



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

RE: 2932802 - IC CONST. - SPENCE RES.

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

Site Information:

Customer Info: IC CONSTRUCTION Project Name: Spence Res. Model: Custom
Lot/Block: N/A Subdivision: N/A
Address: 313 SW Cross Pointe Court, N/A
City: Columbia Cty State: FL

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

Name: License #:
Address:
City: State:

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

Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE 7-16 Wind Speed: 130 mph
Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 31 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.

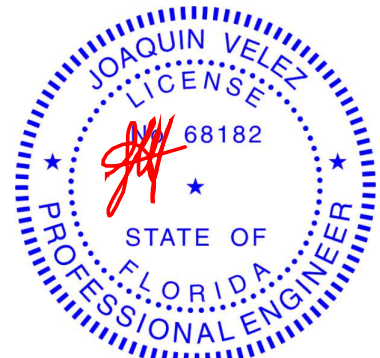
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	T25355917	CJ01	9/15/21	23	T25355939	T17	9/15/21
2	T25355918	CJ03	9/15/21	24	T25355940	T18	9/15/21
3	T25355919	CJ05	9/15/21	25	T25355941	T19	9/15/21
4	T25355920	EJ01	9/15/21	26	T25355942	T20	9/15/21
5	T25355921	HJ10	9/15/21	27	T25355943	T21	9/15/21
6	T25355922	PB01	9/15/21	28	T25355944	T22	9/15/21
7	T25355923	T01	9/15/21	29	T25355945	T23	9/15/21
8	T25355924	T02	9/15/21	30	T25355946	T24	9/15/21
9	T25355925	T03	9/15/21	31	T25355947	T25	9/15/21
10	T25355926	T04	9/15/21				
11	T25355927	T05	9/15/21				
12	T25355928	T06	9/15/21				
13	T25355929	T07	9/15/21				
14	T25355930	T08	9/15/21				
15	T25355931	T09	9/15/21				
16	T25355932	T10	9/15/21				
17	T25355933	T11	9/15/21				
18	T25355934	T12	9/15/21				
19	T25355935	T13	9/15/21				
20	T25355936	T14	9/15/21				
21	T25355937	T15	9/15/21				
22	T25355938	T16	9/15/21				

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-Lake City, FL.

Truss Design Engineer's Name: Velez, Joaquin

My license renewal date for the state of Florida is February 28, 2023.

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.



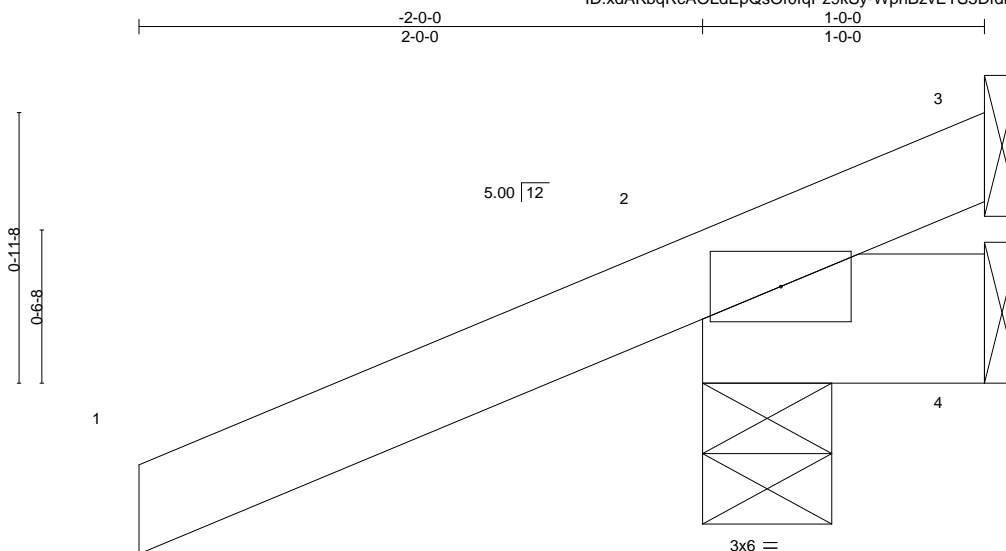
Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

September 15, 2021

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355917
2932802	CJ01	Jack-Open	8	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:22:38 2021 Page 1
ID:xdAKbqRcAOLdEpQsOf0fqPz9kSy-WpnBzvETS5DfdkiwnADqoVpeySixlmWjQ8ttlXydPv?



Scale = 1:8.2

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 0.24	Vert(LL)	0.00	5	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.04	Vert(CT)	0.00	5	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MP						Weight: 7 lb	FT = 20%

LUMBER-

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

BRACING-

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

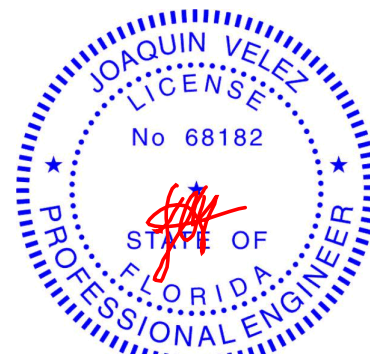
REACTIONS.

(size) 3=Mechanical, 2=0-5-8, 4=Mechanical
Max Horz 2=40(LC 8)
Max Uplift 3=9(LC 1), 2=129(LC 8), 4=64(LC 1)
Max Grav 3=8(LC 8), 2=254(LC 1), 4=40(LC 8)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 3, 129 lb uplift at joint 2 and 64 lb uplift at joint 4.



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
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September 15,2021

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

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355918
2932802	CJ03	Jack-Open	8	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:22:39 2021 Page 1

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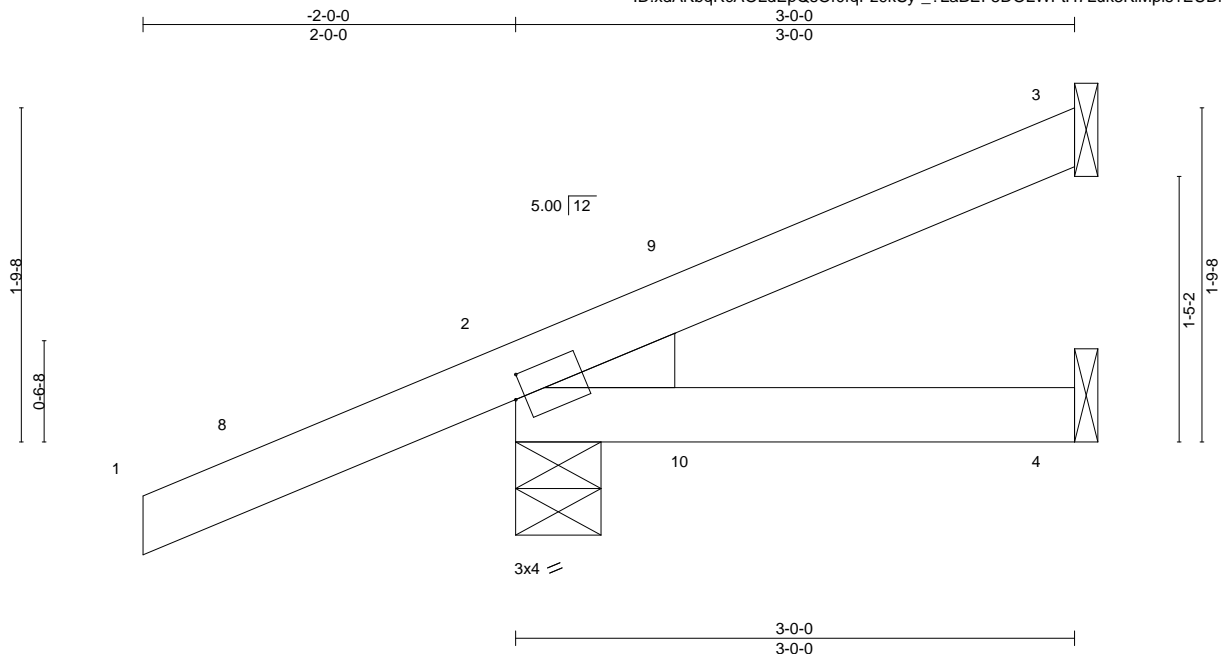


Plate Offsets (X,Y)-- [2:0-0-10,0-1-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	20.0	Plate Grip DOL	1.25	TC	0.24	Vert(LL)	0.01	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.10	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 14 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3

BRACING-

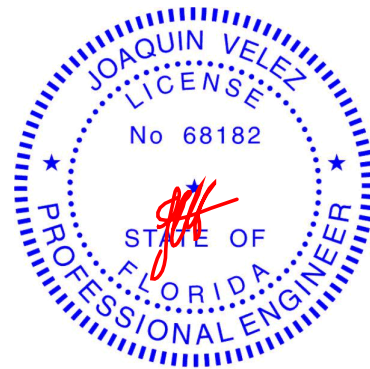
TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-5-8, 4=Mechanical
Max Horz 2=67(LC 12)
Max Uplift 3=33(LC 12), 2=-107(LC 8), 4=-15(LC 9)
Max Grav 3=54(LC 1), 2=253(LC 1), 4=49(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 2-11-4 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
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 3, 107 lb uplift at joint 2 and 15 lb uplift at joint 4.



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
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September 15, 2021

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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

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



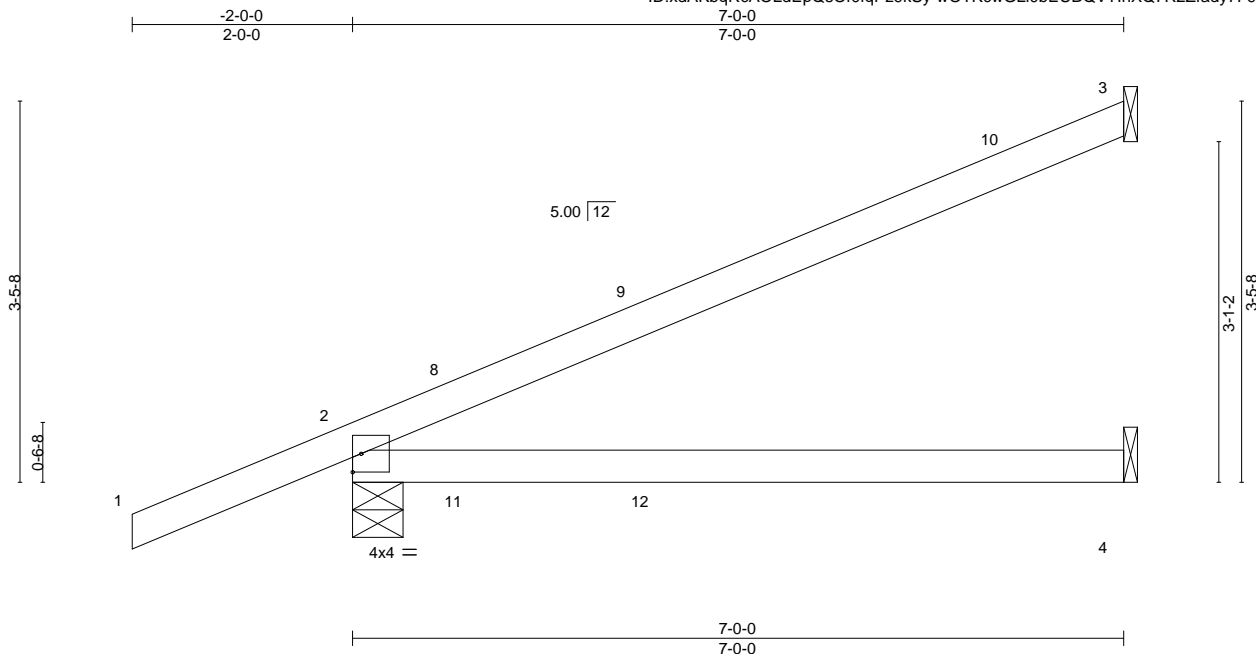
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355920
2932802	EJ01	Jack-Partial	45	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:22:41 2021 Page 1

ID:xdAKbqRcAOLdEpQsOf0fqPz9kSy-wOTKcwGLI0bEUBQVTInXQ7R2Zfady7F9666XLsydPuy



Scale = 1:20.9

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 0.66	Vert(LL)	0.29	4-7	>284	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.68	Vert(CT)	0.25	4-7	>332	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.03	3	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS						Weight: 25 lb	FT = 20%

LUMBER-

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

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.

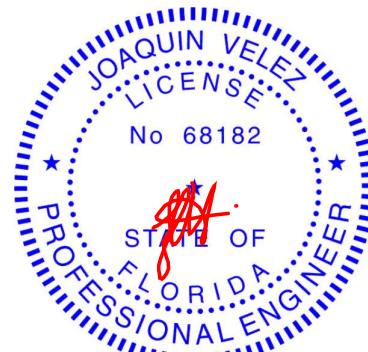
REACTIONS.

(size) 3=Mechanical, 2=0-5-8, 4=Mechanical
Max Horz 2=120(LC 12)
Max Uplift 3=-81(LC 12), 2=-140(LC 8), 4=-40(LC 9)
Max Grav 3=163(LC 1), 2=380(LC 1), 4=126(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 6-11-4 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
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint 3, 140 lb uplift at joint 2 and 40 lb uplift at joint 4.



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September 15,2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



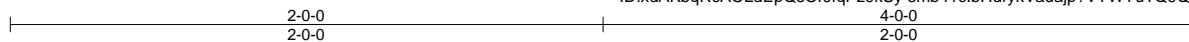
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355922
2932802	PB01	Piggyback	5	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

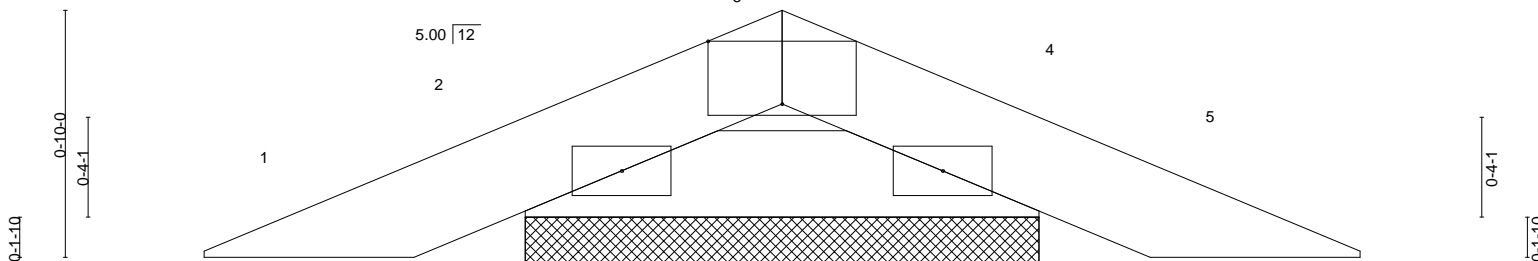
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:22:43 2021 Page 1

ID:xdAKbqRcAOLdEpQsOf0fqPz9kSy-smb41clbHdrykVauajp?VYWYuTQ9Q1ISZQbeQlydPuw



3x6 =

Scale = 1:7.8



2x4 =

2x4 =

4-0-0

4-0-0

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

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.03	Vert(LL)	-0.00	4	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.03	Vert(CT)	-0.00	4	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-P						Weight: 9 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2

BRACING-

TOP CHORD

BOT CHORD

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

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

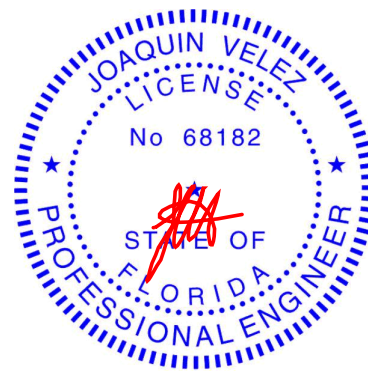
REACTIONS.

(size) 2=1-8-13, 4=1-8-13
Max Horz 2=10(LC 12)
Max Uplift 2=32(LC 8), 4=32(LC 9)
Max Grav 2=104(LC 1), 4=104(LC 1)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 2 and 32 lb uplift at joint 4.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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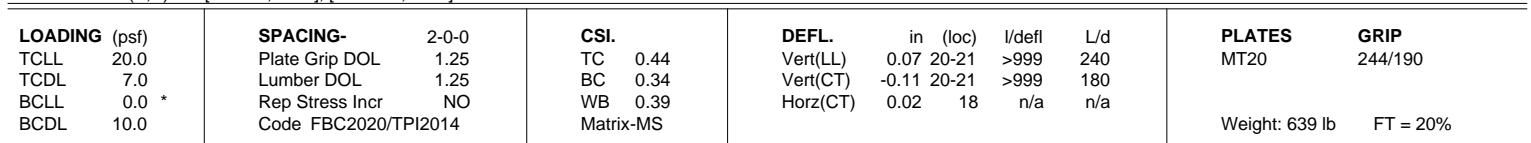
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



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Tampa, FL 36610

Builders FirstSource (Lake City, FL), Lake City, FL - 32055, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:22:53 2021 Page 1
 ID:xdAKbqRcAOLdEpQsOf0fqPz9KSy-aiBs71Ptwi6Xw1LpAq_LvfxA1VlmS5wsz0AmAyidPum
 2-0-0 3-11-6 7-0-0 10-8-4 14-2-12 18-6-0 22-9-4 27-0-0 31-2-12 35-6-0 39-9-4 43-3-12 47-0-0 50-0-10 54-0-0 56-0-0
 2-0-0 3-11-6 3-0-10 3-8-4 3-6-8 4-3-4 4-3-4 4-2-12 4-2-12 4-3-4 4-3-4 4-3-6 4-7-0 5-0-10 5-11-6 5-2-0
 Scale = 1:94.5



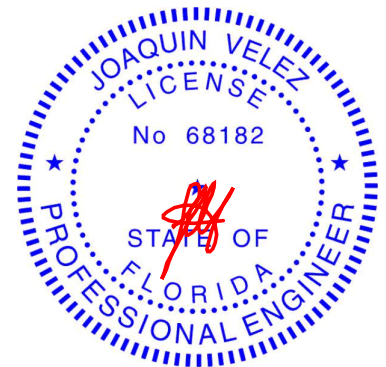
REACTIONS. All bearings 0-5-8 except (jt=length) 2=0-3-8.
 (lb) - Max Horz 2=56(LC 28)
 Max Uplift All uplift 100 lb or less at joint(s) except 2=324(LC 4), **27=1170**(LC 4), **23=1640**(LC 5),
 18=577(LC 9)
 Max Grav All reactions 250 lb or less at joint(s) except 2=714(LC 1), 27=2495(LC 19), 23=3689(LC 20),
 18=1368(LC 1)

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

TOP CHORD	2-3=-1065/489, 3-4=-876/459, 4-5=-778/436, 5-6=-398/915, 6-7=-398/915, 7-9=-347/178, 9-10=-347/178, 10-11=-884/2048, 11-13=-884/2048, 13-14=-1872/909, 14-15=-1872/909, 15-16=-2278/1098, 16-17=-2461/1155, 17-18=-2611/1189
BOT CHORD	2-28=-412/947, 23-25=-563/353, 21-23=-76/256, 20-21=-993/2307, 18-20=-1025/2358
WEBS	5-28=-395/820, 5-27=-1423/694, 6-27=-432/213, 7-27=-1181/555, 7-25=-155/437, 9-25=-459/229, 10-25=-462/1109, 10-23=-1855/832, 11-23=-484/240, 13-23=-2818/1294, 13-21=-897/2013, 14-21=-412/203, 15-21=-578/277, 16-20=-234/587

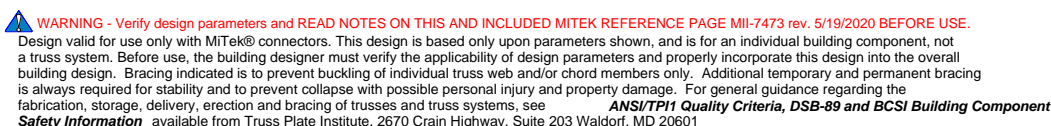
NOTES-

- 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.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 6) Provide adequate drainage to prevent water ponding.
- 7) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 324 lb uplift at joint 2, 1170 lb uplift at joint 27, 1640 lb uplift at joint 23 and 577 lb uplift at joint 18.



