



RE: 2777237 - AMIRA BLDRS. - MARRERO RES.

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

Site Information:

Customer Info: Amira Bldrs. Project Name: Marrero Res. Model: Custom

Lot/Block: 86 Subdivision: Santa Fe River Plantation

Address: N/A, N/A

City: Columbia Cty State: FL

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

Name: License #:

Address:

City: State:

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

Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.4

Wind Code: ASCE 7-16 Wind Speed: 130 mph Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 19 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. 1 2 3 4 5 6 7 8 9 10 11 2 13 14 15 6	Seal# T23853421 T23853423 T23853424 T23853425 T23853426 T23853428 T23853429 T23853430 T23853431 T23853433 T23853434 T23853434 T23853434 T23853434	Truss Name EJ01 PB01 PB01G T01 T01G T02 T02G T03 T04 T05 T05G T06 T07 T07G T08	Date 5/7/21 5/7/21 5/7/21 5/7/21 5/7/21 5/7/21 5/7/21 5/7/21 5/7/21 5/7/21 5/7/21 5/7/21 5/7/21 5/7/21 5/7/21 5/7/21 5/7/21
14	T23853434	T07G	5/7/21



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

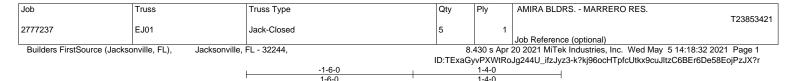
Truss Design Engineer's Name: ORegan, Philip

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

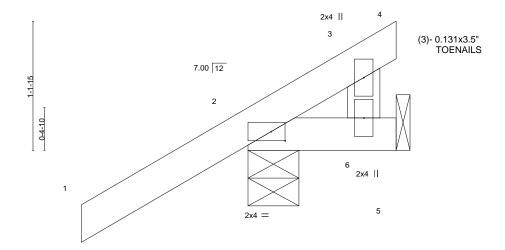
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes),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



6904 Parke East Blvd. Tampa FL 33610







1-4-0
1-4-0

except end verticals.

Plate Off	fsets (X,Y)	[2:0-1-8,0-1-0]										
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.ó	Plate Grip DOL	1.25	TC	0.15	Vert(LL)	0.00	` ģ	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	ВС	0.04	Vert(CT)	0.00	9	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code FBC2020/T	PI2014	Matri	x-MP						Weight: 8 lb	FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

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

WEBS 2x4 SP No.3

REACTIONS. (size) 2=0-5-8, 5=Mechanical

Max Horz 2=52(LC 12)

Max Uplift 2=-61(LC 12), 5=-7(LC 1) Max Grav 2=175(LC 1), 5=24(LC 3)

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

### NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 61 lb uplift at joint 2 and 7 lb uplift at joint 5.



Structural wood sheathing directly applied or 1-4-0 oc purlins,

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

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



Job Truss Truss Type Qty AMIRA BLDRS. - MARRERO RES. T23853422 2777237 PB01 Piggyback 19 Job Reference (optional) Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 5 14:18:32 2021 Page 1 ID:TExaGyvPXWtRoJg244U\_ifzJyz3-k?kj96ocHTpfcUtkx9cuJlt?q6BHr6?e58EojPzJX?r 2-9-0 2-9-0 Scale: 1"=1 4x4 = 3 7.00 12 2 5 0-4-5 0-1-10 0-1-10 6 2x4 || 2x4 =2x4 = LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI **PLATES** GRIP (loc) L/d 20.0 Plate Grip DOL 1.25 TC Vert(LL) 0.00 120 244/190 **TCLL** 0.05 n/r MT20 **TCDL** 7.0 Lumber DOL 1.25 ВС 0.04 Vert(CT) 0.00 5 n/r 120 **BCLL** 0.0 Rep Stress Incr YES WB 0.01 Horz(CT) 0.00 n/a n/a BCDL 10.0 Code FBC2020/TPI2014 Matrix-P Weight: 16 lb FT = 20%

> **BRACING-**TOP CHORD

BOT CHORD

LUMBER-

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

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

REACTIONS.

(size) 2=3-9-11, 4=3-9-11, 6=3-9-11 Max Horz 2=-31(LC 10)

Max Uplift 2=-36(LC 12), 4=-40(LC 13), 6=-9(LC 12) Max Grav 2=106(LC 1), 4=106(LC 1), 6=129(LC 1)

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

### NOTES-

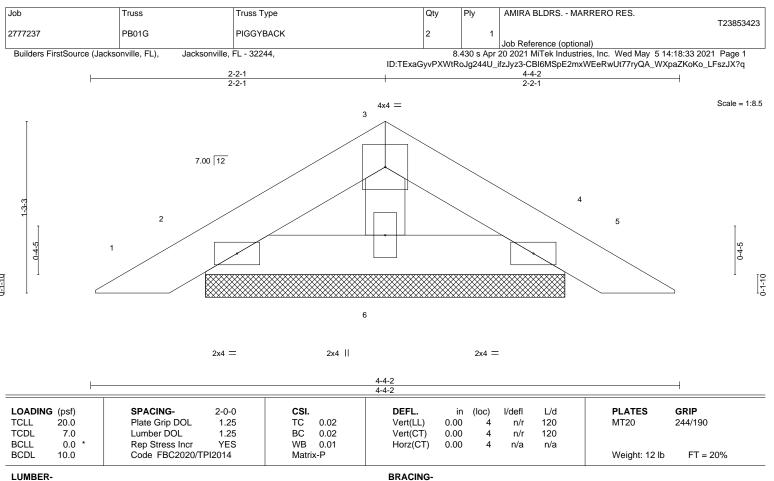
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2, 40 lb uplift at joint 4 and 9 lb uplift at joint 6.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building



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

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





TOP CHORD

BOT CHORD

TOP CHORD

2x4 SP No.2 2x4 SP No.2

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

REACTIONS.

(size) 2=2-7-13, 4=2-7-13, 6=2-7-13

Max Horz 2=-24(LC 10)

Max Uplift 2=-30(LC 12), 4=-33(LC 13), 6=-4(LC 12)

Max Grav 2=85(LC 1), 4=85(LC 1), 6=85(LC 1)

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

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 2, 33 lb uplift at joint 4 and 4 lb uplift at joint 6.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building



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

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



Job Truss Truss Type Qty AMIRA BLDRS - MARRERO RES T23853424 2777237 T01 Common 2 Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 5 14:18:35 2021 Page 1 Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, ID:TExaGyvPXWtRoJg244U\_ifzJyz3-8aPsn8rUaOBDTxbJcH9bwNVQoK4s2OL4n6TSKkzJX?o 23-6-0 16-6-0 22-0-0

5-6-0

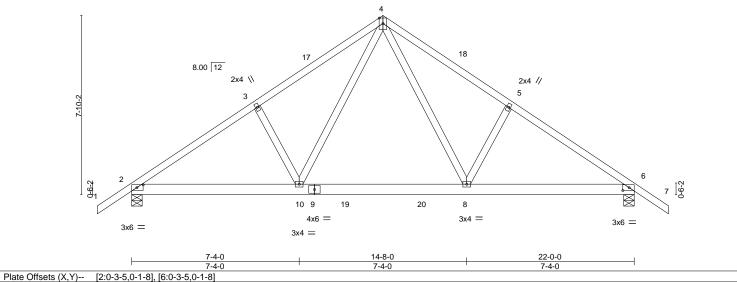
5-6-0

5-6-0 Scale = 1:50.4 4x6 |

Structural wood sheathing directly applied or 4-3-13 oc purlins.

