



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

RE: 2951573 - GIEBEIG - LOT 43 CW

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

**Site Information:**

Customer Info: Giebeig Const. Project Name: Spec Hse Model: 1677  
Lot/Block: 43 Subdivision: Crosswinds  
Address: TBD, TBD  
City: Columbia Cty State: FL

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

Name: License #:  
Address:  
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	T25552141	CJ01	10/5/21	23	T25552163	T14	10/5/21
2	T25552142	CJ03	10/5/21	24	T25552164	T14G	10/5/21
3	T25552143	CJ05	10/5/21	25	T25552165	T15	10/5/21
4	T25552144	EJ01	10/5/21	26	T25552166	T15G	10/5/21
5	T25552145	HJ08	10/5/21	27	T25552167	T16	10/5/21
6	T25552146	PB01	10/5/21	28	T25552168	T17	10/5/21
7	T25552147	PB01G	10/5/21	29	T25552169	T17G	10/5/21
8	T25552148	T01	10/5/21	30	T25552170	T18	10/5/21
9	T25552149	T01G	10/5/21	31	T25552171	T18G	10/5/21
10	T25552150	T02	10/5/21				
11	T25552151	T03	10/5/21				
12	T25552152	T04	10/5/21				
13	T25552153	T05	10/5/21				
14	T25552154	T06	10/5/21				
15	T25552155	T06G	10/5/21				
16	T25552156	T07	10/5/21				
17	T25552157	T07G	10/5/21				
18	T25552158	T08	10/5/21				
19	T25552159	T09	10/5/21				
20	T25552160	T10	10/5/21				
21	T25552161	T11	10/5/21				
22	T25552162	T13G	10/5/21				

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: O'Regan, Philip

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.



Philip J. O'Regan PE No. 58126  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

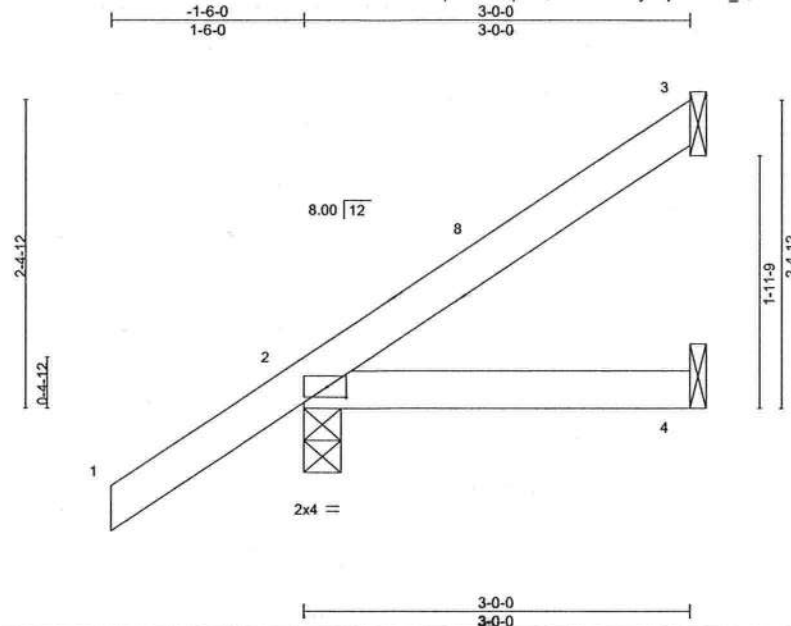
October 5, 2021

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 43 CW	T25552142
2951573	CJ03	Jack-Open	2	1	Job Reference (optional)	

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

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ID:zqaFL3IHcqBYQ?xLR?HG4?yWtpx-86Mv\_Q5UUKK08BGk8SwJWBGFIMYLLUib6ngaluyWhol



Scale = 1:17.3

Plate Offsets (X,Y)-- [2:0-1-13,0-1-0]									
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 0.16	Vert(LL)	-0.00 4-7	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.08	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: 13 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 3-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=97(LC 12)  
Max Uplift 3=-44(LC 12), 2=-49(LC 12)  
Max Grav 3=65(LC 19), 2=210(LC 1), 4=51(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) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 2-11-4 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) 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 44 lb uplift at joint 3 and 49 lb uplift at joint 2.



Philip J. O'Regan PE No.58126  
MITek USA, Inc. FL Cert 6634  
6904 Parke East Blvd, Tampa FL 33610  
Date:

October 5, 2021

**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MJ-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/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



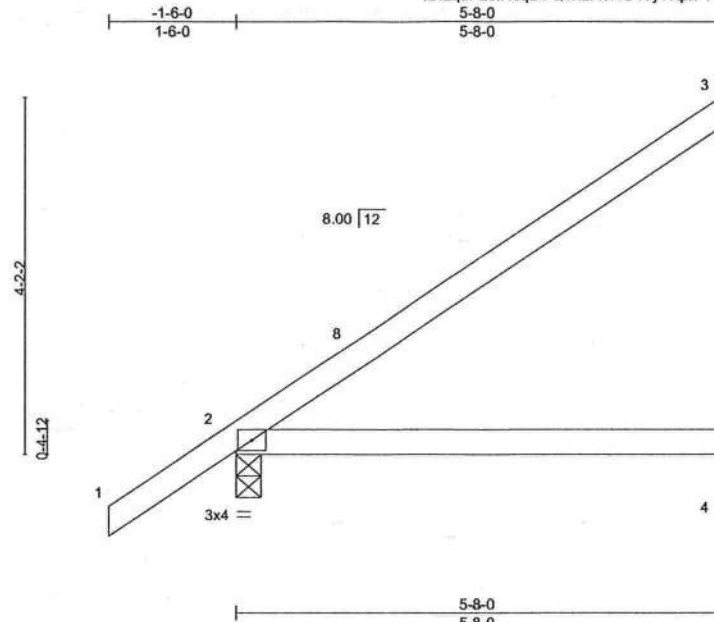
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Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 43 CW	T25552144
2951573	EJ01	Jack-Partial	10	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Oct 4 19:44:00 2021 Page 1

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Scale = 1:26.0



Philip J. O'Regan PE No.58126  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.39	Vert(LL) 0.05	4-7	>999	240	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.33	Vert(CT) -0.09	4-7	>724	180		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.00	Horz(CT) 0.00	3	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MP						
	Code FBC2020/TP12014							

Weight: 22 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 5-8-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=158(LC 12)  
Max Uplift 3=-93(LC 12), 2=-50(LC 12), 4=-1(LC 12)  
Max Grav 3=138(LC 19), 2=299(LC 1), 4=102(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) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 5-7-4 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) 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 93 lb uplift at joint 3, 50 lb uplift at joint 2 and 1 lb uplift at joint 4.

