



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

RE: 3182083 - HOUSECRAFT - MIRANDA RES.

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

**Site Information:**

Customer Info: HOUSECRAFT HOMES Project Name: Miranda Res. Model: Custom  
Lot/Block: N/A Subdivision: N/A  
Address: TBD, TBD  
City: Gilchrist Cty State: FL

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

Name: License #:  
Address:  
City: State:

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

Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.5  
Wind Code: ASCE 7-16 Wind Speed: 130 mph  
Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 37 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.

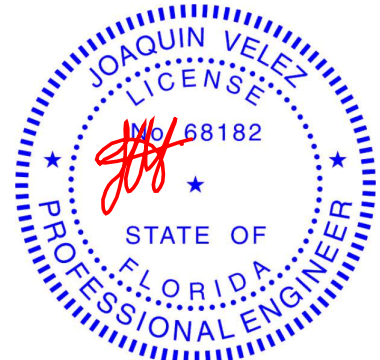
| No. | Seal#     | Truss Name | Date    | No. | Seal#     | Truss Name | Date    |
|-----|-----------|------------|---------|-----|-----------|------------|---------|
| 1   | T27761635 | CJ01       | 5/19/22 | 23  | T27761657 | T14        | 5/19/22 |
| 2   | T27761636 | CJ03       | 5/19/22 | 24  | T27761658 | T15        | 5/19/22 |
| 3   | T27761637 | CJ05       | 5/19/22 | 25  | T27761659 | T16        | 5/19/22 |
| 4   | T27761638 | CJ05A      | 5/19/22 | 26  | T27761660 | T17        | 5/19/22 |
| 5   | T27761639 | EJ01       | 5/19/22 | 27  | T27761661 | T18        | 5/19/22 |
| 6   | T27761640 | EJ02       | 5/19/22 | 28  | T27761662 | T19        | 5/19/22 |
| 7   | T27761641 | EJ03       | 5/19/22 | 29  | T27761663 | T20        | 5/19/22 |
| 8   | T27761642 | HJ05       | 5/19/22 | 30  | T27761664 | T21        | 5/19/22 |
| 9   | T27761643 | HJ07       | 5/19/22 | 31  | T27761665 | T22        | 5/19/22 |
| 10  | T27761644 | HJ10       | 5/19/22 | 32  | T27761666 | T23        | 5/19/22 |
| 11  | T27761645 | T01        | 5/19/22 | 33  | T27761667 | T24        | 5/19/22 |
| 12  | T27761646 | T02        | 5/19/22 | 34  | T27761668 | T25        | 5/19/22 |
| 13  | T27761647 | T03        | 5/19/22 | 35  | T27761669 | T26        | 5/19/22 |
| 14  | T27761648 | T04        | 5/19/22 | 36  | T27761670 | T27        | 5/19/22 |
| 15  | T27761649 | T05        | 5/19/22 | 37  | T27761671 | T28        | 5/19/22 |
| 16  | T27761650 | T06        | 5/19/22 |     |           |            |         |
| 17  | T27761651 | T07        | 5/19/22 |     |           |            |         |
| 18  | T27761652 | T08        | 5/19/22 |     |           |            |         |
| 19  | T27761653 | T09        | 5/19/22 |     |           |            |         |
| 20  | T27761654 | T10        | 5/19/22 |     |           |            |         |
| 21  | T27761655 | T11        | 5/19/22 |     |           |            |         |
| 22  | T27761656 | T12        | 5/19/22 |     |           |            |         |

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

Truss Design Engineer's Name: Velez, Joaquin

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

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



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

May 19,2022

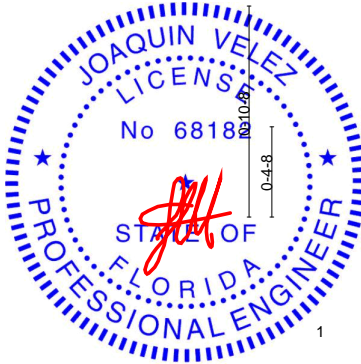
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|---------|-------|------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761635 |
| 3182083 | CJ01  | Jack-Open  | 18  | 1   | Job Reference (optional)  |           |

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:25 2022 Page 1  
ID:WbJvFHLjSlxW8vXEBdMcaYl0PE-d?X2x2ssRLgBe\_gaQgxmwl0sRT6scm7OZ1mD3BzFDzS



Scale = 1:9.5



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

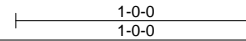
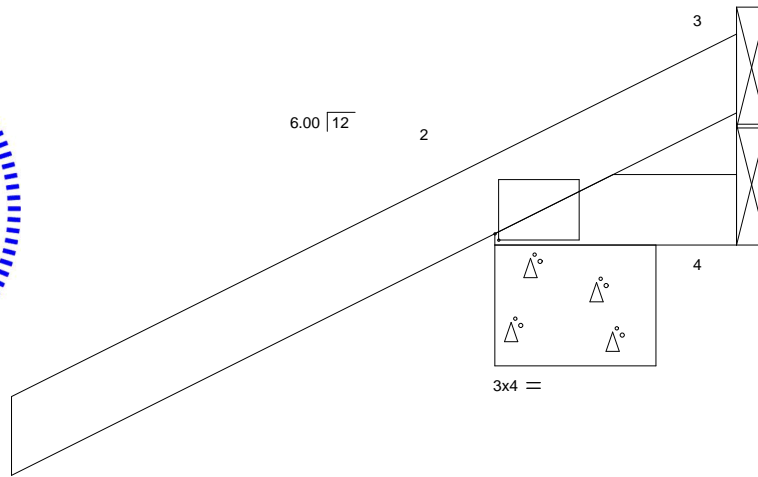


Plate Offsets (X,Y)-- [2:0-0-3,0-0-5]

| LOADING (psf) | SPACING-        |                 | CSL.      | DEFL.    | in   | (loc) | I/defl | L/d | PLATES       | GRIP     |
|---------------|-----------------|-----------------|-----------|----------|------|-------|--------|-----|--------------|----------|
| TCLL 20.0     | Plate Grip DOL  | 2-0-0           | TC 0.25   | Vert(LL) | 0.00 | 7     | >999   | 240 | MT20         | 244/190  |
| TCDL 7.0      | Lumber DOL      | 1.25            | BC 0.06   | 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            | FBC2020/TPI2014 | Matrix-MP |          |      |       |        |     | Weight: 7 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=0-8-0, 4=Mechanical  
Max Horz 2=46(LC 12)  
Max Uplift 3=-27(LC 1), 2=-102(LC 12), 4=-46(LC 1)  
Max Grav 3=16(LC 16), 2=254(LC 1), 4=29(LC 16)

**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 27 lb uplift at joint 3, 102 lb uplift at joint 2 and 46 lb uplift at joint 4.

May 19,2022

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

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

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

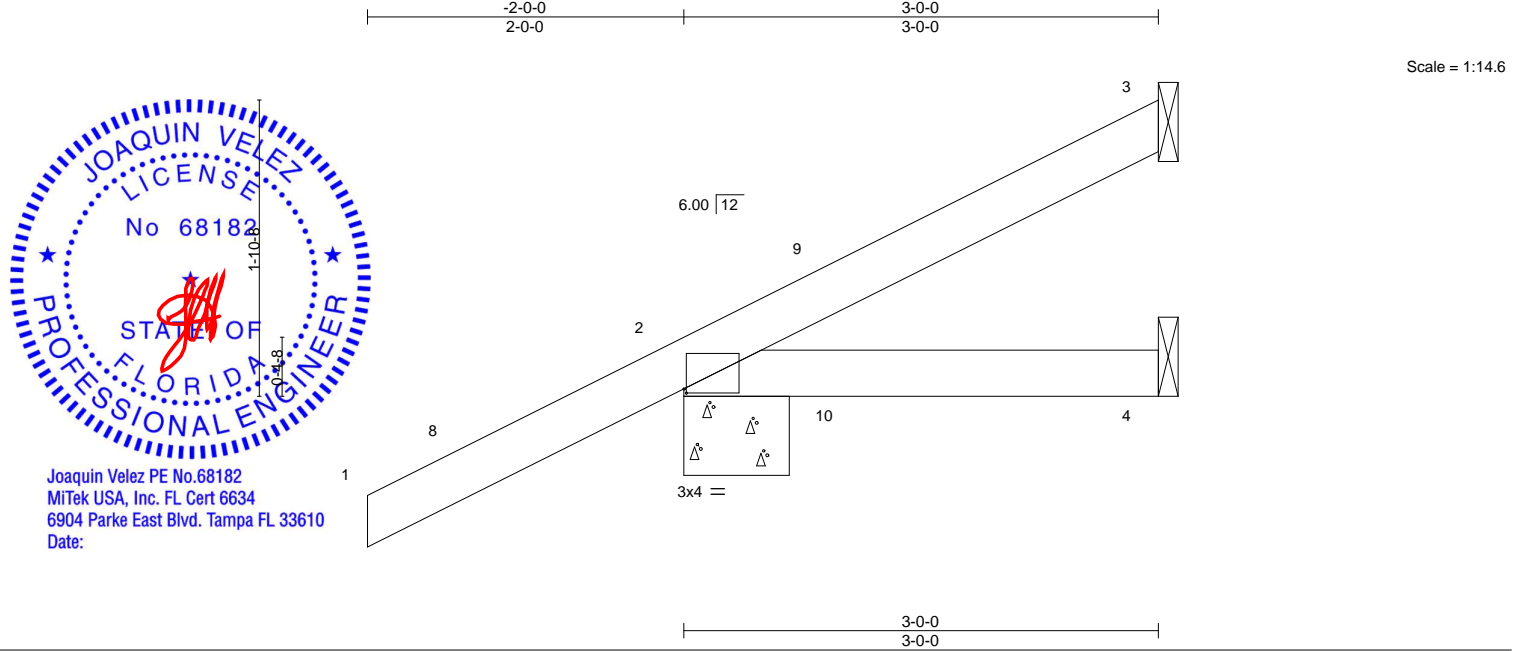


6904 Parke East Blvd.  
Tampa, FL 36610

|         |       |            |     |     |                           |           |
|---------|-------|------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761636 |
| 3182083 | CJ03  | Jack-Open  | 14  | 1   | Job Reference (optional)  |           |

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:25 2022 Page 1  
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| Plate Offsets (X,Y)-- |  | [2:0-0-3,0-0-5]      |           |                |          |        |     |               |          |
|-----------------------|--|----------------------|-----------|----------------|----------|--------|-----|---------------|----------|
| LOADING (psf)         |  | SPACING- 2-0-0       | CSL.      | DEFL.          | in (loc) | I/defl | L/d | PLATES        | GRIP     |
| TCLL 20.0             |  | Plate Grip DOL 1.25  | TC 0.25   | Vert(LL) 0.01  | 4-7      | >999   | 240 | MT20          | 244/190  |
| TCDL 7.0              |  | Lumber DOL 1.25      | BC 0.09   | Vert(CT) -0.01 | 4-7      | >999   | 180 |               |          |
| BCLL 0.0 *            |  | Rep Stress Incr YES  | WB 0.00   | Horz(CT) -0.00 | 3        | n/a    | n/a |               |          |
| BCDL 10.0             |  | Code FBC2020/TPI2014 | Matrix-MP |                |          |        |     | Weight: 13 lb | FT = 20% |

#### LUMBER-

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

#### REACTIONS.

(size) 3=Mechanical, 2=0-8-0, 4=Mechanical  
Max Horz 2=80(LC 12)  
Max Uplift 3=-31(LC 12), 2=-76(LC 12), 4=-14(LC 9)  
Max Grav 3=52(LC 1), 2=253(LC 1), 4=48(LC 3)

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

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 2-11-4 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 3, 76 lb uplift at joint 2 and 14 lb uplift at joint 4.

May 19,2022

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



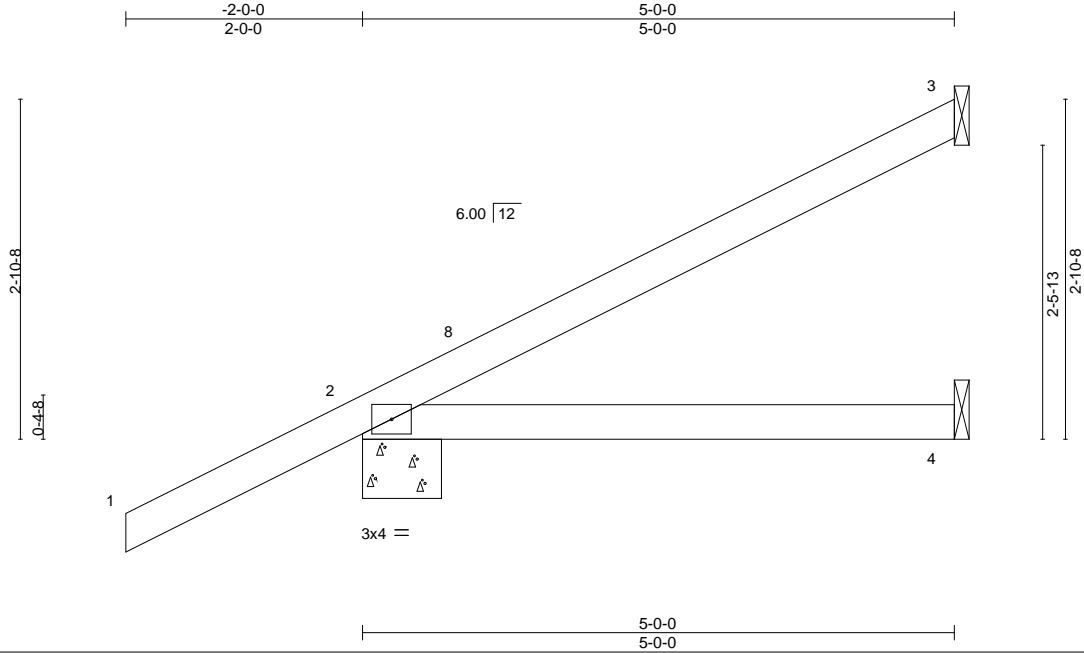
6904 Parke East Blvd.  
Tampa, FL 36610

|         |       |            |     |     |                           |
|---------|-------|------------|-----|-----|---------------------------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. |
| 3182083 | CJ05  | Jack-Open  | 9   | 1   | T27761637                 |

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:26 2022 Page 1

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| LOADING (psf) | SPACING-             | CSI.      | DEFL.    | in (loc) | L/defl | L/d  | PLATES        | GRIP     |
|---------------|----------------------|-----------|----------|----------|--------|------|---------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.26   | Vert(LL) | 0.03     | 4-7    | >999 | MT20          | 244/190  |
| TCDL 7.0      | Lumber DOL 1.25      | BC 0.23   | Vert(CT) | -0.05    | 4-7    | >999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.00   | Horz(CT) | 0.00     | 3      | n/a  |               |          |
| BCDL 10.0     | Code FBC2020/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=0-8-0, 4=Mechanical  
Max Horz 2=114(LC 12)  
Max Uplift 3=64(LC 12), 2=80(LC 12)  
Max Grav 3=108(LC 1), 2=313(LC 1), 4=87(LC 3)

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

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 4-11-4 zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 3 and 80 lb uplift at joint 2.



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

May 19,2022

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

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

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

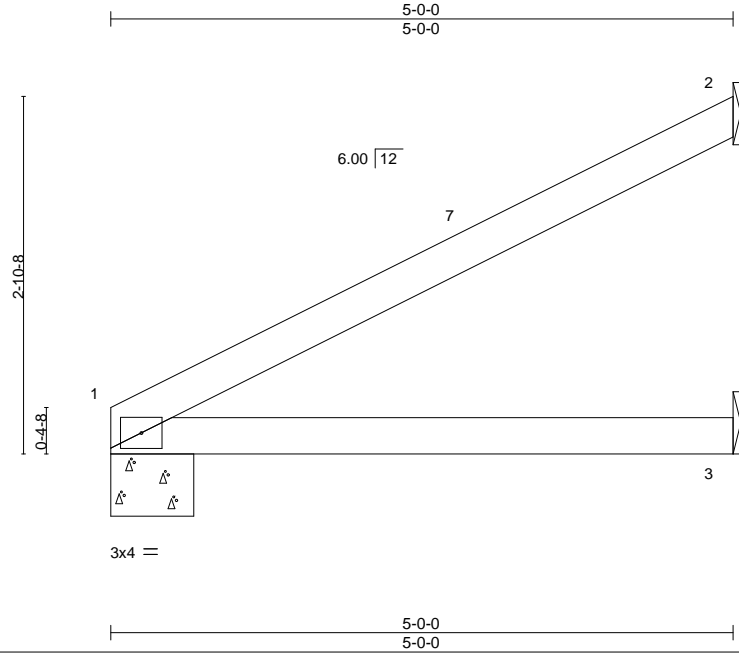


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Tampa, FL 36610

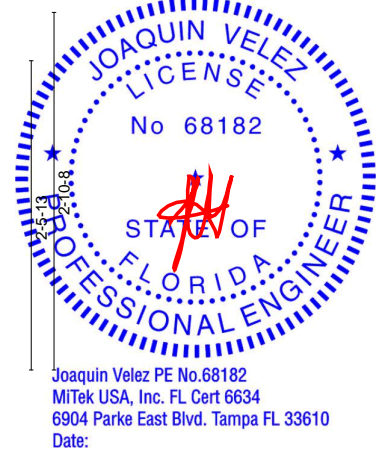
|         |       |            |     |     |                           |           |
|---------|-------|------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761638 |
| 3182083 | CJ05A | Jack-Open  | 1   | 1   | Job Reference (optional)  |           |

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:27 2022 Page 1  
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Scale = 1:18.5



| LOADING (psf) | SPACING-             | CSI.      | DEFL.          | in  | (loc) | I/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|-----------|----------------|-----|-------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL 2-0-0 | TC 0.31   | Vert(LL) 0.04  | 3-6 | >999  | 240    |     | MT20          | 244/190  |
| TCDL 7.0      | Lumber DOL 1.25      | BC 0.25   | Vert(CT) -0.06 | 3-6 | >975  | 180    |     |               |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.00   | Horz(CT) 0.00  | 1   | n/a   | n/a    |     |               |          |
| BCDL 10.0     | Code FBC2020/TPI2014 | Matrix-MP |                |     |       |        |     | Weight: 16 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) 1=0-8-0, 2=Mechanical, 3=Mechanical  
Max Horz 1=85(LC 12)  
Max Uplift 1=-27(LC 12), 2=-70(LC 12), 3=-2(LC 12)  
Max Grav 1=183(LC 1), 2=118(LC 1), 3=90(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) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 4-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 1, 70 lb uplift at joint 2 and 2 lb uplift at joint 3.