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

1-6-0



SPACING-LOADING (psf) 2-0-0 CSI. DEFL. in (loc) I/defI L/d **PLATES** GRIP TCLL 20.0 Plate Grip DOL 1.25 TC 0.39 Vert(LL) -0.10 8-10 >999 240 MT20 244/190 TCDL 7.0 Lumber DOL 1.25 ВС 0.56 Vert(CT) -0.18 8-10 >999 180 **BCLL** 0.0 Rep Stress Incr NO WB 0.30 Horz(CT) 0.02 6 n/a n/a Code FBC2020/TPI2014 FT = 20% **BCDL** 10.0 Matrix-MS Weight: 132 lb

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

> (size) 2=0-5-8, 6=0-5-8 Max Horz 2=-184(LC 10)

1-6-0

5-6-0

Max Uplift 2=-253(LC 12), 6=-253(LC 13) Max Grav 2=1224(LC 19), 6=1224(LC 20)

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

TOP CHORD 2-3=-1703/341, 3-4=-1613/390, 4-5=-1613/390, 5-6=-1703/341

**BOT CHORD**  $2-10=-305/1485,\ 8-10=-114/975,\ 6-8=-202/1370$ 

WFBS 4-8=-228/873, 5-8=-273/200, 4-10=-227/873, 3-10=-273/200

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 11-0-0, Exterior(2R) 11-0-0 to 14-0-0, Interior(1) 14-0-0 to 23-6-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 253 lb uplift at joint 2 and 253 lb uplift at
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

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

Vert: 1-4=-54, 4-7=-54, 10-11=-20, 8-10=-80(F=-60), 8-14=-20



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May 7,2021



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chorembers 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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply AMIRA BLDRS - MARRERO RES T23853425 2777237 T01G Common Supported Gable Job Reference (optional) Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 5 14:18:38 2021 Page 1 ID:TExaGyvPXWtRoJg244U\_ifzJyz3-Z95?PAtNsJZoKPKuHQiJY07?0XC7FoGXT4h6w3zJX?I 23-6-0 22-0-0 1-6-0 11-0-0 11-0-0 1-6-0



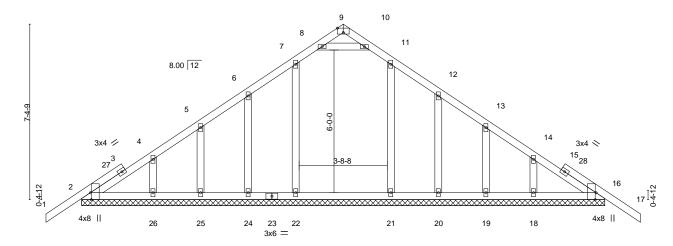


Plate Offsets (X,Y)--[2:0-3-8,Edge], [9:0-3-0,Edge], [16:0-3-8,Edge] LOADING (psf) SPACING-CSI. DEFL. in (loc) I/defI L/d **PLATES** GRIP 1.25 TCLL 20.0 Plate Grip DOL TC 0.13 Vert(LL) -0.00 17 120 MT20 244/190 n/r 7.0 Lumber DOL 1.25 ВС 0.14 Vert(CT) -0.01 17 n/r 120

22-0-0

TCDL **BCLL** 0.0 Rep Stress Incr YES WB 0.09 Horz(CT) 0.01 16 n/a n/a Code FBC2020/TPI2014 FT = 20% **BCDL** 10.0 Weight: 128 lb Matrix-S LUMBER-**BRACING-**

TOP CHORD 2x4 SP No.2 **BOT CHORD** 2x4 SP No.2 **WEBS** 2x4 SP No.3 **OTHERS** 2x4 SP No.3 TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

REACTIONS. All bearings 22-0-0.

Max Horz 2=-176(LC 10) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 22, 24, 25, 26, 21, 20, 19, 18

All reactions 250 lb or less at joint(s) 2, 16, 24, 25, 26, 20, 19, 18 except 22=310(LC 19), 21=286(LC Max Grav

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

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-6-0 to 1-6-0, Exterior(2N) 1-6-0 to 11-0-0, Corner(3R) 11-0-0 to 14-0-0, Exterior(2N) 14-0-0 to 23-6-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 16, 22, 24, 25, 26, 21, 20, 19, 18.



6904 Parke East Blvd. Tampa FL 33610 Date:



Job Truss Truss Type Qty AMIRA BLDRS. - MARRERO RES. T23853426 2777237 T<sub>02</sub> Roof Special Job Reference (optional) Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 5 14:18:40 2021 Page 1 ID:TExaGyvPXWtRoJg244U\_ifzJyz3-VYDlqrudOwpWajUGPrlndRCE8Ll7jakpxOAD?yzJX?j 26-4-9 31-0-0 32-6-0 1-6-0 16-3-0 21-11-8 5-6-0 5-6-0 5-3-0 5-8-8 4-5-1 4-7-7

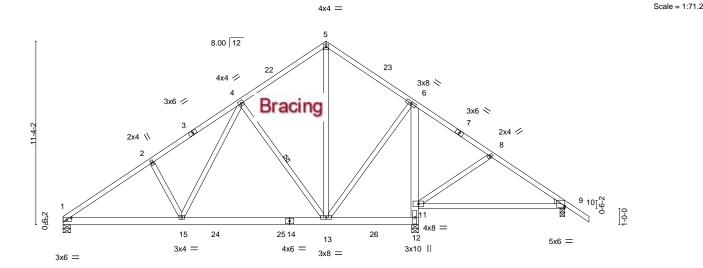


Plate Off	sets (X,Y)	[1:0-3-5,0-1-8], [9:0-0-0,0-0-15	5]								
LOADIN	G (psf)	SPACING- 2-	0-0	CSI.		DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1	.25	TC	0.60	Vert(LL)	0.29 11-21	>382	240	MT20	244/190
TCDL	7.0	Lumber DOL 1	.25	BC	0.74	Vert(CT)	-0.37 11-21	>301	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.61	Horz(CT)	0.02 12	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI201	14	Matri	k-MS					Weight: 207 lb	FT = 20%

BRACING-

WEBS

TOP CHORD

**BOT CHORD** 

21-11-8

31-0-0

Structural wood sheathing directly applied or 4-5-6 oc purlins.

4-13

Rigid ceiling directly applied or 5-7-0 oc bracing.