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date: September 15,2021

Continued on page 2



Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355923
2932802	T01	Hip Girder	1	2	Job Reference (optional)	

NOTES-

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 128 lb down and 85 lb up at 7-0-0, 109 lb down and 85 lb up at 9-0-12, 109 lb down and 85 lb up at 11-0-12, 109 lb down and 85 lb up at 13-0-12, 109 lb down and 85 lb up at 15-0-12, 109 lb down and 85 lb up at 17-0-12, 109 lb down and 85 lb up at 19-0-12, 109 lb down and 85 lb up at 21-0-12, 109 lb down and 85 lb up at 23-0-12, 109 lb down and 85 lb up at 25-0-12, 109 lb down and 85 lb up at 27-0-0, 109 lb down and 85 lb up at 28-11-4, 109 lb down and 85 lb up at 30-11-4, 109 lb down and 85 lb up at 32-11-4, 109 lb down and 85 lb up at 34-11-4, 109 lb down and 85 lb up at 36-11-4, 109 lb down and 85 lb up at 38-11-4, 109 lb down and 85 lb up at 40-11-4, 109 lb down and 85 lb up at 42-11-4, and 109 lb down and 85 lb up at 44-11-4, and 231 lb down and 169 lb up at 47-0-0 on top chord, and 295 lb down and 230 lb up at 7-0-0, 86 lb down and 60 lb up at 9-0-12, 86 lb down and 60 lb up at 11-0-12, 86 lb down and 60 lb up at 13-0-12, 86 lb down and 60 lb up at 15-0-12, 86 lb down and 60 lb up at 17-0-12, 86 lb down and 60 lb up at 19-0-12, 86 lb down and 60 lb up at 21-0-12, 86 lb down and 60 lb up at 23-0-12, 86 lb down and 60 lb up at 25-0-12, 86 lb down and 60 lb up at 27-0-0, 86 lb down and 60 lb up at 28-11-4, 86 lb down and 60 lb up at 30-11-4, 86 lb down and 60 lb up at 32-11-4, 86 lb down and 60 lb up at 34-11-4, 86 lb down and 60 lb up at 36-11-4, 86 lb down and 60 lb up at 38-11-4, 86 lb down and 60 lb up at 40-11-4, 86 lb down and 60 lb up at 42-11-4, and 86 lb down and 60 lb up at 44-11-4, and 295 lb down and 230 lb up at 46-11-4 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, 4-16=-54, 16-19=-54, 29-32=-20

Concentrated Loads (lb)

Vert: 4=-109(F) 8=-109(F) 16=-183(F) 28=-279(F) 25=-58(F) 9=-109(F) 10=-109(F) 11=-109(F) 23=-58(F) 20=-279(F) 12=-109(F) 35=-109(F) 36=-109(F) 37=-109(F) 38=-109(F) 39=-109(F) 40=-109(F) 41=-109(F) 42=-109(F) 43=-109(F) 44=-109(F) 45=-109(F) 46=-109(F) 47=-109(F) 48=-109(F) 49=-58(F) 50=-58(F) 51=-58(F) 52=-58(F) 53=-58(F) 54=-58(F) 55=-58(F) 56=-58(F) 57=-58(F) 58=-58(F) 59=-58(F) 60=-58(F) 61=-58(F) 62=-58(F) 63=-58(F) 64=-58(F) 65=-58(F)

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355924
2932802	T02	Hip	1	1		

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:22:55 2021 Page 1

ID:xdAKbqRcAOLdEpQsOf0fqPz9kSy-W4JdYjR7SJMFALVBHF1p_40ThlRxElZDKHVHr2ydPuk

-2-0-0 | 4-10-2 | 9-0-0 | 14-2-12 | 21-0-0 | 27-0-0 | 33-0-0 | 39-9-4 | 45-0-0 | 49-1-14 | 54-0-0 | 56-0-0

2-0-0 | 4-10-2 | 4-1-14 | 5-2-12 | 6-9-4 | 6-0-0 | 6-0-0 | 6-9-4 | 5-2-12 | 4-1-14 | 4-10-2 | 2-0-0

Scale = 1:94.5

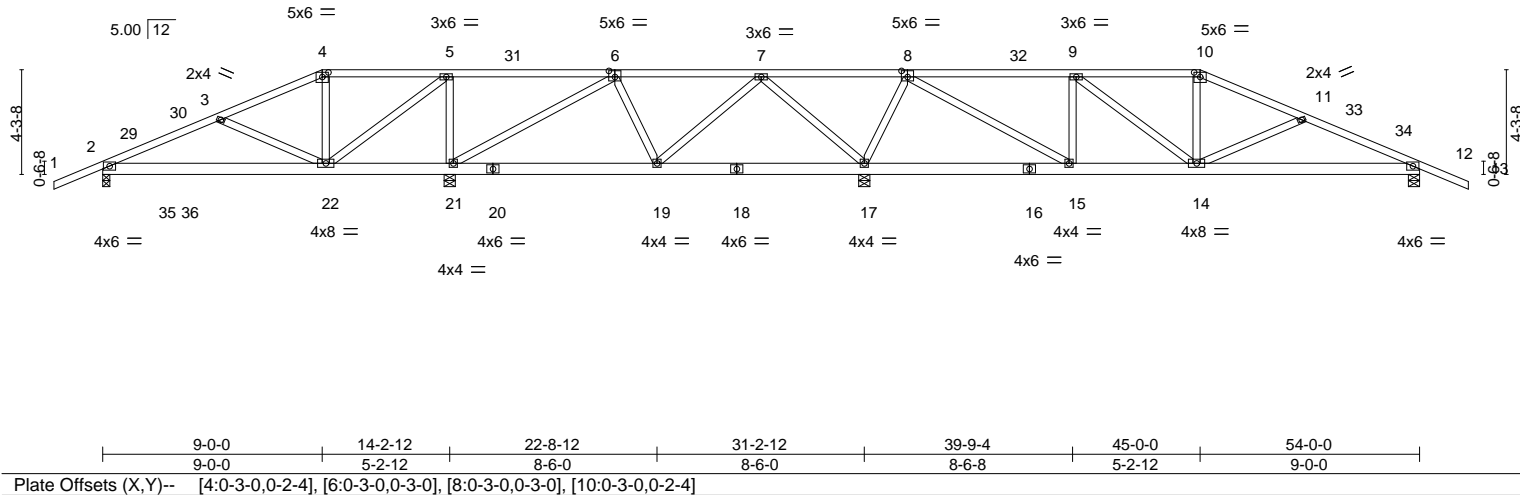


Plate Offsets (X,Y)--		[4:0-3-0,0-2-4], [6:0-3-0,0-3-0], [8:0-3-0,0-3-0], [10:0-3-0,0-2-4]
LOADING (psf)	SPACING-	2-0-0
TCLL 20.0	Plate Grip DOL	1.25
TCDL 7.0	Lumber DOL	1.25
BCLL 0.0 *	Rep Stress Incr	YES
BCDL 10.0	Code	FBC2020/TPI2014
	CSI.	
	TC	0.55
	BC	0.35
	WB	0.65
	Matrix-MS	
	DEFL.	
	Vert(LL)	0.10 22-25 >999 240
	Vert(CT)	-0.12 14-28 >999 180
	Horz(CT)	0.01 12 n/a n/a
	PLATES	GRIP
	MT20	244/190
	Weight: 319 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-3-1 oc purlins.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS. All bearings 0-5-8 except (jt=length) 2=0-3-8.

(lb) - Max Horz 2=68(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) except 2=225(LC 8), 21=415(LC 8), 17=431(LC 9), 12=240(LC 13)

Max Grav All reactions 250 lb or less at joint(s) except 2=543(LC 1), 21=1165(LC 23), 17=1742(LC 24), 12=812(LC 1)

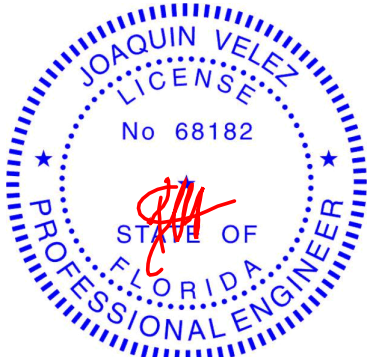
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-604/601, 3-4=-302/459, 4-5=-233/445, 5-6=-82/280, 7-8=-158/792, 8-9=-676/271, 9-10=-851/296, 10-11=-966/295, 11-12=-1253/392

BOT CHORD 2-22=-495/525, 21-22=-280/236, 15-17=-359/148, 14-15=-116/676, 12-14=-292/1118

WEBS 3-22=-323/231, 5-22=-663/639, 5-21=-745/533, 6-21=-551/200, 7-19=-42/420, 7-17=-870/260, 8-17=-1050/356, 8-15=-294/1195, 9-15=-480/184, 11-14=-300/166

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 3-4-13, Interior(1) 3-4-13 to 9-0-0, Exterior(2R) 9-0-0 to 16-7-10, Interior(1) 16-7-10 to 45-0-0, Exterior(2R) 45-0-0 to 52-7-10, Interior(1) 52-7-10 to 56-0-0 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - Provide adequate drainage to prevent water ponding.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 225 lb uplift at joint 2, 415 lb uplift at joint 21, 431 lb uplift at joint 17 and 240 lb uplift at joint 12.



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date: September 15,2021

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355925
2932802	T03	Hip	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,

8.430 s Aug 16 2021
MiTek Industries, Inc.
Wed Sep 15 10:22:56 2021
Page 1

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-2-0-0
5-6-0
11-0-0
19-0-0
27-0-0
35-0-0
43-0-0
48-6-0
54-0-0
56-0-0

-2-0-0
5-6-0
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8-0-0
8-0-0
5-6-0
5-6-0
2-0-0

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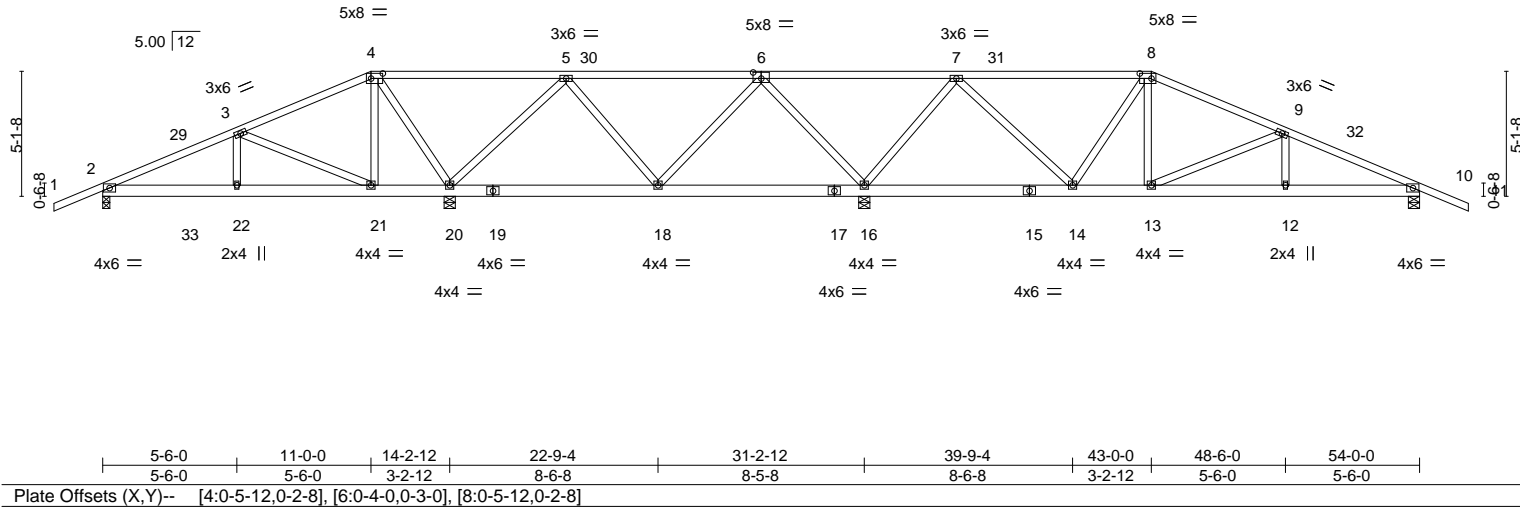


Plate Offsets (X,Y)--		[4:0-5-12,0-2-8], [6:0-4-0,0-3-0], [8:0-5-12,0-2-8]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 20.0	2-0-0	TC 0.79	in (loc) l/defl L/d
TCDL 7.0	Plate Grip DOL 1.25	BC 0.25	Vert(LL) -0.04 12-13 >999 240
BCLL 0.0 *	Lumber DOL 1.25	WB 0.84	Vert(CT) -0.08 12-13 >999 180
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.02 10 n/a n/a
	Code FBC2020/TPI2014		
			PLATES GRIP
			MT20 244/190
			Weight: 323 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-2-0 oc purlins.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS. All bearings 0-5-8 except (jt=length) 2=0-3-8.

(lb) - Max Horz 2=81(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) except 2=-209(LC 8), 20=-423(LC 8), 16=-412(LC 9), 10=-236(LC 13)

Max Grav All reactions 250 lb or less at joint(s) except 2=510(LC 1), 20=1228(LC 23), 16=1756(LC 24), 10=800(LC 1)

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

TOP CHORD 2-3=-558/613, 4-5=-210/413, 6-7=-119/737, 7-8=-445/199, 8-9=-775/265, 9-10=-1240/349

BOT CHORD 2-22=-490/470, 21-22=-490/470, 13-14=-94/670, 12-13=-249/1098, 10-12=-249/1098

WEBS 3-22=-281/245, 3-21=-528/571, 4-21=-459/273, 4-20=-722/655, 5-20=-670/259, 6-18=-3/324, 6-16=-870/258, 7-16=-1173/387, 7-14=-101/638, 8-14=-402/139, 8-13=-55/285, 9-13=-475/171

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 3-4-13, Interior(1) 3-4-13 to 11-0-0, Exterior(2R) 11-0-0 to 18-7-10, Interior(1) 18-7-10 to 43-0-0, Exterior(2R) 43-0-0 to 50-7-10, Interior(1) 50-7-10 to 56-0-0 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - Provide adequate drainage to prevent water ponding.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 209 lb uplift at joint 2, 423 lb uplift at joint 20, 412 lb uplift at joint 16 and 236 lb uplift at joint 10.

