



RE: 2718981 - DETAILS

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

06/30/2022

Site Information:

Customer Info: DETAILS Project Name: N/A Model: N/A Lot/Block: N/A Subdivision: N/A

Address: N/A, N/A

City: N/A State: N/A

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

Name: License #:

Address:

City: State:

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

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

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

This package includes 20 individual, General Truss Details 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.

N.I	01//	Detail Name	Doto	NI-	0 1//	Detail Name	Data
No.	Seal#	Detail Name	Date	No.	Seal#	Detail Name	Date
1	T23399806	MII-REP10	4/2/21	15	T23399820	MII-VALLEY HIGH WIND2	4/2/21
2	T23399807	MII-T-BRACE 2	4/2/21	16	T23399821	MII-VALLEY SP	4/2/21
3	T23399808	MII-SCAB-BRACE	4/2/21	17	T23399822	MII-VALLEY SP	4/2/21
4	T23399809	MII-REP05	4/2/21	18	T23399823	MII-GE146-001	4/2/21
5	T23399810	MII-GE130-D-SP	4/2/21	19	T23399824	MII-REP13B	4/2/21
6	T23399811	MII-GE130-SP	4/2/21	20	T2 825	MENTERS BY Code Com	
7	T23399812	MII-GE140-001	4/2/21	-	T2 825	Keview for Code Con	
8	T23399813	MII-GE170-D-SP	4/2/21			Universal Engineering	ı Science
9	T23399814	MII-GE180-D-SP	4/2/21			9 11 9	
10	T23399815	MII-GE180-D-SP	4/2/21		0	6 91 -	
11	T23399816	MII-PIGGY-ALT-7-16	4/2/21		Jaylek	w Pernell PX	(2707 06
12	T23399817	MII-REP01A1	4/2/21			Examiner-License No.	
13	T23399818	MII-TOENAIL SP	4/2/21				
14	T23399819	MII-VALLEY HIGH WIND1	4/2/21				

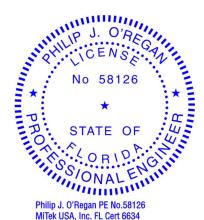
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The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource-Jacksonville.

Truss Design Engineer's Name: ORegan, Philip

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

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



6904 Parke East Blvd. Tampa FL 33610



RE: \$JOBNAME - \$JOBDESC

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

### **Site Information:**

Customer Info: \$SI\_CUSTOMER Project Name: \$SI\_JOBNAME Model: \$SI\_MODEL Lot/Block: \$SI\_LOTNUM Subdivision: \$SI\_SUBDIV Address: \$SI\_SITEADDR

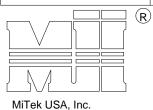
City: \$SI\_SITECITY State: \$SI\_SITESTATE OCTOBER 28, 2016

### STANDARD REPAIR FOR ADDING A FALSE BOTTOM CHORD

MII-REP10 T23399806

MiTek USA, Inc.

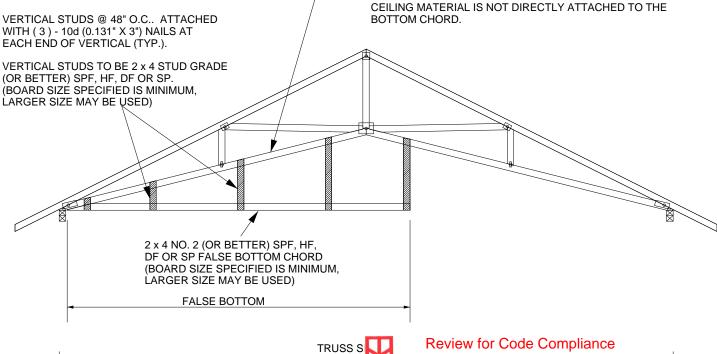
Page 1 of 1



MAIN TRUSS MANUFACTURED WITHOUT FALSE BOTTOM CHORD.

MAIN TRUSS (SPACING = 24" O.C.)

REFER TO THE BOTTOM CHORD BRACING SECTION OF THE INDIVIDUAL TRUSS DESIGN FOR MAXIMUM SPACING OF CONTINUOUS LATERAL BRACING WHENEVER RIGID CEILING MATERIAL IS NOT DIRECTLY ATTACHED TO THE BOTTOM CHORD.



NOTES:

PX2707

Universal Engineering Science

06/30/2022

- 1. LOADING: TOP CHORD: (REFER TO THE MAIN TRUSS DESIGN FOR TOP CHORD LOADING). BOTTOM CHORD: LL = 0 PSF, DL = 10 PSF.
- 2. REFER TO THE MAIN TRUSS DESIGN FOR LUMBER AND PLATING REQUIREMENTS.
- 3. MAXIMUM BOTTOM CHORD PITCH = 6/12.
- 4. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID SPLITTING OF THE WOOD.
- 5. FALSE BOTTOM CHORD ONLY DESIGNED TO CARRY VERTICAL LOAD. NO LATERAL (SHEAR) LOAD ALLOWED.
- 6. FILLER MAY EXTEND FOR FULL LENGTH OF TRUSS.

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Web

Nails

### T-BRACE / I-BRACE DETAIL WITH 2X BRACE ONLY

### MII-T-BRACE 2 T23399807

MiTek USA, Inc.

Page 1 of 1



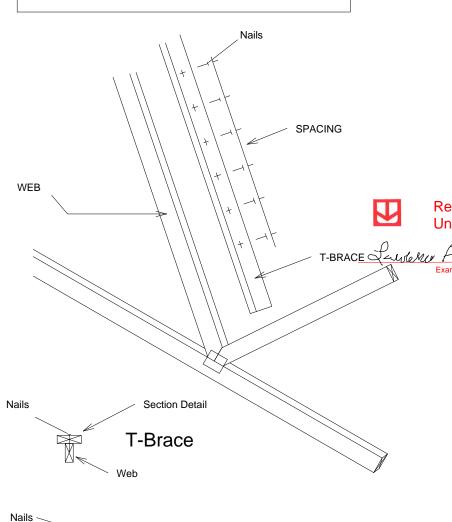
Note: T-Bracing / I-Bracing to be used when continuous lateral bracing is impractical. T-Brace / I-Brace must cover 90% of web length.

Note: This detail NOT to be used to convert T-Brace / I-Brace webs to continuous lateral braced webs.

Nailing Pattern							
Nail Size	Nail Spacing						
10d (0.131" X 3")	6" o.c.						
	Nail Size						

Note: Nail along entire length of T-Brace / I-Brace (On Two-Ply's Nail to Both Plies)

	Brace Size for One-Ply Truss				
	Specified Control Rows of Late				
Web Size	1	2			
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace			
2x6	2x6 T-Brace	2x6 I-Brace			
2x8	2x8 T-Brace	2x8 I-Brace			



I-Brace

	Brace for Two-P				
	Specified Continuous Rows of Lateral Bracing				
Web Size	1	2			
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace			
2x6	2x6 T-Brace	2x6 I-Brace			
view for Code Com	2x8 T-Brace	2x8 I-Brace			
I.E					

Universal Engineering Science
T-Brace / I-Brace must be same species
and grape (or better) as web member.

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April 2,2021

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

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

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

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



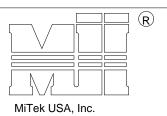
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### SCAB-BRACE DETAIL

### MII-SCAB-BRACE T23399808

MiTek USA, Inc.

Page 1 of 1



Note: Scab-Bracing to be used when continuous lateral bracing at midpoint (or T-Brace) is impractical. Scab must cover full length of web +/- 6".

\*\*\* THIS DETAIL IS NOT APLICABLE WHEN BRACING IS \*\*\* REQUIRED AT 1/3 POINTS OR I-BRACE IS SPECIFIED.

SCAB TO ONE FACE OF WEB WITH APPLY 2x 2 ROWS OF 10d (0.131" X 3") NAILS SPACED 6" O.C. SCAB MUST BE THE SAME GRADE, SIZE AND SPECIES (OR BETTER) AS THE WEB. MAXIMUM WEB AXIAL FORCE = 2500 lbs MAXIMUM WEB LENGTH = 12'-0" 2x4 MINIMUM WEB SIZE SCAB BRACE MINIMUM WEB GRADE OF #3 **Review for Code Compliance** Universal Engineering Science erve PX2707 06/30/2022 Nails Section Detail Scab-Brace Web

Scab-Brace must be same species grade (or better) as web member.

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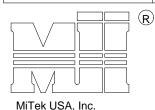
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### STANDARD REPAIR TO REMOVE END **VERTICAL (RIBBON NOTCH VERTICAL)**

MII-REP05 T23399809

MiTek USA, Inc. Page 1 of 1

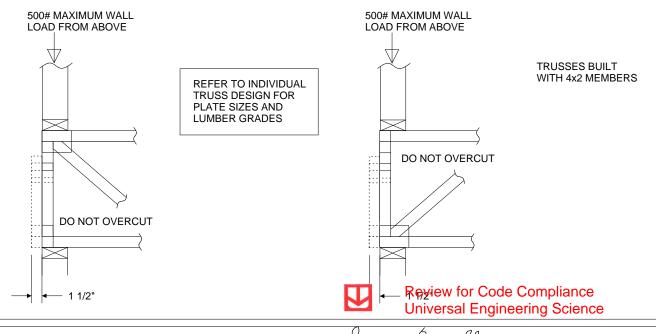


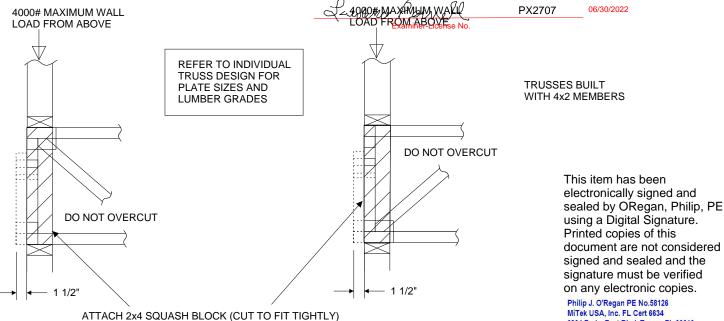
- 1. THIS IS A SPECIFIC REPAIR DETAIL TO BE USED ONLY FOR ITS ORIGINAL INTENTION. THIS REPAIR DOES NOT IMPLY THAT THE REMAINING PORTION OF THE TRUSS IS UNDAMAGED. THE ENTIRE TRUSS SHALL BE INSPECTED TO VERIFY THAT NO FURTHER REPAIRS ARE REQUIRED. WHEN THE REQUIRED REPAIRS ARE PROPERLY APPLIED, THE TRUSS WILL BE CAPABLE OF SUPPORTING THE LOADS INDICATED.
- 2. ALL MEMBERS MUST BE RETURNED TO THEIR ORIGINAL POSITIONS BEFORE
- APPLYING REPAIR AND HELD IN PLACE DURING APPLICATION OF REPAIR.

  3. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE
- SUCH AS TO AVOID SPLITTING OF THE WOOD.

  4. LUMBER MUST BE CUT CLEANLY AND ACCURATELY AND THE REMAINING WOOD MUST BE UNDAMAGED.

  5. THIS REPAIR IS TO BE USED FOR SINGLE PLY TRUSSES IN THE 4X\_ ORIENTATION ONLY.
- 6. CONNECTOR PLATES MUST BE FULLY IMBEDDED AND UNDISTURBED.





April 2,2021



TO BOTH SIDES OF THE TRUSS AS SHOWN WITH

10d (0.131" X 3") NAILS SPACED 3" O.C.

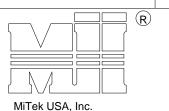
6904 Parke East Blvd. Tampa FL 33610

### Standard Gable End Detail

### MII-GE130-D-SP T23399810

Page 1 of 2

MiTek USA. Inc.



Typical \_x4 L-Brace Nailed To 2x\_ Verticals W/10d Nails spaced 6" o.c. Vertical Stud SECTION B-B

DIAGONAL BRACE 4'-0" O.C. MAX TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY. 12 Varies to Common Truss SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA \*\* 3x4 = - Diagonal Bracing - L-Bracing Refer \*\* Refer to Section A-A to Section B-B

Vertical Stud DIAGONAL (4) - 16d Nails 16d Nails Spaced 6" o.c. (2) - 10d Nails into 2x6 2x6 Stud or 2x4 No.2 of better Typical Horizontal Brace Nailed To 2x\_ Verticals w/(4)-10d Nails **SECTION A-A** 2x4 Stud

> PROVIDE 2x4 BLOCKING BETWEEN THE FIRST TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. ATTACH DIAGONAL BRACE TO BLOCKING WITH (5) - 10d NAILS.

(4) - 8d (0.131" X 2.5") NAILS MINIMUM, PLYWOOD SHEATHING TO 2x4 STD SPF BLOCK

**NAILS** 

### Roof Sheathing

### 1'-3" (2) - 10d/

Max.

(2) - 10d NAILS

24" Max

Trusses @ 24" o.c. Review for Code Compliance Universal Engineering Science

Luding Brace Well at 1/3 points if needed

**End Wall** 

2x6 DIAGONAL BRACE SPACED 48" O.C. ATTACHED TO VERTICAL WITH (4) -16d NAILS AND ATTACHED

TO BLOCKING WITH (5) - 10d NAILS.

HORIZONTAL BRACE (SEE SECTION A-A)

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signature must be verified

April 2,2021

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### NOTE:

- 1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS. 2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND
- WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
- 3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
- 4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH. GRADES: 1x4 SRB OR 2x4 STUD OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C. 5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF
- DIAPHRAM AT 4'-0" O.C.
- 6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 STUD AND A 2x4 STUD AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST STUD. ATTACH TO VERTICAL STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
- 7. GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.
- 8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES
- DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
- 10. SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE 06-01-13 BY SPIB/ALSC.
- NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

Minimum Stud Size Species	Stud Spacing	Without Brace	1x4 L-Brace	2x4 L-Brace DIAGONAL BRACE		2 DIAGONAL BRACES AT 1/3 POINTS	
and Grade		Maximum Stud Length					
2x4 SP No. 3 / Stud	12" O.C.	3-9-13	4-1-1	5-9-6	7-1-3	11-5-7	
2x4 SP No. 3 / Stud	16" O.C.	3-5-4	3-6-8	5-0-2	6-10-8	10-3-13	
2x4 SP No. 3 / Stud	24" O.C.	2-9-11	2-10-11	4-1-1	5-7-6	8-5-1	

Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of diagonal brace with 10d nails 8" o.c., with 3" minimum end distance. Brace must cover 90% of diagonal length.

CATEGORY II BUILDING EXPOSURE D

ASCE 7-10, ASCE 7-10 130 MPH

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.

DURANION OF COAD INCREASE LIFE AS OF READ NOT CONNECTION OF BRACTING IS BASED ON MY FIRST. 519/2020 BEFORE USE.

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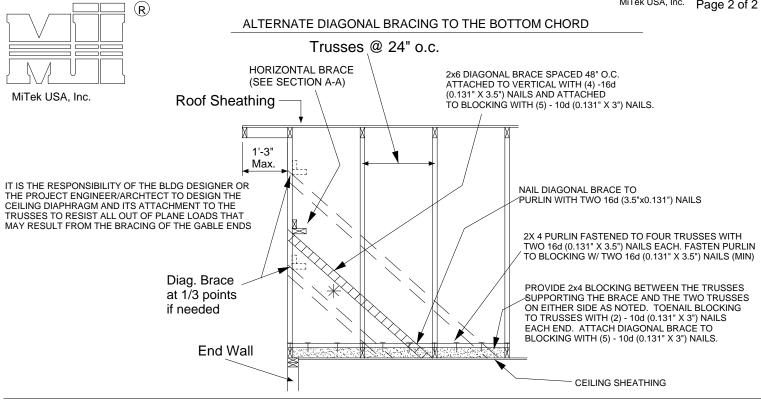
\*\*ANSITP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



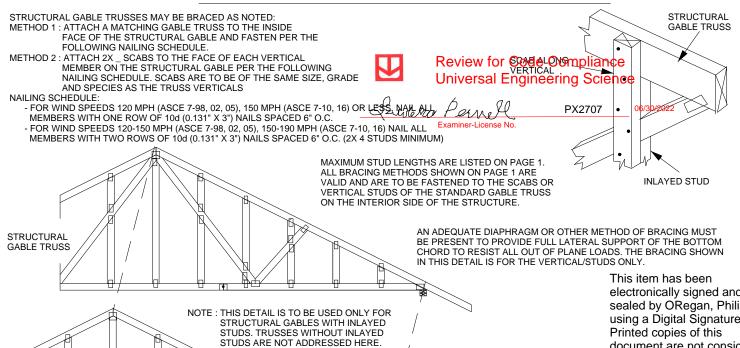
6904 Parke East Blvd

MAX MEAN ROOF HEIGHT = 30 FEET

MiTek USA, Inc. Page 2 of 2



### BRACING REQUIREMENTS FOR STRUCTURAL GABLE TRUSSES



**STANDARD** 

**GABLE TRUSS** 

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April 2,2021

🗥 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see 

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



### Standard Gable End Detail

### MII-GE130-SP T23399811

Page 1 of 2

MiTek USA, Inc.

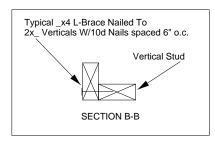


MiTek USA, Inc.

- Diagonal Bracing

NOTE:

Refer to Section A-A



DIAGONAL BRACE TRUSS GEOMETRY AND CONDITIONS 4'-0" O.C. MAX SHOWN ARE FOR ILLUSTRATION ONLY. 12 Varies to Common Truss SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA 3x4 =

- L-Bracing Refer

to Section B-B

Vertical Stud DIAGONAL (4) - 16d Nails 16d Nails Spaced 6" o.c. (2) - 10d Nails into 2x6 2x6 Stud or 2x4 No.2 of better Typical Horizontal Brace Nailed To 2x\_ Verticals w/(4)-10d Nails **SECTION A-A** 2x4 Stud

> PROVIDE 2x4 BLOCKING BETWEEN THE FIRST TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. ATTACH DIAGONAL BRACE TO BLOCKING WITH (5) - 10d NAILS.

(4) - 8d (0.131" X2.5") NAILS MINIMUM, PLYWOOD SHEATHING TO 2x4 STD SPF BLOCK

### Roof Sheathing

1'-3"

e Compliance

(2) - 10d/ Max. **NAILS** (2) - 10d NAILS

ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM. 4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH. GRADES: 1x4 SRB

1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.

MINIMONI GRADE OF #2 WALLENAL IN THE TOT AND BETTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.

3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG.

OR 2x4 STUD OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C. 5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C.

6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 STUD AND A 2x4 STUD AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST STUD. ATTACH TO VERTICAL STUDS WITH (4) 10d NAILS THROUGH 2x4.

(REFER TO SECTION A-A) GABLE STUD DEFLECTIÓN MEETS OR EXCEEDS L/240.

- THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
  DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
- 10. SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE 06-01-13 BY SPIB/ALSC.
- NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

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U	niversal Ær	gineer	ing Science
Luping B	race Well		2x6-DIAGONAL B
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if neede	ed –	`  === \	TO BLOCKING W
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En	d Wall	M /	HORI

24" Max

2x6 DIAGONAL BRACE SPACED 48" O.C. ATTACHED TO VERTICAL WITH (4) -16d NAILS AND ATTACHED TO BLOCKING WITH (5) - 10d NAILS.

Trusses @ 24" o.c.

HORIZONTAL BRACE (SEE SECTION A-A)

Minimum Stud Size Species	Stud Spacing	Without Brace	1x4 L-Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS	
and Grade		Maximum Stud Length		ngth			
2x4 SP No. 3 / Stud	12" O.C.	4-0-7	4-5-6	6-3-8	8-0-15	12-1-6	
2x4 SP No. 3 / Stud	16" O.C.	3-8-0	3-10-4	5-5-6	7-4-1	11-0-1	
2x4 SP No. 3 / Stud	24" O.C.	3-0-10	3-1-12	4-5-6	6-1-5	9-1-15	

Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of diagonal brace with 10d nails 8" o.c., with 3" minimum end distance. Brace must cover 90% of diagonal length.

MAX MEAN ROOF HEIGHT = 30 FEET CATEGORY II BUILDING EXPOSURE B or C

ASCE 7-98, ASCE 7-02, ASCE 7-05 130 MPH

ASCE 7-36, ASCE 7-20 ISO MPH

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.

DURANION OF GABUNGREASE 1914.60 READ NOT CONNECTION OF BRACTINGRS BASED ON MWFRS. 5/19/2020 BEFORE USE.

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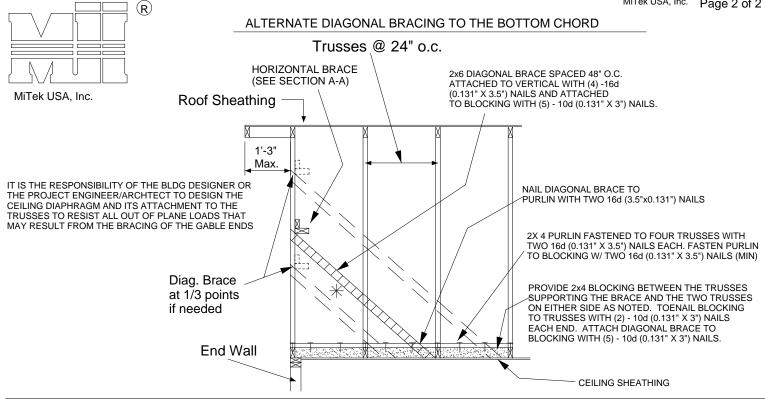
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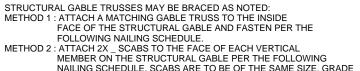
April 2,2021



STRUCTURAL **GABLE TRUSS**  MiTek USA, Inc. Page 2 of 2



### BRACING REQUIREMENTS FOR STRUCTURAL GABLE TRUSSES



NAILING SCHEDULE. SCABS ARE TO BE OF THE SAME SIZE, GRADE AND SPECIES AS THE TRUSS VERTICALS

NAILING SCHEDULE: FOR WIND SPEEDS 120 MPH (ASCE 7-98, 02, 05), 150 MPH (ASCE 7-10, 16) OR LESS WALLAW POWNER MEMBERS WITH ONE ROW OF 10d (0.131" X 3") NAILS SPACED 6" O.C. Examiner-License No FOR WIND SPEEDS 120-150 MPH (ASCE 7-98, 02, 05), 150-190 MPH (ASCE 7-10, 16) NAIL ALL



NOTE: THIS DETAIL IS TO BE USED ONLY FOR

STRUCTURAL GABLES WITH INLAYED

STUDS. TRUSSES WITHOUT INLAYED STUDS ARE NOT ADDRESSED HERE.

> STANDARD GABLE TRUSS

AN ADEQUATE DIAPHRAGM OR OTHER METHOD OF BRACING MUST BE PRESENT TO PROVIDE FULL LATERAL SUPPORT OF THE BOTTOM CHORD TO RESIST ALL OUT OF PLANE LOADS. THE BRACING SHOWN IN THIS DETAIL IS FOR THE VERTICAL/STUDS ONLY.

PX2707

Review for Sode Ompliance Universal Engineering Science

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signed and sealed and the signature must be verified on any electronic copies.

**INLAYED STUD** 

**STRUCTURAL** 

GABLE TRUSS

April 2,2021

MARNING - 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 

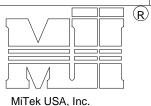
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



### **JANUARY 6, 2017**

### Standard Gable End Detail

### MII-GE140-001 T23399812



DIAGONAL BRACE

4'-0" O.C. MAX

Typical \_x4 L-Brace Nailed To 2x\_ Verticals W/10d Nails spaced 6" o.c. Vertical Stud SECTION B-B

(4) - 16d Nails TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY. **SECTION A-A** 

MiTek USA, Inc. Page 1 of 2 DIAGONAL 16d Nails Spaced 6" o.c. (2) - 10d Nails into 2x6 2x6 Stud or 2x4 No.2 of better

> Typical Horizontal Brace Nailed To 2x\_ Verticals w/(4)-10d Nails

Varies to Common Truss SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA 3x4 =Diagonal Bracing L-Bracing Refer Refer to Section A-A to Section B-B

PROVIDE 2x4 BLOCKING BETWEEN THE FIRST TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. ATTACH DIAGONAL BRACE TO BLOCKING WITH (5) - 10d NAILS.

2x4 Stud

(4) - 8d (0.131" X 2.5") NAILS MINIMUM, PLYWOOD SHEATHING TO 2x4 STD DF/SPF BLOCK

Roof Sheathing

1'-3"

Max

24" Max

Vertical Stud

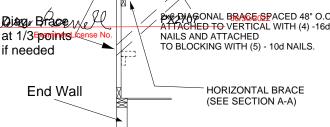
- 1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS. 2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND
- WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.

  3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
- "L" BRACES SPECIFIED ARE TO BE FULL LENGTH. GRADES: 1x4 SRB OR 2x4 STUD OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.
- 5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C. 6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 STUD AND A
- 2x4 STUD AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST STUD. ATTACH TO VERTICAL STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
- GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.
- THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
- 10. NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

		(2) - Tod NAILS
ш	Review for Co	Trusses @ 24" o.c.
$\blacksquare$	/	meering Science
of Dien	u Brace, No. II	DSO DHAGONAL BRAGE SPACED 48" O.C.

(2) - 10d

NAII S



Minimum Stud Size Species	Stud Spacing	Without Brace	1x4 L-Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS		
and Grade		Maximum Stud Length						
2x4 DF/SPF Std/Stud	12" O.C.	3-10-1	3-11-7	5-7-2	7-8-2	11-6-4		
2x4 DF/SPF Std/Stud	16" O.C.	3-3-14	3-5-1	4-10-2	6-7-13	9-11-11		
2x4 DF/SPF Std/Stud	24" O.C.	2-8-9	2-9-8	3-11-7	5-5-2	8-1-12		

Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of web with 10d nails 8" o.c., with 3" minimum end distance. Brace must cover 90% of diagonal length.

MAXIMUM WIND SPEED = 140 MPH MAX MEAN ROOF HEIGHT = 30 FEET CATEGORY II BUILDING **EXPOSURE B or C** 

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April 2,2021

ASCE 7-98, ASCE 7-02, ASCE 7-05

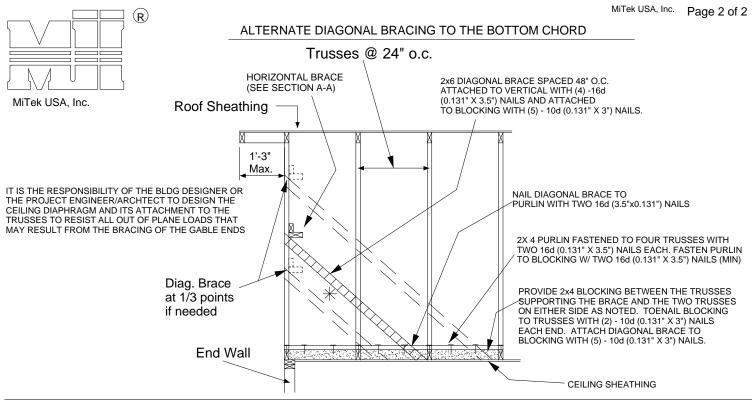
DURANON-OFIGOAD/INGREASE::pt.6:0 REAP GONNECTION IOFISBASED ON COMPONENTS AND CLADDING.

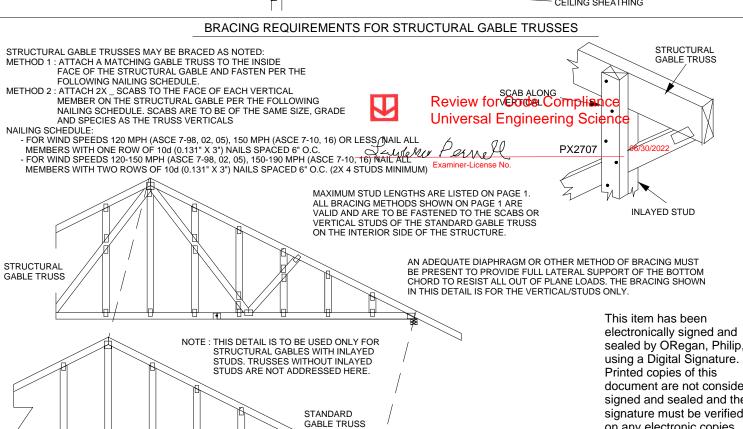
Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

\*\*ANSITP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\*

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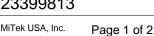
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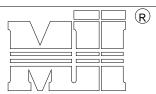




### Standard Gable End Detail

### MII-GE170-D-SP T23399813

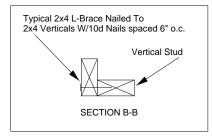




DIAGONAL BRACE

4'-0" O.C. MAX

MiTek USA, Inc.



TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY.

Varies to Common Truss

\*\*

SEE INDIVIDUAL MITEK ENGINEERING

24" Max

DRAWINGS FOR DESIGN CRITERIA

3x4 =

Vertical Stud 2X6 SP OR SPF No. 2 DIAGONAL BRACE (4) - 16d Nails 16d Nails Spaced 6" o.c. (2) - 10d Nails into 2x6 2X6 SP OR SPF No. 2 Typical Horizontal Brace Nailed To 2x4 Verticals w/(4)-10d Nails SECTION A-A 2X4 SP OR SPF No. 2

> PROVIDE 2x4 BLOCKING BETWEEN THE FIRST TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. ATTACH DIAGONAL BRACE TO BLOCKING WITH (5) - 10d NAILS.

10d/

NAILS

(4) - 8d (0.131" X 2.5") NAILS MINIMUM, PLYWOOD SHEATHING TO 2x4 STD SPF BLOCK

- Diagonal Bracing - L-Bracing Refer \*\* Refer to Section A-A to Section B-B NOTE:

- 1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS. 2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
- 3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
- "L" BRACES SPECIFIED ARE TO BE FULL LENGTH, SPF or SP No.3 OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.
  5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF
- DIAPHRAM AT 4'-0" O.C.
- 6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 AND A 2x4 AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST GABLE STUD. ATTACH TO VERTICAL GABLE STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
- 7. GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.
- THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
- DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
- 10. SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE 06-01-13 BY SPIB/ALSC.
- 11. NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

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	Universal l	Éngi	eeri	ng\Sc	sience
<sub>()</sub> Diag	g. Brace 🏒		•	//	
Jayata	3 points /	$\ell \parallel$	\//	$P_{2}$	AGONAL <sup>(</sup>
if ne	edediner-License	No.	//	48" O.0	C. ATTAC
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	End Wall	H	_		— HORI
	Liiu vvali	Ă.			/055

Roof Sheathing

1'-0"

Max.

PX2797GONAL BRACE SPACED 48" O.C. ATTACHED TO VERTICAL WITH (4) -16d NAILS, AND ATTACHED TO BLOCKING WITH (5) -10d NAILS.

(2) - 10d NAILS

Trusses @ 24" o.c.

HORIZONTAL BRACE (SEE SECTION A-A)

Minimum Stud Size Species	Stud Spacing	Without Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS		
and Grade			Maximum St	Stud Length			
2x4 SP No. 3 / Stud	12" O.C.	3-9-7	5-8-8	6-11-1	11-4-4		
2x4 SP No. 3 / Stud	16" O.C.	3-4-12	4-11-15	6-9-8	10-2-3		
2x4 SP No. 3 / Stud	24" O.C.	2-9-4	4-0-7	5-6-8	8-3-13		
2x4 SP No. 2	12" O.C.	3-11-13	5-8-8	6-11-1	11-11-7		
2x4 SP No. 2	16" O.C.	3-7-7	4-11-5	6-11-1	10-10-5		
2x4 SP No. 2	24" O.C.	3-1-15	4-0-7	6-3-14	9-5-14		

Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 l-braces attached to both edges. Fasten T and I braces to narrow edge of diagonal brace with 10d nails 6" o.c., with 3" minimum end distance. Brace must cover 90% of diagonal length. T or I braces must be 2x4 SPF No. 2 or SP No. 2.

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April 2,2021

MAX MEAN ROOF HEIGHT = 30 FEET EXPOSURE D

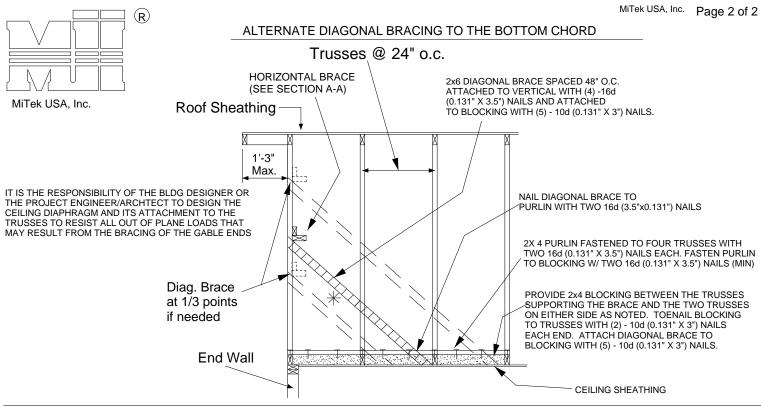
TUD DESIGN IS BASED ON COMPONENTS

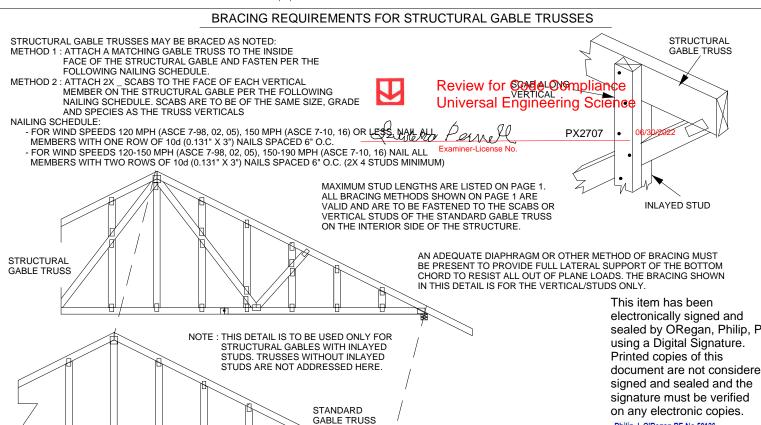
DURATION OF LOAD INCREASE: 1.60
WARNING - Verify design parameters and READ NOTE CONNECTION OF BRACING IS BASED ON MAYERS: 5/19/2020 BEFORE USE

Design valid for use only with MITek® connectors. This design is based only upon parameters and roperly incorporate this design in the overall building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see 

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April 2,2021

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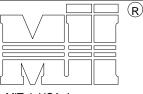


### Standard Gable End Detail

### MII-GE180-D-SP T23399814



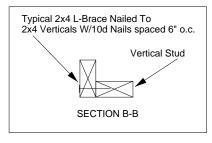
Page 1 of 2



DIAGONAL BRACE

4'-0" O.C. MAX

MiTek USA, Inc.



TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY.

