



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

RE: 3130991 - IC CONST. - MITCHELLE RES.

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

**Site Information:**

Customer Info: IC CONSTRUCTION Project Name: Michelle Res. Model: Custom  
Lot/Block: N/A Subdivision: N/A  
Address: TBD, TBD  
City: Columbia Cty State: FL

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

Name: License #:  
Address:  
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 8.5  
Wind Code: ASCE 7-16 Wind Speed: 130 mph  
Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 32 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.

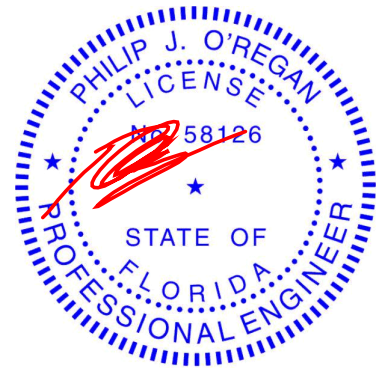
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	T27545457	EJ01	4/27/22	23	T27545479	T14	4/27/22
2	T27545458	EJ01G	4/27/22	24	T27545480	T15	4/27/22
3	T27545459	PB01	4/27/22	25	T27545481	T15G	4/27/22
4	T27545460	PB01G	4/27/22	26	T27545482	T16	4/27/22
5	T27545461	PB03	4/27/22	27	T27545483	T16G	4/27/22
6	T27545462	T01	4/27/22	28	T27545484	V01	4/27/22
7	T27545463	T01G	4/27/22	29	T27545485	V02	4/27/22
8	T27545464	T02	4/27/22	30	T27545486	V03	4/27/22
9	T27545465	T03	4/27/22	31	T27545487	V04	4/27/22
10	T27545466	T03G	4/27/22	32	T27545488	V05	4/27/22
11	T27545467	T04	4/27/22				
12	T27545468	T05	4/27/22				
13	T27545469	T05G	4/27/22				
14	T27545470	T06	4/27/22				
15	T27545471	T07	4/27/22				
16	T27545472	T07G	4/27/22				
17	T27545473	T08	4/27/22				
18	T27545474	T09	4/27/22				
19	T27545475	T10	4/27/22				
20	T27545476	T11	4/27/22				
21	T27545477	T12	4/27/22				
22	T27545478	T13	4/27/22				

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.

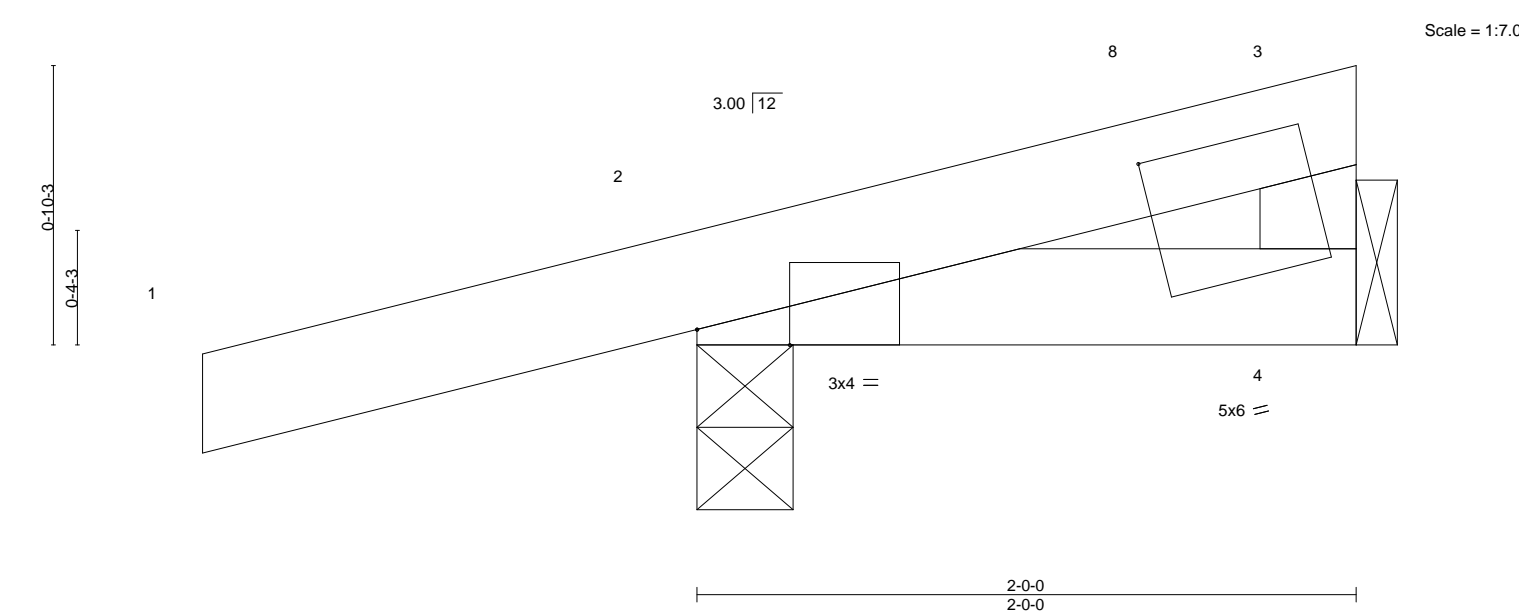
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), 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:

April 27, 2022

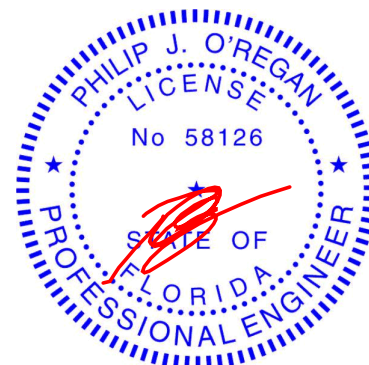
Builders FirstSource (Lake City, FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:16:19 2022 Page 1  
ID: Q7RwmdgDYh8qcxUfiYMXeEzke8Z-q6M8DQII PETEE9xu5ziHN3vS\_Psl\_I mUTqB1POzMnLA  
-1-6-0 2-0-0  
1-6-0 2-0-0



<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 2-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3		

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

- 1) 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) 1'-6-0 to 1'-6-0, Interior(1) 1'-6-0 to 1'-10-4 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 100 lb uplift at joint(s) 2, 4.



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Date:

April 27, 2022



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



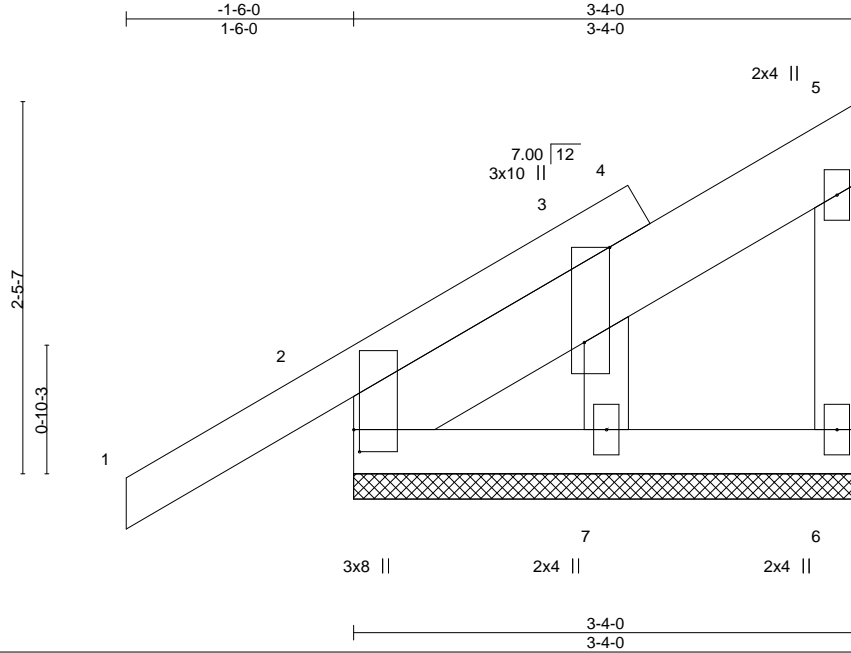
6904 Parke East Blvd  
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - MITCHELLE RES.	T27545458
3130991	EJ01G	Monopitch Supported Gable	1	1	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:16:20 2022 Page 1

ID:Q7RwmdgDYh8qcxUfrYMxEEZke8Z-IlvXQmJOAXb5rJW5egDWwHScBoCWjleiUxbxqzMnL9



Scale = 1:15.2

Plate Offsets (X,Y)-- [2:0-1-12,0-0-7], [3:0-7-8,Edge]

LOADING (psf)	SPACING-		CSL.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.16	Vert(LL)	0.00	1	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.03	Vert(CT)	-0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	-0.00	6	n/a	n/a		
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-P						Weight: 24 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x6 SP No.2 \*Except\*  
1-4: 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-4-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

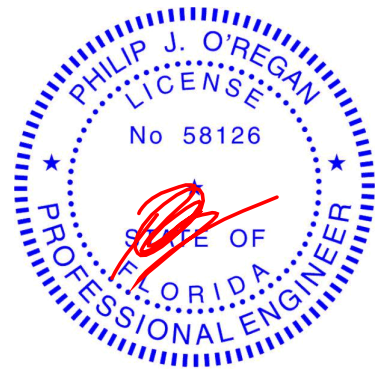
#### REACTIONS.

(size) 2=3-4-0, 6=3-4-0, 7=3-4-0  
Max Horz 2=77(LC 12)  
Max Uplift 2=-28(LC 12), 6=-20(LC 12), 7=-47(LC 12)  
Max Grav 2=174(LC 1), 6=51(LC 19), 7=103(LC 19)

**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 Corner(3E) -1-6-0 to 1-7-0, Exterior(2N) 1-7-0 to 3-2-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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.
- 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) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 7.



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Date:

April 27,2022

**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**



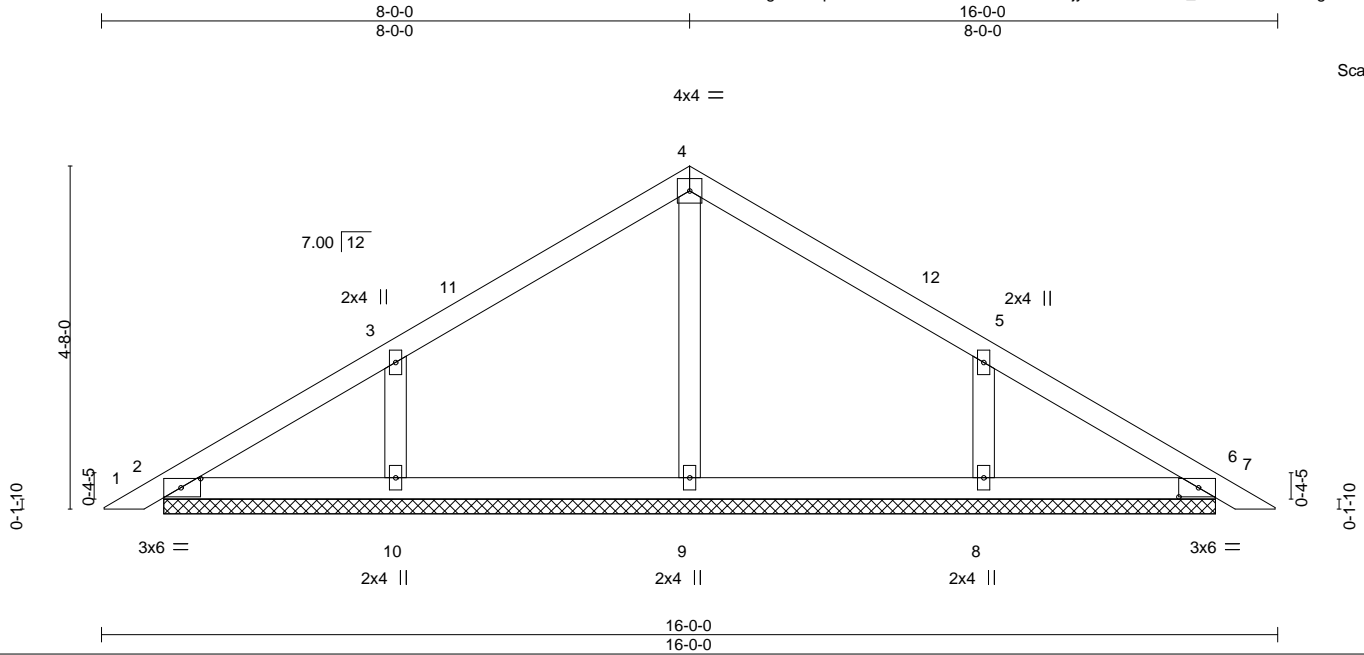
6904 Parke East Blvd.  
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - MITCHELLE RES.	T27545459
3130991	PB01	GABLE	16	1	Job Reference (optional)	

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

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ID:Q7RwmdgDYh8qcxUfiYMxEeZke8Z-mUTve6K0wrjyTT5HCOKISU\_m1CWPSCJnx8g8TGzMNl8



Scale = 1:31.3

Plate Offsets (X,Y)-- [2:0-3-3,0-1-8], [6:0-3-3,0-1-8]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.15	Vert(LL)	0.00	6	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.11	Vert(CT)	0.00	7	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-S						Weight: 59 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" oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.

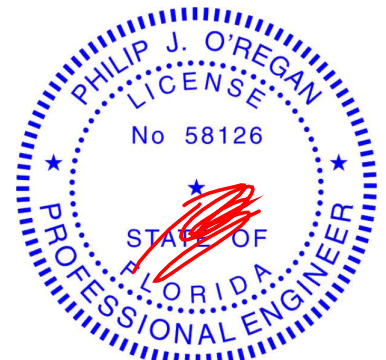
#### REACTIONS.

- All bearings 14-3-11.  
(lb) - Max Horz 2=99(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 8=137(LC 13), 10=138(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 8=318(LC 20), 10=318(LC 19)

**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) 0-3-11 to 3-3-11, Interior(1) 3-3-11 to 8-0-0, Exterior(2R) 8-0-0 to 11-0-0, Interior(1) 11-0-0 to 15-8-5 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 requires continuous bottom chord bearing.
- Gable studs spaced at 4'-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" tall by 2'-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) 2, 6 except (jt=lb) 8=137, 10=138.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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Date:

April 27, 2022

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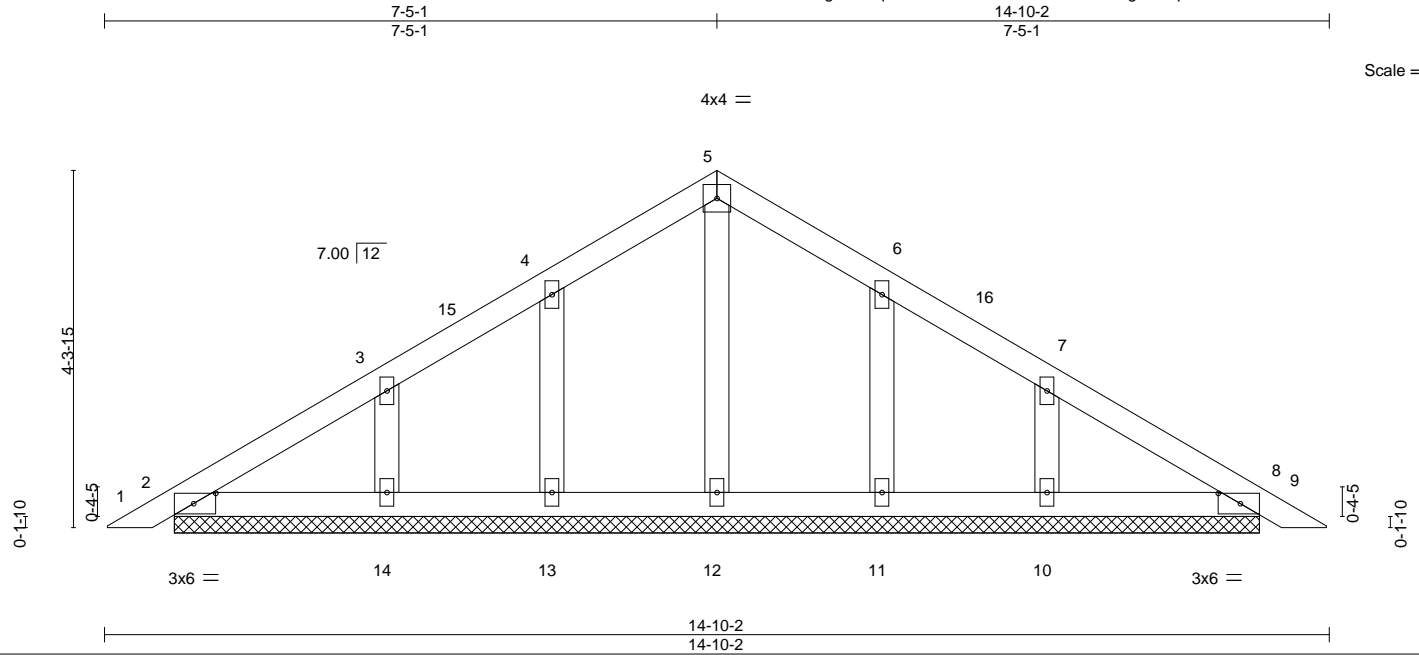


6904 Parke East Blvd.  
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - MITCHELLE RES.	T27545460
3130991	PB01G	GABLE	2	1	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:16:23 2022 Page 1  
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Scale = 1:27.9

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

LOADING (psf)	SPACING-		CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.06	Vert(LL)	0.00	8	n/r	120	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.05	Vert(CT)	0.00	9	n/r	120	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	8	n/a	n/a	
BCDL 10.0	Code FBC2020/TPI2014		Matrix-S						
								Weight: 62 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.