Joaquin Velez
LICENSE
No 68182
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
September 15,2021

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355926
2932802	T04	Hip	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,

8.430 s Aug 16 2021
MiTek Industries, Inc.
Wed Sep 15 10:22:58 2021
Page 1

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2-0-0
2-0-0

7-6-0
7-6-0

13-0-0
5-6-0

20-0-0
7-0-0

27-0-0
7-0-0

34-0-0
7-0-0

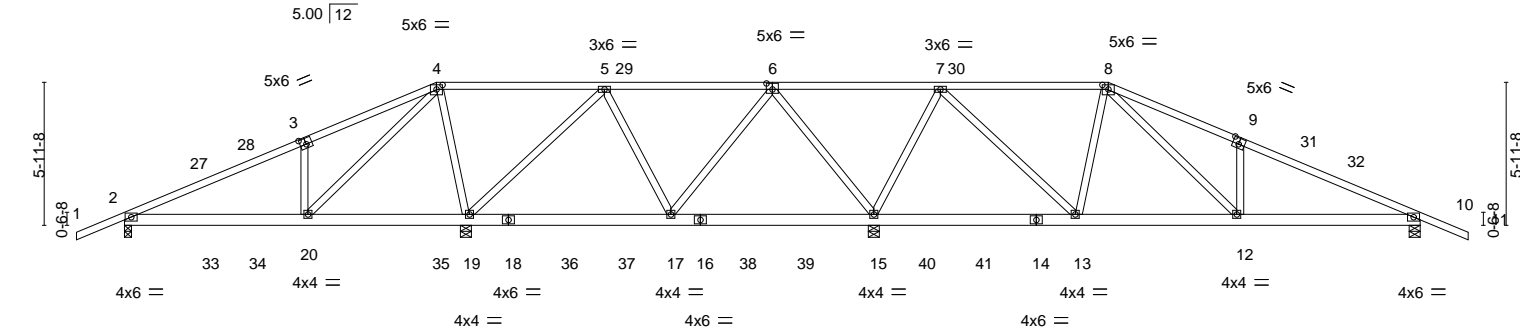
41-0-0
7-0-0

46-6-0
5-6-0

54-0-0
7-6-0

56-0-0
2-0-0

Scale: 1/8"=1'



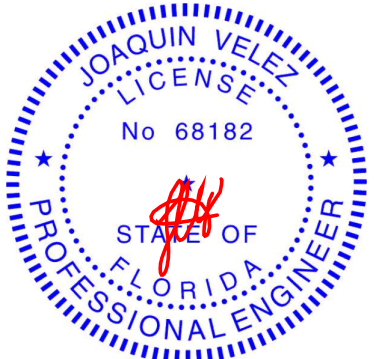
	7-6-0	14-2-12	22-9-4	31-2-12	39-9-4	46-6-0	54-0-0		
	7-6-0	6-8-12	8-6-8	8-5-8	8-6-8	6-8-12	7-6-0		
Plate Offsets (X,Y)--	[3:0-3-0,0-3-0], [4:0-3-0,0-2-4], [6:0-3-0,0-3-0], [8:0-3-0,0-2-4], [9:0-3-0,0-3-0]								
LOADING (psf)	SPACING- 2-0-0		CSI.	DEFL.	in (loc)	l/defl	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL 1.25		TC 0.63	Vert(LL)	0.06 20-23	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25		BC 0.34	Vert(CT)	-0.10 12-26	>999	180		
BCLL 0.0 *	Rep Stress Incr YES		WB 0.97	Horz(CT)	0.01 10	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 324 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-11-9 oc purlins.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS. All bearings 0-5-8 except (jt=length) 2=0-3-8.
 (lb) - Max Horz 2=93(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) except 2=203(LC 8), 19=415(LC 8), 15=399(LC 13), 10=235(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) except 2=510(LC 23), 19=1335(LC 25), 15=1963(LC 26), 10=815(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-448/458, 3-4=-446/553, 4-5=-167/362, 6-7=-72/701, 7-8=-422/202, 8-9=-1186/425, 9-10=-1189/324
 BOT CHORD 2-20=-333/397, 19-20=-206/253, 12-13=-28/503, 10-12=-206/1044
 WEBS 3-20=-361/214, 4-20=-838/805, 4-19=-702/513, 5-19=-568/204, 6-17=-10/440, 6-15=-809/221, 7-15=-1074/353, 7-13=-162/899, 8-13=-410/165, 8-12=-256/773, 9-12=-356/212

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 3-4-13, Interior(1) 3-4-13 to 13-0-0, Exterior(2R) 13-0-0 to 20-7-10, Interior(1) 20-7-10 to 41-0-0, Exterior(2R) 41-0-0 to 48-7-10, Interior(1) 48-7-10 to 56-0-0 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - Provide adequate drainage to prevent water ponding.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 203 lb uplift at joint 2, 415 lb uplift at joint 19, 399 lb uplift at joint 15 and 235 lb uplift at joint 10.



Joaquin Velez PE No.68182
 MiTek USA, Inc. FL Cert 6634
 6904 Parke East Blvd. Tampa FL 33610
 Date: September 15,2021

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355927
2932802	T05	Hip	1	1	Job Reference (optional)	

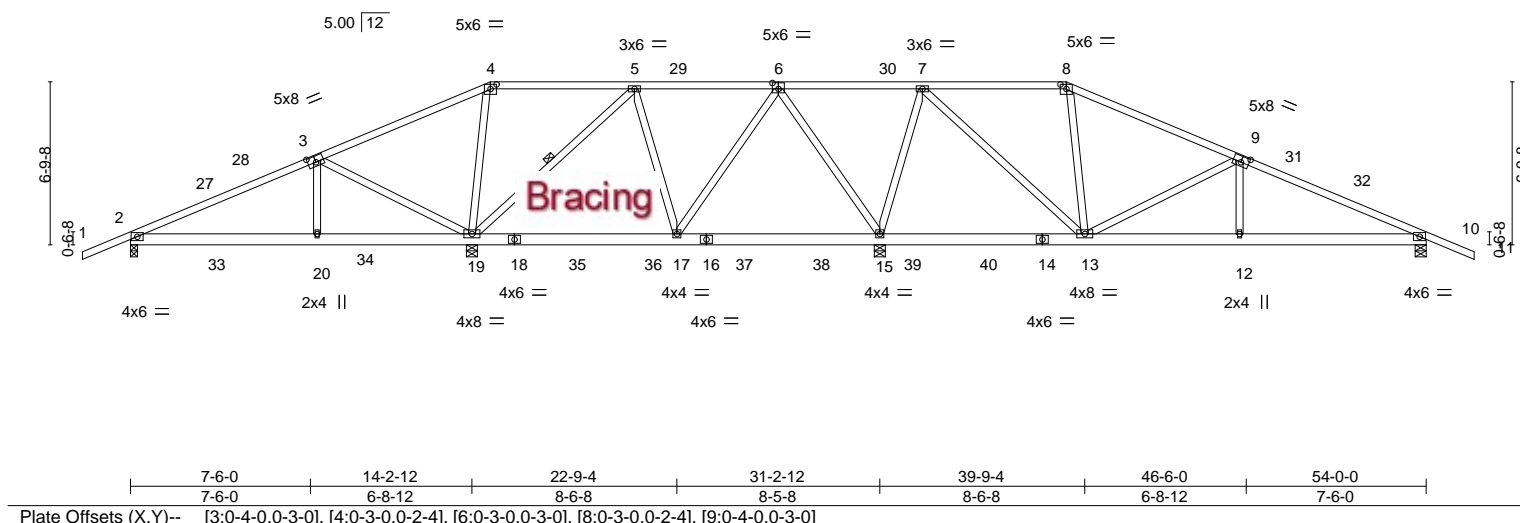
Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:23:00 2021 Page 1

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2-0-0	7-9-5	15-0-0	21-0-0	27-0-0	33-0-0	39-0-0	46-2-11	54-0-0	56-0-0
2-0-0	7-9-5	7-2-11	6-0-0	6-0-0	6-0-0	6-0-0	7-2-11	7-9-5	2-0-0

Scale: 1/8"=1'



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 0.61	Vert(LL)	0.06 20-23	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.35	Vert(CT)	-0.10 12-26	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.87	Horz(CT)	0.01 10	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 332 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-0-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 5-19

REACTIONS.

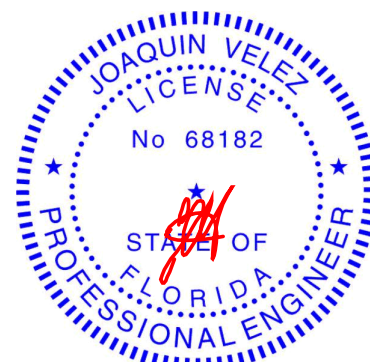
All bearings 0-5-8 except (jt=length) 2=0-3-8.
(lb) - Max Horz 2=106(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) except 2=203(LC 8), 19=399(LC 8), 15=392(LC 13), 10=235(LC 13)
Max Grav All reactions 250 lb or less at joint(s) except 2=517(LC 25), 19=1335(LC 25), 15=1997(LC 26), 10=816(LC 26)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-464/446, 3-4=-177/385, 4-5=-83/271, 6-7=-35/605, 7-8=-411/230, 8-9=-502/199, 9-10=-1191/336
BOT CHORD 2-20=-326/415, 19-20=-338/424, 13-15=-334/178, 12-13=-218/1057, 10-12=-219/1049
WEBS 3-20=-390/301, 3-19=-763/751, 4-19=-451/197, 5-19=-472/148, 6-17=-19/462, 6-15=-767/193, 7-15=-1016/337, 7-13=-231/1021, 9-13=-740/268, 9-12=0/290

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 3-4-13, Interior(1) 3-4-13 to 15-0-0, Exterior(2R) 15-0-0 to 22-7-10, Interior(1) 22-7-10 to 39-0-0, Exterior(2R) 39-0-0 to 46-7-10, Interior(1) 46-7-10 to 56-0-0 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 203 lb uplift at joint 2, 399 lb uplift at joint 19, 392 lb uplift at joint 15 and 235 lb uplift at joint 10.



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

September 15,2021

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

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355928
2932802	T06	Hip	1	1	Job Reference (optional)	

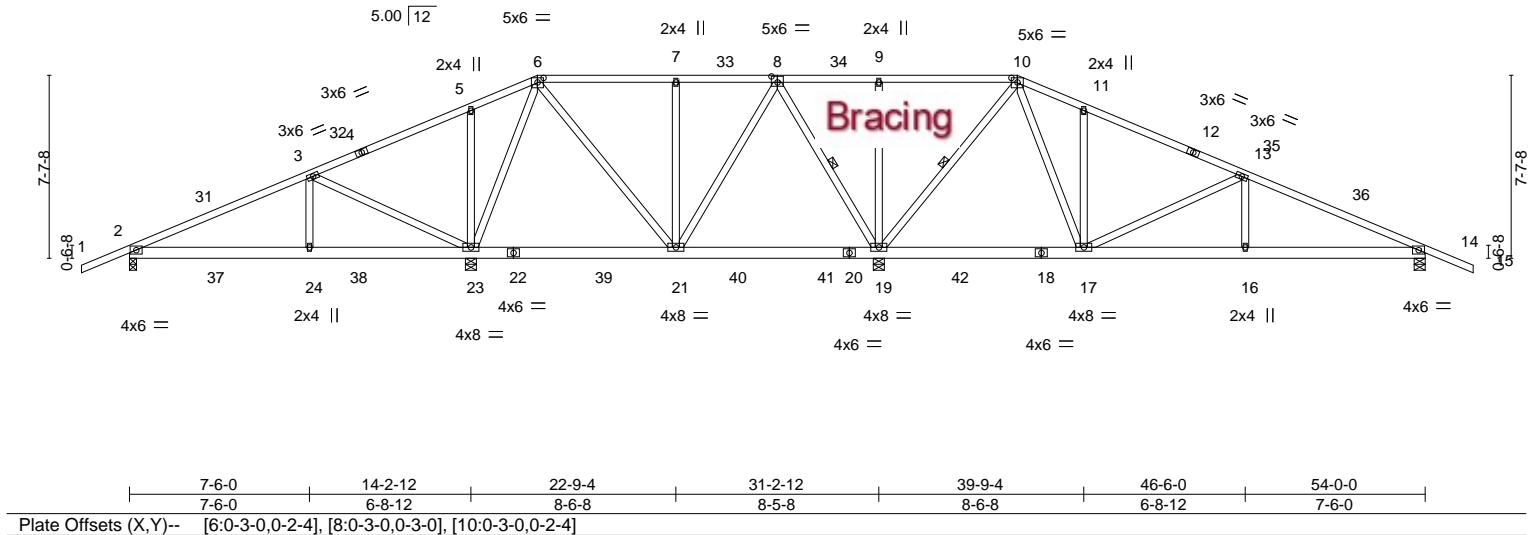
Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:23:02 2021 Page 1

ID:xdAKbqRcAOLdEpQsOf0fPz9kSy-pQEG06WWoSEFWQXXBDfSmZph7q0NRPfXth9b8ydPud

2-0-0	7-6-0	14-2-12	17-0-0	22-9-4	27-0-0	31-2-12	37-0-0	39-9-4	46-6-0	54-0-0	56-0-0
2-0-0	7-6-0	6-8-12	2-9-4	5-9-4	4-2-12	4-2-12	5-9-4	2-9-4	6-8-12	7-6-0	2-0-0

Scale: 1/8"=1'



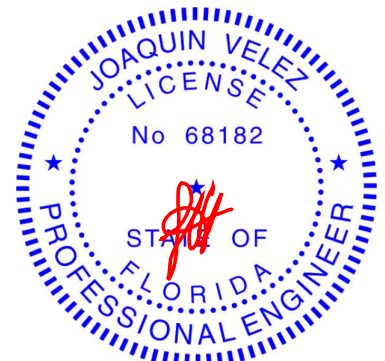
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.50	Vert(LL)	-0.05 16-30	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.33	Vert(CT)	-0.09 16-30	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.77	Horz(CT)	0.01 14	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 357 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-2-0 oc purlins.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x4 SP No.3	WEBS 6-0-0 oc bracing: 21-23,19-21.
	1 Row at midpt 8-19, 10-19

REACTIONS.	All bearings 0-5-8 except (jt=length) 2=0-3-8.
(lb) - Max Horz	2=118(LC 13)
Max Uplift	All uplift 100 lb or less at joint(s) except 2=204(LC 8), 23=369(LC 8), 19=422(LC 13), 14=221(LC 13)
Max Grav	All reactions 250 lb or less at joint(s) except 2=521(LC 23), 23=1317(LC 25), 19=2068(LC 26), 14=789(LC 26)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=482/436, 3-5=172/365, 5-6=98/343, 8-9=43/621, 9-10=43/621, 10-11=421/238, 11-13=449/166, 13-14=1135/297
BOT CHORD	2-24=315/429, 23-24=315/429, 21-23=126/263, 19-21=274/241, 16-17=183/997, 14-16=183/997
WEBS	3-24=379/300, 3-23=731/699, 5-23=275/166, 6-23=508/168, 6-21=56/273, 7-21=313/153, 8-21=67/550, 8-19=715/160, 9-19=318/154, 10-19=1055/279, 10-17=240/881, 11-17=273/165, 13-17=711/249, 13-16=0/291

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 3-4-13, Interior(1) 3-4-13 to 17-0-0, Exterior(2R) 17-0-0 to 24-7-10, Interior(1) 24-7-10 to 37-0-0, Exterior(2R) 37-0-0 to 44-7-10, Interior(1) 44-7-10 to 56-0-0 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - Provide adequate drainage to prevent water ponding.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 204 lb uplift at joint 2, 369 lb uplift at joint 23, 422 lb uplift at joint 19 and 221 lb uplift at joint 14.



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

September 15,2021

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6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355929
2932802	T07	Hip	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:23:03 2021 Page 1

ID:xdAKbqRcAOLdEpQsOf0fqPz9kSy-HdoeDSX8ZmM67Z6klwAhJmLmwXAO6t2OAXRi7bydPuc

2-0-0	7-6-0	14-2-12	19-0-0	27-0-0	35-0-0	39-9-4	46-6-0	54-0-0	56-0-0
2-0-0	7-6-0	6-8-12	4-9-4	8-0-0	8-0-0	4-9-4	6-8-12	7-6-0	2-0-0

Scale: 1/8"=1'

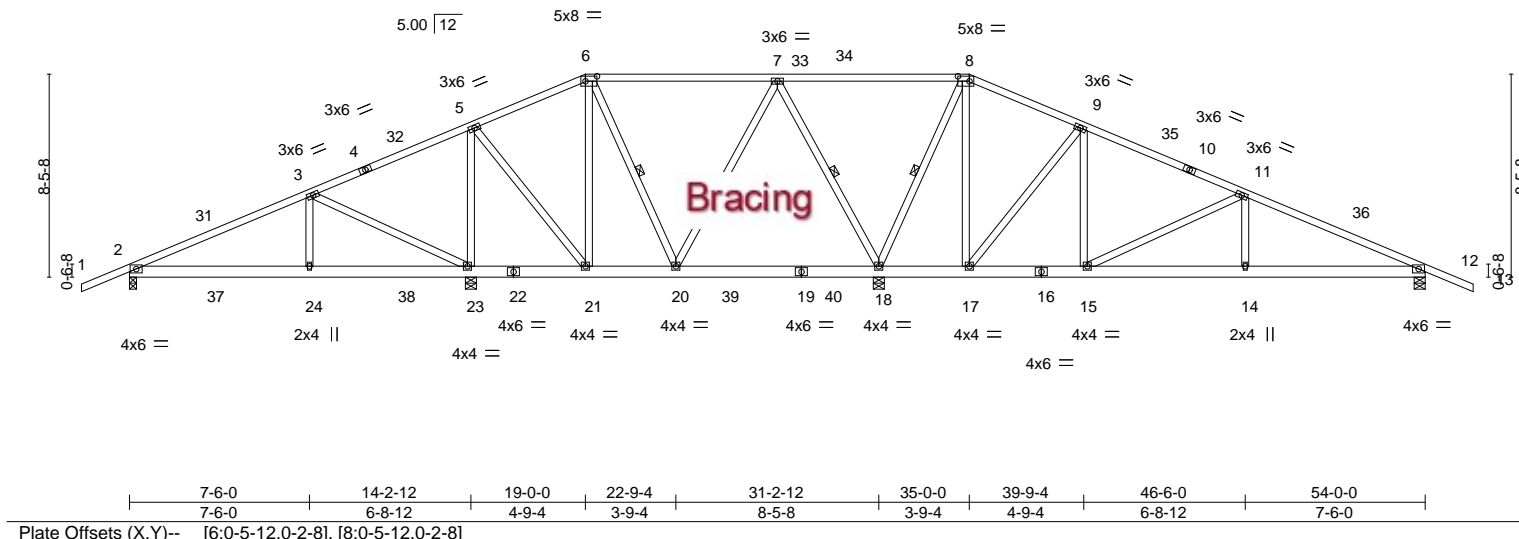


Plate Offsets (X,Y)--	[6:0-5-12,0-2-8], [8:0-5-12,0-2-8]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.86	Vert(LL)	-0.05 18-20	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.32	Vert(CT)	-0.09 14-30	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.87	Horz(CT)	0.01 12	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 361 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-3-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-20, 7-18, 8-18

REACTIONS.

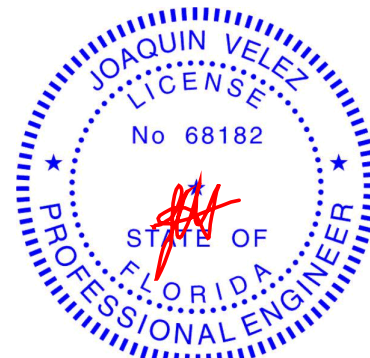
All bearings 0-5-8 except (jt=length) 2=0-3-8.
(lb) - Max Horz 2=130(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) except 2=212(LC 8), 23=341(LC 8), 18=422(LC 13), 12=219(LC 13)
Max Grav All reactions 250 lb or less at joint(s) except 2=550(LC 23), 23=1226(LC 25), 18=2046(LC 2), 12=771(LC 26)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-553/449, 3-5=-133/333, 7-8=-40/628, 8-9=0/276, 9-11=-400/166, 11-12=-1097/292
BOT CHORD 2-24=-327/486, 23-24=-327/486, 21-23=-248/273, 15-17=0/307, 14-15=-178/961, 12-14=-178/961
WEBS 3-24=-364/314, 3-23=-749/667, 5-23=-720/250, 5-21=-87/404, 6-21=-259/119, 7-20=-2/383, 7-18=-845/244, 8-18=-1053/317, 8-17=-166/628, 9-17=-765/243, 9-15=-69/545, 11-15=-729/243, 11-14=0/305

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 3-4-13, Interior(1) 3-4-13 to 19-0-0, Exterior(2R) 19-0-0 to 26-7-10, Interior(1) 26-7-10 to 35-0-0, Exterior(2R) 35-0-0 to 42-7-10, Interior(1) 42-7-10 to 56-0-0 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 212 lb uplift at joint 2, 341 lb uplift at joint 23, 422 lb uplift at joint 18 and 219 lb uplift at joint 12.