Varies to Common Truss

B

\*\*

SEE INDIVIDUAL MITEK ENGINEERING

24" Max

DRAWINGS FOR DESIGN CRITERIA

3x4 =

Vertical Stud 2X6 SP OR SPF No. 2 DIAGONAL BRACE (4) - 16d Nails 16d Nails Spaced 6" o.c. (2) - 10d Nails into 2x6 2X6 SP OR SPF No. 2 Typical Horizontal Brace Nailed To 2x4 Verticals w/(4)-10d Nails SECTION A-A 2X4\SP OR SPF No. 2

> PROVIDE 2x4 BLOCKING BETWEEN THE FIRST TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. ATTACH DIAGONAL BRACE TO BLOCKING WITH (5) - 10d NAILS.

- Diagonal Bracing Refer to Section A-A

NOTE

\*\* - L-Bracing Refer to Section B-B

(2) - 10d/

NAILS

(4) - 8d (0.131" X 2.5") NAILS MINIMUM, PLYWOOD

Roof Sheathing

1'-0'

Max.

SHEATHING TO 2x4 STD SPF BLOCK

2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT 3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY, CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT

1 MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS

BRACING OF ROOF SYSTEM.

"L" BRACES SPECIFIED ARE TO BE FULL LENGTH, SPF or SP No.3 OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.
5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF

DIAPHRAM AT 4'-0" O.C 6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 AND A

2x4 AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST GABLE STUD. ATTACH TO VERTICAL GABLE STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)

7. GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.

THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.

DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.

10. SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE 06-01-13 BY SPIB/ALSC.

NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

Diag. Brace ~4 st 11/3 soints/e if neededher-License No.

ode Compliance Review for C Universal Engineering Science

> PX2701AGONAL BRACE SPACED 48" O.C. ATTACHED TO VERTICAL WITH (4) -16d NAILS, AND ATTACHED TO BLOCKING WITH (5) -10d NAILS.

(2) - 10d NAILS

Trusses @ 24" o.c.

HORIZONTAL BRACE (SEE SECTION A-A)

End Wall

2 DIAGONAL DIAGONAL **Minimum** Without 2x4 **BRACES AT** Stud **BRACE** Stud Size **Brace** L-Brace 1/3 POINTS Spacing **Species** and Grade Maximum Stud Length 3-7-12 6-2-1 10-11-3 2x4 SP No. 3 / Stud 12" O.C 5-4-11 3-2-8 4-8-1 6 - 2 - 19-7-7 2x4 SP No. 3 / Stud 16" O.C. 7-10-4 2-7-7 3-9-12 5-2-13 2x4 SP No. 3 / Stud 24" O.C 3-10-0 5-4-11 6-2-1 11-6-1 2x4 SP No. 2 12" O.C. 3-5-13 4-8-1 6-2-1 10-5-7 16" O.C. 2x4 SP No. 2

3-9-12

2x4 SP No. 2 Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of diagonal brace with 10d nails 6in o.c., with 3in minimum end distance. Brace must cover 90% of diagonal length. T or I braces must be 2x4 SPF No. 2 or SP No. 2.

3-0-8

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April 2,2021

MAX MEAN ROOF HEIGHT = 30 FEET EXPOSURE D

24" O.C

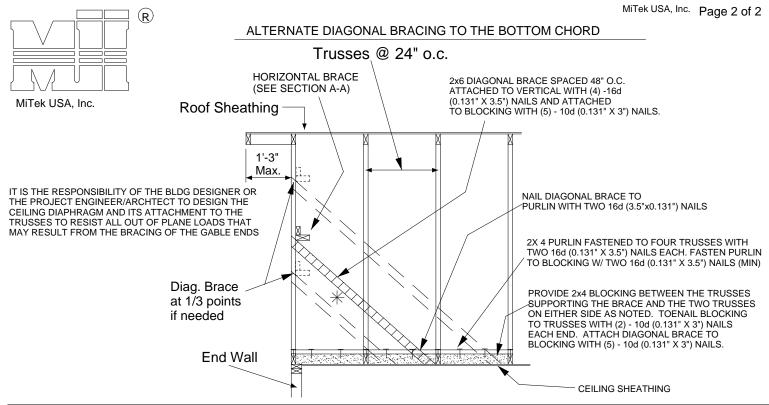
DURATION ARIJE OAD, INCREASE 1. 1910 READ NOTES CONNECTION OF BRACING I SEASED ON MAY FRS. 5/19/2020 BEFORE USE

9-1-9

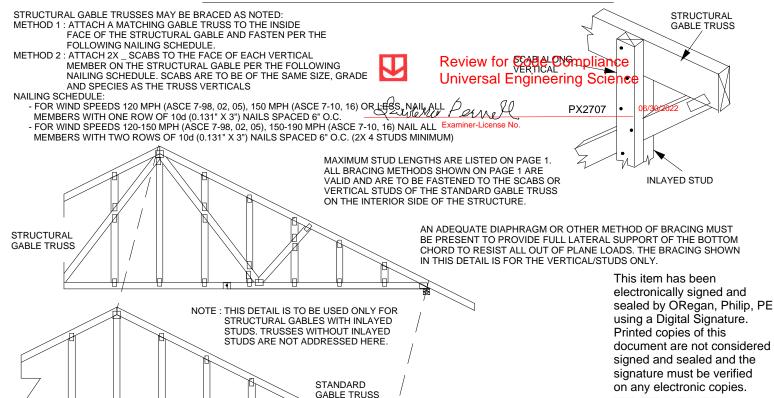
Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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April 2,2021



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### STANDARD PIGGYBACK TRUSS CONNECTION DETAIL

MiTek USA, Inc. Page 1 of 1

MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E MAX MEAN ROOF HEIGHT = 30 FEET MAX TRUSS SPACING = 24 " O.C. CATEGORY II BUILDING EXPOSURE B or C **ENCLOSED BUILDING** LOADING = 5 PSF TCDL ASCE 7-10, ASCE 7-16

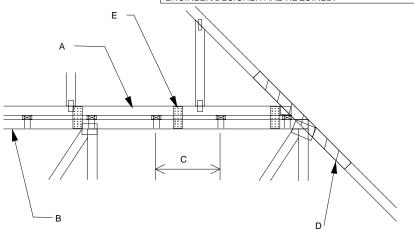
**DURATION OF LOAD INCREASE: 1.60** 

DETAIL IS NOT APPLICABLE FOR TRUSSES TRANSFERING DRAG LOADS (SHEAR TRUSSES). ADDITIONAL CONSIDERATIONS BY BUILDING ENGINEER/DESIGNER ARE REQUIRED.



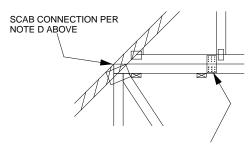
- A PIGGBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
- A PIGGBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
  SHALL BE CONNECTED TO EACH PURLIN
  WITH (2) (0.131" X 3.5") TOE-NAILED.
  B BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
  C PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C.
  UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING.
- UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING. CONNECT TO BASE TRUSS WITH (2) (0.131" X 3.5") NAILS EACH.

   2 X \_\_ X 4'-0" SCAB, SIZE TO MATCH TOP CHORD OF PIGGYBACK TRUSS, MIN GRADE #2, ATTACHED TO ONE FACE, CENTERED ON INTERSECTION, WITH (2) ROWS OF (0.131" X 3") NAILS @ 4" O.C. SCAB MAY BE OMITTED PROVIDED THE TOP CHORD SHEATHING IS CONTINUOUS OVER INTERSECTION AT LEAST 1 FT. IN BOTH DIRECTIONS AND:
- 1. WIND SPEED OF 115 MPH OR LESS FOR ANY PIGGYBACK SPAN, OR 2. WIND SPEED OF 116 MPH TO 180 MPH WITH A MAXIMUM
- PIGGYBACK SPAN OF 12 ft.
   FOR WIND SPEEDS BETWEEN 116 AND 180 MPH, ATTACH
  MITEK NP37 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 72" O.C. W/ (4) (0.131" X 1.5") NAILS PER MEMBER. STAGGER NAILS FROM OPPOSING FACES. ENSURE 0.5" NAIL EDGE DISTANCE. (MIN. 2 PAIRS OF PLATES REQ. REGARDLESS OF SPAN)

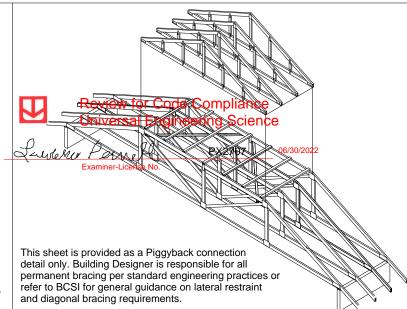


### WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

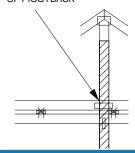
REPLACE TOE NAILING OF PIGGYBACK TRUSS TO PURLINS WITH Nail-On PLATES AS SHOWN, AND INSTALL PURLINS TO BOTTOM EDGE OF BASE TRUSS TOP CHORD AT SPECIFIED SPACING SHOWN ON BASE TRUSS MITEK DESIGN DRAWING.



FOR ALL WIND SPEEDS, ATTACH MITEK NP37 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 48" O.C. W/ (4) (0.131" X 1.5") PER MEMBER. STAGGER NAILS FROM OPPOSING FACES ENSURE 0.5" NAIL EDGE DISTANCE.



VERTICAL WEB TO EXTEND THROUGH BOTTOM CHORD OF PIGGYBACK



### FOR LARGE CONCENTRATED LOADS APPLIED TO CAP TRUSS REQUIRING A VERTICAL WEB:

- VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS MUST MATCH IN SIZE, GRADE, AND MUST LINE UP AS SHOWN IN DETAIL
- x 4'-0" SCAB TO EACH FACE OF TRUSS ASSEMBLY WITH 2 ROWS OF 10d (0.131" X 3") NAILS SPACED 4" O.C. FROM EACH FACE. (SIZE AND GRADE TO MATCH VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS.) (MINIMUM 2X4)
- THIS CONNECTION IS ONLY VALID FOR A MAXIMUM CONCENTRATED LOAD OF 4000 LBS (@1.15). REVIEW BY A QUALIFIED ENGINEER IS REQUIRED FOR LOADS GREATER THAN 4000 LBS.
- 4) FOR PIGGYBACK TRUSSES CARRYING GIRDER LOADS,
  NUMBER OF PLYS OF PIGGYBACK TRUSS TO MATCH BASE TRUSS.
  5) CONCENTRATED LOAD MUST BE APPLIED TO BOTH

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

April 2,2021

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

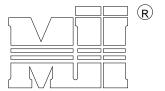


### JANUARY 8, 2019

### STANDARD PIGGYBACK TRUSS CONNECTION DETAIL

### MII-PIGGY-ALT-7-16 T23399816

Page 1 of 1 MiTek USA, Inc.



MiTek USA, Inc.

MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E MAX MEAN ROOF HEIGHT = 30 FEET MAX TRUSS SPACING = 24 " O.C. CATEGORY II BUILDING EXPOSURE B or C ENCLOSED BUILDING LOADING = 5 PSF TCDL MINIMUM

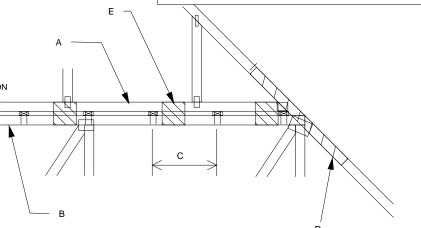
DETAIL IS NOT APPLICABLE FOR TRUSSES TRANSFERING DRAG LOADS (SHEAR TRUSSES). ADDITIONAL CONSIDERATIONS BY BUILDING ENGINEER/DESIGNER ARE REQUIRED.

**DURATION OF LOAD INCREASE: 1.60** 

- A PIGGBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN
  WITH (2) 0(0.131" X 3.5") TOE-NAILED.

  BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
  - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C.
  UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING.

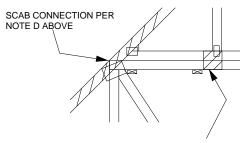
- UNLESS SPECIFIED CLOSER OIN MITEX TRUSS DESIGN DRAWING.
  CONNECT TO BASE TRUSS WITH (2) (0.131" X 3.5") NAILS EACH.
   2 X \_ X 4'-0" SCAB, SIZE TO MATCH TOP CHORD OF
  PIGGYBACK TRUSS, MIN GRADE #2, ATTACHED TO ONE FACE, CENTERED ON
  INTERSECTION, WITH (2) ROWS OF (0.131" X 3") NAILS @ 4" O.C.
  SCAB MAY BE OMITTED PROVIDED THE TOP CHORD SHEATHING IS CONTINUOUS OVER INTERSECTION AT LEAST 1 FT. IN BOTH DIRECTIONS AND:
- 1. WIND SPEED OF 115 MPH OR LESS FOR ANY PIGGYBACK SPAN, OR 2. WIND SPEED OF 116 MPH TO 180 MPH WITH A MAXIMUM
- PIGGYBACK SPAN OF 12 ft.
  E FOR WIND SPEED IN THE RANGE 116 MPH 180 MPH ADD 9" x 9" x 1/2" PLYWOOD (or 7/16" OSB) GUSSET EACH SIDE AT 48" O.C. OR LESS. ATTACH WITH 3 - 6d (0.113" X 2") NAILS INTO EACH CHORD FROM EACH SIDE (TOTAL - 12 NAILS)



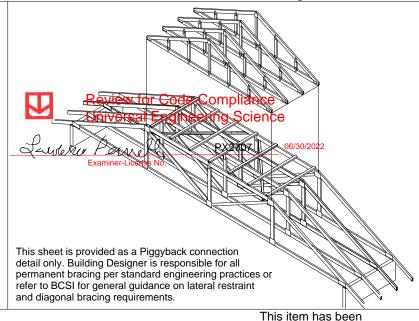
ASCE 7-10, ASCE 7-16

WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

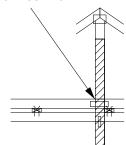
REPLACE TOE NAILING OF PIGGYBACK TRUSS TO PURLINS WITH PLYWOOD GUSSETS AS SHOWN, AND INSTALL PURLINS TO BOTTOM EDGE OF BASE TRUSS TOP CHORD AT SPECIFIED SPACING SHOWN ON BASE TRUSS MITEK DESIGN DRAWING.



7" x 7" x 1/2" PLYWOOD (or 7/16" OSB) GUSSET EACH SIDE AT 24" O.C. ATTACH WITH 3 - 6d (0.113" X 2") NAILS INTO EACH CHORD FROM EACH SIDE (TOTAL - 12 NAILS)



VERTICAL WEB TO EXTEND THROUGH **BOTTOM CHORD** OF PIGGYBACK



### FOR LARGE CONCENTRATED LOADS APPLIED TO CAP TRUSS REQUIRING A VERTICAL WEB:

- 1) VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS MUST MATCH IN SIZE, GRADE, AND MUST LINE UP AS SHOWN IN DETAIL
- ATTACH 2 x \_\_\_ x 4-0" SCAB TO EACH FACE OF TRUSS ASSEMBLY WITH 2 ROWS OF 10d (0.131" X 3") NAILS SPACED 4" O.C. FROM EACH FACE. (SIZE AND GRADE TO MATCH ATTACH 2 x VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS.) (MINIMUM 2X4)
- THIS CONNECTION IS ONLY VALID FOR A MAXIMUM CONCENTRATED LOAD OF 4000 LBS (@1.15). REVIEW BY A QUALIFIED ENGINEER IS REQUIRED FOR LOADS
- GREATER THAN 4000 LBS.
  4) FOR PIGGYBACK TRUSSES CARRYING GIRDER LOADS, NUMBER OF PLYS OF PIGGYBACK TRUSS TO MATCH BASE TRUSS.
- 5) CONCENTRATED LOAD MUST BE APPLIED TO BOTH

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IE PIGGYBACK AND THE BASE TRUSS DESIGN \Lambda 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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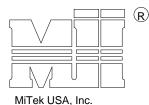


### STANDARD REPAIR DETAIL FOR BROKEN CHORDS. WEBS AND DAMAGED OR MISSING CHORD SPLICE PLATES

### MII-REP01A1 T23399817

MiTek USA, Inc.

Page 1 of 1

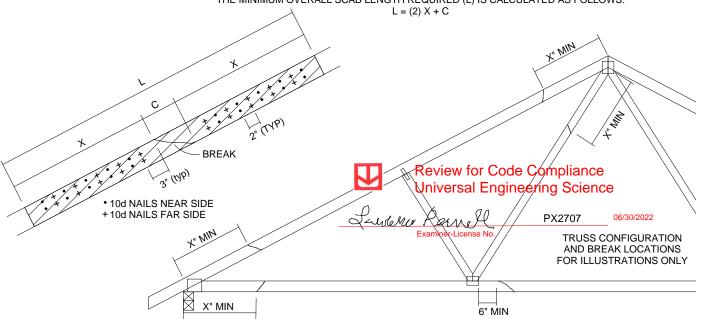


TOTAL NUMBER OF NAILS EACH SIDE OF BREAK *				MA	XIMUM FC	RCE (lbs)	15% LOAI	DURATIO	NC	
		X	SP		DF		SPF		HF	
2x4	2x6		2x4	2x6	2x4	2x6	2x4	2x6	2x4	2x6
20	30	24"	1706	2559	1561	2342	1320	1980	1352	2028
26	39	30"	2194	3291	2007	3011	1697	2546	1738	2608
32	48	36"	2681	4022	2454	3681	2074	3111	2125	3187
38	57	42"	3169	4754	2900	4350	2451	3677	2511	3767
44	66	48"	3657	5485	3346	5019	2829	4243	2898	4347

<sup>\*</sup> DIVIDE EQUALLY FRONT AND BACK

ATTACH 2x\_ SCAB OF THE SAME SIZE AND GRADE AS THE BROKEN MEMBER TO EACH FACE OF THE TRUSS (CENTER ON BREAK OR SPLICE) WITH 10d (0.131" X 3") NAILS (TWO ROWS FOR 2x4, THREE ROWS FOR 2x6) SPACED 4" O.C. AS SHOWN. STAGGER NAIL SPACING FROM FRONT FACE AND BACK FACE FOR A NET 0-2-0 O.C. SPACING IN THE MAIN MEMBER. USE A MIN. 0-3-0 MEMBER END DISTANCE.

THE LENGTH OF THE BREAK (C) SHALL NOT EXCEED 12". (C=PLATE LENGTH FOR SPLICE REPAIRS) THE MINIMUM OVERALL SCAB LENGTH REQUIRED (L) IS CALCULATED AS FOLLOWS:



THE LOCATION OF THE BREAK MUST BE GREATER THAN OR EQUAL TO THE REQUIRED X DIMENSION FROM ANY PERIMETER BREAK OR HEEL JOINT AND A MINIMUM OF 6" FROM ANY INTERIOR JOINT (SEE SKETCH ABOVE)

### DO NOT USE REPAIR FOR JOINT SPLICES

### NOTES

- THIS REPAIR DETAIL IS TO BE USED ONLY FOR THE APPLICATION SHOWN. THIS REPAIR DOES

  NOT IMPLY THAT THE REMAINING PORTION OF THE TRUSS IS UNDAMAGED. THE ENTIRE TRUSS

  SHALL BE INSPECTED TO VERIFY THAT NO FURTHER REPAIRS ARE REQUIRED. WHEN THE REQUIRED

  REPAIRS ARE PROPERLY APPLIED, THE TRUSS WILL BE CAPABLE OF SUPPORTING THE LOADS INDICATED.
- 2. ALL MEMBERS MUST BE RETURNED TO THEIR ORIGINAL POSITIONS BEFORE APPLING REPAIR AND HELD IN PLACE DURING APPLICATION OF REPAIR
- THE END DISTANCE, EDGE DISTANCE AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.
- WHEN NAILING THE SCABS, THE USE OF A BACKUP WEIGHT IS RECOMMENDED TO AVOID LOOSENING OF THE CONNECTOR PLATES AT THE JOINTS OR SPLICES.
  THIS REPAIR IS TO BE USED FOR SINGLE PLY TRUSSES IN THE 2x\_ ORIENTATION ONLY.
- 6. THIS REPAIR IS LIMITED TO TRUSSES WITH NO MORE THAN THREE BROKEN MEMBERS.

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### LATERAL TOE-NAIL DETAIL

MII-TOENAIL SP T23399818

MiTek USA. Inc.

Page 1 of 1



### NOTES:

- TOE-NAILS SHALL BE DRIVEN AT AN ANGLE OF 45 DEGREES WITH THE MEMBER AND MUST HAVE FULL WOOD SUPPORT. (NAIL MUST BE DRIVEN THROUGH AND EXIT AT THE BACK CORNER OF THE MEMBER END AS SHOWN.
- 2. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.
- 3. ALLOWABLE VALUE SHALL BE THE LESSER VALUE OF THE TWO SPECIES FOR MEMBERS OF DIFFERENT SPECIES.

### THIS DETAIL APPLICABLE TO THE THREE END DETAILS SHOWN BELOW

	TOE-NAIL SINGLE SHEAR VALUES PER NDS 2018 (lb/nail)												
	DIAM. SP DF HF SPF SPF-S												
G	.131	88.0	80.6	69.9	68.4	59.7							
LONG	.135	93.5	85.6	74.2	72.6	63.4							
2" L	.162	108.8	99.6	86.4	84.5	73.8							
e,													
Ď	.128	74.2	67.9	58.9	57.6	50.3							
LONG	.131	75.9	69.5	60.3	59.0	51.1							
.25"	.148	81.4	74.5	64.6	63.2 52.5								
3.2				•									

VALUES SHOWN ARE CAPACITY PER TOE-NAIL APPLICABLE DURATION OF LOAD INCREASES MAY BE APPLIED.

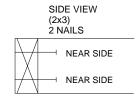
### EXAMPLE:

(3) - 16d (0.162" X 3.5") NAILS WITH SPF SPECIES BOTTOM CHORD

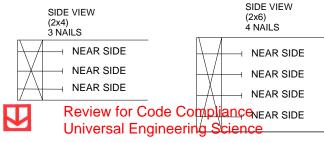
For load duration increase of 1.15:

ANGLE MAY VARY FROM 30° TO 60°

3 (nails) X 84.5 (lb/nail) X 1.15 (DOL) = 291.5 lb Maximum Capacity

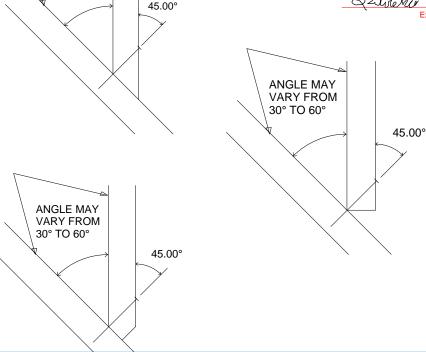


VIEWS SHOWN ARE FOR ILLUSTRATION PURPOSES ONLY



Laudence Parrell

PX2707 06/30/2022



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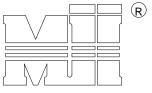


### TRUSSED VALLEY SET DETAIL

### MII-VALLEY HIGH WIND1 T23399819

MiTek USA, Inc.

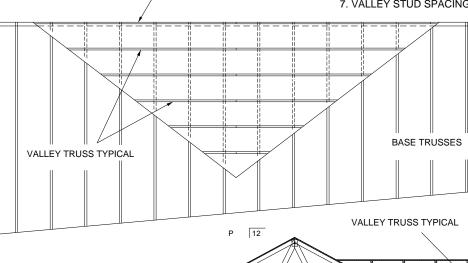
Page 1 of 1



MiTek USA, Inc.

### **GENERAL SPECIFICATIONS**

- 1. NAIL SIZE 10d (0.131" X 3")
- 2. WOOD SCREW = 3" WS3 USP OR EQUIVALENT DO NOT USE DRYWALL OR DECKING TYPE SCREW
- 3. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE PER DETAIL A
- 4. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
- 5. BASE TRUSS SHALL BE DESIGNED WITH A PURLIN SPACING EQUILIVANT TO THE RAKE DIMENSION OF THE VALLEY TRUSS SPACING.
- 6. NAILING DONE PER NDS 01
- 7. VALLEY STUD SPACING NOT TO EXCEED 48" O.C.



GABLE END, COMMON TRUSS

OR GIRDER TRUSS

GABLE END, COMMON TRUSS OR GIRDER TRUSS

ew for Code Compliance Engineering Science SEE DETAIL PX2707 06/30/2022 Horne A BELOW (TYP.)

SECURE VALLEY TRUSS W/ ONE ROW OF 10d NAILS 6" O.C. ATTACH 2x4 CONTINUOUS NO.2 SP TO THE ROOF W/ TWO USP WS3 (1/4" X 3") WOOD SCREWS INTO EACH BASE TRUSS. **DETAIL A** (NO SHEATHING) N.T.S.

WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 146 MPH WIND DESIGN PER ASCE 7-10, ASCE 7-16 160 MPH MAX MEAN ROOF HEIGHT = 30 FEET ROOF PITCH = MINIMUM 3/12 MAXIMUM 6/12 CATEGORY II BUILDING **EXPOSURE C** WIND DURATION OF LOAD INCREASE: 1.60

MAX TOP CHORD TOTAL LOAD = 50 PSF MAX SPACING = 24" O.C. (BASE AND VALLEY)
MINIMUM REDUCED DEAD LOAD OF 6 PSF ON THE TRUSSES

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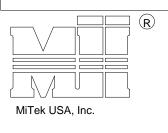


### TRUSSED VALLEY SET DETAIL

### MII-VALLEY HIGH WIND2 T23399820

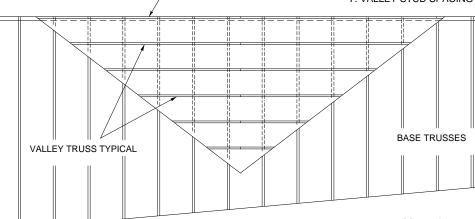
MiTek USA, Inc.

Page 1 of 1



### **GENERAL SPECIFICATIONS**

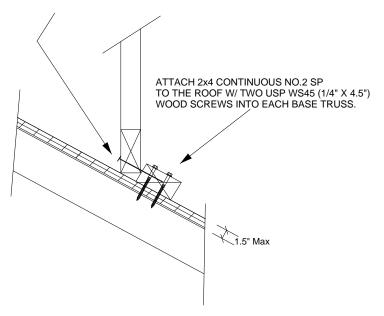
- 1. NAIL SIZE 10d (0.131" X 3")
- 2. WOOD SCREW = 4.5" WS45 USP OR EQUILIVANT
- 3. INSTALL SHEATHING TO TOP CHORD OF BASE TRUSSES.
- 4. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE TO BASE TRUSSES AS PER DETAIL A 5. BRACE VALLEY WEBS IN ACCORDANCE WITH THE
- INDIVIDUAL DESIGN DRAWINGS.
- 6. NAILING DONE PER NDS-01
- 7. VALLEY STUD SPACING NOT TO EXCEED 48" O.C.



GABLE END, COMMON TRUSS OR GIRDER TRUSS

> GABLE END, COMMON TRUSS VALLEY TRUSS TYPICAL OR GIRDER TRUSS 12 w for Code Compliance Universal Engineering Science SEE DETAIL A BELOW (TYP.) 06/30/2022

SECURE VALLEY TRUSS W/ ONE ROW OF 10d NAILS 6" O.C.



WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 146 MPH WIND DESIGN PER ASCE 7-10, ASCE 7-16 160 MPH MAX MEAN ROOF HEIGHT = 30 FEET ROOF PITCH = MINIMUM 3/12 MAXIMUM 6/12 CATEGORY II BUILDING EXPOSURE C WIND DURATION OF LOAD INCREASE: 1.60 MAX TOP CHORD TOTAL LOAD = 50 PSF MAX SPACING = 24" O.C. (BASE AND VALLEY)
MINIMUM REDUCED DEAD LOAD OF 6 PSF ON THE TRUSSES

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April 2,2021



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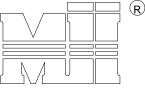


### TRUSSED VALLEY SET DETAIL

### MII-VALLEY SP T23399821

MiTek USA, Inc.

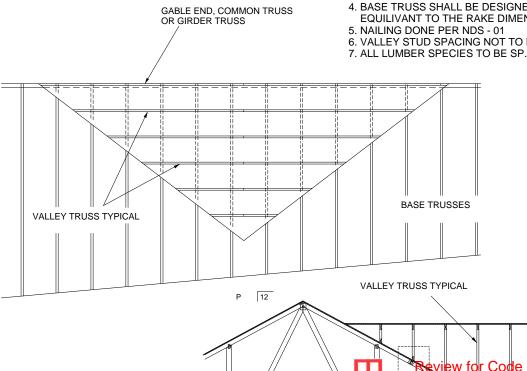
Page 1 of 1



MiTek USA, Inc.

### **GENERAL SPECIFICATIONS**

- 1. NAIL SIZE 16d (0.131" X 3.5")
- 2. INSTALL VALLÈY TRUSSES (24" O.C. MAXIMUM) AND SECURE PER DETAIL A
- BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
- 4. BASE TRUSS SHALL BE DESIGNED WITH A PURLIN SPACING EQUILIVANT TO THE RAKE DIMENSION OF THE VALLEY TRUSS SPACING.
- 5. NAILING DONE PER NDS 01
- 6. VALLEY STUD SPACING NOT TO EXCEED 48" O.C.



SEE DETAIL

A BELOW (TYP.)

veker

eme

GABLE END, COMMON TRUSS OR GIRDER TRUSS w for Code Compliance Engineering Science PX2707 06/30/2022

SECURE VALLEY TRUSS W/ ONE ROW OF 16d NAILS 6" O.C. ATTACH 2x4 CONTINUOUS NO.2 SP TO THE ROOF W/ TWO 16d NAILS INTO EACH BASE TRUSS. THE REAL PROPERTY. **DETAIL A** (MAXIMUM 1" SHEATHING) N.T.S.

WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 120 MPH WIND DESIGN PER ASCE 7-10, ASCE 7-16 150 MPH MAX MEAN ROOF HEIGHT = 30 FEET ROOF PITCH = MINIMUM 3/12 MAXIMUM 10/12 CATEGORY II BUILDING EXPOSURE C OR B
WIND DURATION OF LOAD INCREASE: 1.60
MAX TOP CHORD TOTAL LOAD = 60 PSF
MAX SPACING = 24" O.C. (BASE AND VALLEY)
MINIMUM REDUCED DEAD LOAD OF 4.2 PSF ON THE TRUSSES

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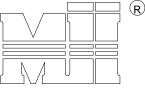


### TRUSSED VALLEY SET DETAIL

### MII-VALLEY SP T23399822

MiTek USA, Inc.

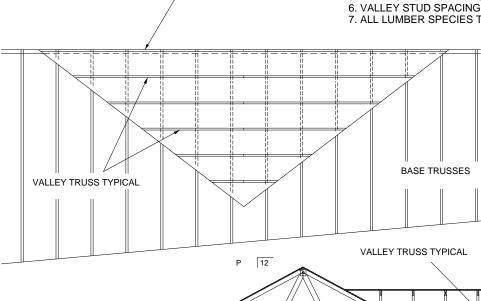
Page 1 of 1



MiTek USA, Inc.

### **GENERAL SPECIFICATIONS**

- 1. NAIL SIZE 16d (0.131" X 3.5")
- 2. INSTALL VALLÈY TRUSSES (24" O.C. MAXIMUM) AND SECURE PER DETAIL A
- BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
- 4. BASE TRUSS SHALL BE DESIGNED WITH A PURLIN SPACING EQUILIVANT TO THE RAKE DIMENSION OF THE VALLEY TRUSS SPACING.
- 5. NAILING DONE PER NDS 01
- 6. VALLEY STUD SPACING NOT TO EXCEED 48" O.C.
- 7. ALL LUMBER SPECIES TO BE SP.



GABLE END, COMMON TRUSS OR GIRDER TRUSS

GABLE END, COMMON TRUSS OR GIRDER TRUSS

w for Code Compliance al Engineering Science SEE DETAIL PX2707 06/30/2022 NeMI erve A BELOW (TYP.)

SECURE VALLEY TRUSS W/ ONE ROW OF 16d NAILS 6" O.C. ATTACH 2x4 CONTINUOUS NO.2 SP TO THE ROOF W/ TWO 16d NAILS INTO EACH BASE TRUSS. THE REAL PROPERTY. **DETAIL A** (MAXIMUM 1" SHEATHING) N.T.S.

WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 120 MPH WIND DESIGN PER ASCE 7-10, ASCE 7-16 150 MPH MAX MEAN ROOF HEIGHT = 30 FEET ROOF PITCH = MINIMUM 3/12 MAXIMUM 10/12 CATEGORY II BUILDING EXPOSURE C OR B WIND DURATION OF LOAD INCREASE: 1.60 MAX TOP CHORD TOTAL LOAD = 60 PSF MAX SPACING = 24" O.C. (BASE AND VALLEY) MINIMUM REDUCED DEAD LOAD OF 4.2 PSF ON THE TRUSSES

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

April 2,2021

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

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

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

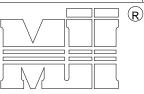


### Standard Gable End Detail

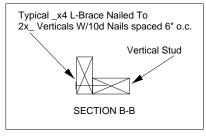
### MII-GE146-001 T23399823







MiTek USA, Inc.



DIAGONAL BRACE TRUSS GEOMETRY AND CONDITIONS 4'-0" O.C. MAX SHOWN ARE FOR ILLUSTRATION ONLY. Varies to Common Truss SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA 3x4 =Diagonal Bracing - L-Bracing Refer Refer to Section A-A to Section B-B

Vertical Stud DIAGONAL (4) - 16d Nails 16d Nails Spaced 6" o.c. (2) - 10d Nails into 2x6 2x6 Stud or 2x4 No.2 of better Typical Horizontal Brace Nailed To 2x\_ Verticals w/(4)-10d Nails **SECTION A-A** 2x4 Stud

> PROVIDE 2x4 BLOCKING BETWEEN THE FIRST TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. ATTACH DIAGONAL BRACE TO BLOCKING WITH (5) - 10d NAILS.

(4) - 8d (0.131" X 2.5") NAILS MINIMUM, PLYWOOD SHEATHING TO 2x4 STD SP BLOCK

### Roof Sheathing

24" Max

if needed

### 1'-3' (2) - 10d/ Max. NÁILS' (2) - 10d NAILS Trusses @ 24" o.c. ode Compliance Review for Co

### NOTE:

- 1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
- 2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
- 3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
- 4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH. GRADES: 2x4 No 3/STUD SP OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.
- 5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C.
- 6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 STUD AND A 2x4 STUD AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST STUD. ATTACH TO VERTICAL STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
- 7. GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.
- THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
- DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES
- 10. NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

Minimum Stud Size Species	Stud Spacing	Without Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS				
and Grade		Maximum Stud Length							
2x4 SP No 3/Stud	12" O.C.	3-11-3	6-8-0	7-2-14	11-9-10				
2x4 SP No 3/Stud	16" O.C.	3-6-14	5-9-5	7-1-13	10-8-11				
2x4 SP No 3/Stud	24" O.C.	3-1-8	4-8-9	6-2-15	9-4-7				

Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of web with 10d nails 8" o.c., with 3" minimum end distance. Brace must cover 90% of diagonal length.

MAXIMUM WIND SPEED = 146 MPH MAX MEAN ROOF HEIGHT = 30 FEET CATEGORY II BUILDING EXPOSURE B or C

Universal Engineering Science Lautolog Braces ØX6DIAGONAL BRACESPACED 48" O.C. ATTACHED TO VERTICAL WITH (4) -16d at 1/3 points ense No. NAILS AND ATTACHED TO BLOCKING WITH (5) - 10d NAILS. HORIZONTAL BRACE **End Wall** (SEE SECTION A-A)

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

April 2,2021

ASCE 7-98, ASCE 7-02, ASCE 7-05
STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.
DURANOMONONO ON COMPONENTS AND CLADDING.
DURANOMONO ON COMPONENTS AND CLADDING.
DURANOMONO ON COMPONENTS AND CLADDING.