October 5, 2021

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6904 Parke East Blvd.  
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Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 43 CW	T25552146
2951573	PB01	Piggyback	10	1	Job Reference (optional)	

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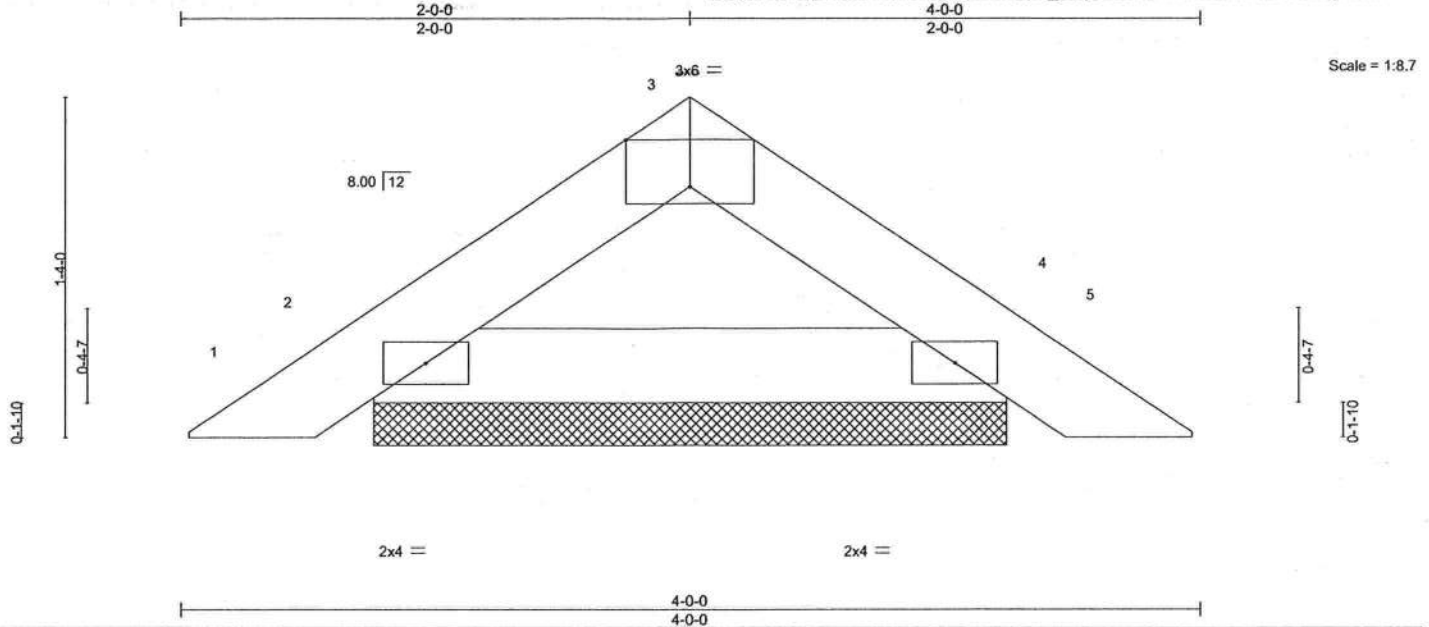


Plate Offsets (X,Y) - [3:0-3:0,Edge]											
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0		Plate Grip DOL	1.25	TC 0.02		Vert(LL)	0.00 4	n/r	120	MT20	244/190
TCCL 7.0		Lumber DOL	1.25	BC 0.07		Vert(CT)	0.00 4	n/r	120		
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.00		Horz(CT)	0.00 4	n/a	n/a		
BCDL 10.0		Code FBC2020/TPI2014		Matrix-P						Weight: 11 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 4-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 2=2-5-12, 4=2-5-12  
Max Horz 2=25(LC 11)  
Max Uplift 2=-29(LC 12), 4=-29(LC 13)  
Max Grav 2=118(LC 1), 4=118(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; 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) 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 29 lb uplift at joint 2 and 29 lb uplift at joint 4.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



Philip J. O'Regan PE No.58126  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

October 5, 2021



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6904 Parke East Blvd.  
Tampa, FL 33610



Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 43 CW	T25552148
2951573	T01	Common	7	1		

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8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Oct 4 19:44:04 2021 Page 1  
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4x6 ||

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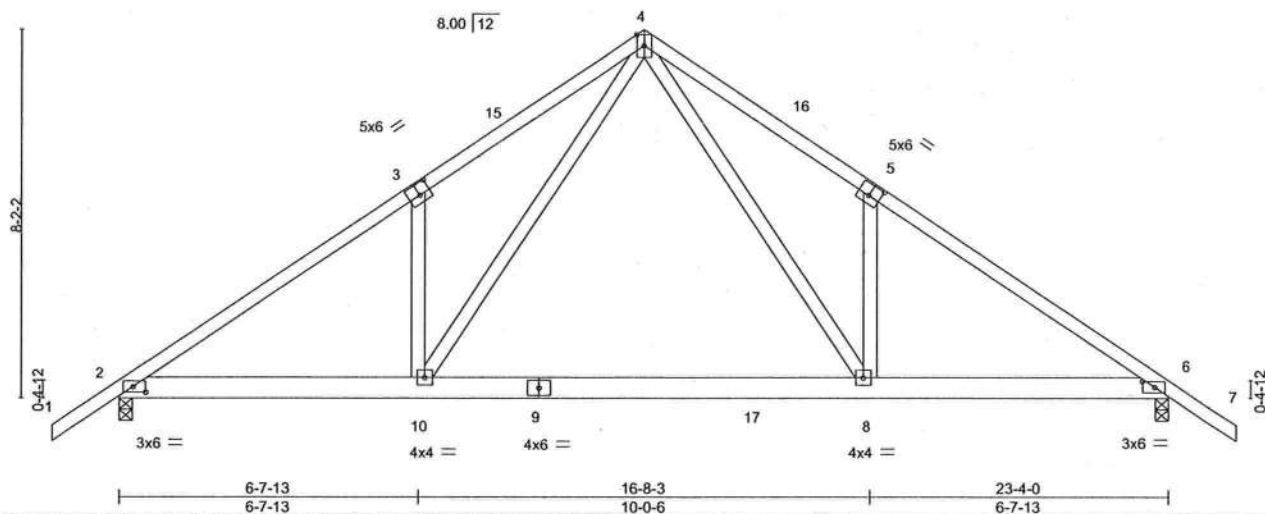


Plate Offsets (X,Y)--		[2:0-3-5,0-1-8], [3:0-3-0,0-3-0], [5:0-3-0,0-3-0], [6:0-3-5,0-1-8]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0		Plate Grip DOL	1.25	TC 0.38		Vert(LL)	-0.23 8-10	>999	240	MT20	244/190
TCDL 7.0		Lumber DOL	1.25	BC 0.97		Vert(CT)	-0.43 8-10	>654	180		
BCLL 0.0		Rep Stress Incr	NO	WB 0.59		Horz(CT)	0.03 6	n/a	n/a		
BCDL 10.0		Code FBC2020/TPI2014		Matrix-MS						Weight: 141 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 3-10-4 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 2=0-3-8, 6=0-3-8  
Max Horz 2=193(LC 11)  
Max Uplift 2=-285(LC 12), 6=-285(LC 13)  
Max Grav 2=1369(LC 19), 6=1370(LC 20)

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

TOP CHORD 2-3=-2089/398, 3-4=-2121/556, 4-5=-2122/556, 5-6=-2089/398  
BOT CHORD 2-10=-339/1793, 8-10=-136/1087, 6-8=-242/1685  
WEBS 4-8=-370/1295, 5-8=-328/246, 4-10=-370/1295, 3-10=-328/246

#### 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) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 11-8-0, Exterior(2R) 11-8-0 to 14-8-0, Interior(1) 14-8-0 to 24-10-0 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.
- 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 285 lb uplift at joint 2 and 285 lb uplift at joint 6.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-4=-54, 4-7=-54, 2-10=-20, 8-10=-80(F=60), 6-8=-20