May 19,2022

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



6904 Parke East Blvd.  
Tampa, FL 36610

|         |       |              |     |     |                           |           |
|---------|-------|--------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type   | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761639 |
| 3182083 | EJ01  | Jack-Partial | 31  | 1   | Job Reference (optional)  |           |

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:28 2022 Page 1

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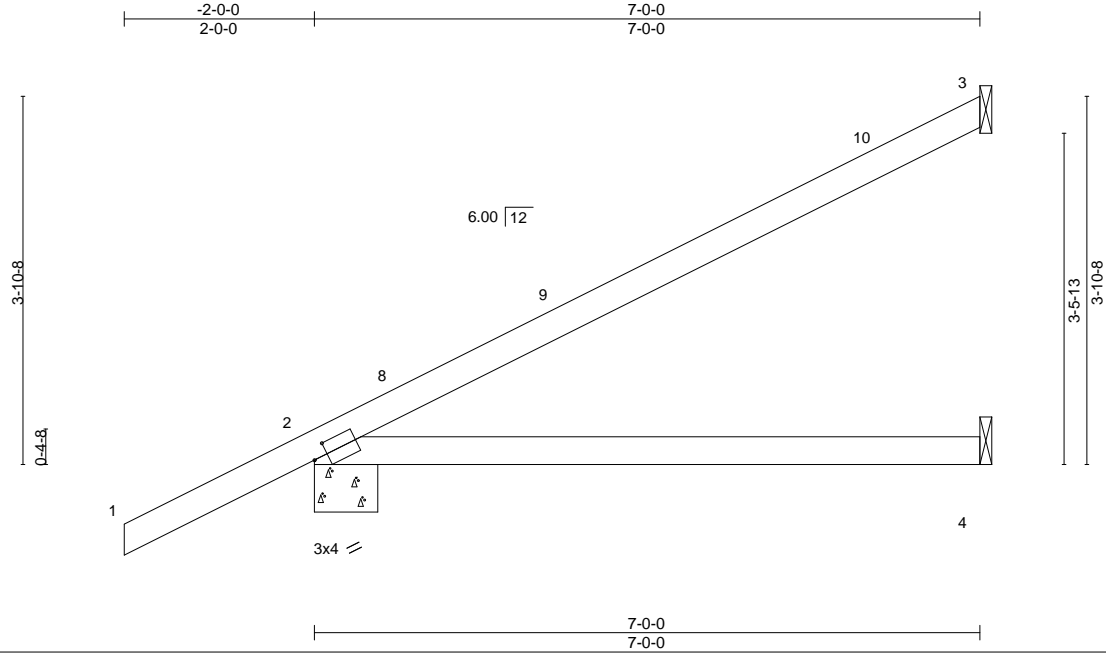


Plate Offsets (X,Y)-- [2:0-1-13,0-1-8]

| LOADING (psf) | SPACING-        |                 | CSI.      | DEFL.    | in    | (loc) | I/defl | L/d | PLATES        | GRIP     |
|---------------|-----------------|-----------------|-----------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL  | 1.25            | TC 0.60   | Vert(LL) | 0.10  | 4-7   | >876   | 240 | MT20          | 244/190  |
| TCDL 7.0      | Lumber DOL      | 1.25            | BC 0.51   | Vert(CT) | -0.21 | 4-7   | >393   | 180 |               |          |
| BCLL 0.0 *    | Rep Stress Incr | YES             | WB 0.00   | Horz(CT) | 0.01  | 2     | n/a    | n/a |               |          |
| BCDL 10.0     | Code            | FBC2020/TPI2014 | Matrix-MS |          |       |       |        |     | Weight: 26 lb | FT = 20% |

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 3=Mechanical, 2=0-8-0, 4=Mechanical  
Max Horz 2=144(LC 12)  
Max Uplift 3=84(LC 12), 2=90(LC 12)  
Max Grav 3=160(LC 1), 2=380(LC 1), 4=125(LC 3)

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

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 6-11-4 zone;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 84 lb uplift at joint 3 and 90 lb uplift at joint 2.



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

May 19,2022

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



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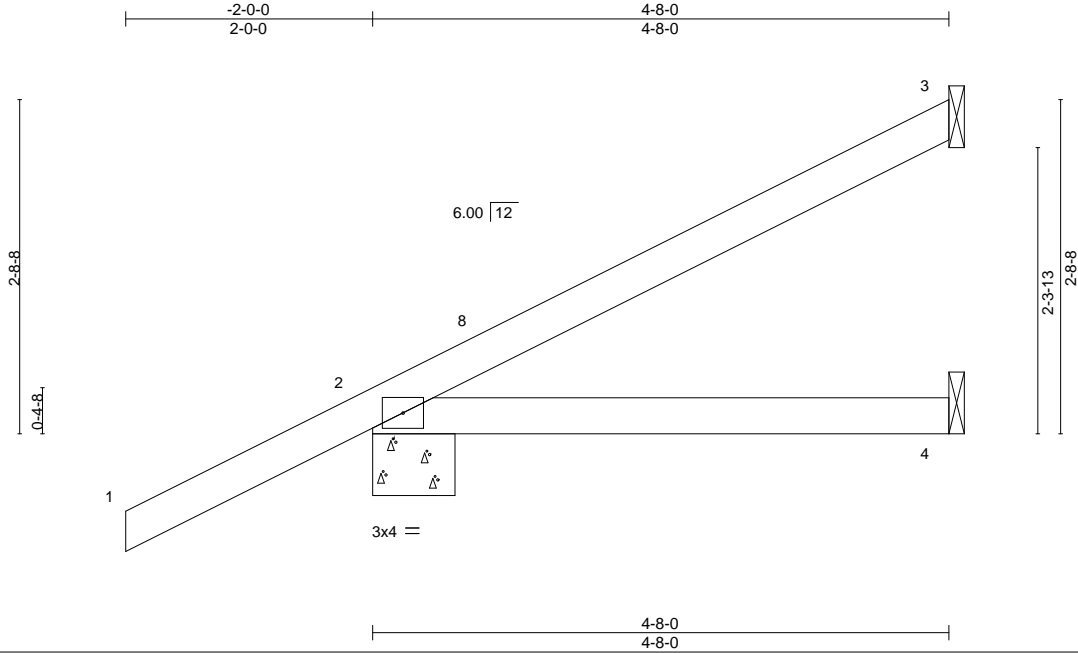


|         |       |            |     |     |                           |
|---------|-------|------------|-----|-----|---------------------------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. |
| 3182083 | EJ02  | Jack-Open  | 4   | 1   | T27761640                 |

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:29 2022 Page 1

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Scale = 1:18.7

| LOADING (psf) | SPACING-             | CSI.      | DEFL.    | in (loc) | L/defl | L/d  | PLATES        | GRIP     |
|---------------|----------------------|-----------|----------|----------|--------|------|---------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.25   | Vert(LL) | -0.02    | 4-7    | >999 | MT20          | 244/190  |
| TCDL 7.0      | Lumber DOL 1.25      | BC 0.19   | Vert(CT) | -0.04    | 4-7    | >999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.00   | Horz(CT) | 0.00     | 3      | n/a  |               |          |
| BCDL 10.0     | Code FBC2020/TPI2014 | Matrix-MP |          |          |        |      | Weight: 18 lb | FT = 20% |

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-8-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 3=Mechanical, 2=0-8-0, 4=Mechanical  
Max Horz 2=109(LC 12)  
Max Uplift 3=-59(LC 12), 2=-79(LC 12)  
Max Grav 3=99(LC 1), 2=302(LC 1), 4=80(LC 3)

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

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 4-7-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 59 lb uplift at joint 3 and 79 lb uplift at joint 2.



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Date:

May 19,2022

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

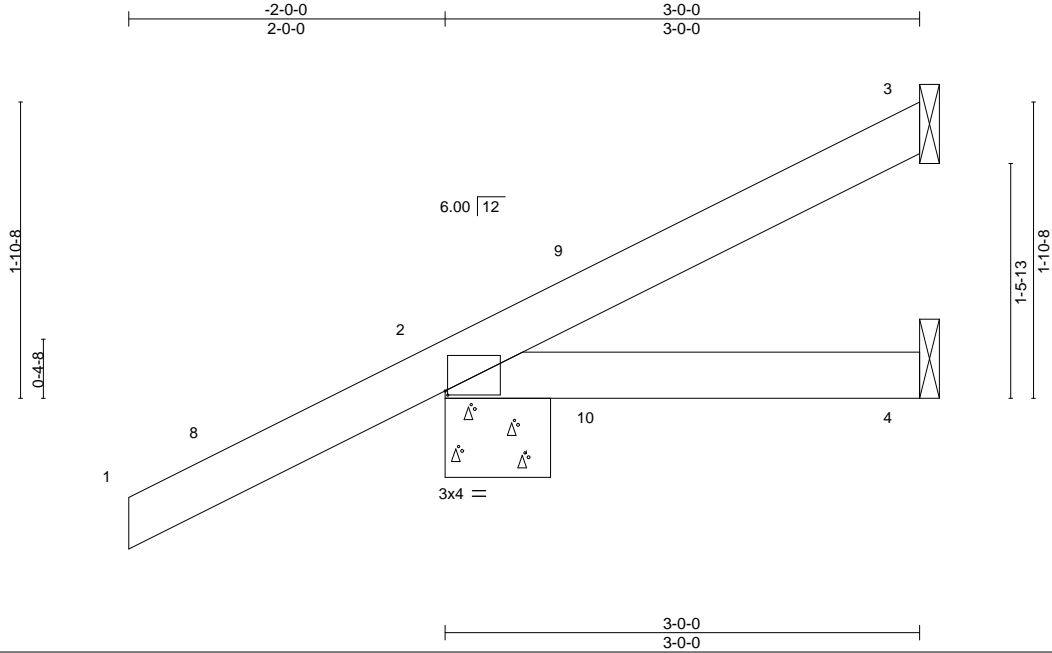


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|         |       |            |     |     |                           |           |
|---------|-------|------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761641 |
| 3182083 | EJ03  | Jack-Open  | 3   | 1   | Job Reference (optional)  |           |

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:30 2022 Page 1  
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Scale = 1:14.6

| Plate Offsets (X,Y)-- |                 | [2:0-0-3,0-0-5] |                             |
|-----------------------|-----------------|-----------------|-----------------------------|
| <b>LOADING</b> (psf)  | <b>SPACING-</b> | 2-0-0           | <b>CSI.</b>                 |
| TCLL 20.0             | Plate Grip DOL  | 1.25            | TC 0.25                     |
| TCDL 7.0              | Lumber DOL      | 1.25            | BC 0.09                     |
| BCLL 0.0 *            | Rep Stress Incr | YES             | WB 0.00                     |
| BCDL 10.0             | Code            | FBC2020/TPI2014 | Matrix-MP                   |
|                       |                 |                 | <b>DEFL.</b>                |
|                       |                 |                 | in (loc) l/defl L/d         |
|                       |                 |                 | Vert(LL) 0.01 4-7 >999 240  |
|                       |                 |                 | Vert(CT) -0.01 4-7 >999 180 |
|                       |                 |                 | Horz(CT) -0.00 3 n/a n/a    |
|                       |                 |                 | <b>PLATES</b>               |
|                       |                 |                 | MT20                        |
|                       |                 |                 | <b>GRIP</b>                 |
|                       |                 |                 | 244/190                     |
|                       |                 |                 | Weight: 13 lb FT = 20%      |

#### LUMBER-

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

#### REACTIONS.

(size) 3=Mechanical, 2=0-8-0, 4=Mechanical  
Max Horz 2=80(LC 12)  
Max Uplift 3=-31(LC 12), 2=-76(LC 12), 4=-14(LC 9)  
Max Grav 3=52(LC 1), 2=253(LC 1), 4=48(LC 3)

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

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 2-11-4 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 3, 76 lb uplift at joint 2 and 14 lb uplift at joint 4.



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

May 19,2022

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



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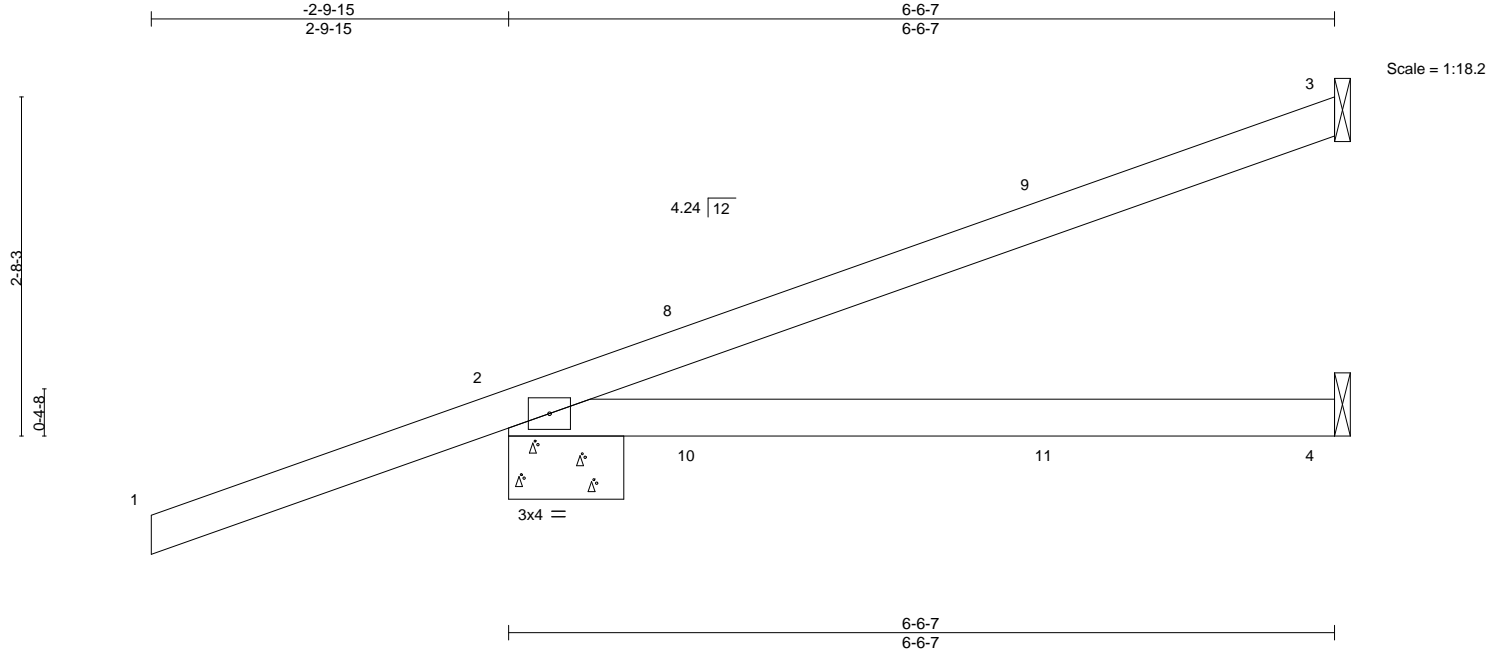


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Tampa, FL 36610

|         |       |                     |     |     |                           |           |
|---------|-------|---------------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type          | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761643 |
| 3182083 | HJ07  | Diagonal Hip Girder | 2   | 1   | Job Reference (optional)  |           |

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:33 2022 Page 1  
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| LOADING (psf) | SPACING-             |       | CSI.      | DEFL.    | in    | (loc) | I/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|-------|-----------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 2-0-0 | TC 0.56   | Vert(LL) | -0.09 | 4-7   | >870   | 240 | MT20          | 244/190  |
| TCDL 7.0      | Lumber DOL           | 1.25  | BC 0.35   | Vert(CT) | -0.12 | 4-7   | >675   | 180 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | NO    | WB 0.00   | Horz(CT) | 0.00  | 2     | n/a    | n/a |               |          |
| BCDL 10.0     | Code FBC2020/TPI2014 |       | Matrix-MP |          |       |       |        |     | Weight: 25 lb | FT = 20% |

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 3=Mechanical, 2=0-10-15, 4=Mechanical  
Max Horz 2=125(LC 4)  
Max Uplift 3=-69(LC 8), 2=-156(LC 4), 4=-16(LC 9)  
Max Grav 3=126(LC 1), 2=332(LC 1), 4=99(LC 3)

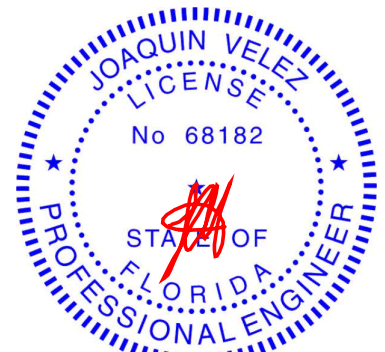
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

#### 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; 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 69 lb uplift at joint 3, 156 lb uplift at joint 2 and 16 lb uplift at joint 4.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 56 lb down and 103 lb up at 1-6-1, 56 lb down and 103 lb up at 1-6-1, and 20 lb down and 33 lb up at 4-4-0, and 20 lb down and 33 lb up at 4-4-0 on top chord, and 21 lb down and 74 lb up at 1-6-1, 21 lb down and 74 lb up at 1-6-1, and 19 lb down and 21 lb up at 4-4-0, and 19 lb down and 21 lb up at 4-4-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) 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: 1-3=-54, 4-5=-20  
Concentrated Loads (lb)  
Vert: 8=50(F=25, B=25) 10=70(F=35, B=35) 11=5(F=2, B=2)



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

May 19,2022

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



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|         |       |            |     |     |                           |           |
|---------|-------|------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761645 |
| 3182083 | T01   | Hip Girder | 1   | 1   | Job Reference (optional)  |           |

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:36 2022 Page 1  
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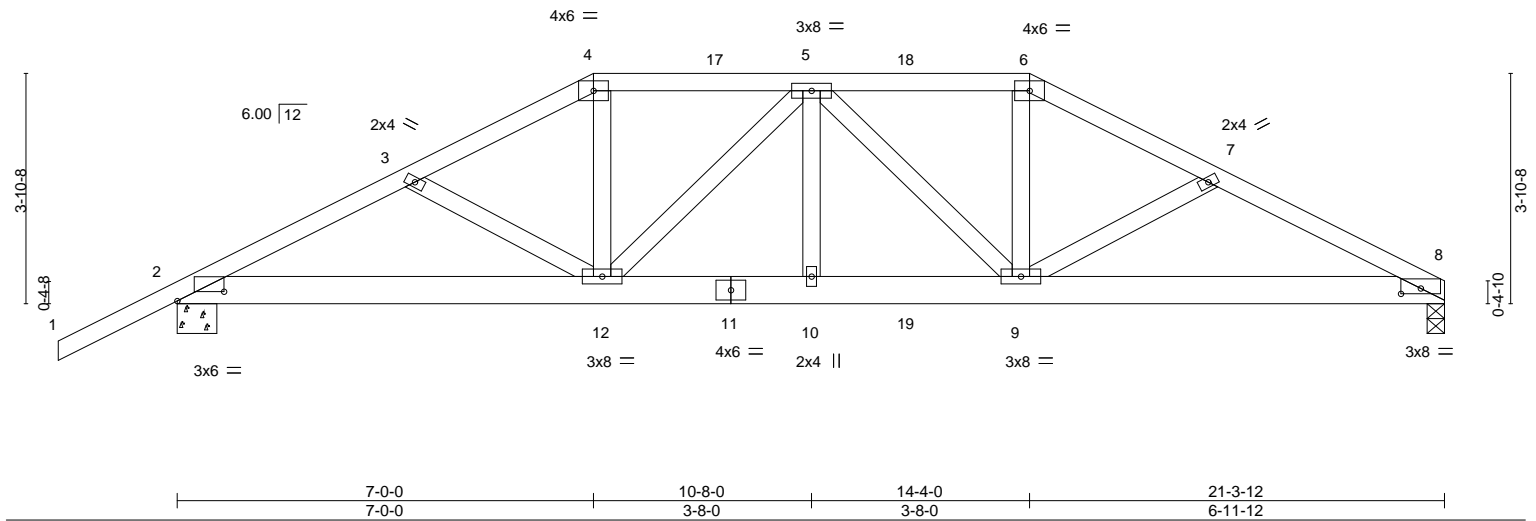


Plate Offsets (X,Y)-- [2:0-9,7,0-1-14], [8:0-4-0,0-1-1]

| LOADING (psf) | SPACING-             |      | CSL       | DEFL.    | in    | (loc) | I/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|------|-----------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.25 | TC 0.34   | Vert(LL) | -0.10 | 10    | >999   | 240 | MT20           | 244/190  |
| TCDL 7.0      | Lumber DOL           | 1.25 | BC 0.61   | Vert(CT) | -0.19 | 10    | >999   | 180 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | NO   | WB 0.34   | Horz(CT) | 0.06  | 8     | n/a    | n/a |                |          |
| BCDL 10.0     | Code FBC2020/TP12014 |      | Matrix-MS |          |       |       |        |     | Weight: 125 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 3-3-3 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 8-2-4 oc bracing.