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

September 15,2021

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6904 Parke East Blvd.
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355930
2932802	T08	Hip	1	1	Job Reference (optional)	

Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:23:05 2021 Page 1

ID:xdAKbqRcAOLdEpQsOf0fgPz9kSy-D?wPe7ZO5Nc9qNtG6tLC9OBRAwKoJanshrwpBTydPua

2-0-0	7-6-0	14-2-12	21-0-0	27-0-0	33-0-0	39-9-4	46-6-0	54-0-0	56-0-0
2-0-0	7-6-0	6-8-12	6-9-4	6-0-0	6-0-0	6-9-4	6-8-12	7-6-0	2-0-0

Scale: 1/8"=1'

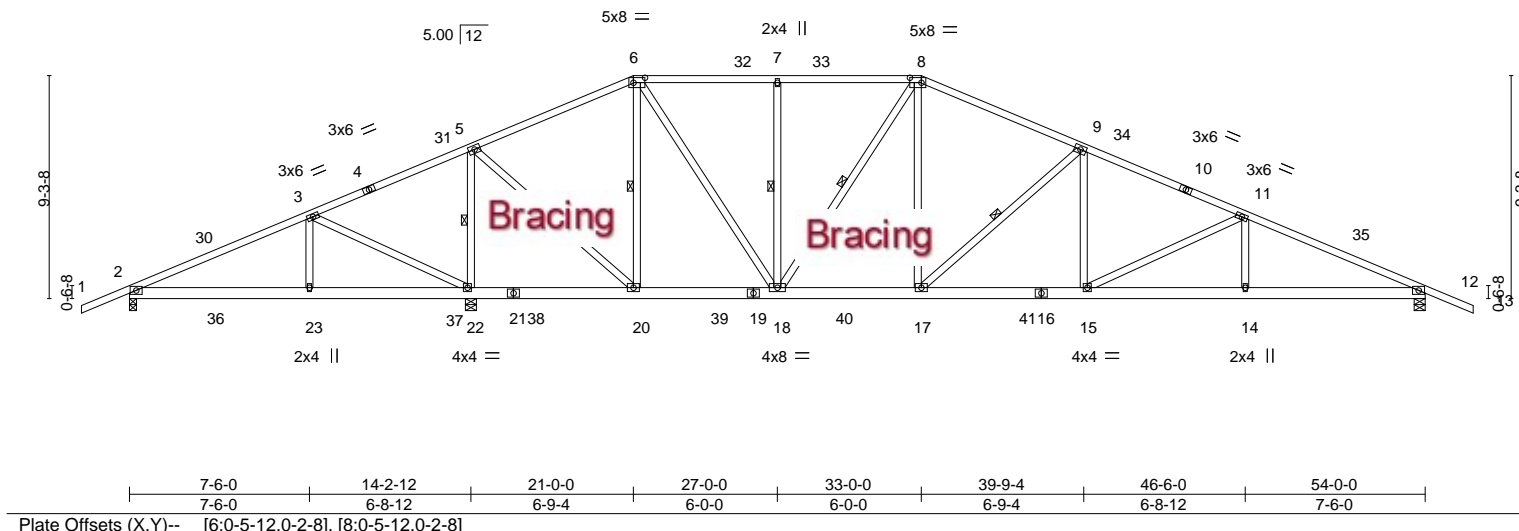


Plate Offsets (X,Y)--		[6:0-5-12,0-2-8], [8:0-5-12,0-2-8]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.63	Vert(LL)	-0.18 15-17	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.54	Vert(CT)	-0.30 15-17	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.79	Horz(CT)	0.05 12	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 360 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-0-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 5-22, 6-20, 7-18, 8-18, 9-17

REACTIONS.

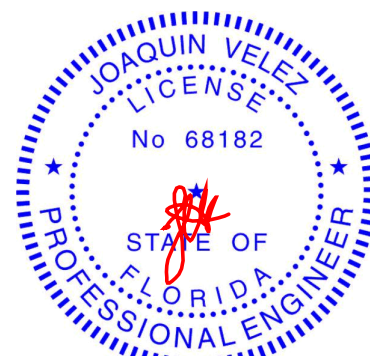
(size) 2=0-3-8, 22=0-5-8, 12=0-5-8
Max Horz 2=143(LC 13)
Max Uplift 2=172(LC 8), 22=564(LC 8), 12=379(LC 13)
Max Grav 2=389(LC 23), 22=2779(LC 2), 12=1575(LC 2)

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

TOP CHORD 2-3=-157/436, 3-5=-244/989, 5-6=-685/206, 6-7=-1220/354, 7-8=-1220/354,
8-9=-1720/448, 9-11=-2441/574, 11-12=-3038/677
BOT CHORD 2-23=-382/240, 22-23=-382/240, 20-22=-861/374, 18-20=-11/595, 17-18=-124/1542,
15-17=-341/2203, 14-15=-532/2748, 12-14=-532/2748
WEBS 3-23=-370/318, 3-22=-749/661, 5-22=-2174/507, 5-20=-345/1909, 6-20=-998/289,
6-18=-272/1202, 7-18=-365/174, 8-18=-582/171, 8-17=-155/865, 9-17=-899/292,
9-15=-53/553, 11-15=-607/213, 11-14=0/259

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 3-4-13, Interior(1) 3-4-13 to 21-0-0, Exterior(2R) 21-0-0 to 28-7-10, Interior(1) 28-7-10 to 33-0-0, Exterior(2R) 33-0-0 to 40-7-10, Interior(1) 40-7-10 to 56-0-0 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- All plates are 4x6 MT20 unless otherwise indicated.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 172 lb uplift at joint 2, 564 lb uplift at joint 22 and 379 lb uplift at joint 12.



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

September 15, 2021

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6904 Parke East Blvd.
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355931
2932802	T09	Hip	1	1		

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

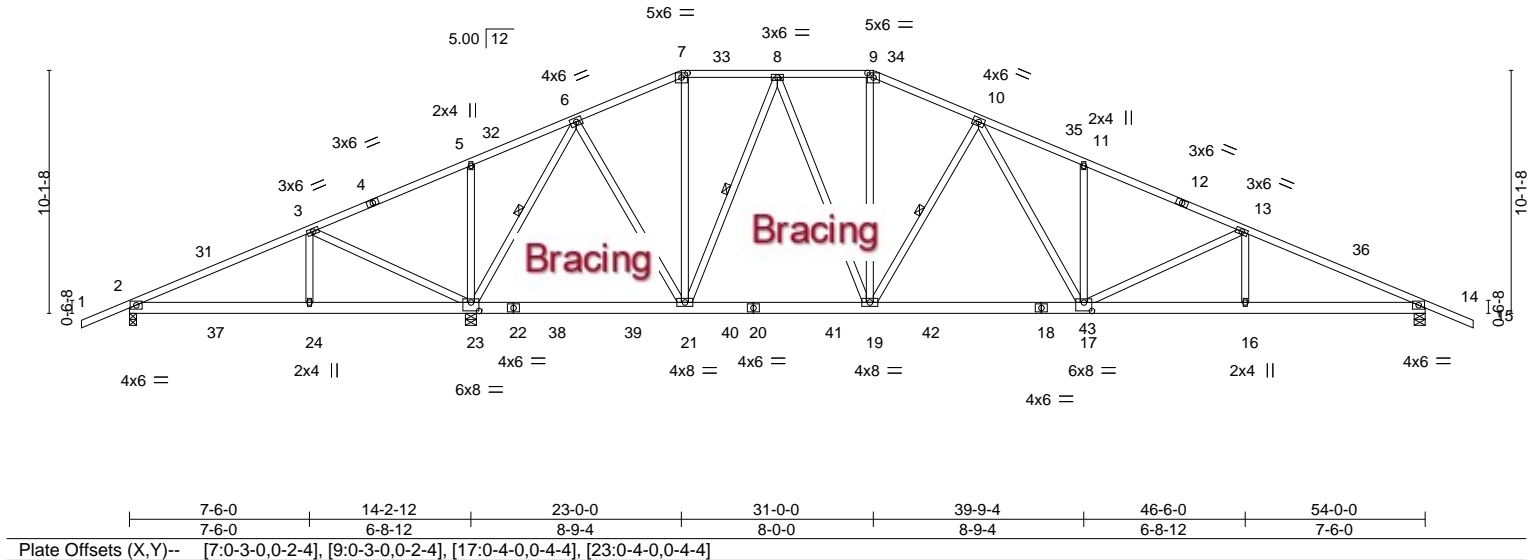
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:23:07 2021 Page 1

ID:xdAKbqRcAOLdEpQsOf0fqPz9kSy-9O293pafd?iYcBQV_mEdTcWWP8Tx2fq_49PwGMydPuY

Job Reference (optional)

2-0-0	7-6-0	14-2-12	18-7-6	23-0-0	27-0-0	31-0-0	35-4-10	39-9-4	46-6-0	54-0-0	56-0-0
2-0-0	7-6-0	6-8-12	4-4-10	4-4-10	4-0-0	4-0-0	4-4-10	4-4-10	6-8-12	7-6-0	2-0-0

Scale: 1/8"=1'

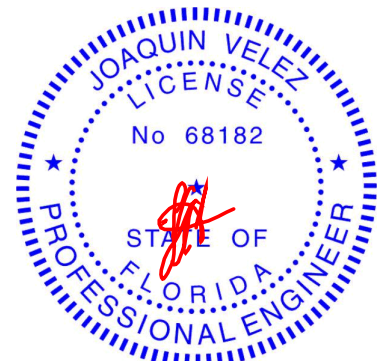


LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.63	Vert(LL)	-0.20 17-19	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.60	Vert(CT)	-0.34 17-19	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.95	Horz(CT)	0.06 14	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 375 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-1-2 oc purlins.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x4 SP No.3	WEBS 6-0-0 oc bracing: 2-24,23-24.
	1 Row at midpt 6-23, 8-21, 10-19

REACTIONS.	(size) 2=0-3-8, 23=0-5-8, 14=0-5-8
	Max Horz 2=155(LC 13)
	Max Uplift 2=165(LC 8), 23=546(LC 8), 14=372(LC 13)
	Max Grav 2=376(LC 23), 23=2836(LC 2), 14=1570(LC 2)
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-128/483, 3-5=-287/1062, 5-6=-215/1039, 6-7=-847/247, 7-8=-748/239,
	8-9=-1340/395, 9-10=-1486/402, 10-11=-2417/633, 11-13=-2435/550, 13-14=-3024/665
BOT CHORD	2-24=-424/275, 23-24=-424/275, 21-23=0/251, 19-21=-35/1081, 17-19=-186/1724,
	16-17=-521/2737, 14-16=-521/2737
WEBS	3-24=-374/305, 3-23=-746/677, 5-23=-310/181, 6-23=-2212/455, 6-21=-194/1217,
	8-21=-925/254, 8-19=-170/717, 9-19=-50/387, 10-19=-784/295, 10-17=-266/969,
	11-17=-306/180, 13-17=-606/230

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 3-4-13, Interior(1) 3-4-13 to 23-0-0, Exterior(2R) 23-0-0 to 30-7-10, Interior(1) 30-7-10 to 31-0-0, Exterior(2R) 31-0-0 to 38-7-10, Interior(1) 38-7-10 to 56-0-0 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - 4) Provide adequate drainage to prevent water ponding.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 165 lb uplift at joint 2, 546 lb uplift at joint 23 and 372 lb uplift at joint 14.



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
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September 15,2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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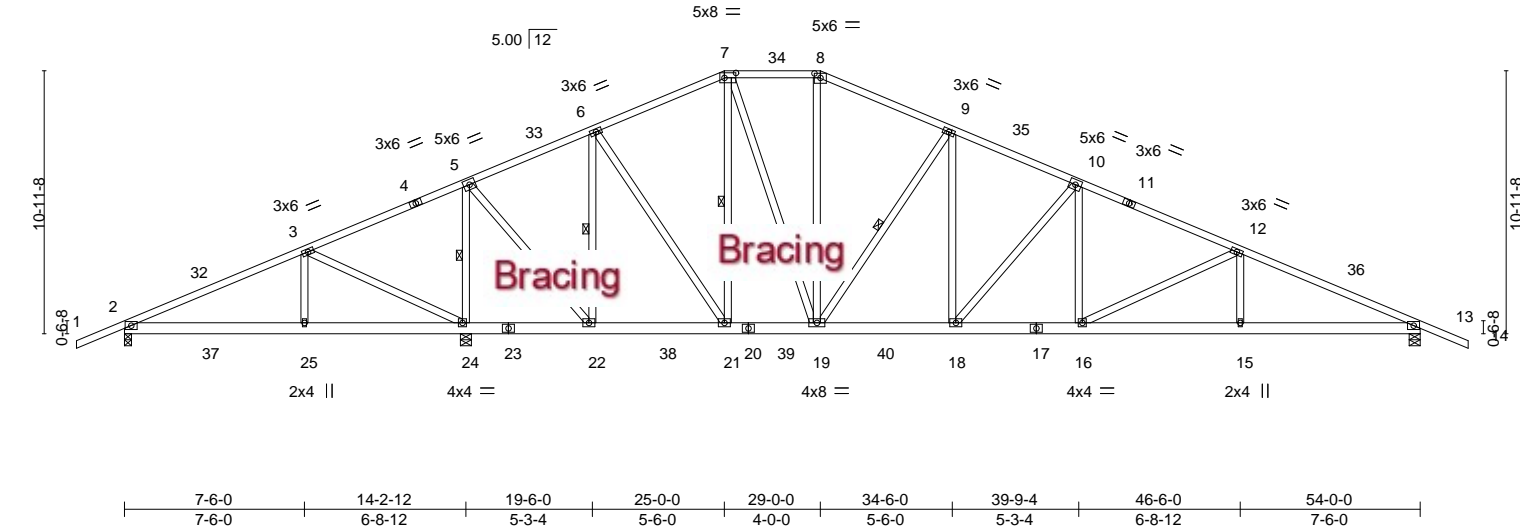
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355932
2932802	T10	Hip	2	1		

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:23:08 2021 Page 1
ID:xdAKbqRcAOLdEpQsOf0fqPz9kSy-eabXG9bHOI?PEL?hYTms0q3hbYqzn6u7Jp8TooydPuX

2-0-0 | 7-6-0 | 14-2-12 | 19-6-0 | 25-0-0 | 29-0-0 | 34-6-0 | 39-9-4 | 46-6-0 | 54-0-0 | 56-0-0
2-0-0 | 7-6-0 | 6-8-12 | 5-3-4 | 5-6-0 | 4-0-0 | 5-6-0 | 5-3-4 | 6-8-12 | 7-6-0 | 2-0-0

Scale: 1/8"=1'



Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355933
2932802	T11	Piggyback Base	5	1		

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,

8.430 s Aug 16 2021
MiTek Industries, Inc.
Wed Sep 15 10:23:10 2021
Page 1

ID:xdAKbqRcAOLdEpQsOf0fqPz9kSy-azjlhrdXwwF7Te84fuok5F804LVRFOOQn6dathydPuV

2-0-0 | 7-6-0 | 14-2-12 | 19-6-0 | 25-0-0 | 29-0-0 | 34-6-0 | 39-9-4 | 46-6-0 | 54-0-0 | 56-0-0
2-0-0 | 7-6-0 | 6-8-12 | 5-3-4 | 5-6-0 | 4-0-0 | 5-6-0 | 5-3-4 | 6-8-12 | 7-6-0 | 2-0-0

Scale: 1/8"=1'

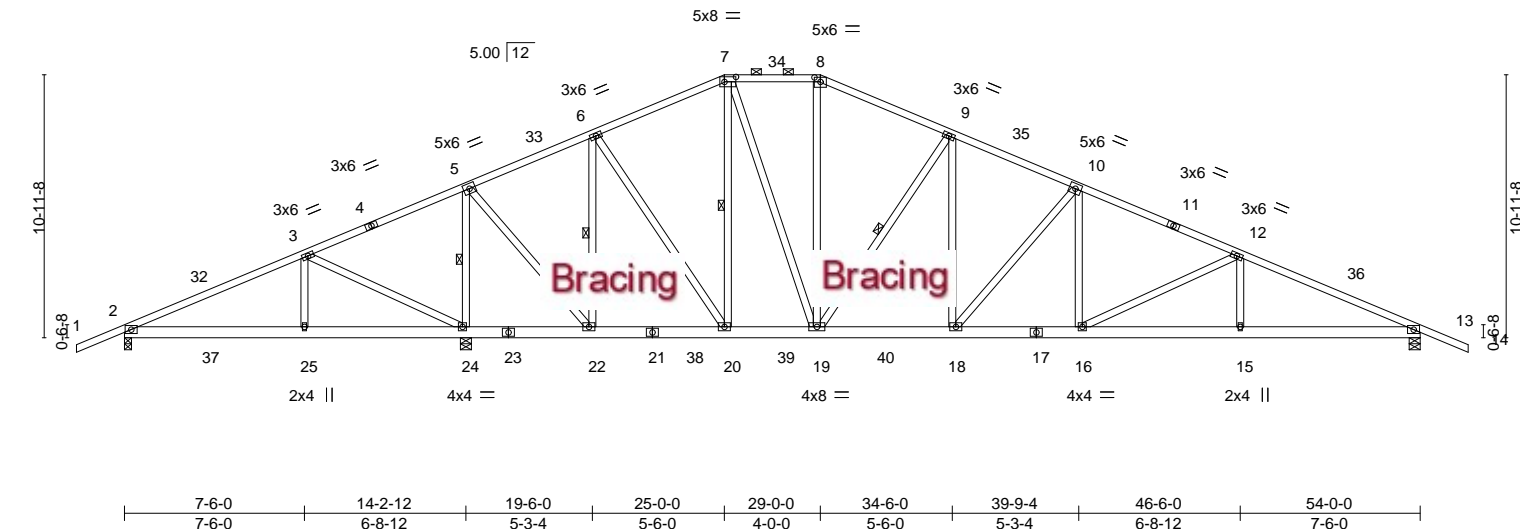
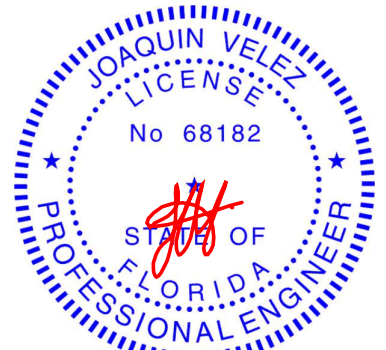


