19	T21323303	100	10/0/20				

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource-Jacksonville.

10/8/20

Truss Design Engineer's Name: Velez, Joaquin

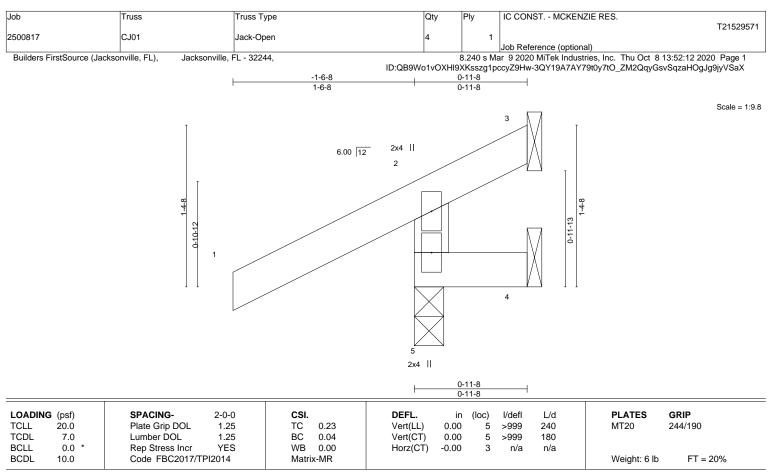
T08

T21529591

My license renewal date for the state of Florida is February 28, 2021.

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.





LUMBER-

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

2x4 SP No.3 **WEBS**

BRACING-

TOP CHORD Structural wood sheathing directly applied or 0-11-8 oc purlins,

except end verticals.

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

REACTIONS. (size) 5=0-3-0, 3=Mechanical, 4=Mechanical

Max Horz 5=48(LC 9)

Max Uplift 5=-102(LC 12), 3=-52(LC 1), 4=-15(LC 1) Max Grav 5=217(LC 1), 3=26(LC 8), 4=9(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 5, 52 lb uplift at joint 3 and 15 lb uplift at joint 4.







IC CONST. - MCKENZIE RES. Job Truss Truss Type Qty Ply T21529572 2500817 CJ02 Jack-Open 2 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:13 2020 Page 1 Jacksonville, FL - 32244.

Builders FirstSource (Jacksonville, FL),

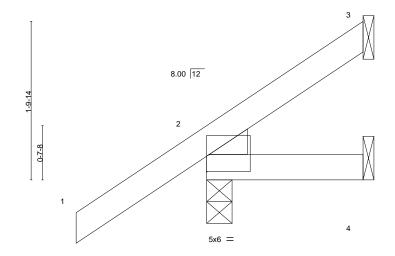
ID:QB9Wo1vOXHl9XKsszg1pccyZ9Hw-Xd6PNW8pJQHkd6h4yi4bbdN8IGFHZQqQdK3DhAyVSaW

Structural wood sheathing directly applied or 1-9-9 oc purlins.

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

-1-6-0 1-6-0 1-9-9

Scale = 1:13.2



1-9-9

Plate Offsets (X,Y)	[2:0-0-3,0-0-2], [2:0-3-14,0-0-4], [2:Edge,0-2-6]

	, ,	, , , , , , .									
LOADIN	G (psf)	SPACING- 2-0-0	cs		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.25	TC	0.18	Vert(LL)	0.00	7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL 1.25	BC	0.06	Vert(CT)	-0.00	7	>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 FBC2017/TPI2014	Ma	rix-MP						Weight: 10 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE Left: 2x4 SP No.3

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical

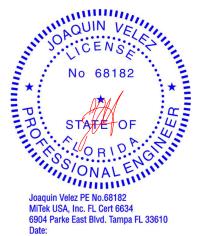
Max Horz 2=100(LC 12) Max Uplift 3=-35(LC 12), 2=-77(LC 12)

Max Grav 3=33(LC 19), 2=181(LC 1), 4=27(LC 3)

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

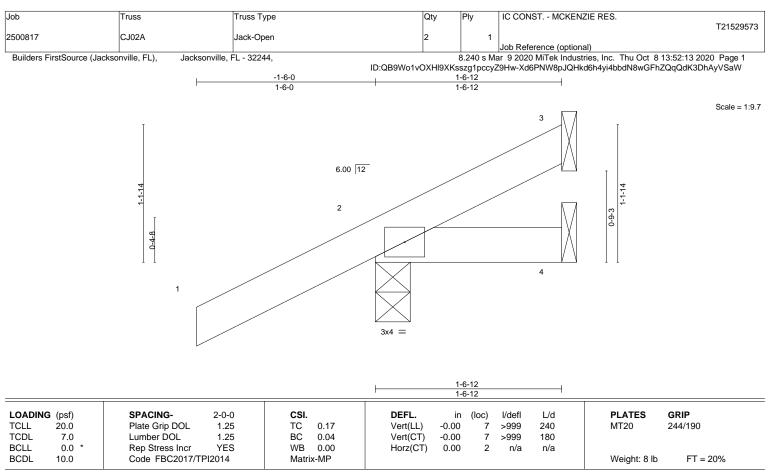
NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; 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 DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 3 and 77 lb uplift at joint 2.



October 8,2020





BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

TOP CHORD 2x4 SP No.2

2x4 SP No.2 BOT CHORD

> 3=Mechanical, 2=0-3-8, 4=Mechanical (size) Max Horz 2=69(LC 12)

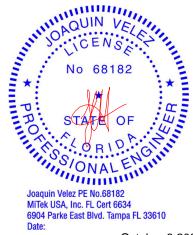
Max Uplift 3=-16(LC 12), 2=-96(LC 12)

Max Grav 3=17(LC 1), 2=178(LC 1), 4=21(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; 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 DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 3 and 96 lb uplift at joint 2.



Structural wood sheathing directly applied or 1-6-12 oc purlins.

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

October 8,2020





NAKNING - Verity design parameters and KEAD NOTES ON THIS AND INCLUDED MITER KEEPENUE PAGE MIT-4/3 fev. 3719/2020 DEFORE USE.

Design valid for use only with MITEN'S connectors. This design is based only upon parameters shown, and is for an individual building operation or 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 quidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/PTI Quality Criteria, DSB-89 and BCSI Building Component Sector (Internation possible) from 2 Trus Bloto personal injury 230 Wolderf, MD 2006. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSVTP/1 Qu Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



IC CONST. - MCKENZIE RES. Job Truss Truss Type Qty Ply T21529574 2500817 CJ03 Jack-Open 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:14 2020 Page 1 Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244. ID:QB9Wo1vOXHI9XKsszg1pccyZ9Hw-?pgnas9R3kPbFGGGWPbq7rvIPgZ4lt3ar_onDcyVSaV 1-6-8 2-11-8 Scale = 1:14.8 6.00 12 2-4-8 3x4 II 1-11-13 2 0-10-12 2x4 Ш 2-11-8 LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defI L/d **PLATES** GRIP TCLL 20.0 Plate Grip DOL 1.25 TC 0.25 Vert(LL) -0.00 244/190 4-5 >999 240 MT20

LUMBER-

TCDL

BCLL

BCDL

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

7.0

0.0

10.0

2x4 SP No.3 **WEBS**

BRACING-

Vert(CT)

Horz(CT)

-0.01

-0.01

4-5

3

TOP CHORD Structural wood sheathing directly applied or 2-11-8 oc purlins,

180

n/a

Weight: 13 lb

FT = 20%

except end verticals.

>999

n/a

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

REACTIONS. (size) 5=0-3-0, 3=Mechanical, 4=Mechanical

Lumber DOL

Rep Stress Incr

Max Horz 5=91(LC 12)

Max Uplift 5=-86(LC 12), 3=-62(LC 12), 4=-3(LC 12) Max Grav 5=221(LC 1), 3=52(LC 1), 4=49(LC 3)

Code FBC2017/TPI2014

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

NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

вс

WB

Matrix-MR

0.09

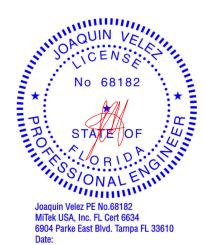
0.00

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

1.25

YES

- * 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 86 lb uplift at joint 5, 62 lb uplift at joint 3 and 3 lb uplift at joint 4.



October 8,2020





NAKNING - Verity design parameters and KEAD NOTES ON THIS AND INCLUDED MITER KEEPENUE PAGE MIT-4/3 fev. 3719/2020 DEFORE USE.

Design valid for use only with MITEN'S connectors. This design is based only upon parameters shown, and is for an individual building operation or 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 quidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/PTI Quality Criteria, DSB-89 and BCSI Building Component Sector (Internation possible) from 2 Trus Bloto personal injury 230 Wolderf, MD 2006. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSVTP/1 Qu Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



IC CONST. - MCKENZIE RES. Job Truss Truss Type Qty Ply T21529575 2500817 CJ04 Jack-Open 2 1 Job Reference (optional)

Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244.

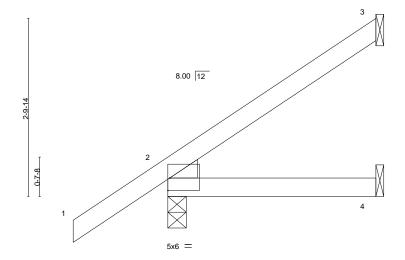
8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:14 2020 Page 1 ID:QB9Wo1vOXHl9XKsszg1pccyZ9Hw-?pgnas9R3kPbFGGGWPbq7rvJUgY2lt3ar_onDcyVSaV

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

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

-1-6-0 1-6-0 3-3-9

Scale = 1:18.3



3-3-9

Plate Offsets (X,Y)-- [2:0-0-3,0-0-2], [2:0-3-14,0-0-4], [2:Edge,0-2-6]

- 10.110	10010 (71,)	[2:0 0 0;0 0 2]; [2:0 0 : :;0	1/1									
LOADIN	IG (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.18	Vert(LL)	-0.01	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.16	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code FBC2017/TP	PI2014	Matri	x-MP						Weight: 14 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE Left: 2x4 SP No.3

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=147(LC 12)

Max Uplift 3=-78(LC 12), 2=-75(LC 12), 4=-8(LC 12) Max Grav 3=81(LC 19), 2=219(LC 1), 4=56(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; 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 DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 78 lb uplift at joint 3, 75 lb uplift at joint 2 and 8 lb uplift at joint 4.

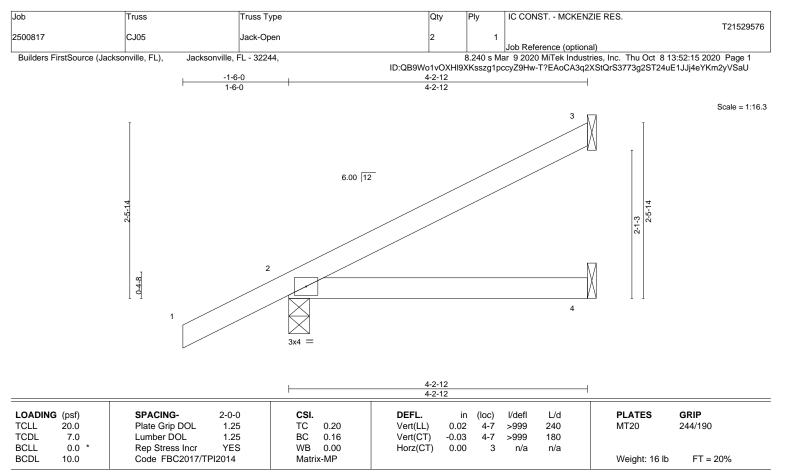


October 8,2020



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





BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

TOP CHORD 2x4 SP No.2

2x4 SP No.2 BOT CHORD

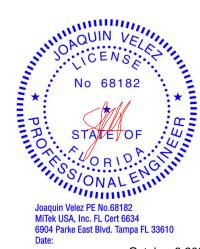
> (size) 3=Mechanical, 2=0-3-8, 4=Mechanical Max Horz 2=133(LC 12)

Max Uplift 3=-84(LC 12), 2=-106(LC 12), 4=-3(LC 12) Max Grav 3=93(LC 1), 2=250(LC 1), 4=73(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; 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 DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 84 lb uplift at joint 3, 106 lb uplift at joint 2 and 3 lb uplift at joint 4.