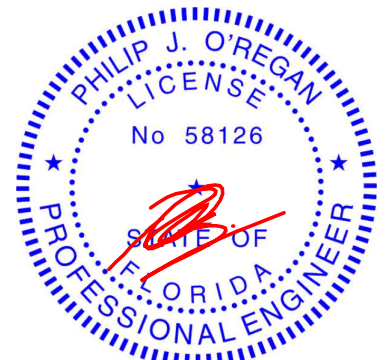
#### REACTIONS.

- All bearings 13-1-13.  
(lb) - Max Horz 2=-91(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10  
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

**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) 0-3-11 to 3-5-1, Interior(1) 3-5-1 to 7-5-1, Exterior(2R) 7-5-1 to 10-5-1, Interior(1) 10-5-1 to 14-6-7 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) 2, 8, 13, 14, 11, 10.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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Date:

April 27, 2022

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Tampa, FL 36610

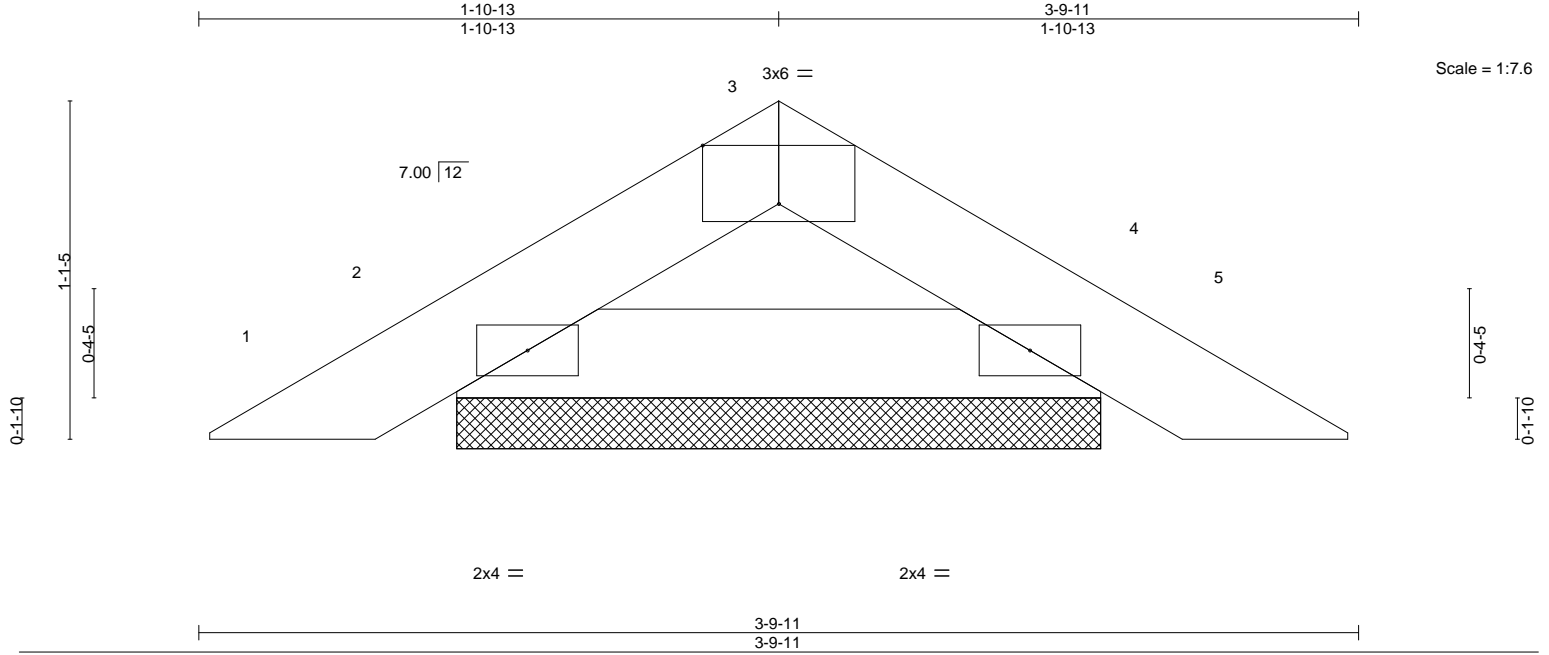


Job	Truss	Truss Type	Qty	Ply	IC CONST. - MITCHELLE RES.	T27545461
3130991	PB03	Piggyback	4	1	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:16:24 2022 Page 1

ID:Q7RwmdgDYh8qcXUfiYMxEeZke8Z-A391G7MuDm5XKxpstWHS47cJlQZ3fZ?Ed6vo4bzMnL5



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.02	Vert(LL)	-0.00	MT20		244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.05	Vert(CT)	-0.00				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00				
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-P							
								Weight: 10 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 3-9-11 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

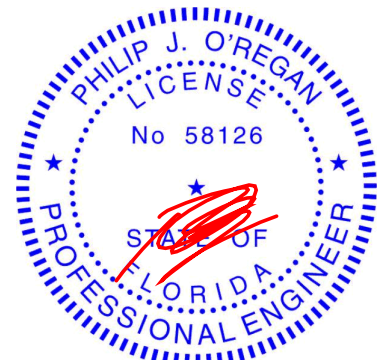
#### REACTIONS.

(size) 2=2-1-6, 4=2-1-6  
Max Horz 2=-21(LC 10)  
Max Uplift 2=-28(LC 12), 4=-28(LC 13)  
Max Grav 2=107(LC 1), 4=107(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 100 lb uplift at joint(s) 2, 4.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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Date:

April 27, 2022

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

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**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

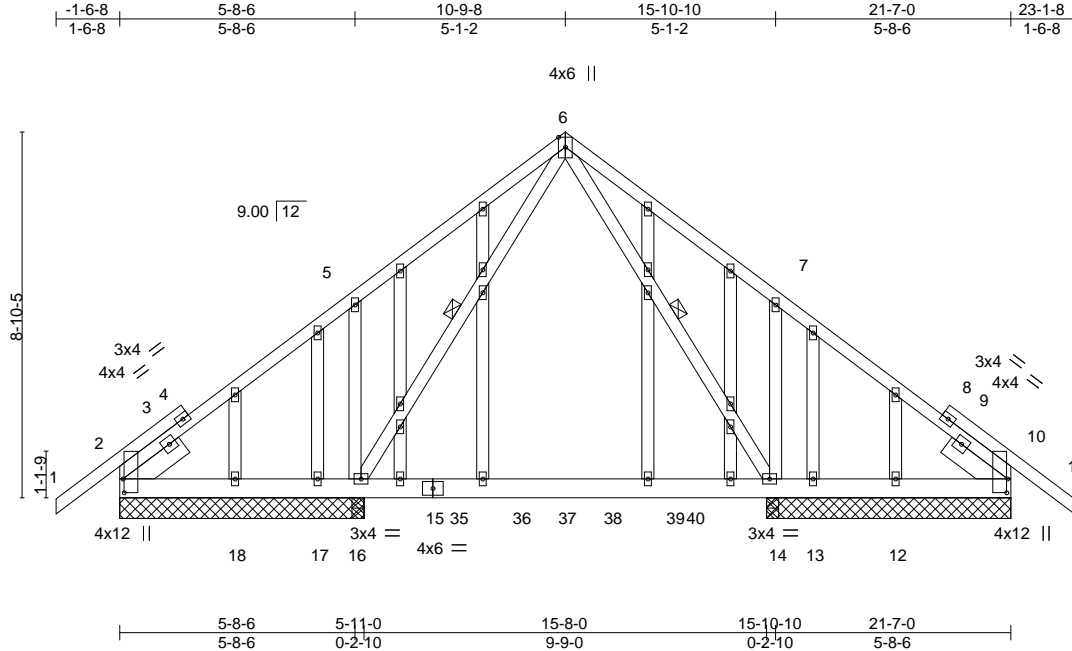


Job	Truss	Truss Type	Qty	Ply	IC CONST. - MITCHELLE RES.	T27545463
3130991	T01G	GABLE	1	1	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:16:28 2022 Page 1

ID:Q7RwmdgDYh8qcxUfiYMxEEzke8Z-3rOY6VPPH?bZpY7d6MMOFznx01pjbM3pYkt0DMzMnL1



Scale = 1:55.8

Plate Offsets (X,Y)-- [2:0-4-0-0-0-5], [10:0-4-0-0-0-5]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.30	Vert(LL)	-0.07 14-16	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.45	Vert(CT)	-0.12 14-16	>999	180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.12	Horz(CT)	0.00 10	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS					Weight: 204 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.3  
 SLIDER Left 2x6 SP No.2 1-8-3, Right 2x6 SP No.2 1-8-3

#### 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 6-14, 6-16

#### REACTIONS.

All bearings 5-11-0.  
 (lb) - Max Horz 2=196(LC 7)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 18 except 14=241(LC 9), 16=258(LC 8), 17=612(LC 33), 13=611(LC 34), 12=102(LC 9)  
 Max Grav All reactions 250 lb or less at joint(s) 17, 18, 13, 12 except 2=260(LC 1), 10=260(LC 1), 14=1208(LC 34), 14=848(LC 1), 16=1227(LC 33), 16=848(LC 1)

#### FORCES.

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

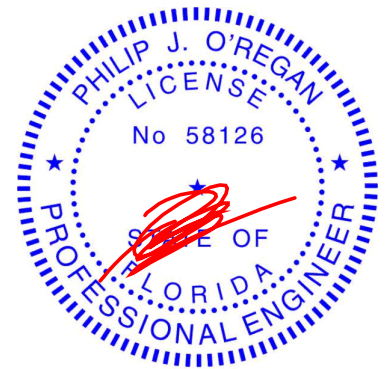
WEBS 7-14=314/244, 5-16=314/244

#### 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
- 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 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 18 except (jt=lb) 14=241, 16=258, 17=612, 13=611, 12=102.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 22 lb down and 16 lb up at 7-8-4, 22 lb down and 16 lb up at 9-8-4, 22 lb down and 16 lb up at 10-9-8, and 22 lb down and 16 lb up at 11-10-12, and 22 lb down and 16 lb up at 13-10-12 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

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



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 MiTek USA, Inc. FL Cert 6634  
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 Date:

April 27, 2022

Continued on page 2

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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

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6904 Parke East Blvd.  
 Tampa, FL 36610



Job	Truss	Truss Type	Qty	Ply	IC CONST. - MITCHELLE RES.	T27545463
3130991	T01G	GABLE	1	1	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:16:28 2022 Page 2  
ID:Q7RwmdgDYh8qcXUfiYMxEEzke8Z-3rOY6VPPH?bZpY7d6MMOFznx01pjbM3pYkt0DMzMnL1

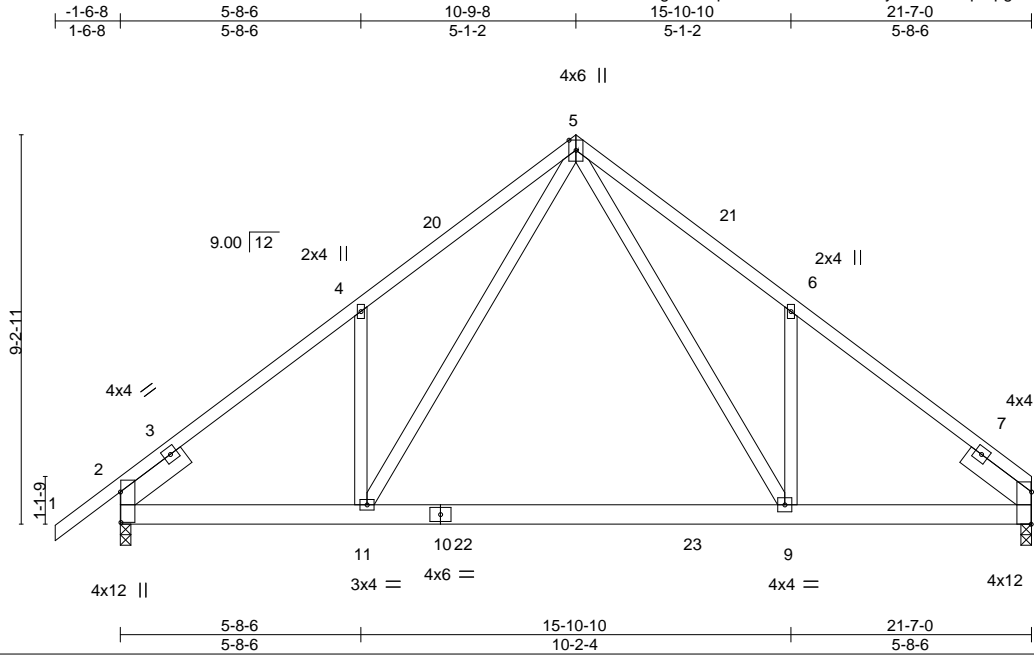
**LOAD CASE(S)** Standard  
Uniform Loads (plf)  
Vert: 1-6=-54, 6-11=-54, 2-10=-20  
Concentrated Loads (lb)  
Vert: 15=-16(B) 36=-16(B) 37=-16(B) 38=-16(B) 40=-16(B)

Job	Truss	Truss Type	Qty	Ply	IC CONST. - MITCHELLE RES.	T27545464
3130991	T02	Common	16	1	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:16:29 2022 Page 1

ID:Q7RwmdgDYh8qcxUfiYMxEzke8Z-X1ywJrQ12lkQiiPg3tdnAK?VR6PKgczmOcZlpzMnL0



Scale = 1:54.6

Plate Offsets (X,Y)-- [2:0-8-11,0-0-2], [8:0-9-3,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.76	Vert(LL)	-0.22 9-11	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.68	Vert(CT)	-0.42 9-11	>624	180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.68	Horz(CT)	0.04 8	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS					Weight: 146 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 SP No.2 \*Except\*  
 8-10: 2x6 SP M 26  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x6 SP No.2 1-11-8, Right 2x6 SP No.2 1-11-8

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-4-15 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 8=0-3-0, 2=0-3-0  
 Max Horz 2=195(LC 11)  
 Max Uplift 8=232(LC 13), 2=265(LC 12)  
 Max Grav 8=1220(LC 20), 2=1301(LC 19)

