



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

RE: 2400113 - DUTTON RES.

MiTek USA, Inc.

6904 Parke East Blvd.  
Tampa, FL 33610-4115

**Site Information:**

Customer Info: Dutton Res. Project Name: Dutton Res. Model: Custom  
Lot/Block: 16/28 Subdivision: Cannon Creek Airpark  
Address: TBD Orange Blossom Trail, N/A  
City: Columbia Cty State: FL

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

Name: License #:  
Address:  
City: State:

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

Design Code: FBC2017/TPI2014 Design Program: MiTek 20/20 8.2  
Wind Code: ASCE 7-10 Wind Speed: 130 mph  
Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 36 individual, Truss Design Drawings and 0 Additional Drawings.

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

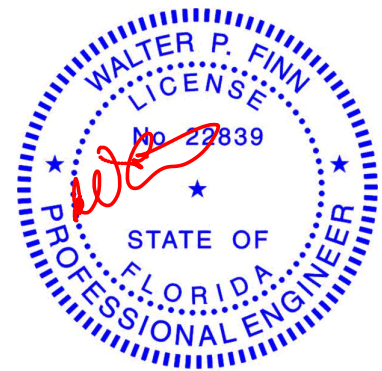
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	T20723918	CJ01	7/14/20	23	T20723940	T02	7/14/20
2	T20723919	CJ01A	7/14/20	24	T20723941	T03	7/14/20
3	T20723920	CJ01B	7/14/20	25	T20723942	T04	7/14/20
4	T20723921	CJ03	7/14/20	26	T20723943	T05	7/14/20
5	T20723922	CJ03A	7/14/20	27	T20723944	T06	7/14/20
6	T20723923	CJ03B	7/14/20	28	T20723945	T07	7/14/20
7	T20723924	CJ05	7/14/20	29	T20723946	T08	7/14/20
8	T20723925	CJ05A	7/14/20	30	T20723947	T09	7/14/20
9	T20723926	CJ05B	7/14/20	31	T20723948	T10	7/14/20
10	T20723927	EJ01	7/14/20	32	T20723949	T11	7/14/20
11	T20723928	EJ02	7/14/20	33	T20723950	T12	7/14/20
12	T20723929	EJ03	7/14/20	34	T20723951	T13	7/14/20
13	T20723930	EJ04	7/14/20	35	T20723952	T14	7/14/20
14	T20723931	EJ05	7/14/20	36	T20723953	T15	7/14/20
15	T20723932	HJ08	7/14/20				
16	T20723933	HJ10	7/14/20				
17	T20723934	HJ10A	7/14/20				
18	T20723935	HJ10B	7/14/20				
19	T20723936	PB01	7/14/20				
20	T20723937	PB02	7/14/20				
21	T20723938	PB03	7/14/20				
22	T20723939	T01	7/14/20				

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

Truss Design Engineer's Name: Finn, Walter

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

**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.



Walter P. Finn PE No.22839  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

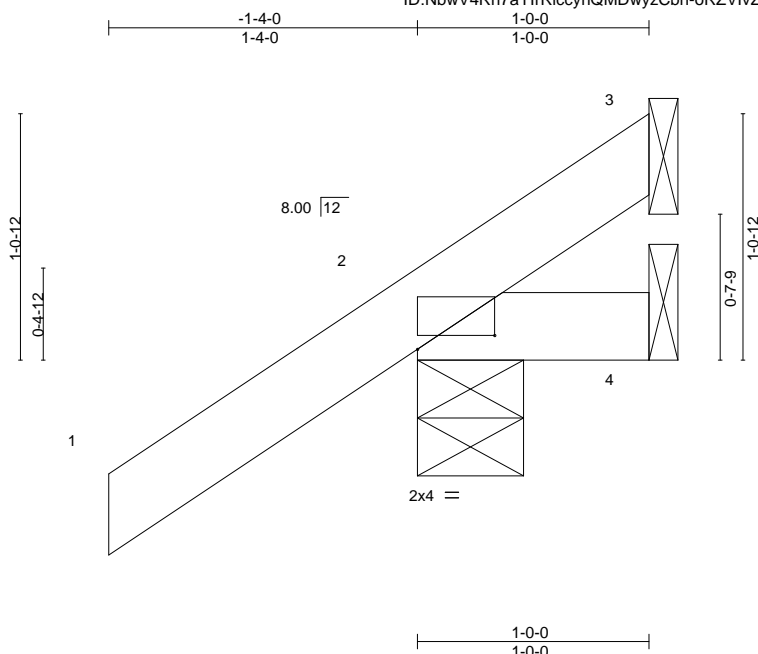
July 14,2020

Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723918
2400113	CJ01	Jack-Open	9	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jul 14 11:04:37 2020 Page 1

ID:NbwV4Rh7aYlrRlccynQMDwyzCbh-oRZVlvZ9WDgdLDIBRiZzQ6nzDu55W3M4i3lk\_9yyABe



Scale = 1:10.0

Plate Offsets (X,Y)--	[2:0-4-0,0-0-12]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.14	Vert(LL)	-0.00	7	>999	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.03	Vert(CT)	0.00	7	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	2	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MP					Weight: 6 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 1-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

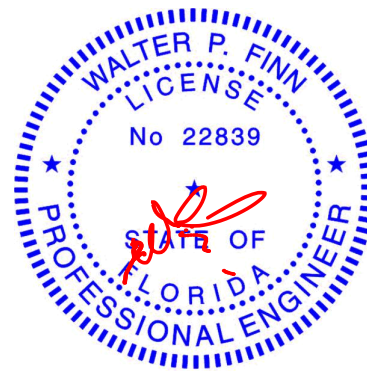
#### REACTIONS.

(size) 3=Mechanical, 2=0-5-8, 4=Mechanical  
Max Horz 2=69(LC 12)  
Max Uplift 3=6(LC 9), 2=92(LC 12), 4=18(LC 19)  
Max Grav 3=7(LC 8), 2=157(LC 1), 4=24(LC 16)

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

#### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 33610

Job 2400113	Truss CJ01A	Truss Type Jack-Open	Qty 1	Ply 1	DUTTON RES. Job Reference (optional)	T20723919
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ID:NbwV4Rh7aYlrRiccynQMDwyzCbh-kpgFjbaP1rxLbXSaZ7bRVXsJihmL\_ysNCNEr22yyABc



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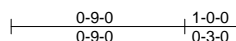
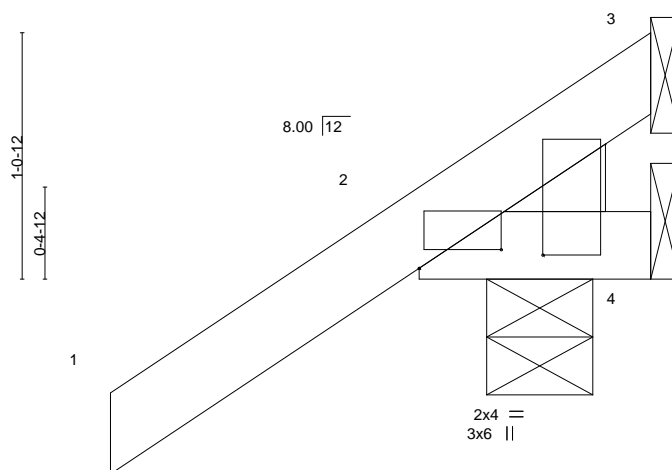


Plate Offsets (X,Y)-- [2:0-4-4,0-1-0], [2:0-0-11,0-6-7]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP		
TCLL	20.0	Plate Grip DOL	1.25	TC	0.14	Vert(LL)	-0.00	5	>999	240	MT20 244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.11	Vert(CT)	-0.00	5	>999	180	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a	
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MP							Weight: 7 lb FT = 20%

#### LUMBER-

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

#### BRACING-

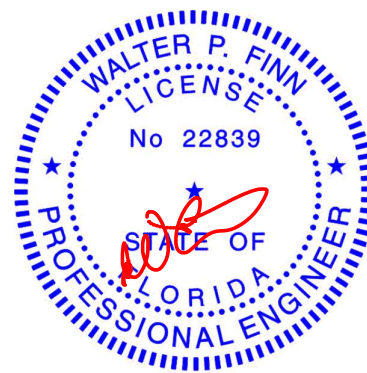
TOP CHORD Structural wood sheathing directly applied or 1-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-5-8, 4=Mechanical  
Max Horz 2=69(LC 12)  
Max Uplift 3=-27(LC 1), 2=-130(LC 12), 4=-51(LC 1)  
Max Grav 3=17(LC 16), 2=223(LC 1), 4=40(LC 16)

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

#### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=130.



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Date:

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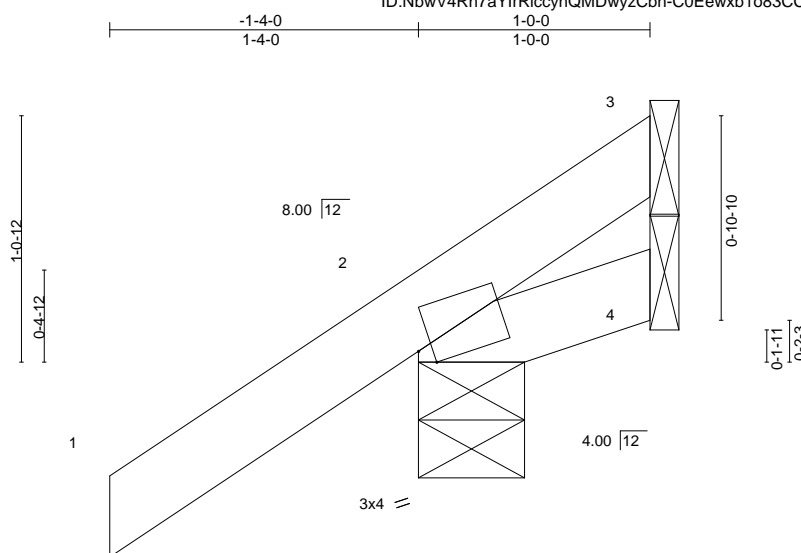


Plate Offsets (X,Y)-- [2:0-0-12,Edge]												
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d				<b>PLATES</b> <b>GRIP</b>		
TCLL	20.0	Plate Grip DOL	1.25	TC	0.14	Vert(LL)	0.00	7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.03	Vert(CT)	0.00	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MP							Weight: 6 lb	FT = 20%

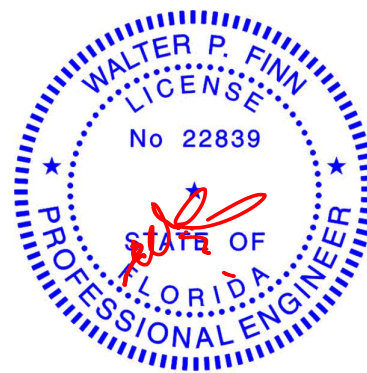
<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 1-0-0 oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-5-8, 4=Mechanical  
 Max Horz 2=69(LC 12)  
 Max Uplift 3=-8(LC 12), 2=-82(LC 12), 4=-12(LC 1)  
 Max Grav 3=9(LC 8), 2=157(LC 1), 4=19(LC 16)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCdL=4.2psf; BCdL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCPI=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Bearing at joint(s) 2 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 capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.



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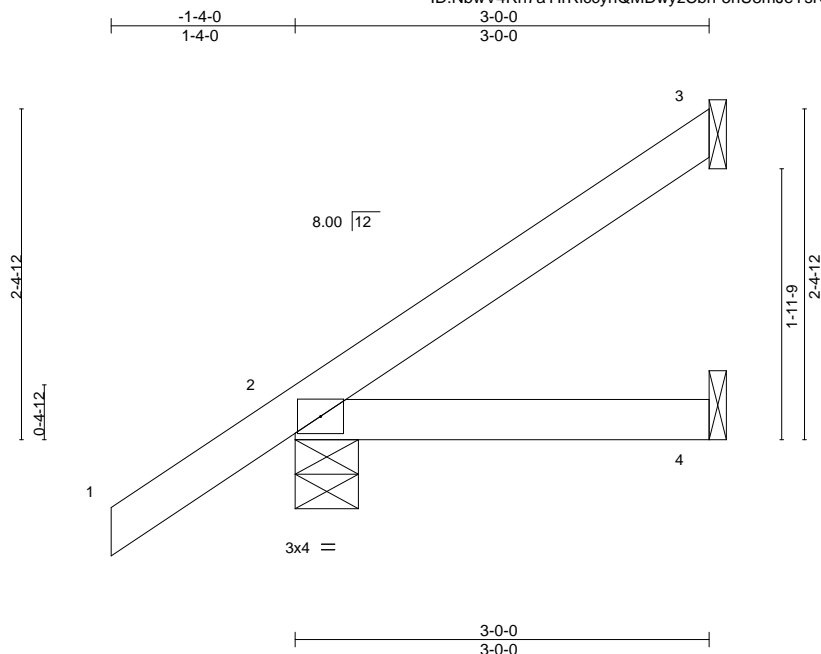
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Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723921
2400113	CJ03	Jack-Open	9	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

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ID:NbwV4Rh7aYlrRlccynQMDwyzCbh-5nU8mJeYsNZehIKXMGbCaZASiPFD56MfyckFyyABX



Scale = 1:16.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.14	Vert(LL)	0.01	4-7	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.12	Vert(CT)	-0.01	4-7	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MP						Weight: 12 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 3=Mechanical, 2=0-5-8, 4=Mechanical  
Max Horz 2=132(LC 12)  
Max Uplift 3=68(LC 12), 2=75(LC 12), 4=27(LC 9)  
Max Grav 3=69(LC 19), 2=197(LC 1), 4=51(LC 3)

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

#### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.



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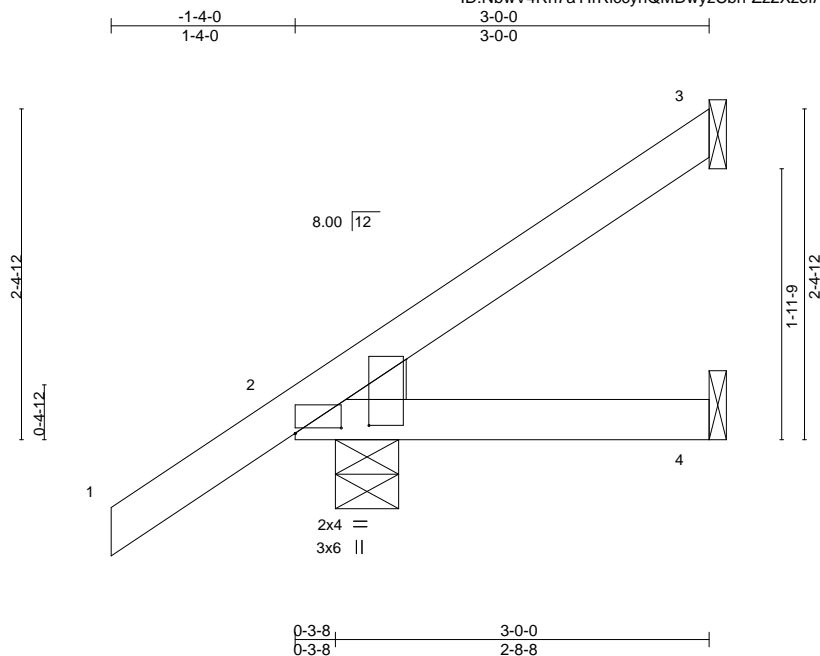
6904 Parke East Blvd.  
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723922
2400113	CJ03A	Jack-Open	1	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jul 14 11:04:45 2020 Page 1

ID:NbwV4Rh7aYIrRiccynQMDwyzCbh-Zz2XzefAdhhVJSvjvOirfo6LB6pfOgLFaJh9GiyyABW



Scale = 1:16.7

Plate Offsets (X,Y)-- [2:0-4-0,0-0-8], [2:0-0-11,0-6-7]											
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	0.14	Vert(LL)	-0.01	4-9	>999	240	MT20 244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.12	Vert(CT)	-0.01	4-9	>999	180	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a	
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MP							Weight: 13 lb FT = 20%

#### LUMBER-

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

#### BRACING-

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

**REACTIONS.** (size) 3=Mechanical, 2=0-5-8, 4=Mechanical  
Max Horz 2=132(LC 12)  
Max Uplift 3=58(LC 12), 2=83(LC 12), 4=3(LC 12)  
Max Grav 3=60(LC 19), 2=219(LC 1), 4=44(LC 3)

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

#### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.