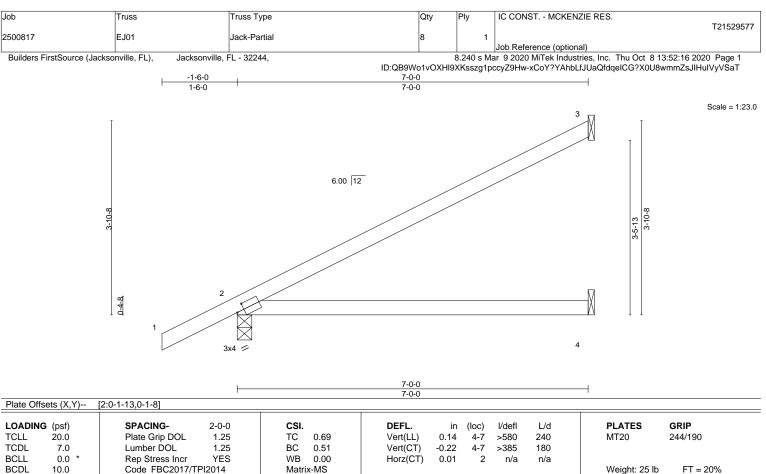


Structural wood sheathing directly applied or 4-2-12 oc purlins.

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







LUMBER-TOP CHORD 2x4 SP No.2 2x4 SP No.2

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.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=200(LC 12)

Max Uplift 3=-148(LC 12), 2=-132(LC 12), 4=-8(LC 12) Max Grav 3=164(LC 1), 2=346(LC 1), 4=126(LC 3)

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

NOTES-

BOT CHORD

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; 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 DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 148 lb uplift at joint 3, 132 lb uplift at ioint 2 and 8 lb uplift at ioint 4.

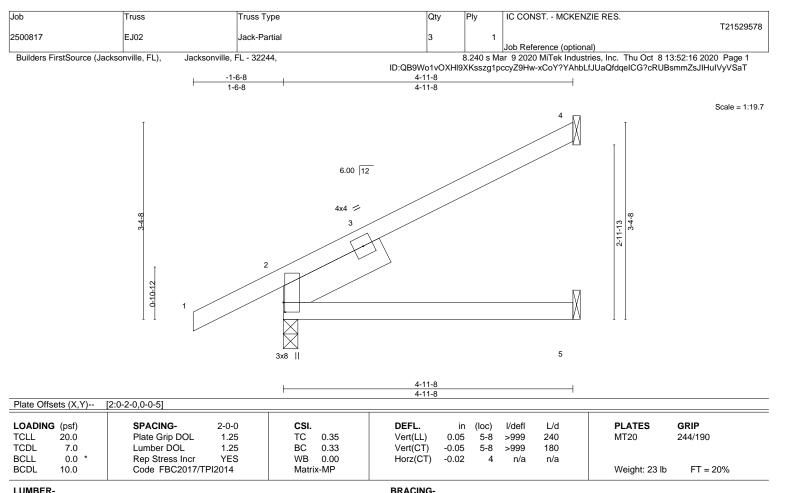


October 8,2020









TOP CHORD

BOT CHORD

LUMBER-

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

SLIDER Left 2x6 SP No.2 1-11-8

REACTIONS.

(size) 4=Mechanical, 2=0-3-0, 5=Mechanical

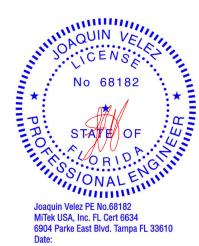
Max Horz 2=151(LC 12)

Max Uplift 4=-109(LC 12), 2=-98(LC 12), 5=-12(LC 12) Max Grav 4=111(LC 1), 2=278(LC 1), 5=85(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 109 lb uplift at joint 4, 98 lb uplift at joint 2 and 12 lb uplift at joint 5.



Structural wood sheathing directly applied or 4-11-8 oc purlins.

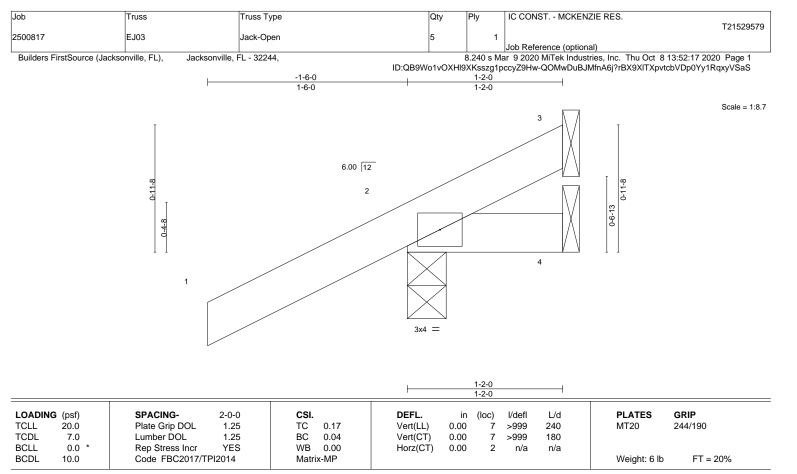
Rigid ceiling directly applied or 10-0-0 oc bracing.

October 8,2020



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





BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

(size)

Max Horz 2=59(LC 12) Max Uplift 3=-3(LC 12), 2=-102(LC 12), 4=-12(LC 1)

Max Grav 3=9(LC 8), 2=176(LC 1), 4=23(LC 16)

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

3=Mechanical, 2=0-3-8, 4=Mechanical

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; 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 DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 3, 102 lb uplift at joint 2 and 12 lb uplift at joint 4.



Structural wood sheathing directly applied or 1-2-0 oc purlins.

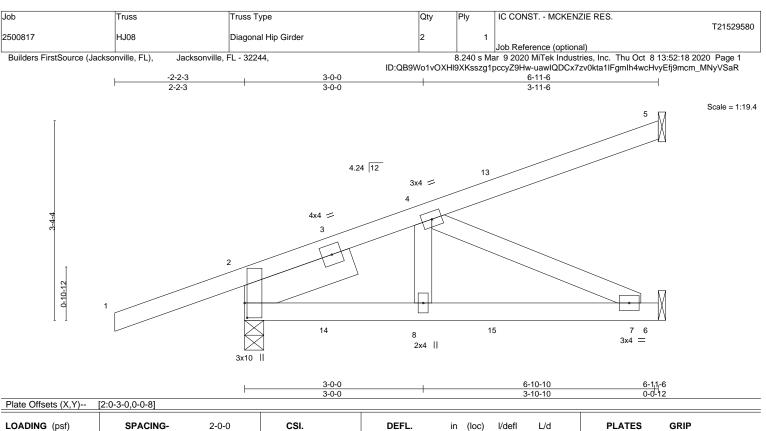
Rigid ceiling directly applied or 10-0-0 oc bracing.

October 8,2020



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





TCLL 20.0 Plate Grip DOL 1.25 TC 0.43 TCDL Lumber DOL 1.25 вс 0.22 7.0 **BCLL** 0.0 Rep Stress Incr NO WB 0.09 Code FBC2017/TPI2014 **BCDL** 10.0 Matrix-MS

-0.03 Horz(CT) -0.01 2 n/a

0.02

7-8

7-8

>999

>999

240

180

n/a

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

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

Vert(LL)

Vert(CT)

BRACING-

TOP CHORD

BOT CHORD

MT20 244/190

Weight: 37 lb FT = 20%

LUMBER-

REACTIONS.

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

SLIDER Left 2x6 SP No.2 1-11-8

(size) 5=Mechanical, 2=0-3-14, 6=Mechanical

Max Horz 2=168(LC 4)

Max Uplift 5=-82(LC 4), 2=-200(LC 4), 6=-61(LC 8) Max Grav 5=103(LC 19), 2=339(LC 1), 6=138(LC 3)

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

TOP CHORD 2-4=-271/246 **WEBS** 4-7=-261/166

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 82 lb uplift at joint 5, 200 lb uplift at joint 2 and 61 lb uplift at joint 6.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 93 lb down and 128 lb up at 1-5-5, 93 lb down and 128 lb up at 1-5-5, and 26 lb down and 60 lb up at 4-3-4, and 26 lb down and 60 lb up at 4-3-4 on top chord, and 11 lb down and 43 lb up at 1-5-5, 11 lb down and 43 lb up at 1-5-5, and 22 lb down and 10 lb up at 4-3-4, and 22 lb down and 10 lb up at 4-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-5=-54, 6-9=-20

Concentrated Loads (lb) Vert: 3=66(F=33, B=33) 15=4(F=2, B=2) No 681

No 681

No 681

No 681

Doaquin Velez PE No.68182 JOAQUIN VE 68182 Joaquin Velez PE No.68182

MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

October 8,2020



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



IC CONST. - MCKENZIE RES. Job Truss Truss Type Qty Ply T21529581 2500817 H.I09 Diagonal Hip Girder 2 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:19 2020 Page 1 Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244. ID:QB9Wo1vOXHI9XKsszg1pccyZ9Hw-MmTgdZDZuG1tL19DlyB?qud5QhE6z5rJ?GWYvpyVSaQ -2-6-0 3-9-0 3-9-0 2-6-0 4-3-8 Scale = 1:23.4 15 4.80 12 3x4 = 13 3x4 = 3 0-7-8 16 17 18 19 8 2x4 || Ш = 3x4 3-9-0 7-11-12 8-Q₇8 Plate Offsets (X,Y)--[2:0-2-0,0-0-11] SPACING-LOADING (psf) **PLATES** GRIP 2-0-0 CSI. DEFL in (loc) I/defl L/d **TCLL** 20.0 Plate Grip DOL 1.25 TC 0.43 Vert(LL) 0.03 7-8 >999 240 MT20 244/190 TCDL Lumber DOL 1.25 вс 0.29 Vert(CT) 7.0 -0.04 7-8 >999 180 **BCLL** 0.0 Rep Stress Incr NO WB 0.16 Horz(CT) 0.00 n/a 6 n/a Code FBC2017/TPI2014 Weight: 40 lb FT = 20%**BCDL** 10.0 Matrix-MS

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SP No.3 SLIDER Left 2x4 SP No.3 1-11-8

REACTIONS. (size) 5=Mechanical, 2=0-4-13, 6=Mechanical

Max Horz 2=197(LC 23)

Max Uplift 5=-98(LC 8), 2=-241(LC 4), 6=-110(LC 8) Max Grav 5=102(LC 1), 2=455(LC 1), 6=202(LC 32)

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

TOP CHORD 2-4=-424/165

BOT CHORD 2-8=-259/370, 7-8=-259/370

WEBS 4-7=-406/285

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 98 lb uplift at joint 5, 241 lb uplift at joint 2 and 110 lb uplift at joint 6.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 92 lb down and 16 lb up at 1-4-12, 84 lb down and 30 lb up at 3-0-14, and 42 lb down and 87 lb up at 4-8-12, and 109 lb down and 80 lb up at 5-6-14 on top chord, and 15 lb down and 6 lb up at 1-4-12, 17 lb down and 4 lb up at 3-0-14, and 33 lb down and 16 lb up at 4-8-12, and 34 lb down and 17 lb up at 5-6-14 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-5=-54, 6-9=-20

Concentrated Loads (lb)

Vert: 14=-5(F) 15=-4(B) 16=6(F) 17=4(B) 18=-14(F) 19=-8(B)