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

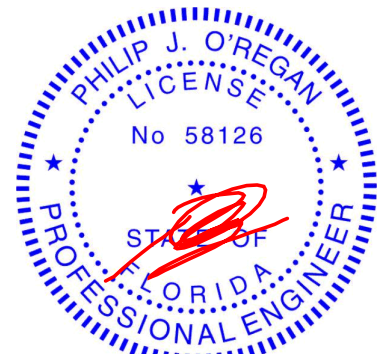
TOP CHORD 2-4=-1597/320, 4-5=-1619/491, 5-6=-1666/498, 6-8=-1639/327  
 BOT CHORD 2-11=-284/1321, 9-11=-114/829, 8-9=-197/1254  
 WEBS 5-9=-349/1054, 5-11=-339/982

#### 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) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 10-9-8, Exterior(2R) 10-9-8 to 13-9-8, Interior(1) 13-9-8 to 21-7-0 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) 8=232, 2=265.
- 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: 1-5=-54, 5-8=-54, 11-16=-20, 9-11=-80(F=-60), 9-12=-20



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 Date:

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

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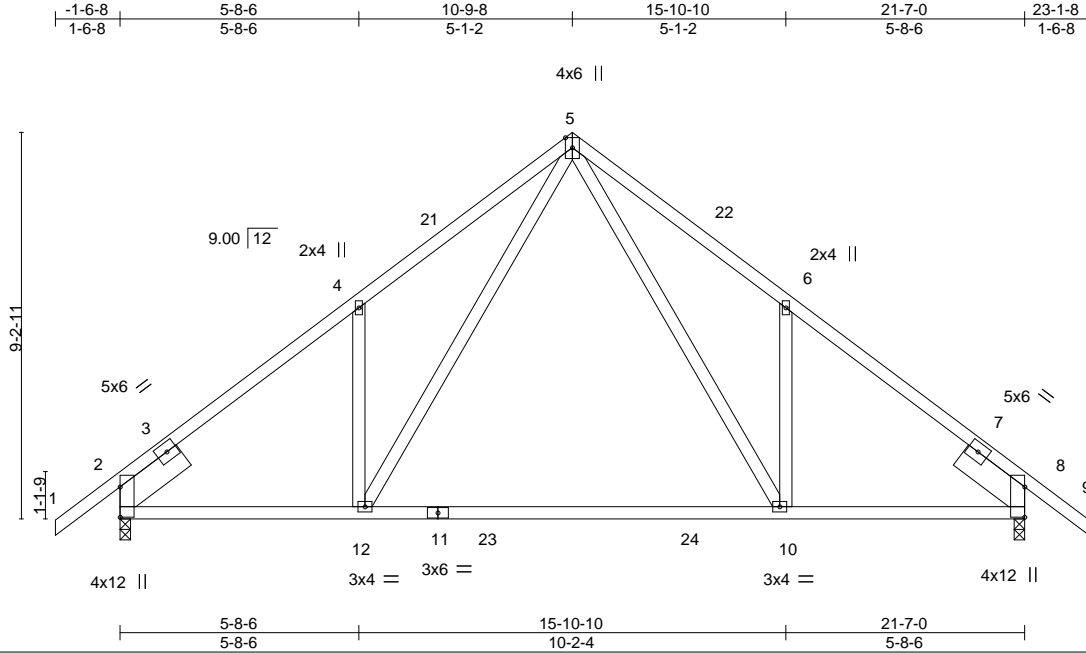
6904 Parke East Blvd.  
 Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - MITCHELLE RES.	T27545465
3130991	T03	Common	1	1	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:16:30 2022 Page 1

ID:Q7RwmdgDYh8qcxUfiYMxEEZke8Z-?DWJWBRfpcsg2sH0EnOsKOsAbqOf39U6?2M7IFzMnL?



Scale = 1:55.0

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

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.74	Vert(LL)	-0.42 10-12	>623	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.93	Vert(CT)	-0.67 10-12	>388	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.51	Horz(CT)	0.06 8	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS					Weight: 134 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2 \*Except\*  
 8-11: 2x4 SP M 31  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x8 SP 2400F 2.0E 1-11-8, Right 2x8 SP 2400F 2.0E 1-11-8

#### REACTIONS.

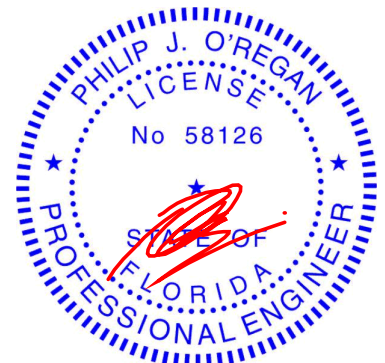
(size) 2=0-3-0, 8=0-3-0  
 Max Horz 2=204(LC 11)  
 Max Uplift 2=182(LC 12), 8=182(LC 13)  
 Max Grav 2=997(LC 19), 8=997(LC 20)

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

TOP CHORD 2-4=-1095/230, 4-5=-1113/361, 5-6=-1126/359, 6-8=-1106/190  
 BOT CHORD 2-12=-161/929, 10-12=-34/609, 8-10=-68/837  
 WEBS 5-10=-253/663, 6-10=-245/261, 5-12=-256/643, 4-12=-242/262

#### 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) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 10-9-8, Exterior(2R) 10-9-8 to 13-9-8, Interior(1) 13-9-8 to 23-1-8 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) 2=182, 8=182.



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 Date:

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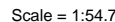
**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

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 ID:Q7RwmdgDYh8qcUfiYMxEeZke8Z-TP4hkXSHaw\_Xg0sCoUv5sbPlUqEY6oj9FEi5gqhzMnL\_  
 -1-6-8 10-9-8 21-7-0 23-1-8  
 1-6-8 10-9-8 10-9-8 1-6-8



LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.2 *Except* 1-3,13-15: 2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x4 SP No.3	WEBS	1 Row at midpt                      8-20

**REACTIONS.** All bearings 21-7-0.  
 (lb) - Max Horz 2=193(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 14, 21, 23, 24, 19, 18, 17 except 25=114(LC 12),  
 16=110(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 14, 20, 21, 23, 24, 25, 19, 18, 17, 16

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDF=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCp=-0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 10-9-8, Exterior(2R) 10-9-8 to 13-9-8, Interior(1) 13-9-8 to 23-1-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2'-0" oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-6" tall by 2'-0" wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14, 21, 23, 24, 19, 18, 17 except (it=lb) 25=114, 16=110.



April 27, 2022



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6904 Parke East Blvd  
Tampa, FL 36610





Job	Truss	Truss Type	Qty	Ply	IC CONST. - MITCHELLE RES.	T27545468
3130991	T05	Common	3	1	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:16:34 2022 Page 1

ID:Q7RwmdgDYh8qcxUfiYMxEeZke8Z-u\_mpMYUAtrM6XTanTcToUE1ukSmU??0iwgKKQ0zMnKx

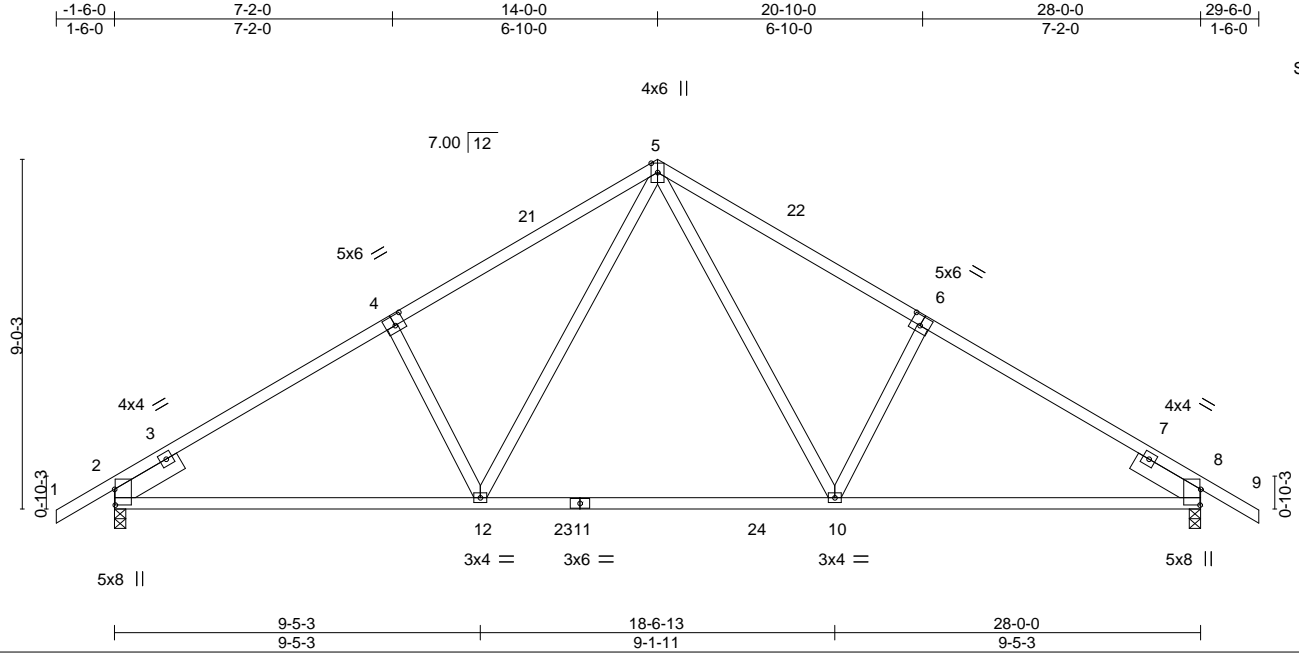


Plate Offsets (X,Y)-- [2:0-4-14,0-0-3], [4:0-3-0,0-3-0], [6:0-3-0,0-3-0], [8:0-4-14,0-0-3]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.60	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.88	Vert(LL) -0.31 10-12 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.35	Vert(CT) -0.47 10-12 >721 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.06 8 n/a n/a		
	Code FBC2020/TPI2014			Weight: 148 lb	FT = 20%

#### LUMBER-

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

#### REACTIONS.

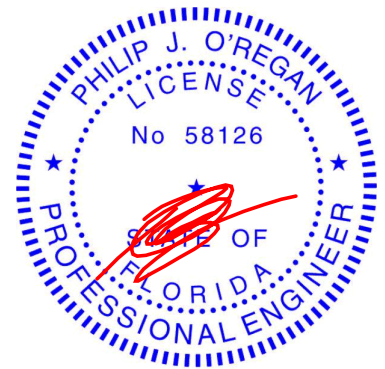
(size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=199(LC 11)  
 Max Uplift 2=240(LC 12), 8=240(LC 13)  
 Max Grav 2=1268(LC 19), 8=1268(LC 20)

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

TOP CHORD 2-4=-1649/304, 4-5=-1547/352, 5-6=-1547/352, 6-8=-1649/304  
 BOT CHORD 2-12=-285/1492, 10-12=-94/1012, 8-10=-162/1346  
 WEBS 5-10=-187/733, 6-10=-322/240, 5-12=-187/733, 4-12=-322/240

#### 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 14-0-0, Exterior(2R) 14-0-0 to 17-0-0, Interior(1) 17-0-0 to 29-6-0 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, 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) 2=240, 8=240.



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April 27,2022

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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



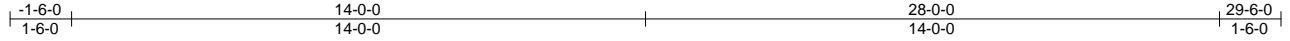
6904 Parke East Blvd.  
 Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - MITCHELLE RES.	T27545469
3130991	T05G	Common Supported Gable	1	1	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:16:36 2022 Page 1

ID:Q7RwmdgDYh8qcxUfrYMxEZke8Z-qNtanEWQOSqcmnk9a1VGZf6MiFfBTzE?N\_pRUvzMnKv



5x6 =

Scale = 1:56.2

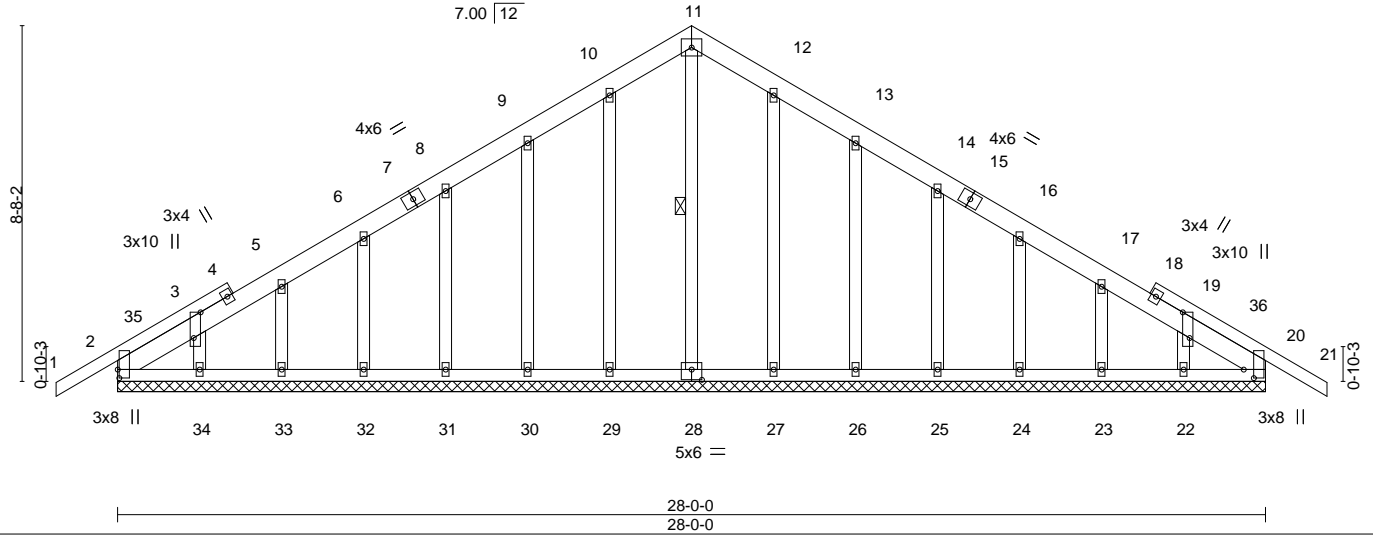


Plate Offsets (X,Y)-- [2:0-2-8,0-0-7], [3:0-7-8,Edge], [19:0-7-8,Edge], [20:0-2-8,0-2-15], [28:0-3-0,0-3-0]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.12	Vert(LL)	-0.01	21	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.03	Vert(CT)	-0.01	21	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.01	20	n/a	n/a		
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-S						Weight: 213 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x6 SP No.2 \*Except\*  
1-4,18-21: 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 11-28

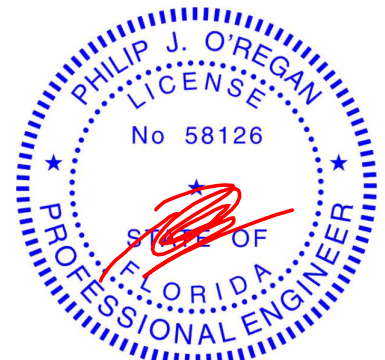
#### REACTIONS.

All bearings 28-0-0.  
(lb) - Max Horz 2=190(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 29, 30, 31, 32, 33, 34, 27, 26, 25, 24, 23, 22, 20  
Max Grav All reactions 250 lb or less at joint(s) 2, 28, 29, 30, 31, 32, 33, 34, 27, 26, 25, 24, 23, 22, 20

**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) -1-6-0 to 1-6-0, Exterior(2N) 1-6-0 to 14-0-0, Corner(3R) 14-0-0 to 17-0-0, Exterior(2N) 17-0-0 to 29-6-0 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) 2, 29, 30, 31, 32, 33, 34, 27, 26, 25, 24, 23, 22, 20.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.