1 Row at midpt

16-3-0

LUMBER-

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

9-11: 2x4 SP No.2

2x4 SP No.3 WEBS WEDGE

Right: 2x4 SP No.3

REACTIONS. (size) 1=0-5-8, 12=0-5-0, 9=0-3-8

Max Horz 1=-244(LC 10)

Max Uplift 1=-222(LC 12), 12=-323(LC 12), 9=-105(LC 13) Max Grav 1=1118(LC 19), 12=1749(LC 19), 9=331(LC 26)

7-4-0

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-1692/597, 2-4=-1599/637, 4-5=-647/348, 5-6=-634/348, 6-8=-20/275 **BOT CHORD** 1-15=-425/1522, 13-15=-211/981, 11-12=-1725/786, 6-11=-1518/503 WEBS 4-15=-353/969, 4-13=-768/332, 5-13=-267/414, 6-13=-297/1122, 8-11=-286/205

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-1-3, Interior(1) 3-1-3 to 16-3-0, Exterior(2R) 16-3-0 to 19-4-3, Interior(1) 19-4-3 to 32-6-0 zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=222, 12=323, 9=105.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

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

Vert: 1-5=-54, 5-10=-54, 15-16=-20, 13-15=-80(F=-60), 12-13=-20, 11-19=-20



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

May 7,2021

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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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



Job Truss Truss Type Qty AMIRA BLDRS - MARRERO RES T23853427 2777237 T02G **GABLE** Job Reference (optional) Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 5 14:18:42 2021 Page 1 ID:TExaGyvPXWtRoJg244U\_ifzJyz3-RwKVFXwtwX3Ep0efWFnFjsleB8QiBVl6OifK3qzJX?h

5-3-0

21-11-8

5-8-8

21-11-8

1 Row at midpt

Scale = 1:71.2 4x4 =

31-0-0

Structural wood sheathing directly applied or 4-11-10 oc purlins.

6-19

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

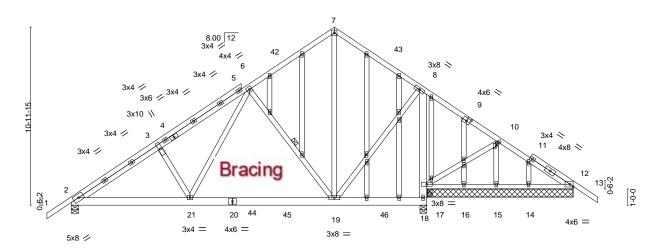
31-0-0

4-7-7

32-6-0

26-4-9

4-5-1



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Plate Off	fsets (X,Y)	[9:0-3-0,0-2-4], [10:0-2-0,	0-0-3]						
LOADIN	G (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc) I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC 0.38	Vert(LL)	0.16 19-21 >999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC 0.74	Vert(CT)	-0.24 19-21 >999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB 0.57	Horz(CT)	0.02 18 n/a	n/a		
BCDL	10.0	Code FBC2020/T	PI2014	Matrix-MS				Weight: 285 lb	FT = 20%

BRACING-

**WEBS** 

TOP CHORD

**BOT CHORD** 

16-3-0

8-11-N

LUMBER-

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

12-17: 2x4 SP No.2

2x4 SP No.3 WEBS

**OTHERS** 2x4 SP No.3

REACTIONS. All bearings 9-0-0 except (jt=length) 2=0-5-8, 18=0-5-0.

Max Horz 2=-243(LC 10) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 18, 16, 15, 14 except 2=-262(LC 12), 17=-369(LC 12),

12=-113(LC 13)

1-6-0 1-6-0

5-6-0

5-6-0

All reactions 250 lb or less at joint(s) 18, 16, 15, 14, 12 except 2=1209(LC 19), 17=1602(LC 19), Max Grav

17=1542(LC 1), 12=257(LC 24)

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

2-3=-1688/588, 3-6=-1594/618, 6-7=-667/343, 7-8=-661/349, 8-10=-53/266 TOP CHORD

7-4-0

7-/1-0

**BOT CHORD** 2-21=-415/1514, 19-21=-223/1011, 8-17=-1494/547

WFBS 6-21=-323/901, 6-19=-763/332, 7-19=-270/440, 8-19=-302/1089

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl. GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-7-3, Interior(1) 1-7-3 to 16-3-0, Exterior(2R) 16-3-0 to 19-4-3, Interior(1) 19-4-3 to 32-6-0 zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) n/a
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 16, 15, 14 except (jt=lb) 2=262, 17=369, 12=113, 12=113.
- 11) 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



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

May 7,2021

### Continued on page 2

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



Job	Truss	Truss Type	Qty	Ply	AMIRA BLDRS MARRERO RES.
		0.5.5			T23853427
2777237	T02G	GABLE	1	1	
					Job Reference (optional)

Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244,

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 5 14:18:43 2021 Page 2 ID:TExaGyvPXWtRoJg244U\_ifzJyz3-v6uuStxWhrB5RACr4zIUF3qpwYmxwy?GdMPtcHzJX?g

### LOAD CASE(S) Standard

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

Vert: 1-7=-54, 7-13=-54, 21-36=-20, 19-21=-80(F=-60), 18-19=-20, 17-39=-20

Job Truss Truss Type Qty AMIRA BLDRS - MARRERO RES T23853428 2777237 T03 Common 3 Job Reference (optional) Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 5 14:18:43 2021 Page 1 ID:TExaGyvPXWtRoJg244U\_ifzJyz3-v6uuStxWhrB5RACr4zIUF3qnGYmUw?gGdMPtcHzJX?g

16-3-0 21-11-8 5-6-0 5-6-0 5-3-0 5-8-8

> Scale = 1:67.7 4x4 =

Structural wood sheathing directly applied or 4-3-8 oc purlins,

4-8, 6-7

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

except end verticals.

1 Row at midpt

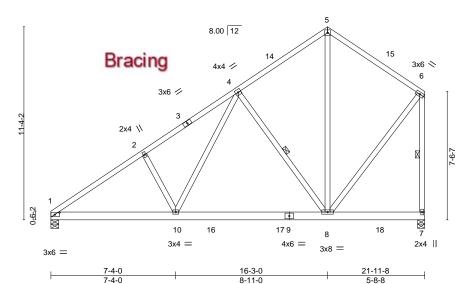


Plate Offsets (X,Y)--[1:0-3-5,0-1-8] SPACING-DEFL. LOADING (psf) 2-0-0 CSI. in (loc) I/defI L/d **PLATES** GRIP Plate Grip DOL TCLL 20.0 1.25 TC 0.48 Vert(LL) -0.14 8-10 >999 240 MT20 244/190 TCDL 7.0 Lumber DOL 1.25 ВС 0.76 Vert(CT) -0.268-10 >991 180 **BCLL** 0.0 Rep Stress Incr NO WB 0.34 Horz(CT) 0.02 n/a n/a Code FBC2020/TPI2014 FT = 20% **BCDL** 10.0 Matrix-MS Weight: 160 lb

BRACING-

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

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

WEBS 2x4 SP No.3

REACTIONS. (size) 1=0-5-8, 7=0-5-0 Max Horz 1=300(LC 12)

Max Uplift 1=-210(LC 12), 7=-289(LC 12) Max Grav 1=1189(LC 19), 7=1274(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 1-2=-1818/331, 2-4=-1725/378, 4-5=-736/207, 5-6=-757/215, 6-7=-1241/312 TOP CHORD

**BOT CHORD** 1-10=-501/1572, 8-10=-316/1031

4-10=-229/968, 4-8=-765/315, 5-8=-121/517, 6-8=-217/961 WFBS

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 16-3-0, Exterior(2R) 16-3-0 to 19-3-0, Interior(1) 19-3-0 to 21-9-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

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

Vert: 1-5=-54, 5-6=-54, 10-11=-20, 8-10=-80(F=-60), 7-8=-20



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



Job Truss Truss Type Qty AMIRA BLDRS - MARRERO RES T23853429 2777237 T<sub>04</sub> Common Job Reference (optional) Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 5 14:18:44 2021 Page 1 ID:TExaGyvPXWtRoJg244U\_ifzJyz3-NJSGgDy8S9Jy2Kn1egpjoHNyOy6lfSsPs08R8jzJX?f

21-10-0 16-3-0 5-6-0 5-6-0 5-3-0 5-7-0

> Scale = 1:67.7 4x4 =

Structural wood sheathing directly applied or 4-3-11 oc purlins,

4-8, 6-7

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

except end verticals.