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Date:

July 14,2020

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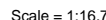
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Tampa, FL 33610



ID:NbwV4Rh7aYlRlccynQMDwyzCbh-1AbvB goO pMwcUwT5D4H?eWxW8t77bPpzRio8vvABV



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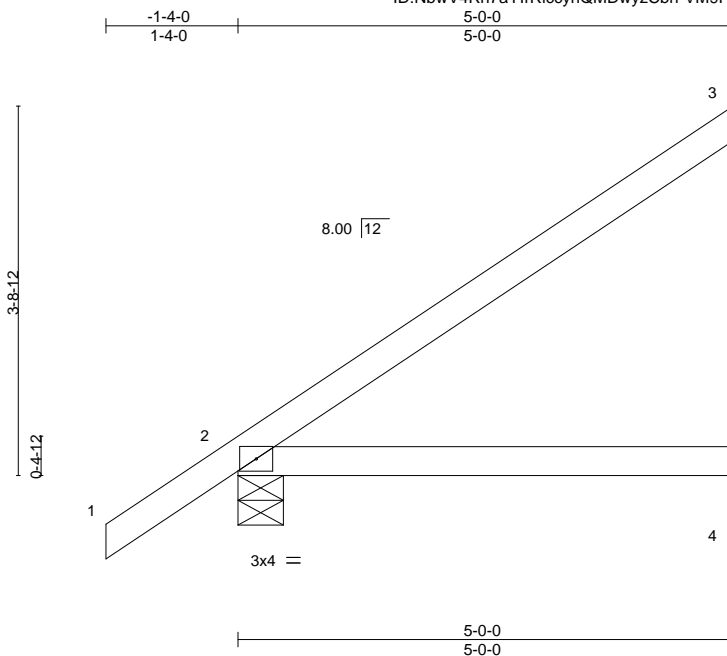
6904 Parke East Blvd.  
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723924
2400113	CJ05	Jack-Open	5	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

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ID:NbwV4Rh7aYlrRccynQMDwyzCbh-VM9HOKhQ9lxCYm361oJqDBeNwRTsaqY2dAGKayyABU



Scale = 1:23.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.36	Vert(LL)	0.04	4-7	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.29	Vert(CT)	-0.07	4-7	>872	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MP						Weight: 19 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 3=Mechanical, 2=0-5-8, 4=Mechanical  
Max Horz 2=197(LC 12)  
Max Uplift 3=-123(LC 12), 2=-82(LC 12), 4=-9(LC 12)  
Max Grav 3=133(LC 19), 2=264(LC 1), 4=90(LC 3)

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

#### NOTES-

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4 except (jt=lb) 3=123.



Walter P. Finn PE No.22839  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

July 14,2020

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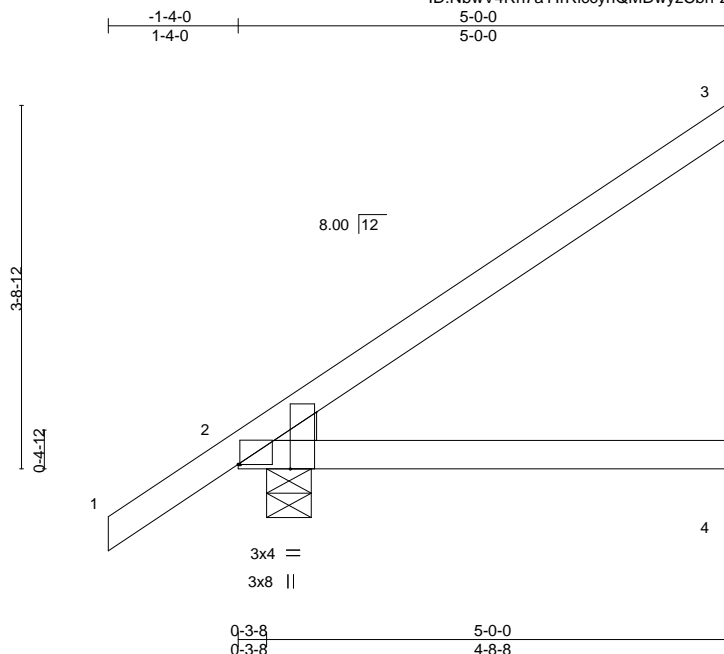


Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723925
2400113	CJ05A	Jack-Open	1	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

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ID:NbwV4Rh7aYIrRiccynQMDwyzCbh-zYjfcgh3wc33AwelbWGYMQkpjJndb14iGHwqt1yyABT



Scale = 1:23.7

Plate Offsets (X,Y)--	[2:0-0-3,0-0-0], [2:0-0-9,Edge]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	I/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.32	Vert(LL)	0.04	4-9	>999	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.29	Vert(CT)	-0.06	4-9	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	3	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MP					Weight: 20 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

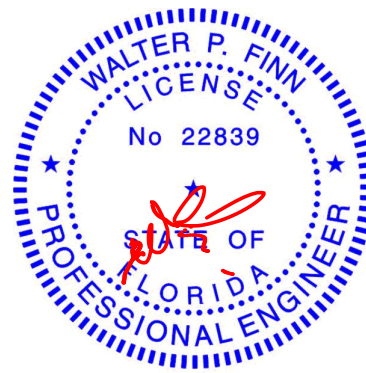
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-5-8, 4=Mechanical  
Max Horz 2=197(LC 12)  
Max Uplift 3=115(LC 12), 2=87(LC 12), 4=12(LC 12)  
Max Grav 3=121(LC 19), 2=281(LC 1), 4=83(LC 3)

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

#### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4 except (jt=lb) 3=115.



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Date:

July 14,2020

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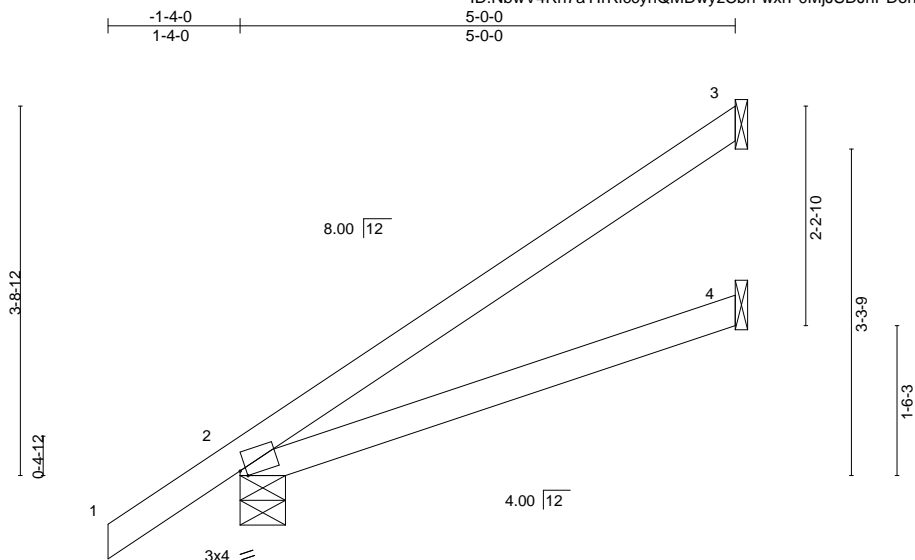
6904 Parke East Blvd.  
Tampa, FL 33610

Job 2400113	Truss CJ05B	Truss Type Jack-Open	Qty 2	Ply 1	DUTTON RES. Job Reference (optional)	T20723926
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Builders FirstSource, Jacksonville, FL - 32244,

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ID:NbwV4Rh7aYlrRlccynQMDwyzCbb-wxrP0MjUSDJnPDohixl0Srp8Q7T63xa\_kbPwxvyyABR



Scale = 1:23.3

Plate Offsets (X,Y)--		[2:0-0-12,Edge]									
<b>LOADING</b> (psf)		<b>SPACING-</b>	2-0-0	<b>CSI.</b>		<b>DEFL.</b>	in (loc)	I/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0		Plate Grip DOL	1.25	TC 0.37		Vert(LL)	0.05 4-7	>999	240	MT20	244/190
TCDL 7.0		Lumber DOL	1.25	BC 0.29		Vert(CT)	-0.07 4-7	>824	180		
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.00		Horz(CT)	0.01 3	n/a	n/a		
BCDL 10.0		Code FBC2017/TPI2014		Matrix-MP						Weight: 20 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

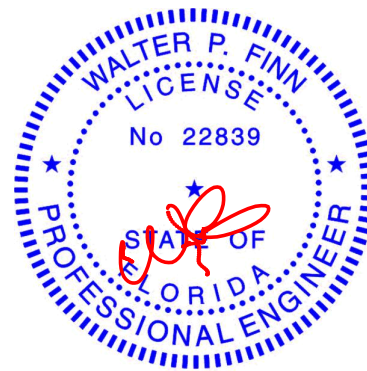
#### REACTIONS.

(size) 3=Mechanical, 2=0-5-8, 4=Mechanical  
Max Horz 2=197(LC 12)  
Max Uplift 3=127(LC 12), 2=76(LC 12), 4=11(LC 12)  
Max Grav 3=134(LC 19), 2=264(LC 1), 4=89(LC 3)

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

#### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Bearing at joint(s) 2 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 capable of withstanding 100 lb uplift at joint(s) 2, 4 except (jt=lb) 3=127.



Walter P. Finn PE No.22839  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

July 14,2020

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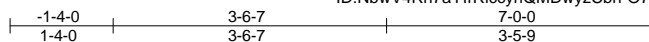
6904 Parke East Blvd.  
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723927
2400113	EJ01	Jack-Partial	15	1		
Job Reference (optional)						

Builders FirstSource, Jacksonville, FL - 32244,

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ID:NbwV4Rh7aYlrRccynQMDwyZCbh-O7PoEikxDXRe1NNtGepF\_3MJNXn\_oNA8zF8UTLyyABQ



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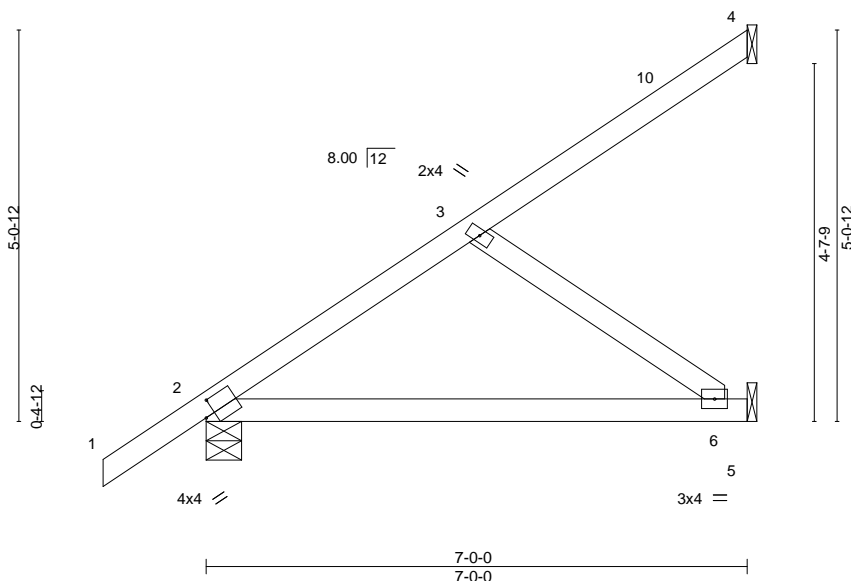


Plate Offsets (X,Y)-- [2:0-1-9,0-2-5]

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 0.36	Vert(LL)	-0.08	6-9	>999	240	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.44	Vert(CT)	-0.16	6-9	>527	180	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.00	2	n/a	n/a	
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS						
								Weight: 31 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

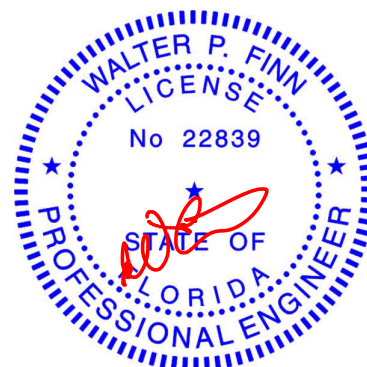
(size) 4=Mechanical, 2=0-5-8, 5=Mechanical  
Max Horz 2=253(LC 12)  
Max Uplift 4=-71(LC 12), 2=-97(LC 12), 5=-100(LC 12)  
Max Grav 4=84(LC 19), 2=336(LC 1), 5=198(LC 19)

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

BOT CHORD 2-6=-187/259  
WEBS 3-6=-318/230

#### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.



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

July 14,2020

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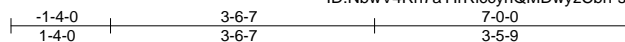
6904 Parke East Blvd.  
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723928
2400113	EJ02	Jack-Partial	10	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

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ID:NbwV4Rh7aYlrRccynQMDwyzCbh-sJzAR2kZ\_qZVeXx3qMKUXGuV?x8FXqRHBvu10oyyABP



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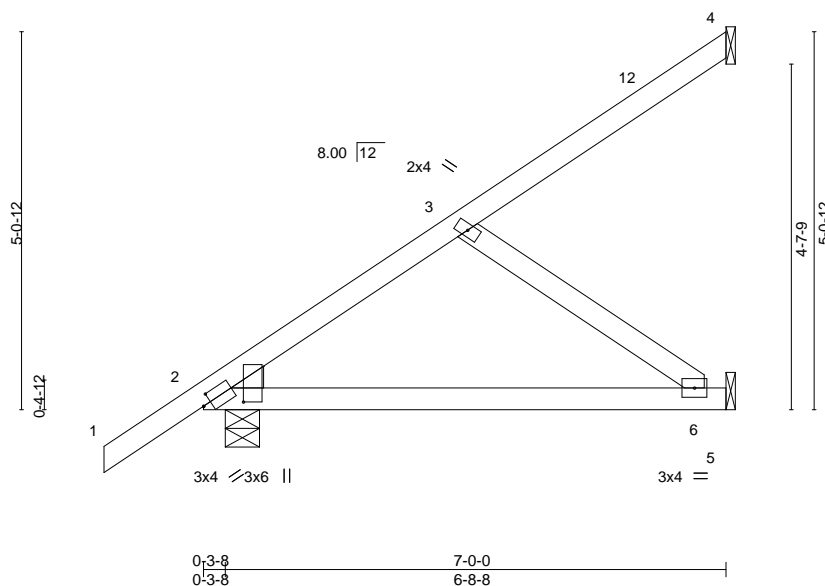


Plate Offsets (X,Y)--	[2:0-1-5,0-1-8], [2:0-0-11,0-6-7]						
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.25	TC 0.30	Vert(LL)	-0.06 6-11	>999	240
TCDL 7.0	Lumber DOL	1.25	BC 0.38	Vert(CT)	-0.12 6-11	>710	180
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.01 4	n/a	n/a
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS				
						Weight: 32 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

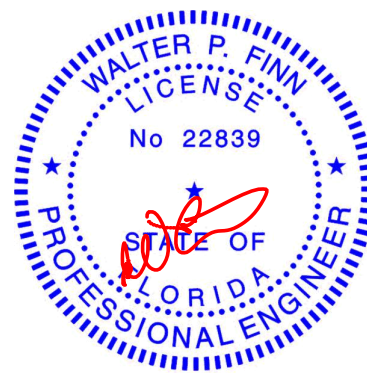
(size) 4=Mechanical, 2=0-5-8, 5=Mechanical  
Max Horz 2=253(LC 12)  
Max Uplift 4=73(LC 12), 2=101(LC 12), 5=94(LC 12)  
Max Grav 4=87(LC 19), 2=350(LC 1), 5=180(LC 19)

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

BOT CHORD 2-6=-178/255  
WEBS 3-6=-313/219

#### NOTES-

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5 except (jt=lb) 2=101.



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

Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723929
2400113	EJ03	Jack-Partial	7	1		
Job Reference (optional)						

Builders FirstSource, Jacksonville, FL - 32244,

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ID:NbwV4Rh7aYlrRlccynQMDWyzCbh-KWXYfOIBk8hMGhWGN3rj3URgSKSNGHPRQZdbYEyyABO

-1-4-0 3-6-3 7-0-0  
1-4-0 3-6-3 3-5-13

Scale = 1:30.0

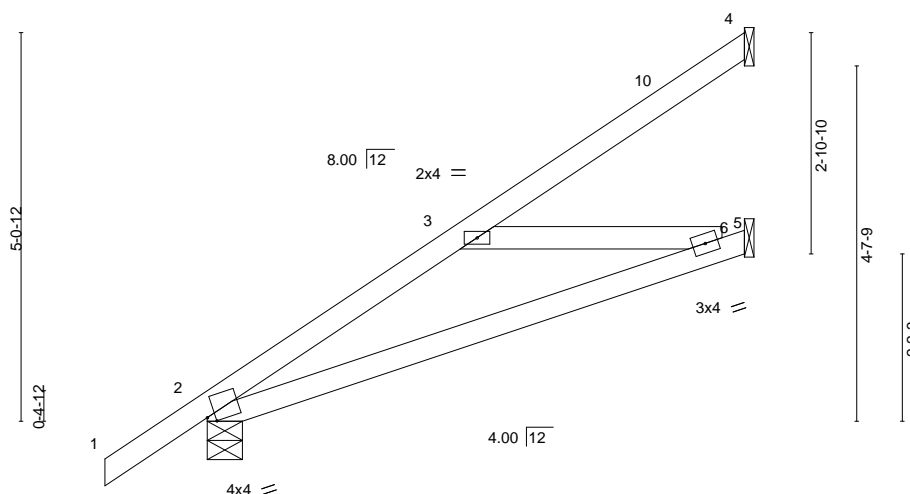


Plate Offsets (X,Y)-- [2:0-1-4,0-0-15]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.32	Vert(LL)	-0.08	6-9	>999	240	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.45	Vert(CT)	-0.15	6-9	>539	180	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.12	Horz(CT)	0.01	2	n/a	n/a	
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS						
								Weight: 31 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 9-8-3 oc bracing.

#### REACTIONS.

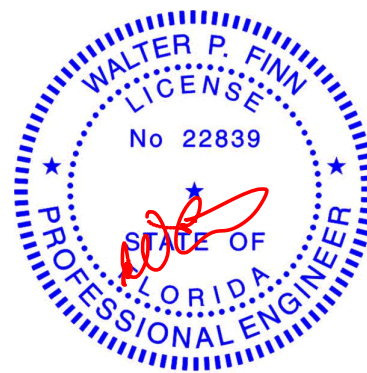
(size) 4=Mechanical, 2=0-5-8, 5=Mechanical  
Max Horz 2=253(LC 12)  
Max Uplift 4=-79(LC 12), 2=-92(LC 12), 5=-97(LC 12)  
Max Grav 4=93(LC 19), 2=336(LC 1), 5=190(LC 19)

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

TOP CHORD 2-3=-409/207  
BOT CHORD 2-6=-373/516  
WEBS 3-6=-480/348

#### NOTES-

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.