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

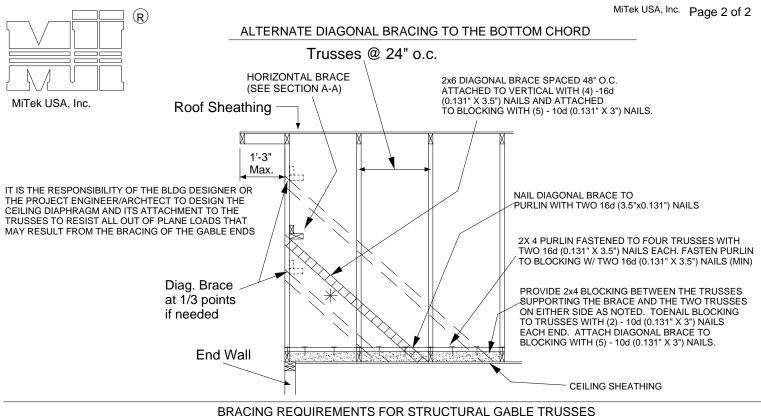


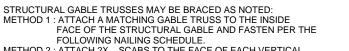
STRUCTURAL

**GABLE TRUSS** 

### Standard Gable End Detail

MII-SHEET 2 T23399823





FOLLOWING NAILING SCHEDULE.

METHOD 2: ATTACH 2X SCABS TO THE FACE OF EACH VERTICAL

MEMBER ON THE STRUCTURAL GABLE PER THE FOLLOWING

NAILING SCHEDULE. SCABS ARE TO BE OF THE SAME SIZE, GRADE AND SPECIES AS THE TRUSS VERTICALS



FOR WIND SPEEDS 120 MPH (ASCE 7-98, 02, 05), 150 MPH (ASCE 7-10, 16) OR LESS, NAIL ALL MEMBERS WITH ONE ROW OF 10d (0.131" X 3") NAILS SPACED 6" O.C. C. M. M.V. - FOR WIND SPEEDS 120-150 MPH (ASCE 7-98, 02, 05), 150-190 MPH (ASCE 7-10, 16) NAIL ALL E erve

Review for Leader Compliance Universal Engineering Science PX2707 MEMBERS WITH TWO ROWS OF 10d (0.131" X 3") NAILS SPACED 6" O.C. (2X 4 STUDS MINIMUM)

MAXIMUM STUD LENGTHS ARE LISTED ON PAGE 1. ALL BRACING METHODS SHOWN ON PAGE 1 ARE VALID AND ARE TO BE FASTENED TO THE SCABS OR VERTICAL STUDS OF THE STANDARD GABLE TRUSS ON THE INTERIOR SIDE OF THE STRUCTURE.

AN ADEQUATE DIAPHRAGM OR OTHER METHOD OF BRACING MUST BE PRESENT TO PROVIDE FULL LATERAL SUPPORT OF THE BOTTOM CHORD TO RESIST ALL OUT OF PLANE LOADS. THE BRACING SHOWN IN THIS DETAIL IS FOR THE VERTICAL/STUDS ONLY.

NOTE: THIS DETAIL IS TO BE USED ONLY FOR STRUCTURAL GABLES WITH INLAYED STUDS. TRUSSES WITHOUT INLAYED STUDS ARE NOT ADDRESSED HERE. STANDARD **GABLE TRUSS** 

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**INLAYED STUD** 

STRUCTURAL GABLE TRUSS

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



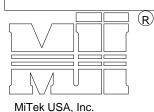
### **OCTOBER 5, 2016**

### REPLACE BROKEN OVERHANG

MII-REP13B T23399824

MiTek USA, Inc.

Page 1 of 1



TRUSS CRITERIA:

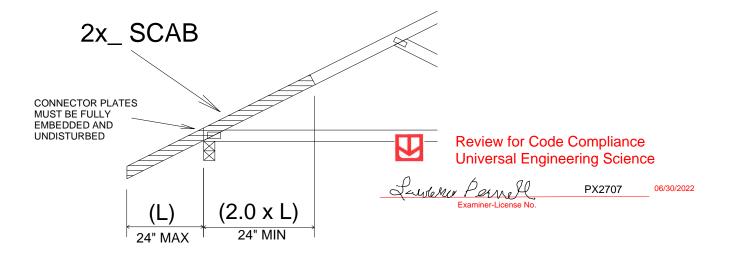
LOADING: 40-10-0-10 DURATION FACTOR: 1.15 SPACING: 24" O.C. TOP CHORD: 2x4 OR 2x6 PITCH: 4/12 - 12/12

HEEL HEIGHT: STANDARD HEEL UP TO 12" ENERGY HEEL

**END BEARING CONDITION** 

### NOTES:

- 1. ATTACH 2x\_ SCAB (MINIMUM NO.2 GRADE SPF, HF, SP, DF) TO ONE FACE OF TRUSS WITH TWO ROWS OF 10d (0.131" X 3") SPACED 6" O.C.
- 2. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.
- 3. WHEN NAILING THE SCABS, THE USE OF A BACKUP WEIGHT IS RECOMMENDED TO AVOID LOOSENING OF THE CONNECTOR PLATES AT THE JOINTS OR SPLICES.



### **IMPORTANT**

This detail to be used only with trusses (spans less than 40') spaced 24" o.c. maximum and having pitches between 4/12 and 12/12 and total top chord loads not exceeding 50 psf.

Trusses not fitting these criteria should be examined individually.

REFER TO INDIVIDUAL TRUSS DESIGN FOR PLATE SIZES AND LUMBER GRADES This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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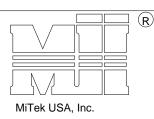
06/30/2022

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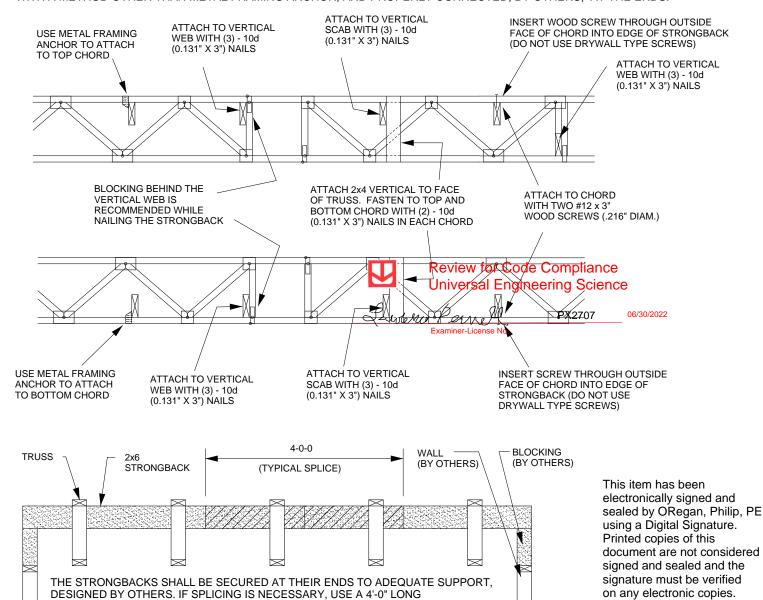
Page 1 of 1



TO MINIMIZE VIBRATION COMMON TO ALL SHALLOW FRAMING SYSTEMS, 2x6 "STRONGBACK" IS RECOMMENDED, LOCATED EVERY 8 TO 10 FEET ALONG A FLOOR TRUSS.

NOTE 1: 2X6 STRONGBACK ORIENTED VERTICALLY MAY BE POSITIONED DIRECTLY UNDER THE TOP CHORD OR DIRECTLY ABOVE THE BOTTOM CHORD. SECURELY FASTENED TO THE TRUSS USING ANY OF THE METHODS ILLUSTRATED BELOW.

NOTE 2: STRONGBACK BRACING ALSO SATISFIES THE LATERAL BRACING REQUIREMENTS FOR THE BOTTOM CHORD OF THE TRUSS WHEN IT IS PLACED ON TOP OF THE BOTTOM CHORD, IS CONTINUOUS FROM END TO END, CONNECTED WITH A METHOD OTHER THAN METAL FRAMING ANCHOR, AND PROPERLY CONNECTED, BY OTHERS, AT THE ENDS.



(0.131" X 3") NAILS EQUALLY SPACED. ALTERNATE METHOD OF SPLICING:

OVERLAP STRONGBACK MEMBERS A MINIMUM OF 4'-0" AND FASTEN WITH (12) - 10d (0.131" X 3") NAILS STAGGERED AND EQUALLY SPACED.

(TO BE USED ONLY WHEN STRONGBACK IS NOT ALIGNED WITH A VERTICAL)

SCAB CENTERED ON THE SPLICE AND JOINED WITH (12) - 10d

April 2,2021



Philip J. O'Regan PE No.58126

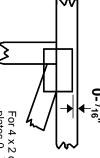
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## Symbols

# PLATE LOCATION AND ORIENTATION



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



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

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

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

### PLATE SIZE

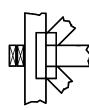
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

# LATERAL BRACING LOCATION



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

### **BEARING**



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

## Industry Standards:

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

DSB-89: ANSI/TPI1:

# and fully embed teeth

BOTTOM CHORDS 7 S

ω

JOINTS ARE GENERALLY NUMBER DILETTER EDUCLOCKWISE AROUND THE TRUSS STARTING AT THE LEFT.

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

PRODUCT CODE APPROVALS P



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

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

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

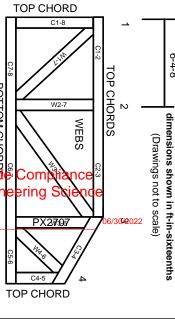
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MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

# Numbering System

6-4-8



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- Unless otherwise noted, moisture content of lumber
- shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the camber for dead load deflection responsibility of truss fabricator. General practice is to
- 11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- 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.



# General Safety Notes

## Damage or Personal Injury Failure to Follow Could Cause Property

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

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

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6

- joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1. Place plates on each face of truss at each
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- 9



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

Universal Engineering Science

06/30/2022 PX2707

RE: 3213335 - SIMQUE - LOT 62 PRESERVE

MiTek USA, Inc.

16023 Swingley Ridge Rd

Customer Info: Aaron Simque Homes Project Name: Custom Model: Bristol Modified

Lot/Block: 62

Address: TBD, TBD

Site Information:

Subdivision: Preserve at Laurel Lakes

City: Columbia Cty

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

State: FL

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: 55.0 psf

This package includes 58 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	T28119627	CJ01A	6/28/22	15	T28119641	T01	6/28/22
2	T28119628	CJ01T	6/28/22	16	T28119642	T01G	6/28/22
3	T28119629	CJ02A	6/28/22	17	T28119643	T02	6/28/22
4	T28119630	CJ02T	6/28/22	18	T28119644	T03	6/28/22
5	T28119631	CJ03A	6/28/22	19	T28119645	T03G	6/28/22
6	T28119632	CJ03T	6/28/22	20	T28119646	T04_	6/28/22
7	T28119633	EJ01	6/28/22	21	T28119647	T04D	6/28/22
8	T28119634	EJ02	6/28/22	22	T28119648	<u>T</u> 04G	6/28/22
9	T28119635	HJ01A	6/28/22	23	T28119649	T05	6/28/22
10	T28119636	HJ01T	6/28/22	24	T28119650	T05D	6/28/22
11	T28119637	PB01	6/28/22	25	T28119651	T06	6/28/22
12	T28119638	PB01G	6/28/22	26	T28119652	T07_	6/28/22
13	T28119639	PB04	6/28/22	27	T28119653	<u>T</u> 07G	6/28/22
14	T28119640	PB04G	6/28/22	28	T28119654	T08	6/28/22

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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: ORegan, Philip

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

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



MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017

June 28,2022



RE: 3213335 - SIMQUE - LOT 62 PRESERVE

MiTek USA, Inc. 16023 Swingley Ridge Rd Chesterfield, MO 63017

### **Site Information:**

Customer Info: Aaron Simque Homes Project Name: Custom Model: Bristol Modified

Lot/Block: 62 Address: TBD, TBD Subdivision: Preserve at Laurel Lakes

City: Columbia Cty State: FL

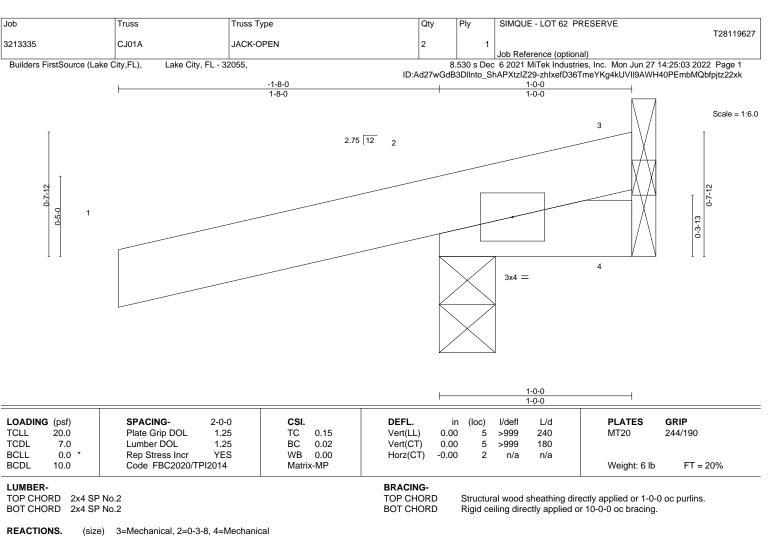
No. 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43	Seal# T28119655 T28119656 T28119657 T28119659 T28119660 T28119661 T28119662 T28119664 T28119664 T28119665 T28119667 T28119667 T28119668	Truss Name T09 T10 T11 T12 T12D T14 T15 T16 T17 T18 T18G T19 T20 T21 T22 T23 T24	Date 6/28/22 6/28/22 6/28/22 6/28/22 6/28/22 6/28/22 6/28/22 6/28/22 6/28/22 6/28/22 6/28/22 6/28/22 6/28/22 6/28/22
46 47 48 49 50 51 52 53 54 55 56 57	T28119672 T28119673 T28119675 T28119676 T28119677 T28119677 T28119679 T28119680 T28119681 T28119682 T28119683 T28119684	T25 T26 T27 T28 T29 TG01 TG02 TG03 TG04 TG05 TG06 TG07 TG08	6/28/22 6/28/22 6/28/22 6/28/22 6/28/22 6/28/22 6/28/22 6/28/22 6/28/22 6/28/22 6/28/22 6/28/22 6/28/22

Review for Code Compliance Universal Engineering Science

PX2707

PX2707

06/30/2022



Max Horz 2=26(LC 8)

Max Uplift 3=-12(LC 1), 2=-137(LC 8), 4=-27(LC 1) Max Grav 3=12(LC 8), 2=202(LC 1), 4=23(LC 8)

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

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 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 recta 6-0 tall Review for Code Compliance will fit between the bottom chord and any other members. Universal Engineering Science
- 5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2 = 137.

2=137.

7) This manufactured product is designed as an individual building component. The suitability and use of this boile building component. particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

PX2707

06/30/2022

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Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

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

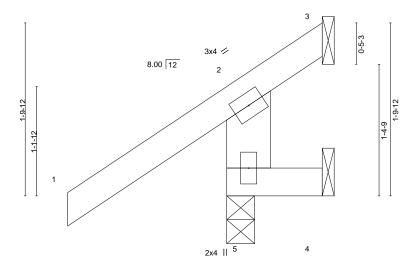
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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



16023 Swingley Ridge Rd

SIMQUE - LOT 62 PRESERVE Job Truss Truss Type Qty Ply T28119628 3213335 CJ01T JACK-OPEN TRUSS 4 Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:25:04 2022 Page 1 ID:Ad27wGdB3Dllnto\_ShAPXtzlZ29-SusJr?EhtnuVAUFHIB0XINjeRTLszDrWfFPNFJz22xj -1-8-0 1-8-0



1-0-0 1-0-0

except end verticals

LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.32	Vert(LL)	0.00	5	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.07	Vert(CT)	0.00	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TF	PI2014	Matri	x-MR						Weight: 8 lb	FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

2x6 SP No.2 WFBS

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical

Max Horz 5=47(LC 9)

Max Uplift 5=-62(LC 12), 3=-58(LC 1), 4=-41(LC 1) Max Grav 5=258(LC 1), 3=11(LC 16), 4=6(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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; end vertical left 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 le
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a recta will fit between the bottom chord and any other members.

Review for Code Compliance <u> Universal Engineering Science</u>

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

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

5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplit(at joint(s) 5, 3, 4/7) This manufactured product is designed as an individual building component. The suitability and use of this component for any yellow. particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Scale: 1"=1'

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Philip J. O'Regan PE No.58126 MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

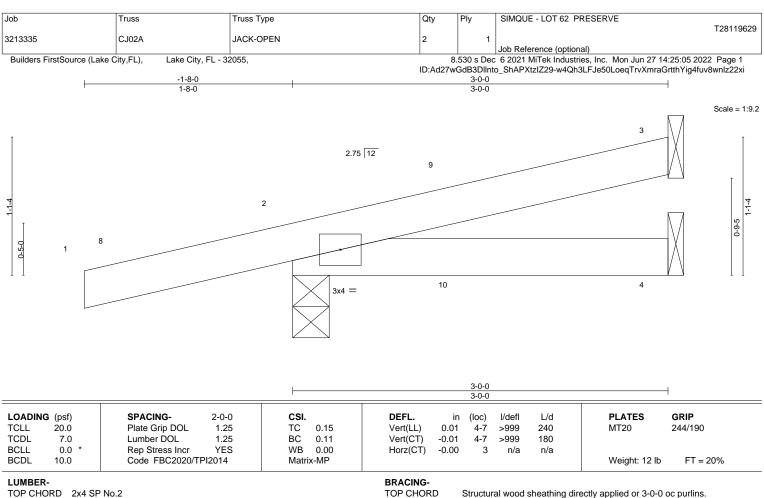
June 28,2022

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**BOT CHORD** 2x4 SP No 2 BOT CHORD

Structural wood sheathing directly applied or 3-0-0 oc purlins.

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=42(LC 8)

Max Uplift 3=-28(LC 8), 2=-135(LC 8), 4=-15(LC 9) Max Grav 3=56(LC 1), 2=224(LC 1), 4=47(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 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.
- 6-0 tall Review for Code Compliance 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a recta will fit between the bottom chord and any other members. Universal Engineering Science
- 5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=135.

7) This manufactured product is designed as an individual building component. The suitability and use of this bollaphoent for any Ne particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

PX2707

06/30/2022

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June 28,2022

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16023 Swingley Ridge Rd

SIMQUE - LOT 62 PRESERVE Job Truss Truss Type Qty Ply T28119630 3213335 CJ02T JACK-OPEN TRUSS 4 Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:25:08 2022 Page 1 ID:Ad27wGdB3DlInto\_ShAPXtzIZ29-Kf5qhNHBx0Owf5Z2X15TSDuK35jWv0q6atNaO4z22xf Scale = 1:18.8 2x4 || 8.00 12 10 3x4 // 2x4 =2x4 ||

**BRACING-**

TOP CHORD

**BOT CHORD** 

LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.28	Vert(LL)	-0.00	6	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.09	Vert(CT)	-0.00	6	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	4	n/a	n/a		
BCDL	10.0	Code FBC2020/T	PI2014	Matri	x-MR						Weight: 18 lb	FT = 20%

LUMBER-

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

WFBS 2x6 SP No 2

REACTIONS.

(size) 8=0-3-8, 4=Mechanical, 5=Mechanical

Max Horz 8=90(LC 12)

Max Uplift 8=-37(LC 12), 4=-28(LC 12), 5=-33(LC 12) Max Grav 8=238(LC 1), 4=49(LC 19), 5=39(LC 10)

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

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 to 2-11-4 zone; end vertical left 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.

Review for Code Compliance 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live load 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle will fit between the bottom chord and any other members.

5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb up the styling laws. E. of the styling laws are the styling laws.

7) This manufactured product is designed as an individual building component. The suitability and use of this component formany-License No. particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

PX2707

Structural wood sheathing directly applied or 3-0-0 oc purlins,

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

except end verticals

06/30/2022

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Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

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



16023 Swingley Ridge Rd Chesterfield, MO 63017

Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119631 3213335 CJ03A JACK-OPEN 2 Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:25:09 2022 Page 1 ID:Ad27wGdB3DlInto\_ShAPXtzIZ29-orfCujlqiJWnGF8E4lci?QQV3U0keT4FpX68wWz22xe -1-8-0 Scale = 1:13.0 2.75 12 5-0-0 5-0-0 LOADING (psf) SPACING-2-0-0 CSL DEFL. in (loc) I/defl I/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.25 TC 0.26 Vert(LL) 0.03 4-7 >999 240 MT20 244/190 TCDL 7.0 Lumber DOL 1.25 вс 0.22 Vert(CT) -0.05 >999 180 WB **BCLL** 0.0 Rep Stress Incr YES 0.00 Horz(CT) 0.00 3 n/a n/a BCDL 10.0 Code FBC2020/TPI2014 Matrix-MP Weight: 18 lb FT = 20% LUMBER-BRACING-TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins. **BOT CHORD** 2x4 SP No 2 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=58(LC 8)

Max Uplift 3=-53(LC 12), 2=-122(LC 8)

Max Grav 3=110(LC 1), 2=288(LC 1), 4=86(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 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 recta 6-0 tall Review for Code Compliance will fit between the bottom chord and any other members. Universal Engineering Science

5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 2=122.

7) This manufactured product is designed as an individual building component. The suitability and use States to the suitability and use States particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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16023 Swingley Ridge Rd

Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119632 3213335 CJ03T JACK-OPEN TRUSS 4 Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:25:14 2022 Page 1 ID:Ad27wGdB3Dlinto\_ShAPXtzlZ29-9pT5xQMyWs94N10CtlCtiT8KNVm\_Jj9\_ypqvbkz22xZ 1-8-0 Scale = 1:25.3 8.00 12 2x4 || 3-5-12 3x8 / 9  $\Box$ 1-1-12 2x4 =1-0-0 7 3x4 =2x4 || 2-3-8 5-0-0 0-0-12 2-3-8 2-7-12 SPACING-PLATES LOADING (psf) 2-0-0 CSI. **DEFL** in (loc) I/defl I/d GRIP **TCLL** 20.0 Plate Grip DOL 1.25 TC 0.42 Vert(LL) 0.11 >526 240 MT20 244/190 TCDL 7.0 Lumber DOL 1.25 вс 0.09 Vert(CT) -0.11 >535 180 WB 0.07 **BCLL** 0.0 Rep Stress Incr YES Horz(CT) -0.06 4 n/a n/a BCDL 10.0 Code FBC2020/TPI2014 Matrix-MP Weight: 27 lb FT = 20%LUMBER-BRACING-TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, 2x4 SP No.2 \*Except\* **BOT CHORD** except end verticals 3-7: 2x4 SP No.3 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. WFBS 2x6 SP No.2 \*Except\* 2-7: 2x4 SP No.3

REACTIONS.

(size) 8=0-3-8, 4=Mechanical, 5=Mechanical

Max Horz 8=137(LC 12)

Max Uplift 8=-38(LC 12), 4=-111(LC 12)

Max Grav 8=297(LC 1), 4=145(LC 19), 5=56(LC 3)

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

TOP CHORD 2-8=-278/134

#### NOTES-

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 to 4-11-4 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate gri 1.60

2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain to the use of this truss component.

1.60 Review for Code Compliance requirements specific Universal Engineering Science

erve

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 Ludeku will fit between the bottom chord and any other members.

5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb)

7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119633 3213335 EJ01 JACK-PARTIAL 9 Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:25:15 2022 Page 1 ID:Ad27wGdB3Dllnto\_ShAPXtzlZ29-d?0T9mNaH9Hx\_AbOR?j6EhgRzvx\_2BZ8BTZS8Az22xY -1-8-0 7-0-0 7-0-0

Scale = 1:16.7

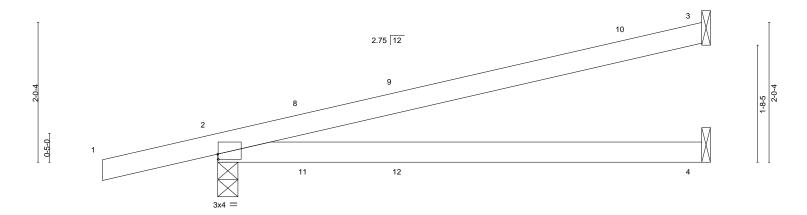


Plate Offsets (X,Y)--[2:0-0-1,0-0-15] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES GRIP TCLL** 20.0 Plate Grip DOL 1.25 TC 0.68 Vert(LL) 0.32 4-7 >261 240 MT20 244/190 TCDL 7.0 Lumber DOL 1.25 BC 0.74 Vert(CT) 0.27 4-7 >303 180 **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.02 n/a n/a BCDL 10.0 Code FBC2020/TPI2014 Matrix-MP Weight: 24 lb FT = 20%

LUMBER-

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

7-0-0

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

REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical Max Horz 2=74(LC 8)

1-8-0

Max Uplift 3=-86(LC 8), 2=-196(LC 8), 4=-44(LC 8)

Max Grav 3=162(LC 1), 2=357(LC 1), 4=123(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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 to 6-11-4 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 le
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a recta will fit between the bottom chord and any other members.

Review for Code Compliance 6-0 tall by 2-0-0 wide Universal Engineering Science

5) Refer to girder(s) for truss to truss connections.

5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplit(at joint(s) 3, 4 except (jt=lb) 7

7) This manufactured product is designed as an individual building component. The suitability and use of this component someonent someon particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

PX2707

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16023 Swingley Ridge Rd

Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119634 3213335 EJ02 JACK-PARTIAL TRUSS 2 Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:25:17 2022 Page 1 ID:Ad27wGdB3DlInto\_ShAPXtzlZ29-ZO8EaSOrpnXeEUlmYQlaK6ltajgAW3cQen2ZC3z22xW -1-8-0 2-3-8 2-3-8 1-8-0 Scale = 1:33.3 8.00 12 3x6 🗸 3x8 / 2 1-1-12 1-0-0 2x4 = 6 3x4 =8

4-8-8

BRACING-

TOP CHORD

**BOT CHORD** 

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. ii	n (loc)	l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.29	Vert(LL) -0.04	6-7	>999 240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.57	Vert(CT) -0.08	6-7	>999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.16	Horz(CT) -0.03	5	n/a n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MP				Weight: 40 lb	FT = 20%

3x4

LUMBER-

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

WFBS 2x4 SP No.3 \*Except\*

2-9: 2x6 SP No.2

REACTIONS. (size) 9=0-3-8, 4=Mechanical, 5=Mechanical

Max Horz 9=178(LC 12) Max Uplift 9=-45(LC 12), 4=-77(LC 12), 5=-50(LC 12)

Max Grav 9=365(LC 1), 4=122(LC 19), 5=145(LC 3) FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-9=-346/123

**BOT CHORD** 8-9=-253/132. 6-7=-341/335

**WEBS** 3-6=-347/353

NOTES-

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Exp B; Review for Code Compliance GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-c Left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip 1-4 zone; end vertical Universal Engineering Science

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.

ernell 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live load nonconcurrent with any oth 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 2n0 no whidense No will fit between the bottom chord and any other members.

9 2x4 II

5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 4, 5.

7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

PX2707

Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals

6-0-0 oc bracing: 7-8.

06/30/2022

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Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

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

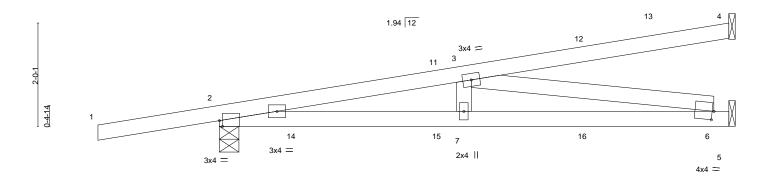
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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



Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119635 3213335 HJ01A DIAGONAL HIP GIRDER Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:25:19 2022 Page 1 ID:Ad27wGdB3Dllnto\_ShAPXtzlZ29-VmG\_?8Q5LOnMTov9grn2PXr8VWKd\_svj65XgHxz22xU -2-4-5 4-9-0 9-10-13 2-4-5 4-9-0

Scale = 1:22.4



	-	4-9-0 4-9-0	9-10-13 5-1-13	<del></del>
Plate Offsets (X,Y)	[2:0-0-11,Edge], [6:0-0-6,0-2-0]			
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 *	SPACING-         2-0-0           Plate Grip DOL         1.25           Lumber DOL         1.25           Rep Stress Incr         NO	CSI.         DEFL.           TC         0.59         Vert(LL)           BC         0.70         Vert(CT)           WB         0.62         Horz(CT)	in (loc) I/defl L/d 0.08 6-7 >999 240 -0.15 6-7 >790 180 0.02 5 n/a n/a	PLATES         GRIP           MT20         244/190
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS		Weight: 41 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

BOT CHORD 2x4 SP No 3 WFBS

REACTIONS. (size) 4=Mechanical, 2=0-4-9, 5=Mechanical

Max Horz 2=72(LC 4)

Max Uplift 4=-63(LC 4), 2=-266(LC 4), 5=-114(LC 4) Max Grav 4=151(LC 1), 2=497(LC 1), 5=283(LC 1)

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

TOP CHORD 2-3=-1231/492

BOT CHORD 2-7=-521/1201, 6-7=-521/1201

WFBS 3-6=-1220/529

## NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plat
- IOL=1.6Review for Code Compliance requirements specific 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain Universal Engineering Science 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 load.

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

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

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

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 Lawleker 5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=266, 5=114.

7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 21 lb down and 34 lb up at 4-3-11, 21 lb down and 34 lb up at 4-3-11, and 41 lb down and 64 lb up at 7-1-10, and 41 lb down and 64 lb up at 7-1-10 chord, and 32 lb down and 40 lb up at 1-5-12, 32 lb down and 40 lb up at 1-5-12, 18 lb down and 23 lb up at 4-3-11, 18 lb down and 23 lb up at 4-3-11, and 39 lb down at 7-1-10, and 39 lb down at 7-1-10 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).

9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

### LOAD CASE(S) Standard

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

Vert: 1-4=-54, 5-8=-20

PX2707

Structural wood sheathing directly applied or 5-2-7 oc purlins.

Rigid ceiling directly applied or 8-0-12 oc bracing.

06/30/2022

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Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

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16023 Swingley Ridge Rd

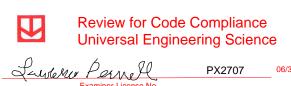
Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 62 PRESERVE
					T28119635
3213335	HJ01A	DIAGONAL HIP GIRDER	1	1	
					Job Reference (optional)

Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:25:19 2022 Page 2 ID:Ad27wGdB3DlInto\_ShAPXtzlZ29-VmG\_?8Q5LOnMTov9grn2PXr8VWKd\_svj65XgHxz22xU

LOAD CASE(S) Standard Concentrated Loads (lb)

Vert: 12=-68(F=-34, B=-34) 14=57(F=28, B=28) 15=-6(F=-3, B=-3) 16=-57(F=-29, B=-29)



Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119636 3213335 HJ01T DIAGONAL HIP GIRDER 2 Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:25:21 2022 Page 1 ID:Ad27wGdB3DlInto\_ShAPXtzIZ29-S9OkQpRLt?14i52YnGqWUywVSK?ESqv0ZP0mLqz22xS 4-11-0 9-10-13 1-8-2 Scale = 1:32.9 5.66 12 3x4 = 4x4 / 3x10 / 12 1-1-6 1-0-0 3x6 = <sub>17</sub> 18 3x4 =16 10 4x4 = 2x4 || 3-2-14 4-11-0 9-10-13 3-2-14 4-11-13 1-8-2 SPACING-CSL LOADING (psf) 2-0-0 DEFL in (loc) I/defl I/d PLATES GRIP **TCLL** 20.0 Plate Grip DOL 1.25 TC 0.49 Vert(LL) 0.04 8-9 >999 240 MT20 244/190 TCDL 7.0 Lumber DOL 1.25 вс 0.69 Vert(CT) -0.07 7-8 >999 180 WB **BCLL** 0.0 Rep Stress Incr NO 0.33 Horz(CT) -0.04 6 n/a n/a BCDL 10.0 Code FBC2020/TPI2014 Matrix-MS Weight: 56 lb FT = 20%LUMBER-BRACING-TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, 2x4 SP No.2 \*Except\* BOT CHORD except end verticals BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. 3-10: 2x4 SP No.3 WFBS 2x4 SP No.3 \*Except\* 2-11: 2x6 SP No.2

REACTIONS.

(size) 11=0-4-15, 5=Mechanical, 6=Mechanical

Max Horz 11=190(LC 8)

Max Uplift 11=-212(LC 4), 5=-100(LC 8), 6=-169(LC 8) Max Grav 11=457(LC 35), 5=139(LC 1), 6=283(LC 32)

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

TOP CHORD 2-11=-469/211, 2-3=-439/180, 3-4=-628/322

BOT CHORD 8-9=-375/444, 7-8=-429/572

WEBS 3-8=-89/274, 4-7=-628/471, 2-10=-120/367

## NOTES-

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; 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 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 rectargle below how y/2-026 whole will fit between the bottom chord and any other members.

5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=212. 5=100. 6=169.

7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 58 lb down and 135 lb up at 1-5-12, 58 lb down and 135 lb up at 1-5-12, 70 lb down and 29 lb up at 4-3-11, 70 lb down and 29 lb up at 4-3-11, and 141 lb down and 123 lb up at 7-1-10, and 141 lb down and 123 lb up at 7-1-10 on top chord, and 5 lb down and 68 lb up at 1-5-12, 5 lb down and 68 lb up at 1-5-12, 39 lb down and 38 lb up at 4-3-11, 39 lb down and 38 lb up at 4-3-11, and 19 lb down at 7-1-10, and 19 lb down at 7-1-10 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).