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

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

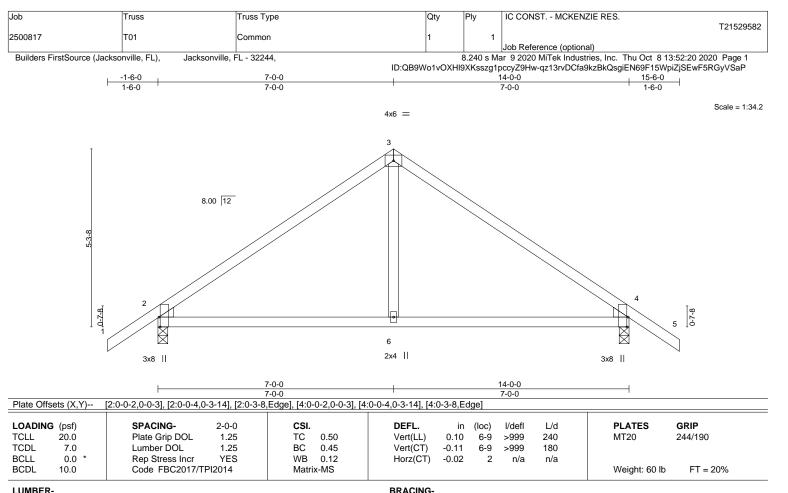
6904 Parke East Blvd. Tampa FL 33610

October 8,2020



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





TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE

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

REACTIONS. (size) 2=0-3-8, 4=0-3-8 Max Horz 2=-176(LC 10)

> Max Uplift 2=-236(LC 12), 4=-236(LC 13) Max Grav 2=599(LC 1), 4=599(LC 1)

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

TOP CHORD 2-3=-588/262, 3-4=-588/262 **BOT CHORD** 2-6=-86/431, 4-6=-86/431

WEBS 3-6=-23/308

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; 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 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 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 236 lb uplift at joint 2 and 236 lb uplift at



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

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

October 8,2020

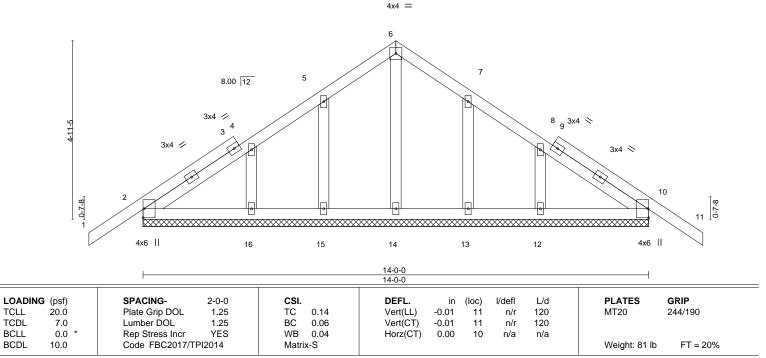


👠 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE



Job Truss Truss Type Qty Ply IC CONST. - MCKENZIE RES. T21529583 2500817 T01G Common Supported Gable 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:21 2020 Page 1 Builders FirstSource (Jacksonville, FL). Jacksonville, FL - 32244. ID:QB9Wo1vOXHI9XKsszg1pccyZ9Hw-I9bR2FEqQuIbbLJcQNDTvJiVSVzER16bSa?eziyVSaO -1-6-0 14-0-0 1-6-0 7-0-0 1-6-0 7-0-0

Scale: 3/8"=1'



LUMBER-

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

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.

REACTIONS. All bearings 14-0-0.

Max Horz 2=-166(LC 10) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 10 except 15=-117(LC 12), 16=-128(LC 12), 13=-116(LC 13),

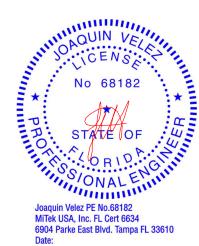
12=-129(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 10, 14, 15, 16, 13, 12

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 (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; 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 DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing
- Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10 except (jt=lb) 15=117, 16=128, 13=116, 12=129.





IC CONST. - MCKENZIE RES. Job Truss Truss Type Qty Ply T21529584 2500817 T02 Roof Special 5 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:22 2020 Page 1 Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244. ID:QB9Wo1vOXHI9XKsszg1pccyZ9Hw-mL9pGbFSBBQSCVto_5liSXFW0u8VAO1lhEkCV8yVSaN 22-11-8 -1-6-0 1-6-0 4-7-15 17-2-0 20-8-8 11-6-0 4-7-15 4-7-9 2-2-8 5-8-0 2-3-0 3-6-8 Scale = 1:55.4 4x6 || 5 2x4 || 8.00 12 2x4 // 3x6 // 10 0 26 11 4x6 Ш 3x4 = 14 13 15 4x4 = 3x6 | |П 4x4 = 2x4 2x4 || 3x8 || 4x12 11-3-8^{2x4} || 15-2-2 22-11-8 9-3-8 20-8-8 Plate Offsets (X,Y)--[2:0-3-8,Edge], [2:0-0-4,0-3-14], [2:0-0-2,0-0-3], [8:0-3-8,Edge], [10:0-3-0,0-0-0]

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.79	Vert(LL)	0.20 10-11	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.76	Vert(CT)	-0.40 10-11	>697	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.14 8	n/a	n/a		
BCDL	10.0	Code FBC2017/TF	PI2014	Matri	x-MS					Weight: 144 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

JOINTS

LUMBER-

TOP CHORD 2x4 SP No.2

2x4 SP No.2 *Except* **BOT CHORD**

4-14,9-10: 2x4 SP No.3, 7-12: 2x4 SP M 31

WEBS 2x4 SP No.3

WEDGE

Left: 2x4 SP No.3

SLIDER Right 2x4 SP No.3 1-2-8

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

Max Horz 2=259(LC 9)

Max Uplift 8=-297(LC 13), 2=-349(LC 12) Max Grav 8=866(LC 1), 2=957(LC 1)

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

TOP CHORD 2-3=-1223/501, 3-4=-1166/508, 4-5=-1242/613, 5-6=-1386/647, 6-7=-1480/619, 7-8=-690/271

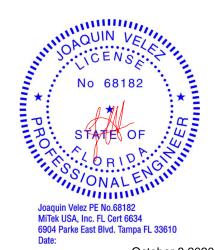
BOT CHORD 2-15=-405/1092, 11-12=-152/809, 10-11=-428/1232, 7-10=-385/1149, 9-10=-316/788,

8-9=-317/755

WEBS 12-15=-379/1106, 5-12=-334/721, 5-11=-322/734, 6-11=-425/330, 7-9=-930/388

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; 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 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 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=297, 2=349,



Structural wood sheathing directly applied or 2-7-9 oc purlins.

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

10-0-0 oc bracing: 12-14, 11-12, 10-11

1 Brace at Jt(s): 11

October 8,2020



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

NAKNING - Verity design parameters and KEAD NOTES ON THIS AND INCLUDED MITER KEEPENUE PAGE MIT-4/3 fev. 3719/2020 DEFORE USE.

Design valid for use only with MITEN'S connectors. This design is based only upon parameters shown, and is for an individual building operation or 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 quidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

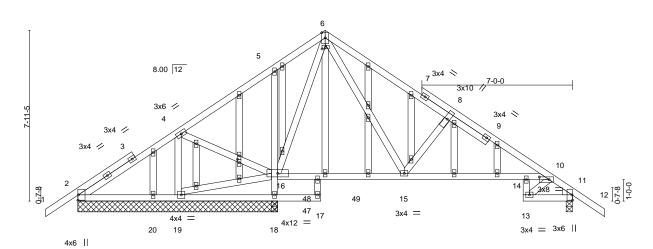
ANSI/PTI Quality Criteria, DSB-89 and BCSI Building Component Sector (Internation possible) from 2 Trus Bloto personal injury 230 Wolderf, MD 2006. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSVTP/1 Qu Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply IC CONST. - MCKENZIE RES. T21529585 GABLE 2500817 T02G 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:24 2020 Page 1 Builders FirstSource (Jacksonville, FL). Jacksonville, FL - 32244.

ID:QB9Wo1vOXHI9XKsszg1pccyZ9Hw-ikHZhHHijpgASo1B5WnAXyKyNiv1eBi29YDJa1yVSaL -1-6-0 4-7-15 20-8-8 23-0-0 1-6-0 4-7-9 2-2-8 5-8-0 2-3-8 4-7-15 3-6-8

Scale = 1:53.6



4x6 ||

9-3-8 11-3-8 0-3-8 2-0-0 20-8-8 23-0-0 4-7-15 15-2-2 9-0-0 4-7-15

[6:0-1-12,0-0-13], [10:0-5-8,0-1-8], [11:0-0-2,0-0-2], [11:0-0-3,0-3-13], [25:0-1-13,0-1-0]

COADING (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 FBC2017/TPI2014	CSI. TC 0.41 BC 0.44 WB 0.89 Matrix-MS	DEFL. in (loc) l/defl L/d Vert(LL) -0.08 14-15 >999 240 Vert(CT) -0.19 14-15 >886 180 Horz(CT) 0.04 11 n/a n/a	PLATES GRIP MT20 244/190 Weight: 197 lb FT = 20%
LUMBER-			BRACING-	

TOP CHORD

BOT CHORD

LUMBER-

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

5-18,13-14: 2x4 SP No.3 **WEBS** 2x4 SP No.3 *Except*

17-21: 2x4 SP No.2 2x4 SP No.3 **OTHERS**

WEDGE

Right: 2x4 SP No.3

REACTIONS. All bearings 9-3-8 except (jt=length) 11=0-3-8.

Max Horz 2=-259(LC 10) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 20 except 18=-354(LC 13),

11=-219(LC 13), 19=-170(LC 24)

All reactions 250 lb or less at joint(s) 2, 19, 20, 2 except 18=1312(LC 1),

18=1312(LC 1), 11=434(LC 20)

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

2-4=-88/314, 4-5=-136/623, 5-6=-23/587, 6-8=-275/251, 8-10=-406/257, TOP CHORD

10-11=-332/179

BOT CHORD 2-20=-264/196, 19-20=-264/196, 16-18=-1321/487, 15-16=-333/290, 14-15=-70/326,

10-14=-57/274

WFBS 4-19=-96/255, 4-16=-468/218, 6-16=-951/283, 6-15=-288/629, 8-15=-454/357

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; 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 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.
- * 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20, 2 except (jt=lb) 18=354, 11=219, 19=170.



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

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

4-10-0 oc bracing: 16-18

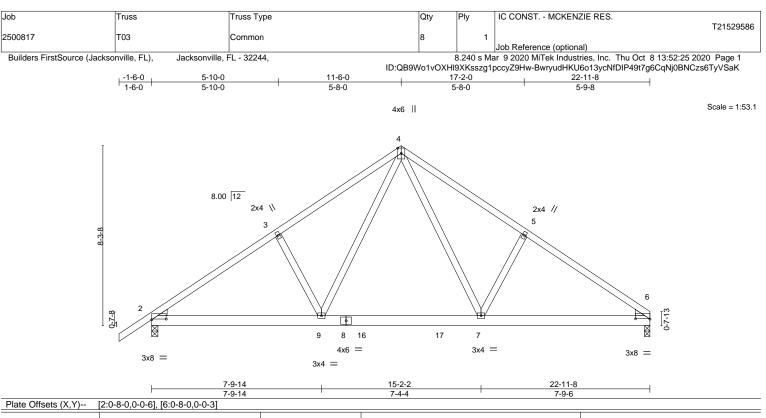
MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

October 8,2020



🗥 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not





LOADIN	G (psf)	SPACING-	2-0-0	CSI.
TCLL	20.0	Plate Grip DOL	1.25	TC 0.44
TCDL	7.0	Lumber DOL	1.25	BC 0.59
BCLL	0.0 *	Rep Stress Incr	NO	WB 0.56
BCDL	10.0	Code FBC2017/T	PI2014	Matrix-MS

BRACING-

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

in (loc)

7-9

7-9

6

-0.11

-0.19

0.03

TOP CHORD **BOT CHORD** Structural wood sheathing directly applied or 4-4-4 oc purlins.