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Date:

July 14,2020

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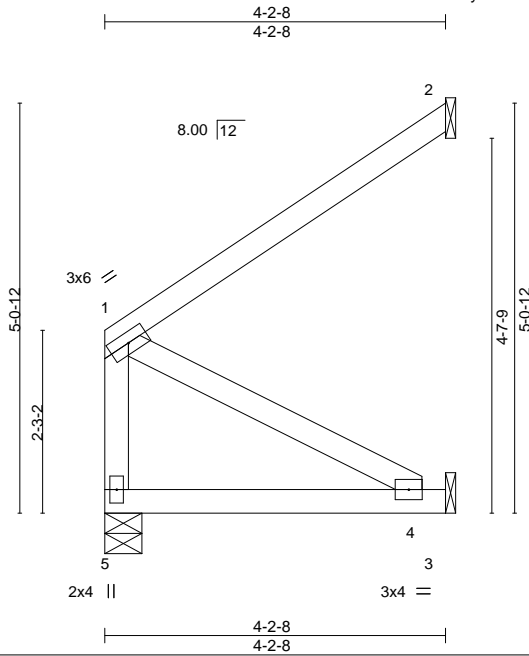
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Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723930
2400113	EJ04	Jack-Partial	4	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

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ID:NbwV4Rh7aYlrRlccynQMDwyzCbh-Guel43nSGly4V\_geVUuB9vW0Q8CrkC3ktt6hc7yyABM



Scale = 1:28.5

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.29	Vert(LL)	-0.02	4-5	>999	240	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.19	Vert(CT)	-0.03	4-5	>999	180	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	2	n/a	n/a	
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MP						
								Weight: 23 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 4-2-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

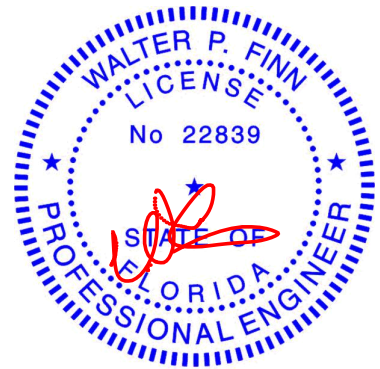
#### REACTIONS.

(size) 5=0-5-8, 2=Mechanical, 3=Mechanical  
Max Horz 5=130(LC 12)  
Max Uplift 2=-124(LC 12), 3=-54(LC 12)  
Max Grav 5=148(LC 1), 2=126(LC 19), 3=80(LC 3)

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

#### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 2=124.



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Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723931
2400113	EJ05	Jack-Partial	3	1	Job Reference (optional)	

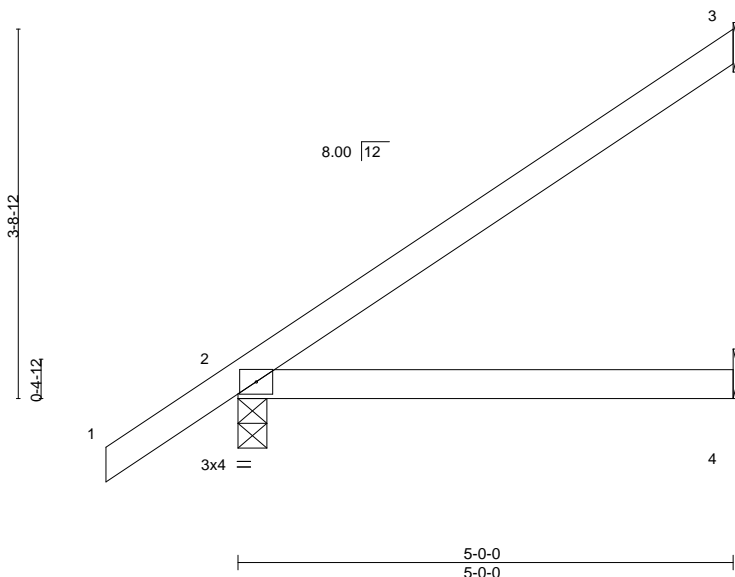
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8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jul 14 11:04:57 2020 Page 1

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Scale = 1:23.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.37	Vert(LL)	0.09	4-7	>677	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.37	Vert(CT)	0.08	4-7	>780	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MP						Weight: 19 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

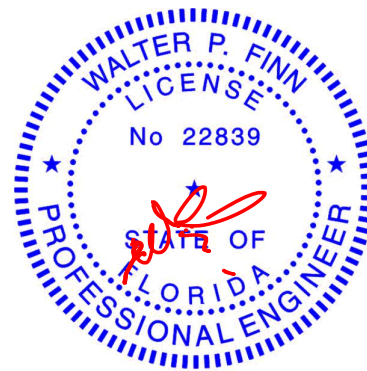
#### REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=197(LC 12)  
Max Uplift 3=123(LC 12), 2=82(LC 12), 4=48(LC 9)  
Max Grav 3=127(LC 19), 2=264(LC 1), 4=90(LC 3)

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

#### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4 except (jt=lb) 3=123.



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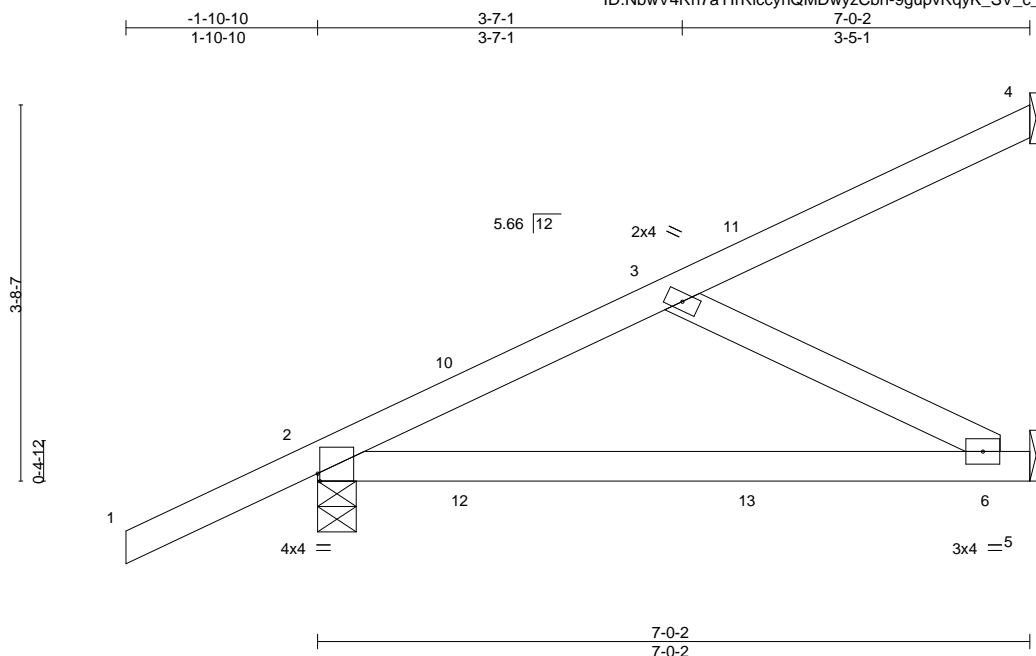
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Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723932
2400113	HJ08	Diagonal Hip Girder	2	1		
Job Reference (optional)						

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Scale = 1:22.7

Plate Offsets (X,Y)--		[2:0-0-4,Edge]									
<b>LOADING</b> (psf)		<b>SPACING-</b>	2-0-0	<b>CSI.</b>		<b>DEFL.</b>	in (loc)	I/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0		Plate Grip DOL	1.25	TC 0.40		Vert(LL)	0.10 6-9	>852	240	MT20	244/190
TCDL 7.0		Lumber DOL	1.25	BC 0.48		Vert(CT)	-0.15 6-9	>564	180		
BCLL 0.0 *		Rep Stress Incr	NO	WB 0.08		Horz(CT)	0.00 2	n/a	n/a		
BCDL 10.0		Code FBC2017/TPI2014		Matrix-MS						Weight: 31 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 4=Mechanical, 2=0-4-9, 5=Mechanical  
Max Horz 2=196(LC 8)  
Max Uplift 4=73(LC 8), 2=225(LC 8), 5=160(LC 5)  
Max Grav 4=81(LC 1), 2=349(LC 19), 5=180(LC 3)

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

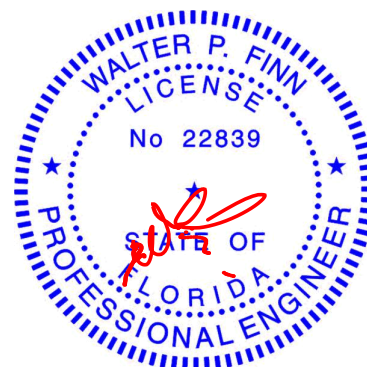
TOP CHORD 2-3=-308/149  
WEBS 3-6=-252/275

#### NOTES-

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=225, 5=160.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 83 lb down and 57 lb up at 1-6-1, 83 lb down and 57 lb up at 1-6-1, and 104 lb down and 67 lb up at 4-4-0, and 104 lb down and 67 lb up at 4-4-0 on top chord, and 54 lb down and 49 lb up at 1-6-1, 54 lb down and 49 lb up at 1-6-1, and 21 lb down and 36 lb up at 4-4-0, and 21 lb down and 36 lb up at 4-4-0 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  
Uniform Loads (plf)  
Vert: 1-4=-54, 5-7=-20  
Concentrated Loads (lb)  
Vert: 10=115(F=57, B=57) 13=-8(F=-4, B=-4)



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Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723933
2400113	HJ10	Diagonal Hip Girder	2	1		
Job Reference (optional)						

Builders FirstSource, Jacksonville, FL - 32244,

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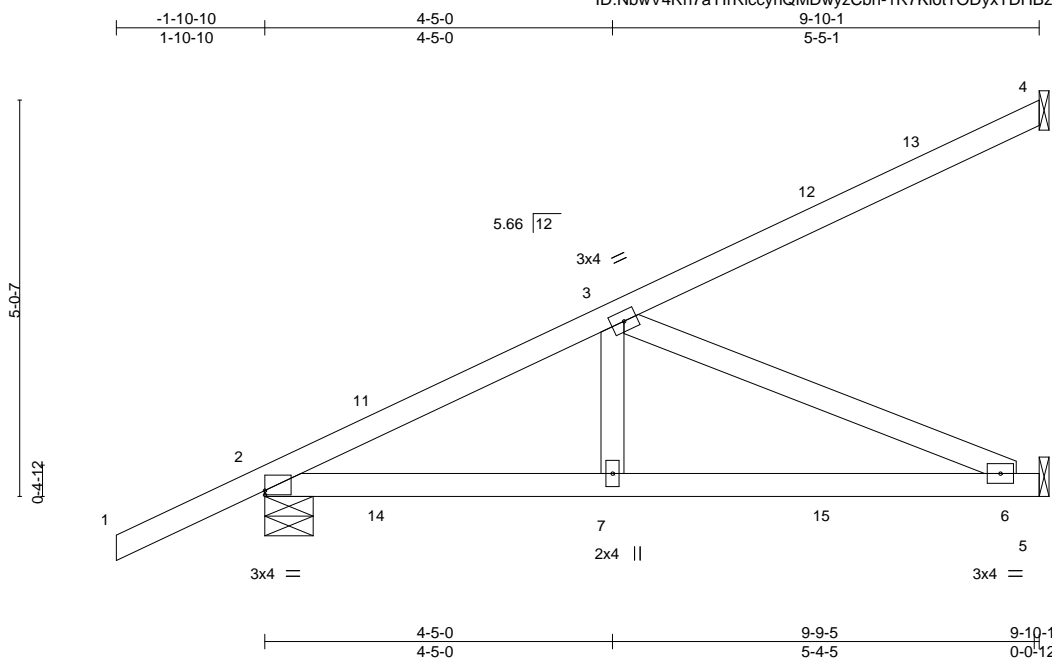


Plate Offsets (X,Y)-- [2:Edge,0-0-10]												
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d				<b>PLATES</b>	<b>GRIP</b>	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.63	Vert(LL)	0.07	6-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.60	Vert(CT)	-0.12	6-7	>988	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.38	Horz(CT)	-0.01	5	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 45 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 7-11-7 oc bracing.

#### REACTIONS.

(size) 4=Mechanical, 2=0-7-6, 5=Mechanical  
Max Horz 2=252(LC 8)  
Max Uplift 4=-147(LC 8), 2=-321(LC 8), 5=-218(LC 8)  
Max Grav 4=155(LC 1), 2=465(LC 19), 5=308(LC 32)

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

TOP CHORD 2-3=-740/431  
BOT CHORD 2-7=-535/577, 6-7=-535/577  
WEBS 3-7=-75/287, 3-6=-627/581

#### NOTES-

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=147, 2=321, 5=218.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 83 lb down and 57 lb up at 1-6-1, 83 lb down and 57 lb up at 1-6-1, 104 lb down and 67 lb up at 4-4-0, 104 lb down and 67 lb up at 4-4-0, and 145 lb down and 132 lb up at 7-1-15, and 145 lb down and 132 lb up at 7-1-15 on top chord, and 21 lb down and 49 lb up at 1-6-1, 21 lb down and 49 lb up at 1-6-1, 19 lb down and 36 lb up at 4-4-0, 19 lb down and 36 lb up at 4-4-0, and 51 lb down and 24 lb up at 7-1-15, and 51 lb down and 24 lb up at 7-1-15 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  
Uniform Loads (plf)  
Vert: 1-4=-54, 5-8=-20  
Concentrated Loads (lb)  
Vert: 7=-8(F=-4, B=-4) 11=115(F=57, B=57) 12=-75(F=-38, B=-38) 15=-62(F=-31, B=-31)



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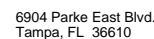
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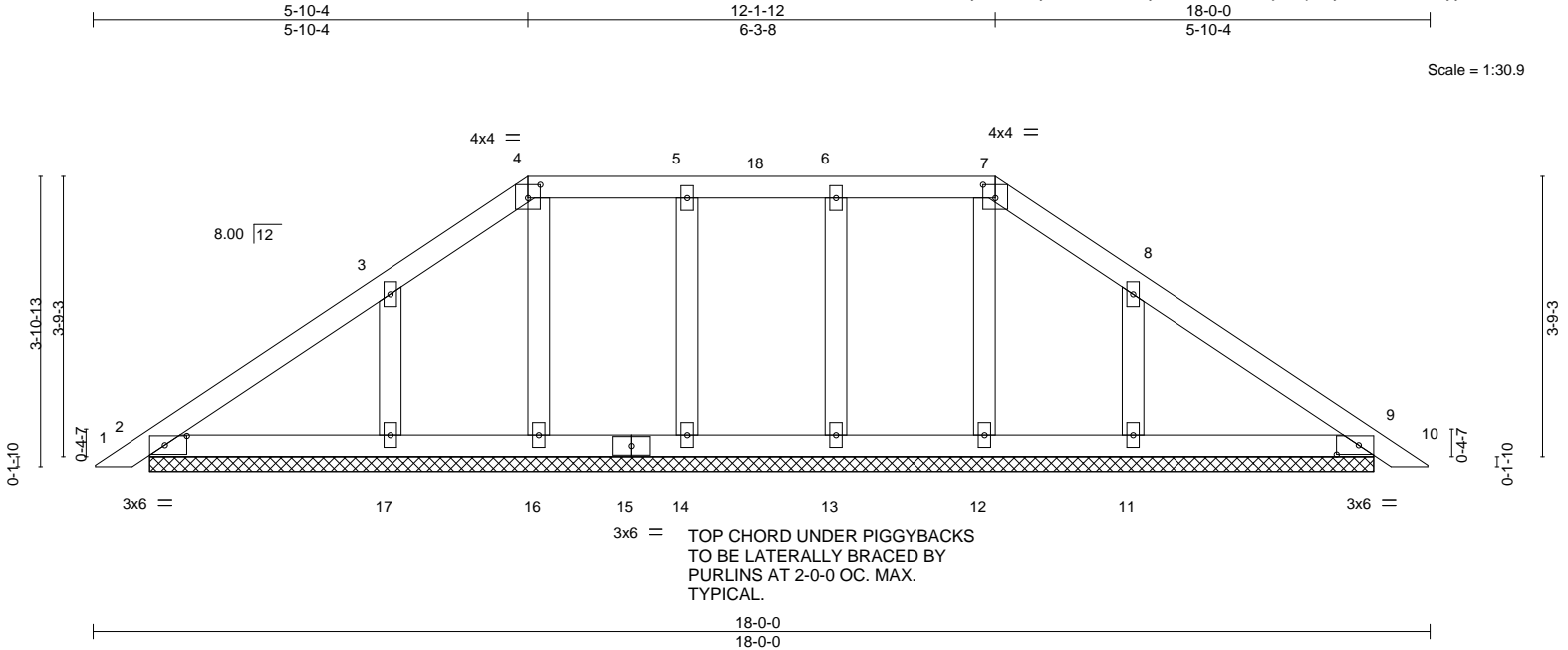




Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723936
2400113	PB01	GABLE	1	1	Job Reference (optional)	

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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 0.10	Vert(LL)	0.00	10	n/r	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.07	Vert(CT)	0.00	10	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	9	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-S					Weight: 80 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 16-5-12.  
(lb) - Max Horz 2=116(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 12, 13, 16, 14, 9 except 11=185(LC 13), 17=185(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 2, 12, 13, 16, 14, 9 except 11=275(LC 20), 17=275(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 7-10; Vult=130mph (3-second gust) Vasd=101mph; TC DL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2'-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, 12, 13, 16, 14, 9 except (jt=lb) 11=185, 17=185.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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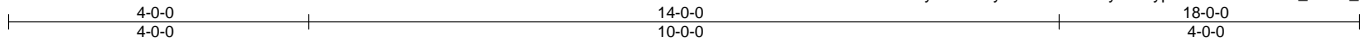


Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723937
2400113	PB02	GABLE	2	1		

Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jul 14 11:05:10 2020 Page 1  
ID:NbwV4Rh7aYlrRccynQMDwyZCbh-Kn2zDCyskMryplJXt8fiG3ecrBLXI\_sxKiF\_elyyAB7

Job Reference (optional)



Scale = 1:30.7

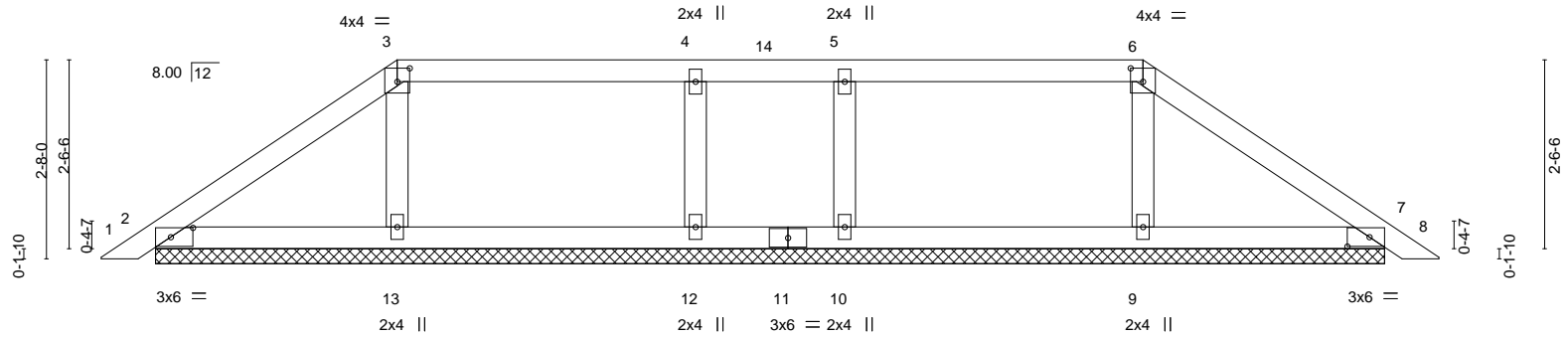


Plate Offsets (X,Y)--		[2:0-3-9,0-1-8], [3:0-2-0,0-2-3], [6:0-2-0,0-2-3], [7:0-3-9,0-1-8]	
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>
TCLL 20.0	Plate Grip DOL 1.25	TC 0.15	in (loc) l/defl L/d
TCDL 7.0	Lumber DOL 1.25	BC 0.12	Vert(LL) 0.00 8 n/r 120
BCLL 0.0 *	Rep Stress Incr YES	WB 0.04	Vert(CT) 0.00 8 n/r 120
BCDL 10.0	Code FBC2017/TPI2014	Matrix-S	Horz(CT) 0.00 7 n/a n/a
			<b>PLATES</b> MT20
			<b>GRIP</b> 244/190
			Weight: 65 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.

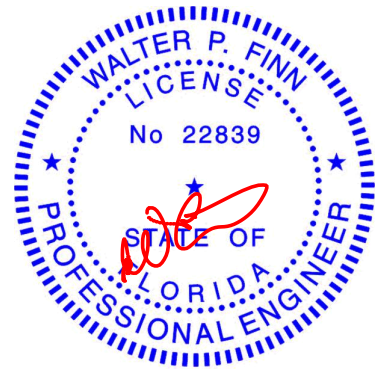
#### REACTIONS.

All bearings 16-5-12.  
(lb) - Max Horz 2=78(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 7 except 9=120(LC 13), 10=117(LC 9), 13=135(LC 12),  
12=117(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) 2, 10, 12, 7 except 9=278(LC 24), 13=278(LC 23)

**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 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 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, 7 except (jt=lb) 9=120, 10=117, 13=135, 12=117.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



Walter P. Finn PE No.22839  
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Date:

July 14,2020

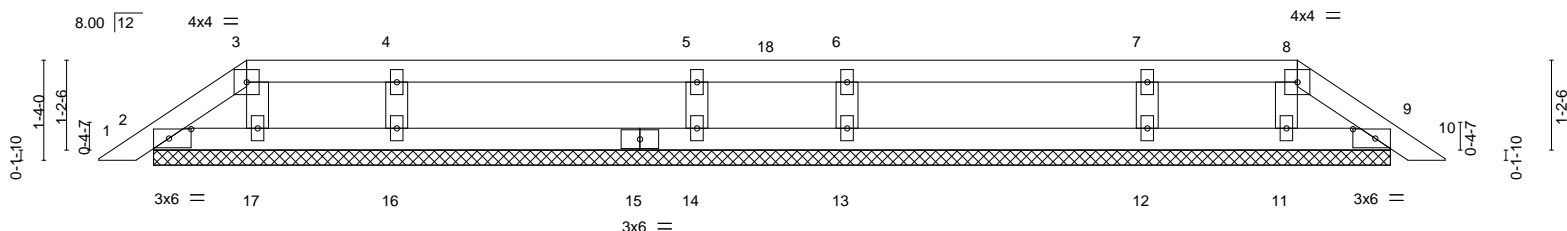
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jul 14 11:05:12 2020 Page 1  
ID:NbwV4Rh7aYIrRlccynQMDwyzCbh-GAAket\_6G\_5f2cTv?ZhALUjzj?0KDuLEo0k5jeyyAB5  
18-0-0  
18-0-0  
Scale = 1:30.7



										18-0-0					
										18-0-0					
Plate Offsets (X,Y)-- [2:0-3-9,0-1-8], [9:0-3-9,0-1-8]															
<b>LOADING</b> (psf)		<b>SPACING-</b>		2-0-0		<b>CSI.</b>		<b>DEFL.</b>		in (loc) l/defl L/d		<b>PLATES</b>		<b>GRIP</b>	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.12	Vert(LL)	0.00	9	n/r	120		MT20	244/190		
TCDL	7.0	Lumber DOL	1.25	BC	0.09	Vert(CT)	0.00	9	n/r	120					
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	9	n/a	n/a					
BCDL	10.0	Code FBC2017/TPI2014		Matrix-S								Weight: 58 lb	FT = 20%		

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

**REACTIONS.** All bearings 16-5-12.  
(lb) - Max Horz 2=36(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 9, 17, 11 except 12=126(LC 9), 13=109(LC 13), 16=126(LC 8), 14=109(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 2, 13, 14, 9, 17, 11 except 12=270(LC 23), 16=270(LC 24)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 4-0-0 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 3-6-0 tall by 2-0-0 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, 9, 17, 11 except (jt=lb) 12=126, 13=109, 16=126, 14=109.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



Walter P. Finn PE No.22839  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

July 14, 2020



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Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723939
2400113	T01	Hip Girder	1	2	Job Reference (optional)	

Builders FirstSource,
Jacksonville, FL - 32244,

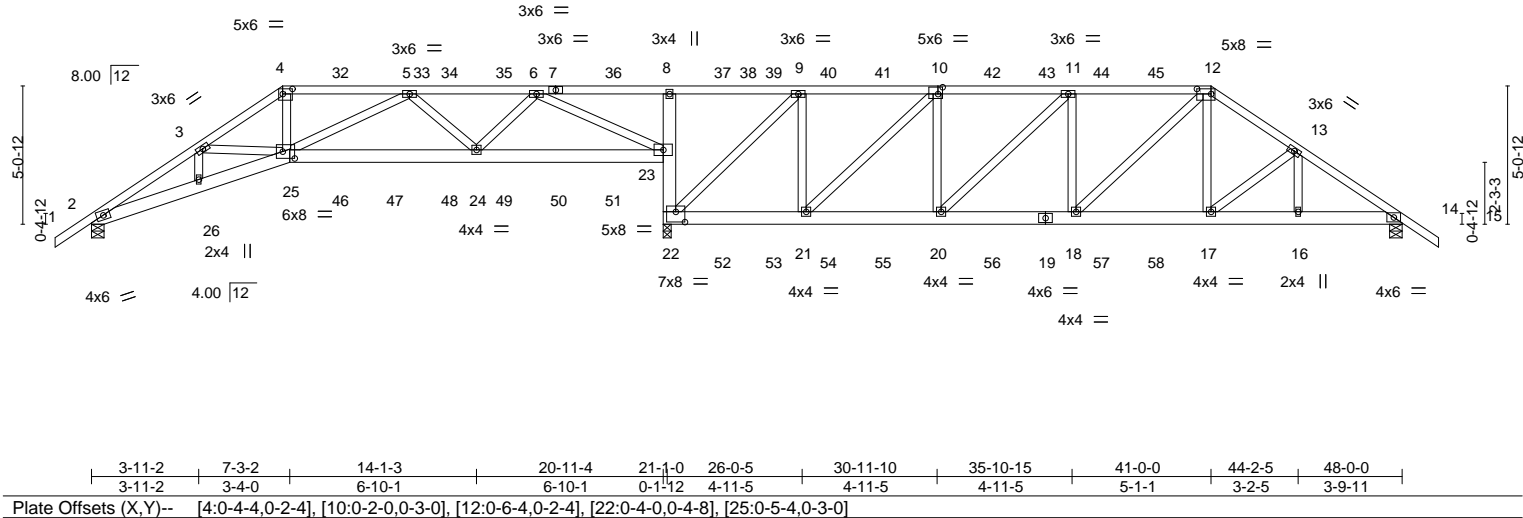
8.240 s Mar 9 2020
MiTek Industries, Inc.
Tue Jul 14 11:05:20 2020
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ID:NbwV4Rh7aYlRlccynQMDwyzCbh-1ifJc47OR5X?q4STEq2fA3GxDec4NfPdGgW\_AyyAAz

1-4-0, 3-11-2, 7-0-0, 11-7-12, 16-3-8, 20-11-4, 26-0-5, 30-11-10, 35-10-15, 41-0-0, 44-2-5, 48-0-0, 49-4-0

1-4-0, 3-11-2, 3-0-14, 4-7-12, 4-7-12, 4-7-12, 5-1-1, 4-11-5, 4-11-5, 5-1-1, 3-2-5, 3-9-11, 1-4-0

Scale = 1:84.4



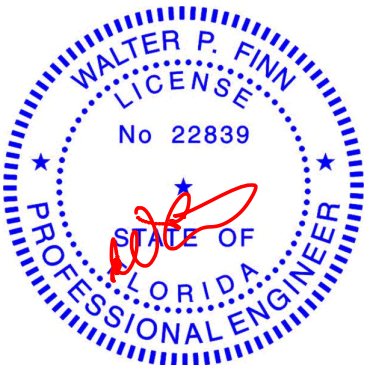
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>2-0-0</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>in (loc)</b>	<b>l/defl</b>	<b>L/d</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.36	Vert(LL)	0.15 24-25	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.52	Vert(CT)	-0.17 24-25	>999	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.53	Horz(CT)	0.05 14	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS					Weight: 619 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>	
TOP CHORD 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, Except:
WEBS 2x4 SP No.3		6-0-0 oc bracing: 22-23.

**REACTIONS.** (size) 2=0-5-8, 22=0-3-8, 14=0-5-8  
Max Horz 2=-174(LC 6)  
Max Uplift 2=-852(LC 8), 22=-2542(LC 5), 14=-1253(LC 9)  
Max Grav 2=1369(LC 19), 22=3989(LC 1), 14=1926(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3532/2285, 3-4=-3552/2375, 4-5=-3107/2136, 5-6=-2755/1874, 6-8=-527/906,  
8-9=-342/625, 9-10=-1514/1200, 10-11=-2663/1926, 11-12=-2995/2132,  
12-13=-2939/2050, 13-14=-3078/2040  
BOT CHORD 2-26=-1972/3115, 25-26=-2018/3189, 24-25=-2047/3122, 23-24=-1219/1850,  
22-23=-1949/1300, 8-23=-370/316, 21-22=-950/1514, 20-21=-1676/2668,  
18-20=-1876/2995, 17-18=-1501/2425, 16-17=-1583/2521, 14-16=-1583/2521  
WEBS 3-25=-449/467, 4-25=-1119/1743, 5-24=-484/402, 6-24=-807/1411, 6-23=-2954/1944,  
9-22=-2792/1751, 9-21=-975/1677, 10-21=-1591/1003, 10-20=-410/788, 11-20=-462/286,  
12-18=-517/807, 12-17=-501/818, 13-17=-298/246

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TC DL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=852, 22=2542, 14=1253.



Walter P. Finn PE No.22839  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

July 14,2020

Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723939
2400113	T01	Hip Girder	1	2	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

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ID:NbwV4Rh7aYlRlccynQMDwyzCbh-1ifJc47OR5X?q4STEq2fA3GxDec4NfPdGgW\_AyyAAz

NOTES-

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 96 lb down and 81 lb up at 7-0-0, 96 lb down and 77 lb up at 9-0-12, 96 lb down and 77 lb up at 11-0-12, 96 lb down and 77 lb up at 13-0-12, 96 lb down and 77 lb up at 15-0-12, 96 lb down and 77 lb up at 17-0-12, 96 lb down and 77 lb up at 19-0-12, 90 lb down and 68 lb up at 21-0-12, 90 lb down and 68 lb up at 23-0-12, 90 lb down and 68 lb up at 24-11-4, 90 lb down and 68 lb up at 26-11-4, 90 lb down and 68 lb up at 28-11-4, 90 lb down and 68 lb up at 30-11-4, 90 lb down and 68 lb up at 32-11-4, 90 lb down and 68 lb up at 34-11-4, 90 lb down and 68 lb up at 36-11-4, and 90 lb down and 68 lb up at 38-11-4, and 229 lb down and 226 lb up at 41-0-0 on top chord, and 430 lb down and 344 lb up at 7-3-2, 160 lb down and 117 lb up at 9-0-12, 160 lb down and 117 lb up at 11-0-12, 160 lb down and 117 lb up at 13-0-12, 160 lb down and 117 lb up at 15-0-12, 160 lb down and 117 lb up at 17-0-12, 160 lb down and 117 lb up at 19-0-12, 167 lb down and 120 lb up at 23-0-12, 167 lb down and 120 lb up at 24-11-4, 167 lb down and 120 lb up at 26-11-4, 167 lb down and 120 lb up at 28-11-4, 167 lb down and 120 lb up at 30-11-4, 167 lb down and 120 lb up at 32-11-4, 167 lb down and 120 lb up at 34-11-4, 167 lb down and 120 lb up at 36-11-4, and 167 lb down and 120 lb up at 38-11-4, and 436 lb down and 366 lb up at 40-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-54, 4-12=-54, 12-15=-54, 25-27=-20, 23-25=-20, 14-22=-20

Concentrated Loads (lb)

Vert: 4=-26(F) 7=-26(F) 12=-96(F) 8=-18(F) 19=-158(F) 25=-395(F) 10=-18(F) 20=-158(F) 17=-413(F) 32=-26(F) 33=-26(F) 34=-26(F) 35=-26(F) 36=-26(F) 37=-18(F) 39=-18(F) 40=-18(F) 41=-18(F) 42=-18(F) 43=-18(F) 44=-18(F) 45=-18(F) 46=-150(F) 47=-150(F) 48=-150(F) 49=-150(F) 50=-150(F) 51=-150(F) 52=-158(F) 53=-158(F) 54=-158(F) 55=-158(F) 56=-158(F) 57=-158(F) 58=-158(F)

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Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723940
2400113	T02	Hip	1	1		

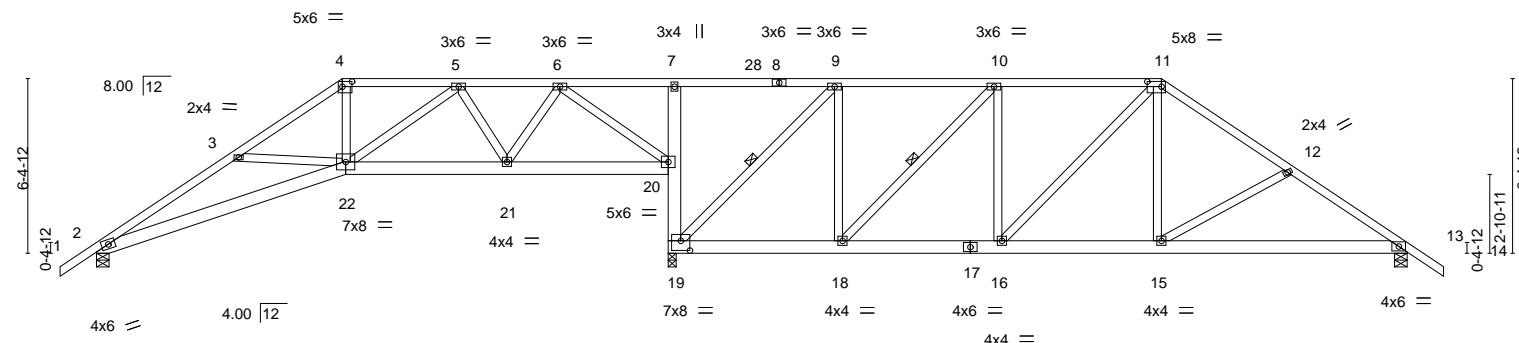
Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jul 14 11:05:22 2020 Page 1