#### REACTIONS.

(size) 8=0-3-8, 2=0-8-0  
Max Horz 2=82(LC 27)  
Max Uplift 8=448(LC 9), 2=484(LC 8)  
Max Grav 8=1490(LC 1), 2=1578(LC 1)

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

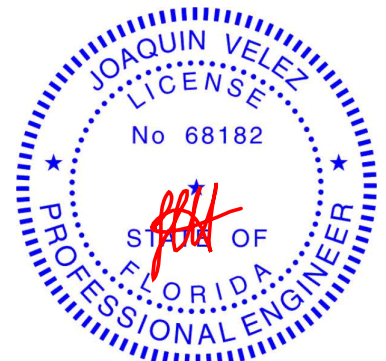
TOP CHORD 2-3=-2902/899, 3-4=-2723/850, 4-5=-2444/791, 5-6=-2509/816, 6-7=-2806/880,  
7-8=-2978/933  
BOT CHORD 2-12=-809/2563, 10-12=-818/2798, 9-10=-818/2798, 8-9=-790/2640  
WEBS 4-12=-224/891, 5-12=-552/197, 5-10=0/254, 5-9=-460/138, 6-9=-186/849

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 448 lb uplift at joint 8 and 484 lb uplift at joint 2.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 125 lb down and 88 lb up at 7-0-0, 106 lb down and 88 lb up at 9-0-12, 106 lb down and 81 lb up at 10-8-0, and 106 lb down and 88 lb up at 12-3-4, and 231 lb down and 177 lb up at 14-4-0 on top chord, and 297 lb down and 145 lb up at 7-0-0, 85 lb down at 9-0-12, 85 lb down at 10-8-0, and 85 lb down at 12-3-4, and 297 lb down and 145 lb up at 14-3-4 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: 1-4=-54, 4-6=-54, 6-8=-54, 2-8=-20



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

May 19,2022

Continued on page 2

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Tampa, FL 36610

|         |       |            |     |     |                           |           |
|---------|-------|------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761645 |
| 3182083 | T01   | Hip Girder | 1   | 1   | Job Reference (optional)  |           |

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:36 2022 Page 2  
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**LOAD CASE(S)** Standard  
Concentrated Loads (lb)  
Vert: 4=-106(F) 6=-184(F) 11=-61(F) 12=-295(F) 10=-61(F) 5=-106(F) 9=-295(F) 17=-106(F) 18=-106(F) 19=-61(F)

|         |       |            |     |     |                           |           |
|---------|-------|------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761646 |
| 3182083 | T02   | Hip        | 1   | 1   | Job Reference (optional)  |           |

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8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:37 2022 Page 1

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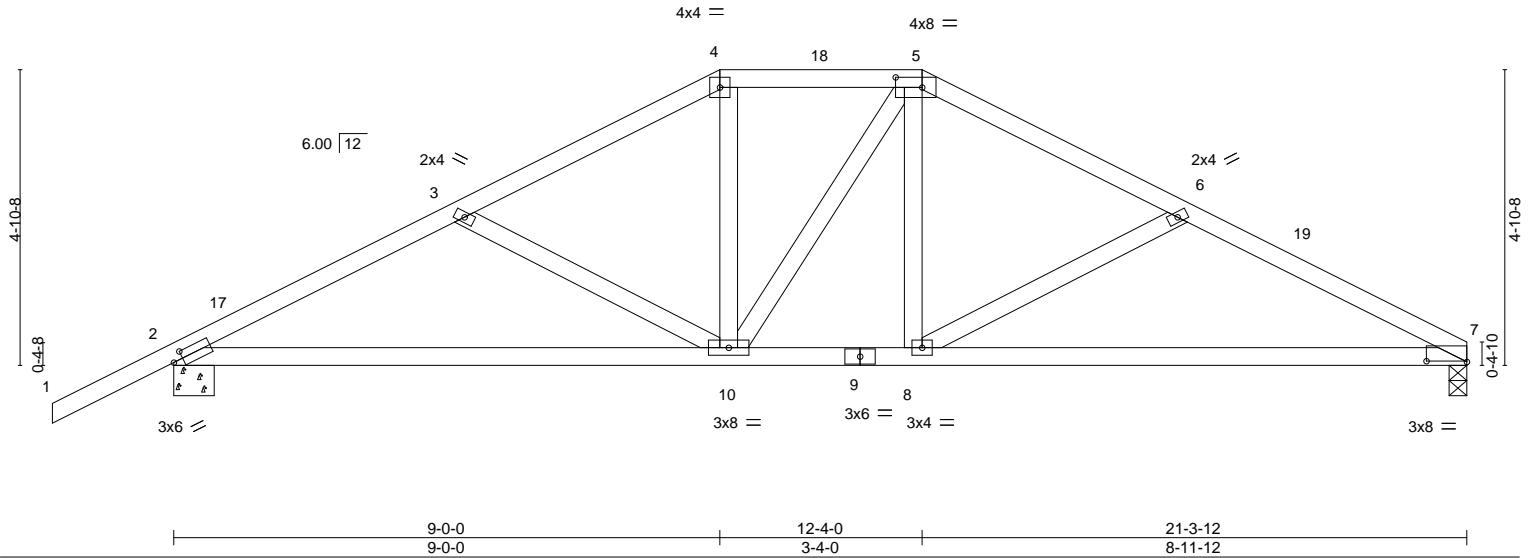


Plate Offsets (X,Y)-- [2:0-1-15,0-1-8], [5:0-5-4,0-2-0], [7:0-8-0,0-0-2]

| LOADING (psf) | SPACING-             |      | CSI.      | DEFL.    | in (loc)    | I/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|------|-----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.25 | TC 0.44   | Vert(LL) | -0.15 10-16 | >999   | 240 | MT20           | 244/190  |
| TCDL 7.0      | Lumber DOL           | 1.25 | BC 0.68   | Vert(CT) | -0.32 8-13  | >808   | 180 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES  | WB 0.16   | Horz(CT) | 0.03 7      | n/a    | n/a |                |          |
| BCDL 10.0     | Code FBC2020/TPI2014 |      | Matrix-MS |          |             |        |     | Weight: 105 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 4-8-13 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 7=0-3-8, 2=0-8-0  
Max Horz 2=97(LC 12)  
Max Uplift 7=165(LC 13), 2=211(LC 12)  
Max Grav 7=783(LC 1), 2=902(LC 1)

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

TOP CHORD 2-3=-1335/341, 3-4=-1070/275, 4-5=-910/276, 5-6=-1076/278, 6-7=-1354/340  
BOT CHORD 2-10=-276/1168, 8-10=-135/915, 7-8=-260/1192  
WEBS 3-10=-303/164, 4-10=-41/307, 5-8=-52/309, 6-8=-326/177

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 9-0-0, Exterior(2E) 9-0-0 to 12-4-0, Exterior(2R) 12-4-0 to 16-8-7, Interior(1) 16-8-7 to 21-3-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 165 lb uplift at joint 7 and 211 lb uplift at joint 2.



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

May 19,2022

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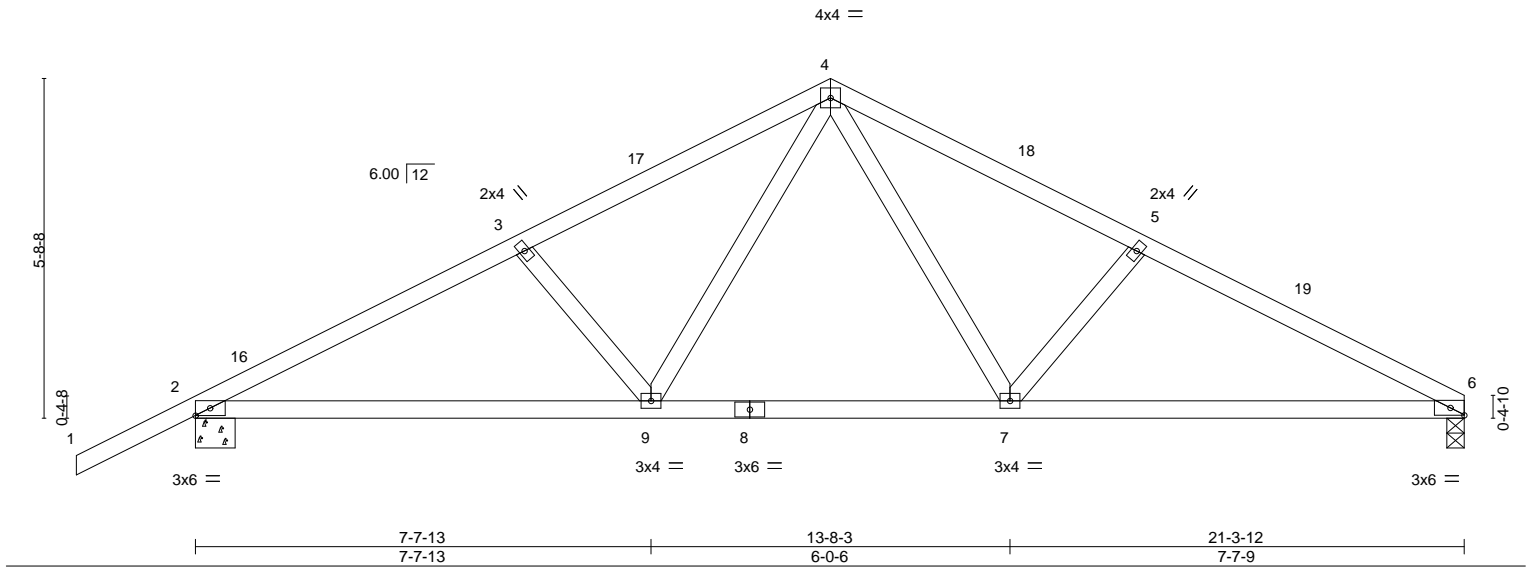
|         |       |            |     |     |                           |
|---------|-------|------------|-----|-----|---------------------------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. |
| 3182083 | T03   | Common     | 3   | 1   | T27761647                 |

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8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:38 2022 Page 1  
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Scale = 1:38.7



| LOADING (psf) | SPACING-             | CSI.      | DEFL.    | in (loc) | I/defl | L/d  | PLATES        | GRIP     |
|---------------|----------------------|-----------|----------|----------|--------|------|---------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.32   | Vert(LL) | -0.08    | 9-15   | >999 | MT20          | 244/190  |
| TCDL 7.0      | Lumber DOL 1.25      | BC 0.53   | Vert(CT) | -0.17    | 7-12   | >999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.17   | Horz(CT) | 0.03     | 6      | n/a  |               |          |
| BCDL 10.0     | Code FBC2020/TPI2014 | Matrix-MS |          |          |        |      | Weight: 98 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 4-9-7 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

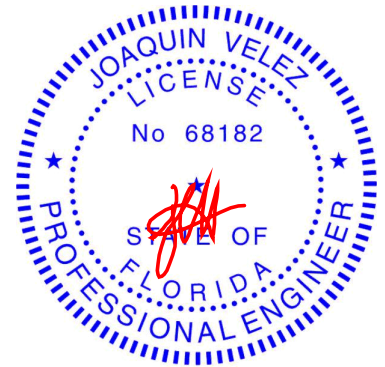
(size) 6=0-3-8, 2=0-8-0  
Max Horz 2=109(LC 12)  
Max Uplift 6=163(LC 13), 2=-208(LC 12)  
Max Grav 6=783(LC 1), 2=902(LC 1)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1338/357, 3-4=-1160/342, 4-5=-1174/355, 5-6=-1343/369  
BOT CHORD 2-9=-270/1152, 7-9=-121/778, 6-7=-275/1172  
WEBS 4-7=-124/440, 5-7=-305/182, 4-9=-111/417, 3-9=-292/175

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 10-8-0, Exterior(2R) 10-8-0 to 13-8-0, Interior(1) 13-8-0 to 21-3-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 163 lb uplift at joint 6 and 208 lb uplift at joint 2.



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

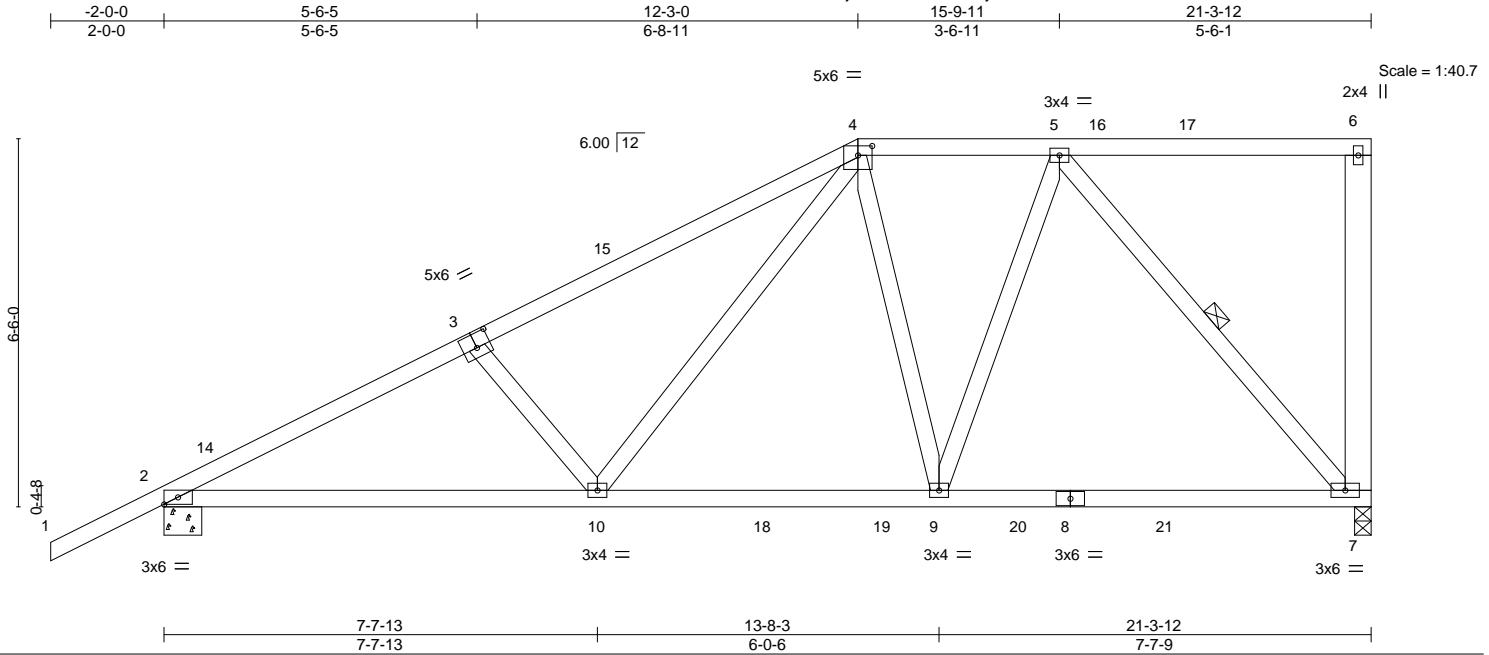


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|         |       |            |     |     |                           |           |
|---------|-------|------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761648 |
| 3182083 | T04   | Half Hip   | 1   | 1   | Job Reference (optional)  |           |

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8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:39 2022 Page 1  
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| LOADING (psf) |       | SPACING-        |                 | CSI.      |      | DEFL.    |                     | PLATES         |  | GRIP     |  |
|---------------|-------|-----------------|-----------------|-----------|------|----------|---------------------|----------------|--|----------|--|
| TCLL          | 20.0  | Plate Grip DOL  | 1.25            | TC        | 0.73 | Vert(LL) | -0.12 9-10 >999 240 | MT20           |  | 244/190  |  |
| TCDL          | 7.0   | Lumber DOL      | 1.25            | BC        | 0.83 | Vert(CT) | -0.22 9-10 >999 180 |                |  |          |  |
| BCLL          | 0.0 * | Rep Stress Incr | NO              | WB        | 0.39 | Horz(CT) | 0.04 7 n/a n/a      |                |  |          |  |
| BCDL          | 10.0  | Code            | FBC2020/TPI2014 | Matrix-MS |      |          |                     |                |  |          |  |
|               |       |                 |                 |           |      |          |                     | Weight: 129 lb |  | FT = 20% |  |

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
6-7: 2x6 SP No.2

#### REACTIONS.

(size) 7=0-3-8, 2=0-8-0  
Max Horz 2=241(LC 12)  
Max Uplift 7=231(LC 9), 2=265(LC 12)  
Max Grav 7=1034(LC 2), 2=1102(LC 2)

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

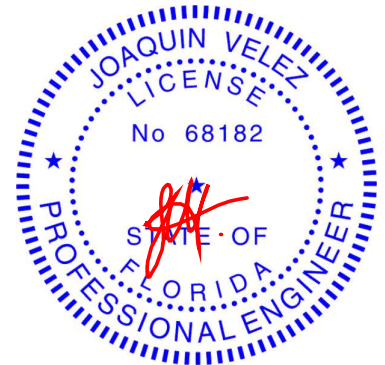
TOP CHORD 2-3=-1793/416, 3-4=-1649/400, 4-5=-915/242  
BOT CHORD 2-10=-528/1581, 9-10=-273/944, 7-9=-191/708  
WEBS 3-10=-328/205, 4-10=-216/792, 5-9=-156/663, 5-7=-1060/297

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 12-3-0, Exterior(2R) 12-3-0 to 16-5-15, Interior(1) 16-5-15 to 21-1-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 231 lb uplift at joint 7 and 265 lb uplift at joint 2.
- 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, 4-6=-54, 10-11=-20, 9-10=-80(F=-60), 7-9=-20