1 Row at midpt

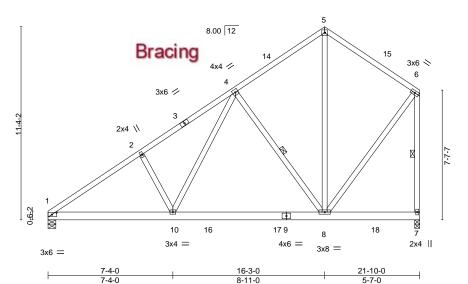


Plate Offsets (X,Y)--[1:0-3-5,0-1-8] SPACING-DEFL. LOADING (psf) 2-0-0 CSI. in (loc) I/defI L/d **PLATES** GRIP Plate Grip DOL TCLL 20.0 1.25 TC 0.46 Vert(LL) -0.14 8-10 >999 240 MT20 244/190 TCDL 7.0 Lumber DOL 1.25 ВС 0.76 Vert(CT) -0.268-10 >989 180 **BCLL** 0.0 Rep Stress Incr NO WB 0.34 Horz(CT) 0.02 n/a n/a Code FBC2020/TPI2014 FT = 20% **BCDL** 10.0 Matrix-MS Weight: 160 lb

BRACING-

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

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

WEBS 2x4 SP No.3

REACTIONS. (size) 1=0-5-8, 7=0-3-8 Max Horz 1=302(LC 12)

Max Uplift 1=-208(LC 12), 7=-290(LC 12) Max Grav 1=1183(LC 19), 7=1271(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 1-2=-1806/327, 2-4=-1713/374, 4-5=-724/204, 5-6=-742/212, 6-7=-1243/313 TOP CHORD

**BOT CHORD** 1-10=-499/1561, 8-10=-315/1020

4-10=-228/969, 4-8=-766/315, 5-8=-118/505, 6-8=-220/964 WFBS

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl. GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 16-3-0, Exterior(2R) 16-3-0 to 19-3-0, Interior(1) 19-3-0 to 21-8-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

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

Vert: 1-5=-54, 5-6=-54, 10-11=-20, 8-10=-80(F=-60), 7-8=-20

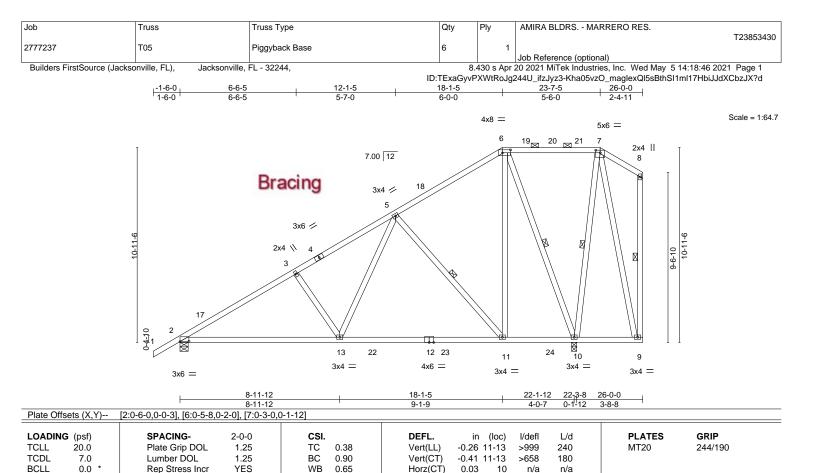


Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

May 7,2021







BRACING-

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

**BCDL** 

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

10.0

REACTIONS. (size) 2=0-5-8, 10=0-3-8 Max Horz 2=364(LC 12)

Max Uplift 2=-178(LC 12), 10=-297(LC 12) Max Grav 2=1032(LC 19), 10=1251(LC 2)

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

Code FBC2020/TPI2014

TOP CHORD 2-3=-1384/199, 3-5=-1246/212, 5-6=-412/87 **BOT CHORD** 2-13=-433/1253, 11-13=-276/788, 10-11=-96/322

WFBS 3-13=-317/195, 5-13=-124/721, 5-11=-731/279, 6-11=-160/874, 6-10=-999/279,

7-10=-306/109

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 18-1-5, Exterior(2R) 18-1-5 to 22-4-3, Interior(1) 22-4-3 to 23-7-5, Exterior(2E) 23-7-5 to 25-10-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-MS

- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=178, 10=297.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 7,2021

FT = 20%

Weight: 193 lb

Structural wood sheathing directly applied or 4-6-9 oc purlins,

except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 6-7.

5-11, 6-10, 7-10, 8-9

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

1 Row at midpt



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





ID:TExaGyvPXWtRoJg244U\_ifzJyz3-ou8OIF\_0l4iWvnWcJpNQPv?Xn9ITst8rYzN5l2zJX?c 23-0-6 25-0-0 26-0-0

Scale = 1:65.4

<del>-1-6-0</del> <del>1-6-0</del> 18-8-4 4-4-2 1-11-10 1-0-0 4x6 = 4x4 =

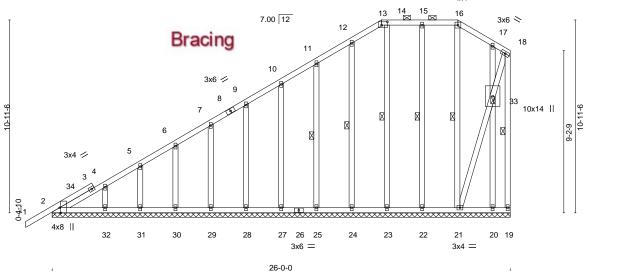


Plate Offsets (X,Y)	[2:0-3-8,Eage], [13:0-4-0,0-2-4]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.13	Vert(LL) 0.00 1 n/r 120	MT20 244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.06	Vert(CT) -0.00 1 n/r 120	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.12	Horz(CT) -0.00 19 n/a n/a	
BCDL 10.0	Code FBC2020/TPI2014	Matrix-S		Weight: 239 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 except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 13-16. **WEBS** 2x4 SP No.3 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. **OTHERS** 2x4 SP No.3 **WEBS** 18-19, 11-25, 12-24, 14-23, 15-22, 16-21 1 Row at midpt **JOINTS** 1 Brace at Jt(s): 33

REACTIONS. All bearings 26-0-0.