9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

### LOAD CASE(S) Standard

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

Vert: 1-2=-54, 2-5=-54, 10-11=-20, 6-9=-20

PX2707

Exp B; Review for Code Compliance

greguire Liniversial Engineering Science

06/30/2022

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Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

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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



Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 62 PRESERVE
					T28119636
3213335	HJ01T	DIAGONAL HIP GIRDER	2	1	
					I loh Reference (ontional)

Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:25:21 2022 Page 2 ID:Ad27wGdB3DlInto\_ShAPXtzIZ29-S9OkQpRLt?14i52YnGqWUywVSK?ESqv0ZP0mLqz22xS

LOAD CASE(S) Standard Concentrated Loads (lb)

Vert: 12=69(F=35, B=35) 14=-99(F=-49, B=-49) 16=64(F=32, B=32) 17=0(F=0, B=0)





Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119637 3213335 PB01 **GABLE** 16 Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:25:23 2022 Page 1 ID:Ad27wGdB3Dllnto\_ShAPXtzIZ29-OYVVqVTcPdHoyPCwvhs\_ZN?xs7qEwoYJ1iVtQiz22xQ 13-6-6 Scale = 1:28.2 4x4 = 8.00 12 2x4 || <sub>5</sub>2x4 || 67 0-1-10 10 9 8 3x6 = 3x6 = 2x4 || 2x4 || 2x4 || 13-6-6 13-6-6 Plate Offsets (X,Y)--[2:0-3-9,0-1-8], [6:0-3-9,0-1-8] LOADING (psf) SPACING-CSI. DEFL. (loc) I/defI L/d **PLATES GRIP TCLL** 20.0 Plate Grip DOL 1.25 TC 0.11 Vert(LL) 0.00 n/r 120 MT20 244/190 TCDL 7.0 Lumber DOL 1.25 BC 0.08 Vert(CT) 0.00 n/r 120 WB **BCLL** 0.0 Rep Stress Incr YES 0.06 Horz(CT) 0.00 6 n/a n/a BCDL 10.0 Code FBC2020/TPI2014 Matrix-S Weight: 53 lb FT = 20% LUMBER-**BRACING-**TOP CHORD 2x4 SP No 2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. BOT CHORD 2x4 SP No 2 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. 2x4 SP No 3 OTHERS REACTIONS. All bearings 12-0-2. Max Horz 2=-98(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 8=-135(LC 13), 10=-135(LC 12) Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 8=280(LC 20), 10=281(LC 19)

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

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-3-5 to 3-3-5, Exterior(2N) 3-3-5 to 6-9-3, Corner(3R) 6-9-3 to 9-6-6, Exterior(2N) 9-6-6 to 13-3-1 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip Review for Code Compliance
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Universal Engineering Science 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) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 4-0-0 oc.

7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 8=135, 10=135
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

PX2707

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Examiner-License No.

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06/30/2022

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Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

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Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119638 3213335 PB01G **GABLE** 2 Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:25:25 2022 Page 1 ID:Ad27wGdB3DlInto\_ShAPXtzIZ29-KwdFFBUswEXWBjMJ06uSeo5HTxWmOi2cU0\_\_Ubz22xO 12-5-11 Scale = 1:25.9 4x4 =2x4 || 8.00 12 5<sup>2x4</sup> || 12 0-1-10 0-1-10 10 9 8 3x6 = 3x6 = 2x4 || 2x4 || 2x4 | 12-5-11 Plate Offsets (X,Y)--[2:0-3-9,0-1-8], [6:0-3-9,0-1-8] LOADING (psf) SPACING-CSI. DEFL. (loc) I/defI L/d **PLATES GRIP TCLL** 20.0 Plate Grip DOL 1.25 TC 0.11 Vert(LL) 0.00 n/r 120 MT20 244/190 TCDL 7.0 Lumber DOL 1.25 BC 0.08 Vert(CT) 0.00 n/r 120 **BCLL** 0.0 Rep Stress Incr YES WB 0.06 Horz(CT) 0.00 6 n/a n/a BCDL 10.0 Code FBC2020/TPI2014 Matrix-S Weight: 49 lb FT = 20% LUMBER-**BRACING-**TOP CHORD 2x4 SP No 2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. BOT CHORD 2x4 SP No 2 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. 2x4 SP No 3 OTHERS REACTIONS. All bearings 10-11-7. Max Horz 2=-90(LC 10) Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 8=-126(LC 13), 10=-127(LC 12) Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 8=267(LC 20), 10=267(LC 19)

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

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-3-5 to 3-3-5, Exterior(2N) 3-3-5 to 6-2-13, Corner(3R) 6-2-13 to 9-2-14, Exterior(2N) 9-2-14 to 12-2-6 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate
- Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Review for Code Compliance 3) Truss designed for wind loads in the plane of the truss only. For stude exposed to wind (normal to the Universal Engineering Science 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific

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Examiner-License No.

- to the use of this truss component. erne
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 4-0-0 oc.

7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 8=126. 10=127
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

PX2707

06/30/2022

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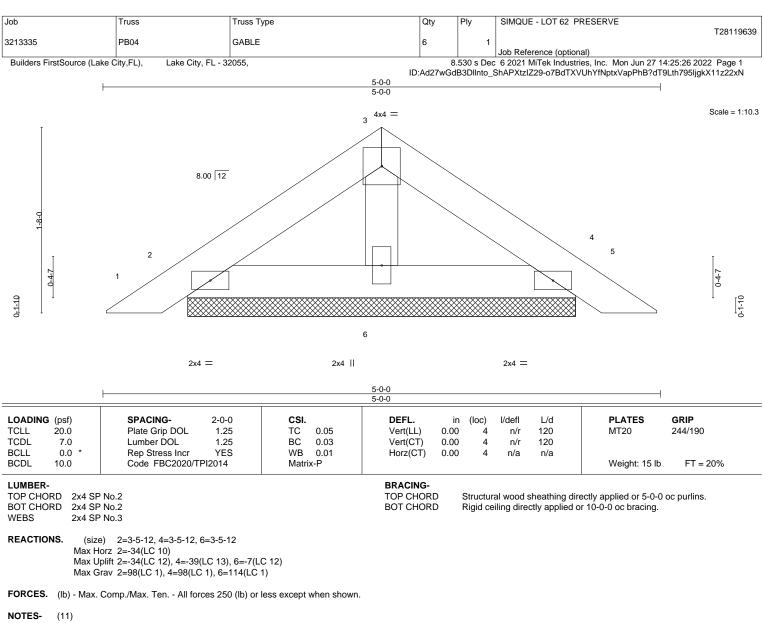
June 28,2022

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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





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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Review for Code Compliance Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain to the use of this truss component.
- 5) Gable requires continuous bottom chord bearing.

6) Gable studs spaced at 2-0-0 oc.

7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live load nonconcurrent with live load nonconcurrent with any other live load nonconcurrent with any other live load nonconcurrent live load nonconcurrent with any other live load nonconcurrent live load noncon 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by/2n0-0-widense No

will fit between the bottom chord and any other members.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 6.

10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building

11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

PX2707

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06/30/2022

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Philip J. O'Regan PE No.58126 MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017

June 28,2022

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Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119640 3213335 PB04G PIGGYBACK TRUSS Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:25:28 2022 Page 1 ID:Ad27wGdB3DlInto\_ShAPXtzlZ29-IVJOuCXkD9w52A5uiES9GQjp28YOb3f2A\_De5wz22xL 1-11-11 Scale = 1:8.6 3 8.00 12 5 2 0-4-7 0-1-10 2x4 =2x4 || 2x4 =3-11-6 3-11-6 LOADING (psf) SPACING-2-0-0 CSL **DEFL** in (loc) I/defI I/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.25 TC 0.02 Vert(LL) 0.00 n/r 120 MT20 244/190 TCDL 7.0 Lumber DOL 1.25 вс 0.02 Vert(CT) 0.00 n/r 120 WB **BCLL** 0.0 Rep Stress Incr YES 0.01 Horz(CT) 0.00 n/a n/a BCDL 10.0 Code FBC2020/TPI2014 Matrix-P Weight: 11 lb FT = 20% LUMBER-BRACING-TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 3-11-6 oc purlins. BOT CHORD 2x4 SP No.2 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. 2x4 SP No.3 **OTHERS** REACTIONS. (size) 2=2-5-2, 4=2-5-2, 6=2-5-2 Max Horz 2=26(LC 11) Max Uplift 2=-28(LC 12), 4=-32(LC 13), 6=-3(LC 12) Max Grav 2=78(LC 1), 4=78(LC 1), 6=76(LC 1) FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. NOTES-1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Gable requires continuous bottom chord bearing.

5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live I

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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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb up a existing 100 lb up a existin

8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building use No. designer

9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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SIMQUE - LOT 62 PRESERVE Job Truss Truss Type Qty Ply T28119641 3213335 T01 COMMON TRUSS 2 Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:25:30 2022 Page 1 ID:Ad27wGdB3Dllnto\_ShAPXtzIZ29-huQ8luY?lmAoHUEGpfUdLro3my9G3olLelilAoz22xJ 11-0-0 16-5-8 22-0-0 23-8-0 5-5-8 5-6-8 Scale = 1:58.7 4x6 || 4 9.00 12 5x6 // 5x6 > 5 3x8 / 3x8 N Ø Ø 10 15 11 9 4x6 = 2x4 || 2x4 || 6x8 = 6x8 = 16-5-8 22-0-0 10-11-0 Plate Offsets (X,Y)-- [3:0-3-0,0-3-0], [5:0-3-0,0-3-0] DEFL. in (loc) I/defI L/d **PLATES** GRIP Vert(LL) -0.19 9-11 >999 240 MT20 244/190 180

LOADING	(psf)	SPACING-	2-0-0	CSI.
TCLL	20.0	Plate Grip DOL	1.25	TC 0.39
TCDL	7.0	Lumber DOL	1.25	BC 0.37
BCLL	0.0 *	Rep Stress Incr	NO	WB 0.74
BCDL	10.0	Code FBC2020/T	Matrix-MS	

Vert(CT) -0.36 9-11 >715 Horz(CT) 0.01 8 n/a n/a

Weight: 163 lb FT = 20%

LUMBER-TOP CHORD

WFBS

2x4 SP No.2 2x6 SP M 26

**BOT CHORD** 2x4 SP No.3 \*Except\* 2-12,6-8: 2x6 SP No.2

Structural wood sheathing directly applied or 4-2-1 oc purlins,

except end verticals.

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

REACTIONS.

(size) 12=0-3-8, 8=0-3-8

Max Horz 12=252(LC 11)

Max Uplift 12=-290(LC 12), 8=-290(LC 13) Max Grav 12=1374(LC 19), 8=1335(LC 20)

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

TOP CHORD 2-3=-1648/326, 3-4=-1695/502, 4-5=-1632/502, 5-6=-1651/326, 2-12=-1438/339,

6-8=-1388/339 BOT CHORD 9-11=-81/863

WEBS 4-9=-342/1011, 5-9=-321/266, 4-11=-342/1054, 3-11=-321/266, 2-11=-177/1258,

6-9=-177/1321

1) Unbalanced roof live loads have been considered for this design.



**BRACING-**TOP CHORD

BOT CHORD

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2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 to 1-4-0, Exterior(3R) 11-0-07 to 14-0-0, Interior(1) 14-0-0 to 23-8-0 zone; end vertical left and right exposed; C-C for members and Consess May (Fig. 1) shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

### LOAD CASE(S) Standard

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

Vert: 1-2=-54, 2-4=-54, 4-6=-54, 6-7=-54, 11-12=-20, 9-11=-80(F=-60), 8-9=-20

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Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

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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



Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119642 3213335 T01G **GABLE** Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:25:34 2022 Page 1 ID:Ad27wGdB3DlInto\_ShAPXtzlZ29-Zfgf8GbVp?gEm5Y22VZZWhzoNZal?mHxZwgyJaz22xF 11-0-0 11-0-0 1-8-0 Scale = 1:58.6 4x4 = 9 10 11 9.00 12 29 12 6 13 5 3x4 × 14 3x4 / 12x14 = 15 5-0-0 28 27 26 25 24 23 22 21 20 19 18 4x6 =12x14 3x6 = 3x6 = 11-0-0 11-0-0 11-0-0 Plate Offsets (X,Y)-- [16:Edge,0-8-4], [28:Edge,0-8-4]

LOADIN TCLL TCDL	<b>G</b> (psf) 20.0 7.0	SPACING- Plate Grip DOL Lumber DOL	2-0-0 1.25 1.25	CSI. TC BC	0.22 0.11	DEFL. Vert(LL) Vert(CT)	in -0.01 -0.02	(loc) 17	l/defl n/r n/r	L/d 120 120	PLATES MT20	<b>GRIP</b> 244/190
BCLL BCDL	0.0 * 10.0	Rep Stress Incr Code FBC2020/T	YES	WB Matri	0.13	Horz(CT)	0.00	18	n/a	n/a	Weight: 177 lb	FT = 20%

BOT CHORD

LUMBER-**BRACING-**TOP CHORD 2x4 SP No.2 TOP CHORD

BOT CHORD 2x6 SP No 2

2x4 SP No.3 \*Except\* WFBS

2-28,16-18: 2x6 SP No.2

**OTHERS** 2x4 SP No.3

REACTIONS. All bearings 22-0-0.

Max Horz 28=207(LC 11) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 28, 18, 23, 24, 26, 21, 20 except 27=-135(LC 12), 19=-129(LC

Max Grav All reactions 250 lb or less at joint(s) 24, 26, 27, 21, 20, 19 except 28=319(LC 1), 18=319(LC 1),

23=386(LC 19), 22=370(LC 20)

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

TOP CHORD 2-28=-291/83, 16-18=-291/88

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

Exp B; Liniversal Engineering Science 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-8-0 to 1-4-0, Exterior(2N) 1-4-0 to 1. 0.0, Sometiments and forces & MWFRS for reactions shown; Lumber DOL-1.60 plate GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-8-0 to 1-4-0, Exterior(2N) 1-4-0 to 11-0-0, Corner(3R) 11-0-0

3) Truss designed for wind loads in the plane of the truss only. For stude exposed to wind (normal to the face), see Standard industrynse No. Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 28, 18, 23, 24, 26, 21, 20 except (jt=lb) 27=135, 19=129.
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Review for Code Compliance

Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

6-0-0 oc bracing: 27-28,18-19.

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16023 Swingley Ridge Rd

Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119643 3213335 T02 COMMON TRUSS 5 Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:25:35 2022 Page 1 ID:Ad27wGdB3Dllnto\_ShAPXtzlZ29-1rE1Mcc7aJo5OF7EcC4o2vVx?zsRk3b4naPWr0z22xE 11-0-0 22-0-0 16-5-8 5-5-8 5-6-8 Scale = 1:58.7 4x6 || 3 9.00 12 2x4 || 2x4 || 3x8 🛇 3x8 4 5 1-4-5 Ø 8 13 9 7 4x6 =2x4 || 2x4 6x8 = 6x8 = 5-6-8 22-0-0 10-11-0 5-6-8 SPACING-GRIP LOADING (psf) 2-0-0 CSL DEFL. in (loc) I/defl I/d **PLATES TCLL** 20.0 Plate Grip DOL 1.25 TC 0.36 Vert(LL) -0.19 7-9 >999 240 MT20 244/190 TCDL 7.0 Lumber DOL 1.25 вс 0.37 Vert(CT) -0.36>712 180 WB **BCLL** 0.0 Rep Stress Incr NO 0.76 Horz(CT) 0.01 6 n/a n/a Code FBC2020/TPI2014 BCDL 10.0 Matrix-MS Weight: 157 lb FT = 20%LUMBER-BRACING-TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 4-2-11 oc purlins, BOT CHORD 2x6 SP M 26 except end verticals 2x4 SP No.3 \*Except\* BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. WFBS 1-10.5-6: 2x6 SP No.2 REACTIONS. (size) 10=0-3-8, 6=0-3-8

Max Horz 10=220(LC 9)

Max Uplift 10=-247(LC 12), 6=-247(LC 13) Max Grav 10=1279(LC 19), 6=1255(LC 19)

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

1-2=-1662/326, 2-3=-1723/513, 3-4=-1660/512, 4-5=-1664/326, 1-10=-1342/277, TOP CHORD

5-6=-1319/277 BOT CHORD 7-9=-103/855

**WEBS** 3-7=-353/1037, 4-7=-343/281, 3-9=-354/1080, 2-9=-343/282, 1-9=-190/1256,

5-7=-192/1317

#### 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=22ft; GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 3-2-12, interior(1) 0 2 12 0 0 11-0-0 to 14-0-0, Interior(1) 14-0-0 to 21-9-4 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for Company of the POL 1 60 plate grip DOI =1 60 GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 11-0-0, Exterior(2R)

3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirer meants inspect of the second second requirer meants in the sec to the use of this truss component.

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=247, 6=247.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

## 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, 9-10=-20, 7-9=-80(F=-60), 6-7=-20

**Review for Code Compliance** 

Exp B; Liniversal Engineering Science

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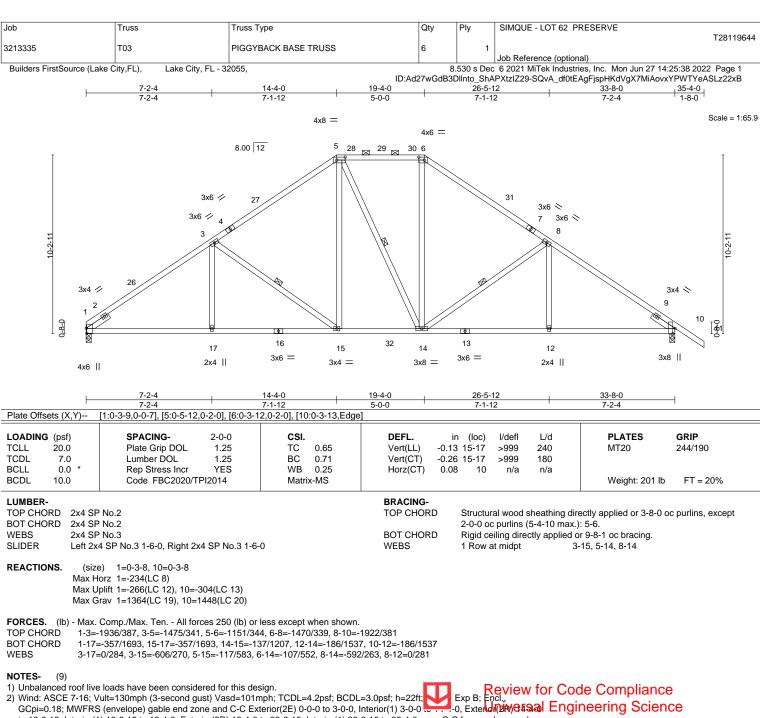
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to 18-6-15, Interior(1) 18-6-15 to 19-4-0, Exterior(2R) 19-4-0 to 23-6-15, Interior(1) 23-6-15 to 35-4-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain Teading feeding fee to the use of this truss component. Examiner-License No.

4) Provide adequate drainage to prevent water ponding.

5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=266, 10=304.

8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

This item has been

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Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119645 3213335 T03G **GABLE** Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:25:40 2022 Page 1 ID:Ad27wGdB3DlInto\_ShAPXtzIZ29-Op1wPJgGOrQOU0?BPlfzlyCqq\_erPTZpxs7HWDz22x9 14-10<u>-5</u> 18-9-11 33-8-0 14-10-5 3-11-6 14-10-5 1-8-0 Scale = 1:65.7 3x6 🖊 3x6 > 11 12 13 14 15 10 8.00 12 16 17 3x6 / 18 3x6 > 19 20 X Ø Ø 21 3x4 < 22 23 0-3-13 5x6 = 3x6 // 40 39 38 37 36 35 34 33 32 31 30 29 28 7x8 = 7x8 = 33-8-0 33-8-0 [10:0-3-0,0-0-2], [14:0-3-0,0-0-2], [31:0-4-0,0-4-8], [37:0-4-0,0-4-8] Plate Offsets (X,Y)--LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defI L/d **PLATES GRIP TCLL** 20.0 Plate Grip DOL 1.25 TC 0.16 Vert(LL) -0.01 25 n/r 120 MT20 244/190 TCDL Vert(CT) 7.0 Lumber DOL 1.25 BC 0.04 -0.01 25 n/r 120 **BCLL** 0.0 Rep Stress Incr YES WB 0.14 Horz(CT) 0.01 24 n/a n/a BCDL 10.0 Code FBC2020/TPI2014 Matrix-S Weight: 288 lb FT = 20% LUMBER-**BRACING-**Structural wood sheathing directly applied or 6-0-0 oc purlins, except TOP CHORD 2x4 SP No 2 TOP CHORD BOT CHORD

WEBS

2x6 SP No 2

2x4 SP No 3 OTHERS

2-0-0 oc purlins (6-0-0 max.): 10-14.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. 1 Row at midpt 12-34, 15-32, 13-33, 9-36, 11-35

REACTIONS. All bearings 33-8-0

Max Horz 1=-236(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 34, 26, 27, 28, 29, 30, 31, 32, 33, 42, 41, 40, 39, 38, 37, 36, 24, 35

Max Grav All reactions 250 lb or less at joint(s) 1, 34, 26, 27, 28, 29, 30, 31, 32, 33, 42, 41, 40, 39, 38, 37, 36, 24, 35

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

1-2=-259/175

## NOTES-

1) Unbalanced roof live loads have been considered for this design.

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=22ft; D-2-8 to 3-2-8. Exterior(2N) 3-2-8. Exp B: Relyiew for Code Compliance GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-2-8 to 3-2-8, Exterior(2N) 3-2-10-5, Comer(3R) 0 zone: Caniversal Engineering Science 14-10-5 to 17-8-0, Exterior(2N) 17-8-0 to 18-9-11, Corner(3R) 18-9-11 to 21-8-0, Exterior(2N) 21-8-0 t members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry

Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirentents specific No. to the use of this truss component.
- 5) Provide adequate drainage to prevent water ponding. 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 34, 26, 27, 28, 29, 30, 31, 32, 33, 42, 41, 40, 39, 38, 37, 36, 24, 35.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

PX2707

06/30/2022

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

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

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



Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119646 3213335 T04 ATTIC TRUSS 3 Job Reference (optional)

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:25:44 2022 Page 1 ID:Ad27wGdB3DlInto\_ShAPXtzIZ29-HaHREhjnS4xpzeJzebkvwoNMwbrDL4TPsU5Uf\_z22x5



Scale = 1:102.6

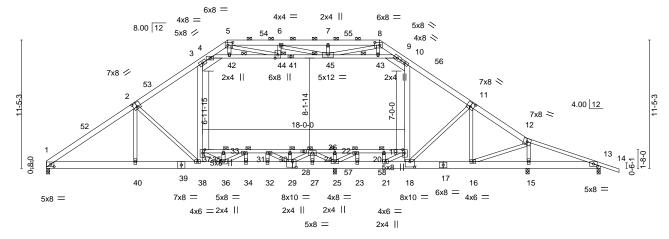


Plate Offse	ets (X,Y)	[1:0-3-10,0-2-8], [2:0-4-0 [37:Edge,0-2-4], [44:0-3-			0-3-0], [11:0-4-0,0-4-8],		, [18:0-5-0	,0-5-12], [19		2,0-6-0],
LOADING	(psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
ΓCLL	20.0	Plate Grip DOL	1.00	TC 0.7	79 Vert(LL)	-0.28 38	>999	240	MT20	244/190
CDL	7.0	Lumber DOL	1.00	BC 0.7	71 Vert(CT)	-0.52 38-40	>590	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.9	91 Horz(CT	) 0.05 13	n/a	n/a		
BCDL	10.0	Code FBC2020/T	PI2014	Matrix-MS	S Attic	-0.20 19-37	1093	360	Weight: 485 lb	FT = 20%

15-9-3 17-9-3 19-8-4 21-8-4 23-8-4 25-8-4 27-8-4 30-0-11 32-0-11

LUMBER-BRACING-

TOP CHORD 2x6 SP No.2 \*Except\* 12-14: 2x4 SP No.2, 3-4,9-10: 2x8 SP 2400F 2.0E

**BOT CHORD** 2x8 SP 2400F 2.0E \*Except\*

28-37,19-28: 2x4 SP No.2

**WEBS** 2x4 SP No.3 \*Except\*

3-38,10-18: 2x6 SP No.2

TOP CHORD

Structural wood sheathing directly applied or 3-1-13 oc purlins,

37-10-0 42-9-11 42-10-4

except

2-0-0 oc purlins (5-8-12 max.): 5-8.

**BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 4-44, 9-45 **JOINTS** 1 Brace at Jt(s): 24, 22, 35, 33, 44, 45, 30, 26, 20

REACTIONS. All bearings 0-3-8

Max Horz 1=-265(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) except 1=-141(LC 12), 15=-386(LC 8),

13=-325(LC 9)

Max Grav All reactions 250 lb or less at joint(s) except 1=1767(LC 2), 15=1477(LC

25), 25=1873(LC 18), 13=873(LC 20)

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

TOP CHORD 1-2=-2860/334, 2-3=-2332/324, 3-4=-1742/387, 4-5=-928/285, 5-6=-1591/556,

6-7=-1516/614, 7-8=-1516/614, 8-9=-760/342, 9-10=-1781/391, 10-11=-2158/354,

11-12=-2183/216, 12-13=-2130/432

**BOT CHORD** 1-40=-194/2459, 38-40=-194/2456, 36-38=-45/2148, 34-36=0/2998, 32-34=0/2998,

29-32=0/2998. 27-29=-164/897. 25-27=-164/897. 23-25=-139/544. 21-23=-139/544.

29-32=0/2998, 27-29=-164/897, 25-27=-164/897, 23-25=-139/544, 21-23=-139/544, 18-21=-52/1518, 16-18=-37/1828, 15-16=-316/2036, 13-15=-328/2007, 35-37=-1468/19x - Lyle Mux Panny 33-35=-1468/15, 31-33=-1339/0, 30-31=-482/232, 26-30=-482/232, 24-26=-153/1971,

22-24=-153/1971, 20-22=-64/1432, 19-20=-64/1432

WEBS 2-40=-43/438, 2-38=-831/305, 3-37=0/794, 18-19=-95/1082, 10-19=-60/589,

12-16=-432/764, 12-15=-1235/505, 4-42=-1266/212, 42-44=-1255/213, 44-45=-894/257, 43-45=-1752/185, 9-43=-1768/184, 24-25=-278/17, 22-23=-85/250, 19-21=-1280/33, 35-36=-261/0, 36-37=0/1304, 33-34=-335/69, 11-16=-325/232, 5-44=-403/964,

8-45=-370/1123, 25-26=-1195/0, 22-25=-885/360, 33-36=-208/467, 26-27=-363/36, 26-29=0/1459, 31-32=-25/350, 29-31=-1109/0, 20-21=-284/93

NOTES-(13)

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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 16-1-13, Exterior(2R) 16-1-13 to 19-1-13, Interior(1) 19-1-13 to 29-8-2, Exterior(2R) 29-8-2 to 32-8-2, Interior(1) 32-8-2 to 51-0-0 zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

4) Provide adequate drainage to prevent water ponding.

# **Review for Code Compliance** Universal Engineering Science

PX2707

06/30/2022

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

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

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 62 PRESERVE
					T28119646
3213335	T04	ATTIC TRUSS	3	1	
					Job Reference (optional)

Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:25:44 2022 Page 2 ID:Ad27wGdB3DlInto\_ShAPXtzIZ29-HaHREhjnS4xpzeJzebkvwoNMwbrDL4TPsU5Uf\_z22x5

#### NOTES-

- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and
- 8) Ceiling dead load (5.0 psf) on member(s). 3-4, 9-10, 4-42, 42-44, 44-45, 43-45, 9-43; Wall dead load (5.0 psf) on member(s).3-37, 10-19
- 9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 35-37, 33-35, 31-33, 30-31, 26-30, 24-26, 22-24, 20-22, 19-20 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 141 lb uplift at joint 1, 386 lb uplift at joint 15 and 325 lb uplift at joint 13.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Attic room checked for L/360 deflection.
- 13) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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Job Truss Truss Type Qty Plv SIMQUE - LOT 62 PRESERVE T28119647 3213335 ATTIC TRUSS T04D Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:25:49 2022 Page 1 ID:Ad27wGdB3Dlinto\_ShAPXtzlZ29-dY4KIOnvHcZ63PBwQ8K4ds4GycUM0Lr8?lpFLCz22x0 16-1-13 32-0-11 5-0-0 9-8-4 13-9-3 5-0-0 4-8-4 4-0-15 1-3-4 Scale = 1:113.1 8x10 =  $8x10 = 4x12 \approx$ 2x4 |  $8.00 \overline{12} 4x6 =$ 4x4 =7x10 || 9 10 4x8 × 46 47 8x10 / 2x4 6x8 || 5x12 = 8x10 × 12 8-1-14 4x6 / 4.00 12 7-0-0 7x8 = 13 18-0-14 15 L 08 C 0-8-0 39  $7^{55}_{x}$  **37** = 3541 18 42 40 33 **2**6 20 16 5x8 =7x10 = 6x8 =6x8 3x8 || 4x12 || 2x4 || 5x12 = 3x8 || 5x8 = 3x8 =8x12 = 8x12 = 4x8 = 5x8 = 2x4 || 10x12 =5x12 = 8x12 =2x4 || 2x4 || SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.) ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER OR THE BUILDING DESIGNER-4 30-0-11 42-10-4 15-9-3 17-9-3 21-8-4 23-8-4 25-8-4 28-0-11 32-0-1 2-0-0 2-0-0 1-11-1 2-0-0 2-0-0 2-0-0 2-4-7 2-0-0 2-0-0 42-9-11 4-7-7 0-0-9 Plate Offsets (X,Y)--[3:0-5-0,0-4-8], [4:0-5-15,Edge], [6:0-7-12,0-4-0], [9:0-7-12,0-4-0], [12:0-5-0,0-4-8], [13:0-4-12,0-2-4], [14:0-4-0,0-2-10], [21:0-2-0,Edge], [30:0-5-12,0-6-0] [32:0-3-8,0-1-8], [38:0-2-8,Edge], [46:0-3-8,0-3-0] LUMBER-BRACING-TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.00	TC 0.58	Vert(LL)	-0.24 37-39	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.00	BC 0.97	Vert(CT)	-0.35 37-39	>871	180		
BCLL 0.0 '	Rep Stress Incr	NO	WB 0.91	Horz(CT)	0.05 14	n/a	n/a		
BCDL 10.0	Code FBC2020/Ti	PI2014	Matrix-MS	Attic	0.13 21-38	1611	360	Weight: 1570 lb	FT = 20%

**BOT CHORD** 

**JOINTS** 

2x6 SP No.2 \*Except\* TOP CHORD 3-6,9-12: 2x8 SP 2400F 2.0E, 13-15: 2x4 SP No.2

**BOT CHORD** 2x8 SP 2400F 2.0E \*Except\*

29-38,21-29: 2x4 SP M 31

**WEBS** 2x4 SP No.3 \*Except\*

4-39,11-19: 2x6 SP No.2, 13-17,26-27,23-26: 2x4 SP No.2

25-26: 2x8 SP 2400F 2.0E

20-21,37-38,27-30,34-37,30-32,20-23: 2x4 SP M 31

REACTIONS. All bearings 0-3-8 except (jt=length) 16=0-4-5 (input: 0-3-8), 26=0-6-9 (input:

0-3-8).

(lb) -Max Horz 1=-265(LC 4)

Max Uplift All uplift 100 lb or less at joint(s) except 1=-1340(LC 5), 16=-2950(LC 4),

14=-222(LC 5), 26=-3852(LC 4)

All reactions 250 lb or less at joint(s) except 1=6223(LC 16),

16=10990(LC 17), 14=431(LC 1), 26=16723(LC 17)

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

TOP CHORD 1-2=-10386/2279, 2-3=-10576/2400, 3-4=-9175/2149, 4-5=-6020/1478, 5-6=-1456/412,

6-7=-1523/459. 7-8=-812/529. 8-9=-812/529. 9-10=-283/551. 10-11=-6329/1558.

11-12=-9446/2294, 12-13=-10365/2577, 13-14=-1019/265

BOT CHORD 1-42=-1977/8729, 40-42=-1977/8729, 39-40=-3062/13338, 37-39=-3000/13158

35-37=-3218/14267, 33-35=-3218/14267, 30-33=-3218/14267, 28-30=-4033/1172, 26-28=-4033/1172, 24-26=-4945/1132, 20-24=-4945/1132, 19-20=-2179/7139,

17-19=-2232/7533, 16-17=-327/1581, 14-16=-172/954, 36-38=-8947/2018, 34-36=-8947/2018, 32-34=-6997/1553, 31-32=-329/757, 27-31=-325/747, 25-27=-4227/18496, 23-25=-4227/18496, 22-23=-983/4302, 21-22=-983/4302

3-40=-363/1772, 3-38=-2903/642, 38-39=-767/2472, 4-38=-1348/5718, 19-21=-617/2381,

11-21=-374/1497, 12-21=-1776/634, 13-17=-2105/7917, 13-16=-9730/2562, 5-44=-5921/1388, 44-46=-5849/1374, 46-47=-6375/1287, 45-47=-8694/2047, 10-45=-8811/2071, 25-26=-1902/397, 23-24=-2374/511, 20-22=-1247/251,

20-21=-4615/1283, 36-37=-1055/200, 37-38=-927/3743, 34-35=-1914/419,

32-33=-771/3254, 30-31=-1028/207, 27-28=-2513/549, 12-17=-1343/278, 6-44=-87/477, 9-45=-155/772, 6-46=-569/425, 9-47=-473/1361, 7-47=-1301/314, 26-27=-8671/1953,

27-30=-2801/12317, 34-37=-546/2284, 30-32=-8875/2017, 38-40=-4527/1059, 17-21=-312/1462, 2-42=-331/123, 2-40=-206/472, 20-23=-2402/9474, 23-26=-7324/1958 **Review for Code Compliance** Universal Engineering Science

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

2-0-0 oc purlins (6-0-0 max.): 6-9.

Landence Pernell

6-0-0 oc bracing: 28-30,26-28,24-26,20-24.

1 Brace at Jt(s): 25, 23, 22, 36, 34, 31, 46, 47

PX2707

06/30/2022

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Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

**WEBS** 

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

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



Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 62 PRESERVE	
3213335	T04D	ATTIC TRUSS	1	9		T28119647
				3	Job Reference (optional)	

Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:25:49 2022 Page 2 ID:Ad27wGdB3DlInto ShAPXtzlZ29-dY4KlOnvHcZ63PBwQ8K4ds4GycUM0Lr8?lpFLCz22x0

#### **NOTES-** (17)

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.

Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-8-0 oc, 2x4 - 1 row at 0-4-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are 3x6 MT20 unless otherwise indicated.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Ceiling dead load (5.0 psf) on member(s). 4-5, 10-11, 5-44, 44-46, 46-47, 45-47, 10-45; Wall dead load (5.0 psf) on member(s). 4-38, 11-21
- 11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 36-38, 34-36, 32-34, 31-32, 27-31, 25-27, 23-25, 22-23, 21-22
- 12) WARNING: Required bearing size at joint(s) 16, 26 greater than input bearing size.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1340 lb uplift at joint 1, 2950 lb uplift at joint 16, 222 lb uplift at joint 14 and 3852 lb uplift at joint 26.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2029 lb down and 574 lb up at 32-11-4 on top chord, and 3072 lb down and 869 lb up at 13-10-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 16) Attic room checked for L/360 deflection.
- 17) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

### LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 1-4=-54, 4-5=-64, 5-6=-54, 6-9=-54, 9-10=-54, 10-11=-64, 13-15=-54, 48-55=-20, 16-55=-265(F=-245), 16-51=-20, 38-56=-40, 21-56=-285(F=-245), 5-10=-10

Drag: 4-38=-10, 11-21=-10

Concentrated Loads (lb)

Vert: 39=-1702(F) 54=-1124

Trapezoidal Loads (plf)

Vert: 11=-201(F=-147)-to-13=-319(F=-265)

**Review for Code Compliance** Universal Engineering Science

Laydekur Parnell PX2707

Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119648 3213335 **GABLE** T04G Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:25:57 2022 Page 1 ID:Ad27wGdB3DlInto\_ShAPXtzlZ29-O4ZLz7txO3Zz1dpSuqTyxYPiurJiu1OJr?lgckz22wu 16-8-2 32-0-11 15-3-10 24-6-9 1-6-6 Scale = 1:122.6 6x8 = 4x4 = 6x8 =  $8.00 \boxed{12} \ 4x6 =$ 4x6 =9 4x8 // 6 80 81 10 <sup>11</sup> 4x8 **◇** 47 44a 46 5 4x6 💸 4x6 // x6 = 4x6 🖊 4x6 > || 5x12 = 4.00 12 13 3 4x4 // 3x6 > 8x10 > 8x10 > 18-0-0 16 0-8-0 3x10 = 83 35 31 28 3x6 | | 42 41 39 32 26 3x6 II 43 30 20 18 5x8 >  $_{3x6}$  ||  $_{3x6} = _{4x8} =$ 3x6 || 4x6 = 4x6 <del>-5</del>x8 Ⅱ 4x6 = 3x6 || 8x10 / 3x6 = 3x6 || 4x8 = 3x6 || 5x8 || 3x6 || 3x6 || 3x6 || 3x6 || 8x10 = $_{3x6} = _{4x6} =$ 3x6 || 8x10 =3x6 || 3x6 =

> 17-9-3 21-3-6 23-8-4 27-8-4 32-0-11 15-9-3 19-8-4 21<sub>1</sub>8-4 25-8-4 30-0-11 2-0-0 2-0-0 1-11-1 0-4-14 2-0-0 2-0-0 2-4-7 2-0-0 37-10-0 5-9-5 42-8-2 43<sub>7</sub>0-0 4-10-2 0-3-14 1-7-2 2-0-0

> > **BOT CHORD**

**JOINTS** 

Plate Offsets (X,Y)--[1:Edge,0-3-8], [7:0-5-4,0-3-0], [10:0-5-4,0-3-0], [16:0-2-0,0-1-8], [17:0-4-0,Edge], [17:0-5-12,Edge], [20:0-5-0,0-6-0], [22:Edge,0-2-4], [32:0-3-12,0-6-0], [40:Edge,0-2-4], [42:0-5-0,0-6-0], [47:0-3-8,0-3-0], [55:0-1-10,0-1-0]

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.00	TC 0.27	Vert(LL) -0.05 19-21 >999 240	MT20 244/190
TCDL 7.0	Lumber DOL 1.00	BC 0.62	Vert(CT) -0.09 19-21 >999 180	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.68	Horz(CT) 0.01 18 n/a n/a	
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS	Attic 0.03 22-40 6554 360	Weight: 544 lb FT = 20%

LUMBER-BRACING-2x6 SP No.2 \*Except\* TOP CHORD

15-17.16-17.1-2: 2x4 SP No.2

**BOT CHORD** 2x8 SP 2400F 2.0E \*Except\*

31-40,22-31: 2x4 SP No.2 **WEBS** 2x4 SP No.3 \*Except\*

5-41,12-21: 2x6 SP No.2

**OTHERS** 2x4 SP No.3

WEDGE

TOP CHORD

Right: 2x4 SP No.3

REACTIONS. All bearings 0-3-8 except (jt=length) 1=0-5-8, 43=0-5-8.

Max Horz 1=-254(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) except 17=-156(LC 9), 1=-234(LC 8),

43=-216(LC 12), 18=-291(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 17 except 1=501(LC 1),

43=1894(LC 20), 18=1708(LC 25), 28=1830(LC 18)

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

TOP CHORD 1-3=-719/512, 3-5=-1276/380, 5-6=-1139/424, 6-7=-816/293, 7-8=-1458/533,

8-9=-1434/523, 9-10=-1434/523, 10-11=-804/264, 11-12=-1135/414, 12-14=-1279/372

14-15=-1189/254, 15-17=-248/422

1-43=-168/597, 41-43=-168/597, 39-41=-54/953, 37-39=-294/1777, 35-37=-294/1777, BOT CHORD  $32 - 35 = -294/1777, \ 30 - 32 = -228/416, \ 28 - 30 = -228/416, \ 26 - 28 = -51/537, \ 24 - 26 = -51/537, \ 24$ 

21-24=-75/1038, 19-21=-92/949, 18-19=-265/257, 17-18=-369/276, 38-40=-682/194 36-38=-682/194, 34-36=-1033/241, 33-34=-485/252, 29-33=-485/252, 27-29=-437/1584,

25-27=-437/1584, 23-25=-118/506, 22-23=-118/506

**WEBS** 3-43=-1636/533, 3-41=-223/1106, 40-41=-559/166, 5-40=-256/234, 21-22=-52/264

15-19=-262/1265, 15-18=-1402/379, 6-45=-668/264, 45-47=-659/265, 47-48=-521/624, 46-48=-598/259, 11-46=-608/259, 27-28=-262/86, 25-26=-98/403, 23-24=-254/97, 22-24=-665/163, 38-39=-274/106, 39-40=-227/815, 29-30=-297/94, 14-19=-398/192,

7-47=-312/897, 10-48=-319/871, 28-29=-1022/267, 25-28=-1269/373, 36-39=-411/72,

32-34=-649/219, 29-32=-307/1100

NOTES-(15)

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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 16-8-2, Exterior(2R) 16-8-2 to 19-8-2, Interior(1) 19-8-2 to 29-1-13, Exterior(2R) 29-1-13 to 32-1-11, Interior(1) 32-1-11 to 49-2-4 zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

**Review for Code Compliance** Universal Engineering Science

Structural wood sheathing directly applied or 6-0-0 oc purlins, except

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

2-0-0 oc purlins (5-10-15 max.): 7-10.

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Examiner-License No

6-0-0 oc bracing: 1-43,41-43,18-19,17-18.

1 Brace at Jt(s): 27, 25, 23, 38, 36, 33, 47, 48

06/30/2022 PX2707 This item has been

electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the

Philip J. O'Regan PE No.58126 MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017

signature must be verified

on any electronic copies.

June 28,2022

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

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

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



Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 62 PRESERVE
					T28119648
3213335	T04G	GABLE	1	1	
					Job Reference (optional)

Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:25:58 2022 Page 2 ID:Ad27wGdB3Dlinto\_ShAPXtzlZ29-sH7kBTuZ9NhqenNfSX\_BUlyteEfxdUeT4fUE8Bz22wt

#### NOTES-

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and
- 10) Ceiling dead load (5.0 psf) on member(s). 5-6, 11-12, 6-45, 45-47, 47-48, 46-48, 11-46; Wall dead load (5.0 psf) on member(s).5-40, 12-22
- 11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 38-40, 36-38, 34-36, 33-34, 29-33, 27-29, 25-27, 23-25, 22-23
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 156 lb uplift at joint 17, 234 lb uplift at joint 1, 216 lb uplift at joint 43 and 291 lb uplift at joint 18.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) Attic room checked for L/360 deflection.
- 15) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Review for Code Compliance Universal Engineering Science

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PX2707



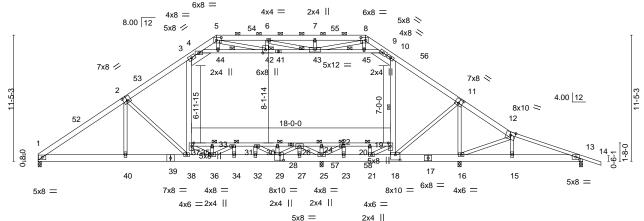


Plate Offsets (X,Y)	[2:0-4-0,0-4-8], [5:0-5-4,0 [42:0-3-8,0-3-0]	-3-0], [8:0-5-4,	0-3-0], [11:0-4-0,0-	8], [13:0-4-0,0-2-10],	18:0-5-0,0-5-12	], [19:Edg	je,0-2-4], [29	9:0-3-12,0-6-0], [37:Edg	e,0-2-4],
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.00	TC 0.76	Vert(LL)	-0.24 38	>999	240	MT20	244/190
CDL 7.0	Lumber DOL	1.00	BC 0.90	Vert(CT)	-0.49 38-40	>633	180		
3CLL 0.0 *	Rep Stress Incr	YES	WB 0.90	Horz(CT)	0.05 13	n/a	n/a		
3CDL 10.0	Code FBC2020/TF	PI2014	Matrix-MS	Attic	-0.15 19-37	1475	360	Weight: 484 lb	FT = 20%

LUMBER-BRACING-TOP CHORD

TOP CHORD 2x6 SP No.2 \*Except\* 12-14: 2x4 SP No.2, 3-4,9-10: 2x8 SP 2400F 2.0E

**BOT CHORD** 

2x8 SP 2400F 2.0E \*Except\*

**WEBS** 2x4 SP No.3 \*Except\* 3-38,10-18: 2x6 SP No.2

28-37,19-28: 2x4 SP No.2 **BOT CHORD** WEBS **JOINTS** 

Structural wood sheathing directly applied or 2-11-0 oc purlins, except

2-0-0 oc purlins (5-8-4 max.): 5-8.

Rigid ceiling directly applied or 10-0-0 oc bracing. 10-19, 4-42, 9-43 1 Brace at Jt(s): 24, 22, 35, 33, 30, 42, 43, 20

REACTIONS. All bearings 0-3-8

Max Horz 1=-265(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) except 1=-136(LC 12), 16=-476(LC 8),

13=-329(LC 9)

Max Grav All reactions 250 lb or less at joint(s) except 1=1720(LC 20), 16=1016(LC

25), 25=2026(LC 18), 13=1287(LC 2)

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

TOP CHORD 1-2=-2777/321, 2-3=-2239/277, 3-4=-1677/341, 4-5=-917/276, 5-6=-1604/557

6-7=-1516/606, 7-8=-1516/606, 8-9=-734/319, 9-10=-1716/354, 10-11=-2072/272,

11-12=-2368/232, 12-13=-3072/464

**BOT CHORD** 1-40=-186/2387, 38-40=-186/2384, 36-38=-30/2076, 34-36=0/2701, 32-34=0/2701,

29-32=0/2701, 27-29=-32/436, 25-27=-32/436, 23-25=-54/348, 21-23=-54/348, 

33-35=-1351/0, 31-33=-1161/0, 30-31=-263/354, 26-30=-263/354, 24-26=-49/2392,

22-24=-49/2392, 20-22=-72/1563, 19-20=-72/1563

2-40=-37/451, 2-38=-815/297, 3-37=0/747, 18-19=-108/1157, 10-19=-69/565,

11-18=-383/226, 11-16=-561/488, 12-16=-1113/591, 12-15=-336/184, 4-44=-1225/118, 42-44=-1214/120, 42-43=-880/368, 43-45=-1669/182, 9-45=-1684/181, 24-25=-277/19, 22-23=0/282, 19-21=-1502/62, 35-36=-264/0, 33-34=-402/75, 31-32=-39/403,

26-27=-414/15, 36-37=0/1185, 5-42=-378/930, 8-43=-358/1109, 25-26=-1198/0 22-25=-992/180, 33-36=-217/578, 29-31=-1222/15, 26-29=0/1586, 20-21=-267/106

NOTES-

WEBS

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 16-1-13, Exterior(2R) 16-1-13 to 19-1-13, Interior(1) 19-1-13 to 29-8-2, Exterior(2R) 29-8-2 to 32-8-2, Interior(1) 32-8-2 to 51-0-0 zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

4) Provide adequate drainage to prevent water ponding.

**Review for Code Compliance** Universal Engineering Science

PX2707

06/30/2022

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

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 

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



Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 62 PRESERVE
2042225	Toe	ATTIC TRUSS	0		T28119649
3213335	T05	ATTIC TRUSS	3	1	Job Reference (optional)

Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:03 2022 Page 2 ID:Ad27wGdB3Dlinto\_ShAPXtzlZ29-DEwdEAyh\_vK7lYGcF4aMBpfdbFHolgRCDxC?pOz22wo

#### NOTES-

- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and
- 8) Ceiling dead load (5.0 psf) on member(s). 3-4, 9-10, 4-44, 42-44, 42-43, 43-45, 9-45; Wall dead load (5.0 psf) on member(s).3-37, 10-19
- 9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 35-37, 33-35, 31-33, 30-31, 26-30, 24-26, 22-24, 20-22, 19-20
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 136 lb uplift at joint 1, 476 lb uplift at joint 16 and 329 lb uplift at joint 13.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Attic room checked for L/360 deflection.
- 13) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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06/30/2022



Job Truss Truss Type Qty Plv SIMQUE - LOT 62 PRESERVE T28119650 3213335 T05D ATTIC TRUSS Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:07 2022 Page 1 ID:Ad27wGdB3Dlinto\_ShAPXtzlZ29-5?A73Y?C18qYEAZNUwelLfqLctecEWWn8ZACy9z22wk 16-1-13 32-0-11 15-0-8 1-3-4 Scale = 1:119.0 8x10 = 4x12 \simes 4x4 = 2x4 || 7 8 10 4x8 🖎 -46 47 **\45** 11 8x10 / 2x4 | 6x8 || 8x10 > 5x12 = 12 4.00 12 4x6 / 2-0-0 8x10 > 13 18-0-<sup>14</sup> 15. 24 27 65 23 27 0-8-0  $39 \, \frac{55}{7} \, \frac{56}{87} = 35$ 18 40 42 33 30 26 24 22 19 17 16 6x8 = 4x8 =5x8 = 4x12 || 6x8 = 4x8 = 2x4 || 8x10 = 5x8 = 2x4 || 3x8 = 8x12 = 7x10 =7x8 = $\sqrt{10x12} =$ 4x12 = SUPPLEMENTARY BEARING PLATES, 58/2 CTAL ANGHORAGE, OR OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.)
ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER OR THE BUILDING DESIGNER. 25-8-4 17-9-3 21-8-4 30-0-11 15-9-3 19-8-4 23-8-4 28-0-11 32-0-11 2-0-0 2-0-0 1-11-1 2-0-0 2-0-0 2-0-0 2-4-7 2-0-0 2-0-0 Plate Offsets (X,Y)--[3:0-5-0,0-4-8], [4:0-5-15,Edge], [6:0-7-12,0-4-0], [9:0-7-12,0-4-0], [12:0-5-0,0-4-8], [14:0-4-0,0-2-10], [20:0-7-8,Edge], [30:0-5-12,0-6-0], [32:0-3-8,0-1-8], [38:0-2-0,Edge], [46:0-3-8,0-3-0] LOADING (psf) SPACING-CSI. DEFL. (loc) **PLATES** GRIP Plate Grip DOL **TCLL** 20.0 1.00 TC 0.57 Vert(LL) -0.30 37-39 >999 240 MT20 244/190 **TCDL** 7.0 Lumber DOL 1.00 BC 0.91 Vert(CT) -0.44 37-39 >708 180 0.0 WB 0.83 0.05 **BCLL** Rep Stress Inci NO Horz(CT) 14 n/a n/a Code FBC2020/TPI2014 BCDL 10.0 -0.16 20-38 1360 Weight: 1570 lb FT = 20%Matrix-MS Attic 360 LUMBER-BRACING-2x6 SP No.2 \*Except\* TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except TOP CHORD 3-6,9-12: 2x8 SP 2400F 2.0E, 13-15: 2x4 SP No.2 2-0-0 oc purlins (6-0-0 max.): 6-9. **BOT CHORD** 2x8 SP 2400F 2.0E \*Except\* BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. 29-38,20-29: 2x4 SP M 31 JOINTS 1 Brace at Jt(s): 25, 23, 21, 36, 34, 31, 46, 47 **WEBS** 2x4 SP No.3 \*Except\* 4-39,11-19: 2x6 SP No.2, 25-26: 2x8 SP 2400F 2.0E 19-21,37-38,27-30,34-37,30-32,22-23: 2x4 SP M 31

REACTIONS. All bearings 0-3-8 except (jt=length) 17=0-4-2 (input: 0-3-8), 26=0-6-2 (input:

0-3-8

(lb) - Max Horz 1=-265(LC 4)

Max Uplift All uplift 100 lb or less at joint(s) except 1=-1269(LC 5), 17=-3017(LC 4),

14=-782(LC 5), 26=-3490(LC 5)

All reactions 250 lb or less at joint(s) except 1=5961(LC 16), 17=10473(LC 17), 14=2482(LC 16), 26=15503(LC 16)

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

TOP CHORD 1-2=-9926/2156, 2-3=-10135/2281, 3-4=-8212/1895, 4-5=-5219/1268, 5-6=-1782/503 6-7=-1685/531, 7-8=-816/522, 8-9=-816/522, 9-10=-130/802, 10-11=-5627/1373,

11-12=-8279/1985. 12-13=-4536/1060. 13-14=-6734/1769

1-42=-1874/8343, 40-42=-1874/8343, 39-40=-3540/15182, 37-39=-3521/15166,

35-37=-3639/15924, 33-35=-3639/15924, 30-33=-3639/15924, 28-30=-2906/717, 26-28=-2906/717, 24-26=-6581/1561, 22-24=-6581/1561, 19-22=-1076/355, 17-19=-351/1196, 16-17=-1586/6355, 14-16=-1598/6375, 36-38=-11775/2753, 34-36=-11775/2753, 32-34=-9556/2212, 31-32=-1509/352, 27-31=-1524/355,

25-27=-3894/17140, 23-25=-3894/17140, 21-23=-1782/7444, 20-21=-1382/5636

3-40=-568/2558, 3-38=-3716/853, 38-39=-679/2138, 4-38=-1260/5391, 19-20=-439/1578, 11-20=-150/642, 12-20=-761/2875, 13-17=-3125/972, 13-16=-188/377, 5-44=-4418/998,

44-46=-4364/988, 46-47=-5192/977, 45-47=-8150/1902, 10-45=-8261/1924,

25-26=-1857/385, 23-24=-2010/419, 21-22=-2716/581, 19-21=-475/2152,

36-37=-1023/190, 37-38=-933/3671, 34-35=-2066/461, 32-33=-848/3543, 30-31=-999/199, 27-28=-2332/500, 12-17=-6484/1795, 6-44=-55/356, 9-45=-145/733, 7-46=-12/290,

6-46=-884/222, 9-47=-572/1713, 7-47=-1583/387, 26-27=-9264/2114, 23-26=-4816/1155, 27-30=-2853/12512. 34-37=-633/2598. 30-32=-9498/2184. 38-40=-6820/1657.

17-20=-721/3031, 2-42=-343/126, 2-40=-218/509, 22-23=-1485/6500

**Review for Code Compliance** Universal Engineering Science

Laudence Pernell PX2707

06/30/2022

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126 MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017

June 28,2022

**BOT CHORD** 

**WEBS** 

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

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

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



Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 62 PRESERVE
					T28119650
3213335	T05D	ATTIC TRUSS	1	3	
				<u> </u>	Job Reference (optional)

Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:07 2022 Page 2 ID:Ad27wGdB3DlInto\_ShAPXtzlZ29-5?A73Y?C18qYEAZNUwelLfqLctecEWWn8ZACy9z22wk

#### **NOTES-** (17)

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.

Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-8-0 oc, 2x4 - 1 row at 0-4-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are 3x6 MT20 unless otherwise indicated.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Ceiling dead load (5.0 psf) on member(s). 4-5, 10-11, 5-44, 44-46, 46-47, 45-47, 10-45; Wall dead load (5.0 psf) on member(s).4-38, 11-20
- 11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 36-38, 34-36, 32-34, 31-32, 27-31, 25-27, 23-25, 21-23, 20-21
- 12) WARNING: Required bearing size at joint(s) 17, 26 greater than input bearing size.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1269 lb uplift at joint 1, 3017 lb uplift at joint 17, 782 lb uplift at joint 14 and 3490 lb uplift at joint 26.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2029 lb down and 574 lb up at 32-11-4 on top chord, and 3072 lb down and 869 lb up at 13-10-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 16) Attic room checked for L/360 deflection.
- 17) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

### LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 1-4=-54, 4-5=-64, 5-6=-54, 6-9=-54, 9-10=-54, 10-11=-64, 13-15=-54, 48-55=-20, 16-55=-265(F=-245), 16-51=-20, 38-56=-40, 21-56=-285(F=-245), 16-51=-20, 38-56=-40, 21-56=-20, 38-56=-40, 21-56=-20, 38-56=-40, 21-56=-20, 38-56=-40, 21-56=-20, 38-56=-40, 21-56=-20, 38-56=-40, 21-56=-20, 38-56=-40, 21-56=-20, 38-56=-40, 21-56=-20, 38-56=-40, 21-56=-20, 38-56=-40, 21-56=-20, 38-56=-40,

20-21=-285(F=-245), 5-10=-10

Drag: 4-38=-10, 11-20=-10

Concentrated Loads (lb)

Vert: 39=-1702(F) 54=-1124

Trapezoidal Loads (plf)

Vert: 11=-201(F=-147)-to-13=-319(F=-265)

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19-8-4 23-3-12 32-0-11 15-9-3 17-9-3 21-8-4 25-8-4 27-8-4 30-0-11 35-1-7 38-2-4 2-0-0 2-0-0 1-11-1 2-0-0 1-7-8 2-4-8 2-0-0 2-4-7 2-0-0 3-0-13 3-0-13

3x6 II

[7:0-5-4,0-3-0], [10:0-5-4,0-3-0], [13:0-2-0,0-4-8], [15:0-4-0,0-2-10], [21:Edge,0-2-4], [30:0-3-0,Edge], [33:0-3-8,0-6-0], [36:0-3-8,0-1-8], [40:Edge,0-2-4],

5x8

8x10 =

3x6 =

2x4 ||

3x6 ||

3x8 =

47:0-3-8.0-3-0 LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) **PLATES** GRIP Plate Grip DOL -0.27 41-43 **TCLL** 20.0 1.00 TC 0.92 Vert(LL) >999 240 MT20 244/190

**TCDL** 7.0 Lumber DOL 1.00 BC 1.00 Vert(CT) -0.53 41-43 >528 180 0.0 WB 0.88 0.04 **BCLL** Rep Stress Inci NO Horz(CT) 15 n/a n/a Code FBC2020/TPI2014 BCDL 10.0 -0.18 21-40 1251 Weight: 1460 lb FT = 20%Matrix-MS Attic 360

LUMBER-BRACING-TOP CHORD 2x6 SP No.2 \*Except\*

14-16: 2x4 SP No.2

**BOT CHORD** 2x8 SP 2400F 2.0E \*Except\*

30-40,21-30: 2x4 SP No.2

2x4 SP No.3 \*Except\*

**WEBS** 5-41,12-20: 2x6 SP No.2 TOP CHORD

**JOINTS** 

Structural wood sheathing directly applied or 6-0-0 oc purlins, except

2-0-0 oc purlins (6-0-0 max.): 7-10. **BOT CHORD** 

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

FASTEN TRUSS TO BEARING FOR

MOVEMENT OF THE BEARING.

THE GRAVITY UPLIFT REACTION SHOWN WHILE PERMITTING NO UPWARD

6-0-0 oc bracing: 29-33,27-29,25-27,23-25. 1 Brace at Jt(s): 47, 48, 28, 38, 36, 22, 24, 26

REACTIONS. All bearings 0-3-8

Plate Offsets (X,Y)--

Max Horz 1=-265(LC 4) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) except 1=-837(LC 8), 18=-2480(LC 20),

29=-452(LC 8), 15=-1033(LC 5)

All reactions 250 lb or less at joint(s) except 1=3819(LC 2), 18=1539(LC Max Grav

17), 29=4795(LC 2), 15=3297(LC 2)

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

TOP CHORD 1-2=-6257/1357, 2-4=-6519/1464, 4-5=-5434/1197, 5-6=-3581/802, 6-7=-1096/329

7-8=-1512/646, 8-9=-1211/879, 9-10=-1211/879, 10-11=-651/591, 11-12=-3708/841,

12-13=-4809/1067, 13-14=-9850/2831, 14-15=-8581/2424

**BOT CHORD** 1-44=-1206/5132, 43-44=-1206/5132, 41-43=-1213/5452, 39-41=-1143/5321, 37-39=-343/3698, 35-37=-343/3698, 33-35=-343/3698, 29-33=-2029/717,

> 27-29=-3753/1104, 25-27=-3753/1104, 23-25=-446/920, 20-23=-596/3330, 18-20=-1563/6203, 17-18=-1566/6211, 15-17=-2217/8099, 38-40=-3929/712,

> 36-38=-3929/712, 34-36=-545/1295, 32-34=-1468/6057, 28-32=-1765/8471, 26-28=-1765/8471, 24-26=-1259/4411, 22-24=-1259/4411, 21-22=-1259/4411

2-44=-441/191, 2-43=-299/503, 4-43=-515/1826, 4-41=-2282/743, 40-41=-562/1419, 5-40=-732/2894, 20-21=-1178/3996, 12-21=-537/1999, 13-20=-2981/1135,

13-17=-1045/3244, 14-17=-2752/800, 6-46=-3203/824, 46-47=-3183/823, 47-48=-2820/864, 48-49=-4495/1201, 11-49=-4526/1206, 13-18=-1356/2328, 7-47=-558/726, 8-48=-556/156, 10-48=-441/1340, 28-29=-389/0, 38-39=-261/0,

36-37=-2590/671, 34-35=-568/3023, 32-33=-281/1795, 22-23=-257/0, 24-25=-336/0, 26-27=-1810/344, 29-32=-3024/370, 26-29=-817/0, 21-23=-4268/1240, 39-40=-418/3070,

36-39=-1431/5191, 33-34=-6661/1122, 25-26=-700/3998

NOTES-(17)

WFBS

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc. Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to

Review for Code Compliance Universal Engineering Science

Laudence Pernell

PX2707

06/30/2022

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

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

ANS/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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



Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 62 PRESERVE	
3213335	T06	Attic Truss	1			T28119651
0210000	100	Auto 17433	'	3	Job Reference (optional)	

Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:13 2022 Page 2 ID:Ad27wGdB3DlInto\_ShAPXtzlZ29-w9XPKb4zd\_aiy51XqBlibw4HZHgVeDDgWUdXApz22we

#### NOTES-

- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are 4x6 MT20 unless otherwise indicated.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and
- 10) Ceiling dead load (5.0 psf) on member(s). 5-6, 11-12, 6-46, 46-47, 47-48, 48-49, 11-49; Wall dead load (5.0 psf) on member(s).5-40, 12-21
- 11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 38-40, 36-38, 34-36, 32-34, 28-32, 26-28, 24-26, 22-24, 21-22
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 837 lb uplift at joint 1, 2480 lb uplift at joint 18, 452 lb uplift at joint 29 and 1033 lb uplift at joint 15.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
- 15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 3690 lb down and 1183 lb up at 13-8-3, 489 lb down at 15-8-10, and 489 lb down at 17-8-10, and 489 lb down at 19-8-10 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 16) Attic room checked for L/360 deflection.
- 17) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

#### LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 1.5=-54, 5-6=-64, 6-7=-54, 7-10=-54, 10-11=-54, 11-12=-64, 12-14=-54, 14-16=-54, 50-53=-20, 21-40=-40, 6-11=-10

Drag: 5-40=-10, 12-21=-10

Concentrated Loads (lb)

Vert: 41=-3690(B) 39=-119(B) 37=-119(B) 35=-119(B)

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PX2707

Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119652 3213335 T07 ATTIC TRUSS 5 Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:15 2022 Page 1 ID:Ad27wGdB3DlInto\_ShAPXtzIZ29-sYe9lH5D9brQBOBwycoAgL9dB5QR67jz\_o6dEhz22wc 16-1-13 7-11-0 31-0-9 34-2-7 36-8-15 1-4-7 3-1-14 2-6-8 Scale = 1:85.9 5x8 = 4x4 = 5x8 = 6 46<sub>×</sub> 748 8.00 12 47 3x4 = 2x4 || 7x8 💸 3 2x4 || 38 36 49 37 39 40 50 10 2x4 | 2x4 || 3x6 =7x8 / 6x8 || 0-8-0 K 20 35 33 31 28 26 18 16 13 12 = 3x6 = 3x6 | | 4x6 = 12x14 =3x6 II 8x12 = 5x12 = 4x6 = 6x8 4x8 =2x4 || 2x4 || 3x8 =3x6 || 4x6 = 3x6 | I3x6 II 4x12 || 4x4 = 23-4-0 22-10-15 22-10-4 | 25-0-7 | 27-1-15 | 30-1-3 | 32-2-11 | 34-2-7 | 36-8-15 | 2-0-13 | 1-8-7 | 2-1-8 | 2-11-4 | 2-1-8 | 1-11-12 | 2-6-8 13-9-3 5-10-3 15-10-11 18-0-3 2-1-8 2-1-8 0-0-11 [2:0-4-0,0-4-8], [5:0-5-4,0-2-12], [8:0-5-8,0-2-12], [11:Edge,0-2-12], [13:0-7-0,0-6-4], [15:0-3-8,0-1-8], [27:0-3-8,0-1-8], [29:0-3-8,0-2-8], [31:0-6-0,0-6-0], Plate Offsets (X,Y)--[34:0-3-12,0-2-8], [38:0-3-8,0-3-0] LOADING (psf) SPACING-CSI. DEFL. (loc) **PLATES** GRIP Plate Grip DOL Vert(LL) -0.31 33-35 244/190 **TCLL** 20.0 1.00 TC 0.92 >896 240 MT20 **TCDL** 7.0 Lumber DOL 1.00 BC 0.72 Vert(CT) -0.63 33-35 >437 180 0.0 Rep Stress Incr WB 0.88 Horz(CT) 0.01 **BCLL** YES 26 n/a n/a Code FBC2020/TPI2014 BCDL 10.0 Matrix-MS 0.18 14-34 1390 Weight: 399 lb FT = 20%Attic 360 LUMBER-BRACING-TOP CHORD TOP CHORD 2x6 SP No.2 Structural wood sheathing directly applied or 5-3-0 oc purlins,

**BOT CHORD** 

WEBS

**JOINTS** 

2x8 SP 2400F 2.0E \*Except\* **BOT CHORD** 

19-34: 2x4 SP M 31, 14-19: 2x4 SP No.2

**WEBS** 2x4 SP No.3 \*Except\*

3-33,10-13,11-12,25-26: 2x6 SP No.2 31-34,13-15,16-17,21-24,29-31: 2x4 SP No.2

REACTIONS. (size) 1=Mechanical, 12=Mechanical, 26=0-3-8

Max Horz 1=290(LC 12)

Max Uplift 1=-118(LC 12), 12=-76(LC 13)

Max Grav 1=1112(LC 1), 12=1242(LC 27), 26=2578(LC 20)

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

TOP CHORD 1-2=-1708/150, 2-3=-973/139, 3-4=-836/182, 4-5=-1100/303, 5-6=-1879/591,

6-7=-1854/632, 7-8=-1854/632, 8-9=-1040/376, 9-10=-935/189, 10-11=-576/14,

1-35=-301/1355, 33-35=-301/1350, 31-33=-145/1162, 30-31=-940/299, 28-30=-940/29 **BOT CHORD** 

26-28=-940/299, 24-26=-2853/626, 20-24=-1661/666, 18-20=-1661/666, 16-18=-1661/ 13-16=-1142/493, 32-34=-1123/81, 29-32=-1098/85, 27-29=-332/1496, 25-27=-525/4239,

23-25=-525/4239, 21-23=-659/3433, 17-21=-699/2214, 15-17=-526/1696, 14-15=-78/446

2-35=-97/635, 2-33=-960/348, 33-34=-557/100, 3-34=-312/209, 13-14=-867/193, 10-14=-846/268, 4-37=-267/432, 37-38=-264/436, 38-39=-576/1294, 39-40=-343/332,

9-40=-350/326, 11-13=-74/1816, 5-38=-409/992, 8-39=-352/1102, 25-26=-263/0,

31-34=0/656, 13-15=-512/1429, 26-27=-3162/223, 23-26=-1044/0, 16-17=-200/598,

31-32=-315/0, 15-16=-829/214, 17-18=-462/46, 27-28=-139/1174, 23-24=0/340,

20-21=-21/587, 21-24=-1847/0, 29-30=-1645/193, 29-31=-487/3032

## NOTES-

WEBS

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 16-1-13, Exterior(2R) 16-1-13 to 20-4-11, Interior(1) 20-4-11 to 29-8-2, Exterior(2R) 29-8-2 to 33-11-1, Interior(1) 33-11-1 to 36-6-3 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

4) Provide adequate drainage to prevent water ponding.

5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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Pernell

Examiner-License No

except end verticals, and 2-0-0 oc purlins (5-2-1 max.): 5-8.

2-33, 3-34 1 Brace at Jt(s): 38, 39, 25, 15, 27, 23, 17, 32, 21, 29

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

1 Row at midpt

PX2707

06/30/2022

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

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

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ANS/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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



16023 Swingley Ridge Rd

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 62 PRESERVE
					T28119652
3213335	T07	ATTIC TRUSS	5	1	
					Job Reference (optional)

Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:16 2022 Page 2 ID:Ad27wGdB3DlInto\_ShAPXtzIZ29-LkCXyd6rwvzHpYl6WJJPDYioxVmgray6DSrBn8z22wb

### NOTES-

- 7) Ceiling dead load (5.0 psf) on member(s). 3-4, 9-10, 4-37, 37-38, 38-39, 39-40, 9-40; Wall dead load (5.0 psf) on member(s).3-34, 10-14
- 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 32-34, 29-32, 27-29, 25-27, 23-25, 21-23, 17-21, 15-17, 14-15
- 9) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 1 and 76 lb uplift at joint 12.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Attic room checked for L/360 deflection.
- 13) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



Lawletter Personal Evaminer-License No.

PX2707

Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119653 3213335 T07G **GABLE** Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:19 2022 Page 1  $ID: Ad27wGdB3DIInto\_ShAPXtzIZ29-IJugbf8kDqLrg0UhBRs6qBKMQixC2y5YvQ4rNTz22wYArVTz22$ 16-8-2 7-11-0 15-3-10 Scale = 1:86.4 5x8 = 4x4 = 3x4 = 8.00 12 9 3x4 =10 54 42 43 41 45 7x8 <> 3x6 = 11 4x8 🖊 12 4x6 // 6x8 2 3 8-1-14 0-8-27 26 4x8 // 39 38 37 36 17 20 3x6 || 3x6 || 3x6 || 3x6 ||  $3x6 \parallel 4x6 = 12x14 =$ 5x8 || 3x6 II 4x6 =6x8 = 3x6 =8x10 = 3x4 =3x4 3x4 = 3x4 =3x6 3x6 || 3x6 || 4x8 = 3x6 II 3x6 3x4 =3x4 = 22-10-15 15-10-11 18-0-3 2-1-8 2-1-8 22-10-4 25-0-7 27-1-15 30-1-3 2-0-13 2-1-8 2-1-8 2-11-4 2-9-4 [6:0-5-4,0-2-12], [9:0-5-4,0-2-12], [32:0-5-0,0-6-0], [35:0-4-0,0-2-4] Plate Offsets (X,Y)--LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.00 TC 0.71 Vert(LL) n/a n/a 999 MT20 244/190 TCDL 7.0 Lumber DOL 1.00 BC 0.09 Vert(CT) n/a n/a 999 **BCLL** 0.0 Rep Stress Incr YES WB 0.79 Horz(CT) 0.01 13 n/a n/a BCDL 10.0 Code FBC2020/TPI2014 Matrix-S Weight: 417 lb FT = 20% LUMBER-**BRACING-**TOP CHORD 2x6 SP No.2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-5-0 max.): 6-9.

**BOT CHORD** 

**JOINTS** 

**BOT CHORD** 2x8 SP 2400F 2.0E \*Except\*

27-35,15-27: 2x4 SP No.2 **WEBS** 2x4 SP No.3 \*Except\*

4-34,11-14,12-13: 2x6 SP No.2

**OTHERS** 2x4 SP No.3

REACTIONS. All bearings 36-8-15.