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May 19,2022

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|         |       |            |     |     |                           |           |
|---------|-------|------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761649 |
| 3182083 | T05   | Hip Girder | 1   | 1   | Job Reference (optional)  |           |

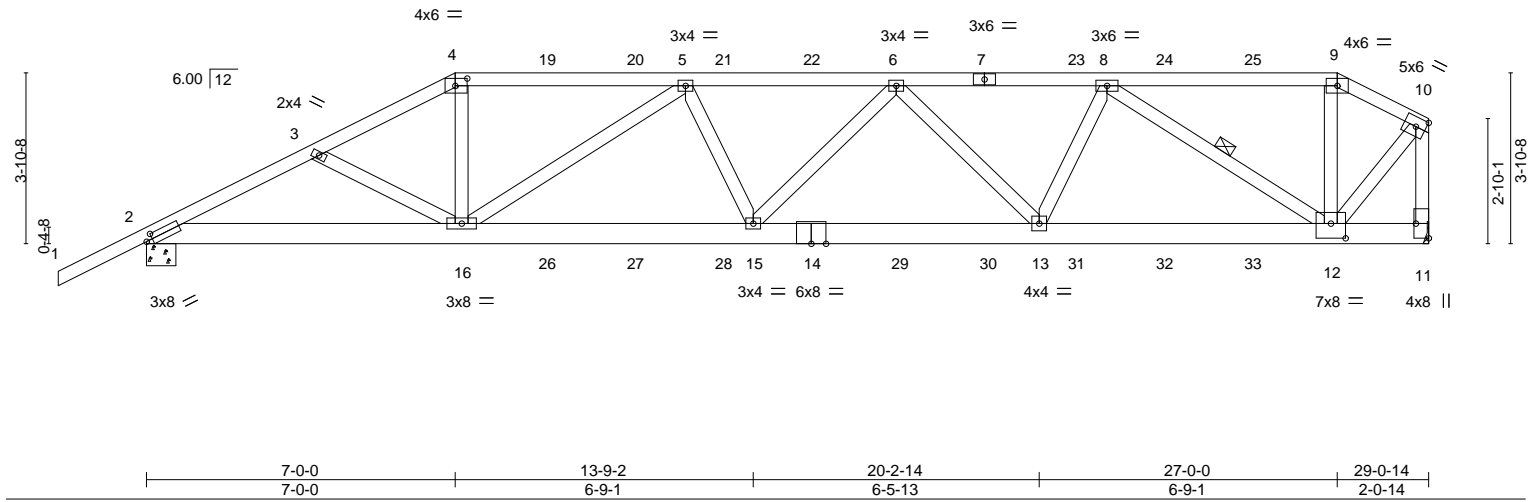
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:41 2022 Page 1

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Scale = 1:52.2



|  |       |                 |                 |           |      |                           |       |       |      |                         |              |
|--|-------|-----------------|-----------------|-----------|------|---------------------------|-------|-------|------|-------------------------|--------------|
| Plate Offsets (X,Y)-- [2:0-1-12,0-1-8], [4:0-3-4,0-2-0], [11:Edge,0-3-8], [12:0-4-0,0-4-0] |       |                 |                 |           |      |                           |       |       |      |                         |              |
| LOADING (psf)  |       | SPACING- 2-0-0  |                 | CSI.      |      | DEFL. in (loc) l/defl L/d |       |       |      | PLATES GRIP             |              |
| TCLL   | 20.0  | Plate Grip DOL  | 1.25            | TC        | 0.97 | Vert(LL)                  | -0.23 | 15    | >999 | 240                     | MT20 244/190 |
| TCDL   | 7.0   | Lumber DOL      | 1.25            | BC        | 0.96 | Vert(CT)                  | -0.44 | 15-16 | >794 | 180                     |              |
| BCLL   | 0.0 * | Rep Stress Incr | NO              | WB        | 1.00 | Horz(CT)                  | 0.12  | 11    | n/a  | n/a                     |              |
| BCDL   | 10.0  | Code            | FBC2020/TPI2014 | Matrix-MS |      |                           |       |       |      | Weight: 180 lb FT = 20% |              |

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-6-8 oc bracing.  
WEBS 1 Row at midpt 8-12

#### REACTIONS.

(size) 2=0-8-0, 11=Mechanical  
Max Horz 2=131(LC 27)  
Max Uplift 2=-599(LC 8), 11=-560(LC 4)  
Max Grav 2=2114(LC 1), 11=2208(LC 1)

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

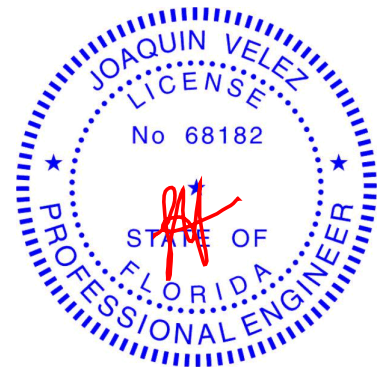
TOP CHORD 2-3=-4101/1147, 3-4=-3943/1104, 4-5=-3562/1025, 5-6=-4726/1260, 6-8=-3981/1043,  
8-9=-1312/342, 9-10=-1458/366, 10-11=-2233/543  
BOT CHORD 2-16=-1081/3628, 15-16=-1288/4650, 13-15=-1255/4576, 12-13=-969/3555  
WEBS 4-16=-286/1343, 5-16=-1371/401, 5-15=0/344, 6-15=-33/311, 6-13=-877/346,  
8-13=-174/1060, 8-12=-2726/781, 9-12=0/371, 10-12=-511/2028

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 599 lb uplift at joint 2 and 560 lb uplift at joint 11.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 125 lb down and 88 lb up at 7-0-0, 106 lb down and 88 lb up at 9-0-12, 106 lb down and 88 lb up at 11-0-12, 106 lb down and 88 lb up at 13-0-12, 106 lb down and 88 lb up at 15-0-12, 106 lb down and 81 lb up at 17-0-12, 106 lb down and 88 lb up at 19-0-12, 106 lb down and 88 lb up at 21-0-12, 106 lb down and 88 lb up at 23-0-12, and 106 lb down and 88 lb up at 25-0-12, and 128 lb down and 88 lb up at 27-0-0 on top chord, and 297 lb down and 145 lb up at 7-0-0, 85 lb down at 9-0-12, 85 lb down at 11-0-12, 85 lb down at 13-0-12, 85 lb down at 15-0-12, 85 lb down at 17-0-12, 85 lb down at 19-0-12, 85 lb down at 21-0-12, 85 lb down at 23-0-12, and 85 lb down at 25-0-12, and 85 lb down at 27-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

Continued on page 2



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|         |       |            |     |     |                           |           |
|---------|-------|------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761649 |
| 3182083 | T05   | Hip Girder | 1   | 1   | Job Reference (optional)  |           |

**LOAD CASE(S)**
Standard

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

Vert: 1-4=-54, 4-9=-54, 9-10=-54, 2-11=-20
- Concentrated Loads (lb)

Vert: 4=-106(B) 7=-106(B) 9=-106(B) 14=-61(B) 16=-295(B) 6=-106(B) 12=-61(B) 19=-106(B) 20=-106(B) 21=-106(B) 22=-106(B) 23=-106(B) 24=-106(B) 25=-106(B) 26=-61(B) 27=-61(B) 28=-61(B) 29=-61(B) 30=-61(B) 31=-61(B) 32=-61(B) 33=-61(B)

|         |       |            |     |     |                           |           |
|---------|-------|------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761650 |
| 3182083 | T06   | Hip        | 1   | 1   | Job Reference (optional)  |           |

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8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:42 2022 Page 1  
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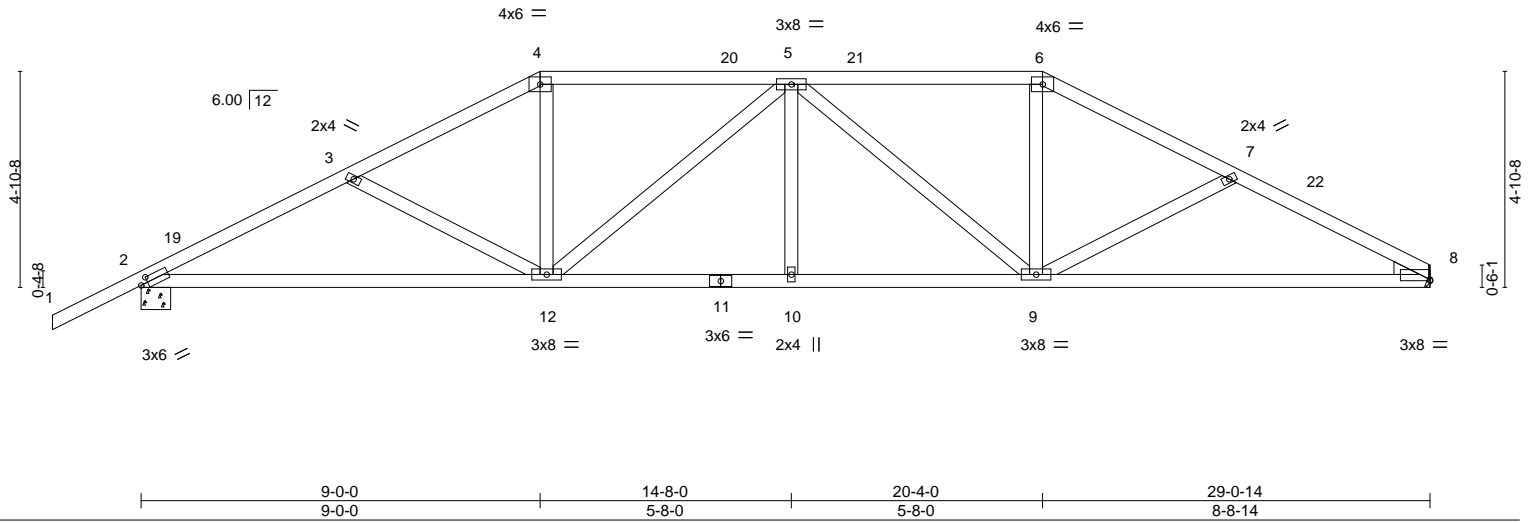


Plate Offsets (X,Y)-- [2:0-1-15,0-1-8], [8:0-0-0,0-0-5]

| LOADING (psf) | SPACING-             |      | CSL       | DEFL.    | in (loc)    | I/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|------|-----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.25 | TC 0.36   | Vert(LL) | -0.15 12-18 | >999   | 240 | MT20           | 244/190  |
| TCDL 7.0      | Lumber DOL           | 1.25 | BC 0.75   | Vert(CT) | -0.32 12-18 | >999   | 180 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES  | WB 0.42   | Horz(CT) | 0.08 8      | n/a    | n/a |                |          |
| BCDL 10.0     | Code FBC2020/TPI2014 |      | Matrix-MS |          |             |        |     | Weight: 148 lb | FT = 20% |

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-1-2 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 9-3-2 oc bracing.

#### REACTIONS.

(size) 8=Mechanical, 2=0-8-0  
Max Horz 2=99(LC 12)  
Max Uplift 8=230(LC 13), 2=277(LC 12)  
Max Grav 8=1072(LC 1), 2=1187(LC 1)

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

TOP CHORD 2-3=-1964/432, 3-4=-1702/363, 4-5=-1487/354, 5-6=-1470/350, 6-7=-1680/364,  
7-8=-1917/431  
BOT CHORD 2-12=-402/1717, 10-12=-308/1737, 9-10=-308/1737, 8-9=-336/1663  
WEBS 3-12=-281/156, 4-12=-70/501, 5-12=-412/147, 5-9=-434/147, 6-9=-68/484

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 9-0-0, Exterior(2R) 9-0-0 to 13-2-15, Interior(1) 13-2-15 to 20-4-0, Exterior(2R) 20-4-0 to 24-8-7, Interior(1) 24-8-7 to 29-0-14 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 230 lb uplift at joint 8 and 277 lb uplift at joint 2.



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

May 19,2022

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



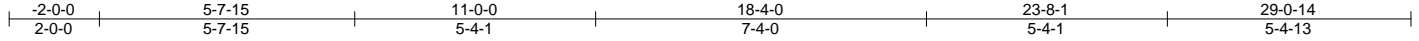
6904 Parke East Blvd.  
Tampa, FL 36610

|         |       |            |     |     |                           |           |
|---------|-------|------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761651 |
| 3182083 | T07   | Hip        | 1   | 1   | Job Reference (optional)  |           |

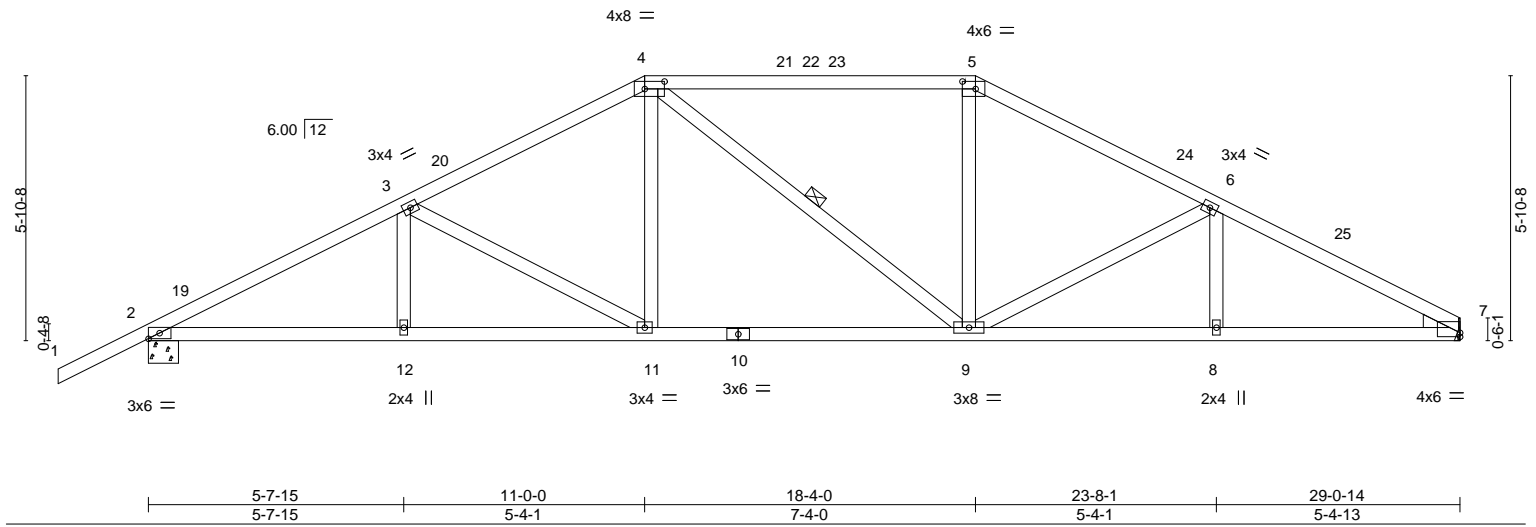
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:43 2022 Page 1

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Scale = 1:51.1



|                       |       |   |                 |             |      |                |             |          |      |
|-----------------------|-------|---|-----------------|-------------|------|----------------|-------------|----------|------|
| Plate Offsets (X,Y)-- |       | [4:0-5-4,0-2-0], [5:0-3-8,0-2-0], [7:0-0-0,0-1-1] |                 |             |      |                |             |          |      |
| <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          | 0.83 | Vert(LL)       | -0.14       | 9-11     | >999 |
| TCDL                  | 7.0   | Lumber DOL  | 1.25            | BC          | 0.65 | Vert(CT)       | -0.26       | 9-11     | >999 |
| BCLL                  | 0.0 * | Rep Stress Incr                                   | YES             | WB          | 0.34 | Horz(CT)       | 0.08        | 7        | n/a  |
| BCDL                  | 10.0  | Code  | FBC2020/TPI2014 | Matrix-MS   |      |                |             |          |      |
|                       |       |   |                 |             |      | <b>PLATES</b>  | <b>GRIP</b> |          |      |
|                       |       |   |                 |             |      | MT20           | 244/190     |          |      |
|                       |       |   |                 |             |      | Weight: 149 lb |             | FT = 20% |      |

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 9-6-4 oc bracing.  
WEBS 1 Row at midpt 4-9

#### REACTIONS.

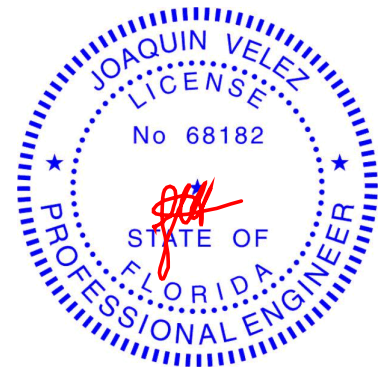
(size) 7=Mechanical, 2=0-8-0  
Max Horz 2=114(LC 12)  
Max Uplift 7=227(LC 13), 2=274(LC 12)  
Max Grav 7=1157(LC 2), 2=1256(LC 2)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2136/403, 3-4=-1691/357, 4-5=-1459/346, 5-6=-1669/357, 6-7=-2063/402  
BOT CHORD 2-12=-385/1868, 11-12=-385/1868, 9-11=-226/1477, 8-9=-305/1793, 7-8=-305/1793  
WEBS 3-11=-471/181, 4-11=-45/477, 5-9=-37/441, 6-9=-410/180

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 11-0-0, Exterior(2R) 11-0-0 to 15-2-15, Interior(1) 15-2-15 to 18-4-0, Exterior(2R) 18-4-0 to 22-6-15, Interior(1) 22-6-15 to 29-0-14 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 227 lb uplift at joint 7 and 274 lb uplift at joint 2.