ID:NbwV4Rh7aYlrRiccynQMDwyzCbh-5nWkl6Nv2LFF8EqafWlb8bg1MFYH4i5Z9d32yyAAx

1-4-0	5-2-7	9-0-0	13-3-2	16-11-11	20-11-4	27-2-1	33-0-2	39-0-0	43-7-7	48-0-0	49-4-0
1-4-0	5-2-7	3-9-9	4-3-2	3-8-9	3-11-10	6-2-13	5-10-1	5-11-14	4-7-7	4-4-9	1-4-0

Scale = 1:84.4



	9-1-8	15-0-6	20-11-4	21-1-0	26-11-8	33-0-2	39-0-0	48-0-0
	9-1-8	5-10-14	5-10-14	0-1-12	5-10-8	6-0-10	5-11-14	9-0-0

Plate Offsets (X,Y)-- [4:0-4-4,0-2-4], [11:0-6-4,0-2-4], [19:0-4-0,0-4-4]

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 0.41	Vert(LL)	0.08	22	>999	240	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.44	Vert(CT)	-0.16	22-25	>999	180	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.54	Horz(CT)	0.04	13	n/a	n/a	
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS						
								Weight: 312 lb	FT = 20%

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

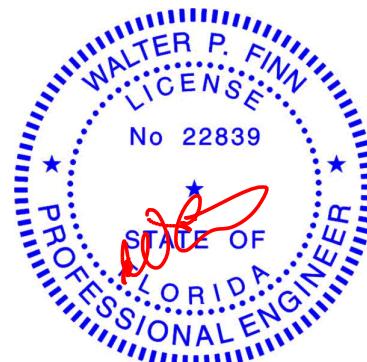
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-2-6 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
7-10-14 oc bracing: 2-22  
6-0-0 oc bracing: 19-20.  
WEBS 1 Row at midpt 9-19, 10-18

**REACTIONS.** (size) 2=0-5-8, 19=0-3-8, 13=0-5-8  
Max Horz 2=-215(LC 10)  
Max Uplift 2=-396(LC 12), 19=-764(LC 9), 13=-530(LC 13)  
Max Grav 2=816(LC 23), 19=1848(LC 1), 13=1038(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1842/984, 3-4=-1472/734, 4-5=-1190/673, 5-6=-887/577, 6-7=-108/304,  
7-9=-148/279, 9-10=-702/598, 10-11=-1048/727, 11-12=-1239/690, 12-13=-1448/787  
BOT CHORD 2-22=-877/1591, 21-22=-474/1069, 20-21=-283/622, 19-20=-996/494, 7-20=-301/226,  
18-19=-272/702, 16-18=-397/1048, 15-16=-309/973, 13-15=-541/1184  
WEBS 3-22=-442/348, 4-22=-248/578, 5-22=-38/292, 5-21=-372/218, 6-21=-165/504,  
6-20=-1036/482, 9-19=-1144/484, 9-18=-107/526, 10-18=-503/193, 11-15=-91/400,  
12-15=-341/270

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=396, 19=764, 13=530.



Walter P. Finn PE No.22839  
MiTek USA, Inc. FL Cert 6634  
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Date:

July 14,2020

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6904 Parke East Blvd.  
Tampa, FL 36610



Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723941
2400113	T03	Hip	1	1		
Job Reference (optional)						

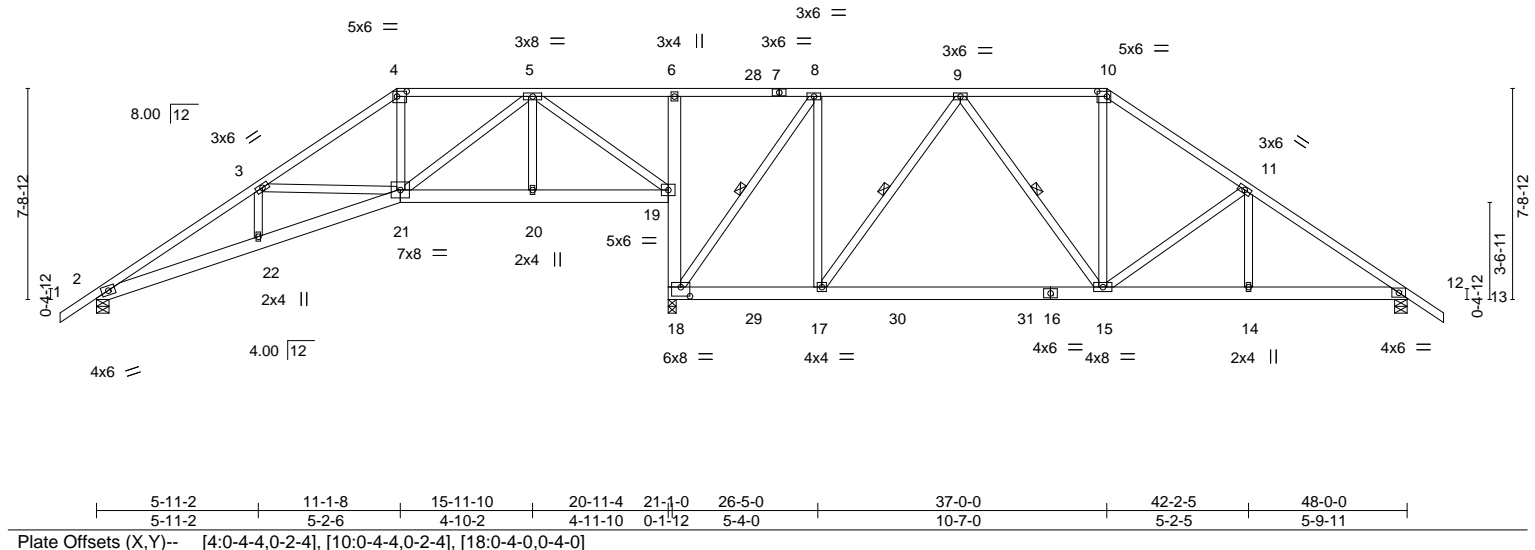
Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jul 14 11:05:25 2020 Page 1

ID:NbwV4Rh7aYlrRlccynQMDwyzCbbh-OgSeNK8GCzjp6bzPFnQDME7NEMplbH8nXOHfNyyAAu

1-4-0	5-11-2	11-0-0	15-11-10	20-11-4	26-5-0	31-7-10	37-0-0	42-2-5	48-0-0	49-4-0
1-4-0	5-11-2	5-0-14	4-11-10	4-11-10	5-5-12	5-2-10	5-4-6	5-2-5	5-9-11	1-4-0

Scale = 1:84.4



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 0.38	Vert(LL)	-0.11 15-17	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.45	Vert(CT)	-0.20 15-17	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.77	Horz(CT)	0.03 12	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS					Weight: 324 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-1-3 oc purlins.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 8-18, 9-17, 9-15

REACTIONS.	(size) 2=0-5-8, 18=0-3-8, 12=0-5-8
Max Horz 2=-257(LC 10)	
Max Uplift 2=-404(LC 12), 18=-708(LC 9), 12=-551(LC 13)	
Max Grav 2=825(LC 23), 18=1833(LC 1), 12=1045(LC 24)	

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1897/985, 3-4=-1275/684, 4-5=-1003/639, 5-6=-177/336, 6-8=-224/363, 8-9=-643/579, 9-10=-886/651, 10-11=-1124/701, 11-12=-1475/790
BOT CHORD 2-22=-894/1631, 21-22=-893/1633, 20-21=-313/701, 19-20=-313/701, 18-19=-969/471, 6-19=-296/223, 17-18=-190/576, 15-17=-300/812, 14-15=-513/1170, 12-14=-513/1170
WEBS 3-21=-707/431, 4-21=-192/420, 5-21=-163/485, 5-19=-1019/444, 8-18=-1105/399, 8-17=-119/686, 9-17=-478/204, 10-15=-193/369, 11-15=-494/322

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=404, 18=708, 12=551.



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6904 Parke East Blvd.  
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Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723942
2400113	T04	Hip	1	1		
Job Reference (optional)						

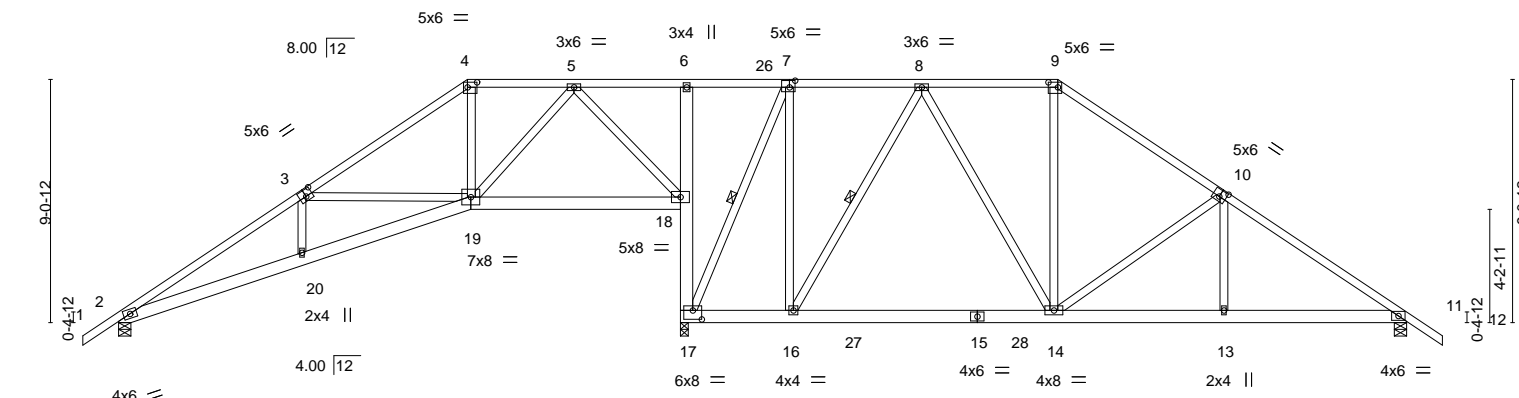
Builders FirstSource, Jacksonville, FL - 32244,

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ID:NbwV4Rh7aYlrRlcynQMDWyzCbh-oF8n?LA8Vu6Oz3i\_xw\_w\_sOcQRP2yzPaTVcxGiyyAAr

-1-4-0	6-10-0	13-0-0	16-11-10	20-11-4	25-0-0	29-11-2	35-0-0	41-2-5	48-0-0	49-4-0
1-4-0	6-10-0	6-2-0	3-11-10	3-11-10	4-0-12	4-11-2	5-0-14	6-2-5	6-9-11	1-4-0

Scale = 1:85.9



	6-10-0	13-1-8	20-11-4	21-1-0	25-0-0	35-0-0	41-2-5	48-0-0
	6-10-0	6-3-8	7-9-12	0-1-12	3-11-0	10-0-0	6-2-5	6-9-11
Plate Offsets (X,Y)--	[3:0-3-0,0-3-0], [4:0-4-4,0-2-4], [7:0-2-8,0-3-0], [9:0-4-4,0-2-4], [10:0-3-0,0-3-0], [17:0-4-0,0-4-0]							

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.50	Vert(LL)	-0.10 14-16	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.42	Vert(CT)	-0.18 14-16	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.68	Horz(CT)	0.03 17	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS					Weight: 337 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-11-15 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 7-17, 8-16

#### REACTIONS.

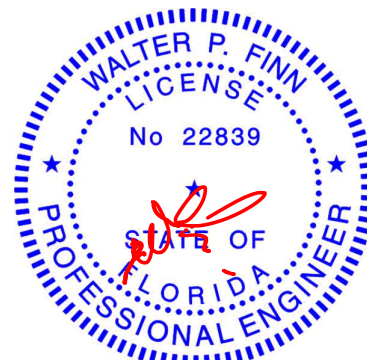
(size) 2=0-5-8, 17=0-3-8, 11=0-5-8  
Max Horz 2=-298(LC 10)  
Max Uplift 2=-412(LC 12), 17=-645(LC 9), 11=-575(LC 13)  
Max Grav 2=830(LC 23), 17=1823(LC 1), 11=1050(LC 24)

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

TOP CHORD 2-3=-1878/1015, 3-4=-1072/646, 4-5=-900/613, 5-6=-256/418, 6-7=-288/438,  
7-8=-568/570, 8-9=-864/670, 9-10=-1013/712, 10-11=-1455/817  
BOT CHORD 2-20=-937/1696, 19-20=-932/1685, 18-19=-244/481, 17-18=-922/443, 16-17=-119/364,  
14-16=-220/638, 13-14=-516/1136, 11-13=-516/1140  
WEBS 3-20=0/267, 3-19=-876/551, 4-19=-166/343, 5-19=-179/613, 5-18=-825/396,  
7-17=-1025/354, 7-16=-155/762, 8-16=-584/225, 8-14=0/323, 9-14=-185/320,  
10-14=-600/384, 10-13=-5/262

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=412, 17=645, 11=575.



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July 14,2020

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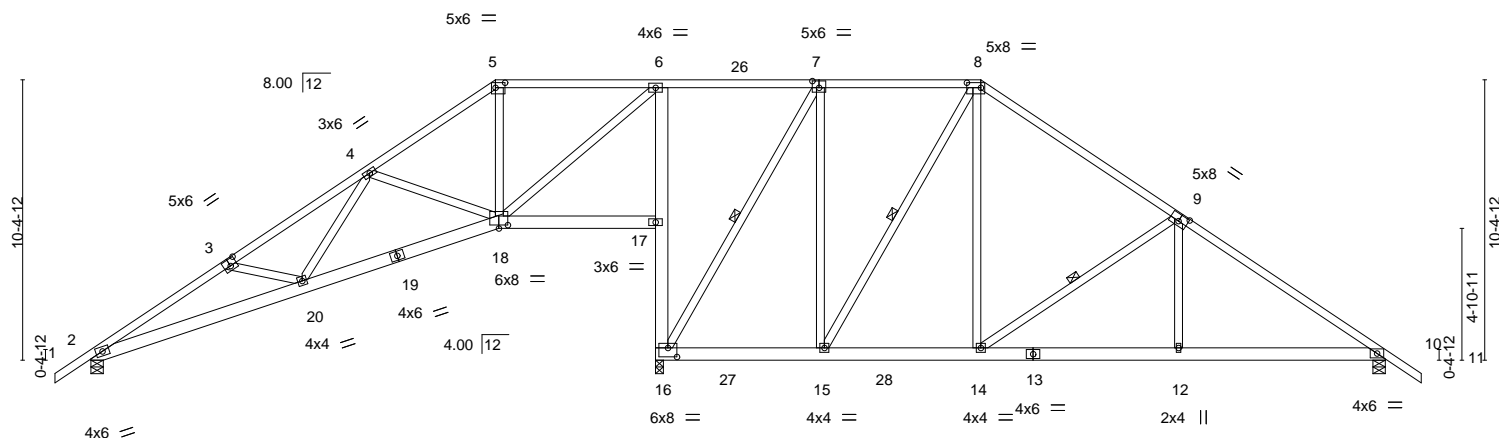
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-1-4-0	5-2-0	10-4-0	15-0-0	20-11-4	27-0-10	33-0-0	40-4-0	48-0-0	49-4-0
-1-4-0	5-2-0	5-2-0	4-8-0	5-11-4	6-1-6	5-11-6	7-4-0	7-8-0	1-4-0

Scale = 1:85.4



	7-10-0	15-1-8	20-11-4	21-1-0	27-0-10	33-0-0	40-4-0	48-0-0
	7-10-0	7-3-8	5-9-12	0-1-12	5-11-10	5-11-6	7-4-0	7-8-0
Plate Offsets (X,Y)--	[3:0-3-0-0-3-0]	[5:0-4-4-0-2-4]	[7:0-3-0-0-3-0]	[8:0-6-4-0-2-4]	[9:0-4-0-0-3-0]	[16:0-4-0-0-4-0]	[18:0-4-0-0-1-8]	

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.63	Vert(LL)	0.11 18-20	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.40	Vert(CT)	-0.14 18-20	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.64	Horz(CT)	0.04 16	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS					Weight: 341 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-0-2 oc purlins.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt 7-16, 8-15, 9-14

**REACTIONS.** (size) 16=0-3-8, 2=0-5-8, 10=0-5-8  
 Max Horz 2=340(LC 10)  
 Max Uplift 16=588(LC 9), 2=414(LC 12), 10=597(LC 13)  
 Max Grav 16=1819(LC 1), 2=833(LC 23), 10=1072(LC 20)

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

TOP CHORD	2-3=-2068/1161, 3-4=-1820/1009, 4-5=-915/641, 5-6=-801/592, 6-7=-359/501, 7-8=-608/652, 8-9=-939/714, 9-10=-1456/846
BOT CHORD	2-20=-1089/1870, 18-20=-679/1295, 16-17=-971/470, 6-17=-900/479, 15-16=-127/461, 14-15=-164/648, 12-14=-531/1126, 10-12=-531/1123
WEBS	3-20=-351/307, 4-20=-202/548, 4-18=-676/445, 5-18=-164/316, 6-18=-348/904, 7-16=-959/314, 7-15=-35/600, 8-15=-405/72, 8-14=-197/548, 9-14=-726/446, 9-12=0/350

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDF=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCp=-0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=588. 2=414. 10=597.