Max Horz 1=286(LC 12) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 40, 39 except 38=-158(LC 12),

34=-156(LC 12), 14=-895(LC 1), 13=-332(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 26, 24, 32, 40, 39, 37, 36, 28,

22, 17, 19, 31 except 1=484(LC 1), 38=587(LC 1), 34=472(LC 24), 14=401(LC 9),

13=1836(LC 1)

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

TOP CHORD 1-2=-673/188, 2-4=-781/252, 4-5=-820/232, 5-6=-946/276, 6-7=-1672/515,

7-8=-1722/511, 8-9=-1722/511, 9-10=-1074/286, 10-11=-880/216, 11-12=-580/120,

**BOT CHORD** 1-40=-139/471, 39-40=-139/471, 38-39=-139/471, 37-38=-139/471, 36-37=-139/471, 34-36=-139/471, 32-34=-104/566, 31-32=-76/427, 28-31=-76/427, 26-28=-76/427.

24-26=-78/433, 22-24=-67/391, 19-22=-67/391, 17-19=-67/391, 14-17=-77/432

2-38=-533/171, 34-35=-498/80, 4-35=-508/161, 14-15=-697/116, 11-15=-679/176,

5-42=-164/310, 42-43=-161/316, 43-44=-423/1160, 44-45=-114/402, 10-45=-117/397,

12-14=-297/1656, 6-43=-324/942, 9-44=-310/828

#### NOTES-

WEBS

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-3 to 3-5-3, Interior(1) 3-5-3 to 16-8-2, Exterior(2R) 16-8-2 to 19-8-2, Interior(1) 19-8-2 to 29-1-13, Exterior(2R) 29-1-13 to 32-1-13, Interior(1) 32-1-13 to 36-6-3 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.

8) Gable studs spaced at 2-0-0 oc.

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



16023 Swingley Ridge Rd

PX2707 06/30/2022 This item has been

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

1 Brace at Jt(s): 43, 44, 25, 23, 33, 16, 29, 21, 18, 30

**Review for Code Compliance** 

Lydence Parnell

Universal Engineering Science

electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 62 PRESERVE
					T28119653
3213335	T07G	GABLE	1	1	
					Job Reference (optional)

Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:19 2022 Page 2 ID:Ad27wGdB3DlInto\_ShAPXtzIZ29-IJugbf8kDqLrg0UhBRs6qBKMQixC2y5YvQ4rNTz22wY

### **NOTES-** (15)

- 10) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 11) Ceiling dead load (5.0 psf) on member(s). 4-5, 10-11, 5-42, 42-43, 43-44, 44-45, 10-45; Wall dead load (5.0 psf) on member(s).4-35, 11-15
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 40, 39 except (jt=lb) 38=158, 34=156, 14=895, 13=332.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) Attic room checked for L/360 deflection.
- 15) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



Lawletter Parmel

PX2707

Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119654 3213335 T08 Attic Truss Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:22 2022 Page 1 ID:Ad27wGdB3Dllnto\_ShAPXtzlZ29-9uaoDgBcVljQXTDGsaQpSpyqPwp3FHU?bOIV\_oz22wV 16-1-13 31-0-9 34-2-7 36-8-15 1-4-7 3-1-14 2-6-8 1-0-3 1-4-7 Scale = 1:83.0 5x8 = 4x4 = 2x4 || 5x8 = 6 46 7<sub>48</sub> 47 8 8.00 12 3x4 = 2x4 || 9 7x8 > 3 49 2x4 || <sup>40</sup> 5x12 = 39 36 10 50 2x4 || 3x6 =7x8 / 6x8 II 8-1-14 7-8-11 6-8-11 0-8-0 22 35 33 31 30 28 26 20 18 16 13 12 3x6 II 4x6 = 12x14 =8x12 = 3x6 | I4x12 | 5x12 =  $4x6 = 3x6 \parallel 3x6 =$ 4x8 = 3x6 || 6x8 = 3x8 3x6 || 22-10-15 22-10-4 25-0-7 2-0-13 2-1-8 27-1-15 30-1-3 2-11-4 15-10-11 18-0-3 2-1-8 2-1-8 32-2-11 34-2-7 36-8-15 2-1-8 1-11-12 2-6-8 2-9-4 Plate Offsets (X,Y)--[2:0-4-0,0-4-8], [5:0-5-4,0-2-12], [8:0-5-8,0-2-12], [11:Edge,0-2-12], [13:0-7-0,0-6-4], [15:0-3-8,0-1-8], [27:0-3-8,0-1-8], [29:0-3-8,0-2-8], [31:0-6-0,0-6-0], [34:0-3-12,0-2-8], [39:0-3-8,0-3-0] LOADING (psf) SPACING-CSI. DEFL. (loc) **PLATES** GRIP Plate Grip DOL 244/190 **TCLL** 20.0 1.00 TC 0.92 Vert(LL) -0.31 33-35 >898 240 MT20 **TCDL** 7.0 Lumber DOL 1.00 BC 0.72 Vert(CT) -0.63 33-35 >438 180 0.0 WB 0.87 Horz(CT) 0.01 **BCLL** Rep Stress Inci YES 26 n/a n/a Code FBC2020/TPI2014 BCDL 10.0 Matrix-MS 0.18 14-34 1399 Weight: 399 lb FT = 20%Attic 360 LUMBER-BRACING-TOP CHORD

**BOT CHORD** 

WEBS

**JOINTS** 

TOP CHORD 2x6 SP No.2

REACTIONS.

2x8 SP 2400F 2.0E \*Except\* **BOT CHORD** 

19-34: 2x4 SP M 31, 14-19: 2x4 SP No.2

**WEBS** 2x4 SP No.3 \*Except\*

3-33,10-13,11-12,25-26: 2x6 SP No.2

31-34,21-24,13-15,16-17,29-31: 2x4 SP No.2

(size) 1=Mechanical, 12=Mechanical, 26=0-3-8

Max Horz 1=290(LC 12)

Max Uplift 1=-117(LC 12), 12=-76(LC 13)

Max Grav 1=1112(LC 1), 12=1241(LC 27), 26=2579(LC 20)

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

TOP CHORD 1-2=-1707/150, 2-3=-973/139, 3-4=-836/182, 4-5=-1100/303, 5-6=-1878/590, 6-7=-1854/632, 7-8=-1854/632, 8-9=-1040/376, 9-10=-935/189, 10-11=-576/14,

1-35=-301/1354, 33-35=-300/1350, 31-33=-145/1161, 30-31=-950/302, 28-30=-950/30 **BOT CHORD** 

26-28=-950/302, 24-26=-2861/629, 20-24=-1677/670, 18-20=-1677/670, 16-18=-1677/ 13-16=-1147/495, 32-34=-1116/79, 29-32=-1092/82, 27-29=-335/1504, 25-27=-529/4248,

23-25=-529/4248, 21-23=-662/3440, 17-21=-703/2230, 15-17=-528/1701, 14-15=-78/446

2-35=-96/633, 2-33=-958/347, 33-34=-555/100, 3-34=-313/209, 13-14=-866/193, 10-14=-845/268, 4-37=-267/430, 37-39=-264/435, 39-40=-576/1293, 38-40=-343/332,

9-38=-350/326, 11-13=-74/1816, 5-39=-409/992, 8-40=-352/1102, 25-26=-262/0,

23-24=0/338, 26-27=-3163/223, 23-26=-1045/0, 27-28=-139/1174, 31-32=-315/0, 31-34=0/653, 20-21=-20/585, 21-24=-1840/0, 15-16=-832/214, 13-15=-514/1434,

17-18=-466/48, 16-17=-202/610, 29-30=-1646/193, 29-31=-488/3033

NOTES-

WEBS

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 16-1-13, Exterior(2R) 16-1-13 to 20-4-11, Interior(1) 20-4-11 to 29-8-2, Exterior(2R) 29-8-2 to 33-11-1, Interior(1) 33-11-1 to 36-6-3 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

4) Provide adequate drainage to prevent water ponding.

5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

Review for Code Compliance Universal Engineering Science

Pernell

Examiner-License No

Structural wood sheathing directly applied or 5-3-0 oc purlins,

2-33, 3-34 1 Brace at Jt(s): 39, 40, 25, 23, 27, 32, 21, 15, 17, 29

except end verticals, and 2-0-0 oc purlins (5-2-1 max.): 5-8.

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

1 Row at midpt

PX2707

06/30/2022

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

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

ANS/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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



16023 Swingley Ridge Rd

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 62 PRESERVE
					T28119654
3213335	T08	Attic Truss	1	1	
					Job Reference (optional)

Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:22 2022 Page 2 ID:Ad27wGdB3Dllnto\_ShAPXtzlZ29-9uaoDgBcVljQXTDGsaQpSpyqPwp3FHU?bOIV\_oz22wV

### NOTES-

- 7) Ceiling dead load (5.0 psf) on member(s). 3-4, 9-10, 4-37, 37-39, 39-40, 38-40, 9-38; Wall dead load (5.0 psf) on member(s).3-34, 10-14
- 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 32-34, 29-32, 27-29, 25-27, 23-25, 21-23, 17-21, 15-17, 14-15
- 9) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12 except (jt=lb) 1=117.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Attic room checked for L/360 deflection.
- 13) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



LaureMur Permel

PX2707

SIMQUE - LOT 62 PRESERVE Job Truss Truss Type Qty Plv T28119655 3213335 T09 ATTIC TRUSS Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:27 2022 Page 1 ID:Ad27wGdB3DlInto\_ShAPXtzlZ29-WsNhGOElKHLjdE5Df7?\_9tfnVxT5wZHklg0Gg?z22wQ 16-1-13 31-0-10 9-6-0 14-9-6 Scale = 1:85.3 5x8 = 4x4 = 5x8 = 10 11 3x4 = 8.00 12 12 13 6 40 38 42 41 5x12 = 5x8 🛇 4x6 // 3x6 = 6x8 || 4x8 🖊 1-5-3 4x6 // 6-8-11 18-0-0 1-8-0 0-8-0 37 36 35 32 29 26 16 15 3x6 =3x6 || 7x10 =3x10 || 8x10 =3x6 || 4x12 || 3x6 || 4x6 = 8x10 =3x6 || 4x8 = 4x12 = 4x6 =3x4 = 3x4 =6x8 = 22-10-15 22-10-4 25-1-7 2-1-13 2-2-8 27-2-15 29-11-3 2-1-8 2-8-4 15-10-11 18-0-3 2-1-8 2-1-8 2-8-4 Plate Offsets (X,Y)--[7:0-5-4,0-2-12], [11:0-2-4,0-2-12], [16:0-5-0,0-5-12], [17:Edge,0-2-4], [30:0-3-8,0-2-0], [32:0-5-0,0-6-0], [34:0-2-0,Edge], [35:0-6-4,0-1-8], [40:0-3-8,0-3-0] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES GRIP TCLL** 20.0 Plate Grip DOL 1.00 TC 0.51 Vert(LL) -0.21 >999 240 MT20 244/190 TCDL Lumber DOL 7.0 1.00 BC 0.92 Vert(CT) -0.40 35 >695 180

Horz(CT)

**BRACING-**

TOP CHORD

**BOT CHORD** 

**JOINTS** 

Attic

0.03

0.12 17-34

26

n/a

Examiner-License No

1812

n/a

360

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

1 Brace at Jt(s): 40, 41, 27, 23, 20, 28, 33, 30, 18

LUMBER-

**BCLL** 

BCDL

TOP CHORD 2x6 SP No.2

0.0

10.0

**BOT CHORD** 2x8 SP 2400F 2.0E \*Except\* 25-34,17-25: 2x4 SP No.2 **WEBS** 2x4 SP No.3 \*Except\*

5-35,13-16,14-15,26-27: 2x6 SP No.2

Rep Stress Incr

17-19,32-34,26-28,23-26,20-24,30-32: 2x4 SP No.2

Code FBC2020/TPI2014

REACTIONS. (size) 1=Mechanical, 15=Mechanical, 26=0-3-8

Max Horz 1=290(LC 28)

Max Uplift 1=-721(LC 8), 15=-1094(LC 9), 26=-658(LC 8) Max Grav 1=3076(LC 1), 15=3893(LC 21), 26=5010(LC 22)

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

1-2=-4990/1168, 2-4=-5050/1234, 4-5=-2686/777, 5-6=-1942/569, 6-7=-1170/324, TOP CHORD

7-8=-1734/595, 8-9=-1434/707, 9-10=-1434/707, 10-11=-508/501, 11-12=-636/445,

12-13=-2025/603, 13-14=-2334/659, 14-15=-4086/1111

**BOT CHORD** 1-37=-1182/4074, 36-37=-1182/4074, 35-36=-3354/12528, 32-35=-3350/12627,

31-32=-629/3517, 29-31=-629/3517, 26-29=-629/3517, 24-26=-3524/919, 21-24=-1129/453, 19-21=-1129/453, 16-19=-448/1589, 33-34=-8751/1958, 30-33=-8726/1961, 28-30=-1670/148, 27-28=-1361/6135, 23-27=-1361/6135,

NO

WB

Matrix-MS

0.78

20-23=-1399/5370, 18-20=-933/3044, 17-18=-933/3044 2-37=-258/151, 2-36=-286/352, 4-36=-888/3305, 4-34=-3303/992, 34-35=-928/2226, Lulehur Pamell

5-34=-506/1225, 16-17=-782/1838, 13-17=-500/662, 6-39=-1108/573, 39-40=-1098/575, 40-41=-1405/1054, 41-42=-1817/605, 12-42=-1818/605, 14-16=-847/3386, 23-24=-39/292,

20-21=-288/1089, 17-19=-2970/947, 28-29=-802/3711, 32-33=-312/0, 32-34=-3058/1055, 7-40=-485/726, 8-41=-341/186, 10-41=-398/1263, 26-28=-8915/1724, 23-26=-912/0, 20-24=-2789/537, 30-31=-4132/973, 30-32=-2118/8246, 34-36=-8825/2300, 18-19=-295/0

NOTES-(17)

WEBS

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.

Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

3) Unbalanced roof live loads have been considered for this design.

4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60

5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

**Review for Code Compliance** Universal Engineering Science

Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-11.

PX2707

Weight: 1244 lb

06/30/2022

FT = 20%

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

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ANS/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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16023 Swingley Ridge Rd

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 62 PRESERVE	
0040005	T00	ATTIO TRUO				T28119655
3213335	T09	ATTIC TRUSS	1	3	Joh Reference (ontional)	

Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:27 2022 Page 2 ID:Ad27wGdB3DlInto\_ShAPXtzIZ29-WsNhGOEIKHLjdE5Df7?\_9tfnVxT5wZHklg0Gg?z22wQ

### NOTES-

- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Ceiling dead load (5.0 psf) on member(s). 5-6, 12-13, 6-39, 39-40, 40-41, 41-42, 12-42; Wall dead load (5.0 psf) on member(s). 5-34, 13-17
- 11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 33-34, 30-33, 28-30, 27-28, 23-27, 20-23, 18-20, 17-18
- 12) Refer to girder(s) for truss to truss connections.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=721, 15=1094, 26=658.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 3725 lb down and 1195 lb up at 13-10-15, 489 lb down at 15-8-10, and 489 lb down at 17-8-10, and 3287 lb down and 1193 lb up at 32-1-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of
- 16) Attic room checked for L/360 deflection.
- 17) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

### LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 1-5=-54, 5-6=-64, 6-7=-54, 7-11=-54, 11-12=-54, 12-13=-64, 13-14=-54, 15-43=-20, 17-34=-40, 6-12=-10

Drag: 5-34=-10, 13-17=-10

Concentrated Loads (lb)

Vert: 35=-3725(F) 16=-3287(F) 32=-119(F) 31=-119(F)

Review for Code Compliance Universal Engineering Science

Layletur Pernell

PX2707

06/30/2022



Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119656 3213335 T10 Monopitch Truss Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:28 2022 Page 1 ID:Ad27wGdB3DlInto\_ShAPXtzlZ29-\_2x3TkFN5bTaFOgQDqXDi4CyLKxif9ctzKlpCRz22wP 13-7-14 6-9-15 6-9-15 Scale = 1:57.3 2x4 || 8.00 12 5 3x6 🖊 3x6 🖊 X 3x4 // 7 6 3x4 =2x4 || 3x6 || 6-9-15 6-9-15 6-9-15 Plate Offsets (X,Y)--[1:0-3-13,Edge] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defI L/d **PLATES GRIP TCLL** 20.0 Plate Grip DOL 1.25 TC 0.50 Vert(LL) 0.06 7-10 >999 240 MT20 244/190 TCDL вс Vert(CT) 7.0 Lumber DOL 1.25 0.45 -0.10 6-7 >999 180 WB 0.19 **BCLL** 0.0 Rep Stress Incr YES Horz(CT) -0.02 n/a n/a BCDL 10.0 Code FBC2020/TPI2014 Matrix-MS Weight: 80 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

WEBS

LUMBER-

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

SLIDER Left 2x4 SP No.3 1-6-0

REACTIONS. (size) 1=0-3-8, 6=Mechanical

Max Horz 1=319(LC 12)

Max Uplift 1=-27(LC 12), 6=-256(LC 12) Max Grav 1=500(LC 1), 6=528(LC 19)

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

TOP CHORD 1-3=-567/0

BOT CHORD 1-7=-225/445, 6-7=-225/445 **WEBS** 3-7=0/307, 3-6=-543/275

### NOTES-

Exp B; Review for Code Compliance 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; 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 Universal Engineering Science 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.

erve) 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live load nonconcurrent with any oth 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 byx2+0+0 widense No. will fit between the bottom chord and any other members.

5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 6=256.

7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

PX2707

Structural wood sheathing directly applied or 6-0-0 oc purlins,

5-6, 3-6

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

except end verticals.

1 Row at midpt

06/30/2022

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

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

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



SIMQUE - LOT 62 PRESERVE Job Truss Truss Type Qty Ply T28119657 3213335 T11 MONOPITCH TRUSS 4 Job Reference (optional)

Builders FirstSource (Lake City,FL),

Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:28 2022 Page 1 ID:Ad27wGdB3DlInto\_ShAPXtzlZ29-\_2x3TkFN5bTaFOgQDqXDi4C?JK\_CfAntzKlpCRz22wP

Structural wood sheathing directly applied or 4-6-14 oc purlins,

2-3

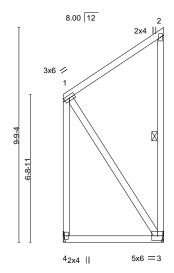
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

1 Row at midpt

4-6-14 4-6-14

Scale = 1:52.4



4-6-14 4-6-14

LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.31	Vert(LL)	-0.02	3-4	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.22	Vert(CT)	-0.04	3-4	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.18	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2	2014	Matri	x-MP						Weight: 49 lb	FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

WFBS

LUMBER-

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

2x4 SP No.3 WFBS

REACTIONS. (size) 4=Mechanical, 3=Mechanical

Max Horz 4=101(LC 12) Max Uplift 3=-232(LC 12)

Max Grav 4=196(LC 21), 3=208(LC 19)

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

**WEBS** 1-3=-159/291

### NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; 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 4-5-2 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 le
- Review for Code Compliance 6-0 tall Waiwersal Engineering Science 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectal will fit between the bottom chord and any other members.

5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb upin at bindes have by the standard of truss to bearing plate capable of withstanding 100 lb upin at bindes have by the standard of truss to bearing plate capable of withstanding 100 lb upin at bindes have by the standard of truss to bearing plate capable of withstanding 100 lb upin at bindes have by the standard of truss to bearing plate capable of withstanding 100 lb upin at bindes have by the standard of truss to bearing plate capable of withstanding 100 lb upin at bindes have by the standard of truss to bearing plate capable of withstanding 100 lb upin at bindes have by the standard of truss to bearing plate capable of withstanding 100 lb upin at bindes have been standard of truss to bearing plate capable of truss to be at bindes have been standard of truss to be at bindes have been st 3=232.

7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

PX2707

06/30/2022

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126 MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

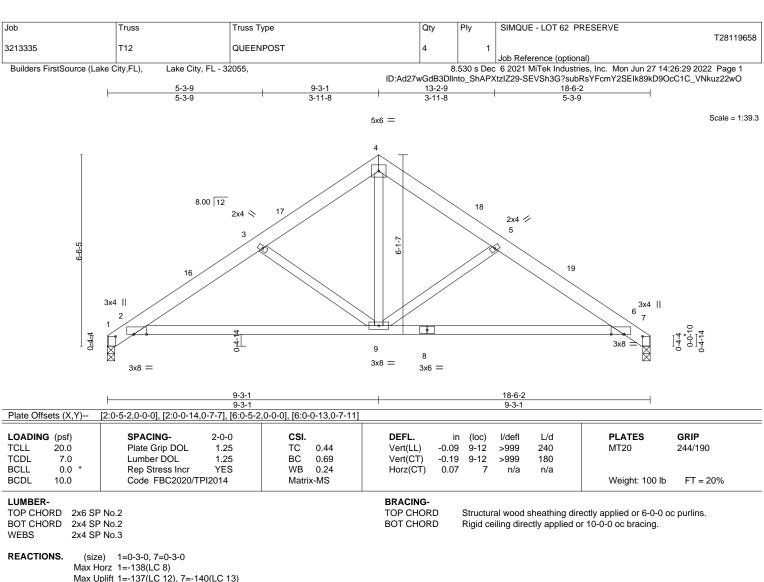
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

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



16023 Swingley Ridge Rd



Max Uplift 1=-137(LC 12), 7=-140(LC 13) Max Grav 1=689(LC 1), 7=679(LC 1)

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

TOP CHORD 1-2=-408/139, 2-3=-1019/242, 3-4=-772/208, 4-5=-772/208, 5-6=-1018/243,

6-7=-373/85

**BOT CHORD** 2-9=-223/879 6-9=-148/874

**WEBS** 3-9=-393/203, 4-9=-134/618, 5-9=-381/196

### NOTES-

1) Unbalanced roof live loads have been considered for this design.

Review for Code Compliance Exp B; Encl. , Exteriod (มีเ) งอรรล Engineering Science 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-8 to 3-1-8, Interior(1) 3-1-8 12-3-1, Interior(1) 12-3-1 to 18-4-10 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 Deading Medican in the control of 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) 1, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

PX2707

06/30/2022

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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



Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119659 3213335 T12D 3 Roof Special Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:31 2022 Page 1 ID:Ad27wGdB3DlInto\_ShAPXtzIZ29-OdcC6lIGOWs96sP?uz4wKjqUcYvesSdJfl\_Tpmz22wM 9-3-1 3-11-8 19-2-10 13-2-9 Scale = 1:42.4 5x6 = 1 8.00 12 16 2x4 🛇 15 3x4 × 5 3 6-1-7 4x4 = 5x6 = 3x4 || 2-0-0 14-14 0-4-4 11 9 10 2x4 || 3x10 = 3x8 =3x8 =3x6 =0-10-6 0-10-6 9-3-1 15-5-4 18-3-1 8-4-11 2-9-14 0-11-9 6-2-3 Plate Offsets (X,Y)--[2:0-5-2,Edge], [2:0-0-11,0-7-8] LOADING (psf) SPACING-CSI. DEFL. in (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.25 TC 0.44 Vert(LL) -0.10 11-14 >999 240 MT20 244/190 TCDL Vert(CT) 7.0 Lumber DOL 1.25 BC 0.62 -0.22 11-14 >999 180

Horz(CT)

**BRACING-**

TOP CHORD

**BOT CHORD** 

0.05

n/a

n/a

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

Weight: 114 lb

FT = 20%

LUMBER-

**BCLL** 

BCDL

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

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

0.0

10.0

REACTIONS.

(size) 1=0-3-8, 8=Mechanical Max Horz 1=135(LC 12)

Max Uplift 1=-138(LC 12), 8=-154(LC 13) Max Grav 1=713(LC 1), 8=701(LC 1)

Rep Stress Incr

Code FBC2020/TPI2014

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

TOP CHORD  $1\hbox{-}2\hbox{--}398/78, 2\hbox{-}3\hbox{--}1060/239, 3\hbox{-}4\hbox{--}814/206, 4\hbox{-}5\hbox{--}797/204, 5\hbox{-}6\hbox{--}1472/313,}$ 

YES

6-7=-1171/232

BOT CHORD 2-11=-272/911, 9-11=-202/955

WEBS 3-11=-390/205, 4-11=-128/627, 5-11=-423/189, 7-8=-669/159, 6-9=-886/226,

7-9=-258/1304, 5-9=-97/490

### (10)

1) Unbalanced roof live loads have been considered for this design.

Universal Engineering Science 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; 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 9-3-1, Exterior(2R) 9-3-1 to 12-3-1, Interior(1) 12-3-1 to 19-0-14 zone; C-C for members and forces & MWFRS for reactions shown - Lumber 2001 + 1.600 tages.

grip DOL=1.60 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific

WB

Matrix-MS

0.50

to the use of this truss component. 4) Provide adequate drainage to prevent water ponding.

5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Bearing at joint(s) 1 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 100 lb uplift at joint(s) except (jt=lb) 1=138, 8=154,
- 10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

PX2707

Review for Code Compliance

Structural wood sheathing directly applied or 5-1-11 oc purlins.

06/30/2022

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June 28,2022

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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

16023 Swingley Ridge Rd

Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119660 3213335 T14 HIP TRUSS Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:32 2022 Page 1 ID:Ad27wGdB3Dllnto\_ShAPXtzlZ29-tpAaJ5lu9p\_?j0\_BSgb9swMbkylTbzETuyj1LCz22wL -1-8-0 7-8-0 0-8-0 12-4-8 14-8-0 1-8-0 2-3-8 Scale = 1:35.9 4x6 = 4x6 = 3 14 4 8.00 12 3x4 || 10 9 3x4 II 2x4 || 13 2x4 || 12 7 3x4 = 3x4 =3x6 || 3x6 Ш 2-3-8 7-0-0 7-8-0 12-4-8 14-8-0 2-3-8 4-8-8 4-8-8 Plate Offsets (X,Y)--[2:0-4-0,0-0-13], [3:0-3-12,0-2-0], [4:0-3-12,0-2-0], [5:0-4-0,0-0-13] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defI L/d **PLATES GRIP TCLL** 20.0 Plate Grip DOL 1.25 TC 0.67 Vert(LL) 0.09 10-11 >999 240 MT20 244/190 TCDL 7.0 Lumber DOL 1.25 BC 0.39 Vert(CT) -0.15 8-9 >999 180 **BCLL** 0.0 Rep Stress Incr WB 0.22 Horz(CT) 0.11 6 n/a n/a BCDL 10.0 Code FBC2020/TPI2014 Matrix-MS Weight: 80 lb FT = 20% LUMBER-**BRACING-**TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 3-10-11 oc purlins,

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

11-12,7-8: 2x4 SP No.3, 2-5: 2x4 SP M 31

**WEBS** 2x4 SP No.3 \*Except\*

2-13,5-6: 2x6 SP No.2

REACTIONS.

(size) 13=0-3-8, 6=0-3-8 Max Horz 13=121(LC 5)

Max Uplift 13=-440(LC 8), 6=-395(LC 9)

Max Grav 13=1018(LC 1), 6=898(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1348/660, 3-4=-1045/604, 4-5=-1346/679, 2-13=-1013/459, 5-6=-899/414

BOT CHORD 2-11=-437/951, 10-11=-508/1066, 9-10=-513/1079, 8-9=-503/1061, 5-8=-485/976

WEBS 3-10=-320/571, 4-9=-336/563

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=22ft; GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60

3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

4) Provide adequate drainage to prevent water ponding.

5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 91 lb down and 87 lb up at 7-0-0, and 91 lb down and 87 lb up at 7-8-0 on top chord, and 349 lb down and 267 lb up at 7-0-0, and 349 lb down and 267 lb up at 7-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

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

Vert: 1-2=-54, 2-3=-54, 3-4=-54, 4-5=-54, 12-13=-20, 8-11=-20, 6-7=-20

**Review for Code Compliance** 

Exp B; Liniversal Engineering Science

except end verticals.

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

Perve

Examiner-License No.

PX2707

06/30/2022

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Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

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

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



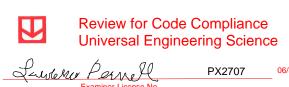
Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 62 PRESERVE
					T28119660
3213335	T14	HIP TRUSS	1	1	
					Job Reference (optional)

Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:33 2022 Page 2 ID:Ad27wGdB3DlInto\_ShAPXtzIZ29-L?kyXRJWw76sLAZN?O6OP8vmULeiKQUc7bTatfz22wK

LOAD CASE(S) Standard Concentrated Loads (lb)

Vert: 3=-60(F) 4=-60(F) 10=-323(F) 9=-323(F)



06/30/2022

SIMQUE - LOT 62 PRESERVE Job Truss Truss Type Qty Ply T28119661 3213335 T15 SPECIAL TRUSS 3 Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:34 2022 Page 1 ID:Ad27wGdB3Dllnto\_ShAPXtzlZ29-pClLknK8hREjzJ8aZ5ddxLS2klx83t\_mMFC8P5z22wJ 7-4-0 12-4-8 14-8-0 5-0-8 5-0-8 Scale = 1:37.9 4x4 = 8.00 12 15 3x10 🖊 3x10 💸 5 3 3x8 × 3x8 // 6 2 10 3x6 = 3x6 4x8 =  $\bigotimes$ 12 8 13 3x6 =3x6 = 2x4 | 2x4 || 2-3-8 14-8-0 5-0-8 5-0-8 SPACING-CSL GRIP LOADING (psf) 2-0-0 DEFL. in (loc) I/defl I/d PLATES **TCLL** 20.0 Plate Grip DOL 1.25 TC 0.25 Vert(LL) -0.04 9-10 >999 240 MT20 244/190 TCDL 7.0 Lumber DOL 1.25 вс 0.64 Vert(CT) -0.08 9-10 >999 180 WB **BCLL** 0.0 Rep Stress Incr YES 0.20 Horz(CT) n/a n/a Code FBC2020/TPI2014 BCDL 10.0 Matrix-MS Weight: 88 lb FT = 20%LUMBER-BRACING-TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, BOT CHORD 2x4 SP No.2 except end verticals 2x4 SP No.3 \*Except\* BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. WFBS 2-13.6-7: 2x6 SP No.2 REACTIONS. (size) 13=0-3-8, 7=0-3-8 Max Horz 13=126(LC 9)

Max Uplift 13=-148(LC 12), 7=-104(LC 13) Max Grav 13=635(LC 1), 7=519(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-500/141, 3-4=-583/166, 4-5=-583/172, 5-6=-532/148, 2-13=-662/228,

6-7=-552/148

BOT CHORD 10-11=-279/768 9-10=-203/748

**WEBS** 4-10=-53/349, 5-10=-376/215, 3-10=-363/233, 2-12=-131/461, 6-8=-118/432

### 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=22ft; GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 10-4-0, Interior(1) 10-4-0 to 14-5-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain Teaching Insulator and Secretary 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

PX2707 06/30/2022

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Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

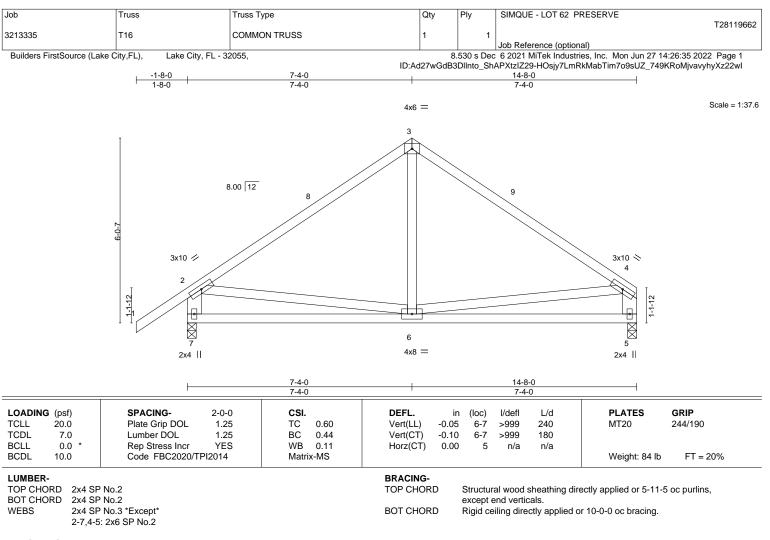
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REACTIONS. (size) 7=0-3-8, 5=0-3-8

Max Horz 7=126(LC 9)

Max Uplift 7=-148(LC 12), 5=-104(LC 13) Max Grav 7=635(LC 1), 5=519(LC 1)

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

TOP CHORD 2-3=-549/151, 3-4=-540/148, 2-7=-572/231, 4-5=-456/148

BOT CHORD 6-7=-248/333 WFBS 3-6=0/278

### NOTES-

1) Unbalanced roof live loads have been considered for this design.

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=148, 5=104.

7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Job Truss Truss Type Qty Plv SIMQUE - LOT 62 PRESERVE T28119663 3213335 T17 COMMON GIRDER 2 Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:37 2022 Page 1 ID:Ad27wGdB3DlInto\_ShAPXtzIZ29-Dn\_TMoM0zMcIqns8EDBLZ\_4bGz1mG65C2DRo0Qz22wG 7-4-0 10-10-4 14-8-0 3-9-12 3-6-4 3-9-12 Scale = 1:37.6 6x8 = 3 8.00 12 4x6 // 4x6 > 5 1-1-12 16 18 19 20 9 8 7x8 = 3x10 || 3x10 || 8x10 = 8x10 =3-9-12 10-10-4 3-6-4 3-9-12 3-9-12 3-6-4 Plate Offsets (X,Y)--[1:0-0-0,0-3-10], [5:0-0-0,0-3-10], [8:0-4-0,0-4-12] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.25 TC 0.11 Vert(LL) -0.03 >999 240 MT20 244/190 TCDL 7.0 Lumber DOL 1.25 BC 0.32 Vert(CT) -0.06 7-8 >999 180 WB **BCLL** 0.0 Rep Stress Incr NO 0.75 Horz(CT) 0.02 5 n/a n/a BCDL 10.0 Code FBC2020/TPI2014 Matrix-MS Weight: 275 lb FT = 20% **BRACING-**

LUMBER-

TOP CHORD 2x8 SP 2400F 2.0E **BOT CHORD** 2x8 SP 2400F 2 0F 2x4 SP No 3 WFBS

WEDGE

Left: 2x6 SP No.2, Right: 2x6 SP No.2

REACTIONS. (size) 1=0-3-8, 5=(0-3-8 + bearing block) (req. 0-3-13)

Max Horz 1=111(LC 5)

Max Uplift 1=-567(LC 8), 5=-1123(LC 9) Max Grav 1=4250(LC 1), 5=6443(LC 1)

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

1-2=-5344/714, 2-3=-4205/626, 3-4=-4210/627, 4-5=-6240/941 1-9=-596/4211, 8-9=-596/4211, 7-8=-732/5000, 5-7=-732/5000 BOT CHORD

WEBS 3-8=-554/3954, 4-8=-1858/443, 4-7=-428/2602, 2-8=-817/178, 2-9=-150/1501

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-3-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

TOP CHORD

**BOT CHORD** 

**Review for Code Compliance** Universal Engineering Science

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

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

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the DOAD COLOR PLANT SECTION PLANT OF THE ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

3) 2x8 SP 2400F 2.0E bearing block 12" long at jt. 5 attached to each face with 4 rows of 10d (0.131"x3") nails spaced 3" o.c. 16 Total fasteners per block. Bearing is assumed to be SP No.2.

4) Unbalanced roof live loads have been considered for this design.