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Date:

April 27,2022

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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



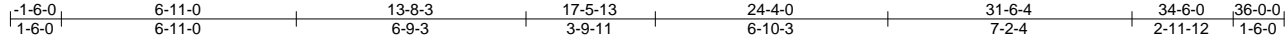
6904 Parke East Blvd.  
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - MITCHELLE RES.	T27545470
3130991	T06	Piggyback Base	4	1	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:16:38 2022 Page 1

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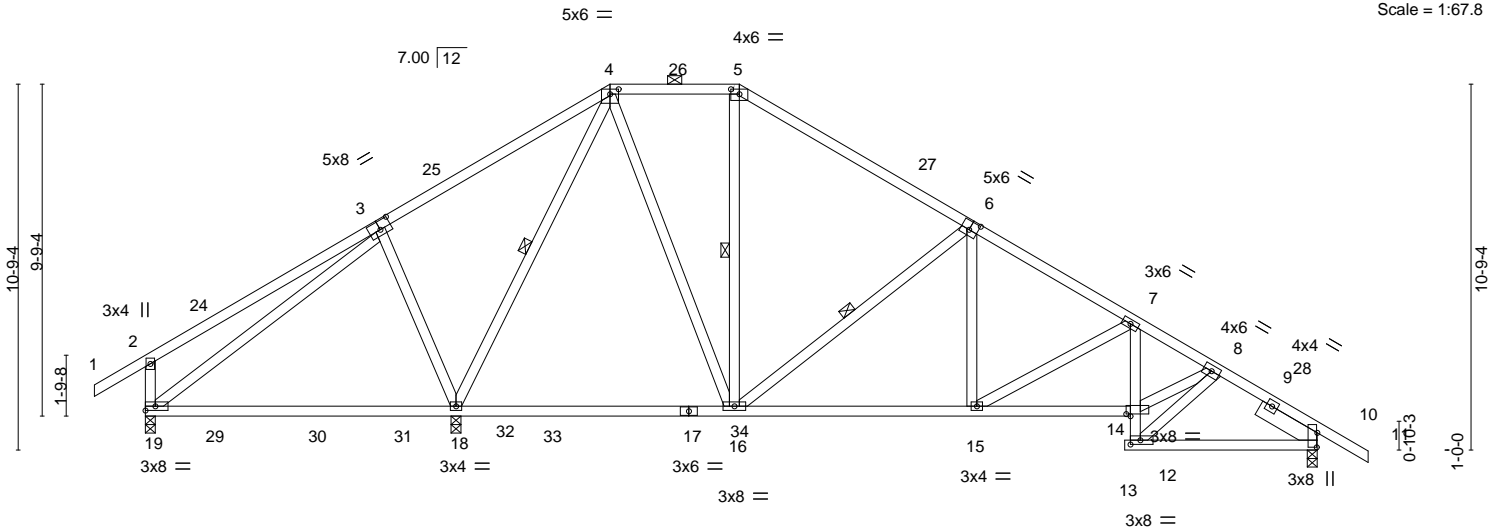


Plate Offsets (X,Y)--	[3:0-4-0,0-3-0], [4:0-3-0,0-1-12], [5:0-3-0,0-1-12], [6:0-3-0,0-3-0], [10:0-5-2,0-0-3], [12:0-3-8,0-1-8], [14:0-1-8,0-0-12]
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LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.57	Vert(LL)	0.25 18-19	>427	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.81	Vert(CT)	-0.33 18-19	>331	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.72	Horz(CT)	0.05 10	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS					Weight: 228 lb	FT = 20%

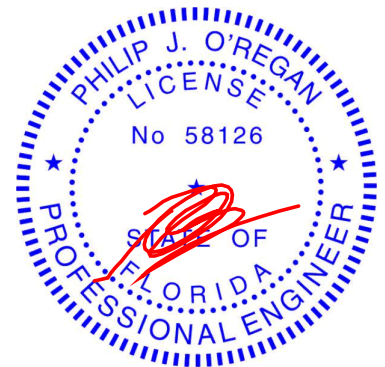
**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
7-12: 2x4 SP No.3  
WEBS 2x4 SP No.3  
SLIDER Right 2x6 SP No.2 1-11-8

**REACTIONS.** (size) 10=0-3-8, 18=0-3-8, 19=0-3-8  
Max Horz 19=-251(LC 10)  
Max Uplift 10=-243(LC 13), 18=-296(LC 12), 19=-95(LC 9)  
Max Grav 10=1051(LC 20), 18=1861(LC 2), 19=277(LC 23)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 3-4=0/509, 4-5=-451/234, 5-6=-587/213, 6-7=-1231/305, 7-8=-1703/374,  
8-10=-1294/306, 2-19=-315/195  
BOT CHORD 18-19=-378/228, 16-18=-80/266, 15-16=-83/985, 14-15=-222/1483, 12-14=-131/856,  
7-14=-26/325, 10-12=-181/1023  
WEBS 3-18=-449/271, 4-18=-1262/192, 4-16=-167/827, 6-16=-802/276, 6-15=-38/477,  
7-15=-567/158, 8-14=-223/1422, 8-12=-1156/222, 3-19=-144/485

#### 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 1-11-6, Interior(1) 1-11-6 to 13-8-3, Exterior(2E) 13-8-3 to 17-5-13, Exterior(2R) 17-5-13 to 22-4-6, Interior(1) 22-4-6 to 36-0-0 zone; end vertical left exposed; 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) 19 except (jt=lb) 10=243, 18=296.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Date:

April 27,2022

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Tampa, FL 33610









Job	Truss	Truss Type	Qty	Ply	IC CONST. - MITCHELLE RES.	T27545472
3130991	T07G	GABLE I Gable I Gable COMMON I I Gable	1	1	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:16:46 2022 Page 2  
ID:Q7RwmdgDYh8qcXUfiYMxEeZke8Z-XIUMtfdh2XtPzJV4A8hczlXwsHu3pPYThXEzrKzMnKI

- NOTES-**
- 10) Bearing at joint(s) 74 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 18, 19, 28, 2 except (jt=lb) 25=354, 17=256, 14=125, 26=539.
  - 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

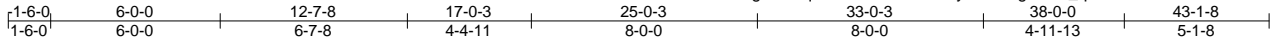
Builders FirstSource (Lake City, FL) Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:16:47 2022 Page 1  
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 1-6-0 6-0-0 12-7-8 17-0-3 25-0-3 31-4-0 33-0-3 38-0-0 43-1-8 44-8-0  
 1-6-0 6-0-0 6-7-8 4-4-11 8-0-0 6-3-13 1-8-3 4-11-13 5-1-8 1-6-8

Job	Truss	Truss Type	Qty	Ply	IC CONST. - MITCHELLE RES.	T27545474
3130991	T09	Piggyback Base	1	1	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:16:49 2022 Page 1

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Scale = 1:81.5

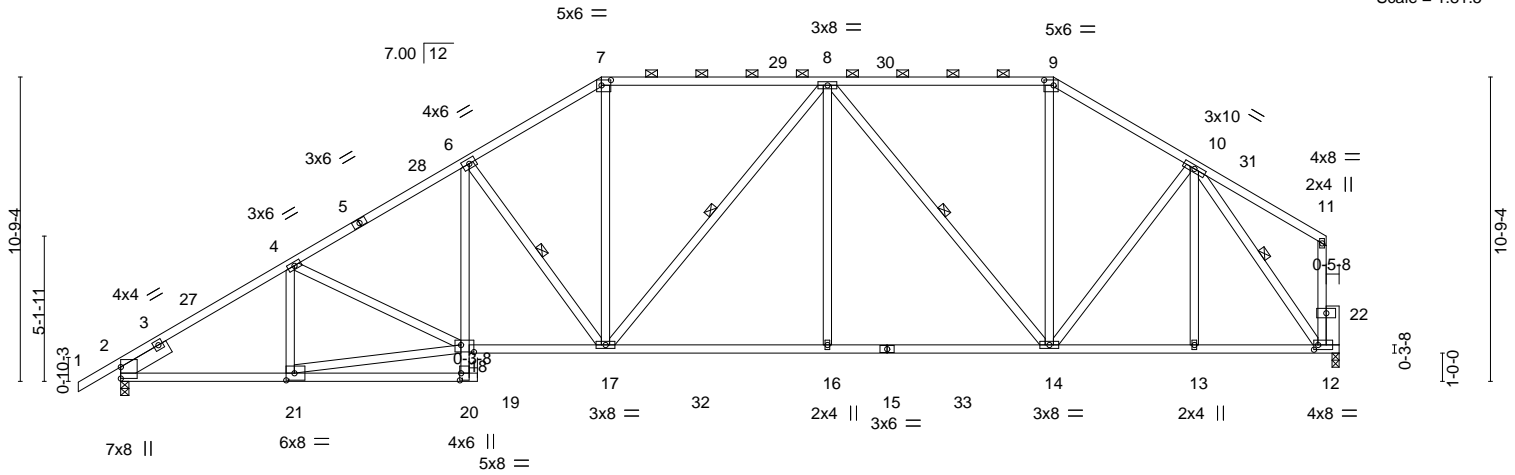


Plate Offsets (X,Y)-- [7:0-4-0,0-2-4], [9:0-4-0,0-2-4], [12:0-1-12,0-2-0], [18:0-5-8,0-3-0], [20:0-3-0,0-0-8], [21:0-3-8,0-3-0]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.89	Vert(LL) -0.24	16-17	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.93	Vert(CT) -0.42	16-17	>999	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.76	Horz(CT) 0.14	12	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS					Weight: 306 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2 \*Except\*  
1-5: 2x4 SP M 31  
BOT CHORD 2x4 SP No.2 \*Except\*  
2-19: 2x4 SP M 31, 6-20: 2x4 SP No.3  
WEBS 2x4 SP No.3  
OTHERS 2x6 SP No.2  
SLIDER Left 2x6 SP No.2 1-11-8

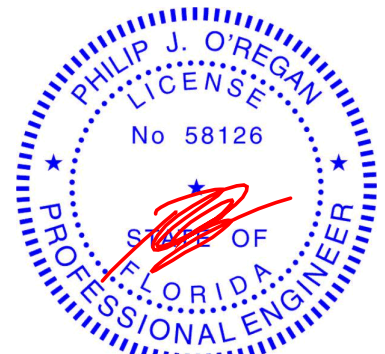
**REACTIONS.** (size) 2=0-3-8, 12=0-3-0  
Max Horz 2=276(LC 9)  
Max Uplift 2=383(LC 12), 12=305(LC 13)  
Max Grav 2=1821(LC 2), 12=1764(LC 2)

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

TOP CHORD 2-4=-2677/543, 4-6=-2758/602, 6-7=-2319/544, 7-8=-1962/508, 8-9=-1454/349,  
9-10=-1731/358  
BOT CHORD 2-21=-558/2309, 20-21=-28/255, 6-18=-93/528, 17-18=-494/2353, 16-17=-386/2039,  
14-16=-386/2039, 13-14=-213/1148, 12-13=-213/1148  
WEBS 4-21=-296/142, 18-21=-538/2081, 6-17=-782/271, 7-17=-122/900, 8-17=-255/210,  
8-16=0/475, 8-14=-963/249, 9-14=-110/587, 10-14=-166/530, 10-12=-1928/314

#### 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 2-9-12, Interior(1) 2-9-12 to 17-0-3, Exterior(2R) 17-0-3 to 23-1-5, Interior(1) 23-1-5 to 33-0-3, Exterior(2R) 33-0-3 to 39-1-5, Interior(1) 39-1-5 to 42-6-4 zone; end vertical 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 100 lb uplift at joint(s) except (jt=lb) 2=383, 12=305.
- 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  
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Date:

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6904 Parke East Blvd.  
Tampa, FL 33610

Job 3130991	Truss T10	Truss Type Piggyback Base	Qty 1	Ply 1	IC CONST. - MITCHELLE RES. T27545475
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:16:51 2022 Page 1

ID:Q7RwmdgDYh8qcxUfiYMxEeZke8Z-uGHFxmHqs3V34N2zhGngpElla6UXeCqpxkWXzMnKg



Scale = 1:71.6

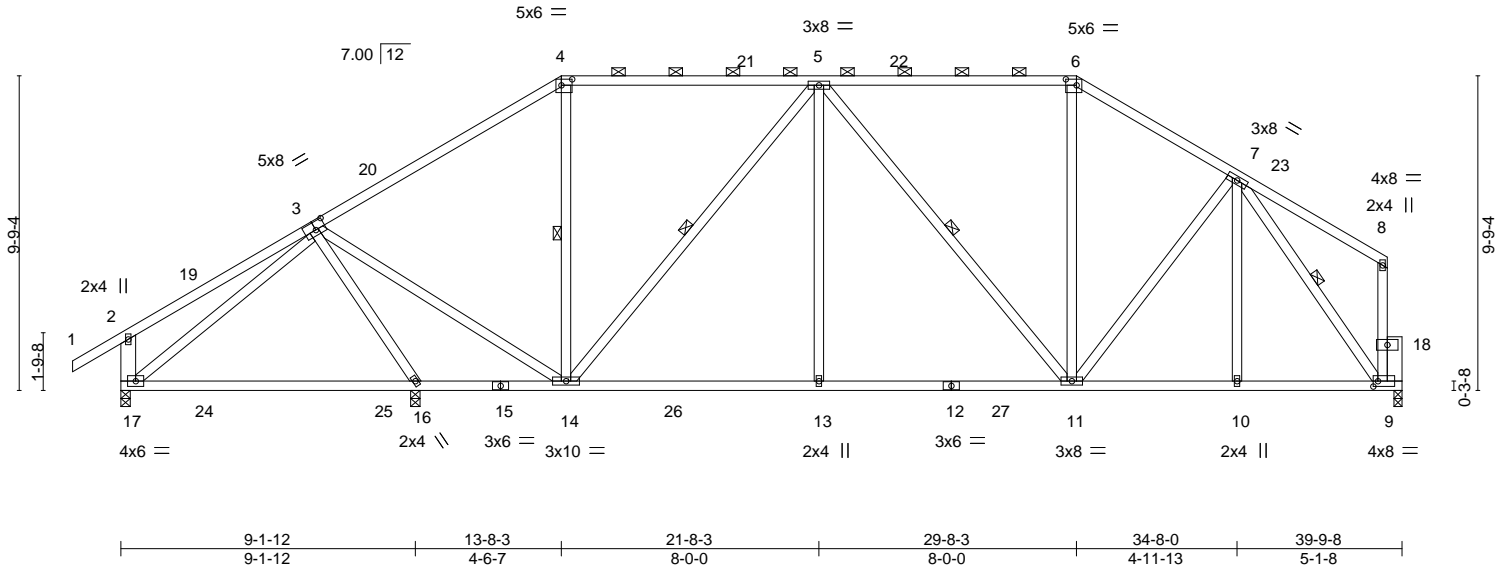


Plate Offsets (X,Y)-- [3:0-3-12,0-3-0], [4:0-4-0,0-2-4], [6:0-4-0,0-2-4], [9:0-1-12,0-2-0]

LOADING (psf)	SPACING-		CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.77	Vert(LL)	0.22 16-17	>491	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.84	Vert(CT)	-0.33 16-17	>328	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.96	Horz(CT)	0.04 9	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 279 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
2-17: 2x6 SP No.2  
OTHERS 2x6 SP No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-4-1 oc purlins, except end verticals, and 2-0-0 oc purlins (5-1-3 max.): 4-6.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 14-16.  
WEBS 1 Row at midpt 4-14, 5-14, 5-11, 7-9

#### REACTIONS.

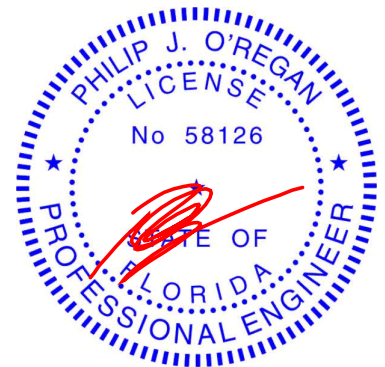
(size) 16=0-3-8, 17=0-3-8, 9=0-3-0  
Max Horz 17=267(LC 9)  
Max Uplift 16=-307(LC 9), 17=-129(LC 12), 9=-249(LC 13)  
Max Grav 16=1447(LC 2), 17=574(LC 25), 9=1279(LC 2)