Max Horz 2=358(LC 12) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 19, 2, 27, 28, 29, 30, 31, 32, 25, 24, 23, 22, 21, 20 Max Grav All reactions 250 lb or less at joint(s) 19, 2, 27, 28, 29, 30, 31, 32, 25, 24, 23, 22, 21, 20

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

TOP CHORD 2-4=-333/182, 4-5=-295/150

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-6-0 to 1-6-0, Exterior(2N) 1-6-0 to 18-8-4, Corner(3R) 18-8-4 to 21-8-4, Exterior(2N) 21-8-4 to 23-0-6, Corner(3E) 23-0-6 to 25-10-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) \* 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.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 2, 27, 28, 29, 30, 31, 32, 25, 24, 23, 22, 21, 20,
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

Job Truss Truss Type Qty AMIRA BLDRS. - MARRERO RES. T23853432 2777237 T06 Piggyback Base Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 5 14:18:49 2021 Page 1 Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, ID:TExaGyvPXWtRoJg244U\_ifzJyz3-kGF9jw?GHhyE95g?QEPuVK4orzmuKcn8?HsCpwzJX?a

5-9-0

18-1-5

4-5-5

26-0-0

Structural wood sheathing directly applied or 5-11-15 oc purlins,

5-9, 6-9, 7-8

except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 5-6.

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

2-2-0 oc bracing: 2-13

6-0-0 oc bracing: 8-9.

1 Row at midpt

Scale = 1:66.4

2-4-11

23-7-5

5-6-0

5x8 = 5x6 = 5 20 21 22 2x4 || 7.00 12 2x4 || Bracing 5x8 / 7x10 🥢 9 0-4-10 12 13 5x12 9 23 2x4 || 11 10 8 3x4 =3x4 2x4 || 4x4 = 3v4 =

22<sub>1</sub>3-8 0-1-12 7-11-0 18-1-5 22-1-12 26-0-0 5-5-8 Plate Offsets (X,Y)-- [2:0-0-11.0-4-0], [3:0-3-0.Edge], [5:0-6-0.0-2-4], [6:0-3-0.0-1-12]

riate enests (rij r j	[2:0 0 ::;0 : 0]; [0:0 0 0;2 ugo]; [0:0 0 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 0.48	Vert(LL) -0.20 2-13 >999 240	MT20 244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.96	Vert(CT) -0.34 2-13 >781 180	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.81	Horz(CT) 0.21 9 n/a n/a	
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS		Weight: 227 lb FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

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

1-3: 2x6 SP M 26 2x4 SP No.2 \*Except\*

1-6-0

2-5-8

5-5-8

**BOT CHORD** 2-14,2-12: 2x6 SP No.2, 4-11: 2x4 SP No.3

WEBS 2x4 SP No.3

REACTIONS. (size) 1=0-5-8, 9=0-3-8

Max Horz 1=337(LC 12)

Max Uplift 1=-140(LC 12), 9=-297(LC 12) Max Grav 1=926(LC 19), 9=1209(LC 2)

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

TOP CHORD 2-18=-573/0, 2-3=-1602/313, 3-4=-840/168, 4-5=-845/281

**BOT CHORD** 2-14=-86/253, 2-13=-528/1490, 12-13=-531/1509, 4-12=-276/191, 9-10=-97/288 **WEBS** 3-13=-33/411, 3-12=-938/328, 5-12=-368/1019, 5-9=-894/285, 6-9=-301/112

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 18-1-5, Exterior(2R) 18-1-5 to 22-4-3, Interior(1) 22-4-3 to 23-7-5, Exterior(2E) 23-7-5 to 25-10-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=140, 9=297.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

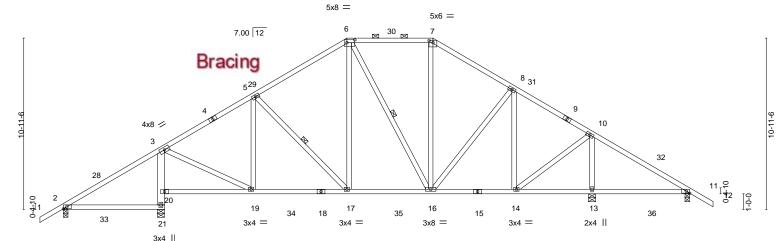


Job Truss Truss Type Qty AMIRA BLDRS. - MARRERO RES. T23853433 2777237 T07 Piggyback Base Job Reference (optional) Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 5 14:18:50 2021 Page 1

ID:TExaGyvPXWtRoJg244U\_ifzJyz3-CTpXwG0v2?45mFFB\_xw71Xd\_MNES3AkIExblLNzJX?Z

28-9-8 40-0-0 41-6-0 1-6-0 23-7-5 33-9-4 1-6-0 1-6-0 6-5-8 5-8-2 5-11-11 5-6-0 5-2-4 4-11-12 6-2-12

Scale = 1:73.6



'
GRIP
244/190
60 lb FT = 20%
5

LUMBER-BRACING-

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

3-21: 2x6 SP No.2

WEBS 2x4 SP No.3

TOP CHORD Structural wood sheathing directly applied or 5-6-1 oc purlins, except

2-0-0 oc purlins (6-0-0 max.): 6-7.

**BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing. WEBS 1 Row at midpt 5-17, 6-16

REACTIONS. All bearings 0-3-8 except (jt=length) 21=0-5-8, 13=0-5-8.

Max Horz 2=-243(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) except 2=-118(LC 8), 21=-347(LC 12), 13=-259(LC 13),

11=-100(LC 13)

All reactions 250 lb or less at joint(s) except 2=279(LC 23), 21=1519(LC 19), 13=1451(LC 2), 11=290(LC Max Grav 24)

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

TOP CHORD 2-3=-175/258, 3-5=-1065/232, 5-6=-992/264, 6-7=-752/275, 7-8=-928/274,

8-10=-850/232

**BOT CHORD** 20-21=-1430/352, 3-20=-1338/367, 17-19=-142/933, 16-17=-92/827, 14-16=-29/681 WFBS 3-19=-151/1043, 6-17=-54/348, 8-14=-372/84, 10-14=-84/884, 10-13=-1227/274

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl. GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-6-0, Interior(1) 2-6-0 to 18-1-5, Exterior(2E) 18-1-5 to 23-7-5, Exterior(2R) 23-7-5 to 29-3-3, Interior(1) 29-3-3 to 41-6-0 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 3x6 MT20 unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 2, 347 lb uplift at joint 21, 259 lb uplift at joint 13 and 100 lb uplift at joint 11.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

May 7,2021

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

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

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty AMIRA BLDRS - MARRERO RES T23853434 2777237 T07G **GABLE** Job Reference (optional) 8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 5 14:18:53 2021 Page 1

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

3-0-4

5-8-2

5-11-11

ID:TExaGyvPXWtRoJg244U\_ifzJyz3-d2VgZl3nKwSgdizmf3UqfAFUDa6hGO4kwvqPyhzJX?W 23-0-6 28-9-8 33-9-4 40-0-0 41-6-0 4-11-1 5-9-2 4-11-12 6-2-12 1-6-0

Scale = 1:78.9

5x8 = 5x6 =7.00 12 51 8 Bracing 3x6 < 3x6 / 9 6<sup>50</sup> 3x6 / 3x6 > 10 4x6 < 4x6 // 11 3x4 ≥ 3x4 <> 6x8 🖊 12 52 49 13 14 9 21 15 19 18 16 53 20 5x8 =54 17 55 3x8 = 3x8 =