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

May 19,2022

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

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Tampa, FL 36610



|         |       |            |     |     |                           |           |
|---------|-------|------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761652 |
| 3182083 | T08   | Hip        | 1   | 1   | Job Reference (optional)  |           |

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8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:44 2022 Page 1  
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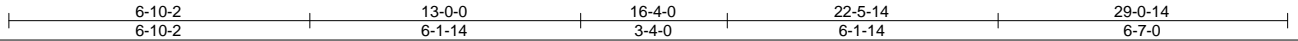
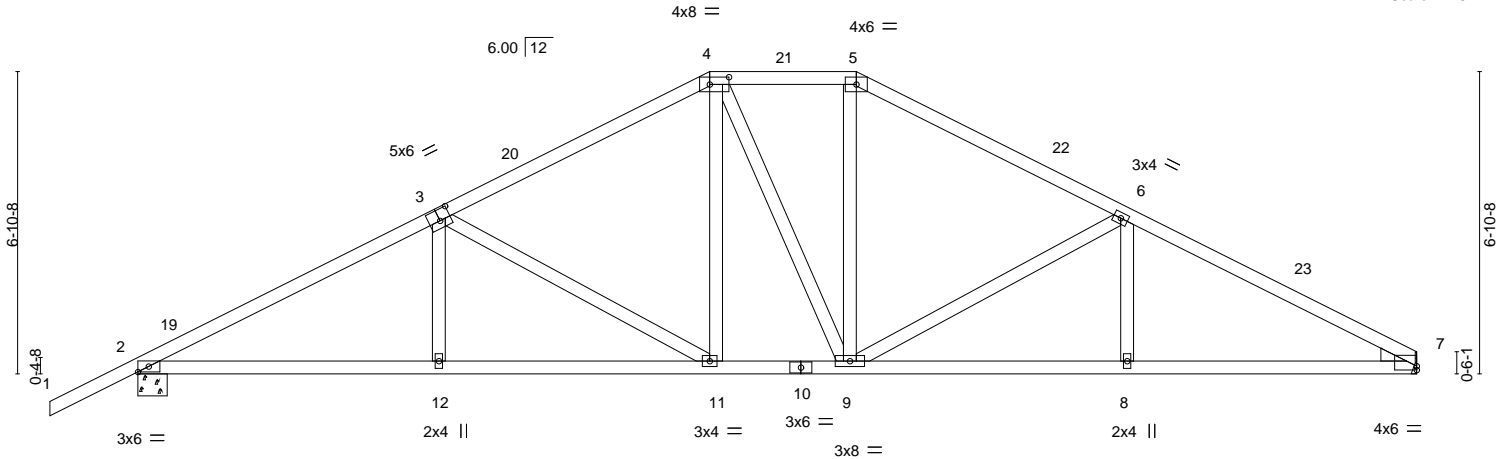


Plate Offsets (X,Y)-- [3:0-3-0,0-3-0], [4:0-5-4,0-2-0], [7:0-0-0,0-1-1]

| LOADING (psf) | SPACING-             |      | CSI.      | DEFL.    | in    | (loc) | I/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|------|-----------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.25 | TC 0.42   | Vert(LL) | -0.09 | 11    | >999   | 240 | MT20           | 244/190  |
| TCDL 7.0      | Lumber DOL           | 1.25 | BC 0.56   | Vert(CT) | -0.19 | 8-9   | >999   | 180 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES  | WB 0.57   | Horz(CT) | 0.07  | 7     | n/a    | n/a |                |          |
| BCDL 10.0     | Code FBC2020/TPI2014 |      | Matrix-MS |          |       |       |        |     | Weight: 154 lb | FT = 20% |

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-10-7 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 9-6-8 oc bracing.

#### REACTIONS.

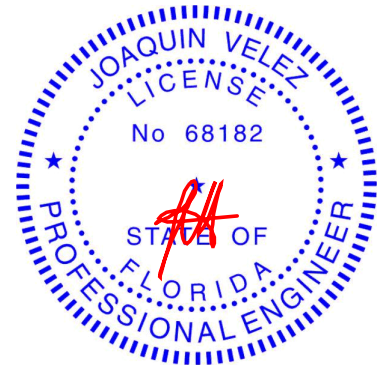
(size) 7=Mechanical, 2=0-8-0  
Max Horz 2=129(LC 12)  
Max Uplift 7=224(LC 13), 2=271(LC 12)  
Max Grav 7=1072(LC 1), 2=1187(LC 1)

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

TOP CHORD 2-3=-1940/389, 3-4=-1399/336, 4-5=-1182/330, 5-6=-1397/338, 6-7=-1900/386  
BOT CHORD 2-12=-376/1673, 11-12=-375/1675, 9-11=-178/1182, 8-9=-283/1631, 7-8=-283/1631  
WEBS 3-12=0/281, 3-11=-575/227, 4-11=-80/375, 5-9=-75/368, 6-9=-534/225, 6-8=0/257

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 13-0-0, Exterior(2E) 13-0-0 to 16-4-0, Exterior(2R) 16-4-0 to 20-6-15, Interior(1) 20-6-15 to 29-0-14 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 224 lb uplift at joint 7 and 271 lb uplift at joint 2.



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

May 19,2022

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



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Tampa, FL 33610



Builders FirstSource (Lake City, FL) Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:47 2022 Page 1  
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 -2-0-0 5-0-10 9-8-15 14-8-0 19-7-1 24-3-6 29-4-0 31-4-0  
 2-0-0 5-0-10 4-8-5 4-11-1 4-11-1 4-8-5 5-0-10 2-0-0



|  |  |  |  |
|--|--|--|--|
| <b>LUMBER-</b><br>TOP CHORD    2x4 SP No.2<br>BOT CHORD    2x4 SP M 31<br>WEBS            2x4 SP No.3<br>WEDGE<br>Left: 2x4 SP No.3 , Right: 2x4 SP No.3 |  | <b>BRACING-</b><br>TOP CHORD    Structural wood sheathing directly applied or 2-2-0 oc purlins.<br>BOT CHORD    Rigid ceiling directly applied or 9-2-14 oc bracing. |  |
|--|--|--|--|

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

|           |  |
|-----------|--|
| TOP CHORD | 2-3=3359/732, 3-5=3131/634, 5-6=2358/409, 6-7=2358/422, 7-9=3131/539,<br>9-10=3359/619 |
| BOT CHORD | 2-14=710/3011, 13-14=530/2722, 12-13=372/2722, 10-12=481/3011                          |
| WEBS      | 6-13=282/1819, 7-13=625/289, 7-12=53/401, 5-13=625/284, 5-14=42/401                    |

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCdL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 14-8-0, Exterior(2R) 14-8-0 to 17-8-0, Interior(1) 17-8-0 to 31-4-0 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.
- 6) Bearing at joint(s) 2, 10 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 268 lb uplift at joint 2 and 268 lb uplift at joint 10.



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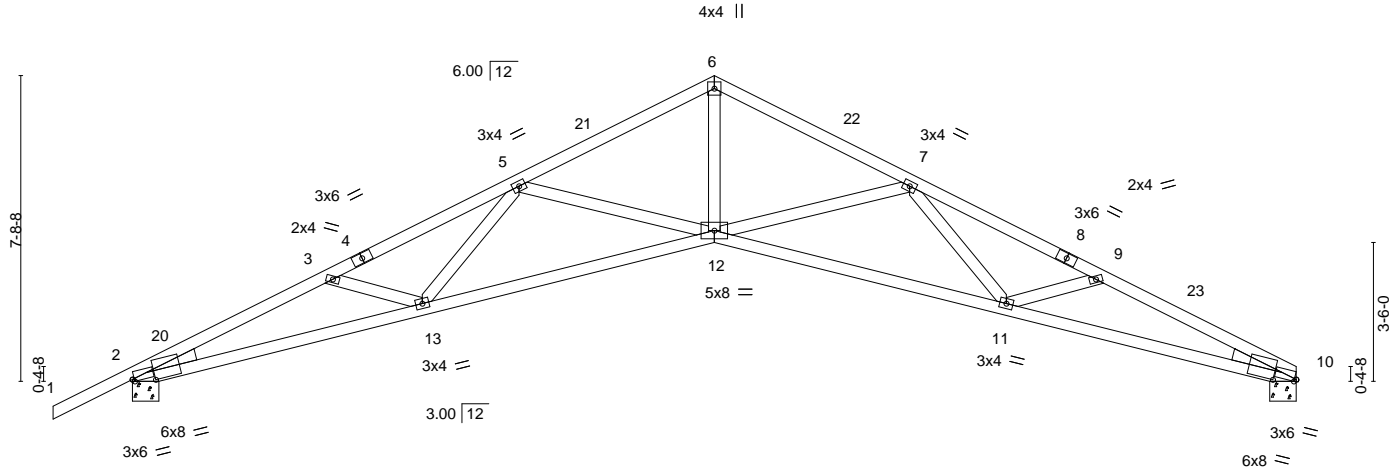
|         |       |            |     |     |                           |           |
|---------|-------|------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761655 |
| 3182083 | T11   | Scissor    | 5   | 1   | Job Reference (optional)  |           |

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8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:49 2022 Page 1  
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Scale = 1:58.1



|                       |  |
|-----------------------|--|
| Plate Offsets (X,Y)-- | [2:0-0-9,Edge], [2:0-6-13,0-1-12], [10:0-0-9,Edge], [10:0-6-13,0-1-12] |
|-----------------------|--|

| LOADING (psf) | SPACING-             | CSI.      | DEFL.    | in (loc) | I/defl | L/d  | PLATES         | GRIP     |
|---------------|----------------------|-----------|----------|----------|--------|------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.80   | Vert(LL) | -0.33    | 12-13  | >999 | MT20           | 244/190  |
| TCDL 7.0      | Plate Grip DOL 1.25  | BC 0.48   | Vert(CT) | -0.64    | 12-13  | >548 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.25      | WB 0.70   | Horz(CT) | 0.38     | 10     | n/a  |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-MS |          |          |        |      | Weight: 140 lb | FT = 20% |
|               | Code FBC2020/TPI2014 |           |          |          |        |      |                |          |

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP M 31  
WEBS 2x4 SP No.3  
WEDGE  
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 9-0-11 oc bracing.

#### REACTIONS.

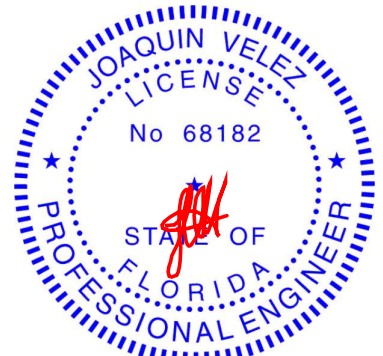
(size) 2=0-8-0, 10=0-8-0  
Max Horz 2=138(LC 16)  
Max Uplift 2=-268(LC 12), 10=-224(LC 13)  
Max Grav 2=1197(LC 1), 10=1082(LC 1)

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

TOP CHORD 2-3=-3373/747, 3-5=-3145/650, 5-6=-2373/449, 6-7=-2373/460, 7-9=-3186/608,  
9-10=-3430/683  
BOT CHORD 2-13=-739/3024, 12-13=-561/2736, 11-12=-437/2751, 10-11=-576/3083  
WEBS 6-12=-298/1831, 7-12=-641/295, 7-11=-65/409, 5-12=-625/284, 5-13=-41/401

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 14-8-0, Exterior(2R) 14-8-0 to 17-8-0, Interior(1) 17-8-0 to 29-4-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 2, 10 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 268 lb uplift at joint 2 and 224 lb uplift at joint 10.



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

May 19,2022

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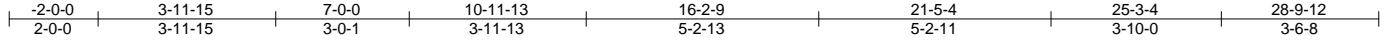


|         |       |                 |     |     |                           |           |
|---------|-------|-----------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type      | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761657 |
| 3182083 | T14   | Half Hip Girder | 1   | 1   | Job Reference (optional)  |           |

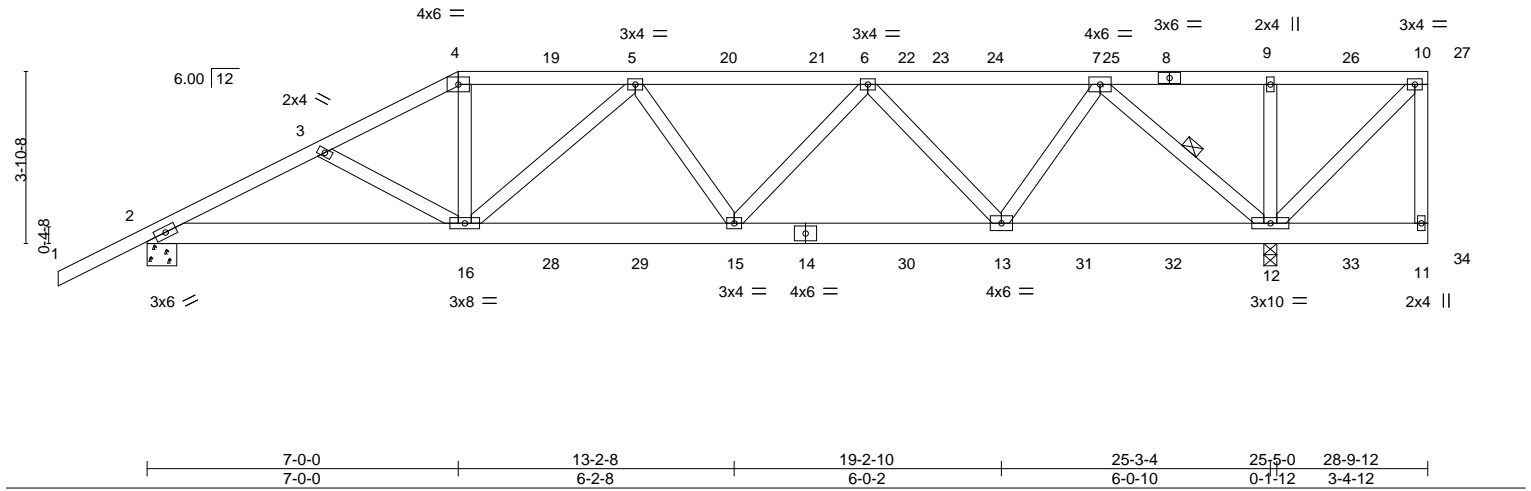
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:52 2022 Page 1

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Scale = 1:51.8



| LOADING (psf) | SPACING-             | CSI.      | DEFL.    | in (loc)    | I/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.70   | Vert(LL) | -0.14 15-16 | >999   | 240 | MT20           | 244/190  |
| TCDL 7.0      | Plate Grip DOL 1.25  | BC 0.71   | Vert(CT) | -0.27 15-16 | >999   | 180 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.25      | WB 0.55   | Horz(CT) | 0.07 12     | n/a    | n/a |                |          |
| BCDL 10.0     | Rep Stress Incr NO   | Matrix-MS |          |             |        |     |                |          |
|               | Code FBC2020/TPI2014 |           |          |             |        |     | Weight: 179 lb | FT = 20% |

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-8-10 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 7-5-1 oc bracing.  
WEBS 1 Row at midpt 7-12

#### REACTIONS.

(size) 2=0-8-0, 12=0-3-8  
Max Horz 2=151(LC 8)  
Max Uplift 2=-515(LC 8), 12=-727(LC 5)  
Max Grav 2=1771(LC 1), 12=2723(LC 1)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3340/964, 3-4=-3165/915, 4-5=-2849/851, 5-6=-3381/917, 6-7=-2307/596,  
7-9=-86/286, 9-10=-86/286  
BOT CHORD 2-16=-936/2952, 15-16=-1000/3392, 13-15=-877/3097, 12-13=-445/1547  
WEBS 4-16=-247/1084, 5-16=-735/254, 6-15=-63/502, 6-13=-1211/448, 7-13=-297/1420,  
7-12=-2482/718, 9-12=-425/214, 10-12=-426/131

#### 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; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 515 lb uplift at joint 2 and 727 lb uplift at joint 12.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 106 lb down and 88 lb up at 7-0-0, 106 lb down and 88 lb up at 9-0-12, 106 lb down and 88 lb up at 11-0-12, 106 lb down and 88 lb up at 13-0-12, 106 lb down and 88 lb up at 15-0-12, 106 lb down and 87 lb up at 17-0-12, 106 lb down and 88 lb up at 19-0-12, 106 lb down and 88 lb up at 21-0-12, 106 lb down and 88 lb up at 23-0-12, 106 lb down and 88 lb up at 25-0-12, and 106 lb down and 88 lb up at 27-0-12, and 125 lb down and 87 lb up at 28-4-4 on top chord, and 297 lb down and 145 lb up at 7-0-0, 85 lb down at 9-0-12, 85 lb down at 11-0-12, 85 lb down at 13-0-12, 85 lb down at 15-0-12, 85 lb down at 17-0-12, 85 lb down at 19-0-12, 85 lb down at 21-0-12, 85 lb down at 23-0-12, 85 lb down at 25-0-12, and 85 lb down at 27-0-12, and 99 lb down at 28-4-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) 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



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

May 19,2022

Continued on page 2

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

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

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

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



6904 Parke East Blvd.  
Tampa, FL 33610



|         |       |                 |     |     |                           |           |
|---------|-------|-----------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type      | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761657 |
| 3182083 | T14   | Half Hip Girder | 1   | 1   | Job Reference (optional)  |           |

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:52 2022 Page 2  
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LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-4=-54, 4-10=-54, 2-11=-20

Concentrated Loads (lb)

Vert: 4=-106(F) 8=-106(F) 14=-61(F) 16=-295(F) 5=-106(F) 15=-61(F) 13=-61(F) 12=-61(F) 9=-106(F) 19=-106(F) 20=-106(F) 21=-106(F) 22=-106(F) 24=-106(F) 25=-106(F) 26=-106(F) 27=-125(F) 28=-61(F) 29=-61(F) 30=-61(F) 31=-61(F) 32=-61(F) 33=-61(F) 34=-68(F)

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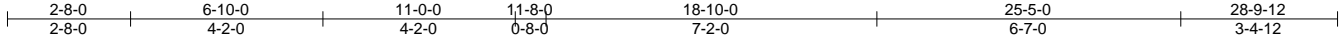


|         |       |            |     |     |                           |           |
|---------|-------|------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761659 |
| 3182083 | T16   | Half Hip   | 1   | 1   | Job Reference (optional)  |           |

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8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:54 2022 Page 1

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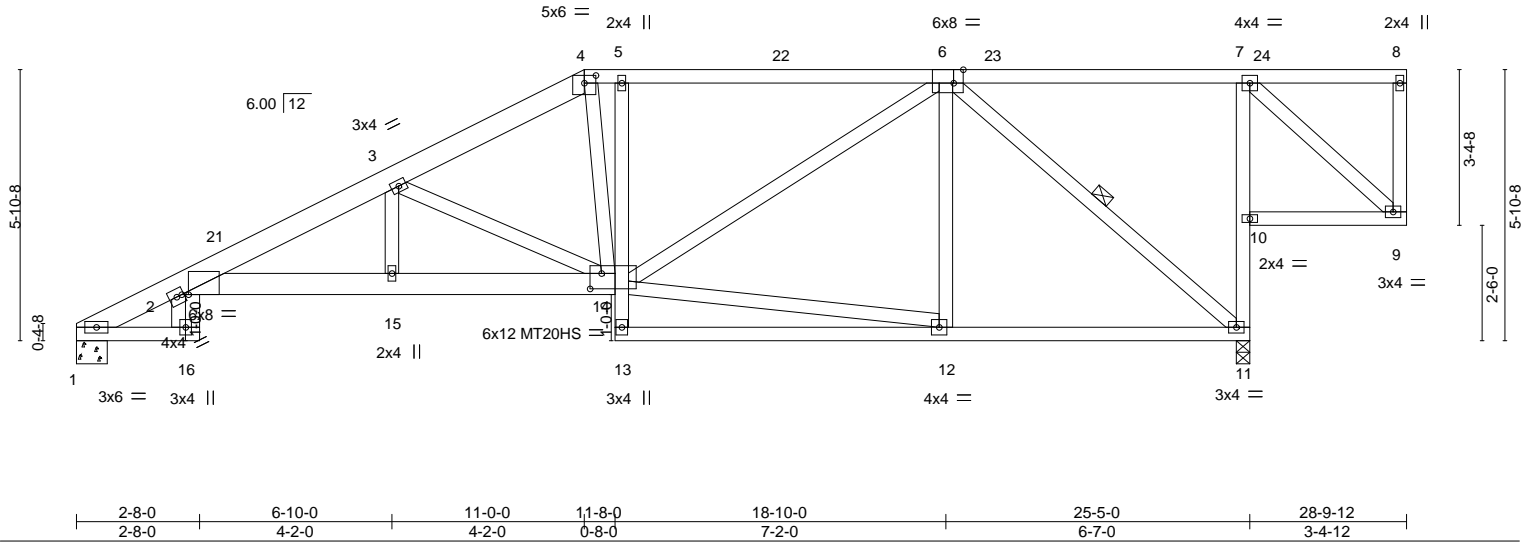