Philip J. O'Regan PE No.58126  
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6904 Parke East Blvd. Tampa FL 33610  
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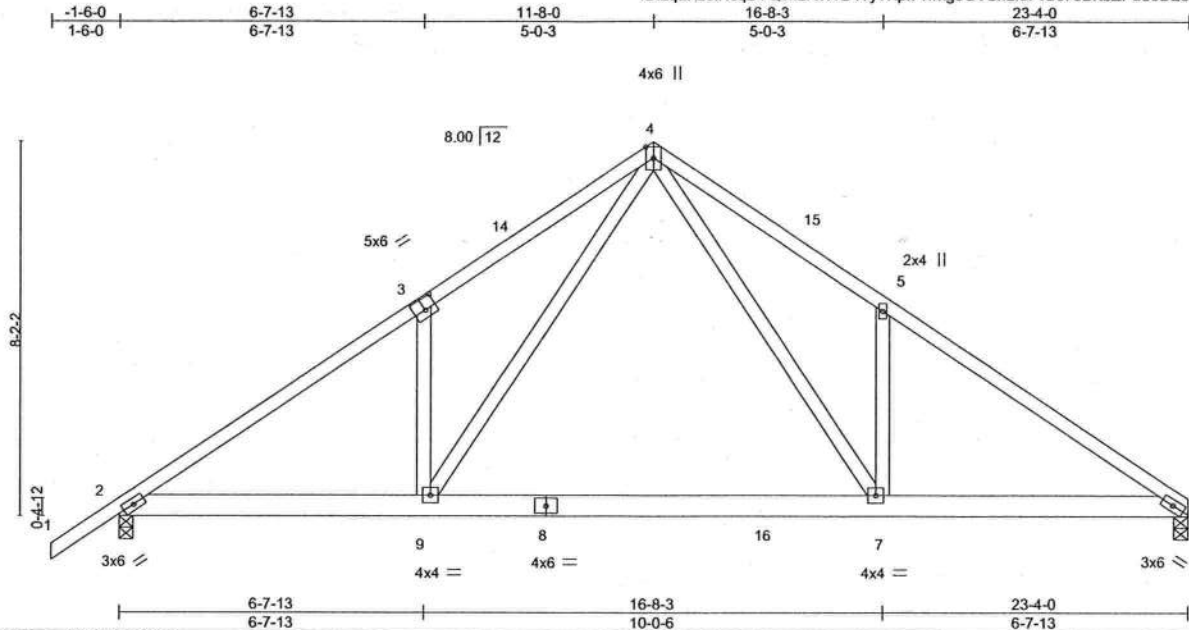
**MiTek**

6904 Parke East Blvd.  
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 43 CW	T25552150
2951573	T02	Common	4	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Oct 4 19:44:06 2021 Page 1  
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Scale = 1:48.5

Plate Offsets (X, Y) --		[3-0-3-0, 0-3-0]									
LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.25	TC 0.38	Vert(LL)	-0.22	7-9	>999	240	MT20	244/190	
TCDL 7.0	Lumber DOL	1.25	BC 0.98	Vert(CT)	-0.43	7-9	>657	180			
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.61	Horz(CT)	0.03	6	n/a	n/a			
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS								
									Weight: 138 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 3-9-11 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 6=0-3-8, 2=0-3-8  
Max Horz 2=186(LC 9)  
Max Uplift 6=-252(LC 13), 2=-286(LC 12)  
Max Grav 6=1293(LC 20), 2=1371(LC 19)

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

TOP CHORD 2-3=-2090/399, 3-4=-2123/557, 4-5=-2139/569, 5-6=-2101/407  
BOT CHORD 2-9=-355/1783, 7-9=-152/1078, 6-7=-259/1679  
WEBS 4-7=-382/1314, 5-7=-333/250, 4-9=-369/1294, 3-9=-328/246

#### 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) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 11-8-0, Exterior(2R) 11-8-0 to 14-8-0, Interior(1) 14-8-0 to 23-4-0 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.
- 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 100 lb uplift at joint(s) except (jt=lb) 6=252, 2=286.
- 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

- Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-4=-54, 4-6=-54, 2-9=-20, 7-9=-80(F=-60), 6-7=-20



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October 5, 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

**MiTek**

6904 Parke East Blvd.  
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 43 CW	T25552151
2951573	T03	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. Mon Oct 4 19:44:07 2021 Page 2  
ID:zqaFL3IHcqBYQ?xLR?HG4?yWtpx-NrPJtVC7D5TWjZSSArbQO58gm\_XyyT1wBhLYatyWhoc

**LOAD CASE(S)** Standard  
Concentrated Loads (lb)

Vert: 4=-76(B) 6=-76(B) 14=-280(B) ~~8=-76(B)~~ 17=-76(B) 18=-76(B) 19=-76(B) 21=-76(B) 22=-76(B) 23=-170(B) 24=-47(B) 25=-47(B) 26=-47(B) 27=-47(B)  
28=-47(B) 29=-47(B) 30=-101(B)



**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MJ1-7473 rev. 5/19/2020 BEFORE USE.

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**ANSI/TPH 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	GIEBEIG - LOT 43 CW	T25552153
2951573	T05	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. Mon Oct 4 19:44:09 2021 Page 1  
ID:zqaFL3IHcqBYQ?xLR?HG4?yWtpx-JDX4IAENijEytcrHGduTWD2xo8UQDHDe?qfelyWhoa

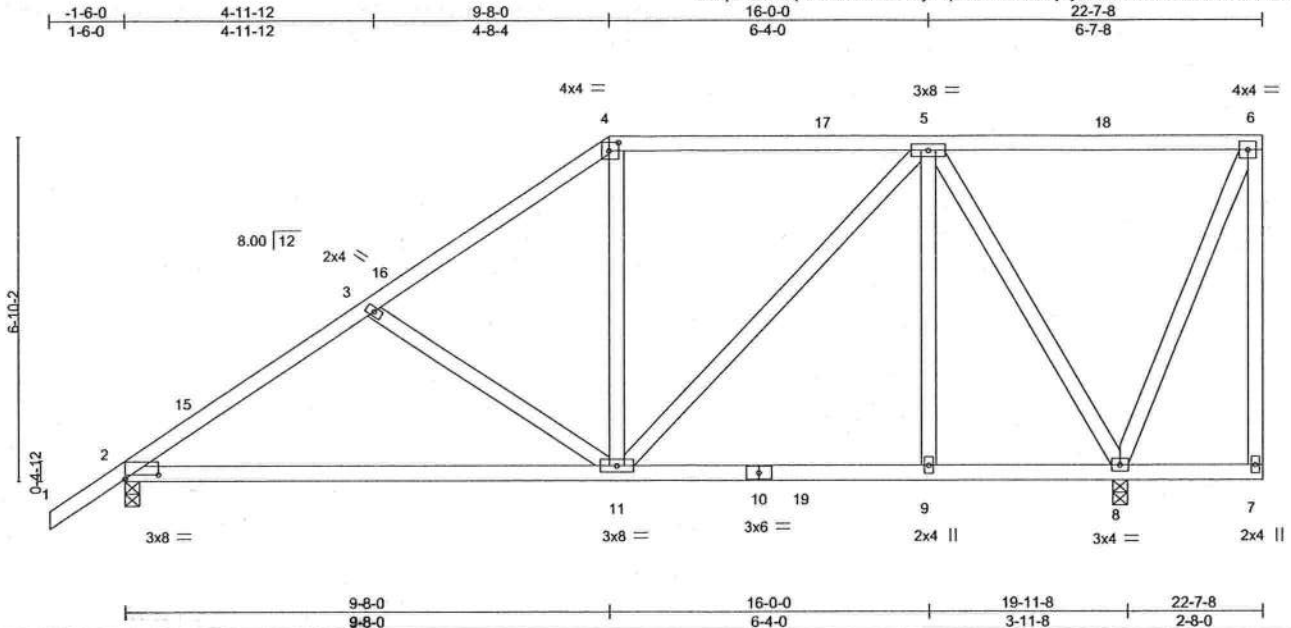


Plate Offsets (X,Y) - [2-0-8-0,0-1-0], [4-0-2-4,0-2-0]		9-8-0 9-8-0		16-0-0 6-4-0		19-11-8 3-11-8		22-7-8 2-8-0	
<b>LOADING</b> (psf)	<b>SPACING</b>	2-0-0	<b>CSI</b>	<b>DEFL.</b>	in (loc)	I/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.49	Vert(LL)	-0.18 11-14	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.74	Vert(CT)	-0.38 11-14	>632	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.97	Horz(CT)	0.02 8	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 143 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-1-5 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 9-11-5 oc bracing.