3x6 =

Į.	6-5-8	12-1-10	18-1-5	23-0-6	28-9-8	33-6-8 33 <sub>1</sub>		4
	6-5-8	5-8-2	5-11-11	4-11-1	5-9-2	4-9-0 0-2-	<u>-12 6-2-12</u>	1
Plate Offsets (X,Y)-	- [3:0-3-0,0-1-8], [7:0	-6-0,0-2-4], [8:0-3-0	0-1-12], [13:0-4-1,0-1-1	12], [16:0-3-8,0-1-	3], [22:0-2-8,0-0-4]			
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip D	OL 1.25	TC 0.45	Vert(LL	-0.18 21-22	>999 240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.96	Vert(CT	) -0.31 21-22	>999 180		
BCLL 0.0 *	Rep Stress I	ncr YES	WB 0.85	Horz(C	0.12 15	n/a n/a		
BCDL 10.0	Code FBC2	020/TPI2014	Matrix-MS				Weight: 323 lb	FT = 20%

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-BRACING-

3x4

3x6 =

3x4 =

2x4 SP No.2 TOP CHORD

3x6 =

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

4-23: 2x4 SP No.3

2x4 SP No.3 WEBS

**OTHERS** 2x4 SP No.3

(size) 2=0-5-8, 13=0-3-8, 15=0-5-8

Max Horz 2=-243(LC 10)

Max Uplift 2=-289(LC 12), 13=-250(LC 25), 15=-345(LC 13) Max Grav 2=1415(LC 19), 13=74(LC 12), 15=2189(LC 2)

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

TOP CHORD 2-3=-2246/439, 3-4=-2887/593, 4-6=-1996/416, 6-7=-1313/322, 7-8=-888/267,

8-9=-1093/265, 9-11=-750/189, 11-13=-208/1006

23

5x6 =

**BOT CHORD** 2-23=-495/2074, 22-23=-280/1310, 4-22=-100/662, 21-22=-604/2715, 19-21=-332/1803,

18-19=-124/1151, 16-18=0/592, 15-16=-795/218, 13-15=-795/218 3-23=-2179/531, 3-22=-557/2488, 4-21=-1009/301, 6-21=-87/681, 6-19=-942/299,

WFBS 7-19=-179/879, 7-18=-525/166, 8-18=-67/339, 9-18=-118/468, 9-16=-731/184,

11-16=-264/1674, 11-15=-1977/362

### NOTES-

REACTIONS.

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-6-0, Interior(1) 2-6-0 to 18-1-5, Exterior(2E) 18-1-5 to 23-0-6, Exterior(2R) 23-0-6 to 28-9-8, Interior(1) 28-9-8 to 41-6-0 zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable studs spaced at 2-0-0 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, with BCDL = 10.0psf.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 289 lb uplift at joint 2, 250 lb uplift at ioint 13 and 345 lb uplift at joint 15.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



5x8 >

Structural wood sheathing directly applied or 3-4-15 oc purlins,

6-19.7-18

2-0-0 oc purlins (5-11-11 max.): 7-8.

1 Row at midpt

Rigid ceiling directly applied or 2-2-0 oc bracing.

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

May 7,2021

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

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

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty AMIRA BLDRS. - MARRERO RES. T23853435 2777237 T08 Piggyback Base Job Reference (optional) Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 5 14:18:54 2021 Page 1 ID:TExaGyvPXWtRoJg244U\_ifzJyz3-5E32me3P5DaXFsYyDn?3CNofs\_bW?vJt9ZZzV8zJX?V

5-11-11

18-1-5

23-7-5

5-6-0

28-9-8

5-2-3

28-9-8

1 Row at midpt

33-9-4

4-11-12

33-9-4

Structural wood sheathing directly applied or 5-7-10 oc purlins,

5-16, 6-15, 7-15

2-0-0 oc purlins (6-0-0 max.): 6-7.

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

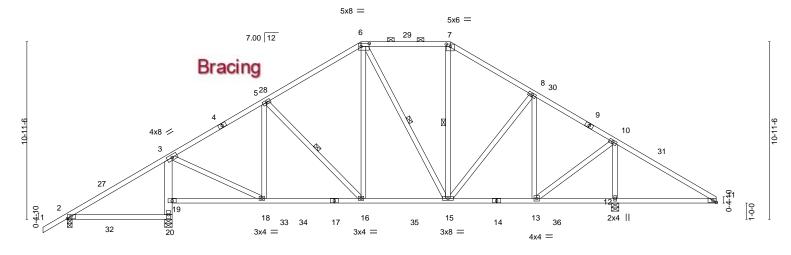
34<sub>T</sub>Q-0

Scale = 1:71.0

40-0-0

6-2-12

40-0-0



	6-2-12 0-2-12 5-8-2	5-11-11	5-6-0	5-2-3	4-11-12	0-2-12 6	-0-0		
Plate Offsets (X,Y) [6:0-6-0,0-2-4], [7:0-3-0,0-1-12], [11:0-2-8,Edge]									
LOADING (psf)	SPACING- 2-0-	CSI.	DEFL.	in (loc) I/defl	L/d	PLATES	GRIP		
TCLL 20.0	Plate Grip DOL 1.2	TC 0.46	Vert(LL) (	0.07 16-18 >999	240	MT20	244/190		
TCDL 7.0	Lumber DOL 1.2	BC 0.41	Vert(CT) -(	0.10 20-23 >768	180				
BCLL 0.0 *	Rep Stress Incr YE	WB 0.60	Horz(CT) (	0.02 12 n/a	n/a				
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS	` ′			Weight: 248	lb FT = 20%		

23-7-5

BRACING-

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

2x4 SP No.2 TOP CHORD

<del>-1-6-0</del> <del>1-6-0</del>

6-5-8

5-8-2

12-1-10

6-5-8

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

3-20: 2x6 SP No.2

6-2-12

WEBS 2x4 SP No.3

REACTIONS. (size) 2=0-3-8, 20=0-5-8, 12=0-5-8

Max Horz 2=243(LC 9)

Max Uplift 2=-95(LC 8), 20=-462(LC 9), 12=-340(LC 13) Max Grav 2=279(LC 23), 20=1392(LC 2), 12=1682(LC 2)

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

TOP CHORD 3-5=-1018/696, 5-6=-932/716, 6-7=-678/615, 7-8=-843/672, 8-10=-687/586,

10-11=-94/506

**BOT CHORD** 19-20=-1272/789, 3-19=-1180/713, 16-18=-538/822, 15-16=-467/758, 13-15=-403/538,

12-13=-384/133, 11-12=-384/133

WEBS 3-18=-652/957, 6-16=-333/334, 8-13=-493/164, 10-13=-550/1080, 10-12=-1435/686

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-6-0, Interior(1) 2-6-0 to 18-1-5, Exterior(2E) 18-1-5 to 23-7-5, Exterior(2R) 23-7-5 to 29-3-3, Interior(1) 29-3-3 to 40-0-0 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 3x6 MT20 unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 95 lb uplift at joint 2, 462 lb uplift at joint 20 and 340 lb uplift at joint 12.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

May 7,2021

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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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



Job Truss Truss Type Qty Ply AMIRA BLDRS - MARRERO RES T23853436 2777237 T09 Piggyback Base 3 Job Reference (optional) Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 5 14:18:56 2021 Page 1 ID:TExaGyvPXWtRoJg244U\_ifzJyz3-1dBoBK5fdrgFUAiLLC1XHot0xoCBToOAct23Z0zJX?T

2-4-11

23-7-5

3-1-5

28-0-0

4-4-11

31-6-8

3-6-8

33-9-4

2-2-12

33-9-4

2-0-0 oc purlins (6-0-0 max.): 6-8.