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

TOP CHORD 3-4=-854/214, 4-5=-659/241, 5-6=-961/294, 6-7=-1164/295, 2-17=-263/180  
BOT CHORD 16-17=-199/402, 14-16=-483/147, 13-14=-251/1145, 11-13=-251/1145, 10-11=-177/819, 9-10=-177/819  
WEBS 3-16=-1408/400, 3-14=-184/1320, 5-14=-793/203, 5-13=0/489, 5-11=-352/155, 6-11=-49/321, 7-11=-129/280, 3-17=-365/58, 7-9=-1346/247

#### 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 2-5-12, Interior(1) 2-5-12 to 13-8-3, Exterior(2R) 13-8-3 to 19-3-11, Interior(1) 19-3-11 to 29-8-3, Exterior(2R) 29-8-3 to 35-3-11, Interior(1) 35-3-11 to 39-2-4 zone; end vertical left and right exposed; 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) except (jt=lb) 16=307, 17=129, 9=249.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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April 27, 2022

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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

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. - MITCHELLE RES.	T27545476
3130991	T11	Piggyback Base	4	1	Job Reference (optional)	

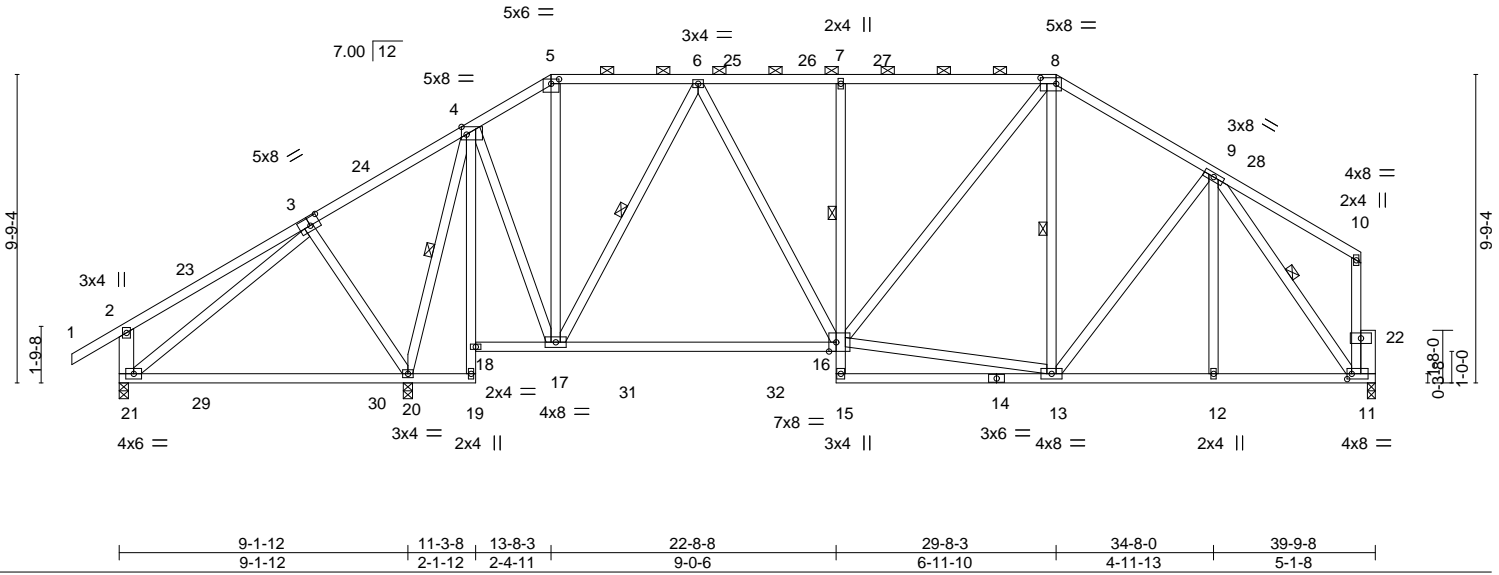
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:16:53 2022 Page 1

ID:Q7RwmdgDYh8qcxUfiYMxEeZke8Z-qeP?L2j4OglQJOXQ46JFIEJ9i6EuyZPV17QqbQzMnKe



Scale = 1:73.0





Job	Truss	Truss Type	Qty	Ply	IC CONST. - MITCHELLE RES.	T27545477
3130991	T12	Piggyback Base	1	1	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:16:54 2022 Page 1

ID:Q7RwmdgDYh8qcxUfiYMxEeZke8Z-IrzNZOkj9\_tHwY6depqUIRsKSVa7h0deWnAO7szMnKd

1-6-0	6-0-0	11-3-8	13-8-3	18-4-1	22-8-8	29-8-3	34-8-0	39-9-8	41-4-0
1-6-0	6-0-0	5-3-8	2-4-11	4-7-14	4-4-7	6-11-10	4-11-13	5-1-8	1-6-8

Scale = 1:75.4

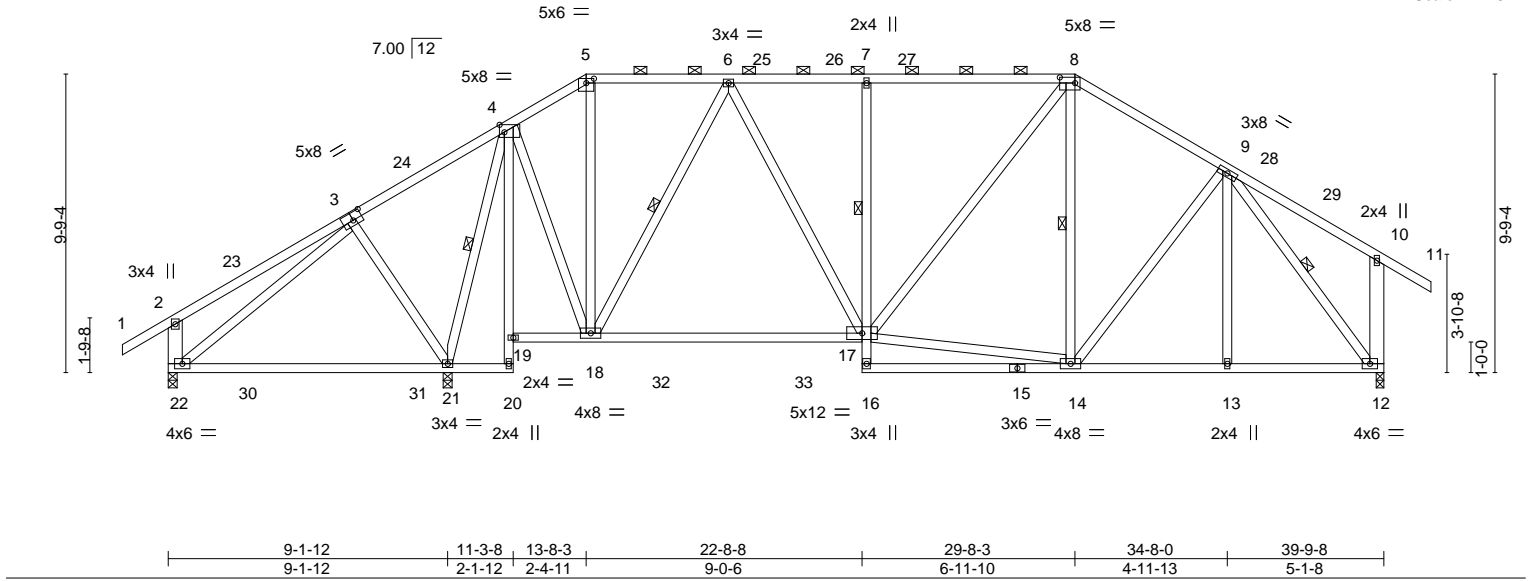


Plate Offsets (X,Y)--		[3:0-3-12,0-3-0], [4:0-1-15,Edge], [5:0-3-0,0-1-12], [8:0-6-0,0-2-4]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.49	Vert(LL)	0.19 21-22	>577	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.94	Vert(CT)	-0.49 17-18	>747	180		
BCLL 0.0 **	Rep Stress Incr	YES	WB 0.50	Horz(CT)	0.05 12	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 319 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2 \*Except\*  
 4-20,7-16: 2x4 SP No.3  
 WEBS 2x4 SP No.3 \*Except\*  
 2-22,10-12: 2x6 SP No.2

#### REACTIONS.

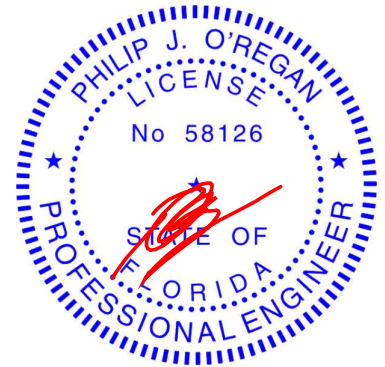
(size) 21=0-3-8, 22=0-3-8, 12=0-3-0  
 Max Horz 22=272(LC 11)  
 Max Uplift 21=-463(LC 9), 22=-94(LC 8), 12=-291(LC 13)  
 Max Grav 21=1912(LC 2), 22=244(LC 20), 12=1231(LC 2)

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

TOP CHORD 3-4=-185/440, 4-5=-520/201, 5-6=-415/189, 6-7=-997/306, 7-8=-995/309, 8-9=-995/304,  
 2-22=-304/189, 10-12=-263/133  
 BOT CHORD 17-18=-168/753, 7-17=-346/170, 13-14=-153/728, 12-13=-153/728  
 WEBS 3-21=-354/206, 4-21=-1366/267, 4-18=-169/1015, 6-18=-744/207, 6-17=-125/523,  
 14-17=-109/866, 8-17=-135/348, 3-22=-306/389, 9-12=-1178/212

#### 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) -1-6-0 to 2-5-12, Interior(1) 2-5-12 to 13-8-3, Exterior(2R) 13-8-3 to 19-3-11, Interior(1) 19-3-11 to 29-8-3, Exterior(2R) 29-8-3 to 35-3-11, Interior(1) 35-3-11 to 41-4-0 zone; end vertical left and right exposed; 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) 22 except (jt=lb) 21=463, 12=291.
- 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  
 Date:

April 27, 2022

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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. - MITCHELLE RES.	T27545478
3130991	T13	Piggyback Base	2	1	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:16:56 2022 Page 1  
ID: Q7RwmdgDYh8qcxUfiYMxEeZke8Z-ED58\_4lzhb7\_ArG?IESyNsxbQJIT9tjx\_5fVBkzMnKb

-1-6-0 6-0-0 11-3-8 13-8-3 21-8-3 29-8-3 34-8-0 37-6-8 39-9-8 41-4-0  
1-6-0 6-0-0 5-3-8 2-4-11 8-0-0 8-0-0 4-11-13 2-10-8 2-3-0 1-6-8

Scale = 1:73.8

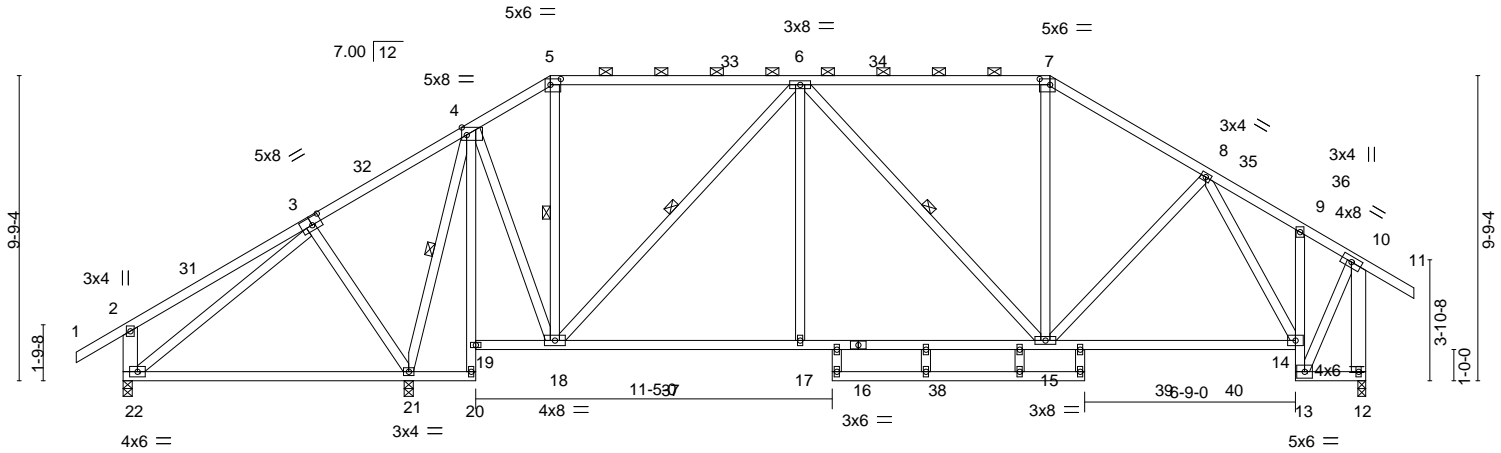


Plate Offsets (X,Y)--	[3:0-3-12,0-3-0], [4:0-1-15,Edge], [5:0-4-0,0-2-4], [7:0-4-0,0-2-4]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.78	Vert(LL)	-0.18 14-15	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.82	Vert(CT)	-0.33 14-15	>999	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.65	Horz(CT)	0.14 12	n/a	n/a		
BCDL 10.0	Code FBC2020/TP12014	Matrix-MS					Weight: 312 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
4-20,23-24: 2x4 SP No.3  
WEBS 2x4 SP No.3 \*Except\*  
2-22,10-12: 2x6 SP No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-3-14 oc purlins, except end verticals, and 2-0-0 oc purlins (5-1-13 max.): 5-7.  
BOT CHORD Rigid ceiling directly applied or 5-11-14 oc bracing.  
WEBS 1 Row at midpt 4-21, 5-18, 6-18, 6-15

#### REACTIONS.

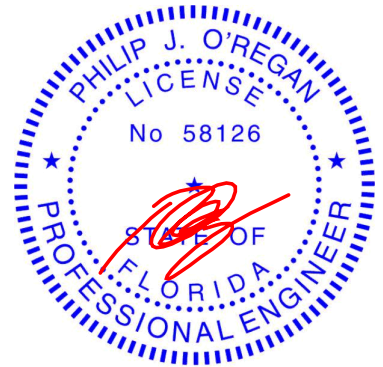
(size) 12=0-3-0, 21=0-3-8, 22=0-3-8  
Max Horz 22=272(LC 11)  
Max Uplift 12=290(LC 13), 21=366(LC 9), 22=75(LC 12)  
Max Grav 12=1274(LC 2), 21=2014(LC 2), 22=235(LC 20)

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

TOP CHORD 3-4=175/521, 4-5=453/233, 5-6=364/217, 6-7=958/313, 7-8=1159/315,  
8-9=662/193, 9-10=603/138, 2-22=317/163, 10-12=1348/312  
BOT CHORD 17-18=209/1021, 15-17=209/1021, 14-15=182/849, 13-14=723/154  
WEBS 3-21=376/206, 4-21=1448/321, 4-18=173/1048, 6-18=972/191, 6-17=0/446,  
7-15=42/330, 3-22=253/499, 10-13=186/967, 8-14=627/138

#### 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 2-5-12, Interior(1) 2-5-12 to 13-8-3, Exterior(2R) 13-8-3 to 19-3-11, Interior(1) 19-3-11 to 29-8-3, Exterior(2R) 29-8-3 to 35-3-11, Interior(1) 35-3-11 to 41-4-0 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 2x4 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 100 lb uplift at joint(s) 22 except (jt=lb) 12=290, 21=366.
- 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  
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6904 Parke East Blvd. Tampa FL 33610  
Date:

April 27,2022

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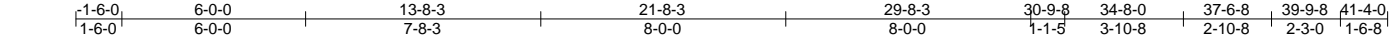
6904 Parke East Blvd.  
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - MITCHELLE RES.	T27545479
3130991	T14	Piggyback Base	1	1	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:16:58 2022 Page 1

ID:Q7RwmdgDYh8qcXUfiYMxEEZke8Z-BcCuPmDDDDNiP9QOtFuQSHoy47\_5dogERP8bGdzMnKZ



Scale = 1:75.2

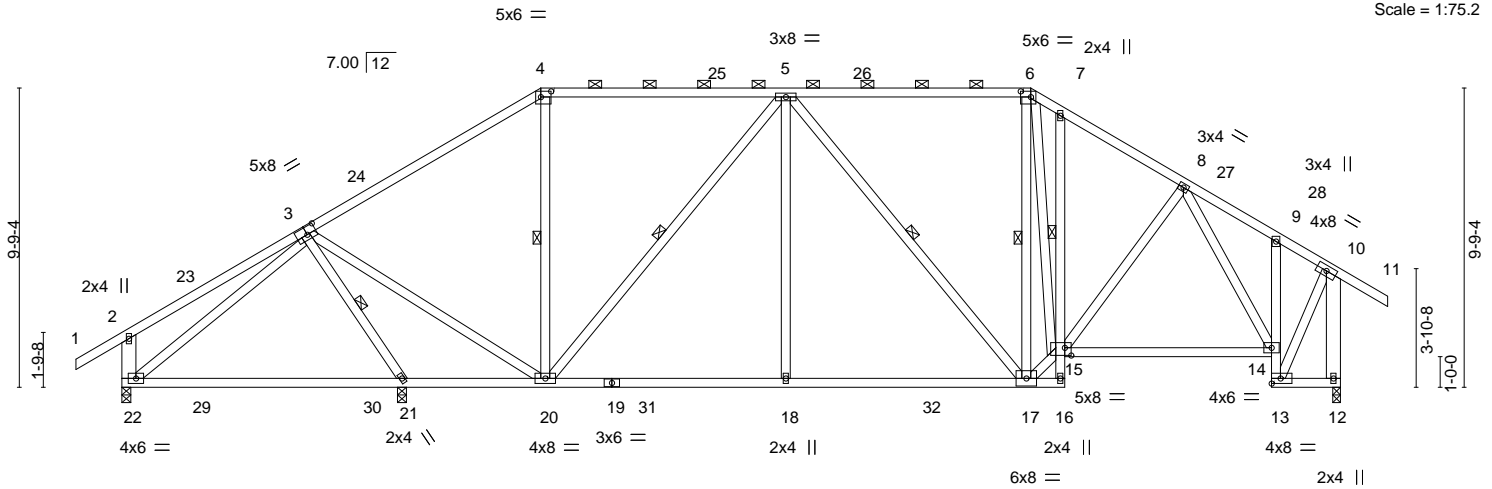


Plate Offsets (X,Y)--	[3:0-3-12,0-3-0], [4:0-4-0,0-2-4], [6:0-4-0,0-2-4], [15:0-2-8,0-3-0]
-----------------------	--

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.77	Vert(LL) 0.22	21-22	>491	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.81	Vert(CT) -0.33	21-22	>328	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.62	Horz(CT) 0.15	12	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS					Weight: 308 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2 \*Except\*  
 7-16: 2x4 SP No.3  
 WEBS 2x4 SP No.3 \*Except\*  
 2-22,10-12: 2x6 SP No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-1-9 oc purlins, except end verticals, and 2-0-0 oc purlins (5-2-13 max.): 4-6.  
 BOT CHORD Rigid ceiling directly applied or 5-7-1 oc bracing. Except:  
 1 Row at midpt 7-15  
 WEBS 1 Row at midpt 3-21, 4-20, 5-20, 5-17, 6-17

#### REACTIONS.

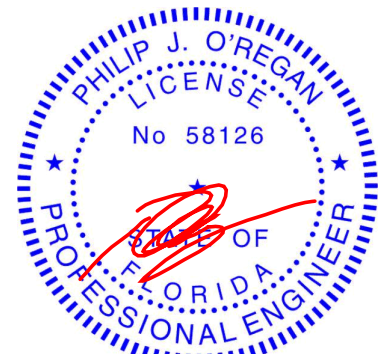
(size) 12=0-3-0, 21=0-3-8, 22=0-3-8  
 Max Horz 22=272(LC 11)  
 Max Uplift 12=292(LC 13), 21=307(LC 9), 22=133(LC 12)  
 Max Grav 12=1354(LC 2), 21=1543(LC 2), 22=524(LC 23)

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

TOP CHORD 3-4=-791/218, 4-5=-604/245, 5-6=-954/304, 6-7=-1161/341, 7-8=-1264/321,  
 8-9=-690/200, 9-10=-624/139, 2-22=-260/180, 10-12=-1429/315  
 BOT CHORD 21-22=-189/336, 20-21=-613/158, 18-20=-241/1109, 17-18=-241/1109, 14-15=-180/925,  
 13-14=-784/158  
 WEBS 3-21=-1522/397, 3-20=-185/1426, 5-20=-822/204, 5-18=0/480, 5-17=-310/150,  
 6-17=-428/145, 15-17=-167/1363, 6-15=-169/696, 8-15=-87/253, 3-22=-287/62,  
 10-13=-190/1038, 8-14=-719/129

#### 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 2-5-12, Interior(1) 2-5-12 to 13-8-3, Exterior(2R) 13-8-3 to 19-3-11, Interior(1) 19-3-11 to 29-8-3, Exterior(2R) 29-8-3 to 35-3-11, Interior(1) 35-3-11 to 41-4-0 zone; end vertical left and right exposed; 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) except (jt=lb) 12=292, 21=307, 22=133.
- 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  
 Date:

April 27, 2022

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6904 Parke East Blvd.  
 Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - MITCHELLE RES.	T27545480
3130991	T15	Piggyback Base	1	1	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:16:59 2022 Page 1

ID:Q7RwmdgDYh8qcxUfiYMxEeZke8Z-fomGc5nr\_WVZ1J?arMPf?VZ6kWiZM9XNg3t9o3zMnKY

-1-6-0	6-0-0	13-8-3	21-8-3	29-8-3	34-8-0	39-9-8	41-4-0
1-6-0	6-0-0	7-8-3	8-0-0	8-0-0	4-11-13	5-1-8	1-6-8

Scale = 1:72.4

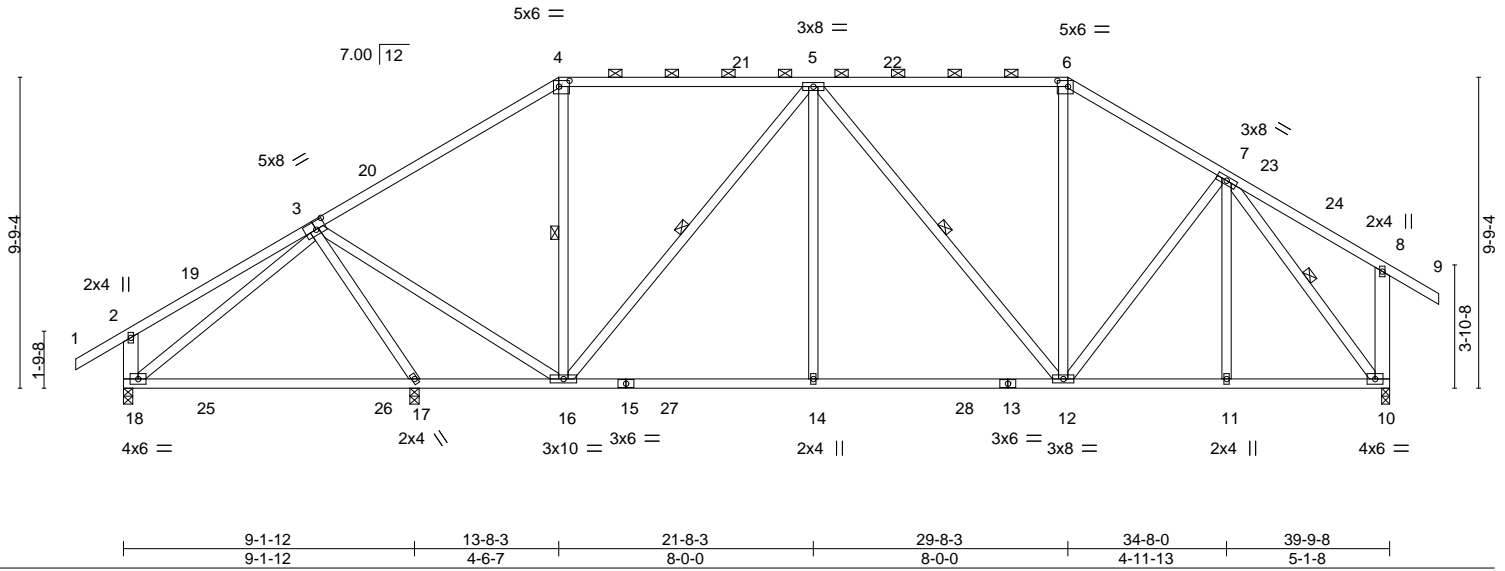


Plate Offsets (X,Y)-- [3:0-3-12,0-3-0], [4:0-4-0,0-2-4], [6:0-4-0,0-2-4]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.77	Vert(LL) 0.22	17-18	>491	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.84	Vert(CT) -0.33	17-18	>328	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.97	Horz(CT) 0.04	10	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS					Weight: 282 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
2-18,8-10: 2x6 SP No.2

#### REACTIONS.

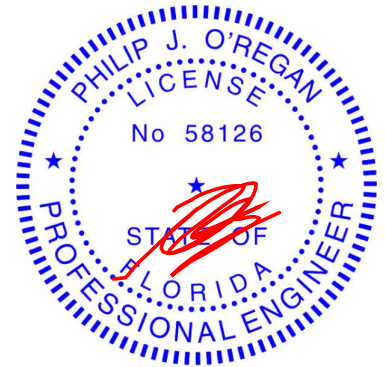
(size) 17=0-3-8, 18=0-3-8, 10=0-3-0  
Max Horz 18=272(LC 11)  
Max Uplift 17=-304(LC 9), 18=-134(LC 12), 10=-296(LC 13)  
Max Grav 17=1454(LC 2), 18=573(LC 25), 10=1374(LC 2)

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

TOP CHORD 3-4=-854/219, 4-5=-659/246, 5-6=-969/308, 6-7=-1172/310, 2-18=-262/181,  
8-10=-265/134  
BOT CHORD 17-18=-191/408, 16-17=-491/154, 14-16=-243/1149, 12-14=-243/1149, 11-12=-156/833,  
10-11=-156/833  
WEBS 3-17=-1416/396, 3-16=-181/1329, 5-16=-799/204, 5-14=0/489, 5-12=-346/155,  
6-12=-52/325, 7-12=-125/267, 3-18=-364/65, 7-10=-1351/217

#### 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 2-5-12, Interior(1) 2-5-12 to 13-8-3, Exterior(2R) 13-8-3 to 19-3-11, Interior(1) 19-3-11 to 29-8-3, Exterior(2R) 29-8-3 to 35-3-11, Interior(1) 35-3-11 to 41-4-0 zone; end vertical left and right exposed; 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) except (jt=lb) 17=304, 18=134, 10=296.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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April 27, 2022

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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 33610



Job	Truss	Truss Type	Qty	Ply	IC CONST. - MITCHELLE RES.	T27545481
3130991	T15G	GABLE	1	1	Job Reference (optional)	

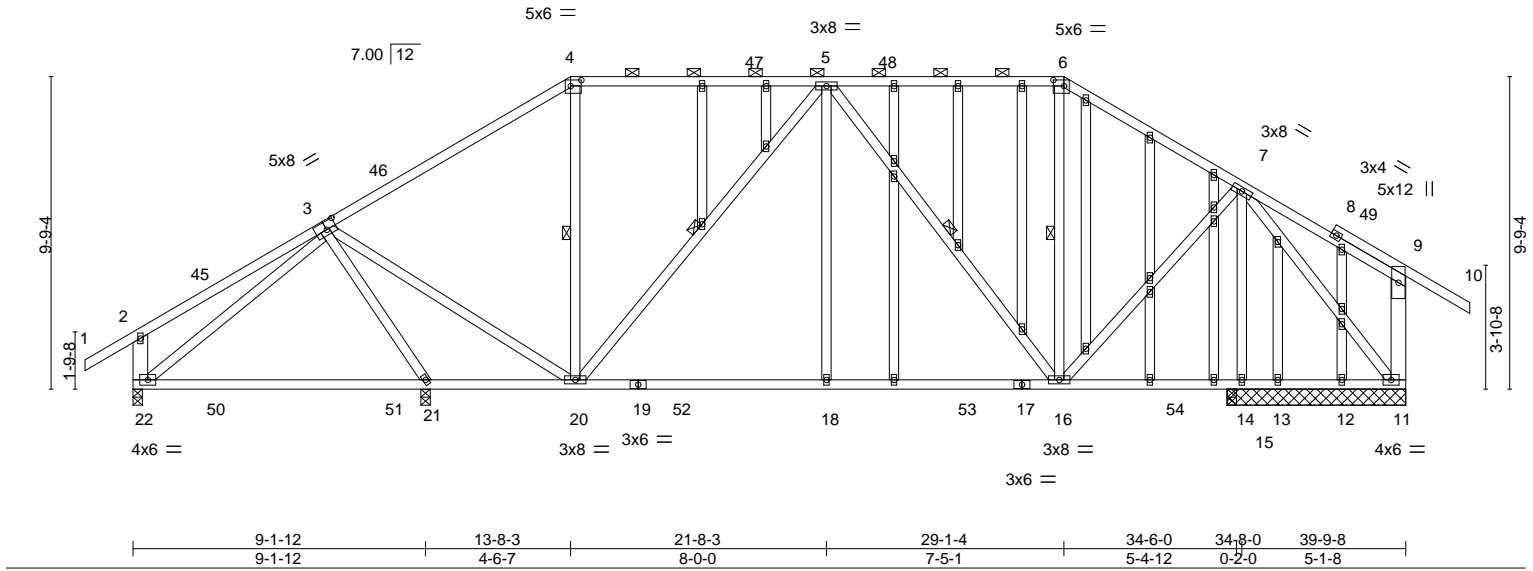
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:17:02 2022 Page 1

ID:Q7RwmdgDYh8qcxUfrYMxEeZke8Z-3NSPE7qkGRu8umj96VzMd7BeakMvZYOpM16pPozMnKV

1-6-0	6-0-0	13-8-3	21-8-3	29-1-4	34-8-0	39-9-8	41-4-0
1-6-0	6-0-0	7-8-3	8-0-0	7-5-1	5-6-12	5-1-8	1-6-8

Scale = 1:72.0



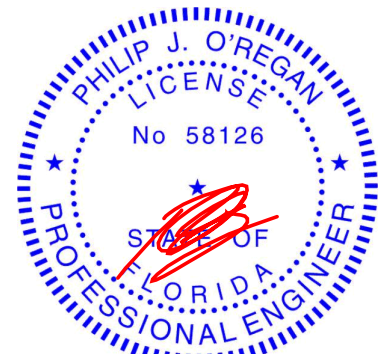
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.73	Vert(LL)	0.22 21-22 >490 240	MT20		244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.76	Vert(CT)	-0.33 21-22 >324 180				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.02 11 n/a n/a				
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							
								Weight: 373 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SP No.3 *Except*	WEBS	1 Row at midpt
	2-22,9-11: 2x6 SP No.2		4-20, 5-20, 5-16, 6-16
OTHERS	2x4 SP No.3		