#### REACTIONS.

(size) 2=0-3-8, 8=0-3-8  
Max Horz 2=252(LC 12)  
Max Uplift 2=-188(LC 12), 8=-241(LC 9)  
Max Grav 2=869(LC 19), 8=1033(LC 2)

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

TOP CHORD 2-3=-1013/231, 3-4=-816/183, 4-5=-624/194  
BOT CHORD 2-11=-348/874, 9-11=-109/388, 8-9=-109/388  
WEBS 3-11=-328/183, 5-11=-125/387, 5-8=-879/230

#### 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) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 9-8-0, Exterior(2R) 9-8-0 to 13-10-15, Interior(1) 13-10-15 to 22-5-12 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, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=188, 8=241.



Philip J. O'Regan PE No.58126  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

October 5, 2021



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6904 Parke East Blvd.  
Tampa, FL 33610



Job 2951573	Truss T06G	Truss Type Common Supported Gable	Qty 1	Ply 1	GIEBEIG - LOT 43 CW	T25552155
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Oct 4 19:44:12 2021 Page 1

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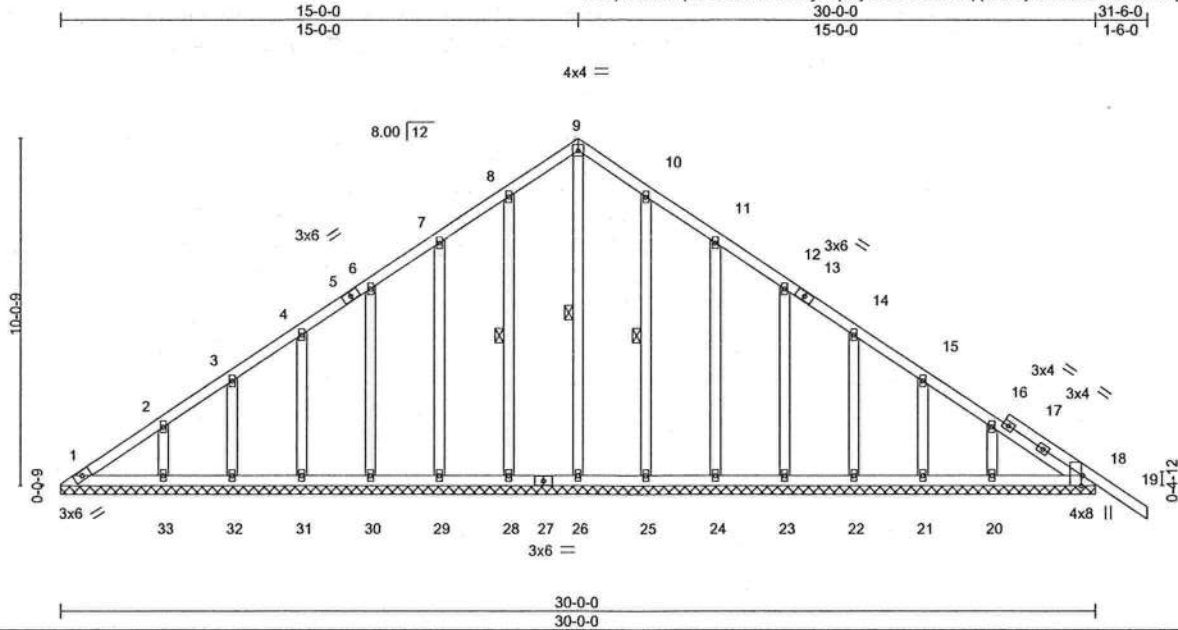


Plate Offsets (X,Y) - [18:0-3-8, Edge]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.13	Vert(LL)	-0.01	19	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.06	Vert(CT)	-0.01	19	n/r	120		
BCLL 0.0	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.01	18	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-S						Weight: 205 lb	FT = 20%

#### LUMBER-

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

#### 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.  
WEBS 1 Row at midpt 9-26, 8-28, 10-25

#### REACTIONS.

All bearings 30-0-0.  
(lb) - Max Horz 1--228(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 28, 29, 30, 31, 32, 33, 25, 24, 23, 22, 21, 20, 18  
Max Grav All reactions 250 lb or less at joint(s) 1, 26, 28, 29, 30, 31, 32, 33, 25, 24, 23, 22, 21, 20, 18

**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 Corner(3E) 0-4-15 to 3-4-15, Exterior(2N) 3-4-15 to 15-0-0, Corner(3R) 15-0-0 to 18-0-0, Exterior(2N) 18-0-0 to 31-6-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- 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 100 lb uplift at joint(s) 1, 28, 29, 30, 31, 32, 33, 25, 24, 23, 22, 21, 20, 18.



Philip J. O'Regan PE No.58126  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

October 5, 2021

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6904 Parke East Blvd.  
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 43 CW	T25552157
2951573	T07G	GABLE	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Oct 4 19:44:14 2021 Page 1

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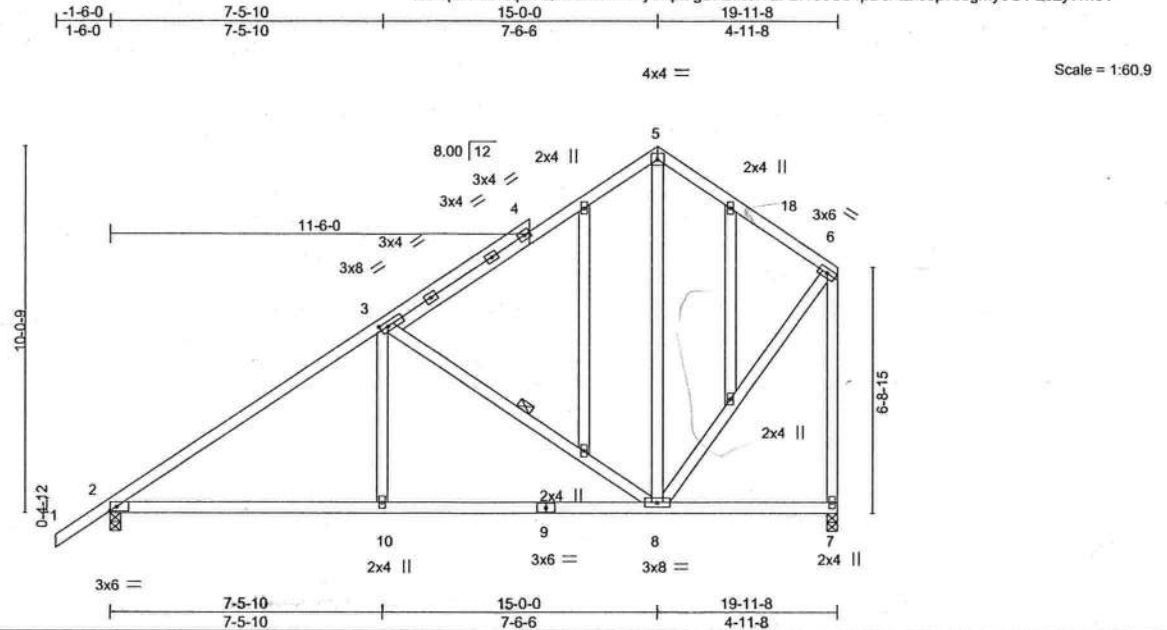


Plate Offsets (X,Y)-- [3:0-2-8,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.66	Vert(LL)	0.07 10-17	>999	240	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.54	Vert(CT)	-0.14 10-17	>999	180		
BCLL 0.0	Lumber DOL 1.25	WB 0.25	Horz(CT)	0.02 7	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS						
	Code FBC2020/TPI2014						Weight: 149 lb	FT = 20%

#### LUMBER-

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

#### REACTIONS.

(size) 2=0-3-8, 7=0-3-8  
Max Horz 2=299(LC 12)  
Max Uplift 2=-167(LC 12), 7=-190(LC 12)  
Max Grav 2=817(LC 1), 7=730(LC 1)

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

TOP CHORD 2-3=-997/164, 3-5=-460/120, 5-6=-413/140, 6-7=-693/198  
BOT CHORD 2-10=-313/786, 8-10=-313/786  
WEBS 3-10=0/325, 3-8=-596/279, 6-8=-133/484

#### 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) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 15-0-0, Exterior(2R) 15-0-0 to 18-0-0, Interior(1) 18-0-0 to 19-9-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 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 studs spaced at 2-0-0 oc.
- 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 100 lb uplift at joint(s) except (jt=lb) 2=167, 7=190.