Plate Offsets (X,Y)--		[7:0-5-12,0-2-8], [8:0-3-0,0-2-4]	
LOADING (psf)		SPACING-	
TCLL	20.0	2-0-0	
TCDL	7.0	Plate Grip DOL	1.25
BCLL	0.0 *	Lumber DOL	1.25
BCDL	10.0	Rep Stress Incr	YES
		Code	FBC2020/TPI2014
		CSL	
		TC	0.61
		BC	0.55
		WB	0.90
		Matrix-MS	
		DEFL.	
		in (loc)	l/defl
		Vert(LL)	-0.18 15-16 >999 240
		Vert(CT)	-0.30 15-16 >999 180
		Horz(CT)	0.06 13 n/a n/a
		PLATES	
		MT20	GRIP 244/190
		Weight: 388 lb FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 3-1-1 oc purlins, except
BOT CHORD	2x6 SP No.2	BOT CHORD	2-0-0 oc purlins (5-5-7 max.): 7-8.
WEBS	2x4 SP No.3	WEBS	Rigid ceiling directly applied or 6-0-0 oc bracing.
			1 Row at midpt 5-24, 6-22, 7-20, 9-19
REACTIONS.			
(size) 2=0-3-8, 24=0-5-8, 13=0-5-8			
Max Horz 2=167(LC 13)			
Max Uplift 2=182(LC 8), 24=493(LC 8), 13=376(LC 13)			
Max Grav 2=423(LC 23), 24=2706(LC 2), 13=1569(LC 2)			

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-244/356, 3-5=-227/929, 5-6=-474/182, 6-7=-1021/315, 7-8=-1142/374, 8-9=-1285/375, 9-10=-1871/479, 10-12=-2410/564, 12-13=-3028/672
BOT CHORD	2-25=-307/244, 24-25=-307/244, 22-24=-808/360, 20-22=-14/467, 19-20=-25/888, 18-19=-167/1685, 16-18=-328/2171, 15-16=-528/2740, 13-15=-528/2740
WEBS	3-25=-363/324, 3-24=-769/664, 5-24=-2149/463, 5-22=-319/1837, 6-22=-1187/309, 6-20=-168/888, 7-20=-544/152, 7-19=-213/781, 8-19=-41/278, 9-19=-971/314, 9-18=-153/784, 10-18=-743/246, 10-16=-64/501, 12-16=-637/223, 12-15=0/266

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TC DL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 3-4-13, Interior(1) 3-4-13 to 25-0-0, Exterior(2E) 25-0-0 to 29-0-0, Exterior(2R) 29-0-0 to 36-7-10, Interior(1) 36-7-10 to 56-0-0 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 4x6 MT20 unless otherwise indicated.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 182 lb uplift at joint 2, 493 lb uplift at joint 24 and 376 lb uplift at joint 13.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date: September 15,2021

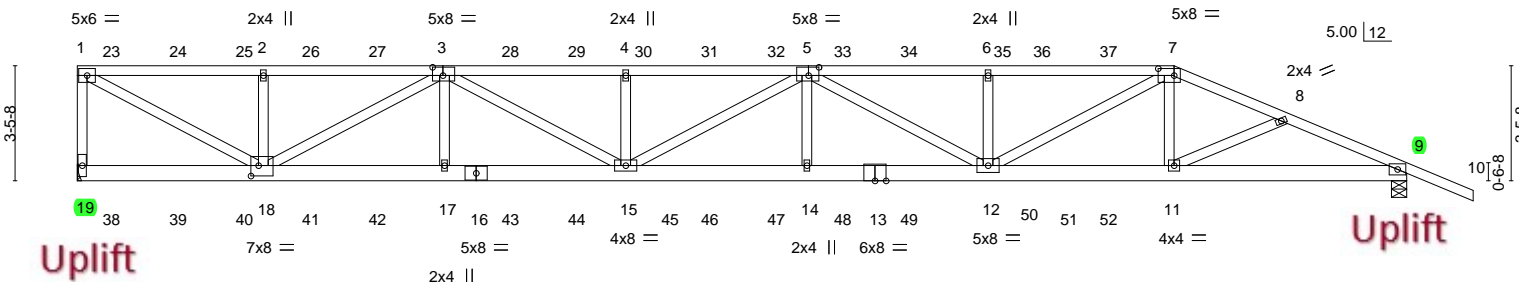
Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355934
2932802	T12	Roof Special Girder	1	2	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:23:14 2021 Page 1
ID:xdAKbqRcAOLdEpQsOf0fqPz9kSy-SkzoXCg2z8lYyGSruksGF5Ji0zn3Bvd0hkbn0SydPuR

5-7-3	11-0-9	16-6-0	21-11-7	27-4-13	33-0-0	36-2-11	40-0-0	42-0-0
5-7-3	5-5-7	5-5-7	5-5-7	5-5-7	5-7-3	3-2-11	3-9-5	2-0-0

Scale = 1:69.3



5-7-3	11-0-9	16-6-0	21-11-7	27-4-13	33-0-0	40-0-0
5-7-3	5-5-7	5-5-7	5-5-7	5-5-7	5-7-3	7-0-0

Plate Offsets (X,Y)-- [3:0-3-12,0-3-0], [5:0-3-12,0-3-0], [7:0-5-12,0-2-8], [18:0-2-12,0-3-12]

LOADING (psf)	SPACING-	2-0-0	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.61	Vert(LL)	0.50 14-15	>963	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.95	Vert(CT)	-0.77 14-15	>618	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.63	Horz(CT)	0.14 9	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS						
								Weight: 486 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP M 31 *Except*
7-10: 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
1-18,3-18,3-15,5-12,7-12: 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-2-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-6-14 oc bracing.

REACTIONS.

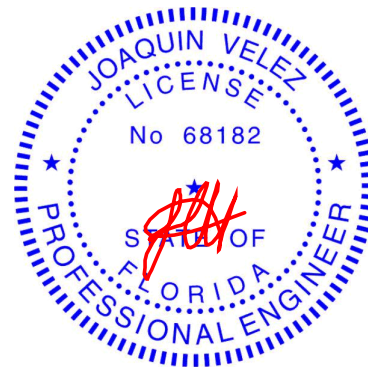
(size) 19=Mechanical, 9=0-5-8
Max Horz 19=-125(LC 24)
Max Uplift 19=-1422(LC 5), 9=-1280(LC 5)
Max Grav 19=3176(LC 1), 9=3025(LC 1)

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

TOP CHORD 1-19=-3020/1363, 1-2=-4905/2197, 2-3=-4905/2197, 3-4=-9939/4460, 4-5=-9939/4460, 5-6=-8957/4036, 6-7=-8957/4036, 7-8=-6498/2900, 8-9=-6499/2833
BOT CHORD 17-18=-3579/8161, 15-17=-3580/8166, 14-15=-4501/10200, 12-14=-4499/10196, 11-12=-2624/6005, 9-11=-2544/5904
WEBS 1-18=-2488/5556, 2-18=-625/309, 3-18=-3750/1685, 3-17=-100/451, 3-15=-915/2034, 4-15=-597/295, 5-15=-299/152, 5-14=-91/449, 5-12=-1427/628, 6-12=-620/307, 7-12=-1521/3371, 7-11=-137/489

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 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.
- 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.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1422 lb uplift at joint 19 and 1280 lb uplift at joint 9.



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

September 15,2021

Continued on page 2.

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

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

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355934
2932802	T12	Roof Special Girder	1	2	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.430 s Aug 16 2021 MiTek Industries, Inc.
Wed Sep 15 10:23:15 2021
Page 2
ID:xdAKbqRcAOLdEpQsOf0fqPz9kSy-xwXBkYggkStPZQ11SROVolrtIM7lwMt9wOLLYuydPuQ

NOTES-

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 115 lb down and 84 lb up at 0-11-4, 109 lb down and 85 lb up at 2-11-4, 109 lb down and 85 lb up at 4-11-4, 109 lb down and 85 lb up at 6-11-4, 109 lb down and 85 lb up at 8-11-4, 109 lb down and 85 lb up at 10-11-4, 109 lb down and 85 lb up at 12-11-4, 109 lb down and 85 lb up at 14-11-4, 109 lb down and 85 lb up at 16-11-4, 109 lb down and 85 lb up at 18-11-4, 109 lb down and 85 lb up at 20-11-4, 109 lb down and 85 lb up at 22-11-4, 109 lb down and 85 lb up at 24-11-4, 109 lb down and 85 lb up at 26-11-4, 109 lb down and 85 lb up at 28-11-4, and 109 lb down and 85 lb up at 30-11-4, and 183 lb down and 169 lb up at 33-0-0 on top chord, and 90 lb down and 58 lb up at 0-11-4, 86 lb down and 60 lb up at 2-11-4, 86 lb down and 60 lb up at 4-11-4, 86 lb down and 60 lb up at 6-11-4, 86 lb down and 60 lb up at 8-11-4, 86 lb down and 60 lb up at 10-11-4, 86 lb down and 60 lb up at 12-11-4, 86 lb down and 60 lb up at 14-11-4, 86 lb down and 60 lb up at 16-11-4, 86 lb down and 60 lb up at 18-11-4, 86 lb down and 60 lb up at 20-11-4, 86 lb down and 60 lb up at 22-11-4, 86 lb down and 60 lb up at 24-11-4, 86 lb down and 60 lb up at 26-11-4, 86 lb down and 60 lb up at 28-11-4, and 86 lb down and 60 lb up at 30-11-4, and 295 lb down and 230 lb up at 32-11-4 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: 1-7=-54, 7-10=-54, 19-20=-20

Concentrated Loads (lb)

Vert: 7=-183(B) 3=-109(B) 17=-58(B) 11=-279(B) 23=-115(B) 24=-109(B) 25=-109(B) 26=-109(B) 27=-109(B) 28=-109(B) 29=-109(B) 30=-109(B) 31=-109(B) 32=-109(B) 33=-109(B) 34=-109(B) 35=-109(B) 36=-109(B) 37=-109(B) 38=-60(B) 39=-58(B) 40=-58(B) 41=-58(B) 42=-58(B) 43=-58(B) 44=-58(B) 45=-58(B) 46=-58(B) 47=-58(B) 48=-58(B) 49=-58(B) 50=-58(B) 51=-58(B) 52=-58(B)

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355935
2932802	T13	Roof Special	1	1	Job Reference (optional)	

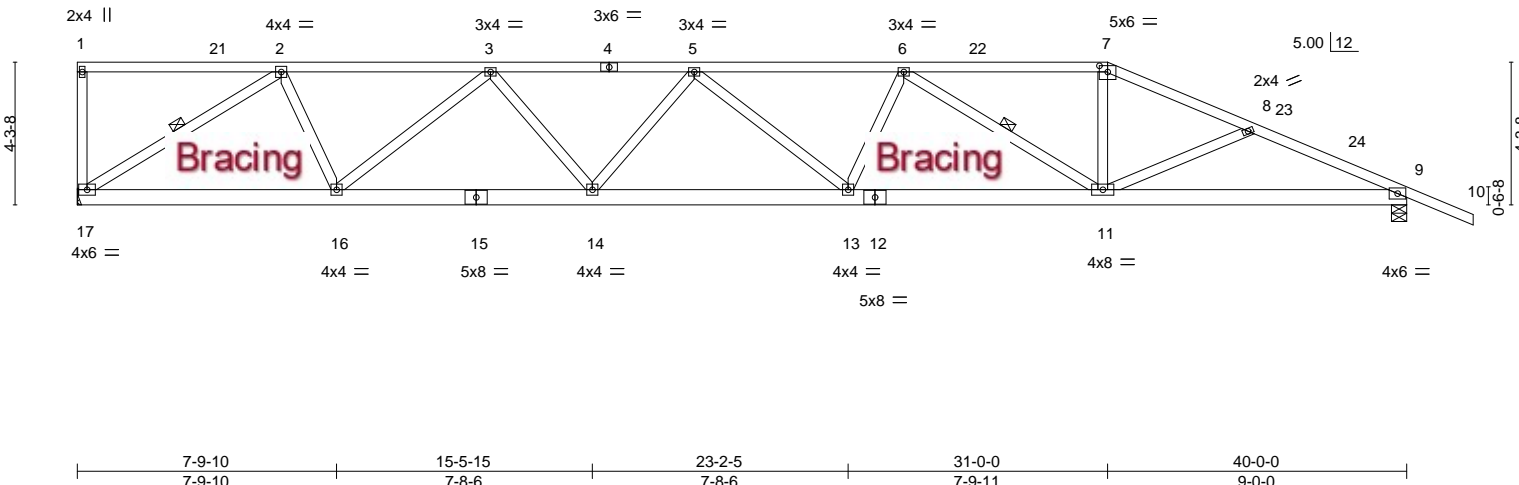
Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:23:16 2021 Page 1

ID:xdAKbqRcAOldEpQsOf0fqPz9kSy-P74ZyuhVrm?GBZcE09vkKWO3?mWBflpJ924u4KydPuP

6-1-10	12-5-3	18-6-12	24-10-6	31-0-0	35-2-11	40-0-0	42-0-0
6-1-10	6-3-9	6-1-9	6-3-10	6-1-10	4-2-11	4-9-5	2-0-0

Scale = 1:69.3



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 0.51	Vert(LL)	-0.29 13-14	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.65	Vert(CT)	-0.55 13-14	>874	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.84	Horz(CT)	0.12 9	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 238 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-8-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-10-7 oc bracing.
WEBS 1 Row at midpt 2-17, 6-11

REACTIONS.

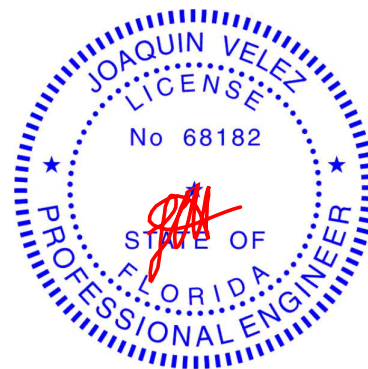
(size) 17=Mechanical, 9=0-5-8
Max Horz 17=-154(LC 13)
Max Uplift 17=-392(LC 9), 9=-374(LC 9)
Max Grav 17=1472(LC 1), 9=1585(LC 1)

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

TOP CHORD 2-3=-2332/602, 3-5=-3529/913, 5-6=-3648/939, 6-7=-2650/653, 7-8=-2872/682, 8-9=-3121/721
BOT CHORD 16-17=-427/1949, 14-16=-759/3209, 13-14=-891/3733, 11-13=-825/3549, 9-11=-602/2828
WEBS 2-17=-2298/624, 2-16=-183/980, 3-16=-1148/344, 3-14=-80/521, 5-14=-331/138, 6-13=-12/322, 6-11=-1075/337, 7-11=-150/816

NOTES-

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-1-12, Interior(1) 4-1-12 to 31-0-0, Exterior(2R) 31-0-0 to 35-0-0, Interior(1) 35-0-0 to 42-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 392 lb uplift at joint 17 and 374 lb uplift at joint 9.



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

September 15,2021

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

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355936
2932802	T14	Roof Special	1	1	Job Reference (optional)	

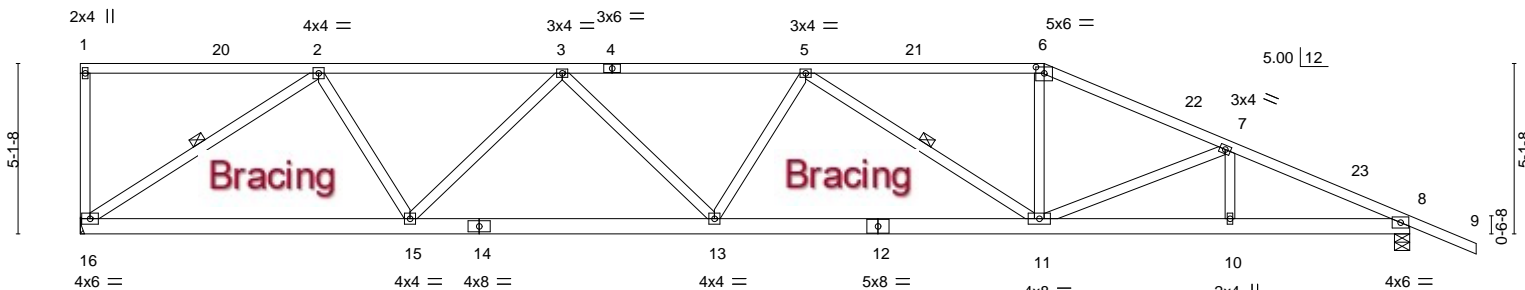
Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:23:17 2021 Page 1

ID:xdAKbqRcAOLdEpQsOf0fqPz9kSy-tJex9EiwG377pjBQasQztjxBvAsHOCqSOiqRcnvdPuO

7-2-0	14-6-0	21-9-14	29-0-0	34-7-2	40-0-0	42-0-0
7-2-0	7-4-0	7-3-14	7-2-2	5-7-2	5-4-14	2-0-0

Scale = 1:69.3



9-11-1	19-0-15	29-0-0	34-7-2	40-0-0
9-11-1	9-1-15	9-11-1	5-7-2	5-4-14

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

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 0.76	Vert(LL)	-0.22 13	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.66	Vert(CT)	-0.44 11-13	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.85	Horz(CT)	0.10 8	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 241 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-11-7 oc bracing.
WEBS 1 Row at midpt 2-16, 5-11

REACTIONS.