PLATES

Weight: 137 lb

MT20

GRIP

244/190

FT = 20%

Rigid ceiling directly applied or 9-9-9 oc bracing.

I/defl

>999

>999

n/a

L/d

240

180

n/a

LUMBER-

TOP CHORD 2x4 SP No.2 2x6 SP No.2 BOT CHORD **WEBS** 2x4 SP No.3

WEDGE

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

REACTIONS. (size) 6=0-3-0, 2=0-3-8 Max Horz 2=259(LC 9)

> Max Uplift 6=-406(LC 13), 2=-459(LC 12) Max Grav 6=1070(LC 20), 2=1153(LC 1)

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

TOP CHORD 2-3=-1595/695, 3-4=-1531/756, 4-5=-1521/760, 5-6=-1597/699

BOT CHORD 2-9=-559/1418, 7-9=-254/936, 6-7=-482/1259

WEBS 3-9=-342/313, 4-9=-385/811, 4-7=-392/814, 5-7=-339/315

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; 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 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 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25 Uniform Loads (plf)

Vert: 1-4=-54, 4-6=-54, 9-13=-20, 7-9=-80(F=-60), 7-10=-20



6904 Parke East Blvd. Tampa FL 33610

October 8,2020



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



Job Truss Truss Type Qty Ply IC CONST. - MCKENZIE RES. T21529587 2500817 T04 Common 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:26 2020 Page 1 Builders FirstSource (Jacksonville, FL). Jacksonville, FL - 32244. ID:QB9Wo1vOXHI9XKsszg1pccyZ9Hw-f7PK5zlyFQwuh6BaDwpecNPIOWY66ABLcsiPewyVSaJ -1-6-0 1-6-0 5-10-0 11-6-0 23-0-0 17-2-0 5-10-0 5-8-0 5-8-0 5-10-0 Scale = 1:53.1 4x6 || 8.00 12 2x4 \\ 2x4 // 3 0-7-8 9 8 16 7 3x4 = 4x6 =3x4 = 3x8 = 3x8 = 23-0-0 7-9-14 15-2-2

Plate Offsets (X,Y)--[2:0-8-0,0-0-6], [6:0-8-0,0-0-6]

LOADIN	G (psf)	SPACING-	2-0-0	CSI.
TCLL	20.0	Plate Grip DOL	1.25	TC 0.45
TCDL	7.0	Lumber DOL	1.25	BC 0.59
BCLL	0.0 *	Rep Stress Incr	NO	WB 0.57
BCDL	10.0	Code FBC2017/T	PI2014	Matrix-MS

BRACING-

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

in (loc)

7-9

7-9

6

-0.11

-0.19

0.03

I/defl

>999

>999

n/a

L/d

240

180

n/a

TOP CHORD **BOT CHORD**

Structural wood sheathing directly applied or 4-4-3 oc purlins. Rigid ceiling directly applied or 9-9-11 oc bracing.

PLATES

Weight: 137 lb

MT20

GRIP

244/190

FT = 20%

WEBS WEDGE

LUMBER-

TOP CHORD

BOT CHORD

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

2x4 SP No.2

2x6 SP No.2

2x4 SP No.3

REACTIONS.

(size) 6=0-3-8, 2=0-3-8 Max Horz 2=259(LC 9)

Max Uplift 6=-406(LC 13), 2=-459(LC 12)

Max Grav 6=1071(LC 20), 2=1155(LC 1)

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

TOP CHORD 2-3=-1597/697, 3-4=-1533/757, 4-5=-1529/764, 5-6=-1605/703

BOT CHORD 2-9=-559/1420, 7-9=-255/939, 6-7=-485/1267

WEBS 4-7=-396/824, 5-7=-341/316, 4-9=-384/809, 3-9=-342/313

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; 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 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 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25 Uniform Loads (plf)

Vert: 1-4=-54, 4-6=-54, 9-13=-20, 7-9=-80(F=-60), 7-10=-20



October 8,2020

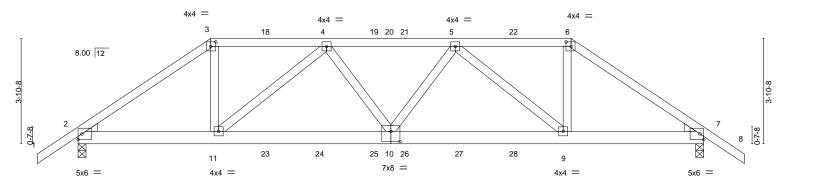


👠 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE



Job Truss Truss Type Qty Ply IC CONST. - MCKENZIE RES. T21529588 2500817 T05 Hip Girder 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:27 2020 Page 1 Builders FirstSource (Jacksonville, FL). Jacksonville, FL - 32244. ID:QB9Wo1vOXHI9XKsszg1pccyZ9Hw-7JyiJIJb0k2IJGmmmeKt9ayQAvrBrbSUrWSzBMyVSal 13-10-6 4-10-8 23-0-0 1-6-0 4-10-8 4-8-12 4-3-2 4-10-8 4-3-2 1-6-0

Scale = 1:42.4



<u> </u>	4-10-8 4-10-8		11-6-0 6-7-8	-	18-1-8 6-7-8		23-0-0 4-10-8	——
Plate Offsets (X,Y)	[3:0-2-4,0-2-0], [6:0-2-4,0	-2-0], [10:0-4-0	0-4-8]					
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code FBC2017/TF	2-0-0 1.25 1.25 NO PI2014	CSI. TC 0.63 BC 0.73 WB 0.69 Matrix-MS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) 0.16 9-10 -0.22 9-10 0.06 7	>999 24	30	GRIP 244/190 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

2x4 SP No.2 TOP CHORD 2x6 SP No.2 **BOT CHORD WEBS** 2x4 SP No.3

WEDGE

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

REACTIONS. (size) 2=0-3-8, 7=0-3-8 Max Horz 2=-133(LC 25)

> Max Uplift 2=-1028(LC 8), 7=-1050(LC 9) Max Grav 2=1799(LC 1), 7=1819(LC 1)

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

TOP CHORD 2-3=-2654/1516, 3-4=-2177/1336, 4-5=-3239/1890, 5-6=-2204/1365, 6-7=-2687/1552

BOT CHORD 2-11=-1241/2132, 10-11=-1847/3088, 9-10=-1842/3098, 7-9=-1212/2159 **WEBS** 3-11=-570/1102, 4-11=-1231/842, 4-10=-76/395, 5-10=-46/387, 5-9=-1201/798,

6-9=-537/1080

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 128 lb down and 152 lb up at 4-10-8, 110 lb down and 148 lb up at 6-11-4, 110 lb down and 148 lb up at 8-11-4, 110 lb down and 144 lb up at 10-11-4, 110 lb down and 144 lb up at 12-0-12. 110 lb down and 148 lb up at 14-0-12, and 110 lb down and 148 lb up at 16-0-12, and 188 lb down and 255 lb up at 18-1-8 on top chord, and 237 lb down and 163 lb up at 4-10-8, 86 lb down and 28 lb up at 6-11-4, 86 lb down and 28 lb up at 8-11-4, 86 lb down and 28 lb up at 10-11-4, 86 lb down and 28 lb up at 12-0-12, 86 lb down and 28 lb up at 14-0-12, and 86 lb down and 28 lb up at 16-0-12, and 237 lb down and 163 lb up at 18-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Continued on page 2



Structural wood sheathing directly applied or 2-9-5 oc purlins.

Rigid ceiling directly applied or 5-4-14 oc bracing.

October 8,2020

🗥 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not

a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSVTP/1 Qu Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	IC CONST MCKENZIE RES.
		L., a		.	T21529588
2500817	T05	Hip Girder	1	1	
					Job Reference (optional)

Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:27 2020 Page 2 ID:QB9Wo1vOXHl9XKsszg1pccyZ9Hw-7JyiJIJb0k2lJGmmmeKt9ayQAvrBrbSUrWSzBMyVSal

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-3=-54, 3-6=-54, 6-8=-54, 12-15=-20

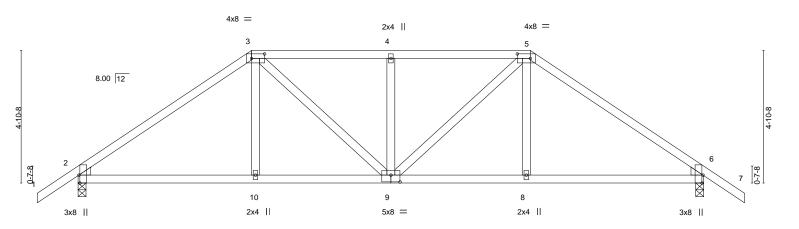
Concentrated Loads (lb)

Vert: 3=-110(B) 6=-144(B) 11=-228(B) 4=-110(B) 5=-110(B) 9=-228(B) 18=-110(B) 19=-110(B) 21=-110(B) 22=-110(B) 23=-64(B) 24=-64(B) 25=-64(B) 26=-64(B) 26=-6 27=-64(B) 28=-64(B)



IC CONST. - MCKENZIE RES. Job Truss Truss Type Qty Ply T21529589 2500817 T06 Hip 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:28 2020 Page 1 Builders FirstSource (Jacksonville, FL). Jacksonville, FL - 32244. ID:QB9Wo1vOXHl9XKsszg1pccyZ9Hw-bVW4WeKDm1AcwQLyKLr6hoUe1JH9a9Jd3ABWjoyVSaH 11-6-0 23-0-0 1-6-0 6-4-8 5-1-8 6-4-8 1-6-0

Scale = 1:42.4



	6-4-8	11-6-0	16-7-8	23-0-0	
	6-4-8	5-1-8	5-1-8	6-4-8	
Plate Offsets (X,Y)	[2:0-3-8,Edge], [2:0-0-4,0-3-14], [2:0	-0-2,0-0-3], [3:0-5-12,0-2-0], [5:0-5	5-12,0-2-0], [6:0-3-8,Edge], [6:0-0-4,	0-3-14], [6:0-0-2,0-0-3], [9:0-4-0,0-3-0]	
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 FBC2017/TPI2014	CSI. TC 0.44 BC 0.36 WB 0.21 Matrix-MS	DEFL. in (loc) l/defl Vert(LL) 0.06 10-13 >999 Vert(CT) -0.08 8-16 >999 Horz(CT) 0.03 6 n/a	240 MT20 2 180	GRIP 244/190 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE

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

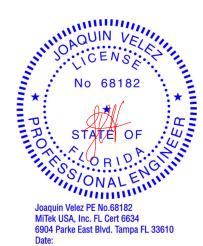
REACTIONS. (size) 2=0-3-8, 6=0-3-8 Max Horz 2=-164(LC 10)

Max Uplift 2=-375(LC 12), 6=-375(LC 13) Max Grav 2=932(LC 1), 6=932(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1145/520, 3-4=-1089/599, 4-5=-1089/599, 5-6=-1145/520 **BOT CHORD** 2-10=-316/870, 9-10=-316/874, 8-9=-270/874, 6-8=-270/870

WEBS 3-9=-243/364, 4-9=-311/244, 5-9=-243/364

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; 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 DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=375, 6=375.



Structural wood sheathing directly applied or 5-0-6 oc purlins.