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Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723944
2400113	T06	Piggyback Base	2	1		
Job Reference (optional)						

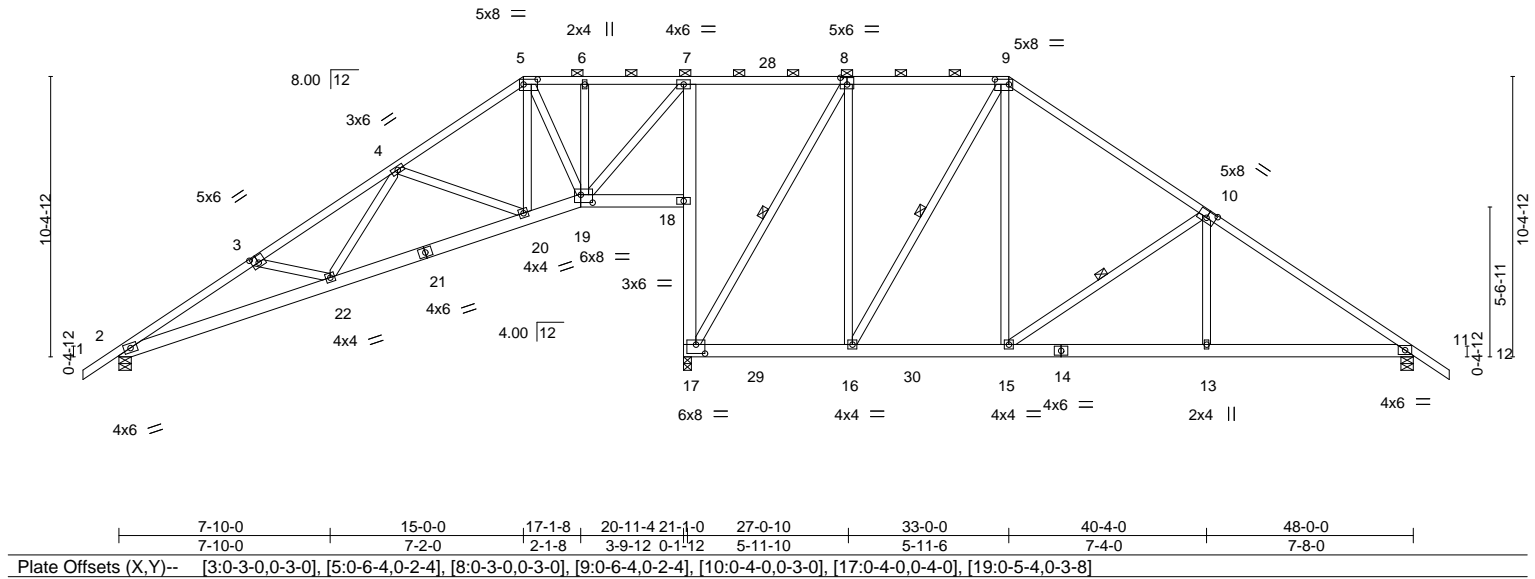
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ID:NbwV4Rh7aYlrRlccynQMDwyzCbh-9Cxcg23EHKQkh3qayjTZ5hw5RVS6RdDCKdnKixwyyAAm

-1-4-0	5-2-0	10-4-0	15-0-0	17-1-8	20-11-4	27-0-10	33-0-0	40-4-0	48-0-0	49-4-0
1-4-0	5-2-0	5-2-0	4-8-0	2-1-8	3-9-12	6-1-6	5-11-6	7-4-0	7-8-0	1-4-0

Scale = 1:85.4



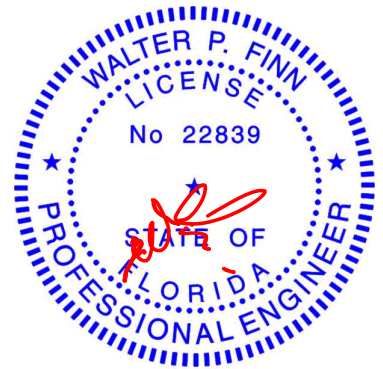
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.63	Vert(LL)	0.11 22	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.40	Vert(CT)	-0.14 20-22	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.64	Horz(CT)	0.04 17	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS					Weight: 351 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-11-15 oc purlins, except
BOT CHORD 2x6 SP No.2	2-0-0 oc purlins (6-0-0 max.): 5-9.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
	WEBS 1 Row at midpt 8-17, 9-16, 10-15

<b>REACTIONS.</b>	(size) 17=0-3-8, 2=0-5-8, 11=0-5-8
	Max Horz 2=-340(LC 10)
	Max Uplift 17=-587(LC 9), 2=-417(LC 12), 11=-598(LC 13)
	Max Grav 17=1811(LC 1), 2=837(LC 23), 11=1075(LC 20)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2084/1169, 3-4=-1836/1019, 4-5=-940/649, 5-6=-720/582, 6-7=-722/586, 7-8=-371/505, 8-9=-695/656, 9-10=-948/716, 10-11=-1462/849
BOT CHORD	2-22=-1094/1880, 20-22=-689/1312, 19-20=-258/699, 17-18=-960/463, 7-18=-896/461, 16-17=-130/466, 15-16=-166/651, 13-15=-534/1130, 11-13=-534/1127
WEBS	3-22=-351/306, 4-22=-198/536, 4-20=-674/451, 5-20=-286/589, 5-19=-392/123, 7-19=-348/823, 8-17=-960/315, 8-16=-32/596, 9-16=-399/70, 9-15=-197/549, 10-15=-726/446, 10-13=0/350

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=587, 2=417, 11=598.
  - 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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6904 Parke East Blvd.  
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Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723945
2400113	T07	Piggyback Base	2	1		
Job Reference (optional)						

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ID:NbwV4Rh7aYlRlccynQMDwyzCbh-Zndog5H9cL6FwJXPb7oJYjxlg87qazmJYMYFyyAAj

1-4-0 5-2-0 10-4-0 15-0-0 19-1-8 20-11-4 27-0-10 33-0-0 40-4-0 48-0-0 49-4-0  
1-4-0 5-2-0 5-2-0 4-8-0 4-1-8 1-9-12 6-1-6 5-11-6 7-4-0 7-8-0 1-4-0

Scale = 1:85.4

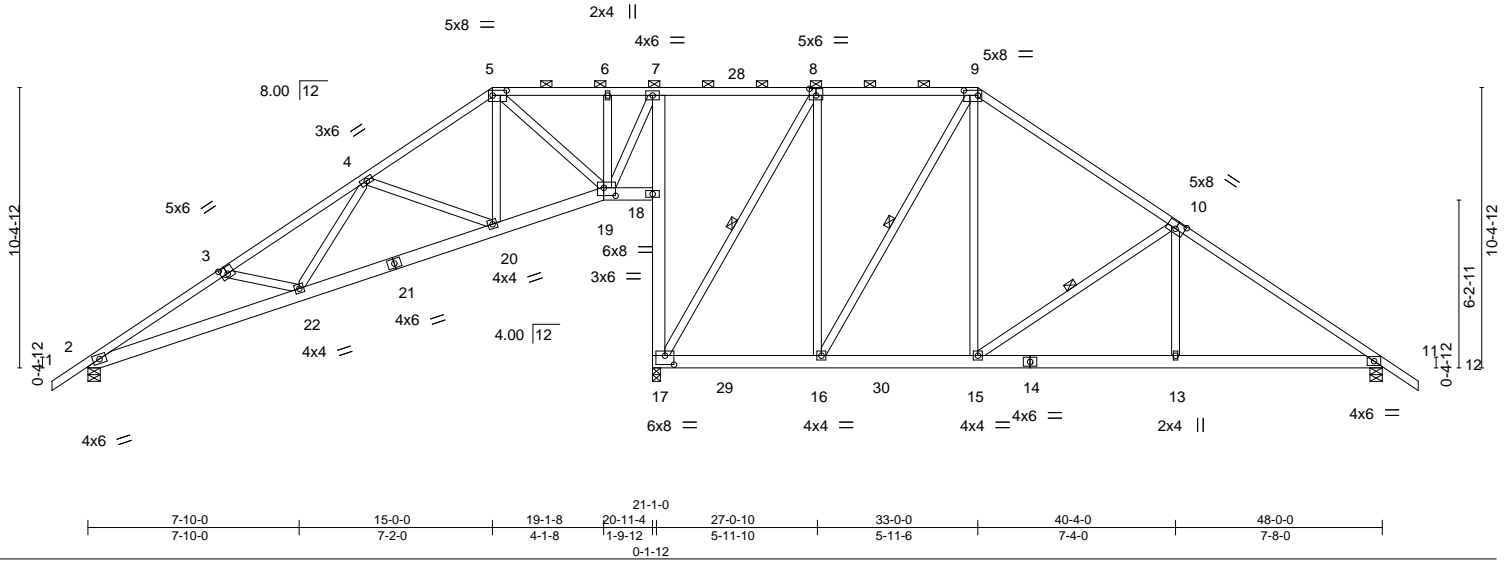


Plate Offsets (X, Y)-- [3:0-3-0,0-3-0], [5:0-6-4,0-2-4], [8:0-3-0,0-3-0], [9:0-6-4,0-2-4], [10:0-4-0,0-3-0], [17:0-4-0,0-4-0], [19:0-5-4,0-3-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.63	Vert(LL)	0.10	22	>999	240	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.40	Vert(CT)	-0.14	20-22	>999	180	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.64	Horz(CT)	0.04	17	n/a	n/a	
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS						
									Weight: 349 lb FT = 20%

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

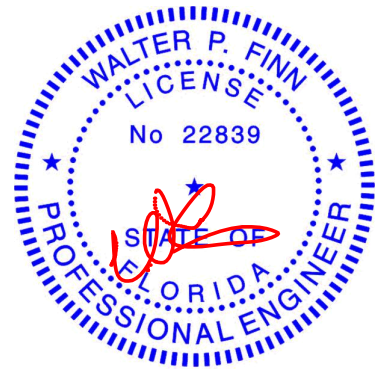
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-11-13 oc purlins, except  
2-0-0 oc purlins (6-0-0 max.): 5-9.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 8-17, 9-16, 10-15

**REACTIONS.** (size) 17=0-3-8, 2=0-5-8, 11=0-5-8  
Max Horz 2=-340(LC 10)  
Max Uplift 17=-586(LC 9), 2=-418(LC 12), 11=-599(LC 13)  
Max Grav 17=1806(LC 1), 2=840(LC 23), 11=1077(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2094/1175, 3-4=-1846/1025, 4-5=-954/658, 5-6=-575/541, 6-7=-578/546,  
7-8=-379/508, 8-9=-701/658, 9-10=-953/718, 10-11=-1465/851  
BOT CHORD 2-22=-1099/1886, 20-22=-694/1321, 19-20=-264/717, 17-18=-955/459, 7-18=-878/431,  
16-17=-133/469, 15-16=-168/653, 13-15=-535/1132, 11-13=-535/1129  
WEBS 3-22=-352/307, 4-22=-198/533, 4-20=-672/448, 5-20=-280/595, 5-19=-532/199,  
7-19=-326/751, 8-17=-958/314, 8-16=-30/593, 9-16=-396/69, 9-15=-197/549,  
10-15=-726/446, 10-13=0/349

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=586, 2=418, 11=599.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Walter P. Finn PE No.22839  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

July 14,2020

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6904 Parke East Blvd.  
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723946
2400113	T08	Piggyback Base	1	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

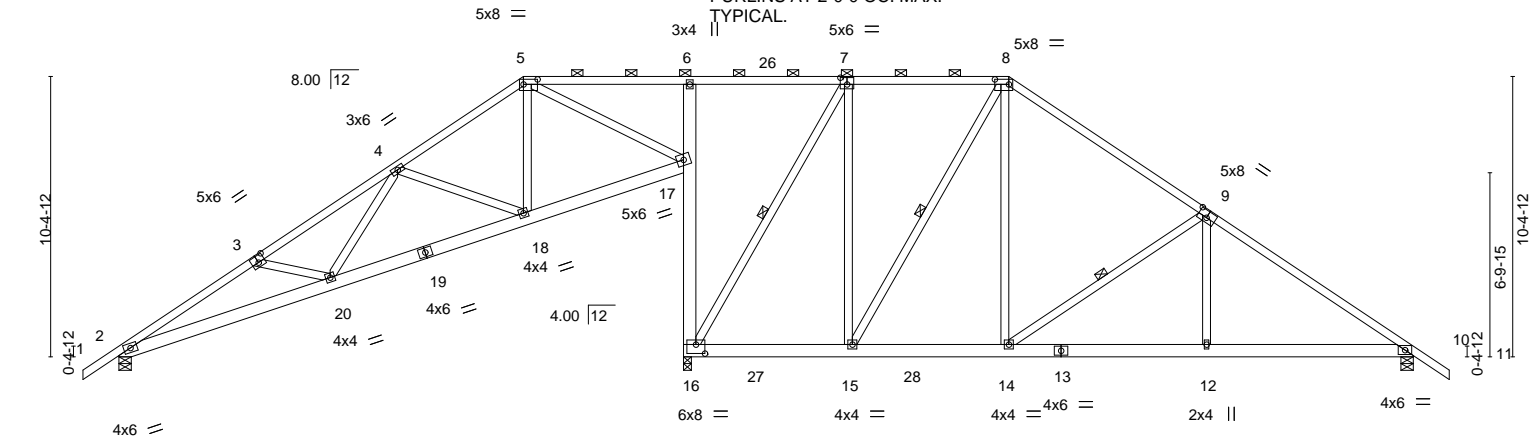
8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jul 14 11:05:38 2020 Page 1

ID:NbwV4Rh7aYlrRlcynQMDwyzCbh-WAlZ5mIQ8zMzAbSvW09GOzoHEtpblU83m31Td7yyAAh

-1-4-0	5-2-0	10-4-0	15-0-0	20-11-4	27-0-10	33-0-0	40-4-0	48-0-0	49-4-0
1-4-0	5-2-0	5-2-0	4-8-0	5-11-4	6-1-6	5-11-6	7-4-0	7-8-0	1-4-0

TOP CHORD UNDER PIGGYBACKS  
TO BE Laterally BRACED BY  
PURLINS AT 2-0-0 OC. MAX.  
TYPICAL.

Scale = 1:85.4



	7-10-0	15-0-0	20-11-4	21-1-0	27-0-10	33-0-0	40-4-0	48-0-0	
	7-10-0	7-2-0	5-11-4	0-1-12	5-11-10	5-11-6	7-4-0	7-8-0	
Plate Offsets (X,Y)--	[3:0-3-0,0-3-0], [5:0-6-4,0-2-4], [7:0-3-0,0-3-0], [8:0-6-4,0-2-4], [9:0-4-0,0-3-0], [16:0-4-0,0-4-0]								
<b>LOADING</b> (psf)	<b>SPACING</b>	2-0-0	<b>CSI</b>	<b>DEFL.</b>	in (loc)	I/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.63	Vert(LL)	0.10 18-20	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.40	Vert(CT)	-0.14 18-20	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.66	Horz(CT)	0.04 16	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS					Weight: 340 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-11-10 oc purlins, except  
2-0-0 oc purlins (6-0-0 max.): 5-8.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 7-16, 8-15, 9-14

#### REACTIONS.

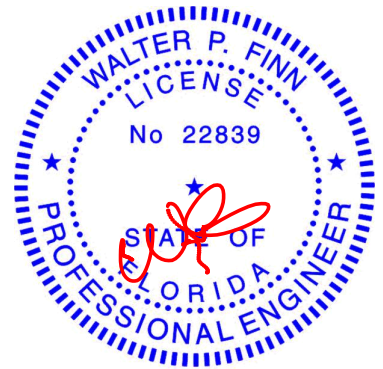
(size) 16=0-3-8, 2=0-5-8, 10=0-5-8  
Max Horz 2=-340(LC 10)  
Max Uplift 16=-583(LC 9), 2=-421(LC 12), 10=-601(LC 13)  
Max Grav 16=1799(LC 1), 2=843(LC 23), 10=1079(LC 20)

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

TOP CHORD 2-3=-2109/1186, 3-4=-1860/1035, 4-5=-971/666, 5-6=-365/488, 6-7=-391/513,  
7-8=-708/660, 8-9=-959/721, 9-10=-1468/853  
BOT CHORD 2-20=-1108/1897, 18-20=-700/1332, 17-18=-272/744, 16-17=-958/462, 6-17=-355/270,  
15-16=-137/472, 14-15=-170/656, 12-14=-537/1135, 10-12=-537/1132  
WEBS 3-20=-352/307, 4-20=-202/532, 4-18=-670/446, 5-18=-263/595, 5-17=-792/304,  
7-16=-946/303, 7-15=-28/590, 8-15=-395/68, 8-14=-198/549, 9-14=-726/446,  
9-12=0/349

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=583, 2=421, 10=601.
- 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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MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

July 14,2020

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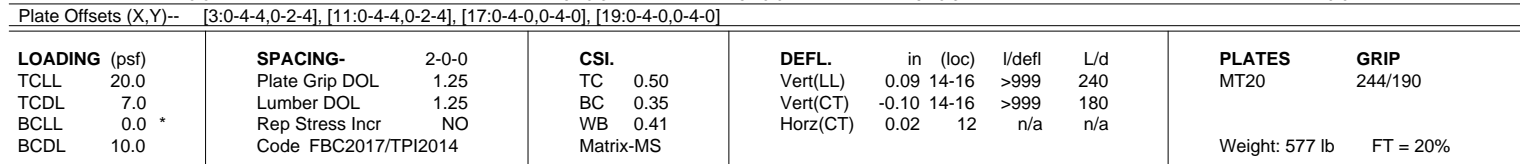
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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



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Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jul 14 11:05:46 2020 Page 1  
ID:NbwV4Rh7aYlRlccynQMDwyzCbh-HiDanVORGQNr7q4S\_il8jf7hHIZFAA?EclzuvtvyyAAZ  
1-4-0 7-0-0 12-7-1 18-1-15 24-0-0 29-10-0 35-4-15 41-0-0 48-0-0 49-4-0  
1-4-0 7-0-0 5-7-1 5-6-15 5-10-1 5-10-1 5-6-15 5-7-1 7-0-0 1-4-0  
Scale = 1:83.0



Structural wood sheathing directly applied or 6-0-0 oc purlins.  
Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
6-0-0 oc bracing: 19-20,17-19.