Plate Offsets (X,Y)-- [2:0-1-12,0-0-0], [4:0-3-0,0-2-0], [6:0-2-8,Edge], [14:0-3-0,0-4-0]

| LOADING (psf) | SPACING-             | CSI.      | DEFL.    | in    | (loc) | I/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-----------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.25  | TC 0.48   | Vert(LL) | -0.14 | 2-15  | >999   | 240 | MT20           | 244/190  |
| TCDL 7.0      | Lumber DOL 1.25      | BC 0.51   | Vert(CT) | -0.26 | 2-15  | >999   | 180 | MT20HS         | 187/143  |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.51   | Horz(CT) | 0.16  | 11    | n/a    | n/a |                |          |
| BCDL 10.0     | Code FBC2020/TPI2014 | Matrix-MS |          |       |       |        |     |                |          |
|               |                      |           |          |       |       |        |     | Weight: 193 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x4 SP No.2 \*Except\*  
1-4: 2x6 SP M 26  
BOT CHORD 2x4 SP No.2 \*Except\*  
2-16: 2x8 SP 2400F 2.0E, 2-14: 2x6 SP M 26, 5-13,7-11: 2x4 SP No.3  
WEBS 2x4 SP No.3

#### REACTIONS.

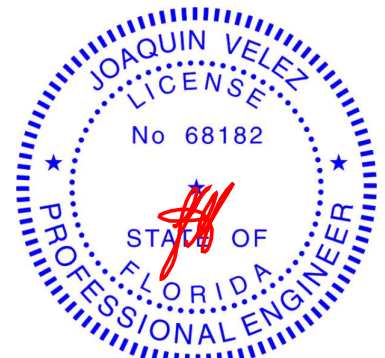
(size) 1=0-8-0, 11=0-3-8  
Max Horz 1=187(LC 12)  
Max Uplift 1=215(LC 12), 11=305(LC 9)  
Max Grav 1=915(LC 1), 11=1191(LC 1)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-20=513/0, 2-3=2242/615, 3-4=1348/379, 4-5=1245/394, 5-6=1251/398  
BOT CHORD 2-15=687/2034, 14-15=687/2034, 5-14=362/185, 11-12=214/788, 10-11=420/153,  
7-10=374/163  
WEBS 3-14=995/363, 6-14=218/549, 6-11=1101/287, 3-15=63/402, 4-14=205/639,  
12-14=199/685

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 11-0-0, Exterior(2R) 11-0-0 to 15-2-15, Interior(1) 15-2-15 to 28-8-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 215 lb uplift at joint 1 and 305 lb uplift at joint 11.



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

May 19,2022

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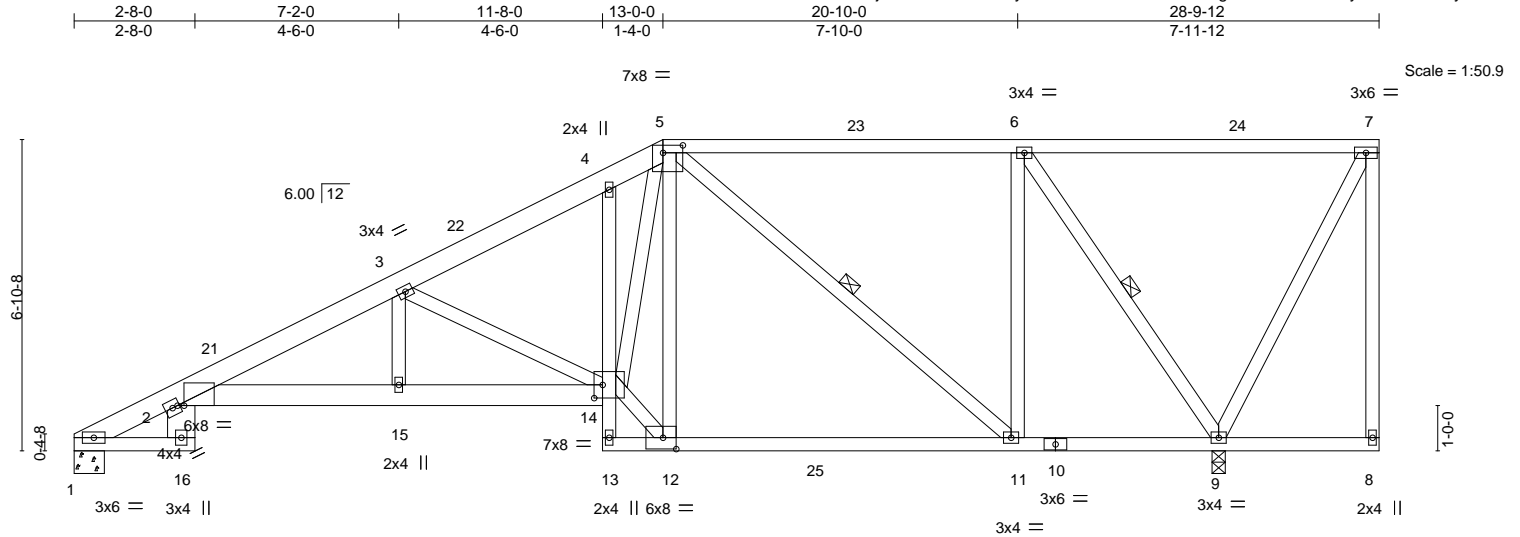


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|         |       |            |     |     |                           |           |
|---------|-------|------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761660 |
| 3182083 | T17   | Half Hip   | 1   | 1   | Job Reference (optional)  |           |

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8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:56 2022 Page 1  
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|                       |       |   |  |       |  |             |  |                                  |  |         |  |                |  |             |  |         |  |
|-----------------------|-------|---|--|-------|--|-------------|--|----------------------------------|--|---------|--|----------------|--|-------------|--|---------|--|
|                       |       | 2-8-0   |  | 7-2-0 |  | 11-8-0      |  | 13-0-0                           |  | 20-10-0 |  | 25-3-4         |  | 25-5-0      |  | 28-9-12 |  |
|                       |       | 2-8-0   |  | 4-6-0 |  | 4-6-0       |  | 1-4-0                            |  | 7-10-0  |  | 4-5-4          |  | 0-1-12      |  | 3-4-12  |  |
| Plate Offsets (X,Y)-- |       | [2:0-1-12,0-0-0], [5:0-5-4,0-2-0], [12:0-3-8,0-3-0], [14:0-2-4,0-3-8] |  |       |  |             |  |                                  |  |         |  |                |  |             |  |         |  |
| <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 0.72     |  | Vert(LL) -0.17 2-15 >999 240     |  |         |  | MT20           |  | 244/190     |  |         |  |
| TCDL                  | 7.0   | Lumber DOL 1.25   |  |       |  | BC 0.64     |  | Vert(CT) -0.30 2-15 >999 180     |  |         |  |                |  |             |  |         |  |
| BCLL                  | 0.0 * | Rep Stress Incr YES   |  |       |  | WB 0.56     |  | Horz(CT) 0.19 9 n/a n/a          |  |         |  |                |  |             |  |         |  |
| BCDL                  | 10.0  | Code FBC2020/TPI2014  |  |       |  | Matrix-MS   |  |                                  |  |         |  | Weight: 204 lb |  | FT = 20%    |  |         |  |

#### LUMBER-

TOP CHORD 2x6 SP M 26 \*Except\*  
5-7: 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
2-16: 2x8 SP 2400F 2.0E, 2-14: 2x6 SP M 26, 4-13: 2x4 SP No.3  
WEBS 2x4 SP No.3

#### REACTIONS.

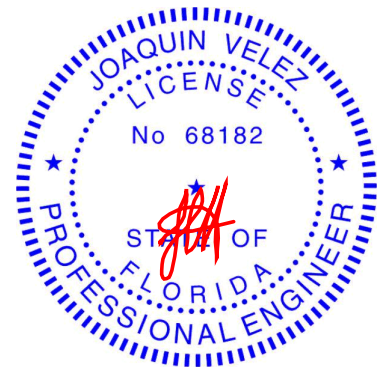
(size) 1=0-8-0, 9=0-3-8  
Max Horz 1=222(LC 12)  
Max Uplift 1=210(LC 12), 9=297(LC 9)  
Max Grav 1=1003(LC 2), 9=1300(LC 2)

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

TOP CHORD 2-20=-557/0, 2-3=-2396/605, 3-4=-1469/369, 4-5=-1344/375, 5-6=-573/151  
BOT CHORD 2-15=-709/2187, 14-15=-709/2187, 11-12=-286/990, 9-11=-151/573  
WEBS 3-14=-1073/378, 12-14=-300/1169, 5-14=-377/1097, 5-12=-465/242, 5-11=-544/177,  
6-11=-71/584, 6-9=-1185/292, 3-15=-70/465

#### NOTES-

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 13-0-0, Exterior(2R) 13-0-0 to 17-2-15, Interior(1) 17-2-15 to 28-8-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 210 lb uplift at joint 1 and 297 lb uplift at joint 9.



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

May 19,2022

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



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|         |       |            |     |     |                           |           |
|---------|-------|------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761661 |
| 3182083 | T18   | Half Hip   | 1   | 1   | Job Reference (optional)  |           |

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:57 2022 Page 1  
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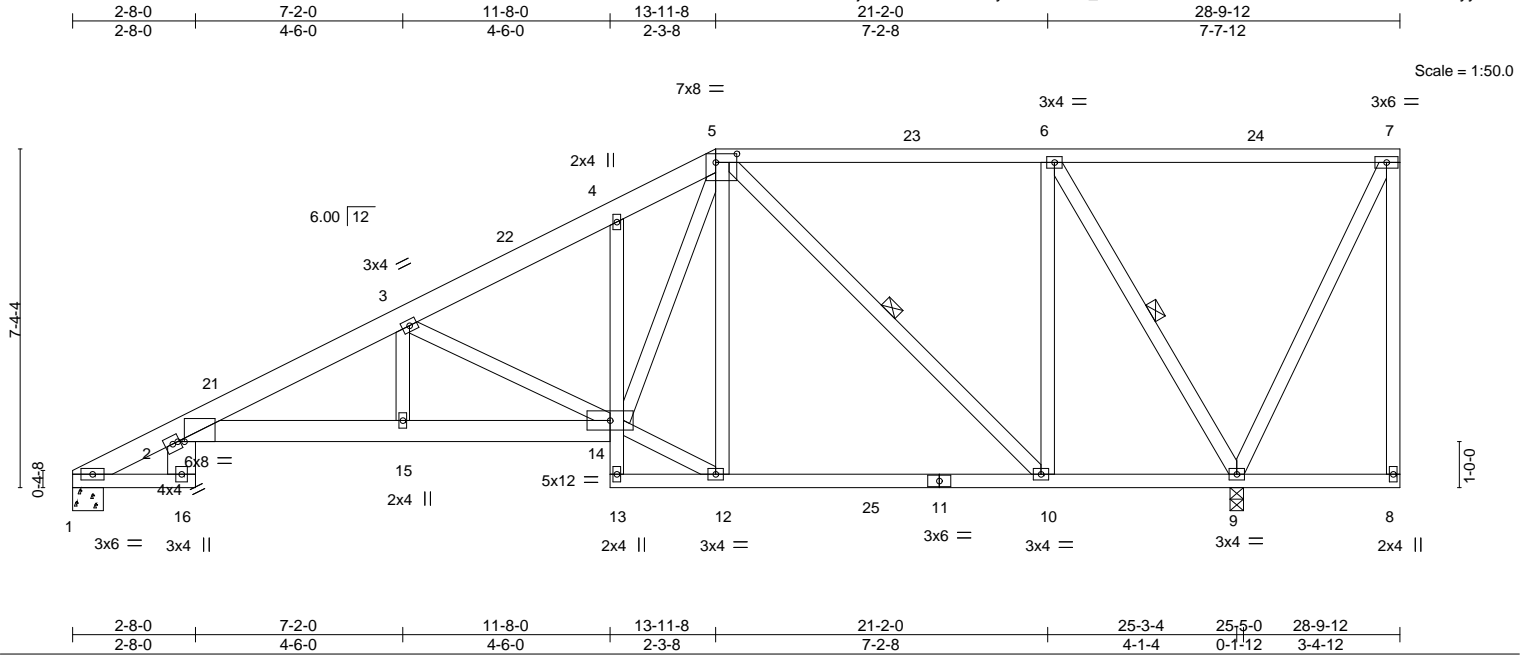


Plate Offsets (X,Y)-- [2:0-1-12,0-0-0], [5:0-5-8,0-2-4]

| LOADING (psf) | SPACING-             |  | CSI.      | DEFL.    | in (loc)   | I/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|--|-----------|----------|------------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.25  |  | TC 0.64   | Vert(LL) | -0.17 2-15 | >999   | 240 | MT20           | 244/190  |
| TCDL 7.0      | Lumber DOL 1.25      |  | BC 0.53   | Vert(CT) | -0.29 2-15 | >999   | 180 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  |  | WB 0.54   | Horz(CT) | 0.18 9     | n/a    | n/a |                |          |
| BCDL 10.0     | Code FBC2020/TPI2014 |  | Matrix-MS |          |            |        |     | Weight: 210 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x6 SP M 26 \*Except\*  
5-7: 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
2-16: 2x8 SP 2400F 2.0E, 2-14: 2x6 SP M 26, 4-13: 2x4 SP No.3  
WEBS 2x4 SP No.3

#### REACTIONS.

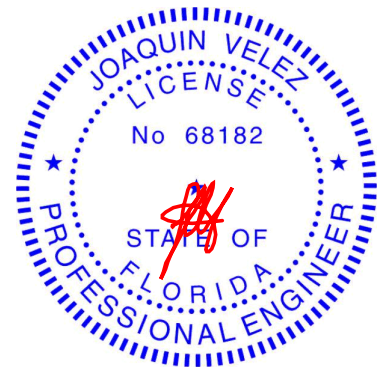
(size) 1=0-8-0, 9=0-3-8  
Max Horz 1=238(LC 12)  
Max Uplift 1=-206(LC 12), 9=-294(LC 9)  
Max Grav 1=1001(LC 2), 9=1302(LC 2)

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

TOP CHORD 2-20=-556/0, 2-3=-2385/600, 3-4=-1475/368, 4-5=-1404/406, 5-6=-496/134  
BOT CHORD 2-15=-722/2177, 14-15=-722/2177, 10-12=-267/902, 9-10=-134/496  
WEBS 3-14=-1049/374, 12-14=-254/937, 5-14=-348/999, 5-10=-567/186, 6-10=-91/618,  
6-9=-1149/284, 3-15=-68/458

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 13-11-8, Exterior(2R) 13-11-8 to 18-2-7, Interior(1) 18-2-7 to 28-8-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 206 lb uplift at joint 1 and 294 lb uplift at joint 9.



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

May 19,2022

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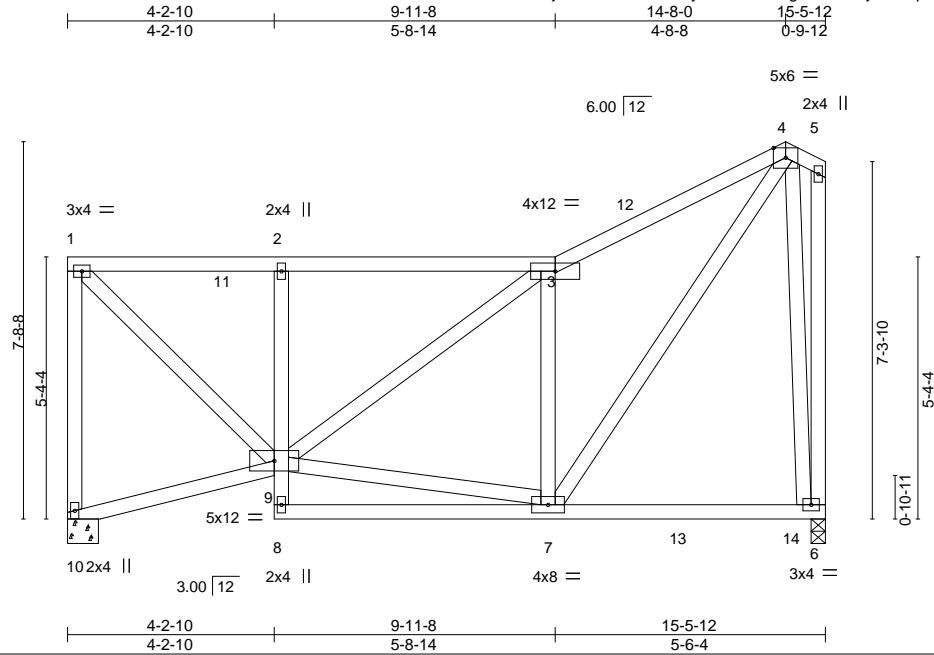


|         |       |              |     |     |                           |
|---------|-------|--------------|-----|-----|---------------------------|
| Job     | Truss | Truss Type   | Qty | Ply | HOUSECRAFT - MIRANDA RES. |
| 3182083 | T20   | Roof Special | 1   | 1   | T27761663                 |

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:14:59 2022 Page 1

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| LOADING (psf) | SPACING-             | CSI.      | DEFL.    | in (loc) | I/defl | L/d  | PLATES         | GRIP     |
|---------------|----------------------|-----------|----------|----------|--------|------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.29   | Vert(LL) | -0.04    | 6-7    | >999 | MT20           | 244/190  |
| TCDL 7.0      | Plate Grip DOL 1.25  | BC 0.30   | Vert(CT) | -0.07    | 6-7    | >999 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.25      | WB 0.57   | Horz(CT) | 0.01     | 6      | n/a  |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-MS |          |          |        |      |                |          |
|               | Code FBC2020/TPI2014 |           |          |          |        |      | Weight: 128 lb | FT = 20% |

#### LUMBER-

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

#### REACTIONS.

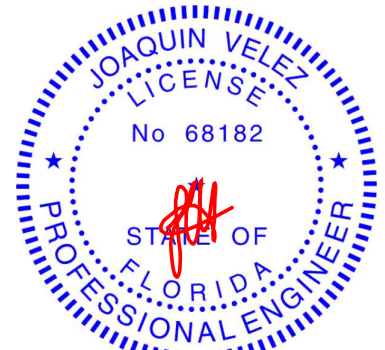
(size) 10=0-7-9, 6=0-3-8  
Max Horz 10=74(LC 12)  
Max Uplift 10=-123(LC 8), 6=-173(LC 12)  
Max Grav 10=604(LC 2), 6=631(LC 2)

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

TOP CHORD 1-10=-531/178, 1-2=-473/128, 2-3=-471/130, 3-4=-561/133  
BOT CHORD 2-9=-306/164  
WEBS 1-9=-178/654, 7-9=-138/415, 3-7=-501/253, 4-7=-227/746, 4-6=-549/291

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 14-8-0, Exterior(2E) 14-8-0 to 15-4-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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) 10 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 123 lb uplift at joint 10 and 173 lb uplift at joint 6.