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



Job Truss Truss Type Qty Ply IC CONST. - MCKENZIE RES. T21529590 2500817 T07 Hip 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:29 2020 Page 1 Builders FirstSource (Jacksonville, FL). Jacksonville, FL - 32244. ID:QB9Wo1vOXHl9XKsszg1pccyZ9Hw-3i4Sk_KrXLITYZw8u3NLE?1j7jagJeunlqx4FEyVSaG

15-1-8

7-3-0

Scale = 1:42.4

1-6-0

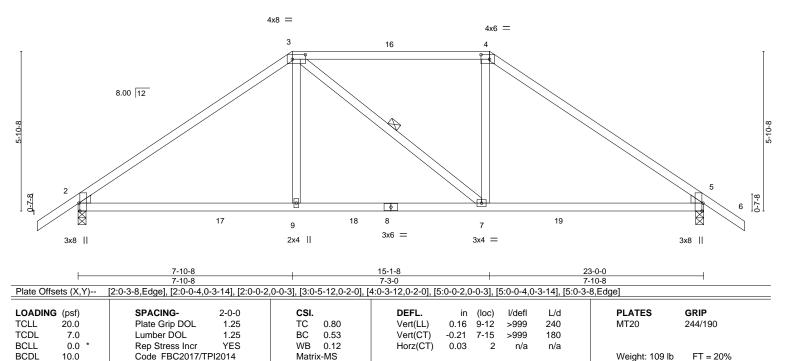
7-10-8

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

3-7

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

1 Row at midpt



BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

1-6-0

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

WEDGE

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

REACTIONS. (size) 2=0-3-8, 5=0-3-8 Max Horz 2=-196(LC 10)

Max Uplift 2=-370(LC 12), 5=-370(LC 13) Max Grav 2=932(LC 1), 5=932(LC 1)

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

7-10-8

7-10-8

TOP CHORD 2-3=-1145/489, 3-4=-859/502, 4-5=-1120/489 **BOT CHORD** 2-9=-262/873, 7-9=-261/881, 5-7=-221/853

WEBS 3-9=0/319, 4-7=-30/303

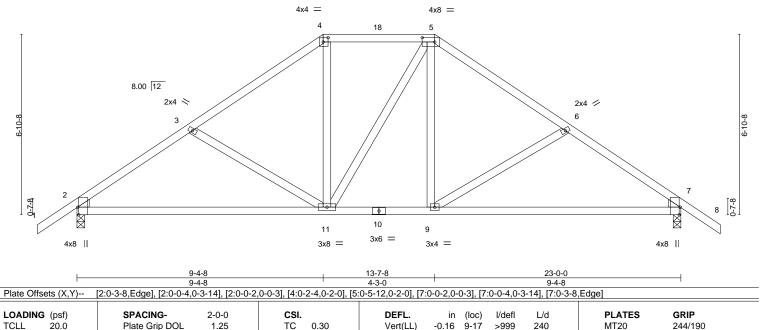
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=370, 5=370.





Job Truss Truss Type Qty Ply IC CONST. - MCKENZIE RES. T21529591 2500817 TOS Hip 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:30 2020 Page 1 Builders FirstSource (Jacksonville, FL). Jacksonville, FL - 32244. ID:QB9Wo1vOXHI9XKsszg1pccyZ9Hw-XuerxKLTlfQKAjVLSmuanDa0h7uR23EwXUgdnhyVSaF 23-0-0 4-4-13 13-7-8 1-6-0 4-4-13 4-11-11 4-3-0 4-11-11 4-4-13 1-6-0

Scale = 1:43.9



Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

-0.31

0.03

9-17

>886

n/a

180

n/a

Rigid ceiling directly applied or 9-1-5 oc bracing.

Structural wood sheathing directly applied or 5-3-12 oc purlins.

Weight: 128 lb

FT = 20%

LUMBER-

TCDL

BCLL

BCDL

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

7.0

0.0

10.0

WEDGE

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

REACTIONS. (size) 2=0-3-8, 7=0-3-8 Max Horz 2=-227(LC 10)

Max Uplift 2=-365(LC 12), 7=-365(LC 13) Max Grav 2=932(LC 1), 7=932(LC 1)

Lumber DOL

Rep Stress Incr

Code FBC2017/TPI2014

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1170/556, 3-4=-955/476, 4-5=-777/463, 5-6=-955/476, 6-7=-1170/556

BOT CHORD 2-11=-409/929, 9-11=-135/731, 7-9=-341/929

WEBS 3-11=-345/267, 4-11=-96/312, 5-9=-96/312, 6-9=-345/268

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; 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 DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

1.25

YES

вс

WB

Matrix-MS

0.69

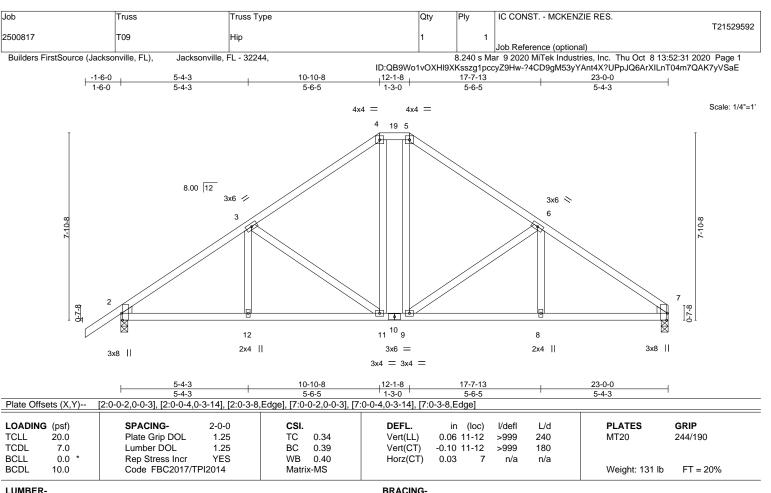
0.24

- * 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=365, 7=365.









TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE

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

REACTIONS. (size) 2=0-3-8, 7=0-3-8 Max Horz 2=247(LC 11)

> Max Uplift 2=-359(LC 12), 7=-307(LC 13) Max Grav 2=935(LC 1), 7=848(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD $2-3=-1189/519,\ 3-4=-873/465,\ 4-5=-770/456,\ 5-6=-873/466,\ 6-7=-1201/526$ BOT CHORD 2-12=-406/972, 11-12=-406/972, 9-11=-152/656, 8-9=-348/940, 7-8=-348/940

WEBS 3-11=-453/308, 4-11=-144/322, 5-9=-144/321, 6-9=-447/320

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; 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 DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=359, 7=307.



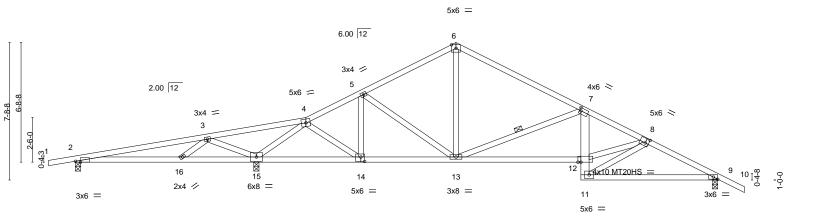
Structural wood sheathing directly applied or 5-2-4 oc purlins.

Rigid ceiling directly applied or 9-1-12 oc bracing.



IC CONST. - MCKENZIE RES. Job Truss Truss Type Qty Ply T21529593 2500817 T10 Roof Special 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:32 2020 Page 1 Builders FirstSource (Jacksonville, FL). Jacksonville, FL - 32244. ID:QB9Wo1vOXHI9XKsszg1pccyZ9Hw-THmbM0NjqGg1P1ejZBw2sefGDwboWuAD_n9ksZyVSaD 37-6-0 21-4-0 1-6-0 7-4-14 12-11-0 16-0-0 28-4-0 31-11-14 7-4-14 5-6-2 3-1-0 5-4-0 7-0-0 3-7-14

Scale: 3/16"=1'



	1	6-0-2	10-1-12 ₁	16-0-0	1 21-4-0	28-4-0	36-0-0	I .
		6-0-2	4-1-10	5-10-4	5-4-0	7-0-0	7-8-0	1
Plate Offsets	(X,Y)	[2:0-3-6,Edge], [7:0-1	-0,0-2-0], [8:0-2-4	0-3-0], [9:0-2-15,Edge],	[12:0-2-0,0-0-0], [14:0	-2-8,0-3-0]		
LOADING (p	osf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc) I/defl L/d	PLATES GRIP	
TCLL 2	0.0	Plate Grip DOI	L 1.25	TC 0.68	Vert(LL) -	0.11 12-13 >999 240	MT20 244/190)
TCDL	7.0	Lumber DOL	1.25	BC 0.63	Vert(CT) -	0.25 12-13 >999 180	MT20HS 187/143	1
BCLL	0.0 *	Rep Stress Inc	or YES	WB 0.54	Horz(CT)	0.07 9 n/a n/a		
BCDL 1	0.0	Code FBC201	17/TPI2014	Matrix-MS	' '		Weight: 187 lb FT = 2	20%

BRACING-

WEBS

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.2

2x4 SP No.2 *Except* **BOT CHORD**

7-11: 2x6 SP No.2 **WEBS** 2x4 SP No.3

REACTIONS. (size) 2=0-3-8, 9=0-3-8, 15=0-3-8

Max Horz 2=-208(LC 13)

Max Uplift 2=-316(LC 8), 9=-417(LC 13), 15=-614(LC 12) Max Grav 2=306(LC 23), 9=965(LC 1), 15=1591(LC 1)

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

TOP CHORD 2-3=-90/428, 3-4=-799/1157, 4-5=-908/439, 5-6=-961/553, 6-7=-995/540,

7-8=-1731/878, 8-9=-1584/838

BOT CHORD 2-16=-335/235, 15-16=-384/230, 14-15=-104/401, 13-14=-237/789, 12-13=-739/1732,

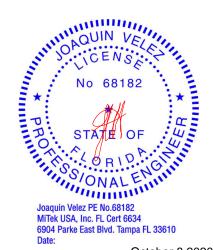
11-12=-244/644, 7-12=-109/443, 9-11=-642/1381

WEBS 3-16=-427/342, 3-15=-891/959, 4-15=-1794/1075, 5-14=-265/244, 6-13=-213/506,

7-13=-995/653, 8-12=-409/1133, 8-11=-1110/506, 4-14=-346/624

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=316, 9=417, 15=614.



Structural wood sheathing directly applied or 4-5-2 oc purlins.

7-13

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

1 Row at midpt





Job Truss Truss Type Qty Ply IC CONST. - MCKENZIE RES. T21529594 2500817 T11 Roof Special 16 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:33 2020 Page 1 Builders FirstSource (Jacksonville, FL). Jacksonville, FL - 32244. ID:QB9Wo1vOXHI9XKsszg1pccyZ9Hw-yTKzZMNLbaou1BDw7vRHOrCUnKs6FIQMDRvHO0yVSaC 6-0-7 17-10-0 37-0-0 11-4-13 29-11-8 33-2-13

6-7-0

5-6-8

3-3-5

Structural wood sheathing directly applied or 5-0-5 oc purlins,

4-15, 2-18

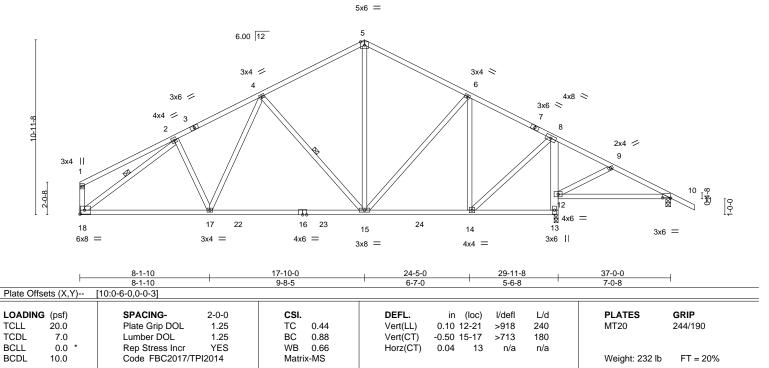
Rigid ceiling directly applied or 6-0-0 oc bracing.

except end verticals.