**REACTIONS.** All bearings 5-7-0 except (jt=length) 21=0-3-8, 22=0-3-8, 15=0-3-8.  
 (lb) - Max Horz 22=270(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) except 21=283(LC 9), 14=292(LC 13), 22=136(LC 12), 11=116(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 12, 13 except 21=1214(LC 2), 14=831(LC 1), 22=591(LC 2), 11=319(LC 24), 15=496(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-4=753/209, 4-5=571/238, 5-6=552/234, 6-7=704/221, 2-22=264/181, 9-11=262/150  
 BOT CHORD 21-22=191/427, 20-21=335/137, 18-20=217/871, 16-18=217/871  
 WEBS 3-21=1133/367, 3-20=154/1017, 5-20=510/170, 5-18=0/470, 5-16=556/169, 7-16=155/788, 7-14=1116/270, 3-22=385/67

- 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 2-5-12, Interior(1) 2-5-12 to 13-8-3, Exterior(2R) 13-8-3 to 19-3-11, Interior(1) 19-3-11 to 29-1-4, Exterior(2R) 29-1-4 to 34-8-0, Interior(1) 34-8-0 to 41-9-8 zone; end vertical left and right exposed; porch left exposed; 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.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - 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, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 283 lb uplift at joint 21, 292 lb uplift at joint 14, 136 lb uplift at joint 22 and 116 lb uplift at joint 11.
  - 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  
 Date:

April 27,2022

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6904 Parke East Blvd.  
 Tampa, FL 36610



Job	Truss	Truss Type	Qty	Ply	IC CONST. - MITCHELLE RES.	T27545482
3130991	T16	MONO TRUSS	15	1	Job Reference (optional)	

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

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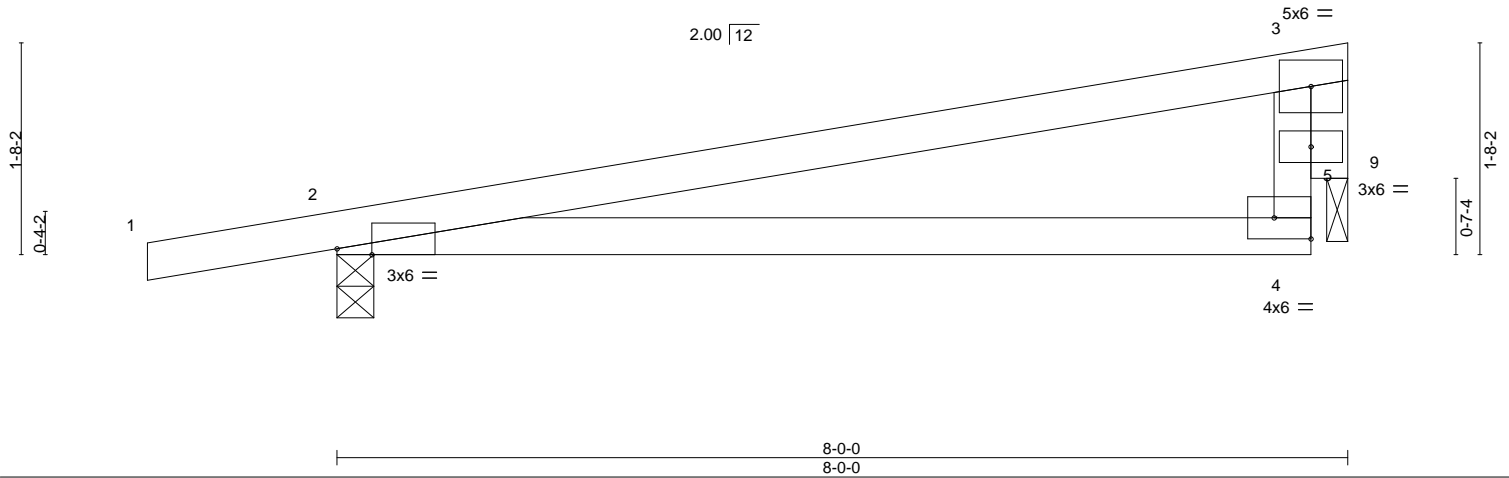


Plate Offsets (X,Y)-- [2:0-3-5,Edge], [4:Edge,0-2-0]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.60	Vert(LL)	0.27	4-8	>351	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.61	Vert(CT)	0.23	4-8	>413	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.43	Horz(CT)	-0.01	2	n/a	n/a		
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-MR						Weight: 29 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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-6-5 oc bracing.

#### REACTIONS.

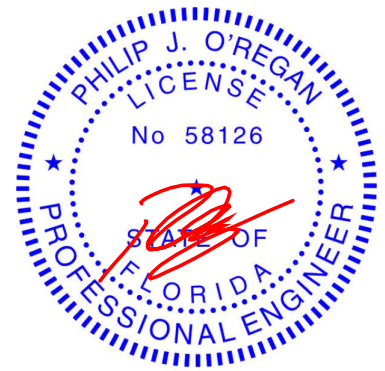
(size) 2=0-3-8, 9=0-2-0  
Max Horz 2=55(LC 8)  
Max Uplift 2=-202(LC 8), 9=-130(LC 8)  
Max Grav 2=381(LC 1), 9=260(LC 1)

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

TOP CHORD 2-3=-304/414, 4-5=-252/149, 3-5=-252/149  
BOT CHORD 2-4=-445/284  
WEBS 3-9=-317/481

#### 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 1-5-10, Interior(1) 1-5-10 to 7-6-12 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) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 202 lb uplift at joint 2 and 130 lb uplift at joint 9.



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MiTek USA, Inc. FL Cert 6634  
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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. - MITCHELLE RES.	T27545483
3130991	T16G	Monopitch Supported Gable	2	1	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:17:03 2022 Page 1  
ID:Q7RwmdgDYh8qcxUfiYmxEeZke8Z-XZ0nStrM1I0?VwlLgCub9Lkqr8kclCfzbrMxrzMnKU



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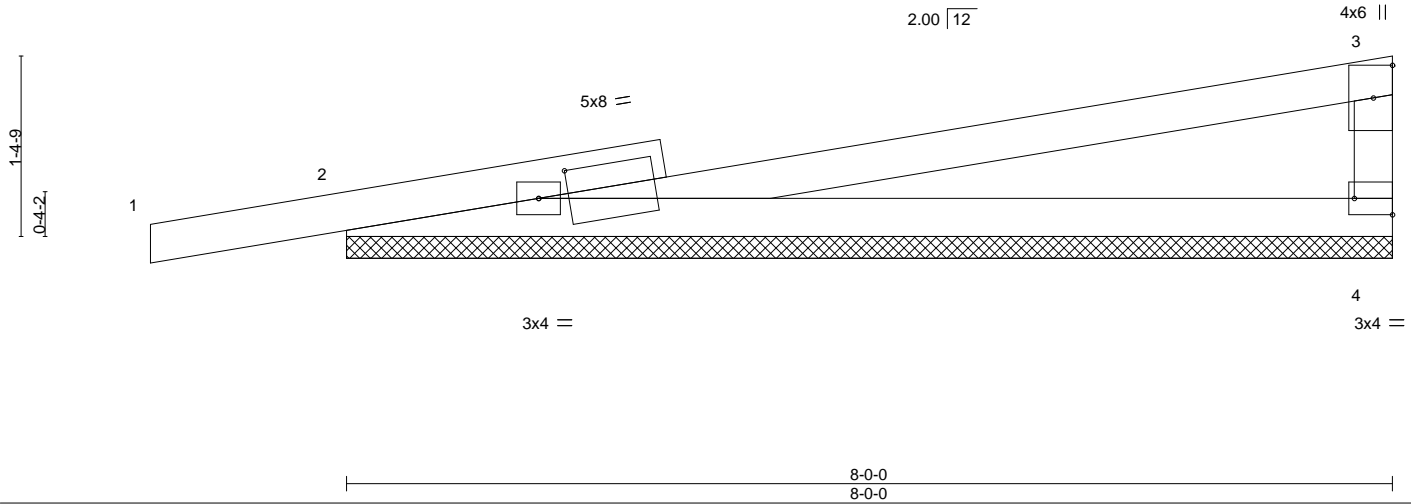


Plate Offsets (X,Y)-- [2:0-2-12,0-2-2], [4:Edge,0-1-8]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.70	Vert(LL)	-0.02	1	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.60	Vert(CT)	0.06	1	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-S						Weight: 29 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, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

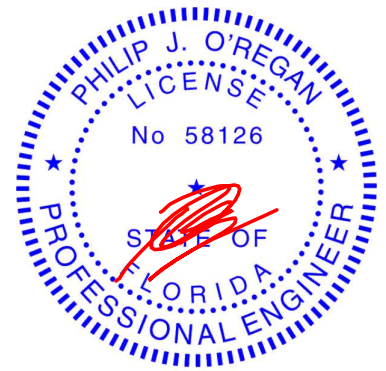
(size) 2=8-0-0, 4=8-0-0  
Max Horz 2=46(LC 8)  
Max Uplift 2=138(LC 8), 4=78(LC 12)  
Max Grav 2=379(LC 1), 4=283(LC 1)

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

TOP CHORD 2-3=-283/174  
BOT CHORD 2-4=-207/254

#### 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 Corner(3E) -1-6-0 to 1-6-0, Exterior(2N) 1-6-0 to 7-10-4 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) 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.
- 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) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 138 lb uplift at joint 2 and 78 lb uplift at joint 4.



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



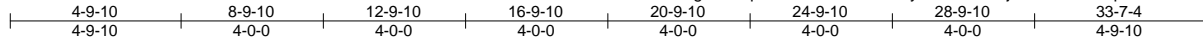
6904 Parke East Blvd.  
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - MITCHELLE RES.	T27545484
3130991	V01	Valley	1	1	Job Reference (optional)	

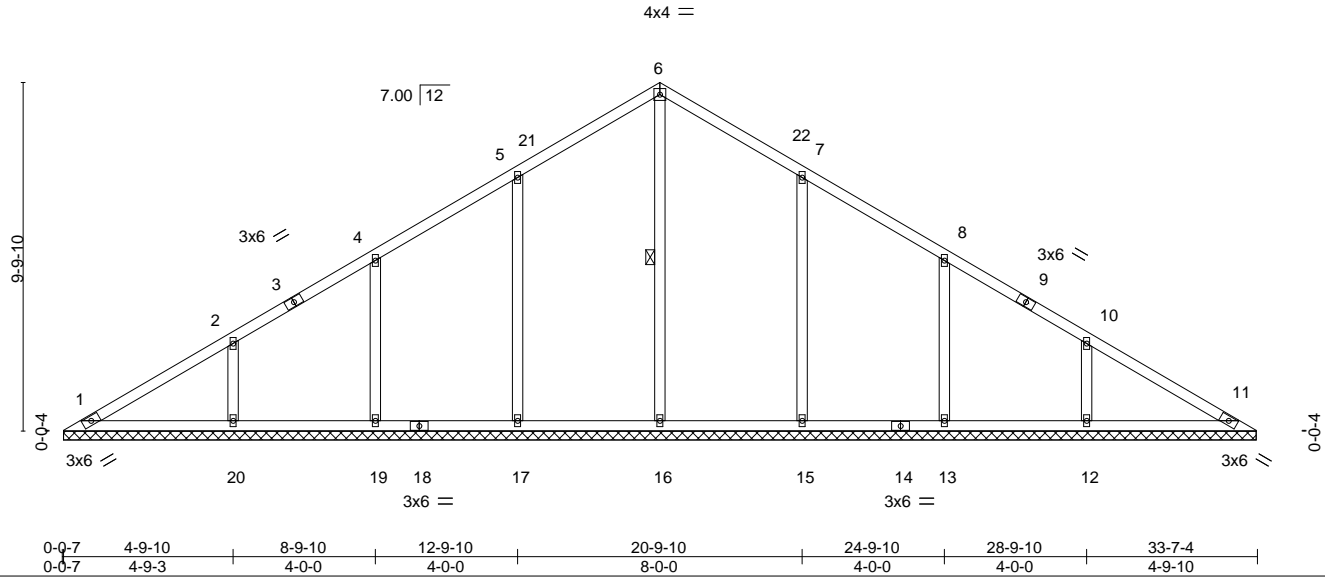
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:17:05 2022 Page 1

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Scale = 1:64.8



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.18	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.17	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.24	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 11 n/a n/a		
	Code FBC2020/TPI2014			Weight: 160 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 6-16

#### REACTIONS.

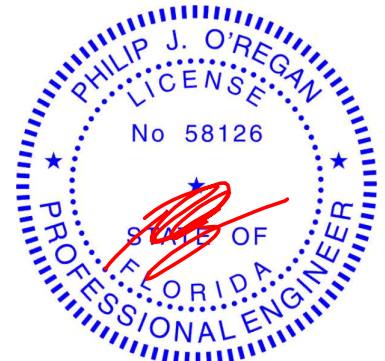
All bearings 33-6-7.  
(lb) - Max Horz 1=-209(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1 except 17=-139(LC 12), 19=-118(LC 12), 20=-151(LC 12), 15=-139(LC 13), 13=-118(LC 13), 12=-150(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 11 except 16=383(LC 22), 17=452(LC 19), 19=373(LC 19), 20=430(LC 19), 15=452(LC 20), 13=373(LC 20), 12=430(LC 20)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-20=-263/171, 10-12=-263/171

#### 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) 0-6-8 to 3-10-12, Interior(1) 3-10-12 to 16-9-10, Exterior(2R) 16-9-10 to 20-1-14, Interior(1) 20-1-14 to 33-0-12 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 17=139, 19=118, 20=151, 15=139, 13=118, 12=150.



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



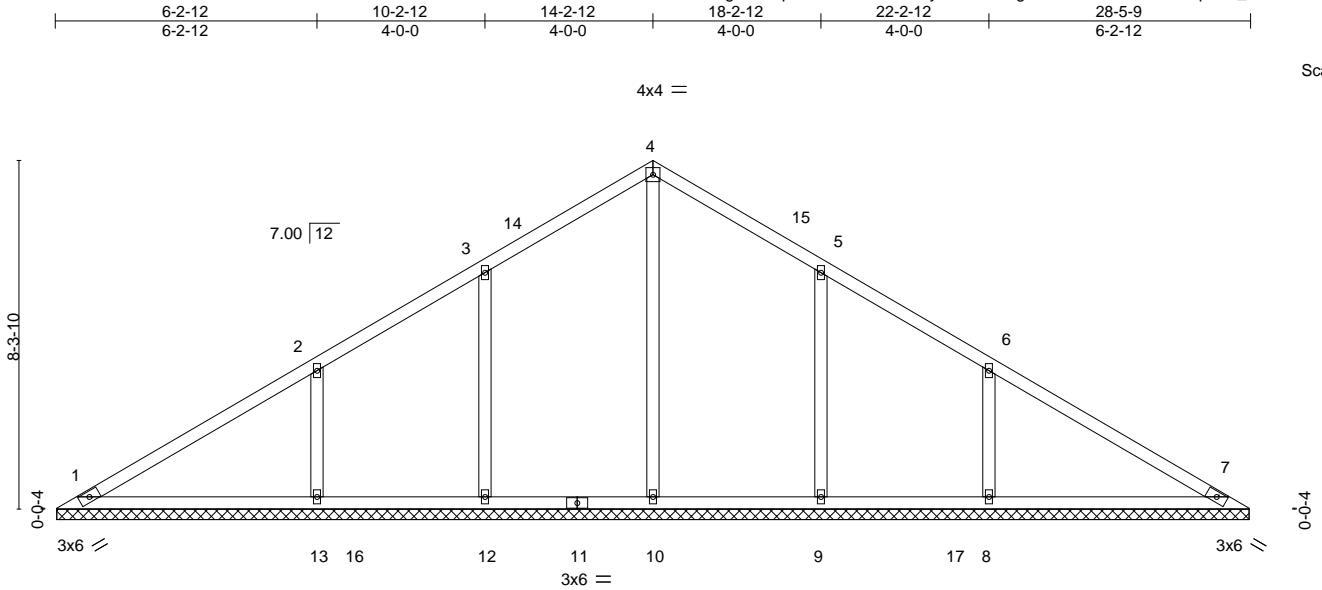
6904 Parke East Blvd.  
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - MITCHELLE RES.	T27545485
3130991	V02	Valley	1	1	Job Reference (optional)	

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

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ID:Q7RwmdgDYh8qcxUfiYMxEEzke8Z-y8hw4VtEKgOaMO1wLK2lnzMQvLqcVWV\_PHe40Y9zMnKR



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.33	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.26	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.22	Horz(CT)	0.01	7	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-S					Weight: 126 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.