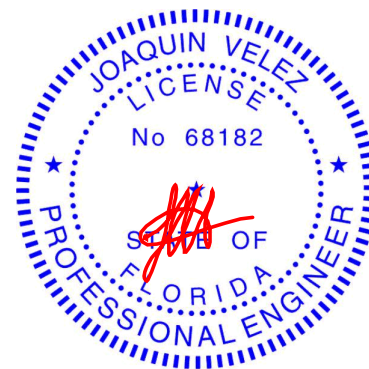
(size) 16=Mechanical, 8=0-5-8
Max Horz 16=-183(LC 13)
Max Uplift 16=-390(LC 9), 8=-358(LC 9)
Max Grav 16=1472(LC 1), 8=1585(LC 1)

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

TOP CHORD 2-3=-2294/578, 3-5=-3075/777, 5-6=-2522/618, 6-7=-2767/644, 7-8=-3082/645
BOT CHORD 15-16=-378/1830, 13-15=-639/2870, 11-13=-686/3093, 10-11=-531/2795, 8-10=-531/2795
WEBS 2-16=-2177/597, 2-15=-152/925, 3-15=-830/272, 3-13=-38/336, 5-11=-690/245, 6-11=-116/721, 7-11=-320/184

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-1-12, Interior(1) 4-1-12 to 29-0-0, Exterior(2R) 29-0-0 to 33-0-0, Interior(1) 33-0-0 to 42-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) 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.
- 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) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 390 lb uplift at joint 16 and 358 lb uplift at joint 8.



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

September 15, 2021

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6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355937
2932802	T15	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:23:18 2021 Page 1

ID:xdAKbqRcAOLdEpQsOf0fqPz9kSy-LVCJNajY1NF_Qtmc7axCQxTMoaCR7fuccMZ?9DydPuN

6-3-4	13-6-0	20-8-10	27-0-0	33-5-14	40-0-0	42-0-0
6-3-4	7-2-12	7-2-10	6-3-6	6-5-14	6-6-2	2-0-0

Scale = 1:69.3

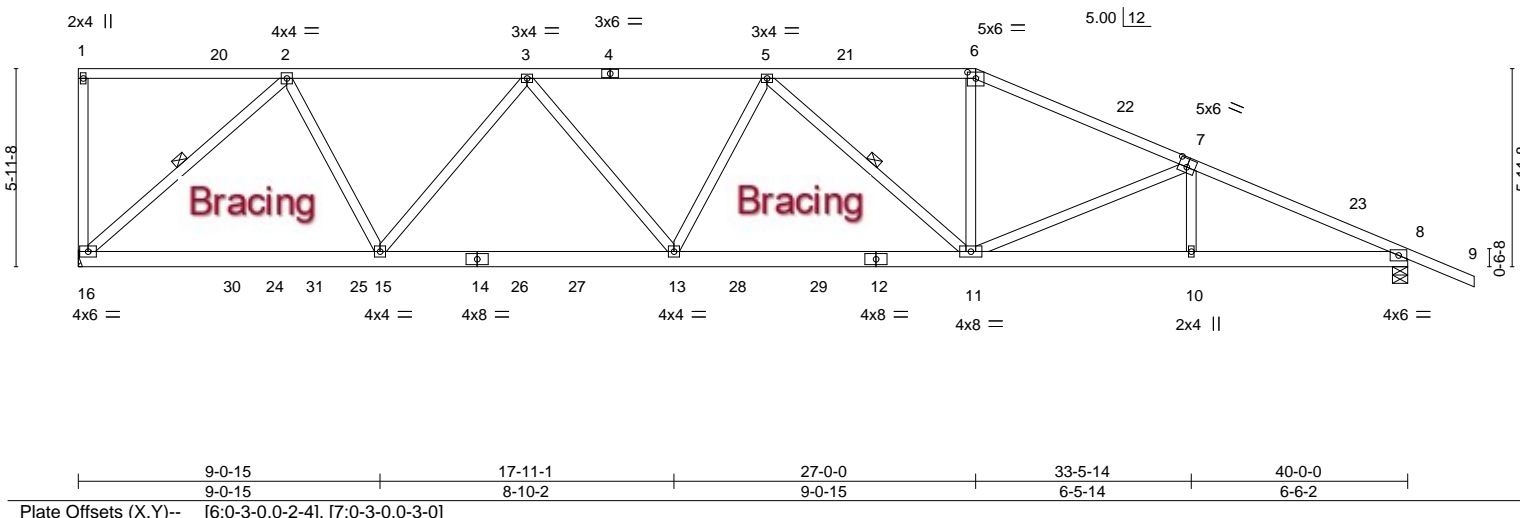


Plate Offsets (X,Y)--		[6:0-3-0,0-2-4], [7:0-3-0,0-3-0]					
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.25	TC 0.75	Vert(LL)	-0.24 11-13	>999	240
TCDL 7.0	Lumber DOL	1.25	BC 0.67	Vert(CT)	-0.42 11-13	>999	180
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.87	Horz(CT)	0.10 8	n/a	n/a
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS				
				PLATES	GRIP		
				MT20	244/190		
				Weight: 249 lb	FT = 20%		

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-16, 5-11

REACTIONS.

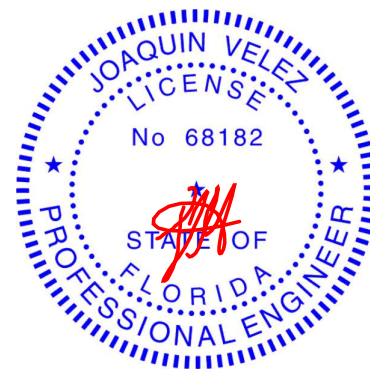
(size) 16=Mechanical, 8=0-5-8
Max Horz 16=-211(LC 13)
Max Uplift 16=-387(LC 9), 8=-342(LC 9)
Max Grav 16=1647(LC 2), 8=1702(LC 2)

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

TOP CHORD 2-3=-2085/457, 3-5=-2921/647, 5-6=-2612/570, 6-7=-2865/591, 7-8=-3372/614
BOT CHORD 15-16=-236/1544, 13-15=-478/2630, 11-13=-533/2931, 10-11=-493/3061, 8-10=-491/3064
WEBS 2-16=-2065/508, 2-15=-172/1205, 3-15=-878/274, 3-13=-55/469, 5-11=-436/164, 6-11=-104/827, 7-11=-515/227

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-1-12, Interior(1) 4-1-12 to 27-0-0, Exterior(2R) 27-0-0 to 31-0-0, Interior(1) 31-0-0 to 42-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) 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.
- 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, with BCDL = 10.0psf.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 387 lb uplift at joint 16 and 342 lb uplift at joint 8.



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

September 15,2021

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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355938
2932802	T16	Hip	1	1		

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

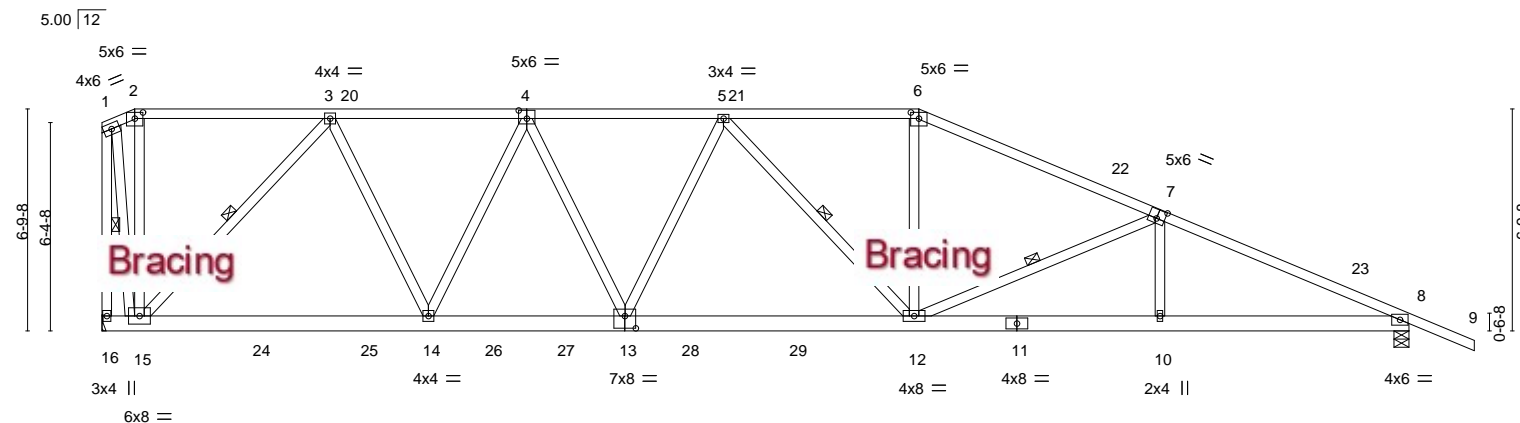
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:23:19 2021 Page 1

ID:xdAKbqRcAOLdEpQsOf0fqPz9kSy-pimhawkBohNr21KphHSRy80UT_YUs85lr0JYhfydPuM

Job Reference (optional)

1-0-0	6-11-12	13-0-0	19-0-4	25-0-0	32-4-9	40-0-0	42-0-0
1-0-0	5-11-12	6-0-4	6-0-4	5-11-12	7-4-9	7-7-7	2-0-0

Scale = 1:70.5



1-0-0	9-11-14	16-0-2	25-0-0	32-4-9	40-0-0
1-0-0	8-11-14	6-0-4	8-11-14	7-4-9	7-7-7

Plate Offsets (X,Y)-- [2:0-3-0,0-2-4], [4:0-3-0,0-3-0], [6:0-3-0,0-2-4], [7:0-3-0,0-3-4], [13:0-4-0,0-4-8]

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 0.95	Vert(LL)	-0.24 12-13	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.68	Vert(CT)	-0.41 12-13	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.74	Horz(CT)	0.09 8	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 275 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-9-2 oc bracing.
WEBS 1 Row at midpt 3-15, 5-12, 7-12, 1-16

REACTIONS.

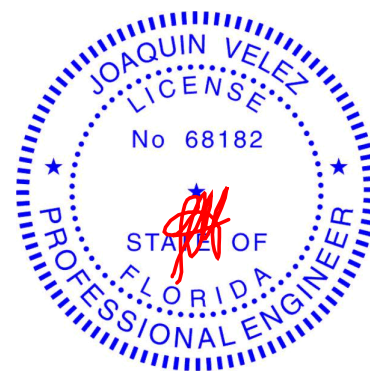
(size) 16=Mechanical, 8=0-5-8
Max Horz 16=-233(LC 13)
Max Uplift 16=-373(LC 9), 8=-395(LC 13)
Max Grav 16=1661(LC 2), 8=1707(LC 2)

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

TOP CHORD 1-2=-301/51, 2-3=-274/59, 3-4=-1951/433, 4-5=-2483/547, 5-6=-2448/579,
6-7=-2702/586, 7-8=-3360/721, 1-16=-1708/298
BOT CHORD 14-15=-194/1469, 13-14=-357/2278, 12-13=-417/2556, 10-12=-574/3044, 8-10=-573/3047
WEBS 3-15=-1776/445, 3-14=-203/1134, 4-14=-770/246, 4-13=-125/486, 5-12=-321/106,
6-12=-79/744, 7-12=-672/259, 7-10=0/258, 1-15=-301/1608

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 1-0-0, Exterior(2R) 1-0-0 to 6-7-14, Interior(1) 6-7-14 to 25-0-0, Exterior(2R) 25-0-0 to 30-7-14, Interior(1) 30-7-14 to 42-0-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 373 lb uplift at joint 16 and 395 lb uplift at joint 8.



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

September 15,2021

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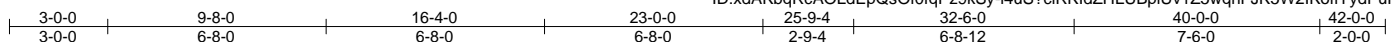
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355939
2932802	T17	Hip	1	1	Job Reference (optional)	

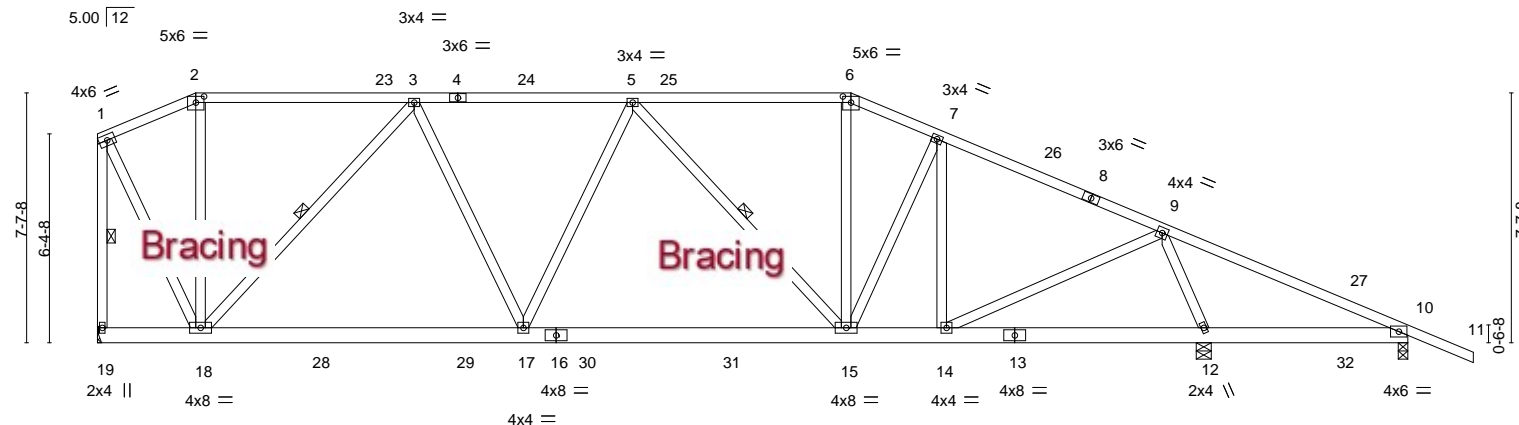
Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:23:21 2021 Page 1

ID:xdAKbqRcAOLdEpQsOf0fqPz9kSy-l4uS?clRKldZHLUBpiUv1Z5wqnFJK5W2IKofYydPuk



Scale = 1:70.3



3-0-0	13-0-0	23-0-0	25-9-4	33-9-4	40-0-0
3-0-0	10-0-0	10-0-0	2-9-4	8-0-0	6-2-12
Plate Offsets (X,Y)--	[2:0-3-0,0-2-4], [6:0-3-0,0-2-4]				

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 0.57	Vert(LL)	-0.12 15-17	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.59	Vert(CT)	-0.21 15-17	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.55	Horz(CT)	0.04 12	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 281 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

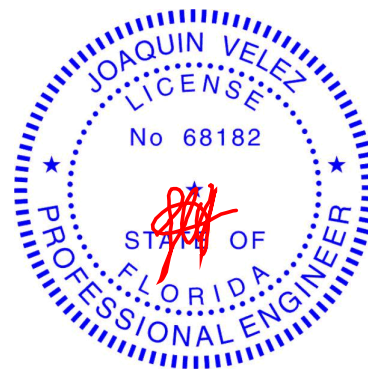
BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-5-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 10-12.
WEBS 1 Row at midpt 3-18, 5-15, 1-19

REACTIONS. (size) 19=Mechanical, 12=0-5-8, 10=0-3-8
Max Horz 19=-245(LC 13)
Max Uplift 19=-297(LC 8), 12=-369(LC 13), 10=-117(LC 9)
Max Grav 19=1371(LC 2), 12=1888(LC 2), 10=158(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-620/139, 2-3=-557/142, 3-5=-1540/363, 5-6=-1344/362, 6-7=-1478/380, 7-9=-1429/342, 9-10=-64/511, 1-19=-1392/291
BOT CHORD 17-18=-163/1301, 15-17=-226/1568, 14-15=-141/1260, 12-14=-72/252, 10-12=-413/128
WEBS 3-18=-1120/303, 3-17=-107/574, 5-15=-402/114, 6-15=-54/385, 7-15=-17/280, 7-14=-399/103, 9-14=-131/1150, 9-12=-1660/415, 1-18=-256/1246

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-0-0, Exterior(2R) 3-0-0 to 8-7-14, Interior(1) 8-7-14 to 23-0-0, Exterior(2R) 23-0-0 to 28-7-14, Interior(1) 28-7-14 to 42-0-0 zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 297 lb uplift at joint 19, 369 lb uplift at joint 12 and 117 lb uplift at joint 10.