- 5) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 6) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=567, 5=1123,
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1092 lb down and 138 lb up at 2-0-12, 1092 lb down and 138 lb up at 4-0-12, 1092 lb down and 138 lb up at 6-0-12, 1092 lb down and 138 lb up at 8-0-12, 1092 lb down and 138 lb up at 10-0-12, and 1092 lb down and 137 lb up at 12-0-12, and 3056 lb down and 741 lb up at 13-3-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 11) This manufactured product is designed as an individual building component. The suitability and use of this component for any

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MARNING - Verity design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MIT-47.3 (ev. 5/19/20/20 BEPORE USE.)

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16023 Swingley Ridge Rd

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 62 PRESERVE
					T28119663
3213335	T17	COMMON GIRDER	1	2	
					Job Reference (optional)

Lake City, FL - 32055,

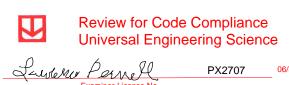
8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:37 2022 Page 2 ID:Ad27wGdB3Dlinto\_ShAPXtzIZ29-Dn\_TMoM0zMcIqns8EDBLZ\_4bGz1mG65C2DRo0Qz22wG

### 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, 10-13=-20

Concentrated Loads (lb)

Vert: 9=-1092(B) 16=-1092(B) 17=-1092(B) 18=-1092(B) 19=-1092(B) 20=-1092(B) 21=-3056(B)



06/30/2022



SIMQUE - LOT 62 PRESERVE Job Truss Truss Type Qty Ply T28119664 3213335 T18 4 Common Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:38 2022 Page 1 ID:Ad27wGdB3Dllnto\_ShAPXtzlZ29-hzXra8Nfkfk9SxRLoxia6BcljMPN?j7LGtALYsz22wF <del>-1-0-0</del> <del>1-0-0</del> 8-4-0 1-0-0 Scale = 1:29.3 4x4 = 3 12.00 12 14 13 0-5-8 0-5-8 6 2x4 || 3x4 3x4 =3-8-0 3-8-0 3-8-0 Plate Offsets (X,Y)--[4:0-1-8,Edge] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defI L/d **PLATES GRIP TCLL** 20.0 Plate Grip DOL 1.25 TC 0.19 Vert(LL) 0.01 6-9 >999 240 MT20 244/190 TCDL вс Vert(CT) 7.0 Lumber DOL 1.25 0.17 -0.01 6-12 >999 180 WB 0.06 **BCLL** 0.0 Rep Stress Incr YES Horz(CT) 0.00 n/a n/a BCDL 10.0 Code FBC2020/TPI2014 Matrix-MS Weight: 36 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

REACTIONS. (size) 2=0-3-8, 4=0-3-8

Max Horz 2=106(LC 11)

Max Uplift 2=-72(LC 12), 4=-72(LC 13) Max Grav 2=325(LC 1), 4=325(LC 1)

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

2-3=-270/159, 3-4=-270/159 TOP CHORD

### 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=22ft; Cat. II; Exp B; Encl. GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 3-8-0, Exterior(2R) 3-8-0 to 6-8-0, Interior(1) 6-8-0 to 8-4-0 zone; C-C for members and forces & MWFRS for reactions shown; Lur D)L=1.60 Rewiew for Code Compliance DOL=1.60 🚽 require Mais versial Engineering Science

3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain 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 by the bottom chord in all areas where a rectangle by the bottom chord in all areas where a rectangle by the bottom chord in all areas where a rectangle by the bottom chord in all areas where a rectangle by the bottom chord in all areas where a rectangle by the bottom chord in all areas where a rectangle by the bottom chord in all areas where a rectangle by the bottom chord in all areas where a rectangle by the bottom chord in all areas where a rectangle by the bottom chord in all areas where a rectangle by the bottom chord in all areas where a rectangle by the bottom chord in all areas where a rectangle by the bottom chord in all areas where a rectangle by the bottom chord in all areas where a rectangle by the bottom chord in all areas where a rectangle by the bottom chord in all areas where a rectangle by the bottom chord in all areas where will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4

7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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

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

06/30/2022

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Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119665 3213335 T18G **GABLE** Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:39 2022 Page 1 ID:Ad27wGdB3DlInto\_ShAPXtzIZ29-A95EnUOHVzs0350XMeDpeP9wjmnjkAXVVXwv5Iz22wE <del>-1-0-0</del> 1-0-0 7-4-0 8-4-0 3-8-0 1-0-0 Scale = 1:27.0 4x4 = 5 12.00 12 14 2x4 || 62x4 || 3x4 7 3x4 📏 0-5-8 0-5-8 4x6 = 2x4 || 2x4 || 2x4 || 7-4-0 7-4-0 Plate Offsets (X,Y)--[2:0-3-1,0-2-0], [8:0-3-1,0-2-0] LOADING (psf) SPACING-CSI. DEFL. (loc) I/defI L/d **PLATES GRIP TCLL** 20.0 Plate Grip DOL 1.25 TC 0.11 Vert(LL) -0.00 n/r 120 MT20 244/190 TCDL 7.0 Lumber DOL 1.25 BC 0.03 Vert(CT) -0.00 n/r 120 WB **BCLL** 0.0 Rep Stress Incr YES 0.05 Horz(CT) 0.00 8 n/a n/a BCDL 10.0 Code FBC2020/TPI2014 Matrix-S Weight: 42 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-TOP CHORD 2x4 SP No 2

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

REACTIONS. All bearings 7-4-0.

Max Horz 2=-96(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 12, 10 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 11, 12, 10

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

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-0-0 to 2-0-0, Exterior(2N) 2-0-0 to 3-8-0, Corner(3R) 3-8-0 to 6-8-0, Exterior(2N) 6-8-0 to 8-4-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip Review for Code Compliance see Standard Industry Universal Engineering Science

3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component. erne Tawleker

5) Gable requires continuous bottom chord bearing.

6) Gable studs spaced at 2-0-0 oc.

7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 12, 10.

10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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

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

Examiner-License No

06/30/2022

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Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119666 3213335 T19 Common Girder Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:40 2022 Page 1 ID:Ad27wGdB3Dllnto\_ShAPXtzlZ29-eMfc?qPvGH\_thEbjwMk2Bch3iA\_5TTKekBfSdlz22wD 3-8-0 3-8-0 Scale = 1:27.9 4x6 || 2 12.00 12 0-5-8 11 4 3x10 || 3x6 =3x6 =3-8-0 3-8-0 3-8-0 [1:0-6-0,0-1-4], [3:0-6-0,0-1-4] Plate Offsets (X,Y)--LOADING (psf) SPACING-CSI. DEFL. in (loc) I/defI L/d **PLATES GRIP TCLL** 20.0 Plate Grip DOL 1.25 TC 0.22 Vert(LL) -0.02 4-7 >999 240 MT20 244/190

LUMBER-

TCDL

**BCLL** 

BCDL

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

7.0

0.0

10.0

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

Max Horz 1=83(LC 26)

Max Uplift 1=-289(LC 9), 3=-289(LC 8) Max Grav 1=1293(LC 1), 3=1293(LC 1)

Lumber DOL

Rep Stress Incr

Code FBC2020/TPI2014

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

TOP CHORD 1-2=-1412/356 2-3=-1412/356 BOT CHORD 1-4=-208/974. 3-4=-208/974

WFBS 2-4=-405/1729

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=22ft; GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60

3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain 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

1.25

NO

BC

WB

Matrix-MS

0.60

0.66

5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle by the Wall by 12-021 wilder will fit between the bottom chord and any other members. 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)

1=289, 3=289. 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 681 lb down and 174 lb up at

2-0-12, and 681 lb down and 174 lb up at 3-8-0, and 681 lb down and 174 lb up at 5-3-4 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).

9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

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

Vert: 1-2=-54, 2-3=-54, 5-8=-20

Concentrated Loads (lb)

Vert: 4=-681(B) 11=-681(B) 12=-681(B)

**BRACING-**

Vert(CT)

Horz(CT)

-0.04

0.01

4-7

3

>999

n/a

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 4-9-0 oc purlins.

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

Exp B; Review for Code Compliance

grequire Liniversial Engineering Science

180

n/a

PX2707

Weight: 38 lb

06/30/2022

FT = 20%

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Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

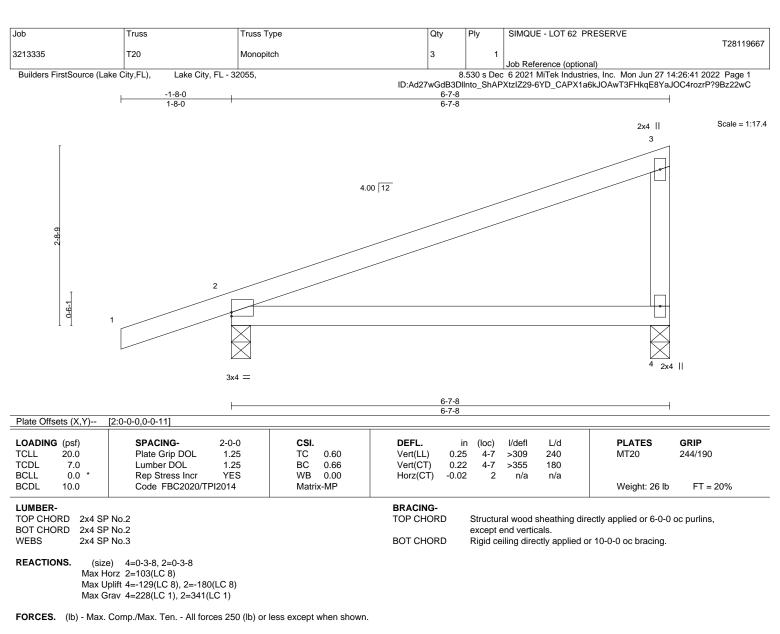
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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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



16023 Swingley Ridge Rd



1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 to 6-5-12 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

**Review for Code Compliance** 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live left

4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 6-0 tall Universal Engineering Science will fit between the bottom chord and any other members.

will fit between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplit(at joint(s) except (it=lb)

6) This manufactured product is designed as an individual building component. The suitability and use of this component formany-License No. particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

PX2707

06/30/2022

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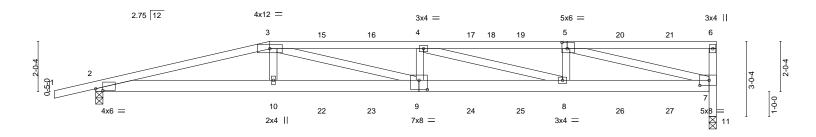


T28119668 3213335 T21 HALF HIP GIRDER 2 Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:44 2022 Page 1 ID:Ad27wGdB3Dllnto\_ShAPXtzlZ29-W7v7qCSPKVUIAsuV9Bp\_LSsh3nlfPDwEfpdgmWz22w9 24-11-8 6-0-7 5-10-10 6-0-7

Qty

Plv

Scale = 1:46.3



VERTICAL LEGS ARE NOT DESIGNED FOR LATERAL LOADS IMPOSED BY SUPPORTS (BEARINGS).

Structural wood sheathing directly applied or 4-6-12 oc purlins,

Rigid ceiling directly applied or 7-11-2 oc bracing.

except end verticals.

SIMQUE - LOT 62 PRESERVE

L	7-0-0	13-0-7	18-11-1	24-11-8	
	7-0-0	6-0-7	5-10-10	6-0-7	
Plate Offsets (X,Y)	[2:0-3-7,0-0-13], [5:0-2-8,0-3-0], [7:0	-4-8,0-2-8], [9:0-4-0,0-4-8]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl	L/d <b>PLATES</b>	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.46	Vert(LL) 0.37 9-10 >813	240 MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.82	Vert(CT) -0.51 9-10 >580	180	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.94	Horz(CT) 0.14 11 n/a	n/a	
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS		Weight: 266 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD

Job

2x4 SP No.2 \*Except\* 3-5: 2x4 SP M 31

Truss

Truss Type

**BOT CHORD** 2x6 SP No.2 **WEBS** 2x4 SP No.3 \*Except\*

6-11: 2x4 SP No.2

REACTIONS. (size) 2=0-3-8, 11=0-3-8

Max Horz 2=75(LC 4)

Max Uplift 2=-960(LC 4), 11=-1022(LC 4) Max Grav 2=1854(LC 1), 11=1948(LC 1)

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

TOP CHORD 2-3=-6544/3307, 3-4=-7753/4030, 4-5=-5609/2937, 5-6=-263/138, 7-11=-1948/1022,

6-7=-264/139

BOT CHORD 2-10=-3240/6345, 9-10=-3262/6390, 8-9=-4031/7755, 7-8=-2927/5591 **WEBS** 

3-10=-244/632, 3-9=-843/1570, 5-8=-439/908, 5-7=-5534/2897, 4-8=-2228/1136

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.

Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S):sections. Blystoe No ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

3) Unbalanced roof live loads have been considered for this design.

- 4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; 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
- 5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=960, 11=1022.

Universal Engineering Science

**Review for Code Compliance** 

PX2707 06/30/2022

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Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

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



16023 Swingley Ridge Rd

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 62 PRESERVE	
3213335	T21	HALF HIP GIRDER	1			T28119668
0210000		THE THE GRADEN	·	2	Job Reference (optional)	

Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:44 2022 Page 2 ID:Ad27wGdB3DlInto\_ShAPXtzlZ29-W7v7qCSPKVUIAsuV9Bp\_LSsh3nlfPDwEfpdgmWz22w9

### NOTES-

- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 230 lb down and 160 lb up at 7-0-0, 108 lb down and 92 lb up at 9-1-1, 108 lb down and 92 lb up at 11-1-1, 108 lb down and 92 lb up at 13-1-1, 108 lb down and 91 lb up at 15-1-1, 108 lb down and 92 lb up at 17-1-1, 108 lb down and 92 lb up at 19-1-1, and 108 lb down and 92 lb up at 21-1-1, and 108 lb down and 92 lb up at 23-1-1 on top chord, and 318 lb down and 212 lb up at 7-0-0, 83 lb down and 64 lb up at 9-1-1, 83 lb down and 64 lb up at 11-1-1, 83 lb down and 64 lb up at 13-1-1, 83 lb down and 64 lb up at 17-1-1, 83 lb down and 64 lb up at 1 down and 64 lb up at 19-1-1, and 83 lb down and 64 lb up at 21-1-1, and 83 lb down and 64 lb up at 23-1-1 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 12) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

### LOAD CASE(S) Standard

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

Vert: 1-3=-54, 3-6=-54, 7-12=-20

Concentrated Loads (lb)

Vert: 3=-183(F) 10=-318(F) 9=-64(F) 5=-108(F) 8=-64(F) 4=-108(F) 15=-108(F) 16=-108(F) 17=-108(F) 19=-108(F) 20=-108(F) 21=-108(F) 21=-108(F) 23=-64(F) 23=-64(F) 23=-64(F) 24=-108(F) 24=-24=-64(F) 25=-64(F) 26=-64(F) 27=-64(F)

Review for Code Compliance Universal Engineering Science

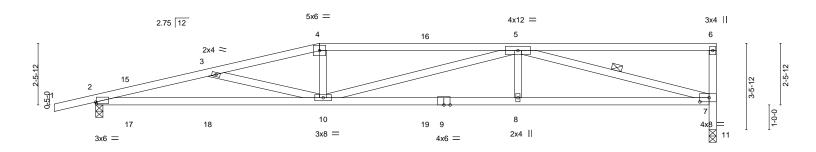
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PX2707

06/30/2022

Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119669 3213335 T22 HALF HIP Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:45 2022 Page 1 ID:Ad27wGdB3DlInto\_ShAPXtzlZ29-\_JSV2YS25pc9n0ThivKDugPprBdz8h7NtTNDIyz22w8 16-11<u>-12</u> -1-8-0 4-10-1 1-8-0 7-11-12 4-10-1 4-1-15 7-11-12

Scale = 1:46.3



VERTICAL LEGS ARE NOT DESIGNED FOR LATERAL LOADS IMPOSED BY SUPPORTS (BEARINGS).

	9-0-0		16-11-12	24-11-8	
ı	9-0-0	1	7-11-12	7-11-12	ı
Plate Offsets (X,Y)	[2:0-0-5,0-0-11], [7:0-4-8,0-2-0]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	I/defl L/d PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.65	Vert(LL) 0.45 8-10	>663 240 MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.88	Vert(CT) -0.46 8-10	>645 180	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.88	Horz(CT) 0.14 11	n/a n/a	
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS	, ,	Weight: 1	17 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

WEBS

LUMBER-TOP CHORD

2x4 SP No.2 \*Except\* 4-6: 2x4 SP M 31

**BOT CHORD** 2x4 SP No.2 **WEBS** 2x4 SP No.3 \*Except\*

6-11: 2x4 SP No.2

REACTIONS.

(size) 2=0-3-8, 11=0-3-8 Max Horz 2=91(LC 8)

Max Uplift 2=-532(LC 8), 11=-470(LC 8) Max Grav 2=1011(LC 1), 11=915(LC 1)

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

TOP CHORD 2-3=-2893/3072, 3-4=-2545/2817, 4-5=-2481/2796, 7-11=-915/970

BOT CHORD 2-10=-3052/2789, 8-10=-2588/2416, 7-8=-2588/2416

WEBS 3-10=-333/296, 4-10=-452/334, 5-7=-2410/2578, 5-10=-262/150, 5-8=-416/322

### NOTES-

1) Unbalanced roof live loads have been considered for this design.

 Exp B; Ывіversal Engineering Science 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 to 9-0-0, Exterior(2R) 9-0-0 to GCpi=0.18; MWFRS (envelope) gable end zone and 0-0 ExtenditzE) - 13-0 to 1-3-0, interior(1) 13-2-15 to 24-9-12 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown: Lumber DOI =1 60 plate grip DOL=1.60

3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirence responsible for verifying applied roof live load shown covers rain loading requirence No. to the use of this truss component.

4) Provide adequate drainage to prevent water ponding.

- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=532, 11=470,
- 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**Review for Code Compliance** 

Structural wood sheathing directly applied or 3-3-7 oc purlins,

Rigid ceiling directly applied or 1-4-12 oc bracing.

except end verticals.

1 Row at midpt

06/30/2022 PX2707

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Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

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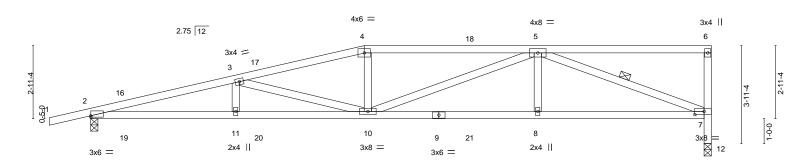
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Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119670 3213335 T23 HALF HIP Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:46 2022 Page 1 ID:Ad27wGdB3Dlinto\_ShAPXtzlZ29-SW0tFtTgs7l0P92tGcrSRtx?8b?StCWX676mrOz22w7 -1-<u>8-0</u> <u>5-10-</u>0 11-0-0 17-11-12 24-11-8 1-8-0 5-10-0 5-2-0 6-11-12 6-11-12

Scale = 1:46.3



VERTICAL LEGS ARE NOT DESIGNED FOR LATERAL LOADS IMPOSED BY SUPPORTS (BEARINGS).

Structural wood sheathing directly applied or 3-1-10 oc purlins,

Rigid ceiling directly applied or 3-1-12 oc bracing.

except end verticals.

1 Row at midpt

	1	5-10-0	1	11-0-0	1	17-11	1-12	1		24-11-8	1
		5-10-0	1	5-2-0		6-11	-12			6-11-12	
Plate Offs	ets (X,Y)	[2:0-0-1,0-0-11], [7:0-4-8,0	-1-8]								
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC (	0.61	Vert(LL)	0.35 8-10	>839	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC (	0.73	Vert(CT)	-0.38 10-11	>792	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB (	0.61	Horz(CT)	0.12 12	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI	2014	Matrix-l	MS					Weight: 119 lb	FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

WEBS

LUMBER-TOP CHORD

2x4 SP No 2 2x4 SP No 2

**BOT CHORD** 2x4 SP No.3 \*Except\* WFBS

6-12: 2x4 SP No.2

REACTIONS.

(size) 2=0-3-8, 12=0-3-8 Max Horz 2=107(LC 8)

Max Uplift 2=-531(LC 8), 12=-472(LC 8) Max Grav 2=1011(LC 1), 12=915(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-2887/3133, 3-4=-2243/2434, 4-5=-2168/2414, 7-12=-915/977  $2-11=-3114/2780,\ 10-11=-3114/2780,\ 8-10=-1981/1830,\ 7-8=-1981/1830$ BOT CHORD **WEBS**  $3-10=-646/747,\ 4-10=-368/276,\ 5-7=-1903/2061,\ 5-8=-378/291,\ 5-10=-501/362$ 

### NOTES-

1) Unbalanced roof live loads have been considered for this design.

Review for Code Compliance

LEAD BY, End.

LOO, Extending read Engineering Science 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 to 15-2-15, Interior(1) 15-2-15 to 24-9-12 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain earlied feeding from this specific to the use of this truss component. Examiner-License No.

4) Provide adequate drainage to prevent water ponding.

5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

- 7) Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=531, 12=472.
- 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

PX2707

06/30/2022

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Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

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

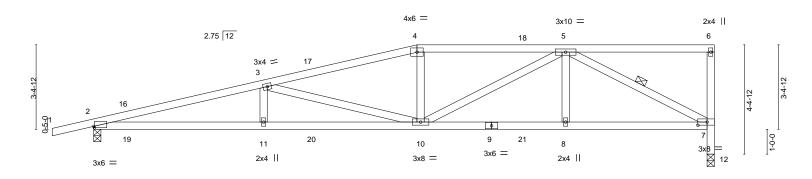
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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SIMQUE - LOT 62 PRESERVE Job Truss Truss Type Qty Ply T28119671 3213335 T24 HALF HIP Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:47 2022 Page 1 ID:Ad27wGdB3Dllnto\_ShAPXtzlZ29-xiaFTDUIdQtt1Jd3qKMhz5UAe?LjcdbgLnsKNrz22w6 -1-<u>8-0</u> 13-0-0 24-11-8 6-10-0 1-8-0 6-2-0 5-11-12

Scale = 1:46.3



VERTICAL LEGS ARE NOT DESIGNED FOR LATERAL LOADS IMPOSED BY SUPPORTS (BEARINGS)

2/1112

		0-10-0		13-0-0		10-11-12			24-11-0	
	Γ.	6-10-0		6-2-0		5-11-12			5-11-12	
Plate Offse	ets (X,Y)	[2:0-0-5,0-0-11], [7:0-4-8	,0-1-8]							
LOADING	i (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defI	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC 0.63	Vert(LL)	0.37 10-11	>807	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC 0.73	Vert(CT)	-0.37 10-11	>802	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.75	Horz(CT)	0.11 12	n/a	n/a		
BCDL	10.0	Code FBC2020/T	PI2014	Matrix-MS					Weight: 121 lb	FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

WEBS

18-11-12

except end verticals.

1 Row at midpt

13-0-0

LUMBER-TOP CHORD

2x4 SP No 2 2x4 SP No 2

BOT CHORD 2x4 SP No.3 \*Except\* WFBS

6-12: 2x4 SP No.2

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

Max Horz 2=123(LC 8) Max Uplift 2=-529(LC 8), 12=-474(LC 8)

Max Grav 2=1011(LC 1), 12=915(LC 1)

6-10-0

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-2855/3065, 3-4=-1943/2098, 4-5=-1862/2082, 7-12=-915/985 BOT CHORD 2-11=-3061/2747, 10-11=-3061/2747, 8-10=-1512/1387, 7-8=-1512/1387 **WEBS**  $3-11=-316/242,\ 3-10=-922/1027,\ 4-10=-296/229,\ 5-7=-1534/1673,\ 5-8=-317/241,$ 

5-10=-674/538

### 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=22ft; GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 to 13-0-0, Exterior(2R) 13-0-0 to 17-2-15, Interior(1) 17-2-15 to 24-9-12 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions Scholar Former 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 requirer neats applied roof live load shown covers rain loading rain load rain to the use of this truss component.

4) Provide adequate drainage to prevent water ponding.

5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=529, 12=474,
- 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Exp B; Ывіversal Engineering Science

**Review for Code Compliance** 

Structural wood sheathing directly applied or 3-1-13 oc purlins,

Rigid ceiling directly applied or 3-0-3 oc bracing.

PX2707

06/30/2022

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Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119672 3213335 MONO HIF T25 Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:48 2022 Page 1 ID:Ad27wGdB3DlInto\_ShAPXtzIZ29-Pu8dgZVwNk?keTCGO1uwWI1MwOjuL9yqaRbtvHz22w5

15-0-0

7-5-12

except end verticals.

1 Row at midpt

Structural wood sheathing directly applied or 4-2-0 oc purlins,

Rigid ceiling directly applied or 4-3-1 oc bracing.

Scale = 1:30.4

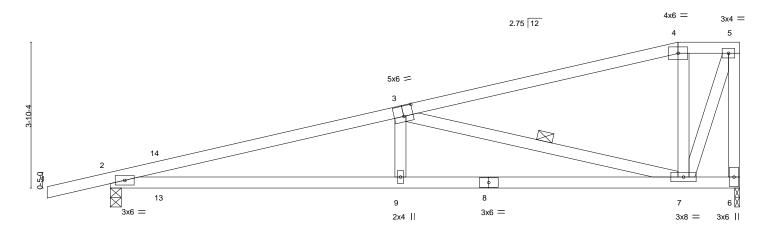


Plate Off	sets (X,Y)	[3:0-3-0,0-3-4]										
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.ó	Plate Grip DOL	1.25	TC	0.53	Vert(LL)	0.20	9-12	>968	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	ВС	0.61	Vert(CT)	-0.19	9-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code FBC2020/T	PI2014	Matri	x-MS						Weight: 81 lb	FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

WEBS

LUMBER-

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

2x4 SP No.3 WFBS

1-8-0

REACTIONS. (size) 2=0-3-8, 6=0-1-8

Max Horz 2=140(LC 8)

Max Uplift 2=-366(LC 8), 6=-322(LC 8) Max Grav 2=704(LC 1), 6=605(LC 1)

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

TOP CHORD 2-3=-1568/1547, 3-4=-320/280, 4-5=-255/289, 5-6=-645/760

**BOT CHORD** 2-9=-1591/1493. 7-9=-1579/1488

WFBS 3-9=-395/311, 3-7=-1262/1328, 5-7=-822/723

### NOTES-

1) Unbalanced roof live loads have been considered for this design.

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=22ft; Exp B; Review for Code Compliance GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0; i-12 zone; pgrch left Universal Engineering Science

3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

4) Provide adequate drainage to prevent water ponding.

5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7-8-0

7-8-0

7-8-0

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) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)

9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

PX2707

06/30/2022

16-7-8

1-5-12

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Philip J. O'Regan PE No.58126 MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

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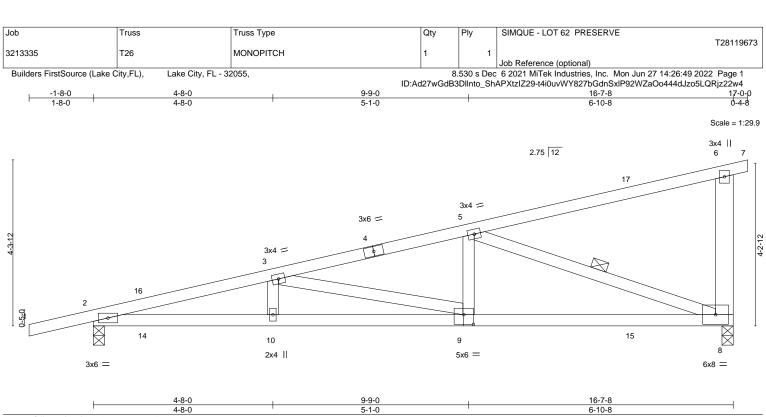


Plate Offsets (X,Y)--[9:0-3-0,0-3-0] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.25 TC 0.35 Vert(LL) 0.16 8-9 >999 240 MT20 244/190 TCDL Vert(CT) 7.0 Lumber DOL 1.25 вс 0.54 -0.16 9-10 >999 180 WB **BCLL** 0.0 Rep Stress Incr YES 0.35 Horz(CT) 0.04 8 n/a n/a BCDL 10.0 Code FBC2020/TPI2014 Matrix-MS Weight: 83 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

WEBS

LUMBER-TOP CHORD

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

**BOT CHORD** 2x4 SP No.3 \*Except\* WFBS

6-8: 2x6 SP No.2

REACTIONS.

(size) 8=0-3-8, 2=0-3-8 Max Horz 2=155(LC 8) Max Uplift 8=-337(LC 8), 2=-360(LC 8) Max Grav 8=635(LC 1), 2=701(LC 1)

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

TOP CHORD 2-3=-1725/1722. 3-5=-1169/1151

BOT CHORD 2-10=-1789/1655, 9-10=-1789/1655, 8-9=-1176/1102 **WEBS** 5-8=-1109/1189, 5-9=-484/368, 3-9=-555/604

### NOTES-

NOTES- (6)

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft;

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft;

1) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; BCDL Exp B: Relyiew for Code Compliance 1-0 zone: porch left Universal Engineering Science GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip D

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.

erve) 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live load some first truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live load some first truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live load some first truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live load some first truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live load some first truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live load some first live live load some first live load some first live live load some first live live load some first live li 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 byx2+0+0 widense No. will fit between the bottom chord and any other members

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=337, 2=360,

6) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

PX2707

Structural wood sheathing directly applied or 4-5-2 oc purlins,

Rigid ceiling directly applied or 4-2-7 oc bracing.

except end verticals.

1 Row at midpt

06/30/2022

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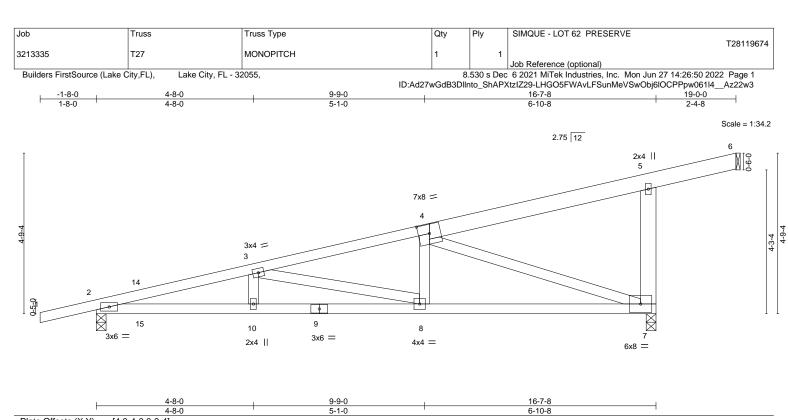


Plate Off	sets (X,Y)	[4:0-4-0,0-3-4]									
LOADIN	G (psf)	SPACING- 2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.25	TC	0.34	Vert(LL)	0.14	7-8	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL 1.25	ВС	0.54	Vert(CT)	-0.15	8-10	>999	180		
BCLL	0.0 *	Rep Stress Incr YES	WB	0.96	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014	Matrix	c-MS						Weight: 94 lb	FT = 20%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP No.2 \*Except\* 1-4: 2x4 SP No.2

**BOT CHORD** 2x4 SP No.2 **WEBS** 2x4 SP No.3 \*Except\*

5-7: 2x6 SP No.2

REACTIONS. (size) 6=Mechanical, 7=0-3-8, 2=0-3-8

Max Horz 2=168(LC 8)

Max Uplift 6=-32(LC 1), 7=-419(LC 8), 2=-349(LC 8) Max Grav 6=16(LC 8), 7=787(LC 1), 2=686(LC 1)

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

TOP CHORD 2-3=-1678/1674, 3-4=-1074/1056, 5-7=-360/210 **BOT CHORD** 2-10=-1751/1611, 8-10=-1751/1611, 7-8=-1084/1003 WEBS 4-7=-1058/1131, 4-8=-490/372, 3-8=-607/654

NOTES-

Review for Code Compliance Exp B; Encl., 11-4 zone parkersal Engineering Science 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 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 100 lb uplift at joint(s) 6 except (jt=lb)

7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

PX2707

Structural wood sheathing directly applied or 4-6-1 oc purlins,

Rigid ceiling directly applied or 4-3-2 oc bracing.

except end verticals.

06/30/2022

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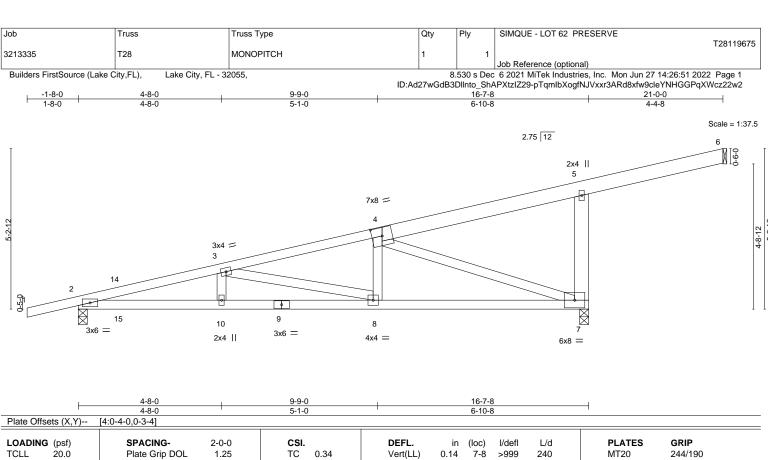
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TCDL 7.0

0.0

10.0

Lumber DOL 1.25 BC WB Rep Stress Incr YES Code FBC2020/TPI2014 Matrix-MS

Vert(CT) -0.15 8-10 Horz(CT) 0.03

**BRACING-**

BOT CHORD

Weight: 99 lb FT = 20%

TOP CHORD Structural wood sheathing directly applied or 4-6-2 oc purlins, except end verticals.

>999

n/a

180

n/a

Rigid ceiling directly applied or 4-3-1 oc bracing.

1-4: 2x4 SP No.2 **BOT CHORD** 2x4 SP No.2

2x4 SP No.3 \*Except\* 5-7: 2x6 SP No.2

2x6 SP No.2 \*Except\*

(size) 6=Mechanical, 7=0-3-8, 2=0-3-8

Max Horz 2=185(LC 8)

Max Uplift 6=-40(LC 12), 7=-425(LC 8), 2=-346(LC 8) Max Grav 6=66(LC 1), 7=798(LC 1), 2=685(LC 1)

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

TOP CHORD 2-3=-1678/1663, 3-4=-1074/1045, 5-7=-371/199 **BOT CHORD** 2-10=-1756/1611, 8-10=-1756/1611, 7-8=-1089/1003 WEBS 4-7=-1058/1134, 4-8=-490/371, 3-8=-607/655

NOTES-

**BCLL** 

BCDL

**WEBS** 

LUMBER-

TOP CHORD

REACTIONS.

Review for Code Compliance
Exp B; Encl.
1-4 zone pixenesal Engineering Science 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

0.54

0.96

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.

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5) Refer to girder(s) for truss to truss connections.