#### REACTIONS.

All bearings 28-4-11.

(lb) - Max Horz 1=176(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 12=117(LC 12), 13=185(LC 12), 9=117(LC 13), 8=185(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=388(LC 22), 12=383(LC 19), 13=552(LC 19), 9=383(LC 20), 8=552(LC 20)

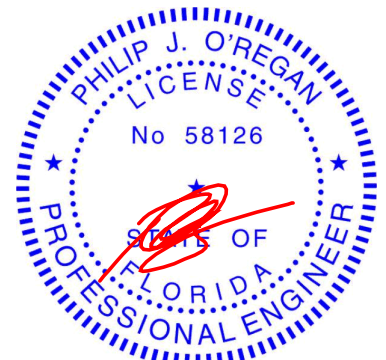
#### FORCES.

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

WEBS 2-13=322/208, 6-8=322/208

#### 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) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 14-2-12, Exterior(2R) 14-2-12 to 17-2-12, Interior(1) 17-2-12 to 27-11-1 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 12=117, 13=185, 9=117, 8=185.



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Date:

April 27, 2022

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



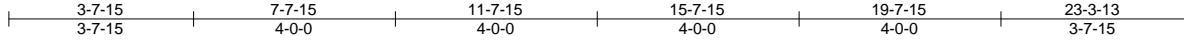
6904 Parke East Blvd.  
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - MITCHELLE RES.	T27545486
3130991	V03	Valley	1	1	Job Reference (optional)	

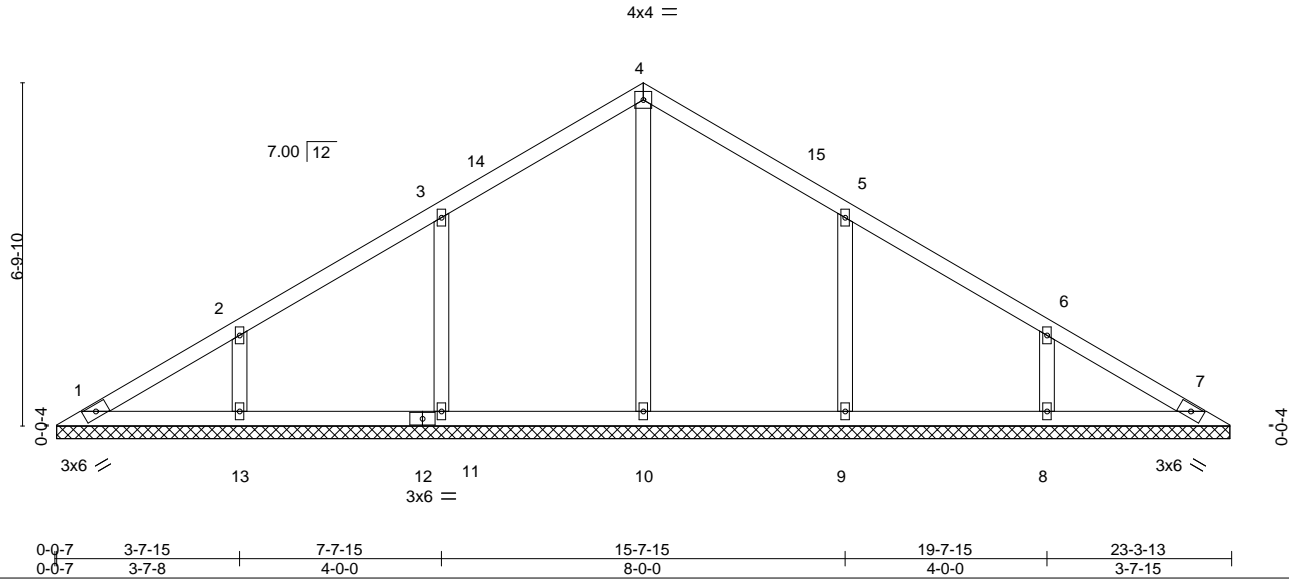
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:17:07 2022 Page 1

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Scale = 1:45.7



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.16	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.17	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.13	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 7 n/a n/a		
	Code FBC2020/TPI2014			Weight: 98 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.

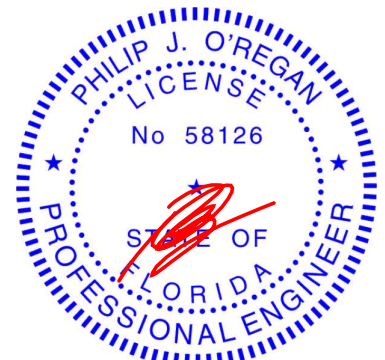
#### REACTIONS.

All bearings 23-3-0.  
(lb) - Max Horz 1=143(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 1 except 11=139(LC 12), 13=123(LC 12), 9=139(LC 13), 8=123(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=363(LC 19), 11=414(LC 19), 13=353(LC 19), 9=414(LC 20), 8=353(LC 20)

**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) 0-6-8 to 3-7-15, Interior(1) 3-7-15 to 11-7-15, Exterior(2R) 11-7-15 to 14-7-15, Interior(1) 14-7-15 to 22-9-5 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 11=139, 13=123, 9=139, 8=123.



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



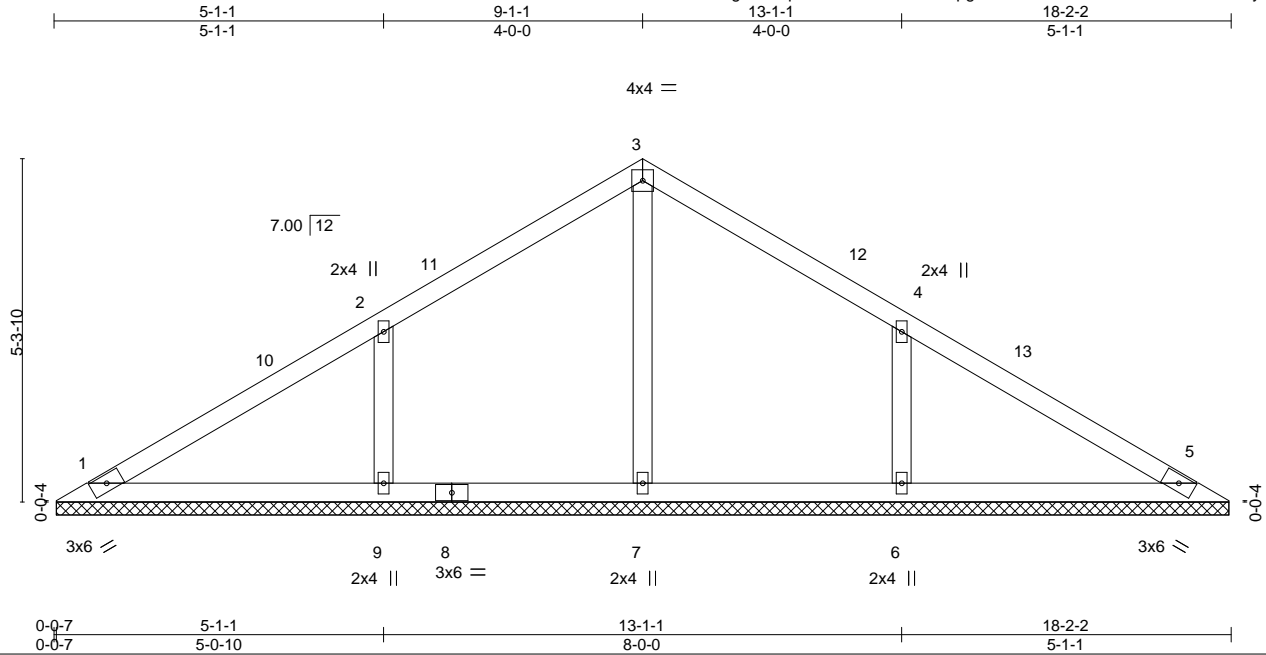
6904 Parke East Blvd.  
Tampa, FL 36610



Job	Truss	Truss Type	Qty	Ply	IC CONST. - MITCHELLE RES.	T27545487
3130991	V04	Valley	1	1	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:17:08 2022 Page 1  
ID:Q7RwmdgDYh8qcxUfiYMxEzke8Z-uXpgVAuVsHeHchBJSI4msORox9YdzRlikyZ7d2zMnKP



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.23	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.16	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.07	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-S					Weight: 71 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.

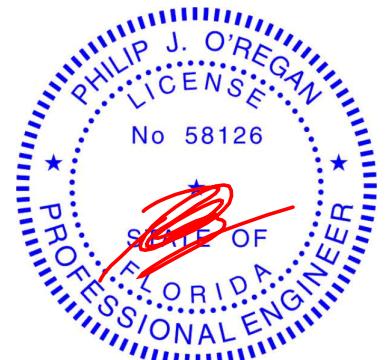
#### REACTIONS.

All bearings 18-1-4.  
(lb) - Max Horz 1=110(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=167(LC 12), 6=167(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 9=395(LC 19), 6=394(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-9=287/189, 4-6=287/189

#### 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) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 9-1-1, Exterior(2R) 9-1-1 to 12-1-1, Interior(1) 12-1-1 to 17-7-10 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 100 lb uplift at joint(s) 1, 5 except (jt=lb) 9=167, 6=167.



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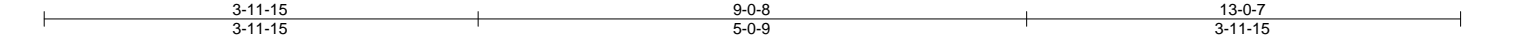
6904 Parke East Blvd.  
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC CONST. - MITCHELLE RES.	T27545488
3130991	V05	GABLE	1	1	Job Reference (optional)	

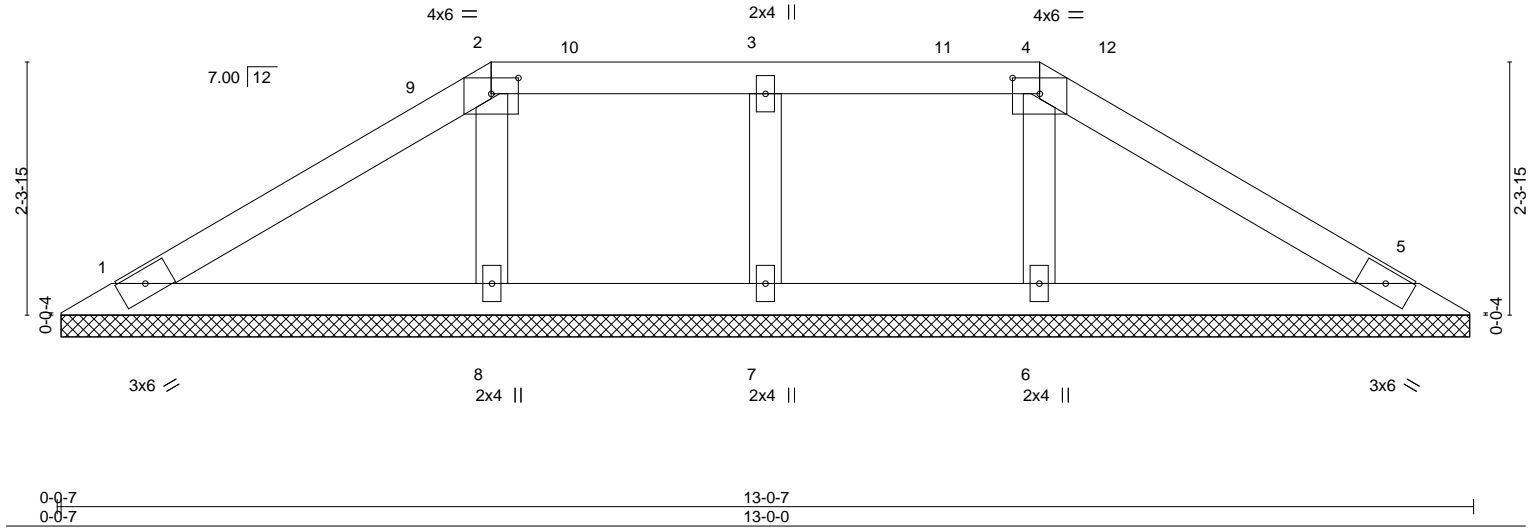
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Apr 26 17:17:09 2022 Page 1

ID: Q7RwmdgDYh8qcUfiYMxEeZke8Z-MjN2iWv7dbm8DrmV0Tb?Pc\_zEYv\_ivgrzch9UzMnKO



Scale = 1:21.2



LOADING (psf)		SPACING-		CSL		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.13	Vert(LL)	n/a	MT20		244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.09	Vert(CT)	n/a				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00				
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-S							
								Weight: 46 lb		FT = 20%	

#### LUMBER-

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

#### REACTIONS.

All bearings 12-11-9.  
(lb) - Max Horz 1=45(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 7, 6, 8  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 6, 8

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

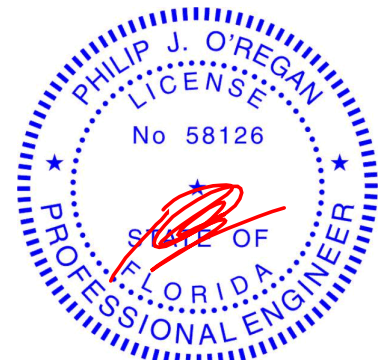
#### NOTES-

- 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) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 3-11-15, Exterior(2R) 3-11-15 to 8-2-13, Interior(1) 8-2-13 to 9-0-8, Exterior(2E) 9-0-8 to 12-5-15 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.
- 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 100 lb uplift at joint(s) 1, 5, 7, 6, 8.

#### 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.

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.



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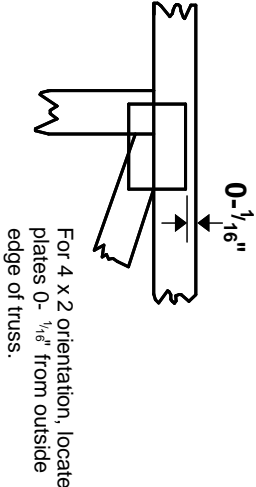
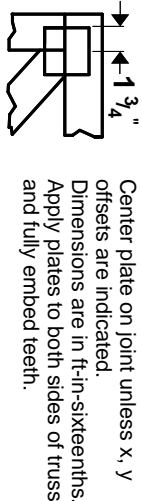
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



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Tampa, FL 36610

# 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.

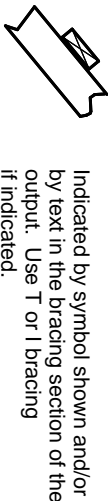
For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

## PLATE SIZE

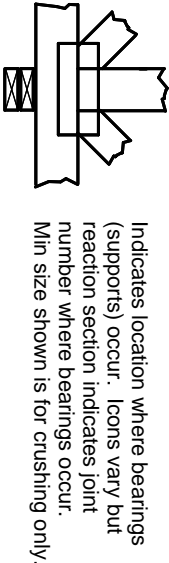
4 X 4

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

## LATERAL BRACING LOCATION



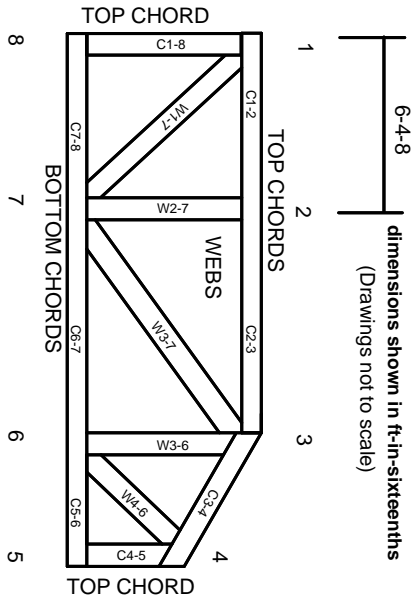
## BEARING



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/TP1: 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/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 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/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.