3-9-3

6-5-3

Scale = 1:72.2



BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD

2x4 SP No.2 *Except* 8-13: 2x6 SP No.2

WEBS 2x4 SP No.3

REACTIONS. (size) 13=0-3-0, 10=0-3-8, 18=Mechanical

Max Horz 18=-253(LC 13)

6-0-7

5-4-6

Max Uplift 13=-487(LC 13), 10=-169(LC 13), 18=-413(LC 12) Max Grav 13=1482(LC 1), 10=284(LC 24), 18=1070(LC 1)

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

TOP CHORD 2-4=-1275/804, 4-5=-878/659, 5-6=-881/658, 6-8=-726/514

BOT CHORD 17-18=-523/1130, 15-17=-406/1044, 14-15=-144/602, 12-13=-1434/965, 8-12=-1249/692 **WEBS**

4-17=-106/294, 4-15=-474/400, 5-15=-303/451, 6-15=-48/281, 6-14=-532/318,

8-14=-430/979, 9-12=-254/316, 2-18=-1309/659

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=487, 10=169, 18=413,



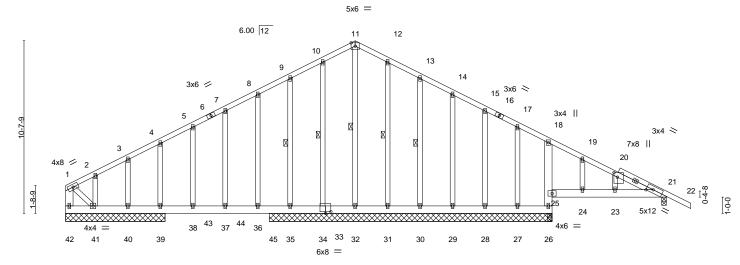


Job Truss Truss Type Qty Ply IC CONST. - MCKENZIE RES. T21529595 GABI F 2500817 T11G 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:35 2020 Page 1 Jacksonville, FL - 32244. Builders FirstSource (Jacksonville, FL). ID:QB9Wo1vOXHI9XKsszg1pccyZ9Hw-urRk_1Pc7B2cGUNIEJTIUGHsd8hFjLcfhlOOTuyVSaA 17-10-0 37-0-0

12-1-8

Scale = 1:70.9

1-6-0



	12-6-8		29-11-8	37-0-0
	12-6-8	l	17-5-0	7-0-8
Plate Offsets (X,Y)	[20:0-3-6,0-2-8], [21:0-4-12,Edge], [33:0-	0-0,0-2-12], [33:0-4-0,0-1	1-4], [34:0-1-12,0-0-0]	
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 NO Code FBC2017/TPI2014	CSI. TC 0.28 BC 0.27 WB 0.11 Matrix-S	DEFL. in (loc) l/defl L/d Vert(LL) 0.05 37 >999 240 Vert(CT) -0.06 37 >999 180 Horz(CT) 0.01 21 n/a n/a	PLATES GRIP MT20 244/190 Weight: 304 lb FT = 20%

LUMBER-BRACING-

17-10-0

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

2x6 SP No.2 *Except*

1-41: 2x4 SP No.3

2x4 SP No.3 OTHERS

TOP CHORD

BOT CHORD

WEBS

1 Row at midpt

except end verticals.

Rigid ceiling directly applied or 6-0-0 oc bracing, Except:

7-0-8

10-0-0 oc bracing: 25-26,24-25,23-24,21-23. 11-32, 10-34, 9-35, 12-31, 13-30

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

REACTIONS. All bearings 17-5-0 except (jt=length) 42=6-1-8, 21=0-3-8, 39=6-1-8, 40=6-1-8, 41=6-1-8.

Max Horz 42=-238(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 31, 30, 29, 28 except 42=-108(LC 39),

25=-237(LC 35), 21=-116(LC 5), 34=-115(LC 40), 35=-383(LC 8), 39=-389(LC 8),

40=-133(LC 40), 41=-343(LC 8), 27=-124(LC 35)

Max Grav All reactions 250 lb or less at joint(s) 26, 26, 34, 40, 31, 30, 29, 28, 27

except 42=296(LC 8), 25=339(LC 27), 21=331(LC 1), 32=284(LC 43), 35=568(LC

19), 39=571(LC 1), 41=260(LC 40)

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

1-42=-271/108, 9-10=-23/262, 10-11=-9/283, 11-12=0/274 TOP CHORD

WEBS 1-41=-97/287

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch right exposed; 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.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 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 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.
- 9) Bearing at joint(s) 25 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface. 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 31, 30, 29, 28
- except (jt=lb) 42=108, 25=237, 21=116, 34=115, 35=383, 39=389, 40=133, 41=343, 27=124. 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 16 lb down and 4 lb up at 5-10-12, 36 lb down and 29 lb up at 7-10-12, 36 lb down and 29 lb up at 8-9-4, and 36 lb down and 29 lb up at 10-9-4, and 16 lb down and 4 lb up at 12-9-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

Continued on page 2 LOAD CASE(S) Standard



MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

October 8,2020

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not

a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSVTP/1 Qu Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	IC CONST MCKENZIE RES.
			_	١.	T21529595
2500817	T11G	GABLE	1	1	
					Job Reference (optional)

Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:36 2020 Page 2 ID:QB9Wo1vOXHI9XKsszg1pccyZ9Hw-M2?6CNQEuVATueyVo1?_0Uq1NY1USospvP7x?KyVSa9

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25 Uniform Loads (plf)

Vert: 1-11=-54, 11-22=-54, 26-42=-20, 21-25=-20

Concentrated Loads (lb)

Vert: 38=1(B) 39=1(B) 43=1(B) 44=1(B) 45=1(B)



IC CONST. - MCKENZIE RES. Job Truss Truss Type Qty Ply T21529596 2500817 T12 Roof Special 16 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:37 2020 Page 1 Builders FirstSource (Jacksonville, FL). Jacksonville, FL - 32244.

ID:QB9Wo1vOXHI9XKsszg1pccyZ9Hw-qEZUPjRsfoJKWoXhMkWDZhM5FxEQB5ky83tVXnyVSa8 39-10-4 5-0-7

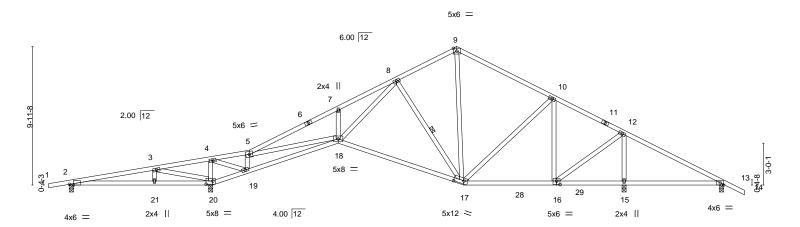
Structural wood sheathing directly applied or 2-2-0 oc purlins.

8-17

Rigid ceiling directly applied or 4-6-1 oc bracing.

1 Row at midpt

Scale = 1:82.8



	3-1-4 10-0-0 10 ₁ 3-8 3-1-4 3-10-12 0-3-8 2-7-8	19-3-12 6-4-12	28-4-0 9-0-4	34-9-13 6-5-13	39-10-4 5-0-7	47-0-0 7-1-12
	[2:0-3-6,Edge], [16:0-3-0,0-3-0], [17:0			0 0 10	307	7 1 12
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 FBC2017/TPI2014	CSI. TC 0.72 BC 0.86 WB 0.71 Matrix-MS	Vert(LL) 0.1	7 15-27 >515 2 ² 3 17-18 >567 18	10 N 30 /a	PLATES GRIP MT20 244/190 Veight: 251 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

WEBS

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

2x4 SP No.3

REACTIONS. All bearings 0-3-8. Max Horz 2=-227(LC 17) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) except 2=-345(LC 8), 20=-735(LC 12), 15=-533(LC 13),

13=-235(LC 10)

Max Grav All reactions 250 lb or less at joint(s) 2, 13 except 20=1728(LC 1), 15=1727(LC 1)

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

TOP CHORD 2-3=-246/808, 3-4=-877/1496, 5-7=-2129/919, 7-8=-2116/1092, 8-9=-642/566,

9-10=-698/556, 10-12=-443/389, 12-13=-296/810

10-3-8 4-2-4

12-11-0

12-11-0

BOT CHORD 2-21=-693/205, 20-21=-693/205, 19-20=-1623/1087, 18-19=-48/364, 17-18=-284/968,

16-17=-43/354, 15-16=-643/320, 13-15=-643/320

3-20=-1101/1217, 4-20=-914/483, 4-19=-755/1600, 5-19=-957/547, 5-18=-829/1778, **WEBS**

7-18=-315/352, 8-18=-605/1386, 8-17=-664/393, 9-17=-236/312, 10-17=-95/347,

10-16=-637/330, 12-16=-402/1204, 12-15=-1549/786

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 3x6 MT20 unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 345 lb uplift at joint 2, 735 lb uplift at joint 20, 533 lb uplift at joint 15 and 235 lb uplift at joint 13.







Job Truss Truss Type Qty Ply IC CONST. - MCKENZIE RES. T21529597 2500817 GABLE T12G 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:39 2020 Page 1 Builders FirstSource (Jacksonville, FL). Jacksonville, FL - 32244. ID:QB9Wo1vOXHl9XKsszg1pccyZ9Hw-mdhEqPS6BQZ2l6h3T9Yhe6SS3I_Jf0mFbNMbcfyVSa6 7-2-2 27-10-0 39-10-4 47-0-0

6-6-0

7-11-9

4-0-11

21-4-0

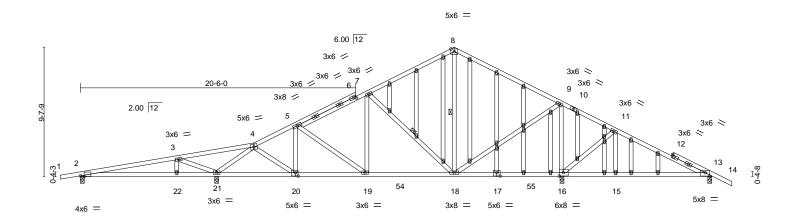
5-4-0

3-1-0

Scale = 1:85.8

1-6-0

7-1-12



L	7-2-2	10-1-12 16	-0-0	21-4-0	27-10-0	1	35	5-8-8	5-9-9 39-10-4	1	47-0-0	
	7-2-2 2	2-11-10 5- ⁻	0-4	5-4-0	6-6-0		7-	10-8)-1 ¹ -1 4-0-11	1	7-1-12	
Plate Offsets (X,Y)-	[2:0-3-6,Edge], [6:0-2-	-0,0-1-8], [13:0-4-	0,0-3-1], [16:	0-3-8,0-3-0], [1	7:0-3-0,0-3-0], [2	0:0-2-8,0-	3-0]					
						. ,						
LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc) I/	defl L/d		PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	_ 1.25	TC	0.64	Vert(LL)	-0.08 16	S-18 >	999 240		MT20	244/190	
TCDL 7.0	Lumber DOL	1.25	BC	0.51	Vert(CT)	-0.17 16	S-18 >	999 180				
BCLL 0.0 *	Rep Stress Inci	r YES	WB	0.67	Horz(CT)	0.02	16	n/a n/a				
BCDL 10.0	Code FBC201	7/TPI2014	Matr	ix-MS						Weight: 33	8 lb FT = 20%	

LUMBER-BRACING-

12-11-0

5-8-14

7-2-2

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

Structural wood sheathing directly applied or 5-6-13 oc purlins. Rigid ceiling directly applied or 6-0-0 oc bracing.

1 Row at midpt 7-18, 8-18

REACTIONS. All bearings 0-3-8.