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb)
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June 28,2022

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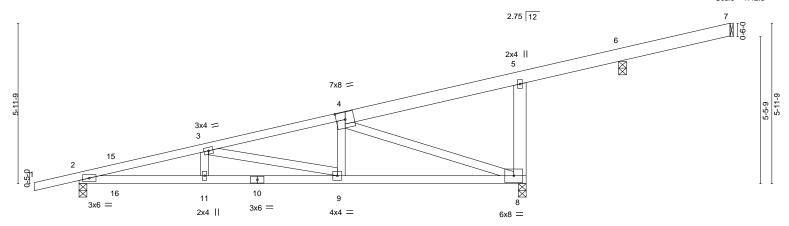
\*\*ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





ID:Ad27wGdB3DlInto\_ShAPXtzIZ29-HfO8WxYRRzVA74W1dtysg8B5y05tHqVPU3Z522z22w1 20-4-4 -1-8<u>-0</u> 16-7-8 1-8-0 4-8-0 3-8-12 3-10-4

Scale = 1:42.8



1	4-8-0	۱ (	9-9-0	16-7-	-8	1	24-2-7	1
	4-8-0	' 5	5-1-0	6-10-	-8		7-6-15	1
Plate Offsets (X,Y)	[4:0-4-0,0-3-4]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.33	Vert(LL)	0.14 8-9	>999 240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.54	Vert(CT)	-0.15 9-11 :	>999 180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.97	Horz(CT)	0.04 8	n/a n/a		
BCDL 10.0	Code FBC2020/7	PI2014	Matrix-MS				Weight: 107 lb	FT = 20%

LUMBER-TOP CHORD

2x6 SP No.2 \*Except\* 1-4: 2x4 SP No.2

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

**WEBS** 2x4 SP No.3 \*Except\*

5-8: 2x6 SP No.2

**BRACING-**

BOT CHORD

TOP CHORD Structural wood sheathing directly applied or 4-6-1 oc purlins,

except end verticals.

Rigid ceiling directly applied or 4-3-1 oc bracing.

REACTIONS. All bearings 0-3-8 except (jt=length) 7=Mechanical.

Max Horz 2=211(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 7, 6 except 2=-340(LC 8), 8=-419(LC 8) Max Grav All reactions 250 lb or less at joint(s) 7, 6 except 2=686(LC 1), 8=785(LC 1)

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

TOP CHORD 2-3=-1680/1641. 3-4=-1076/1021. 5-8=-358/196 **BOT CHORD** 2-11=-1759/1613, 9-11=-1759/1613, 8-9=-1090/1005 WEBS 4-8=-1059/1135, 4-9=-490/372, 3-9=-607/656

NOTES-

Review for Code Compliance
Exp B; Encl.
12 zone Divinesal Engineering Science 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 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 100 lb uplift at joint(s) 7, 6 except (jt=lb)
- 7) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 6.
- 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

PX2707

06/30/2022

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

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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

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SIMQUE - LOT 62 PRESERVE Job Truss Truss Type Qty Plv T28119677 3213335 TG01 FLAT TRUSS 2 Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:55 2022 Page 1 ID:Ad27wGdB3Dllnto\_ShAPXtzlZ29-iE3H8yaJkutl\_YEcl?WZInpXzDC1UBisB1olfNz22w\_ 13-4-0 2-10-0 2-10-0 5-4-4 11-0-0 19-2-0 8-8-0 2-6-4 3-3-12 2-4-0 2-4-0 3-3-12 2-6-4 2-10-0 8x10 = Scale = 1:39.9 8x10 = 2x4 || 8x10 = 2x4 || 3x8 = 5x6 = 8x10 = 2x4 | 2 3 4 5 6 7 8 9 10 18 26 28 17 16 15 14 13 12 11 12x14 = 3x8 || 10x12 =3x6 || 12x14 = 3x8 || 12x14 = 4x8 || 4x8 || 8-8-0 11-0-0 16-7-12 19-2-0 2-10-0 2-6-4 2-4-0 2-4-0 3-3-12 2-6-4 Plate Offsets (X,Y)--[6:0-3-0,0-3-0], [15:0-6-0,0-6-0] LOADING (psf) SPACING-CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.25 TC 0.60 Vert(LL) -0.10 14 >999 240 MT20 244/190 TCDL 7.0 Lumber DOL 1.25 BC 0.25 Vert(CT) -0.19 14 >999 180 **BCLL** 0.0 Rep Stress Incr WB 1.00 Horz(CT) 0.02 10 n/a n/a BCDL 10.0 Code FBC2020/TPI2014 Matrix-MS Weight: 530 lb FT = 20% LUMBER-**BRACING-**TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 4-7-14 oc purlins, **BOT CHORD** 2x8 SP 2400F 2 0F except end verticals. 2x4 SP No.3 \*Except\* BOT CHORD WFBS Rigid ceiling directly applied or 10-0-0 oc bracing. 1-19,9-10: 2x6 SP No.2, 1-17,3-17,7-11,9-11: 2x4 SP No.2 REACTIONS. 19=(0-3-8 + bearing block) (req. 0-4-4), 10=0-3-8 Max Uplift 19=-978(LC 4), 10=-968(LC 4) Max Grav 19=7179(LC 2), 10=5687(LC 1)

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

TOP CHORD 1-19=-6655/925, 1-2=-2858/387, 2-3=-2858/387, 3-4=-6764/1041, 4-5=-6764/1041, 5-6=-6930/1268, 6-7=-6930/1268, 7-8=-2274/397, 8-9=-2274/397, 9-10=-5313/947

16-17=-717/4981, 15-16=-717/4981, 14-15=-1192/7096, 13-14=-1192/7096, BOT CHORD

12-13=-806/4455, 11-12=-806/4455

WEBS 1-17=-963/7121, 3-17=-5554/861, 3-16=-112/1688, 3-15=-680/3732, 5-15=-1155/422,

5-14=-130/1161, 5-13=-555/92, 7-13=-968/5249, 7-12=-45/527, 7-11=-5706/1069,

NOTES-(11)

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc. Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-8-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 6-13 2x4 - 1 row at 0-6-0 oc.

Ludena Pernell

**Review for Code Compliance Universal Engineering Science** 

PX2707 06/30/2022

This item has been

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

3) 2x8 SP 2400F 2.0E bearing block 12" long at jt. 19 attached to each face with 4 rows of 10d (0.131"x3") nails spaced 3" o.c. 16 Total fasteners per block. Bearing is assumed to be SP No.2.

4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60

5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

6) Provide adequate drainage to prevent water ponding.

7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=978, 10=968.

electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

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16023 Swingley Ridge Rd

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 62 PRESERVE
3213335	TG01	FLAT TRUSS	1	_	T28119677
3213335	1601	FLAT TRUSS	'	2	Job Reference (optional)

Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:55 2022 Page 2 ID:Ad27wGdB3DlInto\_ShAPXtzlZ29-iE3H8yaJkutl\_YEcl?WZInpXzDC1UBisB1olfNz22w\_

### NOTES-

- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1222 lb down and 96 lb up at 2-0-12, 1222 lb down and 96 lb up at 4-0-12, 1222 lb down and 96 lb up at 6-0-12, 1222 lb down and 96 lb up at 8-0-12, 1222 lb down and 96 lb up at 10-0-12, 1221 lb down and 96 lb up at 12-0-12, 3873 lb down and 1114 lb up at 13-3-3, 184 lb down at 15-2-5, 184 lb down at 17-2-5, and 184 lb down at 19-2-5, and 189 lb down at 21-2-5 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

### LOAD CASE(S) Standard

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

Vert: 1-9=-54, 10-19=-20

Concentrated Loads (lb)

Vert: 13=-3873(F) 11=-138(F) 20=-1087(F) 21=-1087(F) 22=-1087(F) 23=-1087(F) 24=-1087(F) 25=-1086(F) 26=-138(F) 27=-138(F) 28=-143(F)

Review for Code Compliance Universal Engineering Science

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PX2707

06/30/2022

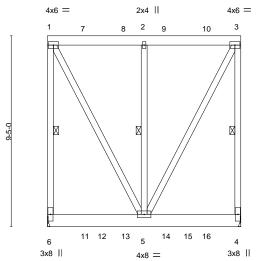


SIMQUE - LOT 62 PRESERVE Job Truss Truss Type Qty Plv T28119678 3213335 TG02 FLAT TRUSS 2 Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:56 2022 Page 1

Scale = 1:56.9

ID:Ad27wGdB3DlInto\_ShAPXtzIZ29-ARdfMlbxVB?bciposj1oq\_MhNdamDkx?PgXIApz22vz 9-6-8 4-9-4 4-9-4



9-6-8 4-9-4 4-9-4

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.69	Vert(LL)	-0.03	5	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.09	Vert(CT)	-0.05	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.55	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2020/TF	PI2014	Matri	x-MS						Weight: 234 lb	FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

WFBS

LUMBER-

TOP CHORD 2x6 SP No.2 BOT CHORD 2x8 SP 2400F 2.0E 2x4 SP No.3 WFBS

REACTIONS. (size) 6=Mechanical, 4=Mechanical Max Uplift 6=-1163(LC 4), 4=-1175(LC 4) Max Grav 6=3710(LC 1), 4=3745(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-6=-3222/971, 1-2=-1196/379, 2-3=-1196/379, 3-4=-3242/975

1-5=-810/2554, 2-5=-3417/836, 3-5=-810/2553 WFBS

### NOTES-(11)

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
- Top chords connected as follows: 2x4 1 row at 0-9-0 oc, 2x6 2 rows staggered at 0-9-0 oc.
- Bottom chords connected as follows: 2x8 2 rows staggered at 0-9-0 oc.
- Webs connected as follows: 2x4 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indic
- ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indic 3) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; GCpi=0.18; MWFRS (envelope) gable end zone; 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 Luvence to the use of this truss component.

5) Provide adequate drainage to prevent water ponding.

- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=1163, 4=1175,
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 635 lb down and 137 lb up at 1-9-11, 635 lb down and 130 lb up at 3-9-11, and 635 lb down and 130 lb up at 5-9-11, and 635 lb down and 137 lb up at 7-9-11 on top chord, and 480 lb down and 276 lb up at 1-9-11, 480 lb down and 276 lb up at 3-9-11, and 480 lb down and 276 lb up at 5-9-11, and 480 lb down and 276 lb up at 7-9-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of others
- 11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

PX2707

Structural wood sheathing directly applied or 6-0-0 oc purlins,

1-6. 3-4. 2-5

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

🚅 Exp B: Ыniversal Engineering Science

Perne

Examiner-License No.

except end verticals

1 Row at midpt

06/30/2022

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 62 PRESERVE
					T28119678
3213335	TG02	FLAT TRUSS	1	2	Job Reference (optional)

Lake City, FL - 32055,

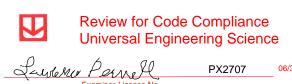
8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:56 2022 Page 2 ID:Ad27wGdB3Dlinto\_ShAPXtzlZ29-ARdfMlbxVB?bciposj1oq\_MhNdamDkx?PgXIApz22vz

### LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25 Uniform Loads (plf) Vert: 1-3=-304, 4-6=-20

Concentrated Loads (lb)

Vert: 7=-635 8=-635 9=-635 10=-635 11=-480(B) 13=-480(B) 14=-480(B) 16=-480(B)



06/30/2022

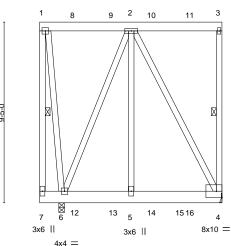
Job Truss Truss Type Qty Plv SIMQUE - LOT 62 PRESERVE T28119679 3213335 TG03 FLAT TRUSS 2 Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:58 2022 Page 1

ID:Ad27wGdB3DlInto\_ShAPXtzlZ29-6plPm\_cB1pFJr?zBz83GwPR?eQFohY\_lt\_0PFiz22vx 4-9-4 9-6-0 4-9-4 4-8-12

2x4 || 4x4 = 3x8 =

Scale = 1:60.0



1-1-12	4-9-4	9-6-0
1-1-12	3-7-8	4-8-12

LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.77	Vert(LL)	-0.02	4-5	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.12	Vert(CT)	-0.03	4-5	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.90	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2020/TF	PI2014	Matri	x-MS						Weight: 257 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WFBS

LUMBER-

TOP CHORD 2x6 SP No.2 BOT CHORD 2x8 SP 2400F 2.0E

2x4 SP No.3 WFBS

REACTIONS. (size) 6=0-3-8, 4=Mechanical

Max Uplift 6=-1335(LC 4), 4=-1173(LC 4) Max Grav 6=3648(LC 1), 4=3307(LC 1)

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

TOP CHORD 1-7=-566/240, 3-4=-913/246 **BOT CHORD** 5-6=-321/902, 4-5=-321/902

**WEBS** 1-6=-356/75. 2-6=-2484/849. 2-5=-541/735. 2-4=-1939/691

### NOTES-(11)

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.

GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60

Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indic

Review for Code Compliance Universal Engineering Science 3) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl.

4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain Deading Medican in the control of to the use of this truss component. Examiner-License No

5) Provide adequate drainage to prevent water ponding.

6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

8) Refer to girder(s) for truss to truss connections.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 625 lb down and 140 lb up at 1-9-3, 625 lb down and 133 lb up at 3-9-3, and 625 lb down and 133 lb up at 5-9-3, and 625 lb down and 140 lb up at 7-9-3 on top chord, and 172 lb down and 252 lb up at 1-9-3, 172 lb down and 252 lb up at 3-9-3, and 172 lb down and 252 lb up at 5-9-3, and 172 lb down and 252 lb up at 7-9-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of

11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Structural wood sheathing directly applied or 6-0-0 oc purlins,

1-7 3-4

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

except end verticals

1 Row at midpt

Philip J. O'Regan PE No.58126 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

06/30/2022

### LOAD CASE(S) Standard

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



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Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 62 PRESERVE
					T28119679
3213335	TG03	FLAT TRUSS	1	2	Job Reference (optional)

Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:58 2022 Page 2 ID:Ad27wGdB3DlInto\_ShAPXtzlZ29-6plPm\_cB1pFJr?zBz83GwPR?eQFohY\_lt\_0PFiz22vx

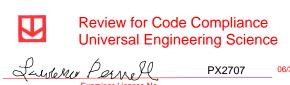
### LOAD CASE(S) Standard

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

Vert: 1-3=-304(F=-250), 5-7=-20, 4-5=-220(B=-200)

Concentrated Loads (lb)

Vert: 8=-625 9=-625 10=-625 11=-625 12=-138(F) 13=-138(F) 14=-138(F) 16=-138(F)



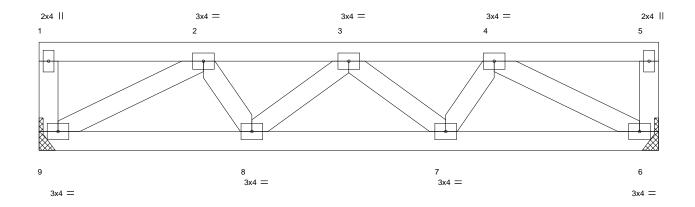
06/30/2022



Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119680 3213335 TG04 **FLOOR** 3 Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:26:59 2022 Page 1 ID:Ad27wGdB3DlInto\_ShAPXtzlZ29-a0Jo\_Kdqo6NAT9YNXraVSd\_LiqYgQAER5emyn8z22vw

4-9-4 2-2-14

Scale = 1:17.7



3-3-5		+		2-11-13					3-3-5	
SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
Plate Grip DOL	1.00	TC	0.11	Vert(LL)	-0.02	`7-8	>999	360	MT20	244/190
Lumber DOL	1.00	ВС	0.27	Vert(CT)	-0.03	7-8	>999	240		
Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.01	6	n/a	n/a		
Code FBC2020/T	PI2014	Matri	x-MS	, ,					Weight: 48 lb	FT = 20%
	3-3-5  SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	3-3-5  SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00	3-3-5  SPACING- 2-0-0 CSI.  Plate Grip DOL 1.00 TC  Lumber DOL 1.00 BC  Rep Stress Incr YES WB	3-3-5  SPACING- 2-0-0 CSI.  Plate Grip DOL 1.00 TC 0.11  Lumber DOL 1.00 BC 0.27  Rep Stress Incr YES WB 0.20	3-3-5 2-11-13    SPACING- 2-0-0 CSI. DEFL.     Plate Grip DOL 1.00 TC 0.11 Vert(LL)     Lumber DOL 1.00 BC 0.27 Vert(CT)     Rep Stress Incr YES WB 0.20 Horz(CT)	SPACING- 2-0-0   CSI.   DEFL. in	SPACING- 2-0-0   CSI.   DEFL.   in (loc)	3-3-5  SPACING- Plate Grip DOL Lumber DOL Lumber DOL Rep Stress Incr YES  2-11-13  DEFL. in (loc) I/defl Vert(LL) -0.02 7-8 >999 Vert(CT) -0.03 7-8 >999 Horz(CT) 0.01 6 n/a	3-3-5	SPACING- 2-0-0   CSI.   DEFL.   in (loc)  /defl   L/d   PLATES

**BRACING-**

TOP CHORD

**BOT CHORD** 

6-3-3

LUMBER-

REACTIONS.

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

2x4 SP No.3 WFBS

(size) 9=Mechanical, 6=Mechanical

3-3-5

Max Grav 9=509(LC 1), 6=509(LC 1)

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

TOP CHORD 2-3=-746/0, 3-4=-746/0 **BOT CHORD** 8-9=0/673, 7-8=0/864, 6-7=0/673

**WEBS** 2-9=-746/0, 4-6=-746/0

### NOTES-

- 1) Refer to girder(s) for truss to truss connections.
- 2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 3) This manufactured product is designed as an individual building component. The suitability and use of this component for any This manufactured product is designed as an individual building component. The contact is designed as an individual building component. The contact is particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building d

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9-6-8

Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

Lander Pernell Examiner-License No.

except end verticals

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Philip J. O'Regan PE No.58126 MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

June 28,2022

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16023 Swingley Ridge Rd

Job Truss Truss Type Qty Ply SIMQUE - LOT 62 PRESERVE T28119681 3213335 TG05 **FLOOR** 3 Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:27:00 2022 Page 1 ID:Ad27wGdB3Dlinto\_ShAPXtzlZ29-2CsABgeSZQV14J7Z5Y5k?qWVXExC9eabKIVWJbz22vv 4-4-8 6-4-13 2-0-5 Scale = 1:16.4 TRUSS IS NOT DESIGNED TO SUPPORT CONCENTRATED LOADS AT ITS CANTILEVERED END(S) 2x4 || 3x4 =2x4 || 3x4 =3x4 = 2 3 4 5

	2-4-3 2-4-3		-4-13 -0-10	6 <sub>F</sub> 6-8 0-1-11	8-9-0 2-2-8	
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0	SPACING-         2-0-0           Plate Grip DOL         1.00           Lumber DOL         1.00           Rep Stress Incr         YES	CSI. TC 0.17 BC 0.13 WB 0.19	<b>DEFL.</b> in Vert(LL) -0.01 Vert(CT) -0.01 Horz(CT) 0.00	(loc) I/defl L/d 8 >999 360 7-8 >999 240 7 n/a n/a	PLATES MT20	<b>GRIP</b> 244/190
BCDL 5.0	Code FBC2020/TPI2014	Matrix-MS	(**)		Weight: 45 lb	FT = 20%

LUMBER-

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

2x4 SP No.3 WFBS

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals

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

REACTIONS. (size) 9=0-3-0, 7=0-3-8

Max Grav 9=332(LC 3), 7=629(LC 1)

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

TOP CHORD 1-9=-316/0, 1-2=-360/0, 2-3=-360/0

**BOT CHORD** 7-8=-44/318 **WEBS** 1-8=0/399, 3-7=-434/0

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

8

3x8 =

3) This manufactured product is designed as an individual building component. The suitability and use of this component for any This manufactured product is designed as an individual building component. The second particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building designer per

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6

2x4 ||

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SIMQUE - LOT 62 PRESERVE Job Truss Truss Type Qty Plv T28119682 3213335 TG06 Flat Girder 2 Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:27:01 2022 Page 1

ID:Ad27wGdB3Dllnto\_ShAPXtzlZ29-WOQYP0f4KkduiTimeGczX23eUeFFu?OkZyF3r1z22vu 3-4-15 6-9-14 3-4-15 3-4-15

Scale = 1:57.2 2x4 || 4x4 =

Structural wood sheathing directly applied or 6-0-0 oc purlins,

1-6. 3-4

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

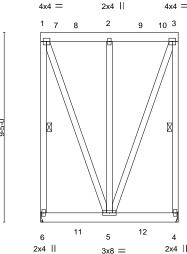
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Perve

Examiner-License No.

except end verticals

1 Row at midpt



6-9-14 3-4-15 3-4-15

LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.28	Vert(LL)	-0.01	5	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.20	Vert(CT)	-0.03	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.54	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2020/TF	PI2014	Matri	x-MP						Weight: 193 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WFBS

LUMBER-

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

2x4 SP No.3 WFBS

REACTIONS. (size) 6=Mechanical, 4=Mechanical

Max Uplift 6=-629(LC 4), 4=-629(LC 4) Max Grav 6=1950(LC 1), 4=1950(LC 1)

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

1-6=-1703/532, 1-2=-496/162, 2-3=-496/162, 3-4=-1703/532 TOP CHORD

WFBS 1-5=-474/1449, 2-5=-1647/336, 3-5=-474/1449

### NOTES-(11)

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.

Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indic ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indic

3) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; GCpi=0.18; MWFRS (envelope) gable end zone; 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 Lawleker to the use of this truss component.

5) Provide adequate drainage to prevent water ponding.

6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 659 lb down and 127 lb up at 1-9-11, and 659 lb down and 127 lb up at 3-4-15, and 659 lb down and 127 lb up at 5-0-3 on top chord, and 480 lb down and 276 lb up at 1-9-11, and 480 lb down and 276 lb up at 3-4-15, and 480 lb down and 276 lb up at 5-0-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

### LOAD CASE(S) Standard

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

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06/30/2022

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June 28,2022

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 62 PRESERVE
3213335	TG06	Flat Girder	1		T28119682
3213333	1900	riat Gildei	!	2	Job Reference (optional)

Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:27:01 2022 Page 2 ID:Ad27wGdB3DlInto\_ShAPXtzIZ29-WOQYP0f4KkduiTimeGczX23eUeFFu?OkZyF3r1z22vu

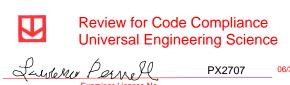
LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-3=-54, 4-6=-20

Concentrated Loads (lb)

Vert: 5=-480(B) 2=-659 8=-659 9=-659 11=-480(B) 12=-480(B)

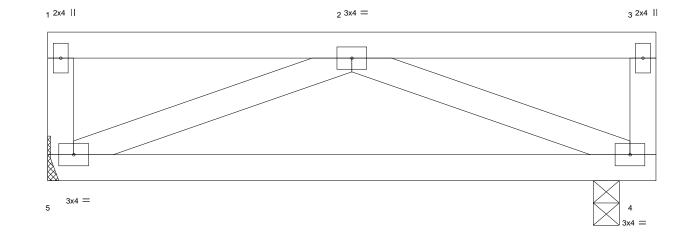


06/30/2022



SIMQUE - LOT 62 PRESERVE Job Truss Truss Type Qty Ply T28119683 3213335 TG07 **FLOOR** 2 Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:27:02 2022 Page 1 ID:Ad27wGdB3DlInto\_ShAPXtzlZ29-\_b\_wcMgi41mlKdHyCz8C4FcpJ2a1dYUuoc\_cOTz22vt

Scale = 1:12.9



	6-4-15							
LOADING (psf)	SPACING- 2-0-0	CSI. DEFL.	in (loc) I/defl L/d	PLATES GRIP				
TCLL 40.0	Plate Grip DOL 1.00	TC 0.28 Vert(LL	0.00 5 **** 360	MT20 244/190				
TCDL 10.0	Lumber DOL 1.00	BC 0.29 Vert(C)	r) -0.05 4-5 >999 240					
BCLL 0.0	Rep Stress Incr YES	WB 0.16 Horz(C	r) 0.01 4 n/a n/a					
BCDL 5.0	Code FBC2020/TPI2014	Matrix-MP		Weight: 33 lb FT = 20%				

**BRACING-**TOP CHORD

**BOT CHORD** 

6-4-15

LUMBER-

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

2x4 SP No.3 WFBS

REACTIONS. (size) 5=Mechanical, 4=0-3-8

Max Grav 5=359(LC 1), 4=359(LC 1)

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

BOT CHORD 4-5=0/472

**WEBS** 2-5=-513/0, 2-4=-513/0

### NOTES-(3)

- 1) Refer to girder(s) for truss to truss connections.
- 2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 3) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Structural wood sheathing directly applied or 6-9-14 oc purlins,

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

Landemer Parnell

except end verticals

6-9-14 3-4-15

PX2707

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6-9-14

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June 28,2022

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SIMQUE - LOT 62 PRESERVE Job Truss Truss Type Qty Ply T28119684 3213335 TG08 **FLOOR** 12 Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Jun 27 14:27:03 2022 Page 1 ID:Ad27wGdB3Dlinto\_ShAPXtzlZ29-TnYlqhgKrLucynr8mhfRdT8\_3RvGM?k10GkAwvz22vs 3-4-15 3-4-15 6-9-14 3-4-15 Scale = 1:12.9 1 2x4 ||  $_{2}$  3x4 = 3 2x4 || 3x4 = 3x4 = 6-9-14 6-9-14 CSL **PLATES** LOADING (psf) SPACING-2-0-0 DEFL. in (loc) I/defI L/d GRIP **TCLL** 40.0 Plate Grip DOL 1.00 TC 0.28 Vert(LL) 0.00 5 360 MT20 244/190 TCDL Lumber DOL 1.00 вс 0.29 Vert(CT) -0.05 >999 240 WB 0.16 **BCLL** 0.0 Rep Stress Incr YES Horz(CT) 0.01 n/a n/a Code FBC2020/TPI2014 Weight: 33 lb BCDL 5.0 Matrix-MP FT = 20% LUMBER-**BRACING-**TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 6-9-14 oc purlins, BOT CHORD 2x4 SP No.2 except end verticals 2x4 SP No.3 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. WFBS REACTIONS.

(size) 5=Mechanical, 4=Mechanical Max Grav 5=359(LC 1), 4=359(LC 1)

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

BOT CHORD 4-5=0/472

**WEBS** 2-5=-513/0, 2-4=-513/0

NOTES-(3)

- 1) Refer to girder(s) for truss to truss connections.
- 2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 3) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**Review for Code Compliance Universal Engineering Science** 

Laurence Parnell

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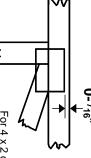


### Symbols

# PLATE LOCATION AND ORIENTATION



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



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

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

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

### PLATE SIZE



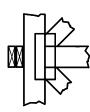
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

### **BEARING**



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

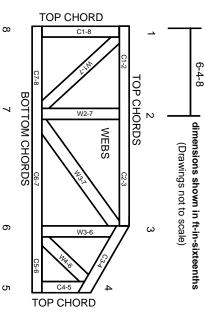
## Industry Standards:

National Design Specification for Metal

ANSI/TPI1: DSB-89:

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

# **Numbering System**



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

# **General Safety Notes**

# Failurs to Follow Could Cause Property Damage or Personal Injury

e 1CAdditional stability bracing for truss system, e.g.
Cediagonal or X-bracing, is always required. See BCSI
Contracting must be designed by an engineer For

Drussenating must be designed by an engineer. For wide truss spacing, individual lateral braces themselves many expuire bracing, or alternative Tor I rebracing should be considered.

4. Provide papies of this truss design to the building Hadesland, grection supervisor, property owner and mall other rested parties.

5 Cut members to bear tightly against each other.

6 CPlace plans on each face of truss at each Diplinit and smbed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.

 Designassumes trusses will be suitably protected from the enaponment in accord with ANS//TPI 1.
 Unless atherwise noted, moisture content of lumber

shall hot exceed 19% at time of fabrication.

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

 Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.

 Plate type, size, orientation and location dimensions indicated are minimum plating requirements.

Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.

 Top chords must be sheathed or purlins provided at spacing indicated on design.

 Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.

Connections not shown are the responsibility of others

Do not cut or alter truss member or plate without prior approval of an engineer.

17. Install and load vertically unless indicated otherwise.

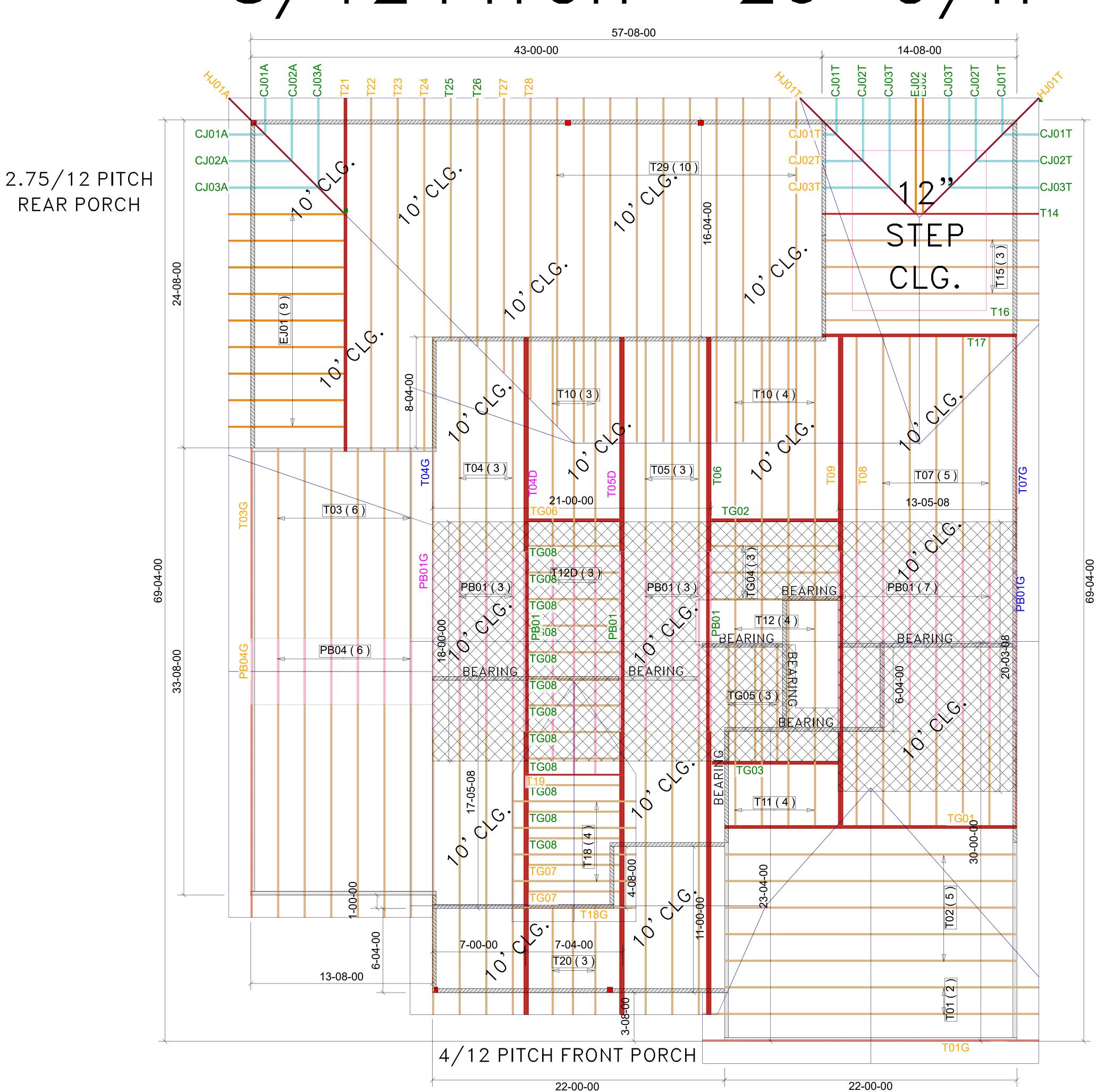
 Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.

 Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.

 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.

## 8/12 PITCH - 20" 0/H



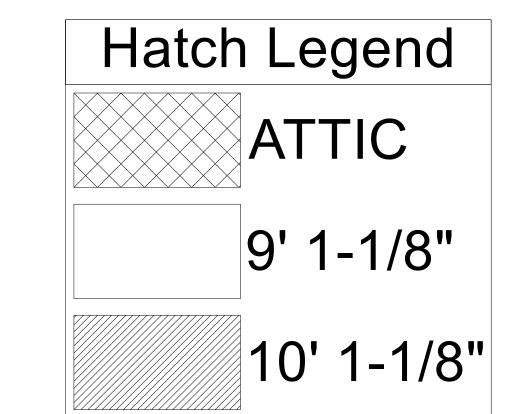
Review for Code Compliance Universal Engineering Science

Examiner-License No.

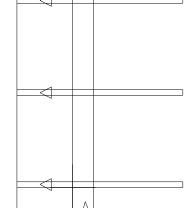
PX2707 06/30/2022

06/30/20

SOME CEILINGS FRAMED DOWN BY BLDR.



THE ARROW HEAD AT THE END OF THE TRUSS ON THE TRUSS PLACEMENT PLAN (LAYOUT)
CORRESPONDS WITH THE LEFT SIDE OF THE INDIVIDUAL TRUSS DRAWING. USE THIS AS AN ORIENTATION GUIDE WHEN SETTING THE TRUSSES ON THE



General Notes:

STRUCTURE.

Per ANSI/TPI 1-2002 all "Truss to Wall" connections re the responsibility of the Building Designer, not the russ Manufacturer.

- Use Manufacturer's specifications for all hanger connections unless noted otherwise.

- Trusses are to be 24" o.c. U.N.O.
- All hangers are to be Simpson or equivalent U.N.O.-

Use 10d x 1 1/2" Nails in hanger connections to single ply girder trusses.

Trusses are not designed to support brick U.N.O.Dimensions are Feet-Inches- Sixteenths

Notes:

No back charges will be accepted by Builders FirstSource unless approved in writing first. 850-835-4541

ACQ lumber is corrisive to truss plates. Any ACQ lumber that comes in contact with truss plates (i.e. scabbed on tails) must have an approved barrier applied first.

Refer to BCSI-B1 Summary Sheet-Guide for handling, Installing and Bracing of Metal Plate Connected Wood Truss prior to and during truss installation.

It is the responsibility of the Contractor to ensure of the proper orientation of the truss placement plans as to the construction documents and field conditions of the structure orientation. If a reversed or flipped layout is

required, it will be supplied at no extra cost by Builders FirstSource.

It is the responsibility of the Contractor to make sure the

It is the responsibility of the Contractor to make sure the placement of trusses are adjusted for plumbing drops, can lights, ect..., so the trusses do not interfere with these type of items.

All common framed roof or floor systems must be designed as to NOT impose any loads on the floor trusses below. The floor trusses have not been designed to carry any additional loads from above.

This truss placement plan was not created by an engineer, but rather by the Builders FirstSource staff and is solely to be used as an installation guide and does not require a seal. Complete truss engineering and analysis can be found on the truss design drawings which may be sealed by the truss design engineer.

Gable end trusses require continuous bottom chord bearing. Refer to local codes for wall framing requirements

Although all attempts have been made to do so, trusses may not be designed symmetrically. Please refer to the individual truss drawings and truss placement plans for proper orientation and placement.



Lake City
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Jacksonville PHONE: 904-772-6100 FAX: 904-772-1973

Tallahassee PHONE: 850-576-5177

Builder:
AARON SIMQUE HOMES
Legal Address:

Lot 62 Preserve at LL

MITEK PLATE APPROVAL #'S 2197.2-2197.4, BOISE EWP PRODUCT #'S LVL FL1644-R2, BCI JOISTS FL1392-R2