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

September 15,2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355940
2932802	T18	Hip	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:23:22 2021 Page 1

ID:xdAKbqRcAOLdEpQsOf0fqPz9kSy-DHSqCxm35cmQvU3NMQ08ane2zBfo3UsBX_XCl_ydPuJ

5-0-0	13-0-0	21-0-0	25-9-4	32-6-0	40-0-0	42-0-0
5-0-0	8-0-0	8-0-0	4-9-4	6-8-12	7-6-0	2-0-0

Scale = 1:70.3

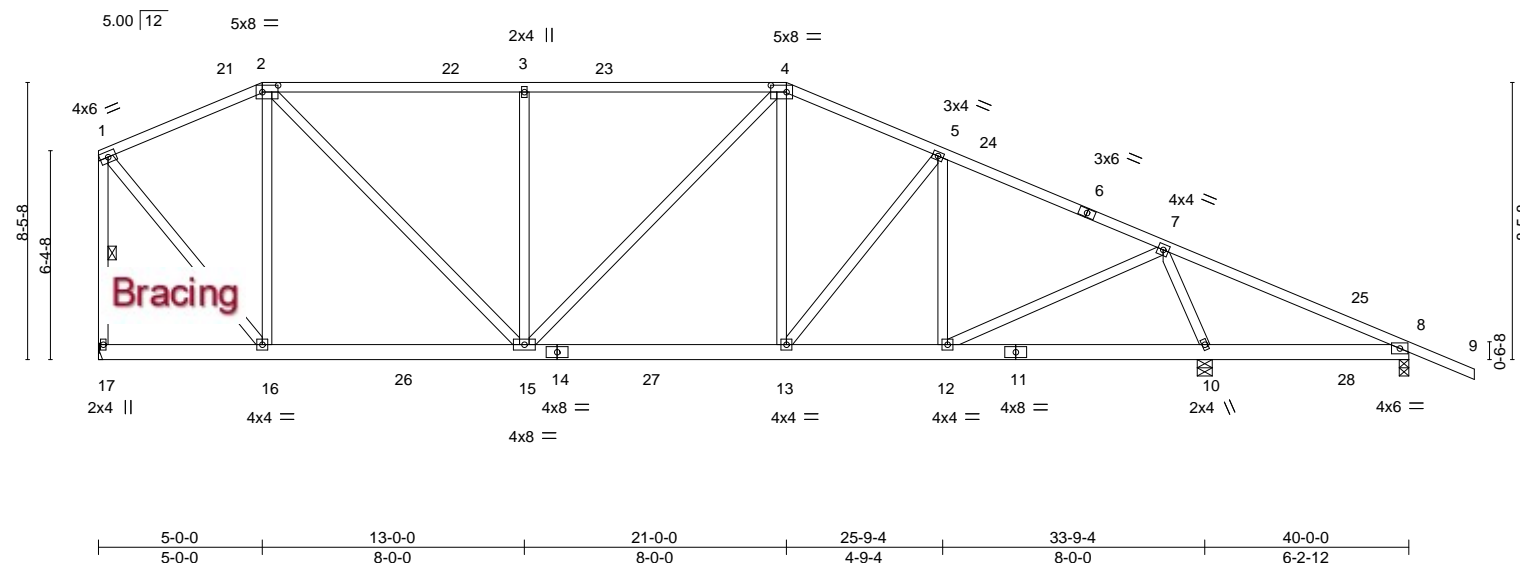


Plate Offsets (X,Y)--	[2:0-5-12,0-2-8], [4:0-5-12,0-2-8]					
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL 1.25	TC 0.74	Vert(LL) -0.09 13-15 >999 240	MT20	244/190	
TCDL 7.0	Lumber DOL 1.25	BC 0.38	Vert(CT) -0.16 13-15 >999 180			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.80	Horz(CT) 0.03 10 n/a n/a			
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS				
				Weight: 281 lb	FT = 20%	

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-0-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 8-10.
WEBS 1 Row at midpt 1-17

REACTIONS.

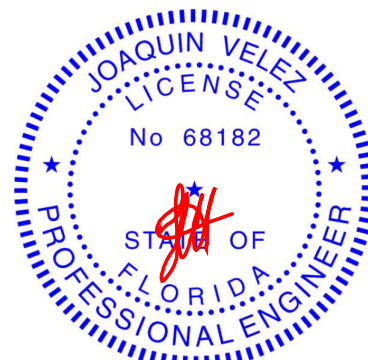
(size) 17=Mechanical, 10=0-5-8, 8=0-3-8
Max Horz 17=-258(LC 13)
Max Uplift 17=-273(LC 8), 10=-365(LC 13), 8=-122(LC 9)
Max Grav 17=1367(LC 2), 10=1868(LC 2), 8=172(LC 24)

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

TOP CHORD 1-2=-852/194, 2-3=-1386/357, 3-4=-1386/357, 4-5=-1463/367, 5-7=-1439/340, 7-8=-61/482, 1-17=-1311/289
BOT CHORD 16-17=-80/256, 15-16=-16/781, 13-15=-124/1314, 12-13=-128/1271, 10-12=-73/271, 8-10=-386/126
WEBS 2-16=-647/222, 2-15=-237/936, 3-15=-502/241, 4-13=-37/263, 5-12=-331/102, 7-12=-111/1139, 7-10=-1642/410, 1-16=-236/1171

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-1-12, Interior(1) 4-1-12 to 5-0-0, Exterior(2R) 5-0-0 to 10-7-14, Interior(1) 10-7-14 to 21-0-0, Exterior(2R) 21-0-0 to 26-7-14, Interior(1) 26-7-14 to 42-0-0 zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 273 lb uplift at joint 17, 365 lb uplift at joint 10 and 122 lb uplift at joint 8.



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

September 15,2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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6904 Parke East Blvd.
Tampa, FL 36610

Job 2932802	Truss T19	Truss Type Hip	Qty 1	Ply 1	IC CONST. - SPENCE RES. T25355941
Job Reference (optional)					

Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:23:24 2021 Page 1

ID:xdAKbqRcAOLdEpQsOf0fgPz9kSy-AfZaddnJdD088oDmUq2cfCjRY?LZXOfU?I0JMydPuH

2-0-0	7-6-0	14-2-12	21-0-0	27-0-0	33-0-0	39-9-4	46-6-0	54-0-0	56-0-0
2-0-0	7-6-0	6-8-12	6-9-4	6-0-0	6-0-0	6-9-4	6-8-12	7-6-0	2-0-0

Scale: 1/8"=1'

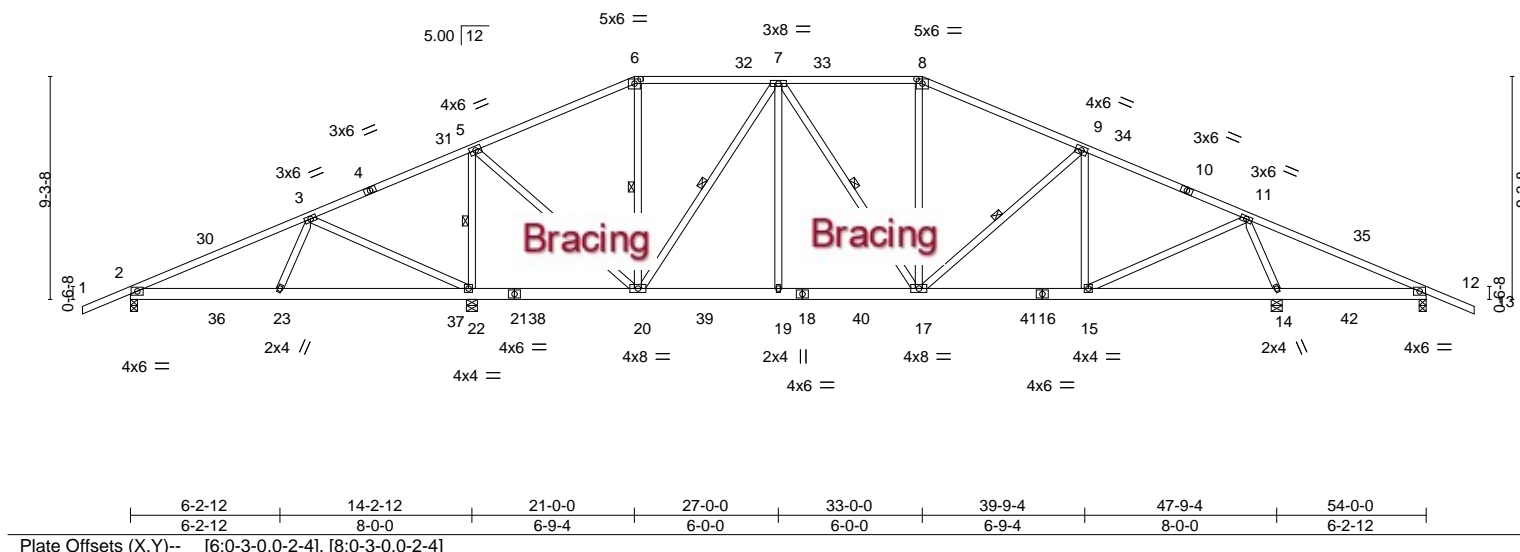


Plate Offsets (X,Y)-- [6:0-3-0,0-2-4], [8:0-3-0,0-2-4]		LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL 20.0		Plate Grip DOL 1.25		TC 0.54		Vert(LL) -0.07 15-17 >999 240		MT20		244/190			
TCDL 7.0		Lumber DOL 1.25		BC 0.30		Vert(CT) -0.11 15-17 >999 180							
BCLL 0.0 *		Rep Stress Incr YES		WB 0.72		Horz(CT) 0.02 14 n/a n/a							
BCDL 10.0		Code FBC2020/TPI2014		Matrix-MS									
										Weight: 361 lb		FT = 20%	

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-7-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 5-22, 6-20, 7-20, 7-17, 9-17

REACTIONS.

All bearings 0-3-8 except (jt=length) 22=0-5-8, 14=0-5-8.

(lb) - Max Horz 2=143(LC 13)

Max Uplift All uplift 100 lb or less at joint(s) except 2=192(LC 8), 22=505(LC 8), 14=364(LC 13), 12=131(LC 9)

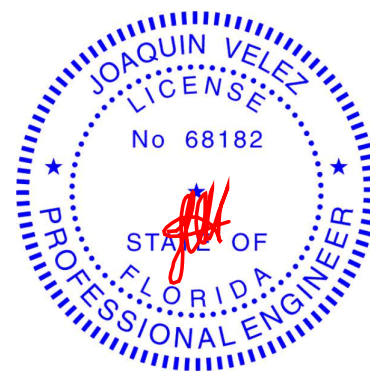
Max Grav All reactions 250 lb or less at joint(s) 12 except 2=486(LC 23), 22=2256(LC 2), 14=1761(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-439/454, 3-5=-207/513, 5-6=-719/223, 6-7=-604/221, 7-8=-1126/369,
8-9=-1280/363, 9-11=-1376/357, 11-12=-48/421
BOT CHORD 2-23=-328/381, 22-23=-175/266, 20-22=-420/339, 19-20=-69/1048, 17-19=-69/1048,
15-17=-140/1217, 14-15=-72/288, 12-14=-331/115
WEBS 3-23=-396/335, 3-22=-663/568, 5-22=-1646/446, 5-20=-274/1365, 7-20=-825/218,
7-19=0/323, 8-17=-19/255, 9-15=-261/104, 11-15=-109/1062, 11-14=-1540/406

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 3-4-13, Interior(1) 3-4-13 to 21-0-0, Exterior(2R) 21-0-0 to 28-7-10, Interior(1) 28-7-10 to 33-0-0, Exterior(2R) 33-0-0 to 40-7-10, Interior(1) 40-7-10 to 56-0-0 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
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 192 lb uplift at joint 2, 505 lb uplift at joint 22, 364 lb uplift at joint 14 and 131 lb uplift at joint 12.



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

September 15, 2021

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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

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355942
2932802	T20	Hip	1	1	Job Reference (optional)	

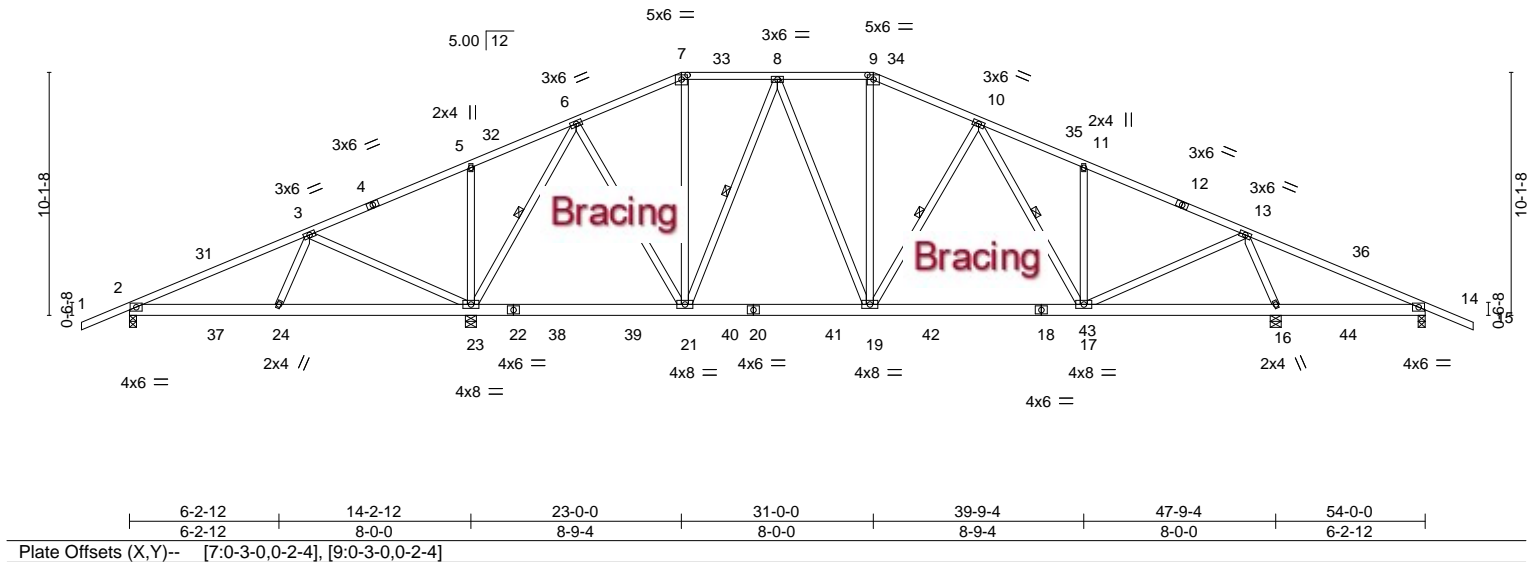
Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:23:26 2021 Page 1

ID:xdAKbqRcAOLdEpQsOf0fqPz9kSy-62hL2Jpa8qGrO6N9bF44kdomto?2_18nScVQRlydPuF

2-0-0	7-6-0	14-2-12	18-7-6	23-0-0	27-0-0	31-0-0	35-4-10	39-9-4	46-6-0	54-0-0	56-0-0
2-0-0	7-6-0	6-8-12	4-4-10	4-4-10	4-0-0	4-0-0	4-4-10	4-4-10	6-8-12	7-6-0	2-0-0

Scale: 1/8"=1'



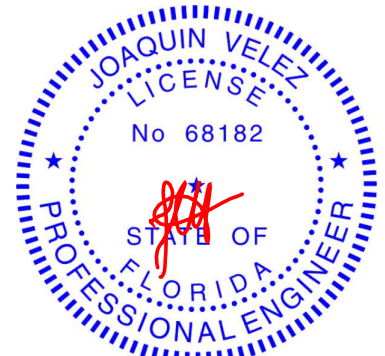
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.55	Vert(LL)	-0.10 17-19	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.43	Vert(CT)	-0.17 17-19	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.72	Horz(CT)	0.03 16	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 377 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-7-12 oc purlins.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x4 SP No.3	6-0-0 oc bracing: 23-24,14-16.
	WEBS 1 Row at midpt 6-23, 8-21, 10-19, 10-17

REACTIONS.	All bearings 0-3-8 except (jt=length) 23=0-5-8, 16=0-5-8.
(lb) - Max Horz	2=155(LC 13)
Max Uplift	All uplift 100 lb or less at joint(s) except 2=188(LC 8), 23=483(LC 8), 16=373(LC 13), 14=126(LC 9)
Max Grav	All reactions 250 lb or less at joint(s) 14 except 2=486(LC 23), 23=2265(LC 2), 16=1780(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=440/443, 3-5=230/504, 5-6=157/489, 6-7=843/253, 7-8=744/245, 8-9=1059/341, 9-10=1183/344, 10-11=1365/415, 11-13=1387/333, 13-14=75/449
BOT CHORD	2-24=319/390, 23-24=165/278, 21-23=0/406, 19-21=26/939, 17-19=75/1174, 16-17=57/267, 14-16=356/139
WEBS	3-24=401/323, 3-23=664/583, 5-23=310/181, 6-23=1560/373, 6-21=139/808, 8-21=553/198, 8-19=89/344, 9-19=41/272, 10-19=271/179, 11-17=296/177, 13-17=103/1078, 13-16=1580/415

NOTES-	
1) Unbalanced roof live loads have been considered for this design.	
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 3-4-13, Interior(1) 3-4-13 to 23-0-0, Exterior(2R) 23-0-0 to 30-7-10, Interior(1) 30-7-10 to 31-0-0, Exterior(2R) 31-0-0 to 38-7-10, Interior(1) 38-7-10 to 56-0-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.	
4) Provide adequate drainage to prevent water ponding.	
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.	
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.	
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 188 lb uplift at joint 2, 483 lb uplift at joint 23, 373 lb uplift at joint 16 and 126 lb uplift at joint 14.	



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
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September 15,2021

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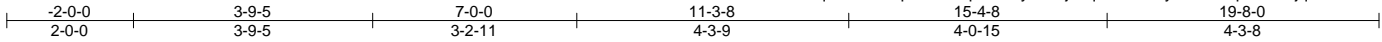


6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355943
2932802	T21	Half Hip Girder	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:23:27 2021 Page 1
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Scale = 1:36.4

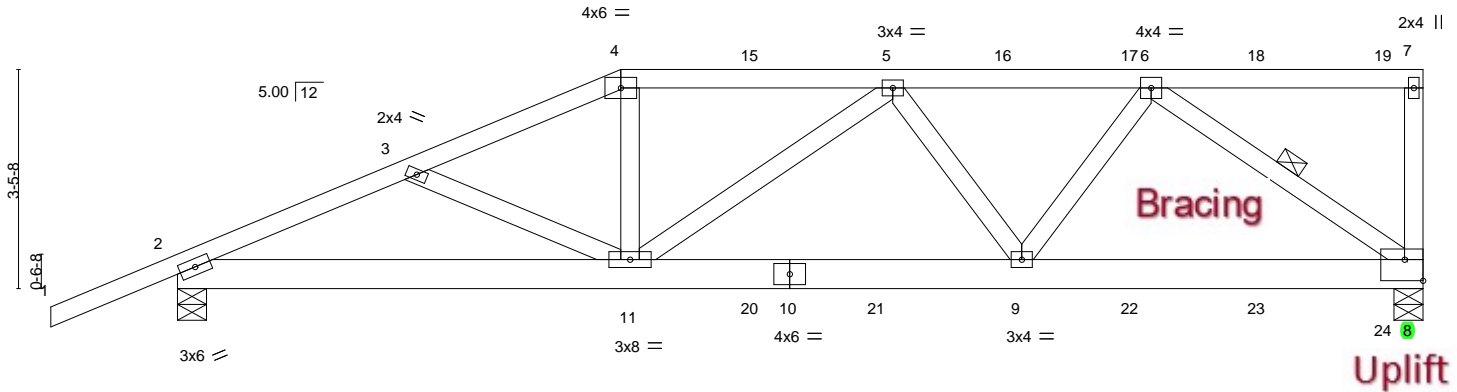


Plate Offsets (X,Y)-- [8:Edge,0-4-0]		7-0-0 7-0-0 13-3-15 6-4-0 19-8-0 6-4-1	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 20.0	2-0-0	TC 0.52	in (loc) l/defl L/d
TCDL 7.0	Plate Grip DOL 1.25	BC 0.58	Vert(LL) 0.11 9-11 >999 240
BCLL 0.0 *	Lumber DOL 1.25	WB 0.44	Vert(CT) -0.17 9-11 >999 180
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.04 8 n/a n/a
	Code FBC2020/TPI2014		
		PLATES MT20	
		GRIP 244/190	
		Weight: 117 lb FT = 20%	

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-4-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-0-4 oc bracing.
WEBS 1 Row at midpt 6-8

REACTIONS.