Scale = 1:78.1

41-6-0 1-6-0

40-0-0

6-2-12

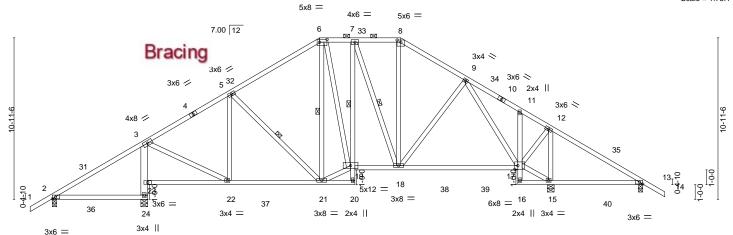
40-0-0

Structural wood sheathing directly applied or 5-8-6 oc purlins, except

5-21, 6-21, 7-18

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

7-19



	1	6-2-12 0-2-12	5-6-8	6-1-5	2-4-11 3-1-5	7-11-3	2-2-12	6-2-12	l	
Plate Offsets (	Plate Offsets (X,Y) [6:0-6-0,0-2-4], [8:0-3-0,0-1-12], [13:0-2-8,Edge], [17:0-2-8,0-3-0]									
LOADING (ps	f)	SPACING-	2-0-0	CSI.	DEFL.	in (loc) I/defl	L/d	PLATES	GRIP	
TCLL 20.	0	Plate Grip DOL	1.25	TC 0.42	Vert(LL)	-0.18 17-18 >999	240	MT20	244/190	
TCDL 7	.0	Lumber DOL	1.25	BC 0.72	Vert(CT)	-0.31 17-18 >999	180			
BCLL 0.	.0 *	Rep Stress Incr	YES	WB 0.69	Horz(CT)	0.03 15 n/a	n/a			
BCDL 10.	0	Code FBC2020/T	PI2014	Matrix-MS				Weight: 281 lb	FT = 20%	
BCDL 10.	0	Code FBC2020/T	PI2014	Matrix-MS				Weight: 281 lb	FT = 20%	

23-7-5

TOP CHORD

**BOT CHORD** 

**WEBS** 

31-6-8

1 Row at midpt

1 Row at midpt

20-6-0

LUMBER-BRACING-

12-0-0

6-5-8

5-6-8

6-1-5

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

<del>1-6-0</del>

6-5-8

3-24: 2x6 SP No.2, 7-20,11-16: 2x4 SP No.3

WEBS 2x4 SP No.3

6-2-12

REACTIONS. All bearings 0-3-8 except (jt=length) 24=0-5-8, 15=0-5-8.

Max Horz 2=-243(LC 10) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 13 except 2=-118(LC 8), 24=-345(LC 12), 15=-288(LC 13) Max Grav All reactions 250 lb or less at joint(s) 13 except 2=280(LC 23), 24=1463(LC 19), 15=1608(LC 2)

18-1-5

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

TOP CHORD 3-5=-1004/225, 5-6=-916/255, 6-7=-796/244, 7-8=-763/251, 8-9=-933/254,

9-11=-396/179, 11-12=-390/137, 12-13=-38/383

**BOT CHORD** 23-24=-1374/349, 3-23=-1287/364, 21-22=-139/886, 18-19=-94/812, 17-18=-25/659,

13-15=-268/95

3-22=-152/992, 19-21=-96/784, 6-19=-66/337, 8-18=-64/284, 9-17=-715/108,

12-17=-57/863, 12-15=-1280/236

### NOTES-

WEBS

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-6-0, Interior(1) 2-6-0 to 18-1-5, Exterior(2E) 18-1-5 to 23-7-5, Exterior(2R) 23-7-5 to 29-3-3, Interior(1) 29-3-3 to 41-6-0 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13 except (jt=lb) 2=118 24=345 15=288
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



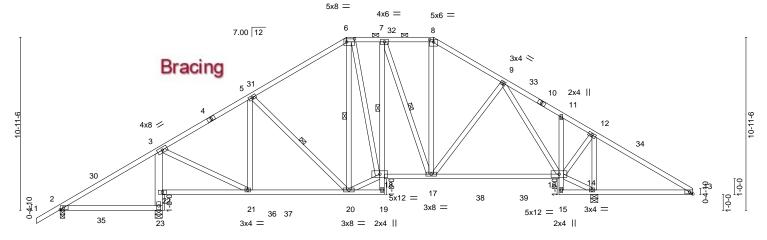
Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:



Job Truss Truss Type Qty AMIRA BLDRS. - MARRERO RES. T23853437 2777237 T10 Piggyback Base Job Reference (optional) Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 5 14:18:58 2021 Page 1

ID:TExaGyvPXWtRoJg244U\_ifzJyz3-z?IZc?6w9S4zkUskSd3?MDyLxbugxh5T4BXAevzJX?R 23-7-5 3-1-5 33-9-4 2-2-12 40-0-0 12-0-0 5-6-8 18-1-5 6-1-5 28-0-0 6-2-12 3-6-8

Scale = 1:72.8



								34-0-0				
6-2-12	9 6-5	5 <sub>7</sub> 8 12-0-0	1	18-1-5	20-6-0	23-7-5	31-6-8	33-9-4	40-0-0	1		
6-2-12	0-2-	-12 5-6-8		6-1-5	2-4-11	3-1-5	7-11-3	2-2-12	6-0-0	7		
								0-2-12				

	Take directory (1,1) [old directory 1,1]; [old dire						
LOADING (psf)	SPACING- 2-0-0	CSI.	<b>DEFL.</b> in (loc) I/defl L/d	PLATES GRIP			
TCLL 20.0	Plate Grip DOL 1.25	TC 0.45	Vert(LL) 0.21 16-17 >999 240	MT20 244/190			
TCDL 7.0	Lumber DOL 1.25	BC 0.72	Vert(CT) -0.31 16-17 >999 180				
BCLL 0.0 *	Rep Stress Incr YES	WB 0.74	Horz(CT) 0.03 14 n/a n/a				
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS		Weight: 278 lb FT = 20%			

LUMBER-BRACING-

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

3-23: 2x6 SP No.2, 7-19,11-15: 2x4 SP No.3

Plate Offsets (X Y)-- [6:0-6-0 0-2-4] [8:0-3-0 0-1-12] [13:0-2-8 Edge]

**WEBS** 2x4 SP No.3

**BOT CHORD** 

TOP CHORD

2-0-0 oc purlins (6-0-0 max.): 6-8. Rigid ceiling directly applied or 6-0-0 oc bracing. Except: 1 Row at midpt 7-18

Structural wood sheathing directly applied or 5-8-12 oc purlins,

**WEBS** 1 Row at midpt 5-20, 6-20, 7-17

REACTIONS. (size) 2=0-3-8, 23=0-5-8, 14=0-5-8

Max Horz 2=293(LC 9)