Philip J. O'Regan PE No.58126  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

October 5, 2021

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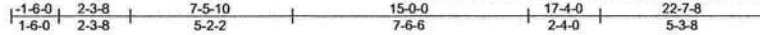
Job 2951573	Truss T09	Truss Type Roof Special	Qty 3	Ply 1	GIEBEIG - LOT 43 CW	T25552159
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Builders FirstSource (Lake City, FL),

Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Oct 4 19:44:16 2021 Page 1

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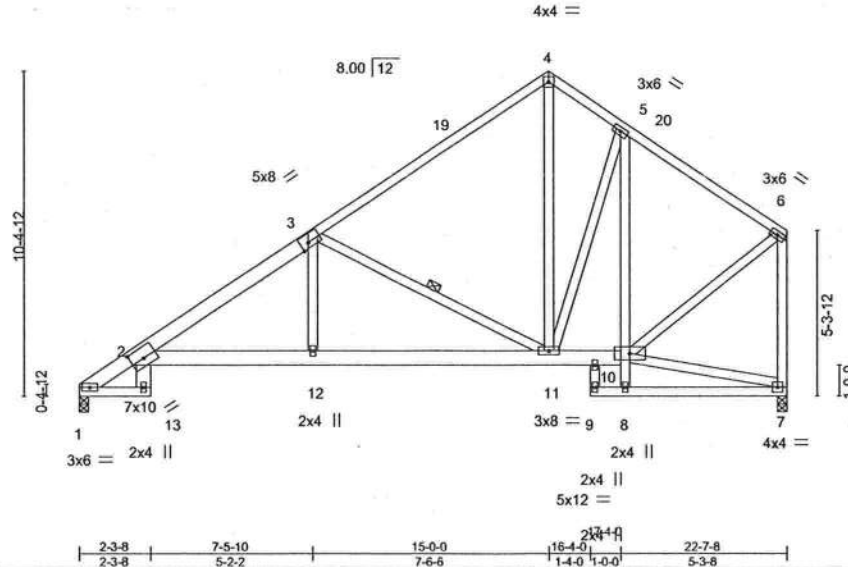


Plate Offsets (X,Y)-- [2:0-5-0,0-4-0], [3:0-3-0,Edge]

LOADING (psf)	SPACING-		CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.71	Vert(LL)	0.15	2-12	>999	240	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.85	Vert(CT)	-0.26	2-12	>999	180	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.31	Horz(CT)	0.17	7	n/a	n/a	
BCDL 10.0	Code FBC2020/TP12014		Matrix-MS						
								Weight: 177 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2 \*Except\*  
1-3: 2x6 SP M 26  
BOT CHORD 2x4 SP No.2 \*Except\*  
2-13,2-10: 2x6 SP No.2, 5-8: 2x4 SP No.3  
WEBS 2x4 SP No.3

#### REACTIONS.

(size) 1=0-3-8, 7=0-3-8  
Max Horz 1=247(LC 12)  
Max Uplift 1=-157(LC 12), 7=-171(LC 12)  
Max Grav 1=837(LC 1), 7=844(LC 1)

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

TOP CHORD 2-18=-557/57, 2-3=-1408/321, 3-4=-711/186, 4-5=-609/216, 5-6=-626/166,  
6-7=-793/187  
BOT CHORD 2-12=-441/1220, 11-12=-443/1233, 10-11=-96/460, 5-10=-275/84  
WEBS 3-12=-7/377, 3-11=-844/379, 4-11=-128/428, 6-10=-122/579

#### 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 3-1-12, Interior(1) 3-1-12 to 15-0-0, Exterior(2R) 15-0-0 to 18-0-0, Interior(1) 18-0-0 to 22-5-12 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.
- 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 100 lb uplift at joint(s) except (jt=lb) 1=157, 7=171.

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-9-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 10-0-0 oc bracing: 8-10  
WEBS 1 Row at midpt 3-11



Philip J. O'Regan PE No.58126  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

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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 2951573	Truss T11	Truss Type Common	Qty 1	Ply 1	GIEBEIG - LOT 43 CW	T25552161
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

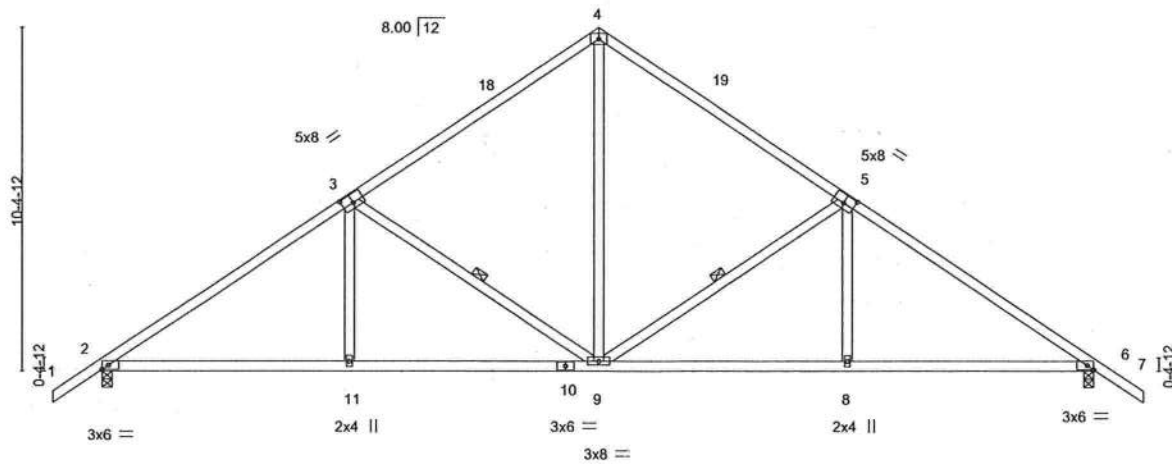
8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Oct 4 19:44:18 2021 Page 1

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4x6 =

Scale = 1:67.2



		7-5-10		15-0-0		22-6-6		30-0-0	
		7-5-10		7-6-6		7-6-6		7-5-10	
Plate Offsets (X,Y)---		[3:0-4-0,0-3-0], [5:0-4-0,0-3-0], [6:0-2-3,Edge]							
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) 0.08 11-14 >999 240		MT20 244/190	
TCDL 7.0		Lumber DOL 1.25		BC 0.60		Vert(CT) -0.17 8-17 >999 180			
BCLL 0.0 *		Rep Stress Incr YES		WB 0.32		Horz(CT) 0.06 6 n/a n/a			
BCDL 10.0		Code FBC2020/TPI2014		Matrix-MS				Weight: 159 lb FT = 20%	

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-11-5 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 5-9, 3-9

#### REACTIONS.

(size) 2=0-3-8, 6=0-3-8  
Max Horz 2=242(LC 11)  
Max Uplift 2=-252(LC 12), 6=-252(LC 13)  
Max Grav 2=1191(LC 1), 6=1191(LC 1)

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

TOP CHORD 2-3=-1653/314, 3-4=-1136/295, 4-5=-1136/295, 5-6=-1653/314  
BOT CHORD 2-11=-300/1315, 9-11=-300/1314, 8-9=-154/1297, 6-8=-154/1298  
WEBS 4-9=-165/760, 5-9=-586/281, 5-8=0/315, 3-9=-585/280, 3-11=0/315

#### 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) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 15-0-0, Exterior(2R) 15-0-0 to 18-0-0, Interior(1) 18-0-0 to 31-6-0 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.
- 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 100 lb uplift at joint(s) except (jt=lb) 2=252, 6=252.