Joaquin Velez PE No.68182  
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Date:

May 19,2022

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

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



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Builders FirstSource (Lake City, FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:15:00 2022 Page 1  
ID:WbJvFHLjSllxW8vXEBdMcaYlOPE-5k8HH0HqB65DLMrJzW4zr7lpDavpJWtXczkanfzFDyv  
5-0-10 9-8-15 14-8-0 15-5-12  
5-0-10 4-8-5 4-11-1 0-9-12

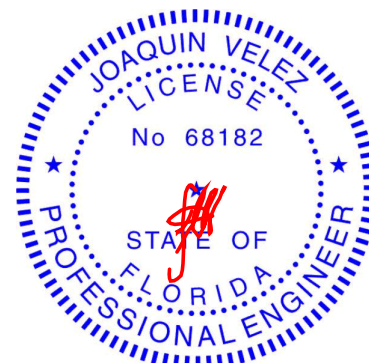


|                |                           |                 |  |
|----------------|---------------------------|-----------------|--|
| <b>LUMBER-</b> |                           | <b>BRACING-</b> |  |
| TOP CHORD      | 2x4 SP No.2               | TOP CHORD       | Structural wood sheathing directly applied or 4-6-11 oc purlins, |
| BOT CHORD      | 2x4 SP No.2               |                 | except end verticals.  |
| WEBS           | 2x4 SP No.3 *Except*      | BOT CHORD       | Rigid ceiling directly applied or 6-0-0 oc bracing.              |
|                | 6-11: 2x4 SP No.2         |                 |  |
| OTHERS         | 2x4 SP No.2               |                 |  |
| LBR SCAB       | 6-11 2x4 SP No.2 one side |                 |  |

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

|           |   |
|-----------|---|
| TOP CHORD | 1-2=-1540/479, 2-4=-1237/348, 7-11=-567/263, 6-7=-694/276 |
| BOT CHORD | 1-10=-653/1378, 9-10=-400/825                             |
| WEBS      | 2-10=-274/211, 4-10=-107/538, 4-9=-708/350, 6-8=-264/591  |

- 1) Attached 7-1-7 scab 6 to 11, front face(s) 2x4 SP No.2 with 1 row(s) of 10d (0.131"x3") nails spaced 9" o.c..
- 2) Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDD=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 14-8-0, Exterior(2E) 14-8-0 to 15-4-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 92 lb uplift at joint 1 and 205 lb uplift at joint 11.



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Date:

May 19, 2022



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Tampa, FL 36610

|         |       |                 |     |     |                           |           |
|---------|-------|-----------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type      | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761665 |
| 3182083 | T22   | Half Hip Girder | 1   | 1   | Job Reference (optional)  |           |

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8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:01 2022 Page 1

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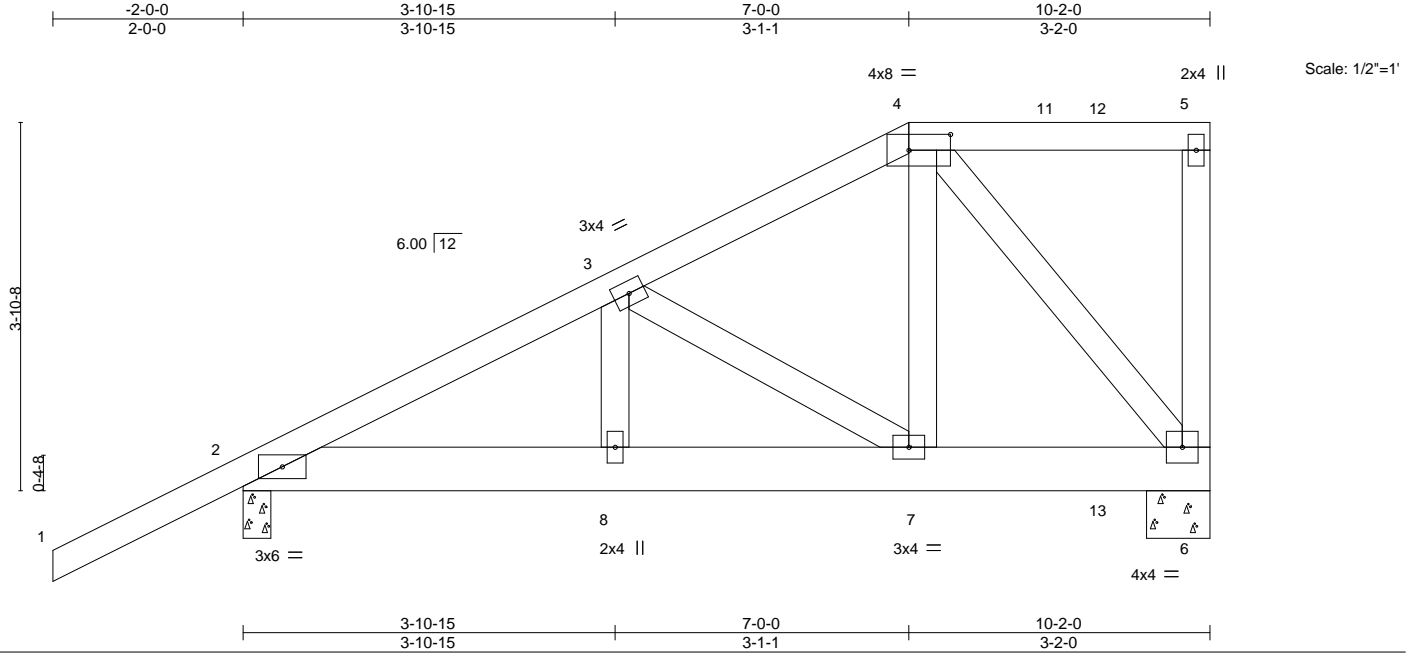


Plate Offsets (X,Y)-- [4:0-5-4,0-2-0]

| LOADING (psf) | SPACING-             |      | CSL       | DEFL.    | in    | (loc) | I/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|------|-----------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.25 | TC 0.27   | Vert(LL) | -0.01 | 8     | >999   | 240 | MT20          | 244/190  |
| TCDL 7.0      | Lumber DOL           | 1.25 | BC 0.21   | Vert(CT) | -0.02 | 8     | >999   | 180 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | NO   | WB 0.29   | Horz(CT) | 0.01  | 6     | n/a    | n/a |               |          |
| BCDL 10.0     | Code FBC2020/TP12014 |      | Matrix-MS |          |       |       |        |     | Weight: 66 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 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 2=0-3-8, 6=0-8-0  
Max Horz 2=151(LC 8)  
Max Uplift 2=180(LC 8), 6=378(LC 5)  
Max Grav 2=622(LC 1), 6=931(LC 1)

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

TOP CHORD 2-3=-821/264, 3-4=-578/198, 5-6=-287/151  
BOT CHORD 2-8=-281/703, 7-8=-281/703, 6-7=-195/503  
WEBS 3-7=-257/115, 4-7=-162/555, 4-6=-747/289

#### 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; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 180 lb uplift at joint 2 and 378 lb uplift at joint 6.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 106 lb down and 88 lb up at 7-0-0, and 107 lb down and 85 lb up at 9-0-12, and 133 lb down and 86 lb up at 10-0-4 on top chord, and 297 lb down and 145 lb up at 7-0-0, and 86 lb down at 9-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) 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, 4-5=-54, 2-6=-20  
Concentrated Loads (lb)  
Vert: 5=-133(F) 7=-295(F) 4=-106(F) 12=-107(F) 13=-61(F)



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

May 19,2022

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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



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Tampa, FL 33610

|         |       |            |     |     |                           |           |
|---------|-------|------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761666 |
| 3182083 | T23   | Half Hip   | 1   | 1   | Job Reference (optional)  |           |

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8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:15:02 2022 Page 1  
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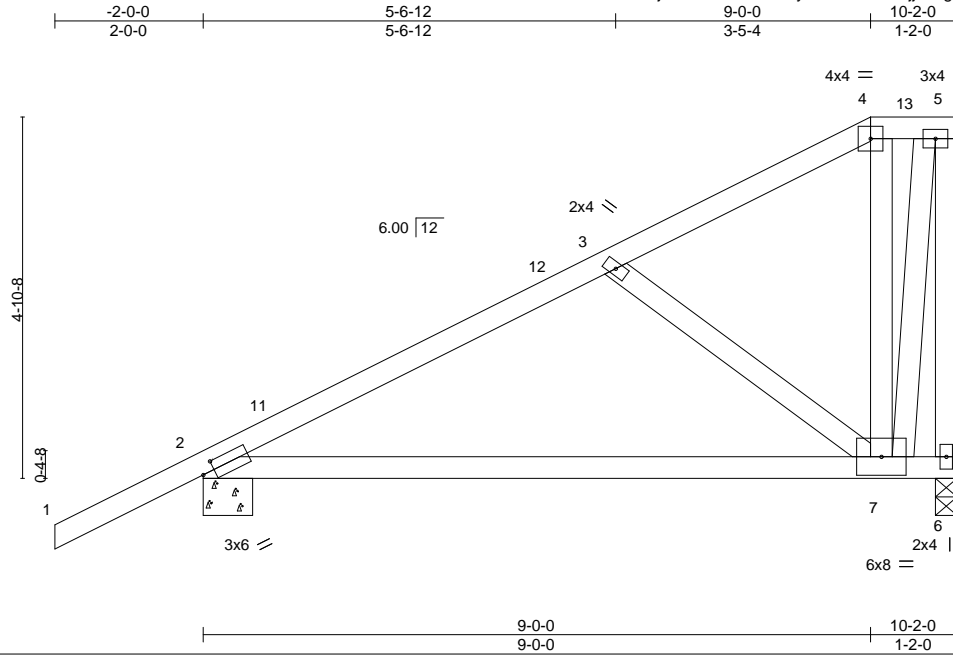


Plate Offsets (X,Y)-- [2:0-1-15,0-1-8]

| LOADING (psf) | SPACING-        |                 | CSL.      | DEFL.    | in    | (loc) | I/defl | L/d | PLATES        | GRIP     |
|---------------|-----------------|-----------------|-----------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL  | 2-0-0           | TC 0.40   | Vert(LL) | -0.13 | 7-10  | >947   | 240 | MT20          | 244/190  |
| TCDL 7.0      | Lumber DOL      | 1.25            | BC 0.61   | Vert(CT) | -0.26 | 7-10  | >461   | 180 |               |          |
| BCLL 0.0 *    | Rep Stress Incr | YES             | WB 0.20   | Horz(CT) | 0.00  | 6     | n/a    | n/a |               |          |
| BCDL 10.0     | Code            | FBC2020/TPI2014 | Matrix-MS |          |       |       |        |     | Weight: 61 lb | FT = 20% |

#### LUMBER-

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

#### REACTIONS.

(size) 6=0-3-8, 2=0-8-0  
Max Horz 2=185(LC 12)  
Max Uplift 6=123(LC 12), 2=112(LC 12)  
Max Grav 6=360(LC 1), 2=490(LC 1)

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

TOP CHORD 2-3=-406/81, 5-6=-555/150  
BOT CHORD 2-7=-200/333  
WEBS 3-7=-299/208, 5-7=-148/535

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 9-0-0, Exterior(2E) 9-0-0 to 10-0-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 123 lb uplift at joint 6 and 112 lb uplift at joint 2.



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

May 19,2022

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



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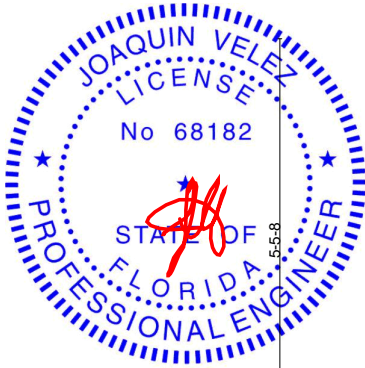
|         |       |            |     |     |                           |           |
|---------|-------|------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761667 |
| 3182083 | T24   | Monopitch  | 1   | 1   | Job Reference (optional)  |           |

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

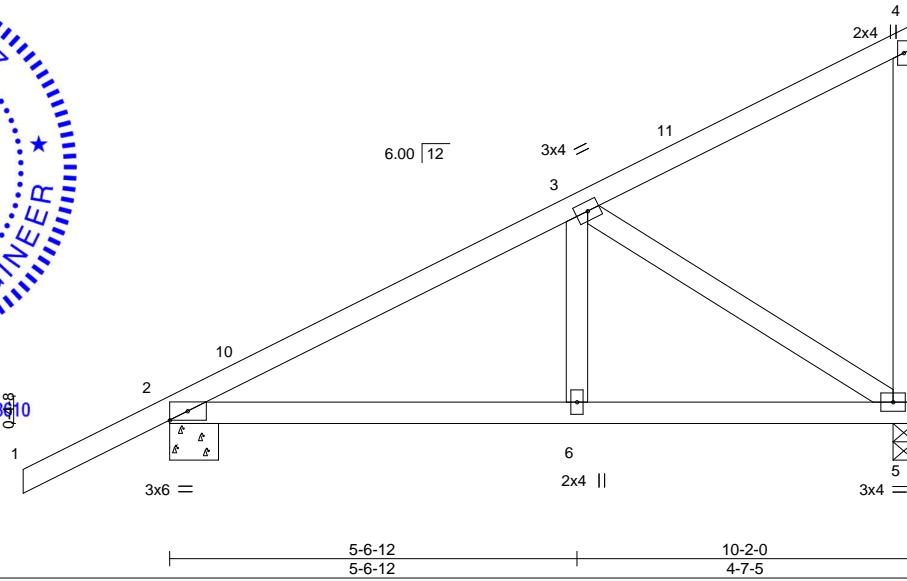
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Scale = 1:31.5



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



| LOADING (psf) | SPACING-             | CSI.      | DEFL.          | in (loc) | I/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|-----------|----------------|----------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.25  | TC 0.25   | Vert(LL) -0.02 | 6-9      | >999   | 240 | MT20          | 244/190  |
| TCDL 7.0      | Lumber DOL 1.25      | BC 0.27   | Vert(CT) -0.05 | 6-9      | >999   | 180 |               |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.23   | Horz(CT) 0.01  | 5        | n/a    | n/a |               |          |
| BCDL 10.0     | Code FBC2020/TPI2014 | Matrix-MS |                |          |        |     | Weight: 54 lb | FT = 20% |

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 2=0-8-0, 5=0-3-8  
Max Horz 2=202(LC 12)  
Max Uplift 2=-104(LC 12), 5=-139(LC 12)  
Max Grav 2=490(LC 1), 5=360(LC 1)

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

TOP CHORD 2-3=-470/55  
BOT CHORD 2-6=-202/371, 5-6=-202/371  
WEBS 3-5=-433/234

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 10-0-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 104 lb uplift at joint 2 and 139 lb uplift at joint 5.

May 19,2022

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



6904 Parke East Blvd.  
Tampa, FL 36610



|         |       |                  |     |     |                           |           |
|---------|-------|------------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type       | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761668 |
| 3182083 | T25   | Monopitch Girder | 1   | 2   | Job Reference (optional)  |           |

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8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:15:03 2022 Page 1

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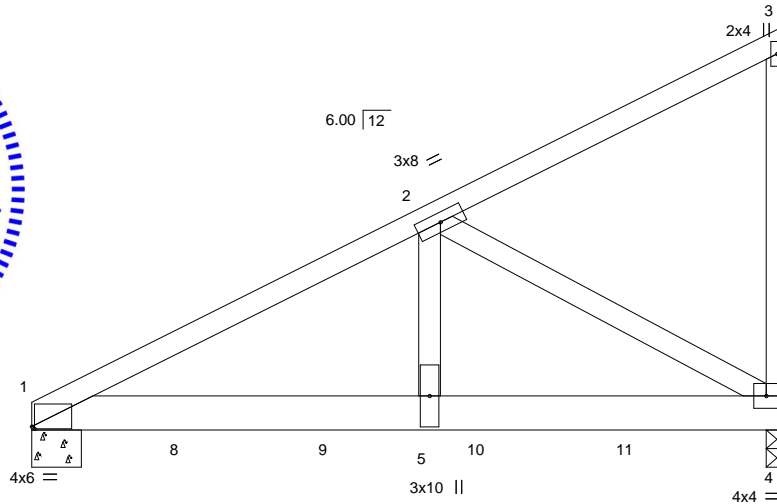
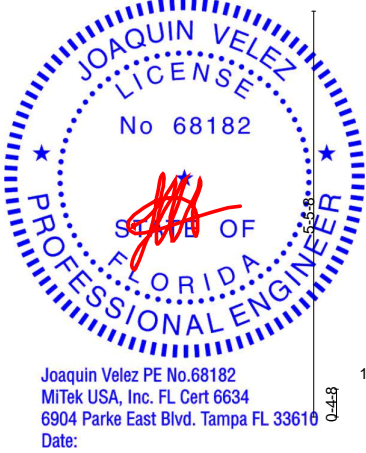


Plate Offsets (X,Y)-- [1:0-0-7,0-0-6]

| LOADING (psf) | SPACING-             |      | CSI.      | DEFL.    | in    | (loc) | I/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|------|-----------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.25 | TC 0.33   | Vert(LL) | -0.05 | 5-7   | >999   | 240 | MT20           | 244/190  |
| TCDL 7.0      | Lumber DOL           | 1.25 | BC 0.37   | Vert(CT) | -0.10 | 5-7   | >999   | 180 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | NO   | WB 0.55   | Horz(CT) | 0.01  | 4     | n/a    | n/a |                |          |
| BCDL 10.0     | Code FBC2020/TP12014 |      | Matrix-MS |          |       |       |        |     | Weight: 117 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 SP M 26  
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) 1=0-8-0, 4=0-3-8  
Max Horz 1=172(LC 23)  
Max Uplift 1=490(LC 8), 4=499(LC 8)  
Max Grav 1=2387(LC 1), 4=2087(LC 1)

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

TOP CHORD 1-2=-3427/675  
BOT CHORD 1-5=-724/3054, 4-5=-724/3054  
WEBS 2-5=-572/2902, 2-4=-3496/827

#### 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.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 490 lb uplift at joint 1 and 499 lb uplift at joint 4.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1062 lb down and 244 lb up at 2-0-4, 1062 lb down and 244 lb up at 4-0-4, and 1062 lb down and 244 lb up at 6-0-4, and 547 lb down and 112 lb up at 8-0-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

#### LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-3=-54, 1-4=-20

May 19,2022

Continued on page 2

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

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

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



6904 Parke East Blvd.  
Tampa, FL 36610



|         |       |                  |     |     |                           |           |
|---------|-------|------------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type       | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761668 |
| 3182083 | T25   | Monopitch Girder | 1   | 2   | Job Reference (optional)  |           |