Max Uplift 2=-87(LC 13), 23=-487(LC 9), 14=-340(LC 13) Max Grav 2=295(LC 20), 23=1363(LC 2), 14=1666(LC 2)

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

3-5=-994/656, 5-6=-903/696, 6-7=-781/690, 7-8=-744/669, 8-9=-911/735,

9-11=-298/489, 11-12=-305/450, 12-13=-92/497

22-23=-1244/851, 3-22=-1155/779, 20-21=-635/804, 17-18=-549/785, 16-17=-500/626, **BOT CHORD** 

13-14=-376/131

3-21=-716/934, 18-20=-573/746, 6-18=-264/310, 8-17=-302/290, 9-16=-768/304,

14-16=-320/161, 12-16=-549/867, 12-14=-1286/726

### NOTES-

WFBS

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-6-0, Interior(1) 2-6-0 to 18-1-5, Exterior(2E) 18-1-5 to 23-7-5, Exterior(2R) 23-7-5 to 29-3-3, Interior(1) 29-3-3 to 40-0-0 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 3x6 MT20 unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 23=487, 14=340,
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

May 7,2021

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

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

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty AMIRA BLDRS. - MARRERO RES. T23853438 2777237 T11 Common 5 Job Reference (optional) Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 5 14:18:59 2021 Page 1 ID:TExaGyvPXWtRoJg244U\_ifzJyz3-RBsxpL7YwmCpLdRw0KbEvRVYc?CJgClcIrHkALzJX?Q

4x4 =

5-7-9

5-7-9

Scale = 1:65.8

34-0-0

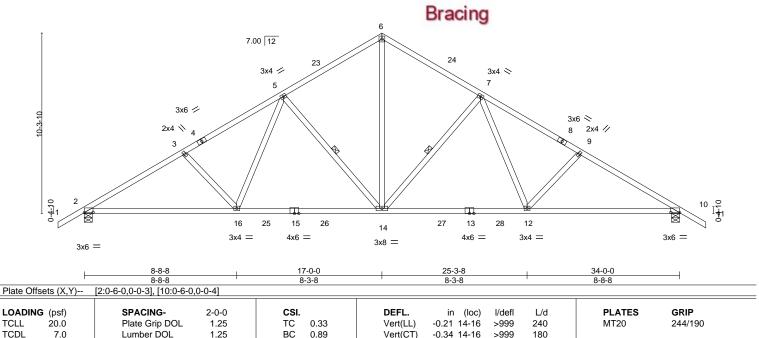
5-8-14

35-6-0

1-6-0

FT = 20%

28-3-2



LUMBER-

TCLL

**BCLL** 

**BCDL** 

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

0.0

10.0

|<del>-1-6-0</del> | 1-6-0

5-8-14

5-7-9

BRACING-

Horz(CT)

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 3-6-10 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

8-11-0 oc bracing: 2-16.

n/a

n/a

1 Row at midpt **WEBS** 

0.09

10

7-14, 5-14

Weight: 188 lb

REACTIONS. (size) 2=0-5-8, 10=0-5-8

Max Horz 2=238(LC 11)

Max Uplift 2=-288(LC 12), 10=-288(LC 13) Max Grav 2=1532(LC 19), 10=1532(LC 20)

Rep Stress Incr

Code FBC2020/TPI2014

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

2-3=-2381/426, 3-5=-2214/412, 5-6=-1525/350, 6-7=-1525/350, 7-9=-2214/412, TOP CHORD

9-10=-2382/426

BOT CHORD 2-16=-435/2187, 14-16=-277/1764, 12-14=-172/1647, 10-12=-274/2009 WEBS

6-14=-230/1222, 7-14=-672/262, 7-12=-93/601, 9-12=-299/183, 5-14=-672/262,

YES

5-16=-93/600, 3-16=-298/183

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-10-13, Interior(1) 1-10-13 to 17-0-0, Exterior(2R) 17-0-0 to 20-4-13, Interior(1) 20-4-13 to 35-6-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

WB

Matrix-MS

0.46

- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=288, 10=288.



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

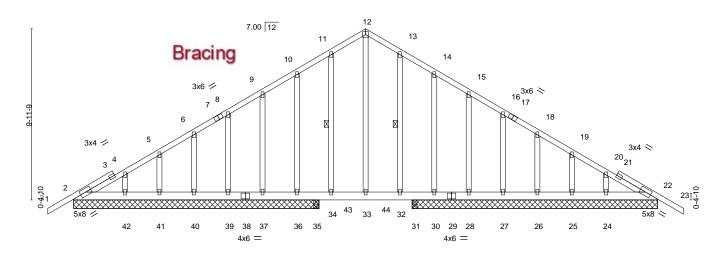


Qty Job AMIRA BI DRS - MARRERO RES Truss Truss Type T23853439 2777237 T11G Common Girder Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Fri May 7 10:32:50 2021 Page 1 ID:TExaGyvPXWtRoJg244U\_ifzJyz3-ZtN6vZQQZ7OTMvwJyuDzZdmppo?XnJ\_8bSVX2Ezlx?h Builders FirstSource, Lake City, FL 32055

<del>-1-6-0</del> <del>1-6-0</del> 17-0-0 34-0-0 35-6-0 17-0-0 17-0-0 1-6-0

4x4 =

Scale = 1:67.1



			5-9-0	ı								
LOADIN TCLL TCDL BCLL	20.0 7.0 0.0 *	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.25 1.25 NO	BC WB	0.15 0.13 0.13	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.00 -0.01 0.01	(loc) 33 33 22	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
BCDL	10.0	Code FBC2020/T	PI2014	Matrix	-S						Weight: 258 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.2 **OTHERS** 2x4 SP No.3 BRACING-

19-10-4

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. WEBS 11-34, 13-32 1 Row at midpt

34-0-0

REACTIONS. All bearings 14-3-8 except (jt=length) 31=0-3-8, 35=0-3-8.

Max Horz 2=230(LC 7) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 36, 37, 39, 40, 41, 42, 28, 27, 26, 25, 24, 35 except 30=-103(LC 9)

14-1-4

All reactions 250 lb or less at joint(s) 2, 36, 37, 39, 40, 41, 42, 30, 28, 27, 26, 25, 24, 22 except Max Grav 31=297(LC 1), 35=300(LC 1)

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 36, 37, 39, 40, 41, 42, 28, 27, 26, 25, 24, 35 except (jt=lb) 30=103.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1 lb down and 9 lb up at 15-10-12, and 1 lb down and 9 lb up at 17-0-0, and 1 lb down and 9 lb up at 18-1-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

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

Vert: 1-12=-54, 12-23=-54, 2-22=-20



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May 7,2021

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\*\*ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

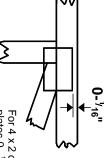


## Symbols

# PLATE LOCATION AND ORIENTATION



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



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

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

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

### PLATE SIZE

4 × 4

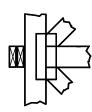
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

### **BEARING**



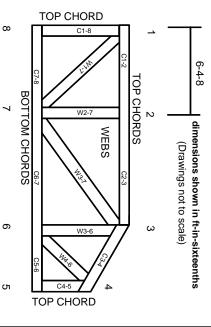
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

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

ANSI/TPI1: DSB-89:

# **Numbering System**



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988 ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

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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

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.

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

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

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- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- 20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.