(size) 8=0-5-8, 2=0-5-8
Max Horz 2=125(LC 8)
Max Uplift 8=722(LC 4), 2=551(LC 8)
Max Grav 8=1602(LC 1), 2=1361(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2589/1122, 3-4=-2440/1087, 4-5=-2259/1037, 5-6=-2134/953
BOT CHORD 2-11=-1091/2339, 9-11=-1077/2384, 8-9=-748/1653
WEBS 4-11=-233/616, 5-9=-454/239, 6-9=-394/880, 6-8=-2014/912

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 722 lb uplift at joint 8 and 551 lb uplift at joint 2.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 128 lb down and 85 lb up at 7-0-0, 109 lb down and 85 lb up at 9-0-12, 109 lb down and 85 lb up at 11-0-12, 109 lb down and 79 lb up at 13-0-12, 109 lb down and 85 lb up at 15-0-12, and 109 lb down and 85 lb up at 17-0-12, and 124 lb down and 84 lb up at 19-0-12 on top chord, and 295 lb down and 230 lb up at 7-0-0, 86 lb down and 60 lb up at 9-0-12, 86 lb down and 60 lb up at 11-0-12, 86 lb down and 60 lb up at 13-0-12, 86 lb down and 60 lb up at 15-0-12, and 86 lb down and 60 lb up at 17-0-12, and 97 lb down and 54 lb up at 19-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 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, 4-7=-54, 8-12=-20



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
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Date:

September 15,2021

Continued on page 2

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355943
2932802	T21	Half Hip Girder	1	1	Job Reference (optional)	

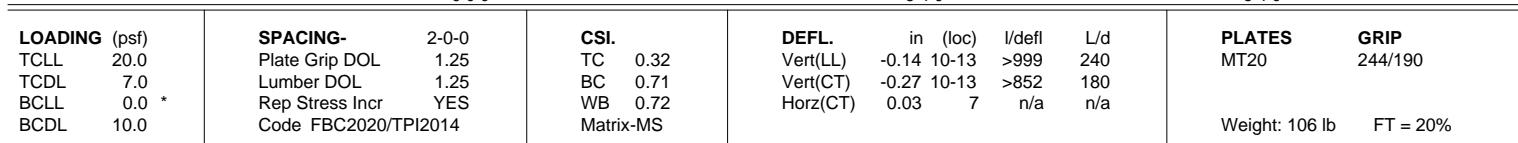
Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.430 s Aug 16 2021 MiTek Industries, Inc.
Wed Sep 15 10:23:28 2021
Page 2
ID:xdAKbqRcAOLdEpQsOf0fqPz9kSy-2Qp5T?rqgSWZdPWXjg6Yq2u6rcfCSHy4ww_XVeydPuD

LOAD CASE(S)
Standard
Concentrated Loads (lb)

Vert: 4=-109(F) 11=-279(F) 5=-109(F) 9=-58(F) 15=-109(F) 16=-109(F) 17=-109(F) 18=-109(F) 19=-124(F) 20=-58(F) 21=-58(F) 22=-58(F) 23=-58(F) 24=-64(F)



Builders FirstSource (Lake City, FL), Lake City, FL - 32055, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:23:28 2021 Page 1
 ID:xdAKbqRcAOLdEpQsOfqPz9kSy-2Qp5T?rqgSWZdPWXjg6Yq2uA1ccASCA4ww_XVeydPuD
 -2-0-0 4-8-8 9-0-0 14-4-0 19-8-0
 2-0-0 4-8-8 4-3-8 5-4-0 5-4-0
 Scale = 1:36



BRACING-	
TOP CHORD	Structural wood sheathing directly applied or 4-10-14 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 9-5-5 oc bracing.

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

TOP CHORD	2-3=-1284/324, 3-4=-1010/234, 4-5=-893/240
BOT CHORD	2-10=-382/1134, 8-10=-186/728, 7-8=-186/728
WEBS	3-10=-270/154, 5-7=-900/230

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 9-0-0, Exterior(2R) 9-0-0 to 13-2-15, Interior(1) 13-2-15 to 19-6-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 182 lb uplift at joint 7 and 216 lb uplift at joint 2.

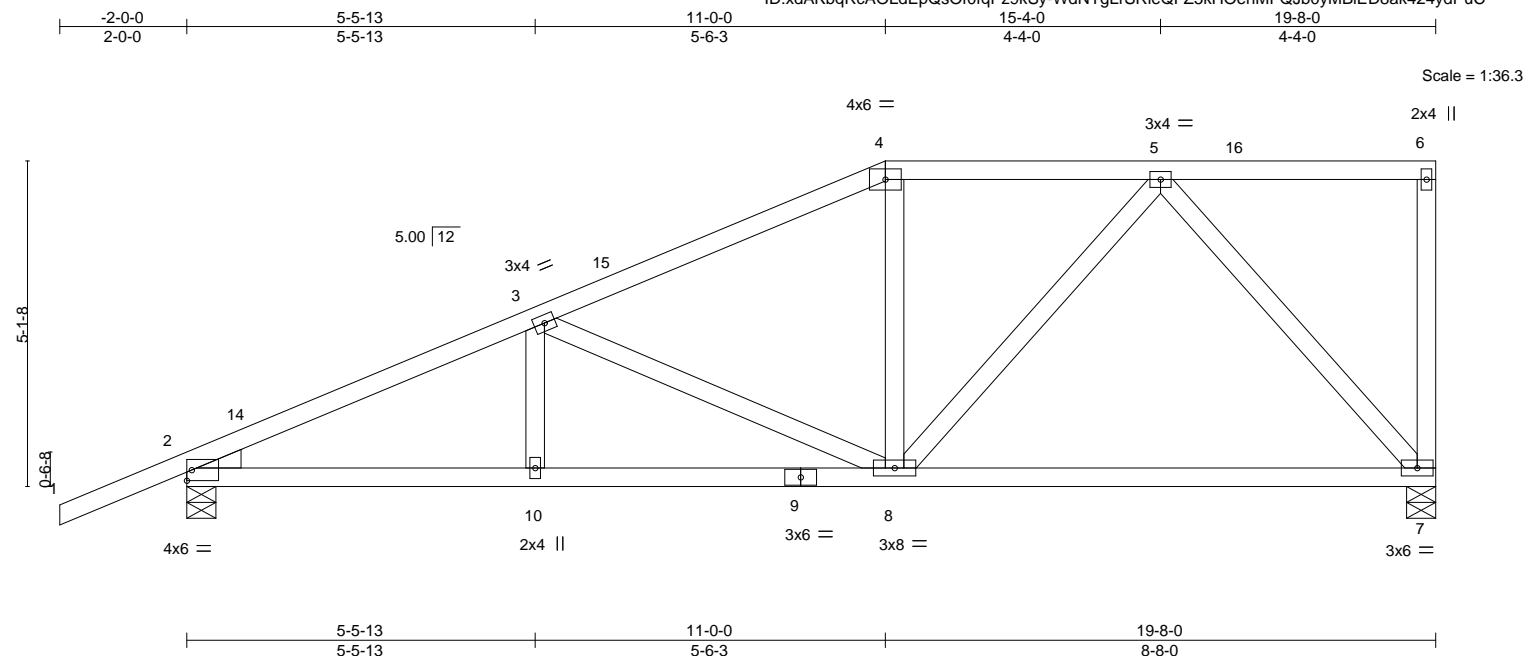


Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355945
2932802	T23	Half Hip	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:23:29 2021 Page 1

ID:xdAKbqRcAOLdEpQsOf0fqPz9kSy-WdNTgLRsrleQFZ5kHOenMFQJb0yMBIED8ak424ydPuC



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 0.39	Vert(LL)	-0.14	7-8	>999	240	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.64	Vert(CT)	-0.29	7-8	>812	180	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.57	Horz(CT)	0.03	7	n/a	n/a	
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS						
								Weight: 108 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3
 WEDGE
 Left: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-9-11 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 9-6-8 oc bracing.

REACTIONS.

(size) 7=0-5-8, 2=0-5-8
 Max Horz 2=183(LC 12)
 Max Uplift 7=177(LC 8), 2=213(LC 12)
 Max Grav 7=717(LC 1), 2=836(LC 1)

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

TOP CHORD 2-3=-1293/292, 3-4=-862/196, 4-5=-741/208
 BOT CHORD 2-10=-379/1137, 8-10=-379/1137, 7-8=-140/487
 WEBS 3-8=-436/186, 5-8=-104/387, 5-7=-722/218

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 11-0-0, Exterior(2R) 11-0-0 to 15-4-0, Interior(1) 15-4-0 to 19-6-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 177 lb uplift at joint 7 and 213 lb uplift at joint 2.



Joaquin Velez PE No.68182
 MiTek USA, Inc. FL Cert 6634
 6904 Parke East Blvd. Tampa FL 33610
 Date:

September 15, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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6904 Parke East Blvd.
 Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355946
2932802	T24	Half Hip	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:23:30 2021 Page 1

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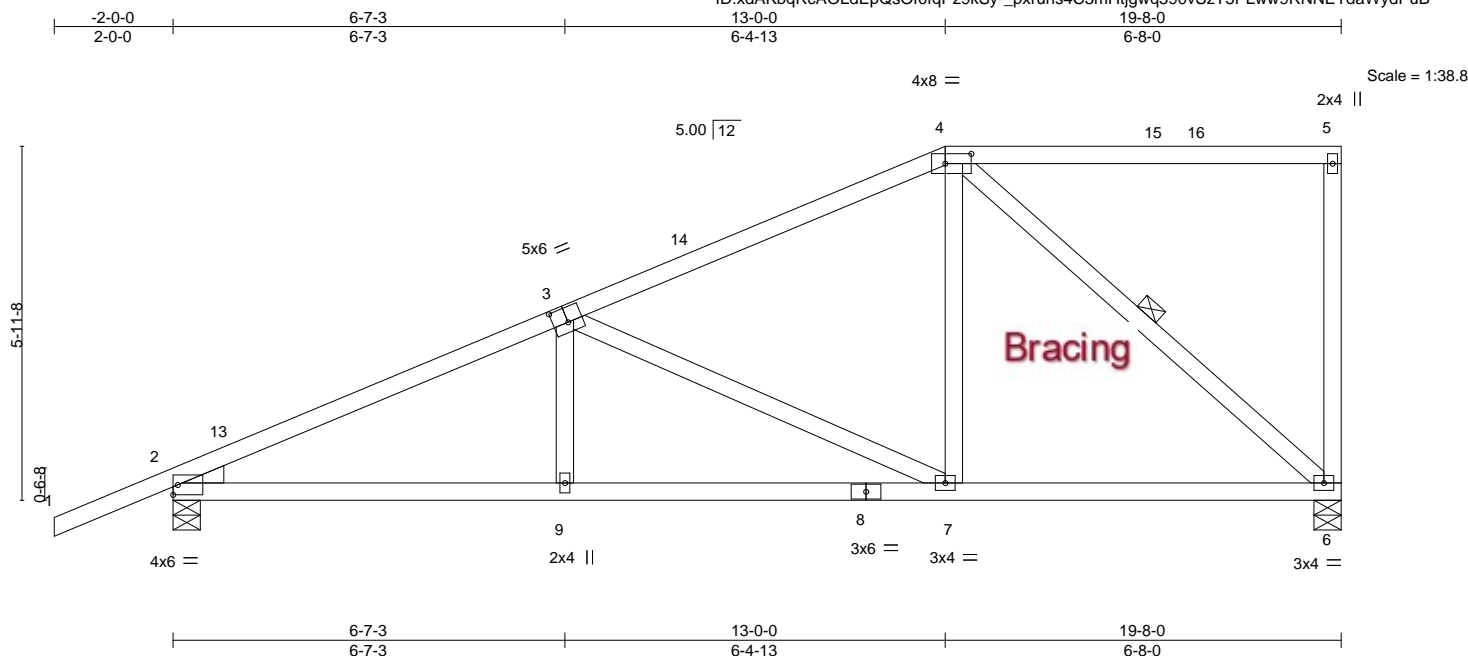


Plate Offsets (X,Y)-- [3:0-3-0,0-3-0], [4:0-5-4,0-2-0]																			
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc)		l/defl		L/d		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL		1.25		TC 0.47		Vert(LL)		-0.05 7-9		>999		240		MT20		244/190	
TCDL	7.0	Lumber DOL		1.25		BC 0.50		Vert(CT)		-0.11 7-9		>999		180					
BCLL	0.0 *	Rep Stress Incr		YES		WB 0.57		Horz(CT)		0.03 6		n/a		n/a					
BCDL	10.0	Code FBC2020/TPI2014				Matrix-MS										Weight: 107 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-10-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-6-13 oc bracing.
WEBS 1 Row at midpt 4-6

REACTIONS.

(size) 6=0-5-8, 2=0-5-8
Max Horz 2=211(LC 12)
Max Uplift 6=180(LC 12), 2=208(LC 12)
Max Grav 6=717(LC 1), 2=836(LC 1)

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

TOP CHORD 2-3=-1265/272, 3-4=-694/154
BOT CHORD 2-9=-381/1104, 7-9=-381/1104, 6-7=-177/585
WEBS 3-7=-581/226, 4-7=-51/462, 4-6=-752/229

NOTES-

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 13-0-0, Exterior(2R) 13-0-0 to 17-2-15, Interior(1) 17-2-15 to 19-6-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 180 lb uplift at joint 6 and 208 lb uplift at joint 2.



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

September 15, 2021

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

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



6904 Parke East Blvd.
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355947
2932802	T25	Half Hip Girder	1	2	Job Reference (optional)	

Builders FirstSource (Lake City,FL),

Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 10:23:32 2021 Page 1

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4-11-6

4-11-6

9-4-2

4-4-12

13-8-14

4-4-12

16-7-8

2-10-10

19-8-0

3-0-8

6x8 =

2x4 ||

6x8 =

4

5

6

5.00 | 12

5x8 =

3

3x4 =

2

6x3-4

Uplift

1

0-6-8

4x12 =

12

16

11

17

10

18

9

19

8

20

21

Uplift

7

3x6 ||

10x12 =

8x10 =

10x12 =

10x12 =

4-11-6

4-11-6

9-4-2

4-4-12

13-8-14

4-4-12

16-7-8

2-10-10

19-8-0

3-0-8

Plate Offsets (X,Y)--

[1:0-0-0,0-0-3], [4:0-6-4,0-2-12], [6:0-4-0,0-2-4], [7:0-5-4,0-1-8], [9:0-3-8,0-6-0], [11:0-3-8,0-6-4]

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 0.66	Vert(LL)	-0.17 11-12	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.61	Vert(CT)	-0.32 11-12	>736	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.97	Horz(CT)	0.04 7	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 321 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2

BOT CHORD 2x8 SP 2400F 2.0E

WEBS 2x4 SP No.2 *Except*

6-7: 2x6 SP No.2, 2-12,2-11,3-9: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-1-14 oc purlins, except end verticals.

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

REACTIONS.

(size) 1=0-5-8, 7=0-5-8

Max Horz 1=197(LC 8)

Max Uplift 1=1700(LC 8), 7=2222(LC 8)

Max Grav 1=5069(LC 1), 7=7820(LC 2)

FORCES.

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

TOP CHORD 1-2=-11936/4075, 2-3=-10510/3419, 3-4=-5652/1707, 4-5=-3154/950, 5-6=-3154/950, 6-7=-6520/1959

BOT CHORD 1-12=-3905/10960, 11-12=-3905/10960, 9-11=-3249/9677, 8-9=-1646/5327

WEBS 2-12=-491/1020, 2-11=-1427/731, 3-11=-1972/5545, 3-9=-5994/2196, 4-9=-1961/6338, 4-8=-4893/1566, 6-8=-2146/7112

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 0-7-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-3-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

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

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

5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

6) Provide adequate drainage to prevent water ponding.

7) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1700 lb uplift at joint 1 and 2222 lb uplift at joint 7.

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 3156 lb down and 1443 lb up at 7-1-9, 1452 lb down and 412 lb up at 9-0-12, 1452 lb down and 410 lb up at 11-0-12, 1627 lb down and 407 lb up at 13-0-12, 1641 lb down and 393 lb up at 15-0-12, and 1351 lb down and 317 lb up at 17-0-12, and 1354 lb down and 287 lb up at 19-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

JOAQUIN VELEZ

LICENSE

No 68182

STATE OF FLORIDA

PROFESSIONAL ENGINEER

Joaquin Velez PE No.68182

MiTek USA, Inc. FL Cert 6634

6904 Parke East Blvd. Tampa FL 33610

Date:

September 15,2021

6904 Parke East Blvd.

Tampa, FL 36610

MiTek

Job	Truss	Truss Type	Qty	Ply	IC CONST. - SPENCE RES.	T25355947
2932802	T25	Half Hip Girder	1	2	Job Reference (optional)	

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Page 2
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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, 7-13=-20

Concentrated Loads (lb)

Vert: 11=-1452(B) 16=-3156(B) 17=-1452(B) 18=-1452(B) 19=-1452(B) 20=-1192(B) 21=-1200(B)

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.

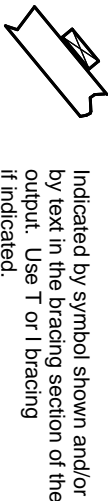
For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

PLATE SIZE

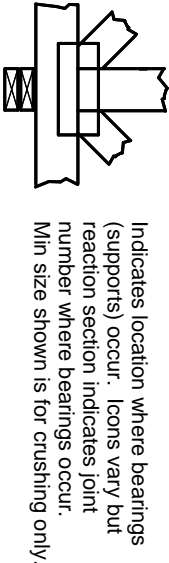
4 X 4

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

LATERAL BRACING LOCATION



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:
ANSI/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:
ESR-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.

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. 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.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. 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.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. 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.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. 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.