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:15:03 2022 Page 2  
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**LOAD CASE(S)** Standard  
Concentrated Loads (lb)  
Vert: 8=-1062(B) 9=-1062(B) 10=-1062(B) 11=-547(B)

|         |       |            |     |     |                           |
|---------|-------|------------|-----|-----|---------------------------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. |
| 3182083 | T26   | Hip Girder | 1   | 2   | T27761669                 |

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:15:05 2022 Page 1  
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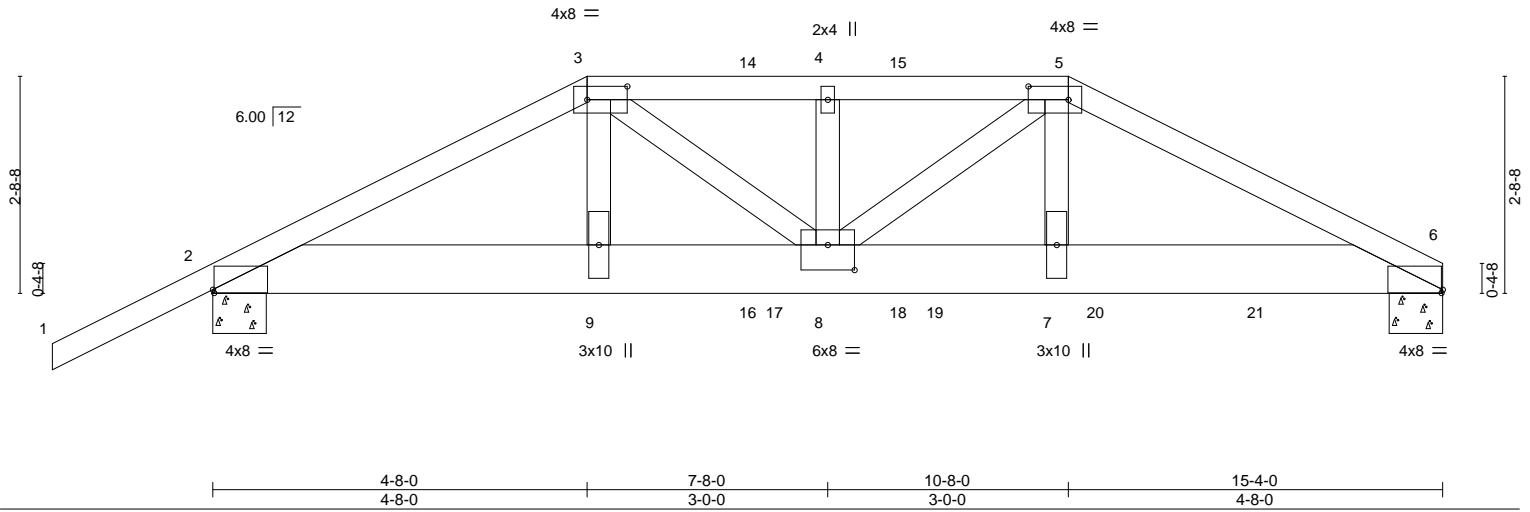
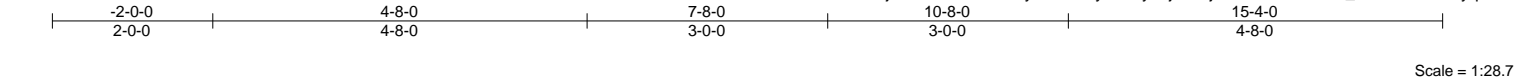


Plate Offsets (X,Y)-- [2:0-0-3,0-0-8], [3:0-6-0,0-2-0], [5:0-6-0,0-2-0], [6:0-0-3,0-0-8], [8:0-4-0,0-3-12]

| LOADING (psf) | SPACING-             | CSL       | DEFL.                     | PLATES         | GRIP     |
|---------------|----------------------|-----------|---------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.39   | in (loc) l/defl L/d       | MT20           | 244/190  |
| TCDL 7.0      | Plate Grip DOL 1.25  | BC 0.35   | Vert(LL) -0.09 8 >999 240 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.25      | WB 0.51   | Vert(CT) -0.17 8 >999 180 |                |          |
| BCDL 10.0     | Rep Stress Incr NO   | Matrix-MS | Horz(CT) 0.03 6 n/a n/a   |                |          |
|               | Code FBC2020/TP12014 |           |                           | Weight: 186 lb | FT = 20% |

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-3-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 6=0-8-0, 2=0-8-0  
Max Horz 2=64(LC 31)  
Max Uplift 6=-974(LC 9), 2=-757(LC 8)  
Max Grav 6=4011(LC 1), 2=2908(LC 1)

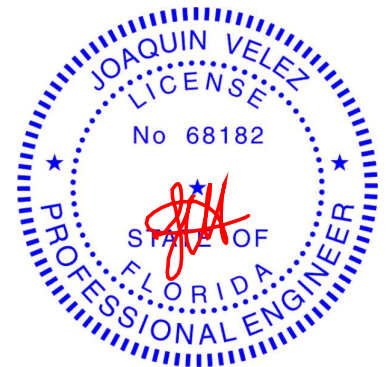
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-6053/1535, 3-4=-7530/1901, 4-5=-7530/1901, 5-6=-7540/1862  
BOT CHORD 2-9=-1348/5365, 8-9=-1360/5421, 7-8=-1645/6882, 6-7=-1608/6713  
WEBS 3-9=-192/866, 3-8=-676/2685, 5-8=-289/877, 5-7=-569/2614

#### NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-5-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 974 lb uplift at joint 6 and 757 lb uplift at joint 2.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 64 lb down and 63 lb up at 4-8-0, 45 lb down and 63 lb up at 6-8-12, and 45 lb down and 63 lb up at 8-7-4, and 64 lb down and 63 lb up at 10-8-0 on top chord, and 105 lb down and 26 lb up at 4-8-0, 41 lb down at 6-8-12, 2188 lb down and 582 lb up at 7-0-12, 41 lb down at 8-7-4, 1052 lb down and 250 lb up at 9-0-12, 105 lb down and 26 lb up at 10-7-4, and 1137 lb down and 247 lb up at 11-0-12, and 1052 lb down and 244 lb up at 13-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

Continued on page 2



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

May 19,2022

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



6904 Parke East Blvd.  
Tampa, FL 36610

|         |       |            |     |     |                           |           |
|---------|-------|------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761669 |
| 3182083 | T26   | Hip Girder | 1   | 2   | Job Reference (optional)  |           |

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:15:05 2022 Page 2  
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LOAD CASE(S) Standard

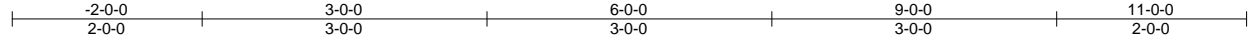
- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
- Uniform Loads (plf)
- Vert: 1-3=-54, 3-5=-54, 5-6=-54, 2-6=-20
- Concentrated Loads (lb)
- Vert: 3=-45(B) 5=-45(B) 9=-48(B) 7=-48(B) 14=-45(B) 15=-45(B) 16=-28(B) 17=-2188(F) 18=-28(B) 19=-1052(F) 20=-1052(F) 21=-1052(F)

|         |       |            |     |     |                           |           |
|---------|-------|------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761670 |
| 3182083 | T27   | Hip Girder | 1   | 1   | Job Reference (optional)  |           |

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8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:15:07 2022 Page 1

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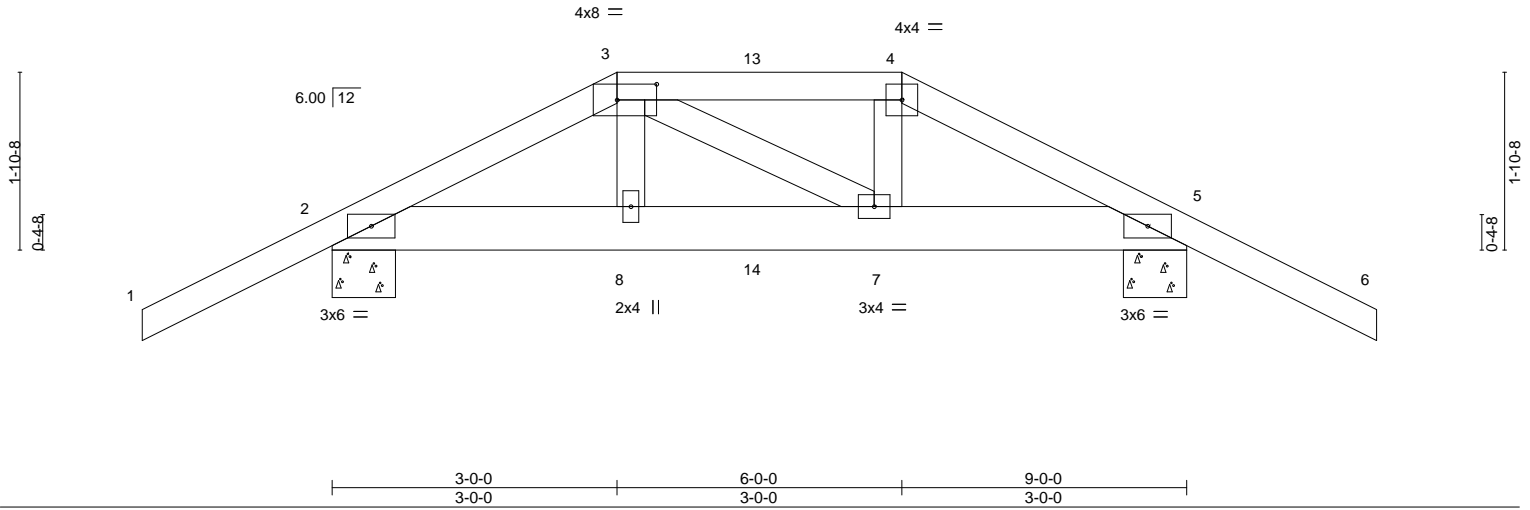


Plate Offsets (X,Y)-- [3:0-5:0,0-2-0]

| LOADING (psf) | SPACING-             |      | CSL       | DEFL.    | in    | (loc) | I/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|------|-----------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.25 | TC 0.27   | Vert(LL) | 0.01  | 8     | >999   | 240 | MT20          | 244/190  |
| TCDL 7.0      | Lumber DOL           | 1.25 | BC 0.15   | Vert(CT) | -0.01 | 7-8   | >999   | 180 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | NO   | WB 0.05   | Horz(CT) | 0.00  | 5     | n/a    | n/a |               |          |
| BCDL 10.0     | Code FBC2020/TPI2014 |      | Matrix-MS |          |       |       |        |     | Weight: 50 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 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 2=0-8-0, 5=0-8-0  
Max Horz 2=-37(LC 13)  
Max Uplift 2=-179(LC 8), 5=-179(LC 9)  
Max Grav 2=443(LC 19), 5=443(LC 1)

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

TOP CHORD 2-3=-456/246, 3-4=-403/231, 4-5=-469/244  
BOT CHORD 2-8=-192/434, 7-8=-197/443, 5-7=-179/444

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 179 lb uplift at joint 2 and 179 lb uplift at joint 5.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 21 lb down and 31 lb up at 3-0-0, and 21 lb down and 23 lb up at 4-6-0, and 91 lb down and 43 lb up at 6-0-0 on top chord, and 102 lb down and 71 lb up at 3-0-0, and 38 lb down and 21 lb up at 4-6-0, and 102 lb down and 71 lb up at 5-11-4 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=-3(F) 4=-3(F) 8=3(F) 7=3(F) 13=-3(F) 14=-1(F)



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

May 19,2022

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

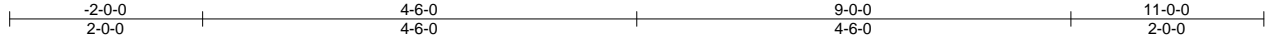


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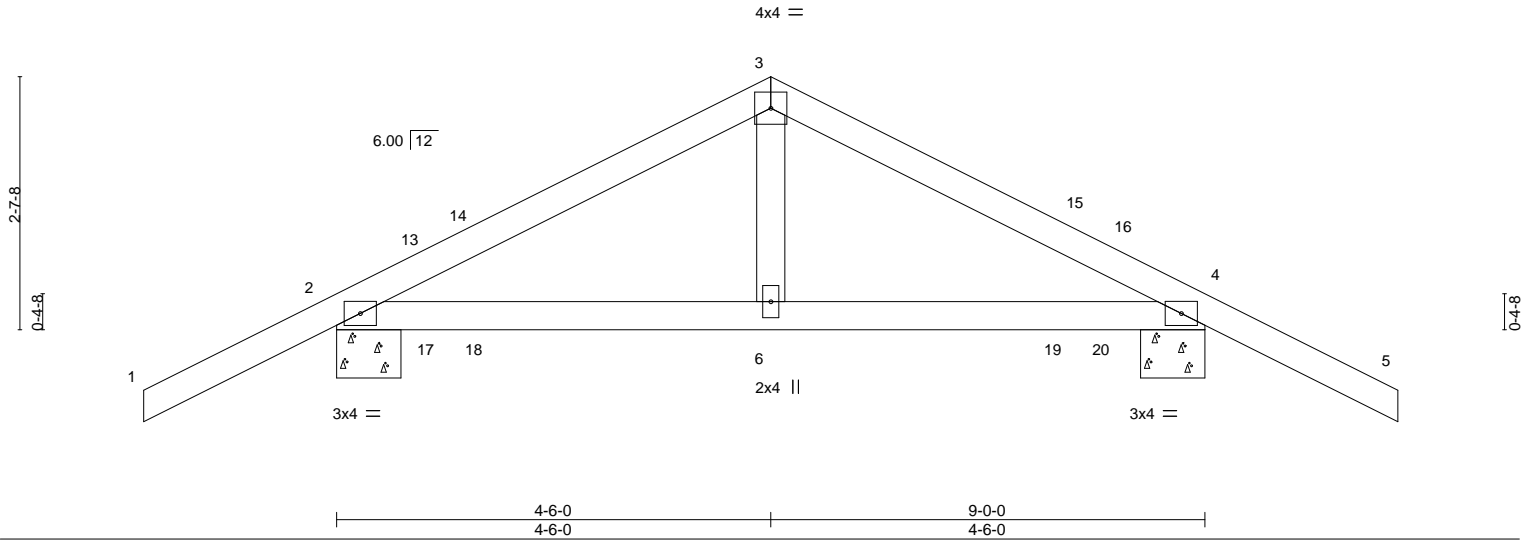
|         |       |            |     |     |                           |           |
|---------|-------|------------|-----|-----|---------------------------|-----------|
| Job     | Truss | Truss Type | Qty | Ply | HOUSECRAFT - MIRANDA RES. | T27761671 |
| 3182083 | T28   | Common     | 1   | 1   | Job Reference (optional)  |           |

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 18 15:15:07 2022 Page 1  
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Scale: 1/2"=1'



| LOADING (psf) | SPACING-             | CSI.      | DEFL.    | in (loc) | L/defl | L/d  | PLATES        | GRIP     |
|---------------|----------------------|-----------|----------|----------|--------|------|---------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.26   | Vert(LL) | 0.03     | 6-12   | >999 | MT20          | 244/190  |
| TCDL 7.0      | Plate Grip DOL 1.25  | BC 0.20   | Vert(CT) | 0.03     | 6-12   | >999 |               |          |
| BCLL 0.0 *    | Lumber DOL 1.25      | WB 0.07   | Horz(CT) | 0.00     | 4      | n/a  |               |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-MS |          |          |        |      | Weight: 38 lb | FT = 20% |
|               | Code FBC2020/TPI2014 |           |          |          |        |      |               |          |

#### 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 9-4-10 oc bracing.

#### REACTIONS.

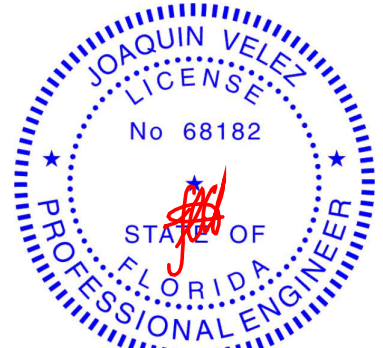
(size) 2=0-8-0, 4=0-8-0  
Max Horz 2=-48(LC 17)  
Max Uplift 2=-115(LC 12), 4=-115(LC 13)  
Max Grav 2=441(LC 1), 4=441(LC 1)

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

TOP CHORD 2-3=-401/545, 3-4=-401/545  
BOT CHORD 2-6=-363/314, 4-6=-363/314  
WEBS 3-6=-287/192

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 4-6-0, Exterior(2R) 4-6-0 to 7-6-0, Interior(1) 7-6-0 to 11-0-0 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 115 lb uplift at joint 2 and 115 lb uplift at joint 4.



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

May 19,2022

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

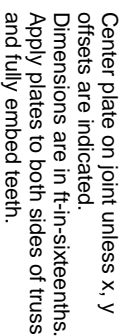


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Tampa, FL 33610

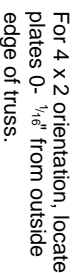


## General Safety Notes

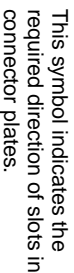
6-4-8 dimensions shown in ft-in-sixteenths  
(Drawings not to scale)



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- $\frac{1}{16}$ " from outside edge of truss.



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

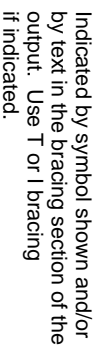
JOINTS ARE GENERALLY NUMBERED/CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

## PRODUCT CODE APPROVALS

## ICC-ES Reports:

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

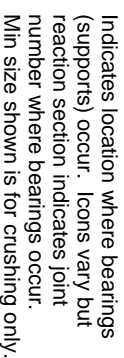
ER-3907, ESR-2362, ESR-1397, ESR-3282



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

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

Lumber design values are in accordance with ANSI/TP1 1 section 6.3. These truss designs rely on lumber values established by others.



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

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ANSI/TP11: National Design Specification for Metal

### Plate Connected Wood Truss Construction.

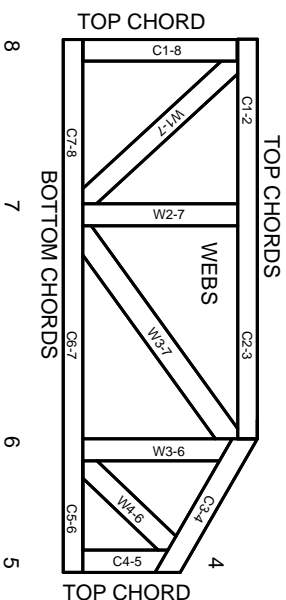
DSB-89: Design Standard for Bracing

BCSI: Building Component Safety Information,

## Guide to Good Practice for Handling,

## Installing & Bracing of Metal Plate

## Connected Wood Trusses.



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 ANS/TP1 section 6.3. These truss designs rely on lumber values established by others.

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

## 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 BCSP.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Torl 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 ware 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. Gamber 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.