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

**TOP CHORD** 2-3=-1336/897, 3-4=-1036/835, 4-6=-144/289, 6-7=-1376/2100, 7-8=-463/404,  
8-10=-2003/1433, 10-11=-1949/1433, 11-12=-2416/1605

**BOT CHORD** 2-22=-693/1088, 20-22=-401/547, 19-20=-1001/759, 17-19=-719/582, 16-17=-785/1254,  
14-16=-1319/2092, 12-14=-1157/1922

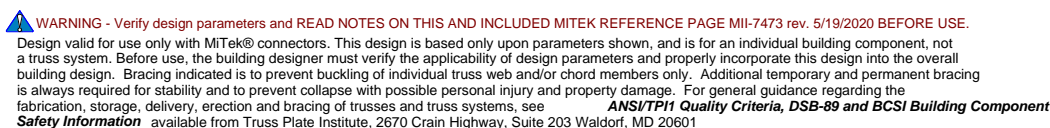
**WEBS** 3-22=-241/459, 4-22=-428/823, 4-20=-946/667, 6-20=-1132/1727, 6-19=-2108/1586,  
7-19=-2640/1777, 7-17=-1363/2164, 8-17=-1491/1044, 8-16=-744/1186, 10-16=-273/264,  
10-14=-253/2222, 11-14=-515/910

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCp=-0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Provide adequate drainage to prevent water ponding.
- 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) except (jt=lb)  
2=616, 19=2966, 12=1014.



July 14, 2020

Continued on page 2



6904 Parke East Blvd.  
Tampa, FL 36610



Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723947
2400113	T09	Hip Girder	1	2	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jul 14 11:05:46 2020 Page 2  
ID:NbwV4Rh7aYlrRlccynQMDwyzCbh-HiDanVORGQNr7q4S\_il8jf7hHiZFAA?EclzuvfyAAZ

NOTES-

9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 90 lb down and 72 lb up at 7-0-0, 90 lb down and 68 lb up at 9-0-12, 90 lb down and 68 lb up at 11-0-12, 90 lb down and 68 lb up at 13-0-12, 119 lb down and 124 lb up at 15-0-12, 119 lb down and 124 lb up at 17-0-12, 119 lb down and 124 lb up at 19-0-12, 119 lb down and 124 lb up at 21-0-12, 92 lb down and 70 lb up at 23-0-12, 92 lb down and 70 lb up at 24-11-4, 92 lb down and 70 lb up at 26-11-4, 92 lb down and 70 lb up at 28-11-4, 92 lb down and 70 lb up at 30-11-4, 92 lb down and 70 lb up at 32-11-4, 92 lb down and 70 lb up at 34-11-4, 92 lb down and 70 lb up at 36-11-4, and 92 lb down and 70 lb up at 38-11-4, and 231 lb down and 226 lb up at 41-0-0 on top chord, and 436 lb down and 366 lb up at 7-0-0, 167 lb down and 120 lb up at 9-0-12, 167 lb down and 120 lb up at 11-0-12, 167 lb down and 120 lb up at 13-0-12, 58 lb down and 66 lb up at 15-0-12, 58 lb down and 66 lb up at 17-0-12, 58 lb down and 66 lb up at 19-0-12, 153 lb down and 114 lb up at 23-0-12, 153 lb down and 114 lb up at 24-11-4, 153 lb down and 114 lb up at 26-11-4, 153 lb down and 114 lb up at 28-11-4, 153 lb down and 114 lb up at 30-11-4, 153 lb down and 114 lb up at 32-11-4, 153 lb down and 114 lb up at 34-11-4, 153 lb down and 114 lb up at 36-11-4, and 153 lb down and 114 lb up at 38-11-4, and 406 lb down and 333 lb up at 40-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-54, 3-11=-54, 11-13=-54, 2-12=-20

Concentrated Loads (lb)

Vert: 3=-18(B) 5=-54(B) 11=-97(B) 22=-413(B) 17=-140(B) 14=-368(B) 9=-21(B) 27=-18(B) 28=-18(B) 29=-18(B) 30=-54(B) 31=-54(B) 32=-54(B) 33=-21(B) 34=-21(B) 35=-21(B) 36=-21(B) 37=-21(B) 38=-21(B) 39=-21(B) 40=-21(B) 41=-158(B) 42=-158(B) 43=-158(B) 44=-20(B) 45=-20(B) 46=-20(B) 47=-140(B) 48=-140(B) 49=-140(B) 50=-140(B) 51=-140(B) 52=-140(B) 53=-140(B) 54=-140(B)

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Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723948
2400113	T10	Hip	1	1	Job Reference (optional)	

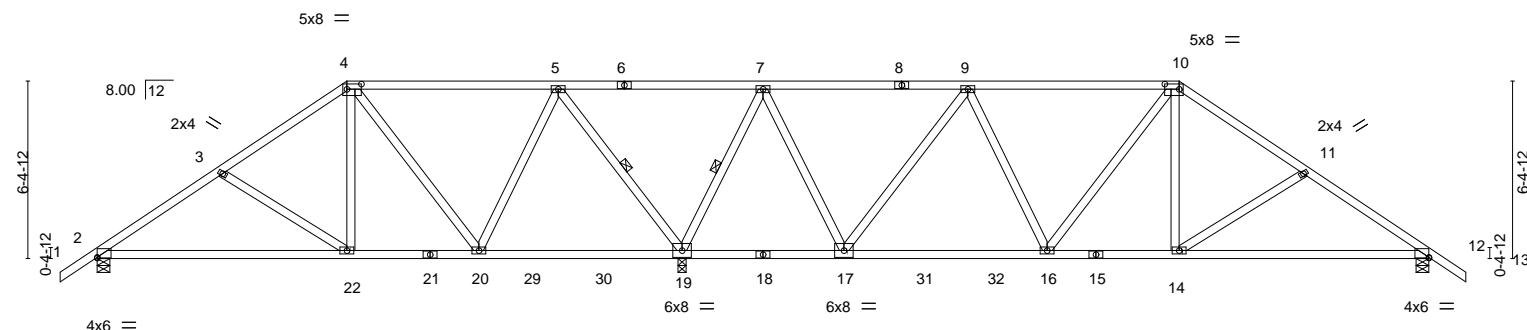
Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jul 14 11:05:47 2020 Page 1

ID:NbwV4Rh7aYlrRccynQMDwyzCbb-lvnz\_rP31kVil\_feYPPNftgoL6qlvW\_NryjRR6yyAAY

1-4-0	4-6-4	9-0-0	16-7-6	24-0-0	31-4-9	39-0-0	43-5-12	48-0-0	49-4-0
1-4-0	4-6-4	4-5-12	7-7-7	7-4-10	7-4-10	7-7-7	4-5-12	4-6-4	1-4-0

Scale = 1:83.0



	9-0-0	13-9-2	21-1-0	26-11-0	34-2-14	39-0-0	48-0-0
	9-0-0	4-9-2	7-3-14	5-10-0	7-3-14	4-9-2	9-0-0

Plate Offsets (X,Y)-- [2:0-0-0,0-0-5], [4:0-6-4,0-2-4], [10:0-6-4,0-2-4], [12:Edge,0-0-5]

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 0.73	Vert(LL)	-0.15 14-28	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.66	Vert(CT)	-0.32 14-28	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.88	Horz(CT)	0.03 12	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS					Weight: 269 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-1-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 5-19, 7-19

#### REACTIONS.

(size) 2=0-5-8, 19=0-3-8, 12=0-5-8  
Max Horz 2=-215(LC 10)  
Max Uplift 2=-321(LC 12), 19=-858(LC 9), 12=-441(LC 13)  
Max Grav 2=654(LC 23), 19=2167(LC 1), 12=911(LC 24)

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

TOP CHORD 2-3=-748/400, 3-4=-537/318, 5-7=-273/767, 9-10=-721/486, 10-11=-992/531,  
11-12=-1200/612  
BOT CHORD 2-22=-360/650, 20-22=-179/445, 19-20=-241/314, 17-19=-331/282, 16-17=-234/640,  
14-16=-184/772, 12-14=-390/974  
WEBS 3-22=-355/256, 4-22=-96/360, 4-20=-437/205, 5-20=-142/494, 5-19=-1103/576,  
7-19=-1261/657, 7-17=-335/842, 9-17=-779/426, 9-16=-9/282, 10-14=-94/355,  
11-14=-350/253

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 3x6 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) except (jt=lb) 2=321, 19=858, 12=441.



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

July 14,2020

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6904 Parke East Blvd.  
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723949
2400113	T11	Hip	1	1		

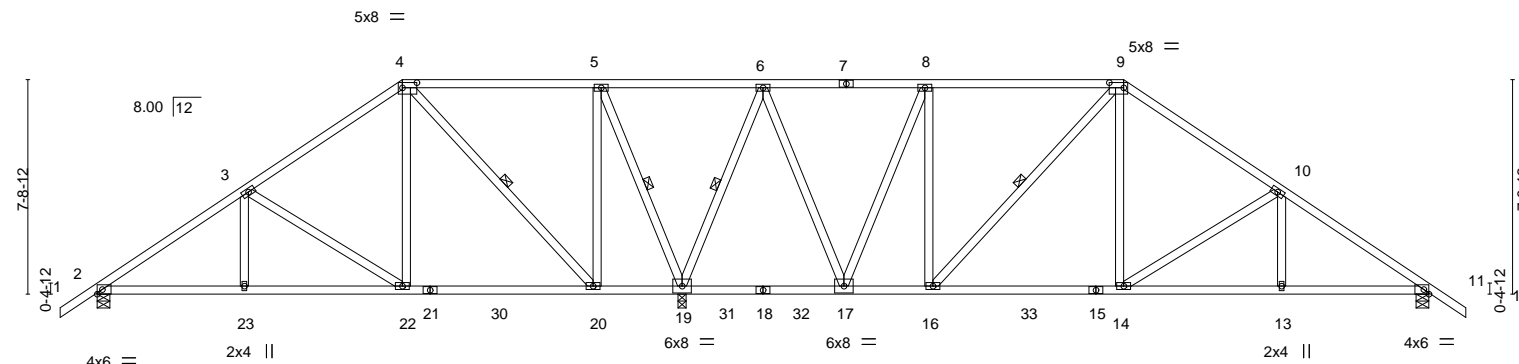
Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jul 14 11:05:49 2020 Page 1

ID:NbwV4Rh7aYlRlccynQMDWyzCbh-hVjPXRJYLIP\_lo1fqssLIIBJvZONPEglGCYW\_yyAAW

1-4-0	5-3-11	11-0-0	18-0-4	24-0-0	29-11-12	37-0-0	42-8-5	48-0-0	49-4-0
1-4-0	5-3-11	5-8-5	7-0-4	5-11-12	5-11-12	7-0-4	5-8-5	5-3-11	1-4-0

Scale = 1:83.0



5-3-11	11-0-0	18-0-4	21-1-0	26-11-0	29-11-12	37-0-0	42-8-5	48-0-0
5-3-11	5-8-5	7-0-4	3-0-12	5-10-0	3-0-12	7-0-4	5-8-5	5-3-11

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.57	Vert(LL)	-0.08 14-16	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.45	Vert(CT)	-0.16 14-16	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.96	Horz(CT)	0.04 11	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS						
								Weight: 301 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-0-4 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 4-20, 5-19, 6-19, 9-16

#### REACTIONS.

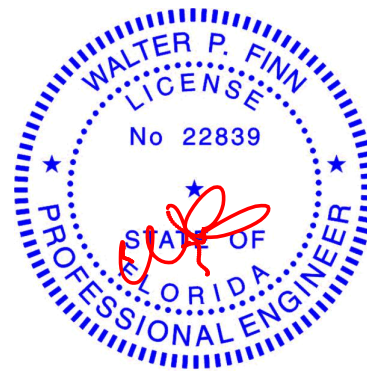
(size) 2=0-5-8, 19=0-3-8, 11=0-5-8  
Max Horz 2=-257(LC 10)  
Max Uplift 2=-318(LC 12), 19=-770(LC 9), 11=-445(LC 13)  
Max Grav 2=676(LC 23), 19=2139(LC 1), 11=928(LC 24)

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

TOP CHORD 2-3=-832/373, 3-4=-456/279, 5-6=-156/583, 6-8=-219/277, 8-9=-489/418,  
9-10=-904/506, 10-11=-1273/596  
BOT CHORD 2-23=-356/754, 22-23=-356/754, 20-22=-164/429, 19-20=-334/351, 17-19=-329/284,  
16-17=-161/489, 14-16=-128/682, 13-14=-367/1006, 11-13=-367/1006  
WEBS 3-22=-519/318, 4-22=-126/460, 4-20=-675/290, 5-20=-176/603, 5-19=-1040/506,  
6-19=-1157/588, 6-17=-349/848, 8-17=-770/382, 8-16=-60/391, 9-16=-372/124,  
9-14=-124/457, 10-14=-512/315

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 3x6 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) except (jt=lb) 2=318, 19=770, 11=445.



Walter P. Finn PE No.22839  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

July 14,2020

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6904 Parke East Blvd.  
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723950
2400113	T12	Hip	1	1		
Job Reference (optional)						

Builders FirstSource, Jacksonville, FL - 32244,

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ID:NbwV4Rh7aYlrRlcynQMDWyzCbh-5sbs1ZTCrG7\_rIXbLyPZYwNiz7Y2aoC6\_EQC6JyyAAT

-1-4-0	6-4-10	13-0-0	18-1-15	24-0-0	29-10-1	35-0-0	41-7-6	48-0-0	49-4-0
1-4-0	6-4-10	6-7-6	5-1-15	5-10-1	5-10-1	5-1-15	6-7-6	6-4-10	1-4-0

Scale = 1:84.5

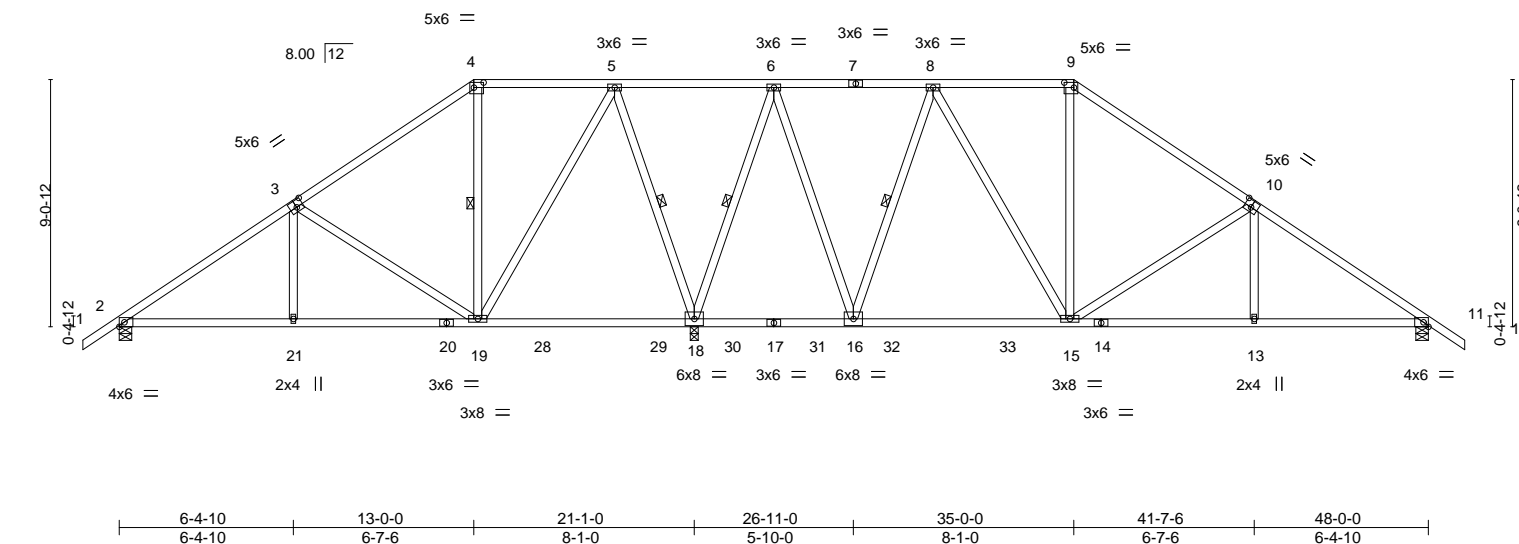


Plate Offsets (X,Y)--		[3:0-3-0,0-3-0], [4:0-4-4,0-2-4], [9:0-4-4,0-2-4], [10:0-3-0,0-3-0]
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0
TCLL 20.0	Plate Grip DOL	1.25
TCDL 7.0	Lumber DOL	1.25
BCLL 0.0 *	Rep Stress Incr	YES
BCDL 10.0	Code FBC2017/TPI2014	
<b>CSI.</b>	<b>DEFL.</b>	in (loc) l/defl L/d
TC 0.48	Vert(LL)	-0.16 15-16 >999 240
BC 0.58	Vert(CT)	-0.26 15-16 >999 180
WB 0.75	Horz(CT)	0.03 11 n/a n/a
Matrix-MS		
<b>PLATES</b>	<b>GRIP</b>	
MT20	244/190	
Weight: 299 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 4-10-7 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 4-19, 5-18, 6-18, 8-16

#### REACTIONS.

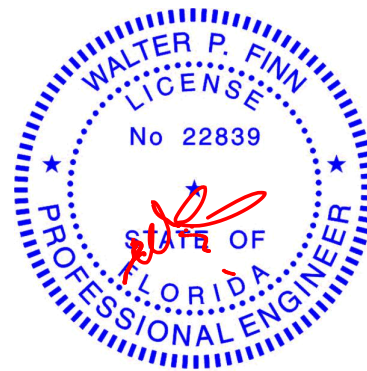
(size) 2=0-5-8, 18=0-3-8, 11=0-5-8  
Max Horz 2=-298(LC 10)  
Max Uplift 2=-313(LC 12), 18=-733(LC 12), 11=-453(LC 13)  
Max Grav 2=675(LC 23), 18=2175(LC 2), 11=927(LC 24)

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

TOP CHORD 2-3=-797/350, 3-4=-340/246, 4-5=-292/280, 5-6=-86/518, 6-8=-221/311, 8-9=-591/487,  
9-10=-791/487, 10-11=-1240/595  
BOT CHORD 2-21=-346/704, 19-21=-346/702, 18-19=-385/348, 16-18=-349/280, 15-16=-124/383,  
13-15=-349/967, 11-13=-349/968  
WEBS 3-21=0/268, 3-19=-617/388, 5-19=-287/738, 5-18=-961/504, 6-18=-1164/579,  
6-16=-317/864, 8-16=-686/361, 8-15=-133/443, 10-15=-611/384, 10-13=0/263

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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=313, 18=733, 11=453.