Philip J. O'Regan PE No.58126  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

October 5, 2021

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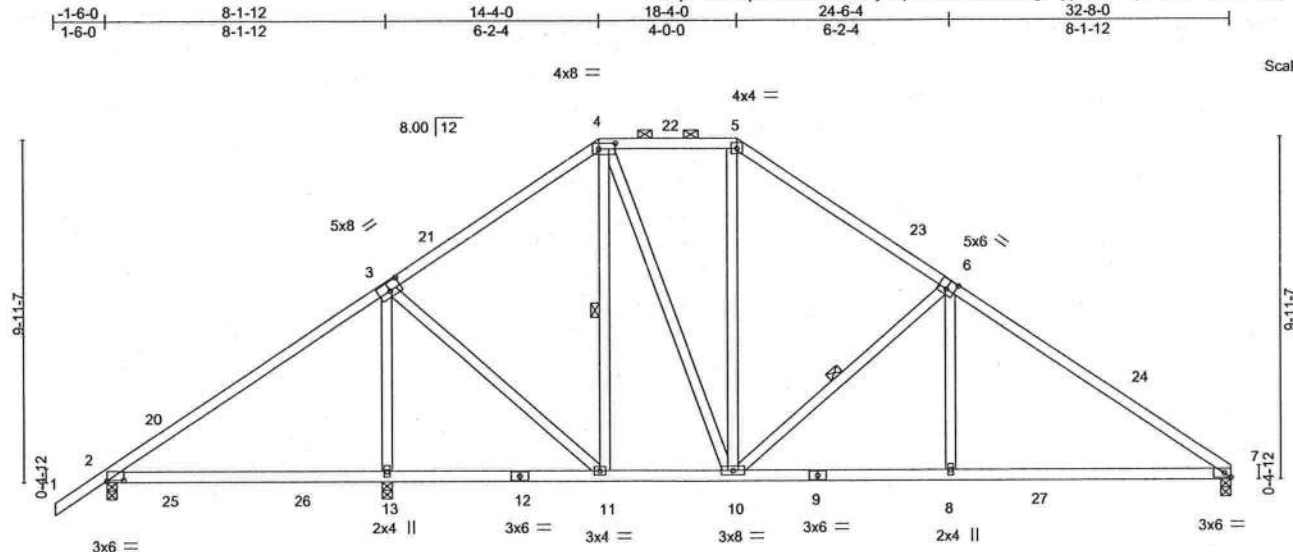
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6904 Parke East Blvd.  
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 43 CW	T25552163
2951573	T14	Piggyback Base	10	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Oct 4 19:44:20 2021 Page 1

ID:zqaFL3IHcqBYQ?xLR?HG4?yWtpx-ULhEcXMH956gnZyyQ4KTPqBtNucVlvrAC?kXcyWhoP



Scale: 3/16"=1'

Plate Offsets (X,Y)-- [2:0-6-0,0-0-4], [3:0-4-0,0-3-0], [4:0-5-12,0-2-0], [6:0-3-0,0-3-4], [7:0-2-3,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.64	Vert(LL) 0.20	13-16	>497	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.77	Vert(CT) -0.31	8-19	>946	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.59	Horz(CT) 0.02	7	n/a	n/a		
BCDL 10.0	Code FBC2020/TP12014	Matrix-MS					Weight: 191 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-9-12 oc purlins, except  
2-0-0 oc purlins (6-0-0 max.): 4-5.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 4-11, 6-10

**REACTIONS.** (size) 2=0-3-8, 13=0-3-8, 7=0-3-8  
Max Horz 2=226(LC 9)  
Max Uplift 2=-97(LC 12), 13=-241(LC 12), 7=-212(LC 13)  
Max Grav 2=414(LC 23), 13=1341(LC 2), 7=1034(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 3-4=-670/244, 4-5=-615/268, 5-6=-824/267, 6-7=-1375/299  
BOT CHORD 10-11=-67/503, 8-10=-142/1071, 7-8=-142/1073  
WEBS 3-13=-1025/260, 3-11=-6/544, 4-10=-117/418, 6-10=-726/272, 6-8=0/378

#### 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) -1-6-0 to 1-9-3, Interior(1) 1-9-3 to 14-4-0, Exterior(2E) 14-4-0 to 18-4-0, Exterior(2R) 18-4-0 to 22-11-7, Interior(1) 22-11-7 to 32-8-0 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 100 lb uplift at joint(s) 2 except (it=lb) 13=241, 7=212.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Philip J. O'Regan PE No.58126  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
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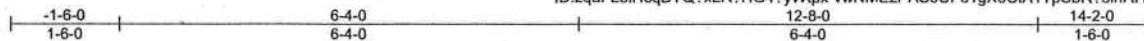


Job 2951573	Truss T15	Truss Type Common	Qty 1	Ply 1	GIEBEIG - LOT 43 CW	T25552165
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Oct 4 19:44:23 2021 Page 1

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4x4 =

Scale = 1:30.6

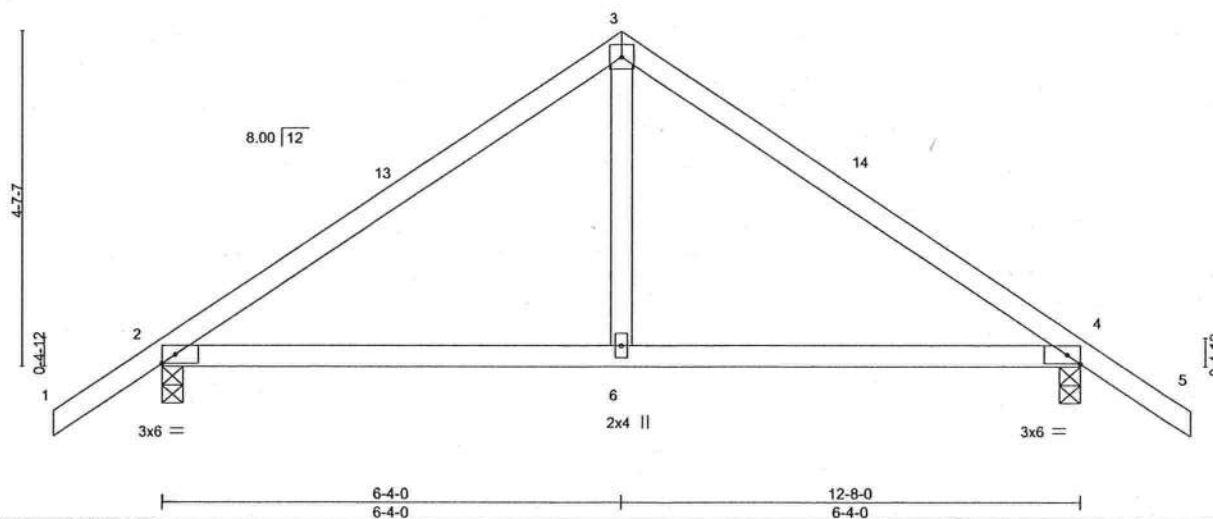


Plate Offsets (X,Y)-- [4:0-2-3,Edge]											
LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.42	Vert(LL)	0.05	6-9	>999	240	MT20	244/190	
TCDL 7.0	Lumber DOL	1.25	BC 0.40	Vert(CT)	-0.08	6-9	>999	180			
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.00	4	n/a	n/a			
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS								
										Weight: 53 lb	FT = 20%