Max Horz 2=-221(LC 17) (lb) -

All uplift 100 lb or less at joint(s) except 2=-237(LC 8), 21=-630(LC 12), 13=-156(LC 13), Max Uplift

16=-590(LC 13)

All reactions 250 lb or less at joint(s) except 2=328(LC 23), 21=1428(LC 1), 13=345(LC 24), 16=1570(LC Max Grav

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

TOP CHORD 2-3=-140/261, 3-4=-463/847, 4-5=-882/519, 5-7=-858/535, 7-8=-509/414, 8-9=-530/399,

9-11=-156/432 **BOT CHORD**

20-21=-215/475, 19-20=-329/800, 18-19=-285/795, 16-18=-333/397

3-21=-1006/608, 4-21=-1556/869, 4-20=-140/438, 7-18=-513/401, 9-18=-346/862, **WEBS**

9-16=-1201/740, 11-16=-401/274

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; 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 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.
- * 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 237 lb uplift at joint 2, 630 lb uplift at joint 21, 156 lb uplift at joint 13 and 590 lb uplift at joint 16.



October 8,2020

🗥 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not

a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSVTP/1 Qu Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



IC CONST. - MCKENZIE RES. Job Truss Truss Type Qty Ply T21529598 2500817 T13 Roof Special 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:41 2020 Page 1 Builders FirstSource (Jacksonville, FL). Jacksonville, FL - 32244. ID:QB9Wo1vOXHl9XKsszg1pccyZ9Hw-j?p?F5UNj1pm_PqSbaa9jXXmqZaG7vfY3hrigYyVSa4

27-10-0 4-3-15

Scale = 1:82.8

39-10-4 5-0-7

Structural wood sheathing directly applied or 2-10-9 oc purlins.

8-18

Rigid ceiling directly applied or 4-7-6 oc bracing.

1 Row at midpt

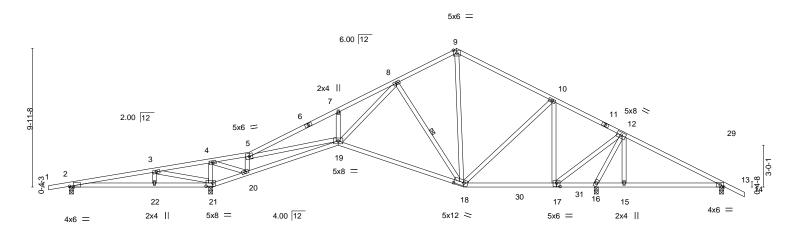


Plate Offsets	6-	1-4 10-0-0 10-10 1-4 3-10-12 0-3 [2:0-3-6,Edge], [17:0-3-0,0	8 2-7-8	19-3-12 6-4-12 3,0-2-8], [21	:0-5-12,0-2-12	28-4-0 9-0-4	+		4-9-13 i-5-13	37-10-4 3-0-7	39-10-4 2-0-0	47-0-0 7-1-12
TCDL 7 BCLL 0	sf) 0.0 7.0 0.0 *	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code FBC2017/TF	2-0-0 1.25 1.25 NO Pl2014	CSI. TC BC WB Matrix	0.81 0.93 0.71 k-MS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.18 -0.61 0.10	15-28	l/defl >632 >537 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 25	GRIP 244/190 56 lb FT = 20%

TOP CHORD

BOT CHORD

WEBS

LUMBER-BRACING-

12-11-0 2-7-8

10-3-8 4-2-4

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

(lb) -

REACTIONS.

All bearings 0-3-8.

Max Horz 2=-227(LC 17) Max Uplift All uplift 100 lb or less at joint(s) except 2=-342(LC 8), 21=-716(LC 12), 16=-550(LC 12),

13=-261(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 2 except 21=1665(LC 1), 16=1728(LC 1), 13=335(LC 24)

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

TOP CHORD $2-3=-226/756,\ 3-4=-859/1429,\ 5-7=-1968/866,\ 7-8=-1956/1040,\ 8-9=-550/537,$

9-10=-618/518, 10-12=-278/277, 12-13=-169/469

BOT CHORD 2-22=-642/192, 21-22=-642/192, 20-21=-1550/1069, 19-20=-50/361, 18-19=-253/866, 16-17=-1188/662, 15-16=-341/211, 13-15=-339/212

3-21=-1096/1216, 4-21=-875/470, 4-20=-728/1517, 5-20=-902/529, 5-19=-791/1649,

WEBS 7-19=-317/354, 8-19=-585/1316, 8-18=-634/384, 10-18=-159/479, 10-17=-896/495,

12-17=-742/1611, 12-16=-1960/1342, 12-15=-311/277

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 3x6 MT20 unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 342 lb uplift at joint 2, 716 lb uplift at joint 21, 550 lb uplift at joint 16 and 261 lb uplift at joint 13.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25 Uniform Loads (plf)

Vert: 1-5=-54, 5-9=-54, 9-29=-64(F=-10), 14-29=-54, 21-23=-20, 19-21=-20, 18-19=-20, 18-26=-20



6904 Parke East Blvd. Tampa FL 33610



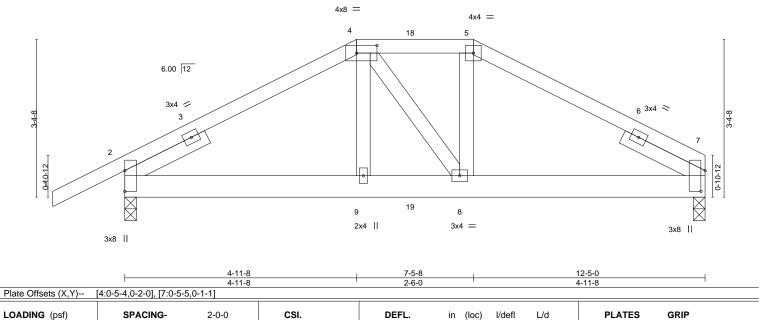


Job Truss Truss Type Qty Ply IC CONST. - MCKENZIE RES. T21529599 2500817 T14 Hip Girder 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:42 2020 Page 1 Builders FirstSource (Jacksonville, FL). Jacksonville, FL - 32244. ID:QB9Wo1vOXHI9XKsszg1pccyZ9Hw-BCMNSRU?TLxdcZPe9H6OGI44vy3TsWYhILaGD_yVSa3 -1-6-8 4-11-8 12-5-0

2-6-0

Scale = 1:24.7

4-11-8



Vert(LL)

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.03

-0.04

0.01

8-9

8-9

>999

>999

n/a

240

180

n/a

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

Structural wood sheathing directly applied or 5-8-1 oc purlins.

MT20

Weight: 71 lb

244/190

FT = 20%

LUMBER-

1-6-8

TOP CHORD 2x4 SP No.2 2x6 SP No.2 BOT CHORD **WEBS** 2x4 SP No.3

20.0

7.0

0.0

10.0

SLIDER Left 2x4 SP No.3 1-11-8, Right 2x4 SP No.3 1-11-8

Plate Grip DOL

Rep Stress Incr

Code FBC2017/TPI2014

Lumber DOL

REACTIONS. (size) 7=0-3-0, 2=0-3-0

Max Horz 2=85(LC 12)

Max Uplift 7=-402(LC 9), 2=-462(LC 8) Max Grav 7=705(LC 1), 2=794(LC 1)

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

2-4=-987/628, 4-5=-867/598, 5-7=-1008/633 **BOT CHORD** 2-9=-527/839, 8-9=-531/847, 7-8=-511/859

NOTES-

TCLL

TCDL

BCLL

BCDL

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

4-11-8

- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

1.25

1.25

NO

TC

вс

WB

Matrix-MS

0.22

0.36

0.09

- * 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 402 lb uplift at joint 7 and 462 lb uplift at
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 76 lb down and 109 lb up at 4-11-8, and 57 lb down and 99 lb up at 6-2-8, and 131 lb down and 189 lb up at 7-5-8 on top chord, and 138 lb down and 103 lb up at 4-11-8, and 45 lb down and 27 lb up at 6-2-8, and 138 lb down and 103 lb up at 7-4-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25 Uniform Loads (plf)

Vert: 1-4=-54, 4-5=-54, 5-7=-54, 10-14=-20

Concentrated Loads (lb)

Vert: 4=-57(F) 5=-84(F) 9=-131(F) 8=-131(F) 18=-57(F) 19=-37(F)



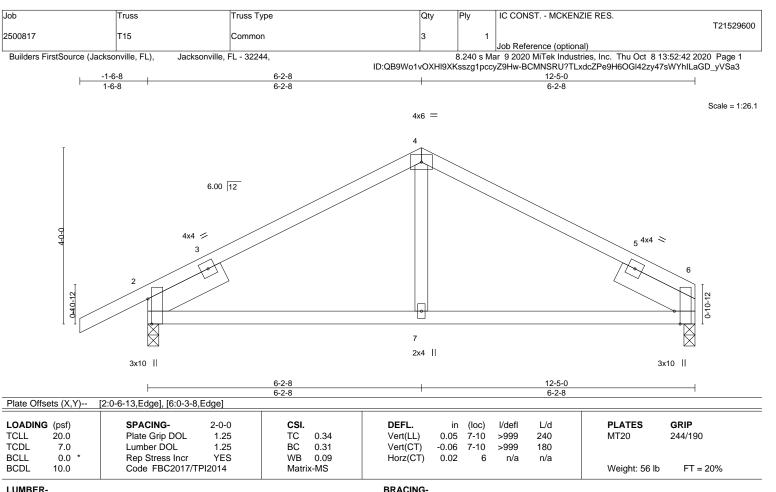
MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

October 8,2020



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





TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SP No.3 SLIDER Left 2x6 SP No.2 1-11-8, Right 2x6 SP No.2 1-11-8

REACTIONS. (size) 6=0-3-0, 2=0-3-0

Max Horz 2=97(LC 16)

Max Uplift 6=-168(LC 13), 2=-223(LC 12) Max Grav 6=454(LC 1), 2=548(LC 1)

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

TOP CHORD 2-4=-474/346, 4-6=-474/344 BOT CHORD 2-7=-195/424, 6-7=-195/424

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 168 lb uplift at joint 6 and 223 lb uplift at joint 2.



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

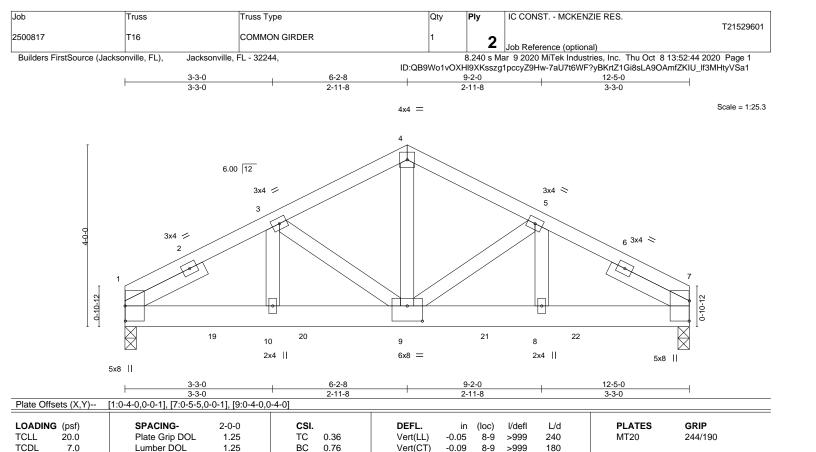
Rigid ceiling directly applied or 10-0-0 oc bracing.