Walter P. Finn PE No.22839  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

July 14,2020

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Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723951
2400113	T13	Hip	1	1		

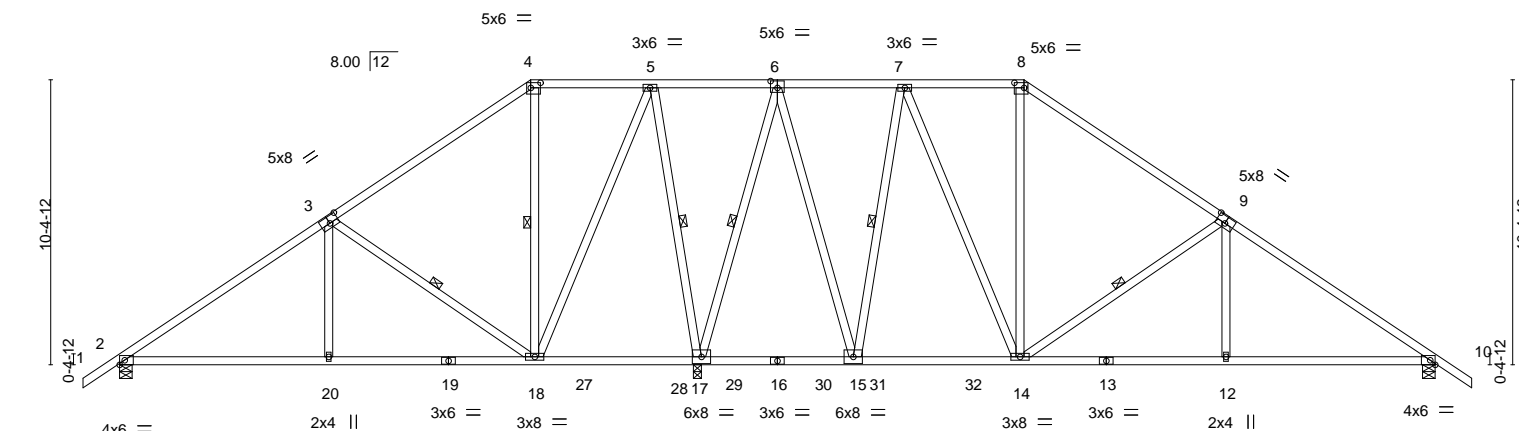
Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jul 14 11:05:54 2020 Page 1

ID:NbwV4Rh7aYlrRlccynQMDWyzCbh-2FicSEUSNtNi43h\_SNR12LT??wEY2h0PSYvJBCyyAAR

1-4-0	7-7-9	15-0-0	19-6-0	24-0-0	28-6-0	33-0-0	40-4-7	48-0-0	49-4-0
1-4-0	7-7-9	7-4-7	4-6-0	4-6-0	4-6-0	4-6-0	7-4-7	7-7-9	1-4-0

Scale = 1:84.1



	7-7-9	15-0-0	21-1-0	26-11-0	33-0-0	40-4-7	48-0-0
	7-7-9	7-4-7	6-1-0	5-10-0	6-1-0	7-4-7	7-7-9

Plate Offsets (X,Y)-- [3:0-4-0,0-3-0], [4:0-4-4,0-2-4], [6:0-3-0,0-3-0], [8:0-4-4,0-2-4], [9:0-4-0,0-3-0]

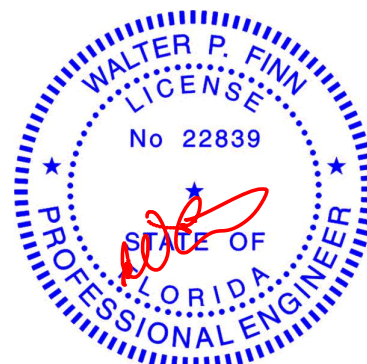
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.64	Vert(LL)	0.12 12-26	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.58	Vert(CT)	-0.18 12-26	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.79	Horz(CT)	0.03 10	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS						
								Weight: 319 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-6-11 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 3-18, 4-18, 5-17, 6-17, 7-15, 9-14

**REACTIONS.** (size) 2=0-5-8, 17=0-3-8, 10=0-5-8  
Max Horz 2=340(LC 10)  
Max Uplift 2=318(LC 12), 17=715(LC 12), 10=461(LC 13)  
Max Grav 2=713(LC 23), 17=2095(LC 1), 10=954(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-824/361, 3-4=-288/252, 4-5=-266/293, 5-6=-21/385, 6-7=-289/352, 7-8=-567/484, 8-9=-720/472, 9-10=-1249/592  
BOT CHORD 2-20=-345/729, 18-20=-344/730, 17-18=-418/367, 15-17=-309/276, 14-15=-100/313, 12-14=-325/965, 10-12=-325/963  
WEBS 3-20=0/332, 3-18=-720/447, 5-18=-344/795, 5-17=-942/495, 6-17=-1082/524, 6-15=-326/843, 7-15=-689/351, 7-14=-192/512, 9-14=-714/444, 9-12=0/328

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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=318, 17=715, 10=461.



Walter P. Finn PE No.22839  
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July 14,2020

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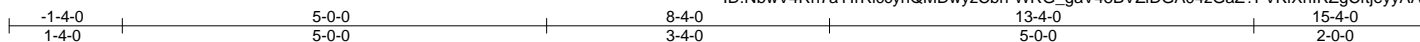


Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723952
2400113	T14	Hip Girder	1	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

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ID:NbwV4Rh7aYlRlccynQMDwyzCbh-WRG\_gaV48BVZiDGA04zGaZ?FVKfXnlRZgCftjeYAAQ



Scale = 1:27.1

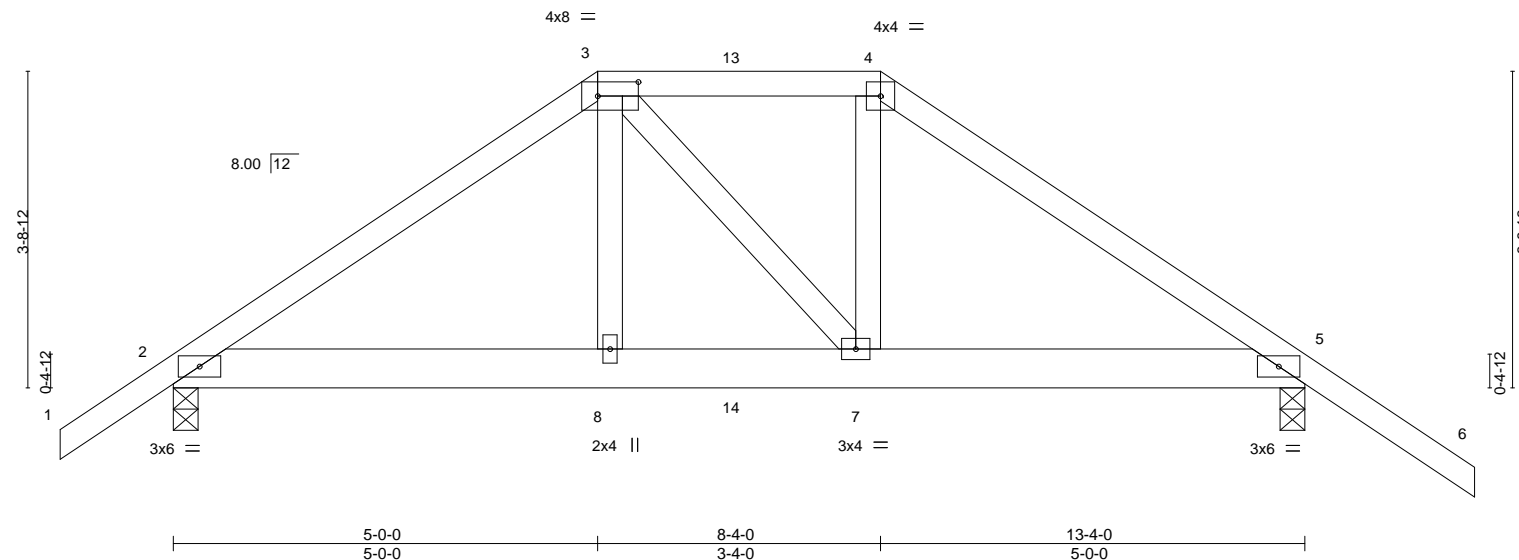


Plate Offsets (X,Y)--	[3:0-5-12,0-2-0]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.34	Vert(LL)	0.04	8	>999	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.28	Vert(CT)	-0.04	8-10	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.14	Horz(CT)	-0.01	5	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS						
								Weight: 75 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-2-13 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 8-3-0 oc bracing.

#### REACTIONS.

(size) 2=0-3-8, 5=0-3-8  
Max Horz 2=-142(LC 6)  
Max Uplift 2=-633(LC 8), 5=-654(LC 9)  
Max Grav 2=845(LC 1), 5=893(LC 1)

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

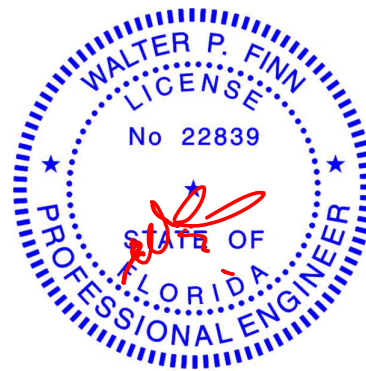
TOP CHORD 2-3=-1136/936, 3-4=-895/823, 4-5=-1132/942  
BOT CHORD 2-8=-779/895, 7-8=-792/907, 5-7=-742/882  
WEBS 3-8=-286/375, 4-7=-264/377

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=633, 5=654.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 121 lb down and 127 lb up at 5-0-0, and 121 lb down and 113 lb up at 6-8-0, and 150 lb down and 199 lb up at 8-4-0 on top chord, and 220 lb down and 252 lb up at 5-0-0, and 50 lb down and 63 lb up at 6-8-0, and 220 lb down and 252 lb up at 8-3-4 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  
Uniform Loads (plf)  
Vert: 1-3=-54, 3-4=-54, 4-6=-54, 2-5=-20  
Concentrated Loads (lb)  
Vert: 3=-60(B) 4=-70(B) 8=-171(B) 7=-171(B) 13=-60(B) 14=-39(B)



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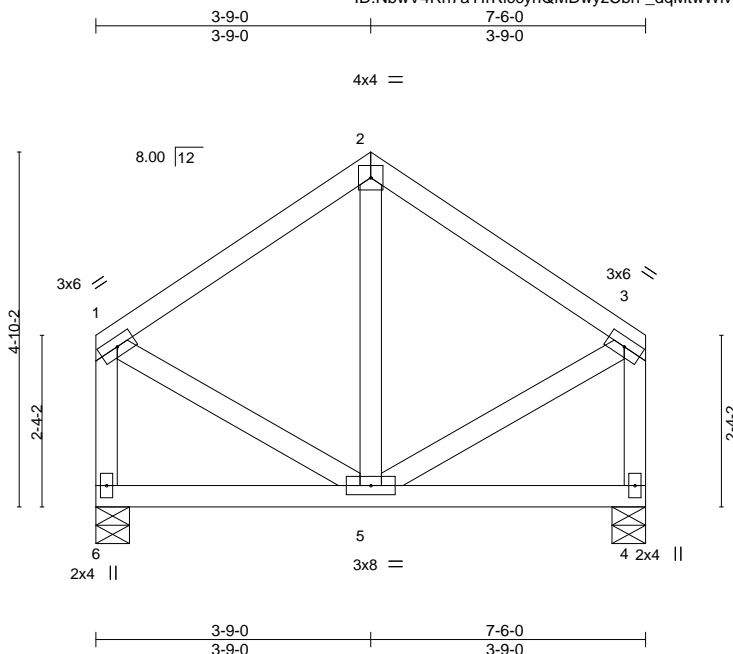


Job	Truss	Truss Type	Qty	Ply	DUTTON RES.	T20723953
2400113	T15	Common	1	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

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ID:NbwV4Rh7aYlrRlccynQMDwyZCbh-\_dqMtwWivVdQKMrNaoUV7mYTdk19WnDivsOQF4yyAAP



Scale = 1:31.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.19	Vert(LL)	0.01	5-6	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.12	Vert(CT)	-0.01	5-6	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS						Weight: 48 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.

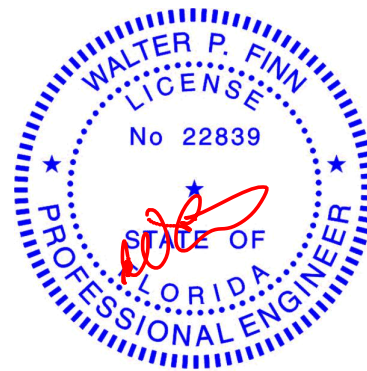
(size) 6=0-5-8, 4=0-5-8  
Max Horz 6=-75(LC 10)  
Max Uplift 6=-90(LC 13), 4=-90(LC 12)  
Max Grav 6=267(LC 1), 4=267(LC 1)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-197/252, 2-3=-197/252, 1-6=-234/278, 3-4=-234/278

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 6, 4.



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Date:

July 14,2020

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

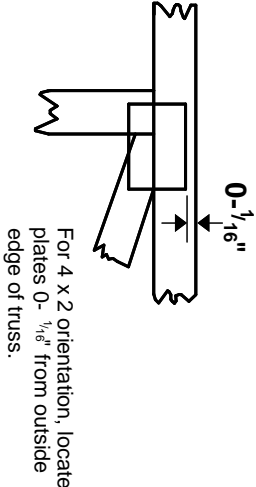
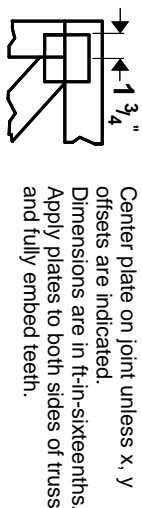
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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# Symbols

## PLATE LOCATION AND ORIENTATION



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

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

## PLATE SIZE

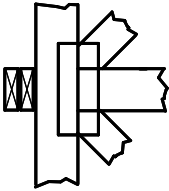
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

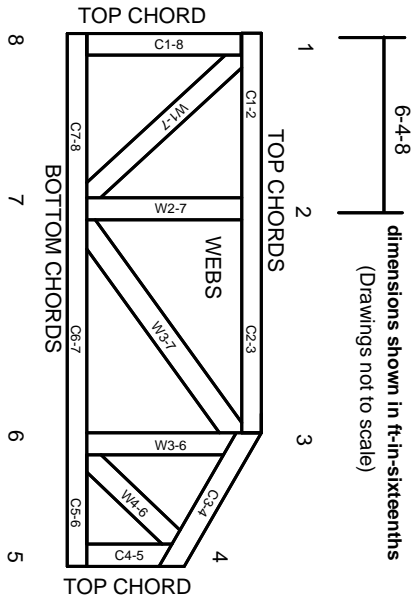
## BEARING



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

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

# Numbering System



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:  
ESR-1311, ESR-1352, ESR1988  
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

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

# General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.