#### LUMBER-

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

#### 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) 2=0-3-8, 4=0-3-8  
Max Horz 2=-115(LC 10)  
Max Uplift 2=-126(LC 12), 4=-126(LC 13)  
Max Grav 2=550(LC 1), 4=550(LC 1)

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

TOP CHORD 2-3=-553/156, 3-4=-553/156  
BOT CHORD 2-6=-30/388, 4-6=-30/388  
WEBS 3-6=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) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 6-4-0, Exterior(2R) 6-4-0 to 9-4-0, Interior(1) 9-4-0 to 14-2-0 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.
- 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 100 lb uplift at joint(s) except (jt=lb) 2=126, 4=126.



Philip J. O'Regan PE No.58126  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
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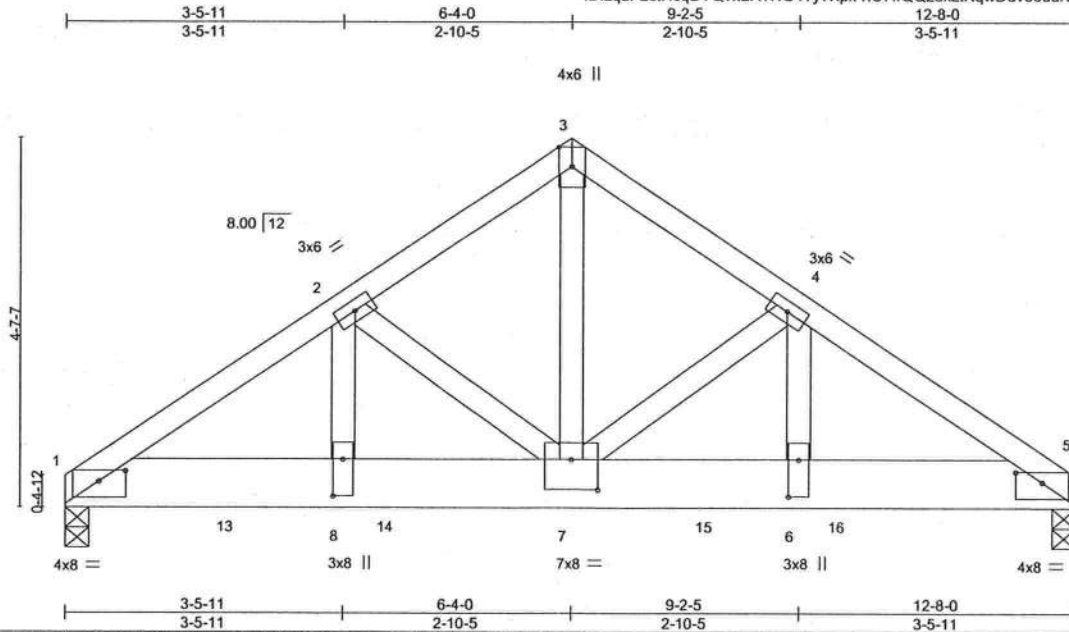
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Tampa, FL 33610

Job 2951573	Truss T16	Truss Type Common Girder	Qty 1	Ply 2	GIEBEIG - LOT 43 CW Job Reference (optional)	T25552167
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Oct 4 19:44:25 2021 Page 1  
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Scale = 1:27.8

Plate Offsets (X,Y)- [1:0-4-0,0-1-9], [5:0-4-0,0-1-9], [6:0-5-8,0-1-8], [7:0-4-0,0-4-8], [8:0-5-8,0-1-8]									
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	0.20	Vert(LL)	-0.05 7 >999	240	MT20 244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.23	Vert(CT)	-0.08 6-7 >999	180	
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.76	Horz(CT)	0.02 5 n/a	n/a	
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 165 lb FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x8 SP 2400F 2.0E  
WEBS 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-3-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 1=0-3-8, 5=0-3-8  
Max Horz 1=-93(LC 23)  
Max Uplift 1=-695(LC 8), 5=-840(LC 9)  
Max Grav 1=3382(LC 1), 5=4084(LC 1)

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

TOP CHORD 1-2=-5142/1061, 2-3=-3817/816, 3-4=-3817/817, 4-5=-5446/1121  
BOT CHORD 1-8=-894/4256, 7-8=-894/4256, 6-7=-891/4511, 5-6=-891/4511  
WEBS 3-7=-836/4009, 4-7=-1725/423, 4-6=-360/1825, 2-7=-1401/356, 2-8=-285/1462

#### 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 0-9-0 oc.  
Bottom chords connected as follows: 2x8 - 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.
- 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.
- 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 100 lb uplift at joint(s) except (jt=lb) 1=695, 5=840.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1088 lb down and 239 lb up at 2-0-12, 1088 lb down and 239 lb up at 4-0-12, 1088 lb down and 239 lb up at 6-0-12, 1088 lb down and 239 lb up at 8-0-12, and 1088 lb down and 239 lb up at 9-8-12, and 1089 lb down and 238 lb up at 11-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

#### LOAD CASE(S) Standard

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



Philip J. O'Regan PE No.58126  
MiTek USA, Inc. FL Cert 6634  
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October 5, 2021

Continued on page 2

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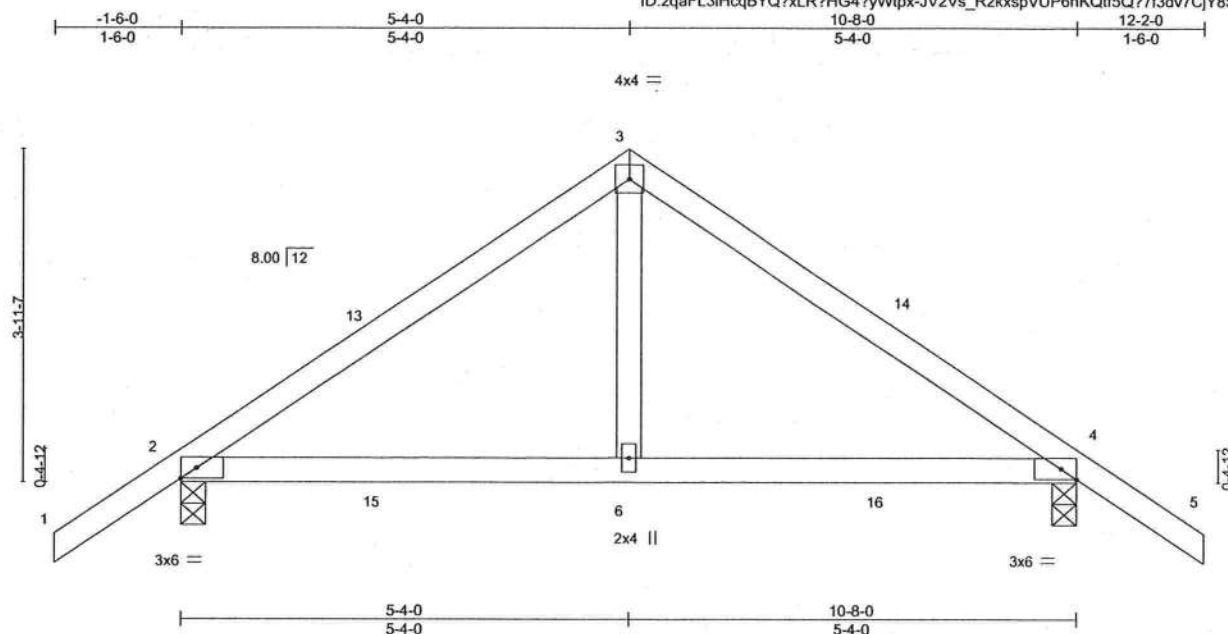
6904 Parke East Blvd.  
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Job 2951573	Truss T17	Truss Type Common	Qty 1	Ply 1	GIEBEIG - LOT 43 CW	T25552168
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Oct 4 19:44:26 2021 Page 1