October 8,2020



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





Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.02

n/a

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

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

Weight: 151 lb

FT = 20%

n/a

LUMBER-

BCLL

BCDL

WEBS

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

0.0

10.0

SLIDER Left 2x4 SP No.3 1-11-8, Right 2x4 SP No.3 1-11-8

REACTIONS. (size) 1=0-3-0, 7=0-3-0 Max Horz 1=-65(LC 13)

2x4 SP No.3

Max Uplift 1=-1257(LC 8), 7=-1595(LC 9)

Rep Stress Incr

Code FBC2017/TPI2014

Max Grav 1=3183(LC 1), 7=4039(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-3=-4523/1799, 3-4=-3757/1506, 4-5=-3758/1507, 5-7=-4666/1856 **BOT CHORD** $1\text{-}10\text{=-}1587/3936, \, 9\text{-}10\text{=-}1587/3936, \, 8\text{-}9\text{=-}1575/4068, \, 7\text{-}8\text{=-}1575/4068}$ WEBS 4-9=-1199/3030, 5-9=-899/430, 5-8=-402/1055, 3-9=-736/364, 3-10=-342/908

NO

WB

Matrix-MS

0.58

NOTES-

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.
- Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; 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 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1257 lb uplift at joint 1 and 1595 lb uplift at joint 7
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1050 lb down and 433 lb up at 2-0-4, 1050 lb down and 433 lb up at 4-0-4, 1050 lb down and 433 lb up at 6-0-4, 1050 lb down and 433 lb up at 8-0-4, and 1050 lb down and 433 lb up at 10-0-4, and 1056 lb down and 427 lb up at 12-0-4 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=1.25, Plate Increase=1.25 Uniform Loads (plf)

Vert: 1-4=-54, 4-7=-54, 11-15=-20

Continued on page 2



October 8,2020



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



Job	Truss	Truss Type	Qty	Ply	IC CONST MCKENZIE RES.
0500047	TAC	COMMON CIPPED			T21529601
2500817	T16	COMMON GIRDER	1	2	Job Reference (optional)

Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:44 2020 Page 2 ID:QB9Wo1vOXHI9XKsszg1pccyZ9Hw-7aU7t6WF?yBKrtZ1Gi8sLA9OAmfZKIU_lf3MHtyVSa1

LOAD CASE(S) Standard Concentrated Loads (lb)

Vert: 9=-1050(B) 17=-1056(B) 19=-1050(B) 20=-1050(B) 21=-1050(B) 22=-1050(B)

Job Truss Truss Type Qty Ply IC CONST. - MCKENZIE RES. T21529602 2500817 V01 Valley 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:45 2020 Page 1 Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244. ID:QB9Wo1vOXHI9XKsszg1pccyZ9Hw-bn2W5SXtmGJBT18DqQf5uNibLA7j3sc8_JpwpJyVSa0

26-4-10

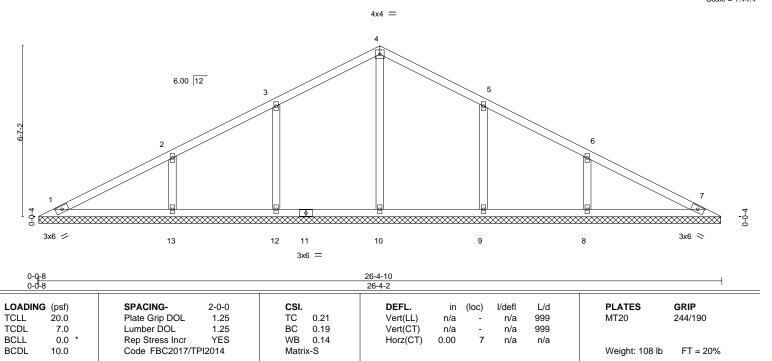
13-2-5

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

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

13-2-5

Scale = 1:44.4



BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

BOT CHORD 2x4 SP No.3 OTHERS

REACTIONS. All bearings 26-3-10.

Max Horz 1=132(LC 12) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 12=-188(LC 12), 13=-227(LC 12), 9=-188(LC 13),

8=-227(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=381(LC 22), 12=310(LC 25), 13=364(LC 1),

9=310(LC 26), 8=364(LC 1)

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

13-2-5

WEBS 2-13=-257/276, 6-8=-257/276

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; 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 DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 12=188, 13=227, 9=188, 8=227.





Job Truss Truss Type Qty Ply T21529603 2500817 V02 Valley 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:46 2020 Page 1 Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244. ID:QB9Wo1vOXHI9XKsszg1pccyZ9Hw-3zculoYVXZR25BjQO7AKQbEkUaRfoKMHCzYTMIyVSa? 10-6-5 21-0-10 10-6-5 10-6-5 Scale = 1:36.5 4x4 = 6.00 12 2x4 || 2x4 || 3x6 / 3x6 > 9 8 10 6 2x4 || 2x4 || 3x6 =2x4 II 0-0-8 21-0-10 LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defI L/d **PLATES** GRIP TCLL Plate Grip DOL 1.25 0.37 999 MT20 244/190 20.0 TC Vert(LL) n/a n/a **TCDL** 7.0 Lumber DOL 1.25 вс 0.28 Vert(CT) n/a n/a 999 **BCLL** 0.0 Rep Stress Incr YES WB 5 0.10 Horz(CT) 0.00 n/a n/a **BCDL** 10.0 Code FBC2017/TPI2014 Matrix-S Weight: 79 lb FT = 20%

LUMBER-

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

BRACING-

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

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

IC CONST. - MCKENZIE RES.

REACTIONS. All bearings 20-11-10.

Max Horz 1=104(LC 12) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=-295(LC 12), 6=-294(LC 13)

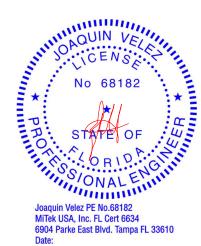
All reactions 250 lb or less at joint(s) 1, 5 except 7=282(LC 22), 9=467(LC 23), 6=467(LC 24)

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

WEBS 2-9=-332/351, 4-6=-332/351

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; 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 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.
- * 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 9=295, 6=294.



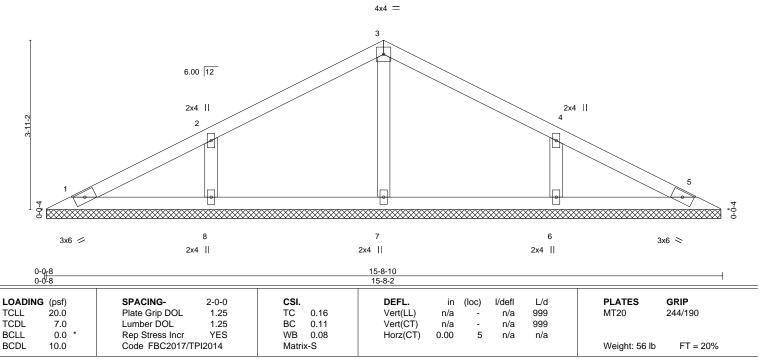




Job Truss Truss Type Qty Ply IC CONST. - MCKENZIE RES. T21529604 2500817 V03 Valley 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:47 2020 Page 1 Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244. 7-10-5

ID:QB9Wo1vOXHI9XKsszg1pccyZ9Hw-X9AGV8Y7ltZviKlcxrhZzonyazqVXn3QRdl1uCyVSa_ 15-8-10 7-10-5

Scale = 1:26.7



LUMBER-

OTHERS

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

REACTIONS. All bearings 15-7-10.

Max Horz 1=76(LC 12) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 7 except 8=-203(LC 12), 6=-203(LC 13)

7-10-5

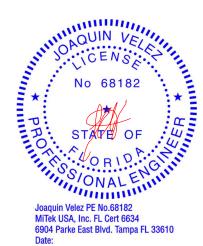
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=254(LC 1), 8=317(LC 23), 6=317(LC 24)

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

WEBS 2-8=-234/254, 4-6=-234/254

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; 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 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.
- * 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 7 except (jt=lb) 8=203, 6=203.





Job Truss Truss Type Qty Ply IC CONST. - MCKENZIE RES. T21529605 2500817 V04 Valley 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Oct 8 13:52:47 2020 Page 1 Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244. ID:QB9Wo1vOXHI9XKsszg1pccyZ9Hw-X9AGV8Y7ltZviKlcxrhZzonxCzo2XoGQRdl1uCyVSa_ 10-4-10 5-2-5 5-2-5 Scale = 1:18.9 4x4 = 6.00 12 3x4 / 3x4 > 2x4 || 0-0₋₈ 10-4-10 LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defI L/d **PLATES** GRIP TCLL 20.0 Plate Grip DOL 1.25 TC 0.25 Vert(LL) 999 MT20 244/190 n/a n/a Lumber DOL **TCDL** 7.0 1.25 вс 0.20 Vert(CT) n/a n/a 999 **BCLL** 0.0 Rep Stress Incr YES WB 0.06 3 Horz(CT) 0.00 n/a n/a

LUMBER-

BCDL

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

10.0

BRACING-

TOP CHORD **BOT CHORD**

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

Weight: 33 lb

FT = 20%

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

REACTIONS. (size) 1=10-3-10, 3=10-3-10, 4=10-3-10

Max Horz 1=-48(LC 13)

Max Uplift 1=-73(LC 12), 3=-82(LC 13), 4=-106(LC 12) Max Grav 1=155(LC 23), 3=155(LC 24), 4=369(LC 1)

Code FBC2017/TPI2014

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

NOTES-

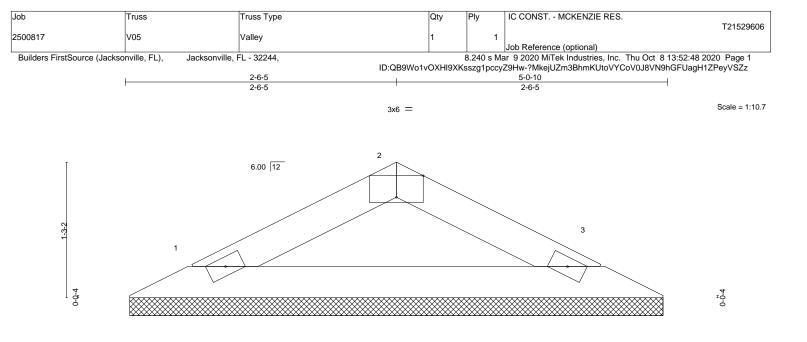
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-S

- 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.
- * 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3 except (jt=lb) 4=106.







2x4 / 2x4 >

5-0-10

Plate Offsets (X,Y)--[2:0-3-0,Edge]

LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES	CSI. TC 0.08 BC 0.18 WB 0.00	DEFL. in Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.00	-	I/defI n/a n/a n/a	L/d 999 999 n/a	PLATES GRIP MT20 244/190
BCDL 10.0	Code FBC2017/TPI2014	Matrix-P	, ,				Weight: 14 lb FT = 20%

BOT CHORD

BRACING-LUMBER-TOP CHORD 2x4 SP No.2 TOP CHORD

2x4 SP No.2 **BOT CHORD**

> (size) 1=4-11-10, 3=4-11-10 Max Horz 1=20(LC 16)

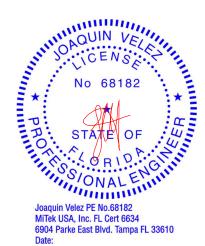
Max Uplift 1=-52(LC 12), 3=-52(LC 13)

Max Grav 1=140(LC 1), 3=140(LC 1)

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 (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; 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 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 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.
- 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 5-0-10 oc purlins.

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

October 8,2020



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

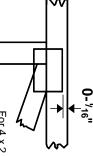


Symbols

PLATE LOCATION AND ORIENTATION



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



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

?

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

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

PLATE SIZE



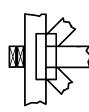
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



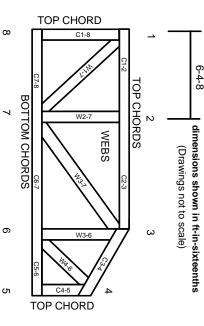
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only

Industry Standards:

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

ANSI/TPI1: DSB-89:

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

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

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

© 2012 MiTek® All Rights Reserved



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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.

Ņ

Never exceed the design loading shown and never stack materials on inadequately braced trusses.

ω

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

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.

ი ე

- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

œ

Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.

9

- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- 15. Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- 20. 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.