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Scale = 1:26.3

Plate Offsets (X,Y)--		[4:0-2-3,Edge]	
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.27
TCDL 7.0	Lumber DOL	1.25	BC 0.29
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS
			<b>DEFL.</b>
			in (loc) l/defl L/d
			Vert(LL) 0.05 6-12 >999 240
			Vert(CT) -0.04 6-9 >999 180
			Horz(CT) 0.00 4 n/a n/a
			<b>PLATES</b> <b>GRIP</b>
			MT20 244/190
			Weight: 46 lb FT = 20%

#### LUMBER-

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

#### 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) 2=0-3-8, 4=0-3-8  
Max Horz 2=100(LC 10)  
Max Uplift 2=112(LC 12), 4=112(LC 13)  
Max Grav 2=476(LC 1), 4=476(LC 1)

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

TOP CHORD 2-3=-455/455, 3-4=-455/455  
BOT CHORD 2-6=-264/318, 4-6=-264/318  
WEBS 3-6=-325/242

#### 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) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 5-4-0, Exterior(2R) 5-4-0 to 8-4-0, Interior(1) 8-4-0 to 12-2-0 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.
- 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 100 lb uplift at joint(s) except (it=lb) 2=112, 4=112.



Philip J. O'Regan PE No.58126  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
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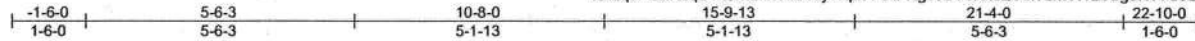
6904 Parke East Blvd.  
Tampa, FL 33610

Job 2951573	Truss T18	Truss Type Common	Qty 2	Ply 1	GIEBEIG - LOT 43 CW	T25552170
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Oct 4 19:44:28 2021 Page 1

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4x6 //

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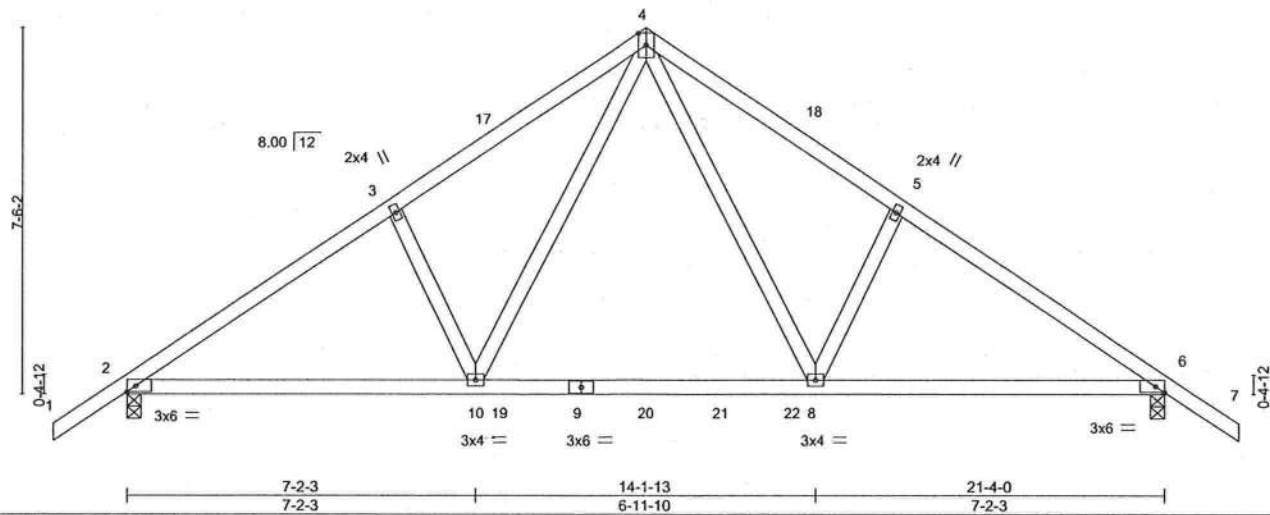


Plate Offsets (X,Y)-- [6:0-2-3,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.30	Vert(LL)	0.10 8-16 >999	240	MT20 244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.54	Vert(CT)	-0.13 8-10 >999	180	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.03 6 n/a	n/a	
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 110 lb FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-1-6 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 7-1-0 oc bracing.

#### REACTIONS.

(size) 2=0-3-8, 6=0-3-8  
Max Horz 2=-179(LC 10)  
Max Uplift 2=-189(LC 12), 6=-189(LC 13)  
Max Grav 2=930(LC 2), 6=930(LC 2)

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

TOP CHORD 2-3=-1202/838, 3-4=-1123/889, 4-5=-1124/889, 5-6=-1202/838  
BOT CHORD 2-10=-616/969, 8-10=-335/647, 6-8=-627/970  
WEBS 4-8=-500/545, 5-8=-286/200, 4-10=-500/543, 3-10=-286/200

#### 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) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 10-8-0, Exterior(2R) 10-8-0 to 13-8-0, Interior(1) 13-8-0 to 22-10-0 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) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=189, 6=189.



Philip J. O'Regan PE No.58126  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

October 5, 2021

**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK 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

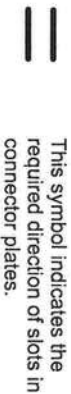
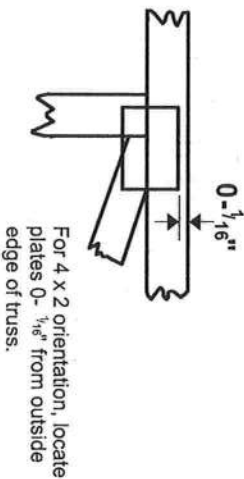
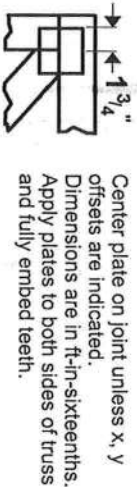
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 36610

# Symbols

## PLATE LOCATION AND ORIENTATION



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

## PLATE SIZE

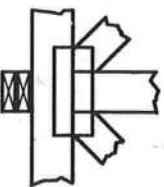
4 X 4

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/TP11:

National Design Specification for Metal Plate Connected Wood Truss Construction.

DSB-89:

Design Standard for Bracing.

Building Component Safety Information,

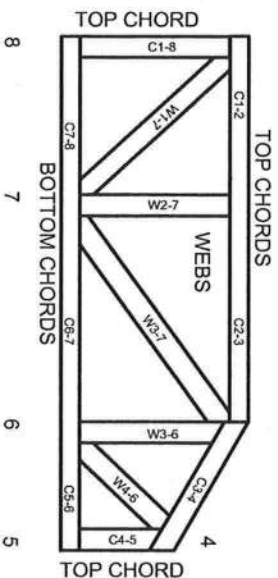
Guide to Good Practice for Handling,

Installing & Bracing of Metal Plate

Connected Wood Trusses.

# Numbering System

6-4-8 dimensions shown in ft-in-sixteenths  
(Drawings not to scale)



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/TP1 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 1 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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.